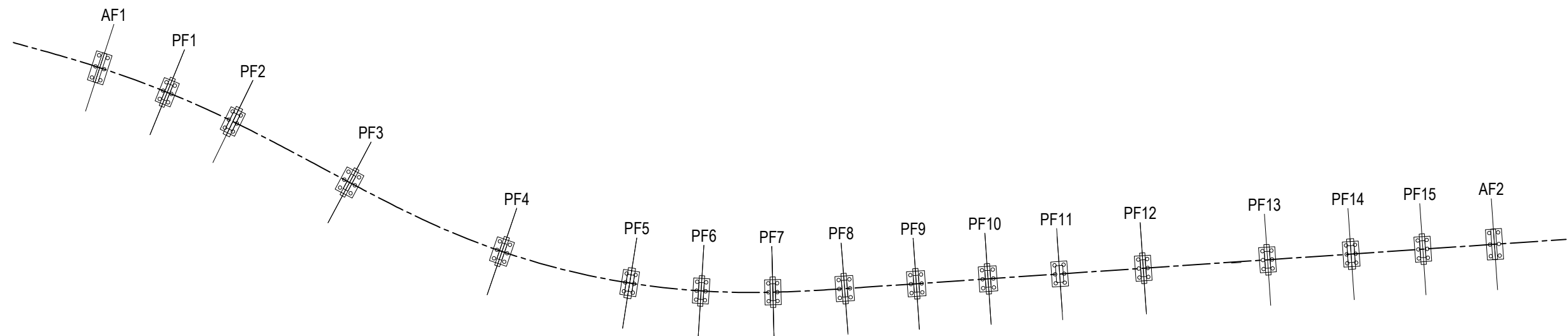
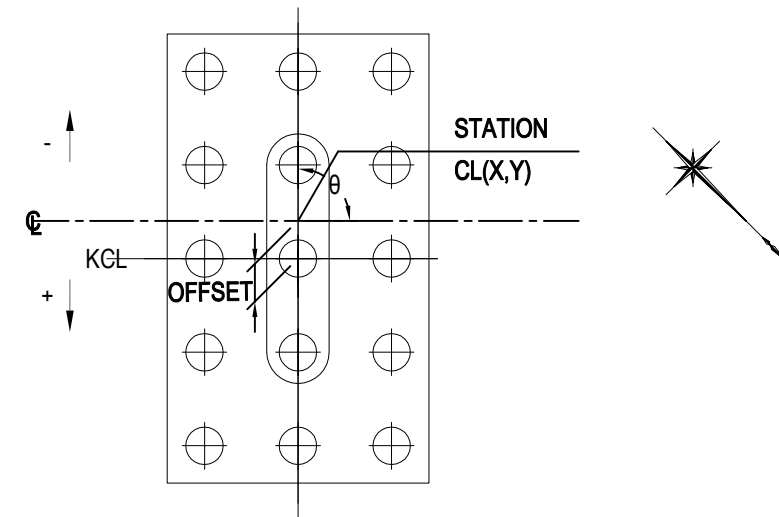


# COORDINATES OF SUBSTRUCTURE (AF1-AF2)

NAME	AF1	PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	
STATION	2+676.000	2+706.000	2+736.000	2+791.000	2+861.000	2+916.000	2+946.000	2+976.000	3+006.000	3+036.000	3+066.000	3+096.000	3+ 131.000	
CL	X	1859447.8518	1859475.0333	1859503.0458	1859555.5233	1859620.9641	1859668.0018	1859691.4036	1859712.9684	1859733.0971	1859752.8190	1859772.5366	1859792.2542	1859815.2580
	Y	204333.1905	204320.5102	204309.7894	204293.3357	204268.7268	204240.3540	204221.6005	204200.7592	204178.5172	204155.9109	204133.3008	204110.6907	204084.3122
AZIMUTH	242d 58' 28"	247d 02' 07"	250d 56' 49"	253d 01' 58"	243d 49' 33"	233d 58' 41"	228d 36' 24"	221d 05' 26"	221d 05' 26"	221d 05' 26"	221d 05' 26"	221d 05' 26"	221d 05' 26"	
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"	92d 29' 51"	90d 07' 09"	90d 00' 00"	90d 00' 00"	90d 00' 00"	
OFFSET (m)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

NAME	PF13	PF14	PF15	AF2	
STATION	3+183.000	3+218.000	3+248.000	3+278.000	
CL	X	1859849.4352	1859872.4390	1859892.1566	1859911.8741
	Y	204045.1214	204018.7429	203996.1328	203973.5227
AZIMUTH	221d 05' 26"	221d 05' 26"	221d 05' 26"	221d 05' 26"	
SKEW ANGLE (θ)	90d 00' 00"	90d 00' 00"	90d 00' 00"	90d 00' 00"	
OFFSET (m)	0.000	0.000	0.000	0.000	



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 COORDINATES OF SUBSTRUCTURE	PACKAGE	
				PREPARED BY	Y. SUZUKI			14 Jul. 2017	3
				CHECKED BY	T. HAYAKAWA			20 Jul. 2017	DWG No.
				APPROVED BY	Y. SANO			25 Jul. 2017	P3-FO-2001

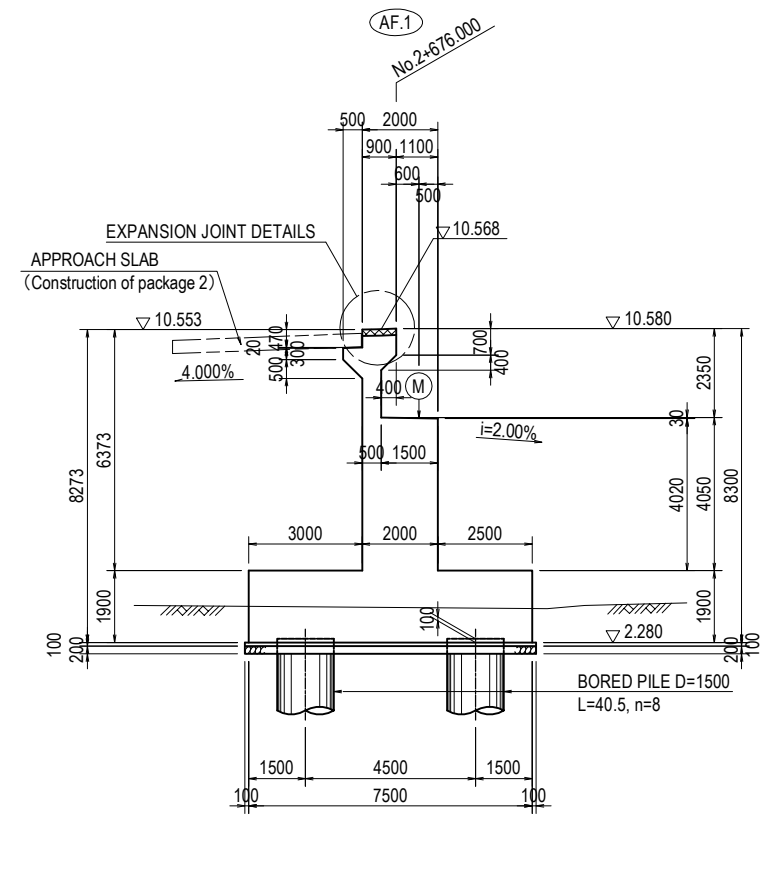
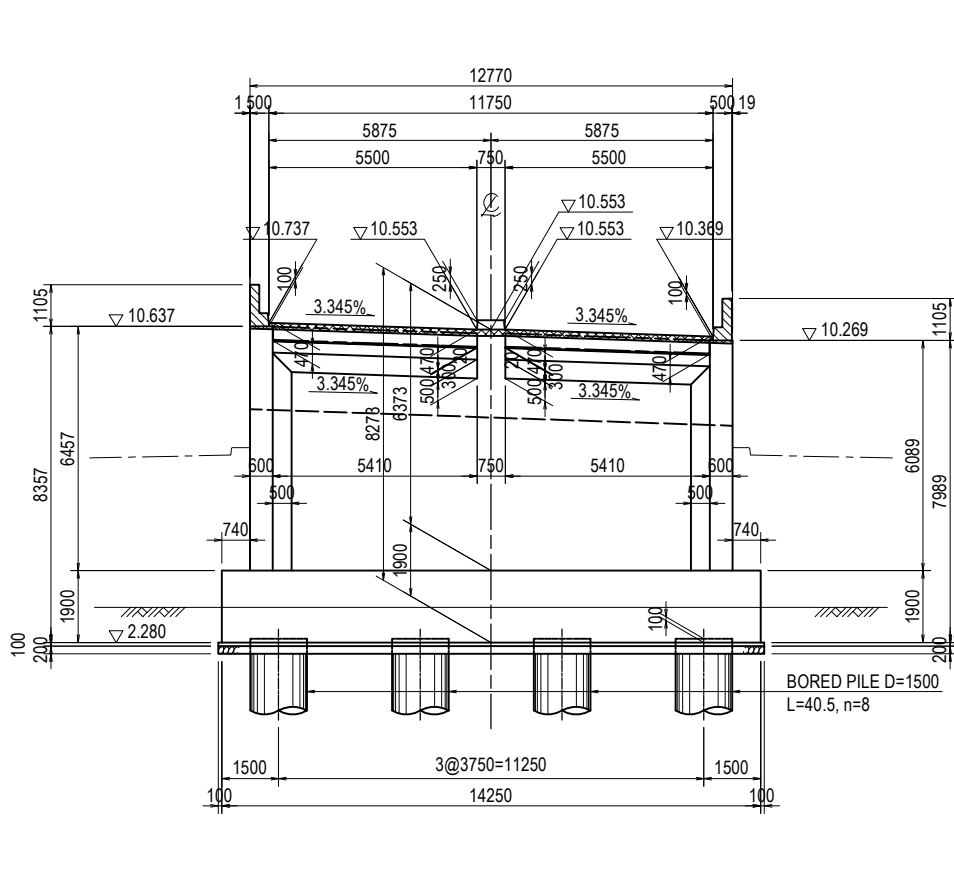
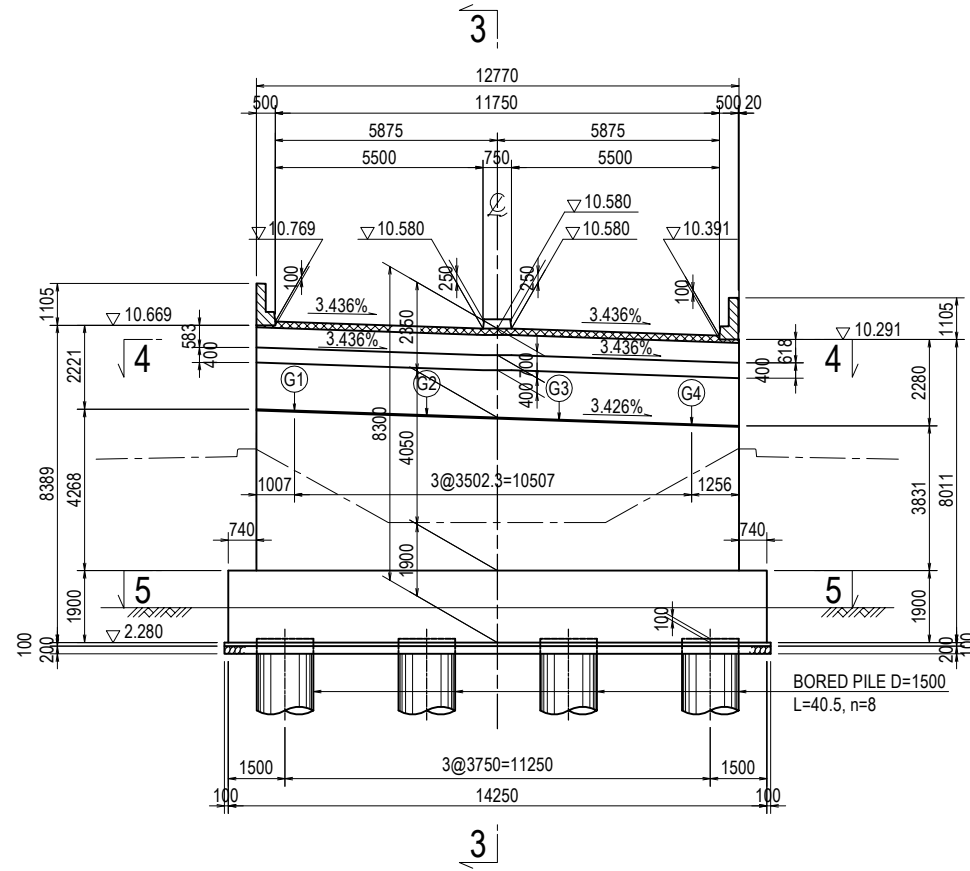
# GENERAL VIEW OF SUBSTRUCTURE AND FOUNDATION (1)

CROSS SECTION S=1:200

1-1

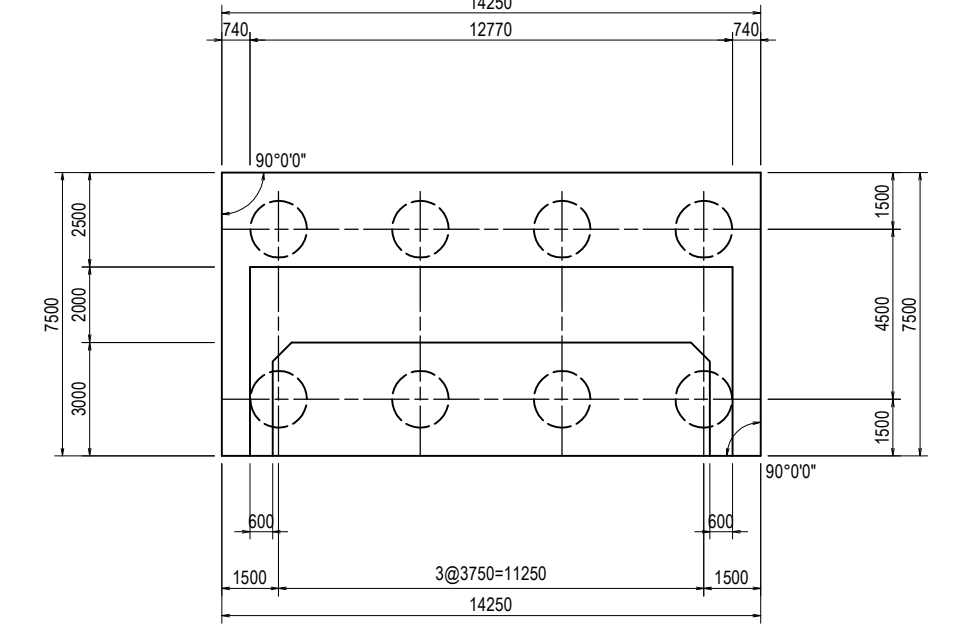
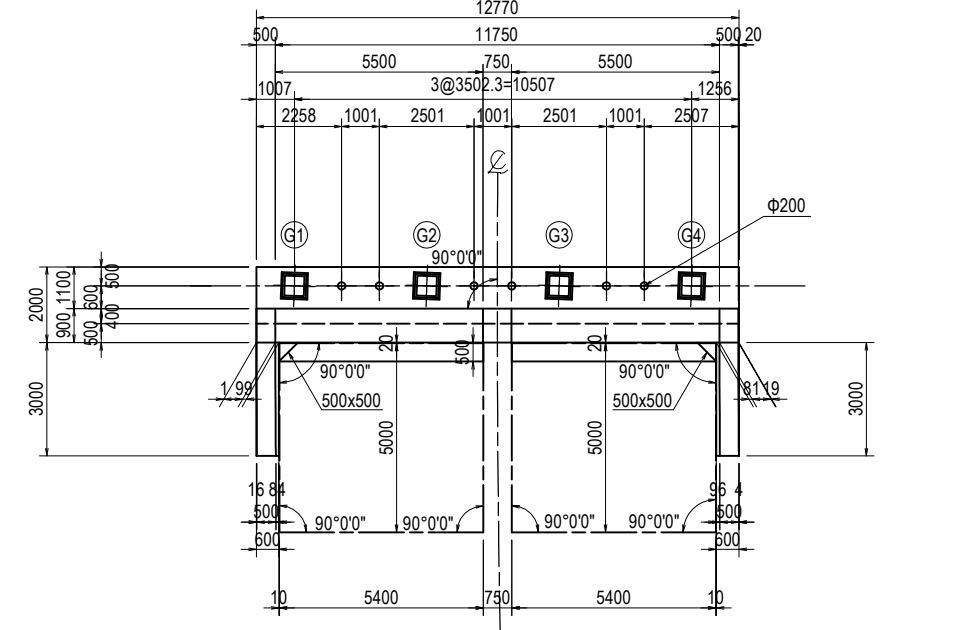
2-2

3-3

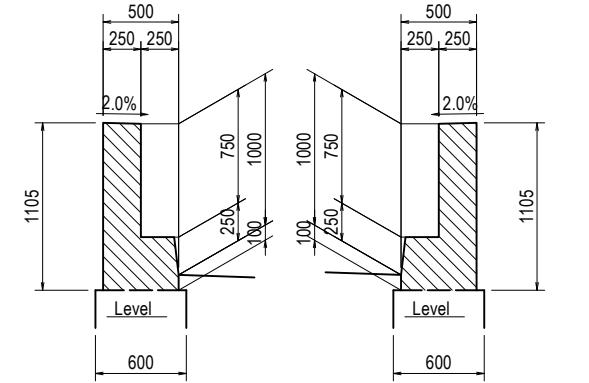


4-4

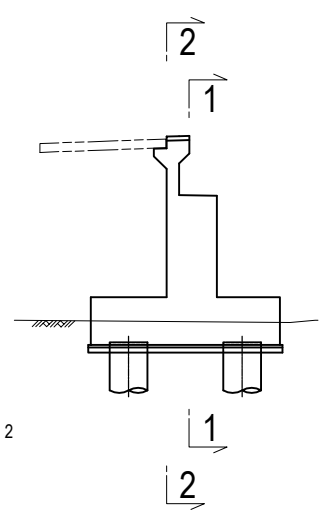
5-5



## CONCRETE RAILING DETAILS S=1:50



## KEY PLAN

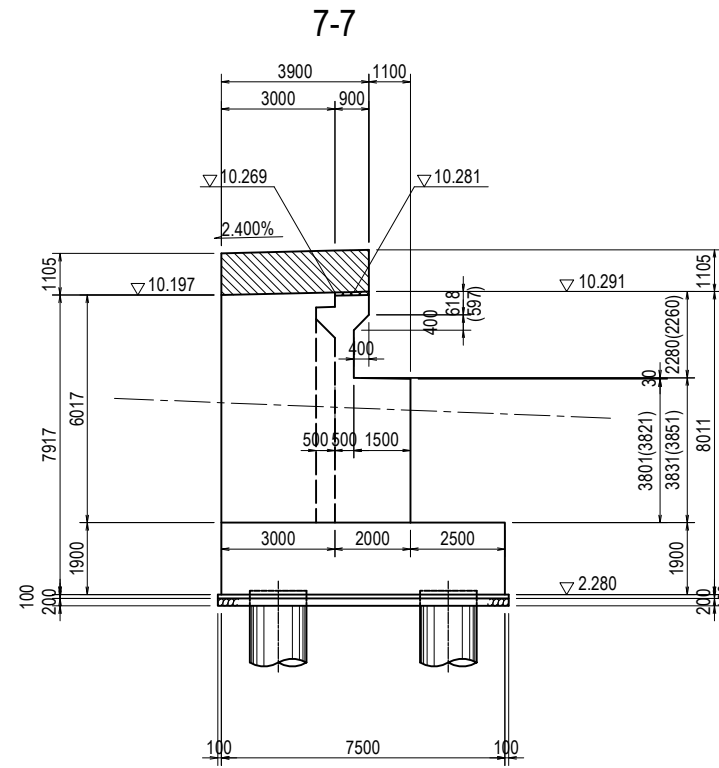
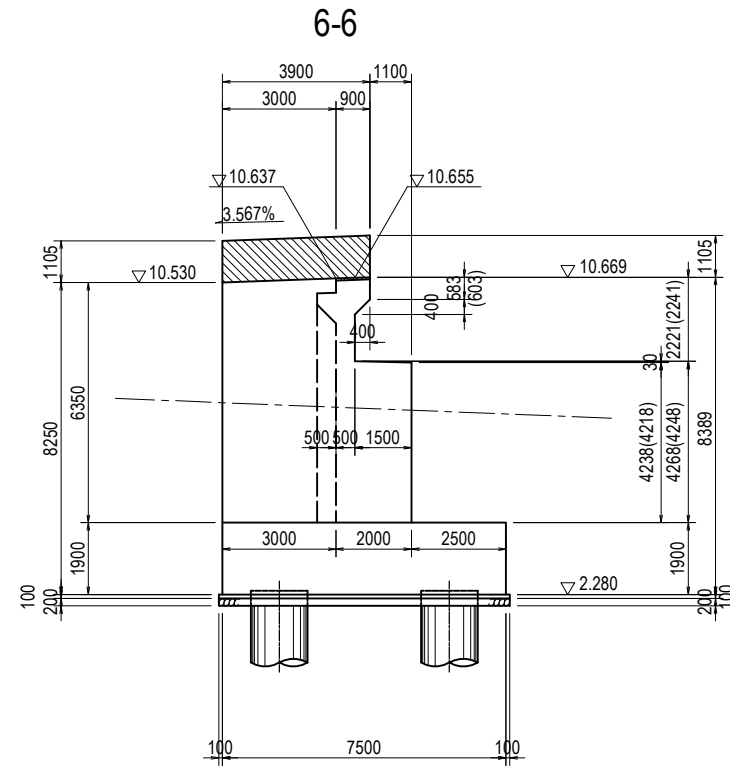


- NOTE:
1. The construction of approach slab is included in Package 2
  2. The work of backfill is included in Package 2

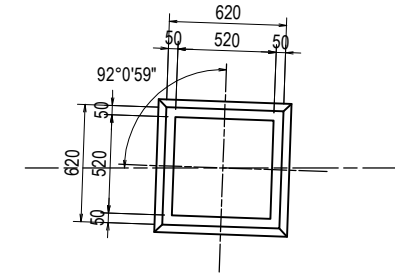
PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JICA JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	NAME Y. SUZUKI T. HAYAKAWA Y. SANO	SIGNATURE <i>YS</i> <i>平川 知平</i> <i>佐野 祐一</i>	DATE 14 Jul. 2017 20 Jul. 2017 25 Jul. 2017	DRAWING TITLE GENERAL VIEW OF SUBSTRUCTURE AND FOUNDATION (1)	PACKAGE 3 DWG No. P3-FO-2002
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# GENERAL VIEW OF SUBSTRUCTURE AND FOUNDATION (2)

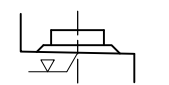
CROSS SECTION S=1:200



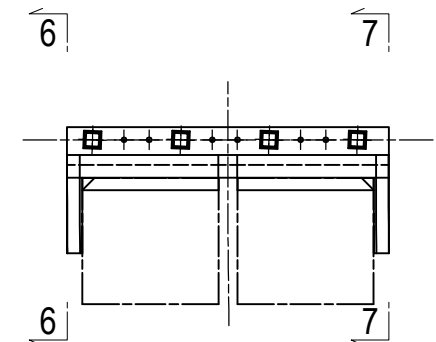
BEARING DETAILS S=1:40



	G1	G2	G3	G4
BEARING MORTAR(mm)	49	49	49	49
LOWER UPPER END HEIGHT	▽ 8.394	▽ 8.274	▽ 8.155	▽ 8.034



KEY PLAN

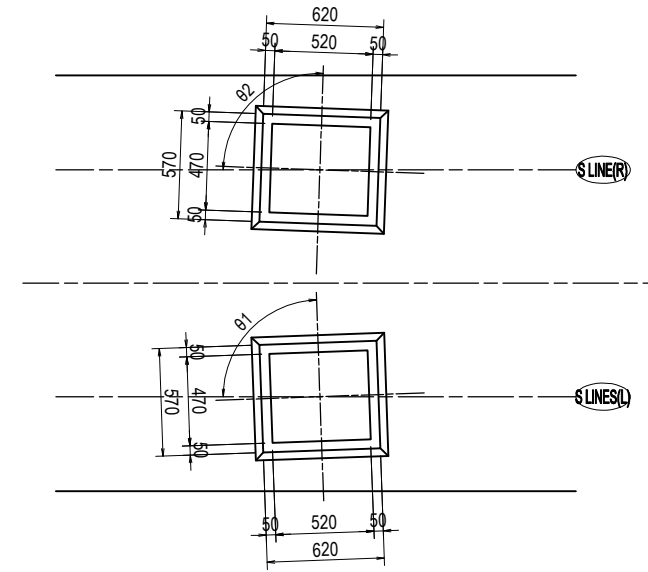
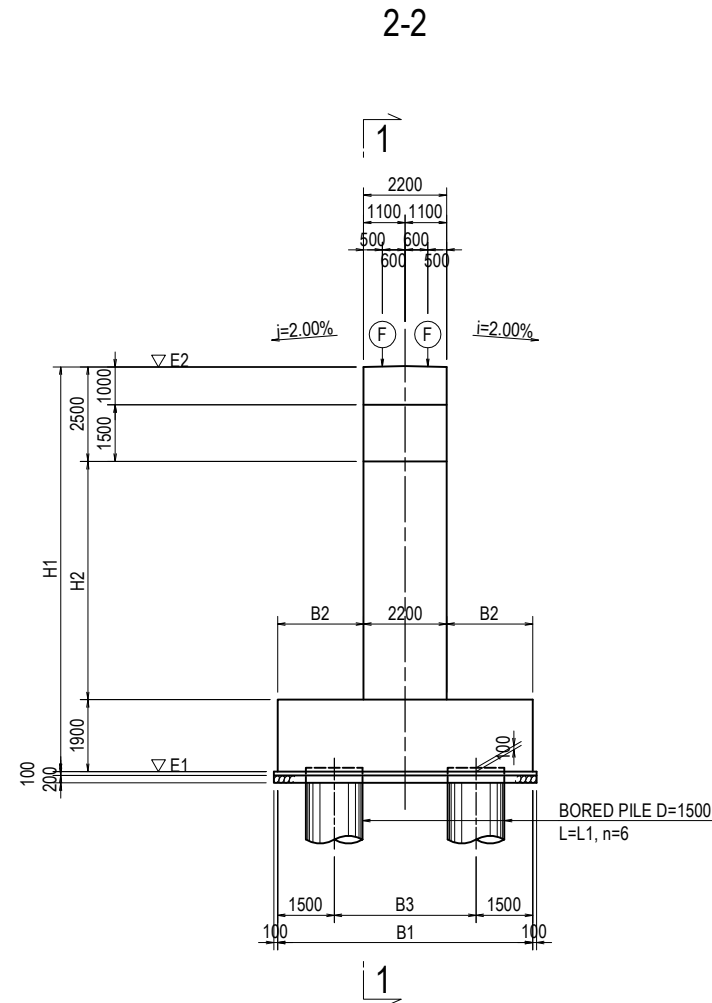
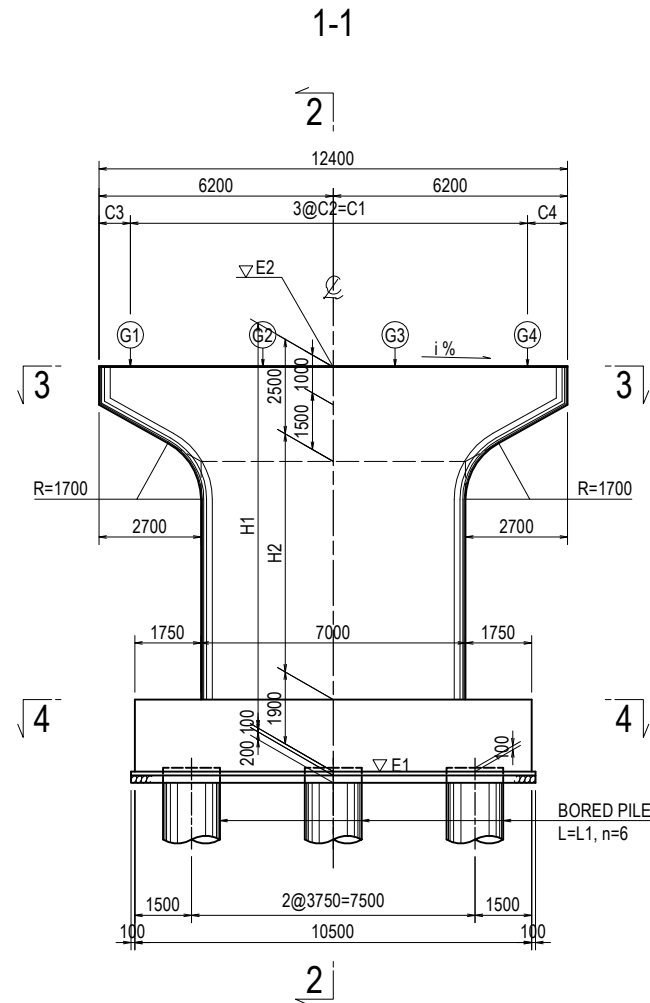


PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	NAME	SIGNATURE	DATE	DRAWING TITLE <b>GENERAL VIEW OF SUBSTRUCTURE AND FOUNDATION (2)</b>	PACKAGE	
				PREPARED BY	Y. SUZUKI			14 Jul. 2017	3
				CHECKED BY	T. HAYAKAWA			20 Jul. 2017	DWG No.
				APPROVED BY	Y. SANO			25 Jul. 2017	P3-FO-2003

# GENERAL VIEW OF SUBSTRUCTURE AND FOUNDATION (3)

CROSS SECTION S=1:200

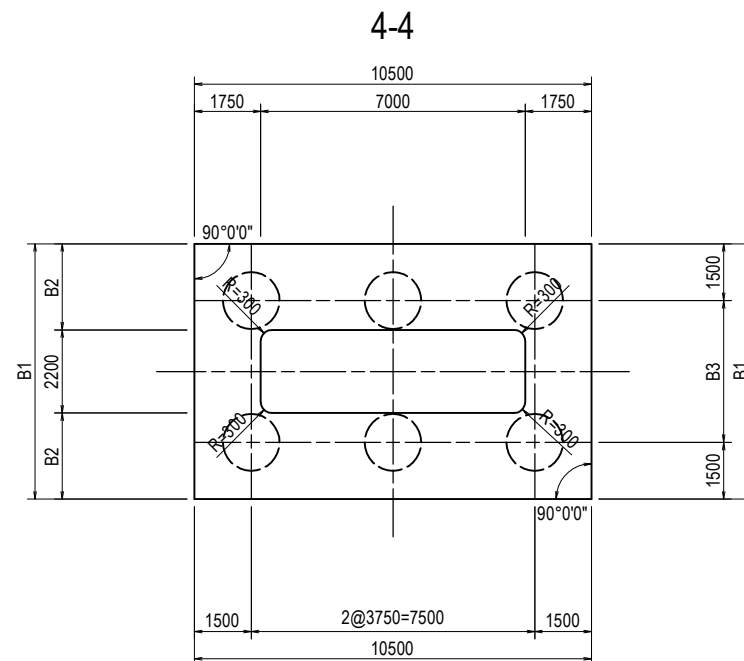
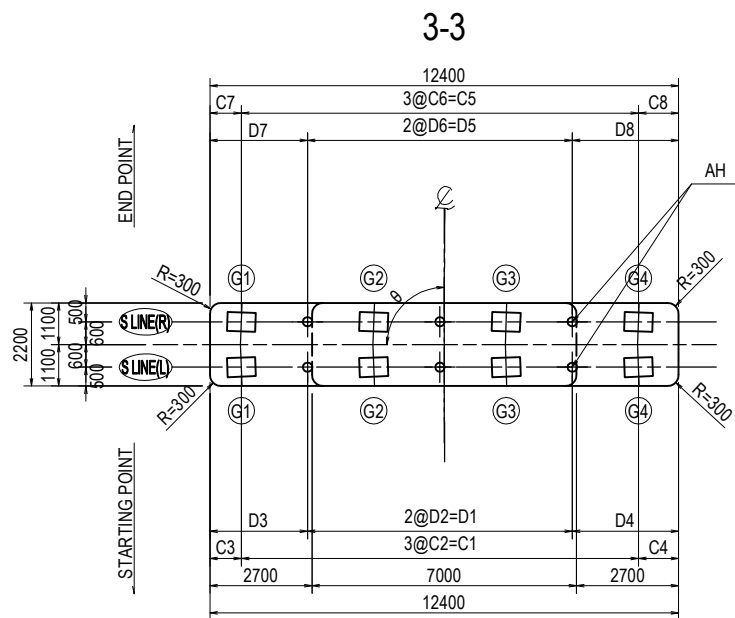
BEARING DETAILS S=1:40



No.	AXIS	STATION No.	i(%)	E1(m)	E2(m)	θ(°)	H1(mm)	H2(mm)	B1(mm)	B2(mm)	B3(mm)	L1(m)
1	PF.1	2+706.000	3.636	2.187	9.087	90°00'00"	6900	2500	8500	3150	5500	41.5
2	PF.6	2+946.000	4.795	1.437	13.337	90°00'00"	11900	7500	6750	2275	3750	33.5
3	PF.8	3+ 6.000	LEVEL	1.184	12.984	90°07'09"	11800	7400	7500	2650	4500	37.0
4	PF.9	3+ 36.000	LEVEL	1.370	12.770	90°00'00"	11400	7000	6750	2275	3750	35.5
5	PF.10	3+ 66.000	LEVEL	1.555	12.555	90°00'00"	11000	6600	7500	2650	4500	32.5
6	PF.15	3+248.000	LEVEL	1.530	9.330	90°00'00"	7800	3400	7500	2650	4500	34.0

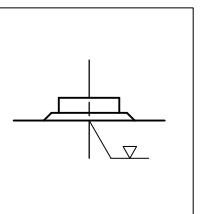
No.	AXIS	C1(mm)	C2(mm)	C3(mm)	C4(mm)	C5(mm)	C6(mm)	C7(mm)	C8(mm)	θ1(°)	θ2(°)	AH
1	PF.1	10507	3502.3	832	1061	10507	3502.3	832	1061	87°57'20"	92°01'20"	Φ250
2	PF.6	10512	3504	1096	792	10512	3504	1096	792	92°41'09"	87°22'15"	Φ250
3	PF.8	10500	3500	945	955	10500	3500	956	944	91°03'14"	90°00'00"	Φ250
4	PF.9	10500	3500	950	950	10500	3500	950	950	90°00'00"	90°00'00"	Φ250
5	PF.10	10500	3500	950	950	10500	3500	950	950	90°00'00"	90°00'00"	Φ250
6	PF.15	10500	3500	950	950	10500	3500	950	950	90°00'00"	90°00'00"	Φ250

No.	AXIS	D1(mm)	D2(mm)	D3(mm)	D4(mm)	D5(mm)	D6(mm)	D7(mm)	D8(mm)
1	PF.1	7004.6	3502.3	2583	2812	7004.6	3502.3	2583	2812
2	PF.6	7008	3504	2848	2544	7008	3504	2848	2544
3	PF.8	7000	3500	2695	2705	7000	3500	2706	2694
4	PF.9	7000	3500	2700	2700	7000	3500	2700	2700
5	PF.10	7000	3500	2700	2700	7000	3500	2700	2700
6	PF.15	7000	3500	2700	2700	7000	3500	2700	2700



No.	AXIS	S LINE (L)				S LINE (R)			
		G1	G2	G3	G4	G1	G2	G3	G4
1	PF.1	50	50	50	50	55	55	55	55
2	PF.6	55	56	58	58	56	58	59	60
3	PF.8	47	47	47	47	40	40	40	41
4	PF.9	48	48	48	48	40	40	40	40
5	PF.10	49	49	49	49	40	40	40	40
6	PF.15	46	46	46	46	40	40	40	40

No.	AXIS	S LINE (L)				S LINE (R)			
		G1	G2	G3	G4	G1	G2	G3	G4
1	PF.1	▽ 9.292	▽ 9.165	▽ 9.037	▽ 8.910	▽ 9.292	▽ 9.165	▽ 9.037	▽ 8.910
2	PF.6	▽ 13.102	▽ 13.270	▽ 13.438	▽ 13.606	▽ 13.102	▽ 13.270	▽ 13.438	▽ 13.606
3	PF.8	▽ 12.994	▽ 12.994	▽ 12.994	▽ 12.994	▽ 12.994	▽ 12.994	▽ 12.994	▽ 12.994
4	PF.9	▽ 12.780	▽ 12.780	▽ 12.780	▽ 12.780	▽ 12.780	▽ 12.780	▽ 12.780	▽ 12.780
5	PF.10	▽ 12.565	▽ 12.565	▽ 12.565	▽ 12.565	▽ 12.565	▽ 12.565	▽ 12.565	▽ 12.565
6	PF.15	▽ 9.340	▽ 9.340	▽ 9.340	▽ 9.340	▽ 9.340	▽ 9.340	▽ 9.340	▽ 9.340

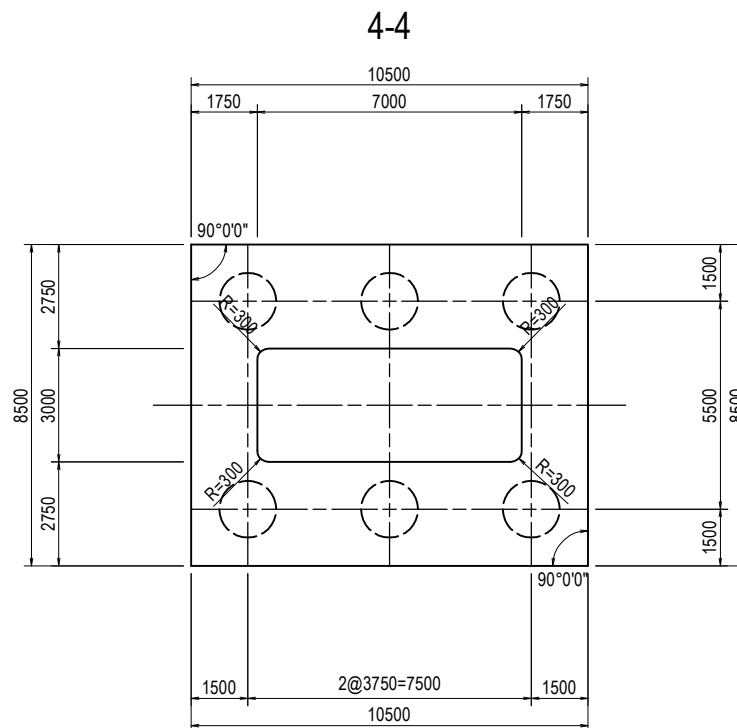
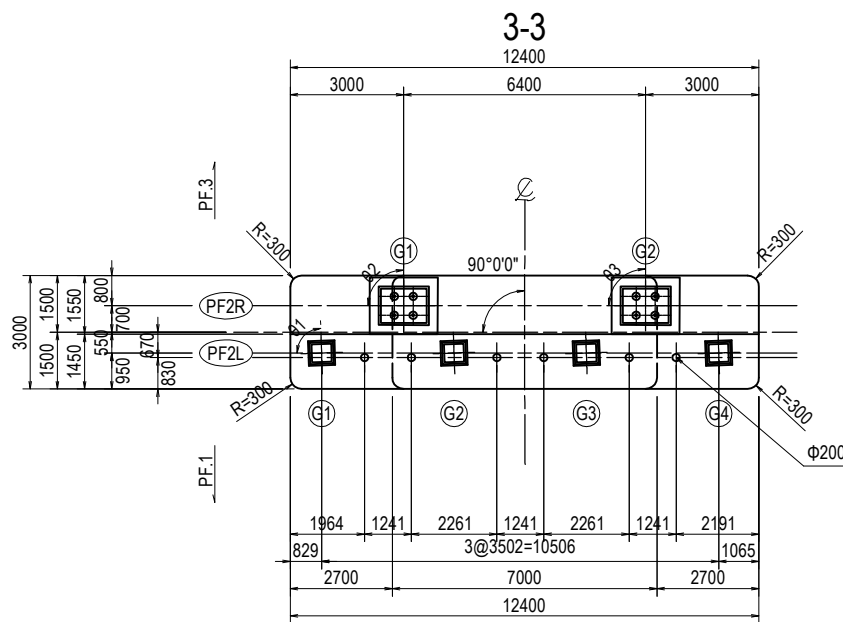
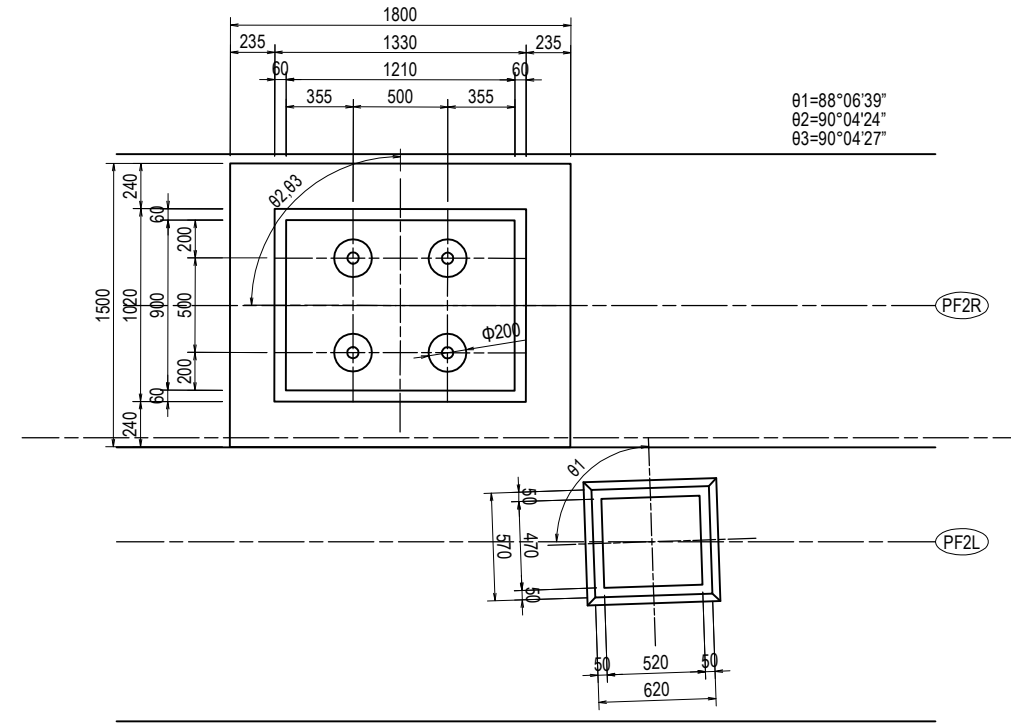
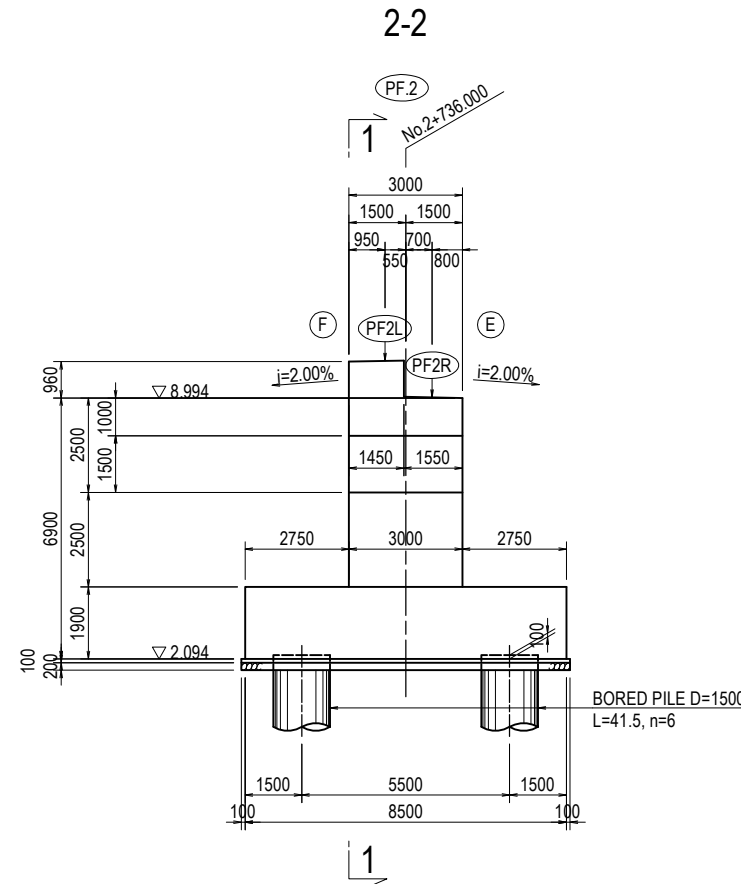
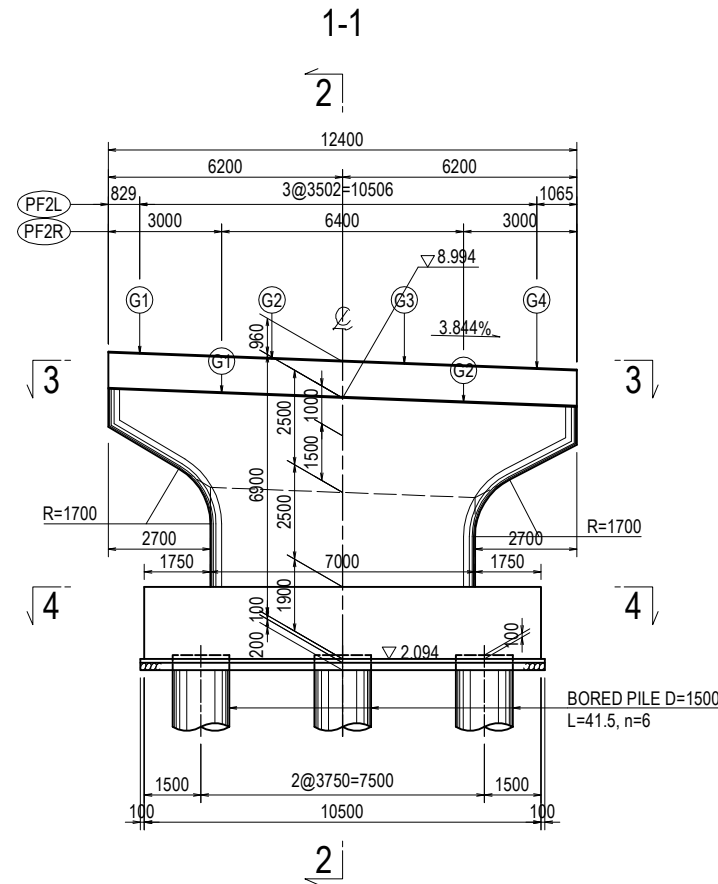




# GENERAL VIEW OF SUBSTRUCTURE AND FOUNDATION (4)

CROSS SECTION S=1:200

BEARING DETAILS S=1:40

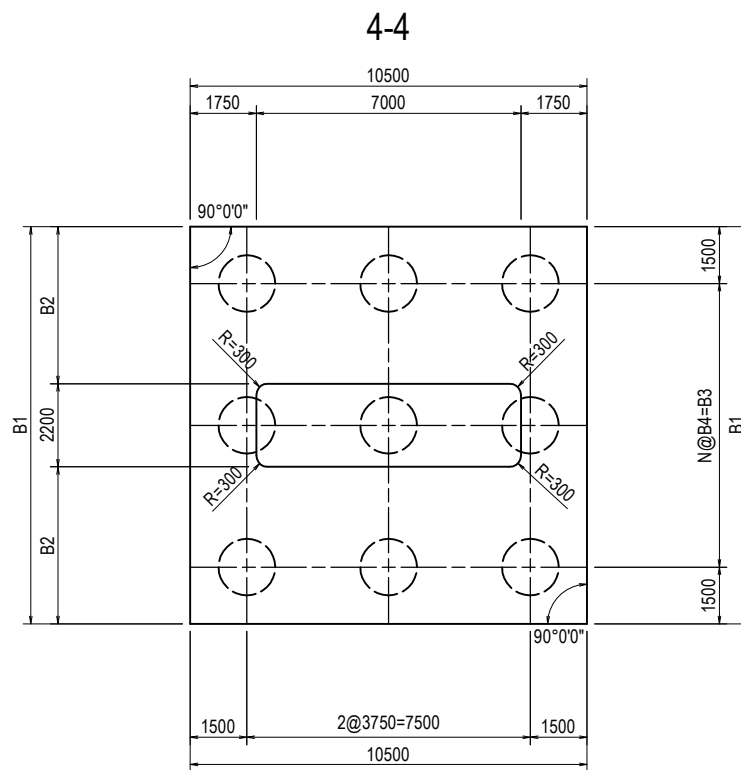
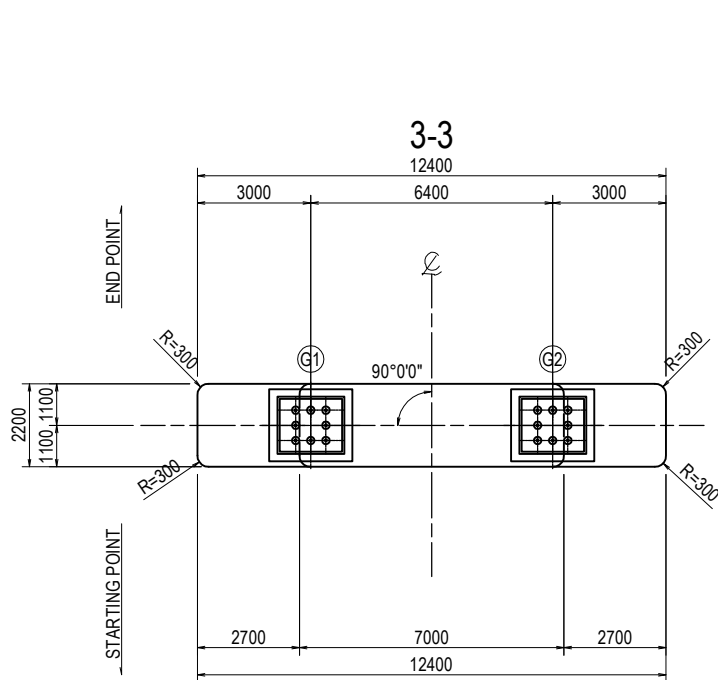
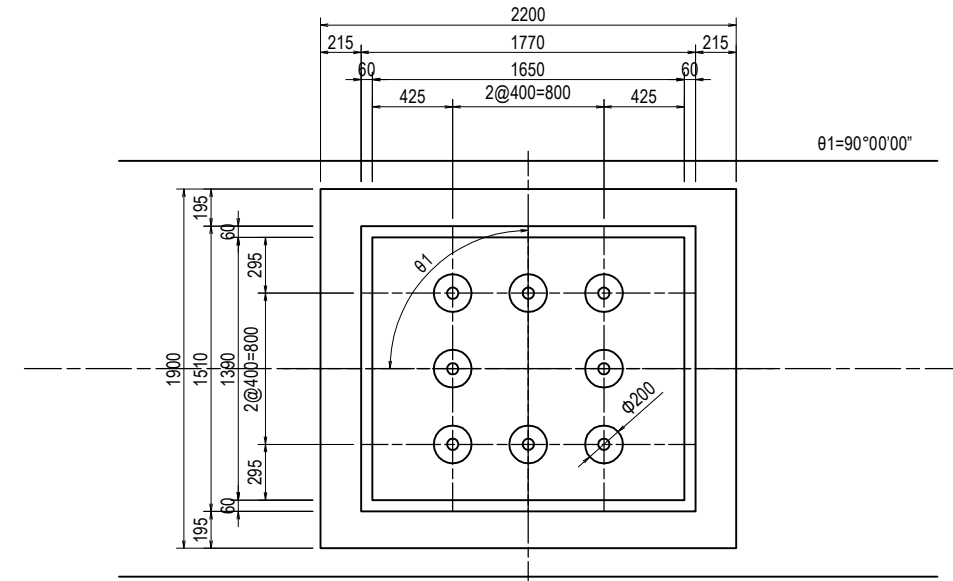
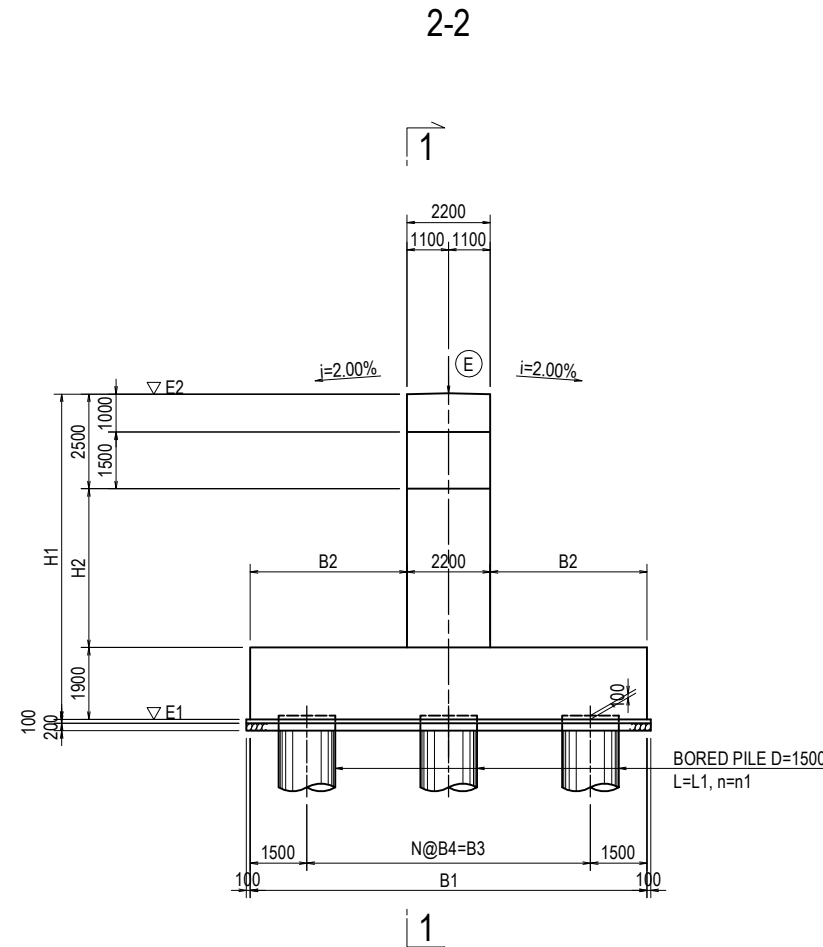
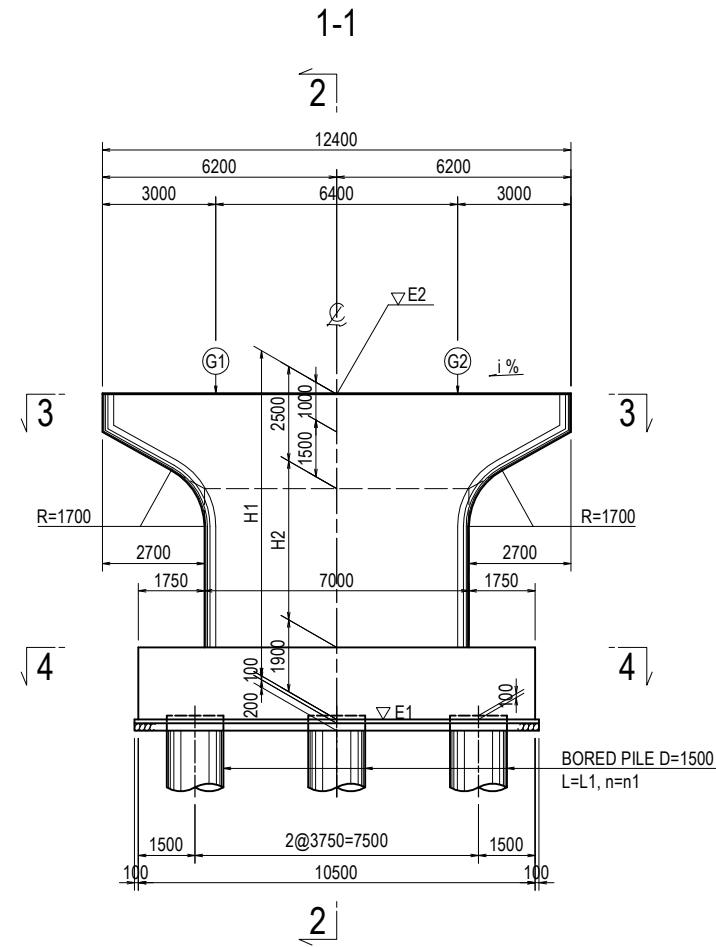


	PF2L				PF2R	
	G1	G2	G3	G4	G1	G2
BEARING MORTAR(mm)	54	54	54	54	32	30
BASE HEIGHT(mm)	-	-	-	-	150	210
LOWER UPPER END HEIGHT	▽ 10.179	▽ 10.045	▽ 9.910	▽ 9.776	▽ 9.133	▽ 8.887

# GENERAL VIEW OF SUBSTRUCTURE AND FOUNDATION (5)

CROSS SECTION S=1:200

BEARING DETAILS S=1:40



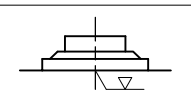
No.	AXIS	STATION No.	i(%)	E1(m)	E2(m)	H1(mm)	H2(mm)
1	PF.3	2+791.000	0.844	2.092	10.392	8300	3900
2	PF.4	2+861.000	5.234	1.879	11.679	9800	5400

No.	AXIS	B1(mm)	B2(mm)	B3(mm)	B4(mm)	N	L1(m)	n1
1	PF.3	10500	4150	7500	3750	2	38.0	9
2	PF.4	6750	2275	3750	-	-	40.5	6

BEARING MORTAR(mm)			
No.	AXIS	G1	G2
1	PF.3	31	32
2	PF.4	31	31

BASE HEIGHT(mm)			
No.	AXIS	G1	G2
1	PF.3	150	150
2	PF.4	150	150

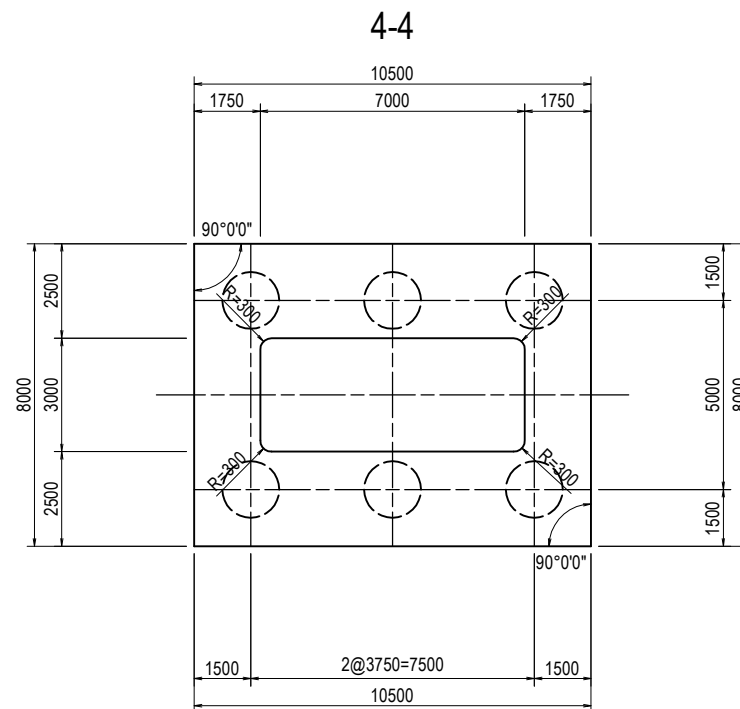
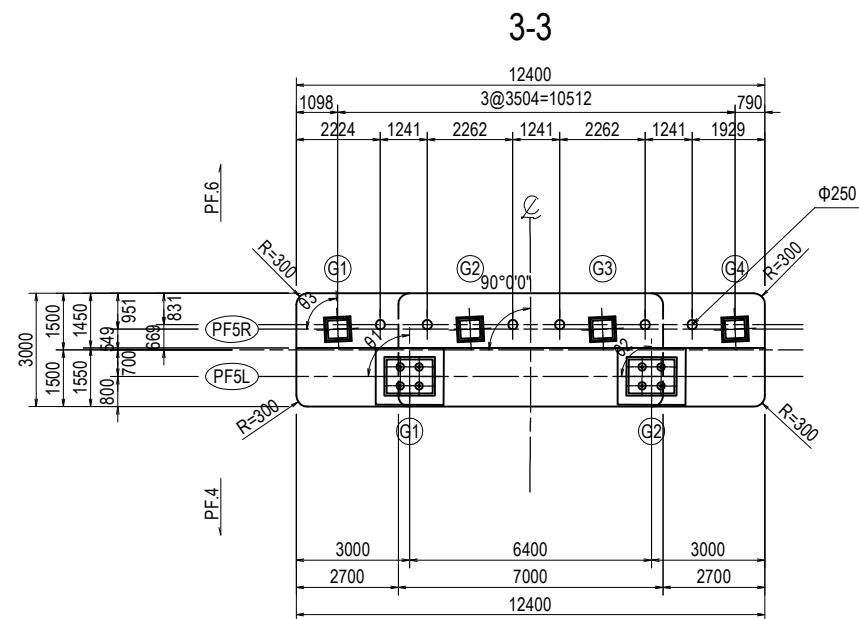
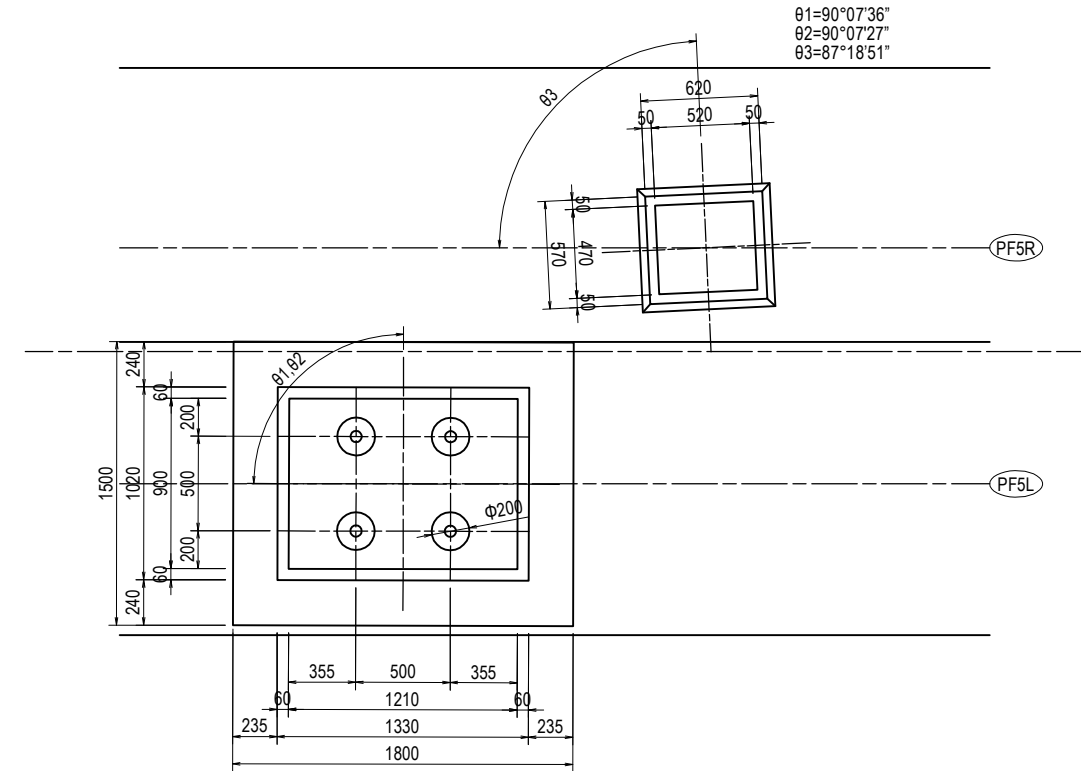
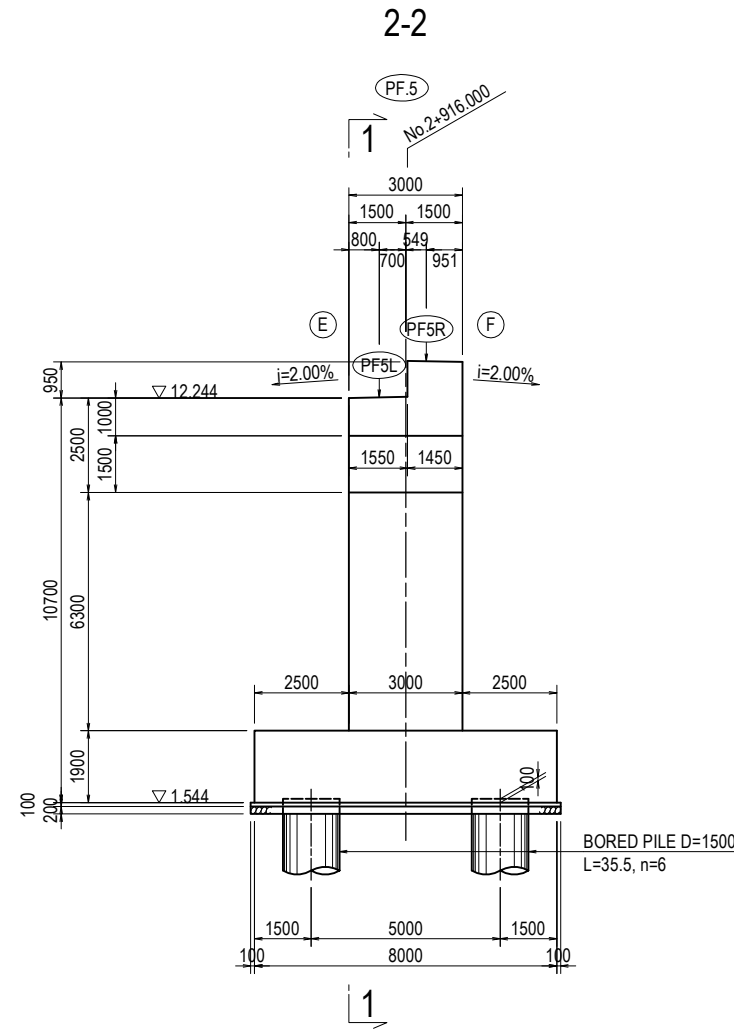
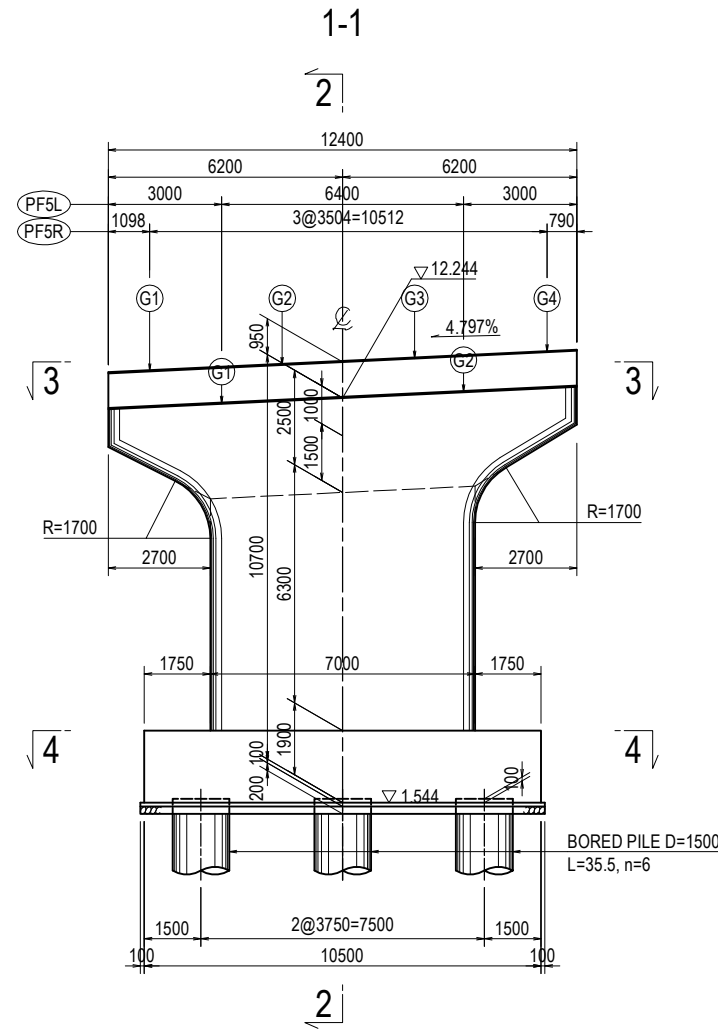
LOWER UPPER END HEIGHT			
No.	AXIS	G1	G2
1	PF.3	▽ 10.387	▽ 10.441
2	PF.4	▽ 11.533	▽ 11.868



# GENERAL VIEW OF SUBSTRUCTURE AND FOUNDATION (6)

CROSS SECTION S=1:200

BEARING DETAILS S=1:40

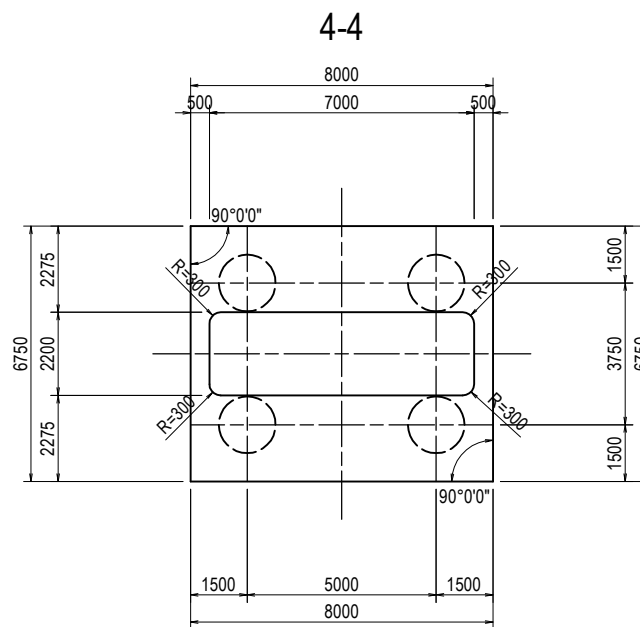
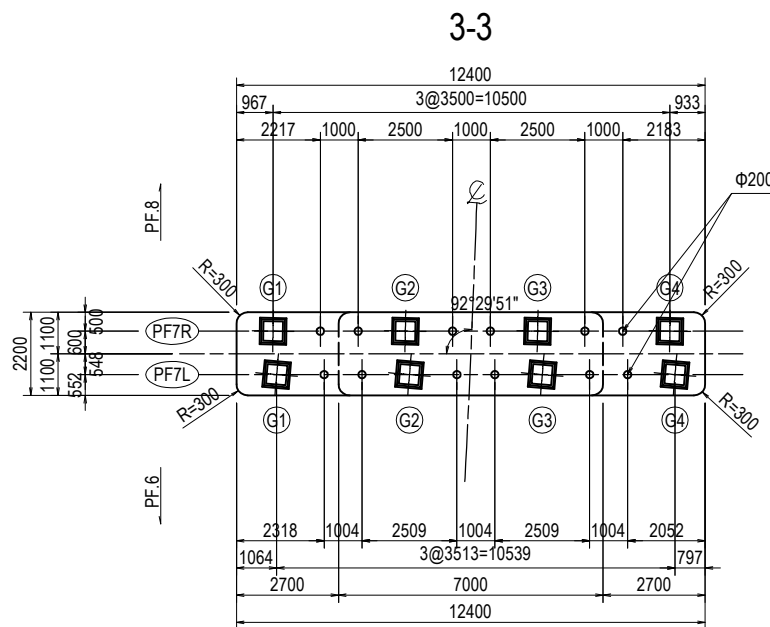
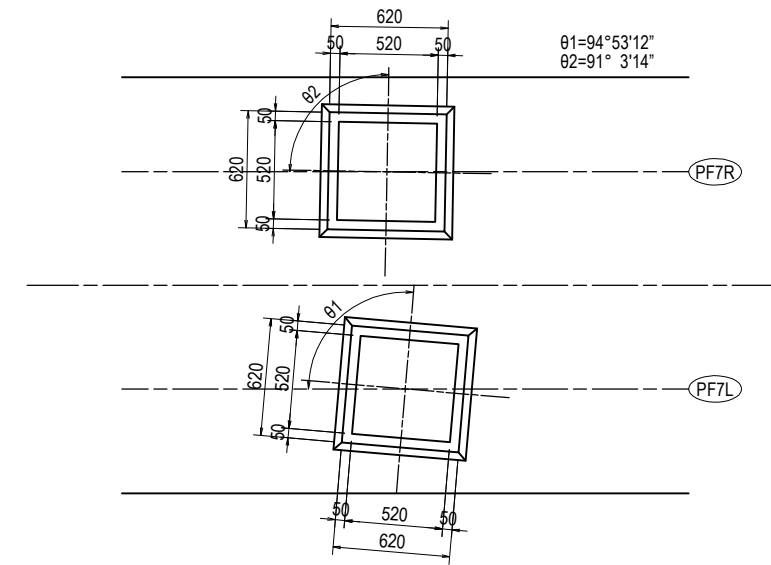
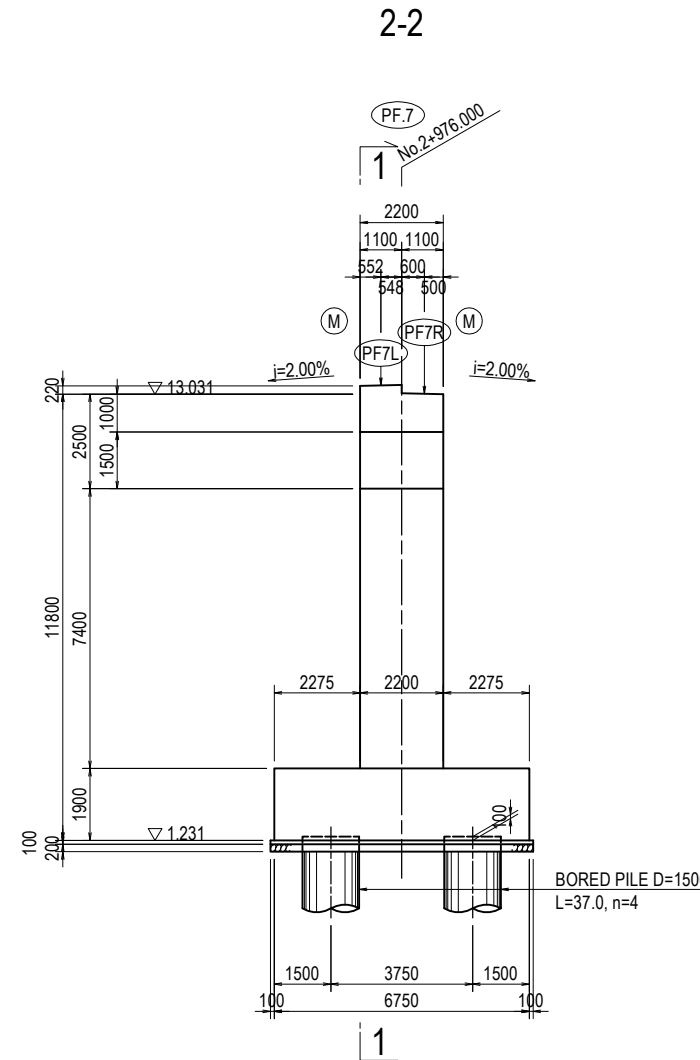
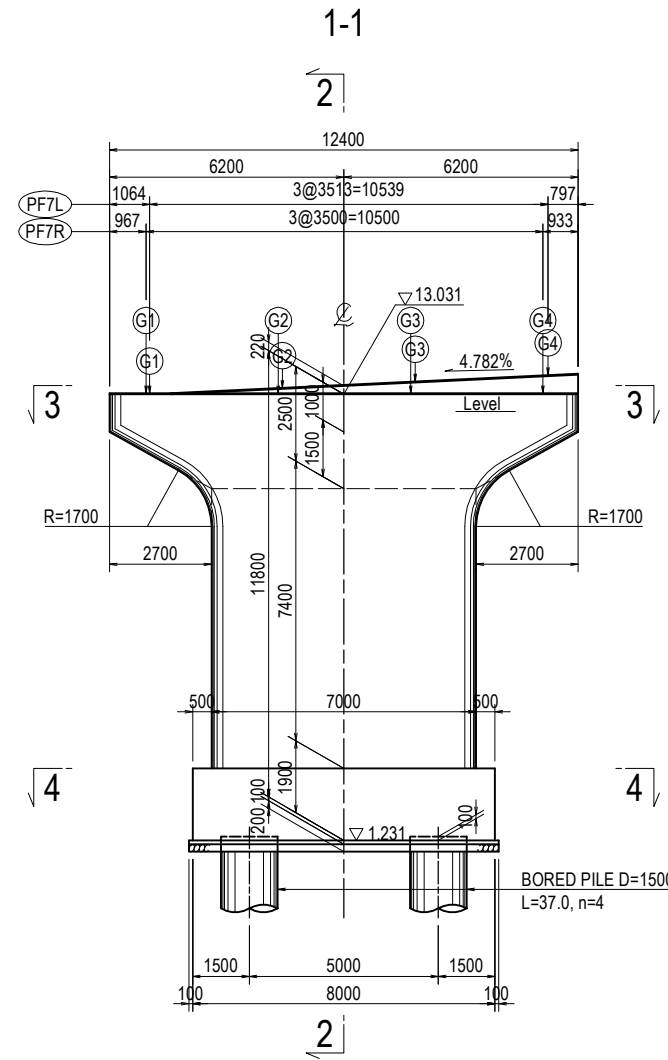


	PF5L		PF5R			
	G1	G2	G1	G2	G3	G4
BEARING MORTAR(mm)	31	33	60	60	60	60
BASE HEIGHT(mm)	150	180	-	-	-	-
LOWER UPPER END HEIGHT	▽ 12.106	▽ 12.413	▽ 12.968	▽ 13.136	▽ 13.304	▽ 13.472

# GENERAL VIEW OF SUBSTRUCTURE AND FOUNDATION (7)

CROSS SECTION S=1:200

BEARING DETAILS S=1:40

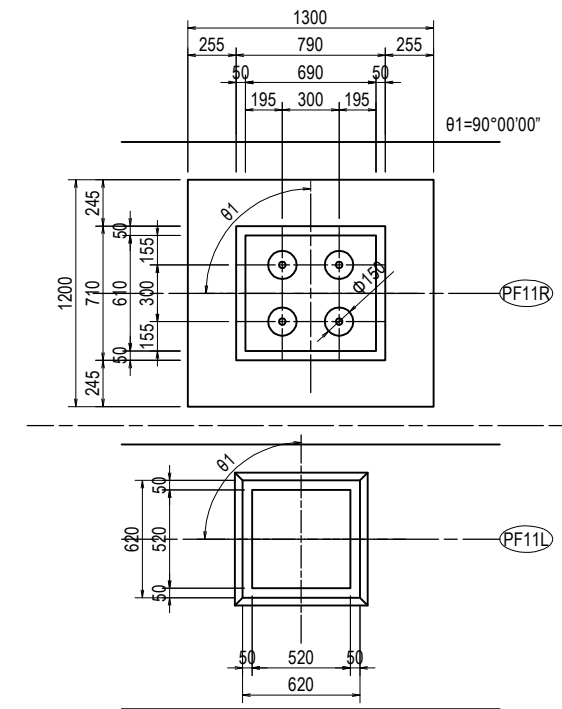
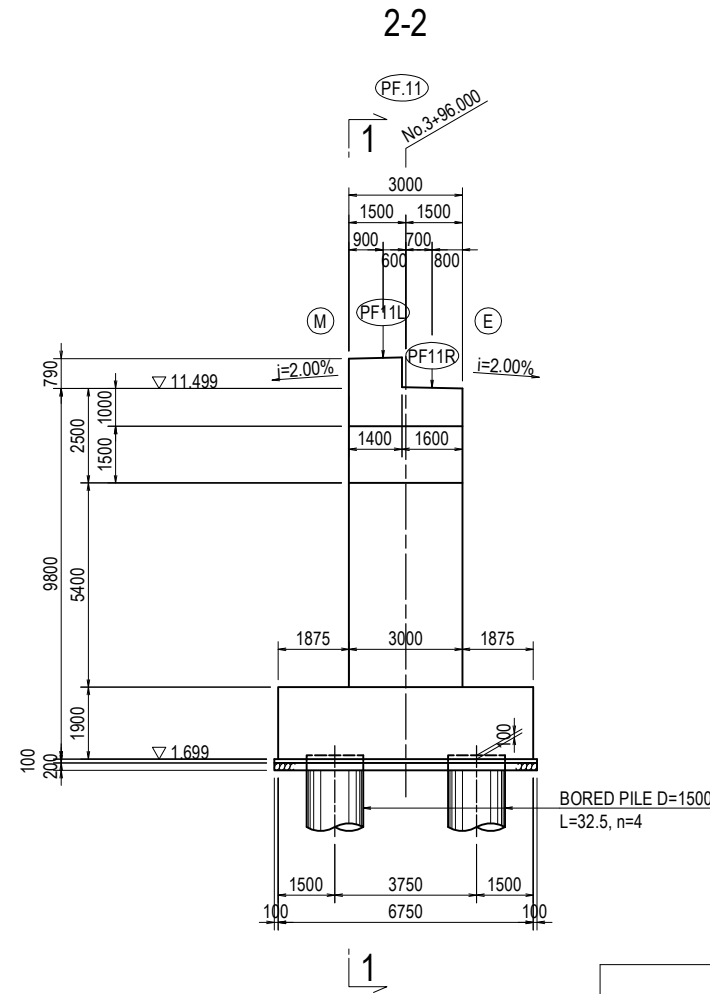
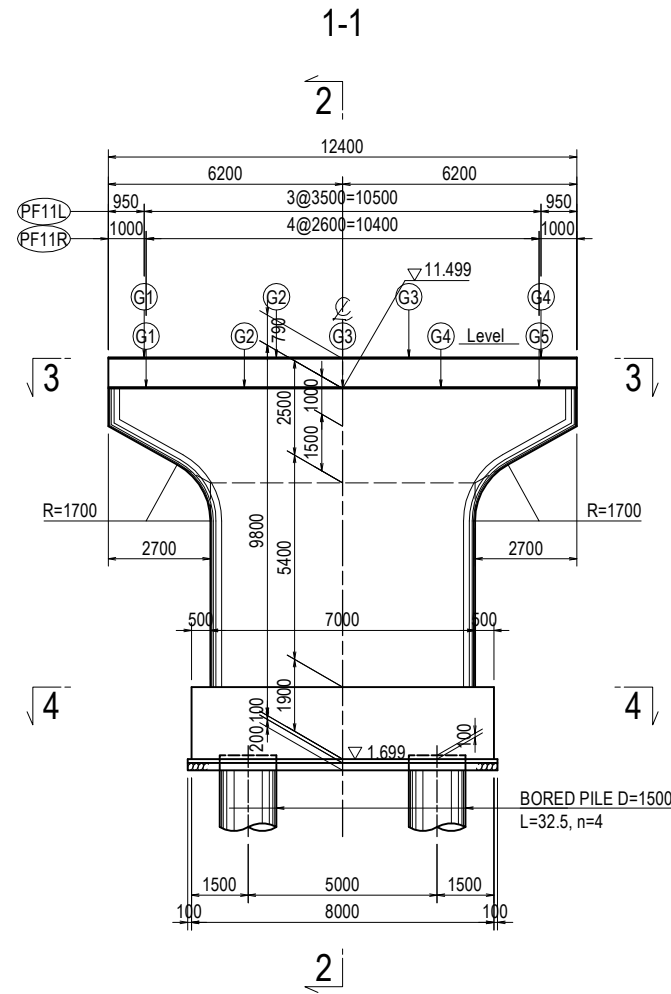


	PF7L				PF7R				
	G1	G2	G3	G4	G1	G2	G3	G4	
BEARING MORTAR(mm)	34	60	60	60	41	41	40	41	
LOWER UPPER END HEIGHT	▽ 13.042	▽ 13.184	▽ 13.352	▽ 13.520	▽ 13.041	▽ 13.041	▽ 13.041	▽ 13.041	

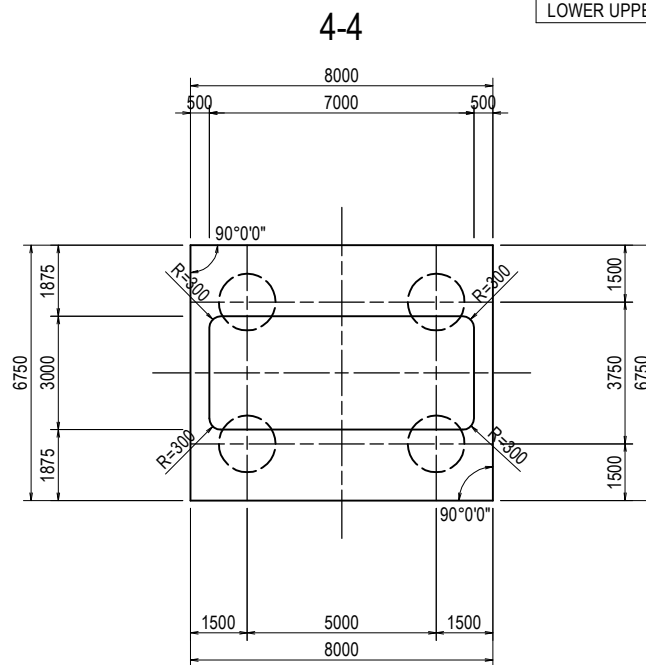
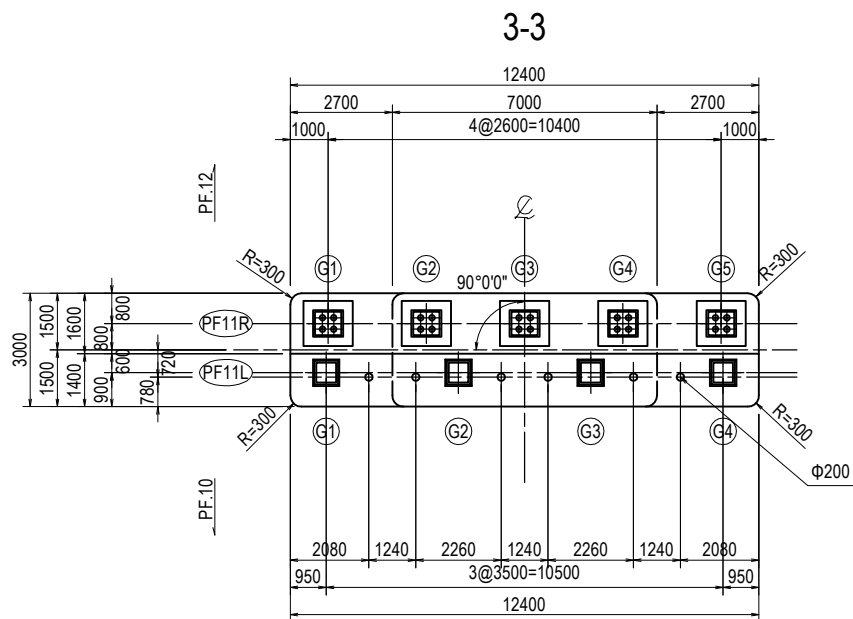
# GENERAL VIEW OF SUBSTRUCTURE AND FOUNDATION (8)

CROSS SECTION S=1:200

BEARING DETAILS S=1:40



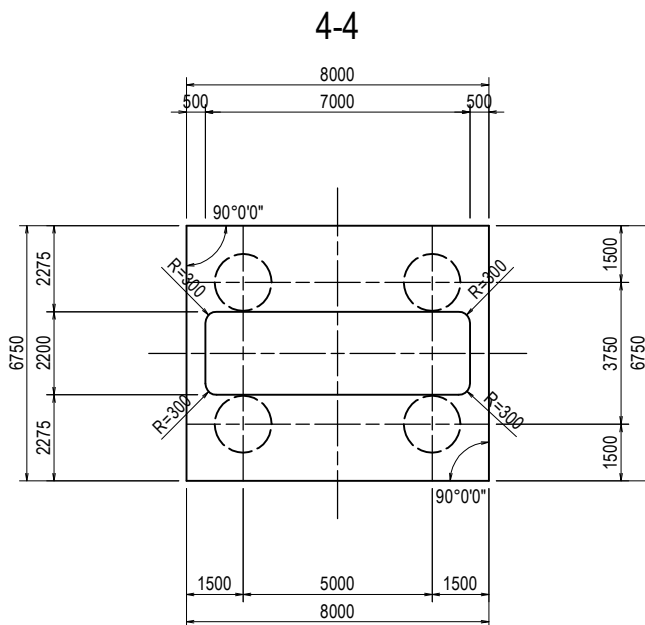
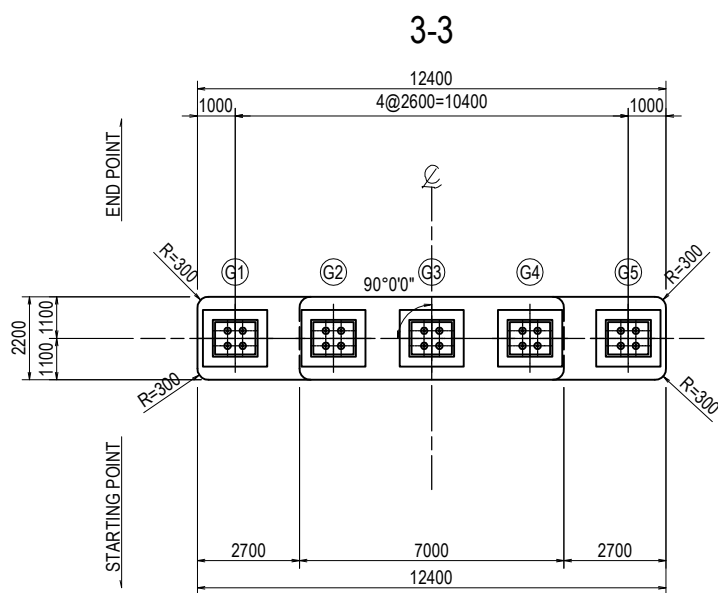
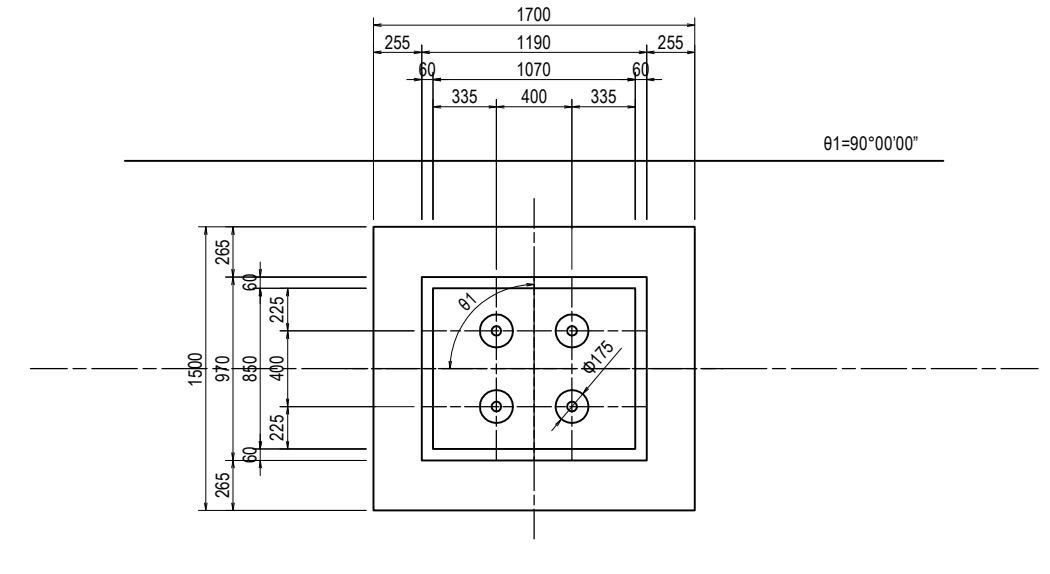
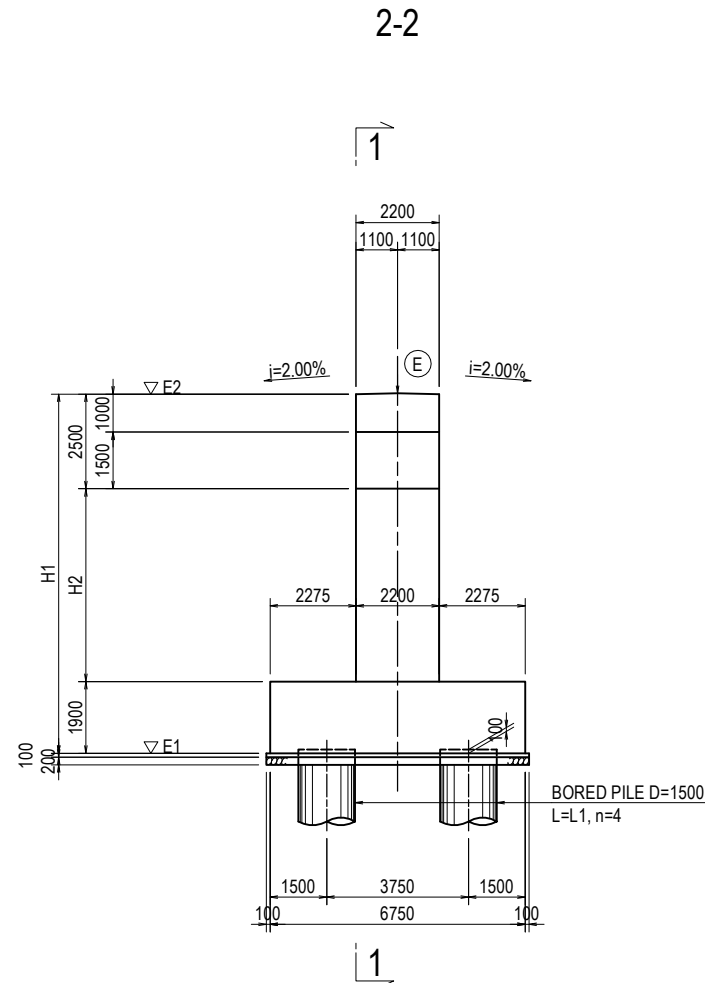
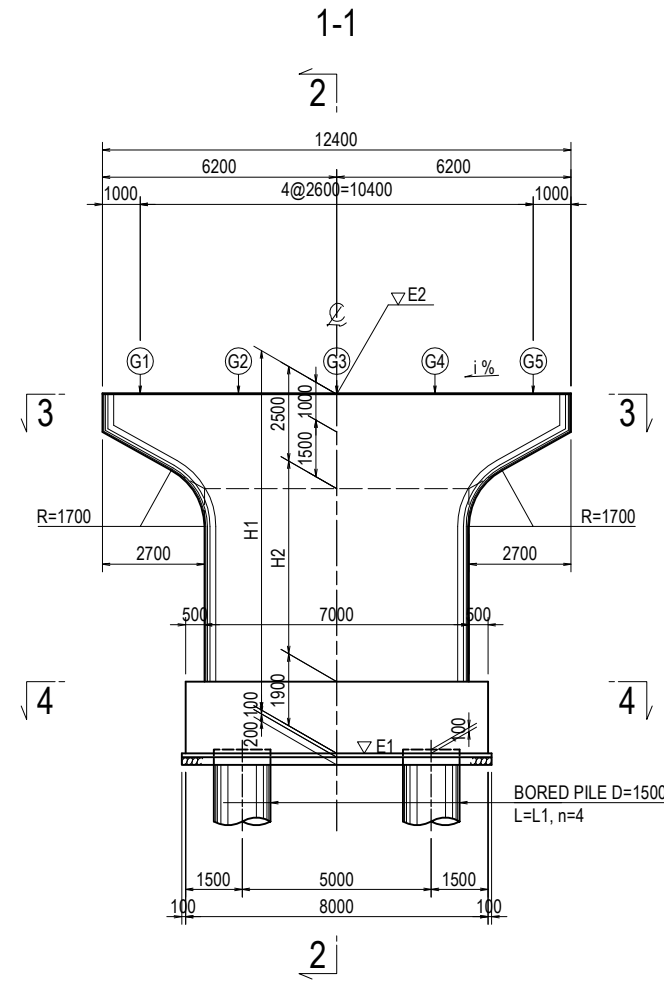
	PF11L				PF11R					
	G1	G2	G3	G4	G1	G2	G3	G4	G5	
BEARING MORTAR(mm)	42	42	42	42	30	32	37	32	30	
BASE HEIGHT(mm)	-	-	-	-	150	200	240	200	150	
LOWER UPPER END HEIGHT	▽ 12.307	▽ 12.307	▽ 12.307	▽ 12.307	▽ 11.515	▽ 11.515	▽ 11.515	▽ 11.515	▽ 11.515	



# GENERAL VIEW OF SUBSTRUCTURE AND FOUNDATION (9)

CROSS SECTION S=1:200

BEARING DETAILS S=1:40

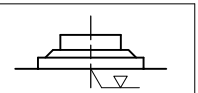


No.	AXIS	STATION No.	i(%)	E1(m)	E2(m)	H1(mm)	H2(mm)	L1(m)
1	PF.12	3+131.000	LEVEL	1.907	11.107	9200	4800	33.0
2	PF.13	3+183.000	LEVEL	1.873	10.173	8300	3900	32.5

No.	AXIS	G1	G2	G3	G4	G5
1	PF.12	30	32	39	32	30
2	PF.13	30	32	39	32	30

No.	AXIS	G1	G2	G3	G4	G5
1	PF.12	150	210	250	210	150
2	PF.13	150	210	250	210	150

No.	AXIS	G1	G2	G3	G4	G5
1	PF.12	▽ 11.129	▽ 11.129	▽ 11.129	▽ 11.129	▽ 11.129
2	PF.13	▽ 10.195	▽ 10.195	▽ 10.195	▽ 10.195	▽ 10.195

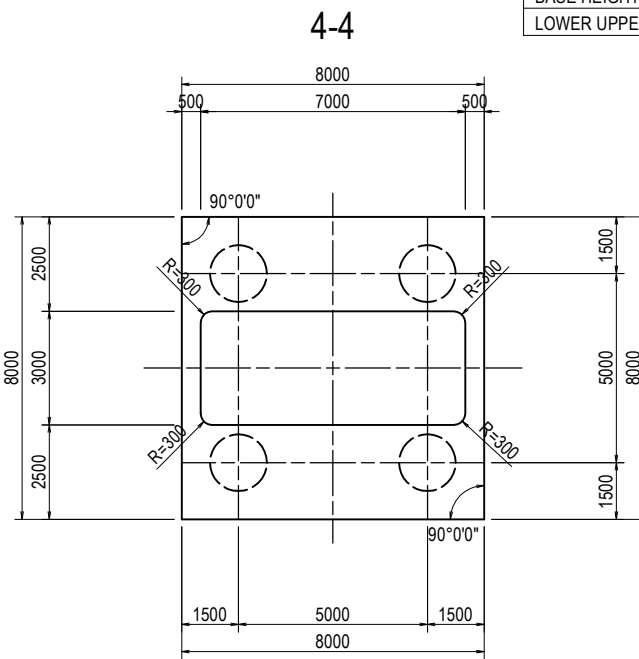
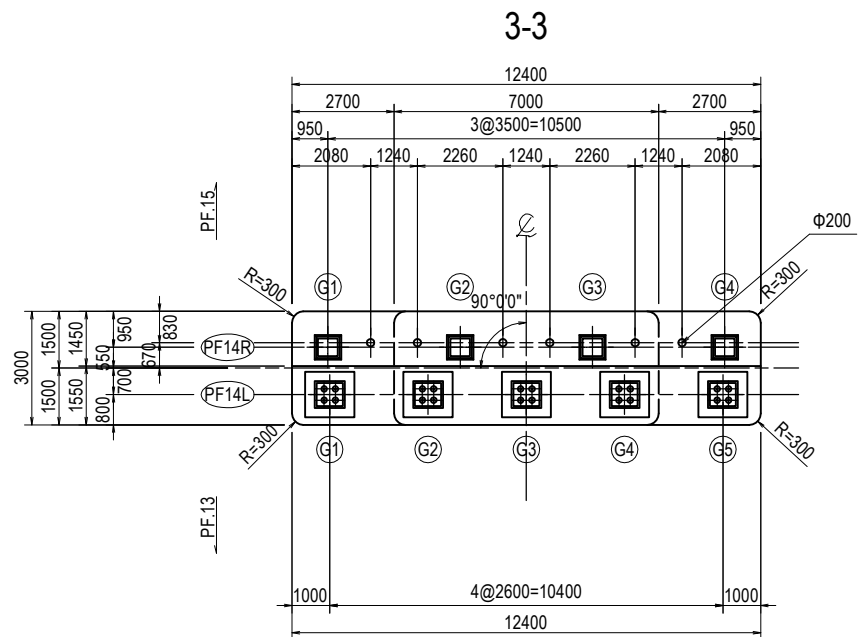
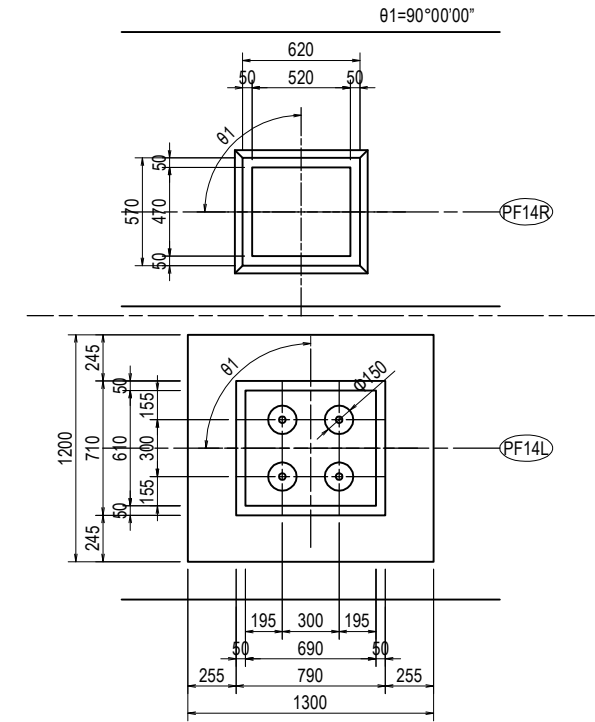
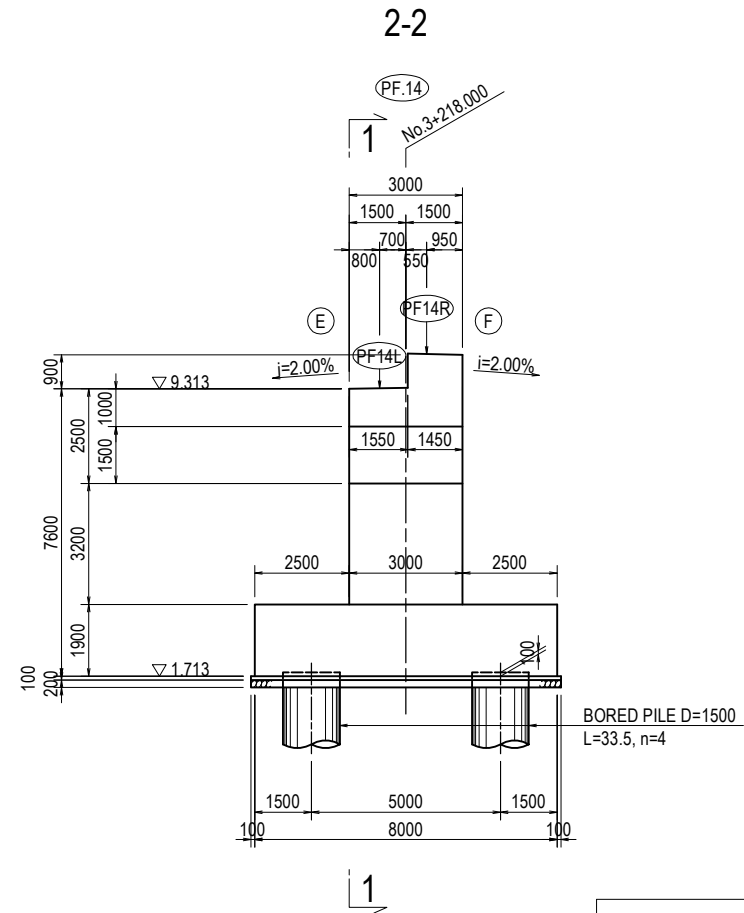
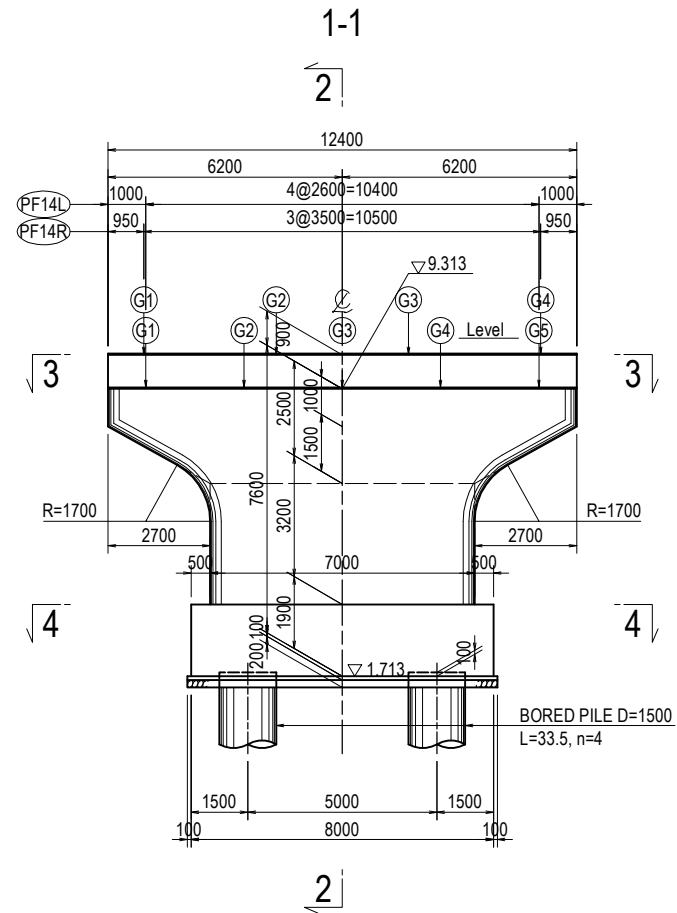




# GENERAL VIEW OF SUBSTRUCTURE AND FOUNDATION (10)

CROSS SECTION S=1:200

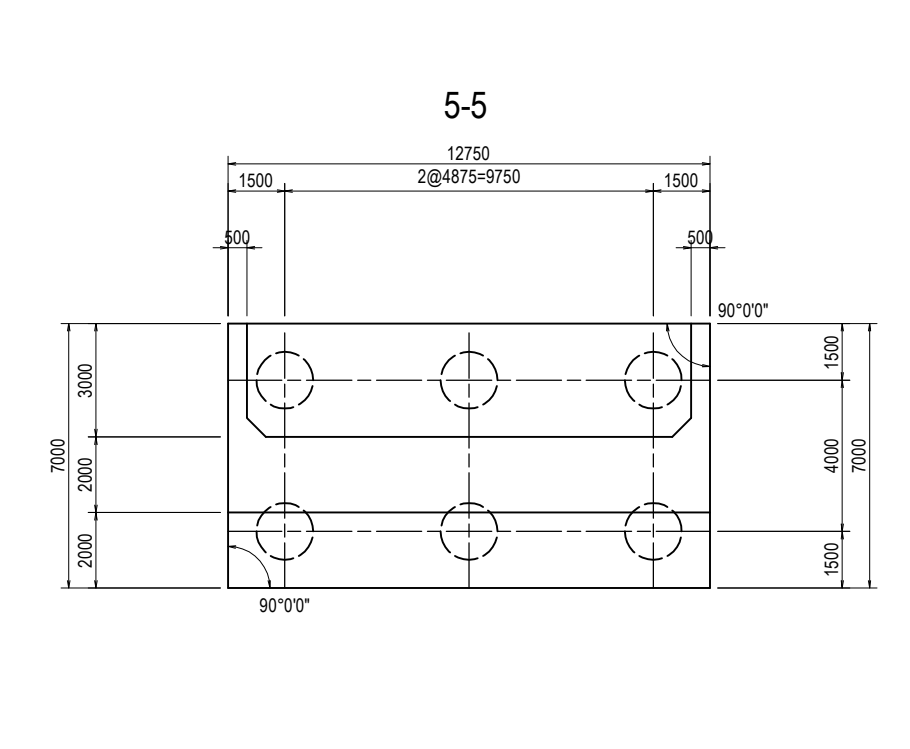
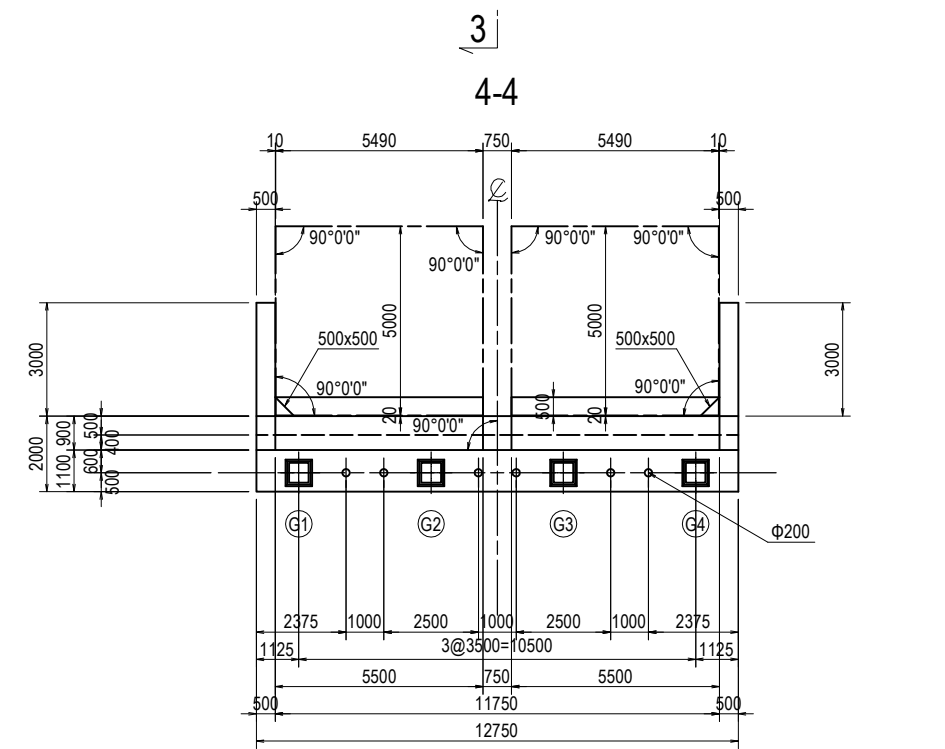
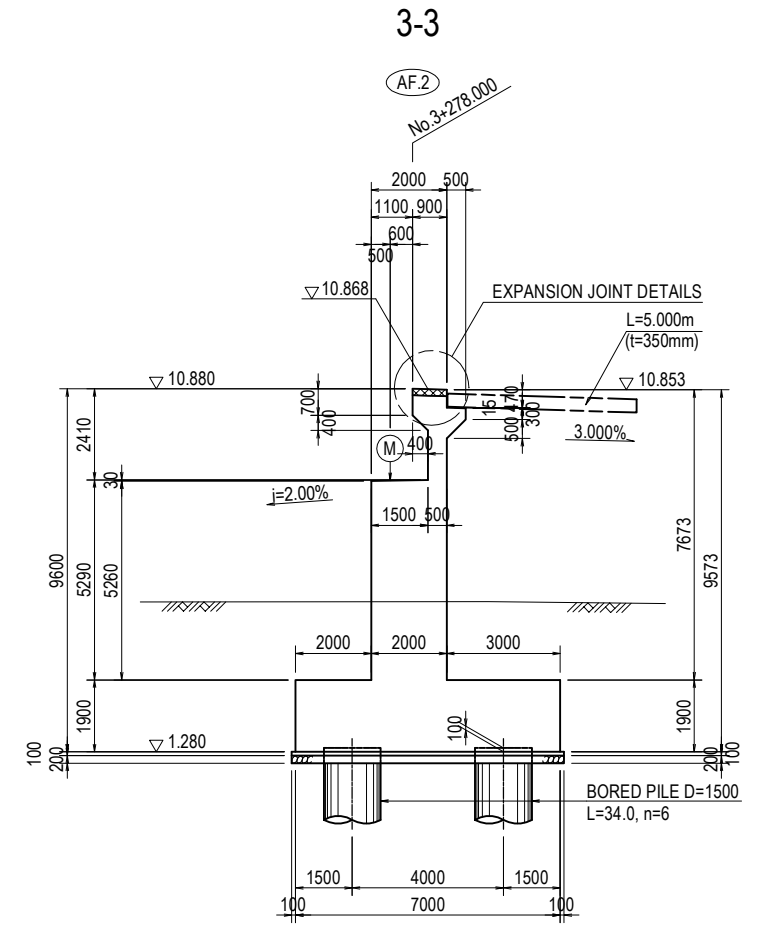
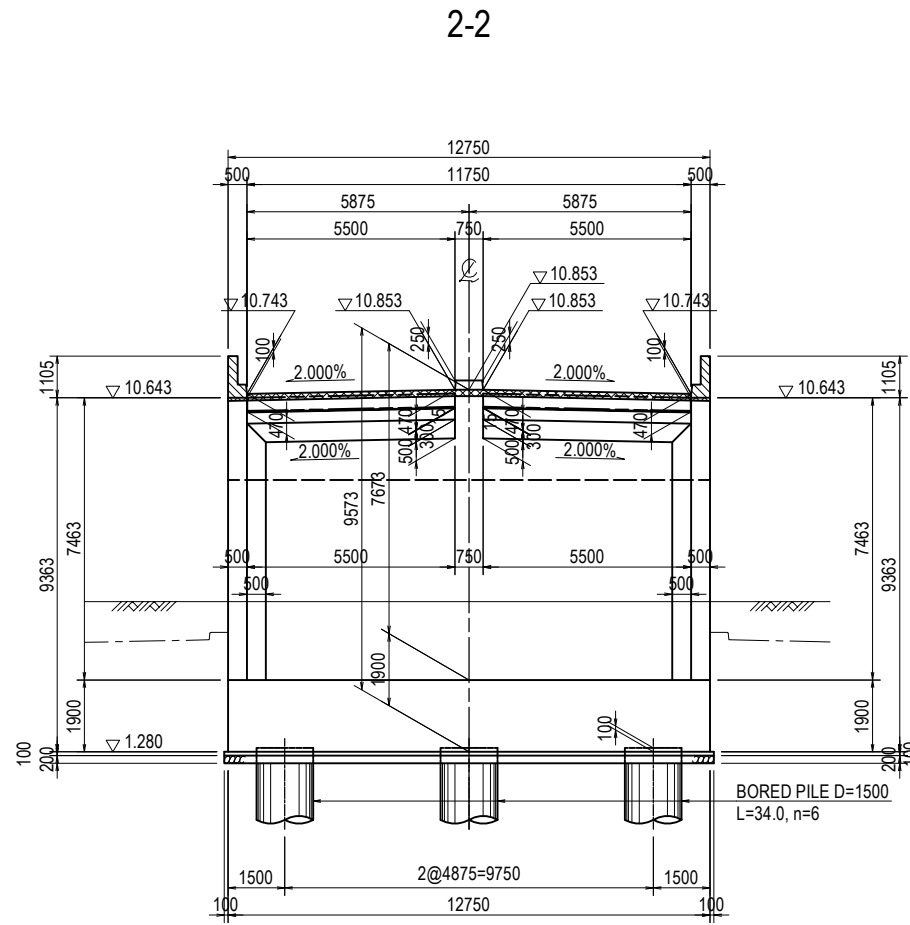
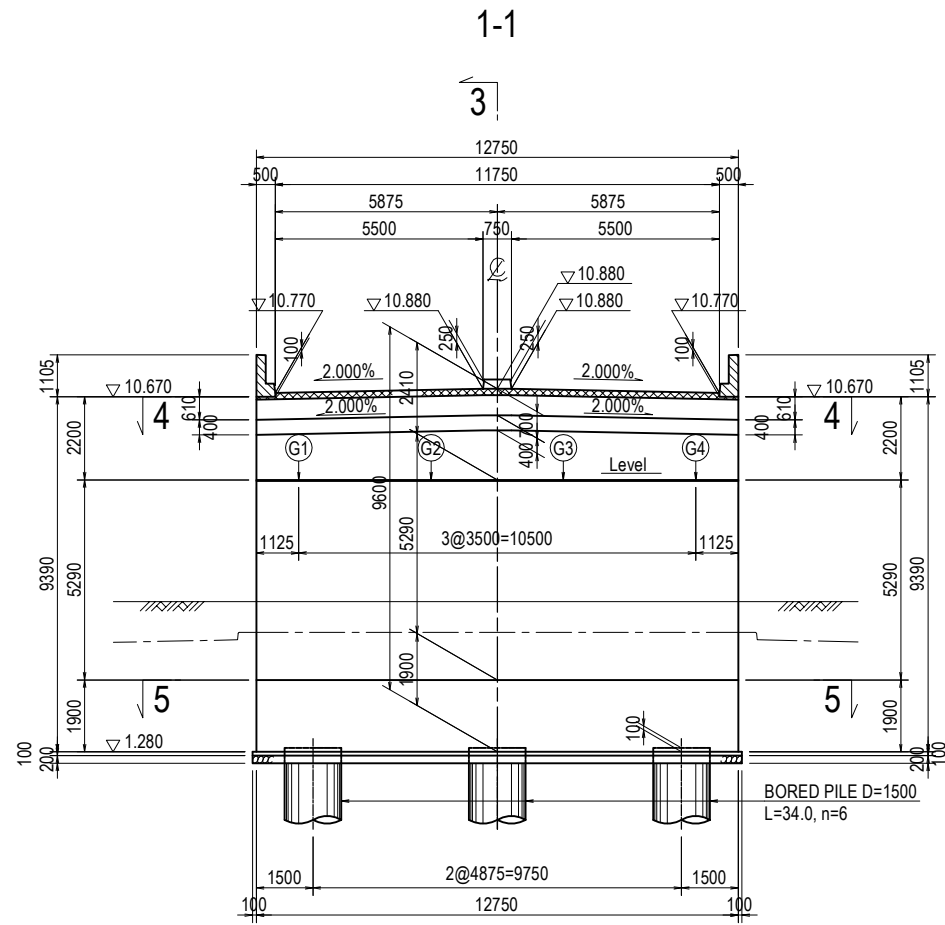
BEARING DETAILS S=1:40



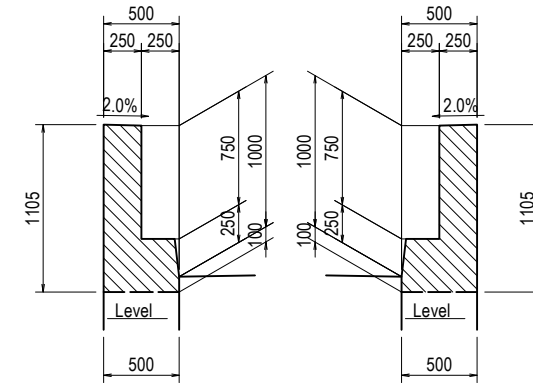
	PF14L					PF14R				
	G1	G2	G3	G4	G5	G1	G2	G3	G4	
BEARING MORTAR(mm)	39	31	35	31	39	49	49	49	49	
BASE HEIGHT(mm)	150	210	250	210	150	-	-	-	-	
LOWER UPPER END HEIGHT	▽ 9.329	▽ 9.329	▽ 9.329	▽ 9.329	▽ 9.329	▽ 10.232	▽ 10.232	▽ 10.232	▽ 10.232	

# GENERAL VIEW OF SUBSTRUCTURE AND FOUNDATION (11)

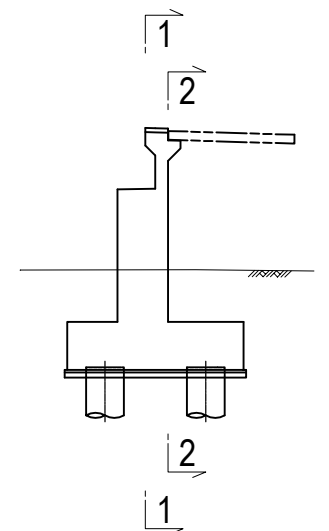
CROSS SECTION S=1:200



## CONCRETE RAILING DETAILS S=1:50



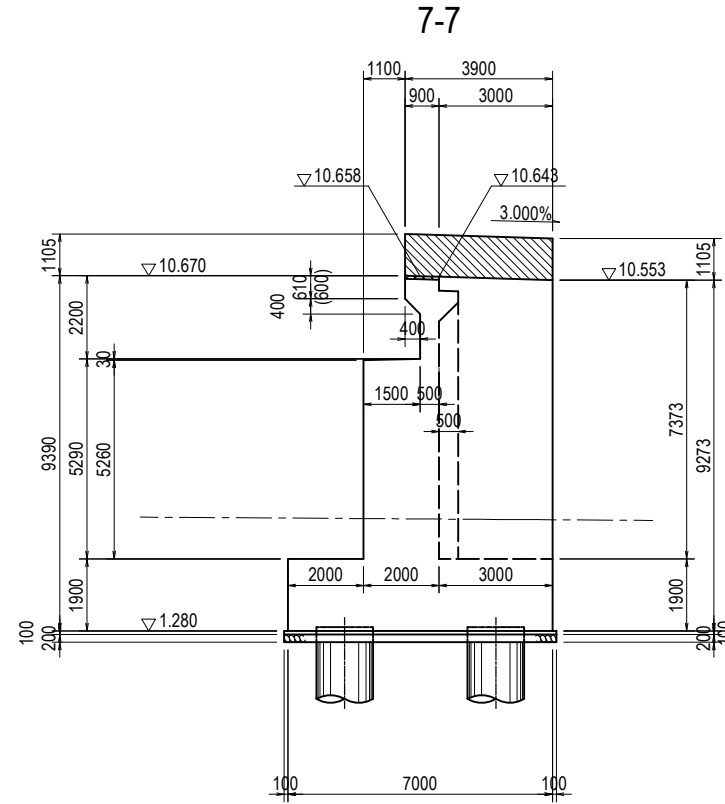
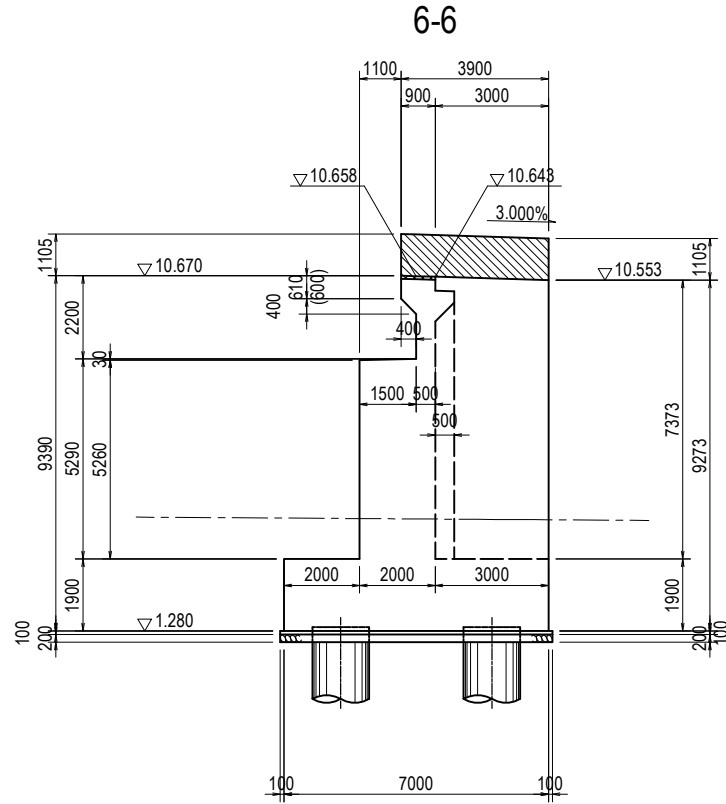
## KEY PLAN



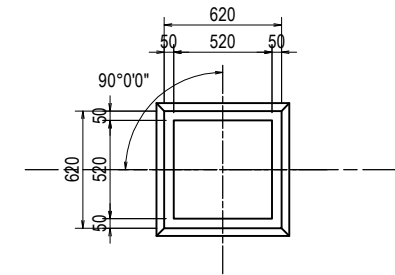
PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	Y. SUZUKI	<i>[Signature]</i>	14 Jul. 2017	GENERAL VIEW OF SUBSTRUCTURE AND FOUNDATION (11)	3
				T. HAYAKAWA	<i>[Signature]</i>	20 Jul. 2017		DWG No.
				Y. SANO	<i>[Signature]</i>	25 Jul. 2017		P3-FO-2012

# GENERAL VIEW OF SUBSTRUCTURE AND FOUNDATION (12)

CROSS SECTION S=1:200

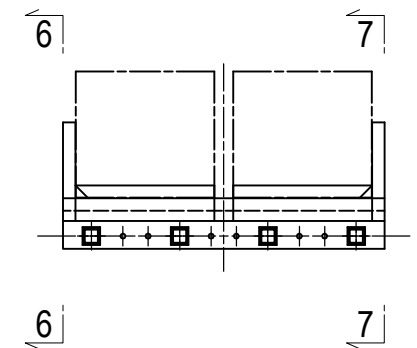


BEARING DETAILS S=1:40



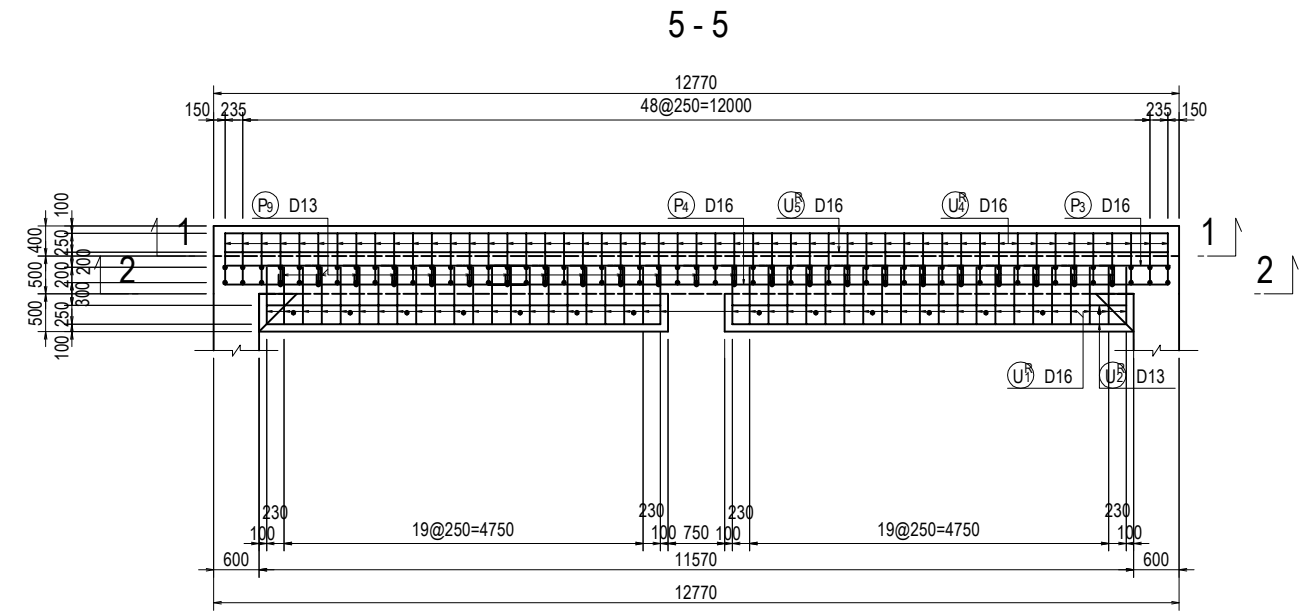
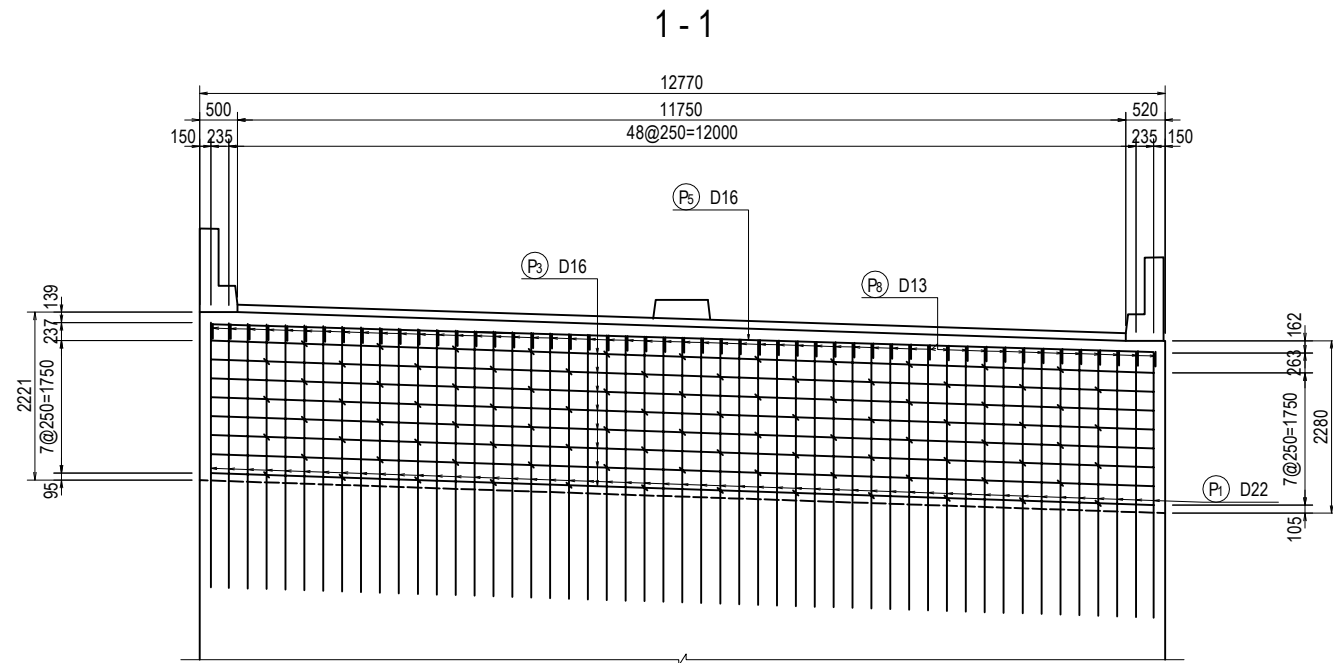
	G1	G2	G3	G4	
BEARING MORTAR(mm)	46	46	46	46	
LOWER UPPER END HEIGHT	▽ 8.450	▽ 8.450	▽ 8.450	▽ 8.450	

KEY PLAN

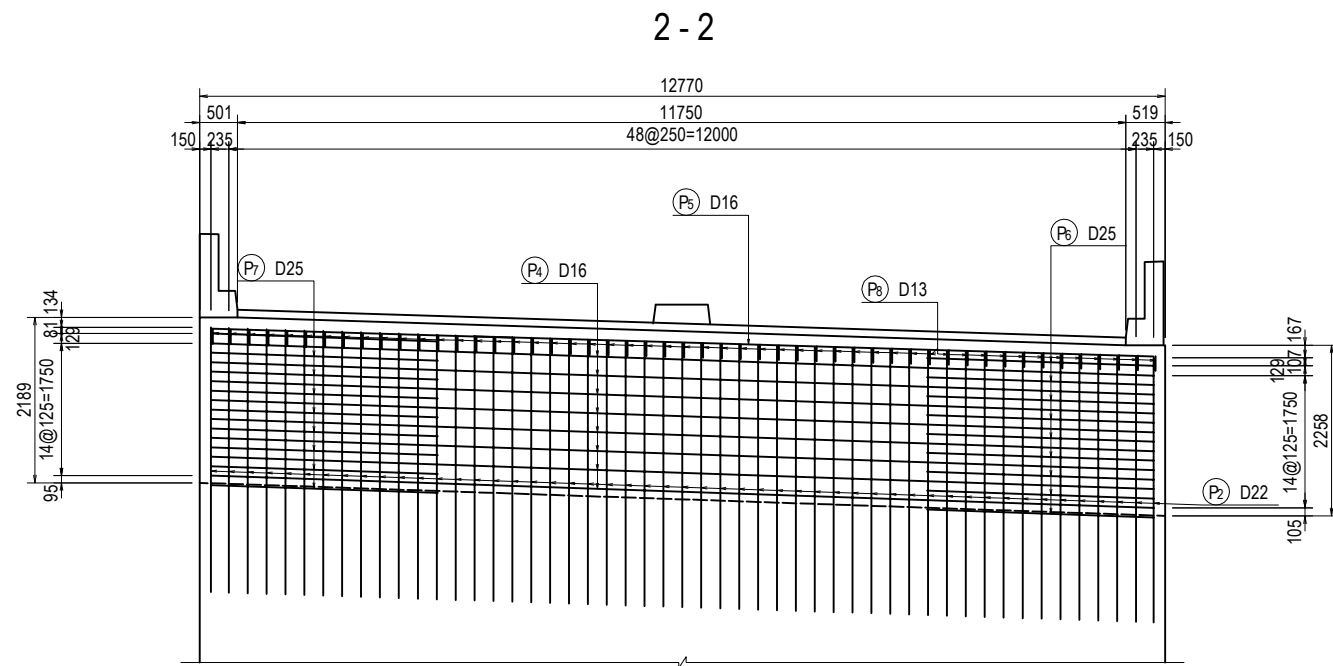


PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	PREPARED BY CHECKED BY APPROVED BY	Y. SUZUKI T. HAYAKAWA Y. SANO	  	14 Jul. 2017 20 Jul. 2017 25 Jul. 2017	GENERAL VIEW OF SUBSTRUCTURE AND FOUNDATION (12)
								3 DWG No. P3-FO-2013

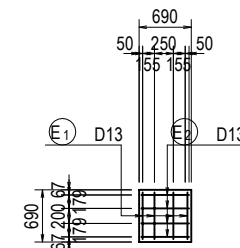
# BAR ARRANGEMENT OF AF1 ABUTMENT (1) S=1:100



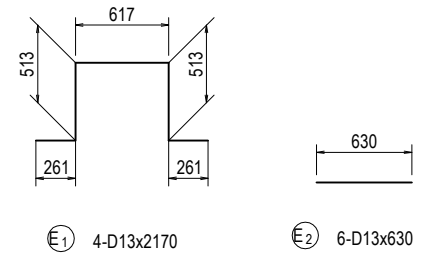
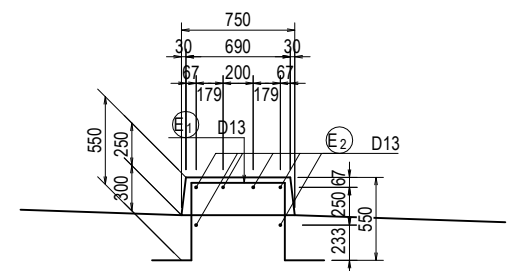
CONCRETE RAILING DETAILS



PLAN S=1:100

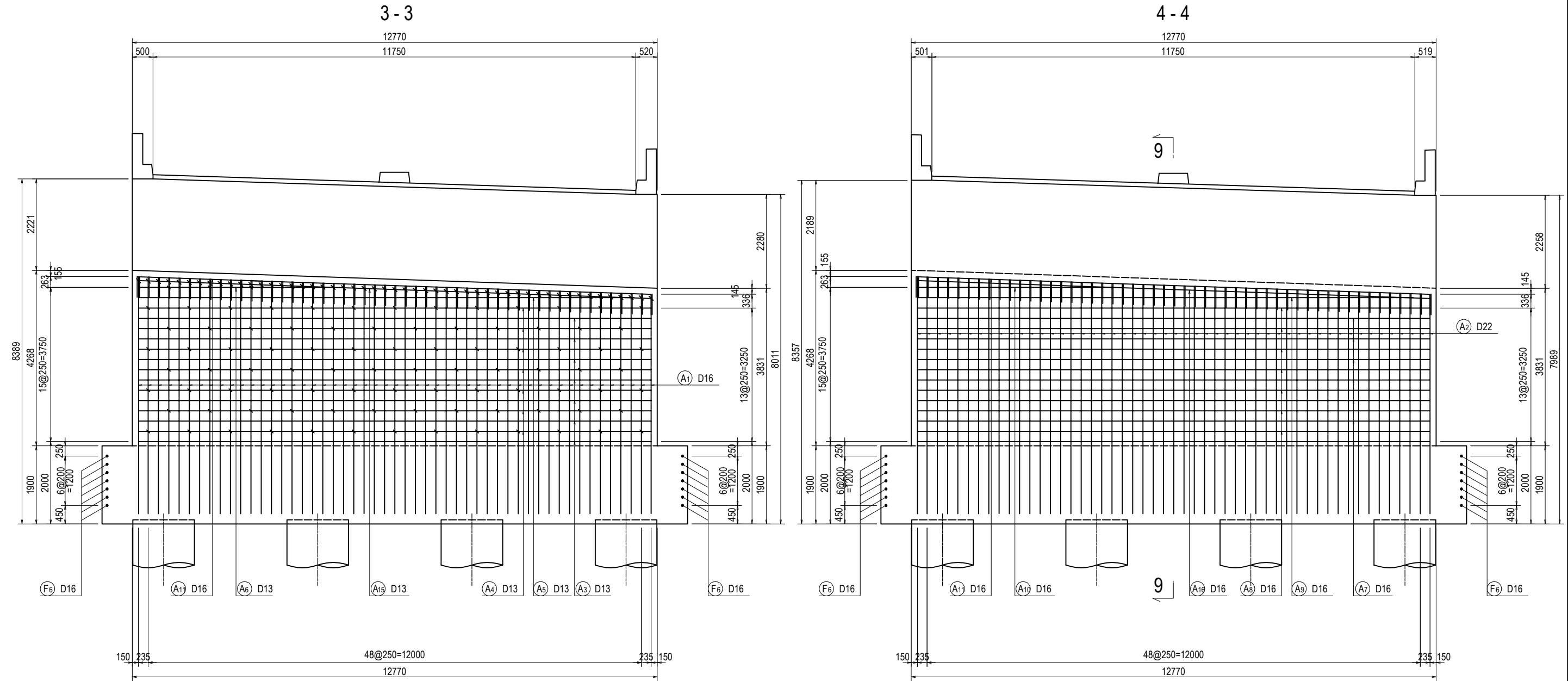


CROSS SECTION S=1:50



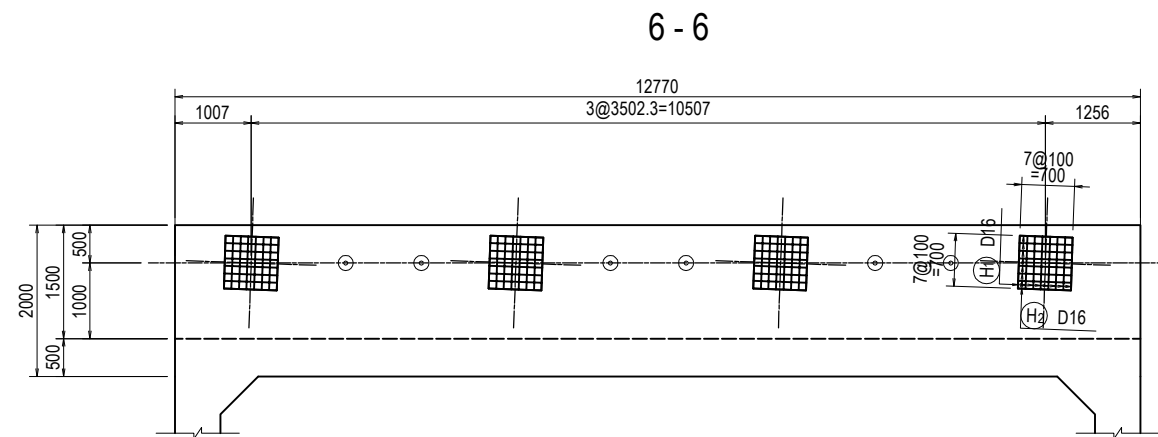
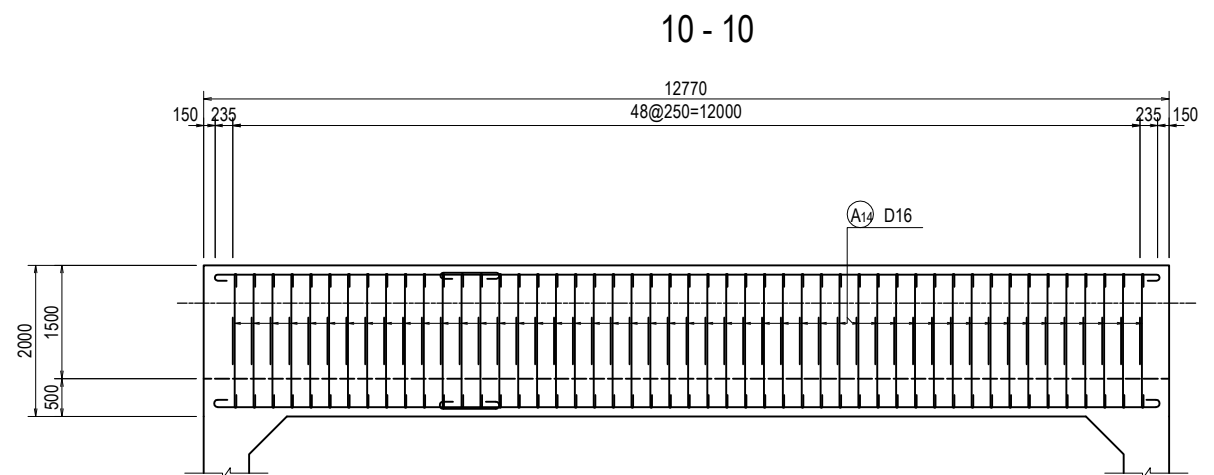
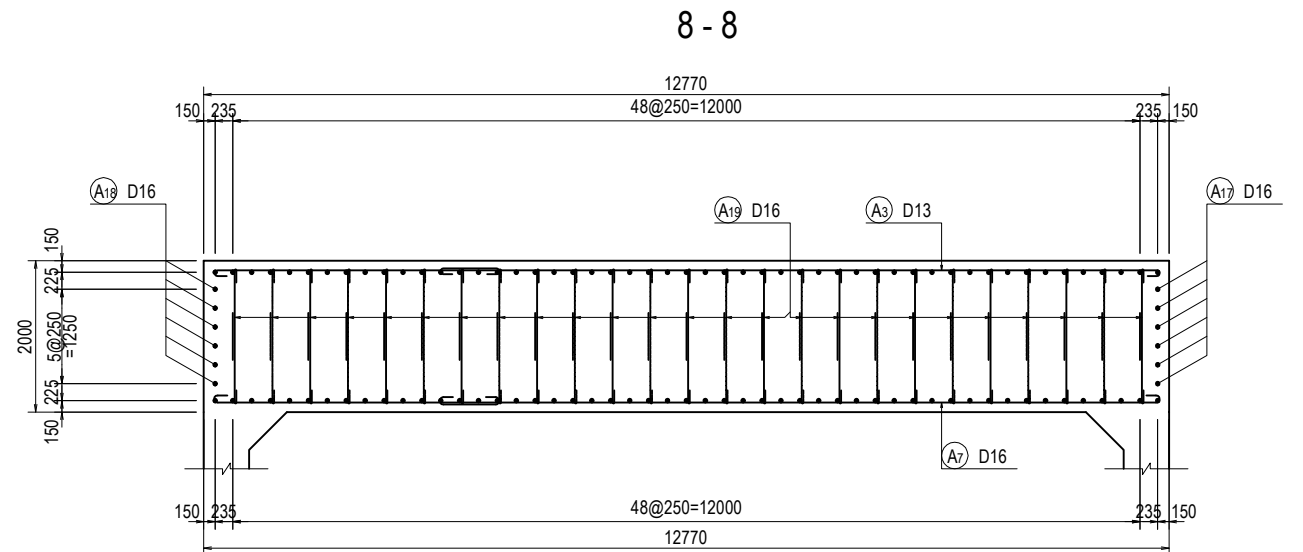
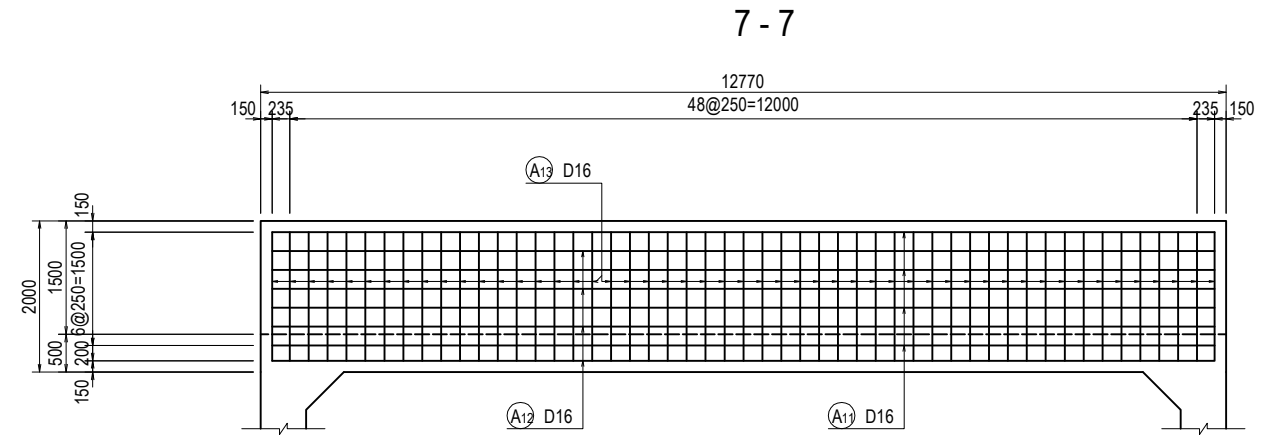
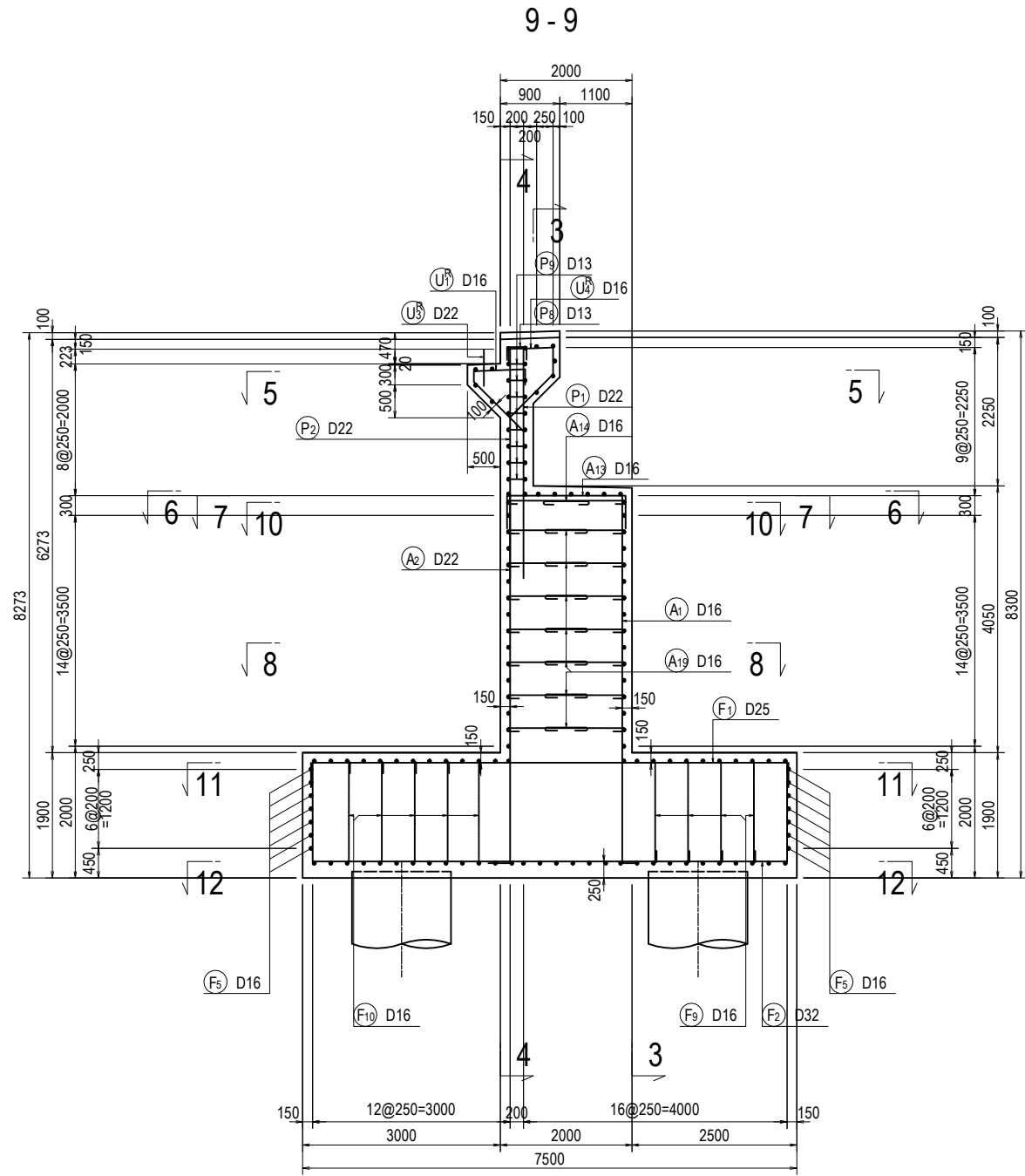
PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE			
				PREPARED BY	Y. SUZUKI				14 Jul. 2017	BAR ARRANGEMENT OF AF1 ABUTMENT (1)	3
				CHECKED BY	T. HAYAKAWA				20 Jul. 2017		DWG No.
				APPROVED BY	Y. SANO				25 Jul. 2017		P3-FO-2014

# BAR ARRANGEMENT OF AF1 ABUTMENT (2) S=1:100



<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="text-align: left;">NAME</th> <th style="text-align: left;">SIGNATURE</th> <th style="text-align: left;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY Y. SUZUKI</td> <td></td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY T. HAYAKAWA</td> <td></td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY Y. SANO</td> <td></td> <td>25 Jul. 2017</td> </tr> </tbody> </table>	NAME	SIGNATURE	DATE	PREPARED BY Y. SUZUKI		14 Jul. 2017	CHECKED BY T. HAYAKAWA		20 Jul. 2017	APPROVED BY Y. SANO		25 Jul. 2017	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">DRAWING TITLE</th> <th style="text-align: left;">PACKAGE</th> </tr> </thead> <tbody> <tr> <td rowspan="3" style="text-align: center; vertical-align: middle;">                     BAR ARRANGEMENT OF AF1 ABUTMENT (2)                 </td> <td>3</td> </tr> <tr> <td>DWG No.</td> </tr> <tr> <td>P3-FO-2015</td> </tr> </tbody> </table>	DRAWING TITLE	PACKAGE	BAR ARRANGEMENT OF AF1 ABUTMENT (2)	3	DWG No.	P3-FO-2015
NAME	SIGNATURE	DATE																						
PREPARED BY Y. SUZUKI		14 Jul. 2017																						
CHECKED BY T. HAYAKAWA		20 Jul. 2017																						
APPROVED BY Y. SANO		25 Jul. 2017																						
DRAWING TITLE	PACKAGE																							
BAR ARRANGEMENT OF AF1 ABUTMENT (2)	3																							
	DWG No.																							
	P3-FO-2015																							

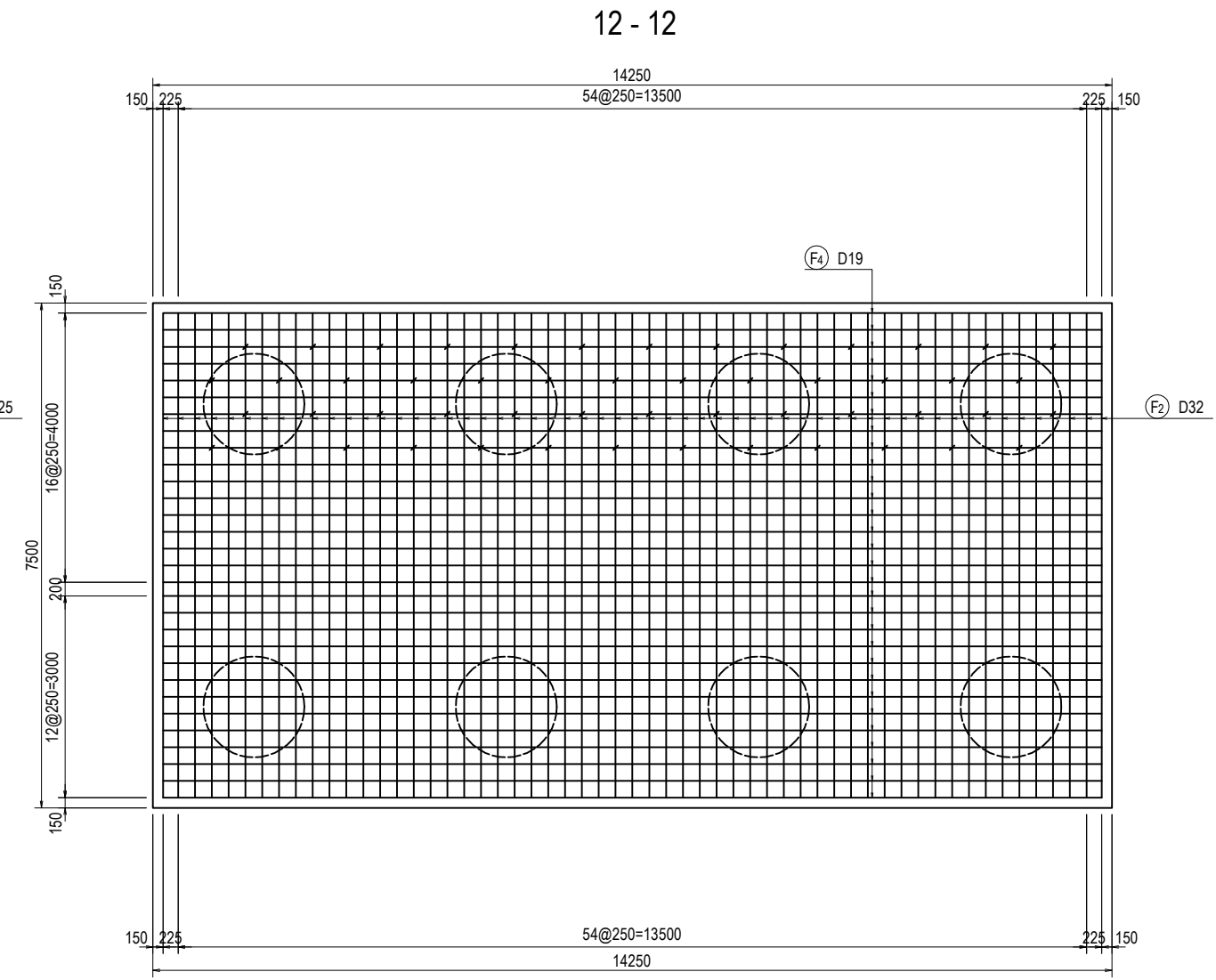
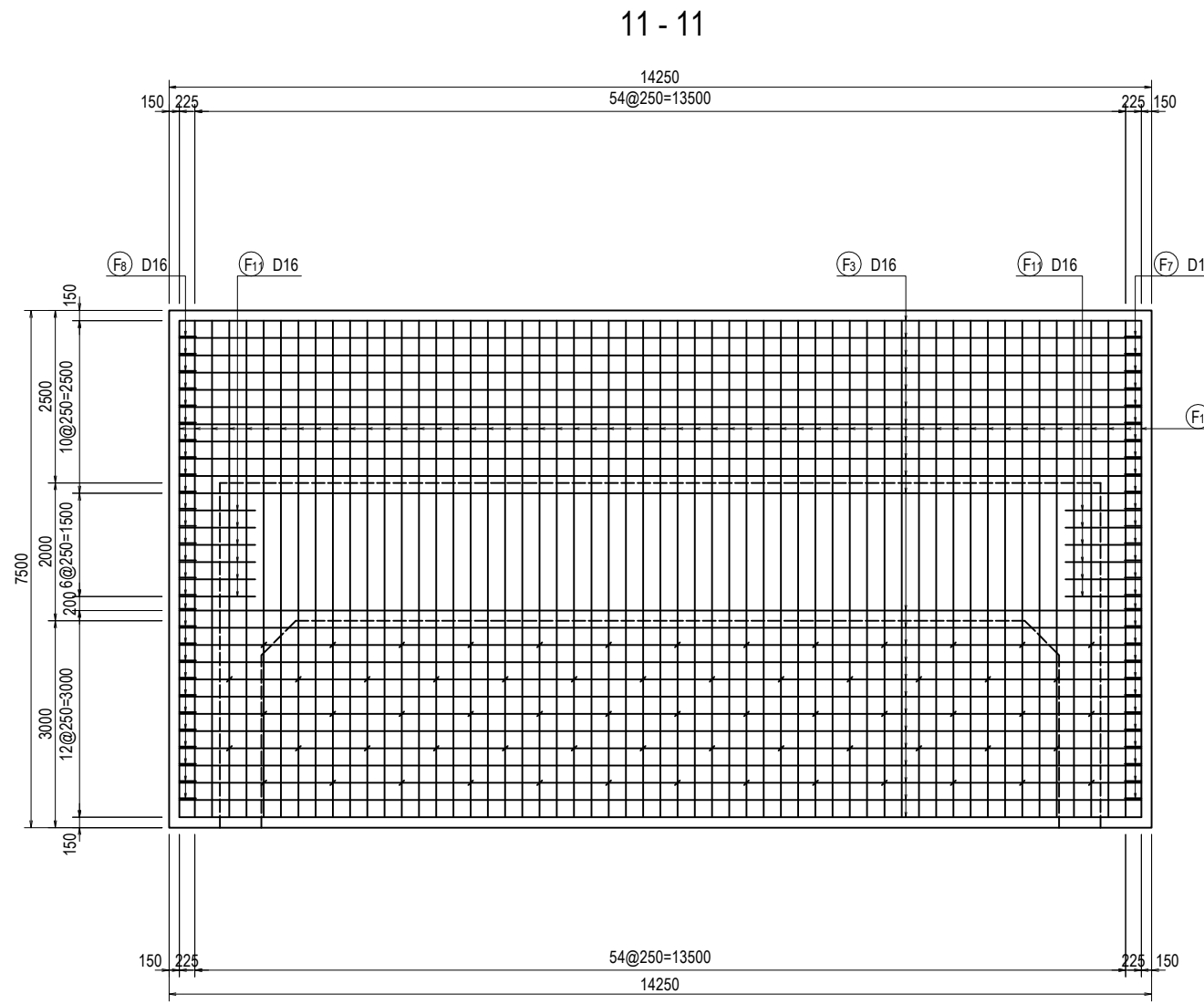
# BAR ARRANGEMENT OF AF1 ABUTMENT (3) S=1:100



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 Y. SUZUKI CHECKED BY T. HAYAKAWA APPROVED BY Y. SANO	SIGNATURE   	DATE 14 Jul. 2017 20 Jul. 2017 25 Jul. 2017	DRAWING TITLE BAR ARRANGEMENT OF AF1 ABUTMENT (3)	PACKAGE 3 DWG No. P3-FO-2016
---------------------------------------------------------------------------------	----------------------------------------------------------	-----------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------	-----------------------	------------------------------------------------------	------------------------------------------------------	---------------------------------------



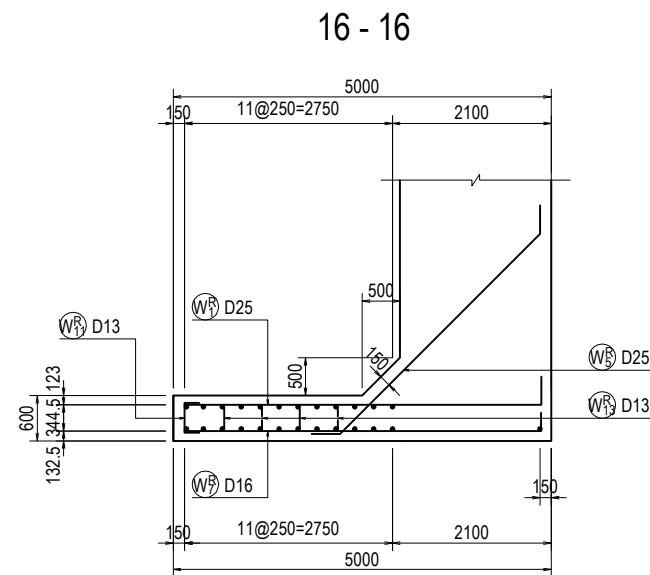
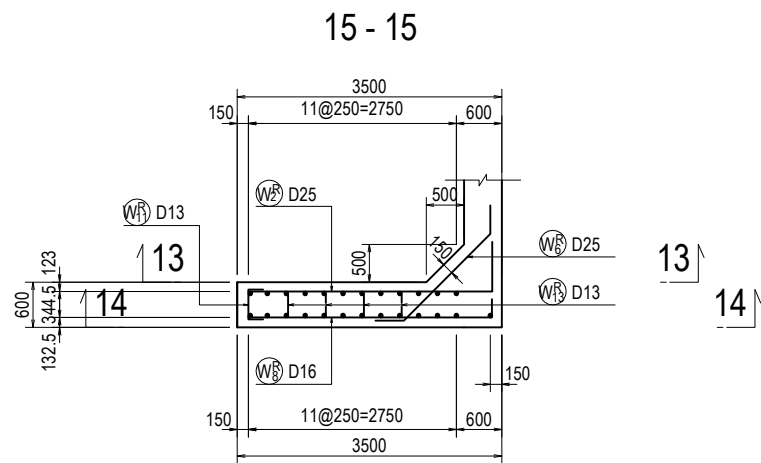
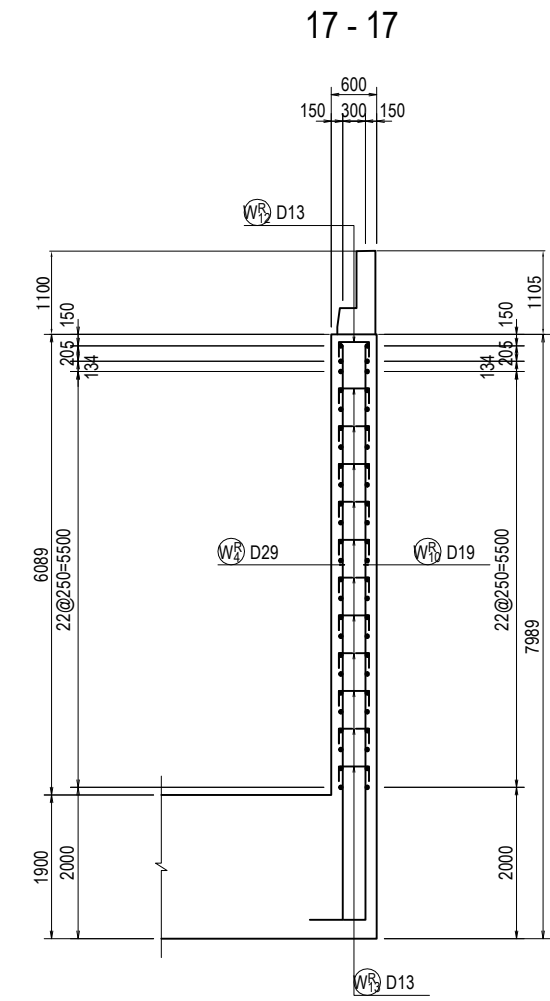
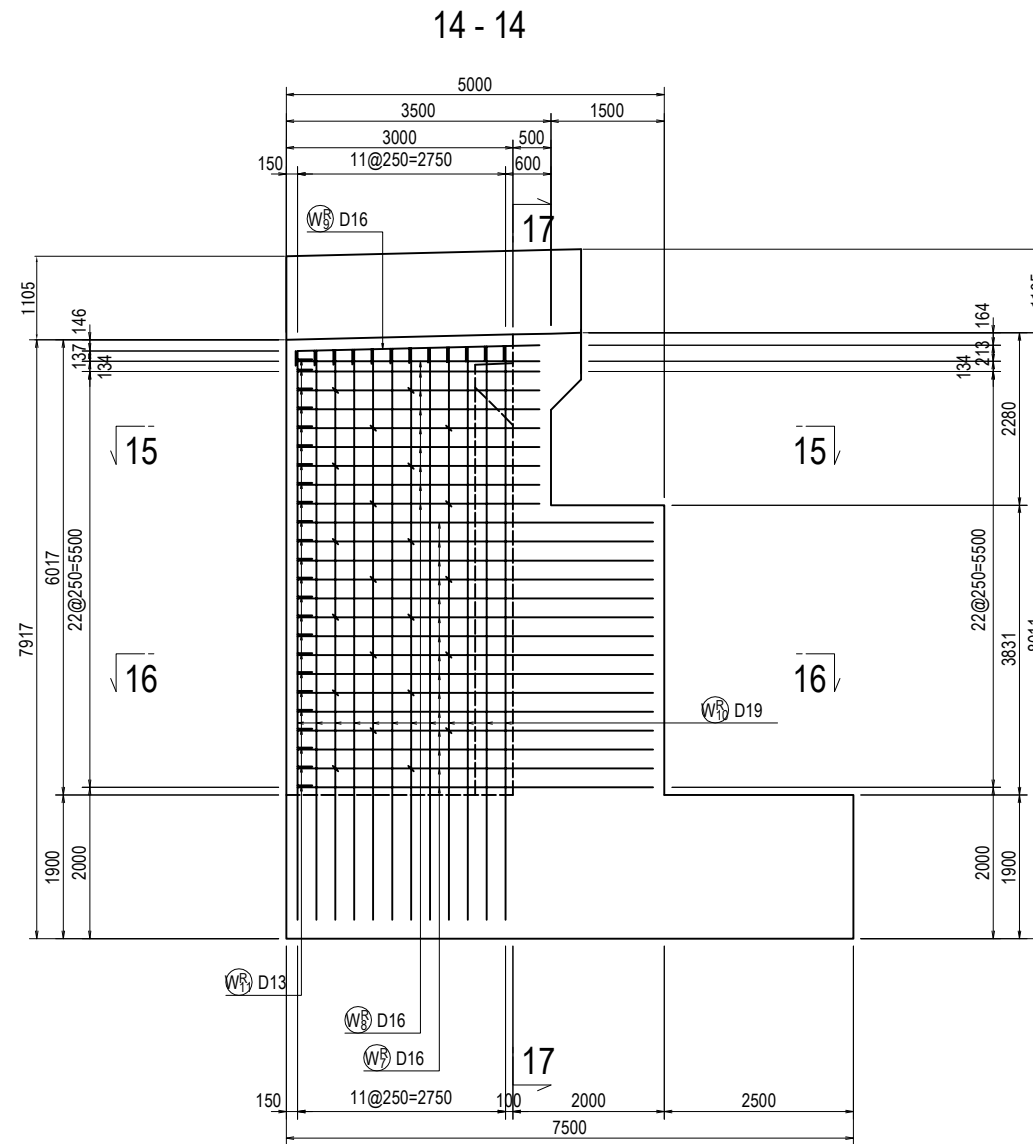
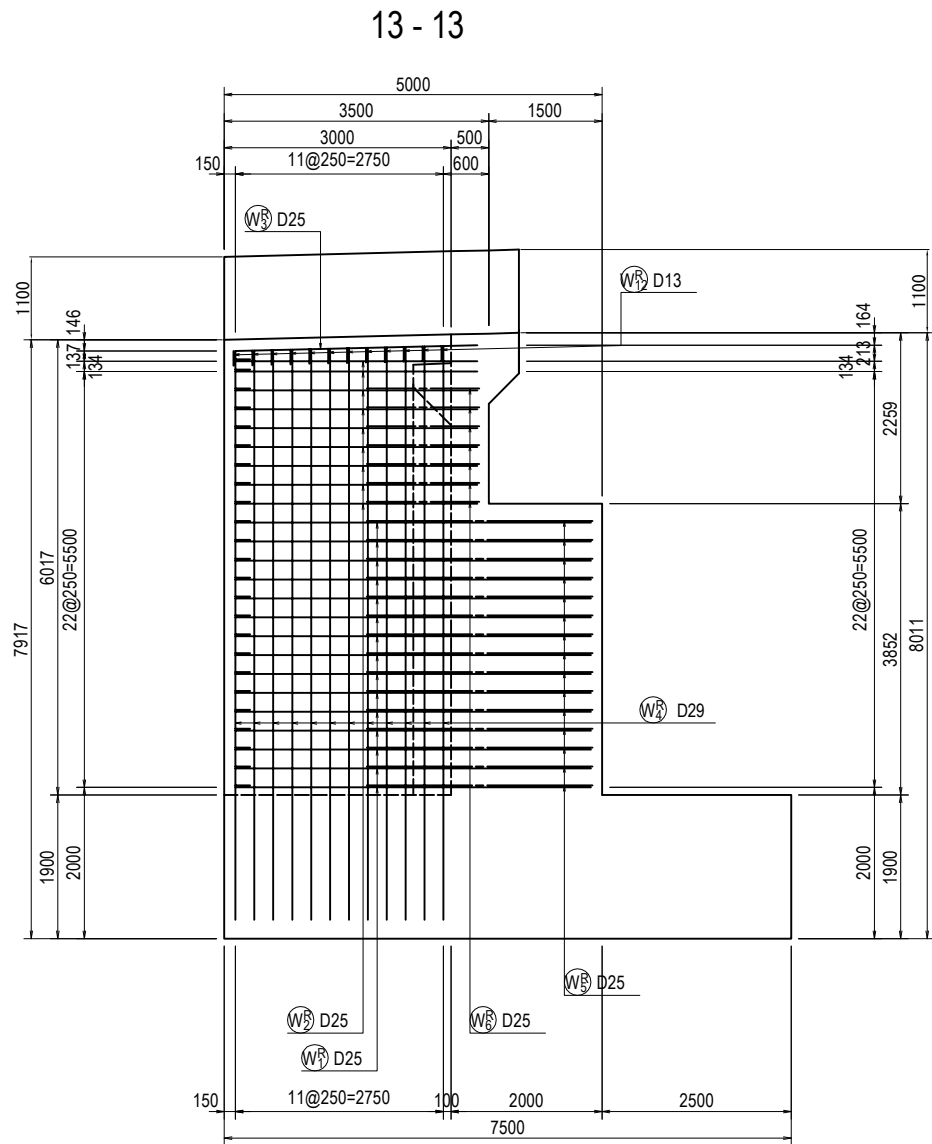
# BAR ARRANGEMENT OF AF1 ABUTMENT (4) S=1:100



<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: 10%;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY</td> <td>Y. SUZUKI</td> <td><i>YS</i></td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY</td> <td>T. HAYAKAWA</td> <td><i>Hayakawa</i></td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY</td> <td>Y. SANO</td> <td><i>San</i></td> <td>25 Jul. 2017</td> </tr> </tbody> </table>		NAME	SIGNATURE	DATE	PREPARED BY	Y. SUZUKI	<i>YS</i>	14 Jul. 2017	CHECKED BY	T. HAYAKAWA	<i>Hayakawa</i>	20 Jul. 2017	APPROVED BY	Y. SANO	<i>San</i>	25 Jul. 2017	<small>DRAWING TITLE</small> BAR ARRANGEMENT OF AF1 ABUTMENT (4)	<small>PACKAGE</small> 3 DWG No. P3-FO-2017
	NAME	SIGNATURE	DATE																			
PREPARED BY	Y. SUZUKI	<i>YS</i>	14 Jul. 2017																			
CHECKED BY	T. HAYAKAWA	<i>Hayakawa</i>	20 Jul. 2017																			
APPROVED BY	Y. SANO	<i>San</i>	25 Jul. 2017																			

# BAR ARRANGEMENT OF AF1 ABUTMENT (5)

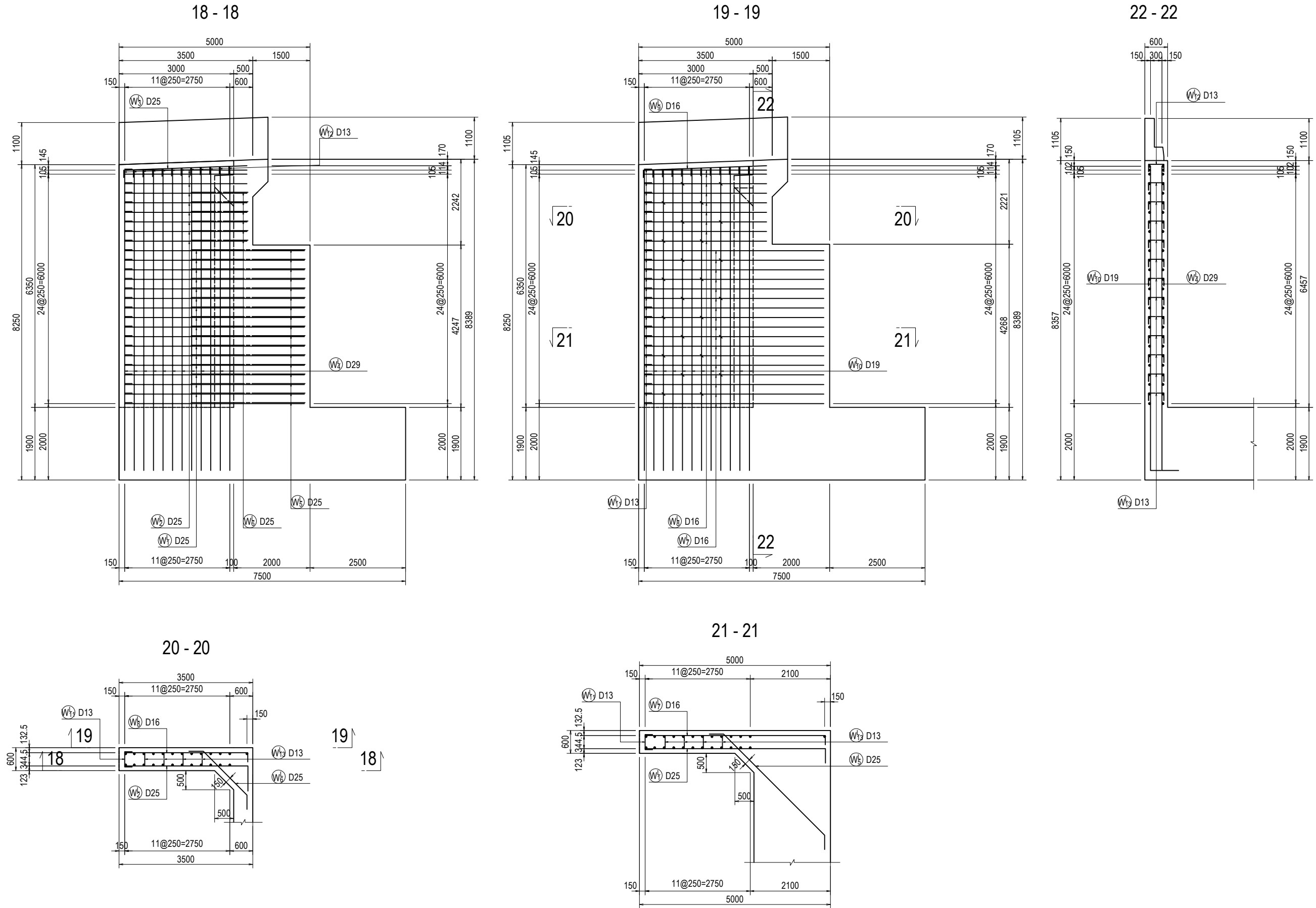
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PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	PREPARED BY Y. SUZUKI	<i>YS</i>	14 Jul. 2017	BAR ARRANGEMENT OF AF1 ABUTMENT (5)	3
				CHECKED BY T. HAYAKAWA	<i>Hayakawa</i>	20 Jul. 2017		DWG No.
				APPROVED BY Y. SANO	<i>Y. Sano</i>	25 Jul. 2017		P3-FO-2018

# BAR ARRANGEMENT OF AF1 ABUTMENT (6)

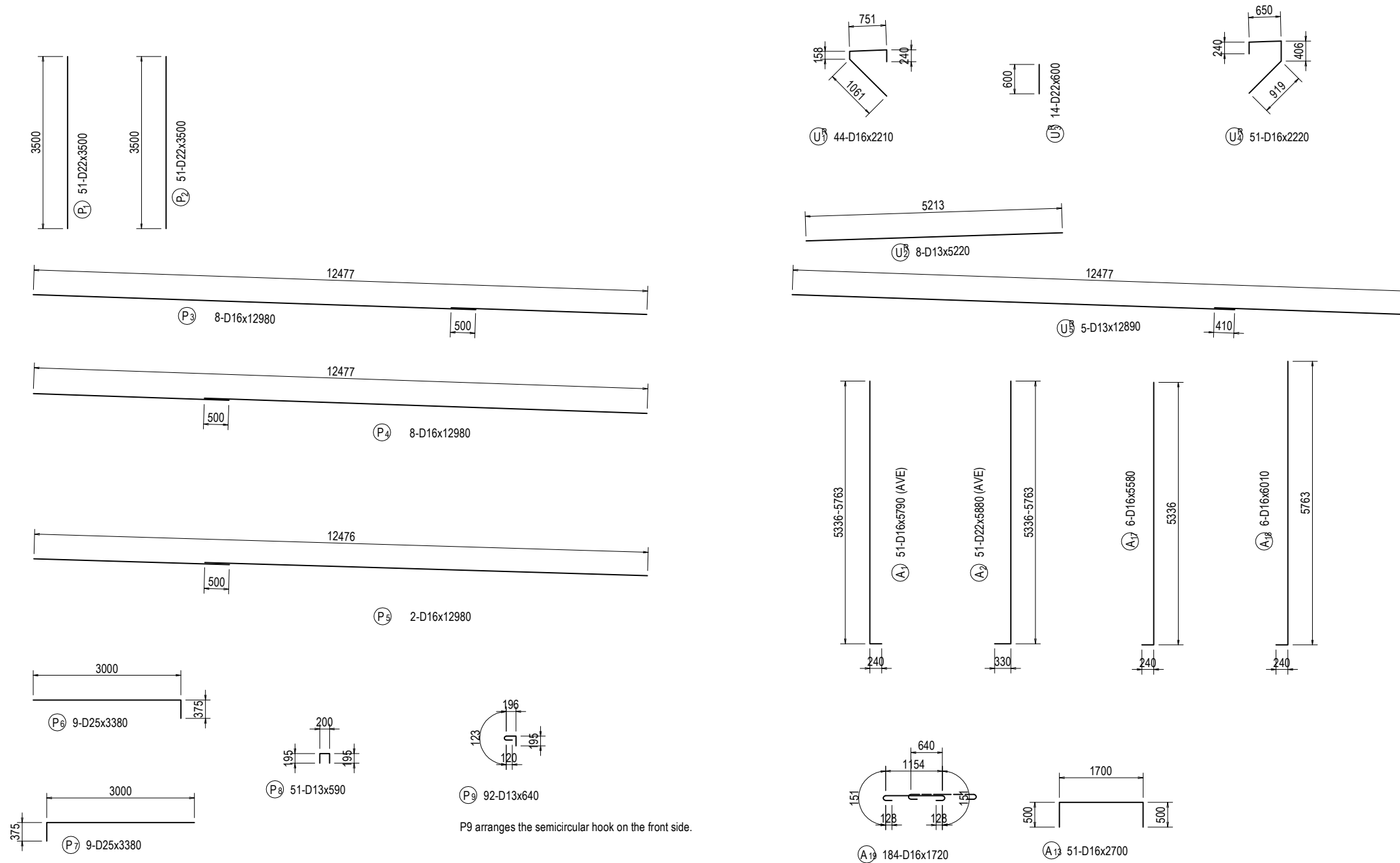
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PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	PREPARED BY CHECKED BY APPROVED BY	Y. SUZUKI T. HAYAKAWA Y. SANO	14 Jul. 2017 20 Jul. 2017 25 Jul. 2017	BAR ARRANGEMENT OF AF1 ABUTMENT (6)	3 DWG No. P3-FO-2019

# BAR ARRANGEMENT OF AF1 ABUTMENT (7)

S=1:100



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.

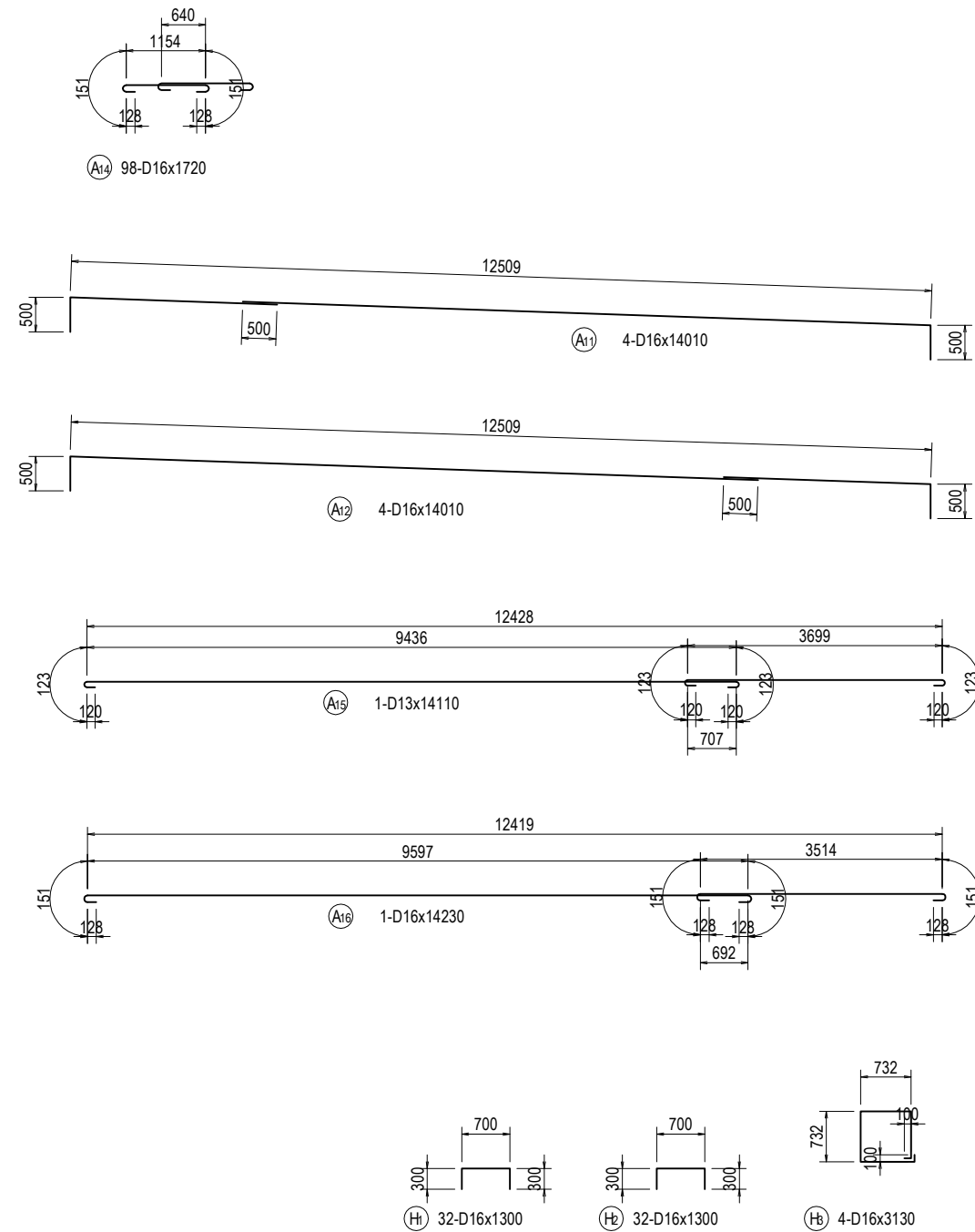
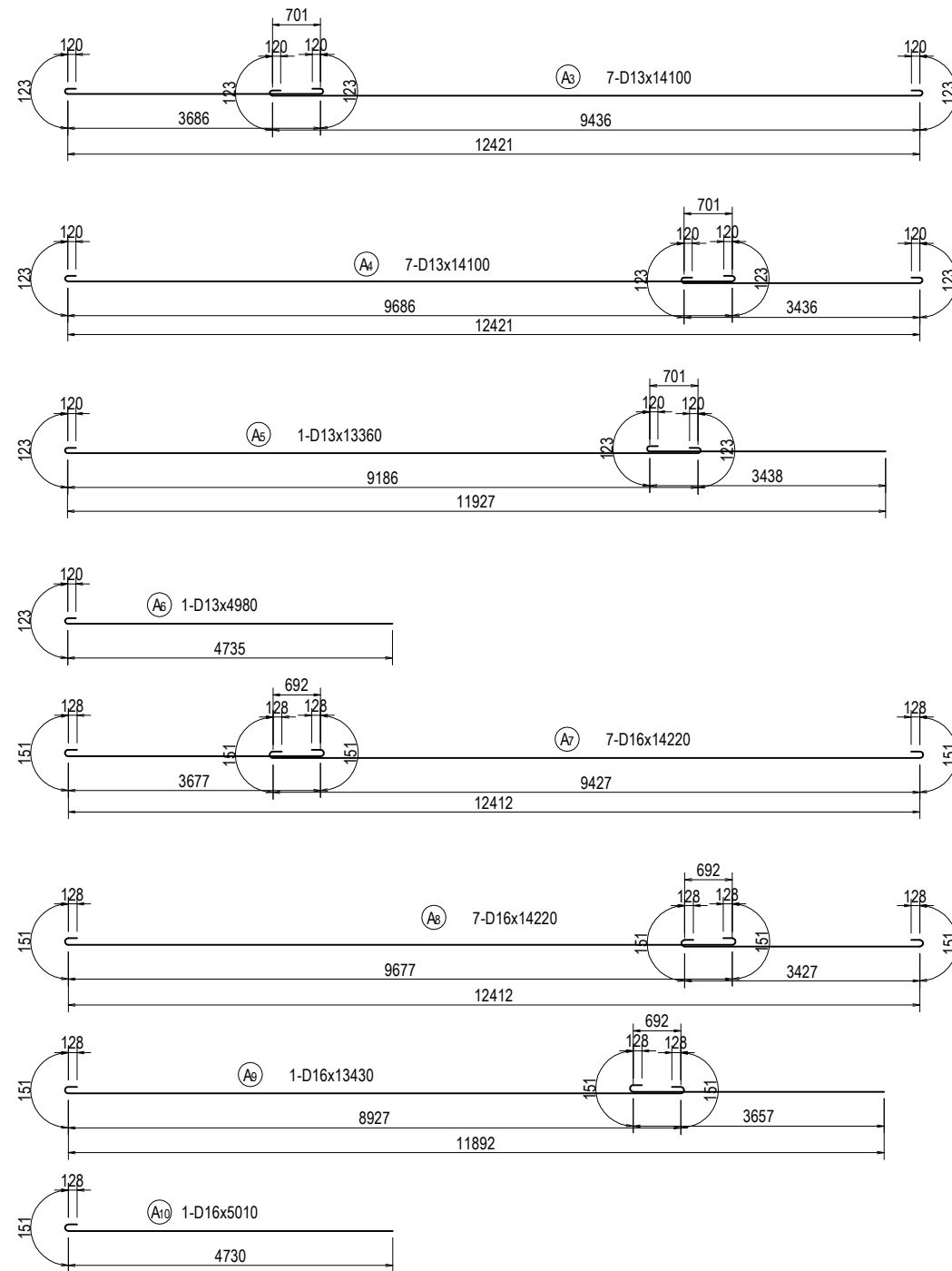
	NAME	SIGNATURE	DATE
PREPARED BY	Y. SUZUKI		14 Jul. 2017
CHECKED BY	T. HAYAKAWA		20 Jul. 2017
APPROVED BY	Y. SANO		25 Jul. 2017

DRAWING TITLE  
BAR ARRANGEMENT OF AF1 ABUTMENT (7)

PACKAGE  
3  
DWG No.  
P3-FO-2020

# BAR ARRANGEMENT OF AF1 ABUTMENT (8)

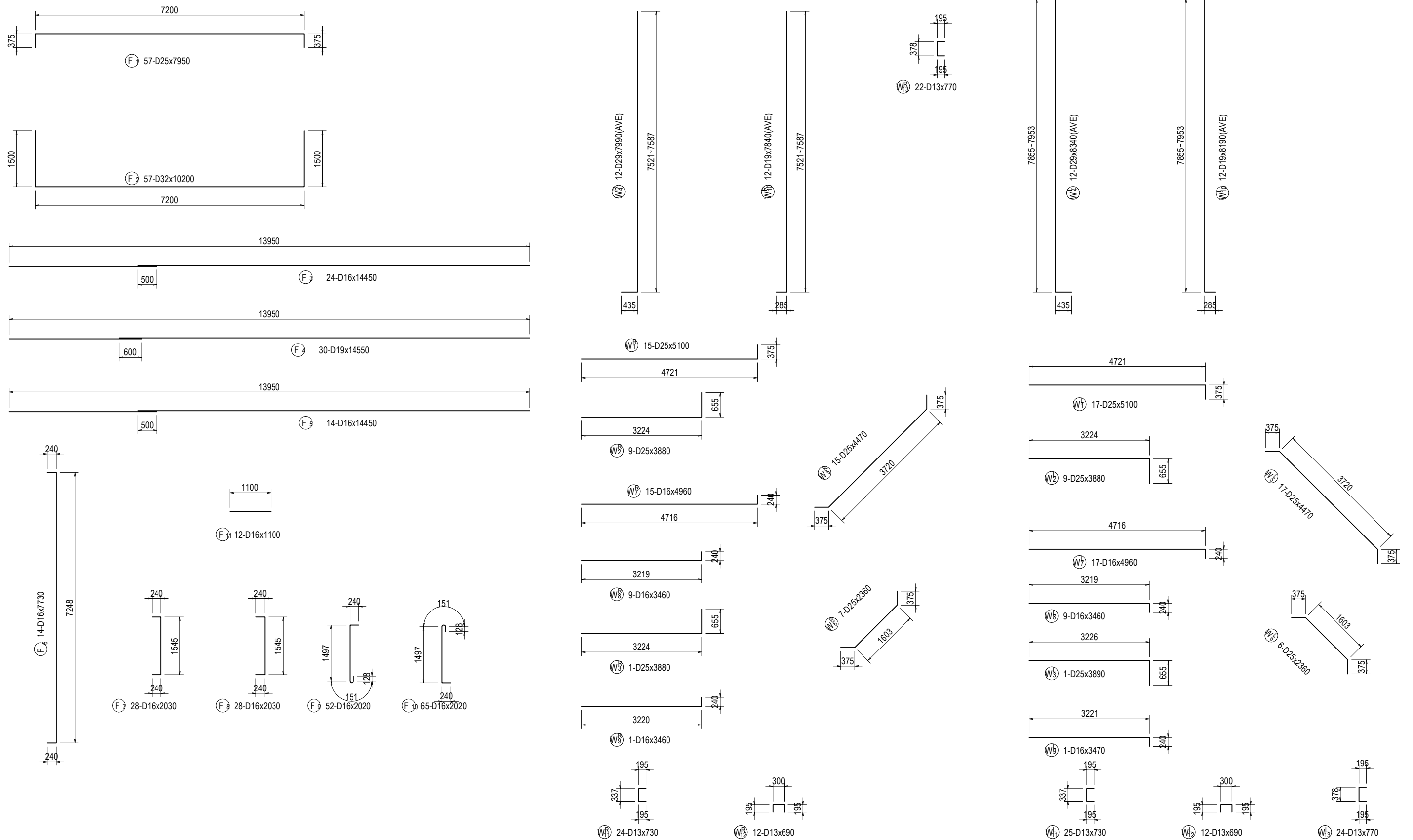
S=1:100



PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	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 Y. SUZUKI		14 Jul. 2017	BAR ARRANGEMENT OF AF1 ABUTMENT (8)	3
				CHECKED BY T. HAYAKAWA		20 Jul. 2017		DWG No.
				APPROVED BY Y. SANO		25 Jul. 2017		P3-FO-2021

# BAR ARRANGEMENT OF AF1 ABUTMENT (9)

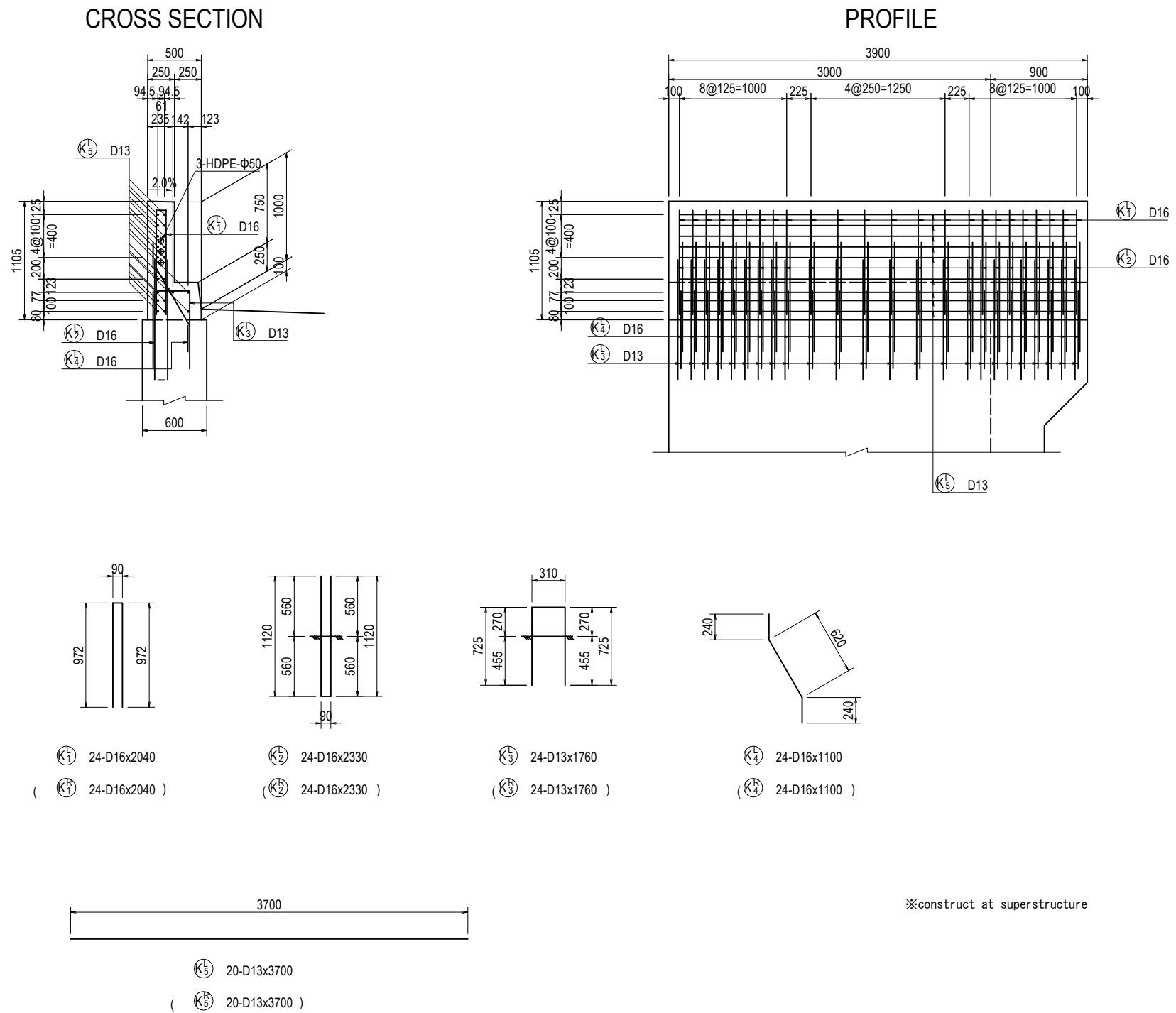
S=1:100



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 AF1 ABUTMENT (9)	PACKAGE	
				PREPARED BY	Y. SUZUKI			14 Jul. 2017	3
				CHECKED BY	T. HAYAKAWA			20 Jul. 2017	DWG No.
				APPROVED BY	Y. SANO			25 Jul. 2017	P3-FO-2022



# BAR ARRANGEMENT OF AF1 ABUTMENT (10) S=1:50



<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: 10%;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY</td> <td>Y. SUZUKI</td> <td></td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY</td> <td>T. HAYAKAWA</td> <td></td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY</td> <td>Y. SANO</td> <td></td> <td>25 Jul. 2017</td> </tr> </tbody> </table>		NAME	SIGNATURE	DATE	PREPARED BY	Y. SUZUKI		14 Jul. 2017	CHECKED BY	T. HAYAKAWA		20 Jul. 2017	APPROVED BY	Y. SANO		25 Jul. 2017	<small>DRAWING TITLE</small> <b>BAR ARRANGEMENT OF AF1 ABUTMENT (10)</b>	<small>PACKAGE</small> 3 DWG No. P3-FO-2023
	NAME	SIGNATURE	DATE																			
PREPARED BY	Y. SUZUKI		14 Jul. 2017																			
CHECKED BY	T. HAYAKAWA		20 Jul. 2017																			
APPROVED BY	Y. SANO		25 Jul. 2017																			

# BAR ARRANGEMENT OF AF1 ABUTMENT (11)

## BAR LIST

REBAR NO.	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT/ONE (kg)	WEIGHT (kg)	REMARKS
P1	D22	3500	51	3.04	10.64	543	
2	D22	3500	51	3.04	10.64	543	
3	D16	12980	8	1.56	20.25	162	
4	D16	12980	8	1.56	20.25	162	
5	D16	12980	2	1.56	20.25	41	
6	D25	3380	9	3.98	13.45	121	
7	D25	3380	9	3.98	13.45	121	
8	D13	590	51	0.995	0.59	30	
9	D13	640	92	0.995	0.64	59	
1782 kg							
U <sup>R</sup>	D16	2210	44	1.56	3.45	152	
2 <sup>R</sup>	D13	5220	8	0.995	5.19	42	
3 <sup>R</sup>	D22	600	14	3.04	1.82	25	
4 <sup>R</sup>	D16	2220	51	1.56	3.46	176	
5 <sup>R</sup>	D13	12890	5	0.995	12.83	64	
459 kg							
A1	D16	5790	51	1.56	9.03	461	AVERAGE
2	D22	5880	51	3.04	17.88	912	AVERAGE
3	D13	14100	7	0.995	14.03	98	
4	D13	14100	7	0.995	14.03	98	
5	D13	13360	1	0.995	13.29	13	
6	D13	4980	1	0.995	4.96	5	
7	D16	14220	7	1.56	22.18	155	
8	D16	14220	7	1.56	22.18	155	
9	D16	13430	1	1.56	20.95	21	
10	D16	5010	1	1.56	7.82	8	
11	D16	14010	4	1.56	21.86	87	
12	D16	14010	4	1.56	21.86	87	
13	D16	2700	51	1.56	4.21	215	
14	D16	1720	98	1.56	2.68	263	
15	D13	14110	1	0.995	14.04	14	
16	D16	14230	1	1.56	22.20	22	
17	D16	5580	6	1.56	8.70	52	
18	D16	6010	6	1.56	9.38	56	
19	D16	1720	184	1.56	2.68	493	
3215 kg							
H1	D16	1300	32	1.56	2.03	65	
2	D16	1300	32	1.56	2.03	65	
3	D16	3130	4	1.56	4.88	20	
150 kg							
F1	D25	7950	57	3.98	31.64	1803	
2	D32	10200	57	6.23	63.55	3622	
3	D16	14450	24	1.56	22.54	541	
4	D19	14550	30	2.25	32.74	982	
5	D16	14450	14	1.56	22.54	316	
6	D16	7730	14	1.56	12.06	169	
7	D16	2030	28	1.56	3.17	89	
8	D16	2030	28	1.56	3.17	89	
9	D16	2020	52	1.56	3.15	164	
10	D16	2020	65	1.56	3.15	205	
11	D16	1100	12	1.56	1.72	21	
8001 kg							

## BAR LIST

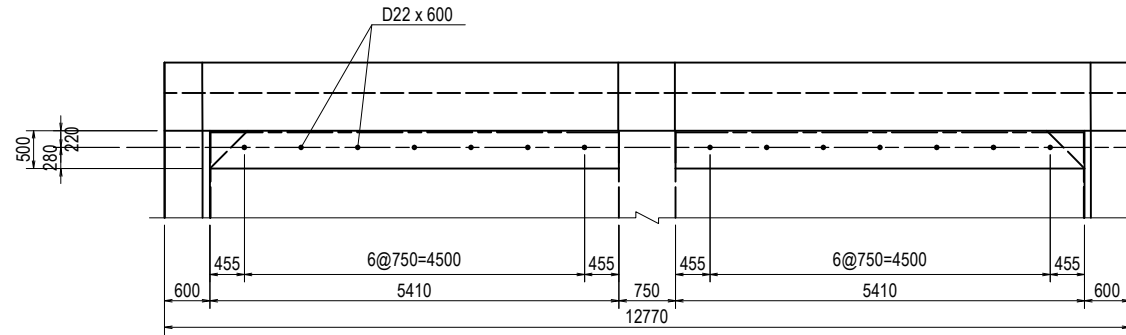
REBAR NO.	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT/ONE (kg)	WEIGHT (kg)	REMARKS
W1	D25	5100	17	3.98	20.30	345	
2	D25	3880	9	3.98	15.44	139	
3	D25	3890	1	3.98	15.48	15	
4	D29	8340	12	5.04	42.03	504	AVERAGE
5	D25	4470	17	3.98	17.79	302	
6	D25	2360	6	3.98	9.39	56	
7	D16	4960	17	1.56	7.74	132	
8	D16	3460	9	1.56	5.40	49	
9	D16	3470	1	1.56	5.41	5	
10	D19	8190	12	2.25	18.43	221	AVERAGE
11	D13	730	25	0.995	0.73	18	
12	D13	690	12	0.995	0.69	8	
13	D13	770	24	0.995	0.77	18	
1812 kg							
W <sup>R</sup>	D25	5100	15	3.98	20.30	305	
2 <sup>R</sup>	D25	3880	9	3.98	15.44	139	
3 <sup>R</sup>	D25	3880	1	3.98	15.44	15	
4 <sup>R</sup>	D29	7990	12	5.04	40.27	483	AVERAGE
5 <sup>R</sup>	D25	4470	15	3.98	17.79	267	
6 <sup>R</sup>	D25	2360	7	3.98	9.39	66	
7 <sup>R</sup>	D16	4960	15	1.56	7.74	116	
8 <sup>R</sup>	D16	3460	9	1.56	5.40	49	
9 <sup>R</sup>	D16	3460	1	1.56	5.40	5	
10 <sup>R</sup>	D19	7840	12	2.25	17.64	212	AVERAGE
11 <sup>R</sup>	D13	730	24	0.995	0.73	18	
12 <sup>R</sup>	D13	690	12	0.995	0.69	8	
13 <sup>R</sup>	D13	770	22	0.995	0.77	17	
1700 kg							
E1	D13	2170	4	0.995	2.16	9	
2	D13	630	6	0.995	0.63	4	
13 kg							
K1	D16	2040	24	1.56	3.18	76	
2	D16	2330	24	1.56	3.63	87	
3	D13	1760	24	0.995	1.75	42	
4	D16	1100	24	1.56	1.72	41	
5	D13	3700	20	0.995	3.68	74	
320 kg							
K <sup>R</sup>	D16	2040	24	1.56	3.18	76	
2 <sup>R</sup>	D16	2330	24	1.56	3.63	87	
3 <sup>R</sup>	D13	1760	24	0.995	1.75	42	
4 <sup>R</sup>	D16	1100	24	1.56	1.72	41	
5 <sup>R</sup>	D13	3700	20	0.995	3.68	74	
320 kg							
				D13	755	kg	
				D16	5276	kg	
				D19	1415	kg	
				D22	2023	kg	
				D25	3694	kg	
				D29	987	kg	
				D32	3622	kg	
				TOTAL	17772	kg	

※construct at superstructure

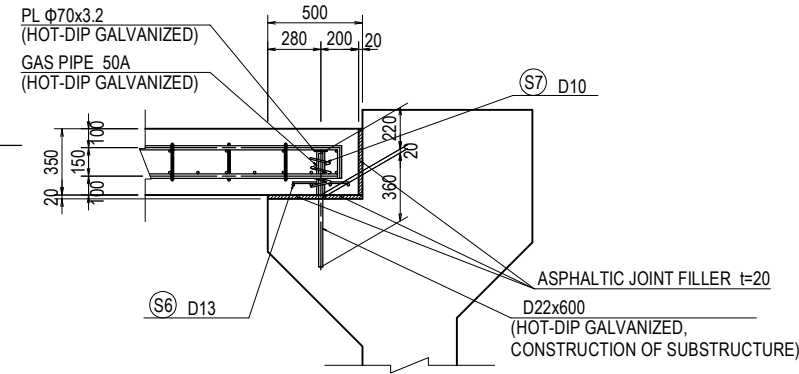
# BAR ARRANGEMENT OF AF1 ABUTMENT (12)

S=1:100

1-1



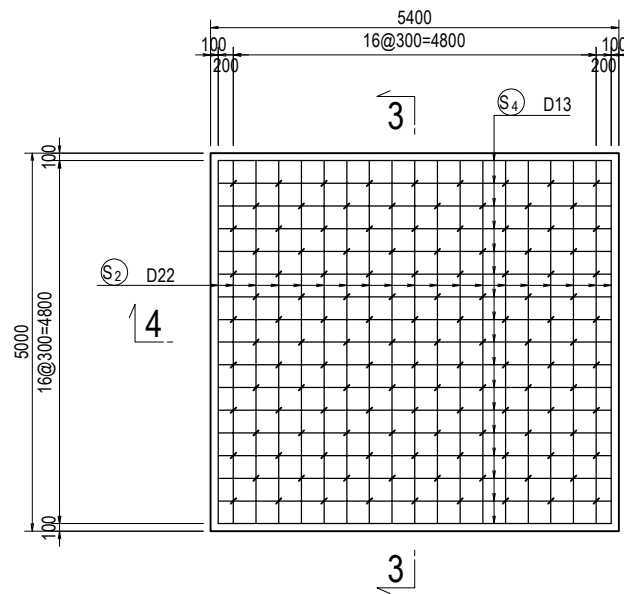
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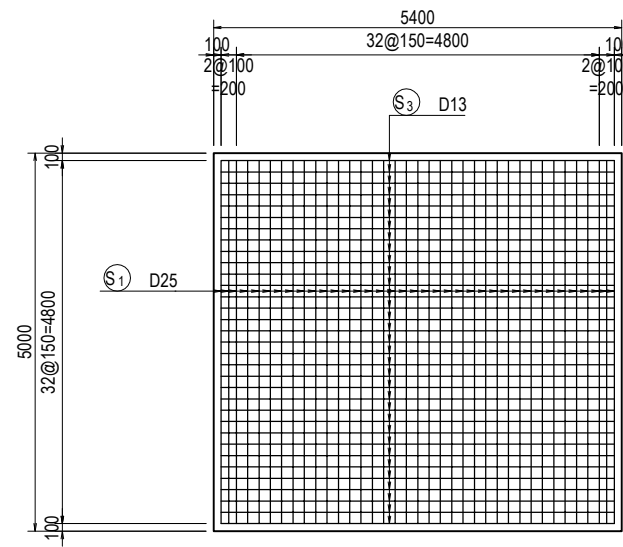
BAR LIST

REBAR NO.	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT/ONE (kg)	WEIGHT (kg)	REMARKS
S 1	D25	4800	74	3.98	19.10	1413	
S 2	D22	5100	38	3.04	15.50	589	
S 3	D13	5200	66	0.995	5.17	341	
S 4	D13	5430	34	0.995	5.40	184	
S 5	D13	570	256	0.995	0.57	146	
S 6	D13	300	112	0.995	0.30	34	
S 7	D10	960	14	0.56	0.54	8	
						D25	1413 kg
						D22	589 kg
						D13	705 kg
						D10	8 kg
						TOTAL	2715 kg
GAS PIPE 50A		230	14	5.31	1.22	17	
PL		Φ70x3.2	14		0.10	1	

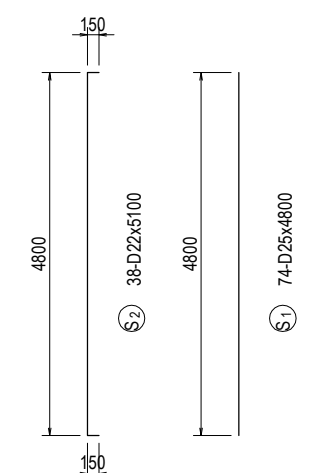
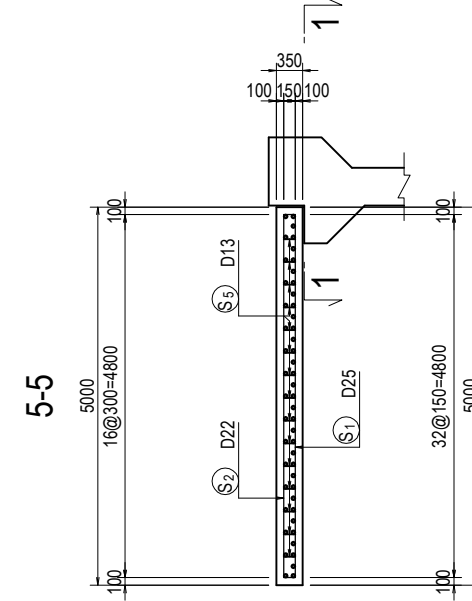
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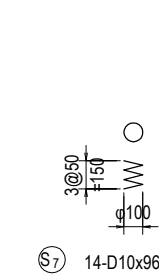
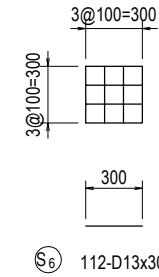
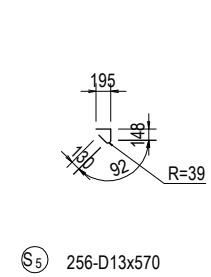
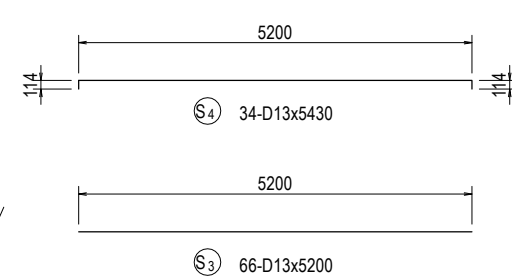
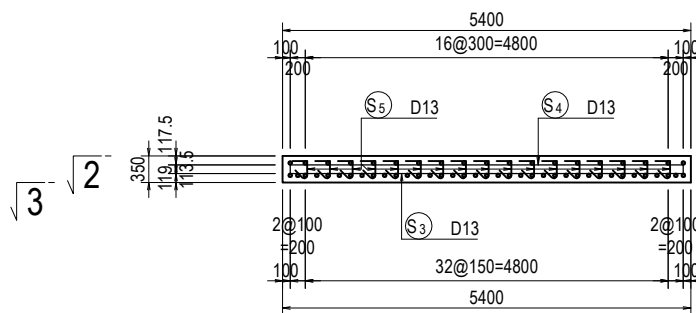
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5-5



4-4



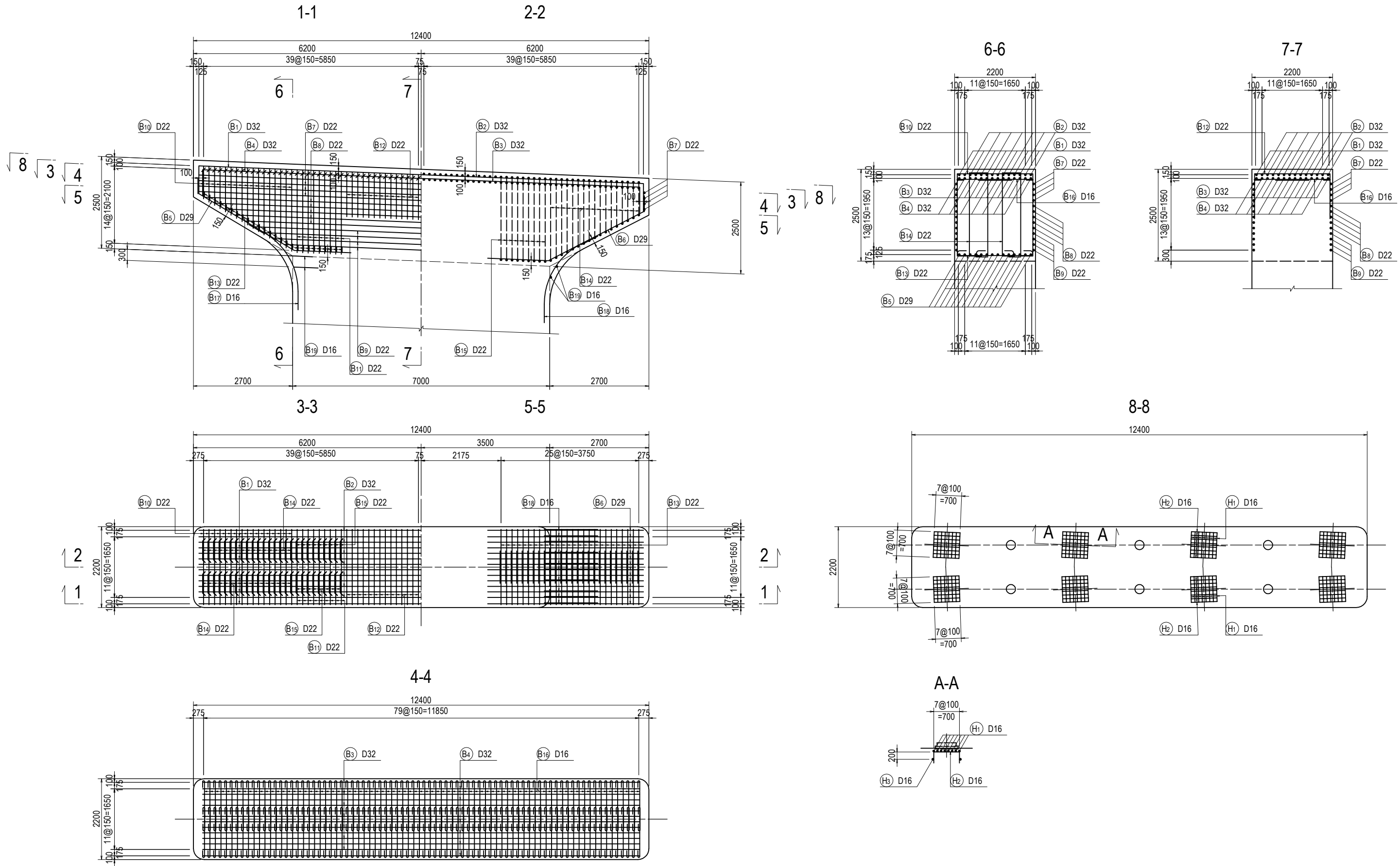
NOTE:

The construction of approach slab is included in Package 2, however, the rebar of D22 x 600 shown in the above figures with \* is included in Package 3.

BAR ARRANGEMENT OF AF1 ABUTMENT (12)

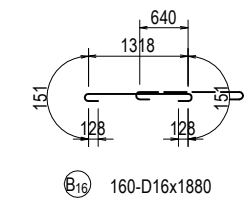
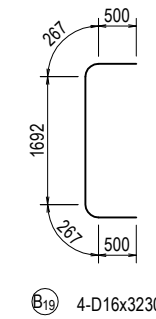
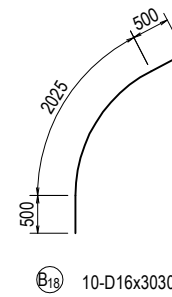
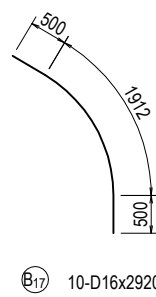
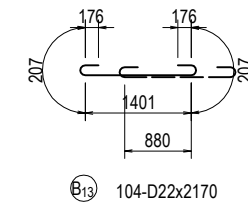
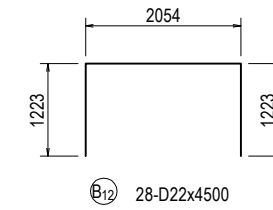
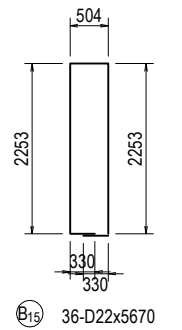
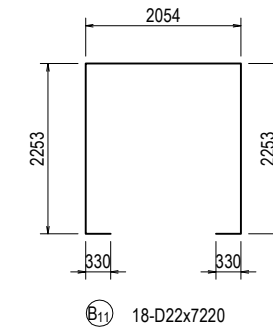
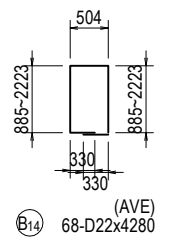
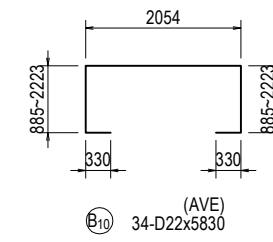
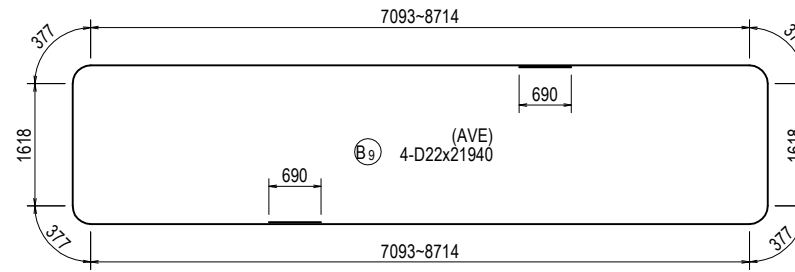
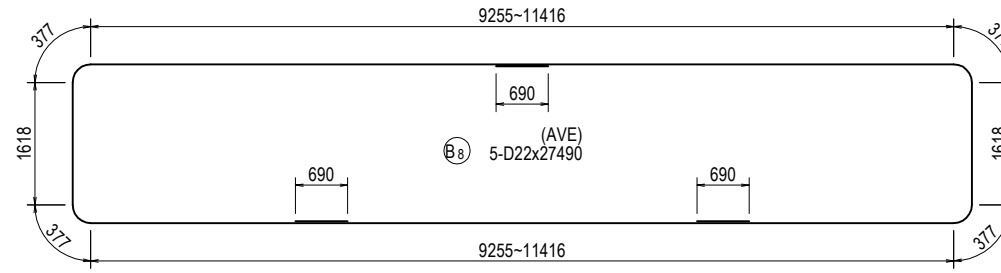
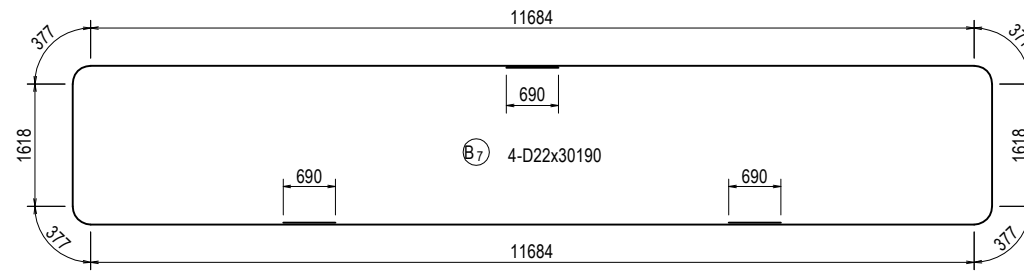
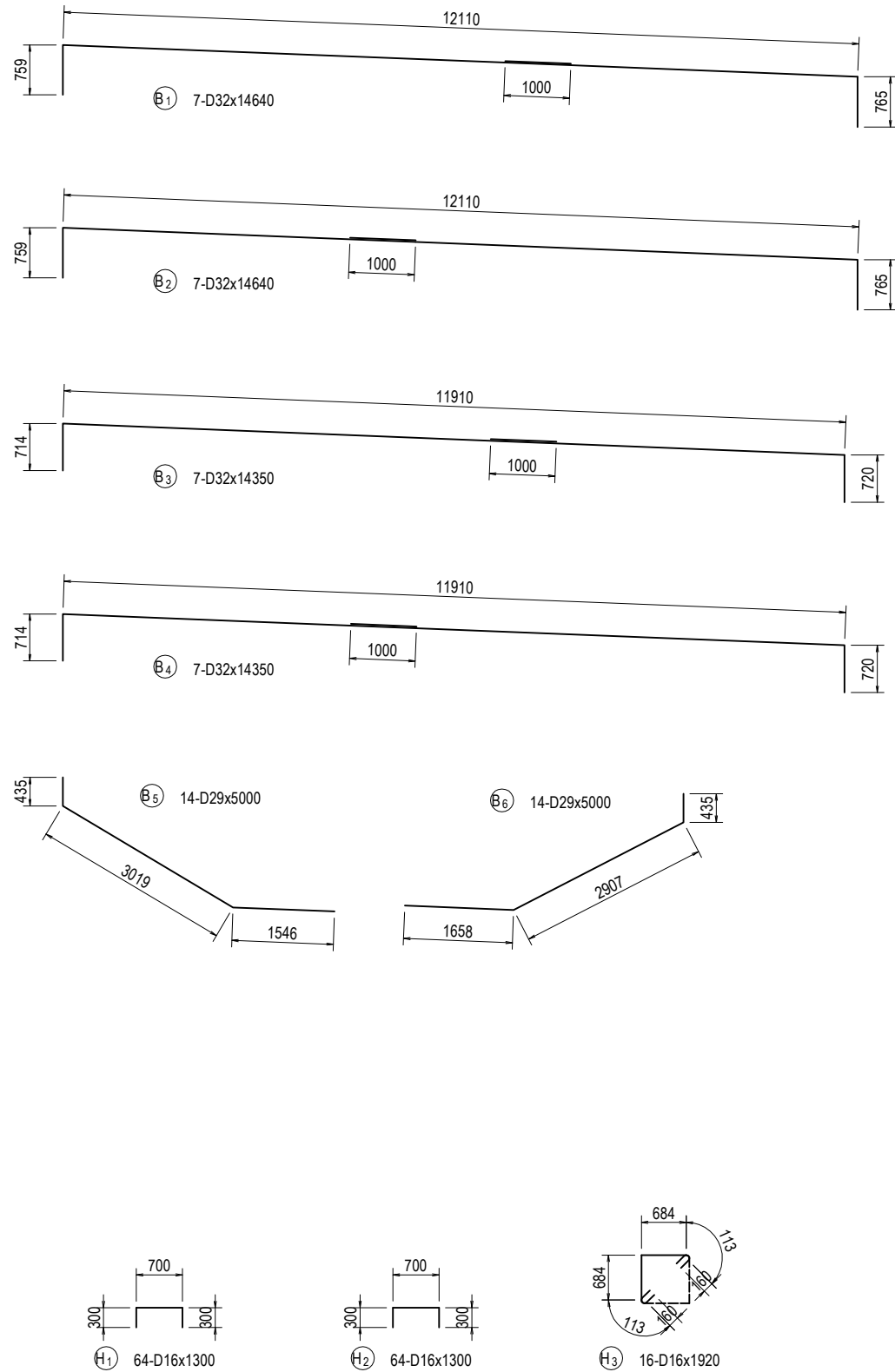
DWG No.  
P3-FO-2025

# BAR ARRANGEMENT OF PF1 PIER (1) S=1:100



<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: 10%;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY</td> <td>Y. SUZUKI</td> <td><i>YS</i></td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY</td> <td>T. HAYAKAWA</td> <td><i>平川知邦</i></td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY</td> <td>Y. SANO</td> <td><i>佐野 祐一</i></td> <td>25 Jul. 2017</td> </tr> </tbody> </table>		NAME	SIGNATURE	DATE	PREPARED BY	Y. SUZUKI	<i>YS</i>	14 Jul. 2017	CHECKED BY	T. HAYAKAWA	<i>平川知邦</i>	20 Jul. 2017	APPROVED BY	Y. SANO	<i>佐野 祐一</i>	25 Jul. 2017	<small>DRAWING TITLE</small> <b>BAR ARRANGEMENT OF PF1 PIER (1)</b>	<small>PACKAGE</small> 3 <small>DWG No.</small> P3-FO-2026
	NAME	SIGNATURE	DATE																			
PREPARED BY	Y. SUZUKI	<i>YS</i>	14 Jul. 2017																			
CHECKED BY	T. HAYAKAWA	<i>平川知邦</i>	20 Jul. 2017																			
APPROVED BY	Y. SANO	<i>佐野 祐一</i>	25 Jul. 2017																			

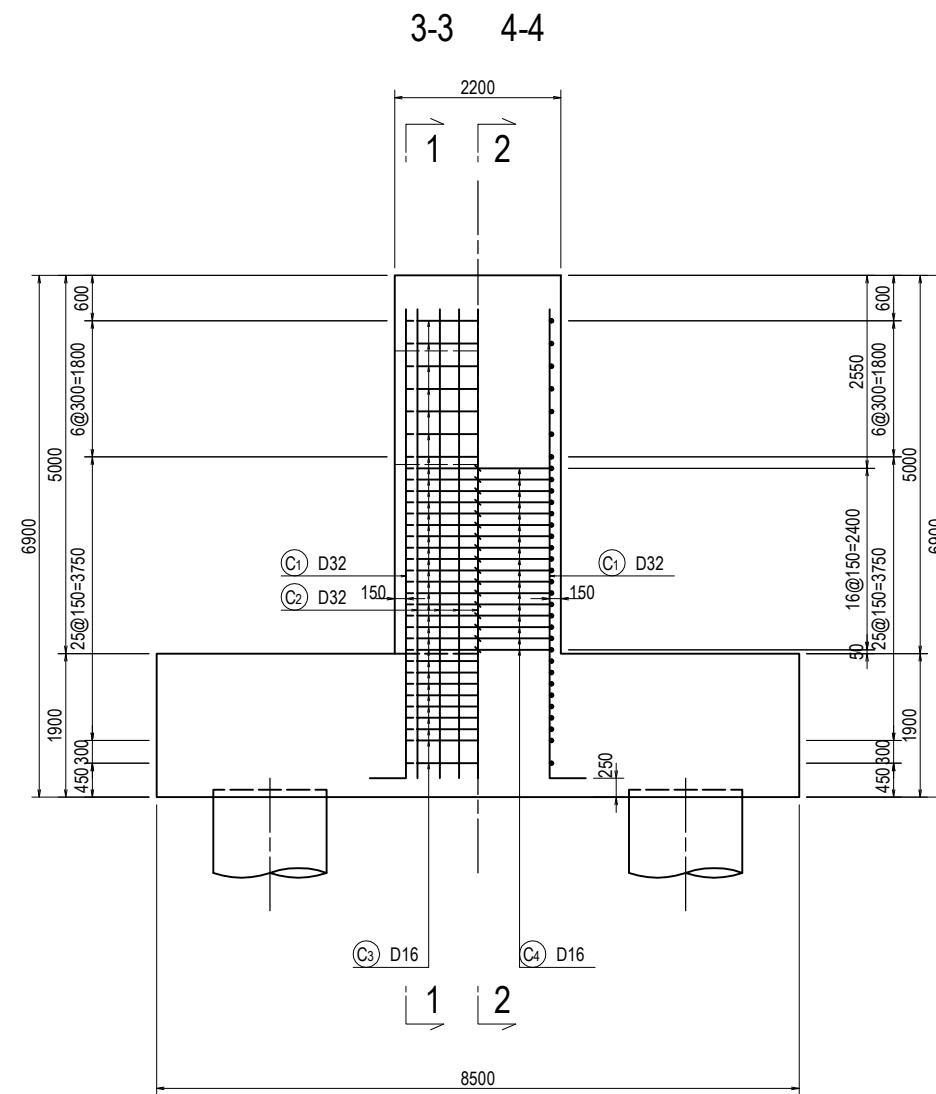
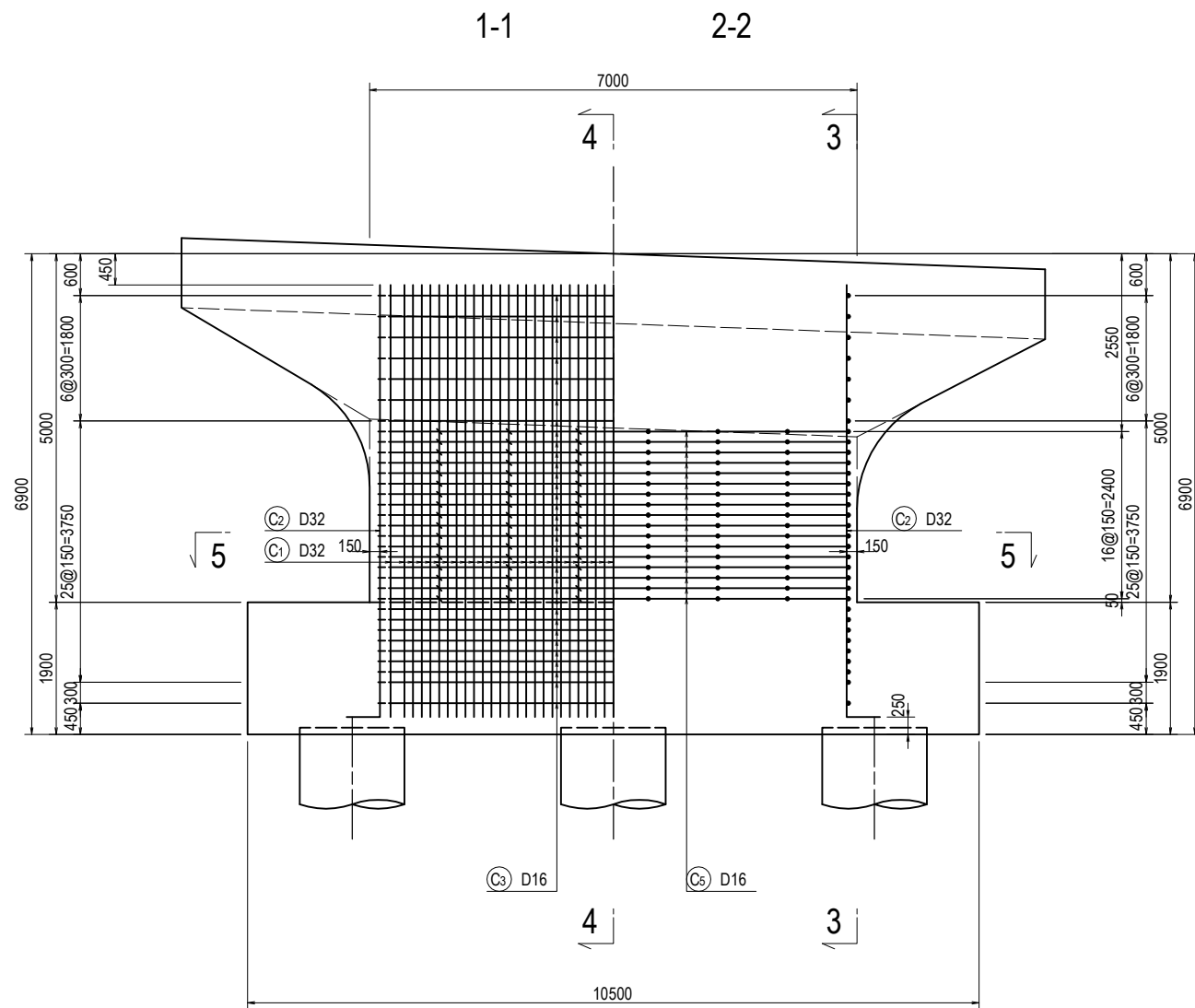
# BAR ARRANGEMENT OF PF1 PIER (2) S=1:100



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 Y. SUZUKI T. HAYAKAWA Y. SANO	SIGNATURE   	DATE 14 Jul. 2017 20 Jul. 2017 25 Jul. 2017	DRAWING TITLE BAR ARRANGEMENT OF PF1 PIER (2)	PACKAGE 3 DWG No. P3-FO-2027
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# BAR ARRANGEMENT OF PF1 PIER (3)

S=1:100



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	Y. SUZUKI	<i>YS</i>	14 Jul. 2017
CHECKED BY	T. HAYAKAWA	<i>Hayakawa</i>	20 Jul. 2017
APPROVED BY	Y. SANO	<i>Y. Sano</i>	25 Jul. 2017

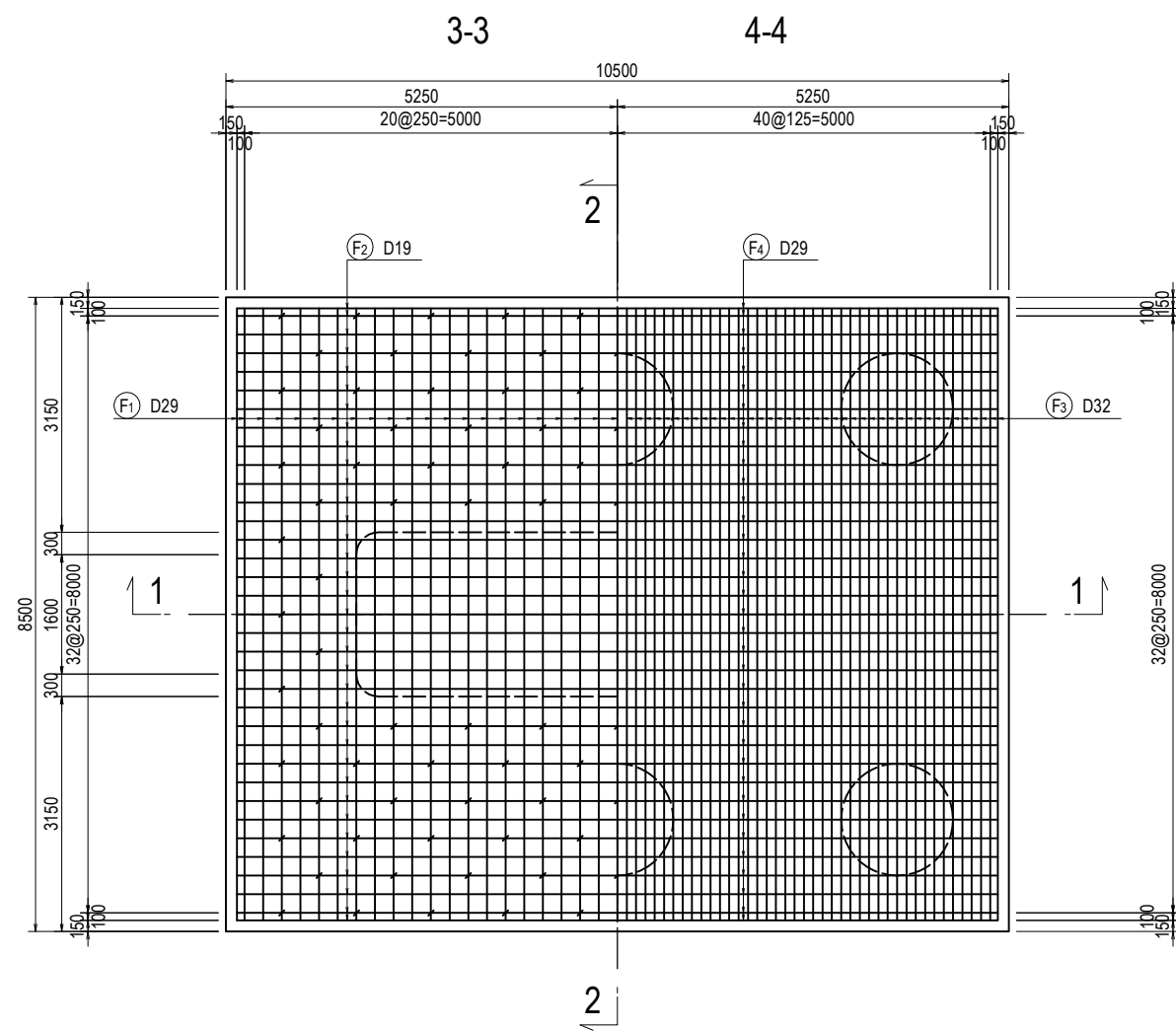
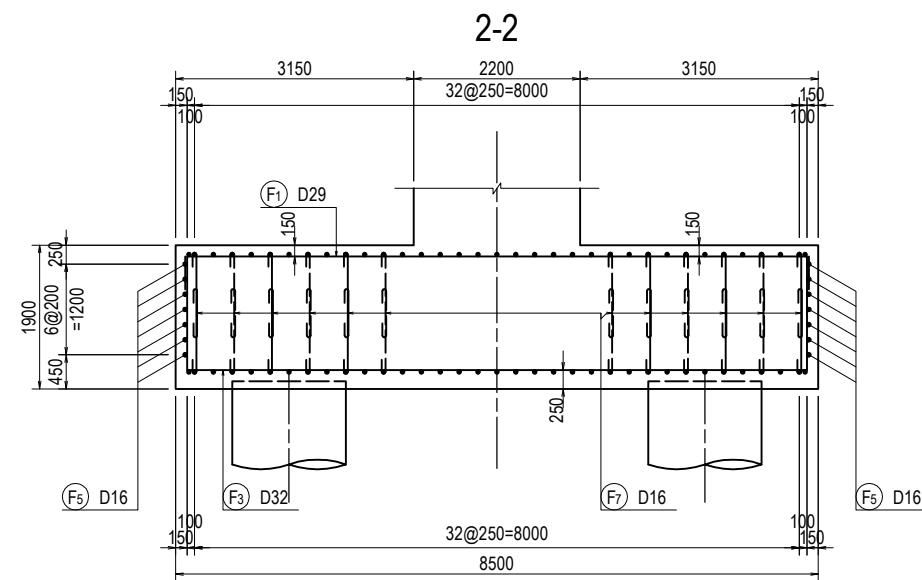
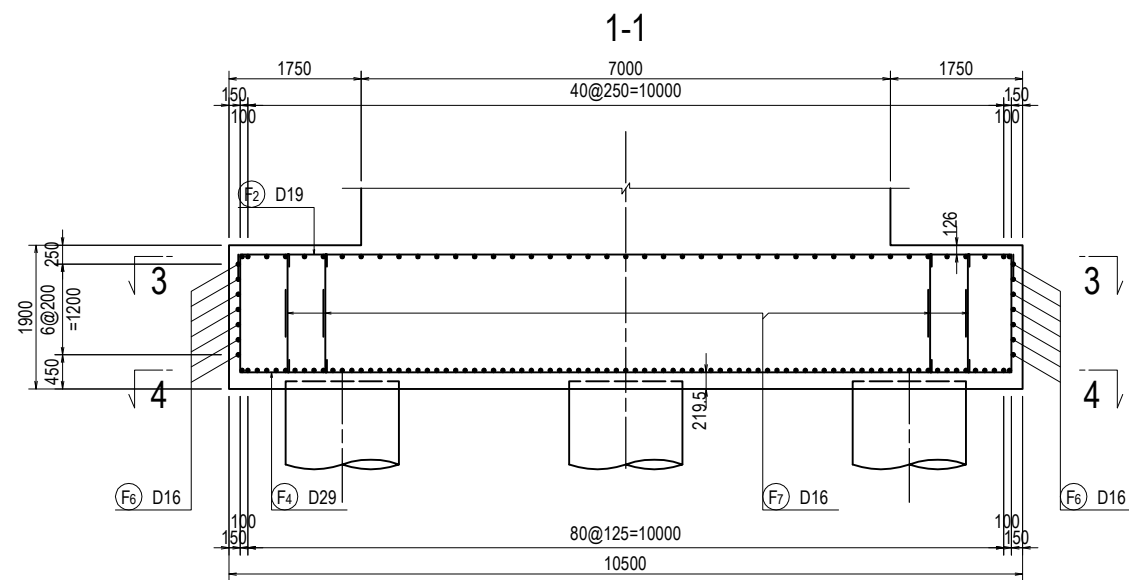
DRAWING TITLE  
 BAR ARRANGEMENT OF PF1 PIER (3)

PACKAGE  
 3  
 DWG No.  
 P3-FO-2028





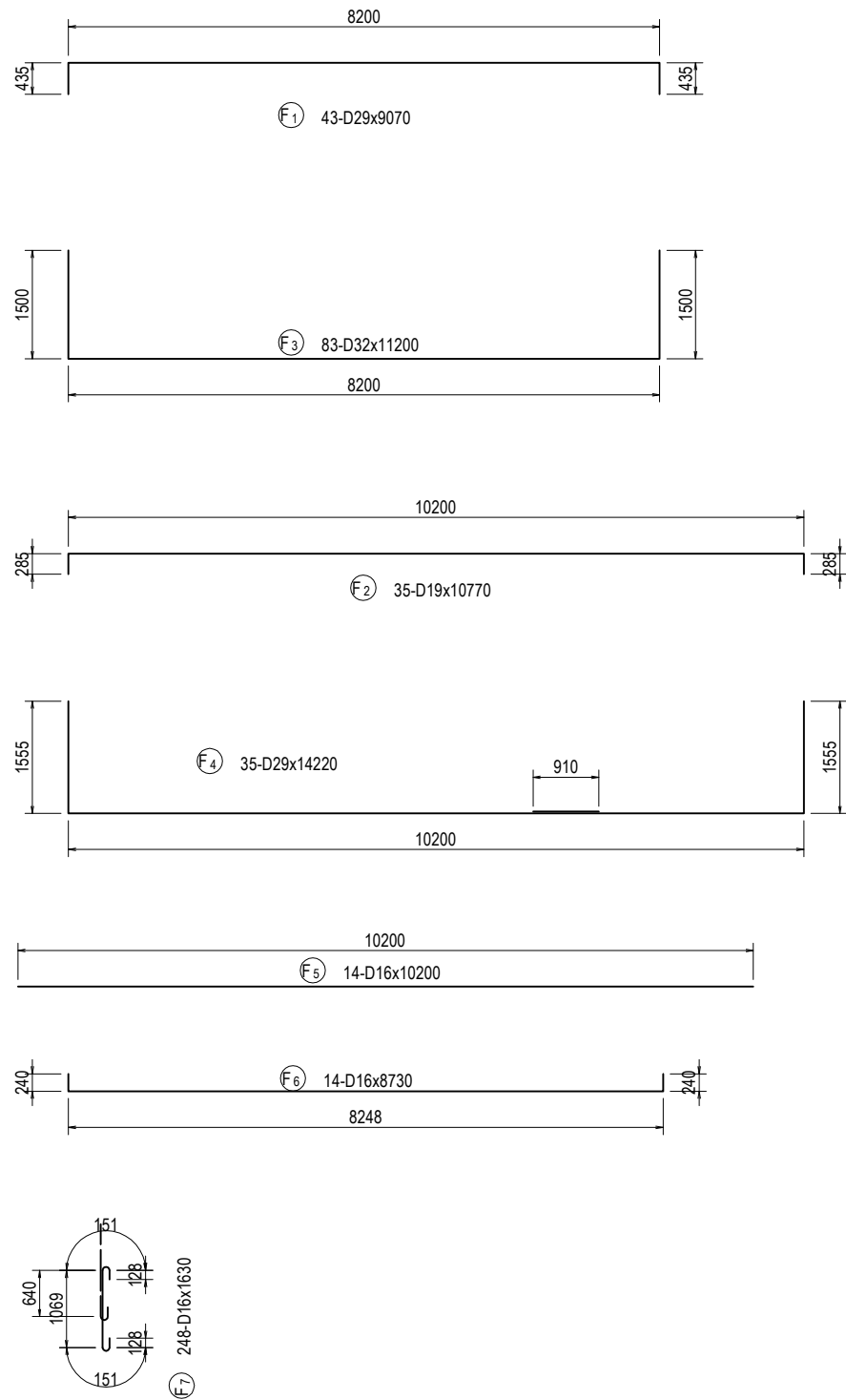
# BAR ARRANGEMENT OF PF1 PIER (5) S=1:100



<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%;">NAME</th> <th style="width: 20%;">SIGNATURE</th> <th style="width: 15%;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY Y. SUZUKI</td> <td></td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY T. HAYAKAWA</td> <td></td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY Y. SANO</td> <td></td> <td>25 Jul. 2017</td> </tr> </tbody> </table>	NAME	SIGNATURE	DATE	PREPARED BY Y. SUZUKI		14 Jul. 2017	CHECKED BY T. HAYAKAWA		20 Jul. 2017	APPROVED BY Y. SANO		25 Jul. 2017	<small>DRAWING TITLE</small> <b>BAR ARRANGEMENT OF PF1 PIER (5)</b>	<small>PACKAGE</small> 3 <small>DWG No.</small> P3-FO-2030
NAME	SIGNATURE	DATE																
PREPARED BY Y. SUZUKI		14 Jul. 2017																
CHECKED BY T. HAYAKAWA		20 Jul. 2017																
APPROVED BY Y. SANO		25 Jul. 2017																

# BAR ARRANGEMENT OF PF1 PIER (6)

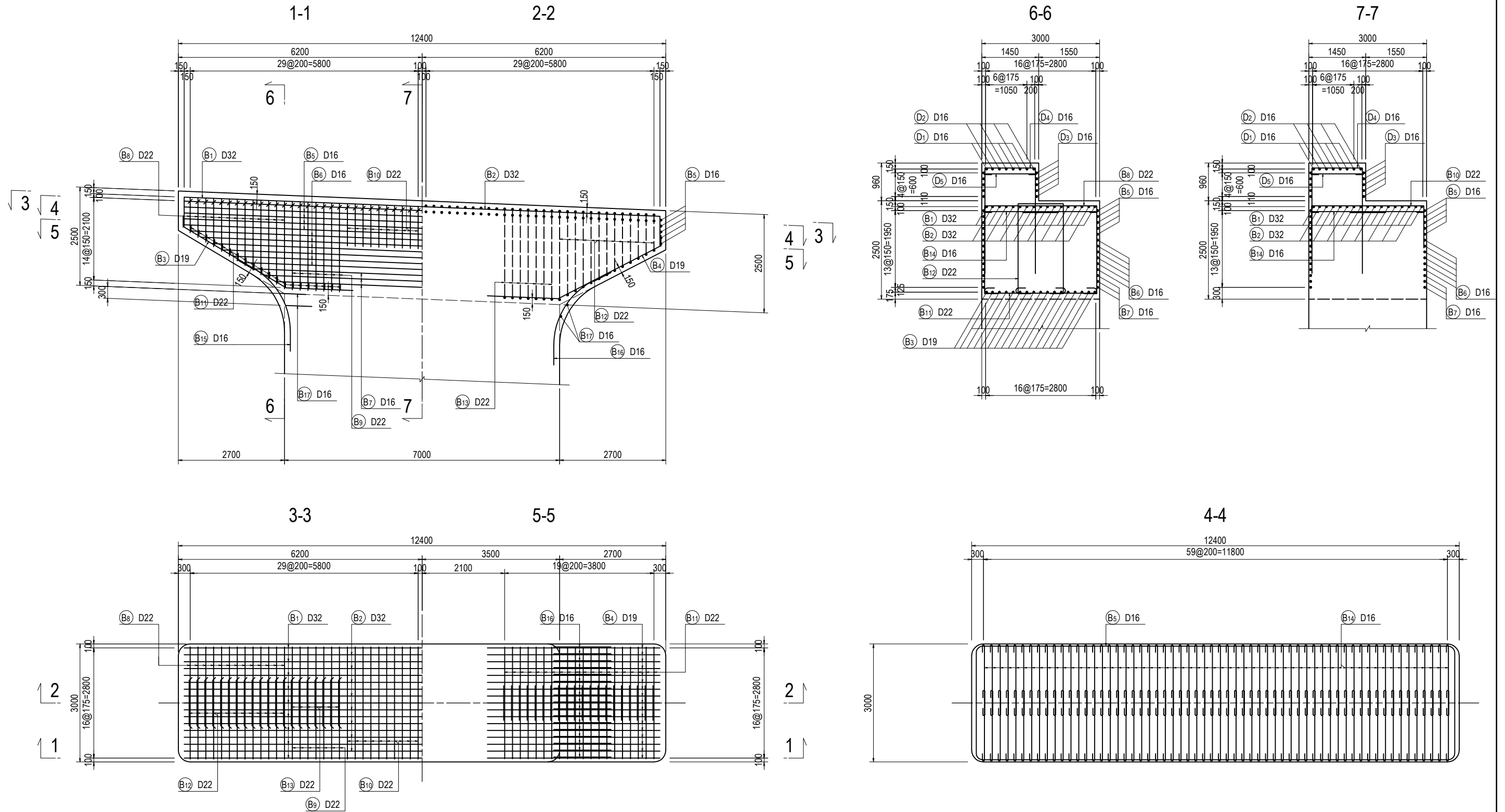
S=1:100



## BAR LIST

REBAR NO.	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT/ONE (kg)	WEIGHT (kg)	REMARKS
B 1	D32	14640	7	6.23	91.21	638	
B 2	D32	14640	7	6.23	91.21	638	
B 3	D32	14350	7	6.23	89.40	626	
B 4	D32	14350	7	6.23	89.40	626	
B 5	D29	5000	14	5.04	25.20	353	
B 6	D29	5000	14	5.04	25.20	353	
B 7	D22	30190	4	3.04	91.78	367	
B 8	D22	27490	5	3.04	83.57	418	AVERAGE
B 9	D22	21940	4	3.04	66.70	267	AVERAGE
B 10	D22	5830	34	3.04	17.72	602	AVERAGE
B 11	D22	7220	18	3.04	21.95	395	
B 12	D22	4500	28	3.04	13.68	383	
B 13	D22	2170	104	3.04	6.60	686	
B 14	D22	4280	68	3.04	13.01	885	AVERAGE
B 15	D22	5670	36	3.04	17.24	621	
B 16	D16	1880	160	1.56	2.93	469	
B 17	D16	2920	10	1.56	4.56	46	
B 18	D16	3030	10	1.56	4.73	47	
B 19	D16	3230	4	1.56	5.04	20	
						8440	
H 1	D16	1300	64	1.56	2.03	130	
H 2	D16	1300	64	1.56	2.03	130	
H 3	D16	1920	16	1.56	3.00	48	
						308	
C 1	D32	6680	102	6.23	41.62	4245	
C 2	D32	6680	14	6.23	41.62	583	
C 3	D16	9830	66	1.56	15.33	1012	
C 4	D16	1820	204	1.56	2.84	579	
C 5	D16	4220	34	1.56	6.58	224	
						6643	
F 1	D29	9070	43	5.04	45.71	1966	
F 2	D19	10770	35	2.25	24.23	848	
F 3	D32	11200	83	6.23	69.78	5792	
F 4	D29	14220	35	5.04	71.67	2508	
F 5	D16	10200	14	1.56	15.91	223	
F 6	D16	8730	14	1.56	13.62	191	
F 7	D16	1630	248	1.56	2.54	630	
						12158	
						D32	13148
						D29	5180
						D22	4624
						D19	848
						D16	3749
						TOTAL	27549

# BAR ARRANGEMENT OF PF2 PIER (1) S=1:100



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

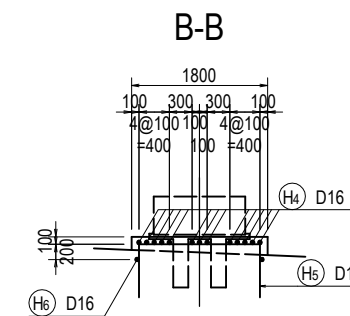
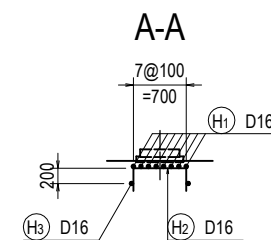
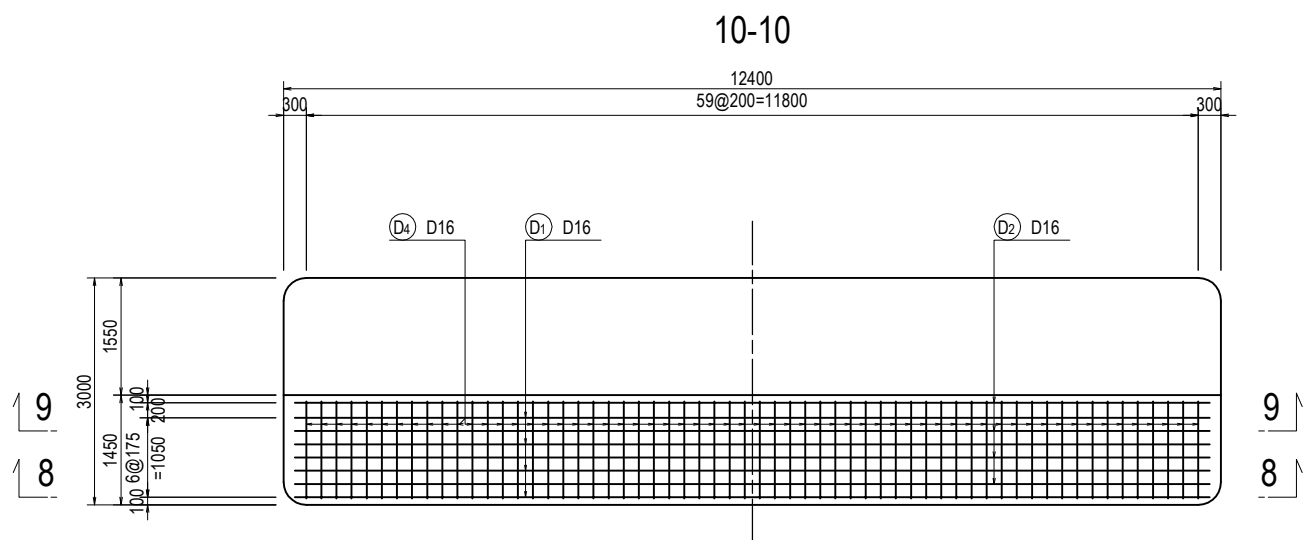
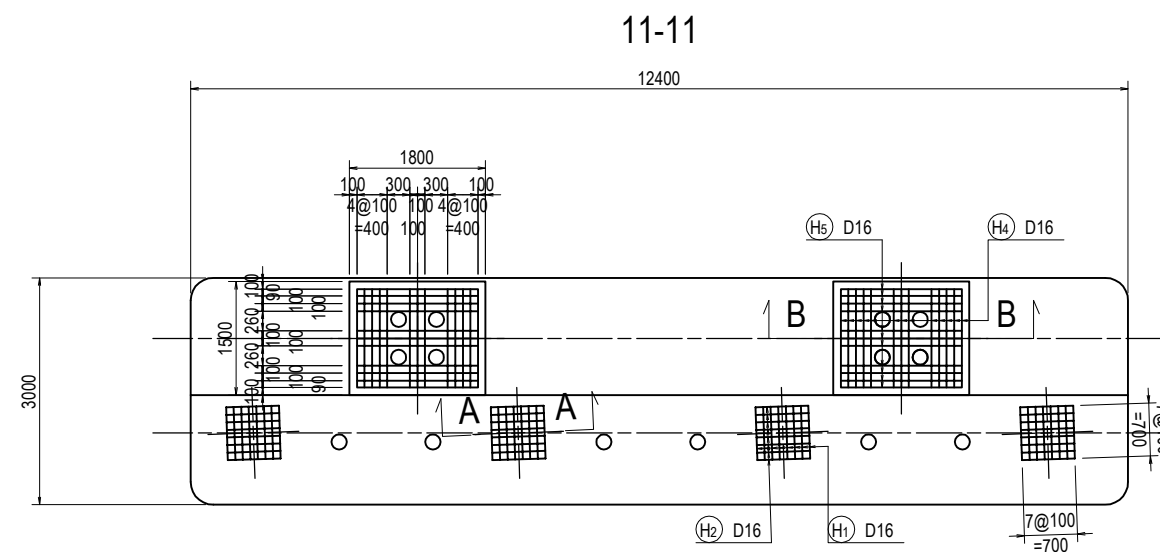
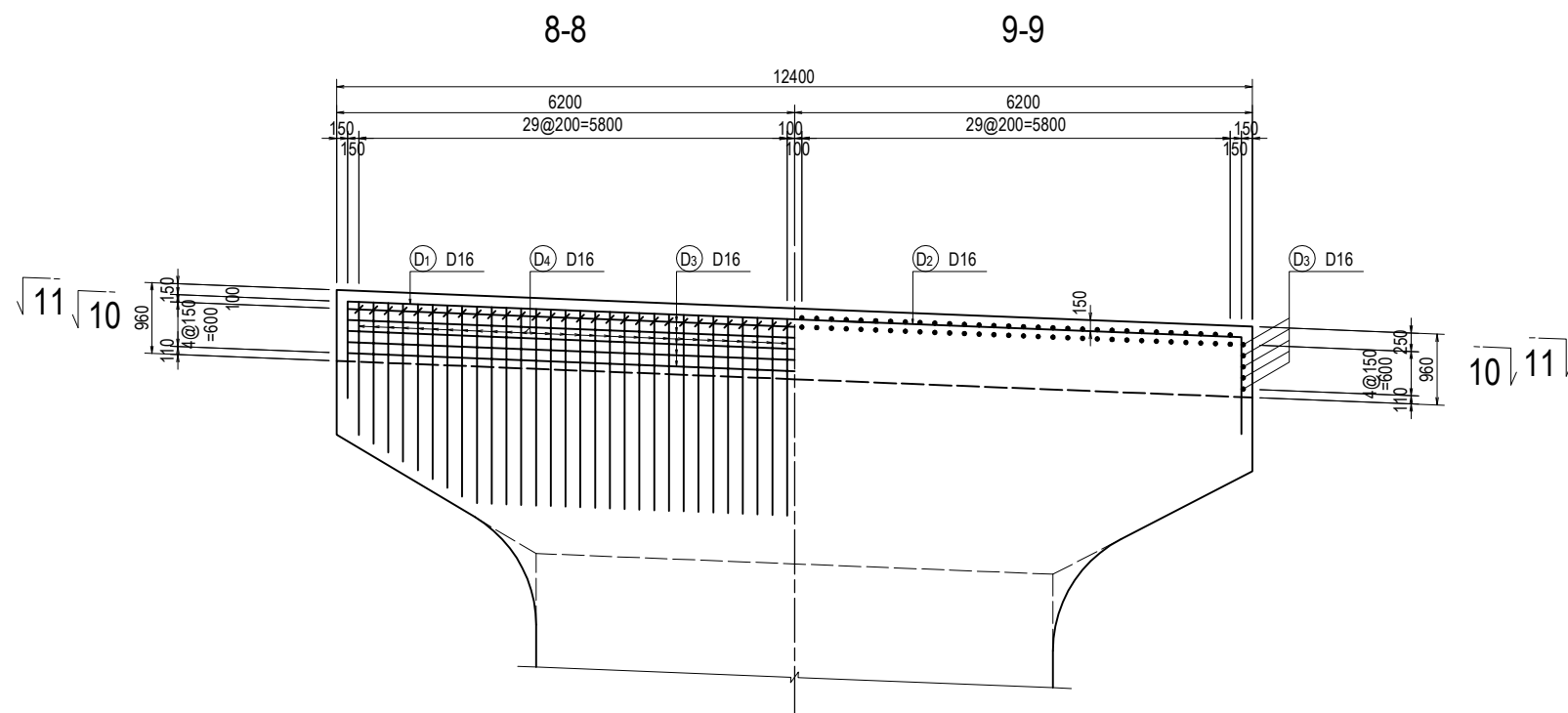
JICA STUDY TEAM  
 NIPPON KOEI CO., LTD.  
 ORIENTAL CONSULTANTS GLOBAL CO., LTD.  
 METROPOLITAN EXPRESSWAY COMPANY LIMITED  
 CHODAI CO., LTD.  
 NIPPON ENGINEERING CONSULTANTS CO., LTD.

	NAME	SIGNATURE	DATE
PREPARED BY	Y. SUZUKI	<i>YS</i>	14 Jul. 2017
CHECKED BY	T. HAYAKAWA	<i>Hayakawa</i>	20 Jul. 2017
APPROVED BY	Y. SANO	<i>Y. Sano</i>	25 Jul. 2017

DRAWING TITLE  
**BAR ARRANGEMENT OF PF2 PIER (1)**

PACKAGE  
 3  
 DWG No.  
 P3-FO-2032

# BAR ARRANGEMENT OF PF2 PIER (2) S=1:100

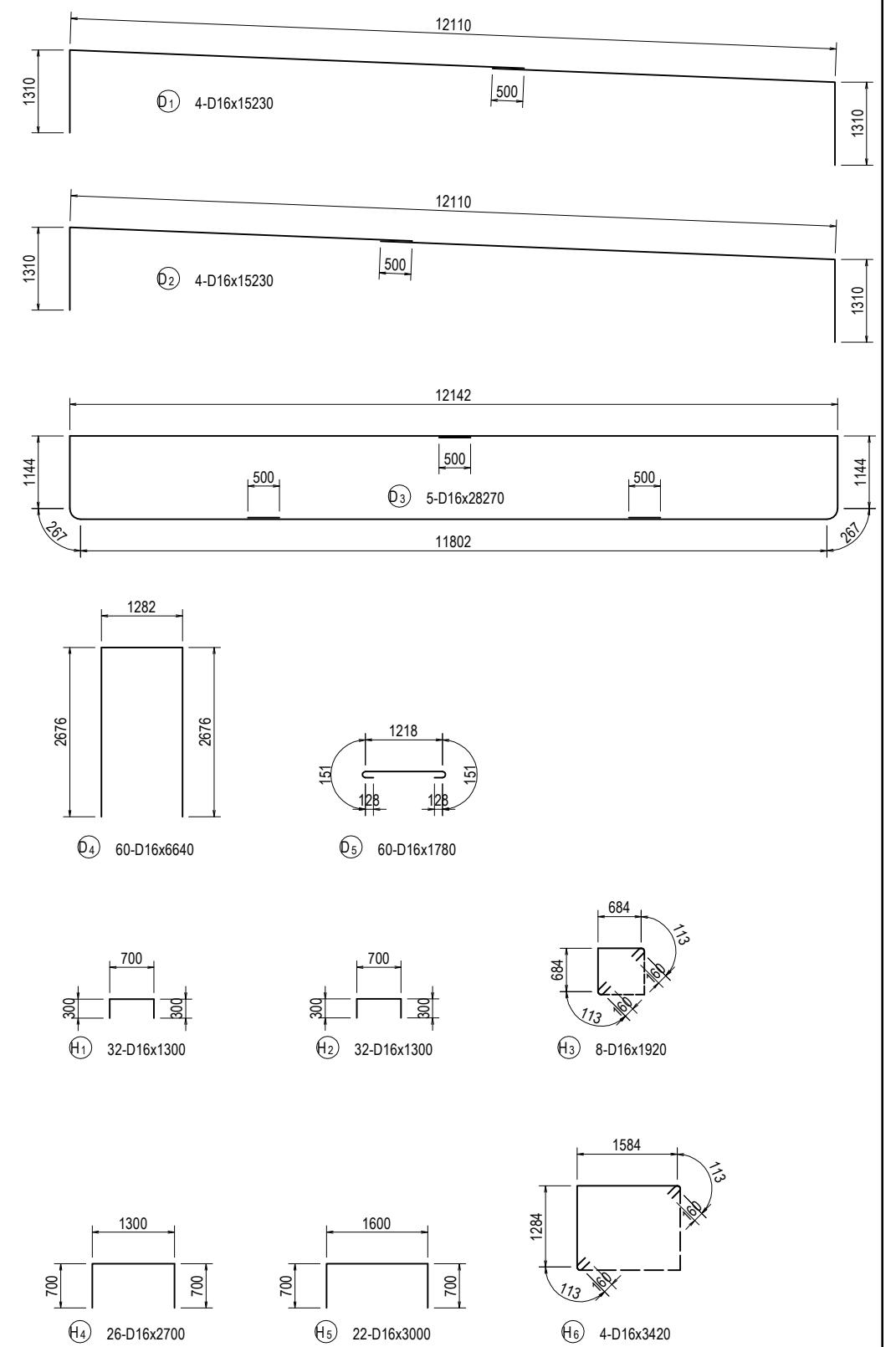
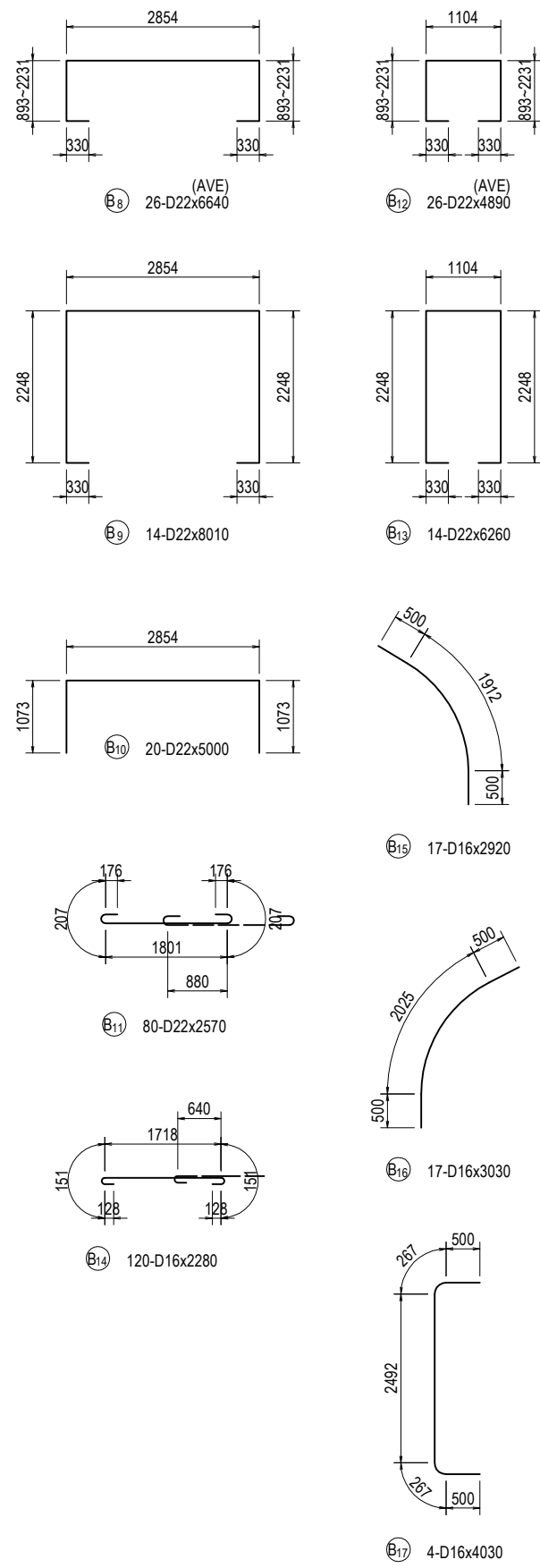
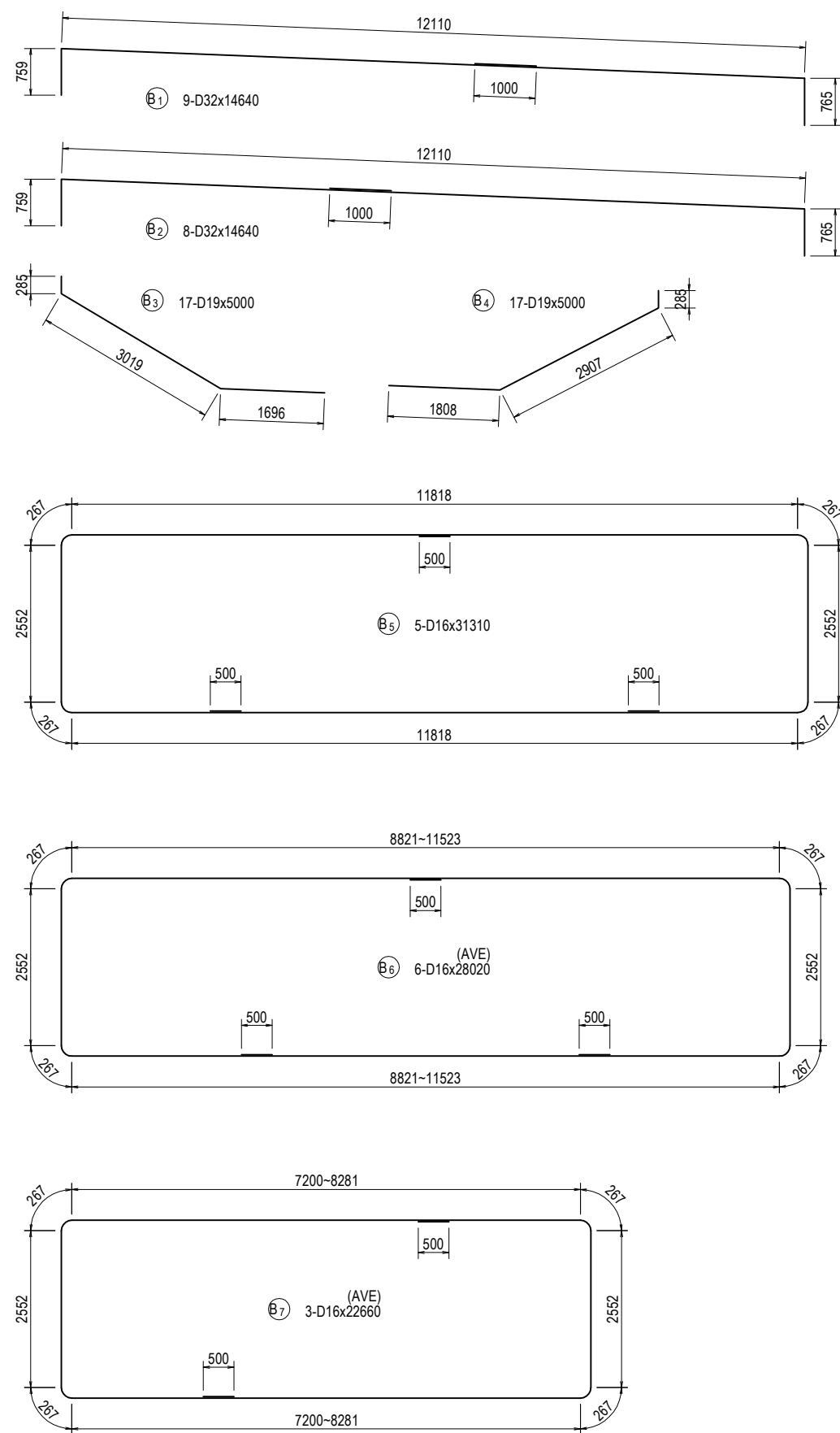


NOTE : The D4 placed at the end of the pier cap should be bent at the time of construction.

<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>Y. SUZUKI</td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY</td> <td>T. HAYAKAWA</td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY</td> <td>Y. SANO</td> <td>25 Jul. 2017</td> </tr> </table>	NAME	SIGNATURE	DATE	PREPARED BY	Y. SUZUKI	14 Jul. 2017	CHECKED BY	T. HAYAKAWA	20 Jul. 2017	APPROVED BY	Y. SANO	25 Jul. 2017	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2">DRAWING TITLE</th> <th>PACKAGE</th> </tr> <tr> <td colspan="2" rowspan="3" style="text-align: center; vertical-align: middle;">                     BAR ARRANGEMENT OF PF2 PIER (2)                 </td> <td style="text-align: center;">3</td> </tr> <tr> <td style="text-align: center;">DWG No.</td> </tr> <tr> <td style="text-align: center;">P3-FO-2033</td> </tr> </table>	DRAWING TITLE		PACKAGE	BAR ARRANGEMENT OF PF2 PIER (2)		3	DWG No.	P3-FO-2033
NAME	SIGNATURE	DATE																							
PREPARED BY	Y. SUZUKI	14 Jul. 2017																							
CHECKED BY	T. HAYAKAWA	20 Jul. 2017																							
APPROVED BY	Y. SANO	25 Jul. 2017																							
DRAWING TITLE		PACKAGE																							
BAR ARRANGEMENT OF PF2 PIER (2)		3																							
		DWG No.																							
		P3-FO-2033																							

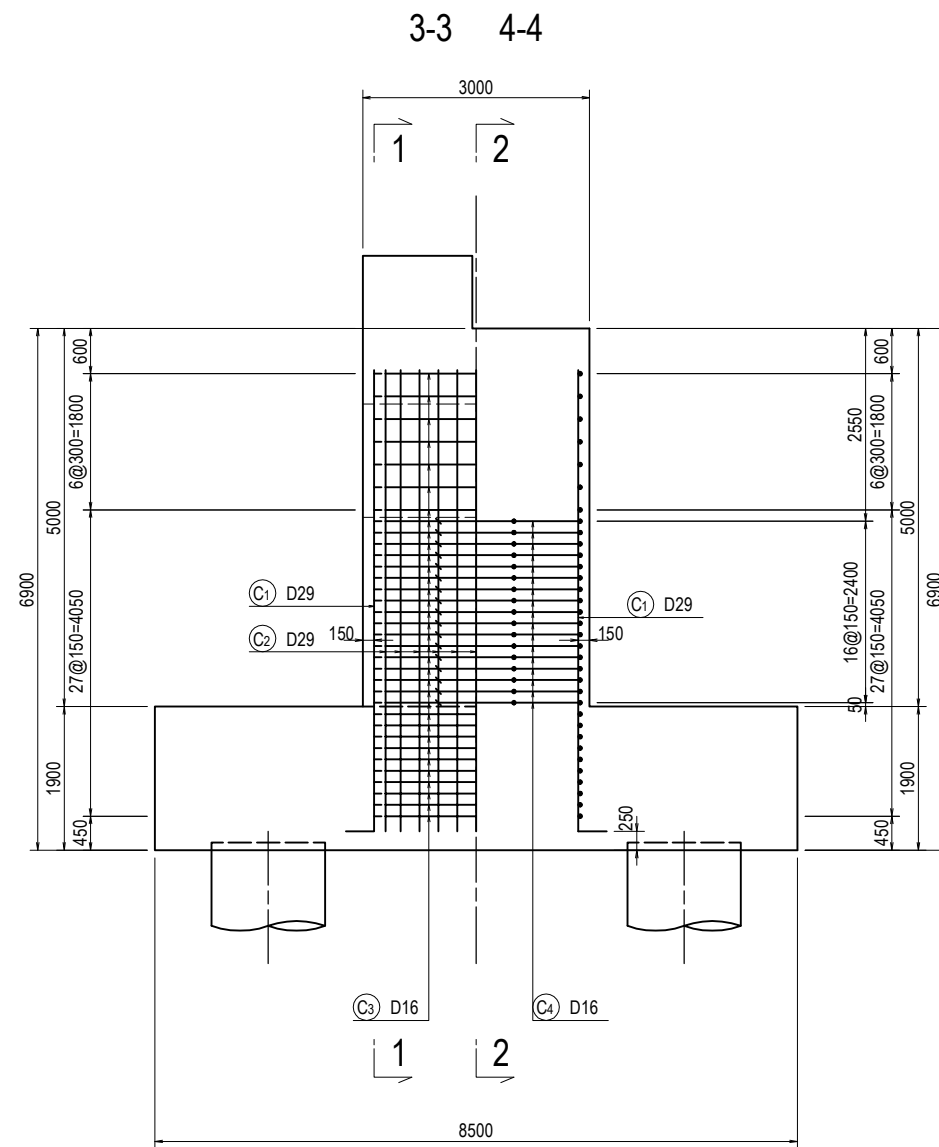
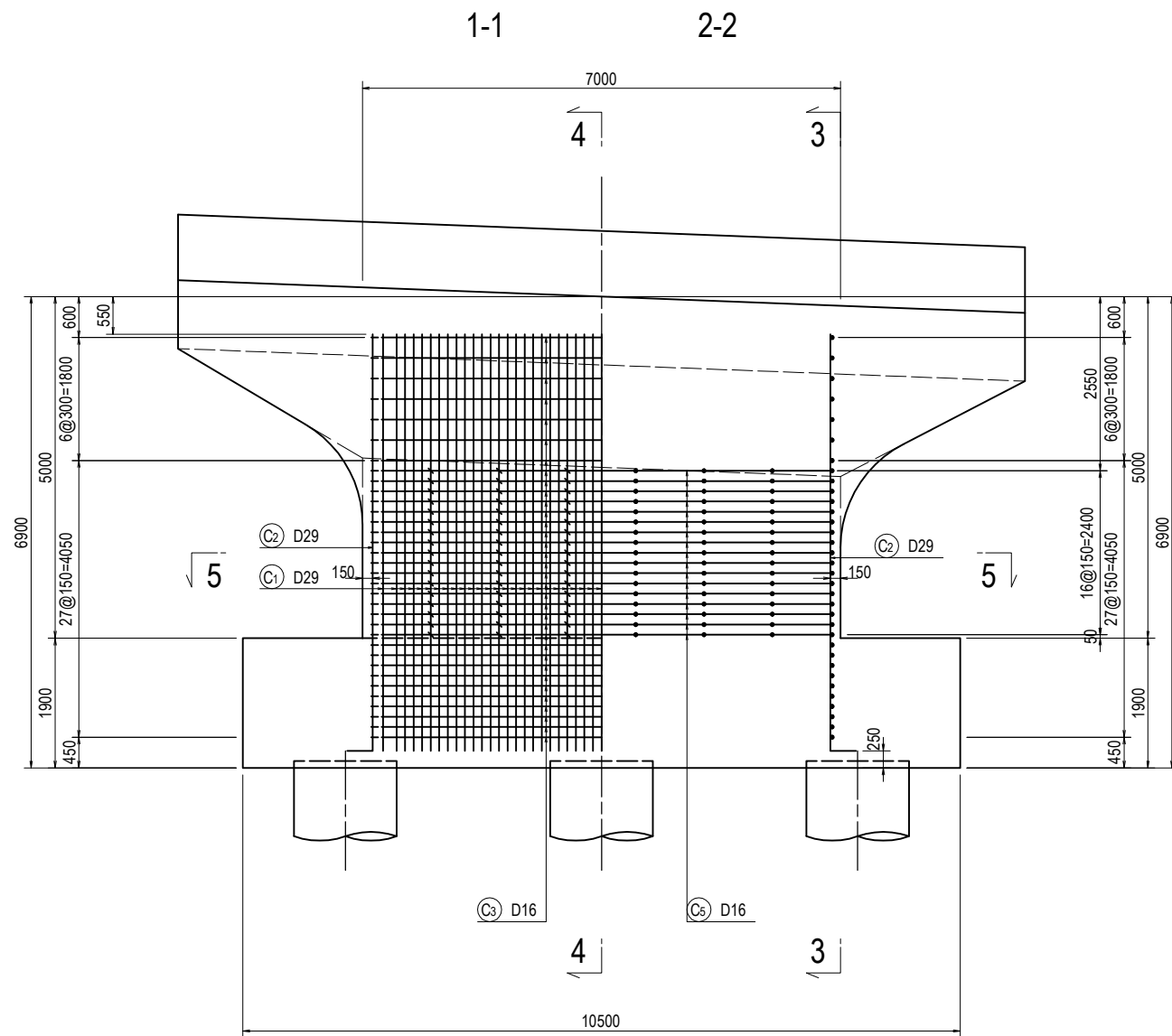
# BAR ARRANGEMENT OF PF2 PIER (3)

S=1:100



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 PF2 PIER (3)	PACKAGE	
				PREPARED BY	Y. SUZUKI			14 Jul. 2017	3
				CHECKED BY	T. HAYAKAWA			20 Jul. 2017	DWG No.
				APPROVED BY	Y. SANO			25 Jul. 2017	P3-FO-2034

# BAR ARRANGEMENT OF PF2 PIER (4) S=1:100



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.

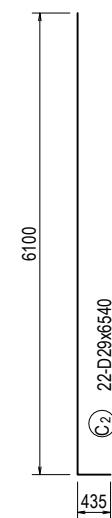
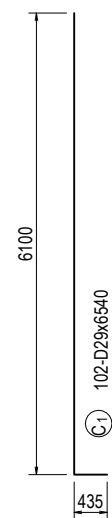
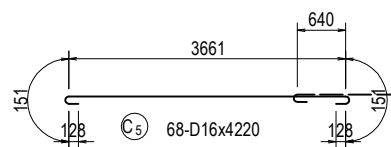
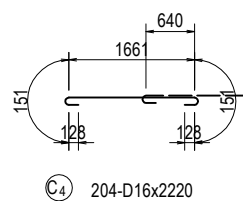
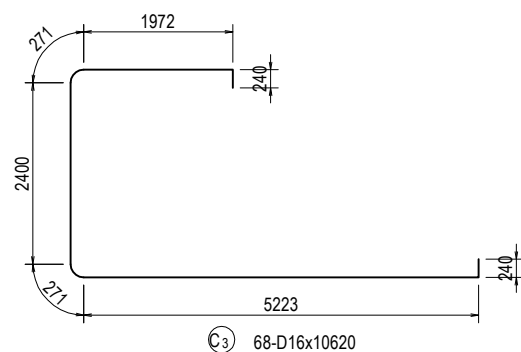
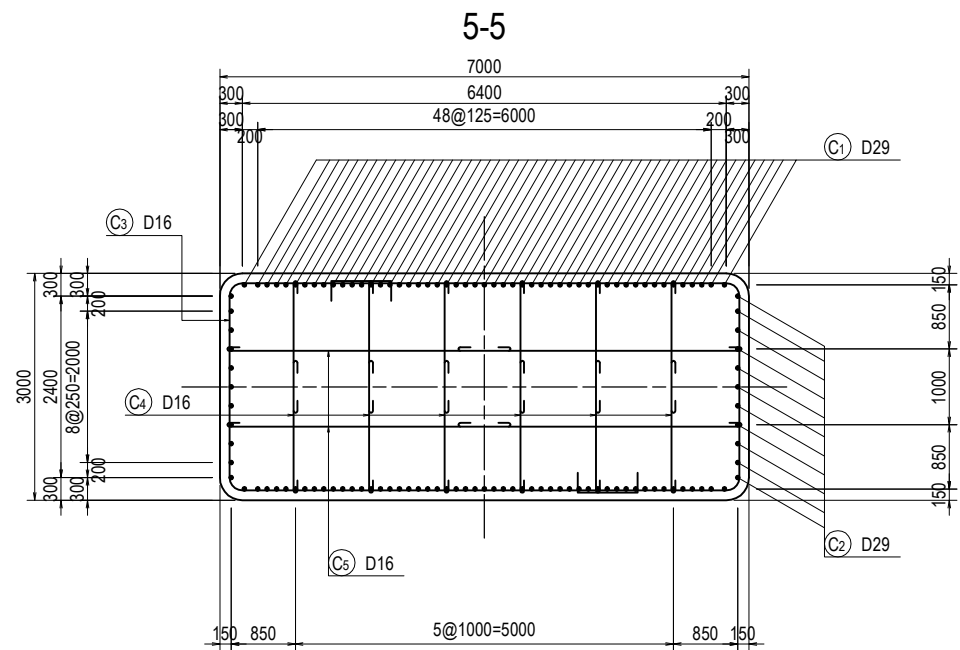
	NAME	SIGNATURE	DATE
PREPARED BY	Y. SUZUKI	<i>YS</i>	14 Jul. 2017
CHECKED BY	T. HAYAKAWA	<i>Hayakawa</i>	20 Jul. 2017
APPROVED BY	Y. SANO	<i>Y. Sano</i>	25 Jul. 2017

DRAWING TITLE  
**BAR ARRANGEMENT OF PF2 PIER (4)**

PACKAGE  
 3  
 DWG No.  
 P3-FO-2035

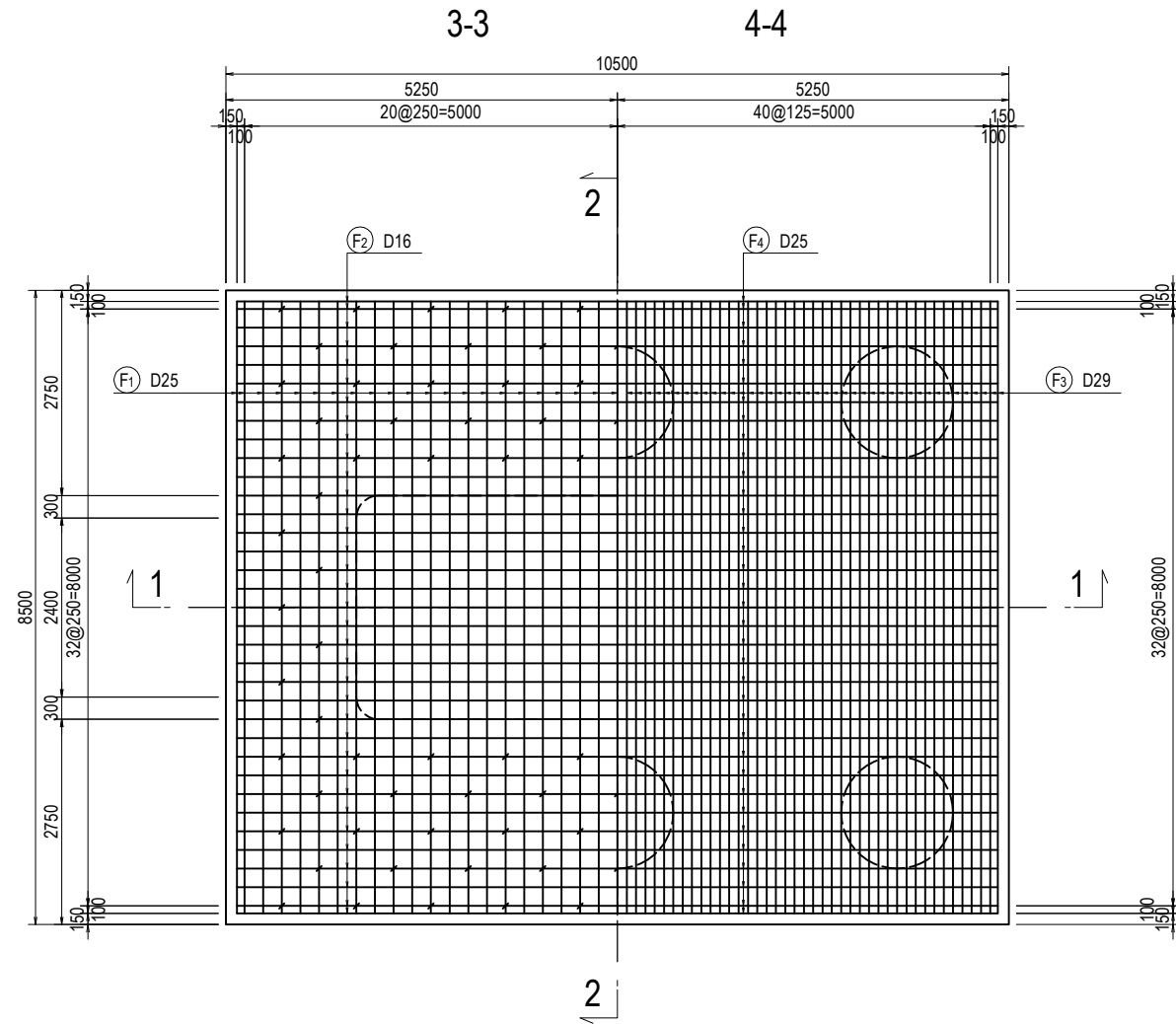
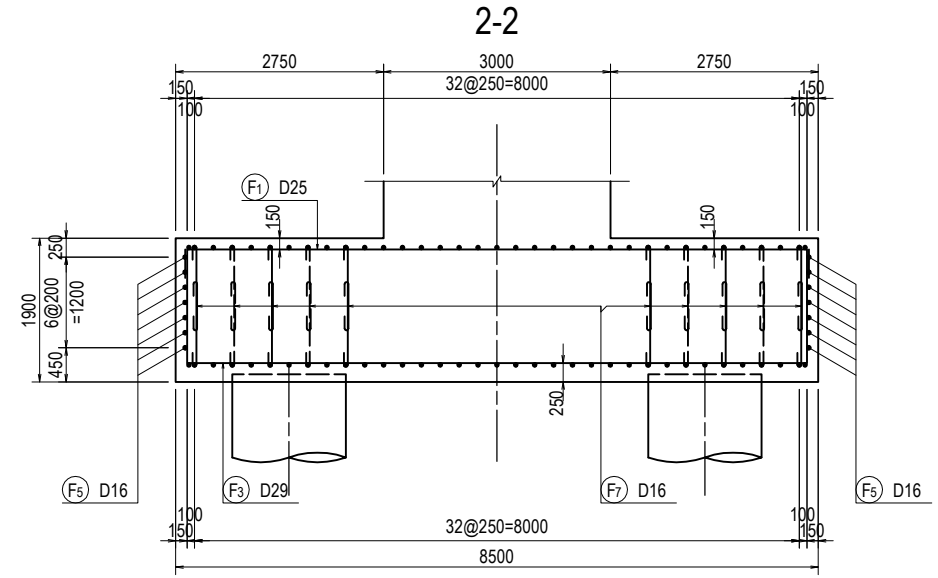
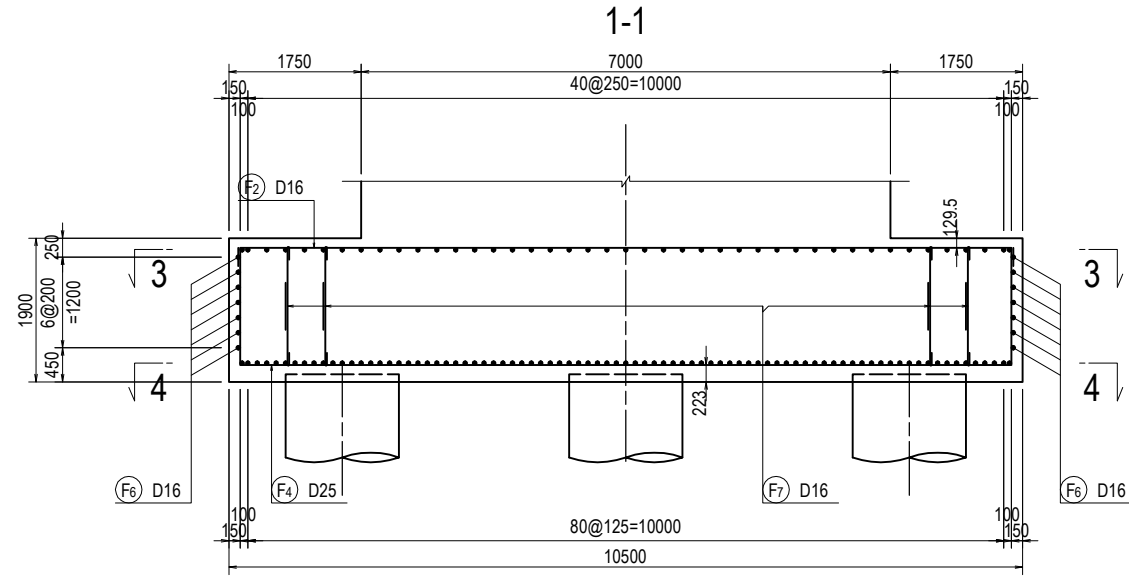


# BAR ARRANGEMENT OF PF2 PIER (5) S=1:100



<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="text-align: left;">NAME</th> <th style="text-align: left;">SIGNATURE</th> <th style="text-align: left;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY Y. SUZUKI</td> <td></td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY T. HAYAKAWA</td> <td></td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY Y. SANO</td> <td></td> <td>25 Jul. 2017</td> </tr> </tbody> </table>	NAME	SIGNATURE	DATE	PREPARED BY Y. SUZUKI		14 Jul. 2017	CHECKED BY T. HAYAKAWA		20 Jul. 2017	APPROVED BY Y. SANO		25 Jul. 2017	<small>DRAWING TITLE</small> <b>BAR ARRANGEMENT OF PF2 PIER (5)</b>	<small>PACKAGE</small> 3 <small>DWG No.</small> P3-FO-2036
NAME	SIGNATURE	DATE																	
PREPARED BY Y. SUZUKI		14 Jul. 2017																	
CHECKED BY T. HAYAKAWA		20 Jul. 2017																	
APPROVED BY Y. SANO		25 Jul. 2017																	

# BAR ARRANGEMENT OF PF2 PIER (6) S=1:100



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  
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 METROPOLITAN EXPRESSWAY COMPANY LIMITED  
 CHODAI CO., LTD.  
 NIPPON ENGINEERING CONSULTANTS CO., LTD.

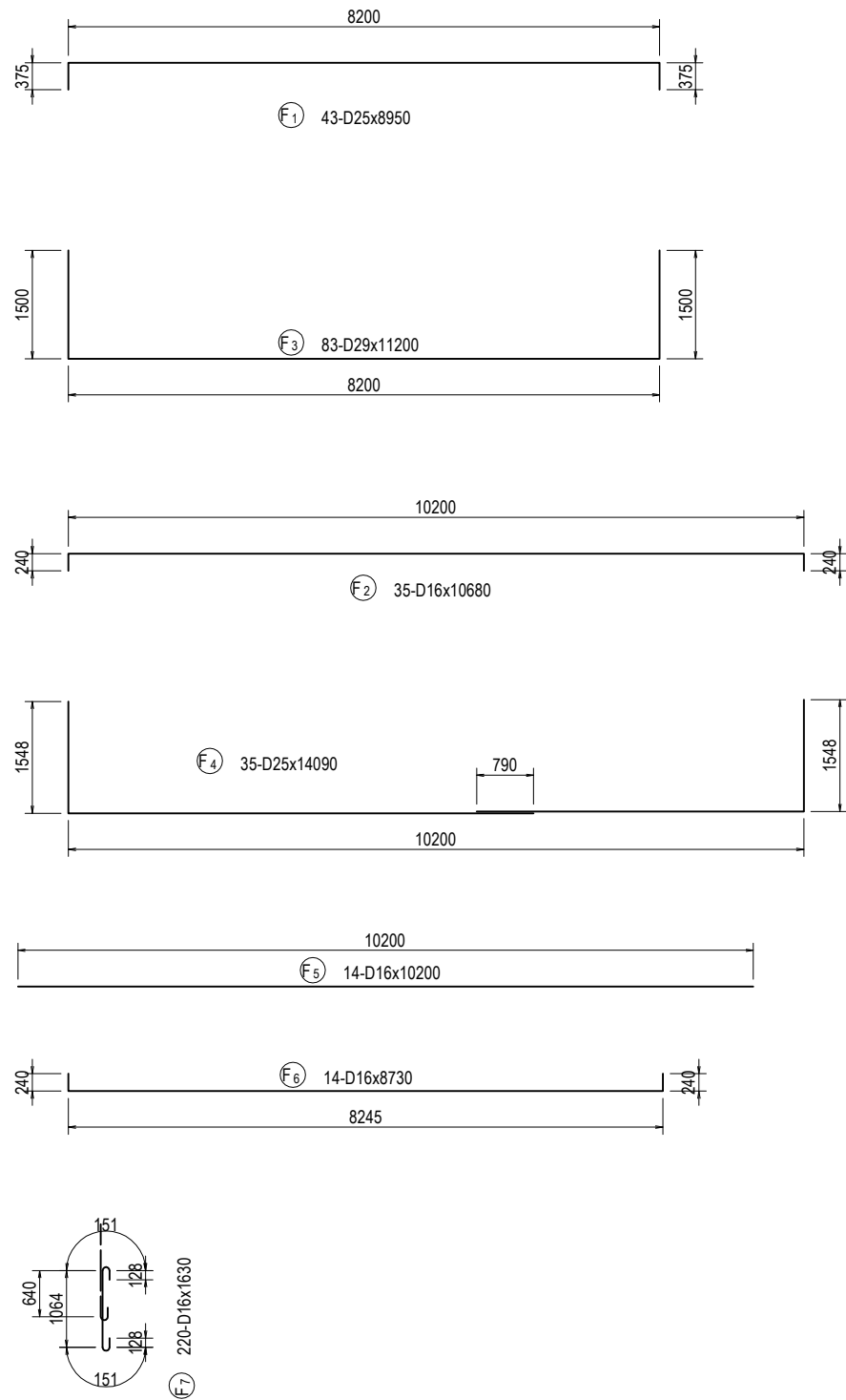
	NAME	SIGNATURE	DATE
PREPARED BY	Y. SUZUKI		14 Jul. 2017
CHECKED BY	T. HAYAKAWA		20 Jul. 2017
APPROVED BY	Y. SANO		25 Jul. 2017

DRAWING TITLE  
**BAR ARRANGEMENT OF PF2 PIER (6)**

PACKAGE  
 3  
 DWG No.  
 P3-FO-2037

# BAR ARRANGEMENT OF PF2 PIER (7)

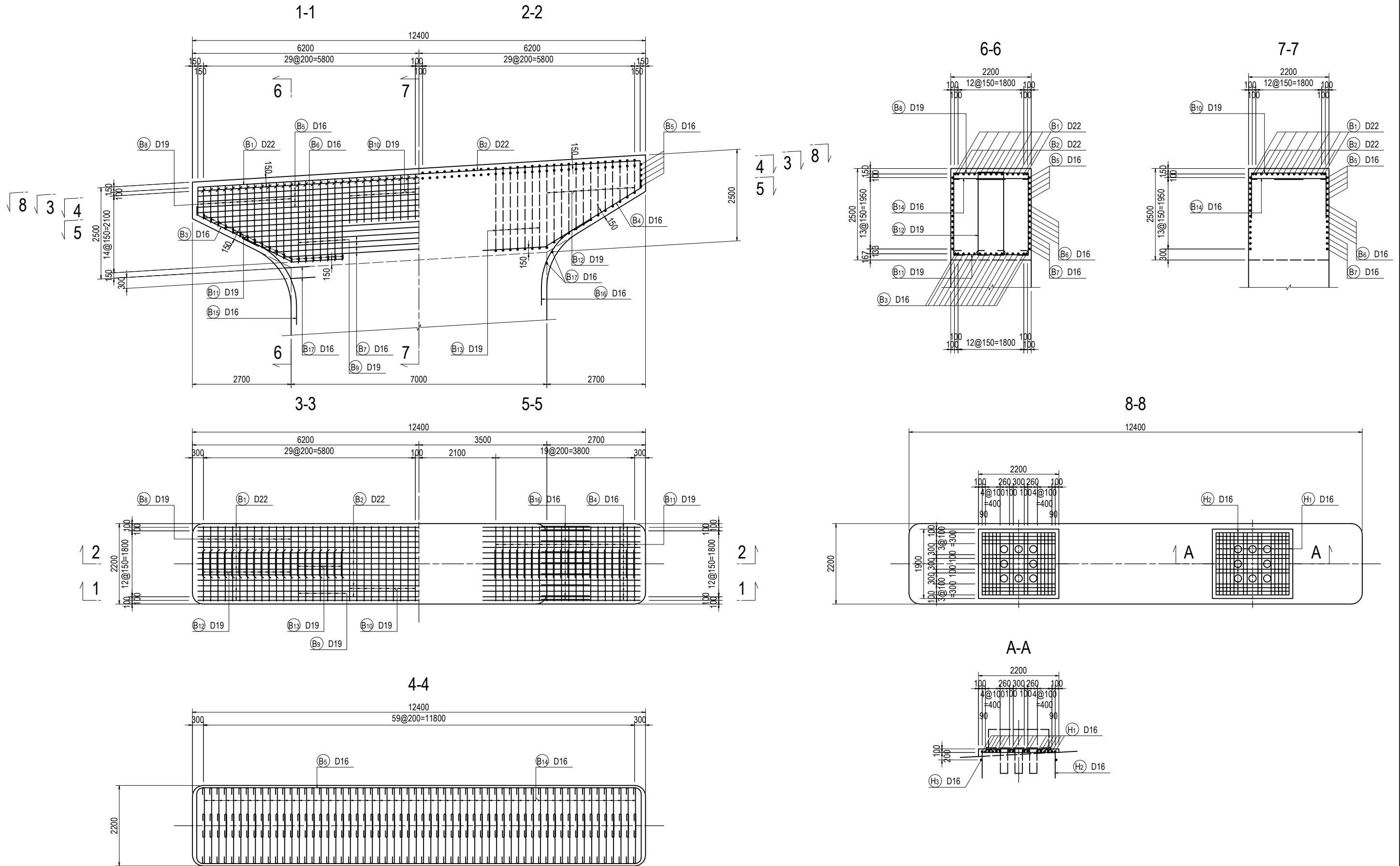
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## BAR LIST

REBAR NO.	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT/ONE (kg)	WEIGHT (kg)	REMARKS
B 1	D32	14640	9	6.23	91.21	821	
B 2	D32	14640	8	6.23	91.21	730	
B 3	D19	5000	17	2.25	11.25	191	
B 4	D19	5000	17	2.25	11.25	191	
B 5	D16	31310	5	1.56	48.84	244	
B 6	D16	28020	6	1.56	43.71	262	AVERAGE
B 7	D16	22660	3	1.56	35.35	106	AVERAGE
B 8	D22	6640	26	3.04	20.19	525	AVERAGE
B 9	D22	8010	14	3.04	24.35	341	
B 10	D22	5000	20	3.04	15.20	304	
B 11	D22	2570	80	3.04	7.81	625	
B 12	D22	4890	26	3.04	14.87	387	AVERAGE
B 13	D22	6260	14	3.04	19.03	266	
B 14	D16	2280	120	1.56	3.56	427	
B 15	D16	2920	17	1.56	4.56	78	
B 16	D16	3030	17	1.56	4.73	80	
B 17	D16	4030	4	1.56	6.29	25	
5603							
D 1	D16	15230	4	1.56	23.76	95	
D 2	D16	15230	4	1.56	23.76	95	
D 3	D16	28270	5	1.56	44.10	221	
D 4	D16	6640	60	1.56	10.36	622	
D 5	D16	1780	60	1.56	2.78	167	
1200							
H 1	D16	1300	32	1.56	2.03	65	
H 2	D16	1300	32	1.56	2.03	65	
H 3	D16	1920	8	1.56	3.00	24	
H 4	D16	2700	26	1.56	4.21	109	
H 5	D16	3000	22	1.56	4.68	103	
H 6	D16	3420	4	1.56	5.34	21	
387							
C 1	D29	6540	102	5.04	32.96	3362	
C 2	D29	6540	22	5.04	32.96	725	
C 3	D16	10620	68	1.56	16.57	1127	
C 4	D16	2220	204	1.56	3.46	706	
C 5	D16	4220	68	1.56	6.58	447	
6367							
F 1	D25	8950	43	3.98	35.62	1532	
F 2	D16	10680	35	1.56	16.66	583	
F 3	D29	11200	83	5.04	56.45	4685	
F 4	D25	14090	35	3.98	56.08	1963	
F 5	D16	10200	14	1.56	15.91	223	
F 6	D16	8730	14	1.56	13.62	191	
F 7	D16	1630	220	1.56	2.54	559	
9736							
					D32	1551	
					D29	8772	
					D25	3495	
					D22	2448	
					D19	382	
					D16	6645	
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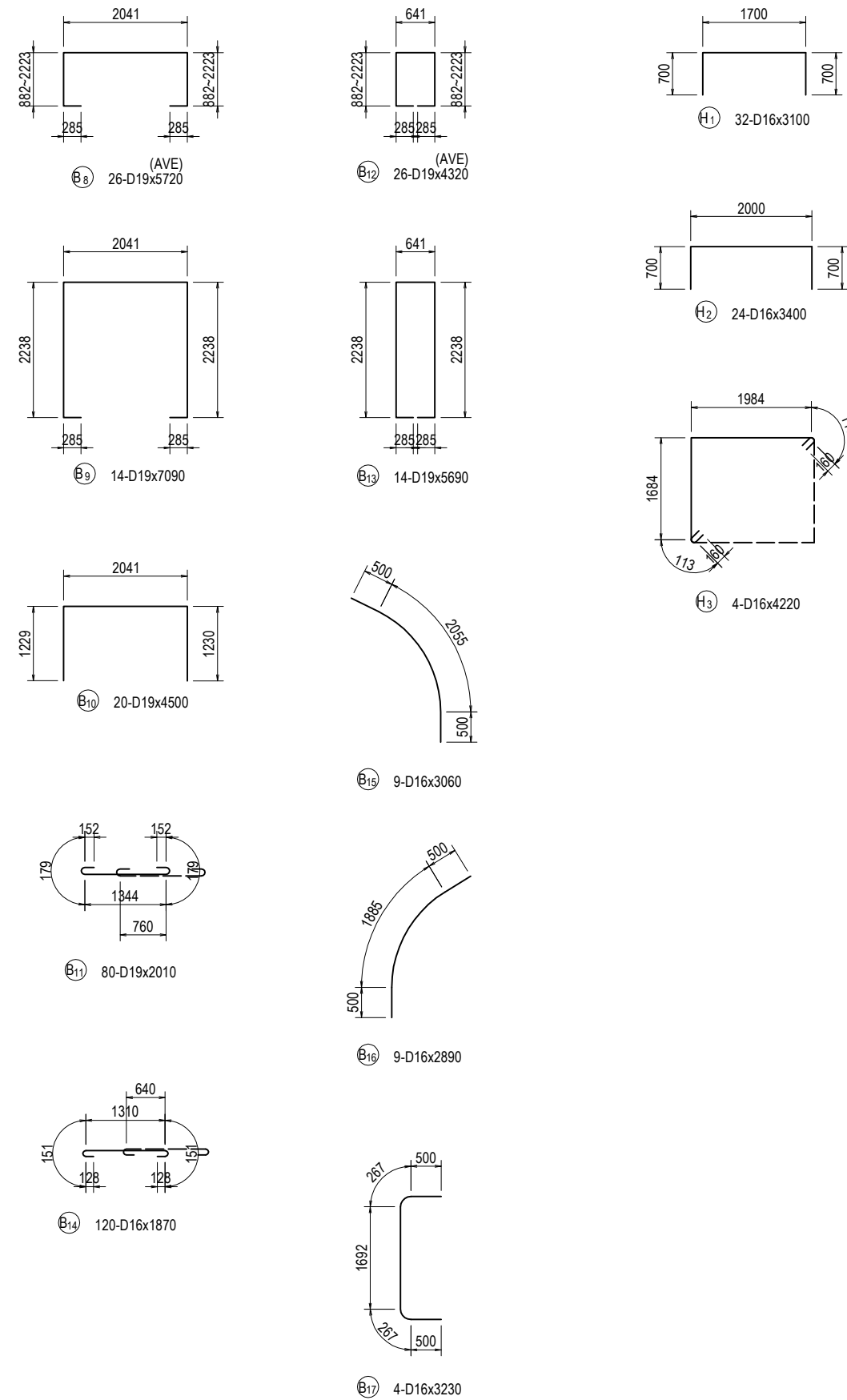
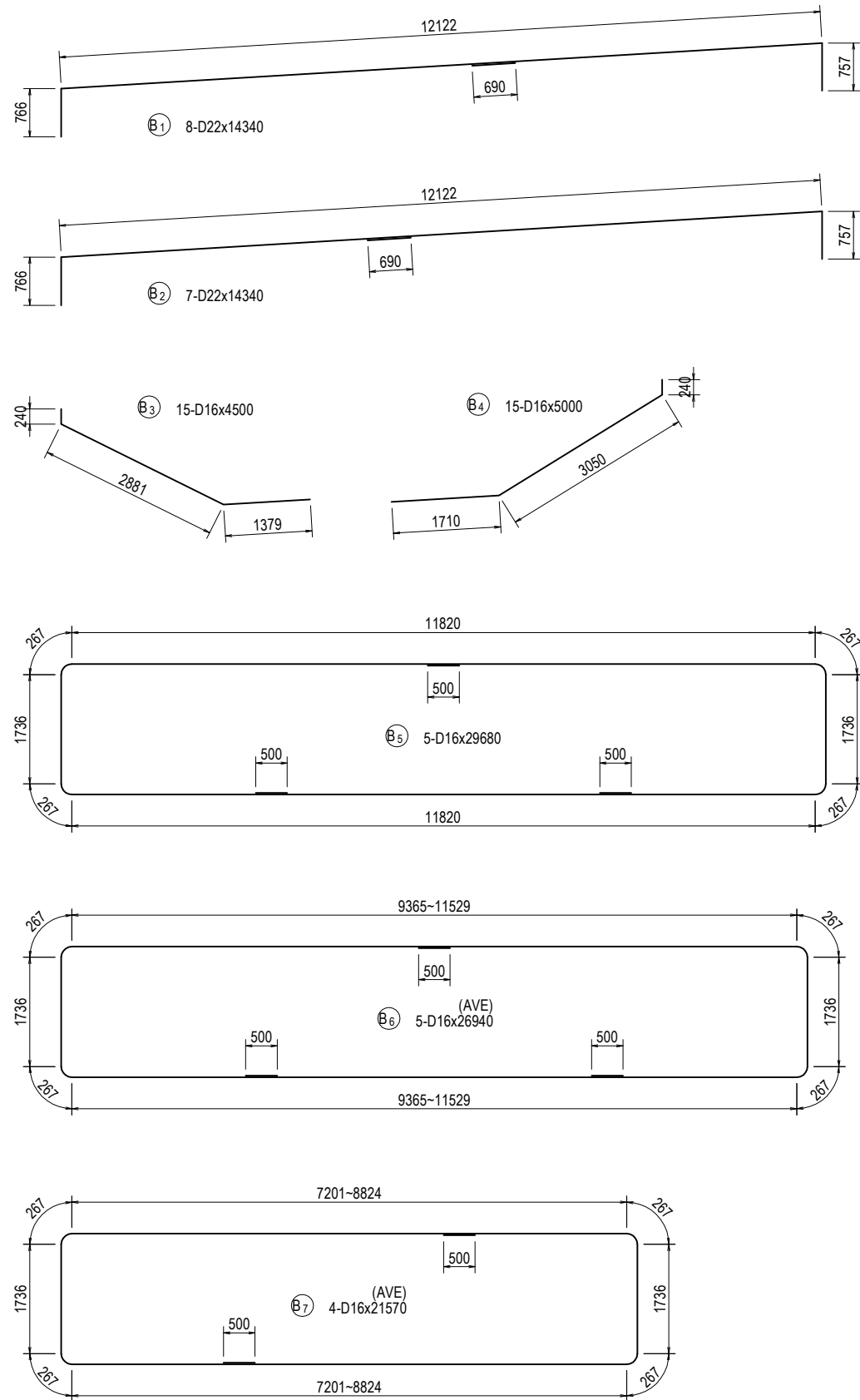
# BAR ARRANGEMENT OF PF3 PIER (1) S=1:100



<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: 10%;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY</td> <td>Y. SUZUKI</td> <td></td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY</td> <td>T. HAYAKAWA</td> <td></td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY</td> <td>Y. SANO</td> <td></td> <td>25 Jul. 2017</td> </tr> </tbody> </table>		NAME	SIGNATURE	DATE	PREPARED BY	Y. SUZUKI		14 Jul. 2017	CHECKED BY	T. HAYAKAWA		20 Jul. 2017	APPROVED BY	Y. SANO		25 Jul. 2017	<small>DRAWING TITLE</small> <b>BAR ARRANGEMENT OF PF3 PIER (1)</b>	<small>PACKAGE</small> 3 <small>DWG No.</small> P3-FO-2039
	NAME	SIGNATURE	DATE																			
PREPARED BY	Y. SUZUKI		14 Jul. 2017																			
CHECKED BY	T. HAYAKAWA		20 Jul. 2017																			
APPROVED BY	Y. SANO		25 Jul. 2017																			

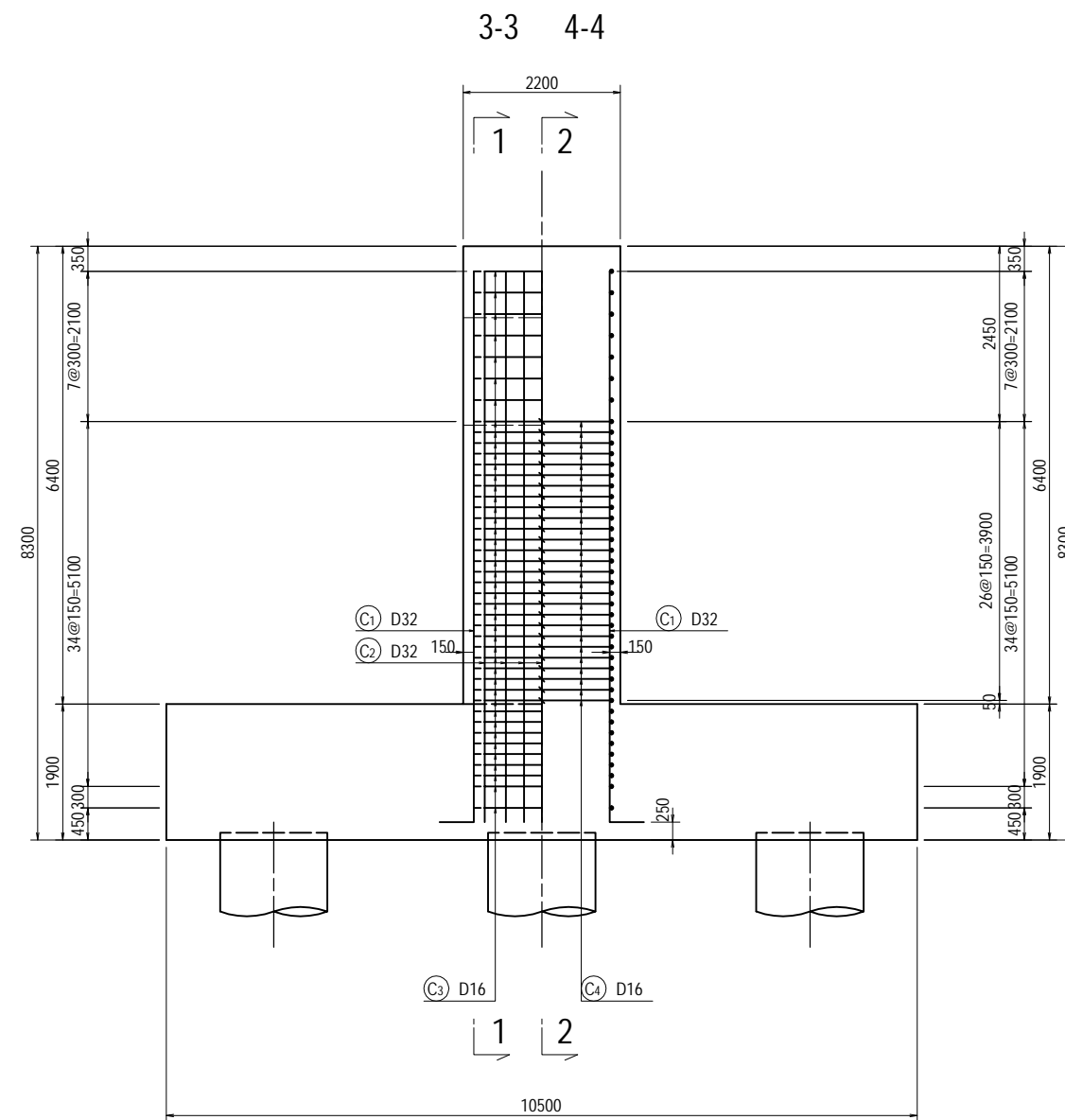
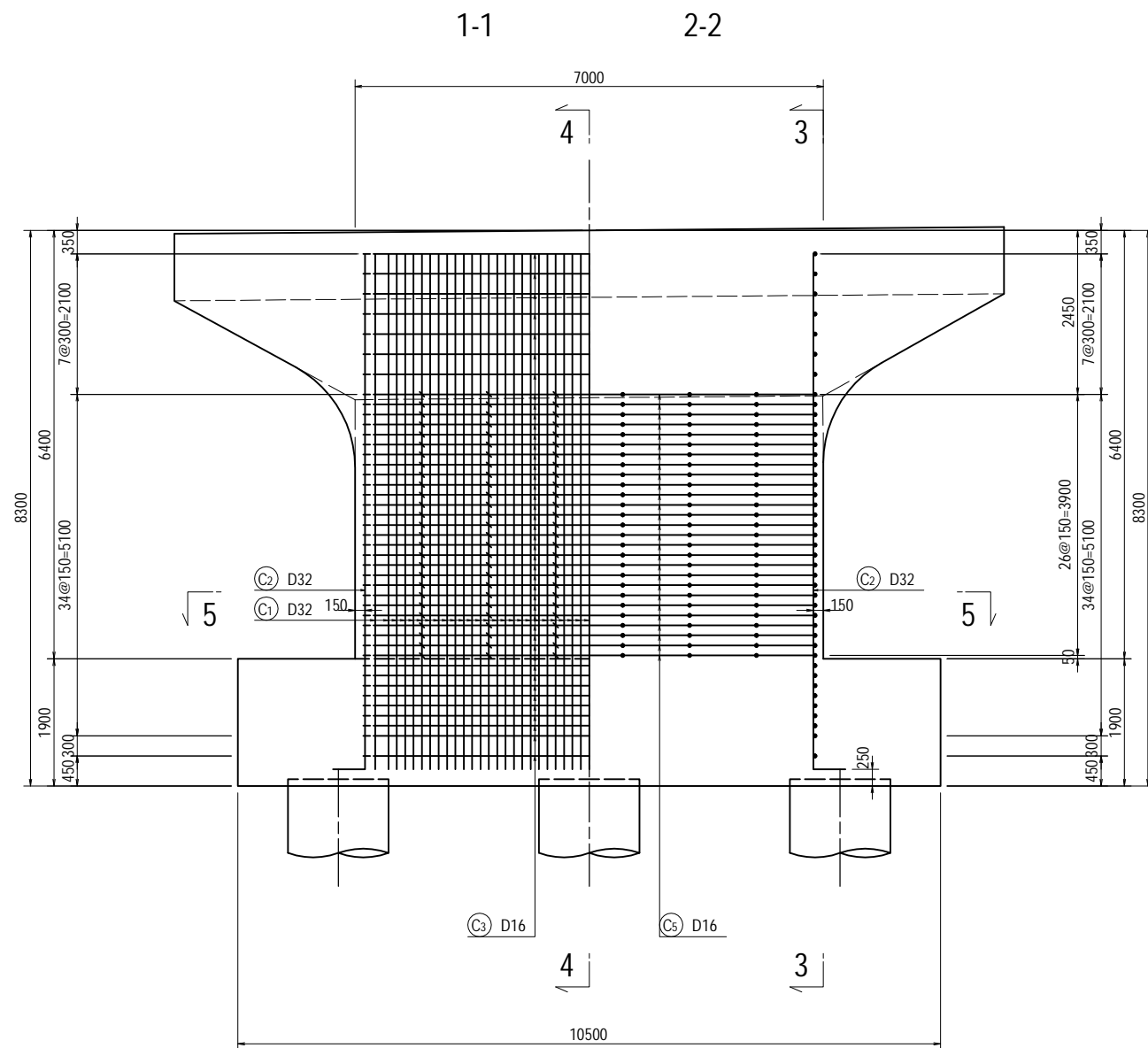
# BAR ARRANGEMENT OF PF3 PIER (2)

S=1:100



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.	Y. SUZUKI	<i>YS</i>	14 Jul. 2017	BAR ARRANGEMENT OF PF3 PIER (2)	3
				T. HAYAKAWA	<i>平川知邦</i>	20 Jul. 2017		DWG No.
				Y. SANO	<i>佐野 祐一</i>	25 Jul. 2017		P3-FO-2040

# BAR ARRANGEMENT OF PF3 PIER (3) S=1:100



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

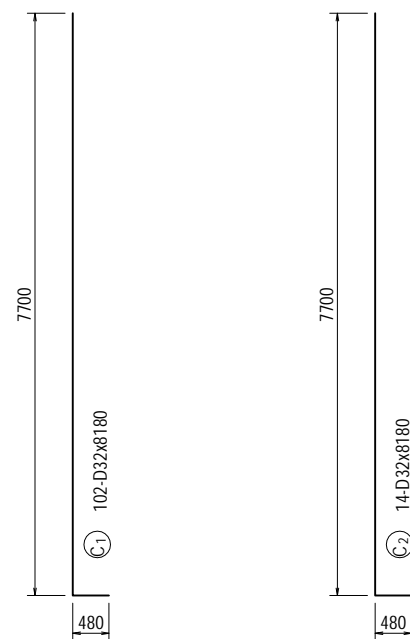
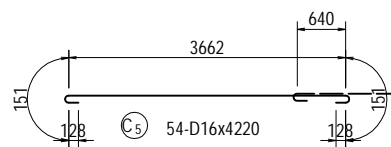
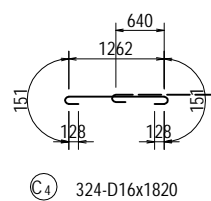
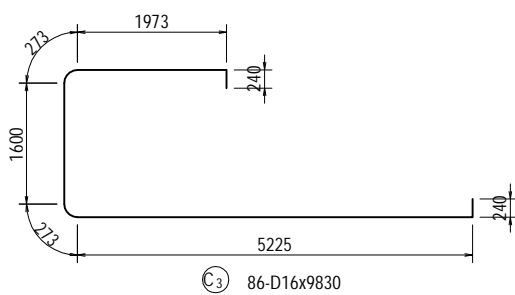
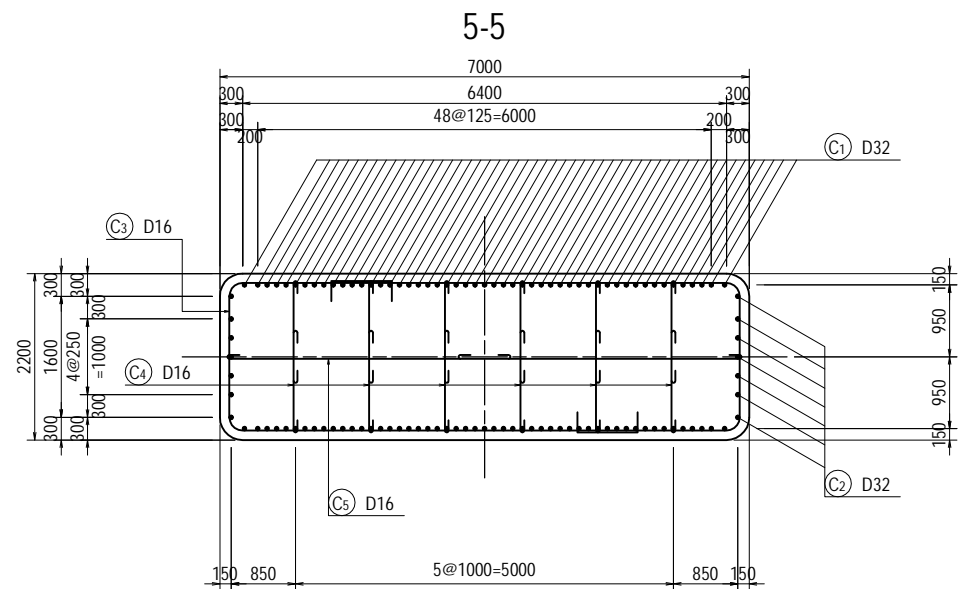
JICA STUDY TEAM  
 NIPPON KOEI CO., LTD.  
 ORIENTAL CONSULTANTS GLOBAL CO., LTD.  
 METROPOLITAN EXPRESSWAY COMPANY LIMITED  
 CHODAI CO., LTD.  
 NIPPON ENGINEERING CONSULTANTS CO., LTD.

	NAME	SIGNATURE	DATE
PREPARED BY	Y. SUZUKI	<i>YS</i>	14 Jul. 2017
CHECKED BY	T. HAYAKAWA	<i>Hayakawa</i>	20 Jul. 2017
APPROVED BY	Y. SANO	<i>Y. Sano</i>	25 Jul. 2017

DRAWING TITLE  
 BAR ARRANGEMENT OF PF3 PIER (3)

PACKAGE  
 3  
 DWG No.  
 P3-FO-2041

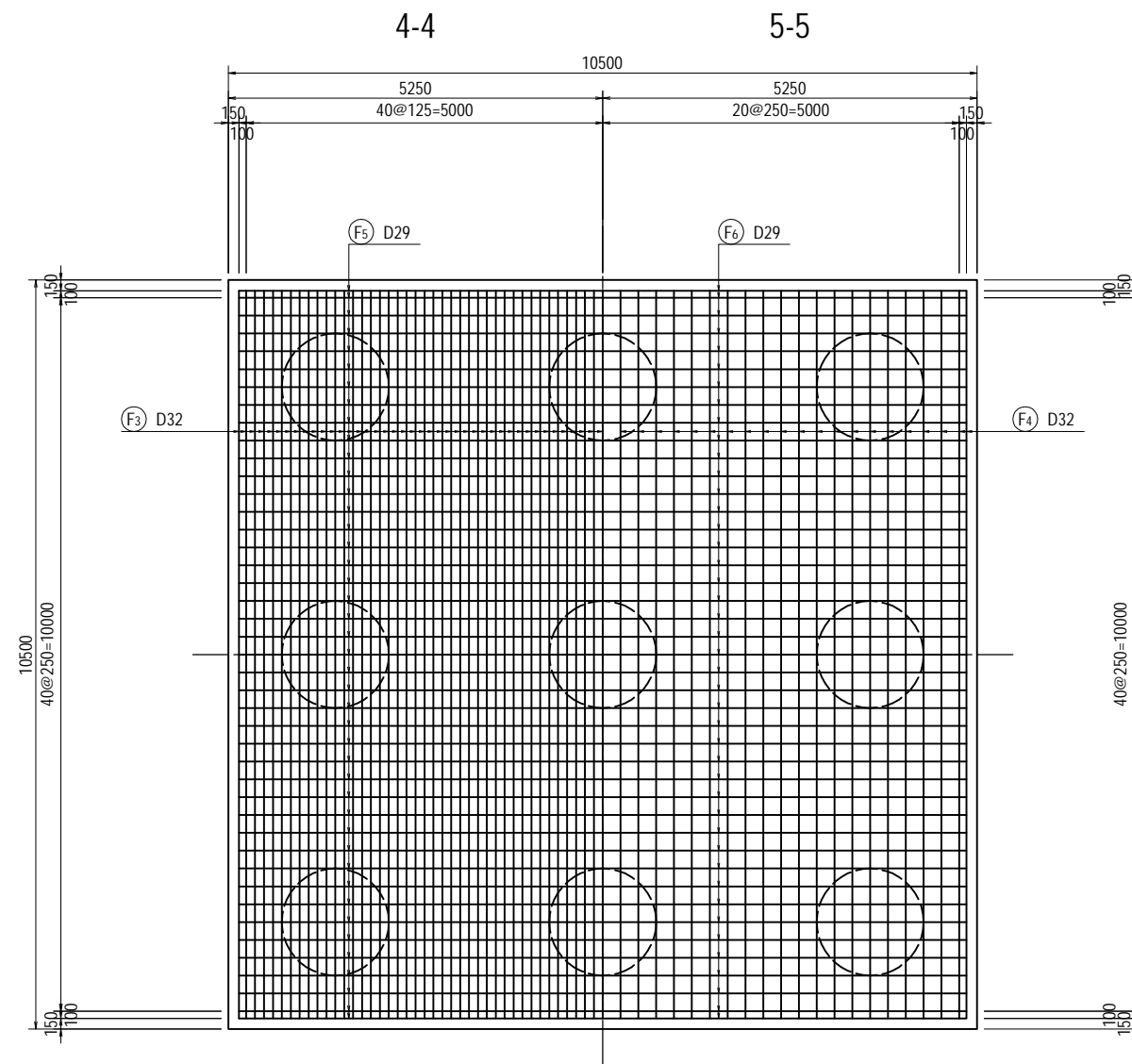
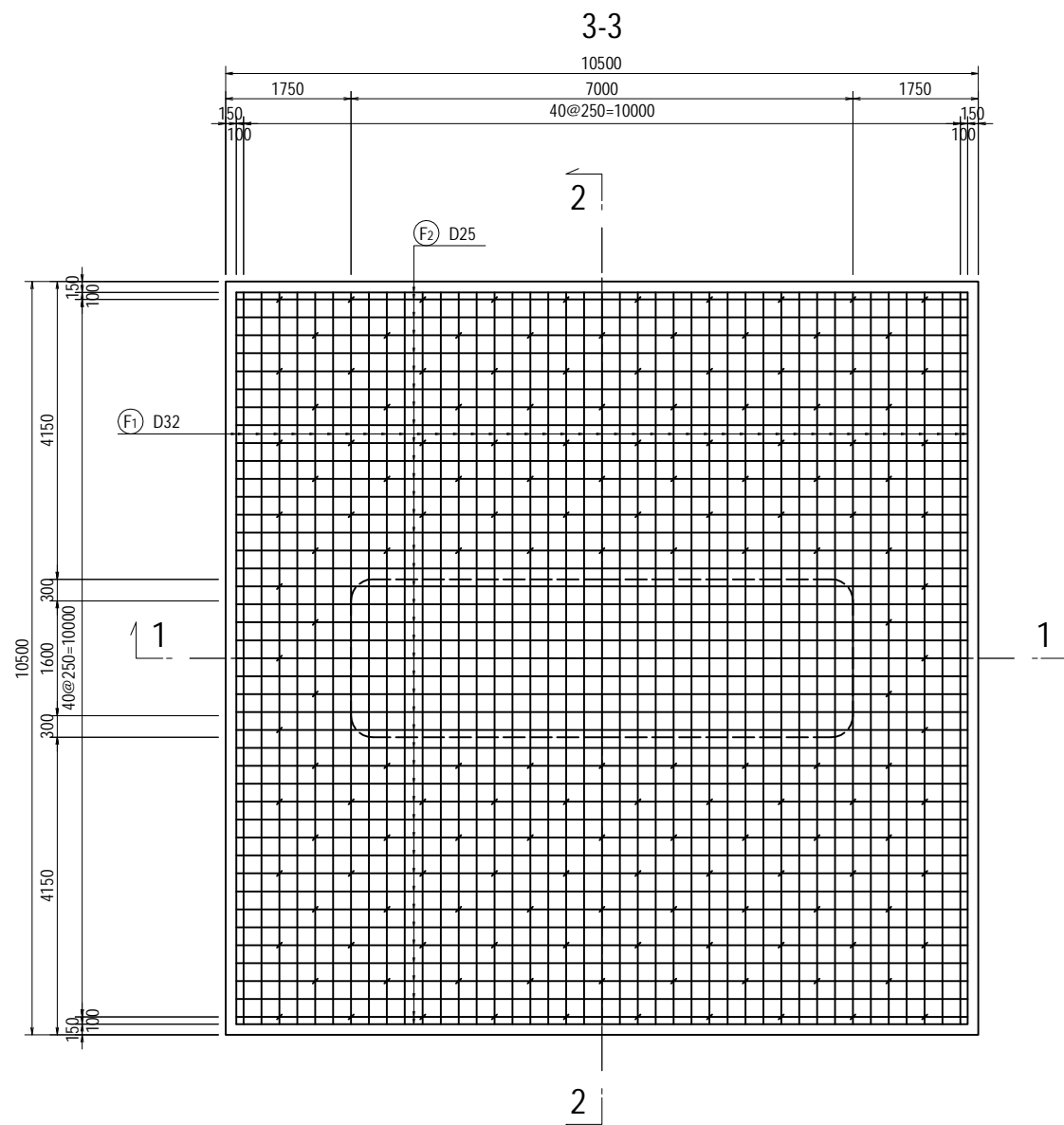
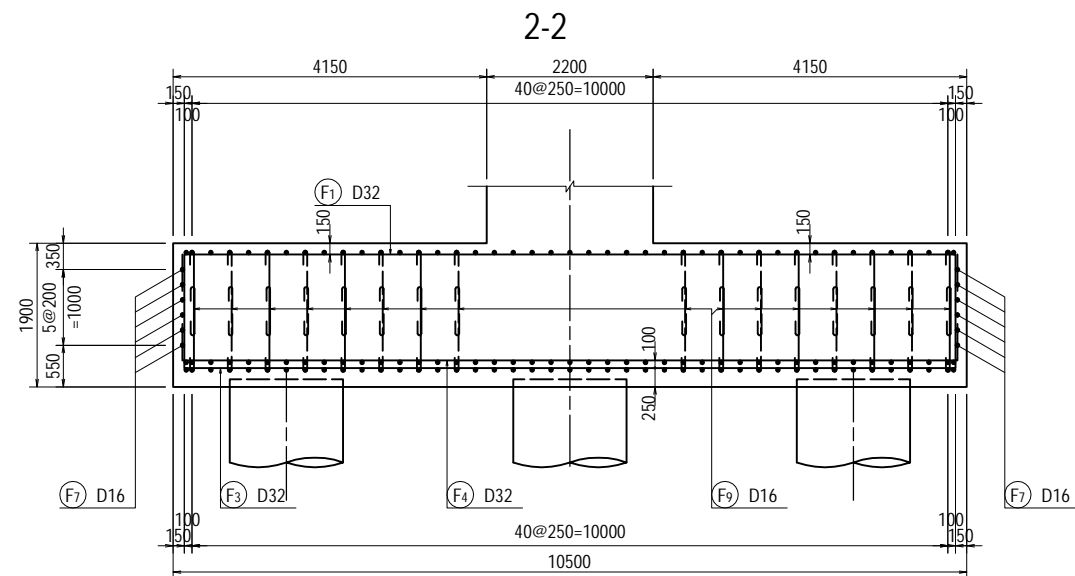
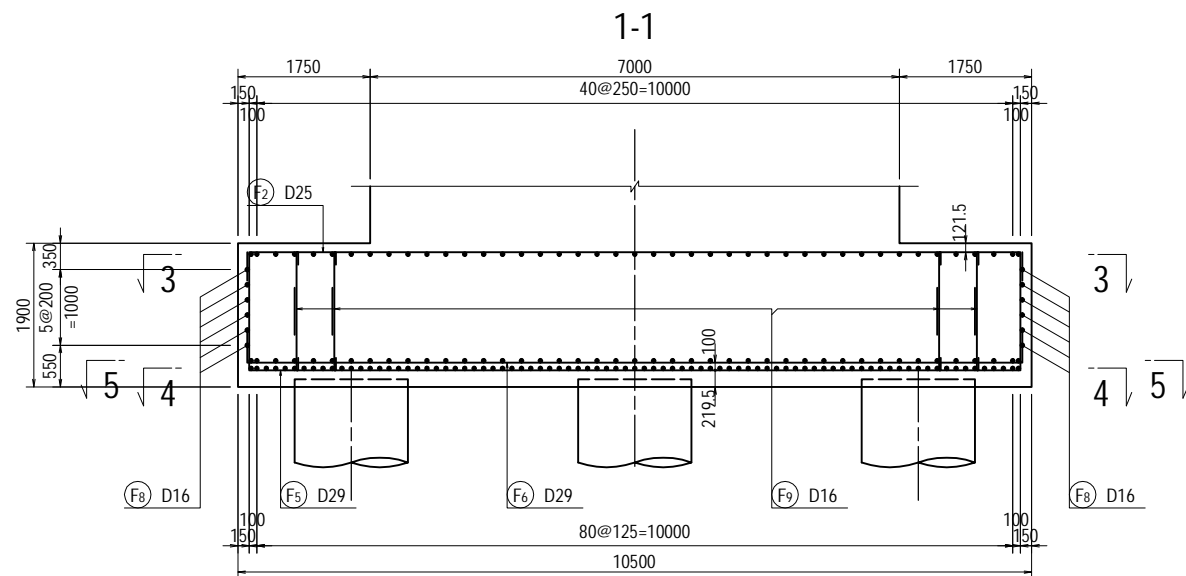
# BAR ARRANGEMENT OF PF3 PIER (4) S=1:100



<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: 20%;"></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>Y. SUZUKI</td> <td><i>YS</i></td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY</td> <td>T. HAYAKAWA</td> <td><i>Hayakawa</i></td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY</td> <td>Y. SANO</td> <td><i>Y. Sano</i></td> <td>25 Jul. 2017</td> </tr> </tbody> </table>		NAME	SIGNATURE	DATE	PREPARED BY	Y. SUZUKI	<i>YS</i>	14 Jul. 2017	CHECKED BY	T. HAYAKAWA	<i>Hayakawa</i>	20 Jul. 2017	APPROVED BY	Y. SANO	<i>Y. Sano</i>	25 Jul. 2017	<small>DRAWING TITLE</small> <b>BAR ARRANGEMENT OF PF3 PIER (4)</b>	<small>PACKAGE</small> 3 <small>DWG No.</small> P3-FO-2042
	NAME	SIGNATURE	DATE																				
PREPARED BY	Y. SUZUKI	<i>YS</i>	14 Jul. 2017																				
CHECKED BY	T. HAYAKAWA	<i>Hayakawa</i>	20 Jul. 2017																				
APPROVED BY	Y. SANO	<i>Y. Sano</i>	25 Jul. 2017																				



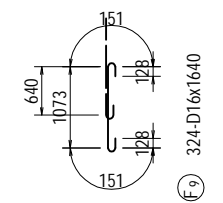
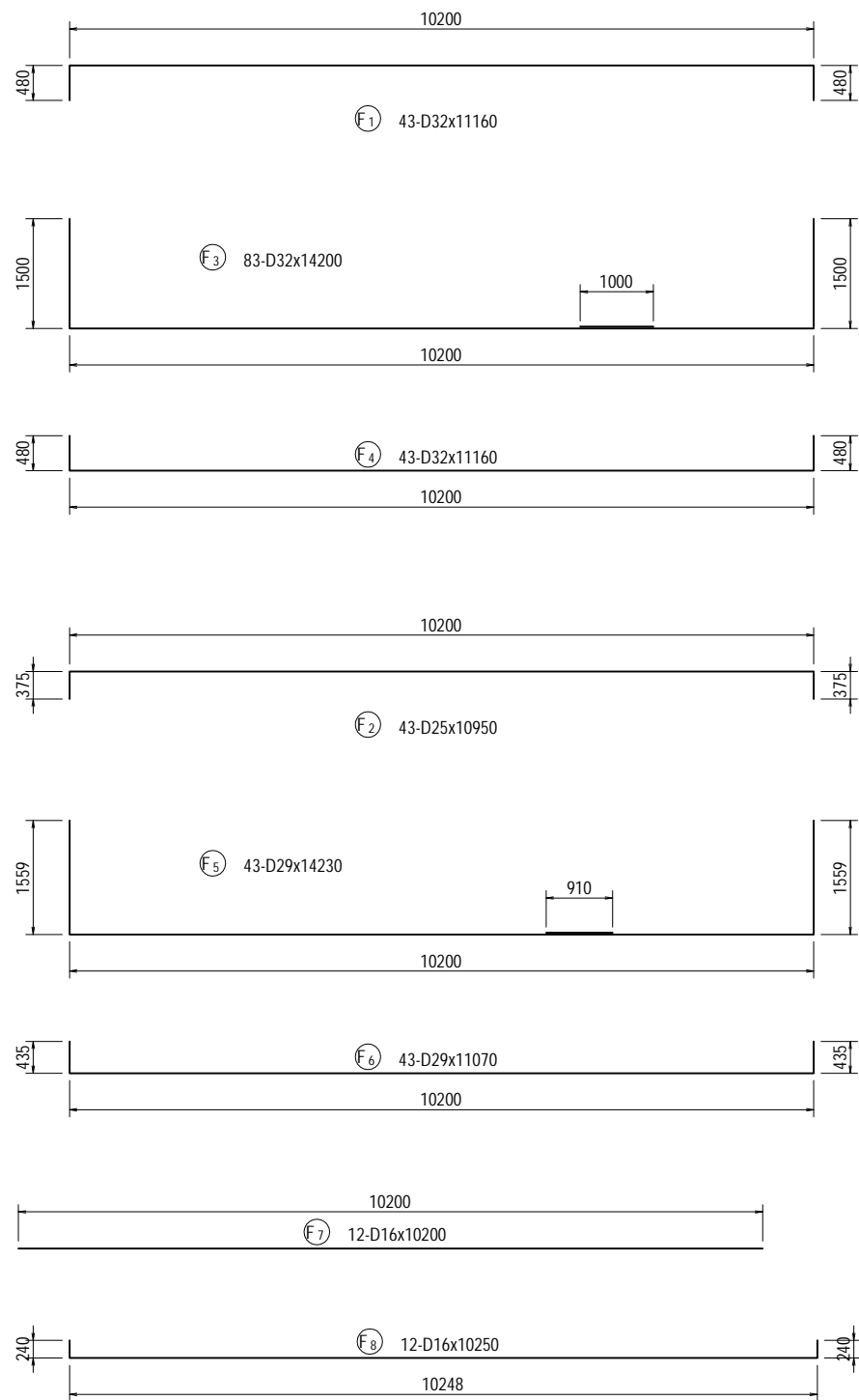
# BAR ARRANGEMENT OF PF3 PIER (5) S=1:100



<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: 15%;">NAME</th> <th style="width: 15%;">SIGNATURE</th> <th style="width: 15%;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY</td> <td>Y. SUZUKI</td> <td></td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY</td> <td>T. HAYAKAWA</td> <td></td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY</td> <td>Y. SANO</td> <td></td> <td>25 Jul. 2017</td> </tr> </tbody> </table>		NAME	SIGNATURE	DATE	PREPARED BY	Y. SUZUKI		14 Jul. 2017	CHECKED BY	T. HAYAKAWA		20 Jul. 2017	APPROVED BY	Y. SANO		25 Jul. 2017	<small>DRAWING TITLE</small> BAR ARRANGEMENT OF PF3 PIER (5)	<small>PACKAGE</small> 3 DWG No. P3-FO-2043
	NAME	SIGNATURE	DATE																			
PREPARED BY	Y. SUZUKI		14 Jul. 2017																			
CHECKED BY	T. HAYAKAWA		20 Jul. 2017																			
APPROVED BY	Y. SANO		25 Jul. 2017																			

# BAR ARRANGEMENT OF PF3 PIER (6)

S=1:100



## BAR LIST

REBAR NO.	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT/ONE (kg)	WEIGHT (kg)	REMARKS
B 1	D22	14340	8	3.04	43.59	349	
B 2	D22	14340	7	3.04	43.59	305	
B 3	D16	4500	15	1.56	7.02	105	
B 4	D16	5000	15	1.56	7.80	117	
B 5	D16	29680	5	1.56	46.30	232	
B 6	D16	26940	5	1.56	42.03	210	AVERAGE
B 7	D16	21570	4	1.56	33.65	135	AVERAGE
B 8	D19	5720	26	2.25	12.87	335	AVERAGE
B 9	D19	7090	14	2.25	15.95	223	
B 10	D19	4500	20	2.25	10.13	203	
B 11	D19	2010	80	2.25	4.52	362	
B 12	D19	4320	26	2.25	9.72	253	AVERAGE
B 13	D19	5690	14	2.25	12.80	179	
B 14	D16	1870	120	1.56	2.92	350	
B 15	D16	3060	9	1.56	4.77	43	
B 16	D16	2890	9	1.56	4.51	41	
B 17	D16	3230	4	1.56	5.04	20	
						3462	
H 1	D16	3100	32	1.56	4.84	155	
H 2	D16	3400	24	1.56	5.30	127	
H 3	D16	4220	4	1.56	6.58	26	
						308	
C 1	D32	8180	102	6.23	50.96	5198	
C 2	D32	8180	14	6.23	50.96	713	
C 3	D16	9830	86	1.56	15.33	1318	
C 4	D16	1820	324	1.56	2.84	920	
C 5	D16	4220	54	1.56	6.58	355	
						8504	
F 1	D32	11160	43	6.23	69.53	2990	
F 2	D25	10950	43	3.98	43.58	1874	
F 3	D32	14200	83	6.23	88.47	7343	
F 4	D32	11160	43	6.23	69.53	2990	
F 5	D29	14230	43	5.04	71.72	3084	
F 6	D29	11070	43	5.04	55.79	2399	
F 7	D16	10200	12	1.56	15.91	191	
F 8	D16	10250	12	1.56	15.99	192	
F 9	D16	1640	324	1.56	2.56	829	
						21892	
					D32	19234	
					D29	5483	
					D25	1874	
					D22	654	
					D19	1555	
					D16	5366	
					TOTAL	34166	

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

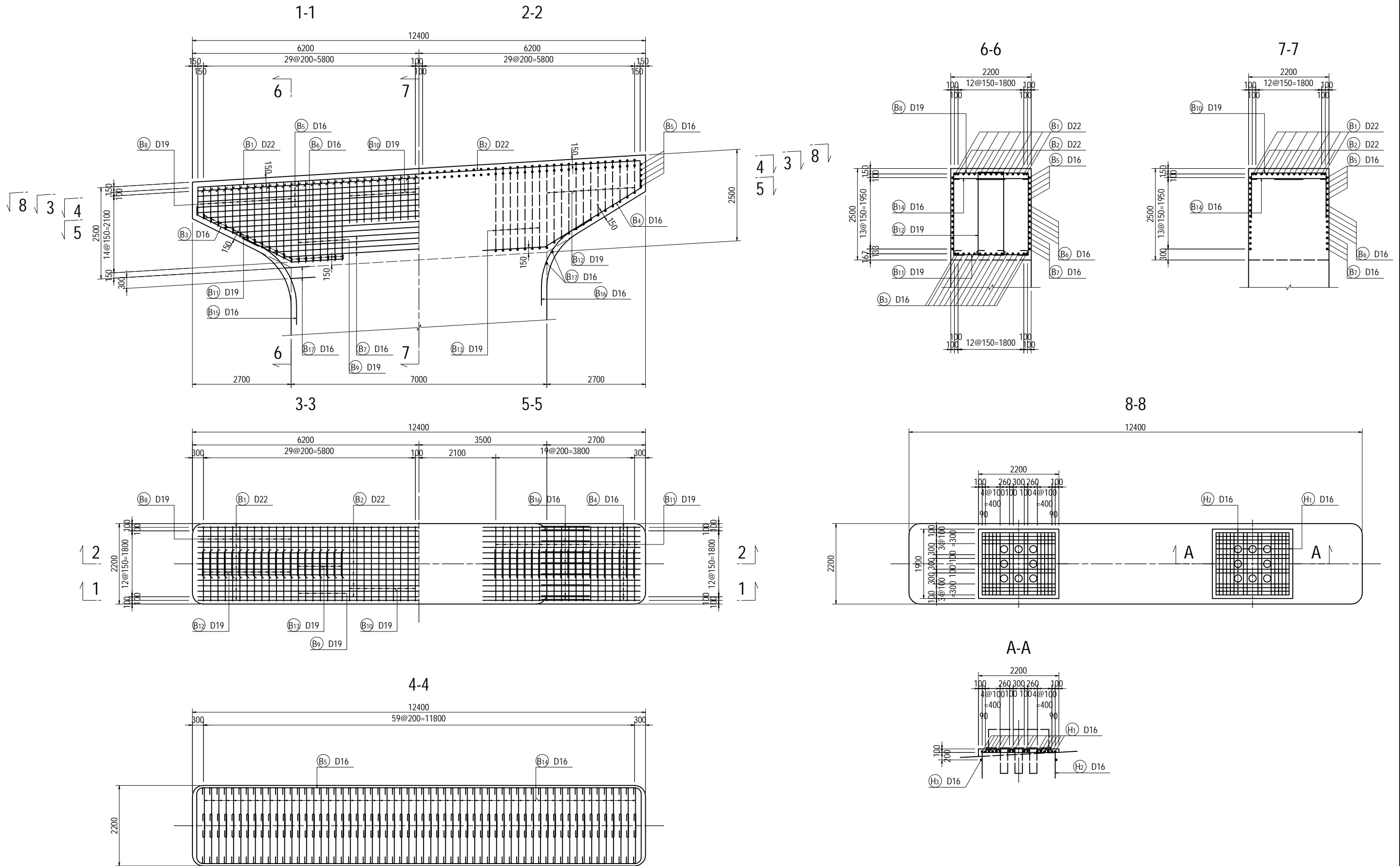
JICA STUDY TEAM  
 NIPPON KOEI CO., LTD.  
 ORIENTAL CONSULTANTS GLOBAL CO., LTD.  
 METROPOLITAN EXPRESSWAY COMPANY LIMITED  
 CHODAI CO., LTD.  
 NIPPON ENGINEERING CONSULTANTS CO., LTD.

	NAME	SIGNATURE	DATE
PREPARED BY	Y. SUZUKI		14 Jul. 2017
CHECKED BY	T. HAYAKAWA		20 Jul. 2017
APPROVED BY	Y. SANO		25 Jul. 2017

DRAWING TITLE  
BAR ARRANGEMENT OF PF3 PIER (6)

PACKAGE  
3  
DWG No.  
P3-FO-2044

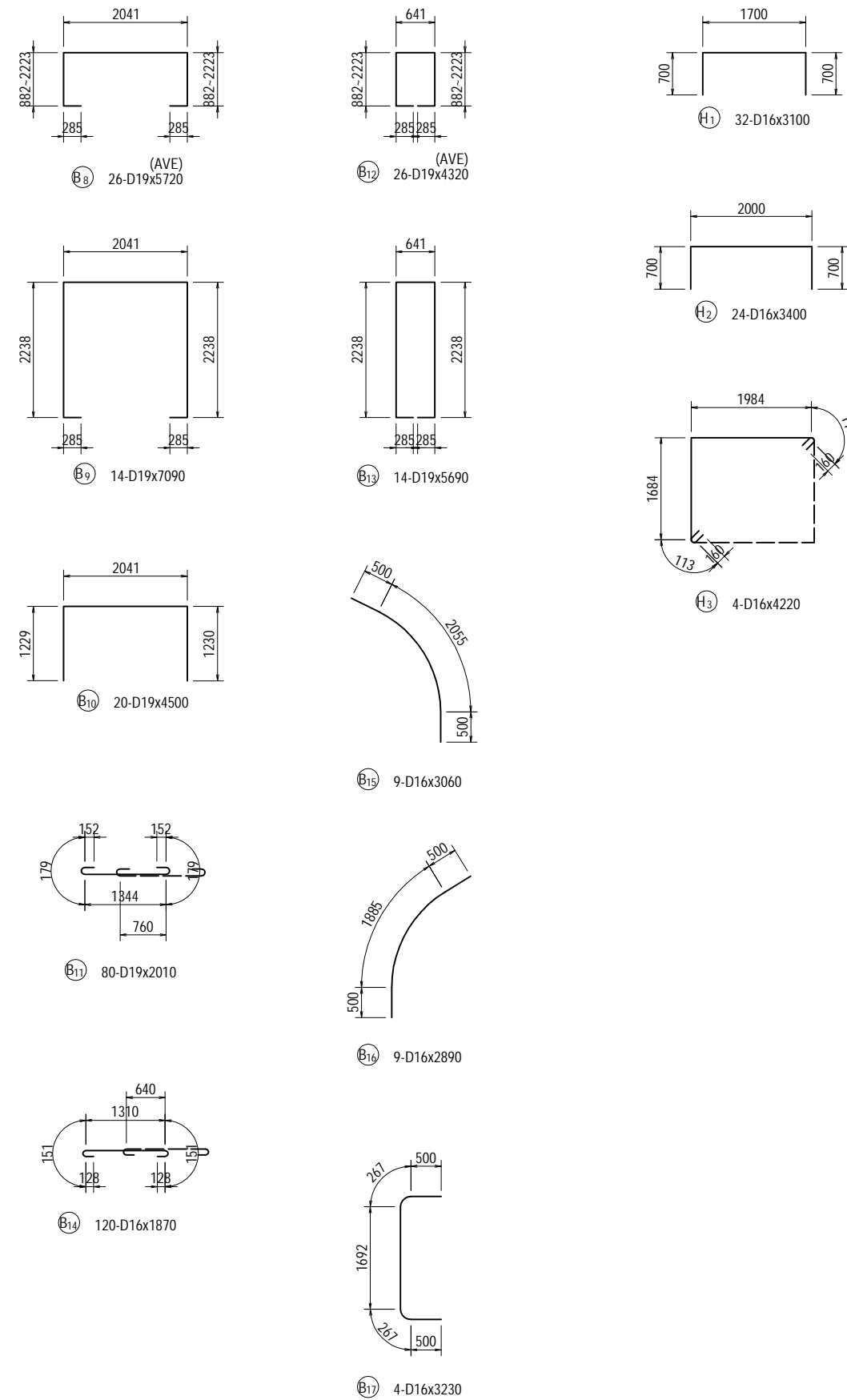
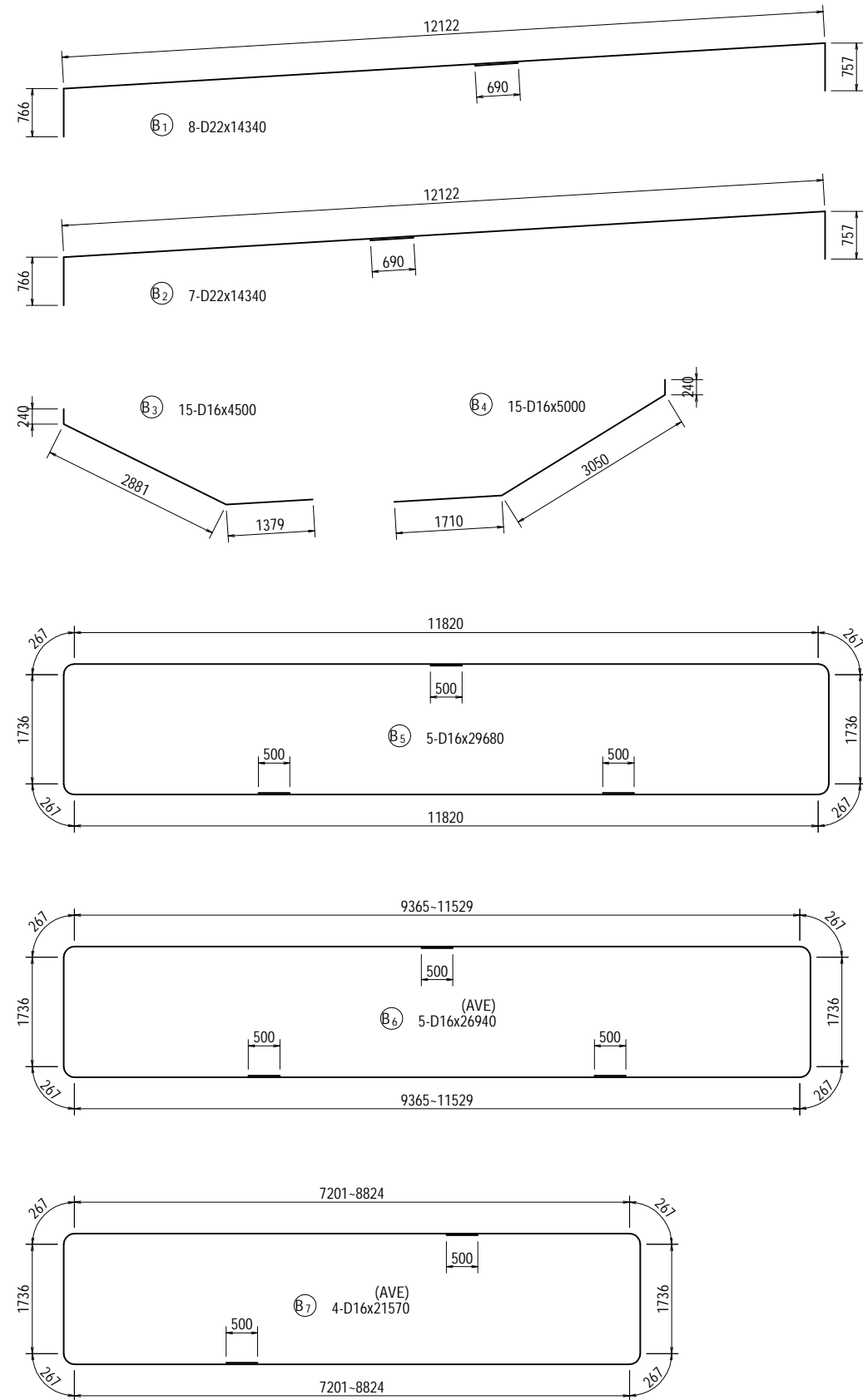
# BAR ARRANGEMENT OF PF4 PIER (1) S=1:100



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</td> <td>Y. SUZUKI</td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY</td> <td>T. HAYAKAWA</td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY</td> <td>Y. SANO</td> <td>25 Jul. 2017</td> </tr> </tbody> </table>	NAME	SIGNATURE	DATE	PREPARED BY	Y. SUZUKI	14 Jul. 2017	CHECKED BY	T. HAYAKAWA	20 Jul. 2017	APPROVED BY	Y. SANO	25 Jul. 2017	DRAWING TITLE <h3 style="text-align: center;">BAR ARRANGEMENT OF PF4 PIER (1)</h3>	PACKAGE 3 DWG No. P3-FO-2045
NAME	SIGNATURE	DATE																
PREPARED BY	Y. SUZUKI	14 Jul. 2017																
CHECKED BY	T. HAYAKAWA	20 Jul. 2017																
APPROVED BY	Y. SANO	25 Jul. 2017																

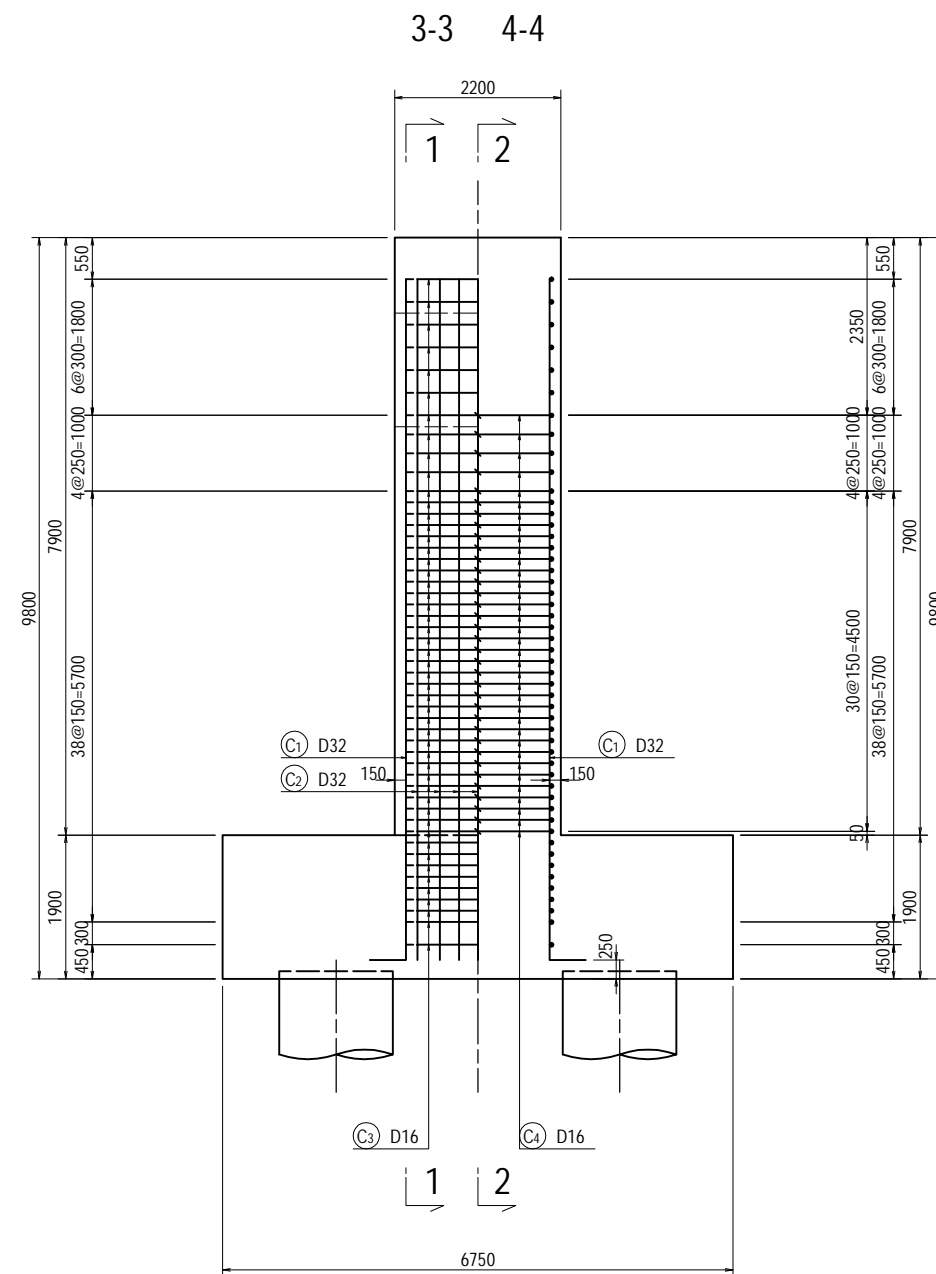
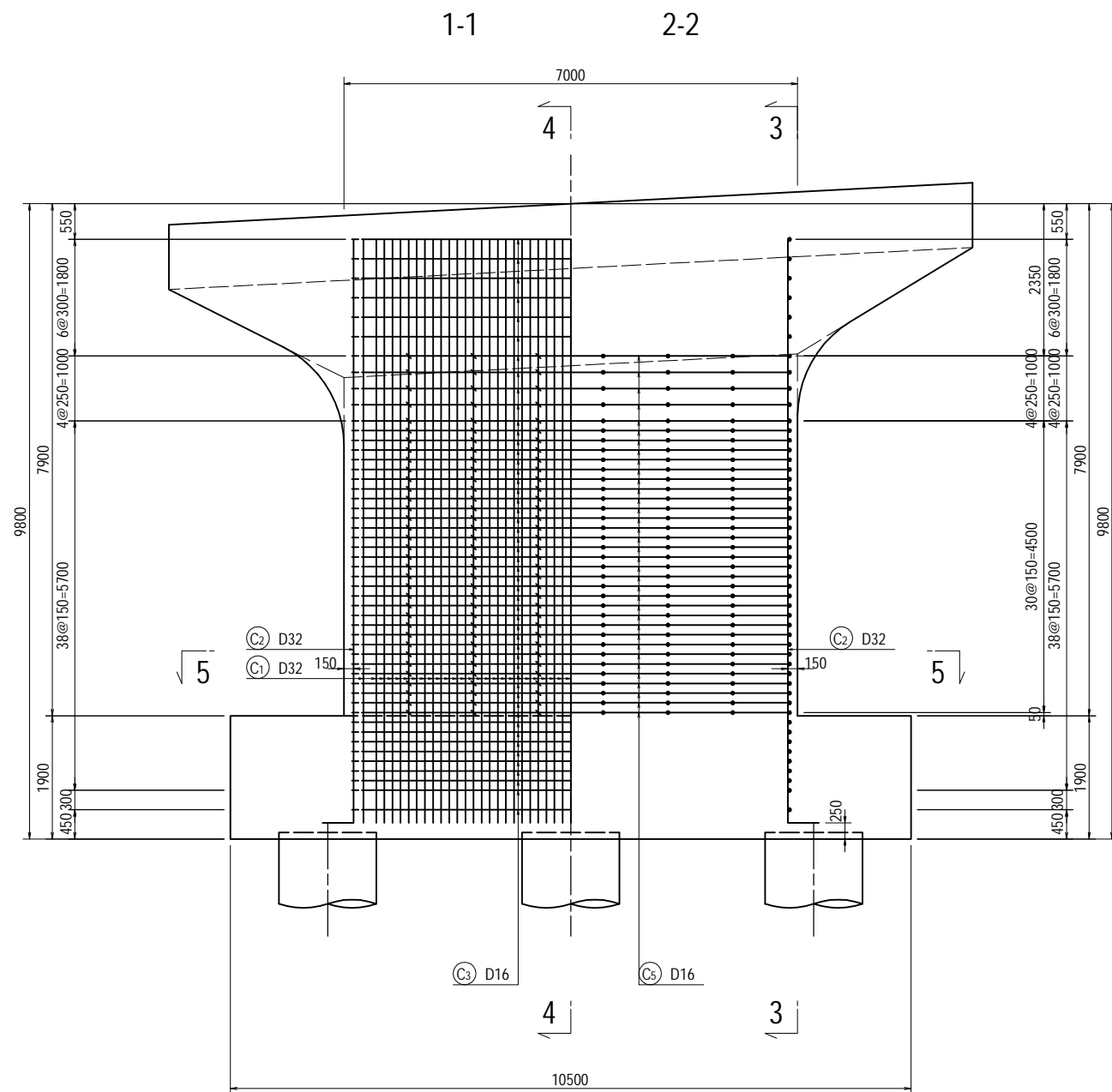
# BAR ARRANGEMENT OF PF4 PIER (2)

S=1:100



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.	Y. SUZUKI	<i>YS</i>	14 Jul. 2017	BAR ARRANGEMENT OF PF4 PIER (2)	3
				T. HAYAKAWA	<i>平川知邦</i>	20 Jul. 2017		DWG No.
				Y. SANO	<i>佐野 祐一</i>	25 Jul. 2017		P3-FO-2046

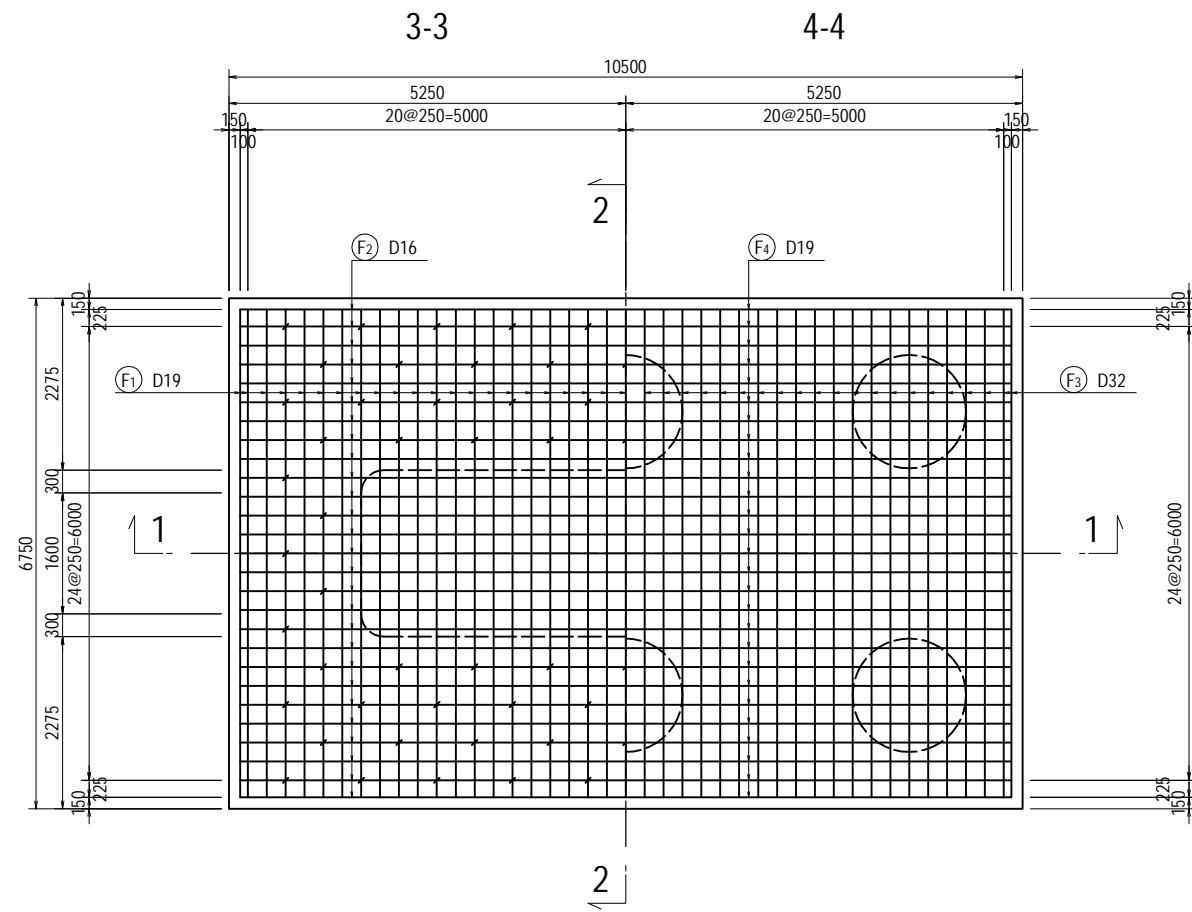
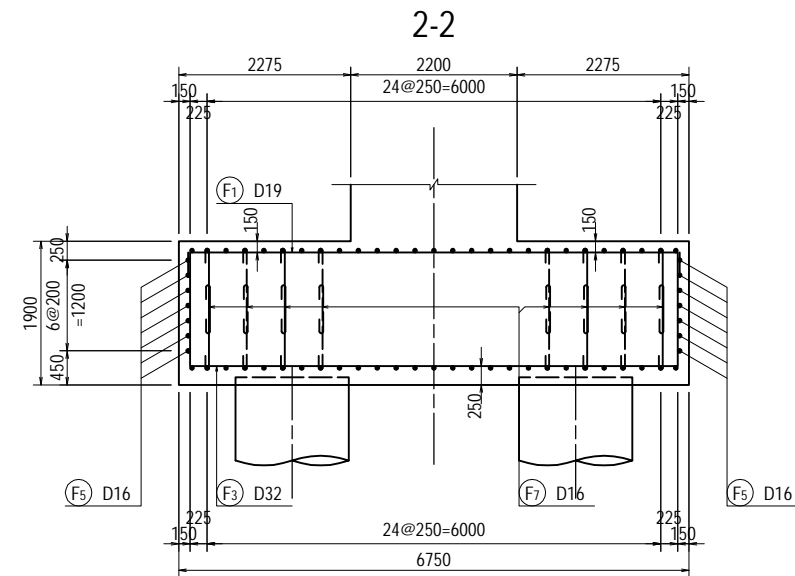
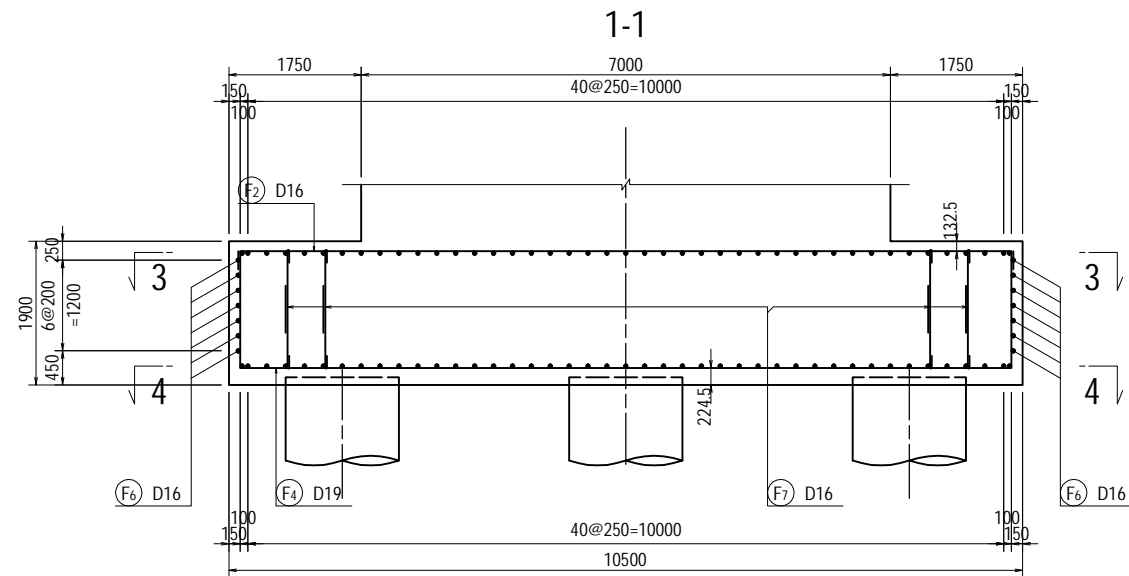
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<small>PROJECT NAME</small> DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	<small>FINANCED BY</small> JAPAN INTERNATIONAL COOPERATION AGENCY	<small>COUNTERPART</small> REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT 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;"> <thead> <tr> <th>NAME</th> <th>SIGNATURE</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY Y. SUZUKI</td> <td></td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY T. HAYAKAWA</td> <td></td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY Y. SANO</td> <td></td> <td>25 Jul. 2017</td> </tr> </tbody> </table>	NAME	SIGNATURE	DATE	PREPARED BY Y. SUZUKI		14 Jul. 2017	CHECKED BY T. HAYAKAWA		20 Jul. 2017	APPROVED BY Y. SANO		25 Jul. 2017	<small>DRAWING TITLE</small> <b>BAR ARRANGEMENT OF PF4 PIER (3)</b>	<small>PACKAGE</small> 3 <small>DWG No.</small> P3-FO-2047
NAME	SIGNATURE	DATE																	
PREPARED BY Y. SUZUKI		14 Jul. 2017																	
CHECKED BY T. HAYAKAWA		20 Jul. 2017																	
APPROVED BY Y. SANO		25 Jul. 2017																	



# BAR ARRANGEMENT OF PF4 PIER (5) S=1:100

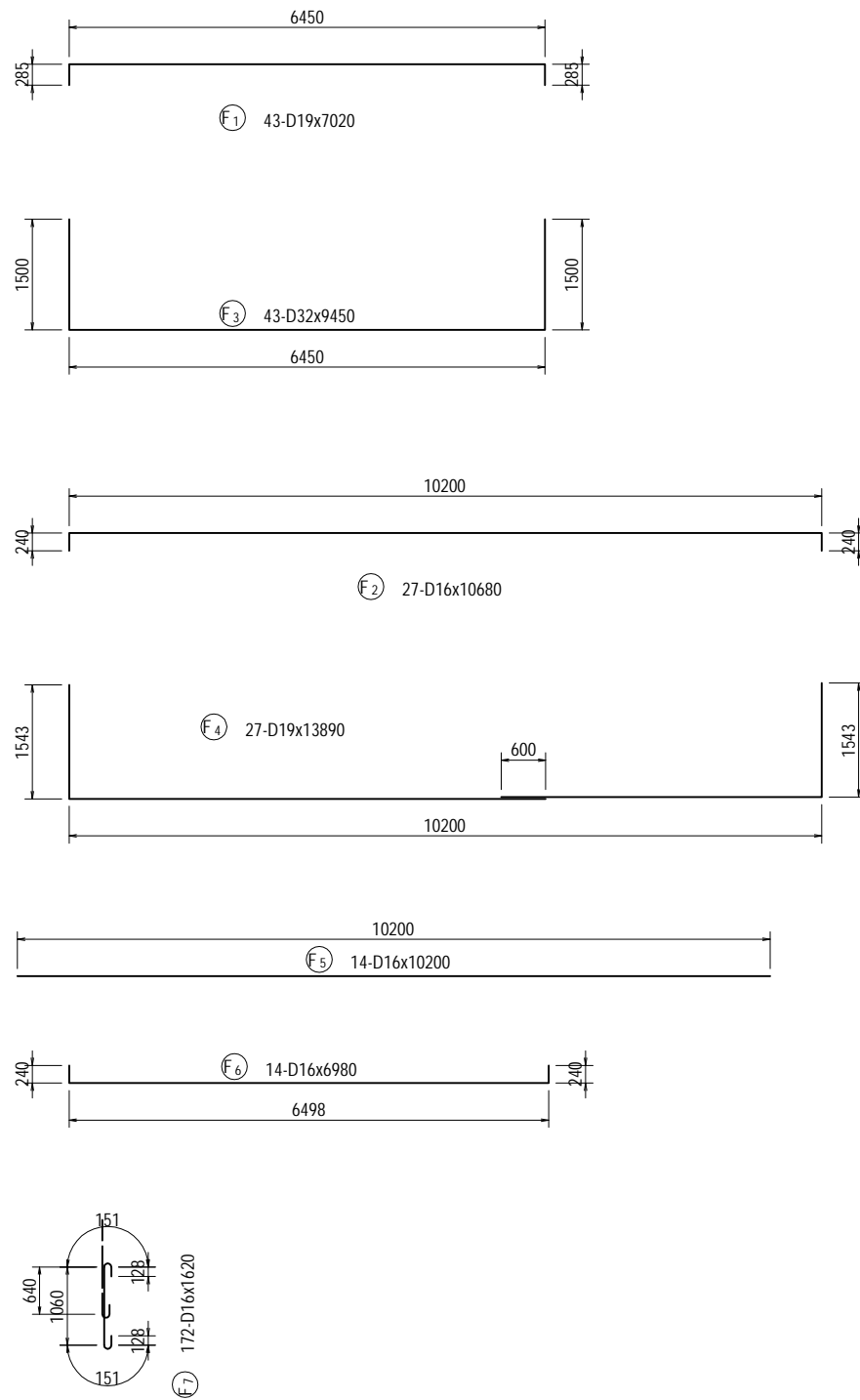


<small>PROJECT NAME</small> DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	<small>FINANCED BY</small> JAPAN INTERNATIONAL COOPERATION AGENCY	<small>COUNTERPART</small> REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	<small>JICA STUDY TEAM</small> NIPPON KOEI 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: 15%;">NAME</th> <th style="width: 15%;">SIGNATURE</th> <th style="width: 15%;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY</td> <td>Y. SUZUKI</td> <td><i>YS</i></td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY</td> <td>T. HAYAKAWA</td> <td><i>Hayakawa</i></td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY</td> <td>Y. SANO</td> <td><i>Y. Sano</i></td> <td>25 Jul. 2017</td> </tr> </tbody> </table>		NAME	SIGNATURE	DATE	PREPARED BY	Y. SUZUKI	<i>YS</i>	14 Jul. 2017	CHECKED BY	T. HAYAKAWA	<i>Hayakawa</i>	20 Jul. 2017	APPROVED BY	Y. SANO	<i>Y. Sano</i>	25 Jul. 2017	<small>DRAWING TITLE</small> BAR ARRANGEMENT OF PF4 PIER (5)	<small>PACKAGE</small> 3 <small>DWG No.</small> P3-FO-2049
	NAME	SIGNATURE	DATE																			
PREPARED BY	Y. SUZUKI	<i>YS</i>	14 Jul. 2017																			
CHECKED BY	T. HAYAKAWA	<i>Hayakawa</i>	20 Jul. 2017																			
APPROVED BY	Y. SANO	<i>Y. Sano</i>	25 Jul. 2017																			



# BAR ARRANGEMENT OF PF4 PIER (6)

S=1:100

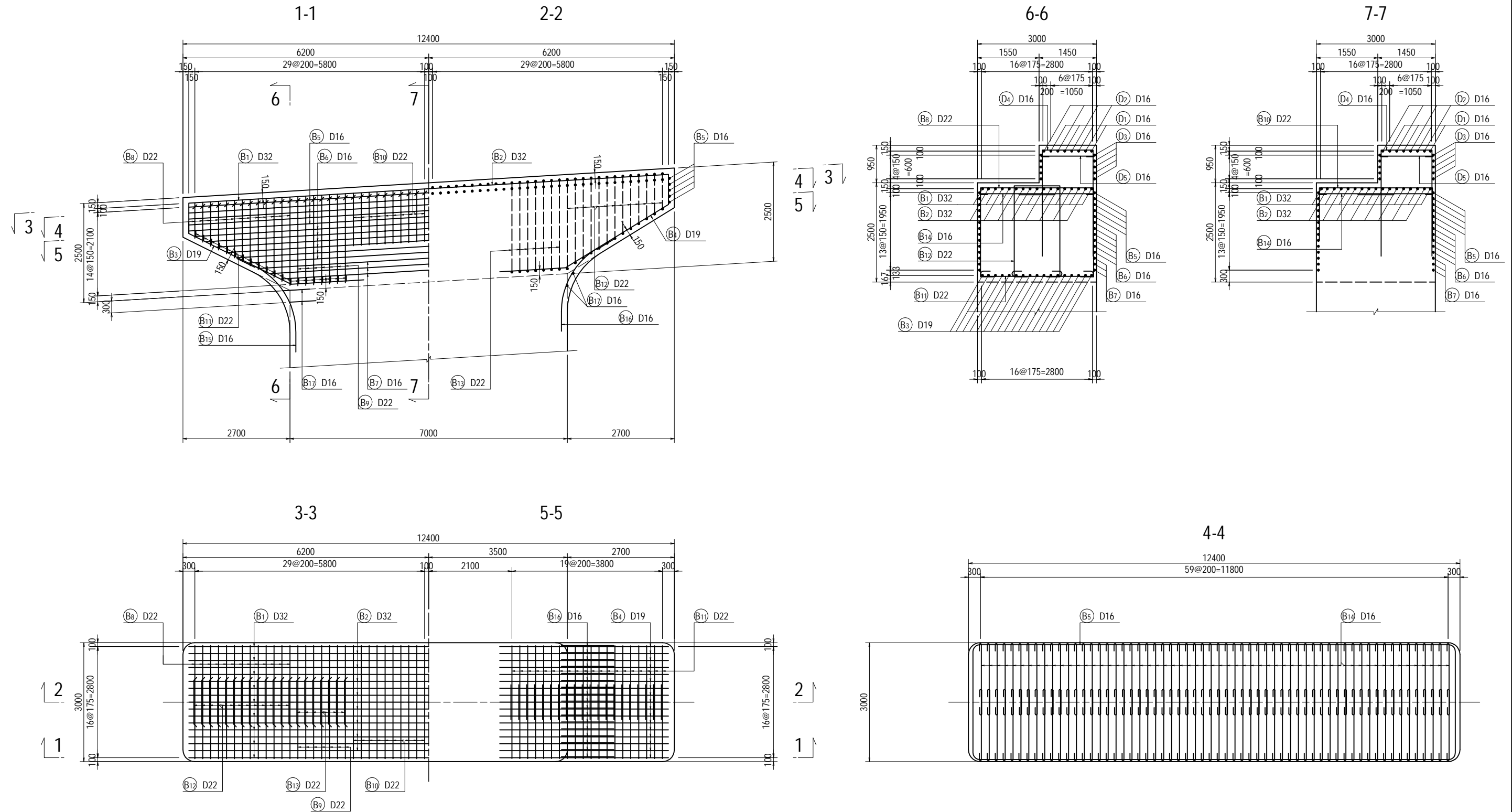


## BAR LIST

REBAR NO.	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT/ONE (kg)	WEIGHT (kg)	REMARKS
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B 2	D22	14340	7	3.04	43.59	305	
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B 4	D16	5000	15	1.56	7.80	117	
B 5	D16	29680	5	1.56	46.30	232	
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B 7	D16	21570	4	1.56	33.65	135	AVERAGE
B 8	D19	5720	26	2.25	12.87	335	AVERAGE
B 9	D19	7090	14	2.25	15.95	223	
B 10	D19	4500	20	2.25	10.13	203	
B 11	D19	2010	80	2.25	4.52	362	
B 12	D19	4320	26	2.25	9.72	253	AVERAGE
B 13	D19	5690	14	2.25	12.80	179	
B 14	D16	1870	120	1.56	2.92	350	
B 15	D16	3060	9	1.56	4.77	43	
B 16	D16	2890	9	1.56	4.51	41	
B 17	D16	3230	4	1.56	5.04	20	
						3462	
H 1	D16	3100	32	1.56	4.84	155	
H 2	D16	3400	24	1.56	5.30	127	
H 3	D16	4220	4	1.56	6.58	26	
						308	
C 1	D32	9480	102	6.23	59.06	6024	
C 2	D32	9480	14	6.23	59.06	827	
C 3	D16	9830	100	1.56	15.33	1533	
C 4	D16	1820	420	1.56	2.84	1193	
C 5	D16	4220	70	1.56	6.58	461	
						10038	
F 1	D19	7020	43	2.25	15.80	679	
F 2	D16	10680	27	1.56	16.66	450	
F 3	D32	9450	43	6.23	58.87	2531	
F 4	D19	13890	27	2.25	31.25	844	
F 5	D16	10200	14	1.56	15.91	223	
F 6	D16	6980	14	1.56	10.89	152	
F 7	D16	1620	172	1.56	2.53	435	
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					D32	9382	
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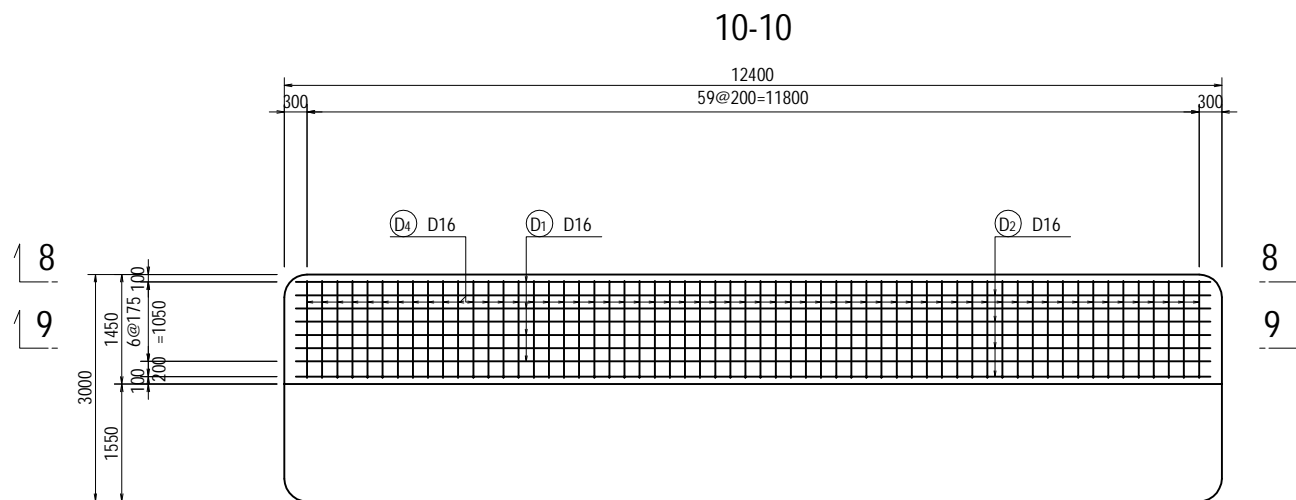
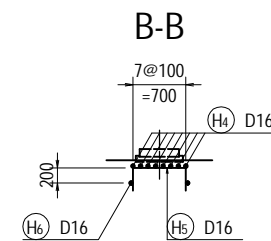
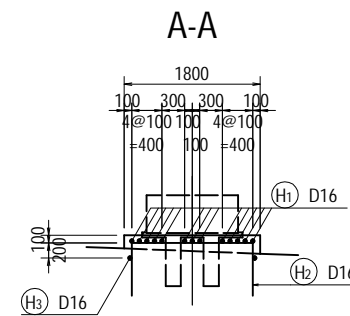
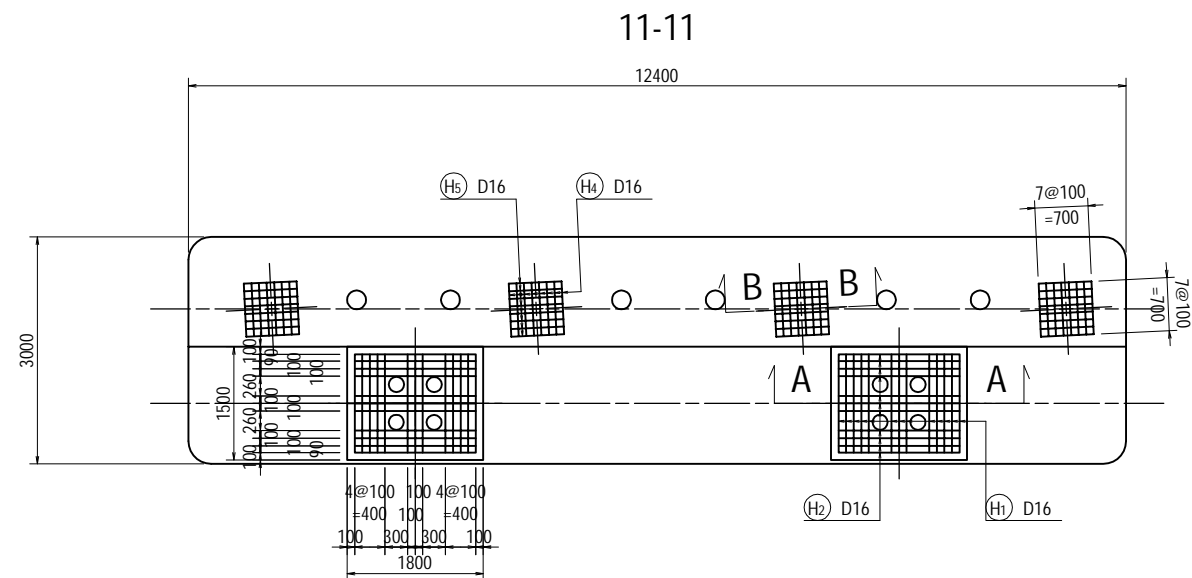
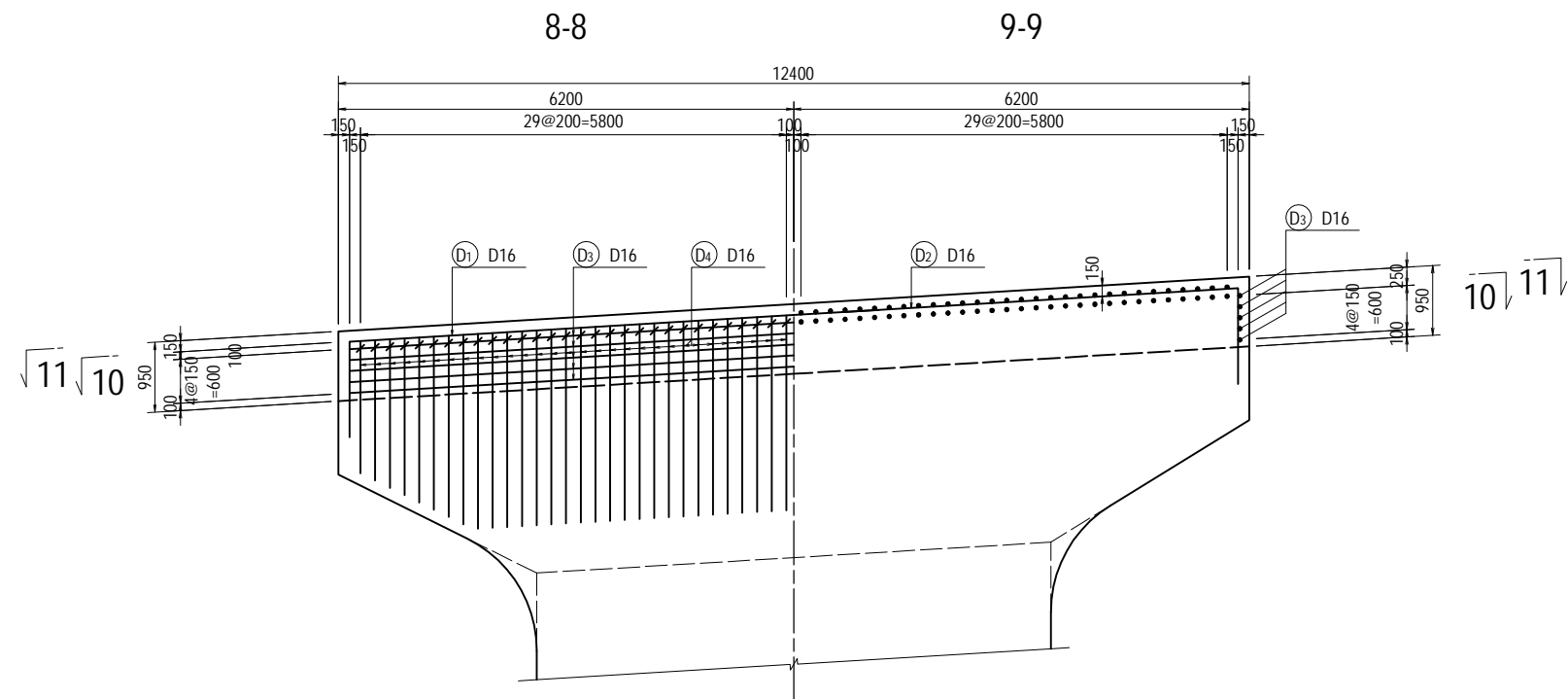
PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE	
				PREPARED BY	Y. SUZUKI				14 Jul. 2017
				CHECKED BY	T. HAYAKAWA				20 Jul. 2017
				APPROVED BY	Y. SANO				25 Jul. 2017
							BAR ARRANGEMENT OF PF4 PIER (6)	P3-FO-2050	

# BAR ARRANGEMENT OF PF5 PIER (1) S=1:100



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	JICASTUDY 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: 10%;"></th> <th style="width: 20%;">NAME</th> <th style="width: 20%;">SIGNATURE</th> <th style="width: 10%;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY</td> <td>Y. SUZUKI</td> <td><i>YS</i></td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY</td> <td>T. HAYAKAWA</td> <td><i>Hayakawa</i></td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY</td> <td>Y. SANO</td> <td><i>Y. Sano</i></td> <td>25 Jul. 2017</td> </tr> </tbody> </table>		NAME	SIGNATURE	DATE	PREPARED BY	Y. SUZUKI	<i>YS</i>	14 Jul. 2017	CHECKED BY	T. HAYAKAWA	<i>Hayakawa</i>	20 Jul. 2017	APPROVED BY	Y. SANO	<i>Y. Sano</i>	25 Jul. 2017	DRAWING TITLE <h2 style="text-align: center;">BAR ARRANGEMENT OF PF5 PIER (1)</h2>	PACKAGE 3 DWG No. P3-FO-2051
	NAME	SIGNATURE	DATE																			
PREPARED BY	Y. SUZUKI	<i>YS</i>	14 Jul. 2017																			
CHECKED BY	T. HAYAKAWA	<i>Hayakawa</i>	20 Jul. 2017																			
APPROVED BY	Y. SANO	<i>Y. Sano</i>	25 Jul. 2017																			

# BAR ARRANGEMENT OF PF5 PIER (2) S=1:100

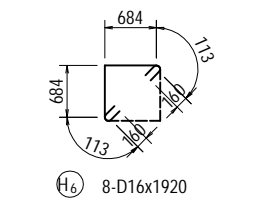
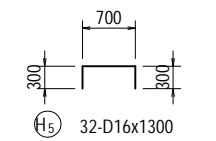
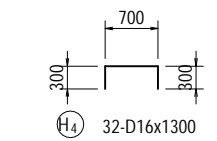
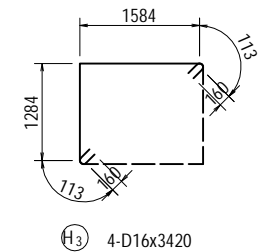
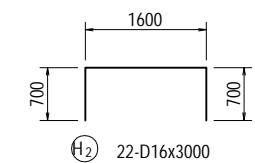
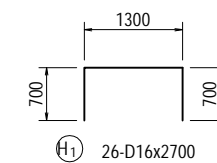
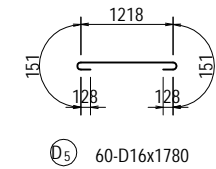
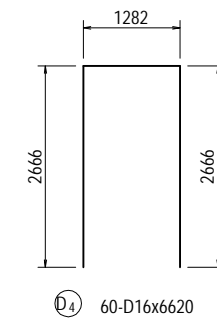
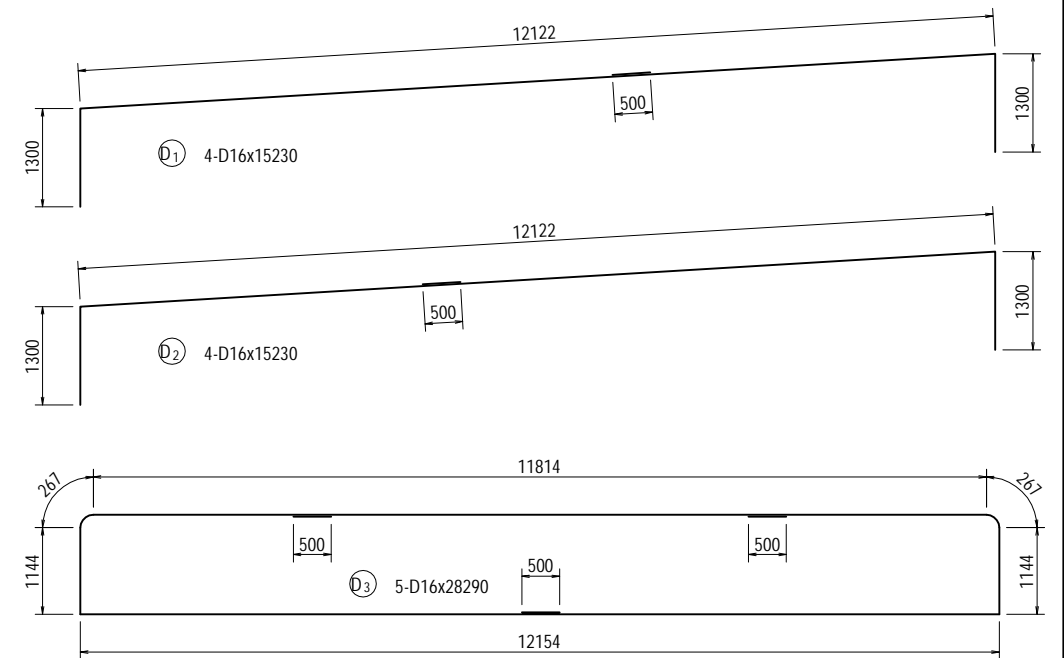
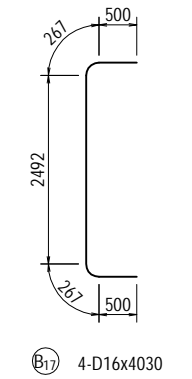
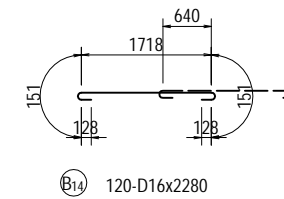
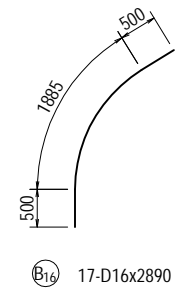
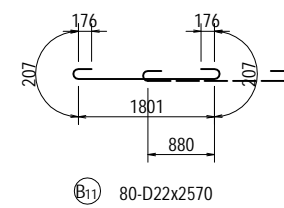
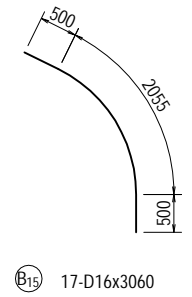
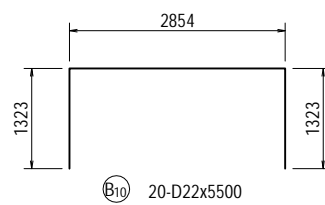
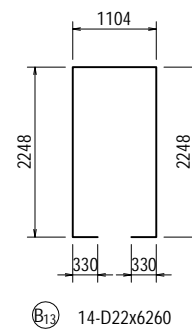
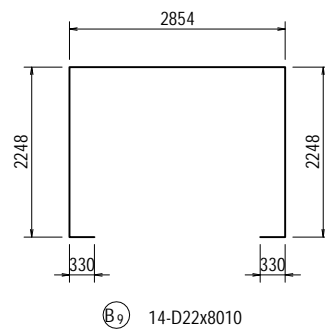
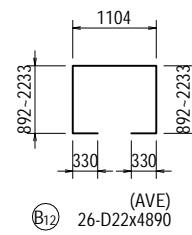
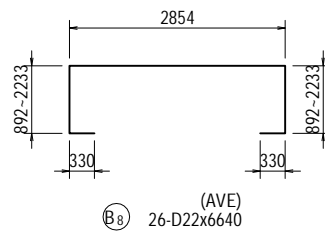
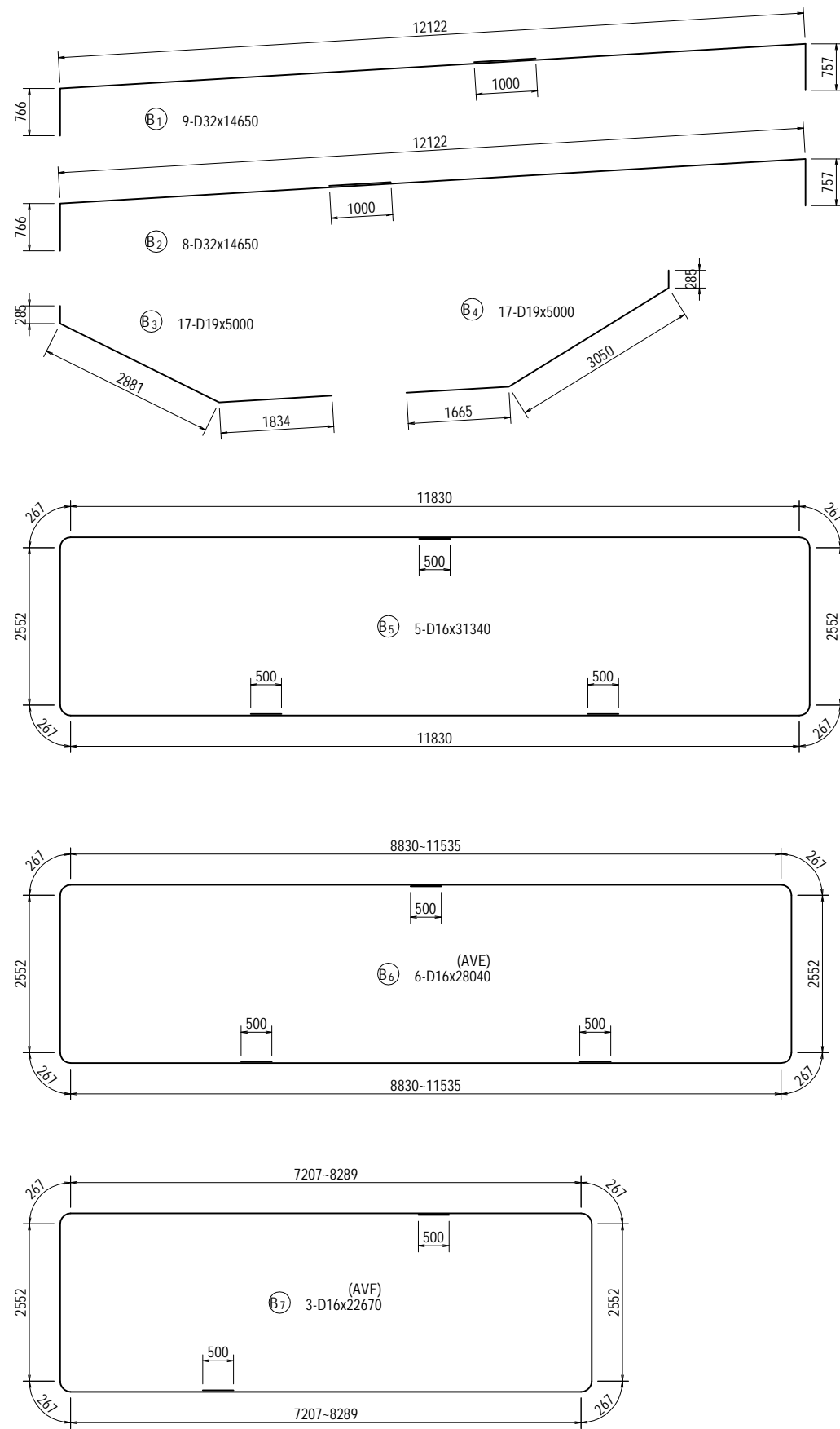


NOTE : The D4 placed at the end of the pier cap should be bent at the time of construction.

<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: 10%;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY</td> <td>Y. SUZUKI</td> <td><i>YS</i></td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY</td> <td>T. HAYAKAWA</td> <td><i>Hayakawa</i></td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY</td> <td>Y. SANO</td> <td><i>Y. Sano</i></td> <td>25 Jul. 2017</td> </tr> </tbody> </table>		NAME	SIGNATURE	DATE	PREPARED BY	Y. SUZUKI	<i>YS</i>	14 Jul. 2017	CHECKED BY	T. HAYAKAWA	<i>Hayakawa</i>	20 Jul. 2017	APPROVED BY	Y. SANO	<i>Y. Sano</i>	25 Jul. 2017	<small>DRAWING TITLE</small> <b>BAR ARRANGEMENT OF PF5 PIER (2)</b>	<small>PACKAGE</small> 3 <small>DWG No.</small> P3-FO-2052
	NAME	SIGNATURE	DATE																			
PREPARED BY	Y. SUZUKI	<i>YS</i>	14 Jul. 2017																			
CHECKED BY	T. HAYAKAWA	<i>Hayakawa</i>	20 Jul. 2017																			
APPROVED BY	Y. SANO	<i>Y. Sano</i>	25 Jul. 2017																			

# BAR ARRANGEMENT OF PF5 PIER (3)

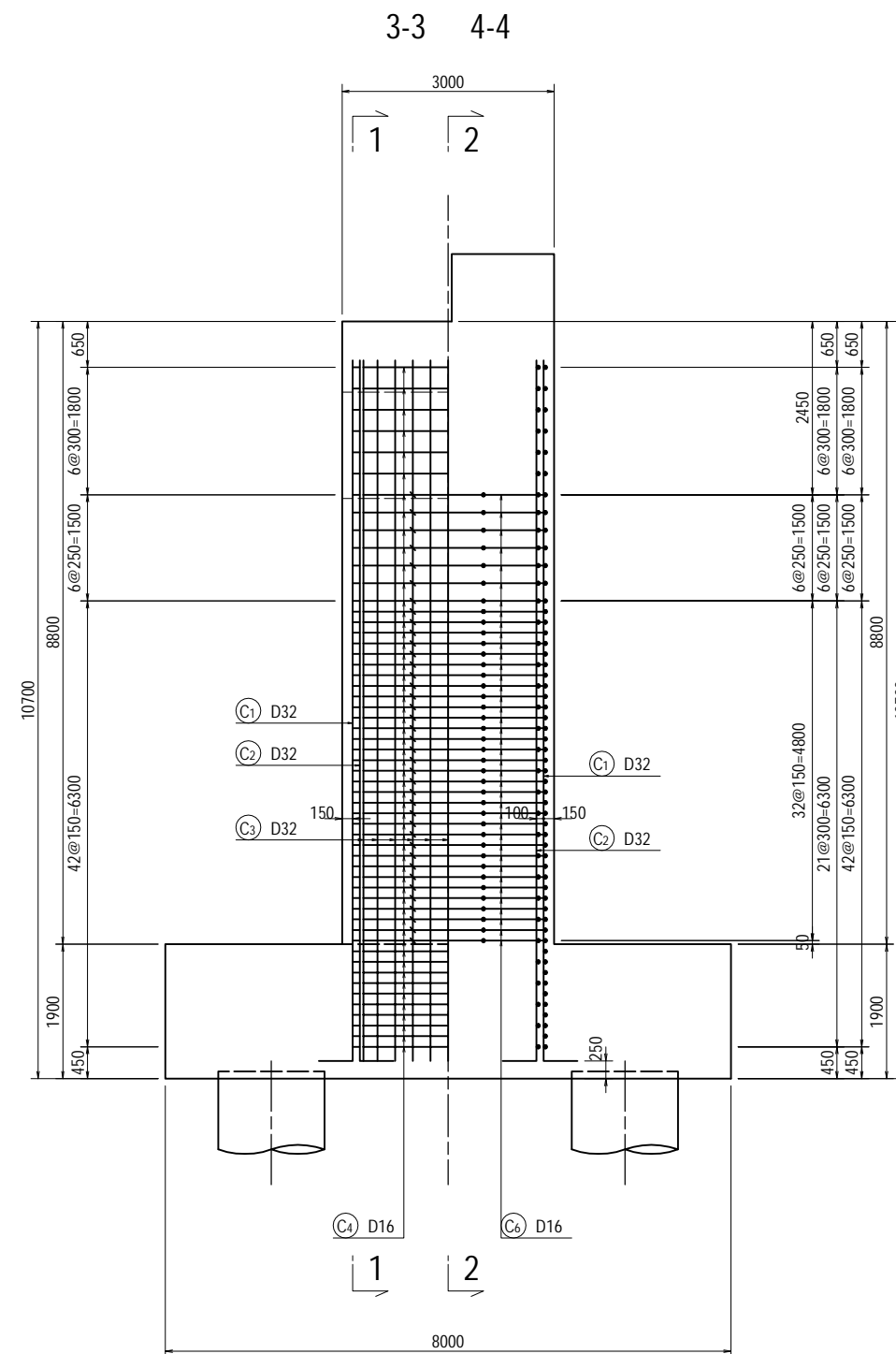
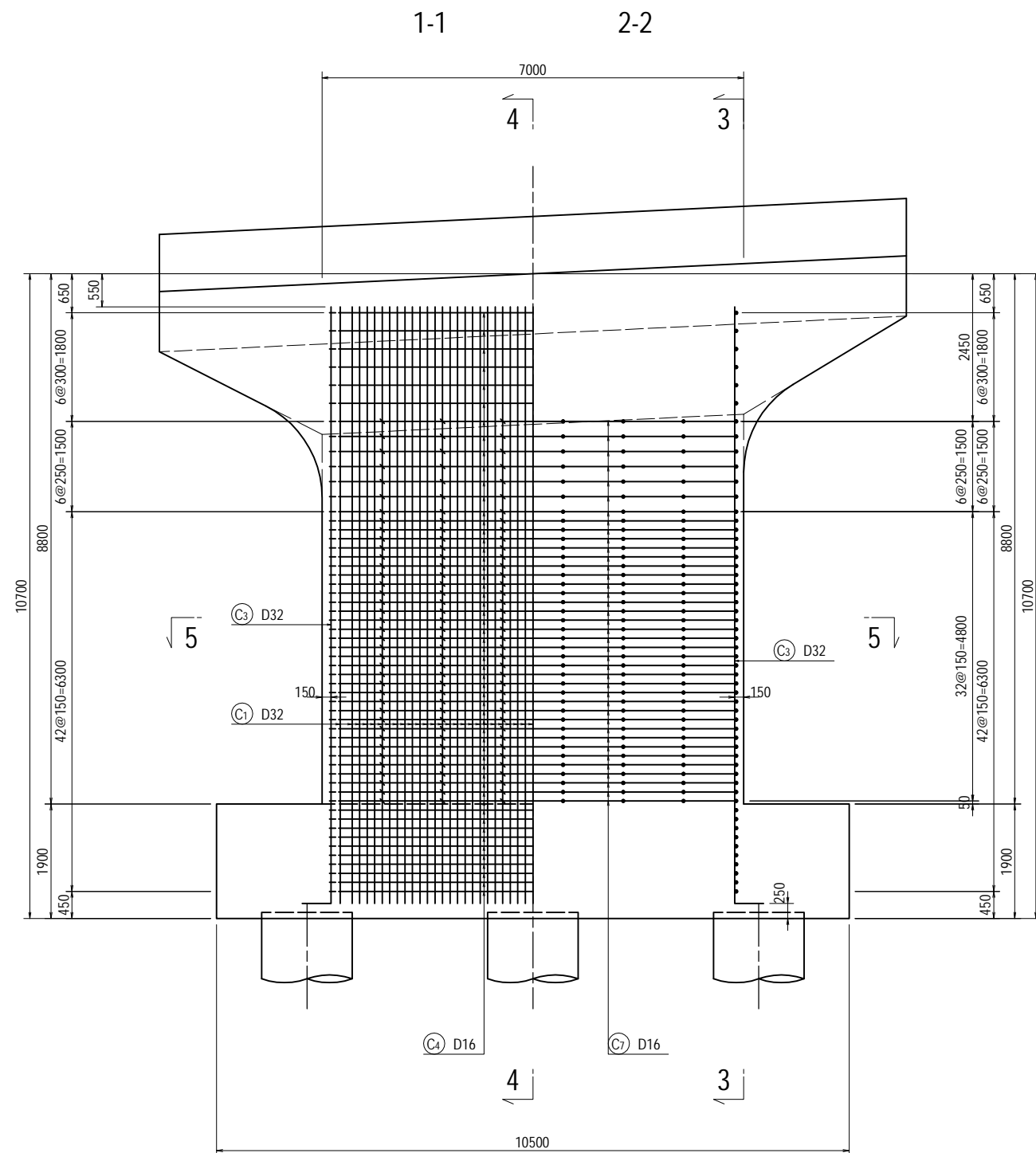
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PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. 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 PF5 PIER (3)	PACKAGE	
				PREPARED BY	Y. SUZUKI			14 Jul. 2017	3
				CHECKED BY	T. HAYAKAWA			20 Jul. 2017	DWG No.
				APPROVED BY	Y. SANO			25 Jul. 2017	P3-FO-2053

# BAR ARRANGEMENT OF PF5 PIER (4)

S=1:100



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.

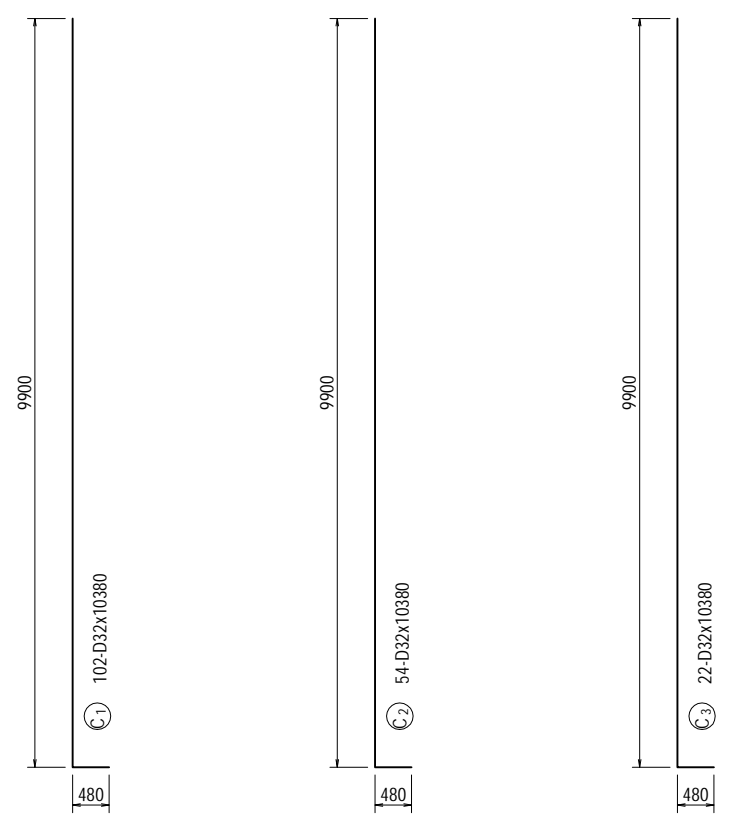
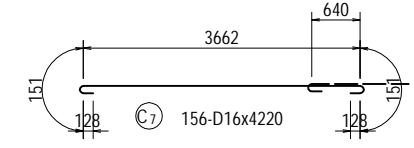
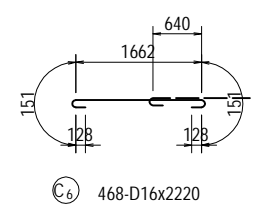
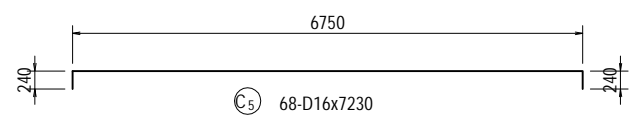
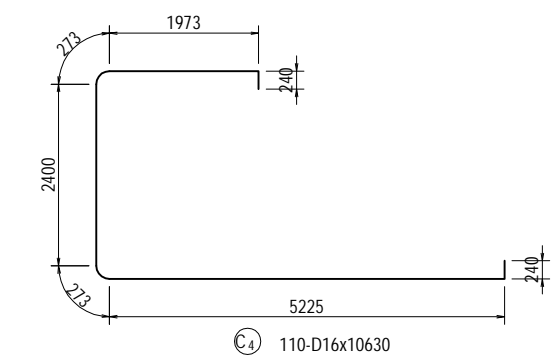
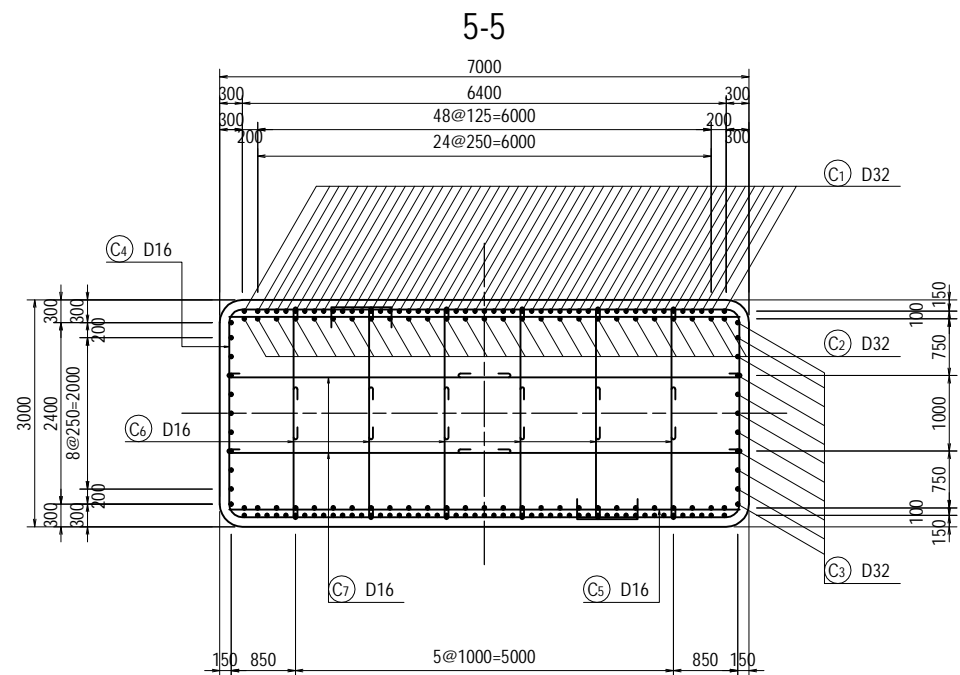
	NAME	SIGNATURE	DATE
PREPARED BY	Y. SUZUKI	<i>YS</i>	14 Jul. 2017
CHECKED BY	T. HAYAKAWA	<i>Hayakawa</i>	20 Jul. 2017
APPROVED BY	Y. SANO	<i>Y. Sano</i>	25 Jul. 2017

DRAWING TITLE  
 BAR ARRANGEMENT OF PF5 PIER (4)

PACKAGE  
 3  
 DWG No.  
 P3-FO-2054

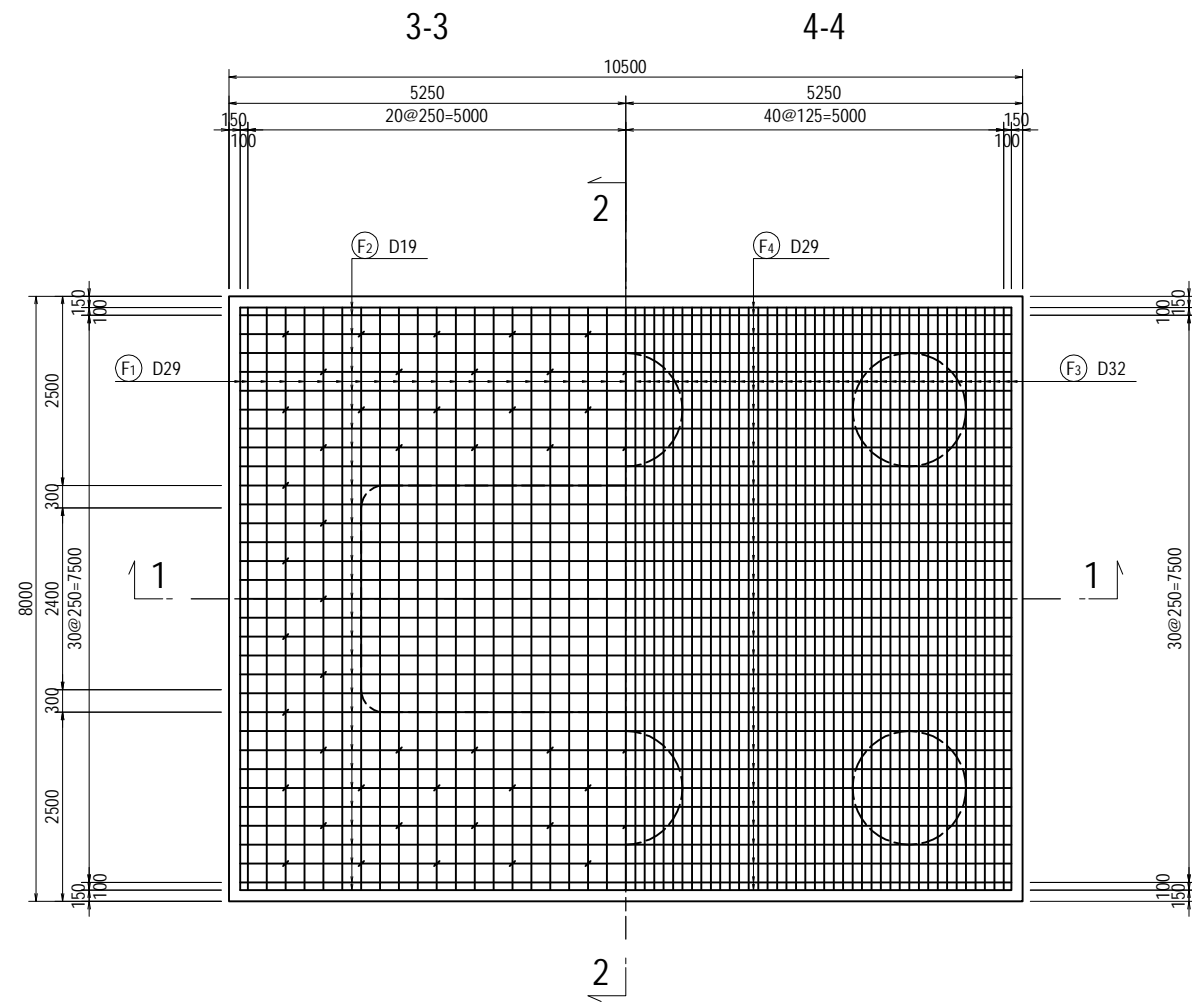
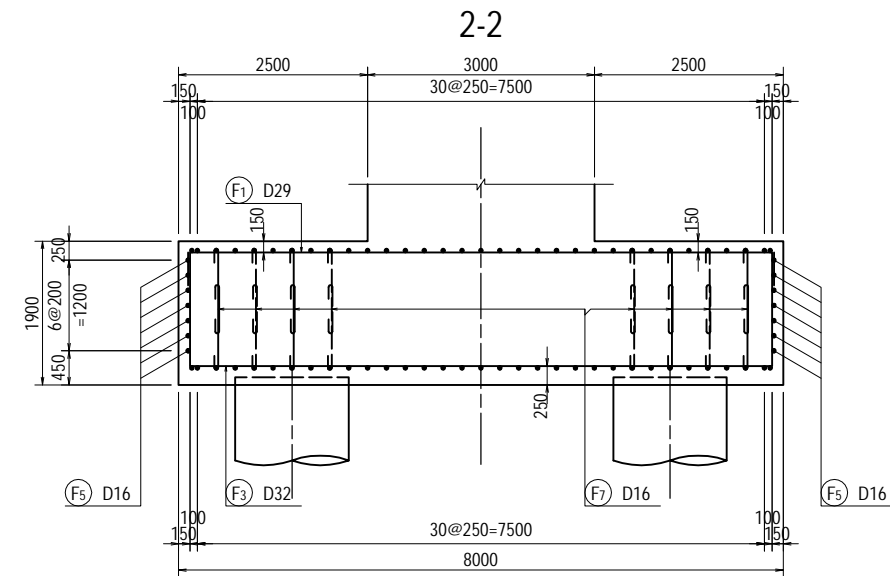
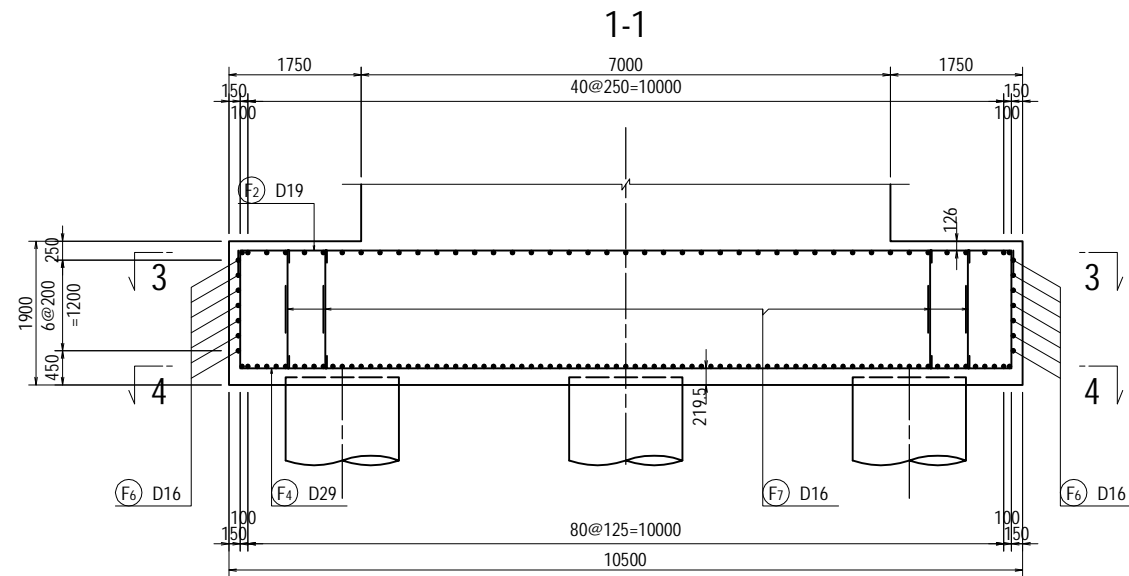
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S=1:100



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	PACKAGE			
				PREPARED BY	Y. SUZUKI				14 Jul. 2017	BAR ARRANGEMENT OF PF5 PIER (5)	3
				CHECKED BY	T. HAYAKAWA				20 Jul. 2017		DWG No.
				APPROVED BY	Y. SANO				25 Jul. 2017		P3-FO-2055

# BAR ARRANGEMENT OF PF5 PIER (6) S=1:100



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.

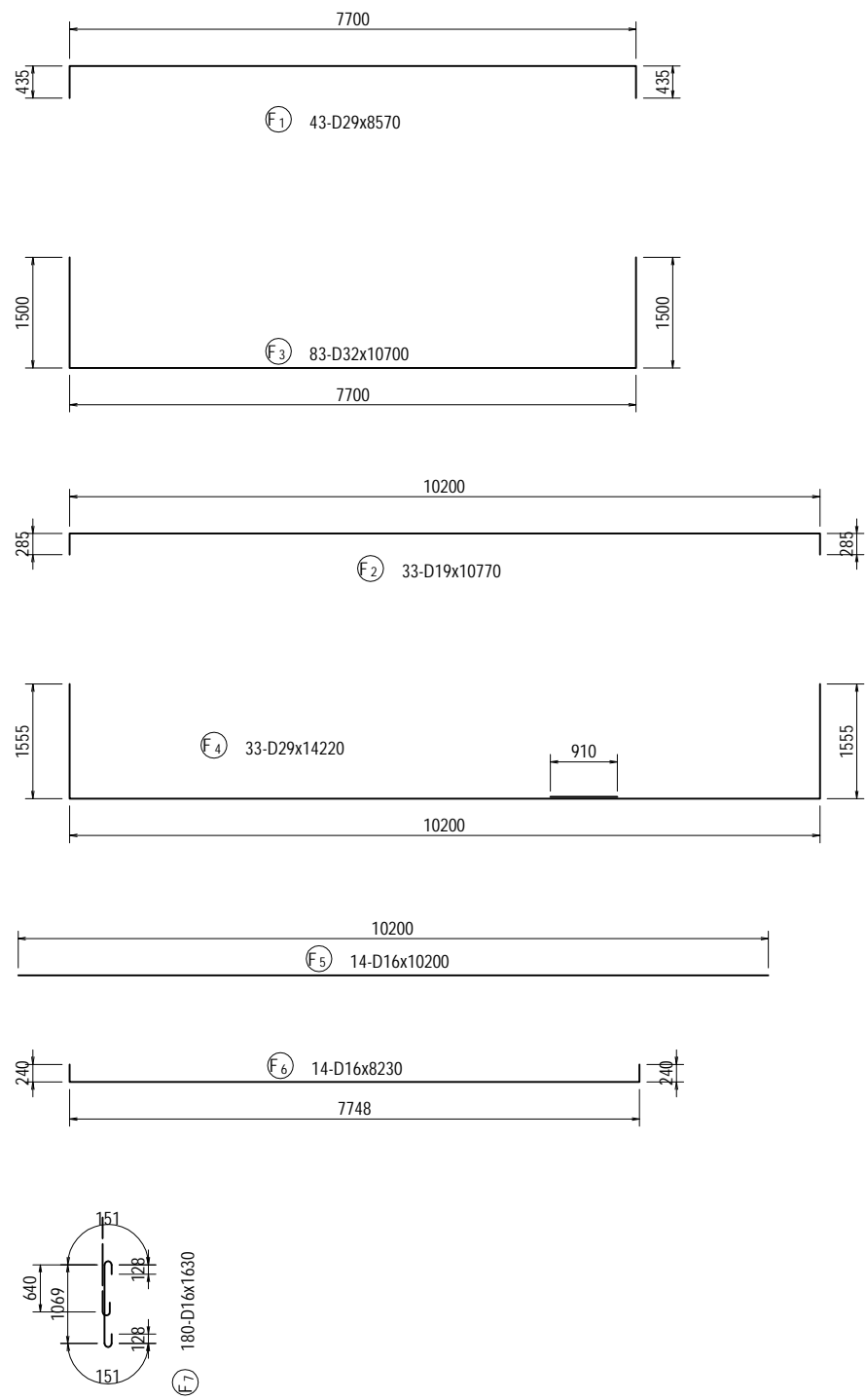
	NAME	SIGNATURE	DATE
PREPARED BY	Y. SUZUKI	<i>YS</i>	14 Jul. 2017
CHECKED BY	T. HAYAKAWA	<i>Hayakawa</i>	20 Jul. 2017
APPROVED BY	Y. SANO	<i>Y. Sano</i>	25 Jul. 2017

DRAWING TITLE  
**BAR ARRANGEMENT OF PF5 PIER (6)**

PACKAGE  
 3  
 DWG No.  
 P3-FO-2056



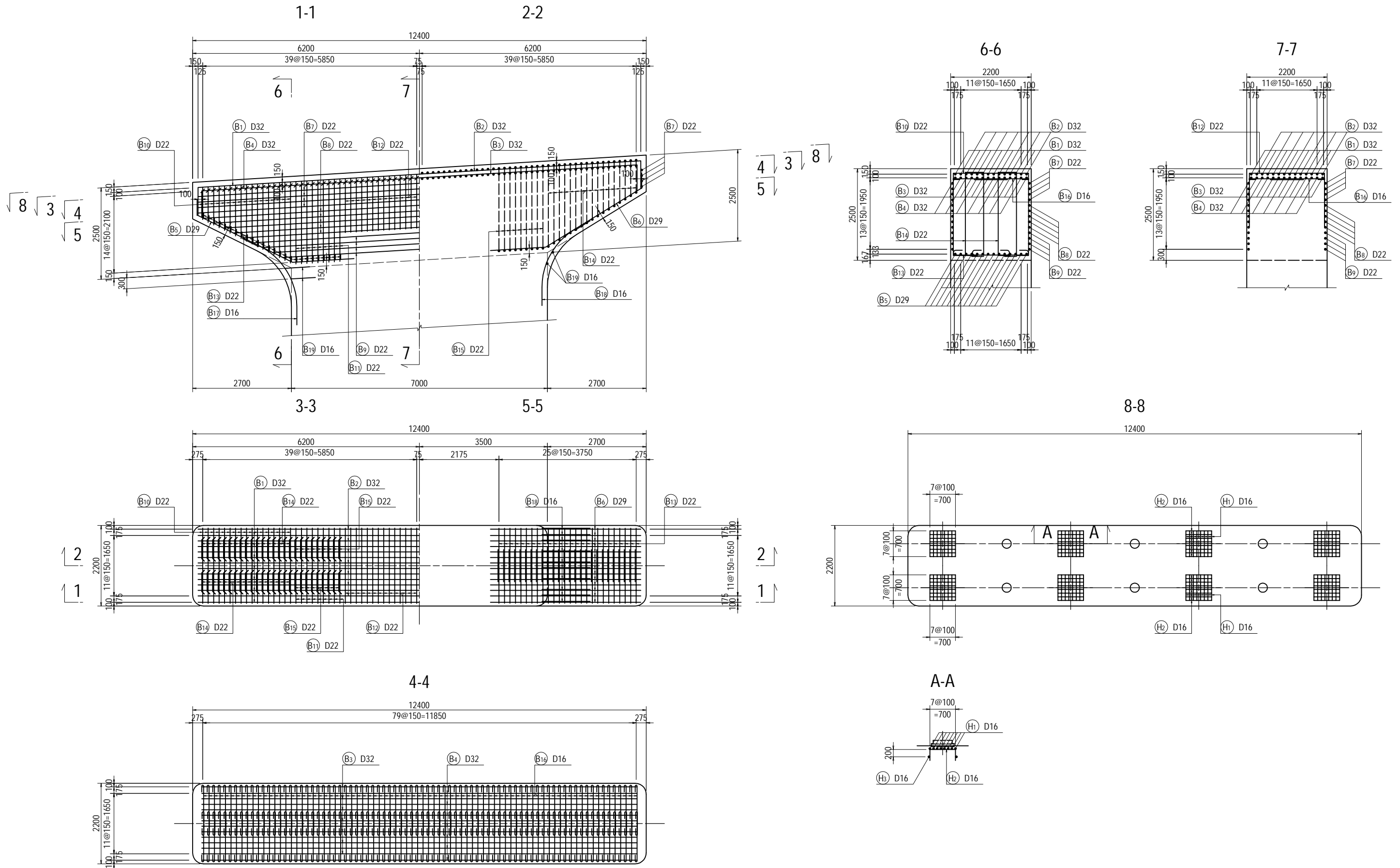
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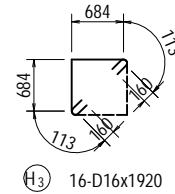
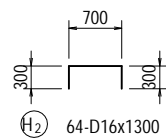
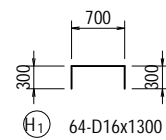
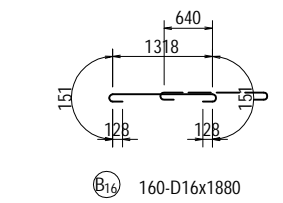
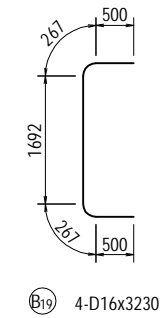
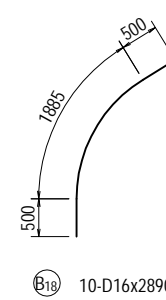
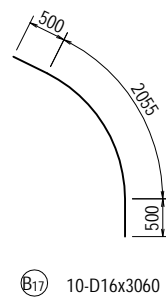
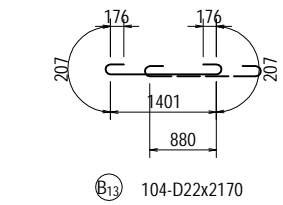
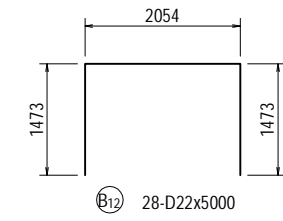
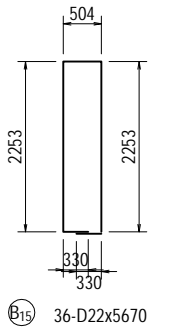
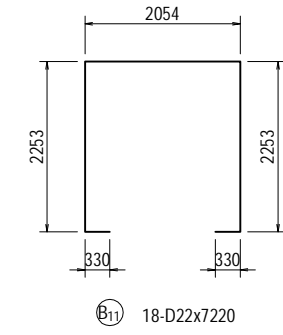
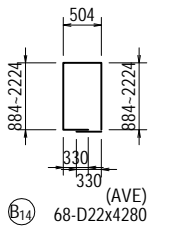
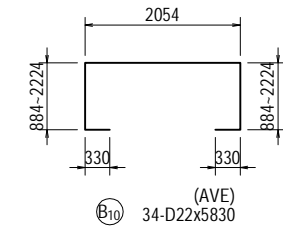
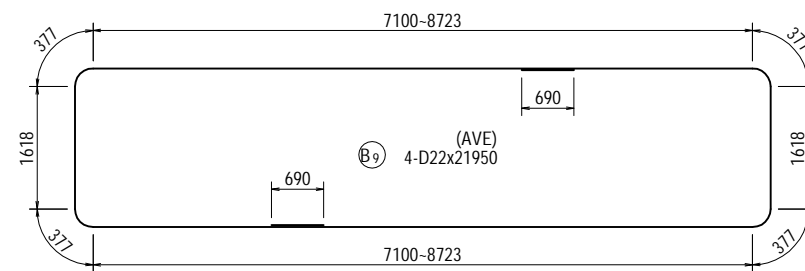
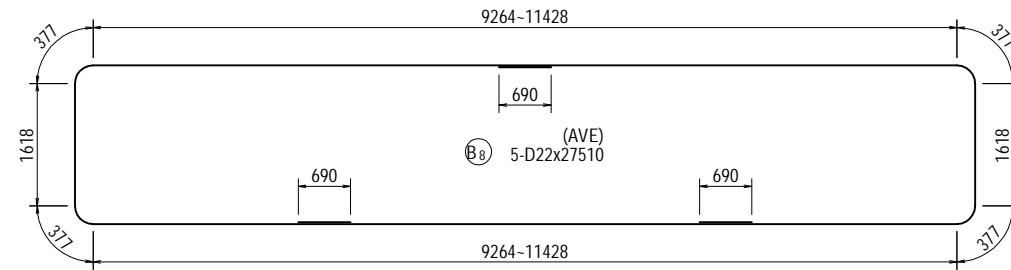
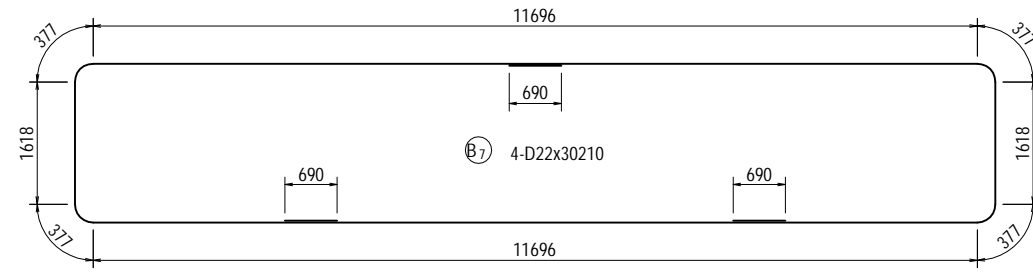
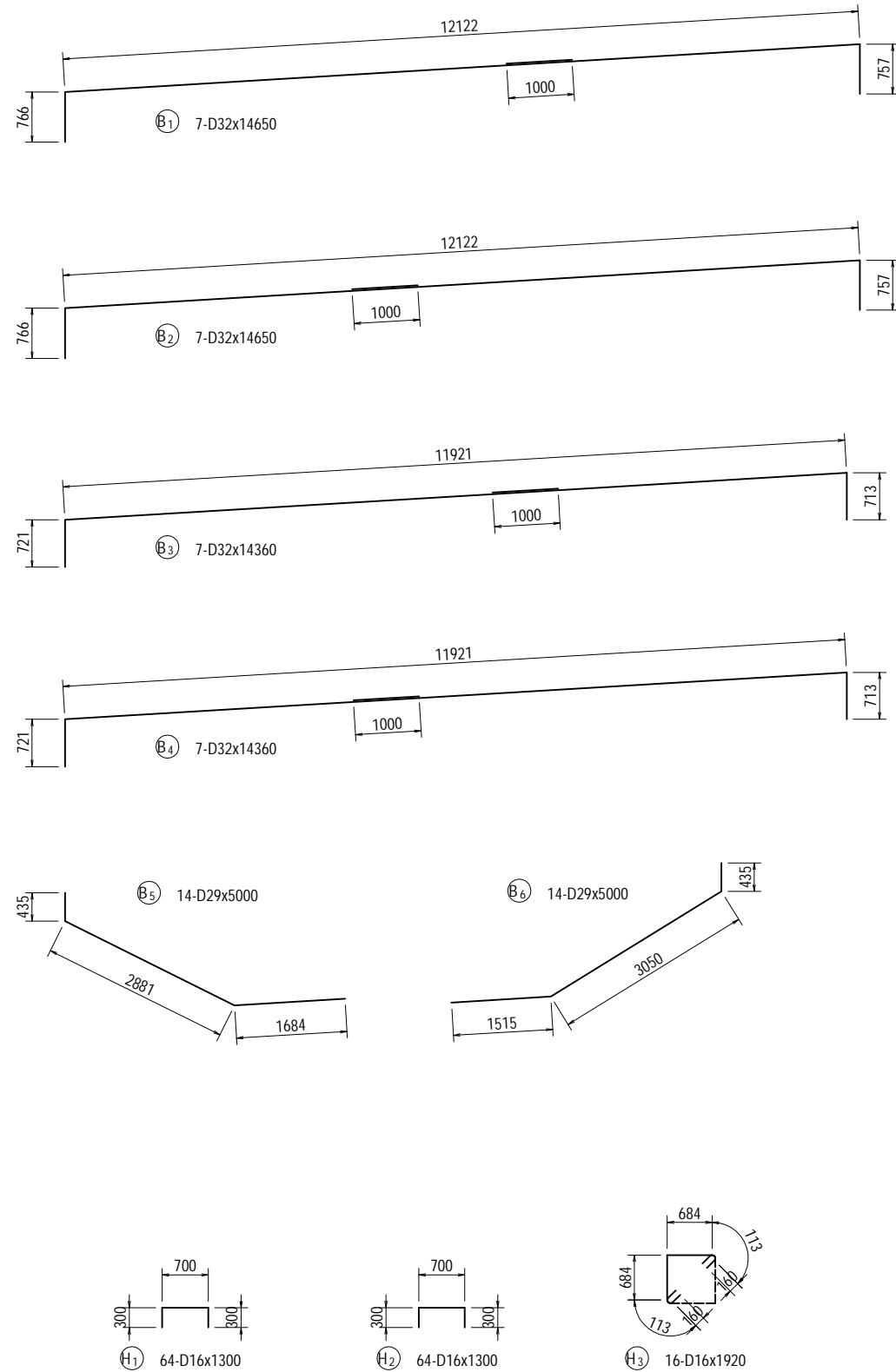
REBAR NO.	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT/ONE (kg)	WEIGHT (kg)	REMARKS
B 1	D32	14650	9	6.23	91.27	821	
B 2	D32	14650	8	6.23	91.27	730	
B 3	D19	5000	17	2.25	11.25	191	
B 4	D19	5000	17	2.25	11.25	191	
B 5	D16	31340	5	1.56	48.89	244	
B 6	D16	28040	6	1.56	43.74	262	AVERAGE
B 7	D16	22670	3	1.56	35.37	106	AVERAGE
B 8	D22	6640	26	3.04	20.19	525	AVERAGE
B 9	D22	8010	14	3.04	24.35	341	
B 10	D22	5500	20	3.04	16.72	334	
B 11	D22	2570	80	3.04	7.81	625	
B 12	D22	4890	26	3.04	14.87	387	AVERAGE
B 13	D22	6260	14	3.04	19.03	266	
B 14	D16	2280	120	1.56	3.56	427	
B 15	D16	3060	17	1.56	4.77	81	
B 16	D16	2890	17	1.56	4.51	77	
B 17	D16	4030	4	1.56	6.29	25	
5633							
D 1	D16	15230	4	1.56	23.76	95	
D 2	D16	15230	4	1.56	23.76	95	
D 3	D16	28290	5	1.56	44.13	221	
D 4	D16	6620	60	1.56	10.33	620	
D 5	D16	1780	60	1.56	2.78	167	
1198							
H 1	D16	2700	26	1.56	4.21	109	
H 2	D16	3000	22	1.56	4.68	103	
H 3	D16	3420	4	1.56	5.34	21	
H 4	D16	1300	32	1.56	2.03	65	
H 5	D16	1300	32	1.56	2.03	65	
H 6	D16	1920	8	1.56	3.00	24	
387							
C 1	D32	10380	102	6.23	64.67	6596	
C 2	D32	10380	54	6.23	64.67	3492	
C 3	D32	10380	22	6.23	64.67	1423	
C 4	D16	10630	110	1.56	16.58	1824	
C 5	D16	7230	68	1.56	11.28	767	
C 6	D16	2220	468	1.56	3.46	1619	
C 7	D16	4220	156	1.56	6.58	1026	
16747							
F 1	D29	8570	43	5.04	43.19	1857	
F 2	D19	10770	33	2.25	24.23	800	
F 3	D32	10700	83	6.23	66.66	5533	
F 4	D29	14220	33	5.04	71.67	2365	
F 5	D16	10200	14	1.56	15.91	223	
F 6	D16	8230	14	1.56	12.84	180	
F 7	D16	1630	180	1.56	2.54	457	
11415							
					D32	18595	
					D29	4222	
					D22	2478	
					D19	1182	
					D16	8903	
					TOTAL	35380	

# BAR ARRANGEMENT OF PF6 PIER (1) S=1:100



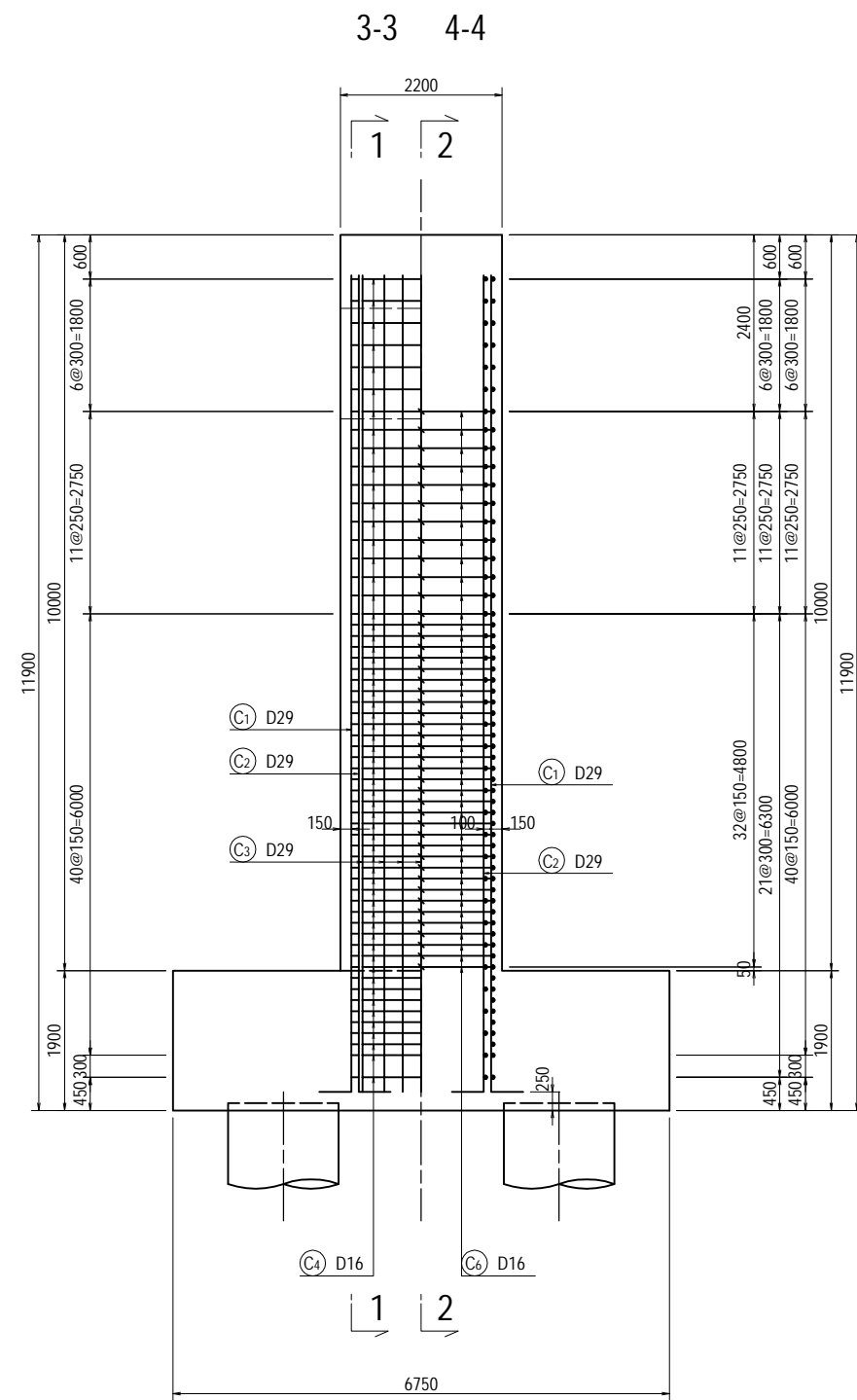
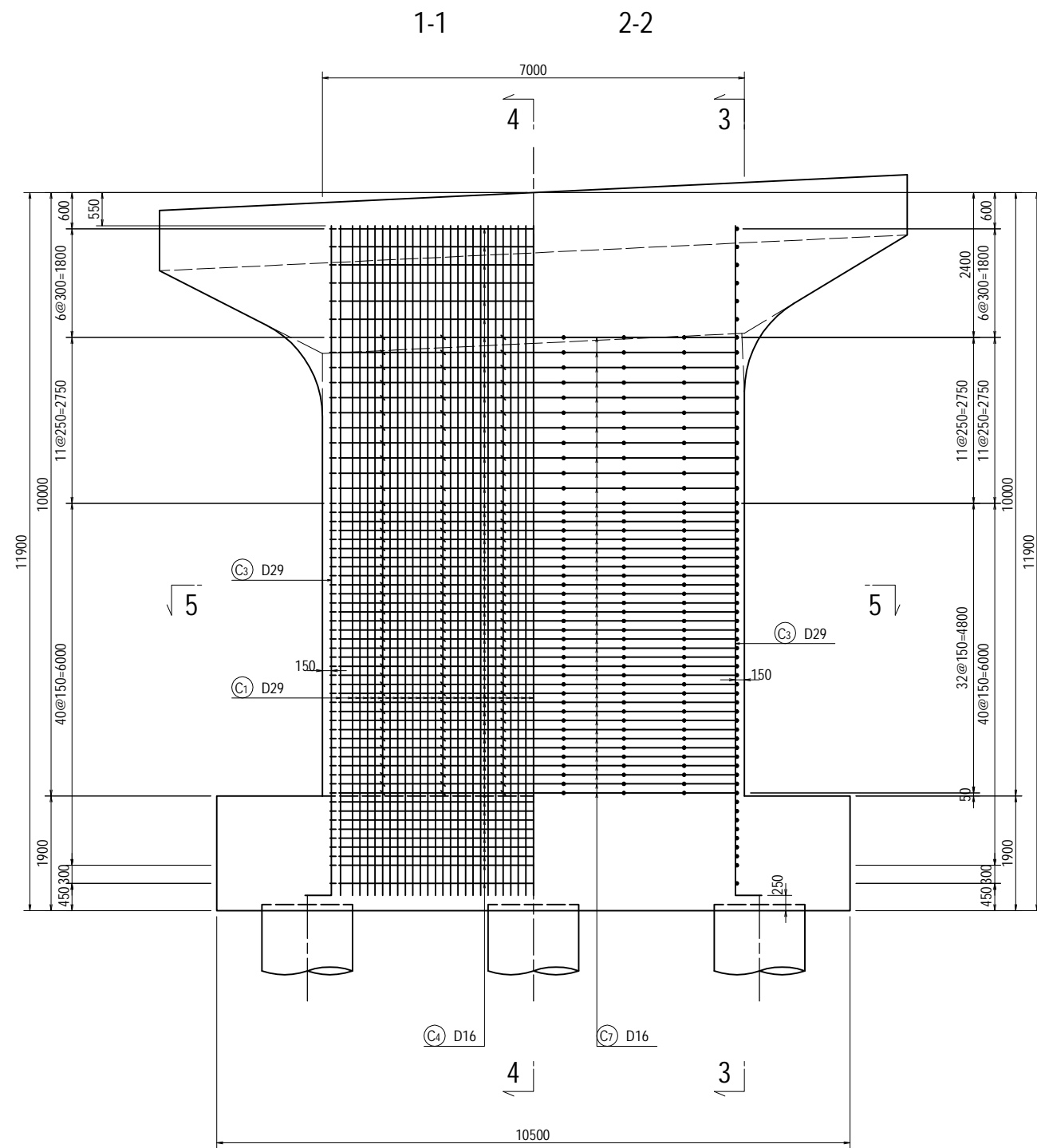
PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN 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: 10%;">NAME</th> <th style="width: 10%;">SIGNATURE</th> <th style="width: 10%;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY</td> <td>Y. SUZUKI</td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY</td> <td>T. HAYAKAWA</td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY</td> <td>Y. SANO</td> <td>25 Jul. 2017</td> </tr> </tbody> </table>	NAME	SIGNATURE	DATE	PREPARED BY	Y. SUZUKI	14 Jul. 2017	CHECKED BY	T. HAYAKAWA	20 Jul. 2017	APPROVED BY	Y. SANO	25 Jul. 2017	DRAWING TITLE <h2 style="text-align: center;">BAR ARRANGEMENT OF PF6 PIER (1)</h2>	PACKAGE 3 DWG No. P3-FO-2058
NAME	SIGNATURE	DATE																
PREPARED BY	Y. SUZUKI	14 Jul. 2017																
CHECKED BY	T. HAYAKAWA	20 Jul. 2017																
APPROVED BY	Y. SANO	25 Jul. 2017																

# BAR ARRANGEMENT OF PF6 PIER (2) S=1:100



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 Y. SUZUKI CHECKED BY T. HAYAKAWA APPROVED BY Y. SANO	SIGNATURE   	DATE 14 Jul. 2017 20 Jul. 2017 25 Jul. 2017	DRAWING TITLE <b>BAR ARRANGEMENT OF PF6 PIER (2)</b>	PACKAGE 3 DWG No. P3-FO-2059
---------------------------------------------------------------------------------	----------------------------------------------------------	-----------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------	-----------------------	------------------------------------------------------	---------------------------------------------------------	---------------------------------------

# BAR ARRANGEMENT OF PF6 PIER (3) S=1:100



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

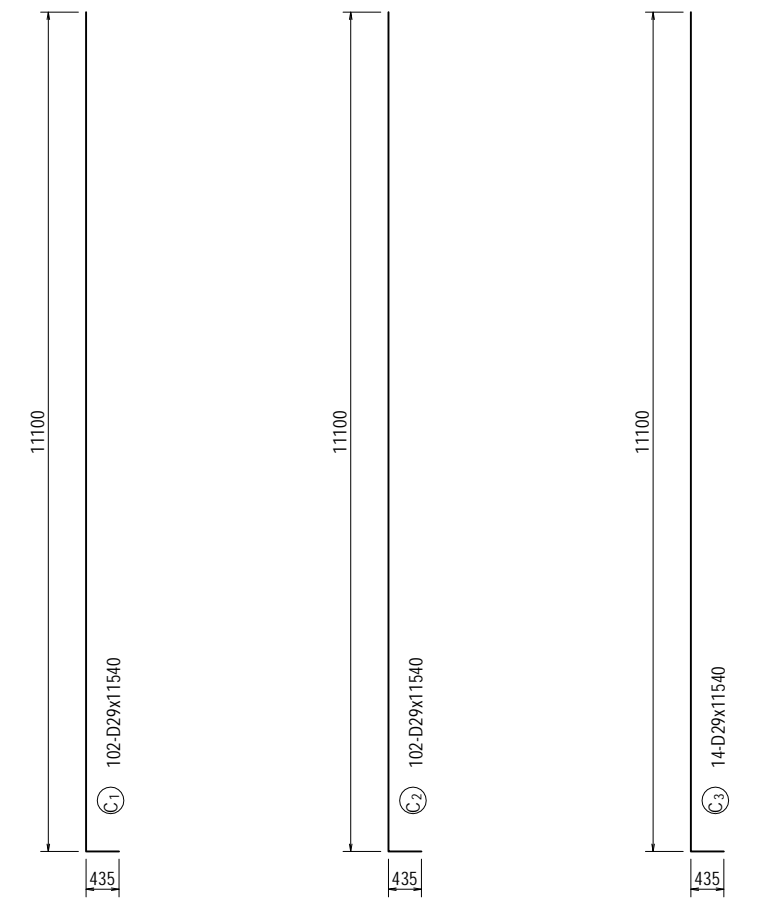
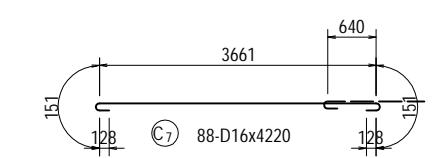
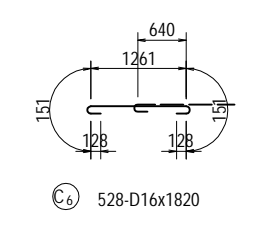
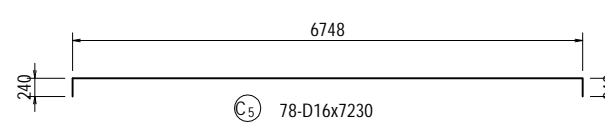
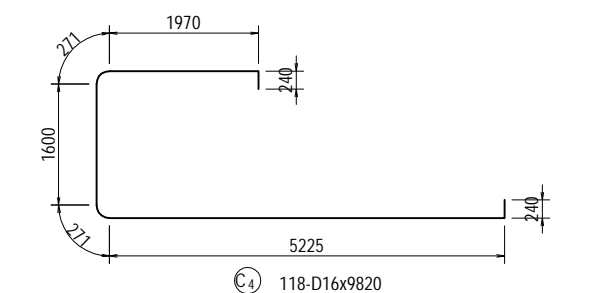
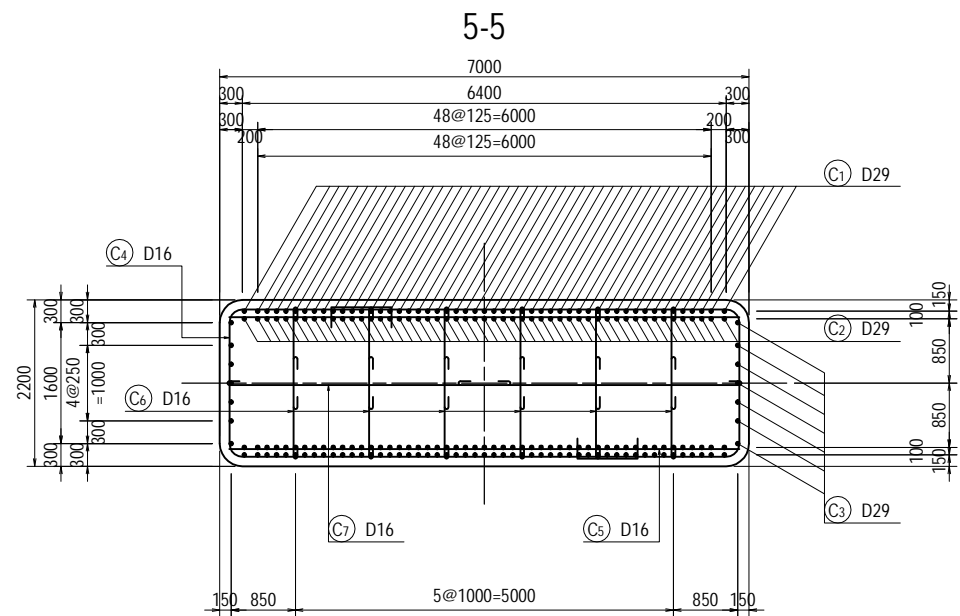
JICA STUDY TEAM  
 NIPPON KOEI CO., LTD.  
 ORIENTAL CONSULTANTS GLOBAL CO., LTD.  
 METROPOLITAN EXPRESSWAY COMPANY LIMITED  
 CHODAI CO., LTD.  
 NIPPON ENGINEERING CONSULTANTS CO., LTD.

	NAME	SIGNATURE	DATE
PREPARED BY	Y. SUZUKI	<i>YS</i>	14 Jul. 2017
CHECKED BY	T. HAYAKAWA	<i>平川知平</i>	20 Jul. 2017
APPROVED BY	Y. SANO	<i>佐野 祐一</i>	25 Jul. 2017

DRAWING TITLE  
**BAR ARRANGEMENT OF PF6 PIER (3)**

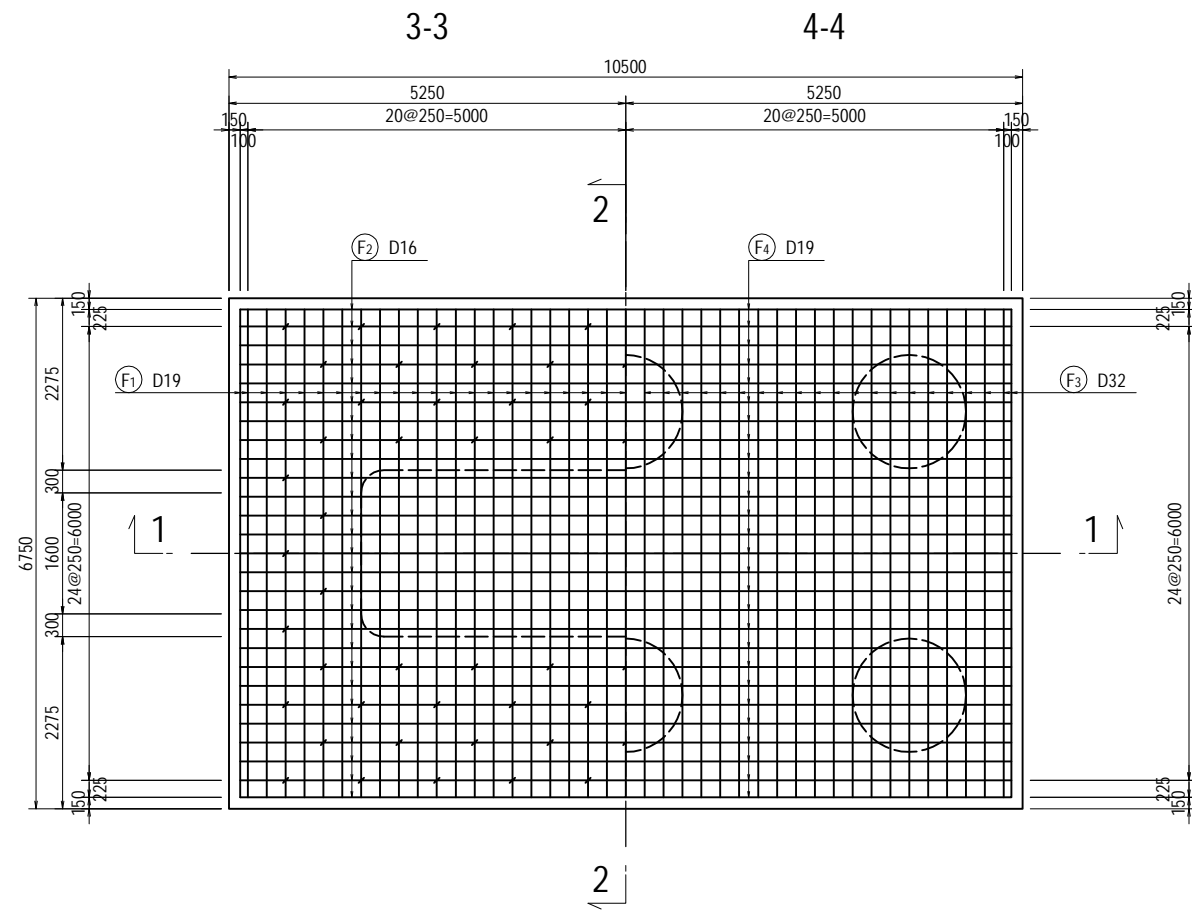
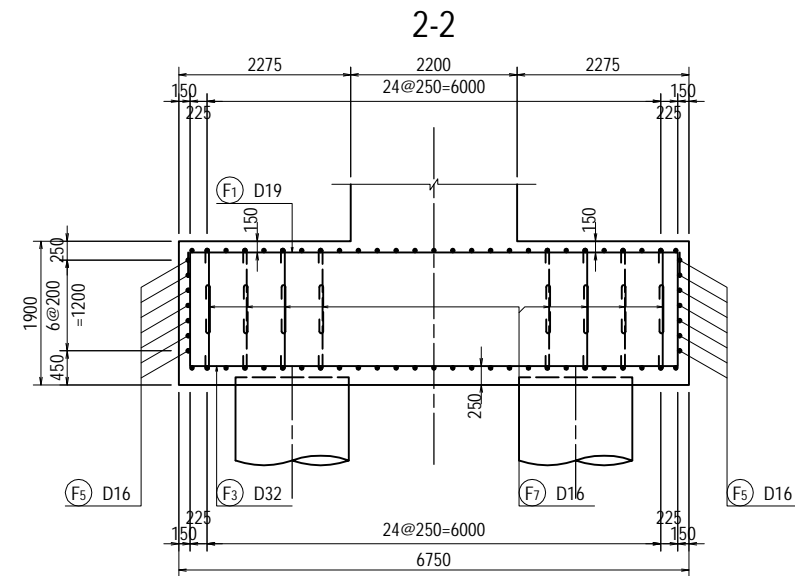
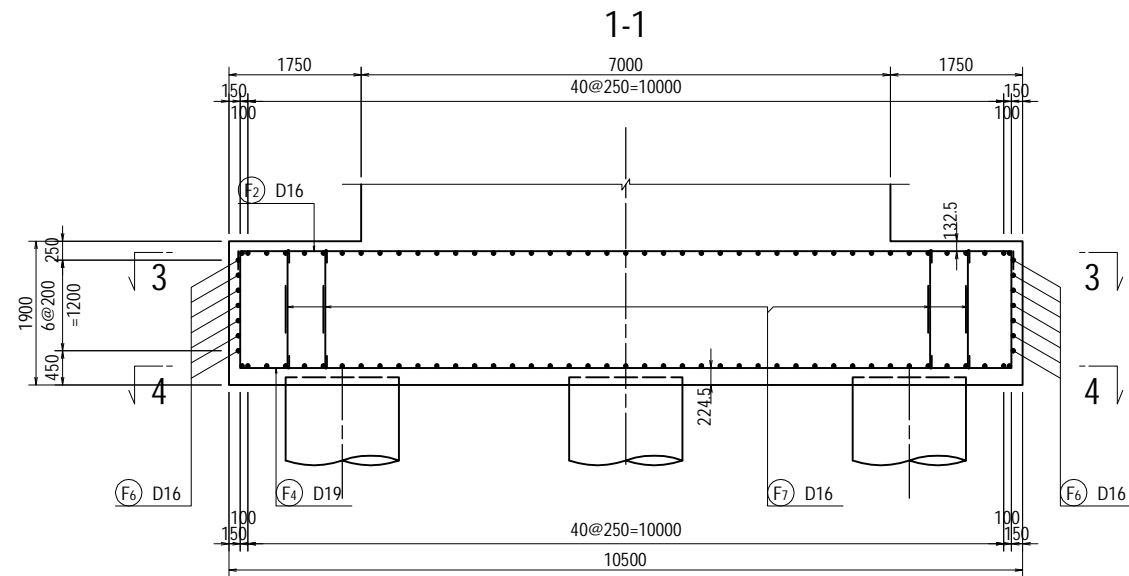
PACKAGE  
 3  
 DWG No.  
 P3-FO-2060

# BAR ARRANGEMENT OF PF6 PIER (4) S=1:100



<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%;">NAME</th> <th style="width: 15%;">SIGNATURE</th> <th style="width: 15%;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY Y. SUZUKI</td> <td></td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY T. HAYAKAWA</td> <td></td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY Y. SANO</td> <td></td> <td>25 Jul. 2017</td> </tr> </tbody> </table>	NAME	SIGNATURE	DATE	PREPARED BY Y. SUZUKI		14 Jul. 2017	CHECKED BY T. HAYAKAWA		20 Jul. 2017	APPROVED BY Y. SANO		25 Jul. 2017	<small>DRAWING TITLE</small> <b>BAR ARRANGEMENT OF PF6 PIER (4)</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 100%;">PACKAGE</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">3</td> </tr> <tr> <td style="text-align: center;">DWG No.</td> </tr> <tr> <td style="text-align: center;">P3-FO-2061</td> </tr> </tbody> </table>	PACKAGE	3	DWG No.	P3-FO-2061
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PREPARED BY Y. SUZUKI		14 Jul. 2017																					
CHECKED BY T. HAYAKAWA		20 Jul. 2017																					
APPROVED BY Y. SANO		25 Jul. 2017																					
PACKAGE																							
3																							
DWG No.																							
P3-FO-2061																							

# BAR ARRANGEMENT OF PF6 PIER (5) S=1:100



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.

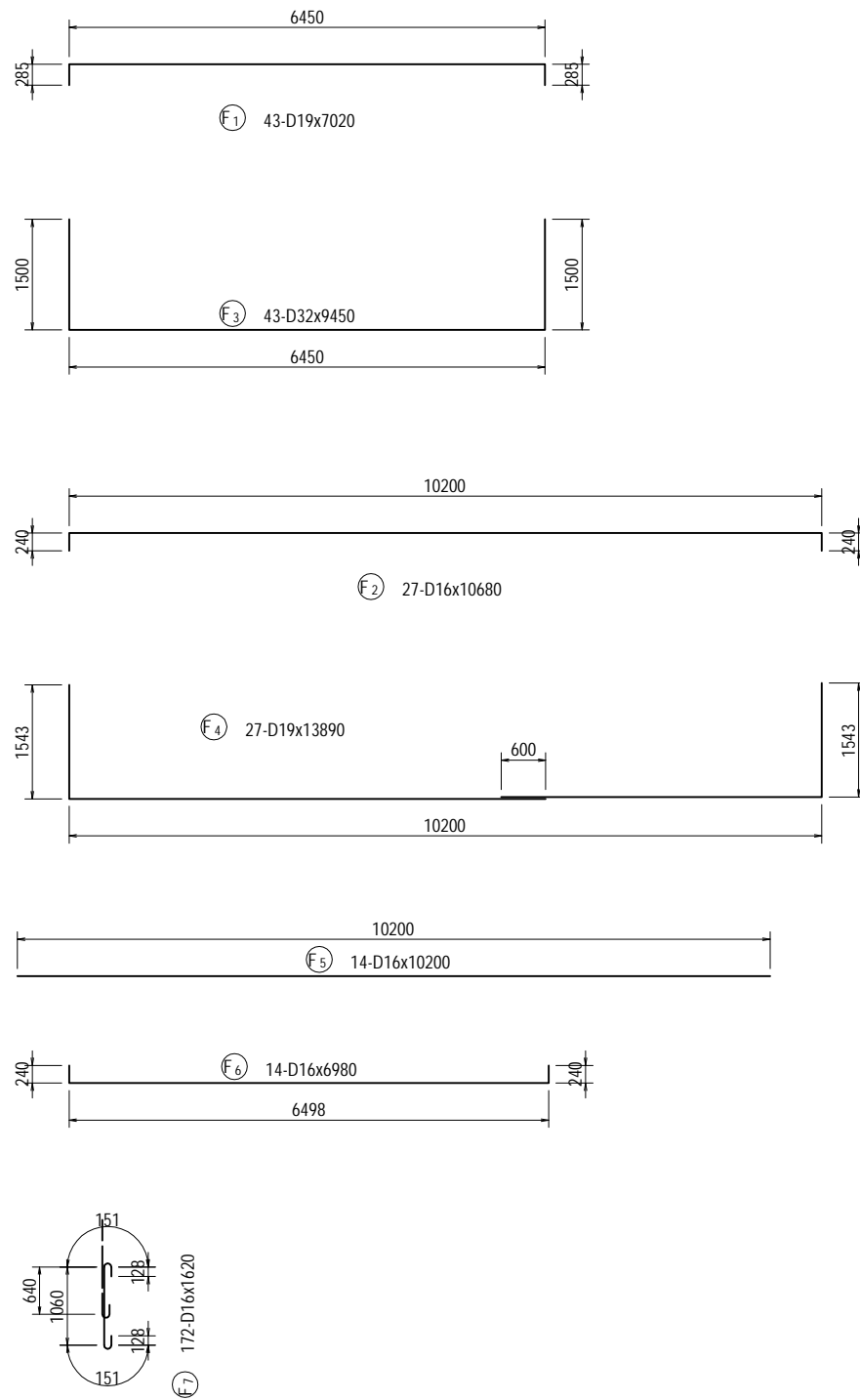
	NAME	SIGNATURE	DATE
PREPARED BY	Y. SUZUKI	<i>YS</i>	14 Jul. 2017
CHECKED BY	T. HAYAKAWA	<i>Hayakawa</i>	20 Jul. 2017
APPROVED BY	Y. SANO	<i>Y. Sano</i>	25 Jul. 2017

DRAWING TITLE  
**BAR ARRANGEMENT OF PF6 PIER (5)**

PACKAGE  
 3  
 DWG No.  
 P3-FO-2062

# BAR ARRANGEMENT OF PF6 PIER (6)

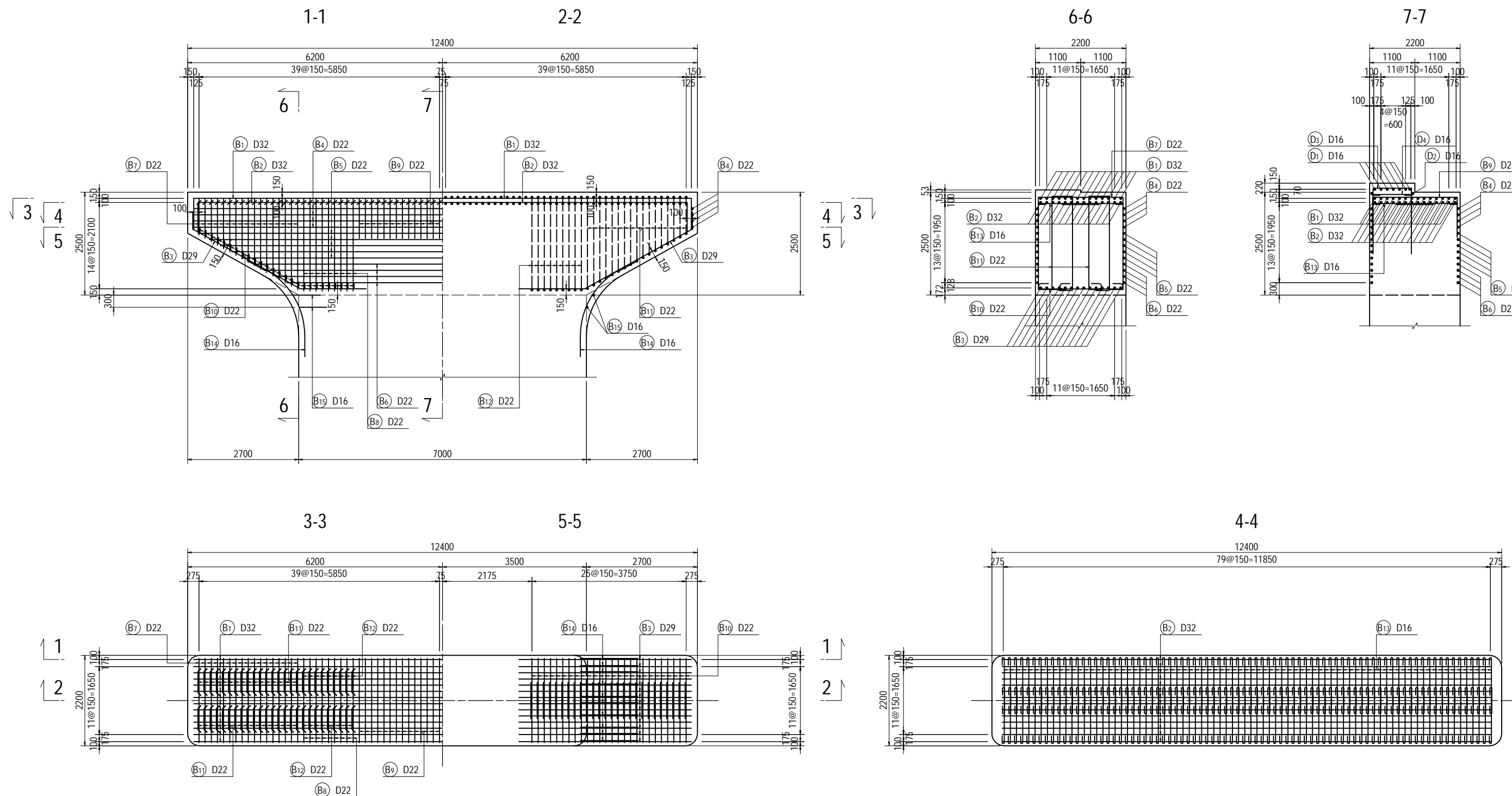
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## BAR LIST

REBAR NO.	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT/ONE (kg)	WEIGHT (kg)	REMARKS
B 1	D32	14650	7	6.23	91.27	639	
B 2	D32	14650	7	6.23	91.27	639	
B 3	D32	14360	7	6.23	89.46	626	
B 4	D32	14360	7	6.23	89.46	626	
B 5	D29	5000	14	5.04	25.20	353	
B 6	D29	5000	14	5.04	25.20	353	
B 7	D22	30210	4	3.04	91.84	367	
B 8	D22	27510	5	3.04	83.63	418	AVERAGE
B 9	D22	21950	4	3.04	66.73	267	AVERAGE
B 10	D22	5830	34	3.04	17.72	602	AVERAGE
B 11	D22	7220	18	3.04	21.95	395	
B 12	D22	5000	28	3.04	15.20	426	
B 13	D22	2170	104	3.04	6.60	686	
B 14	D22	4280	68	3.04	13.01	885	AVERAGE
B 15	D22	5670	36	3.04	17.24	621	
B 16	D16	1880	160	1.56	2.93	469	
B 17	D16	3060	10	1.56	4.77	48	
B 18	D16	2890	10	1.56	4.51	45	
B 19	D16	3230	4	1.56	5.04	20	
						8485	
H 1	D16	1300	64	1.56	2.03	130	
H 2	D16	1300	64	1.56	2.03	130	
H 3	D16	1920	16	1.56	3.00	48	
						308	
C 1	D29	11540	102	5.04	58.16	5932	
C 2	D29	11540	102	5.04	58.16	5932	
C 3	D29	11540	14	5.04	58.16	814	
C 4	D16	9820	118	1.56	15.32	1808	
C 5	D16	7230	78	1.56	11.28	880	
C 6	D16	1820	528	1.56	2.84	1500	
C 7	D16	4220	88	1.56	6.58	579	
						17445	
F 1	D19	7020	43	2.25	15.80	679	
F 2	D16	10680	27	1.56	16.66	450	
F 3	D32	9450	43	6.23	58.87	2531	
F 4	D19	13890	27	2.25	31.25	844	
F 5	D16	10200	14	1.56	15.91	223	
F 6	D16	6980	14	1.56	10.89	152	
F 7	D16	1620	172	1.56	2.53	435	
						5314	
					D32	5061	
					D29	13384	
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# BAR ARRANGEMENT OF PF7 PIER (1) S=1:100

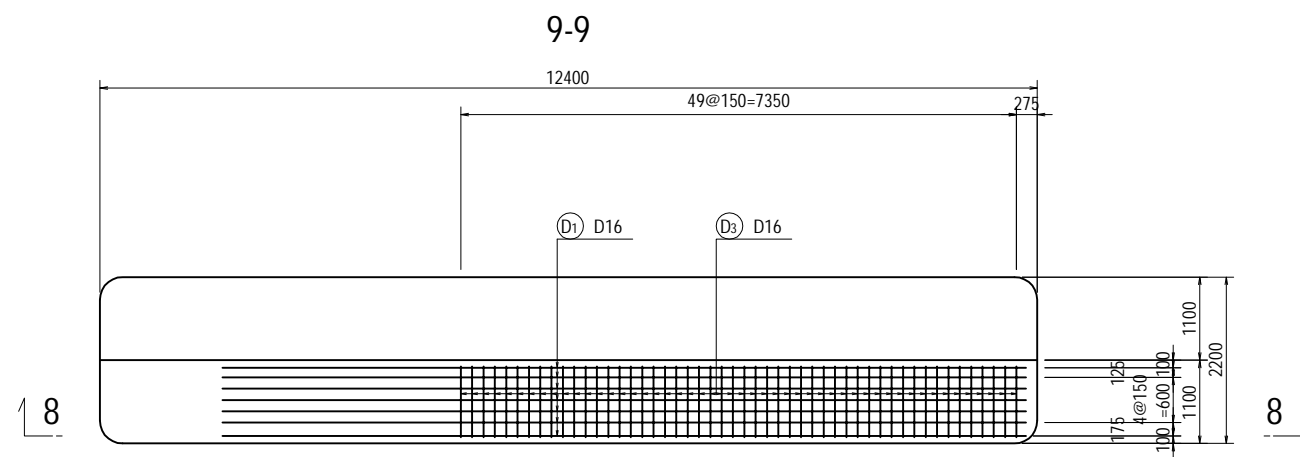
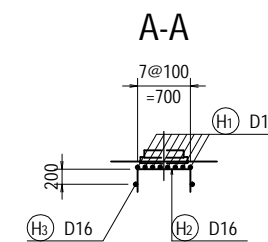
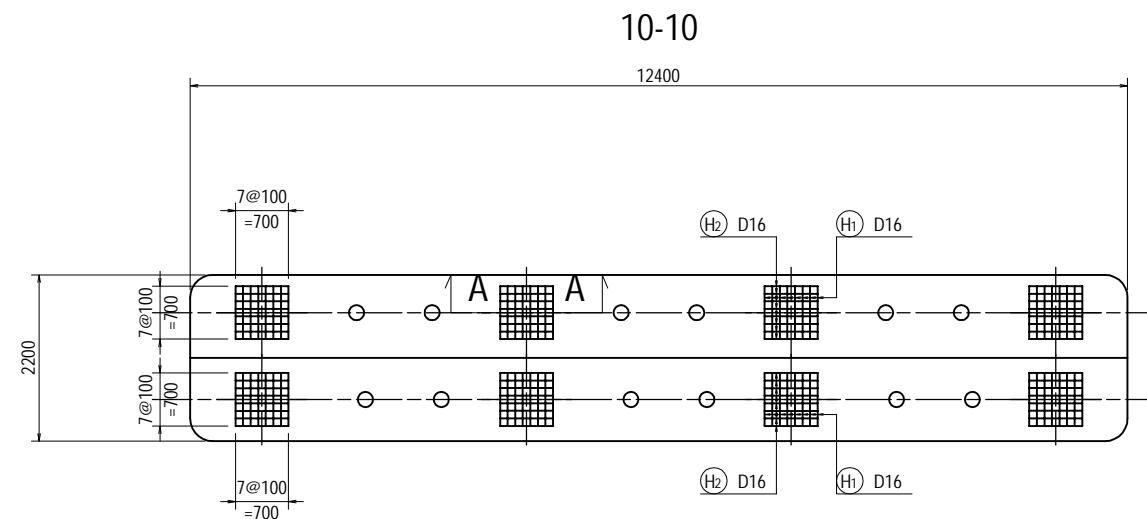
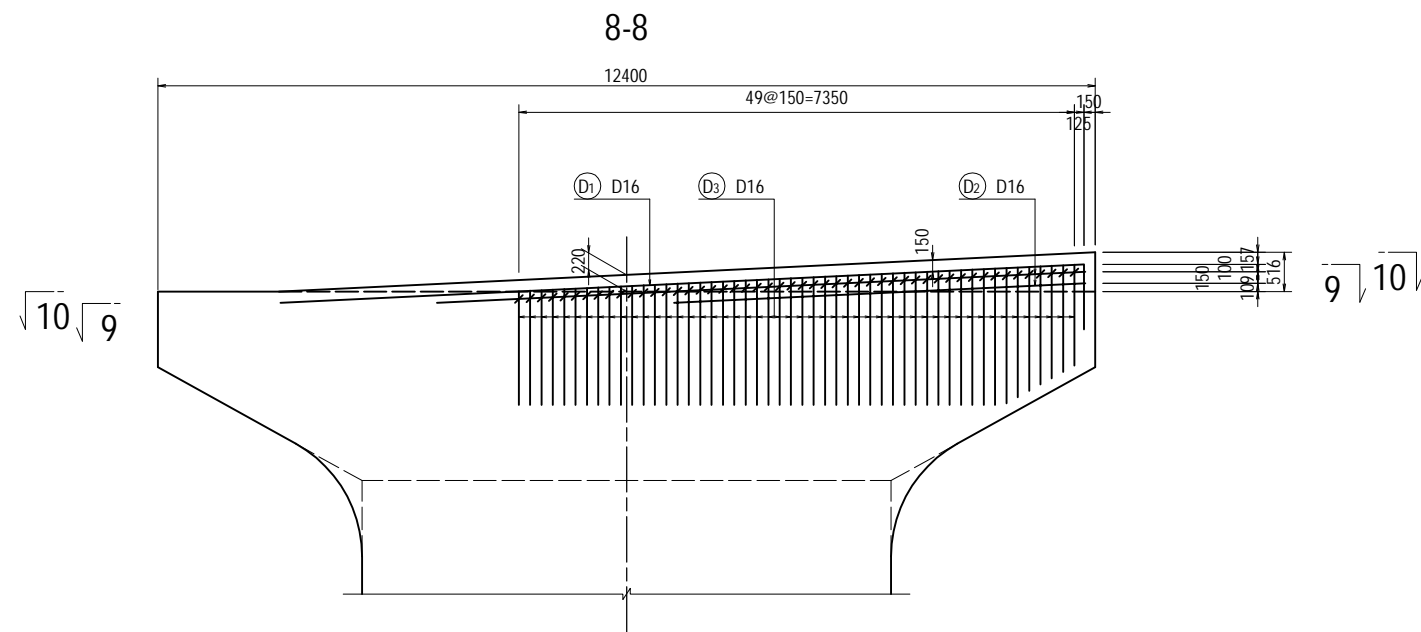


<small>PROJECT NAME</small> DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	<small>FINANCED BY</small> JAPAN INTERNATIONAL COOPERATION AGENCY	<small>COUNTERPART</small> REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	<small>JICA STUDY TEAM</small> NIPPON KOEI 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>NAME</th> <th>SIGNATURE</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY Y. SUZUKI</td> <td></td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY T. HAYAKAWA</td> <td></td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY Y. SANO</td> <td></td> <td>25 Jul. 2017</td> </tr> </tbody> </table>	NAME	SIGNATURE	DATE	PREPARED BY Y. SUZUKI		14 Jul. 2017	CHECKED BY T. HAYAKAWA		20 Jul. 2017	APPROVED BY Y. SANO		25 Jul. 2017	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>DRAWING TITLE</th> <th>PACKAGE</th> </tr> </thead> <tbody> <tr> <td rowspan="3" style="text-align: center;">BAR ARRANGEMENT OF PF7 PIER (1)</td> <td style="text-align: center;">3</td> </tr> <tr> <td style="text-align: center;">DWG No.</td> </tr> <tr> <td style="text-align: center;">P3-FO-2064</td> </tr> </tbody> </table>	DRAWING TITLE	PACKAGE	BAR ARRANGEMENT OF PF7 PIER (1)	3	DWG No.	P3-FO-2064
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CHECKED BY T. HAYAKAWA		20 Jul. 2017																						
APPROVED BY Y. SANO		25 Jul. 2017																						
DRAWING TITLE	PACKAGE																							
BAR ARRANGEMENT OF PF7 PIER (1)	3																							
	DWG No.																							
	P3-FO-2064																							



# BAR ARRANGEMENT OF PF7 PIER (2)

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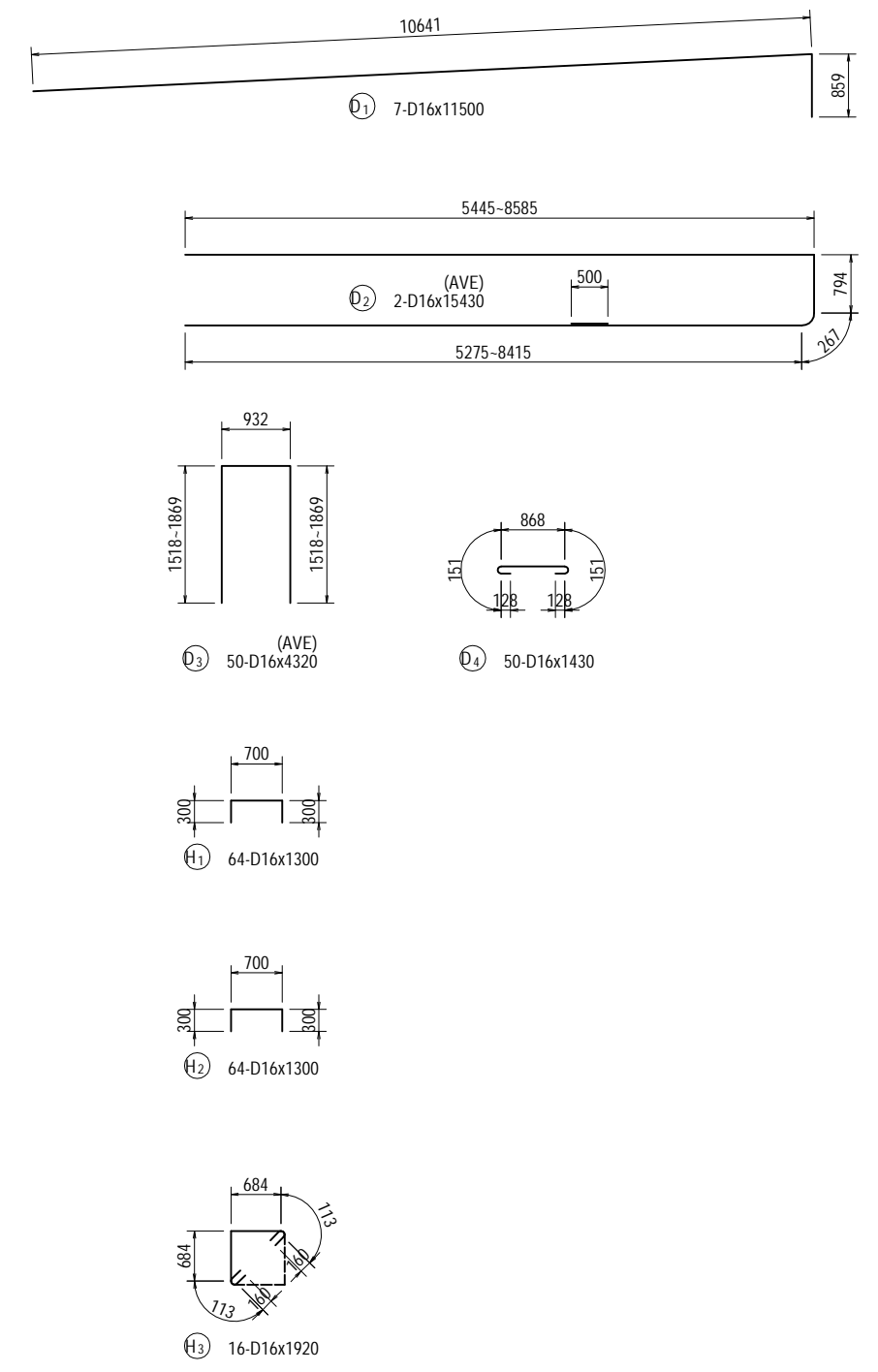
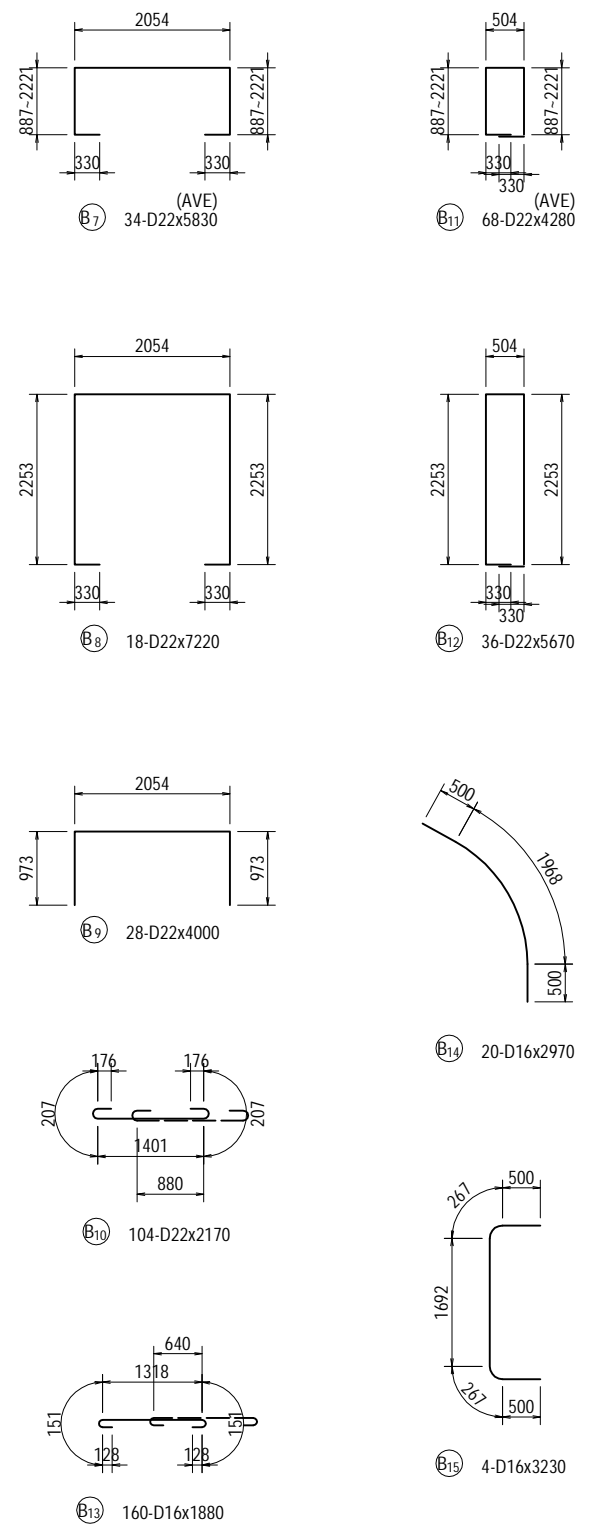
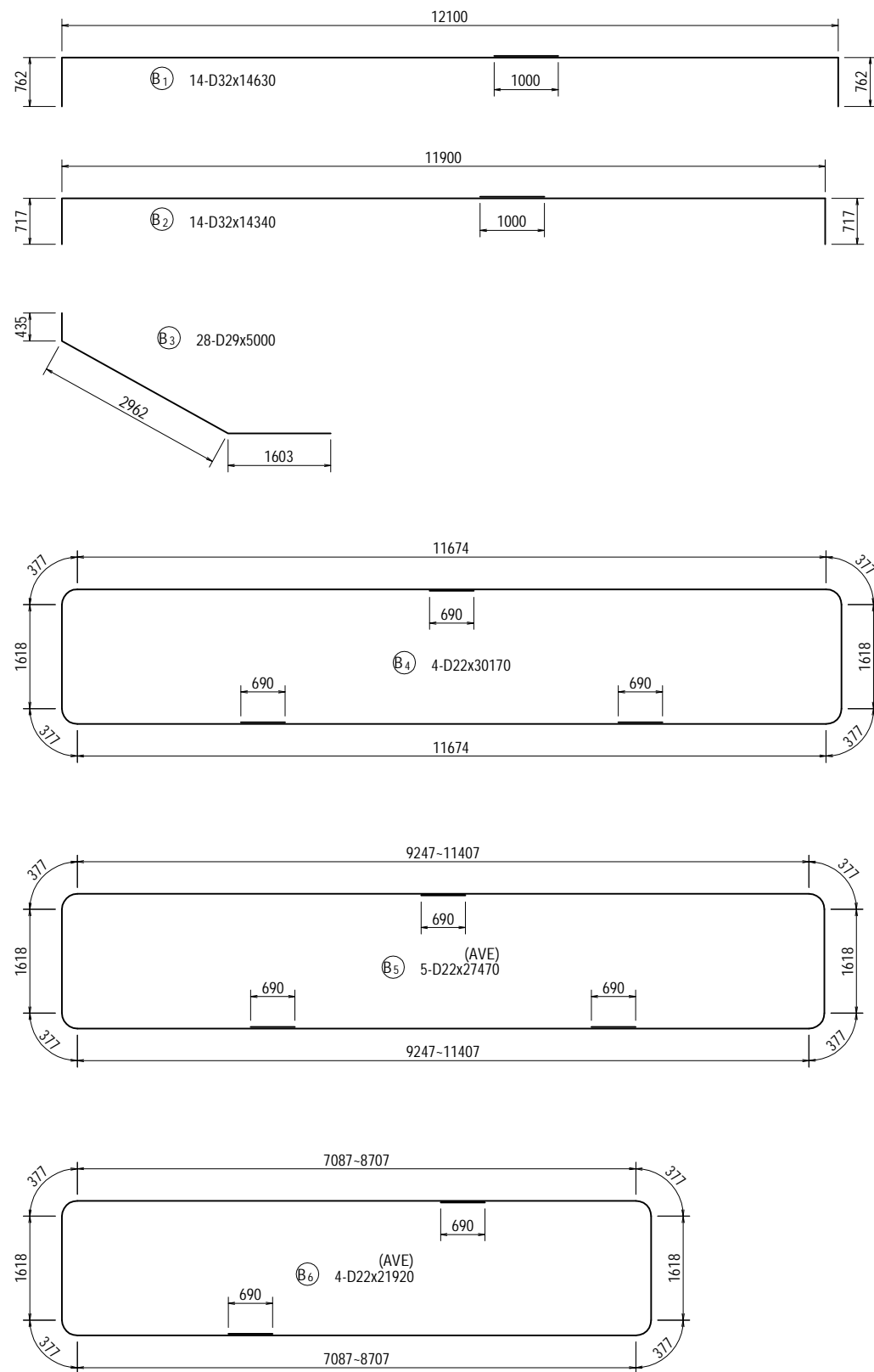


NOTE : The D3 placed at the end of the pier cap should be bent at the time of construction.

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.	Y. SUZUKI	<i>YS</i>	14 Jul. 2017	BAR ARRANGEMENT OF PF7 PIER (2)	3
				T. HAYAKAWA	<i>平川知邦</i>	20 Jul. 2017		DWG No.
				Y. SANO	<i>佐野 祐一</i>	25 Jul. 2017		P3-FO-2065

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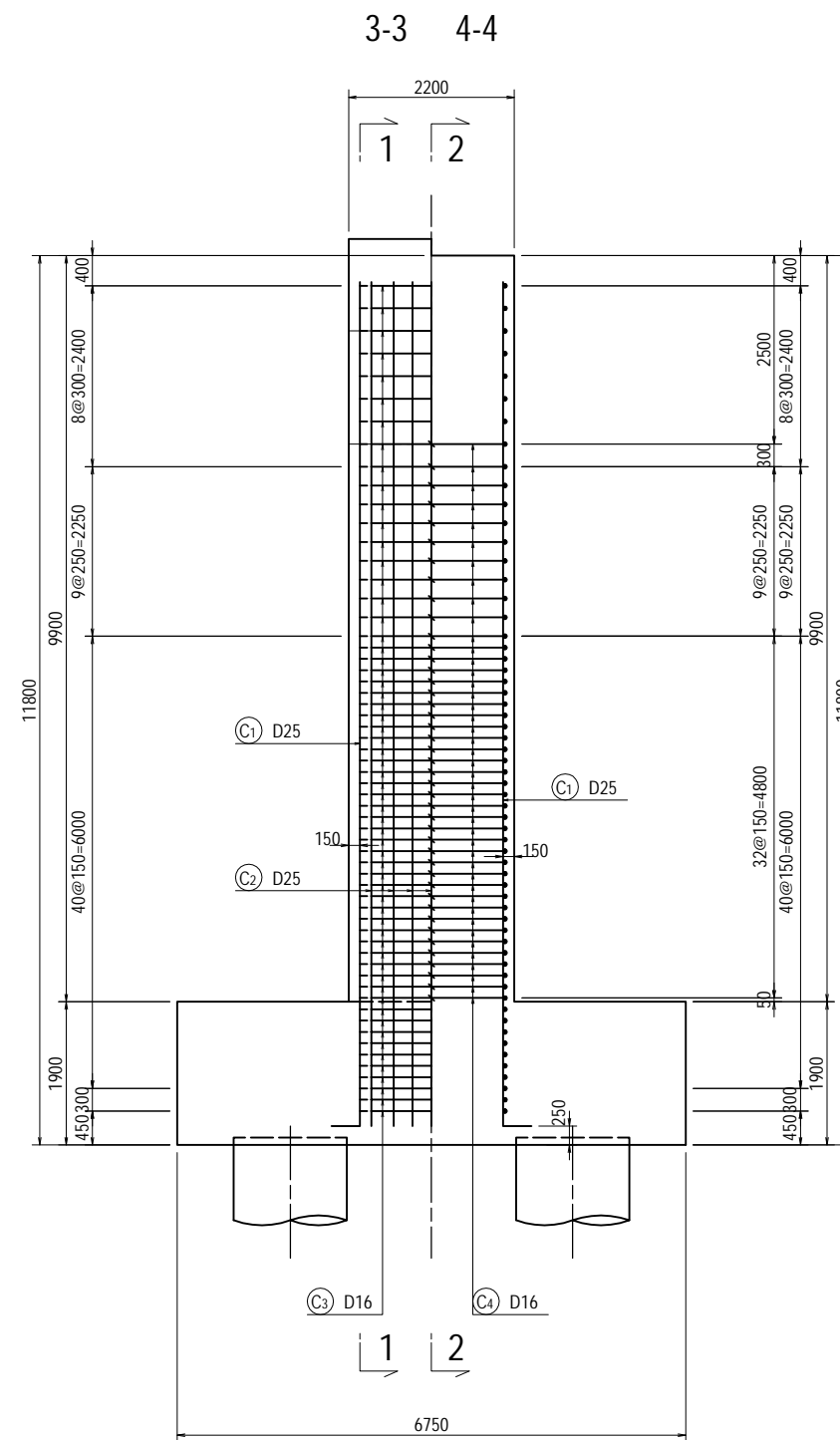
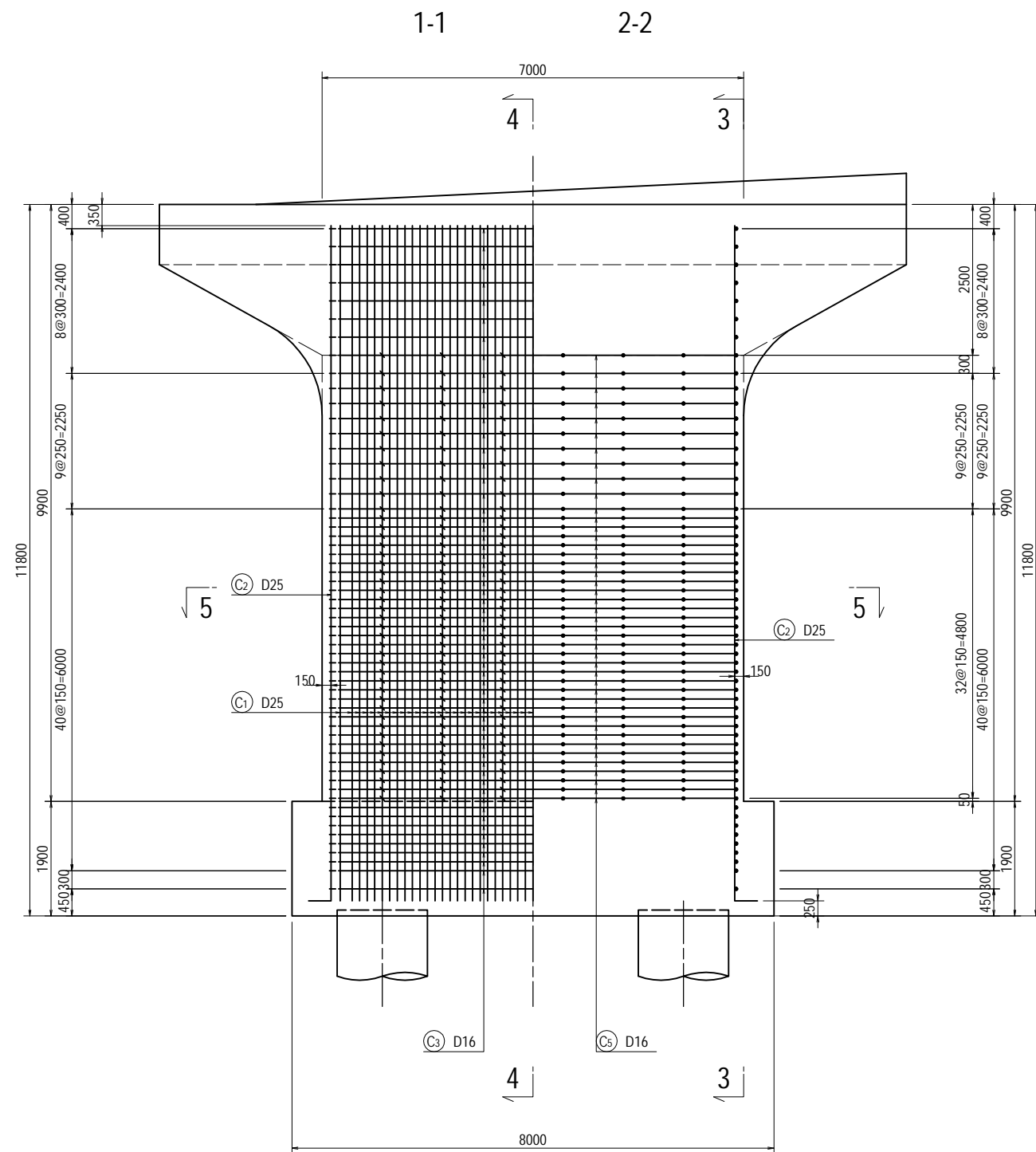
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PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM 	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE			
				PREPARED BY	Y. SUZUKI	<i>YS</i>			14 Jul. 2017	BAR ARRANGEMENT OF PF7 PIER (3)	3
				CHECKED BY	T. HAYAKAWA	<i>Hayakawa</i>			20 Jul. 2017		DWG No.
				APPROVED BY	Y. SANO	<i>Y. Sano</i>			25 Jul. 2017		P3-FO-2066

# BAR ARRANGEMENT OF PF7 PIER (4)

S=1:100



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.

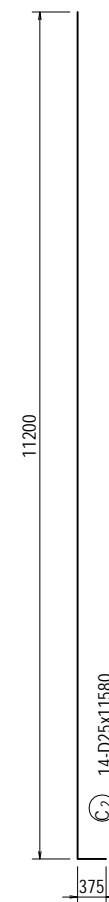
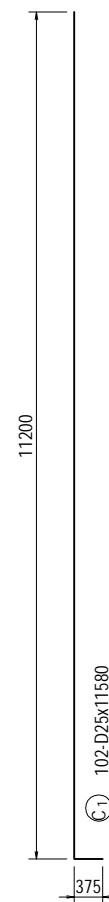
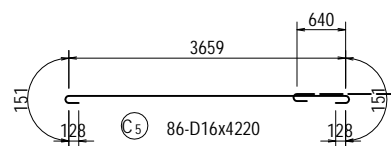
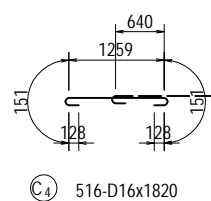
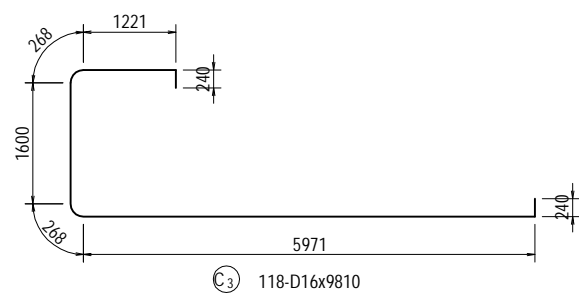
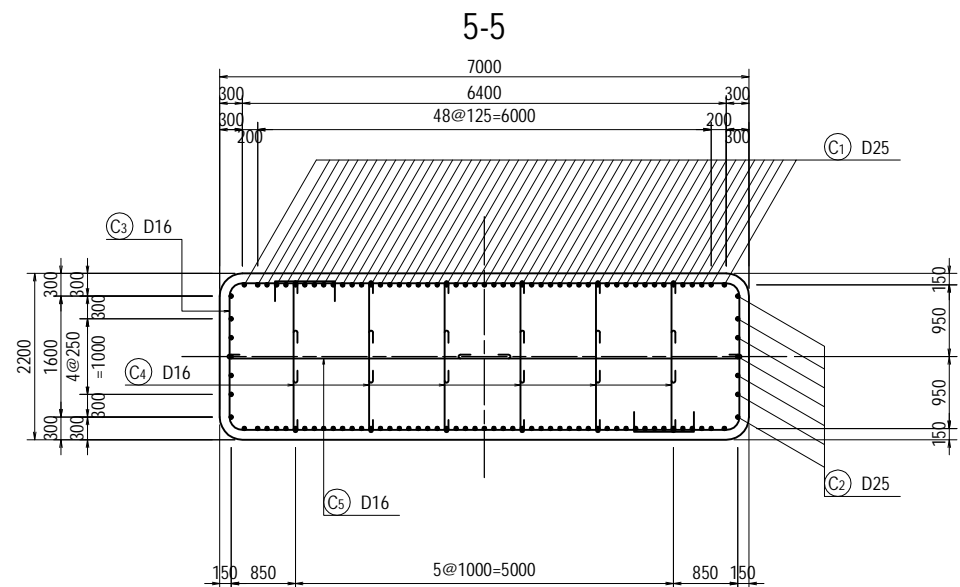
	NAME	SIGNATURE	DATE
PREPARED BY	Y. SUZUKI		14 Jul. 2017
CHECKED BY	T. HAYAKAWA		20 Jul. 2017
APPROVED BY	Y. SANO		25 Jul. 2017

DRAWING TITLE  
BAR ARRANGEMENT OF PF7 PIER (4)

PACKAGE  
3  
DWG No.  
P3-FO-2067

# BAR ARRANGEMENT OF PF7 PIER (5)

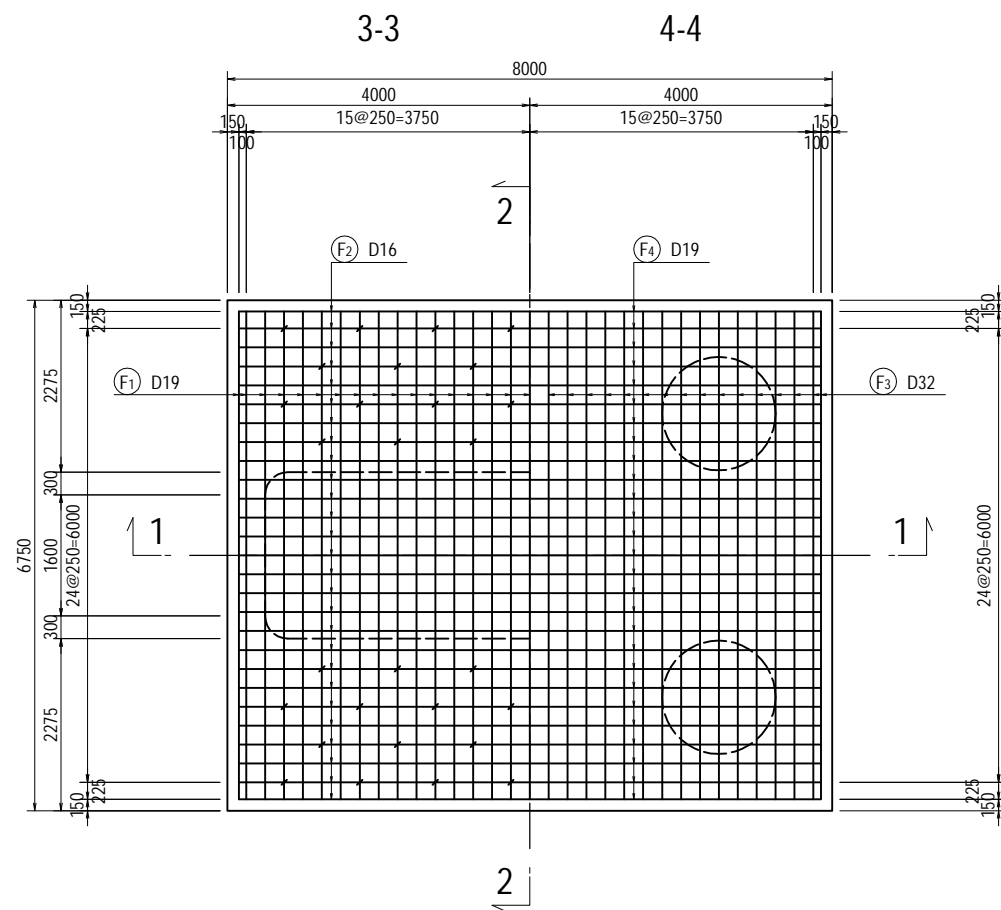
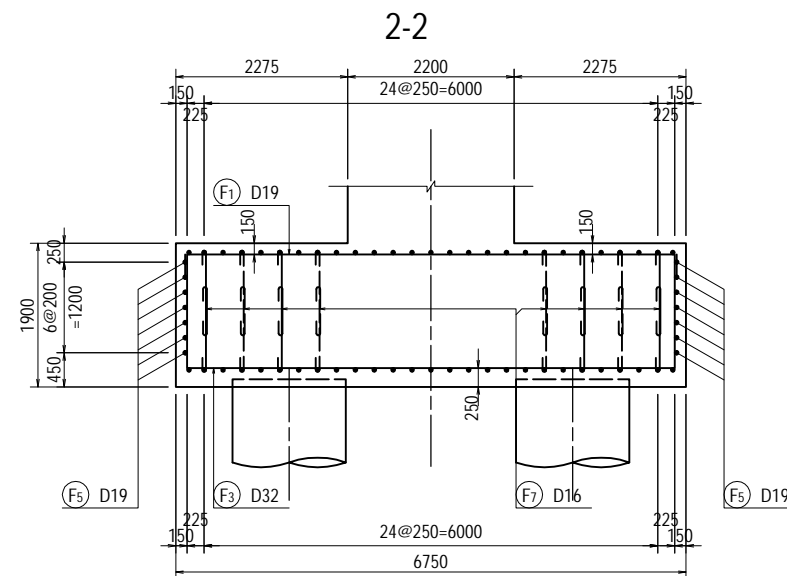
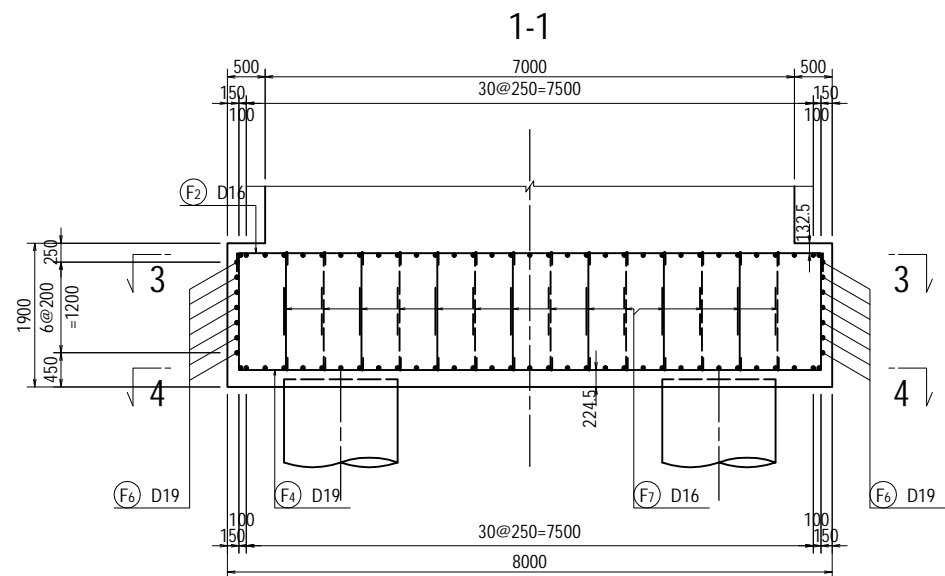
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PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	Y. SUZUKI	<i>YS</i>	14 Jul. 2017	BAR ARRANGEMENT OF PF7 PIER (5)	3
				T. HAYAKAWA	<i>平川知邦</i>	20 Jul. 2017		DWG No.
				Y. SANO	<i>佐野 祐一</i>	25 Jul. 2017		P3-FO-2068

# BAR ARRANGEMENT OF PF7 PIER (6)

S=1:100



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.

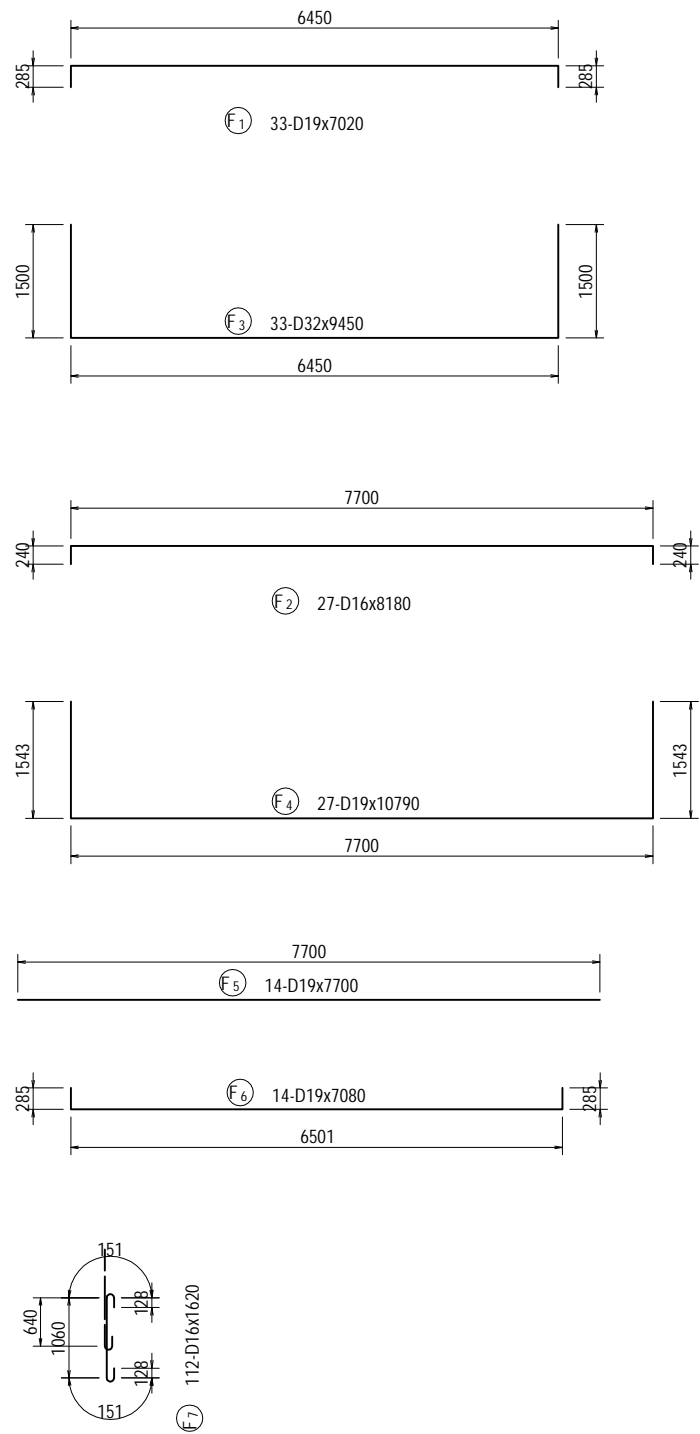
	NAME	SIGNATURE	DATE
PREPARED BY	Y. SUZUKI		14 Jul. 2017
CHECKED BY	T. HAYAKAWA		20 Jul. 2017
APPROVED BY	Y. SANO		25 Jul. 2017

DRAWING TITLE  
BAR ARRANGEMENT OF PF7 PIER (6)

PACKAGE  
3  
DWG No.  
P3-FO-2069

# BAR ARRANGEMENT OF PF7 PIER (7)

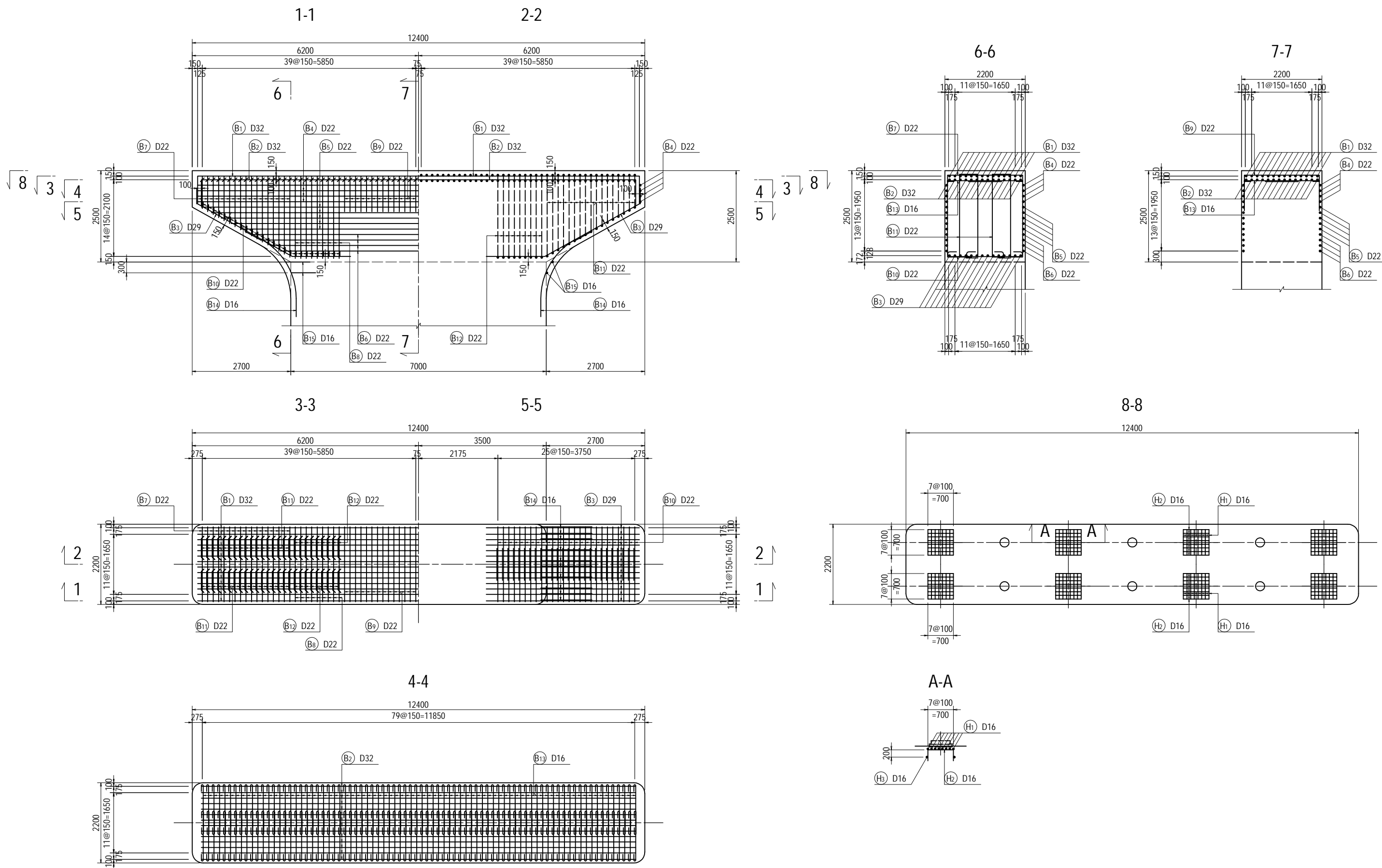
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## BAR LIST

REBAR NO.	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT/ONE (kg)	WEIGHT (kg)	REMARKS
B 1	D32	14630	14	6.23	91.14	1276	
B 2	D32	14340	14	6.23	89.34	1251	
B 3	D29	5000	28	5.04	25.20	706	
B 4	D22	30170	4	3.04	91.72	367	
B 5	D22	27470	5	3.04	83.51	418	AVERAGE
B 6	D22	21920	4	3.04	66.64	267	AVERAGE
B 7	D22	5830	34	3.04	17.72	602	AVERAGE
B 8	D22	7220	18	3.04	21.95	395	
B 9	D22	4000	28	3.04	12.16	340	
B 10	D22	2170	104	3.04	6.60	686	
B 11	D22	4280	68	3.04	13.01	885	AVERAGE
B 12	D22	5670	36	3.04	17.24	621	
B 13	D16	1880	160	1.56	2.93	469	
B 14	D16	2970	20	1.56	4.63	93	
B 15	D16	3230	4	1.56	5.04	20	
						8396	
D 1	D16	11500	7	1.56	17.94	126	
D 2	D16	15430	2	1.56	24.07	48	AVERAGE
D 3	D16	4320	50	1.56	6.74	337	AVERAGE
D 4	D16	1430	50	1.56	2.23	112	
						623	
H 1	D16	1300	64	1.56	2.03	130	
H 2	D16	1300	64	1.56	2.03	130	
H 3	D16	1920	16	1.56	3.00	48	
						308	
C 1	D25	11580	102	3.98	46.09	4701	
C 2	D25	11580	14	3.98	46.09	645	
C 3	D16	9810	118	1.56	15.30	1805	
C 4	D16	1820	516	1.56	2.84	1465	
C 5	D16	4220	86	1.56	6.58	566	
						9182	
F 1	D19	7020	33	2.25	15.80	521	
F 2	D16	8180	27	1.56	12.76	345	
F 3	D32	9450	33	6.23	58.87	1943	
F 4	D19	10790	27	2.25	24.28	656	
F 5	D19	7700	14	2.25	17.33	243	
F 6	D19	7080	14	2.25	15.93	223	
F 7	D16	1620	112	1.56	2.53	283	
						4214	
					D32	4470	
					D29	706	
					D25	5346	
					D22	4581	
					D19	1643	
					D16	5977	
					TOTAL	22723	

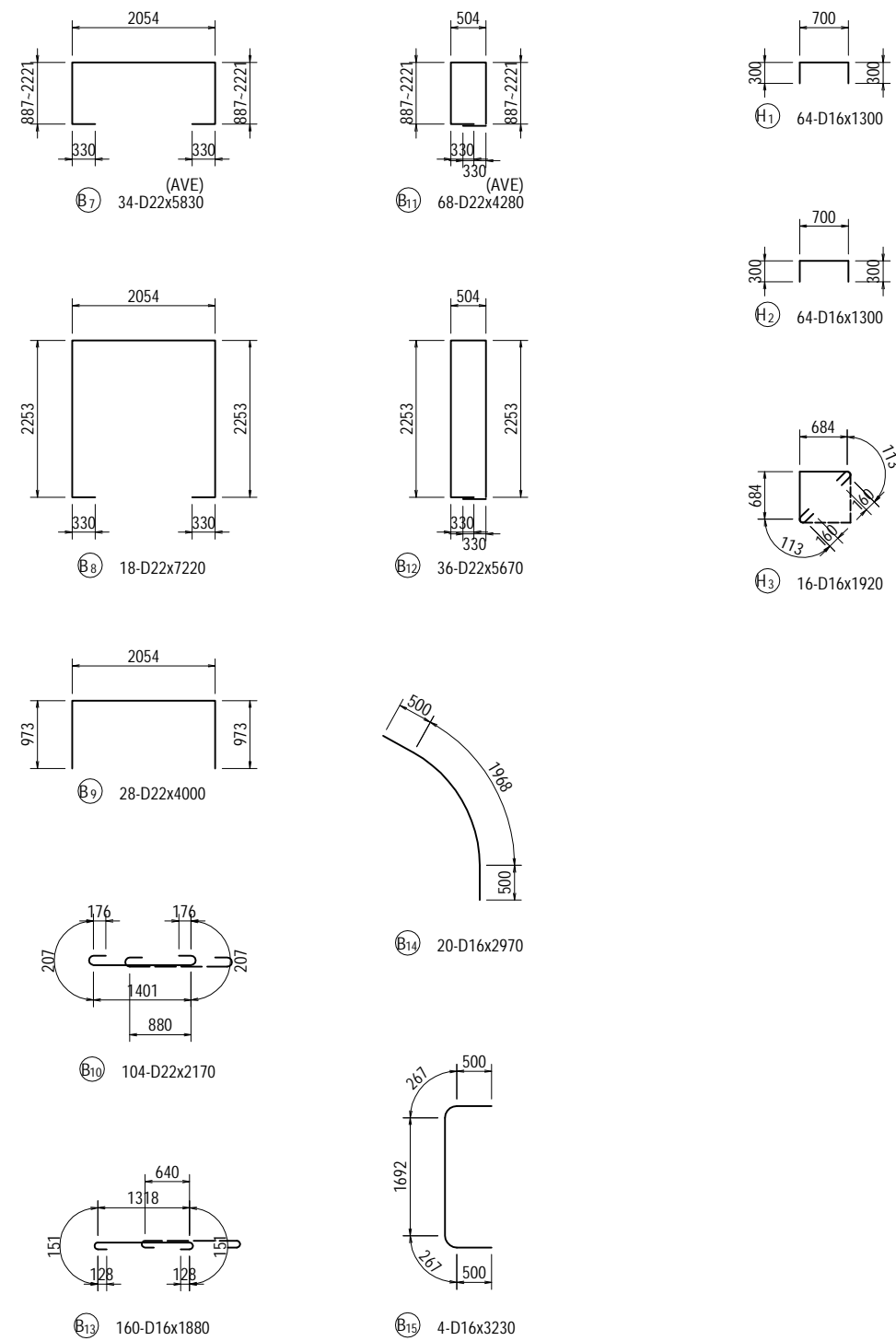
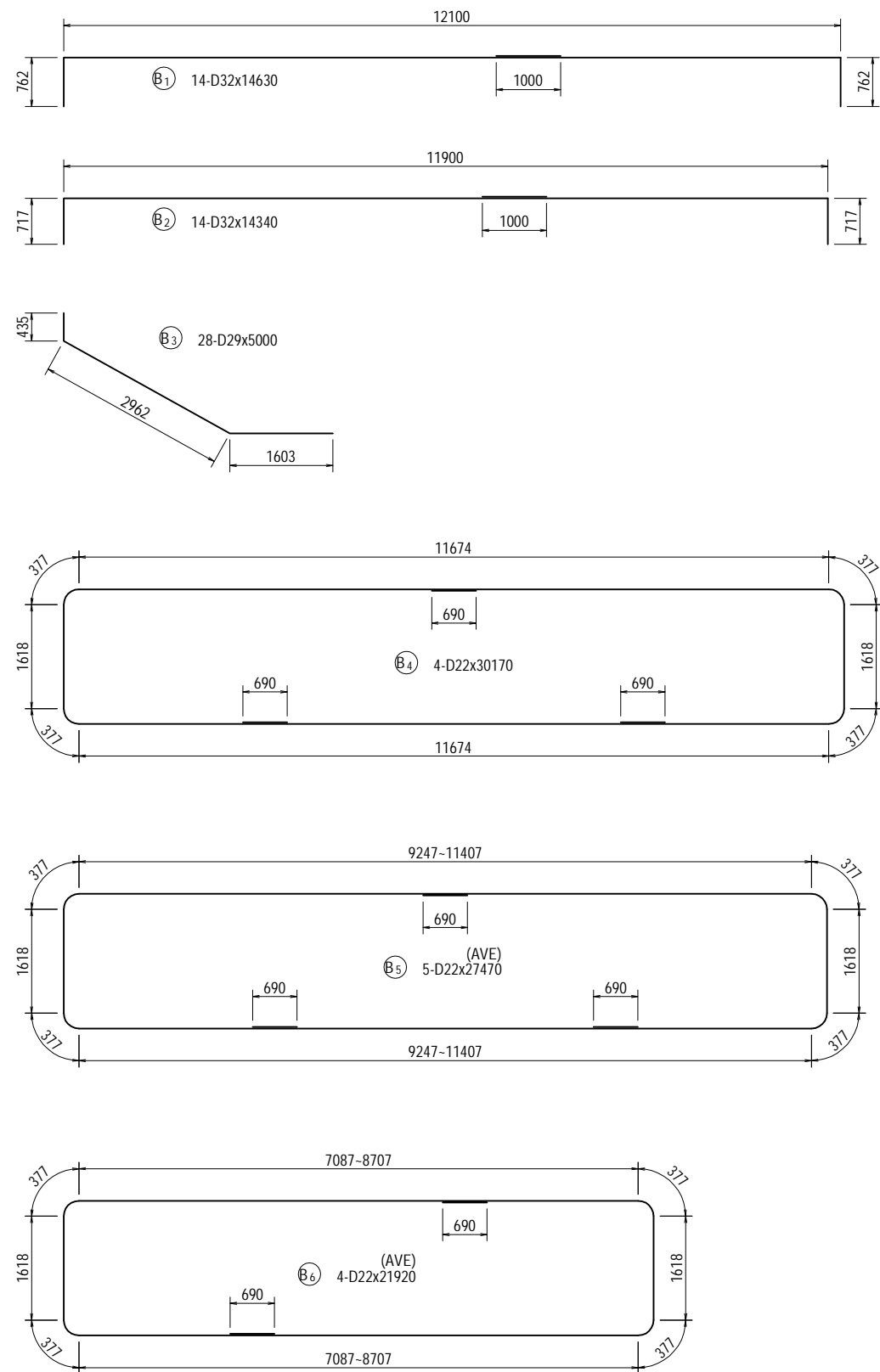
# BAR ARRANGEMENT OF PF8 PIER (1) S=1:100



<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: 10%;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY</td> <td>Y. SUZUKI</td> <td><i>YS</i></td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY</td> <td>T. HAYAKAWA</td> <td><i>Hayakawa</i></td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY</td> <td>Y. SANO</td> <td><i>Y. Sano</i></td> <td>25 Jul. 2017</td> </tr> </tbody> </table>		NAME	SIGNATURE	DATE	PREPARED BY	Y. SUZUKI	<i>YS</i>	14 Jul. 2017	CHECKED BY	T. HAYAKAWA	<i>Hayakawa</i>	20 Jul. 2017	APPROVED BY	Y. SANO	<i>Y. Sano</i>	25 Jul. 2017	<small>DRAWING TITLE</small> <b>BAR ARRANGEMENT OF PF8 PIER (1)</b>	<small>PACKAGE</small> 3 <small>DWG No.</small> P3-FO-2071
	NAME	SIGNATURE	DATE																			
PREPARED BY	Y. SUZUKI	<i>YS</i>	14 Jul. 2017																			
CHECKED BY	T. HAYAKAWA	<i>Hayakawa</i>	20 Jul. 2017																			
APPROVED BY	Y. SANO	<i>Y. Sano</i>	25 Jul. 2017																			

# BAR ARRANGEMENT OF PF8 PIER (2)

S=1:100

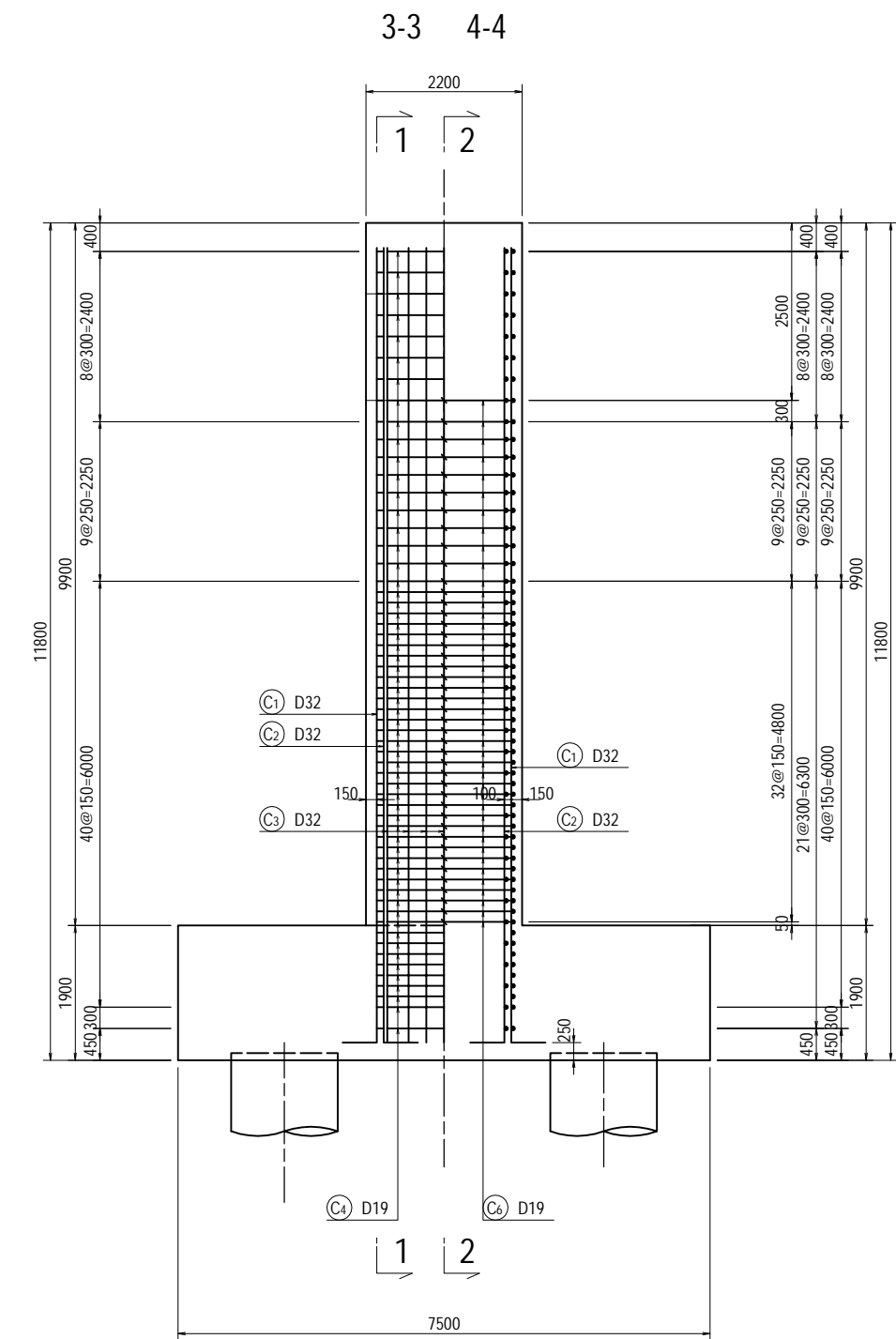
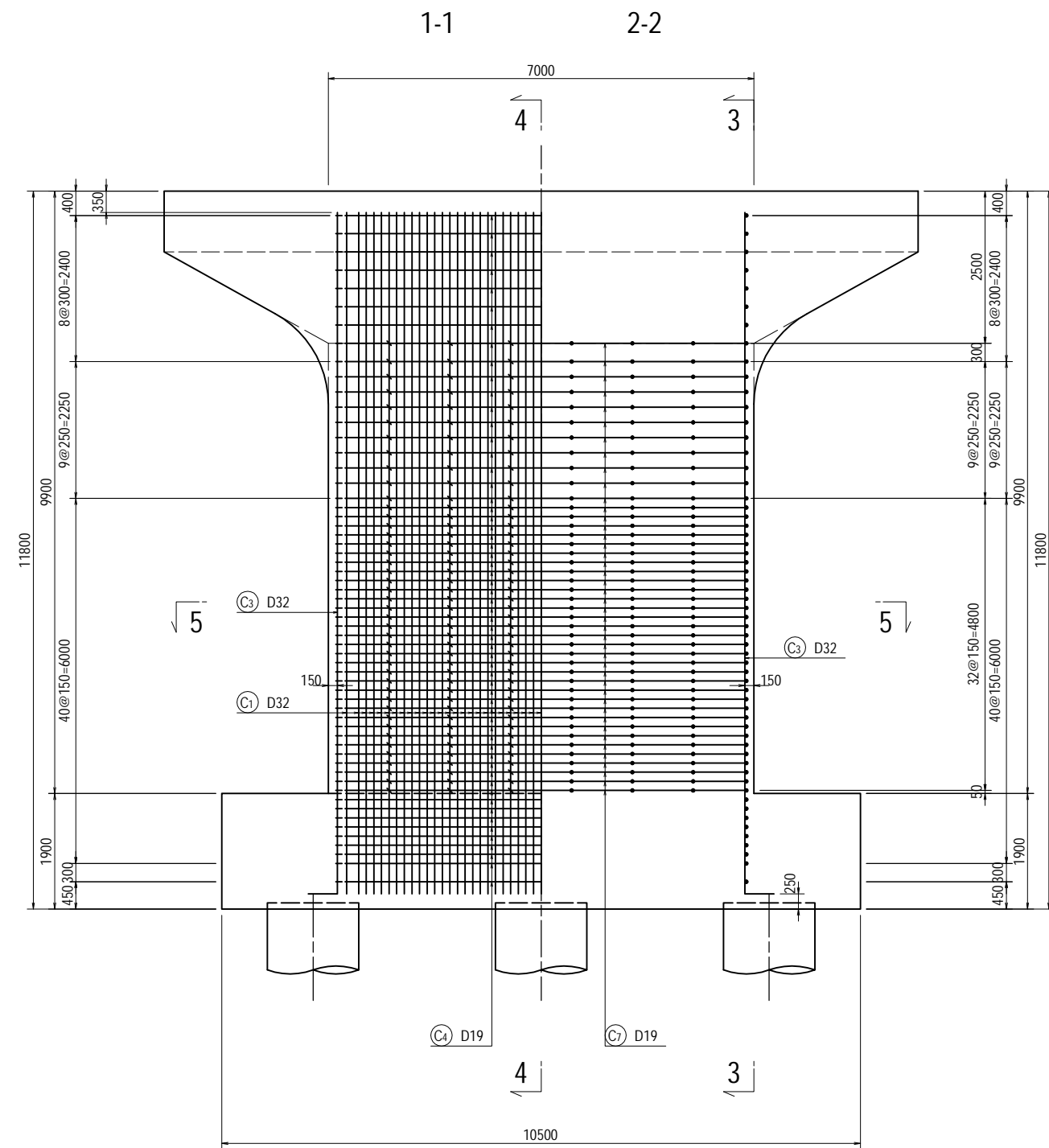


PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	Y. SUZUKI	<i>YS</i>	14 Jul. 2017	BAR ARRANGEMENT OF PF8 PIER (2)	3
				T. HAYAKAWA	<i>Hayakawa</i>	20 Jul. 2017		DWG No.
				Y. SANO	<i>Y. Sano</i>	25 Jul. 2017		P3-FO-2072



# BAR ARRANGEMENT OF PF8 PIER (3)

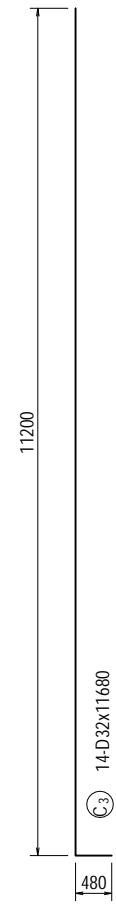
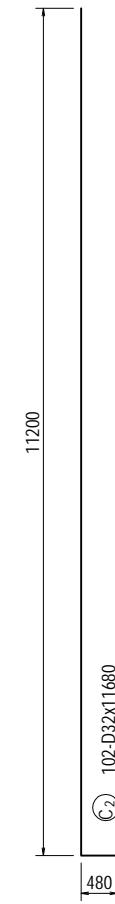
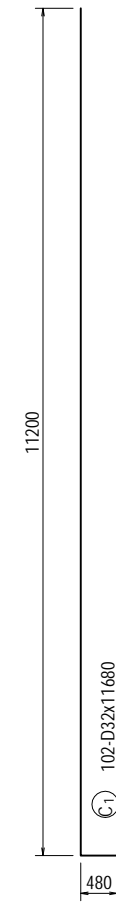
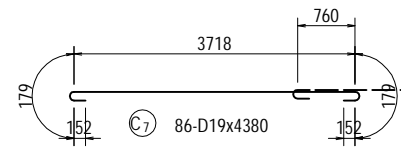
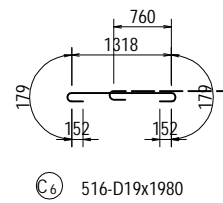
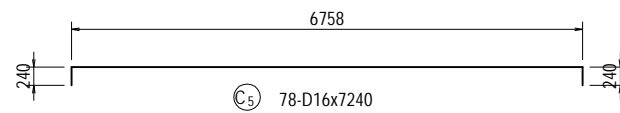
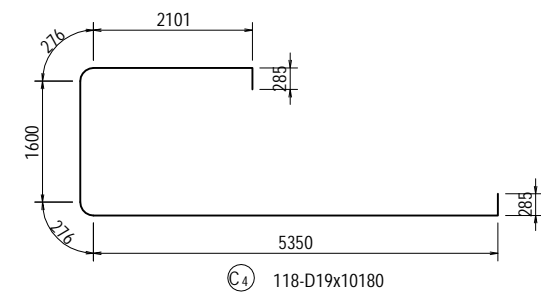
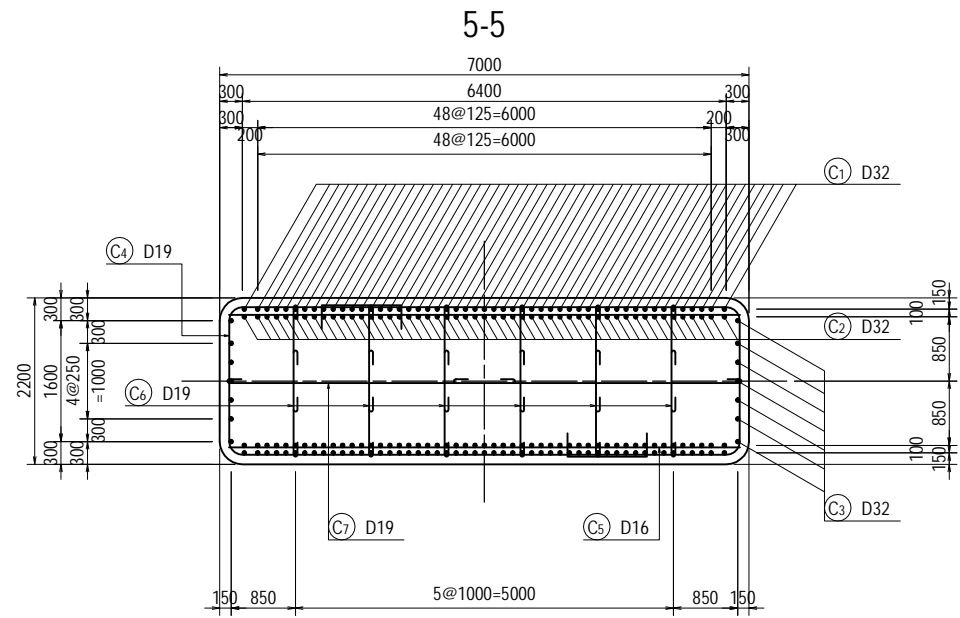
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PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE			
				PREPARED BY	Y. SUZUKI				14 Jul. 2017	BAR ARRANGEMENT OF PF8 PIER (3)	3
				CHECKED BY	T. HAYAKAWA				20 Jul. 2017		DWG No.
				APPROVED BY	Y. SANO				25 Jul. 2017		P3-FO-2073

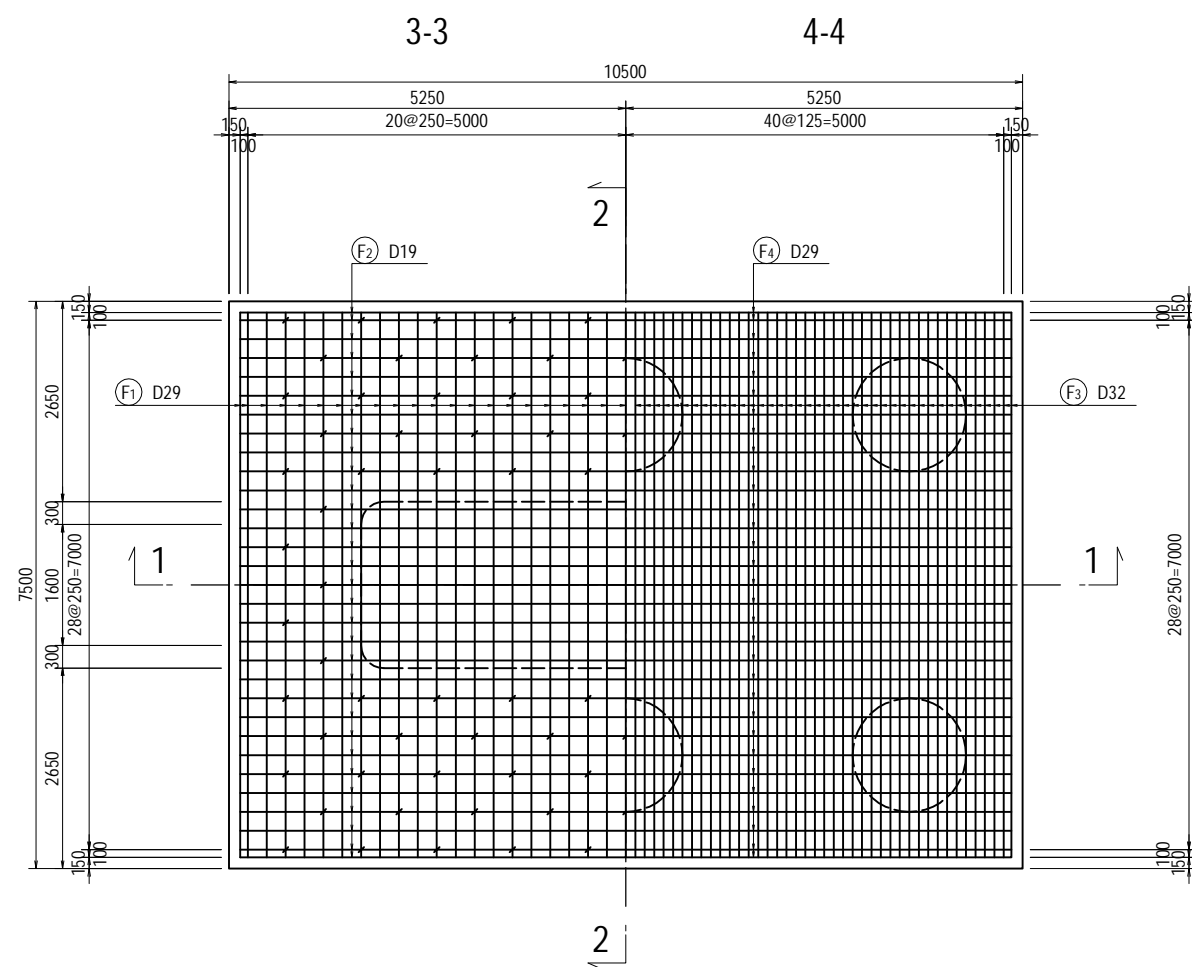
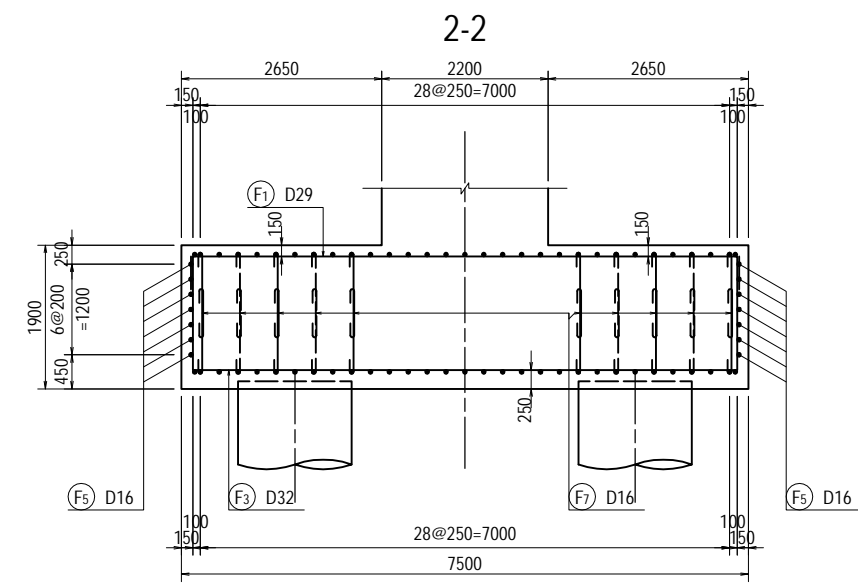
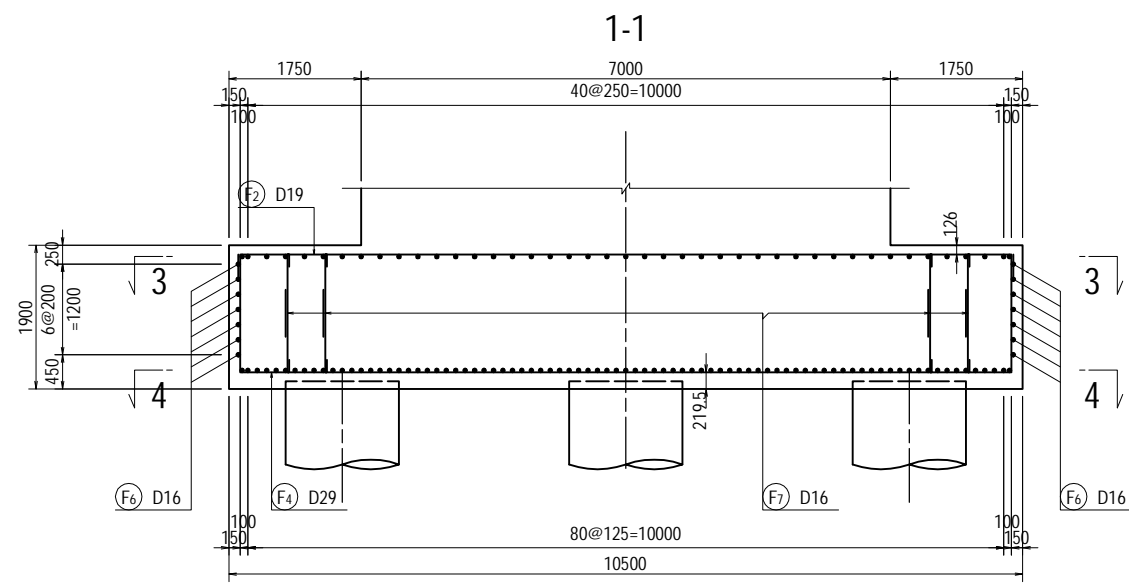
# BAR ARRANGEMENT OF PF8 PIER (4)

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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 PF8 PIER (4)	PACKAGE	
				PREPARED BY	Y. SUZUKI			14 Jul. 2017	3
				CHECKED BY	T. HAYAKAWA			20 Jul. 2017	DWG No.
				APPROVED BY	Y. SANO			25 Jul. 2017	P3-FO-2074

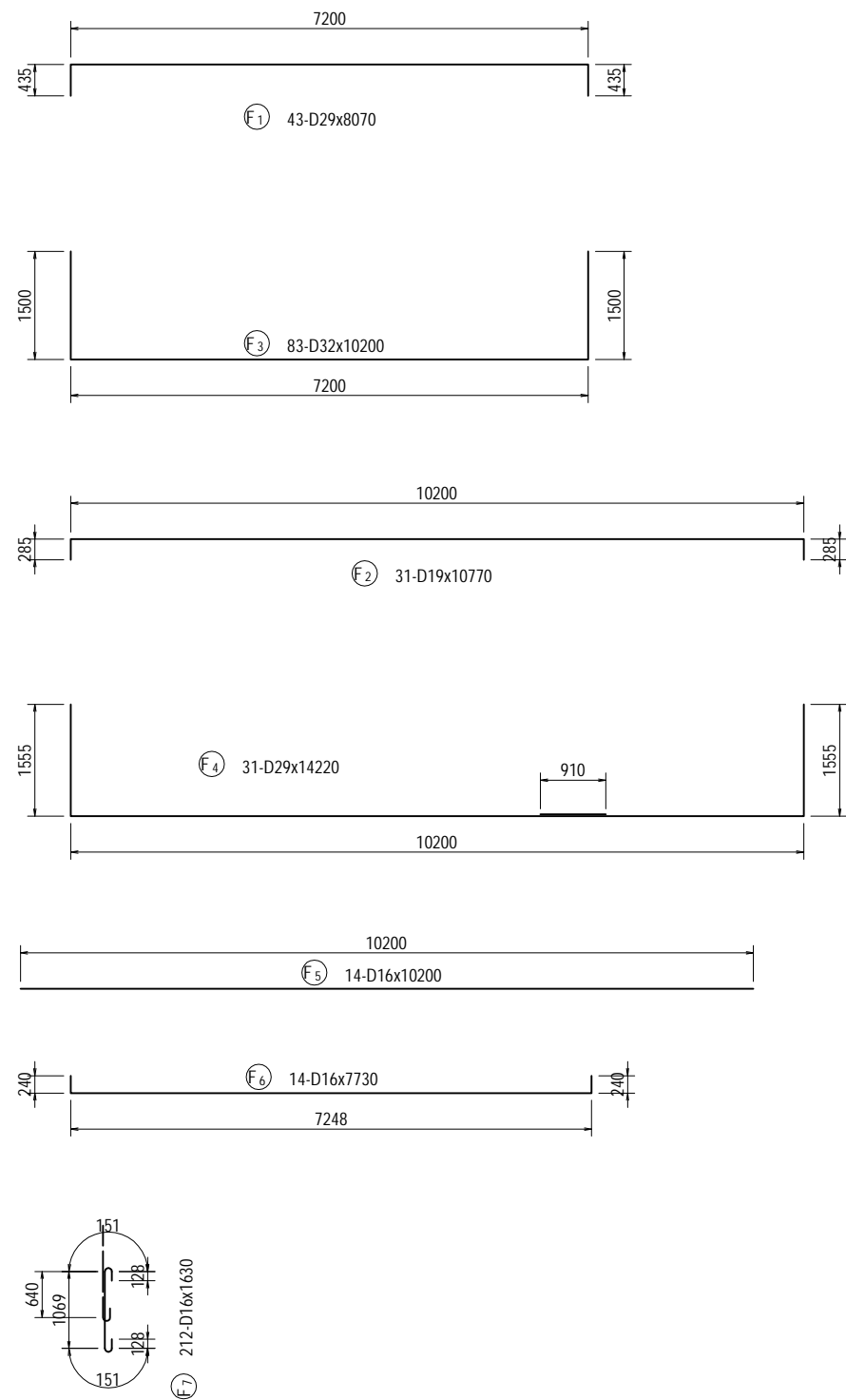
# BAR ARRANGEMENT OF PF8 PIER (5) S=1:100



<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%;">NAME</th> <th style="width: 15%;">SIGNATURE</th> <th style="width: 15%;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY Y. SUZUKI</td> <td></td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY T. HAYAKAWA</td> <td></td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY Y. SANO</td> <td></td> <td>25 Jul. 2017</td> </tr> </tbody> </table>	NAME	SIGNATURE	DATE	PREPARED BY Y. SUZUKI		14 Jul. 2017	CHECKED BY T. HAYAKAWA		20 Jul. 2017	APPROVED BY Y. SANO		25 Jul. 2017	DRAWING TITLE <b>BAR ARRANGEMENT OF PF8 PIER (5)</b>	PACKAGE 3 DWG No. P3-FO-2075
NAME	SIGNATURE	DATE																	
PREPARED BY Y. SUZUKI		14 Jul. 2017																	
CHECKED BY T. HAYAKAWA		20 Jul. 2017																	
APPROVED BY Y. SANO		25 Jul. 2017																	

# BAR ARRANGEMENT OF PF8 PIER (6)

S=1:100



## BAR LIST

REBAR NO.	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT/ONE (kg)	WEIGHT (kg)	REMARKS
B 1	D32	14630	14	6.23	91.14	1276	
B 2	D32	14340	14	6.23	89.34	1251	
B 3	D29	5000	28	5.04	25.20	706	
B 4	D22	30170	4	3.04	91.72	367	
B 5	D22	27470	5	3.04	83.51	418	AVERAGE
B 6	D22	21920	4	3.04	66.64	267	AVERAGE
B 7	D22	5830	34	3.04	17.72	602	AVERAGE
B 8	D22	7220	18	3.04	21.95	395	
B 9	D22	4000	28	3.04	12.16	340	
B 10	D22	2170	104	3.04	6.60	686	
B 11	D22	4280	68	3.04	13.01	885	AVERAGE
B 12	D22	5670	36	3.04	17.24	621	
B 13	D16	1880	160	1.56	2.93	469	
B 14	D16	2970	20	1.56	4.63	93	
B 15	D16	3230	4	1.56	5.04	20	
						8396	
H 1	D16	1300	64	1.56	2.03	130	
H 2	D16	1300	64	1.56	2.03	130	
H 3	D16	1920	16	1.56	3.00	48	
						308	
C 1	D32	11680	102	6.23	72.77	7423	
C 2	D32	11680	102	6.23	72.77	7423	
C 3	D32	11680	14	6.23	72.77	1019	
C 4	D19	10180	118	2.25	22.91	2703	
C 5	D16	7240	78	1.56	11.29	881	
C 6	D19	1980	516	2.25	4.46	2301	
C 7	D19	4380	86	2.25	9.86	848	
						22598	
F 1	D29	8070	43	5.04	40.67	1749	
F 2	D19	10770	31	2.25	24.23	751	
F 3	D32	10200	83	6.23	63.55	5275	
F 4	D29	14220	31	5.04	71.67	2222	
F 5	D16	10200	14	1.56	15.91	223	
F 6	D16	7730	14	1.56	12.06	169	
F 7	D16	1630	212	1.56	2.54	538	
						10927	
					D32	23667	
					D29	4677	
					D22	4581	
					D19	6603	
					D16	2701	
					TOTAL	42229	

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

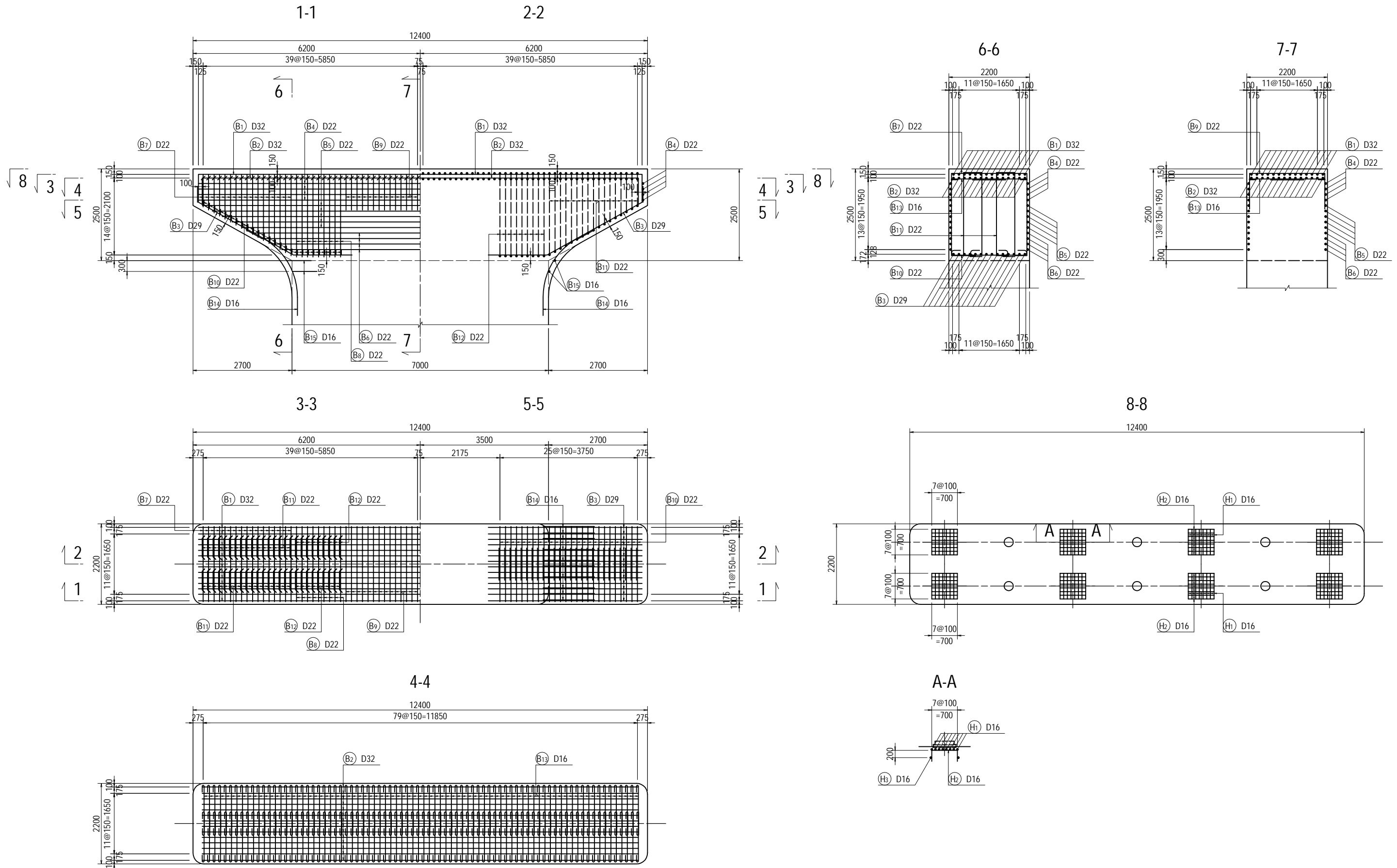
JICA STUDY TEAM  
NIPPON KOEI CO., LTD.  
ORIENTAL CONSULTANTS GLOBAL CO., LTD.  
METROPOLITAN EXPRESSWAY COMPANY LIMITED  
CHODAI CO., LTD.  
NIPPON ENGINEERING CONSULTANTS CO., LTD.

	NAME	SIGNATURE	DATE
PREPARED BY	Y. SUZUKI	<i>YS</i>	14 Jul. 2017
CHECKED BY	T. HAYAKAWA	<i>平川知平</i>	20 Jul. 2017
APPROVED BY	Y. SANO	<i>佐野 一</i>	25 Jul. 2017

DRAWING TITLE  
BAR ARRANGEMENT OF PF8 PIER (6)

PACKAGE  
3  
DWG No.  
P3-FO-2076

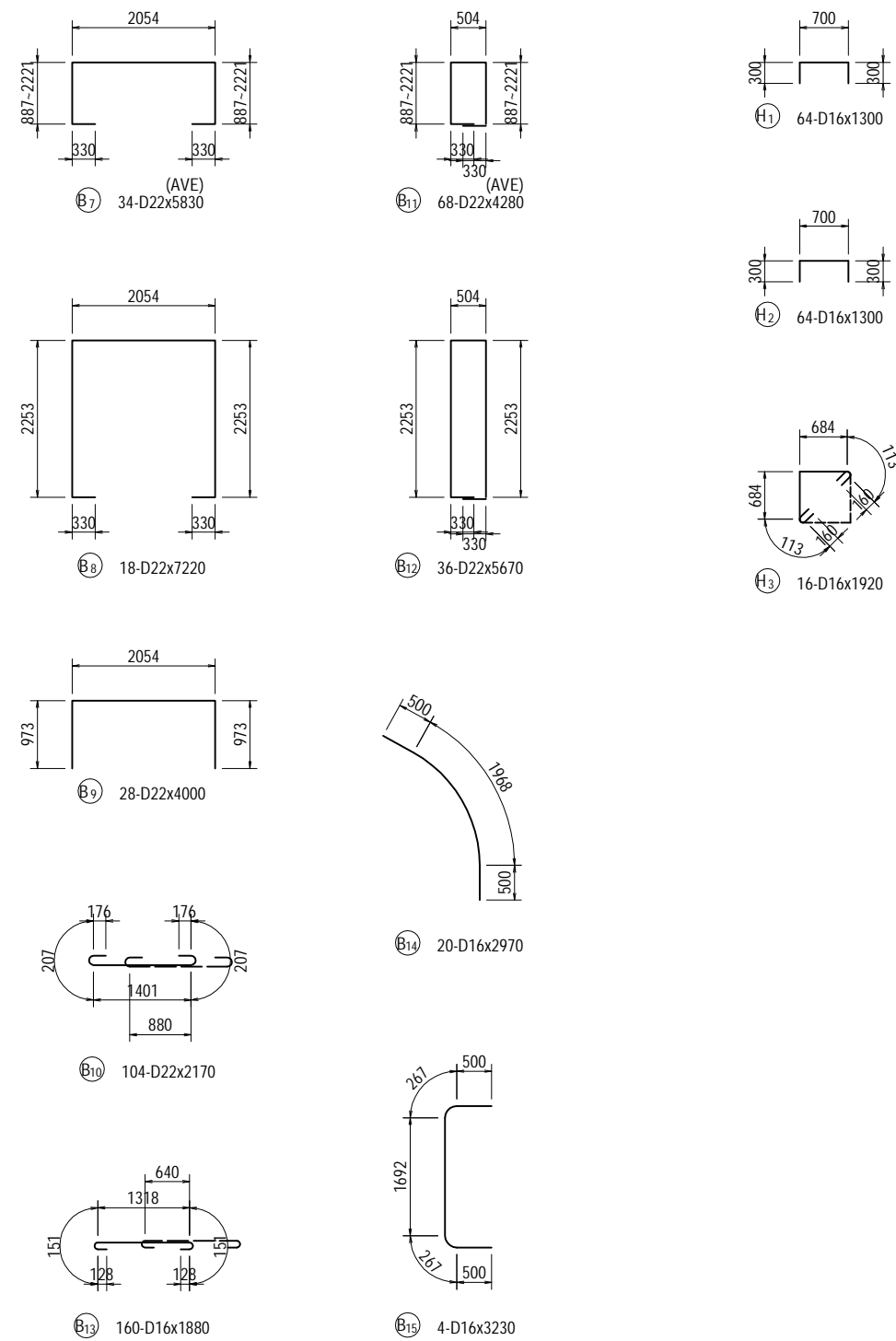
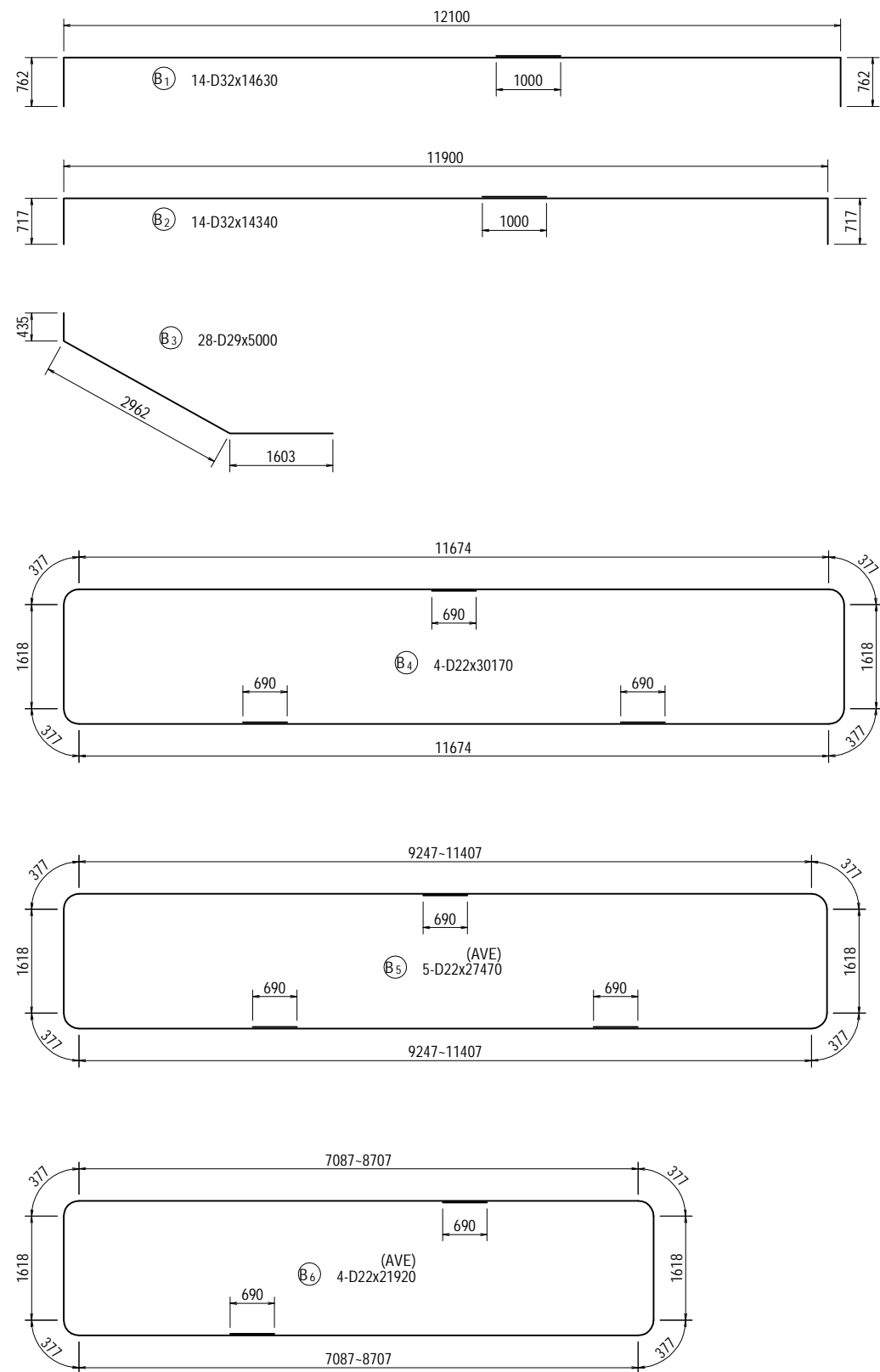
# BAR ARRANGEMENT OF PF9 PIER (1) S=1:100



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: 10%;">NAME</th> <th style="width: 10%;">SIGNATURE</th> <th style="width: 10%;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY</td> <td>Y. SUZUKI</td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY</td> <td>T. HAYAKAWA</td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY</td> <td>Y. SANO</td> <td>25 Jul. 2017</td> </tr> </tbody> </table>	NAME	SIGNATURE	DATE	PREPARED BY	Y. SUZUKI	14 Jul. 2017	CHECKED BY	T. HAYAKAWA	20 Jul. 2017	APPROVED BY	Y. SANO	25 Jul. 2017	DRAWING TITLE <h2 style="text-align: center;">BAR ARRANGEMENT OF PF9 PIER (1)</h2>	PACKAGE 3 DWG No. P3-FO-2077
NAME	SIGNATURE	DATE																
PREPARED BY	Y. SUZUKI	14 Jul. 2017																
CHECKED BY	T. HAYAKAWA	20 Jul. 2017																
APPROVED BY	Y. SANO	25 Jul. 2017																

# BAR ARRANGEMENT OF PF9 PIER (2)

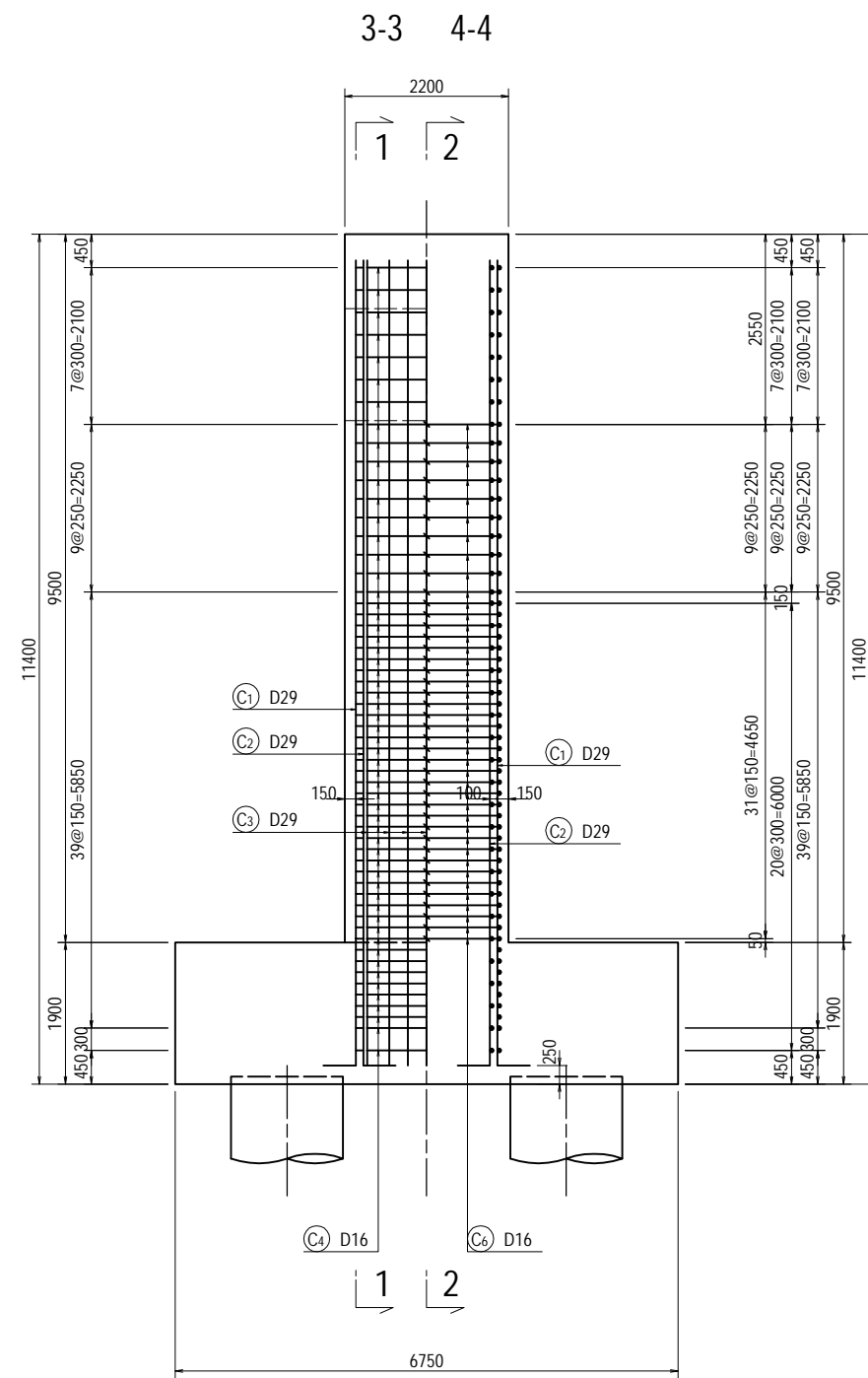
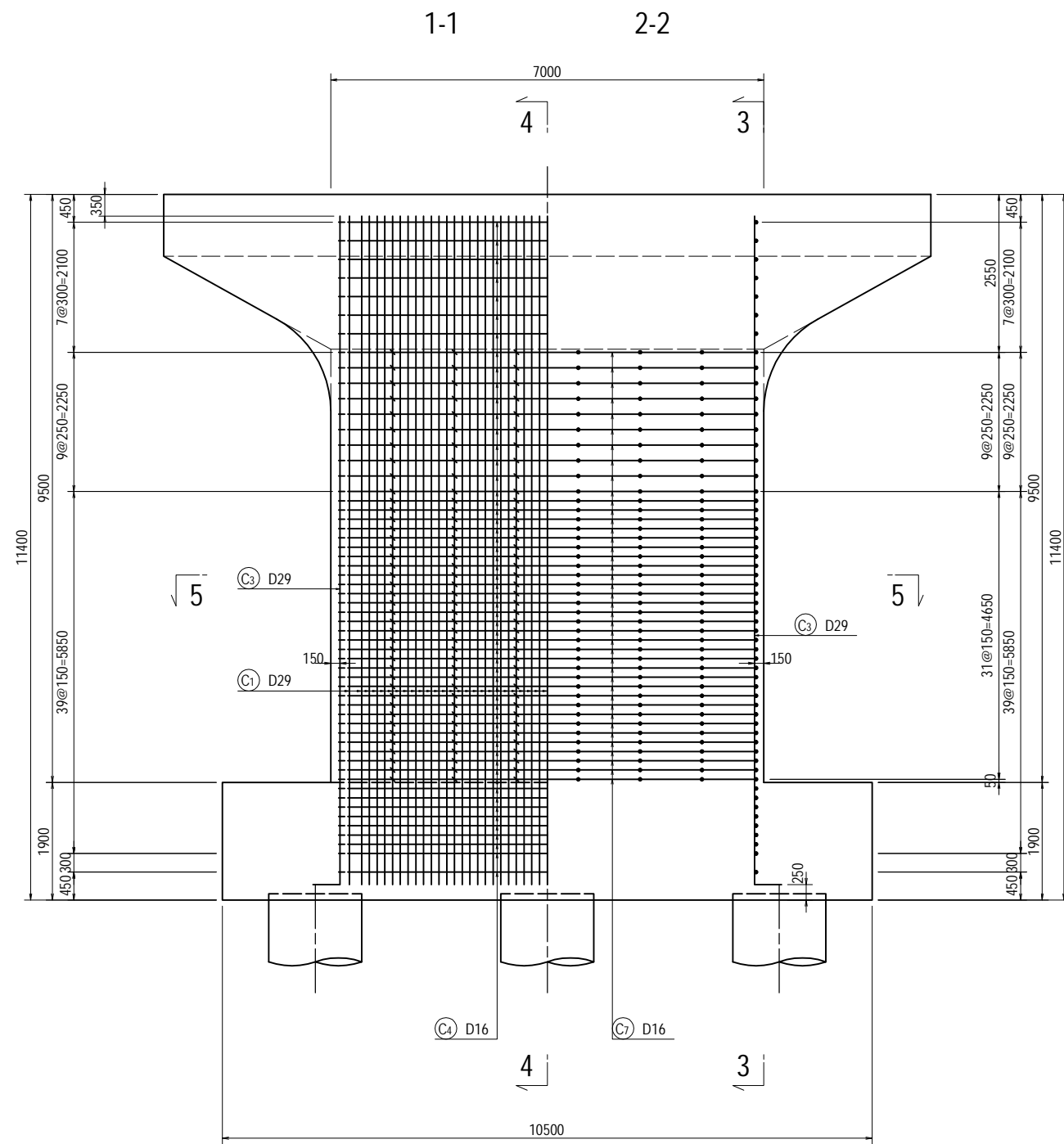
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PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	Y. SUZUKI	<i>YS</i>	14 Jul. 2017	BAR ARRANGEMENT OF PF9 PIER (2)	3
				T. HAYAKAWA	<i>Hayakawa</i>	20 Jul. 2017		DWG No.
				Y. SANO	<i>San</i>	25 Jul. 2017		P3-FO-2078

# BAR ARRANGEMENT OF PF9 PIER (3)

S=1:100



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.

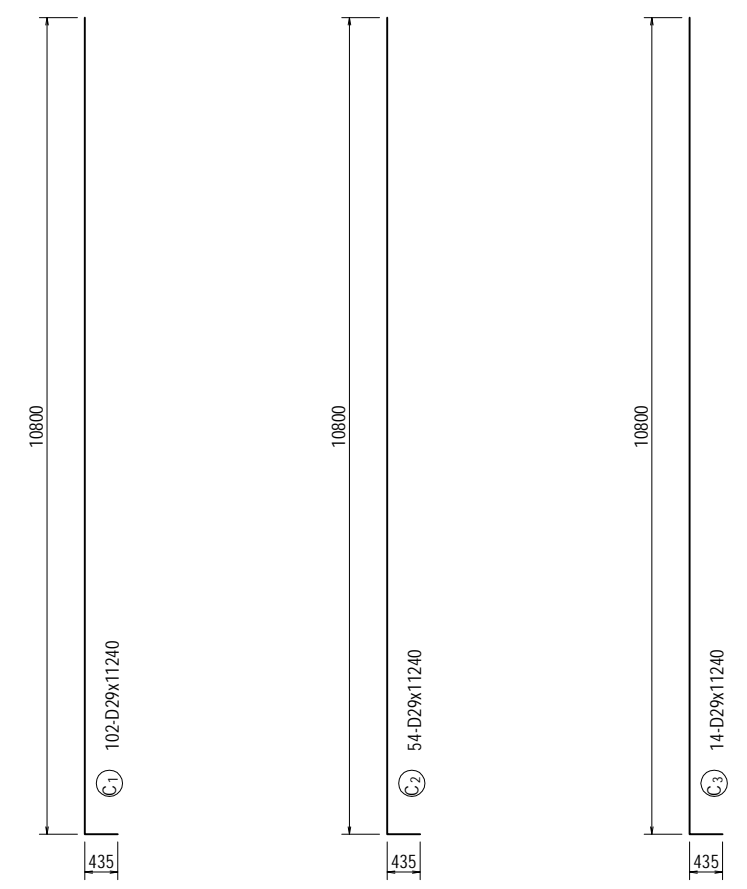
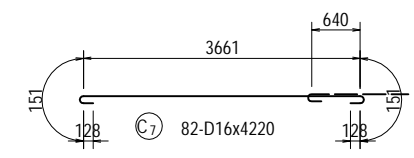
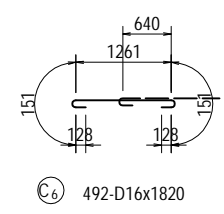
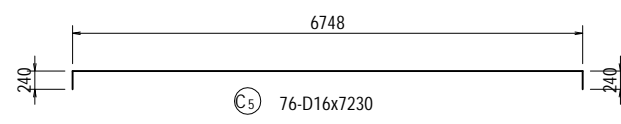
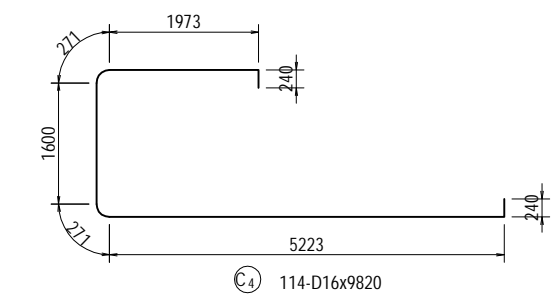
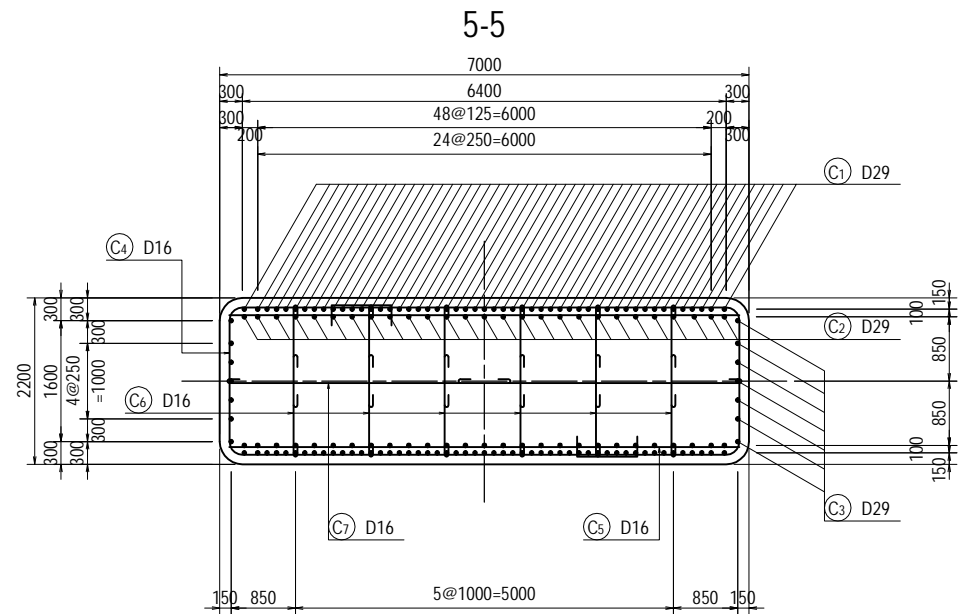
	NAME	SIGNATURE	DATE
PREPARED BY	Y. SUZUKI		14 Jul. 2017
CHECKED BY	T. HAYAKAWA		20 Jul. 2017
APPROVED BY	Y. SANO		25 Jul. 2017

DRAWING TITLE  
 BAR ARRANGEMENT OF PF9 PIER (3)

PACKAGE  
 3  
 DWG No.  
 P3-FO-2079

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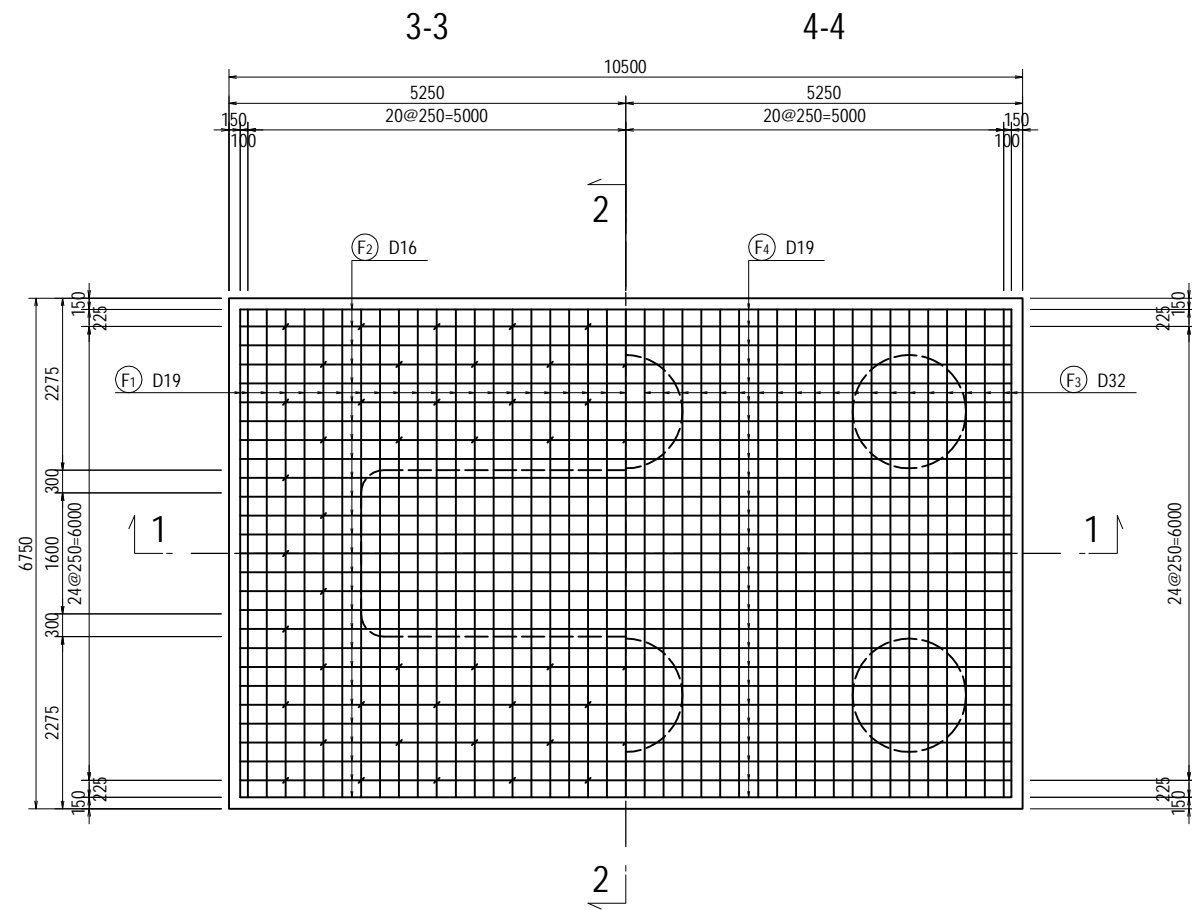
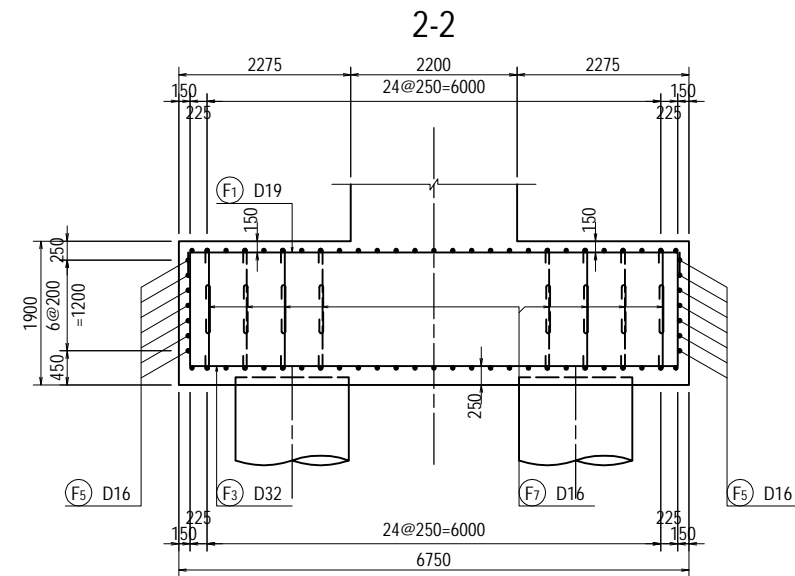
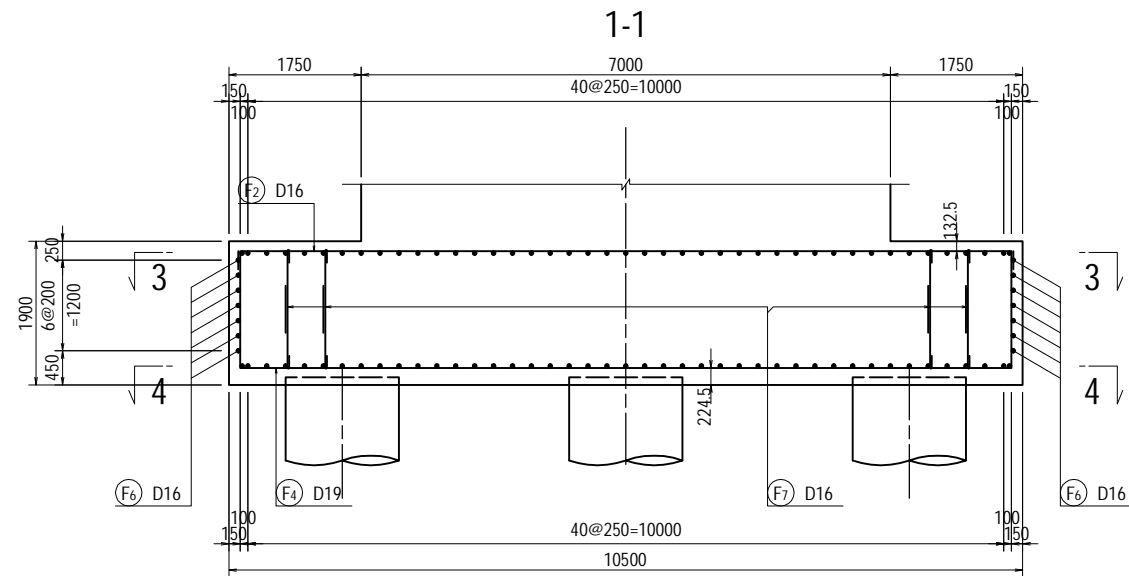
S=1:100



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	PACKAGE	
				PREPARED BY	Y. SUZUKI				14 Jul. 2017
				CHECKED BY	T. HAYAKAWA				20 Jul. 2017
				APPROVED BY	Y. SANO				25 Jul. 2017
BAR ARRANGEMENT OF PF9 PIER (4)							3	DWG No.	
								P3-FO-2080	



# BAR ARRANGEMENT OF PF9 PIER (5) S=1:100



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

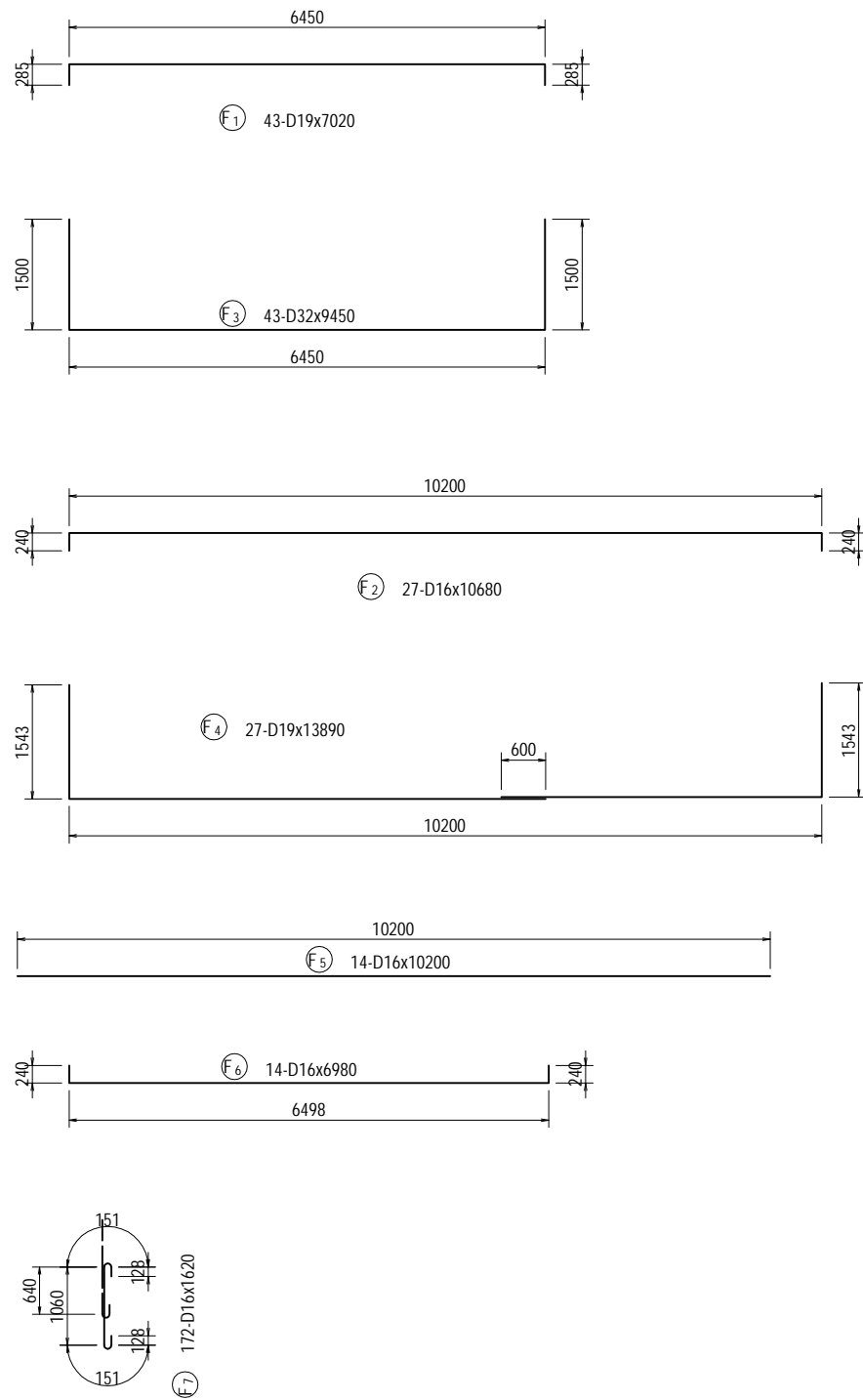
JICA STUDY TEAM  
 NIPPON KOEI CO., LTD.  
 ORIENTAL CONSULTANTS GLOBAL CO., LTD.  
 METROPOLITAN EXPRESSWAY COMPANY LIMITED  
 CHODAI CO., LTD.  
 NIPPON ENGINEERING CONSULTANTS CO., LTD.

	NAME	SIGNATURE	DATE
PREPARED BY	Y. SUZUKI	<i>YS</i>	14 Jul. 2017
CHECKED BY	T. HAYAKAWA	<i>Hayakawa</i>	20 Jul. 2017
APPROVED BY	Y. SANO	<i>Y. Sano</i>	25 Jul. 2017

DRAWING TITLE  
**BAR ARRANGEMENT OF PF9 PIER (5)**

PACKAGE  
 3  
 DWG No.  
 P3-FO-2081

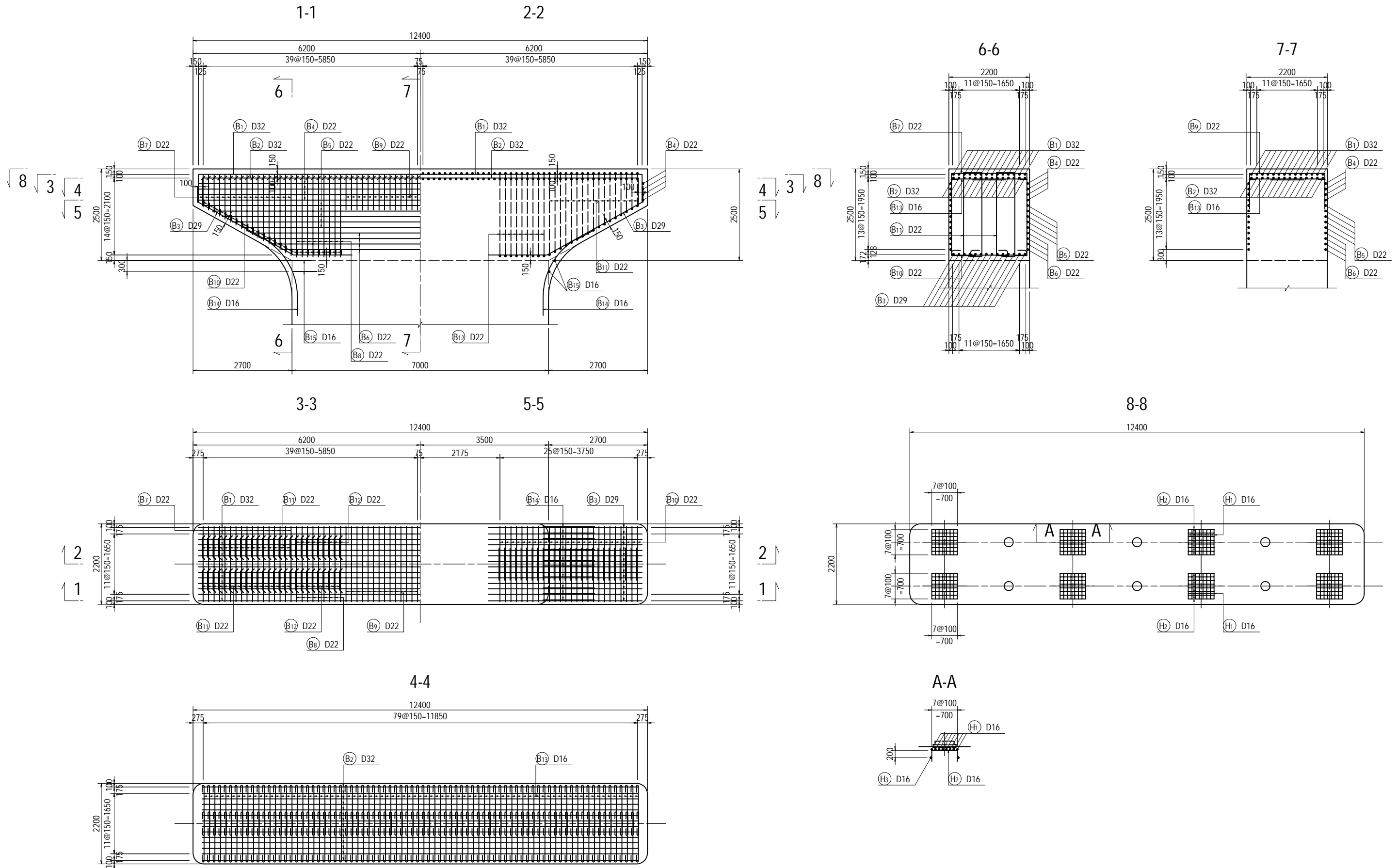
# BAR ARRANGEMENT OF PF9 PIER (6) S=1:100



## BAR LIST

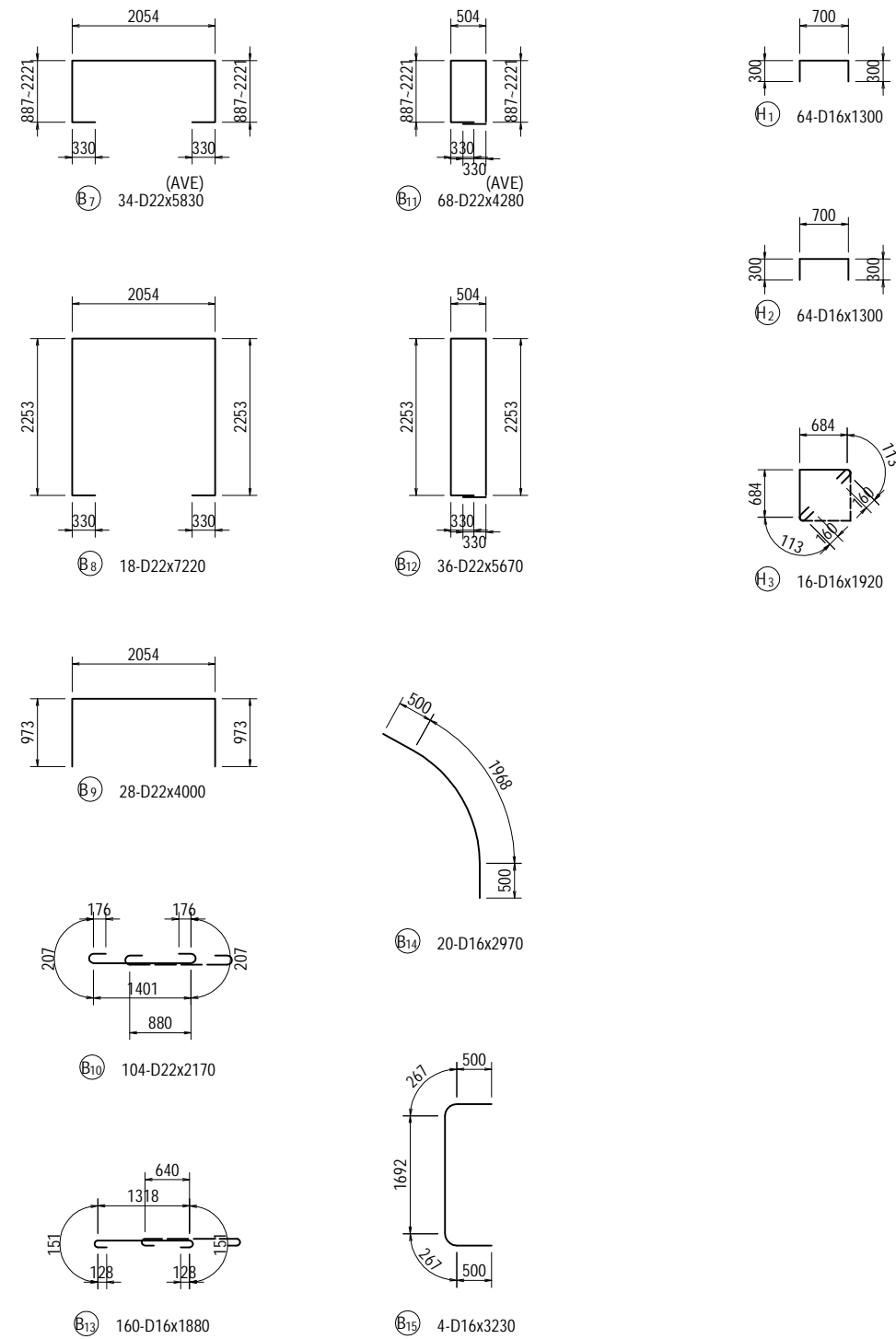
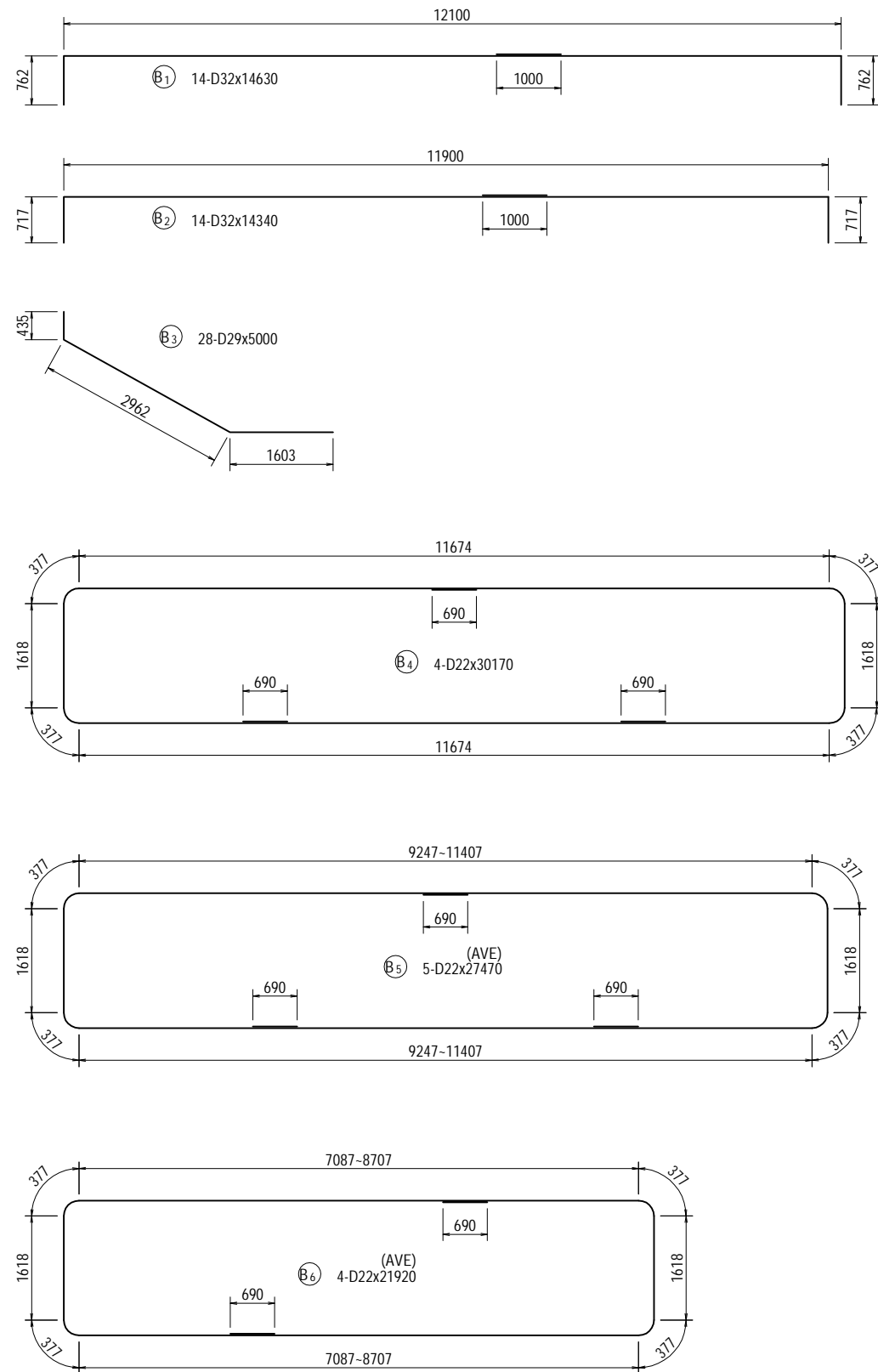
REBAR NO.	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT/ONE (kg)	WEIGHT (kg)	REMARKS
B 1	D32	14630	14	6.23	91.14	1276	
B 2	D32	14340	14	6.23	89.34	1251	
B 3	D29	5000	28	5.04	25.20	706	
B 4	D22	30170	4	3.04	91.72	367	
B 5	D22	27470	5	3.04	83.51	418	AVERAGE
B 6	D22	21920	4	3.04	66.64	267	AVERAGE
B 7	D22	5830	34	3.04	17.72	602	AVERAGE
B 8	D22	7220	18	3.04	21.95	395	
B 9	D22	4000	28	3.04	12.16	340	
B 10	D22	2170	104	3.04	6.60	686	
B 11	D22	4280	68	3.04	13.01	885	AVERAGE
B 12	D22	5670	36	3.04	17.24	621	
B 13	D16	1880	160	1.56	2.93	469	
B 14	D16	2970	20	1.56	4.63	93	
B 15	D16	3230	4	1.56	5.04	20	
						8396	
H 1	D16	1300	64	1.56	2.03	130	
H 2	D16	1300	64	1.56	2.03	130	
H 3	D16	1920	16	1.56	3.00	48	
						308	
C 1	D29	11240	102	5.04	56.65	5778	
C 2	D29	11240	54	5.04	56.65	3059	
C 3	D29	11240	14	5.04	56.65	793	
C 4	D16	9820	114	1.56	15.32	1746	
C 5	D16	7230	76	1.56	11.28	857	
C 6	D16	1820	492	1.56	2.84	1397	
C 7	D16	4220	82	1.56	6.58	540	
						14170	
F 1	D19	7020	43	2.25	15.80	679	
F 2	D16	10680	27	1.56	16.66	450	
F 3	D32	9450	43	6.23	58.87	2531	
F 4	D19	13890	27	2.25	31.25	844	
F 5	D16	10200	14	1.56	15.91	223	
F 6	D16	6980	14	1.56	10.89	152	
F 7	D16	1620	172	1.56	2.53	435	
						5314	
					D32	5058	
					D29	10336	
					D22	4581	
					D19	1523	
					D16	6690	
					TOTAL	28188	

# BAR ARRANGEMENT OF PF10 PIER (1) S=1:100



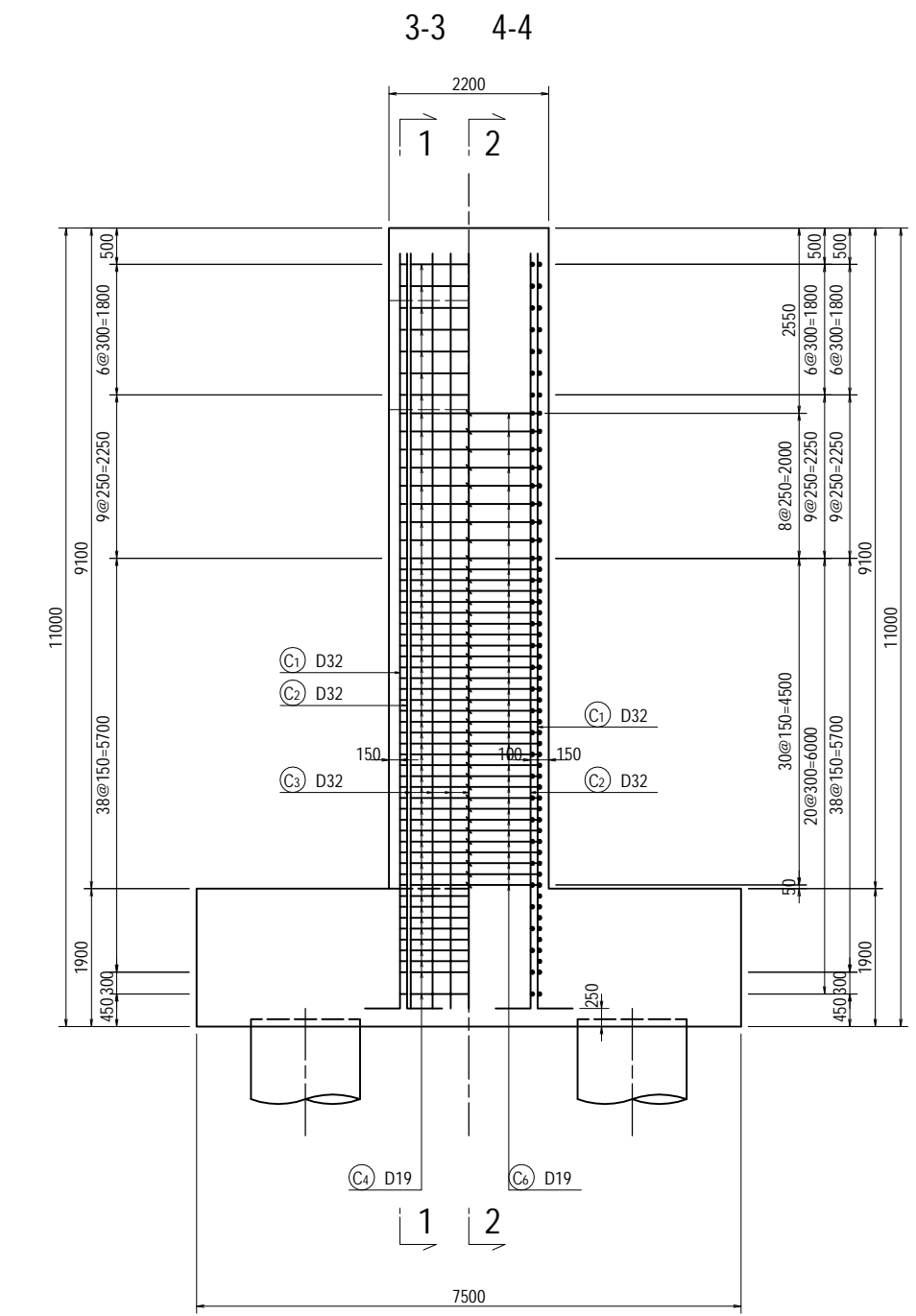
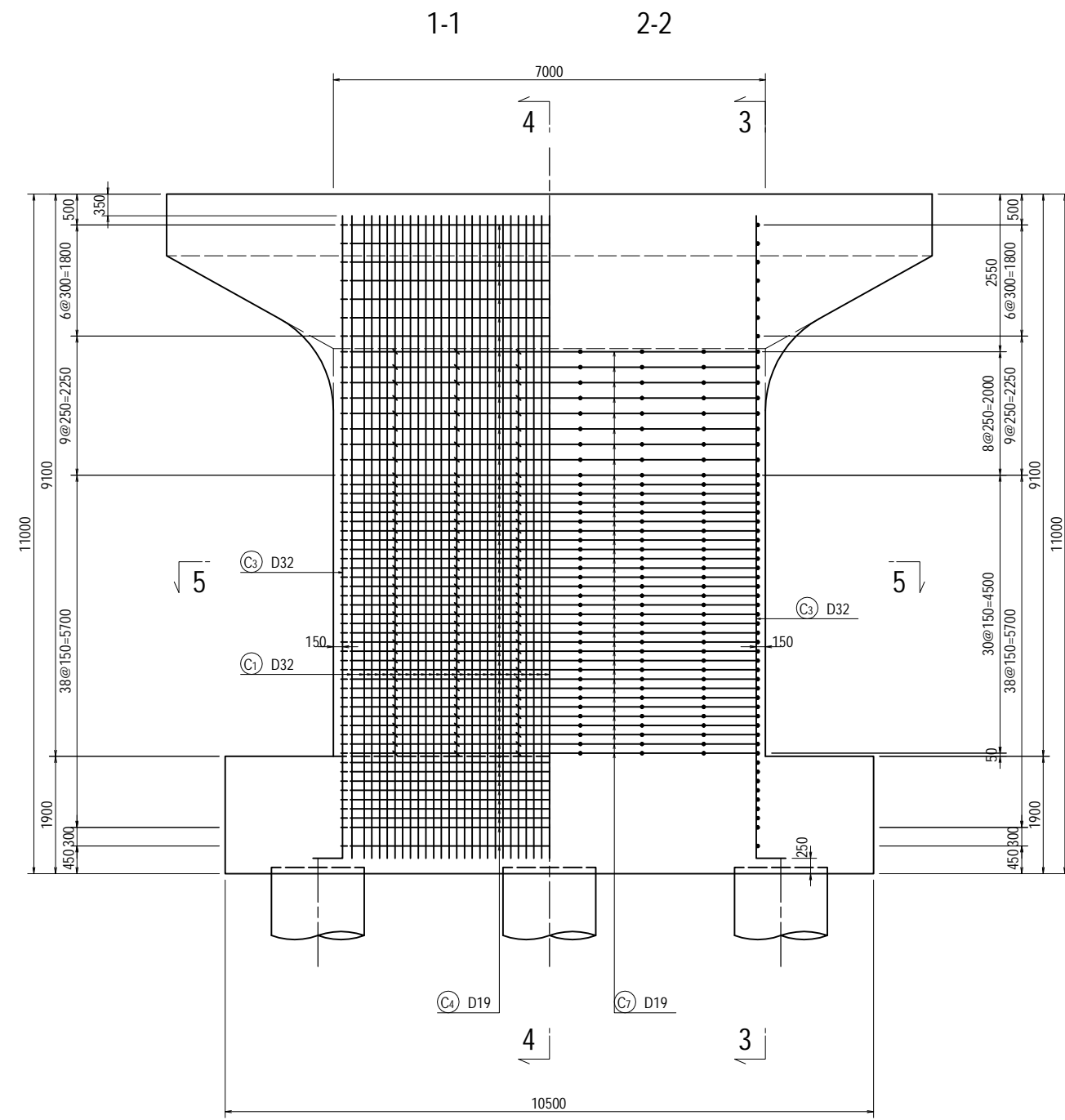
<small>PROJECT NAME</small> DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	<small>FINANCED BY</small> JAPAN INTERNATIONAL COOPERATION AGENCY	<small>COUNTERPART</small> REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	<small>JICA STUDY TEAM</small> NIPPON KOEI 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: 10%;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY</td> <td>Y. SUZUKI</td> <td><i>YS</i></td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY</td> <td>T. HAYAKAWA</td> <td><i>平川知邦</i></td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY</td> <td>Y. SANO</td> <td><i>佐野 祐一</i></td> <td>25 Jul. 2017</td> </tr> </tbody> </table>		NAME	SIGNATURE	DATE	PREPARED BY	Y. SUZUKI	<i>YS</i>	14 Jul. 2017	CHECKED BY	T. HAYAKAWA	<i>平川知邦</i>	20 Jul. 2017	APPROVED BY	Y. SANO	<i>佐野 祐一</i>	25 Jul. 2017	<small>DRAWING TITLE</small> <b>BAR ARRANGEMENT OF PF10 PIER (1)</b>	<small>PACKAGE</small> 3 <small>DWG No.</small> P3-FO-2083
	NAME	SIGNATURE	DATE																			
PREPARED BY	Y. SUZUKI	<i>YS</i>	14 Jul. 2017																			
CHECKED BY	T. HAYAKAWA	<i>平川知邦</i>	20 Jul. 2017																			
APPROVED BY	Y. SANO	<i>佐野 祐一</i>	25 Jul. 2017																			

# BAR ARRANGEMENT OF PF10 PIER (2) S=1:100



<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 Y. SUZUKI</td> <td></td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY T. HAYAKAWA</td> <td></td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY Y. SANO</td> <td></td> <td>25 Jul. 2017</td> </tr> </table>	NAME	SIGNATURE	DATE	PREPARED BY Y. SUZUKI		14 Jul. 2017	CHECKED BY T. HAYAKAWA		20 Jul. 2017	APPROVED BY Y. SANO		25 Jul. 2017	DRAWING TITLE <b>BAR ARRANGEMENT OF PF10 PIER (2)</b>	<small>PACKAGE</small> 3 <small>DWG No.</small> P3-FO-2084
NAME	SIGNATURE	DATE																
PREPARED BY Y. SUZUKI		14 Jul. 2017																
CHECKED BY T. HAYAKAWA		20 Jul. 2017																
APPROVED BY Y. SANO		25 Jul. 2017																

# BAR ARRANGEMENT OF PF10 PIER (3) S=1:100



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

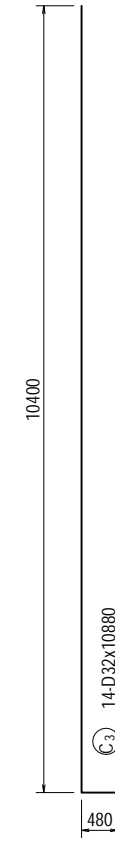
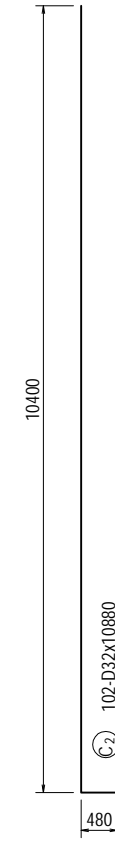
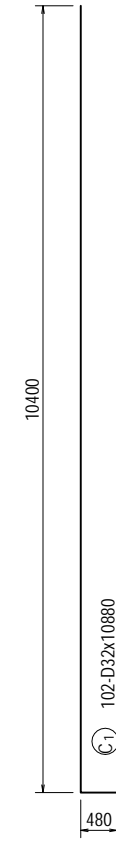
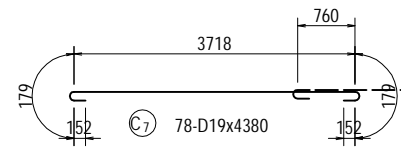
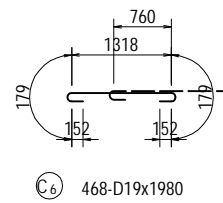
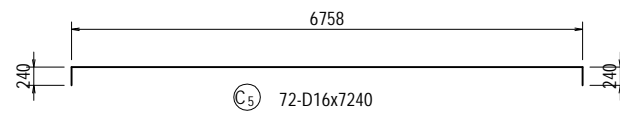
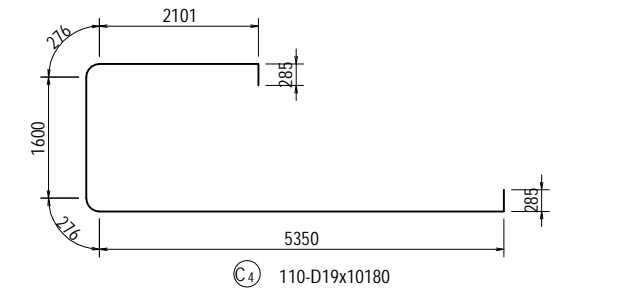
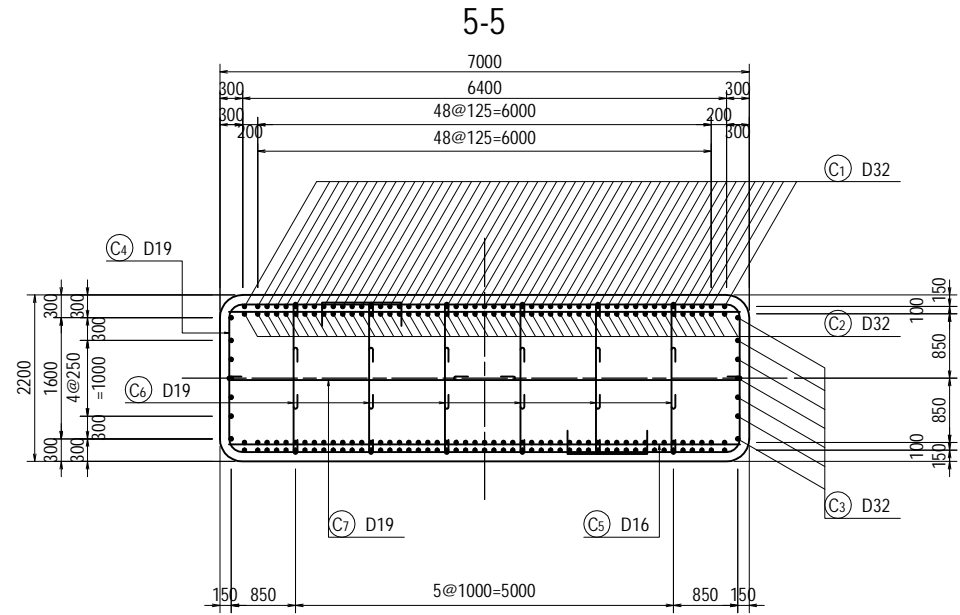
JICA STUDY TEAM  
 NIPPON KOEI CO., LTD.  
 ORIENTAL CONSULTANTS GLOBAL CO., LTD.  
 METROPOLITAN EXPRESSWAY COMPANY LIMITED  
 CHODAI CO., LTD.  
 NIPPON ENGINEERING CONSULTANTS CO., LTD.

	NAME	SIGNATURE	DATE
PREPARED BY	Y. SUZUKI	<i>YS</i>	14 Jul. 2017
CHECKED BY	T. HAYAKAWA	<i>Hayakawa</i>	20 Jul. 2017
APPROVED BY	Y. SANO	<i>San</i>	25 Jul. 2017

DRAWING TITLE  
**BAR ARRANGEMENT OF PF10 PIER (3)**

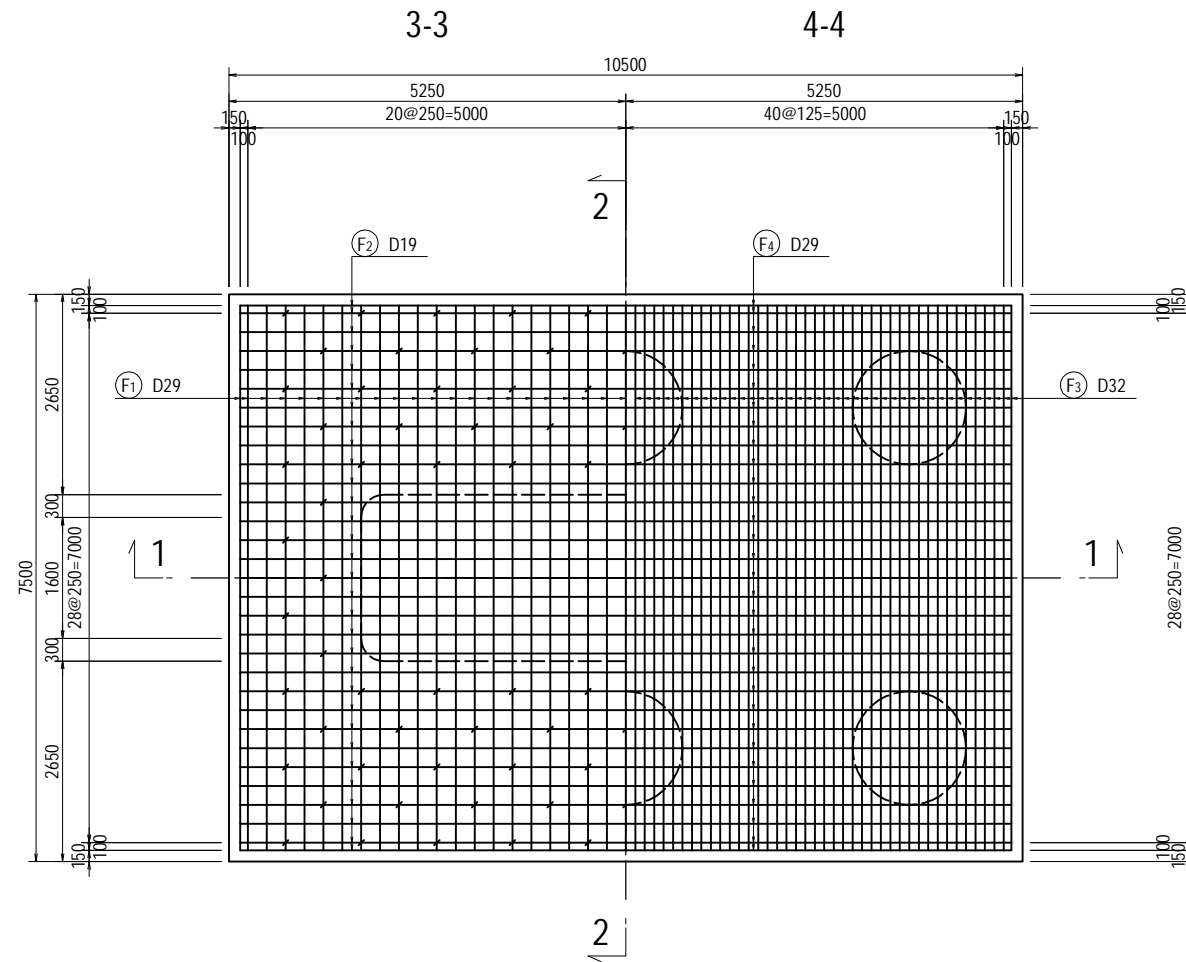
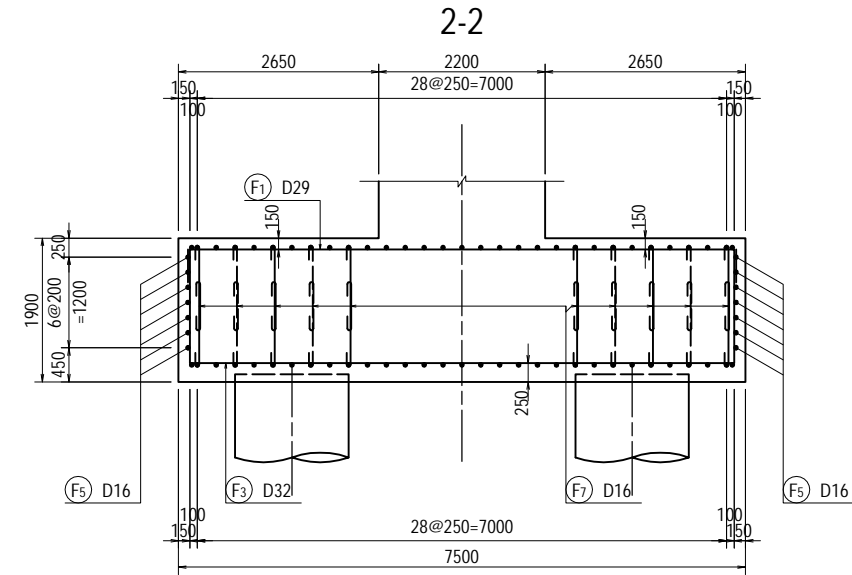
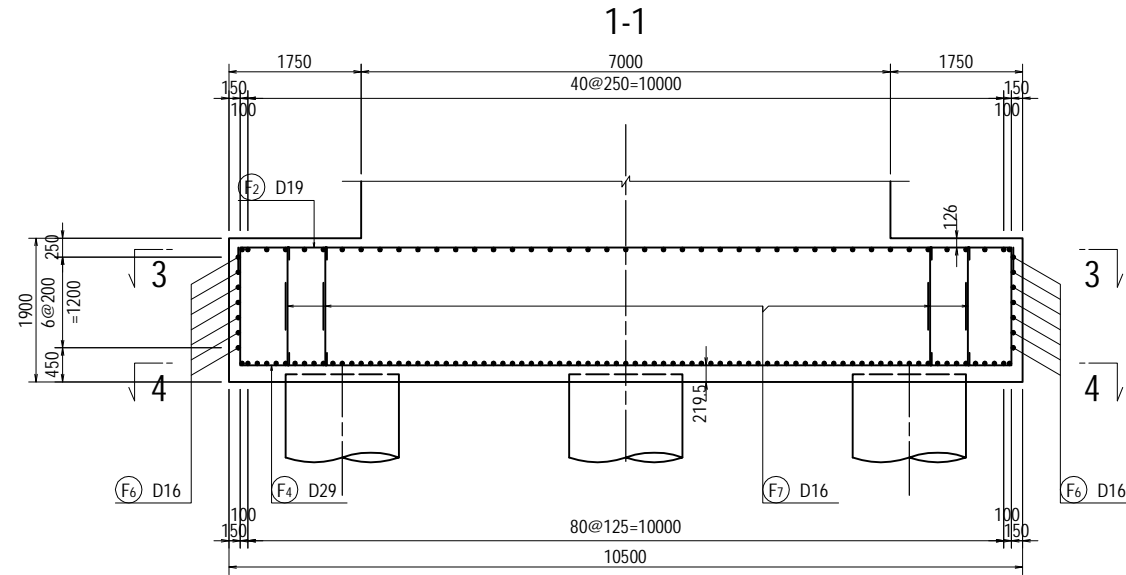
PACKAGE  
 3  
 DWG No.  
 P3-FO-2085

# BAR ARRANGEMENT OF PF10 PIER (4) S=1:100



<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="text-align: left;">NAME</th> <th style="text-align: left;">SIGNATURE</th> <th style="text-align: left;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY Y. SUZUKI</td> <td></td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY T. HAYAKAWA</td> <td></td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY Y. SANO</td> <td></td> <td>25 Jul. 2017</td> </tr> </tbody> </table>	NAME	SIGNATURE	DATE	PREPARED BY Y. SUZUKI		14 Jul. 2017	CHECKED BY T. HAYAKAWA		20 Jul. 2017	APPROVED BY Y. SANO		25 Jul. 2017	<small>DRAWING TITLE</small> <b>BAR ARRANGEMENT OF PF10 PIER (4)</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">PACKAGE</th> </tr> </thead> <tbody> <tr> <td>3</td> </tr> <tr> <td>DWG No.</td> </tr> <tr> <td>P3-FO-2086</td> </tr> </tbody> </table>	PACKAGE	3	DWG No.	P3-FO-2086
NAME	SIGNATURE	DATE																					
PREPARED BY Y. SUZUKI		14 Jul. 2017																					
CHECKED BY T. HAYAKAWA		20 Jul. 2017																					
APPROVED BY Y. SANO		25 Jul. 2017																					
PACKAGE																							
3																							
DWG No.																							
P3-FO-2086																							

# BAR ARRANGEMENT OF PF10 PIER (5) S=1:100



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

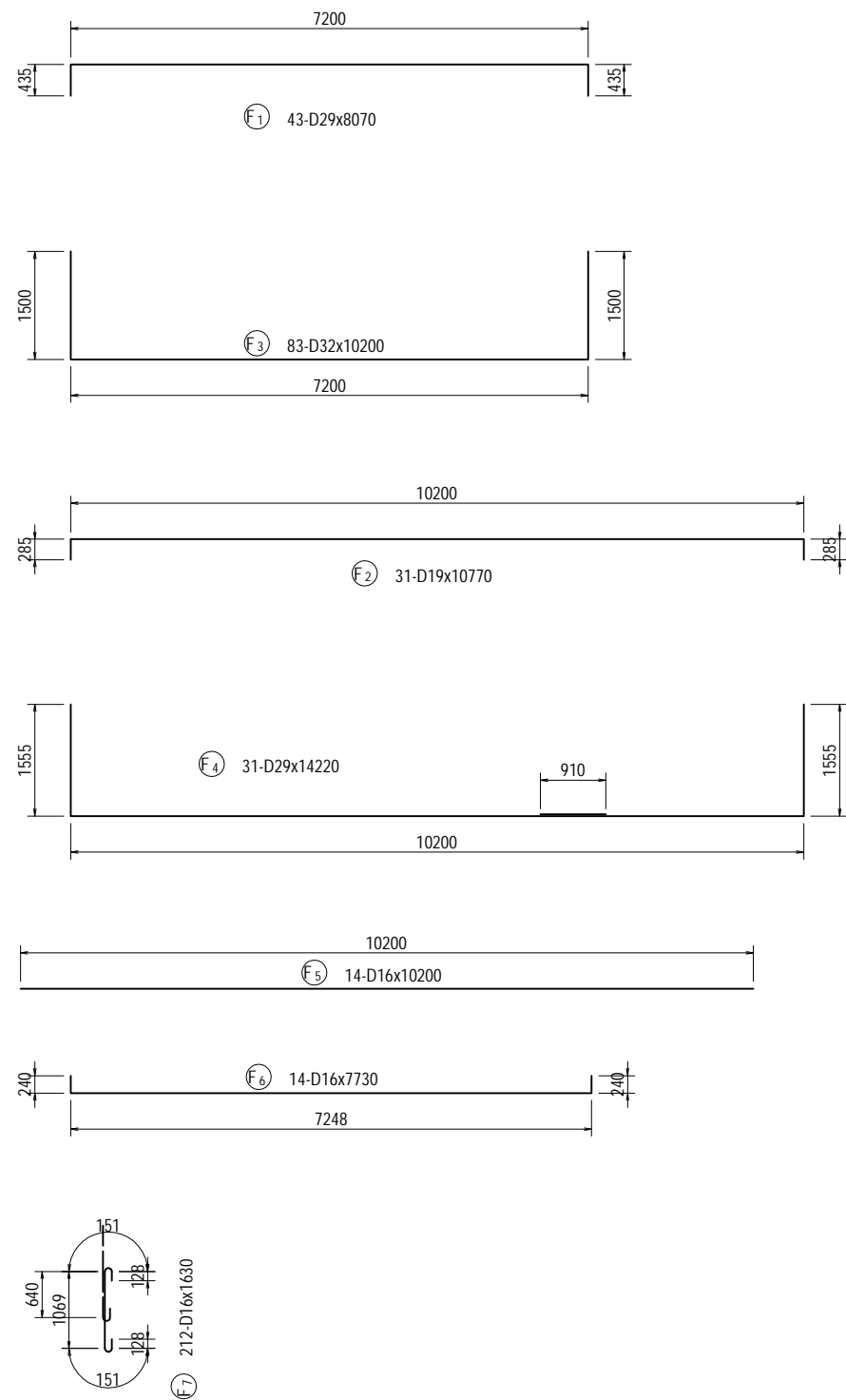
JICA STUDY TEAM  
 NIPPON KOEI CO., LTD.  
 ORIENTAL CONSULTANTS GLOBAL CO., LTD.  
 METROPOLITAN EXPRESSWAY COMPANY LIMITED  
 CHODAI CO., LTD.  
 NIPPON ENGINEERING CONSULTANTS CO., LTD.

	NAME	SIGNATURE	DATE
PREPARED BY	Y. SUZUKI	<i>YS</i>	14 Jul. 2017
CHECKED BY	T. HAYAKAWA	<i>Hayakawa</i>	20 Jul. 2017
APPROVED BY	Y. SANO	<i>Y. Sano</i>	25 Jul. 2017

DRAWING TITLE  
**BAR ARRANGEMENT OF PF10 PIER (5)**

PACKAGE  
 3  
 DWG No.  
 P3-FO-2087

# BAR ARRANGEMENT OF PF10 PIER (6) S=1:100

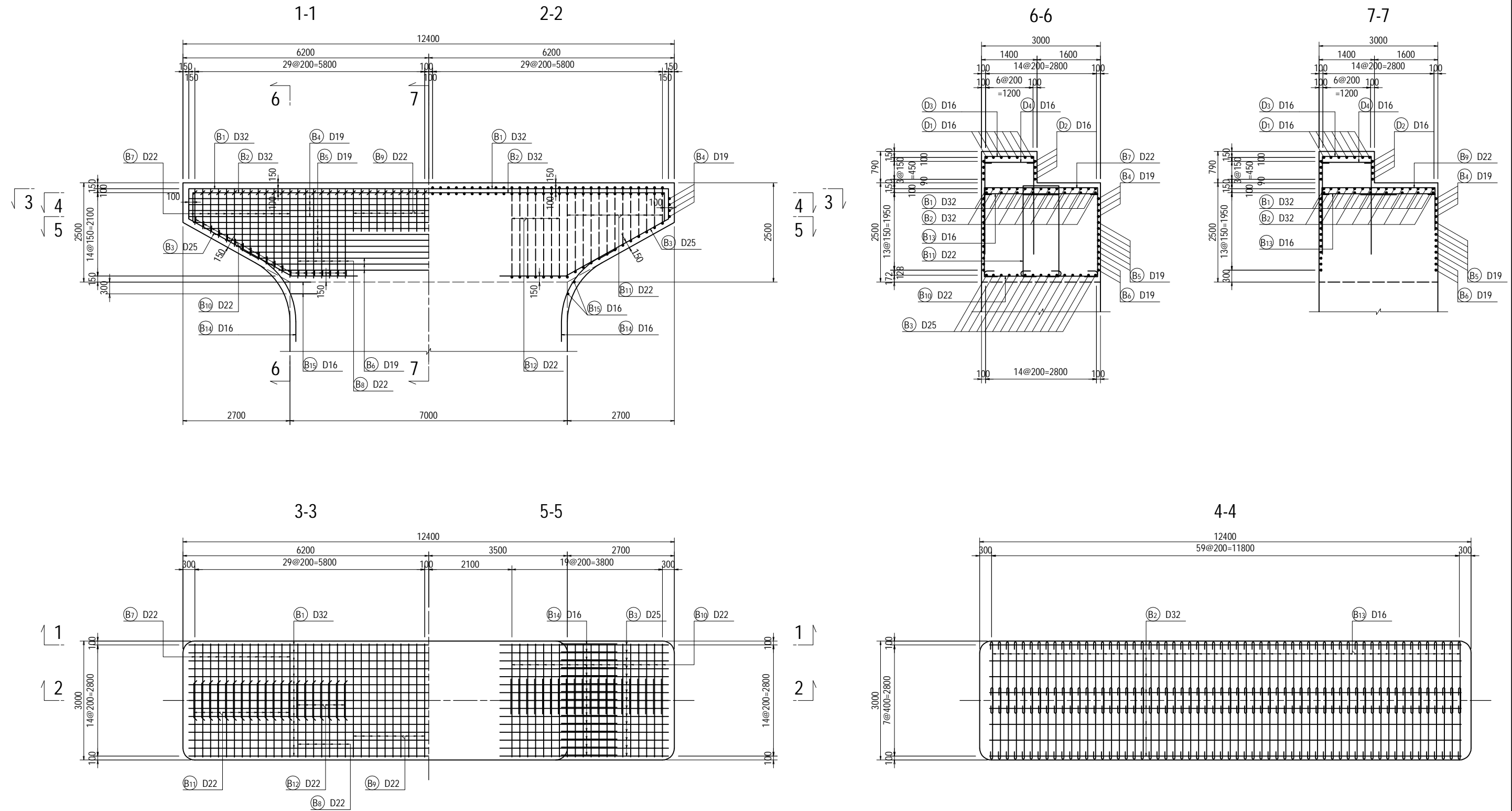


## BAR LIST

REBAR NO.	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT/ONE (kg)	WEIGHT (kg)	REMARKS
B 1	D32	14630	14	6.23	91.14	1276	
B 2	D32	14340	14	6.23	89.34	1251	
B 3	D29	5000	28	5.04	25.20	706	
B 4	D22	30170	4	3.04	91.72	367	
B 5	D22	27470	5	3.04	83.51	418	AVERAGE
B 6	D22	21920	4	3.04	66.64	267	AVERAGE
B 7	D22	5830	34	3.04	17.72	602	AVERAGE
B 8	D22	7220	18	3.04	21.95	395	
B 9	D22	4000	28	3.04	12.16	340	
B 10	D22	2170	104	3.04	6.60	686	
B 11	D22	4280	68	3.04	13.01	885	AVERAGE
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B 14	D16	2970	20	1.56	4.63	93	
B 15	D16	3230	4	1.56	5.04	20	
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H 1	D16	1300	64	1.56	2.03	130	
H 2	D16	1300	64	1.56	2.03	130	
H 3	D16	1920	16	1.56	3.00	48	
						308	
C 1	D32	10880	102	6.23	67.78	6914	
C 2	D32	10880	102	6.23	67.78	6914	
C 3	D32	10880	14	6.23	67.78	949	
C 4	D19	10180	110	2.25	22.91	2520	
C 5	D16	7240	72	1.56	11.29	813	
C 6	D19	1980	468	2.25	4.46	2087	
C 7	D19	4380	78	2.25	9.86	769	
						20966	
F 1	D29	8070	43	5.04	40.67	1749	
F 2	D19	10770	31	2.25	24.23	751	
F 3	D32	10200	83	6.23	63.55	5275	
F 4	D29	14220	31	5.04	71.67	2222	
F 5	D16	10200	14	1.56	15.91	223	
F 6	D16	7730	14	1.56	12.06	169	
F 7	D16	1630	212	1.56	2.54	538	
						10927	
					D32	22579	
					D29	4677	
					D22	4581	
					D19	6127	
					D16	2633	
					TOTAL	40597	

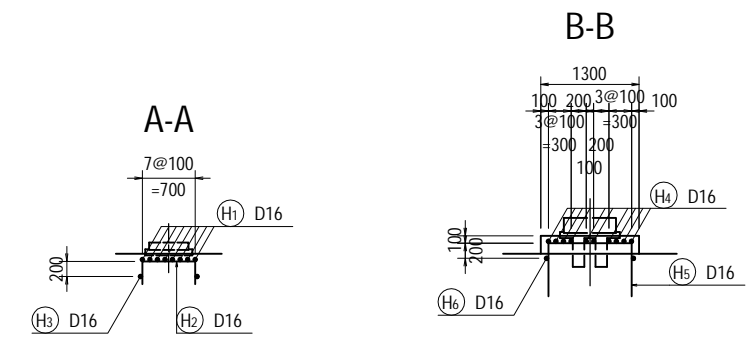
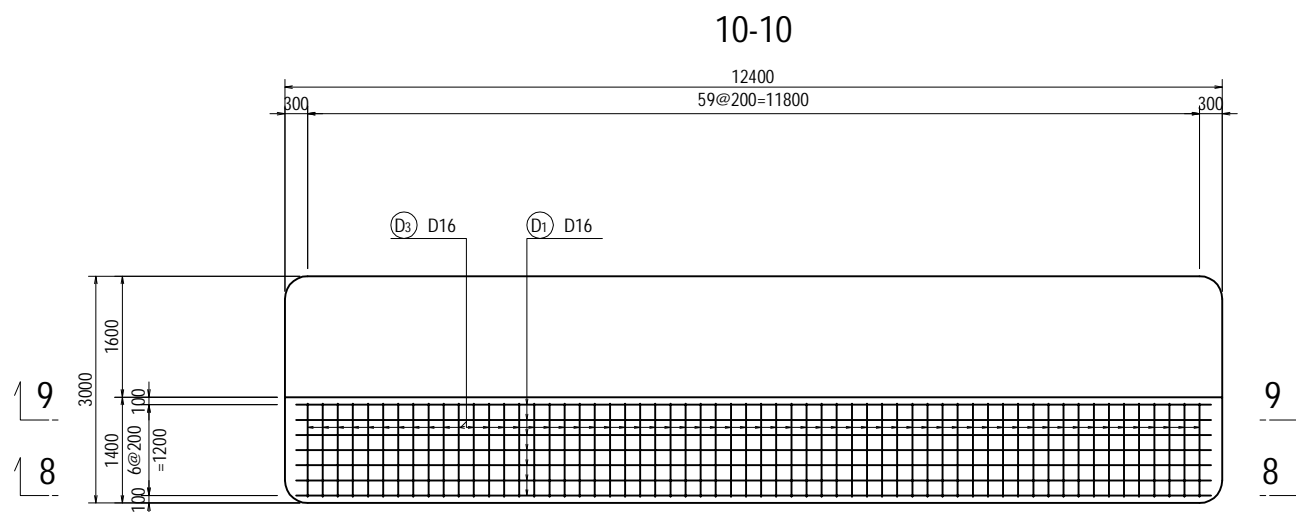
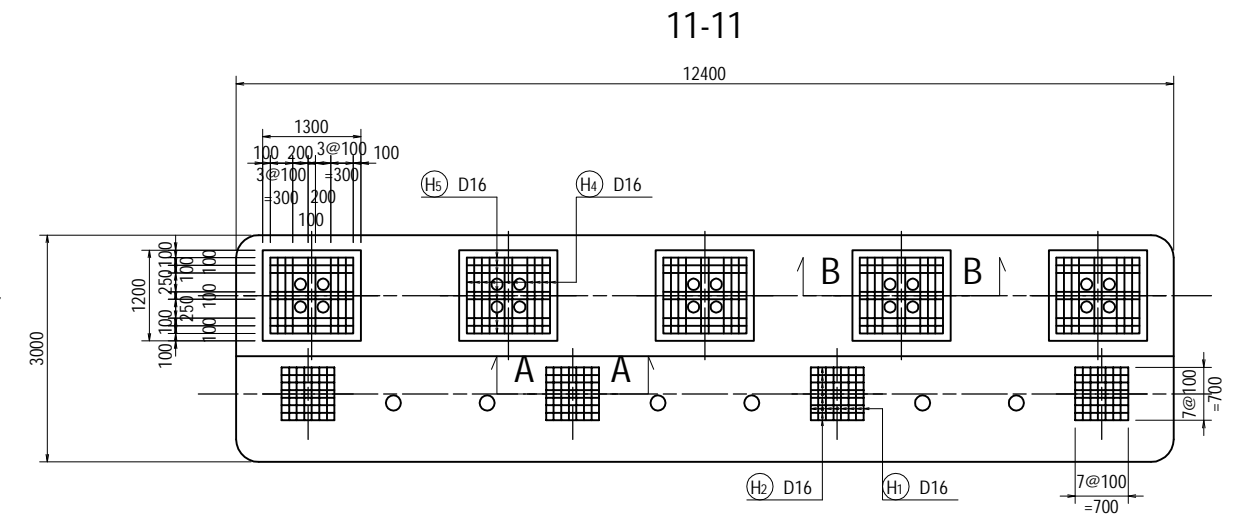
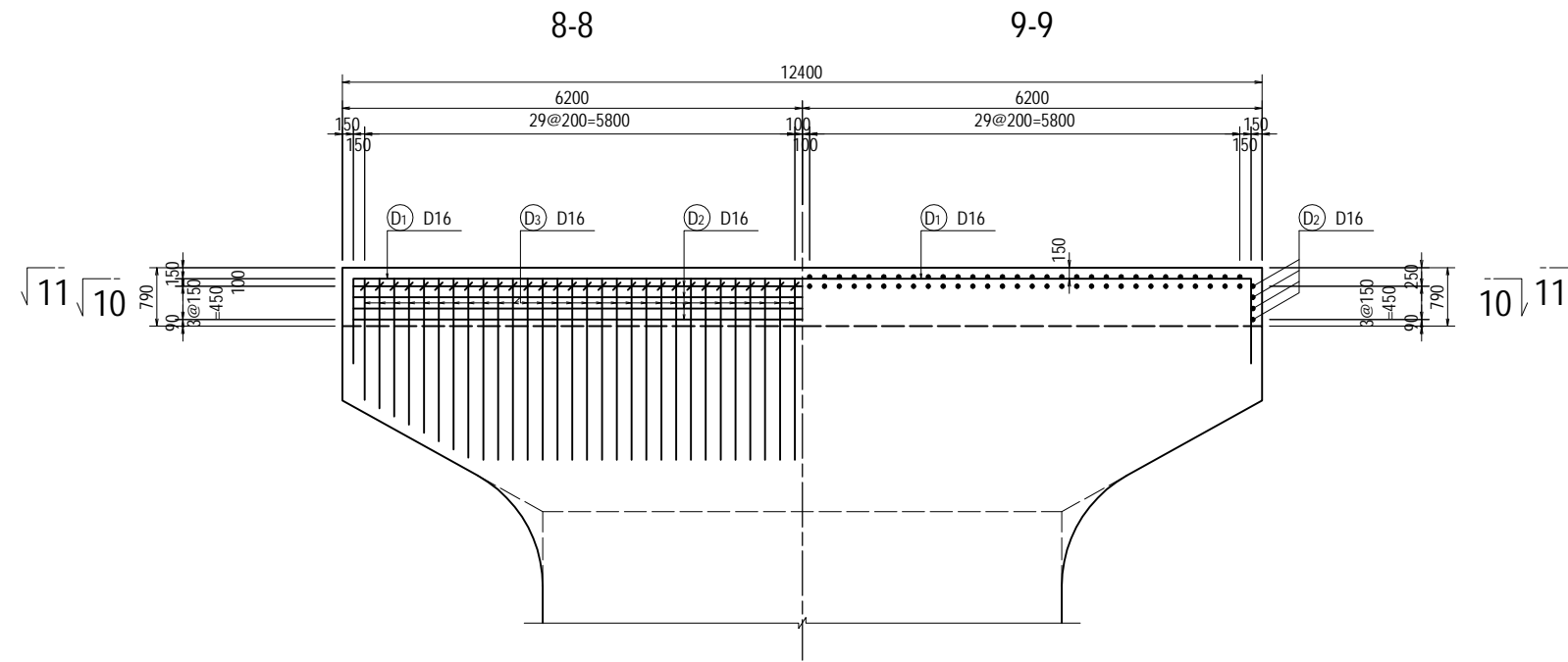


# BAR ARRANGEMENT OF PF11 PIER (1) S=1:100



<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: 10%;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY</td> <td>Y. SUZUKI</td> <td><i>YS</i></td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY</td> <td>T. HAYAKAWA</td> <td><i>Hayakawa</i></td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY</td> <td>Y. SANO</td> <td><i>Y. Sano</i></td> <td>25 Jul. 2017</td> </tr> </tbody> </table>		NAME	SIGNATURE	DATE	PREPARED BY	Y. SUZUKI	<i>YS</i>	14 Jul. 2017	CHECKED BY	T. HAYAKAWA	<i>Hayakawa</i>	20 Jul. 2017	APPROVED BY	Y. SANO	<i>Y. Sano</i>	25 Jul. 2017	<small>DRAWING TITLE</small> BAR ARRANGEMENT OF PF11 PIER (1)	<small>PACKAGE</small> 3 DWG No. P3-FO-2089
	NAME	SIGNATURE	DATE																			
PREPARED BY	Y. SUZUKI	<i>YS</i>	14 Jul. 2017																			
CHECKED BY	T. HAYAKAWA	<i>Hayakawa</i>	20 Jul. 2017																			
APPROVED BY	Y. SANO	<i>Y. Sano</i>	25 Jul. 2017																			

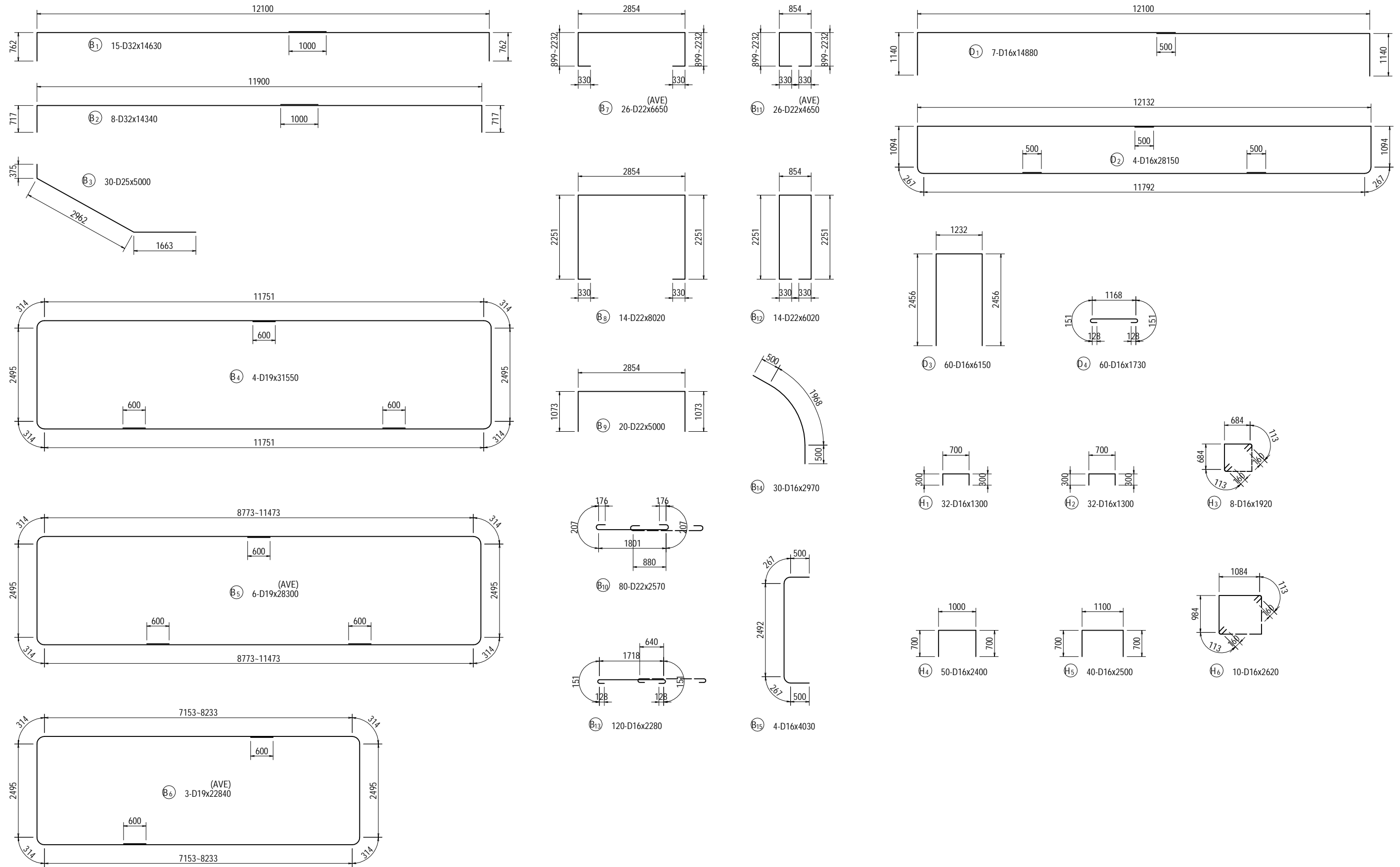
# BAR ARRANGEMENT OF PF11 PIER (2) S=1:100



NOTE : The D3 placed at the end of the pier cap should be bent at the time of construction.

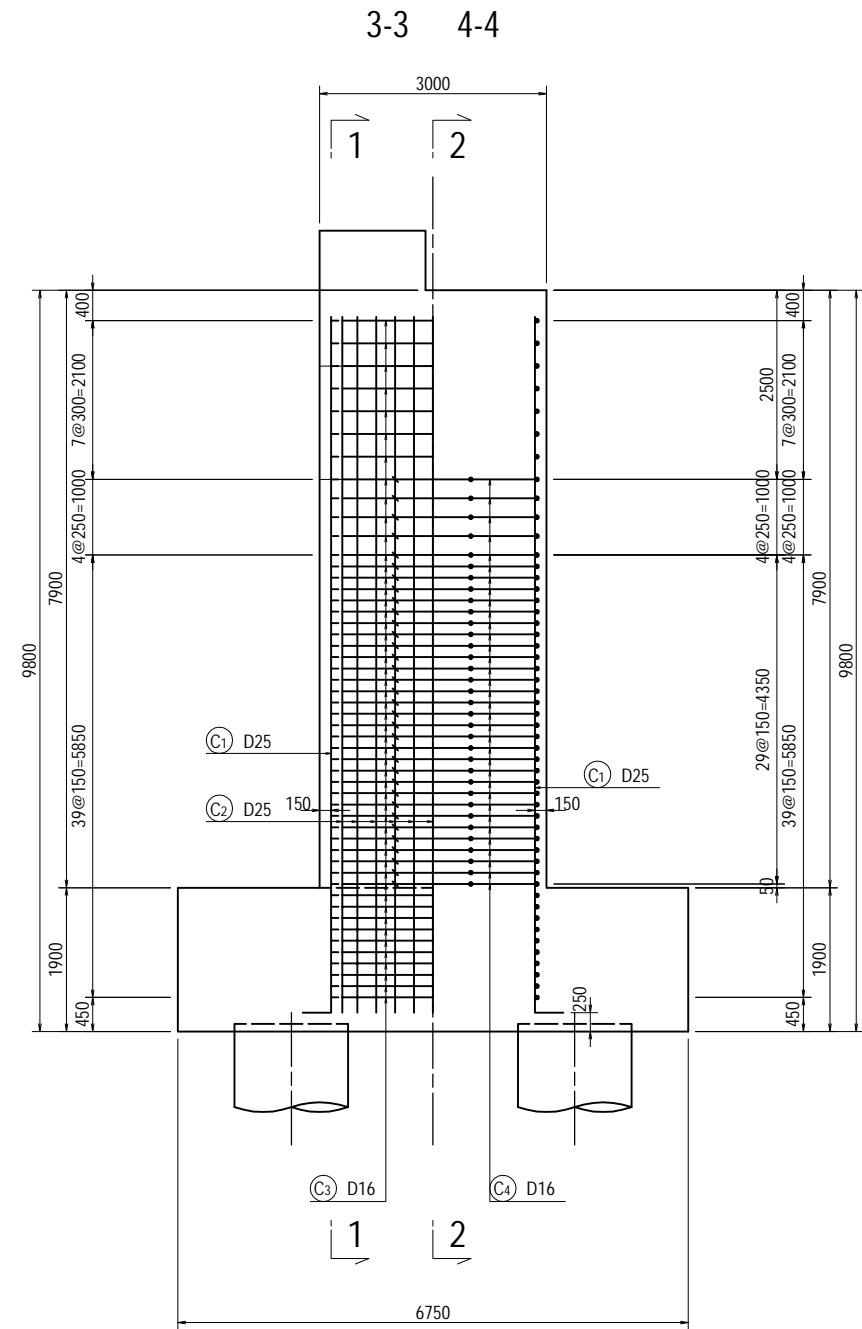
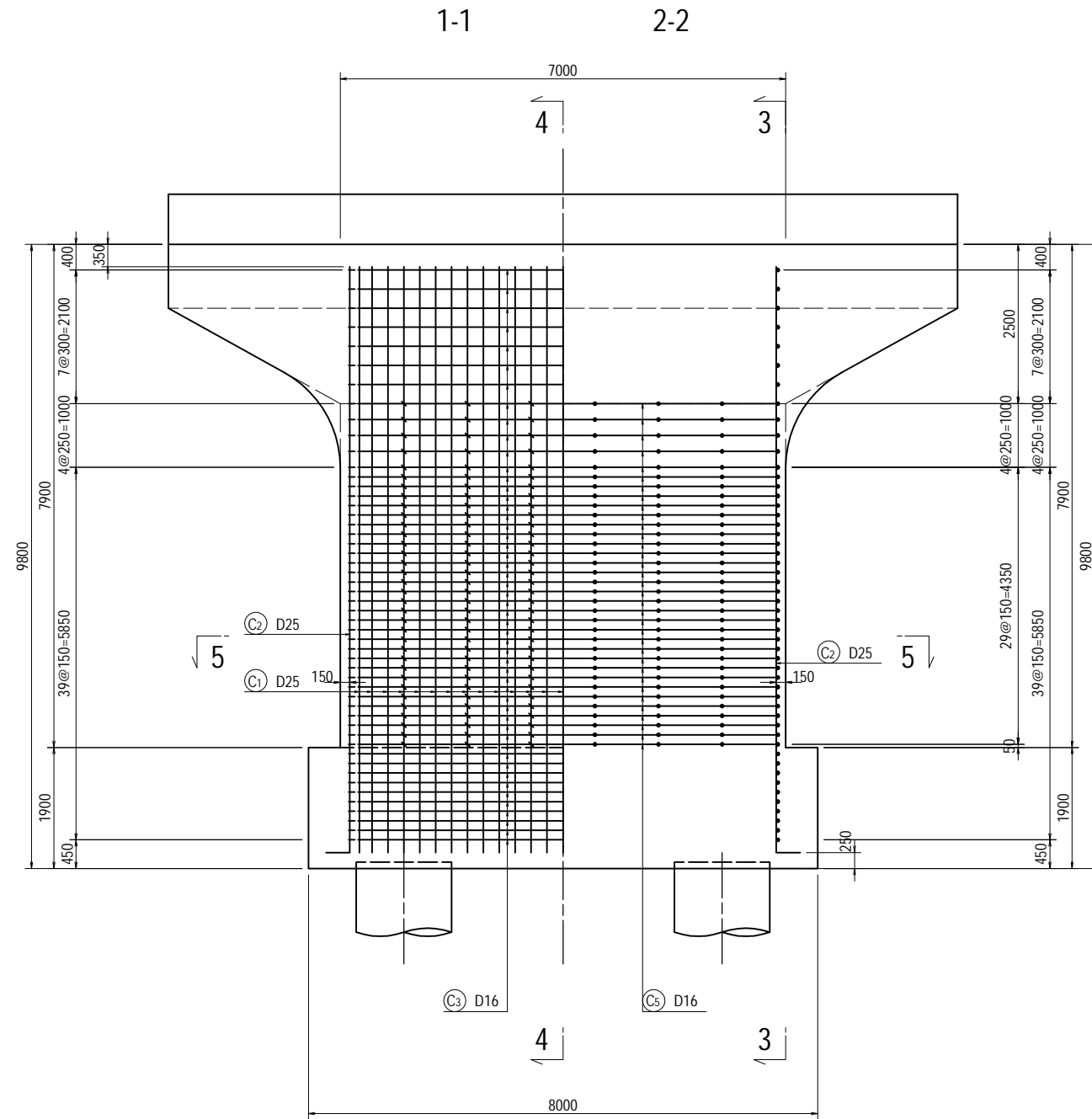
<small>PROJECT NAME</small> DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	<small>FINANCED BY</small> JAPAN INTERNATIONAL COOPERATION AGENCY	<small>COUNTERPART</small> REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	<small>JICA STUDY TEAM</small> NIPPON KOEI 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: 10%;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY</td> <td>Y. SUZUKI</td> <td><i>YS</i></td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY</td> <td>T. HAYAKAWA</td> <td><i>Hayakawa</i></td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY</td> <td>Y. SANO</td> <td><i>Y. Sano</i></td> <td>25 Jul. 2017</td> </tr> </tbody> </table>		NAME	SIGNATURE	DATE	PREPARED BY	Y. SUZUKI	<i>YS</i>	14 Jul. 2017	CHECKED BY	T. HAYAKAWA	<i>Hayakawa</i>	20 Jul. 2017	APPROVED BY	Y. SANO	<i>Y. Sano</i>	25 Jul. 2017	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 100%;">DRAWING TITLE</th> <th style="width: 10%;">PACKAGE</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">BAR ARRANGEMENT OF PF11 PIER (2)</td> <td style="text-align: center;">3</td> </tr> <tr> <td></td> <td style="text-align: center;">DWG No.</td> </tr> <tr> <td></td> <td style="text-align: center;">P3-FO-2090</td> </tr> </tbody> </table>	DRAWING TITLE	PACKAGE	BAR ARRANGEMENT OF PF11 PIER (2)	3		DWG No.		P3-FO-2090
	NAME	SIGNATURE	DATE																										
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CHECKED BY	T. HAYAKAWA	<i>Hayakawa</i>	20 Jul. 2017																										
APPROVED BY	Y. SANO	<i>Y. Sano</i>	25 Jul. 2017																										
DRAWING TITLE	PACKAGE																												
BAR ARRANGEMENT OF PF11 PIER (2)	3																												
	DWG No.																												
	P3-FO-2090																												

# BAR ARRANGEMENT OF PF11 PIER (3) S=1:100



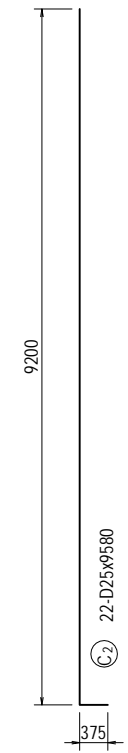
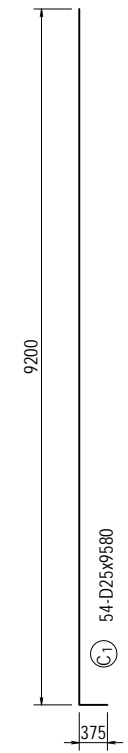
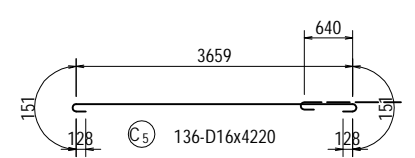
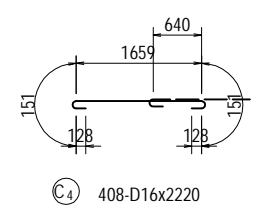
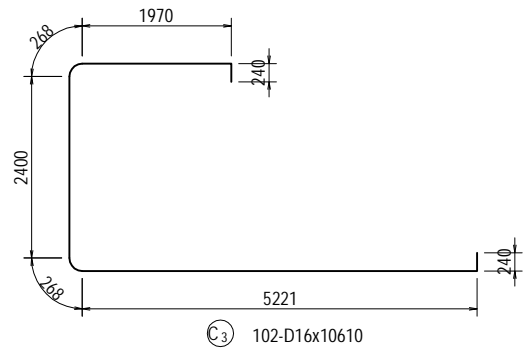
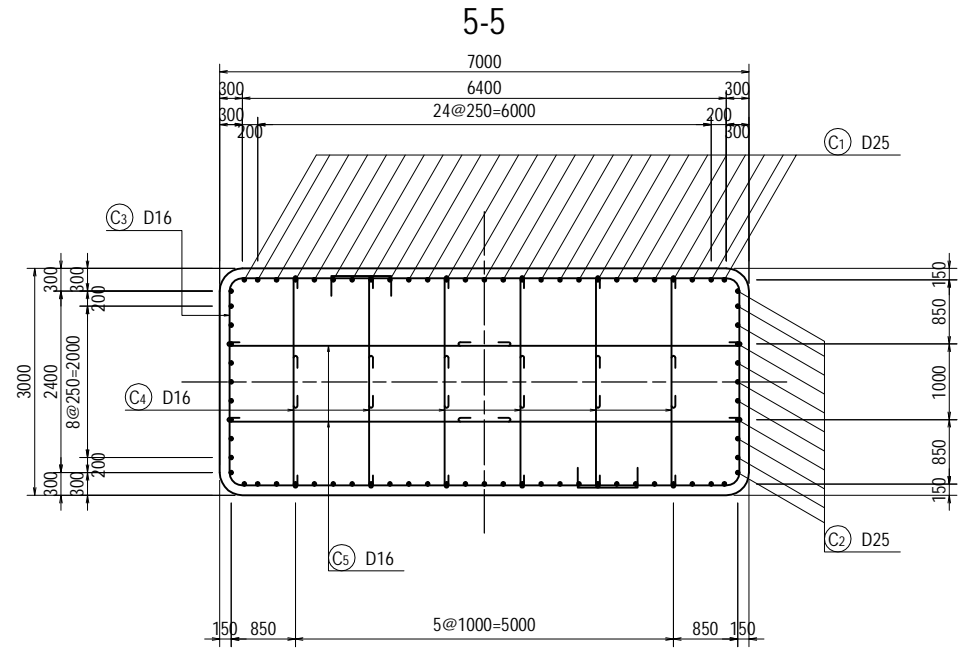
<small>PROJECT NAME</small> DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	<small>FINANCED BY</small> JAPAN INTERNATIONAL COOPERATION AGENCY	<small>COUNTERPART</small> REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	<small>JICA STUDY TEAM</small> NIPPON KOEI 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: 10%;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY</td> <td>Y. SUZUKI</td> <td></td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY</td> <td>T. HAYAKAWA</td> <td></td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY</td> <td>Y. SANO</td> <td></td> <td>25 Jul. 2017</td> </tr> </tbody> </table>		NAME	SIGNATURE	DATE	PREPARED BY	Y. SUZUKI		14 Jul. 2017	CHECKED BY	T. HAYAKAWA		20 Jul. 2017	APPROVED BY	Y. SANO		25 Jul. 2017	<small>DRAWING TITLE</small> <b>BAR ARRANGEMENT OF PF11 PIER (3)</b>	<small>PACKAGE</small> 3 <small>DWG No.</small> P3-FO-2091
	NAME	SIGNATURE	DATE																			
PREPARED BY	Y. SUZUKI		14 Jul. 2017																			
CHECKED BY	T. HAYAKAWA		20 Jul. 2017																			
APPROVED BY	Y. SANO		25 Jul. 2017																			

# BAR ARRANGEMENT OF PF11 PIER (4) S=1:100



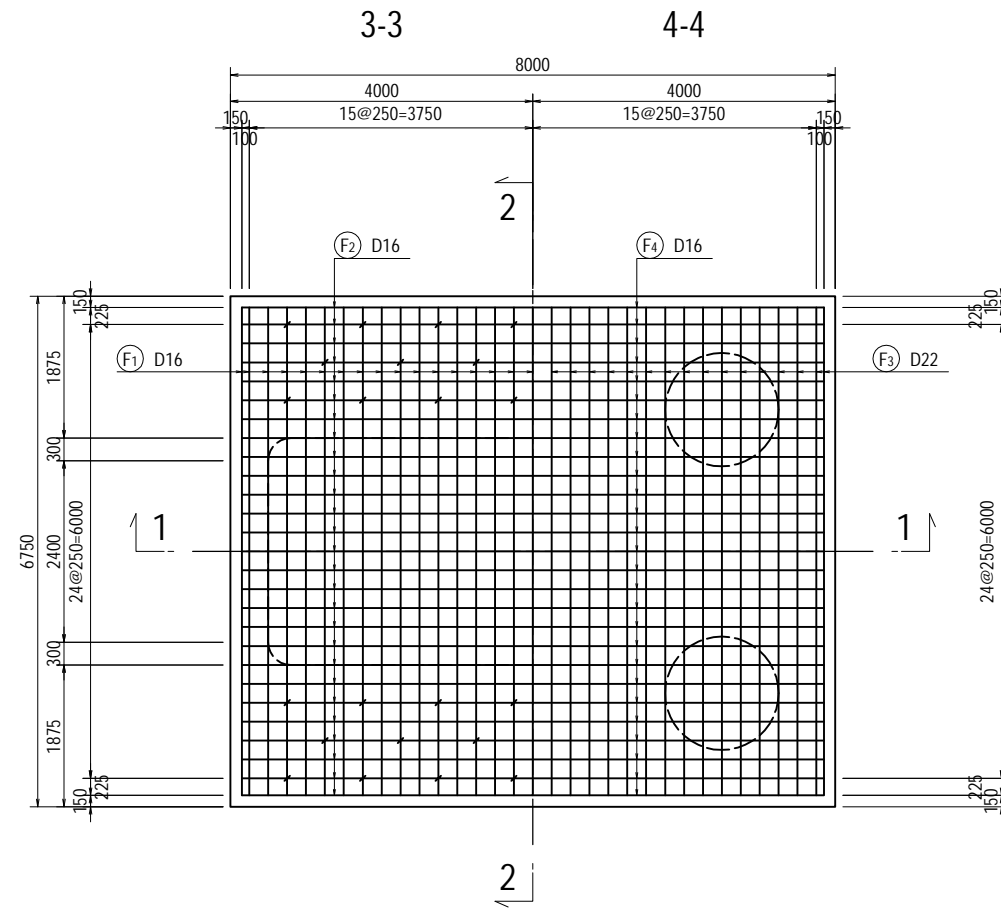
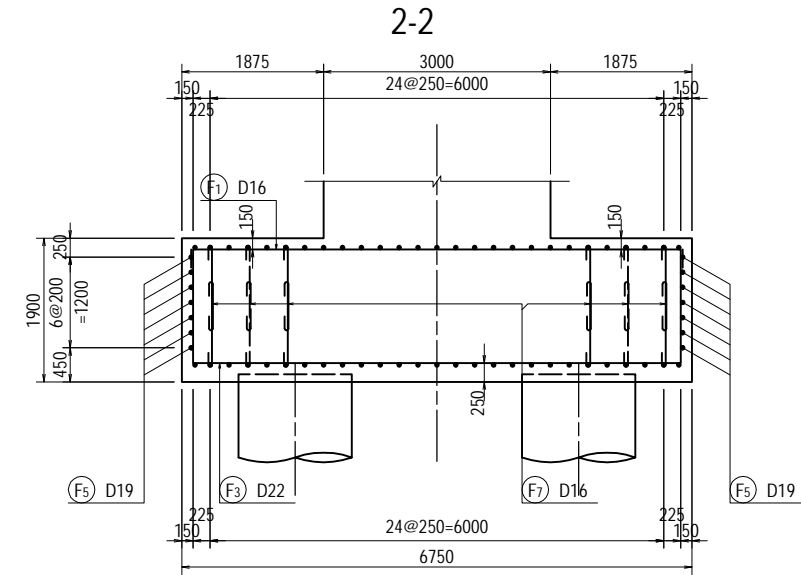
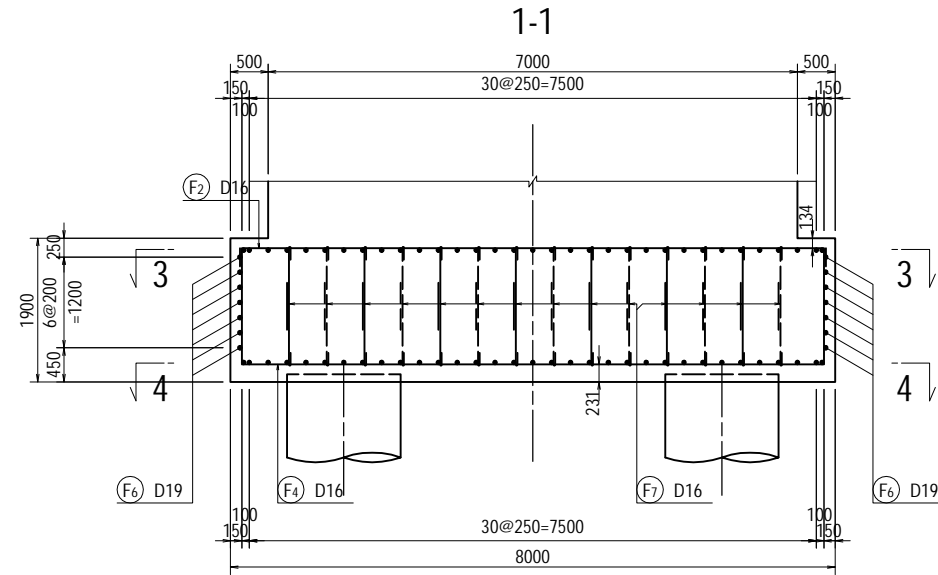
<small>PROJECT NAME</small> DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	<small>FINANCED BY</small> JAPAN INTERNATIONAL COOPERATION AGENCY	<small>COUNTERPART</small> REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	<small>JICA STUDY TEAM</small> NIPPON KOEI 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%;">NAME</th> <th style="width: 10%;">SIGNATURE</th> <th style="width: 10%;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY Y. SUZUKI</td> <td></td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY T. HAYAKAWA</td> <td></td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY Y. SANO</td> <td></td> <td>25 Jul. 2017</td> </tr> </tbody> </table>	NAME	SIGNATURE	DATE	PREPARED BY Y. SUZUKI		14 Jul. 2017	CHECKED BY T. HAYAKAWA		20 Jul. 2017	APPROVED BY Y. SANO		25 Jul. 2017	<small>DRAWING TITLE</small> <b>BAR ARRANGEMENT OF PF11 PIER (4)</b>	<small>PACKAGE</small> 3 <small>DWG No.</small> P3-FO-2092
NAME	SIGNATURE	DATE																
PREPARED BY Y. SUZUKI		14 Jul. 2017																
CHECKED BY T. HAYAKAWA		20 Jul. 2017																
APPROVED BY Y. SANO		25 Jul. 2017																

# BAR ARRANGEMENT OF PF11 PIER (5) S=1:100



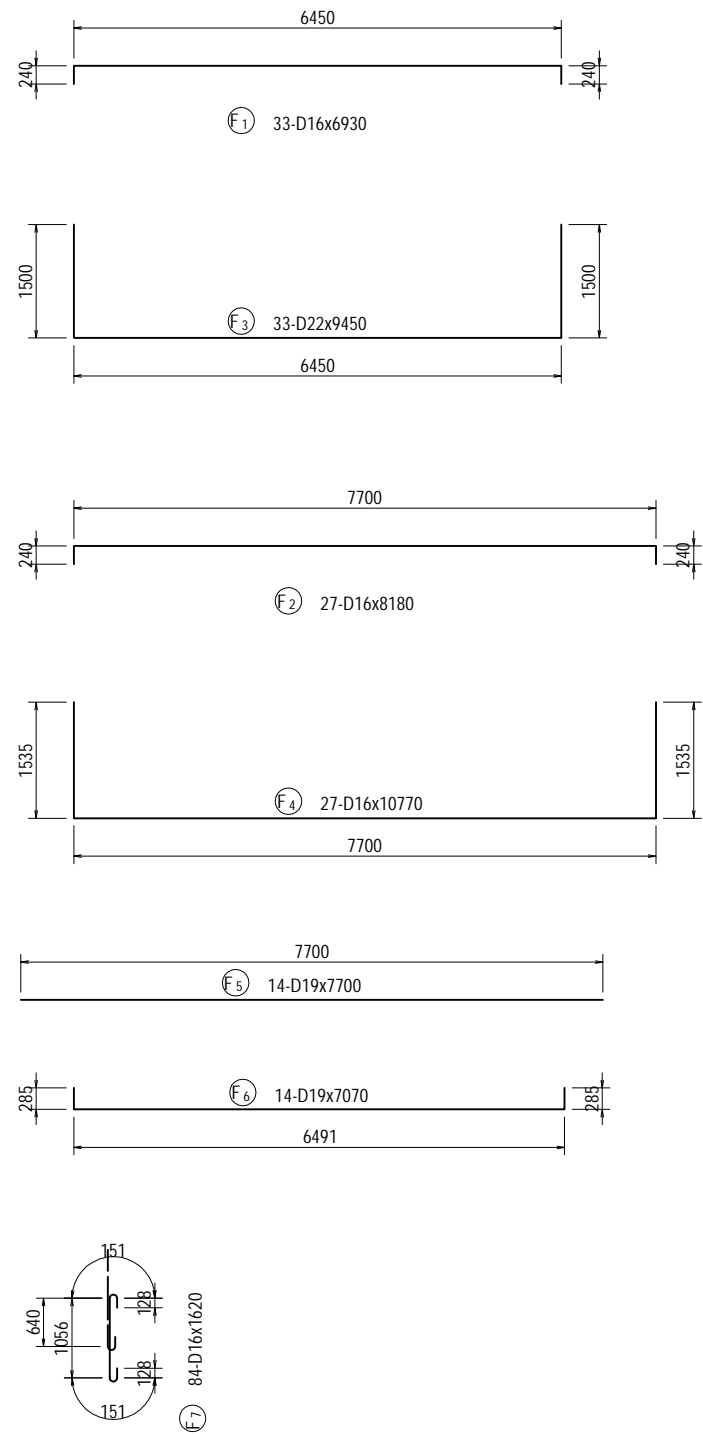
<small>PROJECT NAME</small> DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	<small>FINANCED BY</small> JAPAN INTERNATIONAL COOPERATION AGENCY	<small>COUNTERPART</small> REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	<small>JICA STUDY TEAM</small> NIPPON KOEI 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="text-align: left;">NAME</th> <th style="text-align: left;">SIGNATURE</th> <th style="text-align: left;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY Y. SUZUKI</td> <td></td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY T. HAYAKAWA</td> <td></td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY Y. SANO</td> <td></td> <td>25 Jul. 2017</td> </tr> </tbody> </table>	NAME	SIGNATURE	DATE	PREPARED BY Y. SUZUKI		14 Jul. 2017	CHECKED BY T. HAYAKAWA		20 Jul. 2017	APPROVED BY Y. SANO		25 Jul. 2017	<small>DRAWING TITLE</small> <b>BAR ARRANGEMENT OF PF11 PIER (5)</b>	<small>PACKAGE</small> 3 <small>DWG No.</small> P3-FO-2093
NAME	SIGNATURE	DATE																	
PREPARED BY Y. SUZUKI		14 Jul. 2017																	
CHECKED BY T. HAYAKAWA		20 Jul. 2017																	
APPROVED BY Y. SANO		25 Jul. 2017																	

# BAR ARRANGEMENT OF PF11 PIER (6) S=1:100



<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="text-align: left;">NAME</th> <th style="text-align: left;">SIGNATURE</th> <th style="text-align: left;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY Y. SUZUKI</td> <td></td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY T. HAYAKAWA</td> <td></td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY Y. SANO</td> <td></td> <td>25 Jul. 2017</td> </tr> </tbody> </table>	NAME	SIGNATURE	DATE	PREPARED BY Y. SUZUKI		14 Jul. 2017	CHECKED BY T. HAYAKAWA		20 Jul. 2017	APPROVED BY Y. SANO		25 Jul. 2017	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">DRAWING TITLE</th> <th style="text-align: left;">PACKAGE</th> </tr> </thead> <tbody> <tr> <td rowspan="3" style="text-align: center; vertical-align: middle;">                     BAR ARRANGEMENT OF PF11 PIER (6)                 </td> <td style="text-align: center;">3</td> </tr> <tr> <td style="text-align: center;">DWG No.</td> </tr> <tr> <td style="text-align: center;">P3-FO-2094</td> </tr> </tbody> </table>	DRAWING TITLE	PACKAGE	BAR ARRANGEMENT OF PF11 PIER (6)	3	DWG No.	P3-FO-2094
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	P3-FO-2094																							

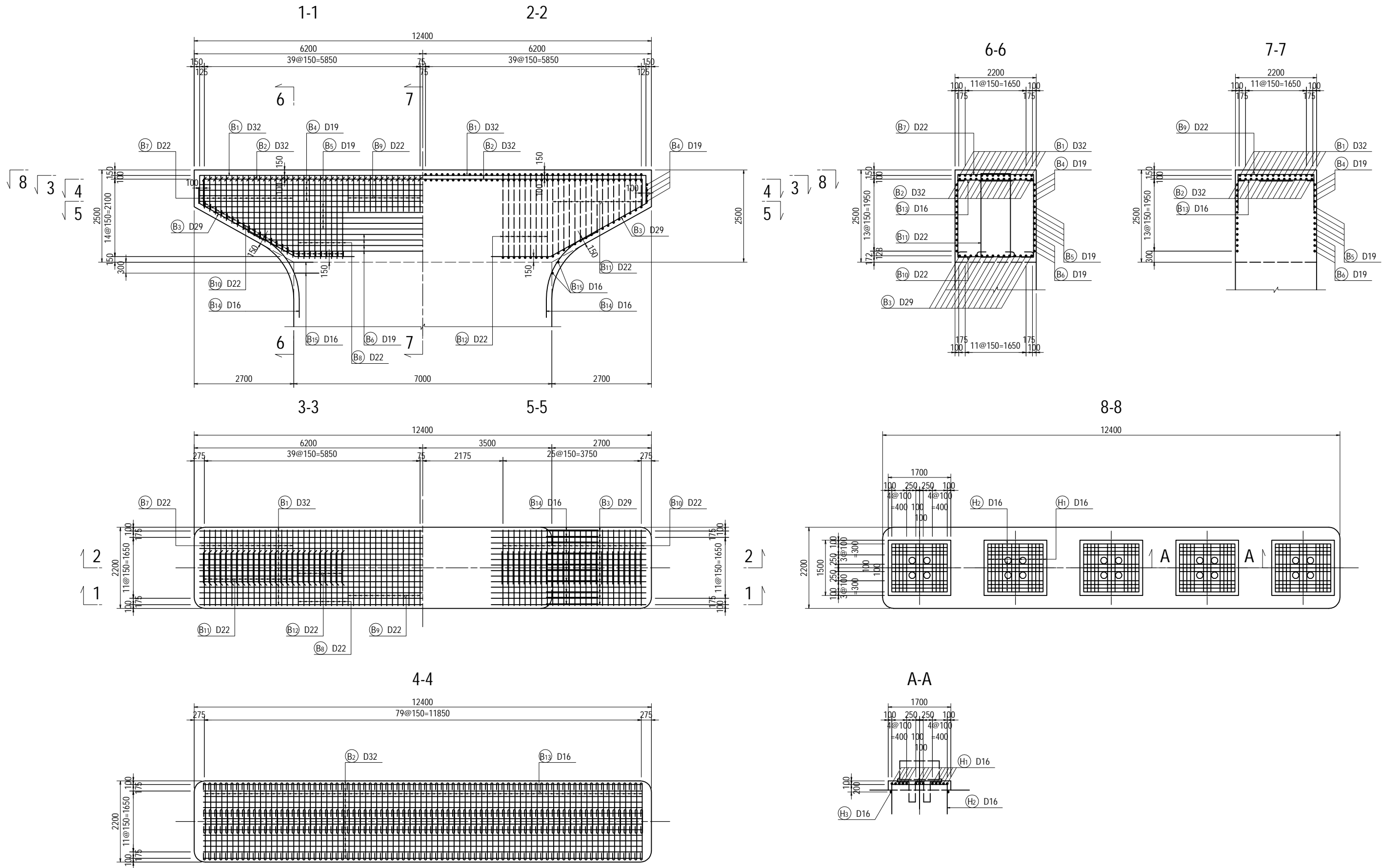
# BAR ARRANGEMENT OF PF11 PIER (7) S=1:100



## BAR LIST

REBAR NO.	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT/ONE (kg)	WEIGHT (kg)	REMARKS
B 1	D32	14630	15	6.23	91.14	1367	
B 2	D32	14340	8	6.23	89.34	715	
B 3	D25	5000	30	3.98	19.90	597	
B 4	D19	31550	4	2.25	70.99	284	
B 5	D19	28300	6	2.25	63.68	382	AVERAGE
B 6	D19	22840	3	2.25	51.39	154	AVERAGE
B 7	D22	6650	26	3.04	20.22	526	AVERAGE
B 8	D22	8020	14	3.04	24.38	341	
B 9	D22	5000	20	3.04	15.20	304	
B 10	D22	2570	80	3.04	7.81	625	
B 11	D22	4650	26	3.04	14.14	368	AVERAGE
B 12	D22	6020	14	3.04	18.30	256	
B 13	D16	2280	120	1.56	3.56	427	
B 14	D16	2970	30	1.56	4.63	139	
B 15	D16	4030	4	1.56	6.29	25	
						6510	
D 1	D16	14880	7	1.56	23.21	162	
D 2	D16	28150	4	1.56	43.91	176	
D 3	D16	6150	60	1.56	9.59	575	
D 4	D16	1730	60	1.56	2.70	162	
						1075	
H 1	D16	1300	32	1.56	2.03	65	
H 2	D16	1300	32	1.56	2.03	65	
H 3	D16	1920	8	1.56	3.00	24	
H 4	D16	2400	50	1.56	3.74	187	
H 5	D16	2500	40	1.56	3.90	156	
H 6	D16	2620	10	1.56	4.09	41	
						538	
C 1	D25	9580	54	3.98	38.13	2059	
C 2	D25	9580	22	3.98	38.13	839	
C 3	D16	10610	102	1.56	16.55	1688	
C 4	D16	2220	408	1.56	3.46	1412	
C 5	D16	4220	136	1.56	6.58	895	
						6893	
F 1	D16	6930	33	1.56	10.81	357	
F 2	D16	8180	27	1.56	12.76	345	
F 3	D22	9450	33	3.04	28.73	948	
F 4	D16	10770	27	1.56	16.80	454	
F 5	D19	7700	14	2.25	17.33	243	
F 6	D19	7070	14	2.25	15.91	223	
F 7	D16	1620	84	1.56	2.53	213	
						2783	
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						D25	3495
						D22	3368
						D19	1286
						D16	7568
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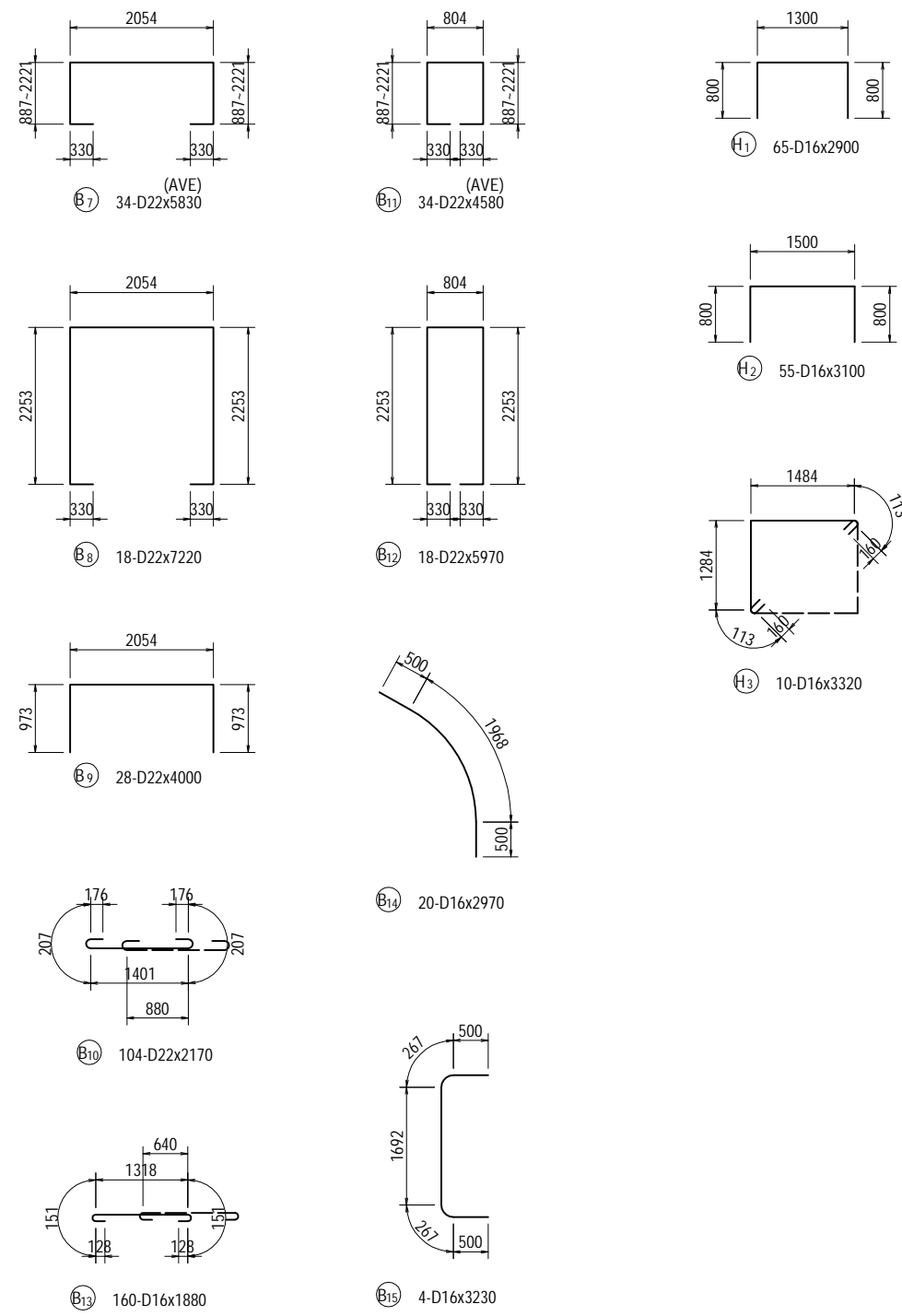
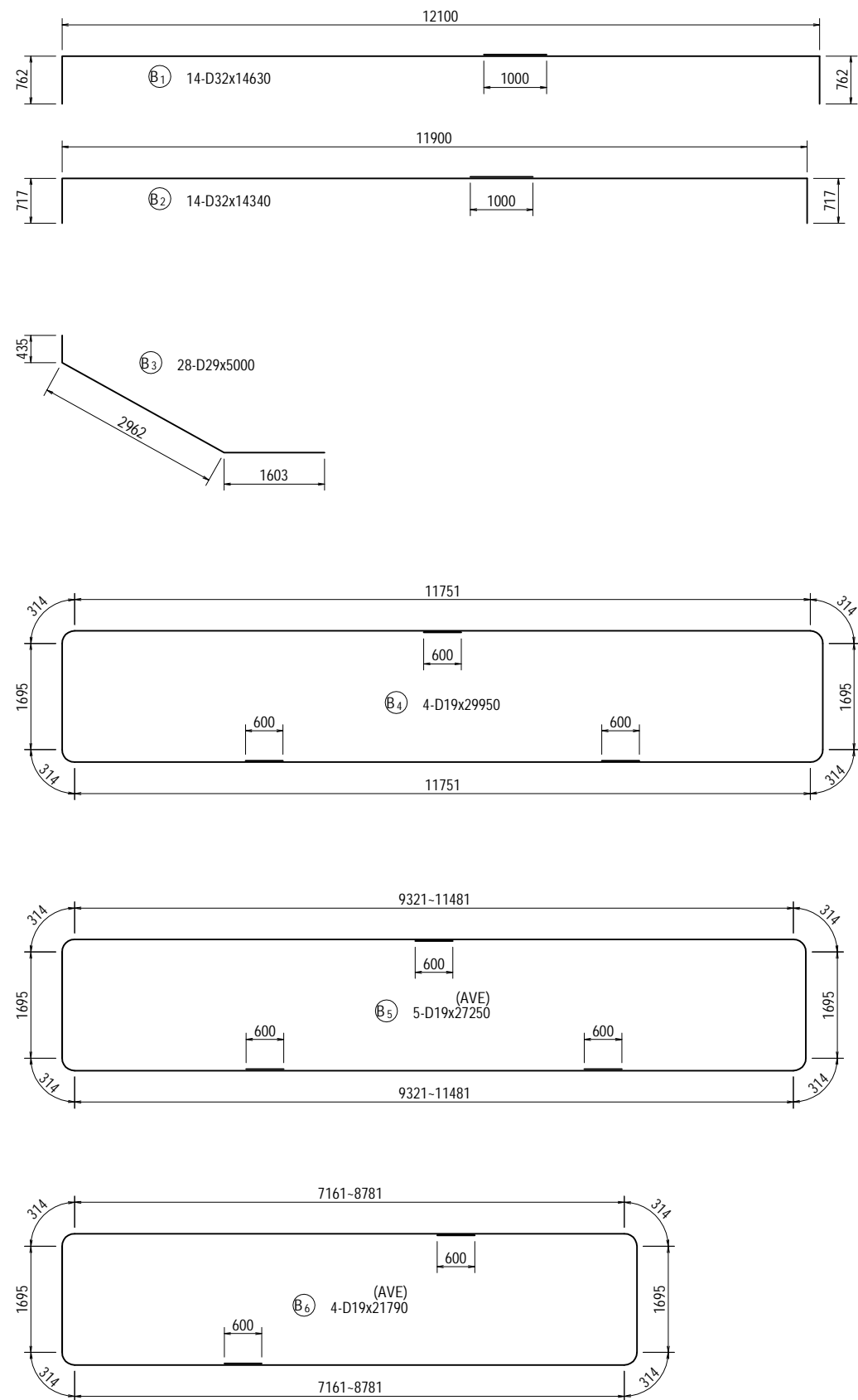
# BAR ARRANGEMENT OF PF12 PIER (1) S=1:100



<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: 10%;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY</td> <td>Y. SUZUKI</td> <td><i>YS</i></td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY</td> <td>T. HAYAKAWA</td> <td><i>Hayakawa</i></td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY</td> <td>Y. SANO</td> <td><i>Y. Sano</i></td> <td>25 Jul. 2017</td> </tr> </tbody> </table>		NAME	SIGNATURE	DATE	PREPARED BY	Y. SUZUKI	<i>YS</i>	14 Jul. 2017	CHECKED BY	T. HAYAKAWA	<i>Hayakawa</i>	20 Jul. 2017	APPROVED BY	Y. SANO	<i>Y. Sano</i>	25 Jul. 2017	<small>DRAWING TITLE</small> <b>BAR ARRANGEMENT OF PF12 PIER (1)</b>	<small>PACKAGE</small> 3 <small>DWG No.</small> P3-FO-2096
	NAME	SIGNATURE	DATE																			
PREPARED BY	Y. SUZUKI	<i>YS</i>	14 Jul. 2017																			
CHECKED BY	T. HAYAKAWA	<i>Hayakawa</i>	20 Jul. 2017																			
APPROVED BY	Y. SANO	<i>Y. Sano</i>	25 Jul. 2017																			

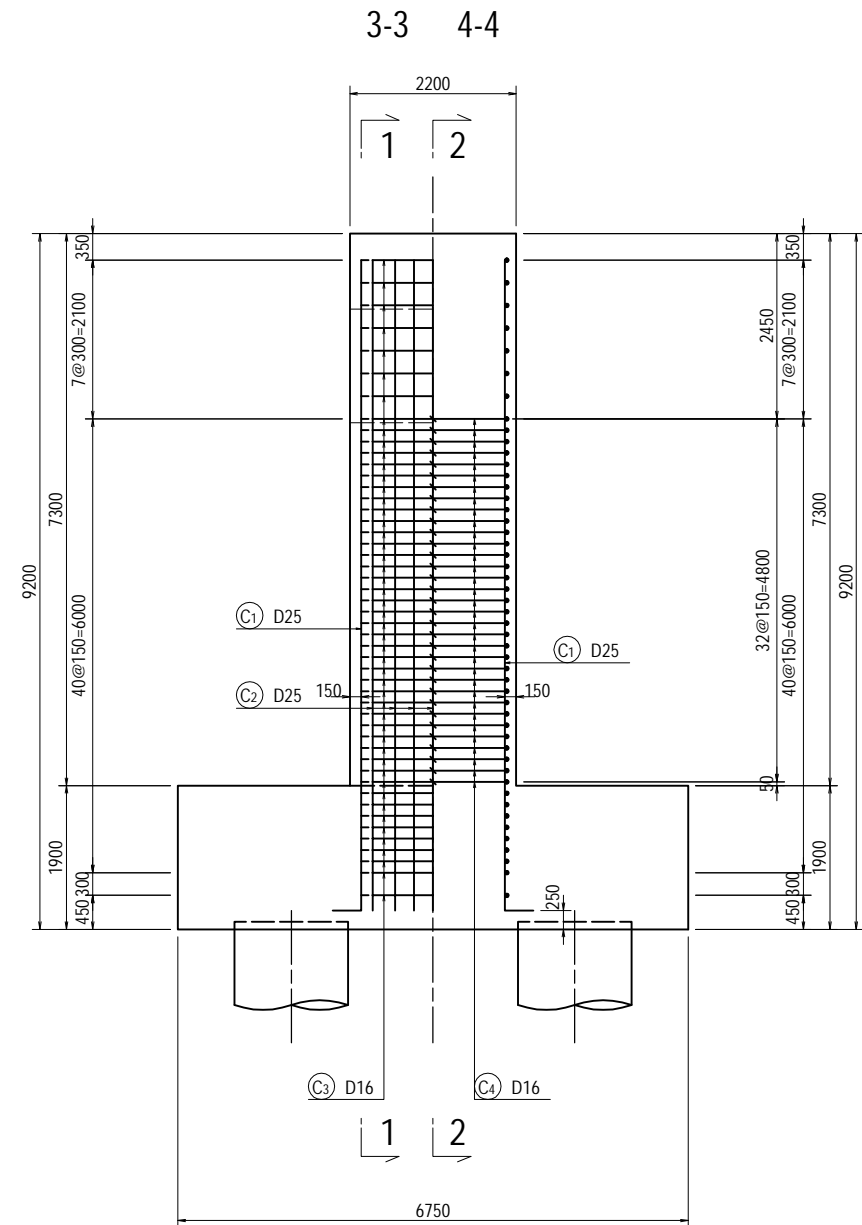
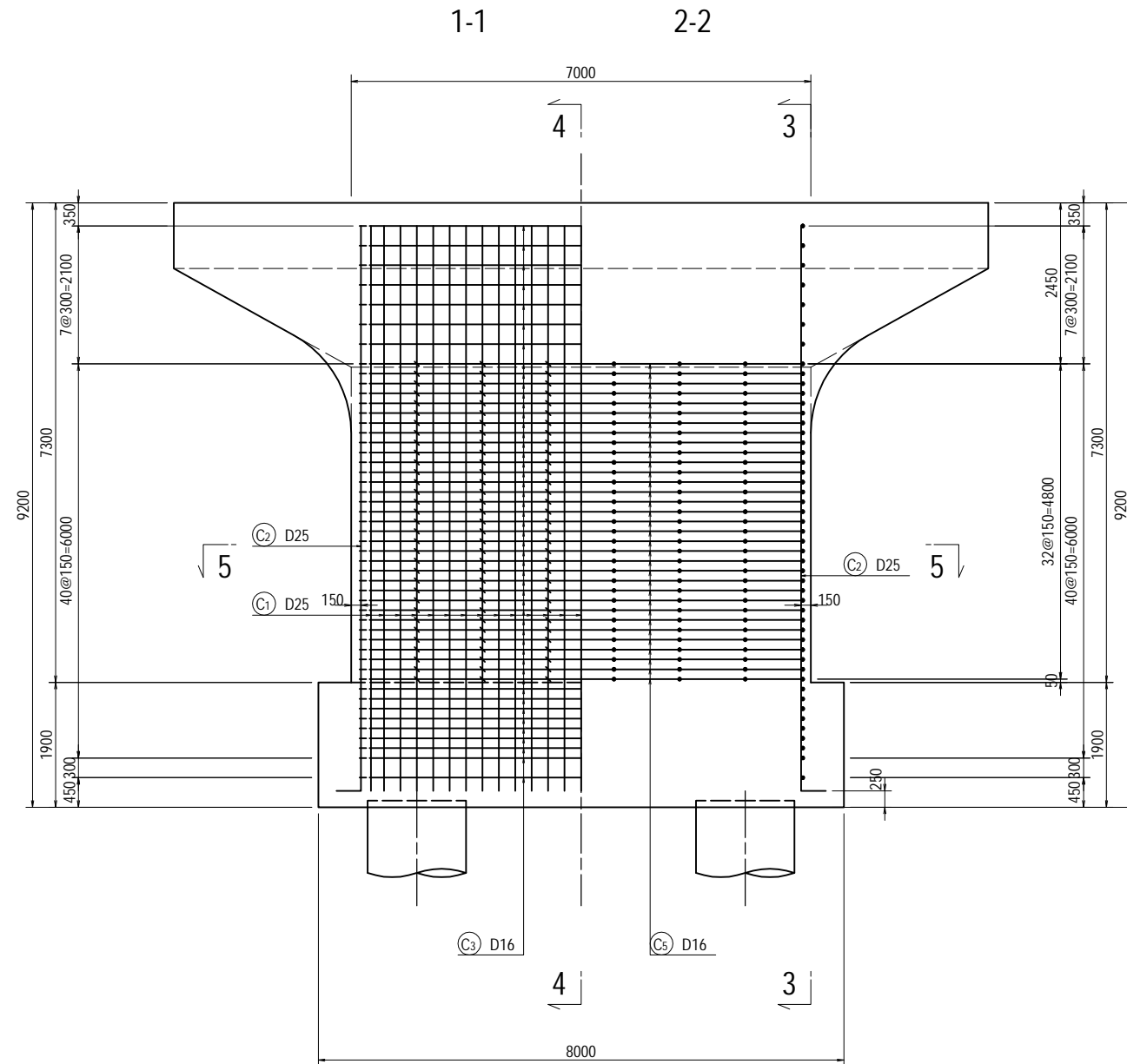


# BAR ARRANGEMENT OF PF12 PIER (2) S=1:100



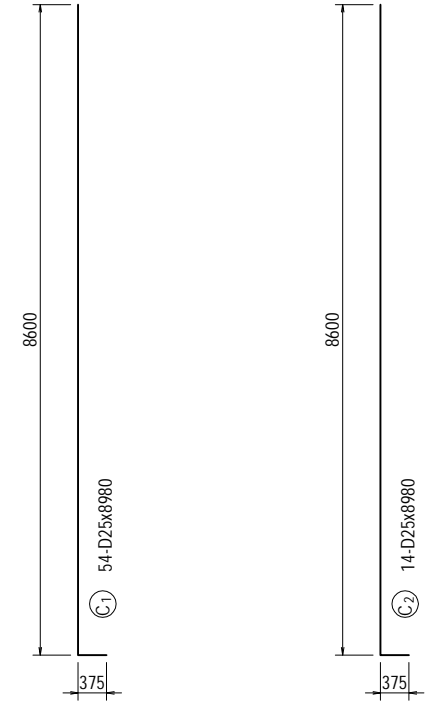
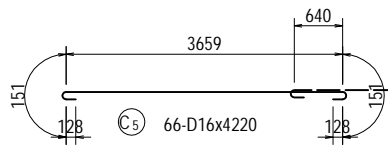
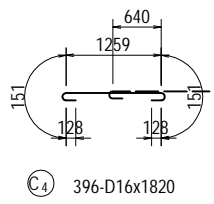
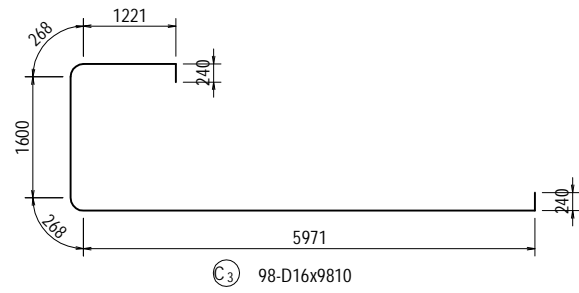
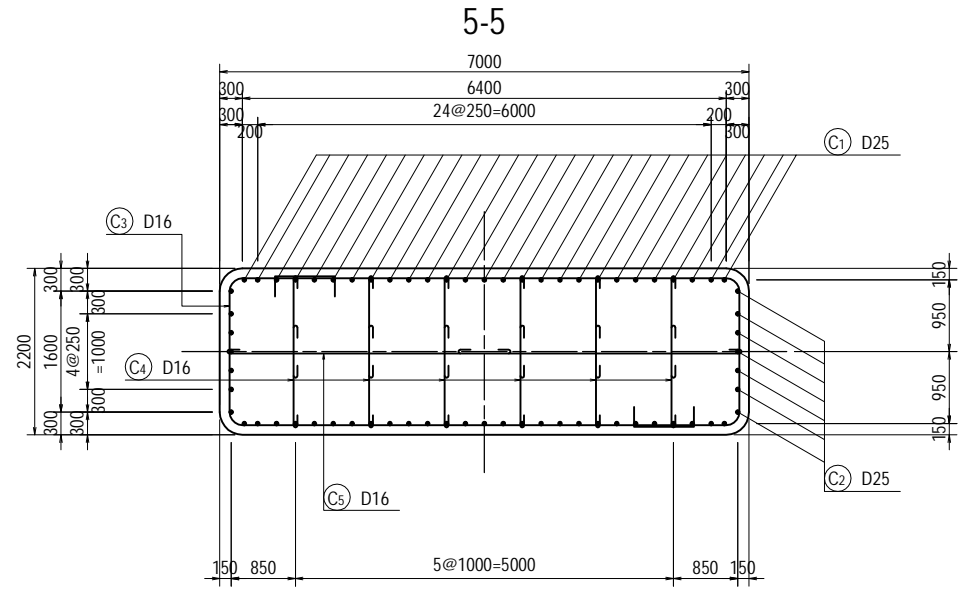
<small>PROJECT NAME</small> DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	<small>FINANCED BY</small> JAPAN INTERNATIONAL COOPERATION AGENCY	<small>COUNTERPART</small> REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	<small>JICA STUDY TEAM</small> NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.		<small>NAME</small> Y. SUZUKI T. HAYAKAWA Y. SANO	<small>SIGNATURE</small>   	<small>DATE</small> 14 Jul. 2017 20 Jul. 2017 25 Jul. 2017	<small>DRAWING TITLE</small> <b>BAR ARRANGEMENT OF PF12 PIER (2)</b>	<small>PACKAGE</small> 3 DWG No. P3-FO-2097
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# BAR ARRANGEMENT OF PF12 PIER (3) S=1:100



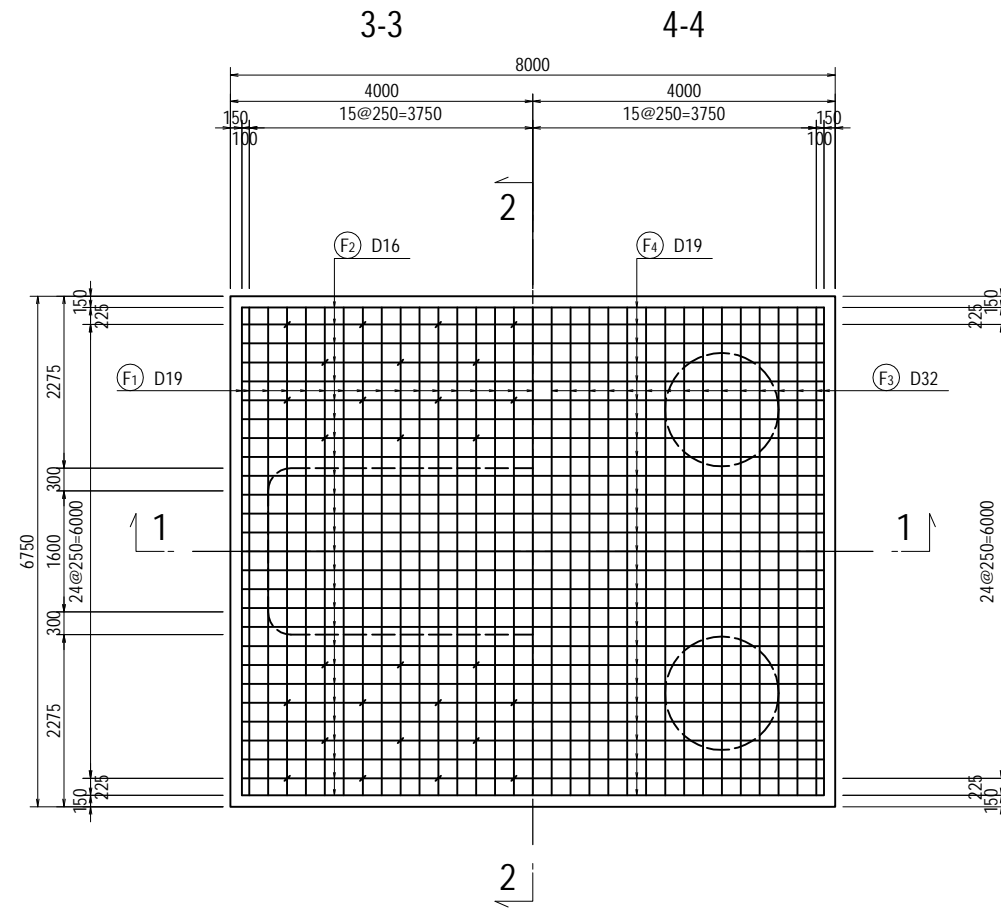
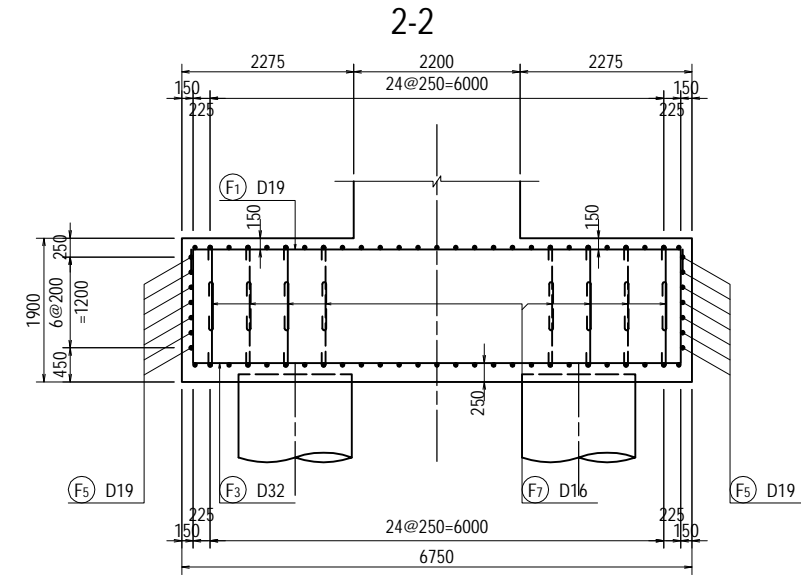
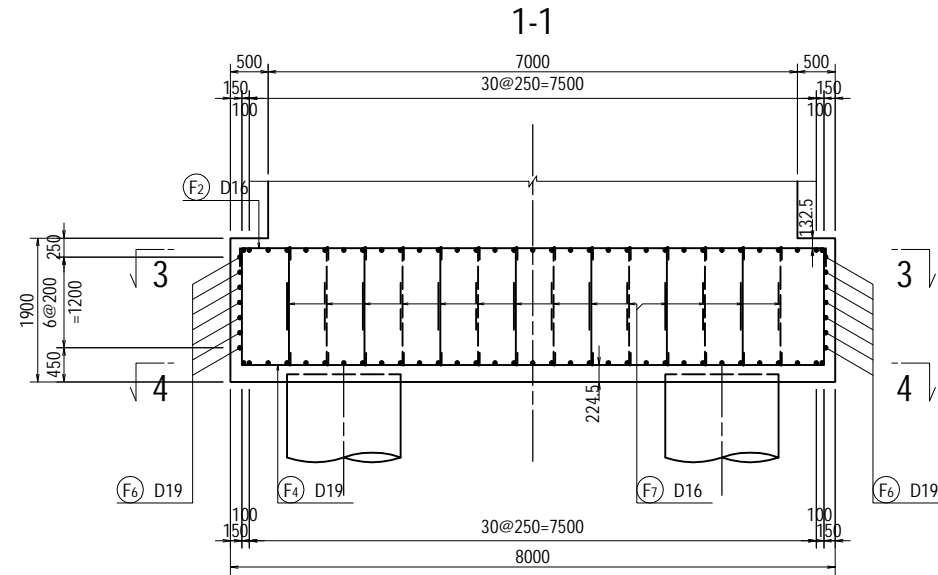
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CHECKED BY	T. HAYAKAWA	<i>Hayakawa</i>	20 Jul. 2017																							
APPROVED BY	Y. SANO	<i>Y. Sano</i>	25 Jul. 2017																							
PACKAGE																										
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DWG No.																										
P3-FO-2098																										

# BAR ARRANGEMENT OF PF12 PIER (4) S=1:100



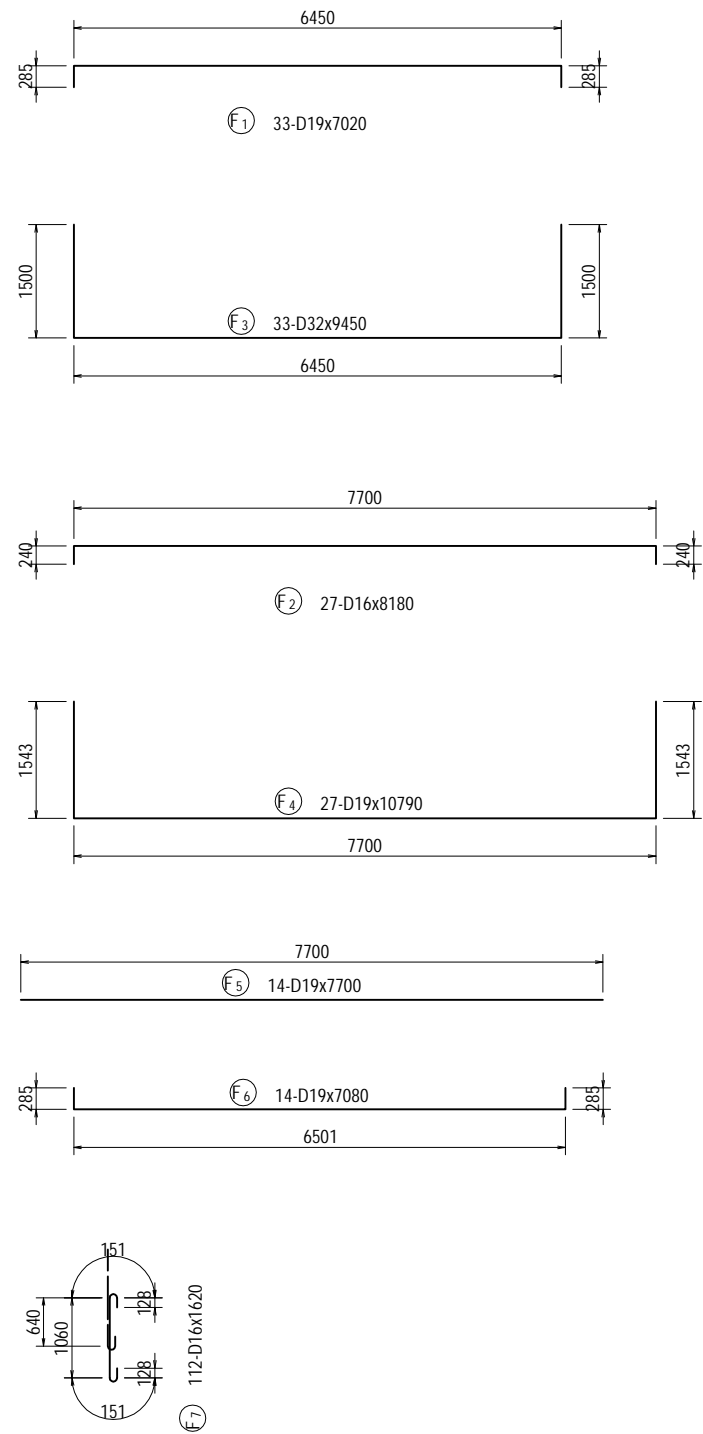
<small>PROJECT NAME</small> DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	<small>FINANCED BY</small> JAPAN INTERNATIONAL COOPERATION AGENCY	<small>COUNTERPART</small> REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	<small>JICA STUDY TEAM</small> NIPPON KOEI 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="text-align: left;">NAME</th> <th style="text-align: left;">SIGNATURE</th> <th style="text-align: left;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY Y. SUZUKI</td> <td></td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY T. HAYAKAWA</td> <td></td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY Y. SANO</td> <td></td> <td>25 Jul. 2017</td> </tr> </tbody> </table>	NAME	SIGNATURE	DATE	PREPARED BY Y. SUZUKI		14 Jul. 2017	CHECKED BY T. HAYAKAWA		20 Jul. 2017	APPROVED BY Y. SANO		25 Jul. 2017	<small>DRAWING TITLE</small> <b>BAR ARRANGEMENT OF PF12 PIER (4)</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">PACKAGE</th> </tr> </thead> <tbody> <tr> <td>3</td> </tr> <tr> <td>DWG No.</td> </tr> <tr> <td>P3-FO-2099</td> </tr> </tbody> </table>	PACKAGE	3	DWG No.	P3-FO-2099
NAME	SIGNATURE	DATE																					
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CHECKED BY T. HAYAKAWA		20 Jul. 2017																					
APPROVED BY Y. SANO		25 Jul. 2017																					
PACKAGE																							
3																							
DWG No.																							
P3-FO-2099																							

# BAR ARRANGEMENT OF PF12 PIER (5) S=1:100



<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="text-align: left;">NAME</th> <th style="text-align: left;">SIGNATURE</th> <th style="text-align: left;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY Y. SUZUKI</td> <td></td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY T. HAYAKAWA</td> <td></td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY Y. SANO</td> <td></td> <td>25 Jul. 2017</td> </tr> </tbody> </table>	NAME	SIGNATURE	DATE	PREPARED BY Y. SUZUKI		14 Jul. 2017	CHECKED BY T. HAYAKAWA		20 Jul. 2017	APPROVED BY Y. SANO		25 Jul. 2017	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">DRAWING TITLE</th> <th style="text-align: left;">PACKAGE</th> </tr> </thead> <tbody> <tr> <td rowspan="3" style="text-align: center; vertical-align: middle;">                     BAR ARRANGEMENT OF PF12 PIER (5)                 </td> <td style="text-align: center;">3</td> </tr> <tr> <td style="text-align: center;">DWG No.</td> </tr> <tr> <td style="text-align: center;">P3-FO-2100</td> </tr> </tbody> </table>	DRAWING TITLE	PACKAGE	BAR ARRANGEMENT OF PF12 PIER (5)	3	DWG No.	P3-FO-2100
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CHECKED BY T. HAYAKAWA		20 Jul. 2017																						
APPROVED BY Y. SANO		25 Jul. 2017																						
DRAWING TITLE	PACKAGE																							
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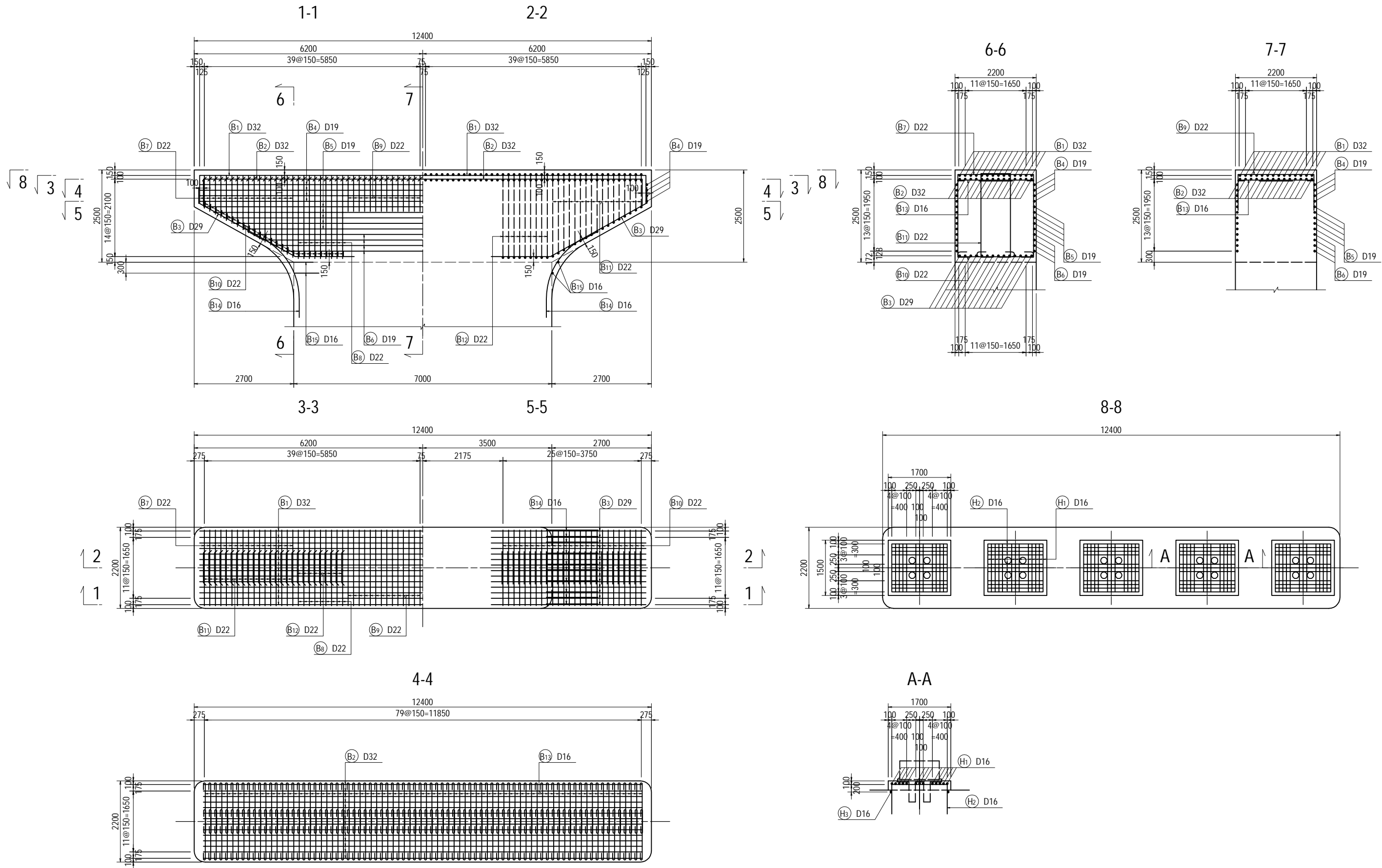
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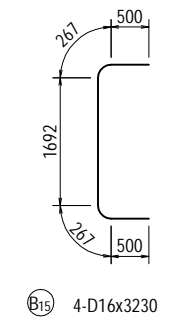
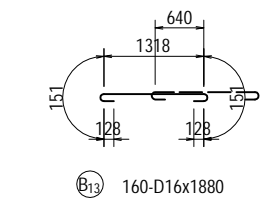
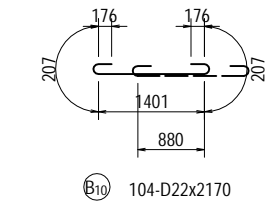
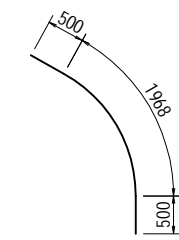
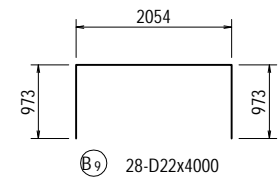
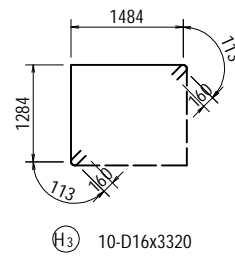
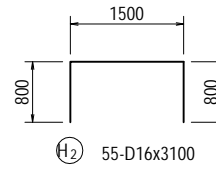
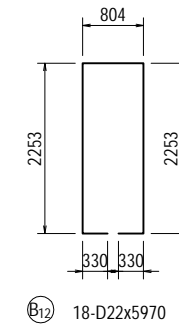
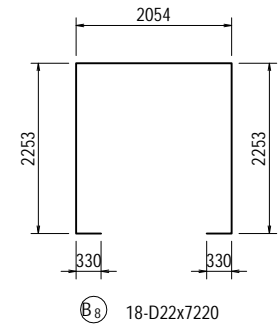
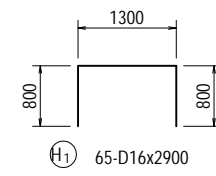
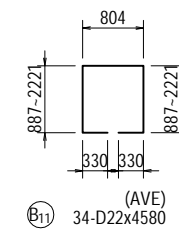
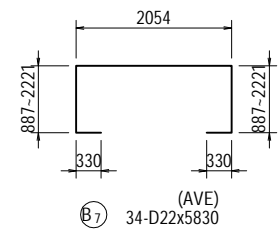
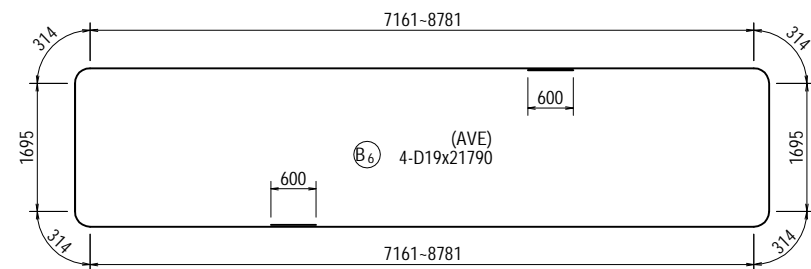
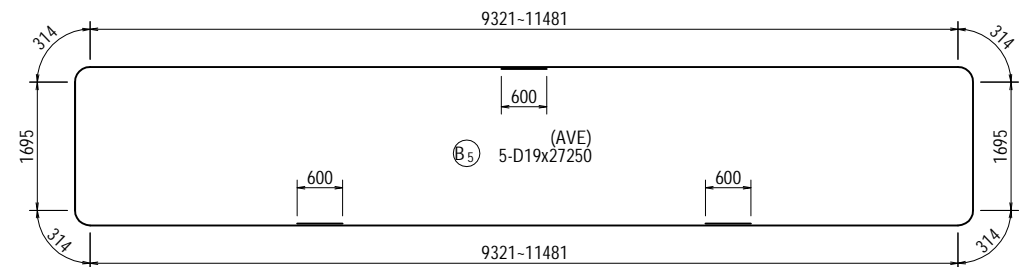
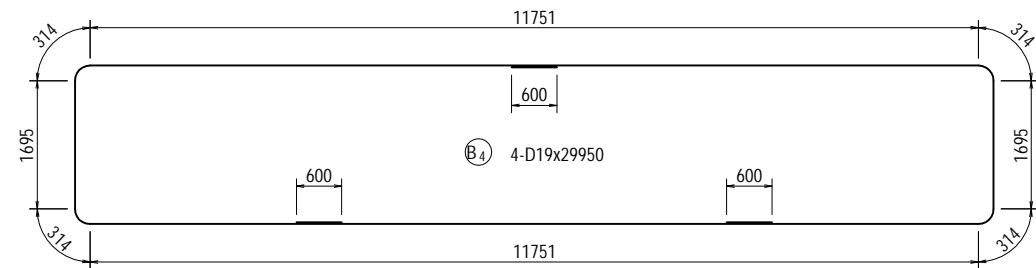
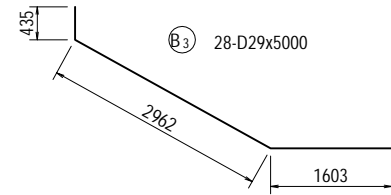
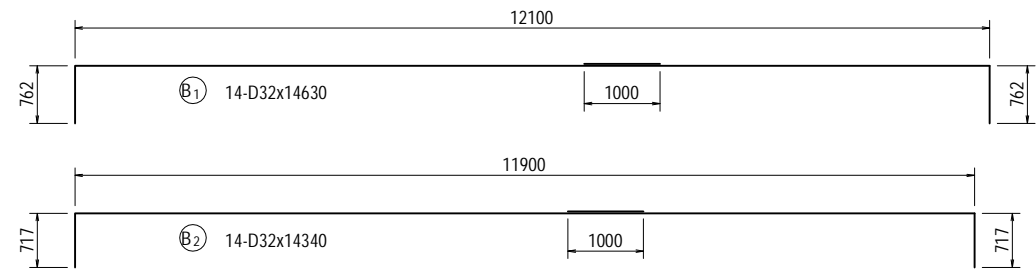
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B 2	D32	14340	14	6.23	89.34	1251	
B 3	D29	5000	28	5.04	25.20	706	
B 4	D19	29950	4	2.25	67.39	270	
B 5	D19	27250	5	2.25	61.31	307	AVERAGE
B 6	D19	21790	4	2.25	49.03	196	AVERAGE
B 7	D22	5830	34	3.04	17.72	602	AVERAGE
B 8	D22	7220	18	3.04	21.95	395	
B 9	D22	4000	28	3.04	12.16	340	
B 10	D22	2170	104	3.04	6.60	686	
B 11	D22	4580	34	3.04	13.92	473	AVERAGE
B 12	D22	5970	18	3.04	18.15	327	
B 13	D16	1880	160	1.56	2.93	469	
B 14	D16	2970	20	1.56	4.63	93	
B 15	D16	3230	4	1.56	5.04	20	
						7411	
H 1	D16	2900	65	1.56	4.52	294	
H 2	D16	3100	55	1.56	4.84	266	
H 3	D16	3320	10	1.56	5.18	52	
						612	
C 1	D25	8980	54	3.98	35.74	1930	
C 2	D25	8980	14	3.98	35.74	500	
C 3	D16	9810	98	1.56	15.30	1499	
C 4	D16	1820	396	1.56	2.84	1125	
C 5	D16	4220	66	1.56	6.58	434	
						5488	
F 1	D19	7020	33	2.25	15.80	521	
F 2	D16	8180	27	1.56	12.76	345	
F 3	D32	9450	33	6.23	58.87	1943	
F 4	D19	10790	27	2.25	24.28	656	
F 5	D19	7700	14	2.25	17.33	243	
F 6	D19	7080	14	2.25	15.93	223	
F 7	D16	1620	112	1.56	2.53	283	
						4214	
						D32	4470
						D29	706
						D25	2430
						D22	2823
						D19	2416
						D16	4880
						TOTAL	17725

# BAR ARRANGEMENT OF PF13 PIER (1) S=1:100



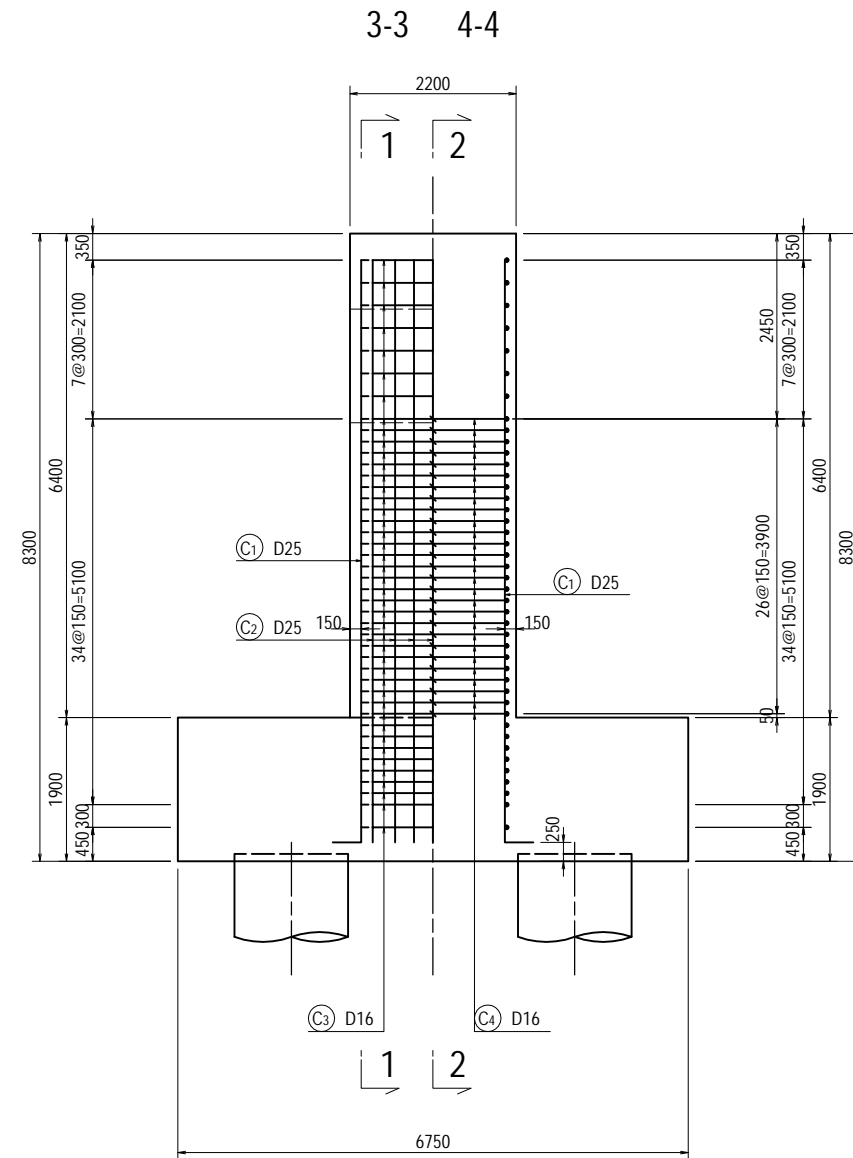
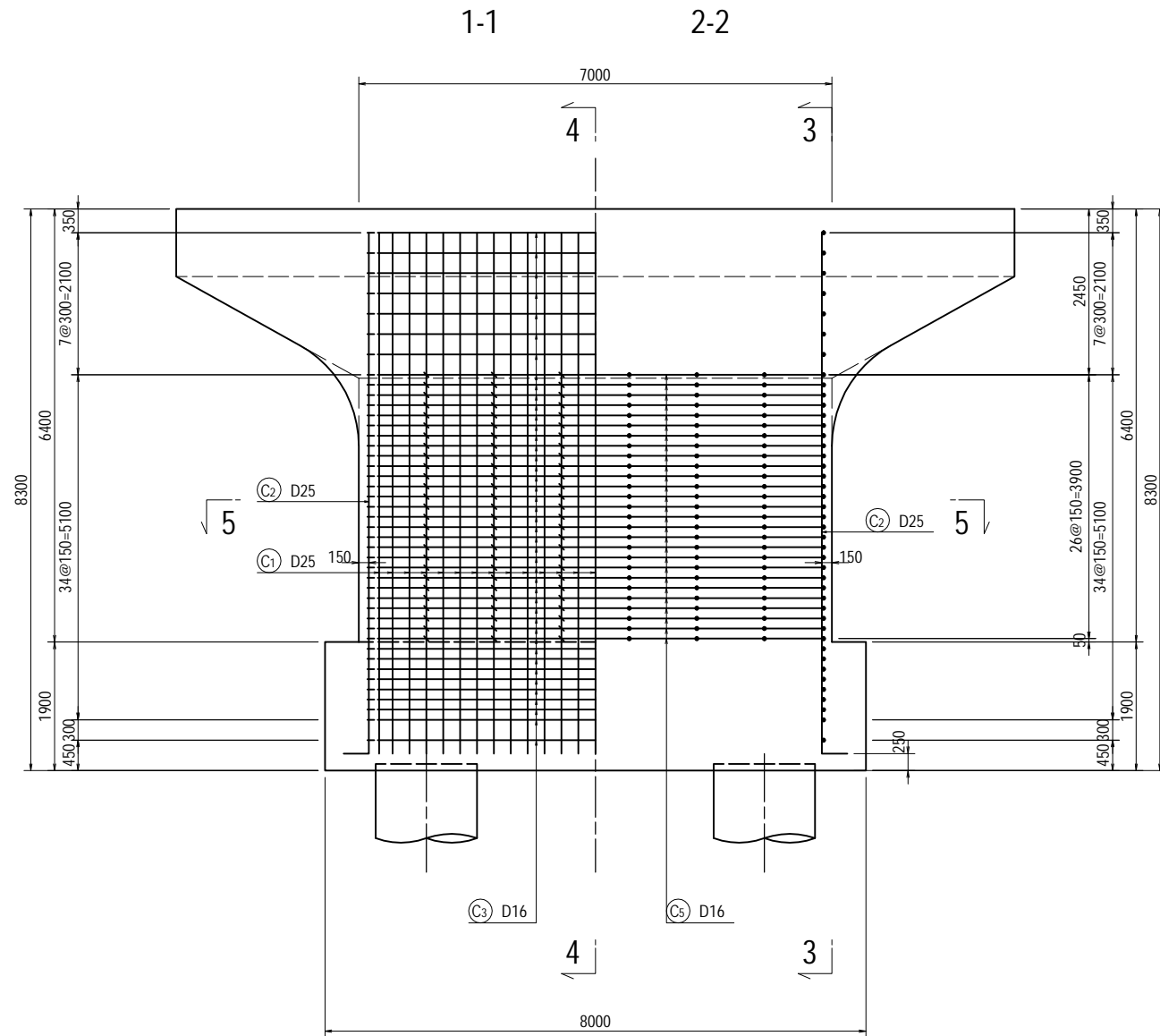
PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN 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: 10%;">NAME</th> <th style="width: 10%;">SIGNATURE</th> <th style="width: 10%;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY</td> <td>Y. SUZUKI</td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY</td> <td>T. HAYAKAWA</td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY</td> <td>Y. SANO</td> <td>25 Jul. 2017</td> </tr> </tbody> </table>	NAME	SIGNATURE	DATE	PREPARED BY	Y. SUZUKI	14 Jul. 2017	CHECKED BY	T. HAYAKAWA	20 Jul. 2017	APPROVED BY	Y. SANO	25 Jul. 2017	DRAWING TITLE <h2 style="text-align: center;">BAR ARRANGEMENT OF PF13 PIER (1)</h2>	PACKAGE 3 DWG No. P3-FO-2102
NAME	SIGNATURE	DATE																
PREPARED BY	Y. SUZUKI	14 Jul. 2017																
CHECKED BY	T. HAYAKAWA	20 Jul. 2017																
APPROVED BY	Y. SANO	25 Jul. 2017																

# BAR ARRANGEMENT OF PF13 PIER (2) S=1:100



<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.		<small>NAME</small> Y. SUZUKI T. HAYAKAWA Y. SANO	<small>SIGNATURE</small>   	<small>DATE</small> 14 Jul. 2017 20 Jul. 2017 25 Jul. 2017	<small>DRAWING TITLE</small> <b>BAR ARRANGEMENT OF PF13 PIER (2)</b>	<small>PACKAGE</small> 3 DWG No. P3-FO-2103
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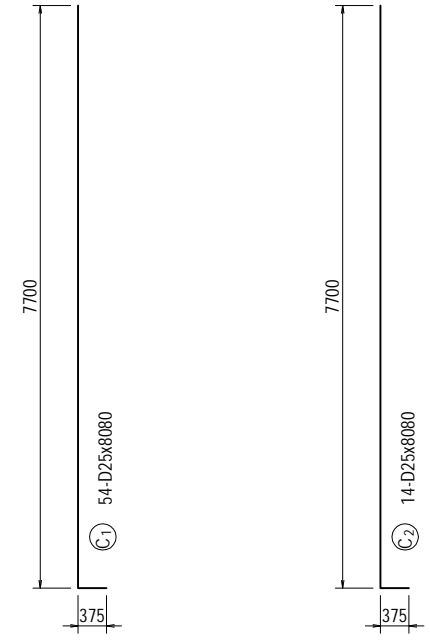
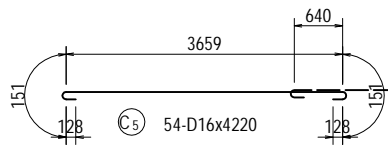
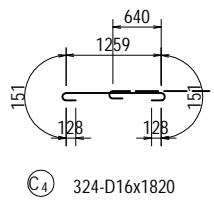
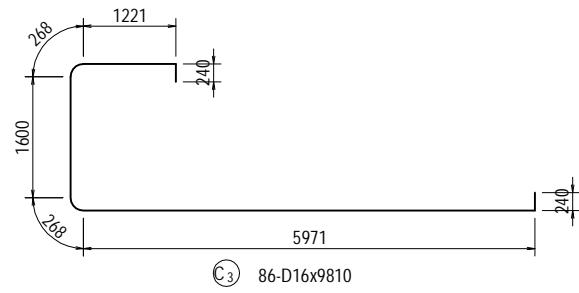
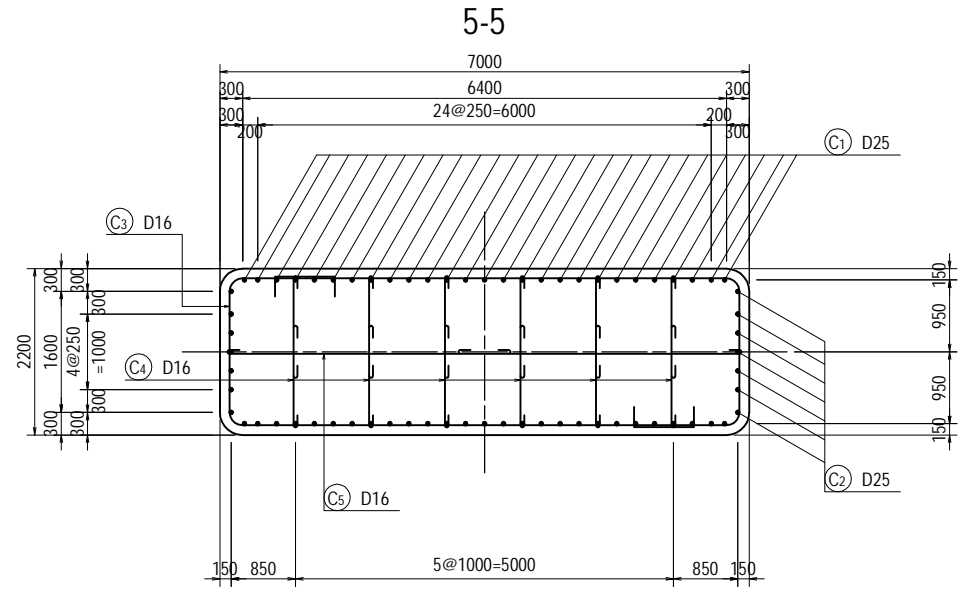
# BAR ARRANGEMENT OF PF13 PIER (3) S=1:100



<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>Y. SUZUKI</td> <td><i>YS</i></td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY</td> <td>T. HAYAKAWA</td> <td><i>Hayakawa</i></td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY</td> <td>Y. SANO</td> <td><i>San</i></td> <td>25 Jul. 2017</td> </tr> </tbody> </table>		NAME	SIGNATURE	DATE	PREPARED BY	Y. SUZUKI	<i>YS</i>	14 Jul. 2017	CHECKED BY	T. HAYAKAWA	<i>Hayakawa</i>	20 Jul. 2017	APPROVED BY	Y. SANO	<i>San</i>	25 Jul. 2017	<small>DRAWING TITLE</small> <b>BAR ARRANGEMENT OF PF13 PIER (3)</b>	<small>PACKAGE</small> 3 <small>DWG No.</small> P3-FO-2104
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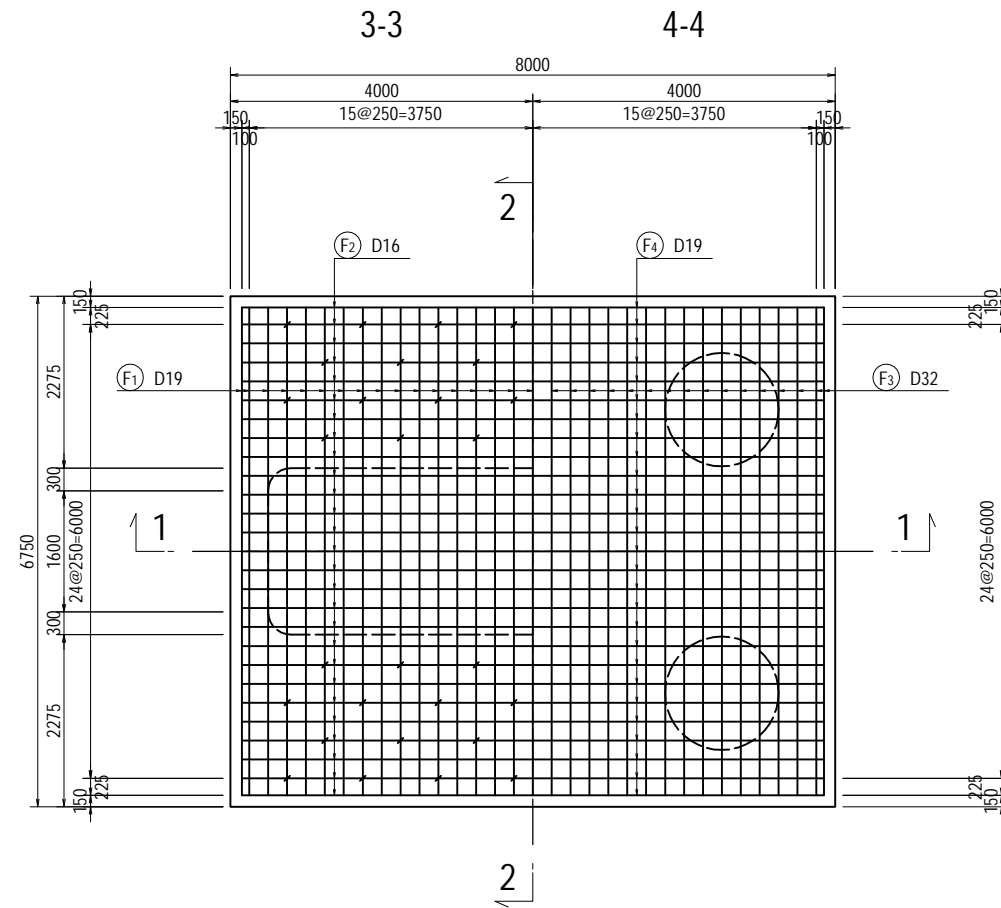
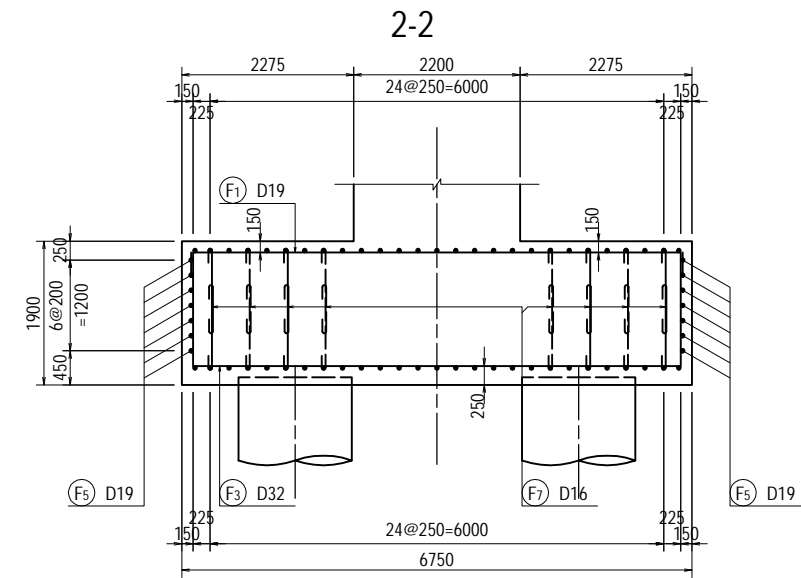
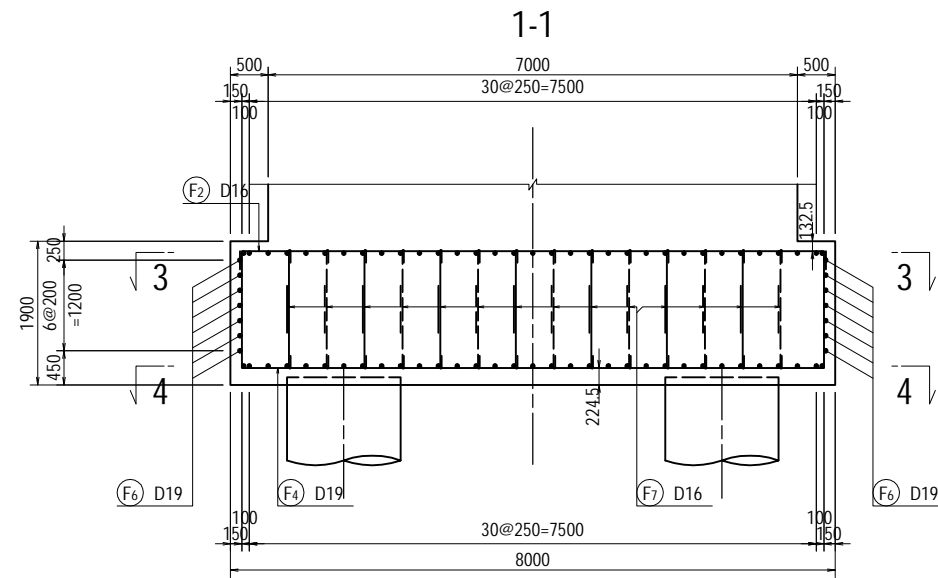


# BAR ARRANGEMENT OF PF13 PIER (4) S=1:100



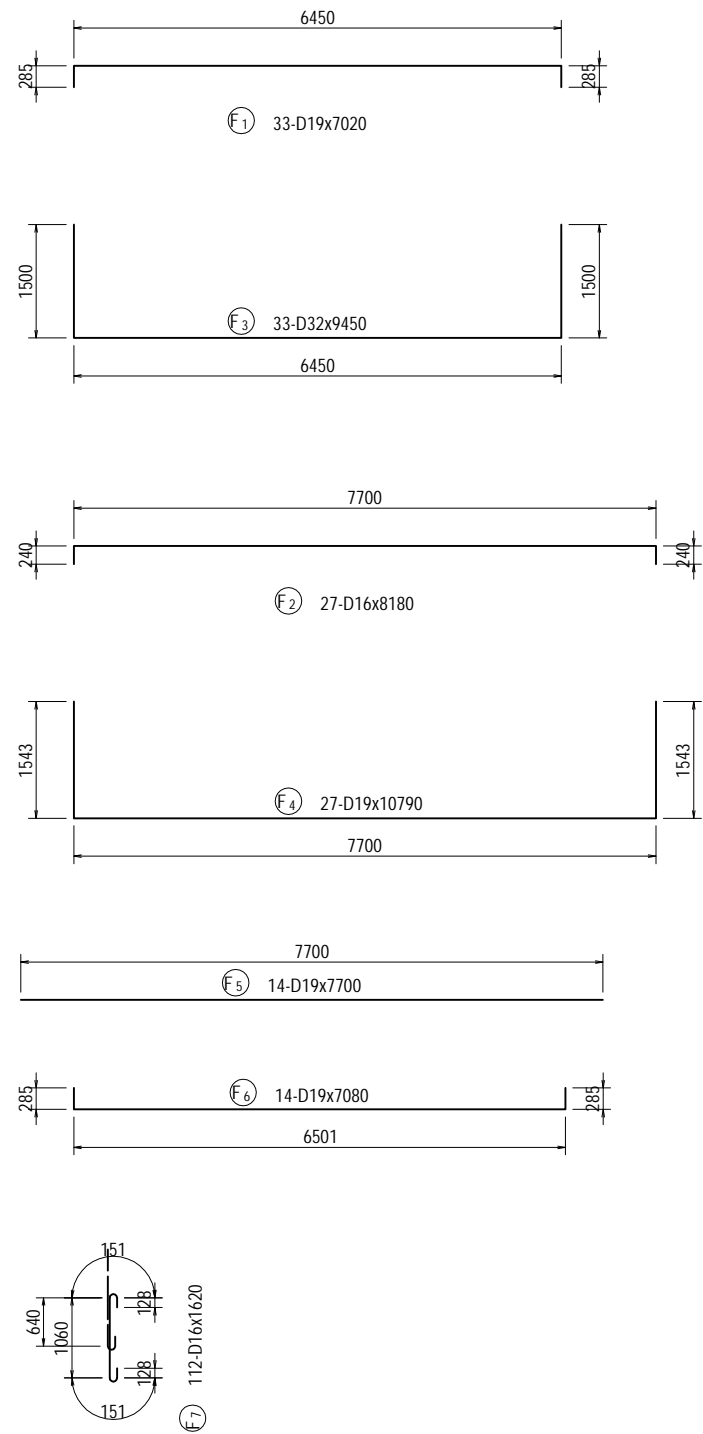
PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.		NAME PREPARED BY Y. SUZUKI CHECKED BY T. HAYAKAWA APPROVED BY Y. SANO	SIGNATURE 	DATE 14 Jul. 2017 20 Jul. 2017 25 Jul. 2017	DRAWING TITLE <b>BAR ARRANGEMENT OF PF13 PIER (4)</b>	PACKAGE 3 DWG No. P3-FO-2105
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# BAR ARRANGEMENT OF PF13 PIER (5) S=1:100



<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="text-align: left;">NAME</th> <th style="text-align: left;">SIGNATURE</th> <th style="text-align: left;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY Y. SUZUKI</td> <td></td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY T. HAYAKAWA</td> <td></td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY Y. SANO</td> <td></td> <td>25 Jul. 2017</td> </tr> </tbody> </table>	NAME	SIGNATURE	DATE	PREPARED BY Y. SUZUKI		14 Jul. 2017	CHECKED BY T. HAYAKAWA		20 Jul. 2017	APPROVED BY Y. SANO		25 Jul. 2017	<small>DRAWING TITLE</small> <b>BAR ARRANGEMENT OF PF13 PIER (5)</b>	<small>PACKAGE</small> 3 DWG No. P3-FO-2106
NAME	SIGNATURE	DATE																	
PREPARED BY Y. SUZUKI		14 Jul. 2017																	
CHECKED BY T. HAYAKAWA		20 Jul. 2017																	
APPROVED BY Y. SANO		25 Jul. 2017																	

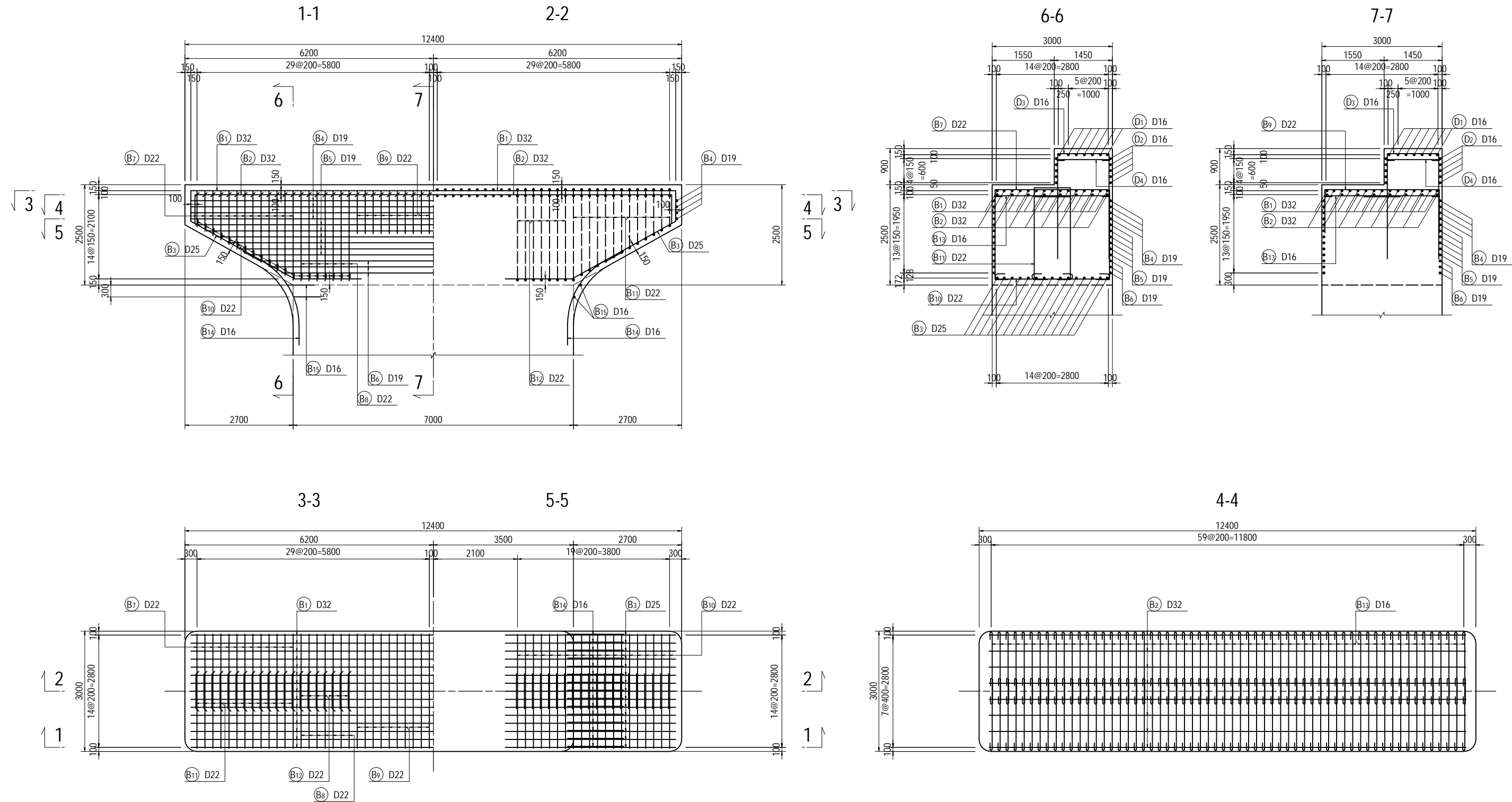
# BAR ARRANGEMENT OF PF13 PIER (6) S=1:100



## BAR LIST

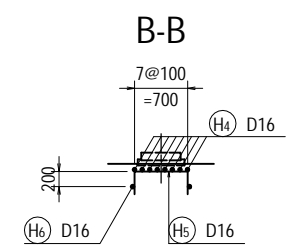
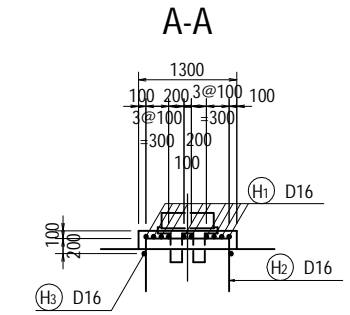
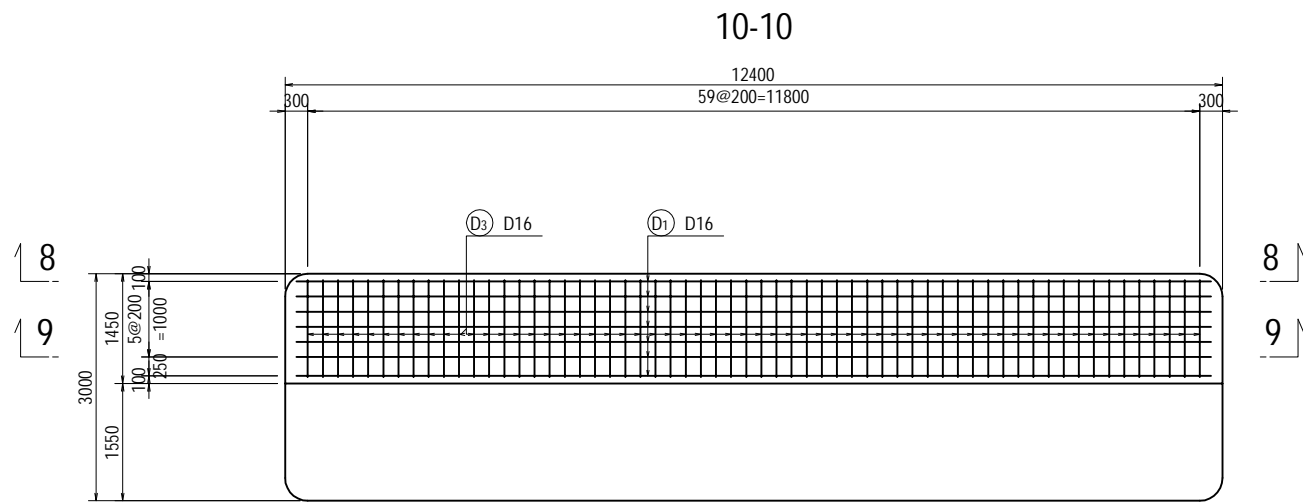
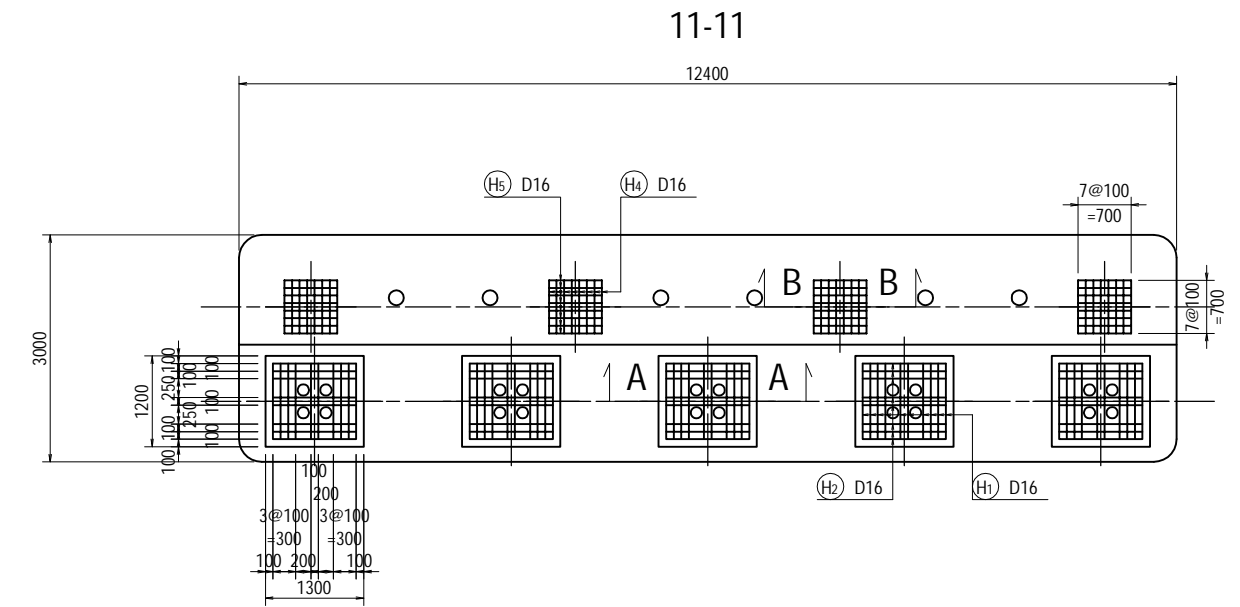
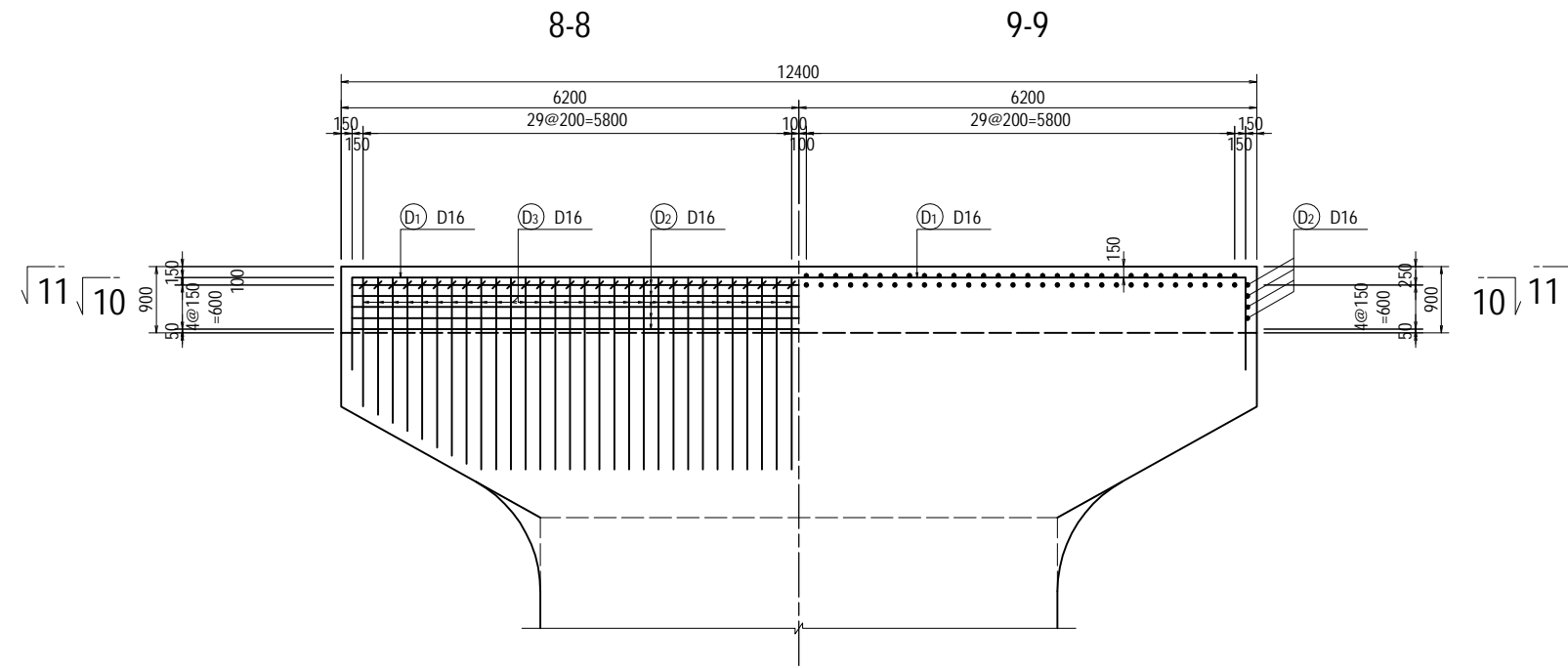
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B 1	D32	14630	14	6.23	91.14	1276	
B 2	D32	14340	14	6.23	89.34	1251	
B 3	D29	5000	28	5.04	25.20	706	
B 4	D19	29950	4	2.25	67.39	270	
B 5	D19	27250	5	2.25	61.31	307	AVERAGE
B 6	D19	21790	4	2.25	49.03	196	AVERAGE
B 7	D22	5830	34	3.04	17.72	602	AVERAGE
B 8	D22	7220	18	3.04	21.95	395	
B 9	D22	4000	28	3.04	12.16	340	
B 10	D22	2170	104	3.04	6.60	686	
B 11	D22	4580	34	3.04	13.92	473	AVERAGE
B 12	D22	5970	18	3.04	18.15	327	
B 13	D16	1880	160	1.56	2.93	469	
B 14	D16	2970	20	1.56	4.63	93	
B 15	D16	3230	4	1.56	5.04	20	
						7411	
H 1	D16	2900	65	1.56	4.52	294	
H 2	D16	3100	55	1.56	4.84	266	
H 3	D16	3320	10	1.56	5.18	52	
						612	
C 1	D25	8080	54	3.98	32.16	1737	
C 2	D25	8080	14	3.98	32.16	450	
C 3	D16	9810	86	1.56	15.30	1316	
C 4	D16	1820	324	1.56	2.84	920	
C 5	D16	4220	54	1.56	6.58	355	
						4778	
F 1	D19	7020	33	2.25	15.80	521	
F 2	D16	8180	27	1.56	12.76	345	
F 3	D32	9450	33	6.23	58.87	1943	
F 4	D19	10790	27	2.25	24.28	656	
F 5	D19	7700	14	2.25	17.33	243	
F 6	D19	7080	14	2.25	15.93	223	
F 7	D16	1620	112	1.56	2.53	283	
						4214	
						D32	4470
						D29	706
						D25	2187
						D22	2823
						D19	2416
						D16	4413
						TOTAL	17015

# BAR ARRANGEMENT OF PF14 PIER (1) S=1:100



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: 10%;">NAME</th> <th style="width: 10%;">SIGNATURE</th> <th style="width: 10%;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY Y. SUZUKI</td> <td></td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY T. HAYAKAWA</td> <td></td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY Y. SANO</td> <td></td> <td>25 Jul. 2017</td> </tr> </tbody> </table>	NAME	SIGNATURE	DATE	PREPARED BY Y. SUZUKI		14 Jul. 2017	CHECKED BY T. HAYAKAWA		20 Jul. 2017	APPROVED BY Y. SANO		25 Jul. 2017	DRAWING TITLE <h2 style="text-align: center;">BAR ARRANGEMENT OF PF14 PIER (1)</h2>	PACKAGE 3 DWG No. P3-FO-2108
NAME	SIGNATURE	DATE																
PREPARED BY Y. SUZUKI		14 Jul. 2017																
CHECKED BY T. HAYAKAWA		20 Jul. 2017																
APPROVED BY Y. SANO		25 Jul. 2017																

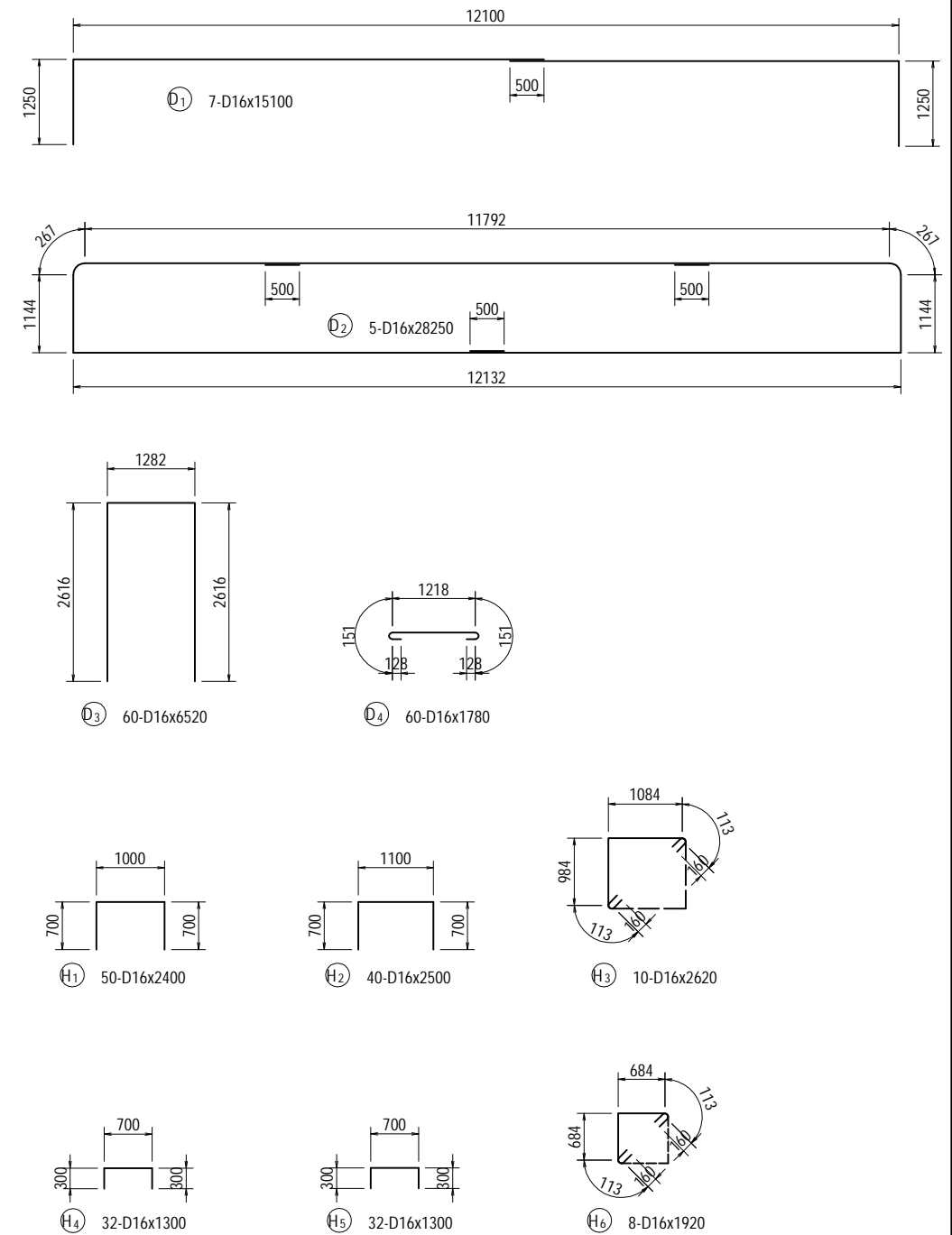
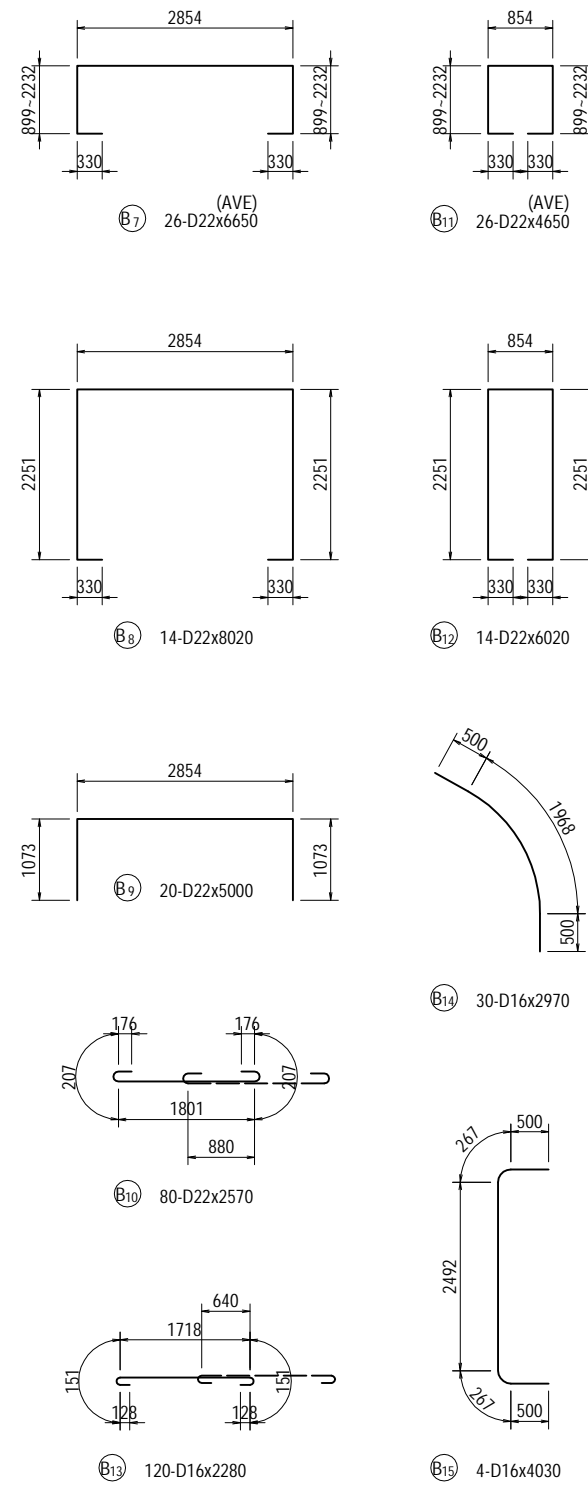
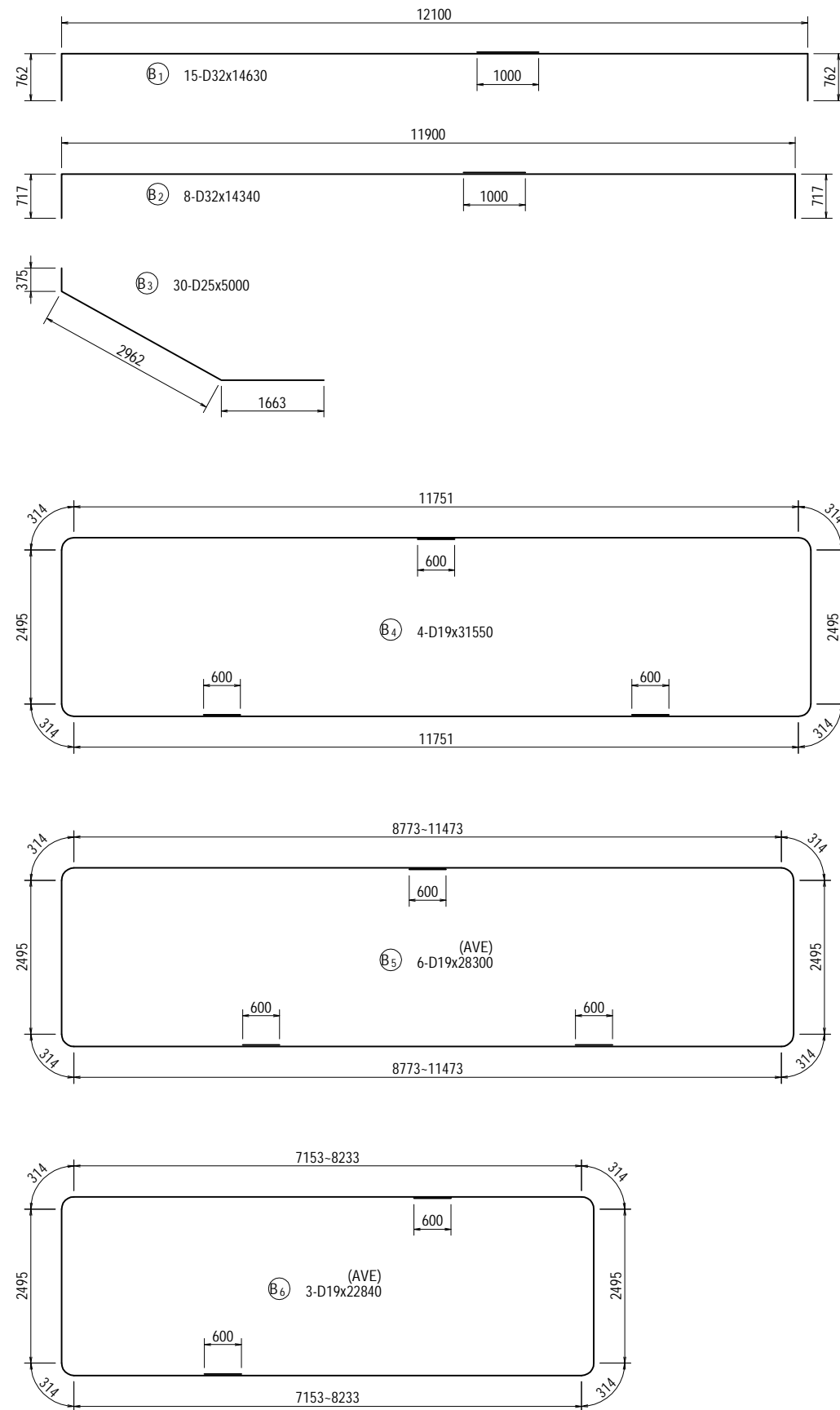
# BAR ARRANGEMENT OF PF14 PIER (2) S=1:100



NOTE : The D3 placed at the end of the pier cap should be bent at the time of construction.

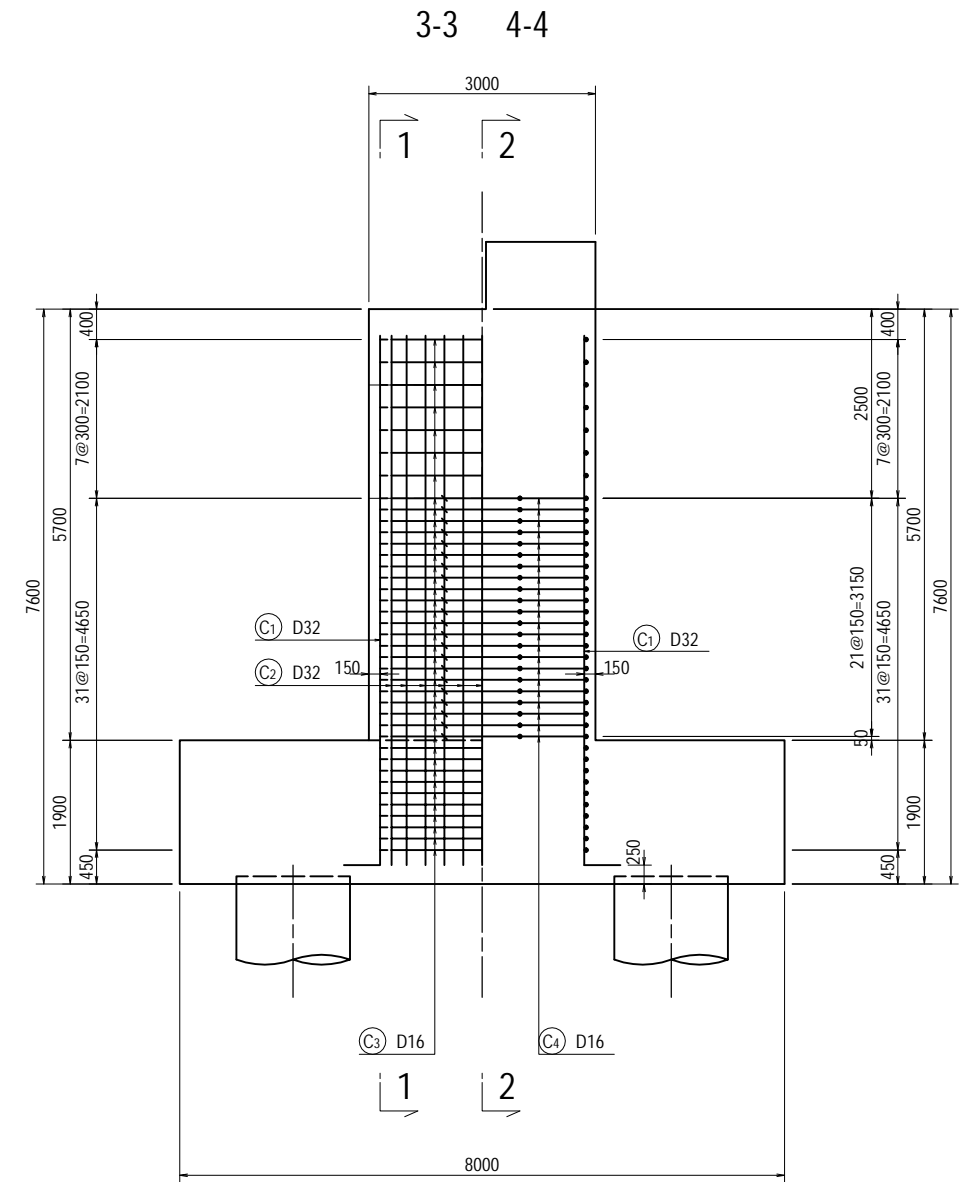
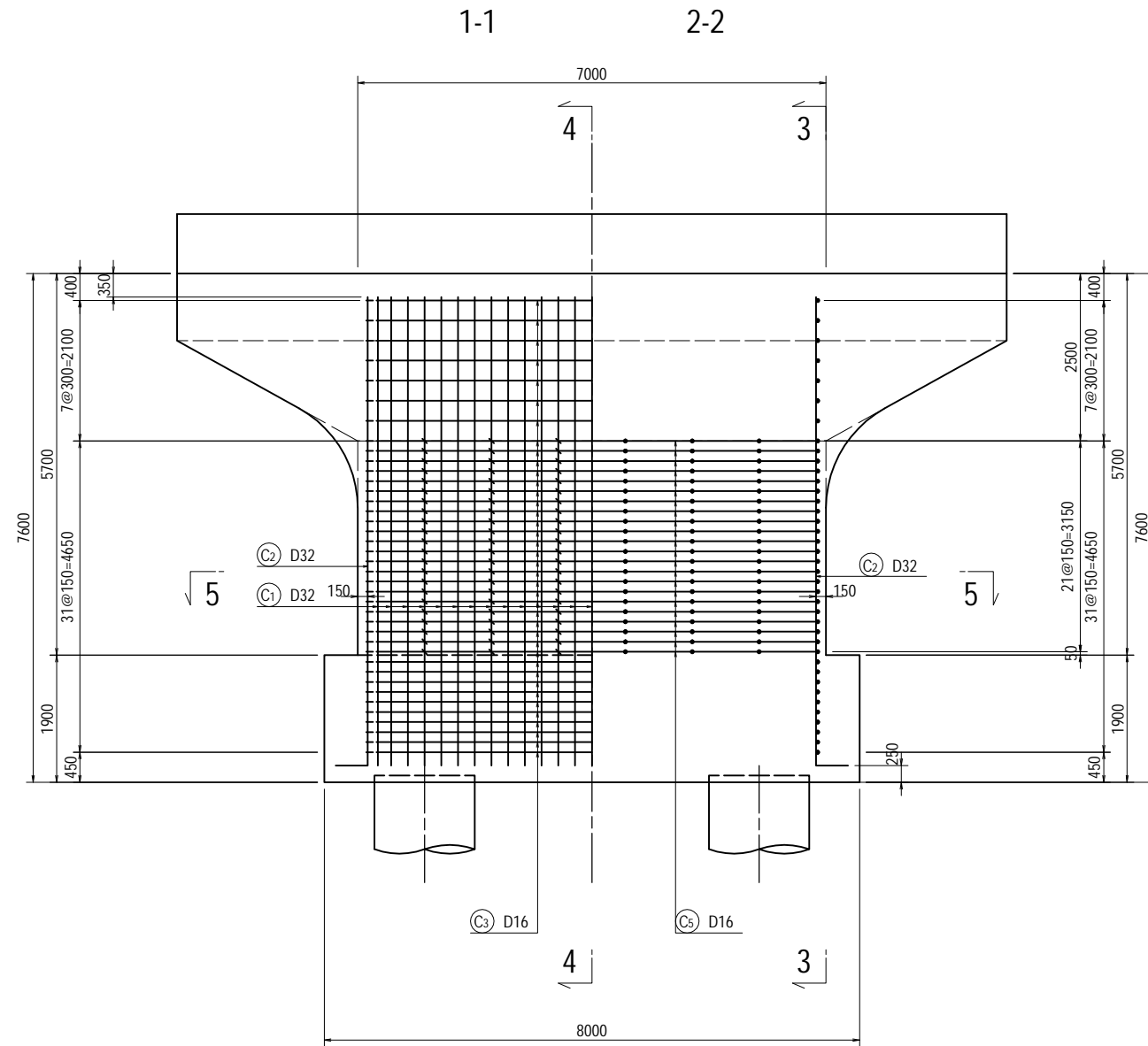
PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN 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: 10%;">NAME</th> <th style="width: 10%;">SIGNATURE</th> <th style="width: 10%;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY</td> <td>Y. SUZUKI</td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY</td> <td>T. HAYAKAWA</td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY</td> <td>Y. SANO</td> <td>25 Jul. 2017</td> </tr> </tbody> </table>	NAME	SIGNATURE	DATE	PREPARED BY	Y. SUZUKI	14 Jul. 2017	CHECKED BY	T. HAYAKAWA	20 Jul. 2017	APPROVED BY	Y. SANO	25 Jul. 2017	DRAWING TITLE <h2 style="text-align: center;">BAR ARRANGEMENT OF PF14 PIER (2)</h2>	PACKAGE 3 DWG No. P3-FO-2109
NAME	SIGNATURE	DATE																
PREPARED BY	Y. SUZUKI	14 Jul. 2017																
CHECKED BY	T. HAYAKAWA	20 Jul. 2017																
APPROVED BY	Y. SANO	25 Jul. 2017																

# BAR ARRANGEMENT OF PF14 PIER (3) S=1:100



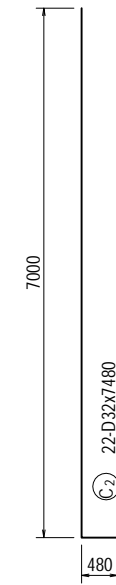
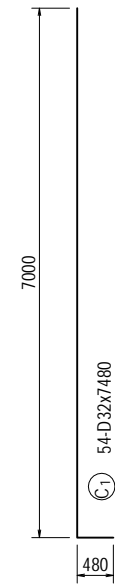
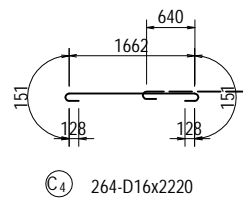
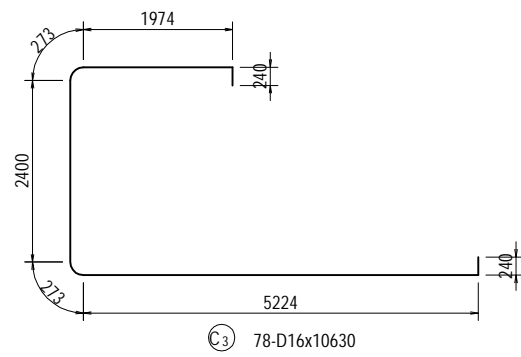
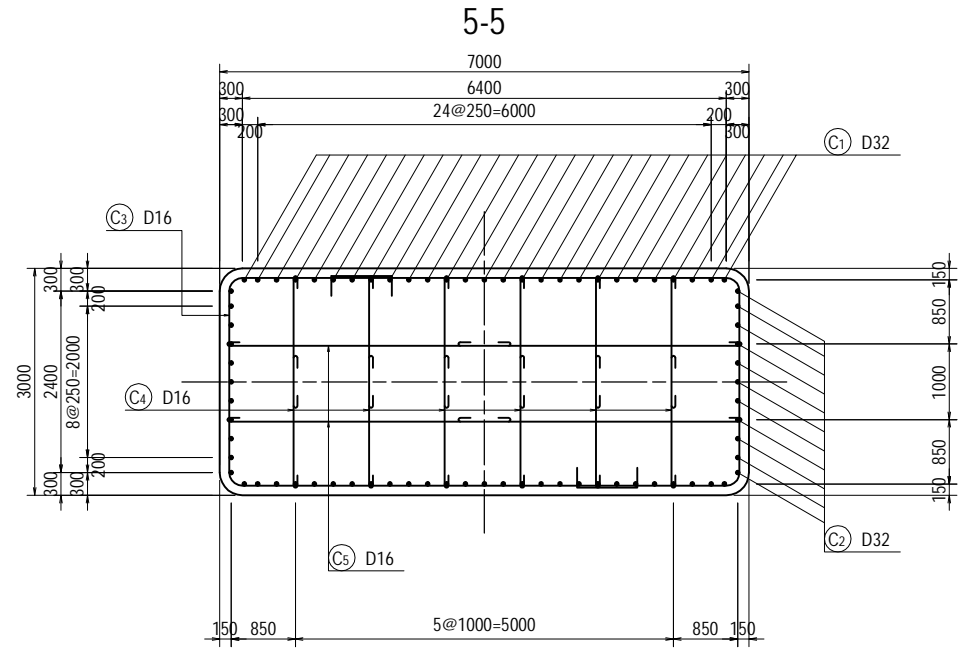
<small>PROJECT NAME</small> DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	<small>FINANCED BY</small> JAPAN INTERNATIONAL COOPERATION AGENCY	<small>COUNTERPART</small> REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	<small>JICA STUDY TEAM</small> NIPPON KOEI 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: 10%;">NAME</th> <th style="width: 10%;">SIGNATURE</th> <th style="width: 10%;">DATE</th> </tr> <tr> <td>PREPARED BY</td> <td>Y. SUZUKI</td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY</td> <td>T. HAYAKAWA</td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY</td> <td>Y. SANO</td> <td>25 Jul. 2017</td> </tr> </table>	NAME	SIGNATURE	DATE	PREPARED BY	Y. SUZUKI	14 Jul. 2017	CHECKED BY	T. HAYAKAWA	20 Jul. 2017	APPROVED BY	Y. SANO	25 Jul. 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;">BAR ARRANGEMENT OF PF14 PIER (3)</td> </tr> </table>	DRAWING TITLE	BAR ARRANGEMENT OF PF14 PIER (3)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 100%;">PACKAGE</th> </tr> <tr> <td style="text-align: center;">3</td> </tr> <tr> <td style="text-align: center;">DWG No.</td> </tr> <tr> <td style="text-align: center;">P3-FO-2110</td> </tr> </table>	PACKAGE	3	DWG No.	P3-FO-2110
NAME	SIGNATURE	DATE																						
PREPARED BY	Y. SUZUKI	14 Jul. 2017																						
CHECKED BY	T. HAYAKAWA	20 Jul. 2017																						
APPROVED BY	Y. SANO	25 Jul. 2017																						
DRAWING TITLE																								
BAR ARRANGEMENT OF PF14 PIER (3)																								
PACKAGE																								
3																								
DWG No.																								
P3-FO-2110																								

# BAR ARRANGEMENT OF PF14 PIER (4) S=1:100



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.	PREPARED BY Y. SUZUKI	<i>YS</i>	14 Jul. 2017	BAR ARRANGEMENT OF PF14 PIER (4)	3
				CHECKED BY T. HAYAKAWA	<i>Hayakawa</i>	20 Jul. 2017		DWG No.
				APPROVED BY Y. SANO	<i>Y. Sano</i>	25 Jul. 2017		P3-FO-2111

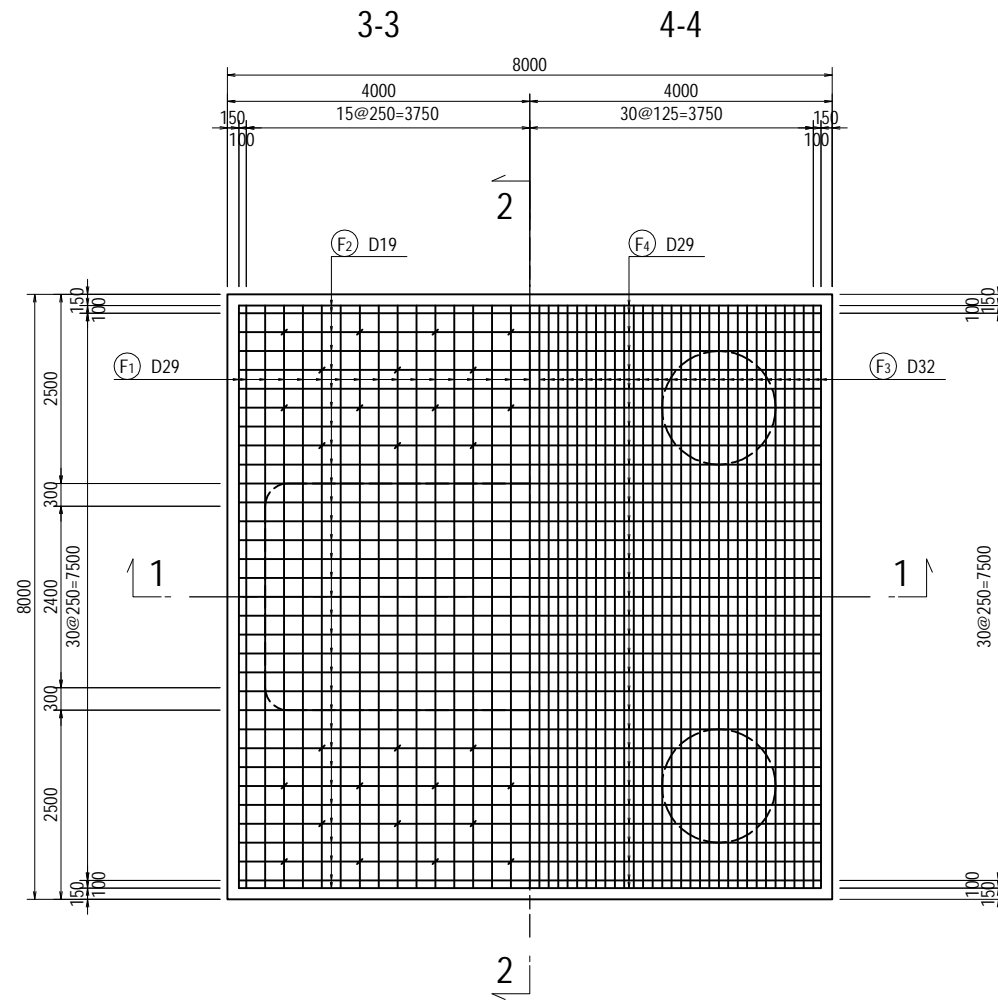
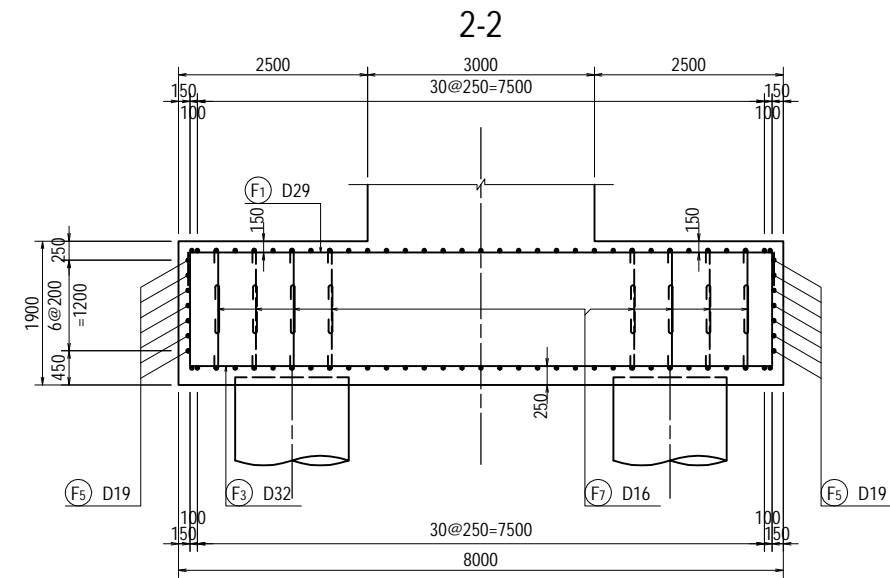
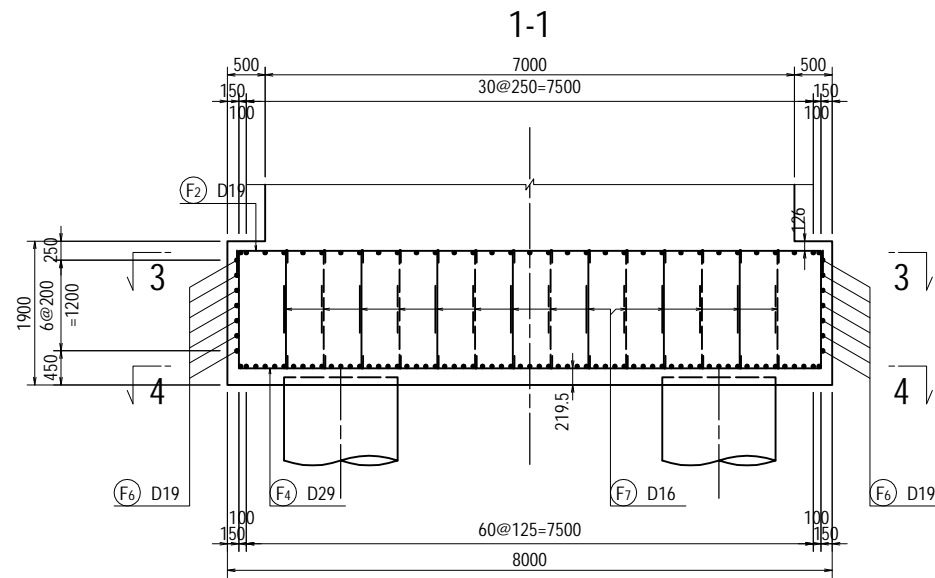
# BAR ARRANGEMENT OF PF14 PIER (5) S=1:100



<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%;">NAME</th> <th style="width: 15%;">SIGNATURE</th> <th style="width: 15%;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY Y. SUZUKI</td> <td></td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY T. HAYAKAWA</td> <td></td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY Y. SANO</td> <td></td> <td>25 Jul. 2017</td> </tr> </tbody> </table>	NAME	SIGNATURE	DATE	PREPARED BY Y. SUZUKI		14 Jul. 2017	CHECKED BY T. HAYAKAWA		20 Jul. 2017	APPROVED BY Y. SANO		25 Jul. 2017	<small>DRAWING TITLE</small> <b>BAR ARRANGEMENT OF PF14 PIER (5)</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 100%;">PACKAGE</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">3</td> </tr> <tr> <td style="text-align: center;">DWG No.</td> </tr> <tr> <td style="text-align: center;">P3-FO-2112</td> </tr> </tbody> </table>	PACKAGE	3	DWG No.	P3-FO-2112
NAME	SIGNATURE	DATE																					
PREPARED BY Y. SUZUKI		14 Jul. 2017																					
CHECKED BY T. HAYAKAWA		20 Jul. 2017																					
APPROVED BY Y. SANO		25 Jul. 2017																					
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P3-FO-2112																							

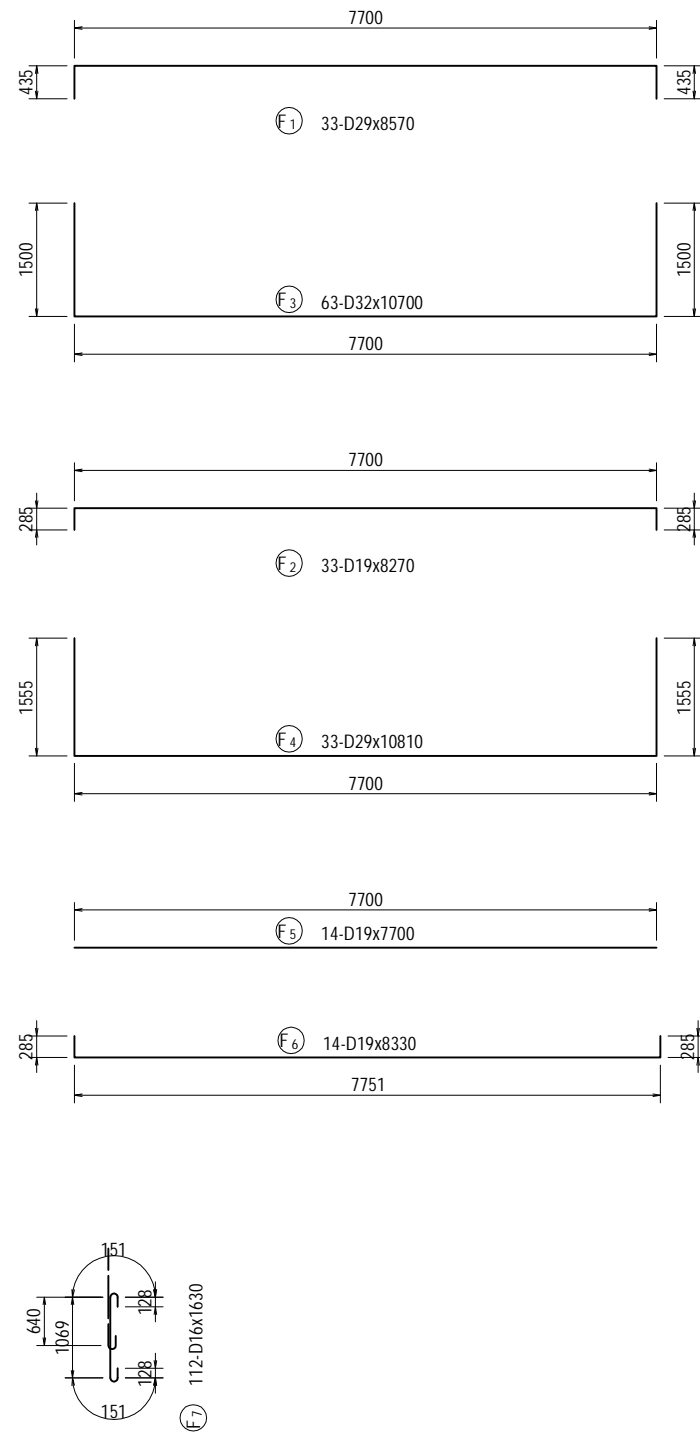


# BAR ARRANGEMENT OF PF14 PIER (6) S=1:100



<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%;">NAME</th> <th style="width: 15%;">SIGNATURE</th> <th style="width: 15%;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY Y. SUZUKI</td> <td></td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY T. HAYAKAWA</td> <td></td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY Y. SANO</td> <td></td> <td>25 Jul. 2017</td> </tr> </tbody> </table>	NAME	SIGNATURE	DATE	PREPARED BY Y. SUZUKI		14 Jul. 2017	CHECKED BY T. HAYAKAWA		20 Jul. 2017	APPROVED BY Y. SANO		25 Jul. 2017	<small>DRAWING TITLE</small> <b>BAR ARRANGEMENT OF PF14 PIER (6)</b>	<small>PACKAGE</small> 3 <small>DWG No.</small> P3-FO-2113
NAME	SIGNATURE	DATE																	
PREPARED BY Y. SUZUKI		14 Jul. 2017																	
CHECKED BY T. HAYAKAWA		20 Jul. 2017																	
APPROVED BY Y. SANO		25 Jul. 2017																	

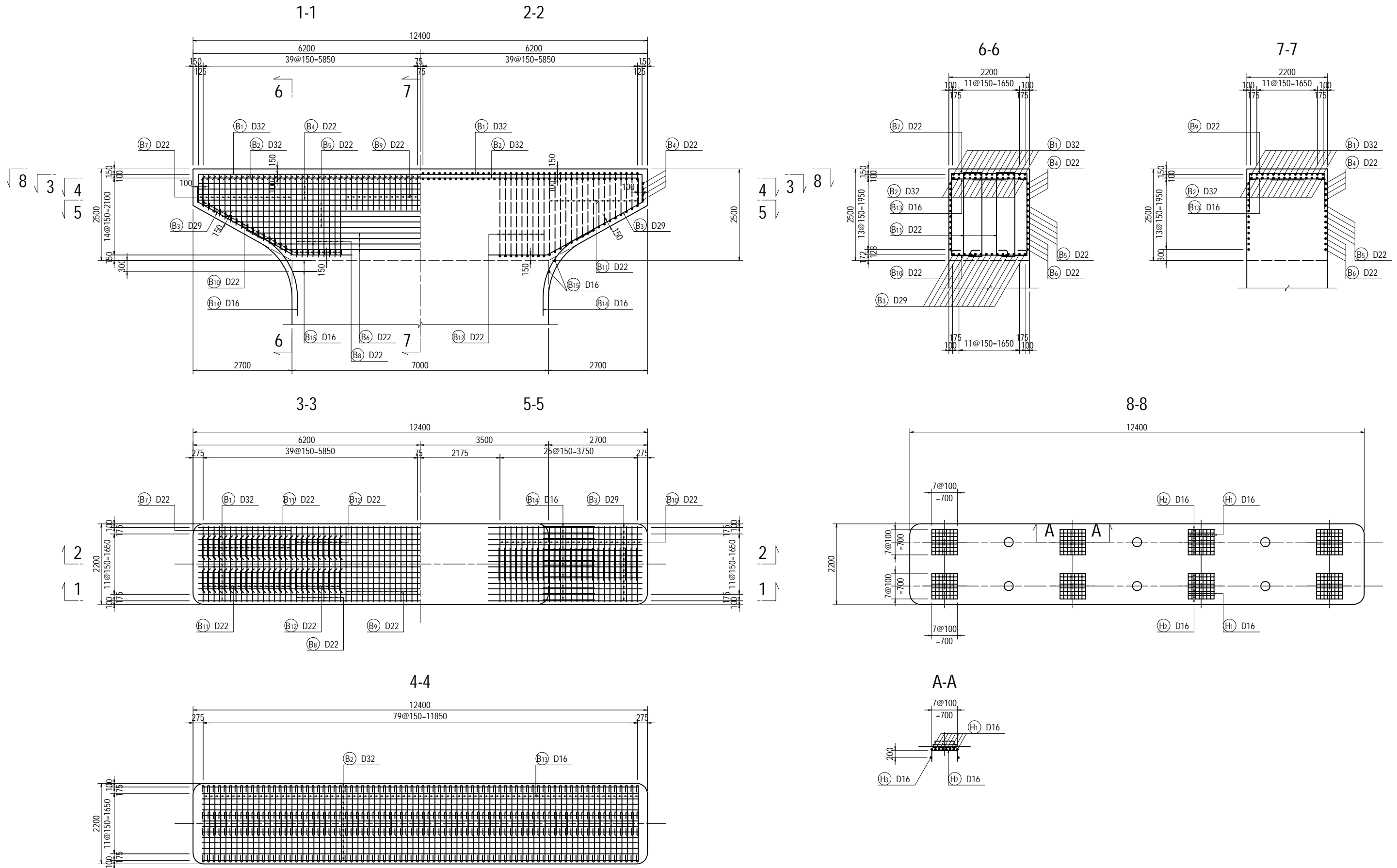
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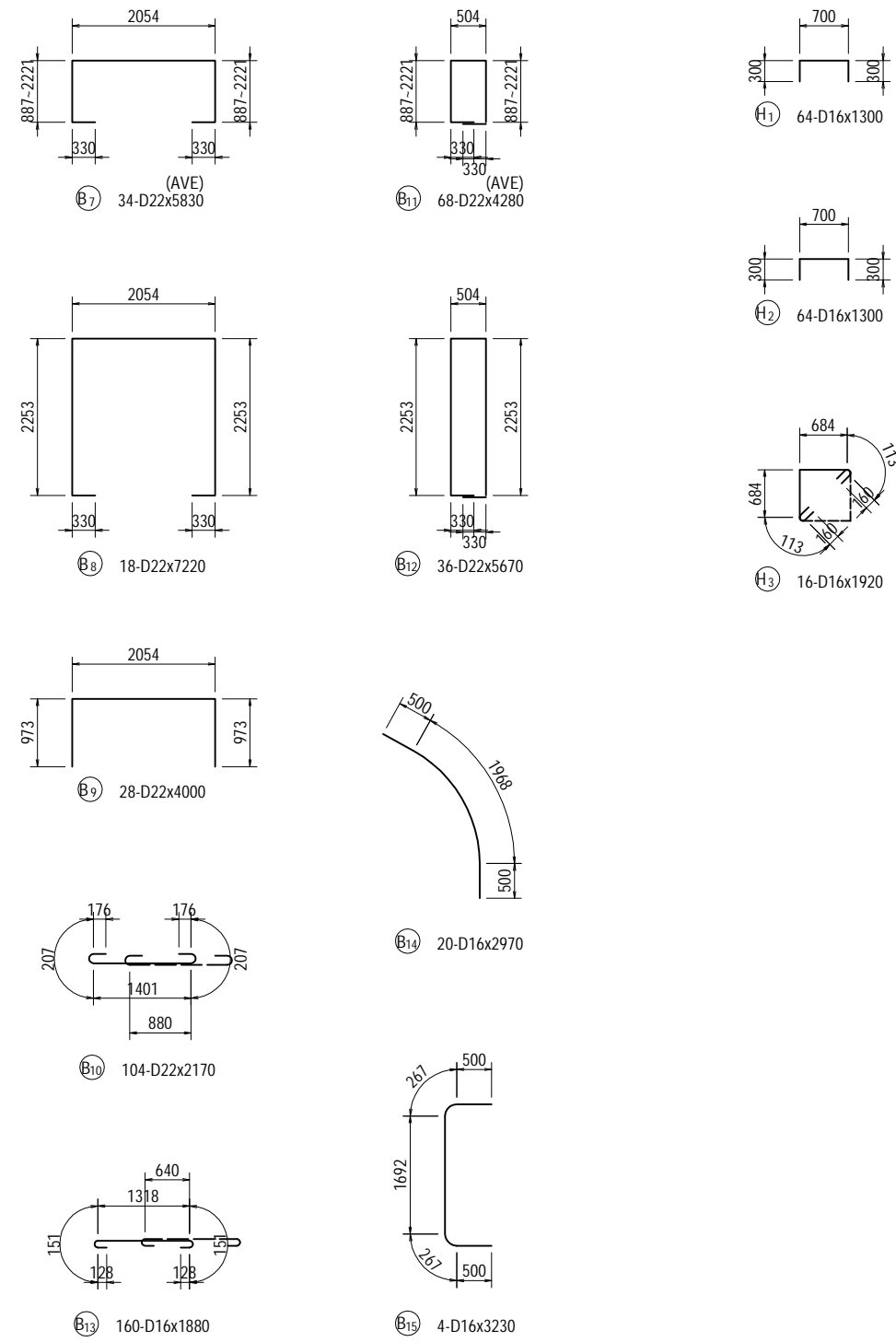
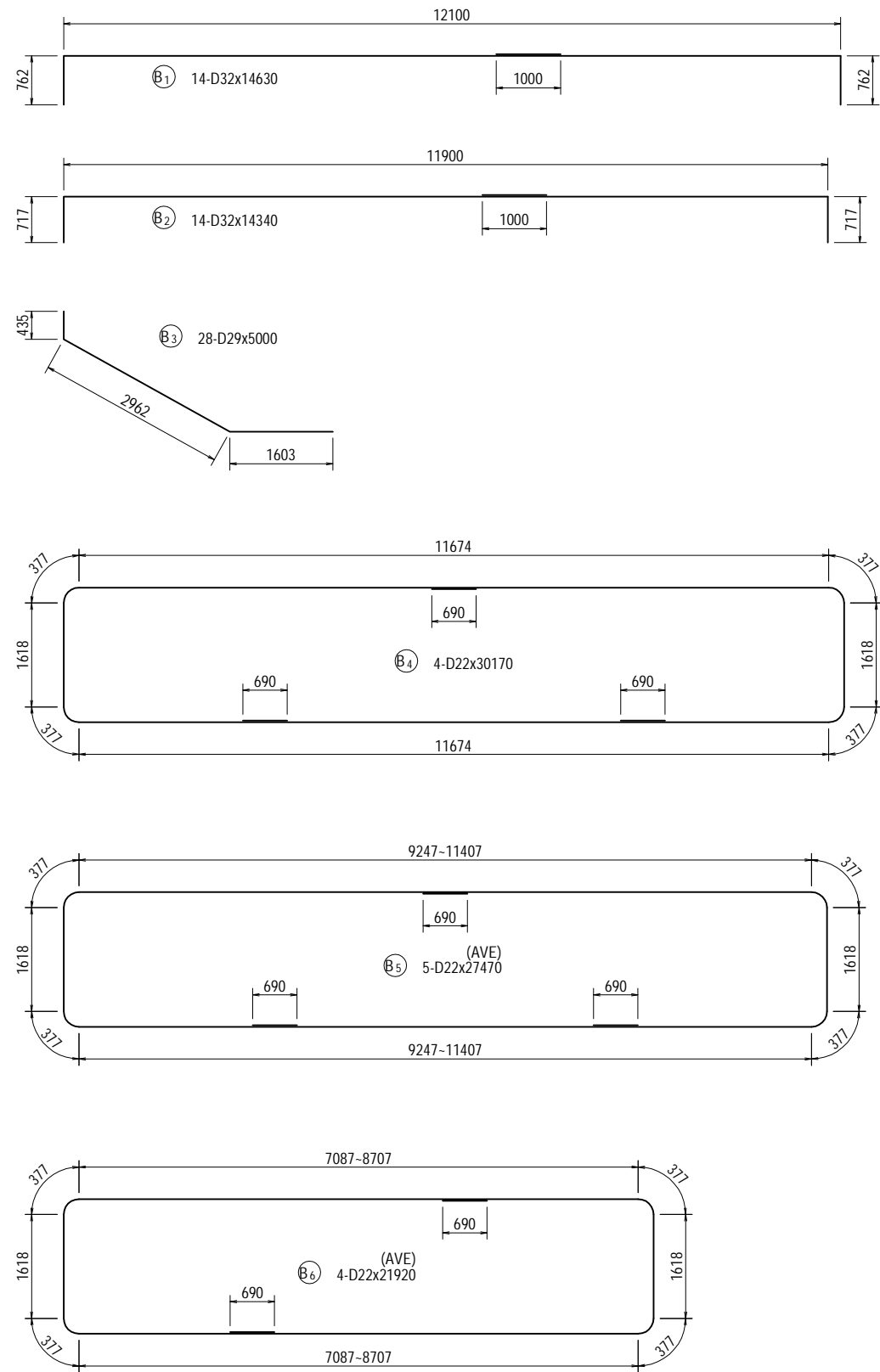
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B 2	D32	14340	8	6.23	89.34	715	
B 3	D25	5000	30	3.98	19.90	597	
B 4	D19	31550	4	2.25	70.99	284	
B 5	D19	28300	6	2.25	63.68	382	AVERAGE
B 6	D19	22840	3	2.25	51.39	154	AVERAGE
B 7	D22	6650	26	3.04	20.22	526	AVERAGE
B 8	D22	8020	14	3.04	24.38	341	
B 9	D22	5000	20	3.04	15.20	304	
B 10	D22	2570	80	3.04	7.81	625	
B 11	D22	4650	26	3.04	14.14	368	AVERAGE
B 12	D22	6020	14	3.04	18.30	256	
B 13	D16	2280	120	1.56	3.56	427	
B 14	D16	2970	30	1.56	4.63	139	
B 15	D16	4030	4	1.56	6.29	25	
						6510	
D 1	D16	15100	7	1.56	23.56	165	
D 2	D16	28250	5	1.56	44.07	220	
D 3	D16	6520	60	1.56	10.17	610	
D 4	D16	1780	60	1.56	2.78	167	
						1162	
H 1	D16	2400	50	1.56	3.74	187	
H 2	D16	2500	40	1.56	3.90	156	
H 3	D16	2620	10	1.56	4.09	41	
H 4	D16	1300	32	1.56	2.03	65	
H 5	D16	1300	32	1.56	2.03	65	
H 6	D16	1920	8	1.56	3.00	24	
						538	
C 1	D32	7480	54	6.23	46.60	2516	
C 2	D32	7480	22	6.23	46.60	1025	
C 3	D16	10630	78	1.56	16.58	1293	
C 4	D16	2220	264	1.56	3.46	913	
C 5	D16	4220	88	1.56	6.58	579	
						6326	
F 1	D29	8570	33	5.04	43.19	1425	
F 2	D19	8270	33	2.25	18.61	614	
F 3	D32	10700	63	6.23	66.66	4200	
F 4	D29	10810	33	5.04	54.48	1798	
F 5	D19	7700	14	2.25	17.33	243	
F 6	D19	8330	14	2.25	18.74	262	
F 7	D16	1630	112	1.56	2.54	284	
						8826	
						D32	9823
						D29	3223
						D25	597
						D22	2420
						D19	1939
						D16	5360
						TOTAL	23362

# BAR ARRANGEMENT OF PF15 PIER (1) S=1:100



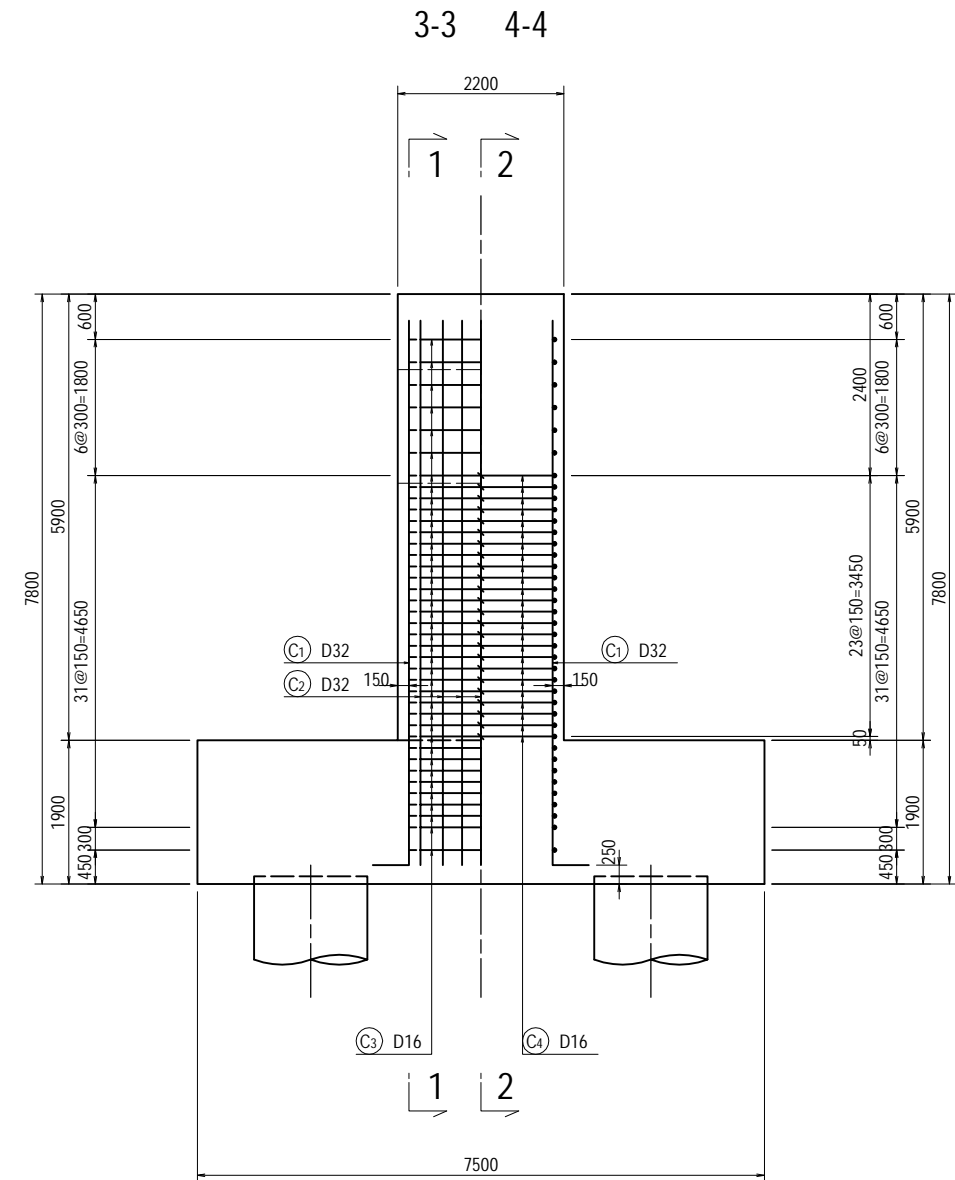
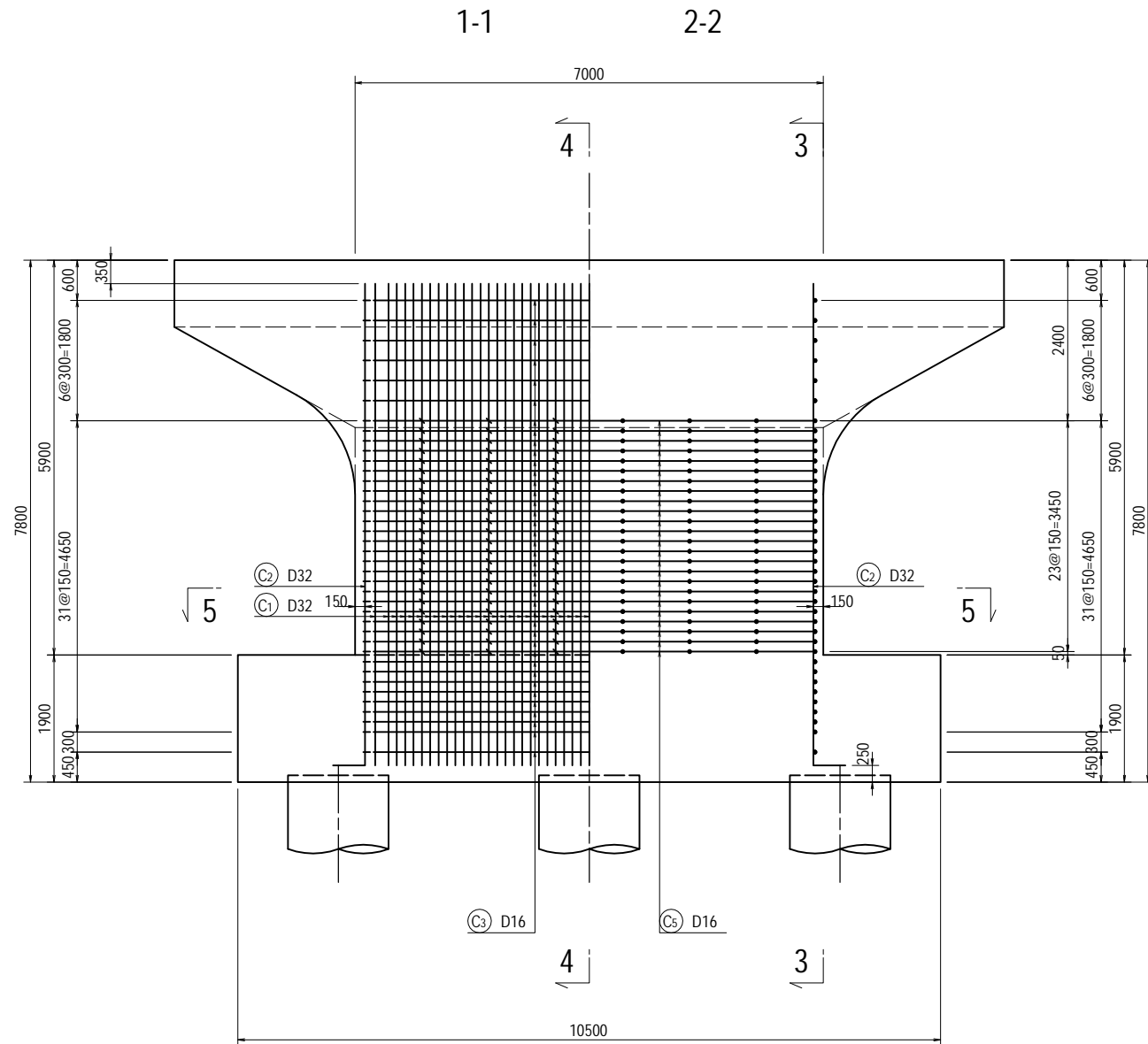
<small>PROJECT NAME</small> DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	<small>FINANCED BY</small> JAPAN INTERNATIONAL COOPERATION AGENCY	<small>COUNTERPART</small> REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	<small>JICA STUDY TEAM</small> NIPPON KOEI 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>Y. SUZUKI</td> <td></td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY</td> <td>T. HAYAKAWA</td> <td></td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY</td> <td>Y. SANO</td> <td></td> <td>25 Jul. 2017</td> </tr> </tbody> </table>		NAME	SIGNATURE	DATE	PREPARED BY	Y. SUZUKI		14 Jul. 2017	CHECKED BY	T. HAYAKAWA		20 Jul. 2017	APPROVED BY	Y. SANO		25 Jul. 2017	<small>DRAWING TITLE</small> <b>BAR ARRANGEMENT OF PF15 PIER (1)</b>	<small>PACKAGE</small> 3 <small>DWG No.</small> P3-FO-2115
	NAME	SIGNATURE	DATE																			
PREPARED BY	Y. SUZUKI		14 Jul. 2017																			
CHECKED BY	T. HAYAKAWA		20 Jul. 2017																			
APPROVED BY	Y. SANO		25 Jul. 2017																			

# BAR ARRANGEMENT OF PF15 PIER (2) S=1:100



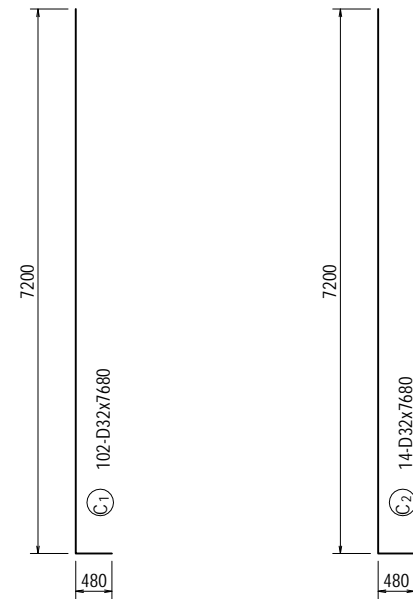
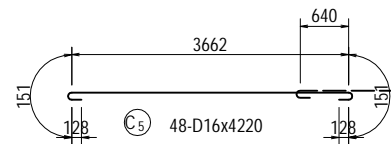
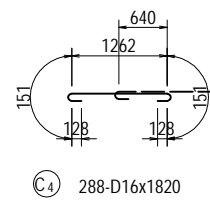
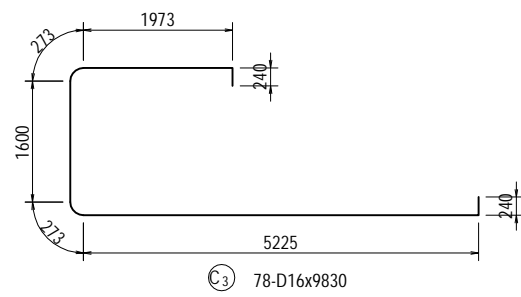
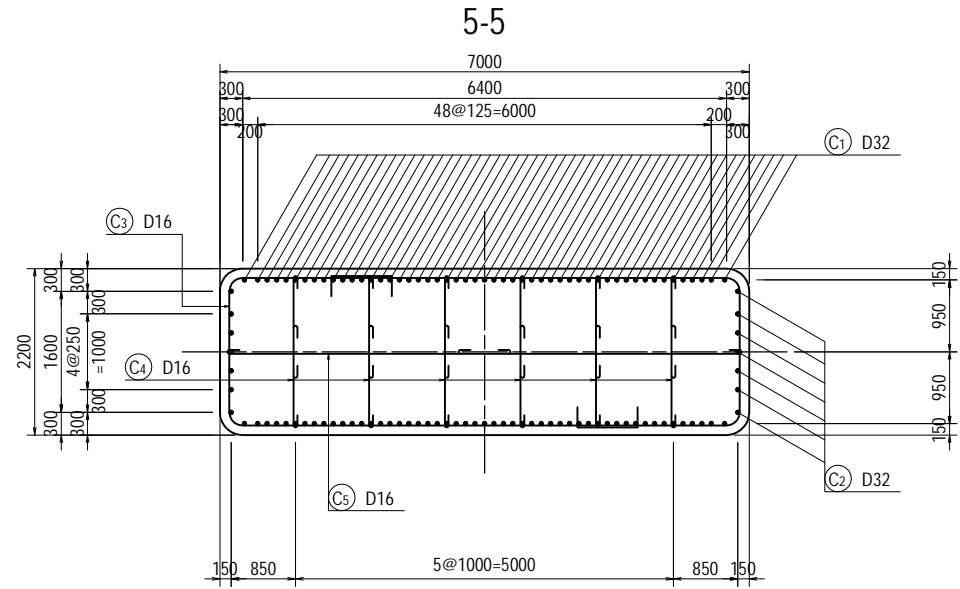
<small>PROJECT NAME</small> DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	<small>FINANCED BY</small> JAPAN INTERNATIONAL COOPERATION AGENCY	<small>COUNTERPART</small> REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	<small>JICA STUDY TEAM</small> NIPPON KOEI 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: 20%;">NAME</th> <th style="width: 20%;">SIGNATURE</th> <th style="width: 20%;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY Y. SUZUKI</td> <td></td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY T. HAYAKAWA</td> <td></td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY Y. SANO</td> <td></td> <td>25 Jul. 2017</td> </tr> </tbody> </table>	NAME	SIGNATURE	DATE	PREPARED BY Y. SUZUKI		14 Jul. 2017	CHECKED BY T. HAYAKAWA		20 Jul. 2017	APPROVED BY Y. SANO		25 Jul. 2017	<small>DRAWING TITLE</small> <b>BAR ARRANGEMENT OF PF15 PIER (2)</b>	<small>PACKAGE</small> 3 <small>DWG No.</small> P3-FO-2116
NAME	SIGNATURE	DATE																	
PREPARED BY Y. SUZUKI		14 Jul. 2017																	
CHECKED BY T. HAYAKAWA		20 Jul. 2017																	
APPROVED BY Y. SANO		25 Jul. 2017																	

# BAR ARRANGEMENT OF PF15 PIER (3) S=1:100



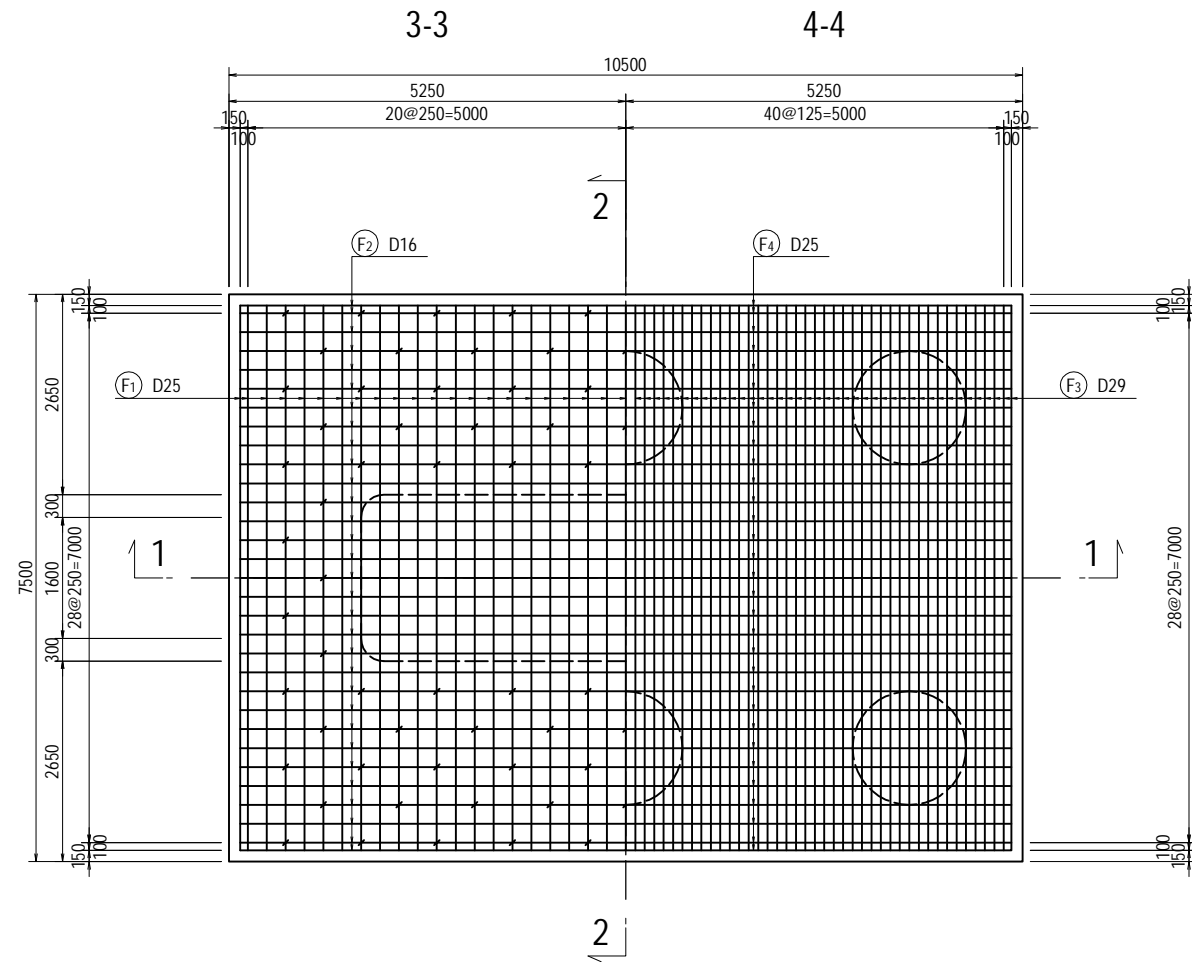
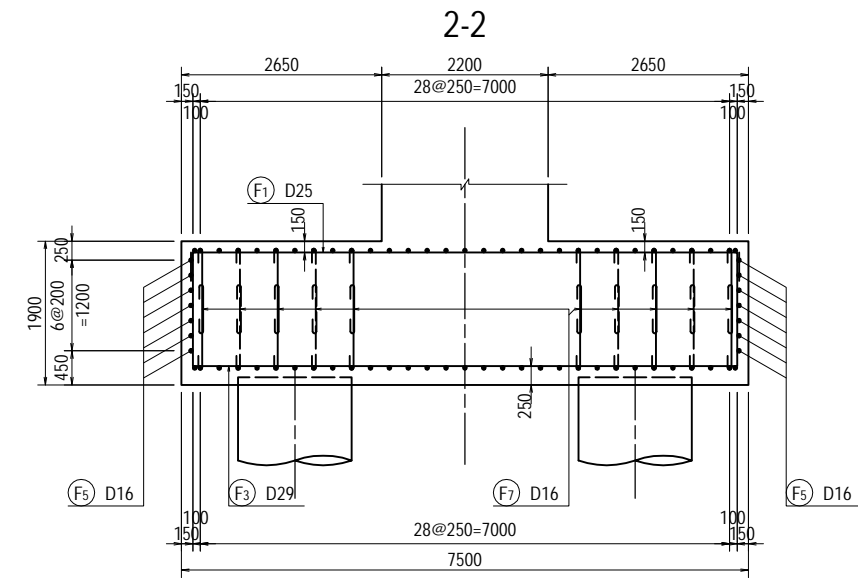
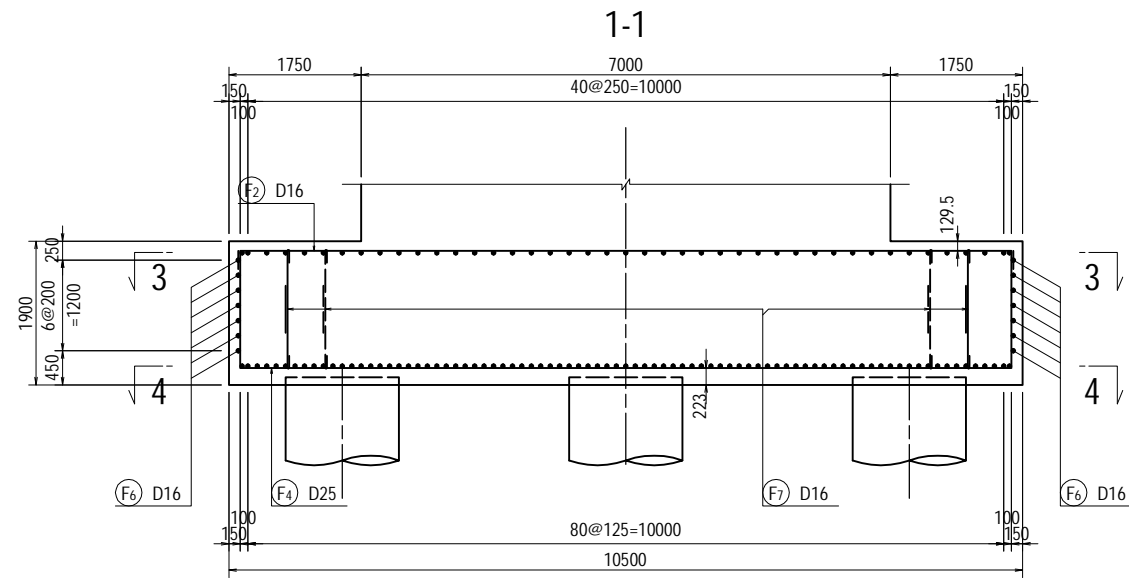
<small>PROJECT NAME</small> DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	<small>FINANCED BY</small> JAPAN INTERNATIONAL COOPERATION AGENCY	<small>COUNTERPART</small> REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	<small>JICA STUDY TEAM</small> NIPPON KOEI 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%;">NAME</th> <th style="width: 10%;">SIGNATURE</th> <th style="width: 10%;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY</td> <td>Y. SUZUKI</td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY</td> <td>T. HAYAKAWA</td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY</td> <td>Y. SANO</td> <td>25 Jul. 2017</td> </tr> </tbody> </table>	NAME	SIGNATURE	DATE	PREPARED BY	Y. SUZUKI	14 Jul. 2017	CHECKED BY	T. HAYAKAWA	20 Jul. 2017	APPROVED BY	Y. SANO	25 Jul. 2017	<small>DRAWING TITLE</small> <b>BAR ARRANGEMENT OF PF15 PIER (3)</b>	<small>PACKAGE</small> 3 DWG No. P3-FO-2117
NAME	SIGNATURE	DATE																
PREPARED BY	Y. SUZUKI	14 Jul. 2017																
CHECKED BY	T. HAYAKAWA	20 Jul. 2017																
APPROVED BY	Y. SANO	25 Jul. 2017																

# BAR ARRANGEMENT OF PF15 PIER (4) S=1:100



<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%;">NAME</th> <th style="width: 15%;">SIGNATURE</th> <th style="width: 15%;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY Y. SUZUKI</td> <td></td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY T. HAYAKAWA</td> <td></td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY Y. SANO</td> <td></td> <td>25 Jul. 2017</td> </tr> </tbody> </table>	NAME	SIGNATURE	DATE	PREPARED BY Y. SUZUKI		14 Jul. 2017	CHECKED BY T. HAYAKAWA		20 Jul. 2017	APPROVED BY Y. SANO		25 Jul. 2017	<small>DRAWING TITLE</small> <b>BAR ARRANGEMENT OF PF15 PIER (4)</b>	<small>PACKAGE</small> 3 <small>DWG No.</small> P3-FO-2118
NAME	SIGNATURE	DATE																	
PREPARED BY Y. SUZUKI		14 Jul. 2017																	
CHECKED BY T. HAYAKAWA		20 Jul. 2017																	
APPROVED BY Y. SANO		25 Jul. 2017																	

# BAR ARRANGEMENT OF PF15 PIER (5) S=1:100



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

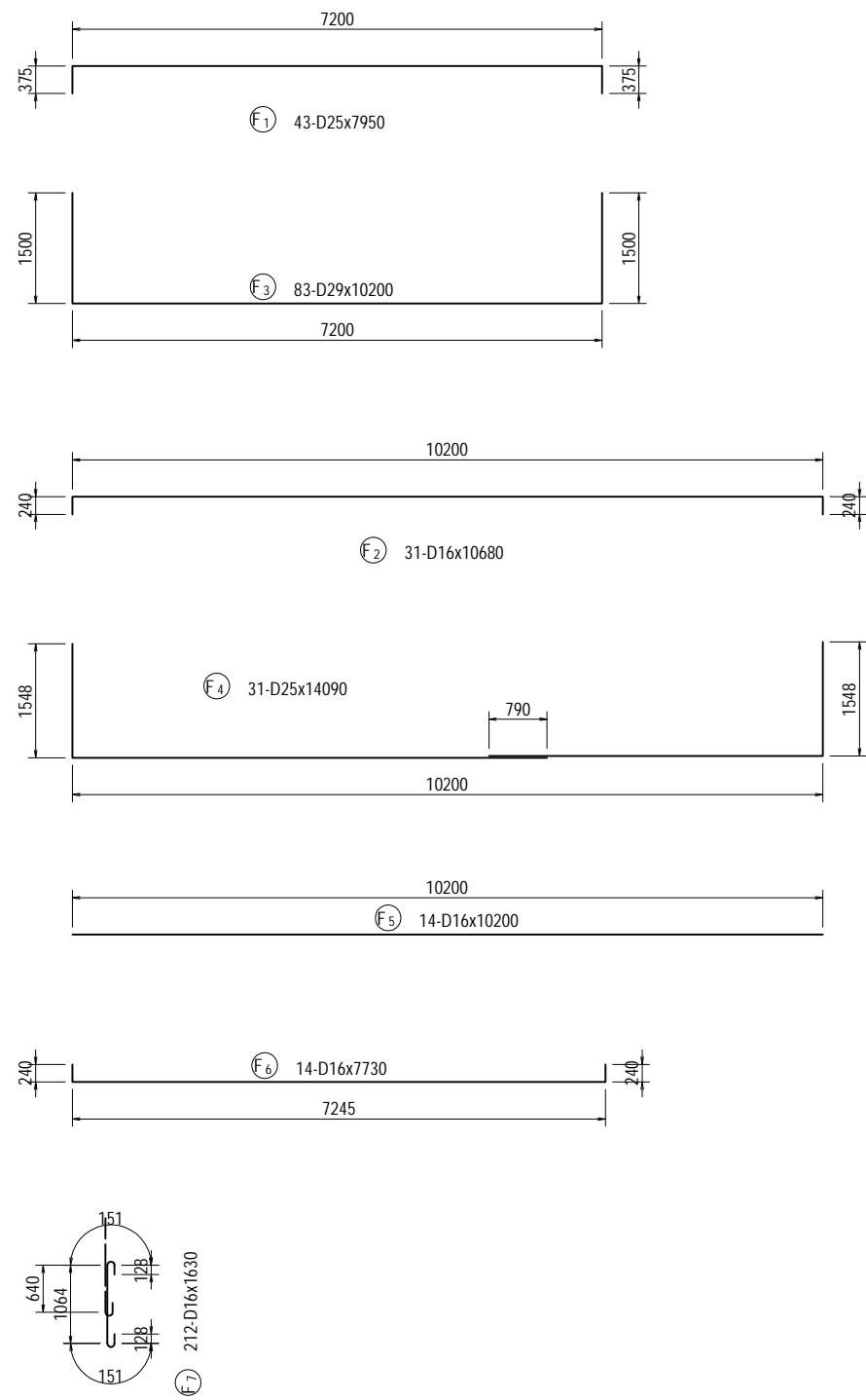
JICA STUDY TEAM  
 NIPPON KOEI CO., LTD.  
 ORIENTAL CONSULTANTS GLOBAL CO., LTD.  
 METROPOLITAN EXPRESSWAY COMPANY LIMITED  
 CHODAI CO., LTD.  
 NIPPON ENGINEERING CONSULTANTS CO., LTD.

	NAME	SIGNATURE	DATE
PREPARED BY	Y. SUZUKI	<i>YS</i>	14 Jul. 2017
CHECKED BY	T. HAYAKAWA	<i>Hayakawa</i>	20 Jul. 2017
APPROVED BY	Y. SANO	<i>Y. Sano</i>	25 Jul. 2017

DRAWING TITLE  
**BAR ARRANGEMENT OF PF15 PIER (5)**

PACKAGE  
 3  
 DWG No.  
 P3-FO-2119

# BAR ARRANGEMENT OF PF15 PIER (6) S=1:100



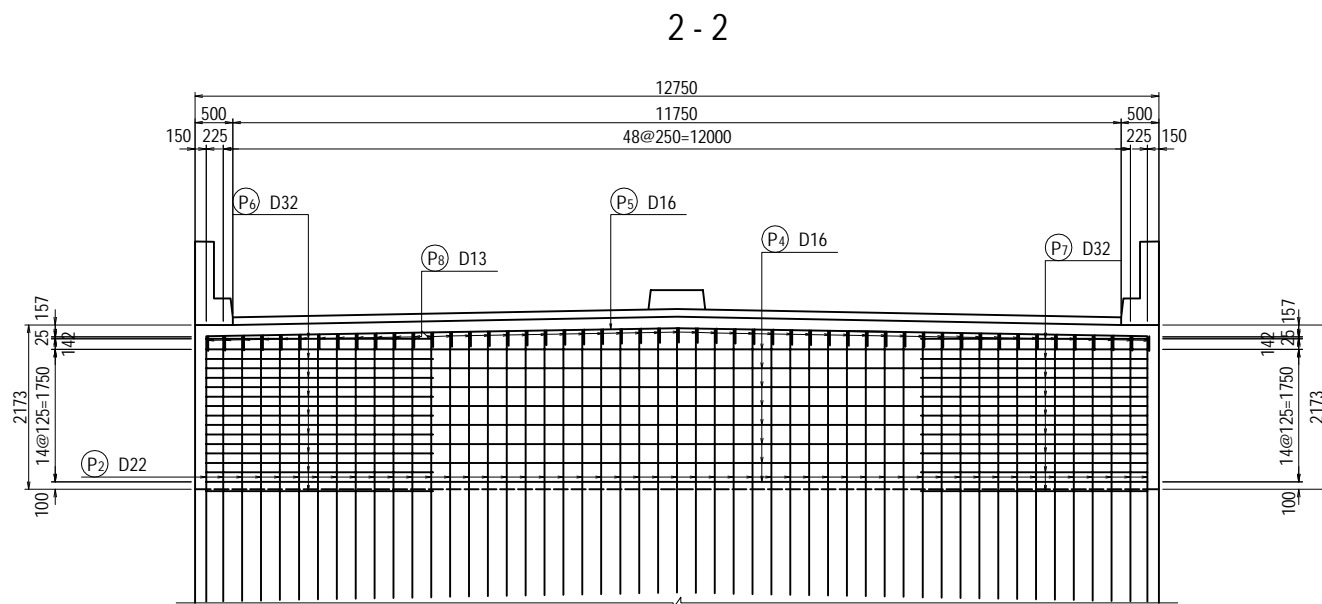
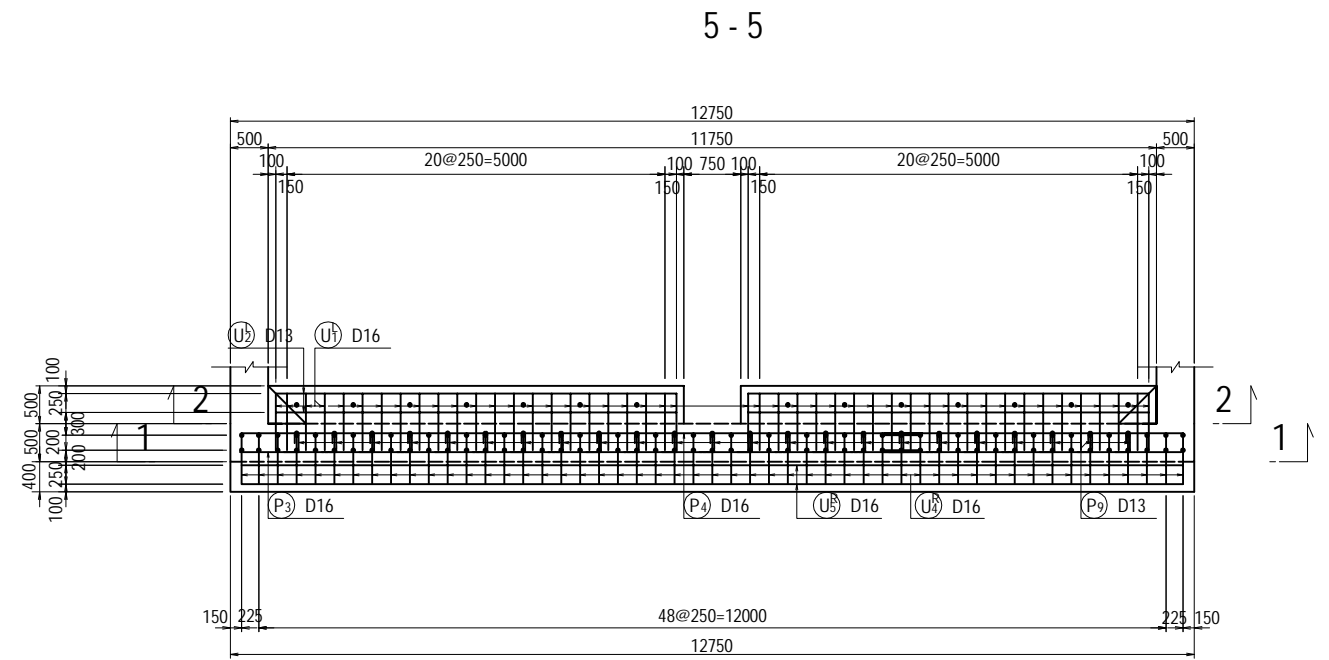
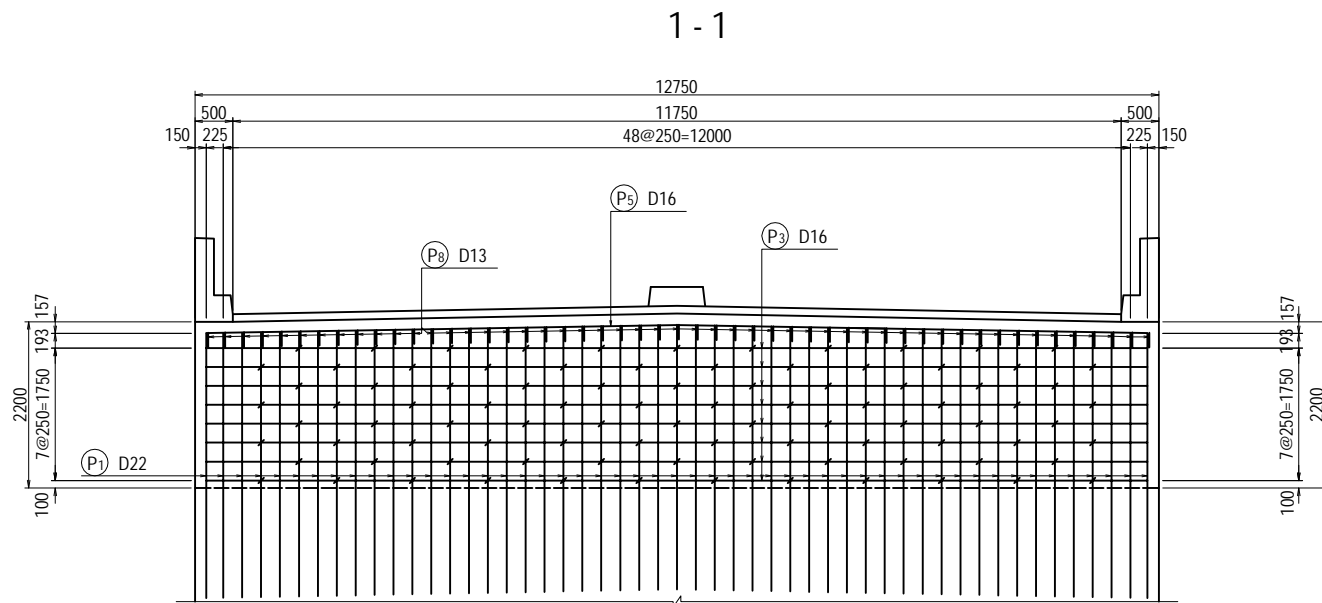
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B 2	D32	14340	14	6.23	89.34	1251	
B 3	D29	5000	28	5.04	25.20	706	
B 4	D22	30170	4	3.04	91.72	367	
B 5	D22	27470	5	3.04	83.51	418	AVERAGE
B 6	D22	21920	4	3.04	66.64	267	AVERAGE
B 7	D22	5830	34	3.04	17.72	602	AVERAGE
B 8	D22	7220	18	3.04	21.95	395	
B 9	D22	4000	28	3.04	12.16	340	
B 10	D22	2170	104	3.04	6.60	686	
B 11	D22	4280	68	3.04	13.01	885	AVERAGE
B 12	D22	5670	36	3.04	17.24	621	
B 13	D16	1880	160	1.56	2.93	469	
B 14	D16	2970	20	1.56	4.63	93	
B 15	D16	3230	4	1.56	5.04	20	
						8396	
H 1	D16	1300	64	1.56	2.03	130	
H 2	D16	1300	64	1.56	2.03	130	
H 3	D16	1920	16	1.56	3.00	48	
						308	
C 1	D32	7680	102	6.23	47.85	4881	
C 2	D32	7680	14	6.23	47.85	670	
C 3	D16	9830	78	1.56	15.33	1196	
C 4	D16	1820	288	1.56	2.84	818	
C 5	D16	4220	48	1.56	6.58	316	
						7881	
F 1	D25	7950	43	3.98	31.64	1361	
F 2	D16	10680	31	1.56	16.66	516	
F 3	D29	10200	83	5.04	51.41	4267	
F 4	D25	14090	31	3.98	56.08	1738	
F 5	D16	10200	14	1.56	15.91	223	
F 6	D16	7730	14	1.56	12.06	169	
F 7	D16	1630	212	1.56	2.54	538	
						8812	
					D32	8078	
					D29	4973	
					D25	3099	
					D22	4581	
					D16	4666	
					TOTAL	25397	



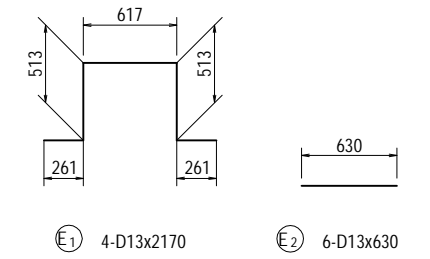
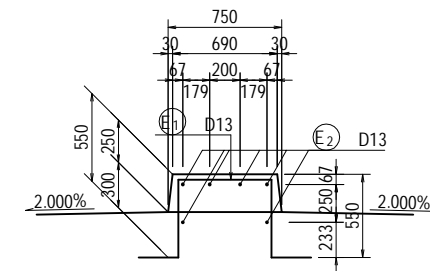
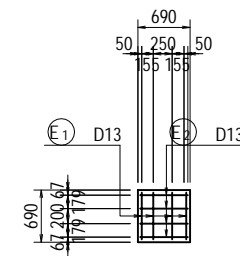
# BAR ARRANGEMENT OF AF2 ABUTMENT (1)

S=1:100



CROSS SECTION S=1:50

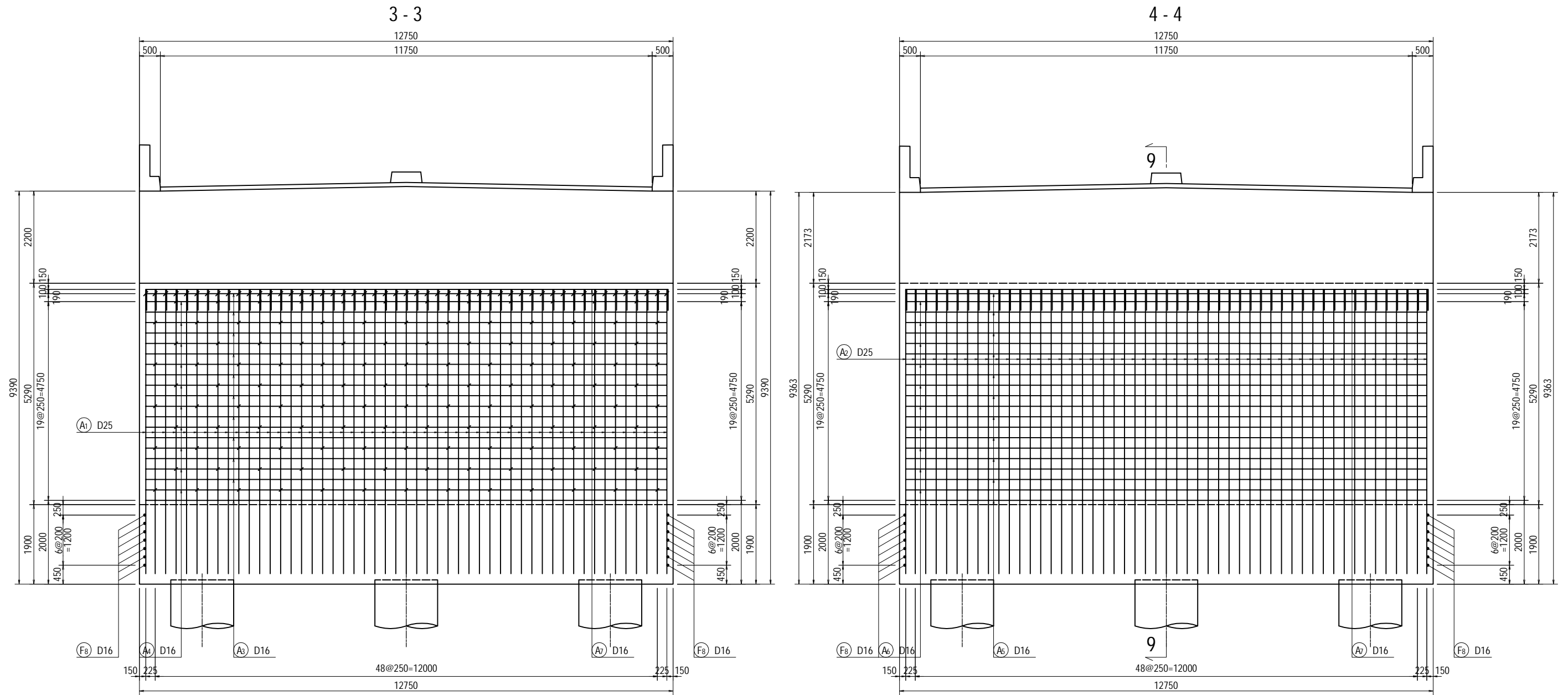
PLAN S=1:100



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 AF2 ABUTMENT (1)	PACKAGE 3 DWG No. P3-FO-2121	
				PREPARED BY	Y. SUZUKI				14 Jul. 2017
				CHECKED BY	T. HAYAKAWA				20 Jul. 2017
				APPROVED BY	Y. SANO				25 Jul. 2017

# BAR ARRANGEMENT OF AF2 ABUTMENT (2)

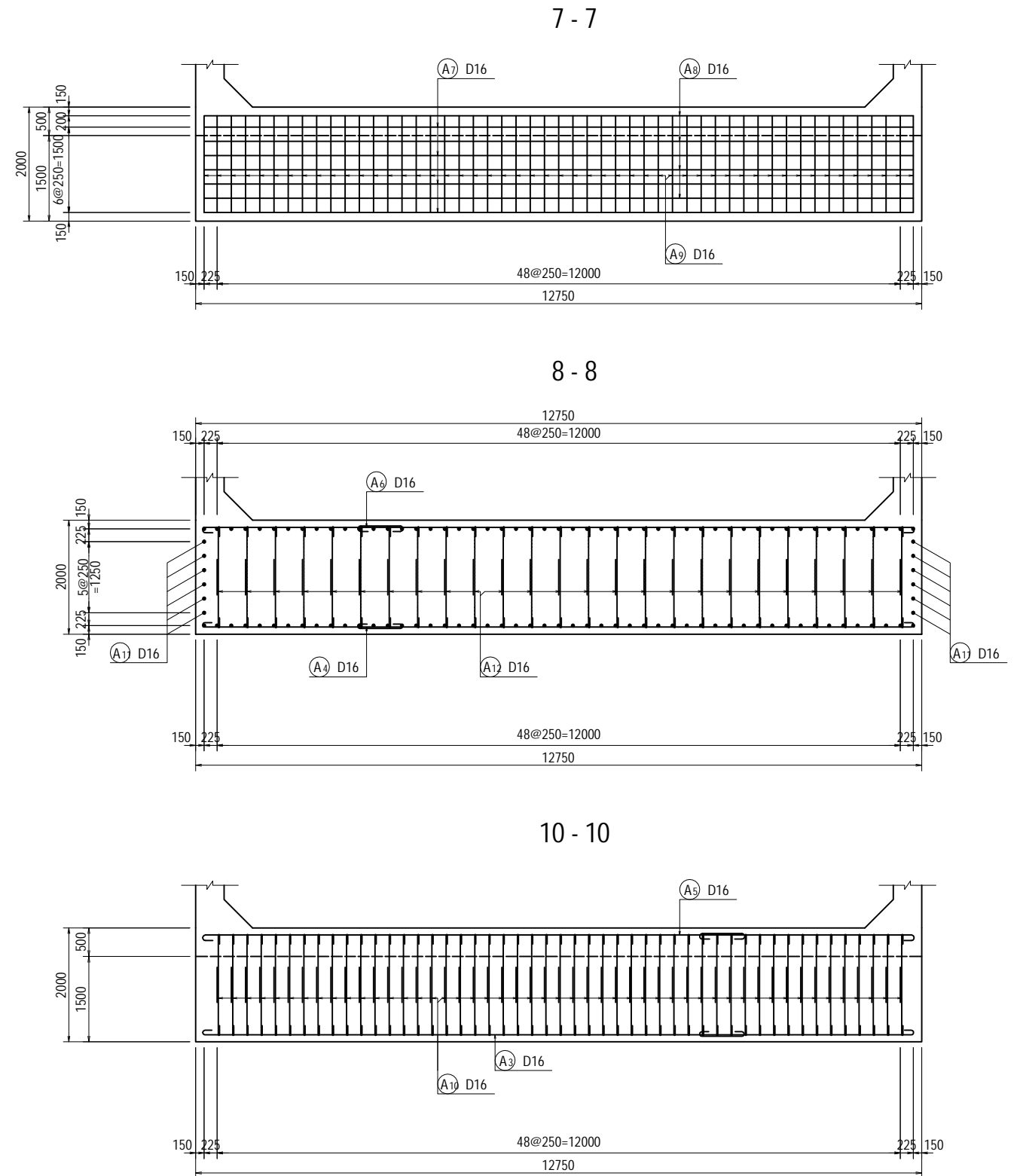
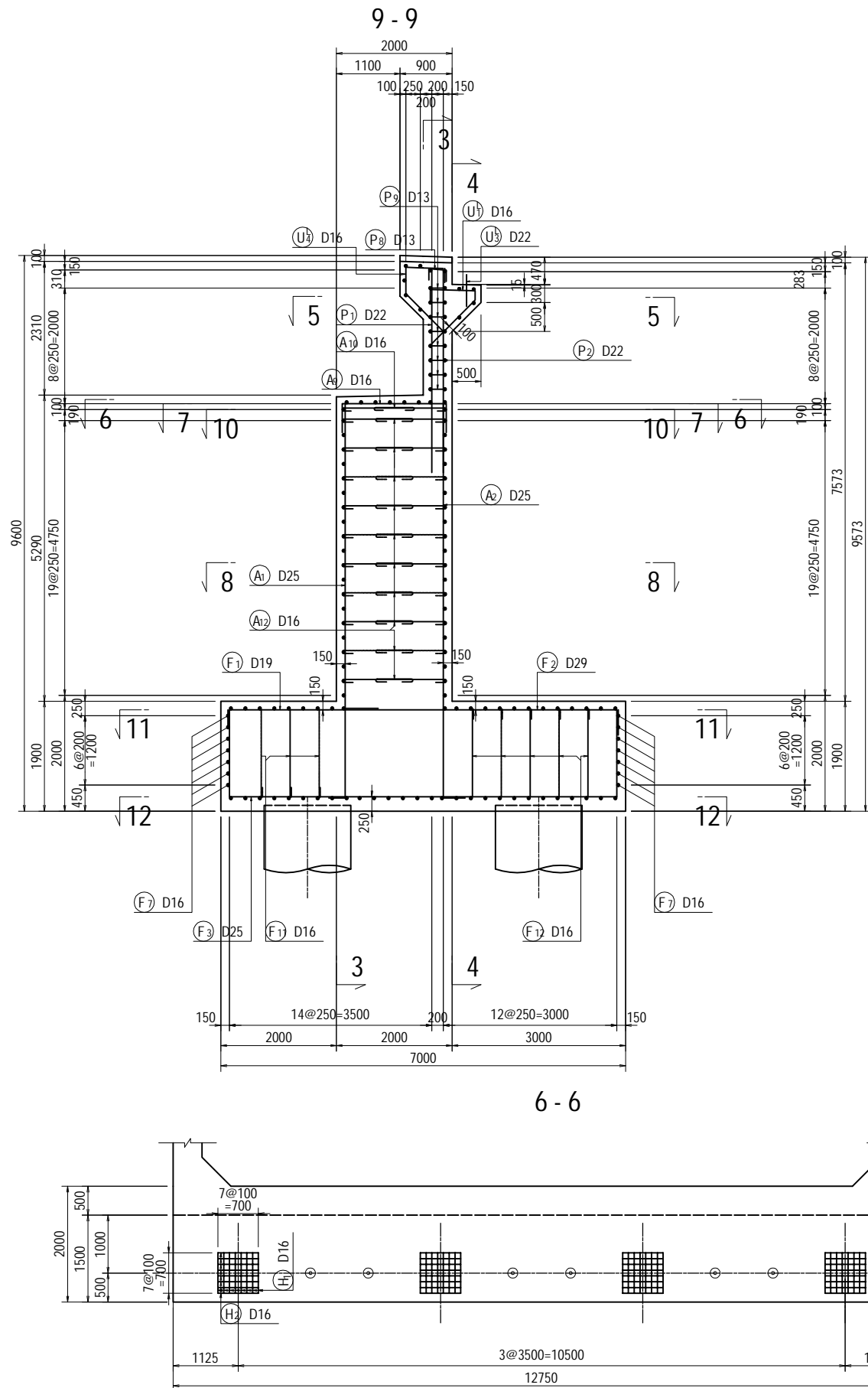
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PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	PREPARED BY Y. SUZUKI	<i>YS</i>	14 Jul. 2017	BAR ARRANGEMENT OF AF2 ABUTMENT (2)	3
				CHECKED BY T. HAYAKAWA	<i>Hayakawa</i>	20 Jul. 2017		DWG No.
				APPROVED BY Y. SANO	<i>Y. Sano</i>	25 Jul. 2017		P3-FO-2122

# BAR ARRANGEMENT OF AF2 ABUTMENT (3)

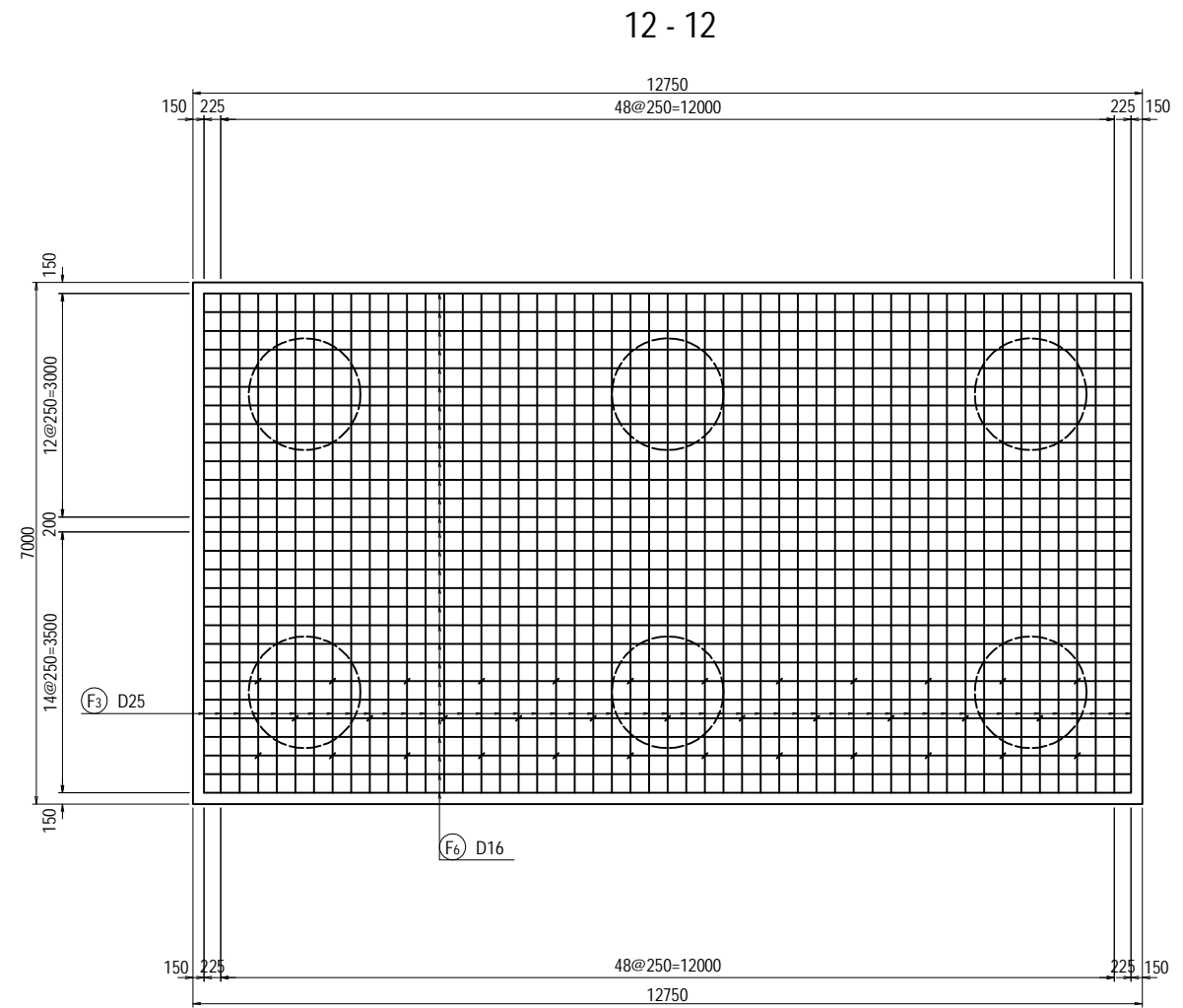
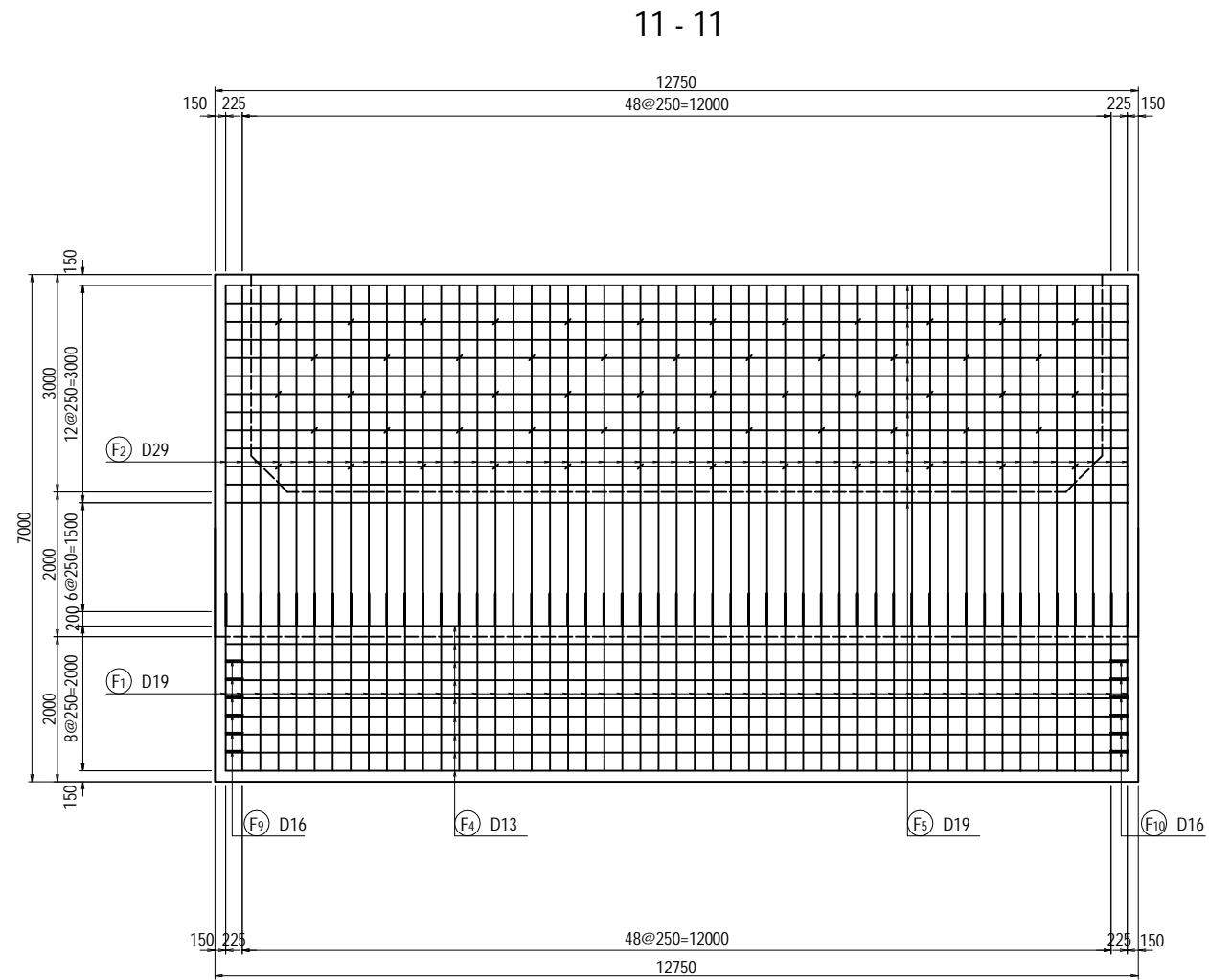
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PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	Y. SUZUKI	<i>[Signature]</i>	14 Jul. 2017	BAR ARRANGEMENT OF AF2 ABUTMENT (3)	3
				T. HAYAKAWA	<i>[Signature]</i>	20 Jul. 2017		DWG No.
				Y. SANO	<i>[Signature]</i>	25 Jul. 2017		P3-FO-2123

# BAR ARRANGEMENT OF AF2 ABUTMENT (4)

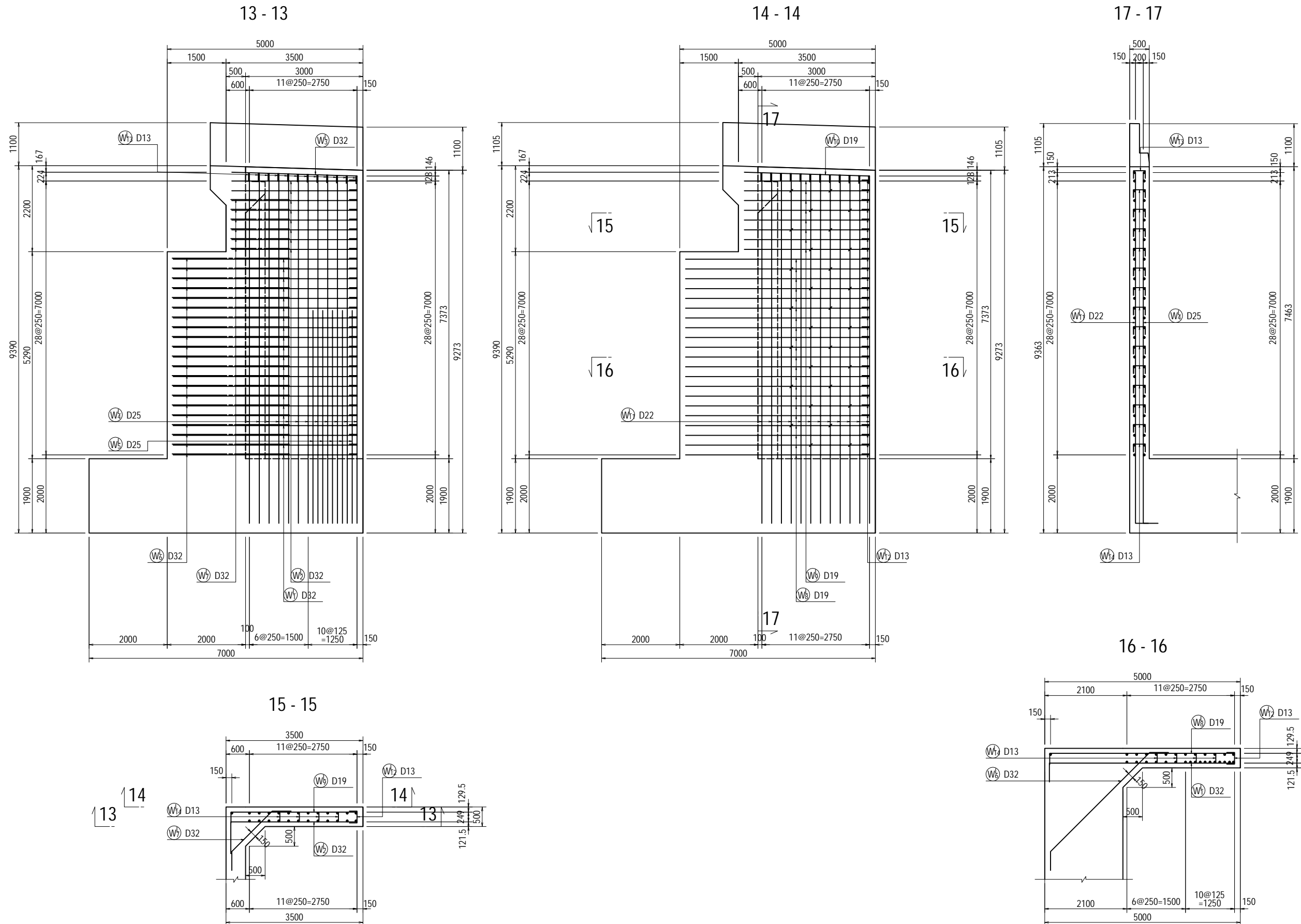
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PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION 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 Y. SUZUKI		14 Jul. 2017	BAR ARRANGEMENT OF AF2 ABUTMENT (4)	3
				CHECKED BY T. HAYAKAWA		20 Jul. 2017		DWG No.
				APPROVED BY Y. SANO		25 Jul. 2017		P3-FO-2124

# BAR ARRANGEMENT OF AF2 ABUTMENT (5)

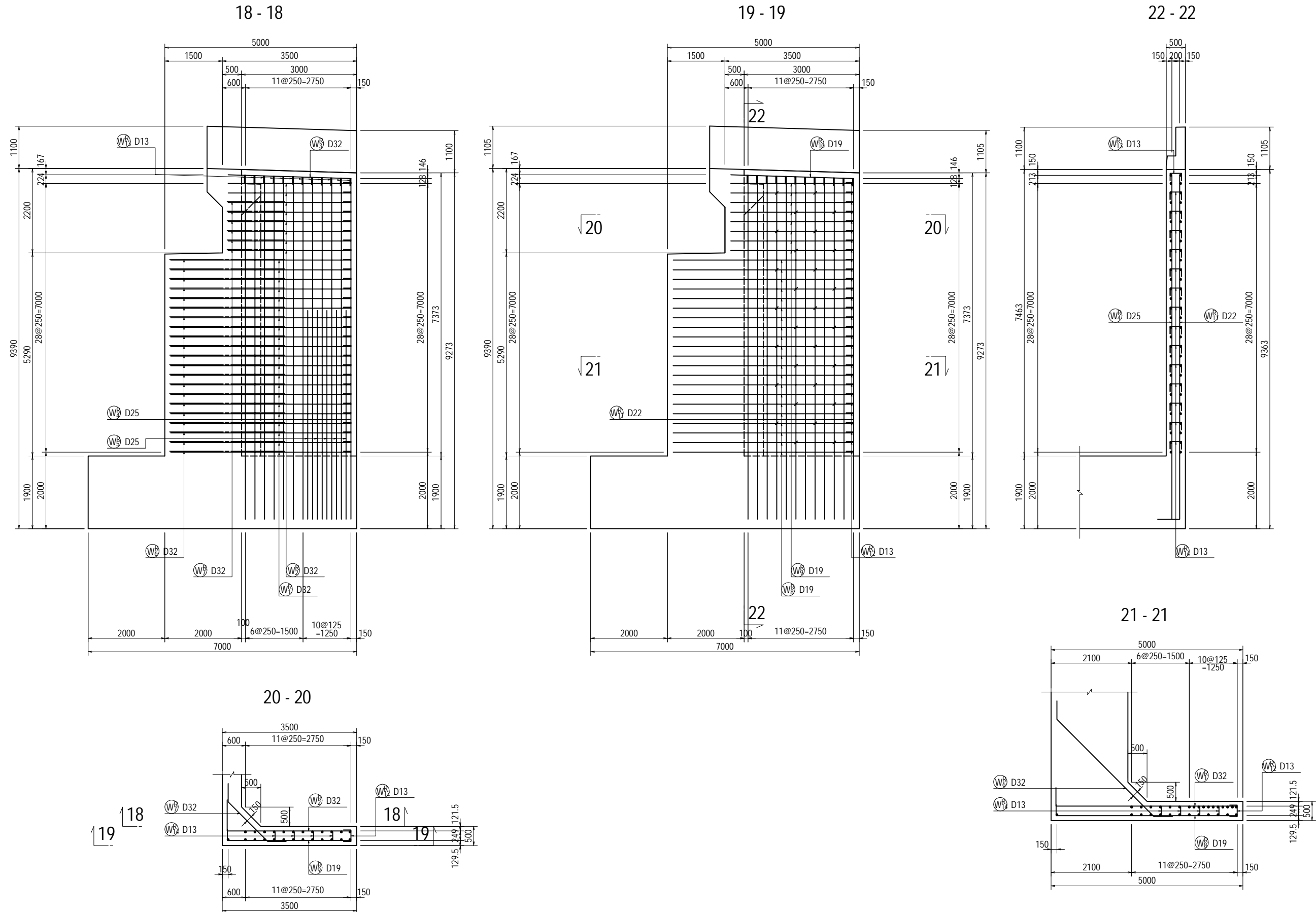
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PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE			
				PREPARED BY	Y. SUZUKI				14 Jul. 2017	BAR ARRANGEMENT OF AF2 ABUTMENT (5)	3
				CHECKED BY	T. HAYAKAWA				20 Jul. 2017		DWG No.
				APPROVED BY	Y. SANO				25 Jul. 2017		P3-FO-2125

# BAR ARRANGEMENT OF AF2 ABUTMENT (6)

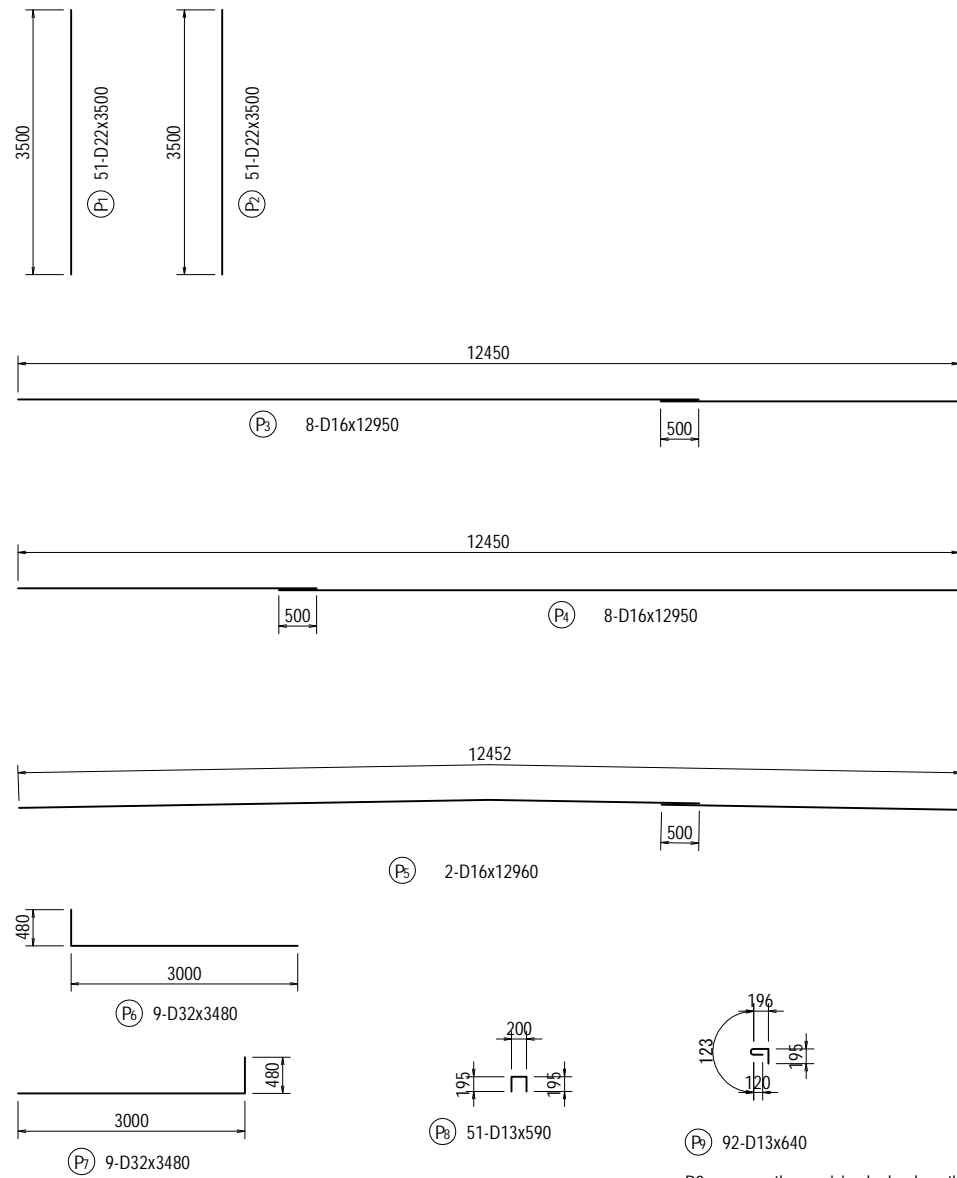
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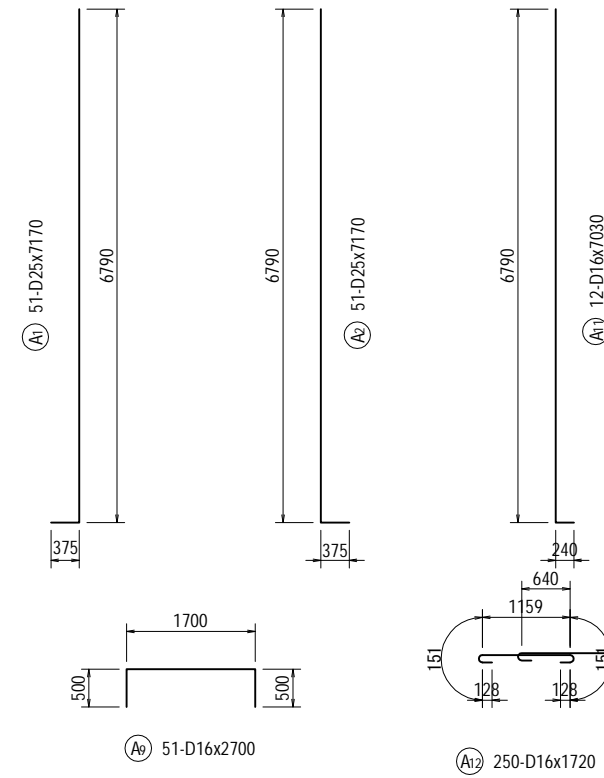
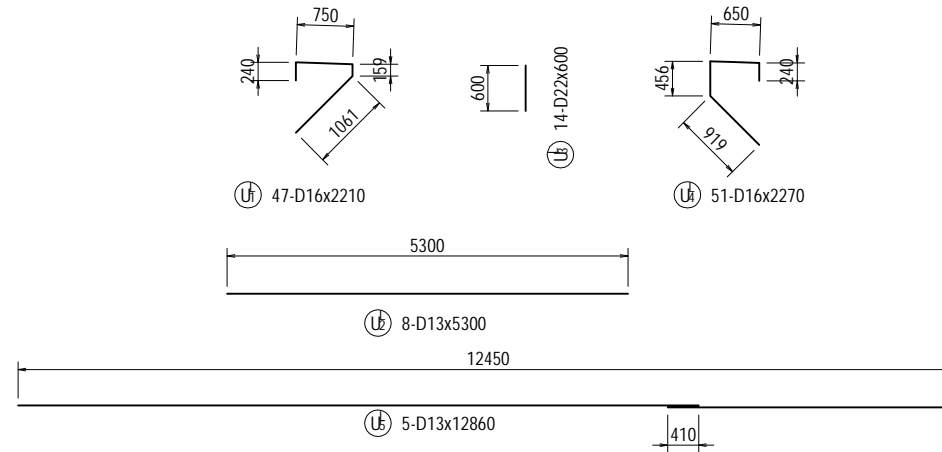
PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE	
				PREPARED BY	Y. SUZUKI				14 Jul. 2017
				CHECKED BY	T. HAYAKAWA				20 Jul. 2017
				APPROVED BY	Y. SANO				25 Jul. 2017
							BAR ARRANGEMENT OF AF2 ABUTMENT (6)	3	
								DWG No.	
								P3-FO-2126	

# BAR ARRANGEMENT OF AF2 ABUTMENT (7)

S=1:100



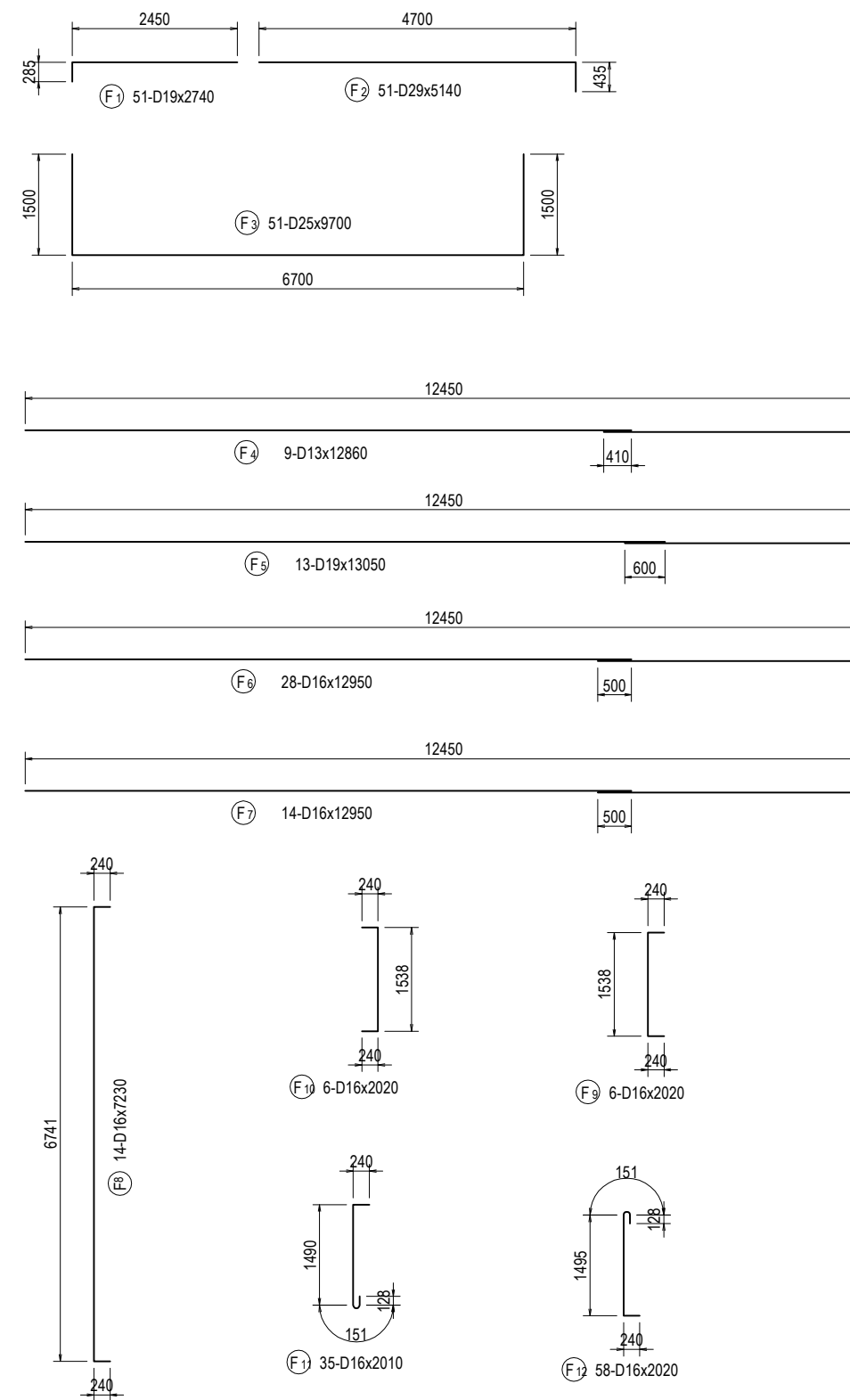
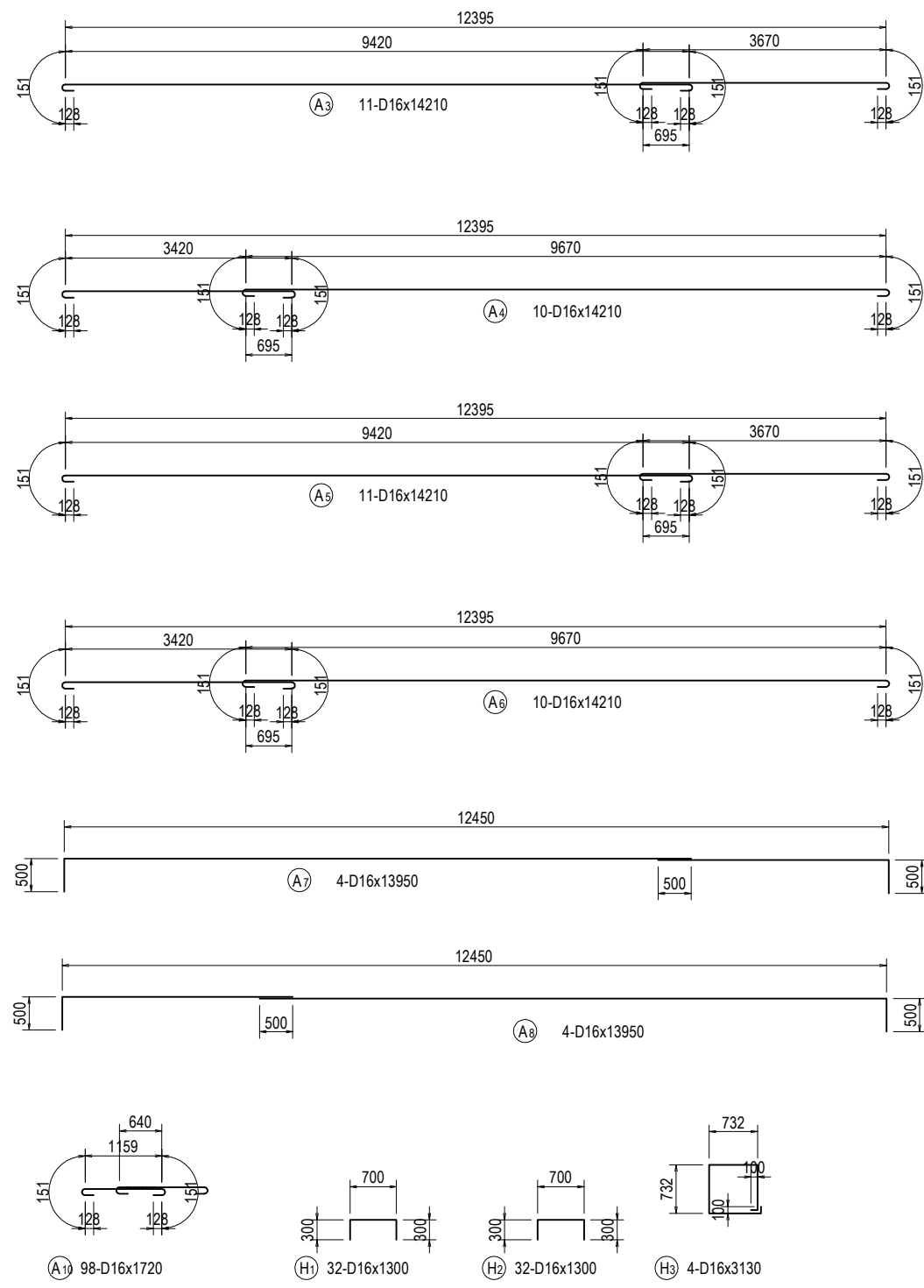
P9 arranges the semicircular hook on the front side.



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.	Y. SUZUKI	<i>[Signature]</i>	14 Jul. 2017	BAR ARRANGEMENT OF AF2 ABUTMENT (7)	3
				T. HAYAKAWA	<i>[Signature]</i>	20 Jul. 2017		DWG No.
				Y. SANO	<i>[Signature]</i>	25 Jul. 2017		P3-FO-2127

# BAR ARRANGEMENT OF AF2 ABUTMENT (8)

S=1:100

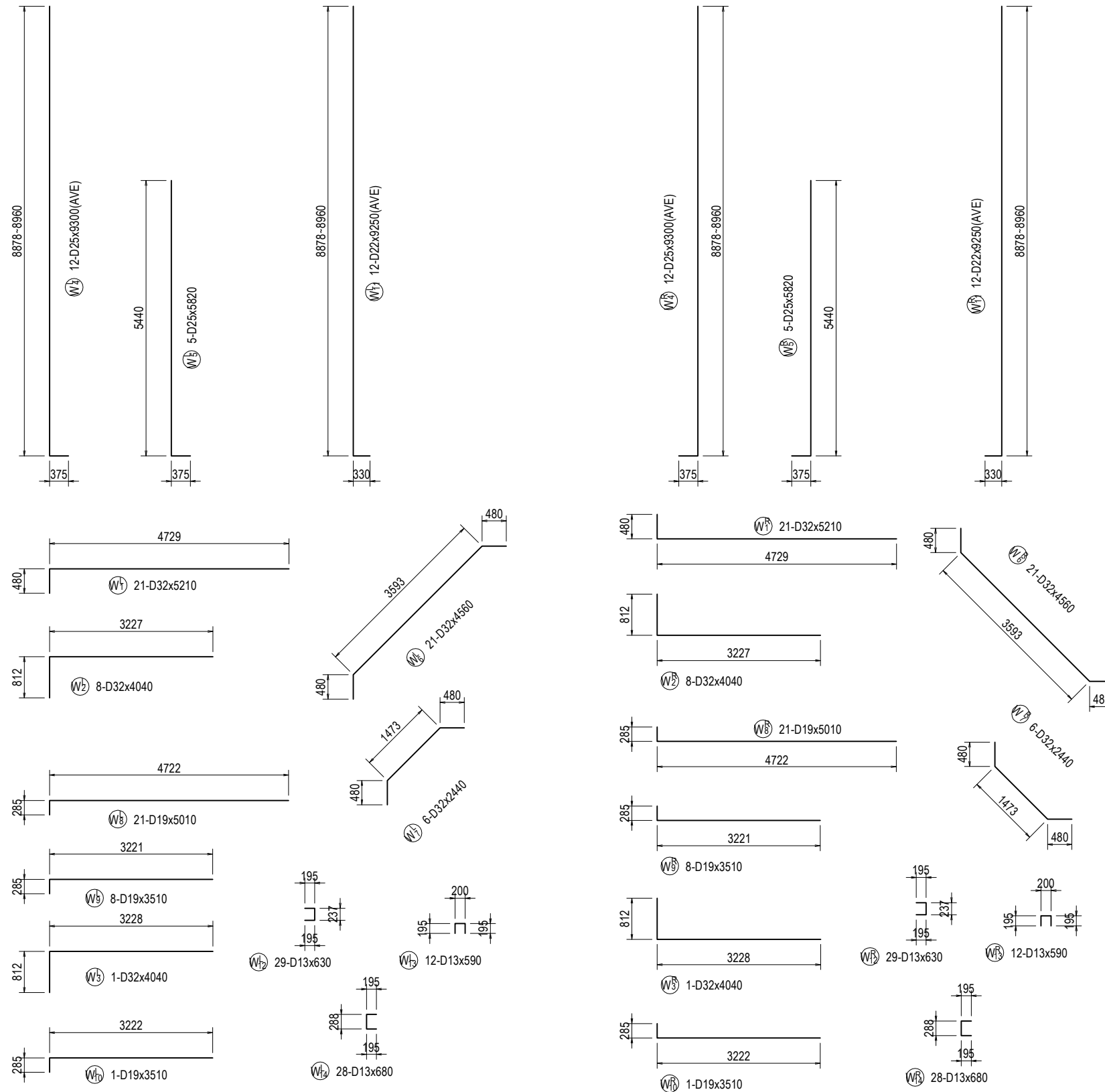


PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	NAME	SIGNATURE	DATE	DRAWING TITLE BAR ARRANGEMENT OF AF2 ABUTMENT (8)	PACKAGE	
				PREPARED BY	Y. SUZUKI			14 Jul. 2017	3
				CHECKED BY	T. HAYAKAWA			20 Jul. 2017	DWG No.
				APPROVED BY	Y. SANO			25 Jul. 2017	P3-FO-2128



# BAR ARRANGEMENT OF AF2 ABUTMENT (9)

S=1:100



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	Y. SUZUKI		14 Jul. 2017
CHECKED BY	T. HAYAKAWA		20 Jul. 2017
APPROVED BY	Y. SANO		25 Jul. 2017

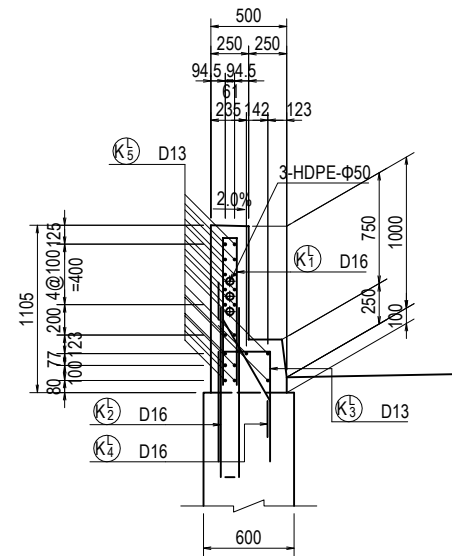
DRAWING TITLE  
 BAR ARRANGEMENT OF AF2 ABUTMENT (9)

PACKAGE  
 3  
 DWG No.  
 P3-FO-2129

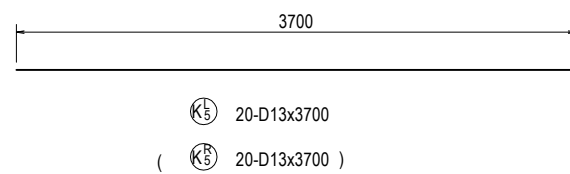
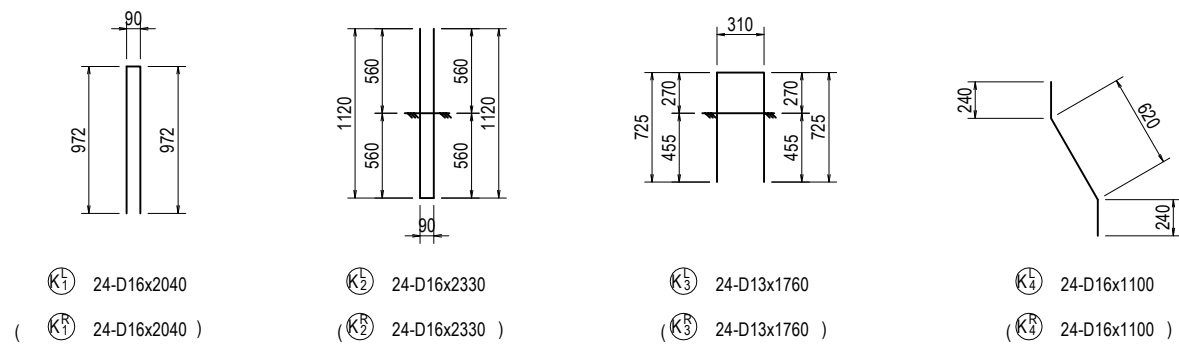
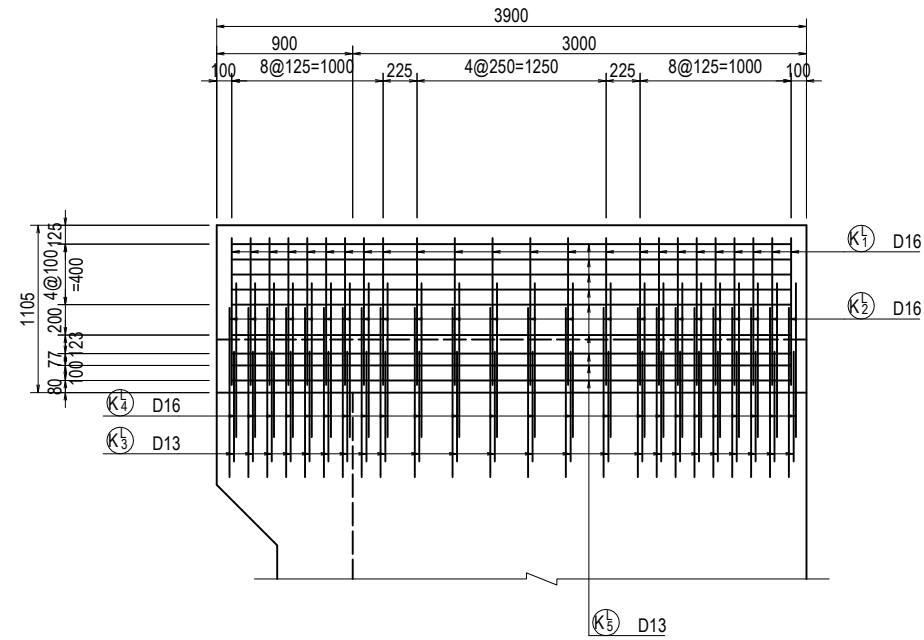
# BAR ARRANGEMENT OF AF2 ABUTMENT (10)

S=1:50

### CROSS SECTION



### PROFILE



※construct at superstructure

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 BAR ARRANGEMENT OF AF2 ABUTMENT (10)	PACKAGE
				PREPARED BY	Y. SUZUKI	14 Jul. 2017		3
				CHECKED BY	T. HAYAKAWA	20 Jul. 2017		DWG No.
				APPROVED BY	Y. SANO	25 Jul. 2017		P3-FO-2130

# BAR ARRANGEMENT OF AF2 ABUTMENT (11)

## BAR LIST

REBAR NO.	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT/ONE (kg)	WEIGHT (kg)	REMARKS
P1	D22	3500	51	3.04	10.64	543	
2	D22	3500	51	3.04	10.64	543	
3	D16	12950	8	1.56	20.20	162	
4	D16	12950	8	1.56	20.20	162	
5	D16	12960	2	1.56	20.22	40	
6	D32	3480	9	6.23	21.68	195	
7	D32	3480	9	6.23	21.68	195	
8	D13	590	51	0.995	0.59	30	
9	D13	640	92	0.995	0.64	59	
1929 kg							
U1	D16	2210	47	1.56	3.45	162	
2	D13	5300	8	0.995	5.27	42	
3	D22	600	14	3.04	1.82	25	
4	D16	2270	51	1.56	3.54	181	
5	D13	12860	5	0.995	12.80	64	
474 kg							
A1	D25	7170	51	3.98	28.54	1456	
2	D25	7170	51	3.98	28.54	1456	
3	D16	14210	11	1.56	22.17	244	
4	D16	14210	10	1.56	22.17	222	
5	D16	14210	11	1.56	22.17	244	
6	D16	14210	10	1.56	22.17	222	
7	D16	13950	4	1.56	21.76	87	
8	D16	13950	4	1.56	21.76	87	
9	D16	2700	51	1.56	4.21	215	
10	D16	1720	98	1.56	2.68	263	
11	D16	7030	12	1.56	10.97	132	
12	D16	1720	250	1.56	2.68	670	
5298 kg							
H 1	D16	1300	32	1.56	2.03	65	
2	D16	1300	32	1.56	2.03	65	
3	D16	3130	4	1.56	4.88	20	
150 kg							
F 1	D19	2740	51	2.25	6.17	315	
2	D29	5140	51	5.04	25.91	1321	
3	D25	9700	51	3.98	38.61	1969	
4	D13	12860	9	0.995	12.80	115	
5	D19	13050	13	2.25	29.36	382	
6	D16	12950	28	1.56	20.20	566	
7	D16	12950	14	1.56	20.20	283	
8	D16	7230	14	1.56	11.28	158	
9	D16	2020	6	1.56	3.15	19	
10	D16	2020	6	1.56	3.15	19	
11	D16	2010	35	1.56	3.14	110	
12	D16	2020	58	1.56	3.15	183	
5440 kg							

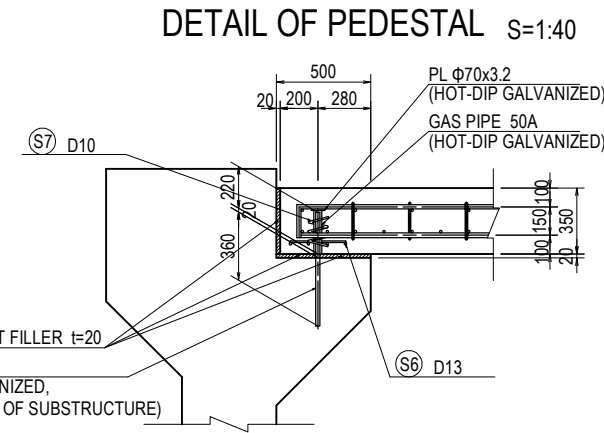
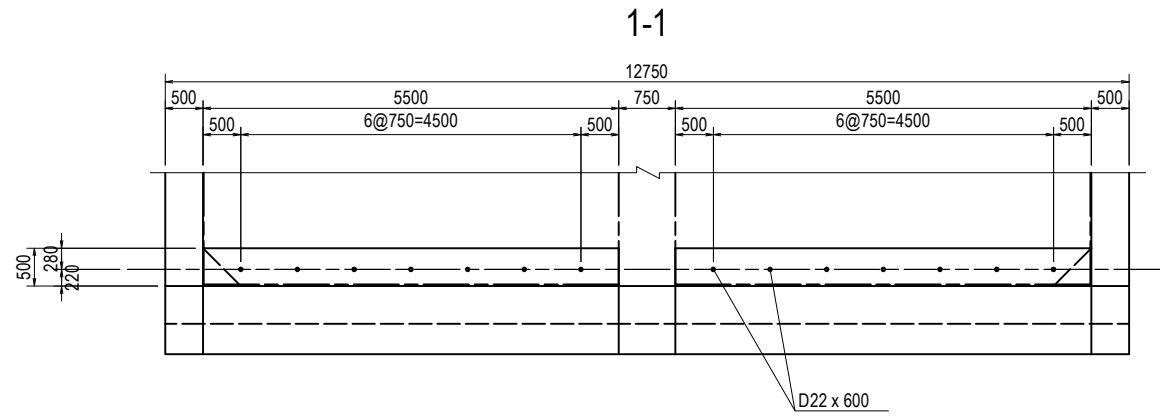
## BAR LIST

REBAR NO.	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT/ONE (kg)	WEIGHT (kg)	REMARKS
W1	D32	5210	21	6.23	32.46	682	
2	D32	4040	8	6.23	25.17	201	
3	D32	4040	1	6.23	25.17	25	
4	D25	9300	12	3.98	37.01	444	AVERAGE
5	D25	5820	5	3.98	23.16	116	
6	D32	4560	21	6.23	28.41	597	
7	D32	2440	6	6.23	15.20	91	
8	D19	5010	21	2.25	11.27	237	
9	D19	3510	8	2.25	7.90	63	
10	D19	3510	1	2.25	7.90	8	
11	D22	9250	12	3.04	28.12	337	AVERAGE
12	D13	630	29	0.995	0.63	18	
13	D13	590	12	0.995	0.59	7	
14	D13	680	28	0.995	0.68	19	
2845 kg							
WR	D32	5210	21	6.23	32.46	682	
2	D32	4040	8	6.23	25.17	201	
3	D32	4040	1	6.23	25.17	25	
4	D25	9300	12	3.98	37.01	444	AVERAGE
5	D25	5820	5	3.98	23.16	116	
6	D32	4560	21	6.23	28.41	597	
7	D32	2440	6	6.23	15.20	91	
8	D19	5010	21	2.25	11.27	237	
9	D19	3510	8	2.25	7.90	63	
10	D19	3510	1	2.25	7.90	8	
11	D22	9250	12	3.04	28.12	337	AVERAGE
12	D13	630	29	0.995	0.63	18	
13	D13	590	12	0.995	0.59	7	
14	D13	680	28	0.995	0.68	19	
2845 kg							
E 1	D13	2170	4	0.995	2.16	9	
2	D13	630	6	0.995	0.63	4	
13 kg							
K 1	D16	2040	24	1.56	3.18	76	
2	D16	2330	24	1.56	3.63	87	
3	D13	1760	24	0.995	1.75	42	
4	D16	1100	24	1.56	1.72	41	
5	D13	3700	20	0.995	3.68	74	
320 kg							
K R	D16	2040	24	1.56	3.18	76	
2	D16	2330	24	1.56	3.63	87	
3	D13	1760	24	0.995	1.75	42	
4	D16	1100	24	1.56	1.72	41	
5	D13	3700	20	0.995	3.68	74	
320 kg							
D13 643 kg							
D16 4989 kg							
D19 1313 kg							
D22 1785 kg							
D25 6001 kg							
D29 1321 kg							
D32 3582 kg							
TOTAL 19634 kg							

※construct at superstructure

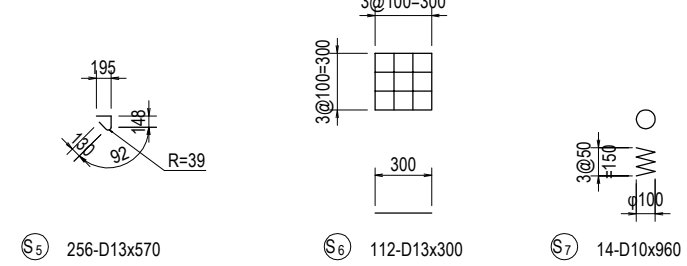
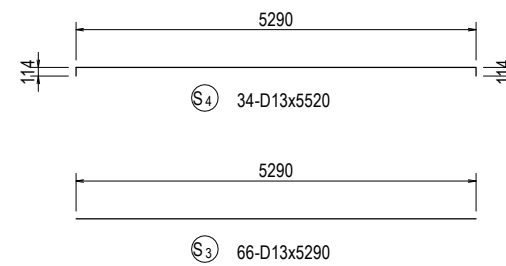
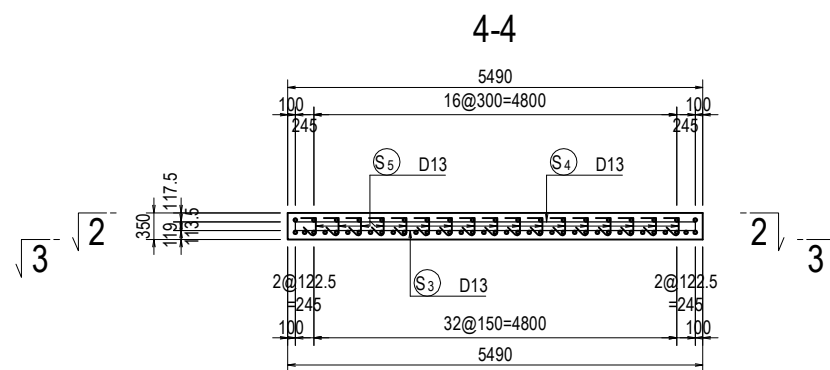
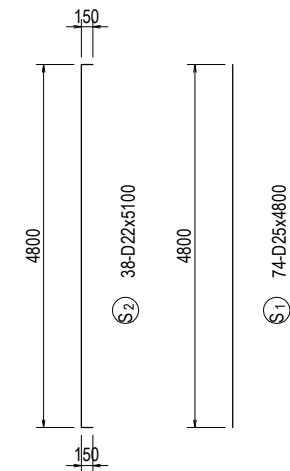
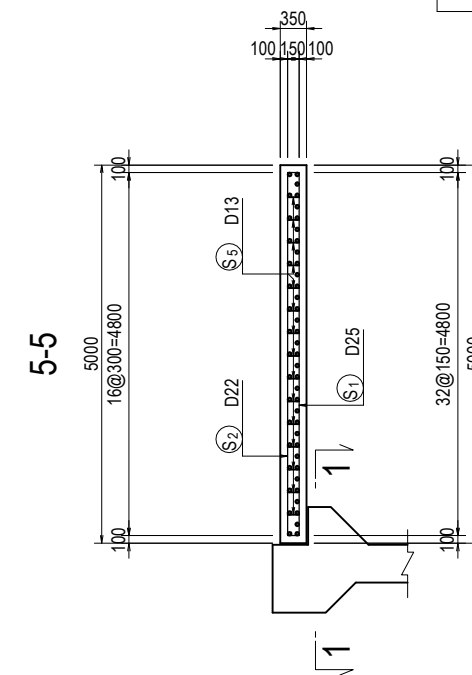
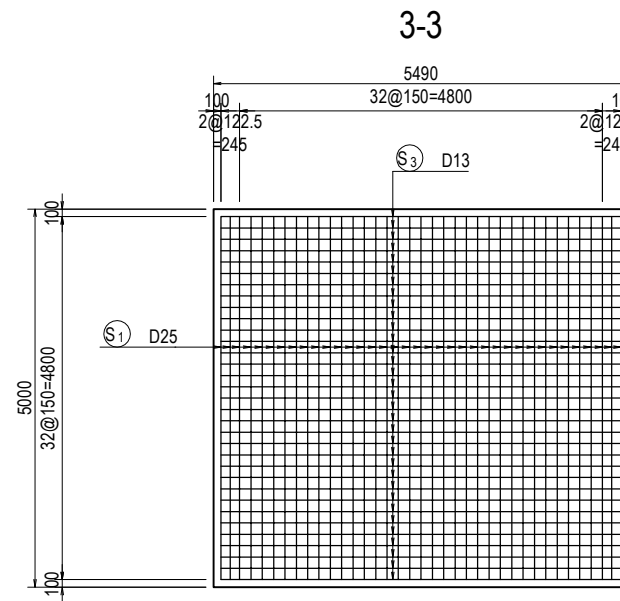
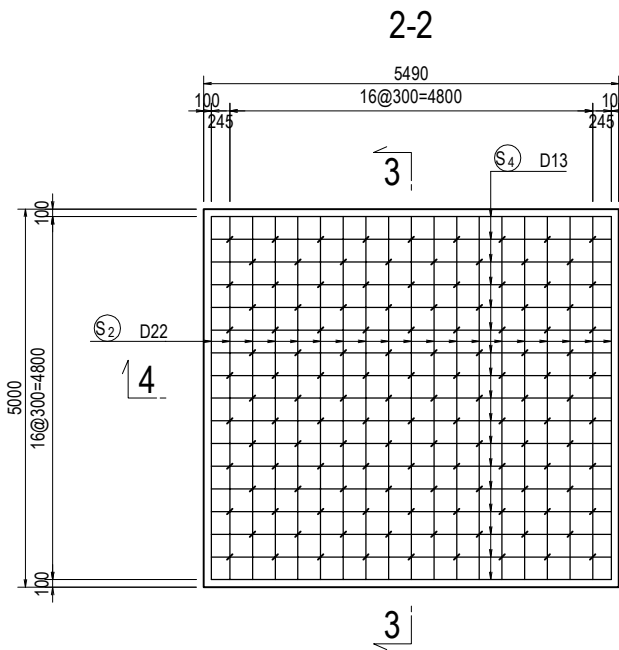
# BAR ARRANGEMENT OF AF2 ABUTMENT (12)

S=1:100



## BAR LIST

REBAR NO.	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT/ONE (kg)	WEIGHT (kg)	REMARKS
S 1	D25	4800	74	3.98	19.10	1413	
S 2	D22	5100	38	3.04	15.50	589	
S 3	D13	5290	66	0.995	5.26	347	
S 4	D13	5520	34	0.995	5.49	187	
S 5	D13	570	256	0.995	0.57	146	
S 6	D13	300	112	0.995	0.30	34	
S 7	D10	960	14	0.56	0.54	8	
					D25	1413 kg	
					D22	589 kg	
					D13	714 kg	
					D10	8 kg	
					TOTAL	2724 kg	
GAS PIPE 50A		230	14	5.31	1.22	17	
PL		Φ70x3.2	14		0.10	1	



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  
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METROPOLITAN EXPRESSWAY COMPANY LIMITED  
CHODAI CO., LTD.  
NIPPON ENGINEERING CONSULTANTS CO., LTD.

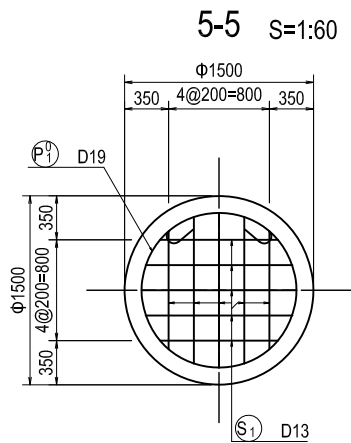
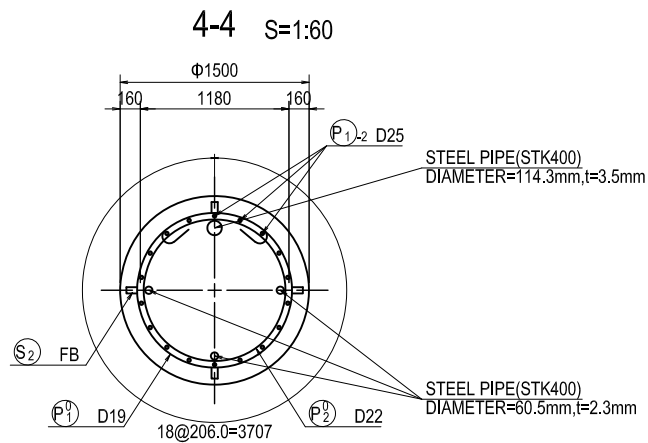
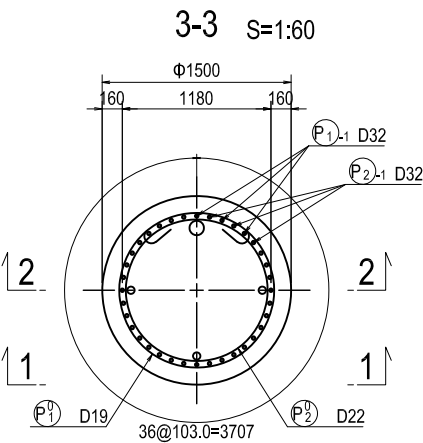
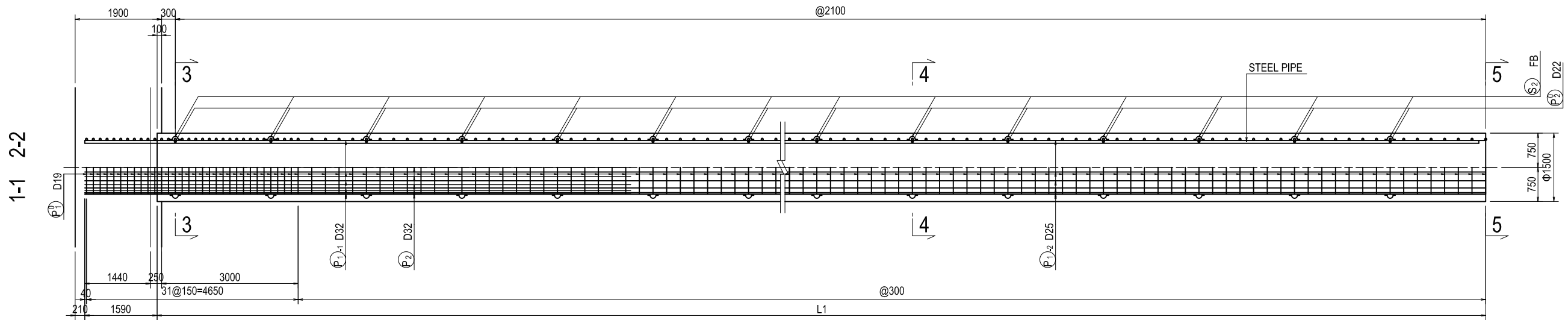
	NAME	SIGNATURE	DATE
PREPARED BY	Y. SUZUKI	<i>YS</i>	14 Jul. 2017
CHECKED BY	T. HAYAKAWA	<i>TH</i>	20 Jul. 2017
APPROVED BY	Y. SANO	<i>YS</i>	25 Jul. 2017

DRAWING TITLE  
BAR ARRANGEMENT OF AF2 ABUTMENT (12)

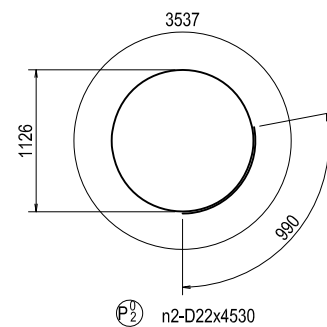
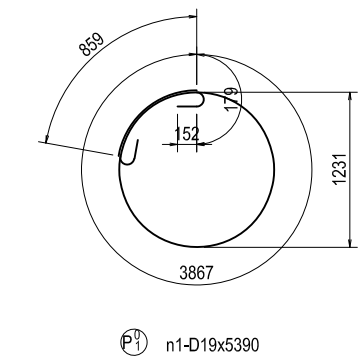
PACKAGE  
3  
DWG No.  
P3-FO-2132

# BAR ARRANGEMENT OF CAST IN PLACE PILE (1) S=1:100

AF.1,PF.1,2



No.	AXIS	L1(m)	L2(mm)	L3(mm)	n1	n2	n3
1	AF.1	40.5	26215	28470	157	20	80
2	PF.1	41.5	27215	29470	160	20	80
3	PF.2	41.5	27215	29470	160	20	80

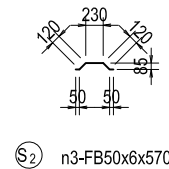


105 105

(AVE)

Φ1 10-D13x1440

TYPE	No	I	L
1	2	1199	1590
2	4	1130	1520
3	4	893	1280
TOTAL	10	1049	1440



Change the parallel crossed reinforcing bars at the tip according to the construction method.

# BAR ARRANGEMENT OF CAST IN PLACE PILE (2)

AF.1,PF.1,2

## BAR LIST <AF.1>

REBAR NO.	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT/ONE (kg)	WEIGHT (kg)	REMARKS
P 1 -1	D32	18440	18	6.23	114.88	2068	
P 1 -2	D25	28470	18	3.98	113.31	2040	
P 2	D32	15940	18	6.23	99.31	1788	
						5896	
P 1 <sup>0</sup>	D19	5390	157	2.25	12.13	1904	
P 2 <sup>0</sup>	D22	4530	20	3.04	13.77	275	
						2179	
S 1	D13	1440	10	0.995	1.43	14	AVERAGE
						14	
S 2	FB50x6	570	80	2.36	1.35	108	
						108	
						D32	3856 x 8 = 30848
						D25	2040 x 8 = 16320
						D22	275 x 8 = 2200
						D19	1904 x 8 = 15232
						D13	14 x 8 = 112
						TOTAL	8089 x 8 = 64712
						FB50x6	108 x 8 = 864

## BAR LIST <PF.1>

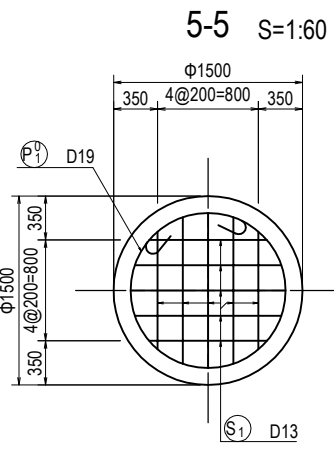
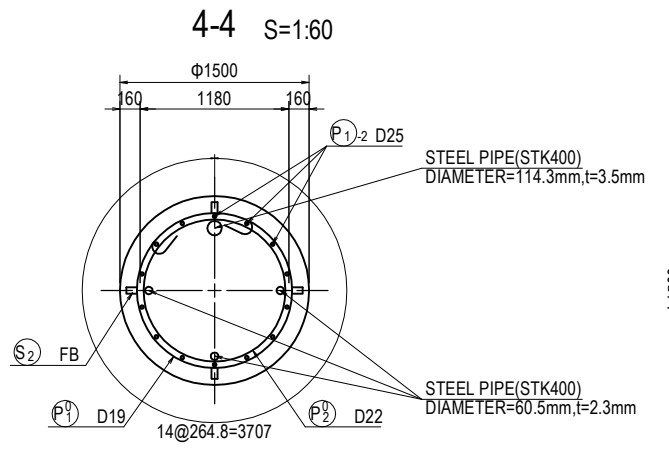
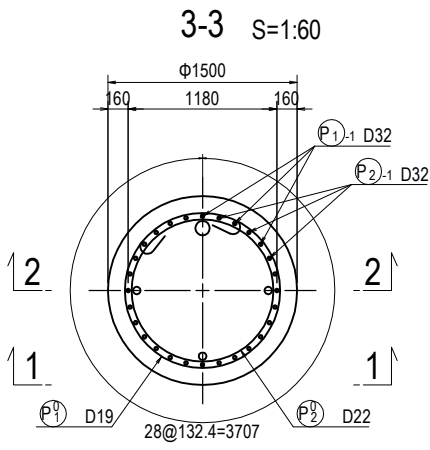
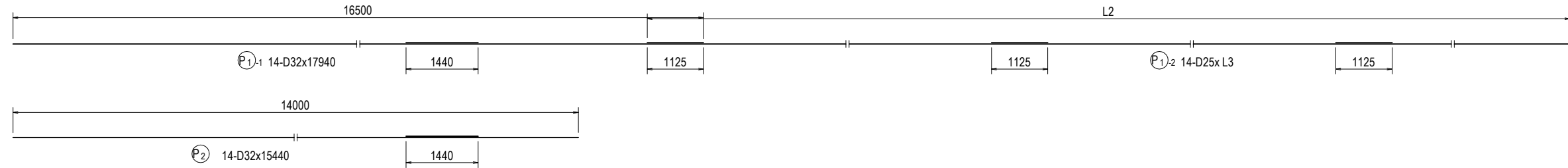
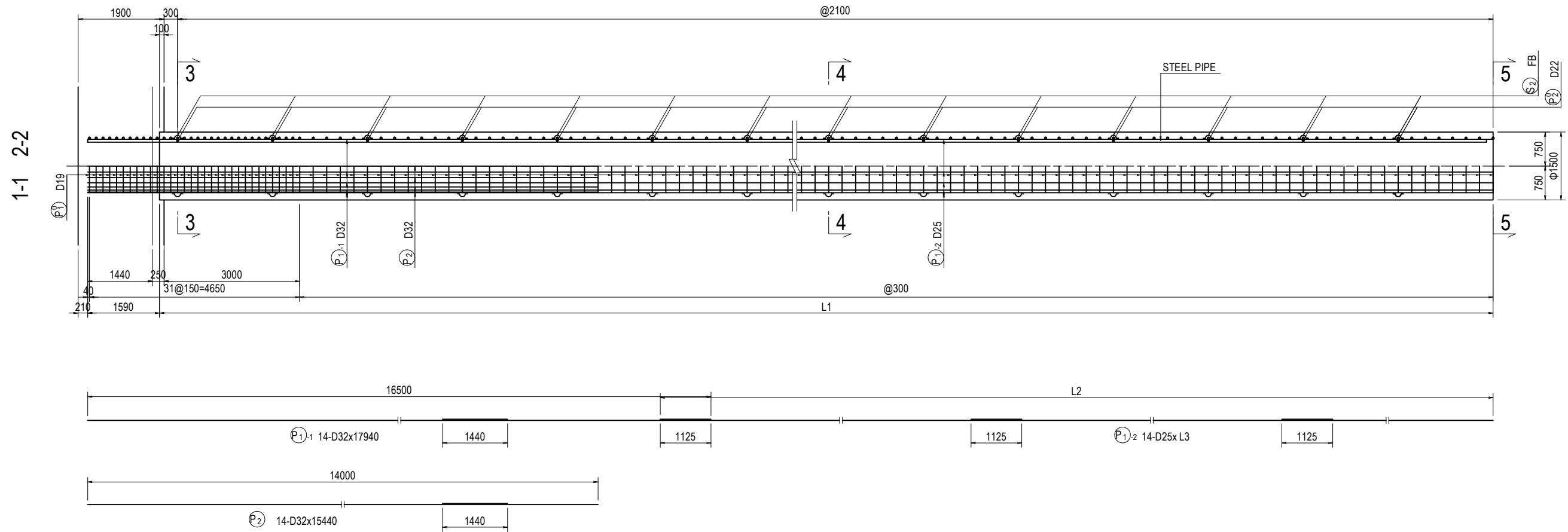
REBAR NO.	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT/ONE (kg)	WEIGHT (kg)	REMARKS
P 1 -1	D32	18440	18	6.23	114.88	2068	
P 1 -2	D25	29470	18	3.98	117.29	2111	
P 2	D32	15940	18	6.23	99.31	1788	
						5967	
P 1 <sup>0</sup>	D19	5390	160	2.25	12.13	1941	
P 2 <sup>0</sup>	D22	4530	20	3.04	13.77	275	
						2216	
S 1	D13	1440	10	0.995	1.43	14	AVERAGE
						14	
S 2	FB50x6	570	80	2.36	1.35	108	
						108	
						D32	3856 x 6 = 23136
						D25	2111 x 6 = 12666
						D22	275 x 6 = 1650
						D19	1941 x 6 = 11646
						D13	14 x 6 = 84
						TOTAL	8197 x 6 = 49182
						FB50x6	108 x 6 = 648

## BAR LIST <PF.2>

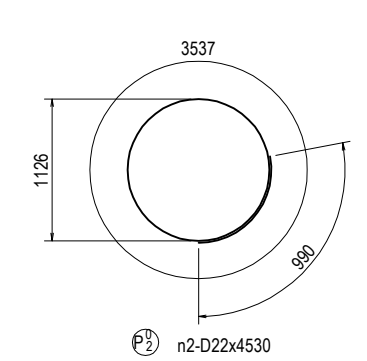
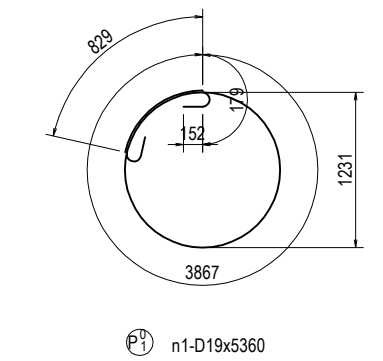
REBAR NO.	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT/ONE (kg)	WEIGHT (kg)	REMARKS
P 1 -1	D32	18440	18	6.23	114.88	2068	
P 1 -2	D25	29470	18	3.98	117.29	2111	
P 2	D32	15940	18	6.23	99.31	1788	
						5967	
P 1 <sup>0</sup>	D19	5390	160	2.25	12.13	1941	
P 2 <sup>0</sup>	D22	4530	20	3.04	13.77	275	
						2216	
S 1	D13	1440	10	0.995	1.43	14	AVERAGE
						14	
S 2	FB50x6	570	80	2.36	1.35	108	
						108	
						D32	3856 x 6 = 23136
						D25	2111 x 6 = 12666
						D22	275 x 6 = 1650
						D19	1941 x 6 = 11646
						D13	14 x 6 = 84
						TOTAL	8197 x 6 = 49182
						FB50x6	108 x 6 = 648

# BAR ARRANGEMENT OF CAST IN PLACE PILE (3) S=1:100

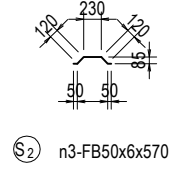
PF.3,4



No.	AXIS	L1(m)	L2(mm)	L3(mm)	n1	n2	n3
1	PF.3	38.0	24215	26470	149	18	72
2	PF.4	40.5	26715	28970	157	20	80



TYPE	No	I	L
1	2	1199	1590
2	4	1130	1520
3	4	893	1280
TOTAL	10	1049	1440



Change the parallel crossed reinforcing bars at the tip according to the construction method.

# BAR ARRANGEMENT OF CAST IN PLACE PILE (4)

PF.3,4

BAR LIST <PF.3>

REBAR NO.	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT/ONE (kg)	WEIGHT (kg)	REMARKS
P 1 -1	D32	17940	14	6.23	111.77	1565	
P 1 -2	D25	26470	14	3.98	105.35	1475	
P 2	D32	15440	14	6.23	96.19	1347	
4387							
P 1 <sup>0</sup>	D19	5360	149	2.25	12.06	1797	
P 2 <sup>0</sup>	D22	4530	18	3.04	13.77	248	
2045							
S 1	D13	1440	10	0.995	1.43	14	AVERAGE
14							
S 2	FB50x6	570	72	2.36	1.35	97	
97							
				D32	2912 x 9	= 26208	
				D25	1475 x 9	= 13275	
				D22	248 x 9	= 2232	
				D19	1797 x 9	= 16173	
				D13	14 x 9	= 126	
				TOTAL	6446 x 9	= 58014	
				FB50x6	97 x 9	= 873	

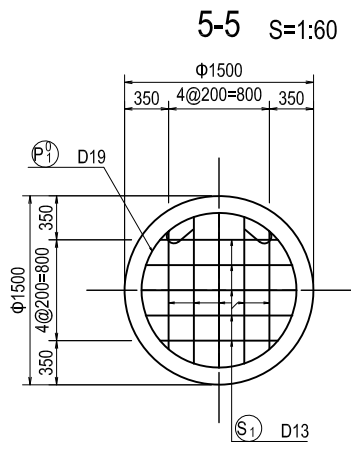
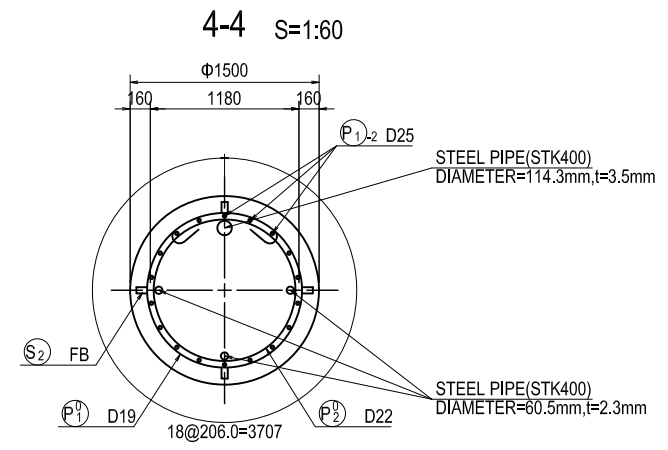
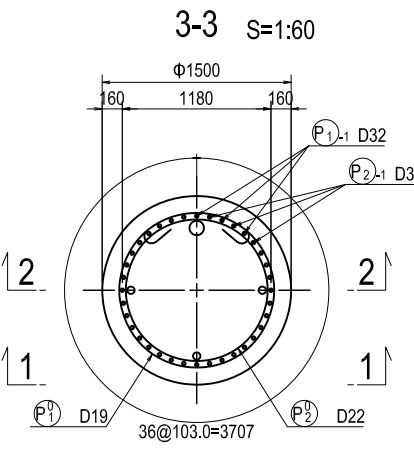
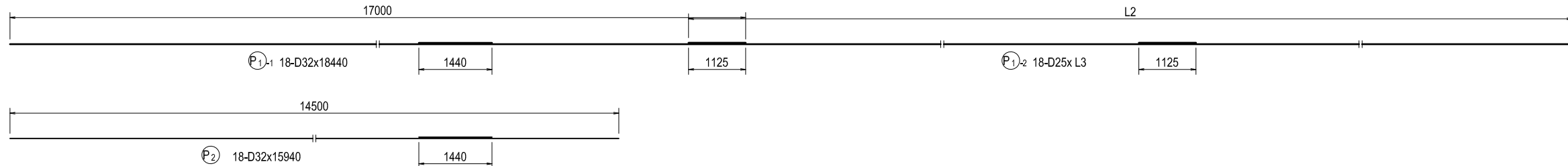
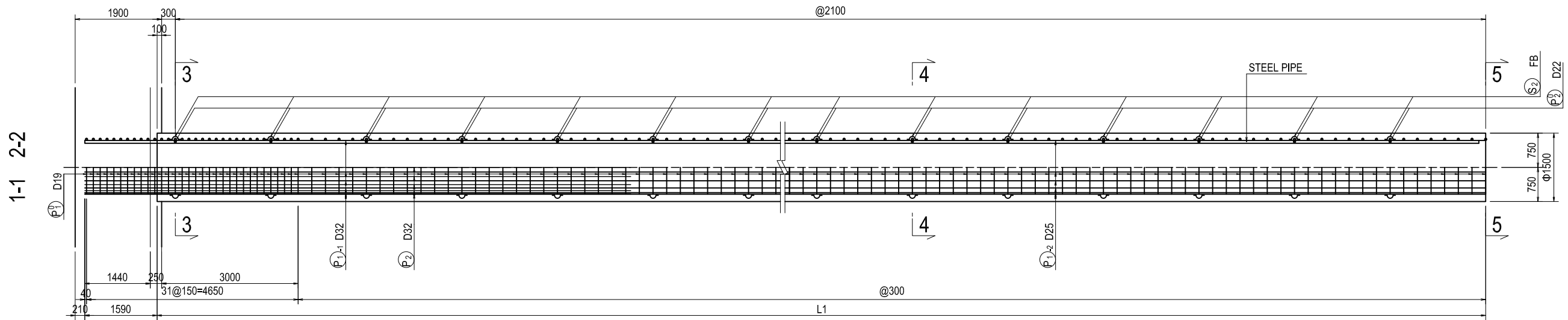
BAR LIST <PF.4>

REBAR NO.	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT/ONE (kg)	WEIGHT (kg)	REMARKS
P 1 -1	D32	17940	14	6.23	111.77	1565	
P 1 -2	D25	28970	14	3.98	115.30	1614	
P 2	D32	15440	14	6.23	96.19	1347	
4526							
P 1 <sup>0</sup>	D19	5360	157	2.25	12.06	1893	
P 2 <sup>0</sup>	D22	4530	20	3.04	13.77	275	
2168							
S 1	D13	1440	10	0.995	1.43	14	AVERAGE
14							
S 2	FB50x6	570	80	2.36	1.35	108	
108							
				D32	2912 x 6	= 17472	
				D25	1614 x 6	= 9684	
				D22	275 x 6	= 1650	
				D19	1893 x 6	= 11358	
				D13	14 x 6	= 84	
				TOTAL	6708 x 6	= 40248	
				FB50x6	108 x 6	= 648	

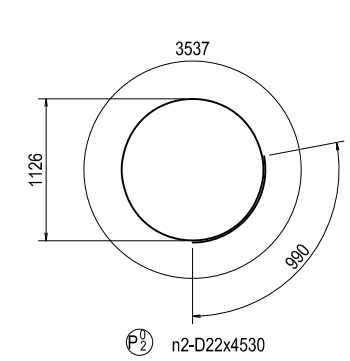
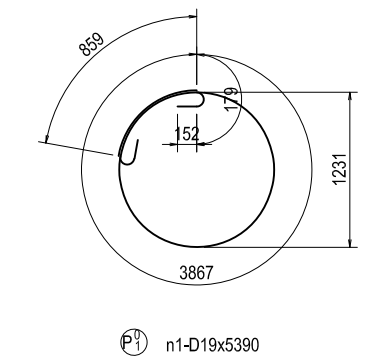


# BAR ARRANGEMENT OF CAST IN PLACE PILE (5) S=1:100

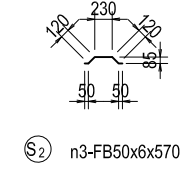
PF.5,6,8,10



No.	AXIS	L1(m)	L2(mm)	L3(mm)	n1	n2	n3
1	PF.5	35.5	21215	22340	140	17	68
2	PF.6	33.5	19215	20340	134	16	64
3	PF.8	37.0	22715	23840	145	18	72
4	PF.10	32.5	18215	19340	130	16	64



TYPE	No	I	L
1	2	1199	1590
2	4	1130	1520
3	4	893	1280
TOTAL	10	1049	1440



Change the parallel crossed reinforcing bars at the tip according to the construction method.

# BAR ARRANGEMENT OF CAST IN PLACE PILE (6)

PF.5,6,8,10

**BAR LIST <PF.5>**

REBAR NO.	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT/ONE (kg)	WEIGHT (kg)	REMARKS
P 1 -1	D32	18440	18	6.23	114.88	2068	
P 1 -2	D25	22340	18	3.98	88.91	1600	
P 2	D32	15940	18	6.23	99.31	1788	
						5456	
P <sup>0</sup> <sub>1</sub>	D19	5390	140	2.25	12.13	1698	
P <sup>0</sup> <sub>2</sub>	D22	4530	17	3.04	13.77	234	
						1932	
S 1	D13	1440	10	0.995	1.43	14	AVERAGE
						14	
S 2	FB50x6	570	68	2.36	1.35	92	
						92	
						D32	3856 x 6 = 23136
						D25	1600 x 6 = 9600
						D22	234 x 6 = 1404
						D19	1698 x 6 = 10188
						D13	14 x 6 = 84
						TOTAL	7402 x 6 = 44412
						FB50x6	92 x 6 = 552

**BAR LIST <PF.6>**

REBAR NO.	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT/ONE (kg)	WEIGHT (kg)	REMARKS
P 1 -1	D32	18440	18	6.23	114.88	2068	
P 1 -2	D25	20340	18	3.98	80.95	1457	
P 2	D32	15940	18	6.23	99.31	1788	
						5313	
P <sup>0</sup> <sub>1</sub>	D19	5390	134	2.25	12.13	1625	
P <sup>0</sup> <sub>2</sub>	D22	4530	16	3.04	13.77	220	
						1845	
S 1	D13	1440	10	0.995	1.43	14	AVERAGE
						14	
S 2	FB50x6	570	64	2.36	1.35	86	
						86	
						D32	3856 x 6 = 23136
						D25	1457 x 6 = 8742
						D22	220 x 6 = 1320
						D19	1625 x 6 = 9750
						D13	14 x 6 = 84
						TOTAL	7172 x 6 = 43032
						FB50x6	86 x 6 = 516

**BAR LIST <PF.8>**

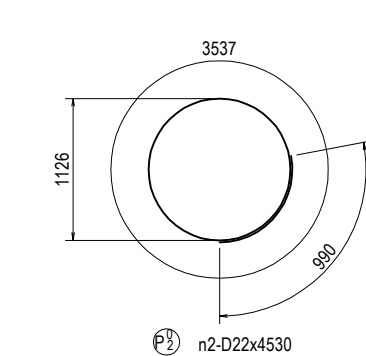
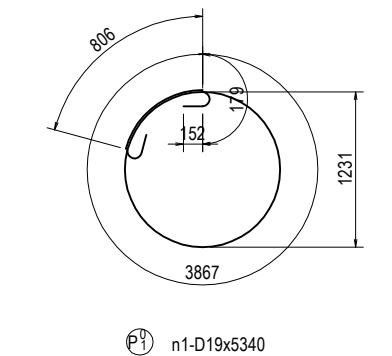
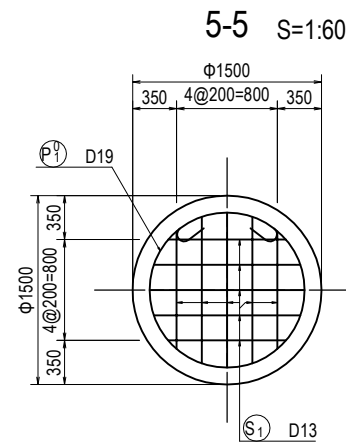
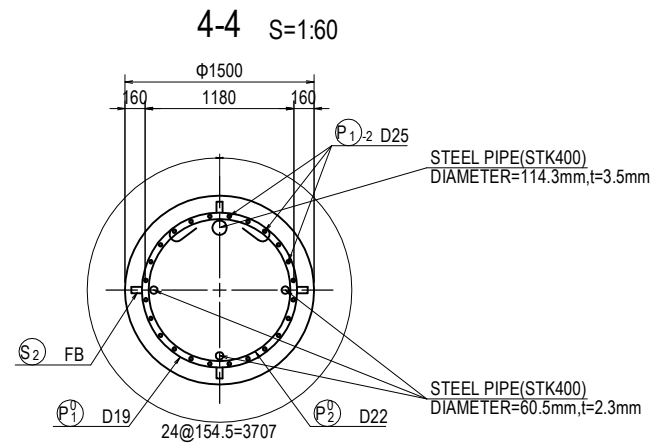
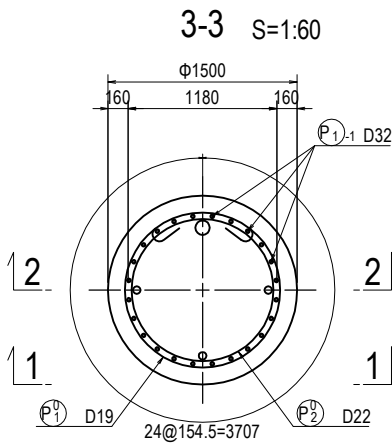
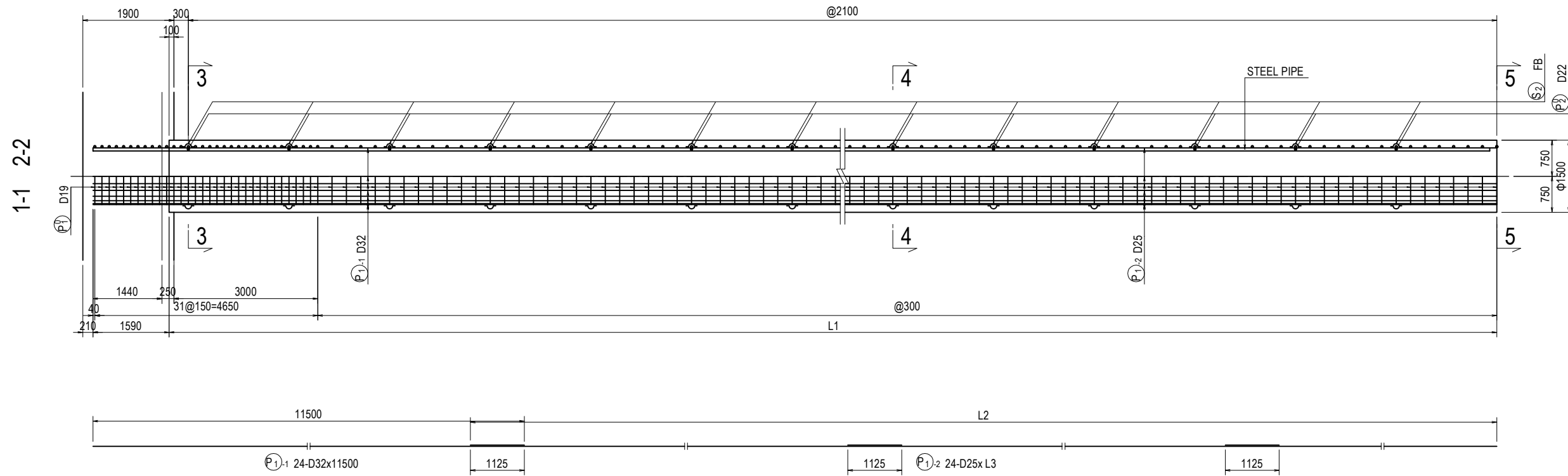
REBAR NO.	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT/ONE (kg)	WEIGHT (kg)	REMARKS
P 1 -1	D32	18440	18	6.23	114.88	2068	
P 1 -2	D25	23840	18	3.98	94.88	1708	
P 2	D32	15940	18	6.23	99.31	1788	
						5564	
P <sup>0</sup> <sub>1</sub>	D19	5390	145	2.25	12.13	1759	
P <sup>0</sup> <sub>2</sub>	D22	4530	18	3.04	13.77	248	
						2007	
S 1	D13	1440	10	0.995	1.43	14	AVERAGE
						14	
S 2	FB50x6	570	72	2.36	1.35	97	
						97	
						D32	3856 x 6 = 23136
						D25	1708 x 6 = 10248
						D22	248 x 6 = 1488
						D19	1759 x 6 = 10554
						D13	14 x 6 = 84
						TOTAL	7585 x 6 = 45510
						FB50x6	97 x 6 = 582

**BAR LIST <PF.10>**

REBAR NO.	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT/ONE (kg)	WEIGHT (kg)	REMARKS
P 1 -1	D32	18440	18	6.23	114.88	2068	
P 1 -2	D25	19340	18	3.98	76.97	1385	
P 2	D32	15940	18	6.23	99.31	1788	
						5241	
P <sup>0</sup> <sub>1</sub>	D19	5390	130	2.25	12.13	1577	
P <sup>0</sup> <sub>2</sub>	D22	4530	16	3.04	13.77	220	
						1797	
S 1	D13	1440	10	0.995	1.43	14	AVERAGE
						14	
S 2	FB50x6	570	64	2.36	1.35	86	
						86	
						D32	3856 x 6 = 23136
						D25	1385 x 6 = 8310
						D22	220 x 6 = 1320
						D19	1577 x 6 = 9462
						D13	14 x 6 = 84
						TOTAL	7052 x 6 = 42312
						FB50x6	86 x 6 = 516

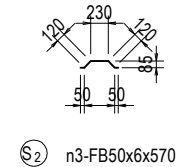
# BAR ARRANGEMENT OF CAST IN PLACE PILE (7) S=1:100

PF.7



(AVE) 10-D13x1440

TYPE	No	I	L
1	2	1199	1590
2	4	1130	1520
3	4	893	1280
TOTAL	10	1049	1440



Change the parallel crossed reinforcing bars at the tip according to the construction method.

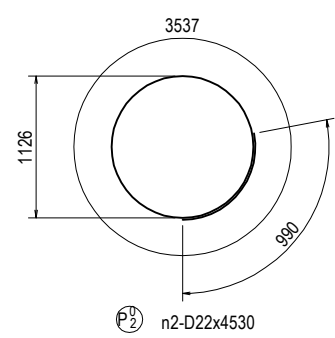
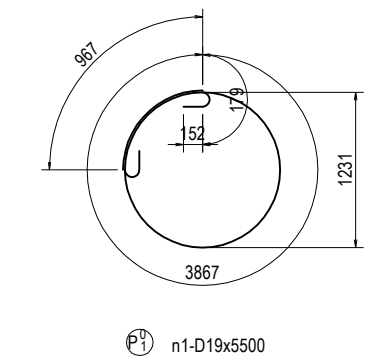
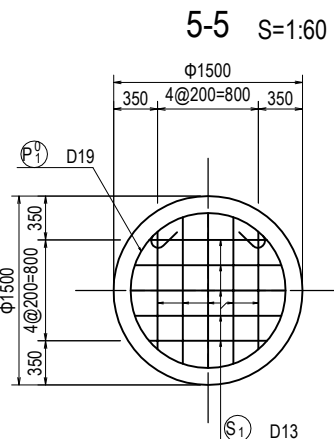
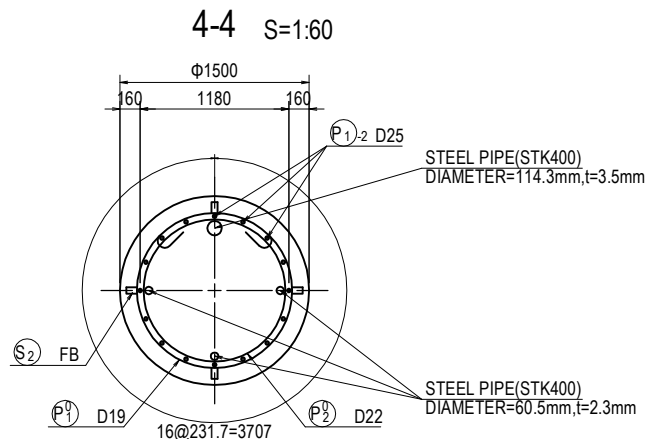
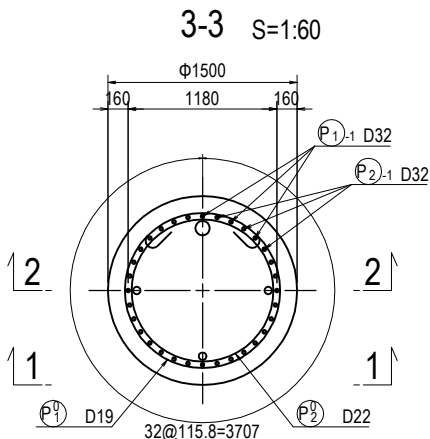
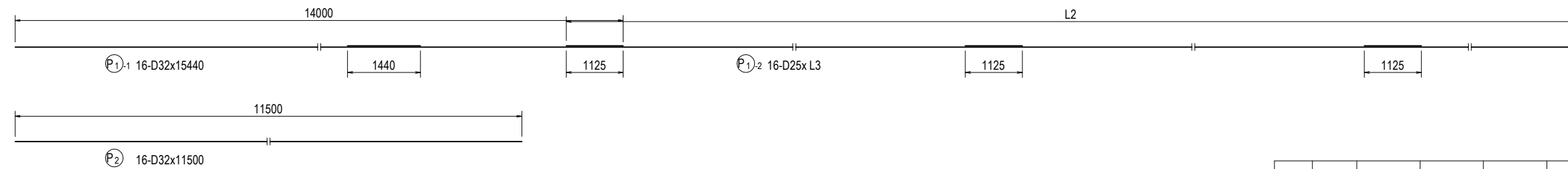
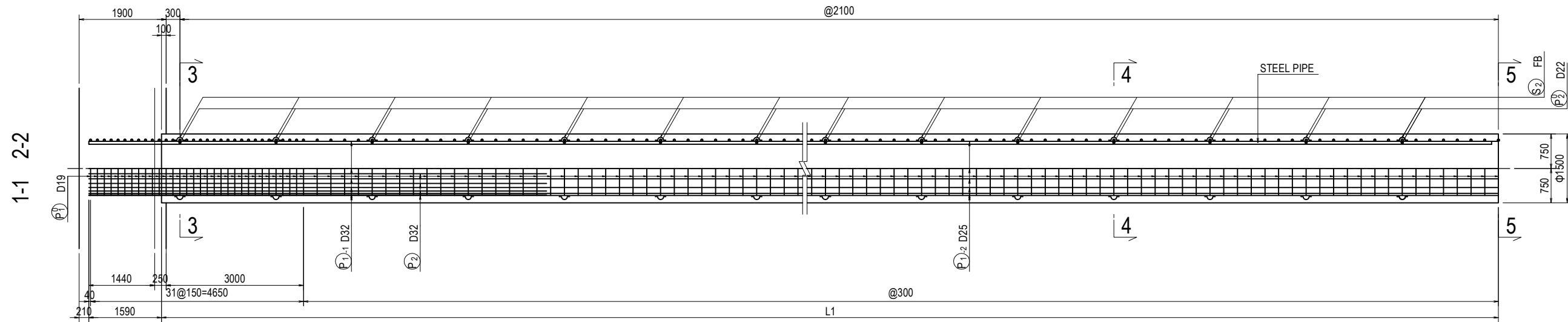
No.	AXIS	L1(m)	L2(mm)	L3(mm)	n1	n2	n3
1	PF.7	37.0	28215	30470	145	18	72

## BAR LIST

REBAR NO.	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT/ONE (kg)	WEIGHT (kg)	REMARKS
P 1 -1	D32	11500	24	6.23	71.65	1720	
P 1 -2	D25	30470	24	3.98	121.27	2910	
4630							
P 1 0	D19	5340	145	2.25	12.02	1743	
P 2 0	D22	4530	18	3.04	13.77	248	
1991							
S 1	D13	1440	10	0.995	1.43	14	AVERAGE
14							
S 2	FB50x6	570	72	2.36	1.35	97	
97							
						D32	1720 x 4 = 6880
						D25	2910 x 4 = 11640
						D22	248 x 4 = 992
						D19	1743 x 4 = 6972
						D13	14 x 4 = 56
						TOTAL	6635 x 4 = 26540
						FB50x6	97 x 4 = 388

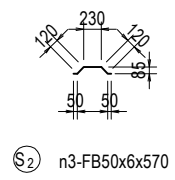
# BAR ARRANGEMENT OF CAST IN PLACE PILE (8) S=1:100

PF.9



(AVE) 10-D13x1440

TYPE	No	I	L
1	2	1199	1590
2	4	1130	1520
3	4	893	1280
TOTAL	10	1049	1440



Change the parallel crossed reinforcing bars at the tip according to the construction method.

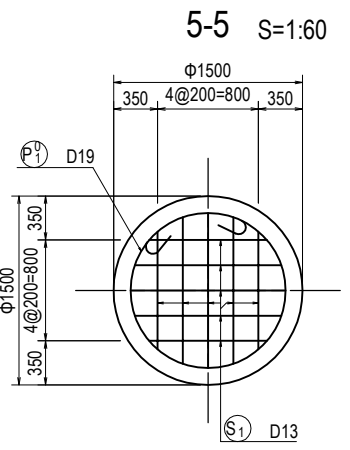
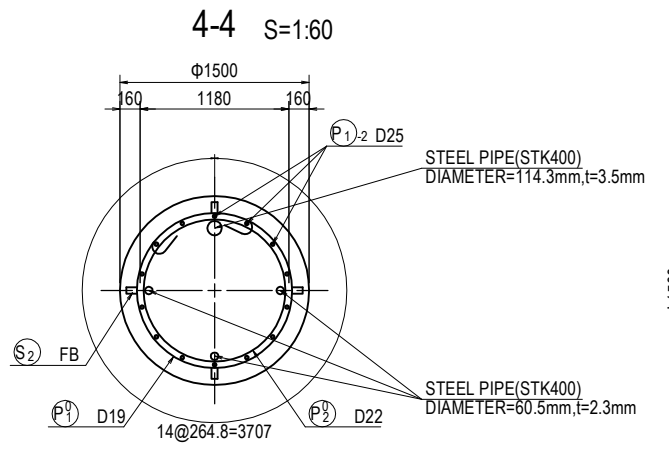
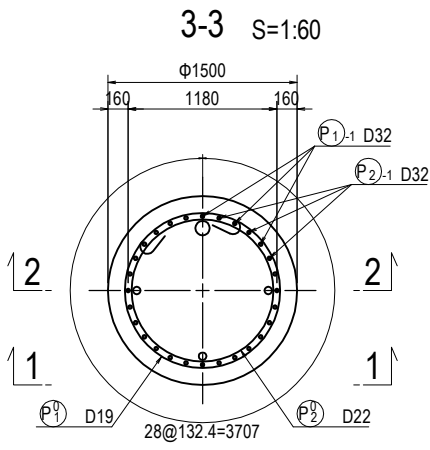
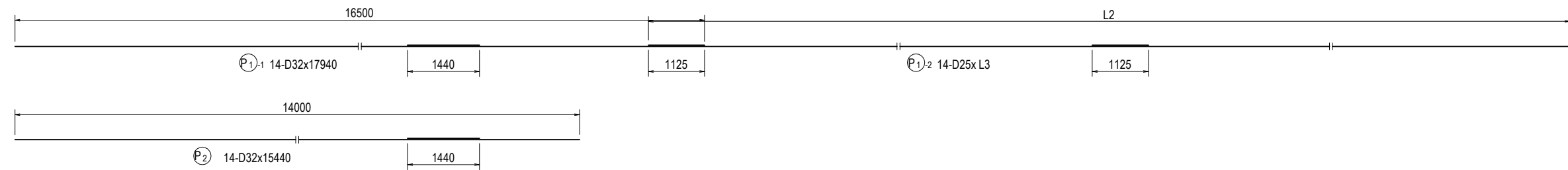
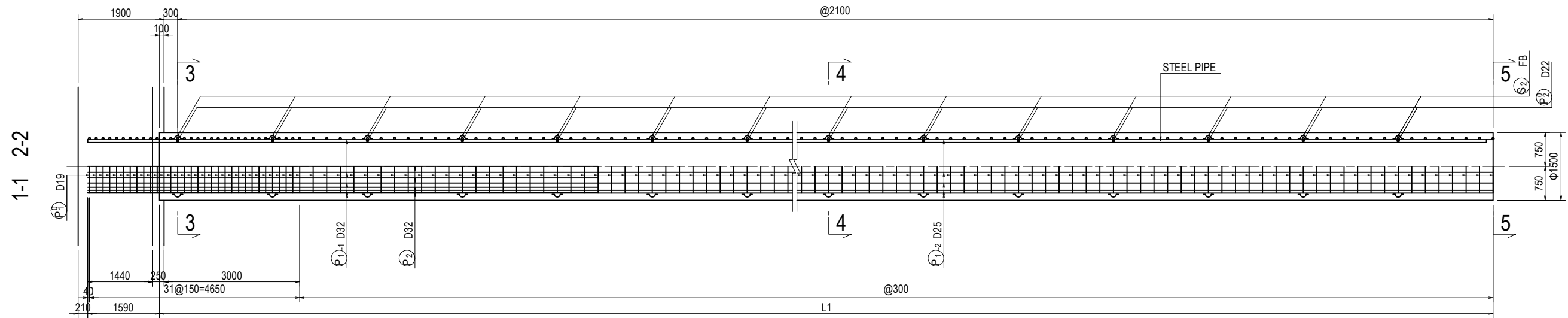
No.	AXIS	L1(m)	L2(mm)	L3(mm)	n1	n2	n3
1	PF.9	35.5	24215	26470	140	17	68

## BAR LIST

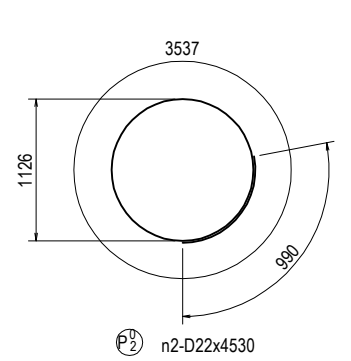
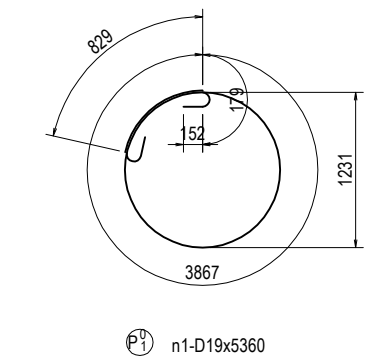
REBAR NO.	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT/ONE (kg)	WEIGHT (kg)	REMARKS
P 1 -1	D32	15440	16	6.23	96.19	1539	
P 1 -2	D25	26470	16	3.98	105.35	1686	
P 2	D32	11500	16	6.23	71.65	1146	
							4371
P 1	D19	5500	140	2.25	12.38	1733	
P 2	D22	4530	17	3.04	13.77	234	
							1967
S 1	D13	1440	10	0.995	1.43	14	AVERAGE
							14
S 2	FB50x6	570	68	2.36	1.35	92	
							92
					D32	2685 x 6 =	16110
					D25	1686 x 6 =	10116
					D22	234 x 6 =	1404
					D19	1733 x 6 =	10398
					D13	14 x 6 =	84
					TOTAL	6352 x 6 =	38112
					FB50x6	92 x 6 =	552

# BAR ARRANGEMENT OF CAST IN PLACE PILE (9) S=1:100

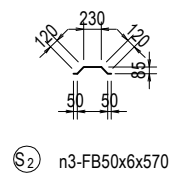
PF.11,12,13,15



No.	AXIS	L1(m)	L2(mm)	L3(mm)	n1	n2	n3
1	PF.11	32.5	18715	19840	130	16	64
2	PF.12	33.0	19215	20340	132	16	64
3	PF.13	32.5	18715	19840	130	16	64
4	PF.15	34.0	20215	21340	135	16	64



TYPE	No	I	L
1	2	1199	1590
2	4	1130	1520
3	4	893	1280
TOTAL	10	1049	1440



Change the parallel crossed reinforcing bars at the tip according to the construction method.

# BAR ARRANGEMENT OF CAST IN PLACE PILE (10)

PF.11,12,13,15

## BAR LIST <PF.11>

REBAR NO.	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT/ONE (kg)	WEIGHT (kg)	REMARKS
P 1 -1	D32	17940	14	6.23	111.77	1565	
P 1 -2	D25	19840	14	3.98	78.96	1105	
P 2	D32	15440	14	6.23	96.19	1347	
4017							
P <sup>0</sup> <sub>1</sub>	D19	5360	130	2.25	12.06	1568	
P <sup>0</sup> <sub>2</sub>	D22	4530	16	3.04	13.77	220	
1788							
S 1	D13	1440	10	0.995	1.43	14	AVERAGE
14							
S 2	FB50x6	570	64	2.36	1.35	86	
86							
						D32	2912 x 4 = 11648
						D25	1105 x 4 = 4420
						D22	220 x 4 = 880
						D19	1568 x 4 = 6272
						D13	14 x 4 = 56
						TOTAL	5819 x 4 = 23276
						FB50x6	86 x 4 = 344

## BAR LIST <PF.12>

REBAR NO.	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT/ONE (kg)	WEIGHT (kg)	REMARKS
P 1 -1	D32	17940	14	6.23	111.77	1565	
P 1 -2	D25	20340	14	3.98	80.95	1133	
P 2	D32	15440	14	6.23	96.19	1347	
4045							
P <sup>0</sup> <sub>1</sub>	D19	5360	132	2.25	12.06	1592	
P <sup>0</sup> <sub>2</sub>	D22	4530	16	3.04	13.77	220	
1812							
S 1	D13	1440	10	0.995	1.43	14	AVERAGE
14							
S 2	FB50x6	570	64	2.36	1.35	86	
86							
						D32	2912 x 4 = 11648
						D25	1133 x 4 = 4532
						D22	220 x 4 = 880
						D19	1592 x 4 = 6368
						D13	14 x 4 = 56
						TOTAL	5871 x 4 = 23484
						FB50x6	86 x 4 = 344

## BAR LIST <PF.13>

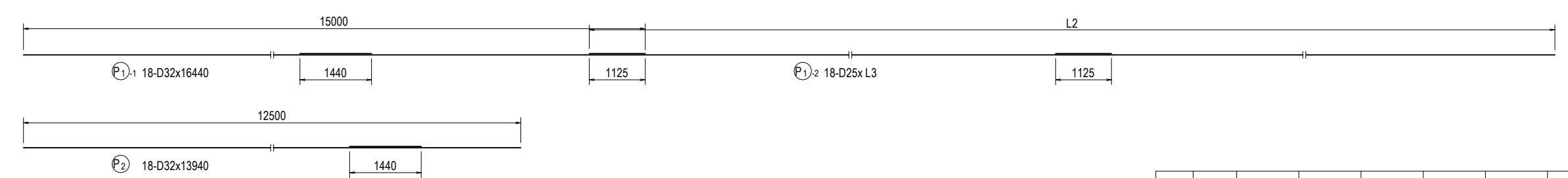
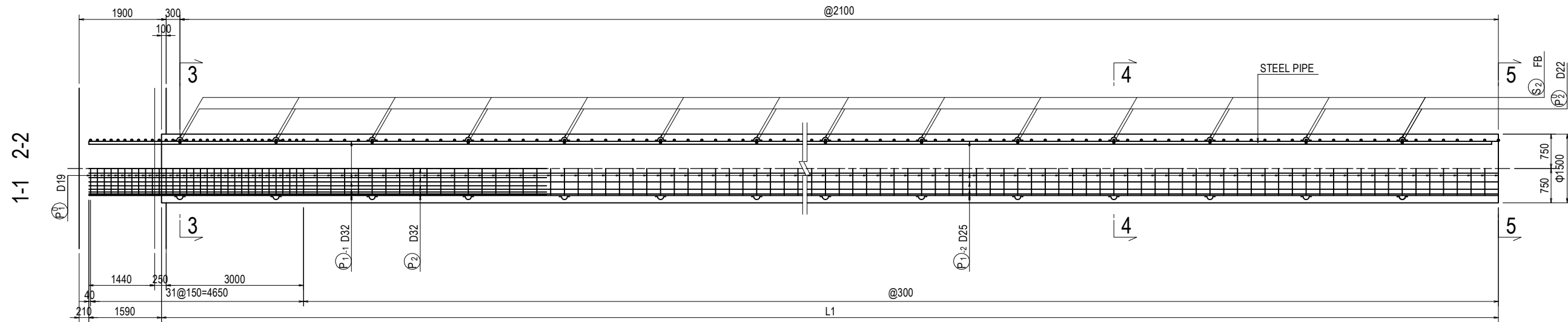
REBAR NO.	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT/ONE (kg)	WEIGHT (kg)	REMARKS
P 1 -1	D32	17940	14	6.23	111.77	1565	
P 1 -2	D25	19840	14	3.98	78.96	1105	
P 2	D32	15440	14	6.23	96.19	1347	
4017							
P <sup>0</sup> <sub>1</sub>	D19	5360	130	2.25	12.06	1568	
P <sup>0</sup> <sub>2</sub>	D22	4530	16	3.04	13.77	220	
1788							
S 1	D13	1440	10	0.995	1.43	14	AVERAGE
14							
S 2	FB50x6	570	64	2.36	1.35	86	
86							
						D32	2912 x 4 = 11648
						D25	1105 x 4 = 4420
						D22	220 x 4 = 880
						D19	1568 x 4 = 6272
						D13	14 x 4 = 56
						TOTAL	5819 x 4 = 23276
						FB50x6	86 x 4 = 344

## BAR LIST <PF.15>

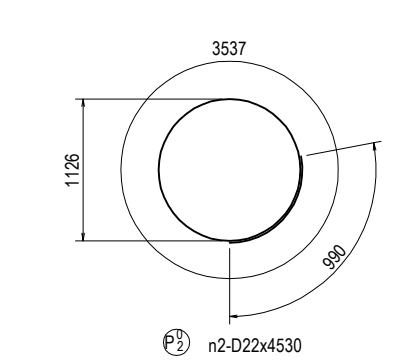
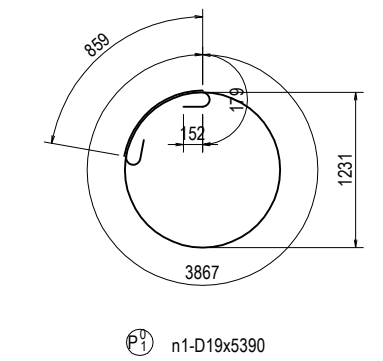
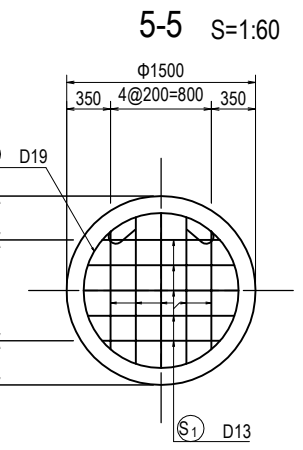
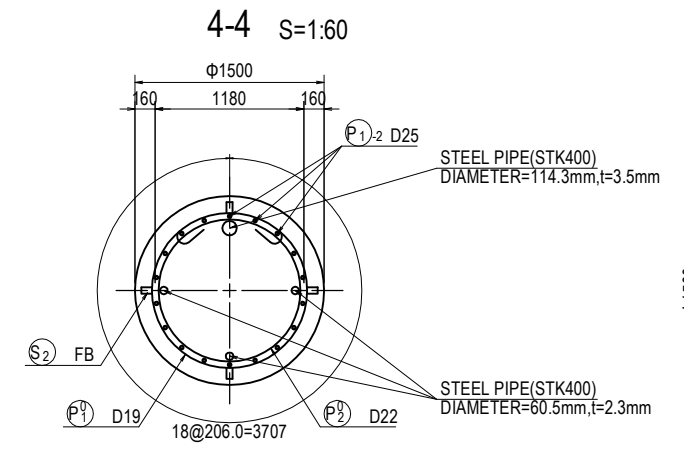
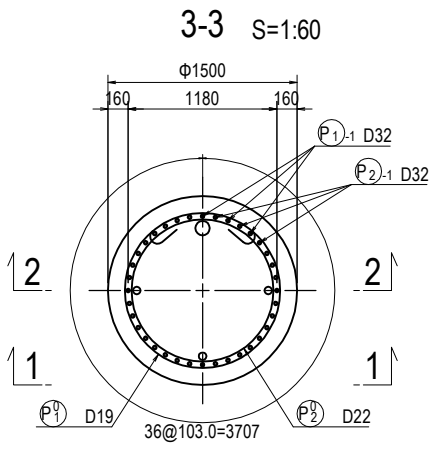
REBAR NO.	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT/ONE (kg)	WEIGHT (kg)	REMARKS
P 1 -1	D32	17940	14	6.23	111.77	1565	
P 1 -2	D25	21340	14	3.98	84.93	1189	
P 2	D32	15440	14	6.23	96.19	1347	
4101							
P <sup>0</sup> <sub>1</sub>	D19	5360	135	2.25	12.06	1628	
P <sup>0</sup> <sub>2</sub>	D22	4530	16	3.04	13.77	220	
1848							
S 1	D13	1440	10	0.995	1.43	14	AVERAGE
14							
S 2	FB50x6	570	64	2.36	1.35	86	
86							
						D32	2912 x 6 = 17472
						D25	1189 x 6 = 7134
						D22	220 x 6 = 1320
						D19	1628 x 6 = 9768
						D13	14 x 6 = 84
						TOTAL	5963 x 6 = 35778
						FB50x6	86 x 6 = 516

# BAR ARRANGEMENT OF CAST IN PLACE PILE (11) S=1:100

PF.14,AF.2



No.	AXIS	L1(m)	L2(mm)	L3(mm)	n1	n2	n3
1	PF.14	33.5	21215	22340	134	16	64
2	AF.2	34.0	21715	22840	135	16	64



TYPE	No	I	L
1	2	1199	1590
2	4	1130	1520
3	4	893	1280
TOTAL	10	1049	1440

Change the parallel crossed reinforcing bars at the tip according to the construction method.



# BAR ARRANGEMENT OF CAST IN PLACE PILE (12)

PF.14,AF.2

**BAR LIST <PF.14>**

REBAR NO.	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT/ONE (kg)	WEIGHT (kg)	REMARKS
P 1 -1	D32	16440	18	6.23	102.42	1844	
P 1 -2	D25	22340	18	3.98	88.91	1600	
P 2	D32	13940	18	6.23	86.85	1563	
5007							
P 1 <sup>0</sup>	D19	5390	134	2.25	12.13	1625	
P 2 <sup>0</sup>	D22	4530	16	3.04	13.77	220	
1845							
S 1	D13	1440	10	0.995	1.43	14	AVERAGE
14							
S 2	FB50x6	570	64	2.36	1.35	86	
86							
				D32	3407 x 4 =	13628	
				D25	1600 x 4 =	6400	
				D22	220 x 4 =	880	
				D19	1625 x 4 =	6500	
				D13	14 x 4 =	56	
				TOTAL	6866 x 4 =	27464	
				FB50x6	86 x 4 =	344	

**BAR LIST <AF.2>**

REBAR NO.	DIA (mm)	LENGTH (mm)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT/ONE (kg)	WEIGHT (kg)	REMARKS
P 1 -1	D32	16440	18	6.23	102.42	1844	
P 1 -2	D25	22840	18	3.98	90.90	1636	
P 2	D32	13940	18	6.23	86.85	1563	
5043							
P 1 <sup>0</sup>	D19	5390	135	2.25	12.13	1638	
P 2 <sup>0</sup>	D22	4530	16	3.04	13.77	220	
1858							
S 1	D13	1440	10	0.995	1.43	14	AVERAGE
14							
S 2	FB50x6	570	64	2.36	1.35	86	
86							
				D32	3407 x 6 =	20442	
				D25	1636 x 6 =	9816	
				D22	220 x 6 =	1320	
				D19	1638 x 6 =	9828	
				D13	14 x 6 =	84	
				TOTAL	6915 x 6 =	41490	
				FB50x6	86 x 6 =	516	



# QUANTITY TABLE OF SUBSTRUCTRE (1) (REFERENCE DRAWING)

QUANTITY OF MAIN STRUCTURE																								
Item	Classification	Specification	Unit	AF1 Abutment	PF1 Pier	PF2 Pier	PF3 Pier	PF4 Pier	PF5 Pier	PF6 Pier	PF7 Pier	PF8 Pier	PF9 Pier	PF10 Pier	PF11 Pier	PF12 Pier	PF13 Pier	PF14 Pier	PF15 Pier	AF2 Abutment	Total	Remarks		
Earth work	Excavation	Soil	m3	162.1	282.6	274.7	509.6	367.7	423.5	365.2	317.8	407.5	402.2	400.0	318.0	314.4	320.0	355.7	395.9	452.4	6069.3			
	Backfill	Soil	m3	30.4	112.8	81.7	250.2	194.8	215.1	192.6	181.8	217.6	228.9	209.5	176.0	178.8	183.7	176.1	202.7	227.0	3059.7			
	Surplus soil treatment	Soil	m3	128.3	157.3	183.9	231.6	151.3	184.5	151.2	115.8	165.7	147.9	167.2	122.4	115.7	115.9	160.0	170.7	200.2	2669.6			
	Base levelling	-	m2	97.1	82.5	82.5	98.6	63.8	77.1	63.8	49.9	71.8	63.8	71.8	49.9	49.9	49.9	60.2	71.8	82.6	1187.0			
	Embankment	Soil	m3	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	248.3	248.3		
Concrete volume	Reinforcement structure	Post-cast part	σck=24N/mm2	m3	1.8	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1.8	3.6		
		Superstructure construction	σck=24N/mm2	m3	2.8	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	2.8	5.6	
		Substructure construction	σck=24N/mm2	m3	349.0	268.5	323.4	330.7	279.4	392.6	310.2	280.1	323.6	302.6	311.3	314.4	239.5	225.8	289.9	262.3	347.9	5151.2		
Form area	Reinforcement structure	Post-cast part	Common part	m2	4.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	4.0	8.0		
		Superstructure construction	Common part	m2	18.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	18.0	36.0	
		Substructure construction	Common part	m2	345.0	72.2	72.2	79.8	65.6	70.3	65.6	56.1	68.4	65.6	68.4	56.1	56.1	56.1	60.8	68.4	388.1	1714.8		
			Special part	m2	-----	89.0	126.1	91.5	91.5	125.6	89.0	95.7	89.0	89.0	89.0	123.2	95.1	95.1	126.2	89.0	-----	1504.0	Metal form	
	Ordinary part	m2	-----	26.8	38.8	51.9	78.7	103.3	116.3	114.5	114.5	107.3	100.2	85.7	68.0	51.9	42.8	141.5	-----	1242.2	Metal form			
Lean concrete	Plain concrete structure	σck=18N/mm2, t=100mm	m2	97.1	82.5	82.5	98.6	63.8	77.1	63.8	49.9	71.8	63.8	71.8	49.9	49.9	49.9	60.2	71.8	82.6	1187.0			
	Form area	t=100mm	m2	4.4	3.9	3.9	4.3	3.5	3.8	3.5	3.0	3.7	3.5	3.7	3.0	3.0	3.0	3.3	3.7	4.0	61.2			
	Plain concrete structure	Volume	m3	9.7	8.3	8.3	9.9	6.4	7.7	6.4	5.0	7.2	6.4	7.2	5.0	5.0	5.0	6.0	7.2	8.3	119.0			
Reinforcement bar	SD345	D13	t	0.755	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0.643	1.398		
		D16	t	5.276	3.749	6.645	5.366	6.008	8.903	6.917	5.977	2.701	6.690	2.633	7.568	4.880	4.413	5.360	4.666	4.989	92.741			
		D19	t	1.415	0.848	0.382	1.555	3.078	1.182	1.523	1.643	6.603	1.523	6.127	1.286	2.416	2.416	1.939	-----	-----	1.313	35.249		
		D22	t	2.023	4.624	2.448	0.654	0.654	2.478	4.667	4.581	4.581	4.581	4.581	3.368	2.823	2.823	2.420	4.581	1.785	53.672			
		D25	t	3.694	-----	3.495	1.874	-----	-----	-----	5.346	-----	-----	-----	3.495	2.430	2.187	0.597	3.099	6.001	32.218			
		D29	t	0.987	5.180	8.772	5.483	-----	4.222	13.384	0.706	4.677	10.336	4.677	-----	0.706	0.706	3.223	4.973	1.321	69.353			
		D32	t	3.622	13.148	1.551	19.234	9.382	18.595	5.061	4.470	23.667	5.058	22.579	2.082	4.470	4.470	9.823	8.078	3.582	158.872			
		Total	t	17.772	27.549	23.293	34.166	19.122	35.380	31.552	22.723	42.229	28.188	40.597	17.799	17.725	17.015	23.362	25.397	19.634	443.503			
		Scaffolding	Prefabricated scaffold	H 30 m	Body	m2	252	190	217	243	300	368	380	380	376	361	346	329	277	243	244	224	304	5034
φ150	m			-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	7.8	-----	-----	7.8	-----	-----	15.6	
Blockout	Cylindrical form	φ175	m	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	11.0	11.0	-----	-----	-----	22.0		
		φ200	m	4.2	-----	9.3	10.2	10.2	5.1	-----	4.5	-----	-----	-----	4.2	-----	-----	4.2	-----	-----	4.2	56.1		
		φ250	m	-----	2.9	-----	-----	-----	5.1	5.2	-----	6.0	2.6	12.6	-----	-----	-----	-----	6.0	-----	-----	40.4		
		Non-shrinkage mortar	m3	0.21	0.23	0.49	0.62	0.62	0.64	0.44	0.20	0.41	0.18	0.69	0.49	0.43	0.43	0.45	0.30	-----	0.20	7.02		
Foundation material	-	RC-40	t=200	m2	97.1	82.5	82.5	98.6	63.8	77.1	63.8	49.9	71.8	63.8	71.8	49.9	49.9	49.9	60.2	71.8	82.6	1187.0		
Timbering	Wedge combination	H 30 m	m3	29	38	52	55	73	114	98	97	97	92	87	99	66	55	64	49	36	1201			
	Pipe support	H < 4 m	m3	7	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	8	15			

# QUANTITY TABLE OF SUBSTRUCTURE (2) (REFERENCE DRAWING)

QUANTITY OF FOUNDATION  
Reverse circulation method

Item	Unit	AF1 Abutment	PF1 Pier	PF2 Pier	PF3 Pier	PF4 Pier	PF5 Pier	PF6 Pier	PF7 Pier	PF8 Pier	PF9 Pier	PF10 Pier	PF11 Pier	PF12 Pier	PF13 Pier	PF14 Pier	PF15 Pier	AF2 Abutment	Total	Remarks		
Pile diameter	m	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	-----		
Number of pile	No.	8	6	6	9	6	6	6	4	6	6	6	4	4	4	4	6	6	6	-----		
Design length of pile	m	40.5	41.5	41.5	38.0	40.5	35.5	33.5	37.0	37.0	35.5	32.5	32.5	33.0	32.5	33.5	34.0	34.0	34.0	-----		
Total length	m	324.0	249.0	249.0	342.0	243.0	213.0	201.0	148.0	222.0	213.0	195.0	130.0	132.0	130.0	134.0	204.0	204.0	3533.0			
For each pile																						
Concrete	σ <sub>ck</sub> =24N/mm <sup>2</sup> (Nominal strength σ <sub>ck</sub> =30N/mm <sup>2</sup> )	m <sup>3</sup>	71.6	73.3	73.3	67.2	71.6	62.7	59.2	65.4	65.4	62.7	57.4	57.4	58.3	57.4	59.2	60.1	60.1	1082.3		
Concrete (design pile length)	σ <sub>ck</sub> =24N/mm <sup>2</sup> (Nominal strength σ <sub>ck</sub> =30N/mm <sup>2</sup> )	m <sup>3</sup>	69.8	71.5	71.5	65.4	69.8	60.9	57.4	63.6	63.6	60.9	55.6	55.6	56.5	55.6	57.4	58.3	58.3	1051.7		
Demolition concrete		m <sup>3</sup>	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	30.6		
Reinforcement bar (SD345)	D13	t	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.238		
	D16	t	-----	-----	-----	-----	-----	-----	-----	-----	-----	0.014	-----	-----	-----	-----	-----	-----	-----	-----	0.014	
	D19	t	1.904	1.941	1.941	1.797	1.893	1.698	1.625	-----	1.759	1.733	1.577	1.568	1.592	1.568	1.625	1.628	1.671	27.520		
	D22	t	0.275	0.275	0.275	0.248	0.275	0.234	0.220	1.743	0.248	0.234	0.220	0.220	0.220	0.220	0.220	0.220	0.220	0.220	5.567	
	D25	t	2.040	2.111	2.111	1.475	1.614	1.600	1.457	0.248	1.708	1.622	1.385	1.105	1.133	1.105	1.600	1.189	1.454	24.957		
	D29	t	-----	-----	-----	-----	-----	-----	-----	2.910	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	2.910	
	D32	t	3.856	3.856	3.856	2.912	2.912	3.856	3.856	-----	3.856	3.029	3.856	2.912	2.912	2.912	3.407	2.912	3.029	53.929		
	D35	t	-----	-----	-----	-----	-----	-----	-----	1.720	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1.720	
Total	t	8.089	8.197	8.197	6.446	6.708	7.402	7.172	-----	7.585	6.632	7.052	5.819	5.871	5.819	6.866	5.963	6.388	110.206			
Flat steel	FB50×6	t	0.108	0.108	0.108	0.097	0.108	0.092	0.086	6.635	0.097	0.092	0.086	0.086	0.086	0.086	0.086	0.086	0.086	8.133		
Excavation length		m	41.3	43.0	43.2	40.8	43.3	38.4	36.3	39.9	39.9	38.4	35.3	35.4	35.8	35.4	36.3	36.8	36.9	656.4		
Weighted average soil coefficient			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-----		
Excavation volume		m <sup>3</sup>	73.0	76.0	76.4	72.1	76.6	67.8	64.2	70.4	70.5	67.8	62.4	62.5	63.3	62.5	64.2	65.0	65.1	1159.8		
Excavation length for different N value	Soil N value: Less than 20	m	15.7	15.5	14.9	13.0	12.0	11.8	11.6	11.6	11.9	12.5	13.3	13.5	13.8	11.8	12.1	12.0	12.0	218.5		
	Soil N value: 20~Less than 40	m	23.8	25.6	26.3	25.8	29.5	23.7	23.1	24.4	25.9	24.4	22.0	21.9	22.0	23.6	24.8	24.7	24.9	416.3		
	Soil N value: More than 40	m	1.8	1.9	2.1	2.1	1.9	2.9	1.6	3.8	2.1	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.6		
	Total	m	41.3	43.0	43.3	40.8	43.3	38.4	36.3	39.9	39.9	38.4	35.3	35.4	35.8	35.4	36.3	36.8	36.9	656.4		

※ ( ) is flare groove weld position

QUANTITY OF APPROACH SLAB

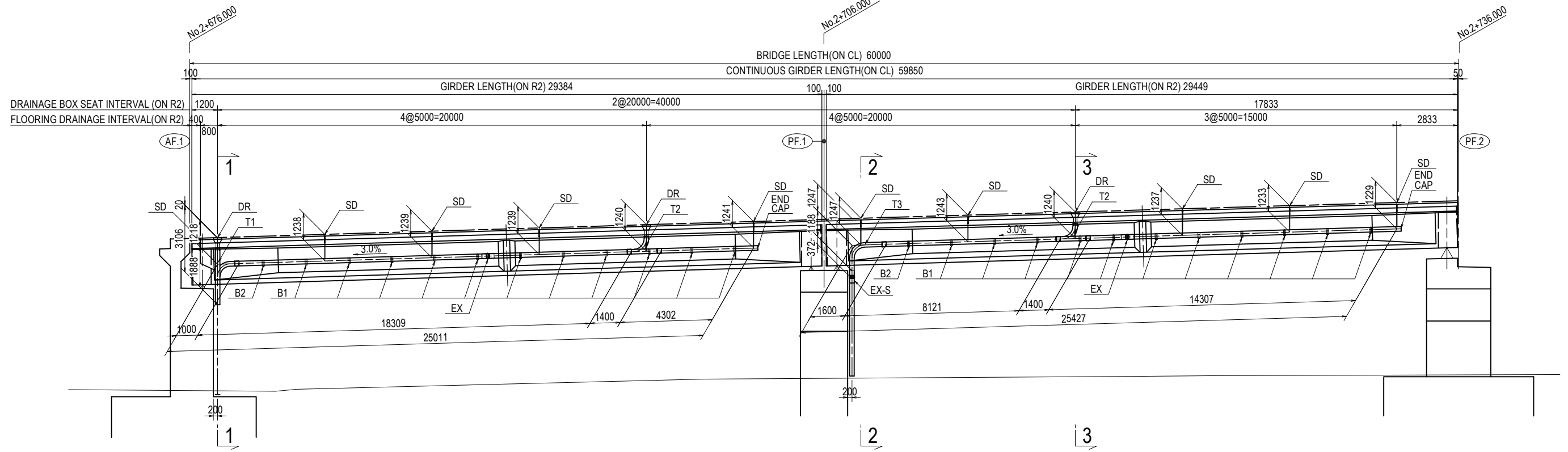
Item	Specification	Unit	AF1 Abutment	AF2 Abutment	Total	Remarks	
Concrete	Reinforcement structure	m <sup>3</sup>	-----	18.9	18.9	σ <sub>ck</sub> =24N/mm <sup>2</sup>	
Form	Reinforcement structure	m <sup>2</sup>	-----	7.3	7.3		
Reinforcement bar	Weight	D10	t	-----	0.008	0.008	SD345
		D13	t	-----	0.714	0.714	SD345
		D16	t	-----	-----	-----	SD345
		D22	t	-----	-----	-----	SD345
		D25	t	-----	0.589	0.589	SD345
		D29	t	-----	1.413	1.413	SD345
		D32	t	-----	-----	-----	SD345
		Total	t	-----	2.724	2.724	SD345
Rubber bearing	t=20	m <sup>2</sup>	-----	2.2	2.2		
Joint material	t=20	m <sup>2</sup>	-----	9	9		
Gas pipe	Sgp4oa	kg	-----	17	17		
Cap	φ60×3.2	kg	-----	2	2		

※The construction of approach slab of AF1 is included in Package 2

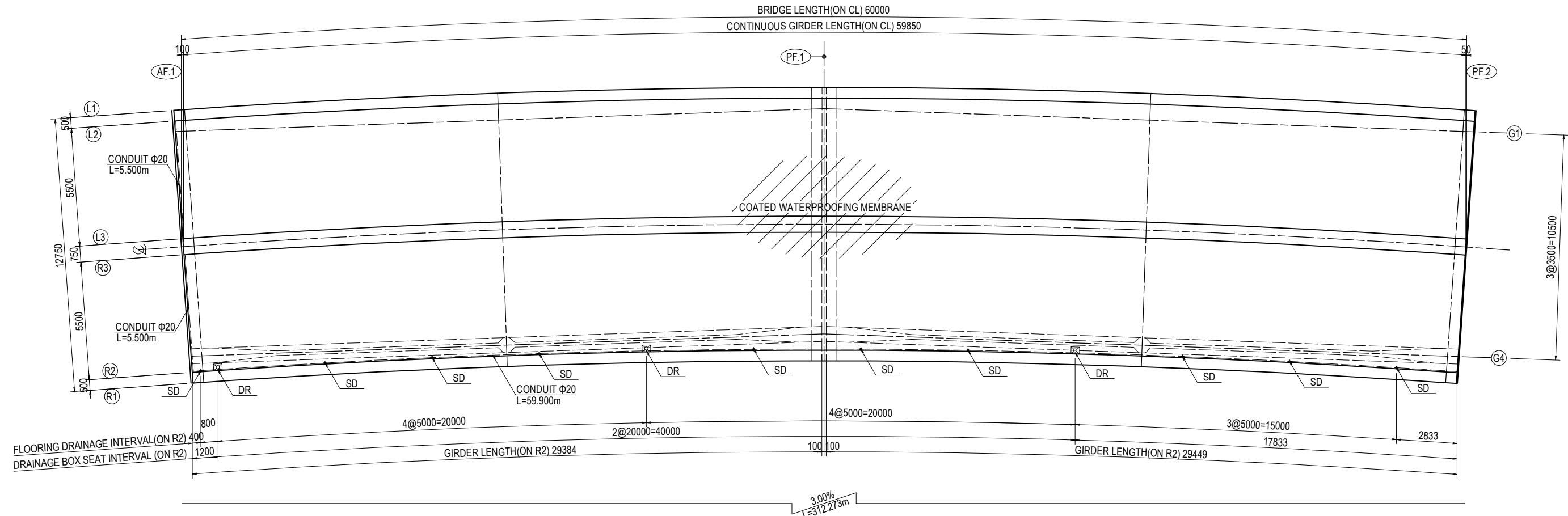
PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO.,LTD. NIPPON ENGINEERING CONSULTANTS CO.,LTD.	NAME	SIGNATURE	DATE	DRAWING TITLE <b>QUANTITY TABLE OF SUBSTRUCTURE(2)</b>	PACKAGE	
				PREPARED BY	Y. SUZUKI			14 Jul. 2017	3
				CHECKED BY	T. HAYAKAWA			20 Jul. 2017	DWG No.
				APPROVED BY	Y. SANO			25 Jul. 2017	P3-FO- 2146

# BRIDGE DRAINAGE LAYOUT (AF1-PF2) (1)

PROFILE S=1:200



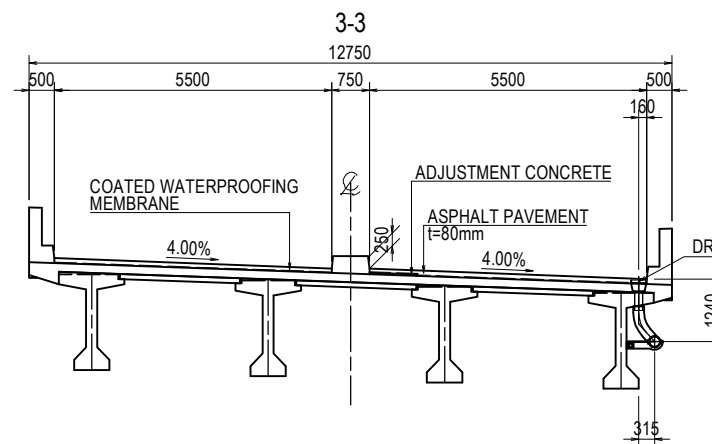
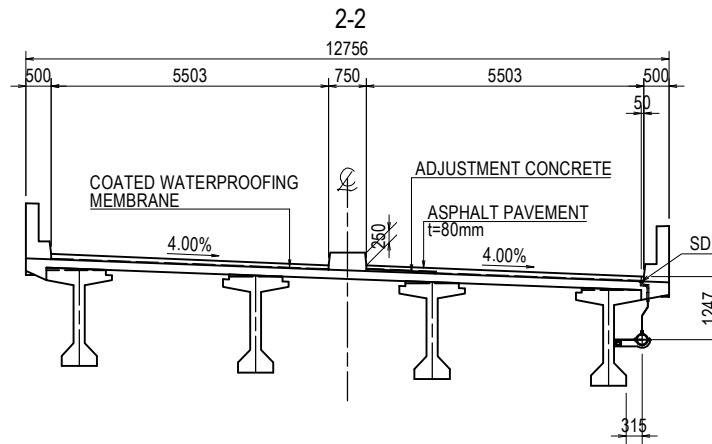
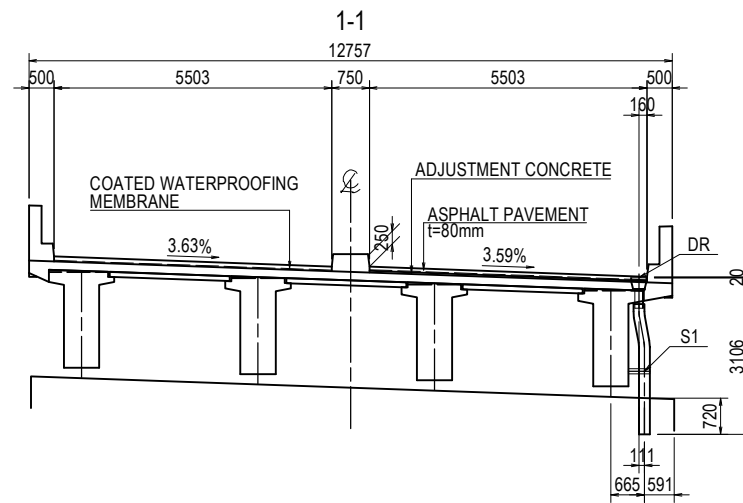
PLAN S=1:200



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	PACKAGE	
				PREPARED BY	Y. SUZUKI				14 Jul. 2017
				CHECKED BY	T. HAYAKAWA				20 Jul. 2017
				APPROVED BY	Y. SANO				25 Jul. 2017
							BRIDGE DRAINAGE LAYOUT (AF1-PF2) (1)	3	
								DWG No.	
								P3-FO-3001	

# BRIDGE DRAINAGE LAYOUT (AF1-PF2) (2)

DRAINAGE SECTION S=1:150

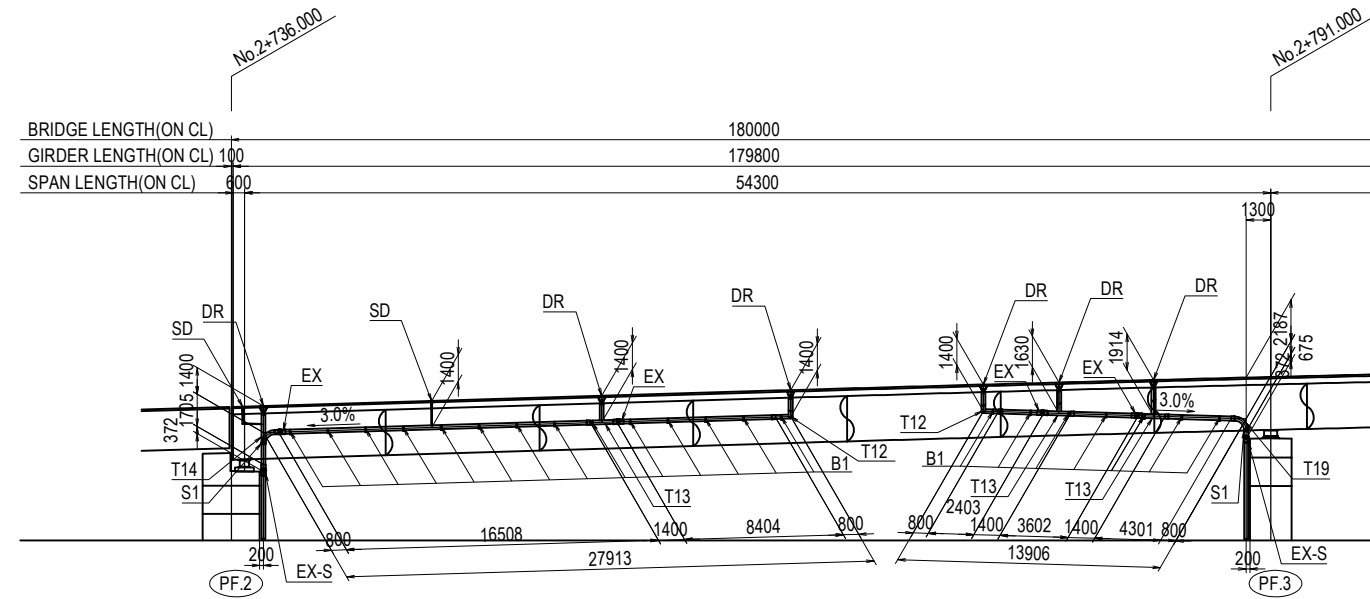


DR	: 3
SD	: 10
SUPPORT B1	: 22
SUPPORT B2	: 2
SUPPORT S1	: 2
SPECIAL PIPET T1	: 1
SPECIAL PIPET T2	: 2
SPECIAL PIPET T3	: 1
CAP	: 2
EX	: 2
EX-S	: 1

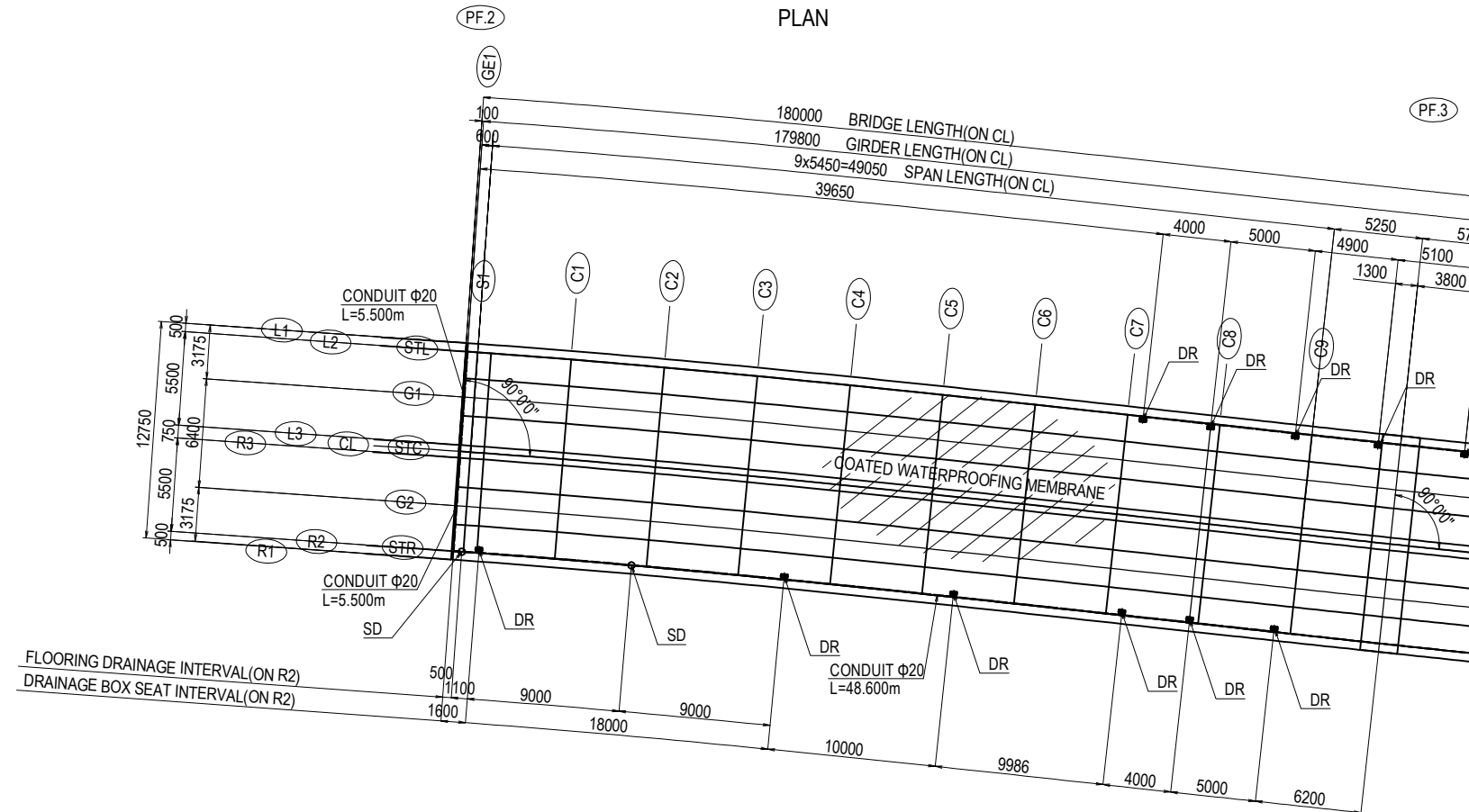
PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	Y. SUZUKI	<i>YS</i>	14 Jul. 2017	BRIDGE DRAINAGE LAYOUT (AF1-PF2) (2)	3
				T. HAYAKAWA	<i>Hayakawa</i>	20 Jul. 2017		DWG No.
				Y. SANO	<i>Y. Sano</i>	25 Jul. 2017		P3-FO-3002

# BRIDGE DRAINAGE LAYOUT (PF2-PF5) (1) S=1:400

PROFILE(G2)



PLAN

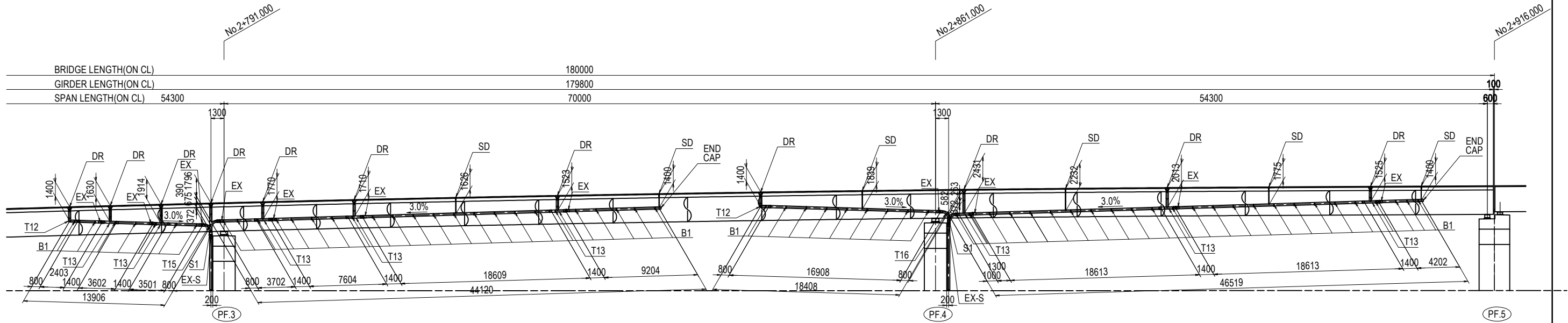


DR	: 6
SD	: 2
SUPPORT B1	: 21
SUPPORT S1	: 2
SPECIAL PIPET T11	: 7
SPECIAL PIPET T12	: 2
SPECIAL PIPET T13	: 3
SPECIAL PIPET T14	: 1
SPECIAL PIPET T19	: 1
EX	: 4
EX-S	: 2

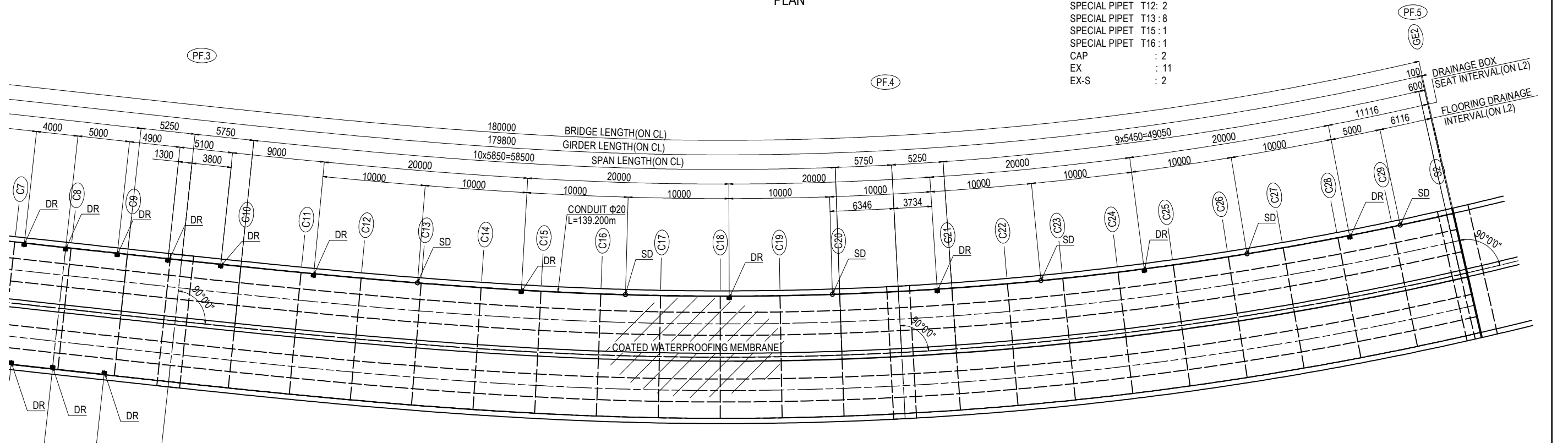
PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE	
				PREPARED BY	Y. SUZUKI				14 Jul. 2017
				CHECKED BY	T. HAYAKAWA				20 Jul. 2017
				APPROVED BY	Y. SANO				25 Jul. 2017
							BRIDGE DRAINAGE LAYOUT (PF2-PF5) (1)	3	
								DWG No.	
								P3-FO-3003	

# BRIDGE DRAINAGE LAYOUT (PF2-PF5) (2) S=1:400

PROFILE(G1)



PLAN



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
PREPARED BY	Y. SUZUKI	<i>YS</i>	14 Jul. 2017
CHECKED BY	T. HAYAKAWA	<i>平川知平</i>	20 Jul. 2017
APPROVED BY	Y. SANO	<i>佐野 祐一</i>	25 Jul. 2017

DRAWING TITLE  
BRIDGE DRAINAGE LAYOUT (PF2-PF5) (2)

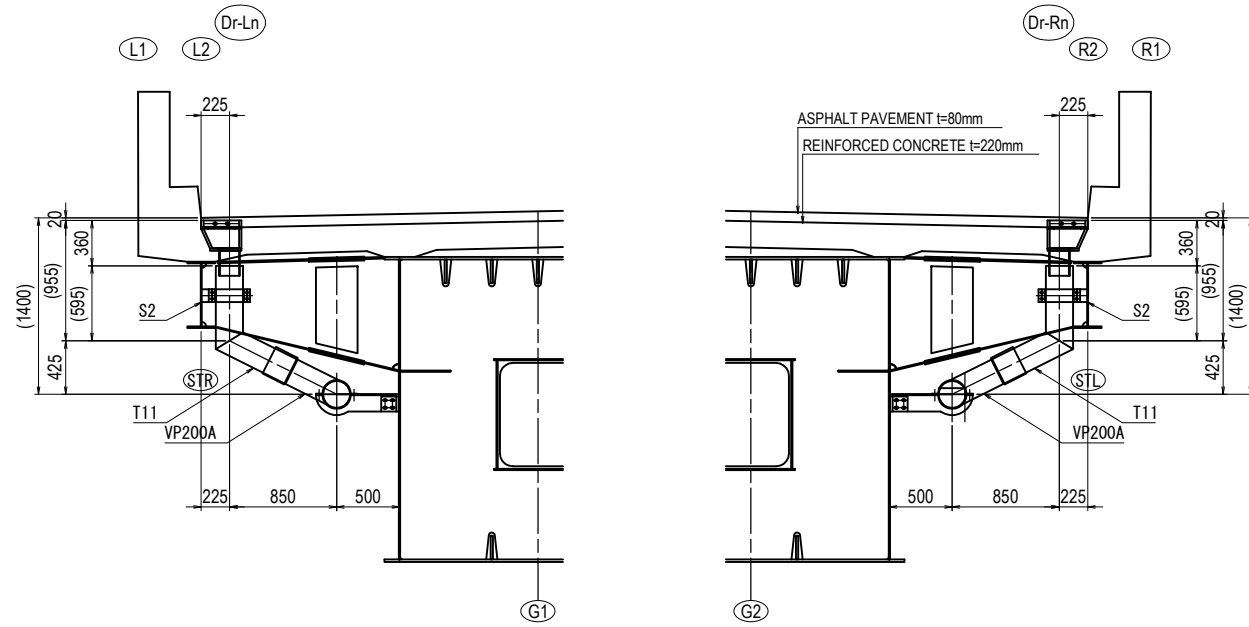
PACKAGE  
3  
DWG No.  
P3-FO-3004



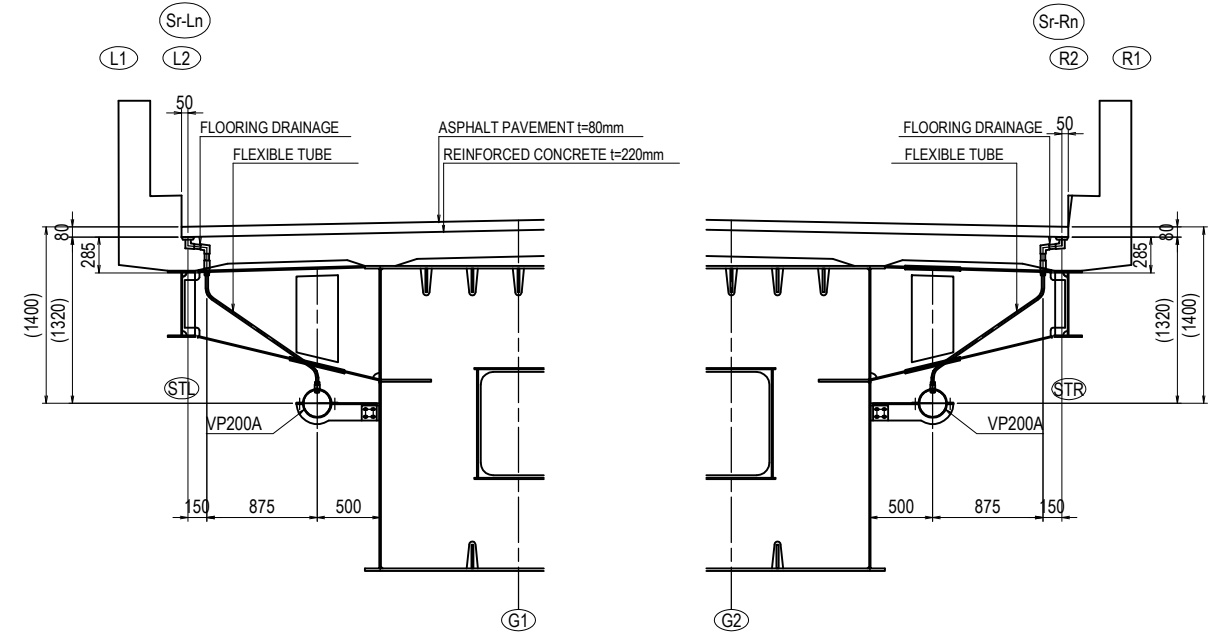
# BRIDGE DRAINAGE LAYOUT (PF2-PF5) (3) S=1:60

## DRAINAGE SECTION

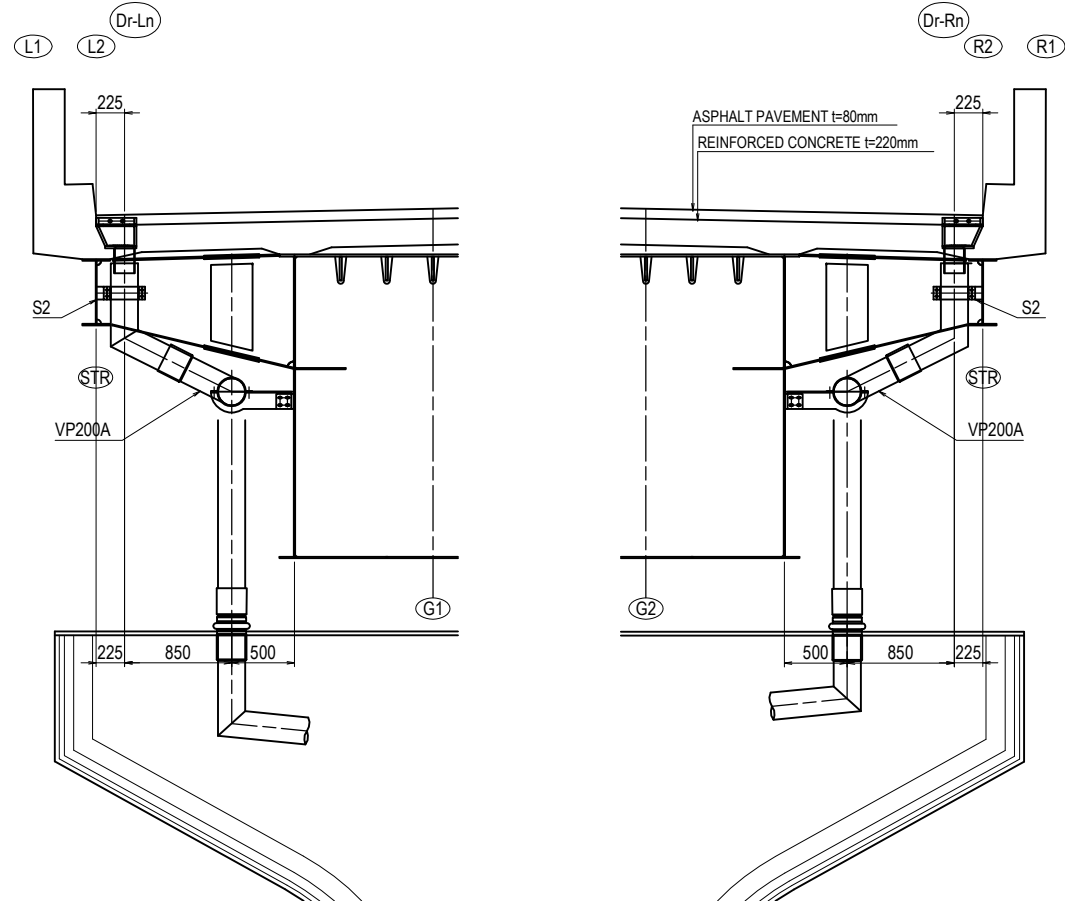
DRAINAGE BOX SEAT



FLOORING DRAINAGE



PIRE



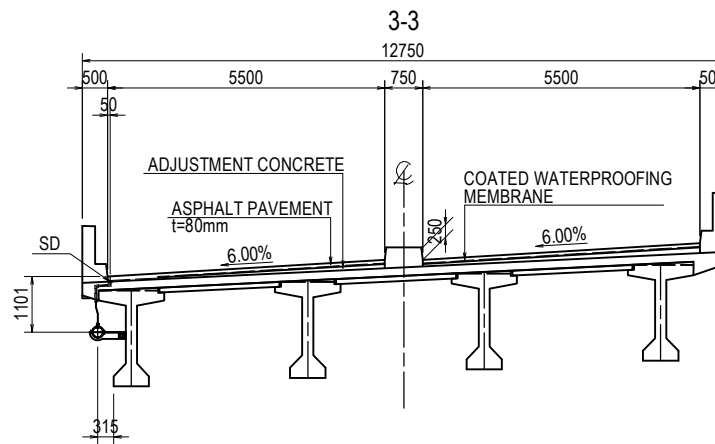
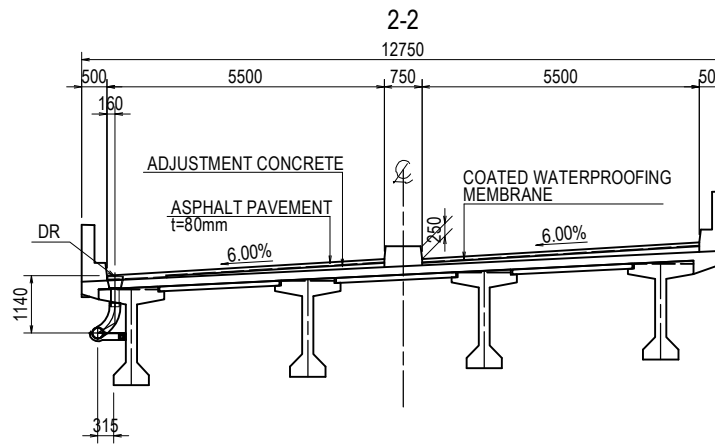
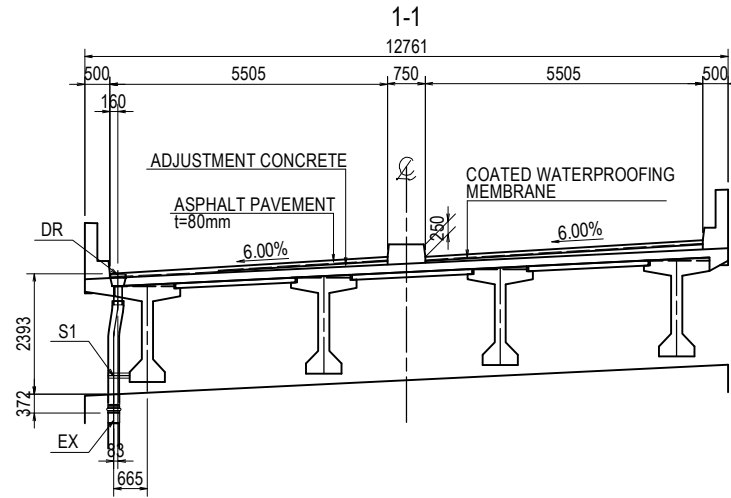
PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	NAME	SIGNATURE	DATE	DRAWING TITLE BRIDGE DRAINAGE LAYOUT (PF2-PF5) (3)	PACKAGE	
				PREPARED BY	Y. SUZUKI			14 Jul. 2017	DWG No.
				CHECKED BY	T. HAYAKAWA			20 Jul. 2017	P3-FO-3005
				APPROVED BY	Y. SANO			25 Jul. 2017	





# BRIDGE DRAINAGE LAYOUT (PF5-PF7) (2)

## DRAINAGE SECTION S=1:150

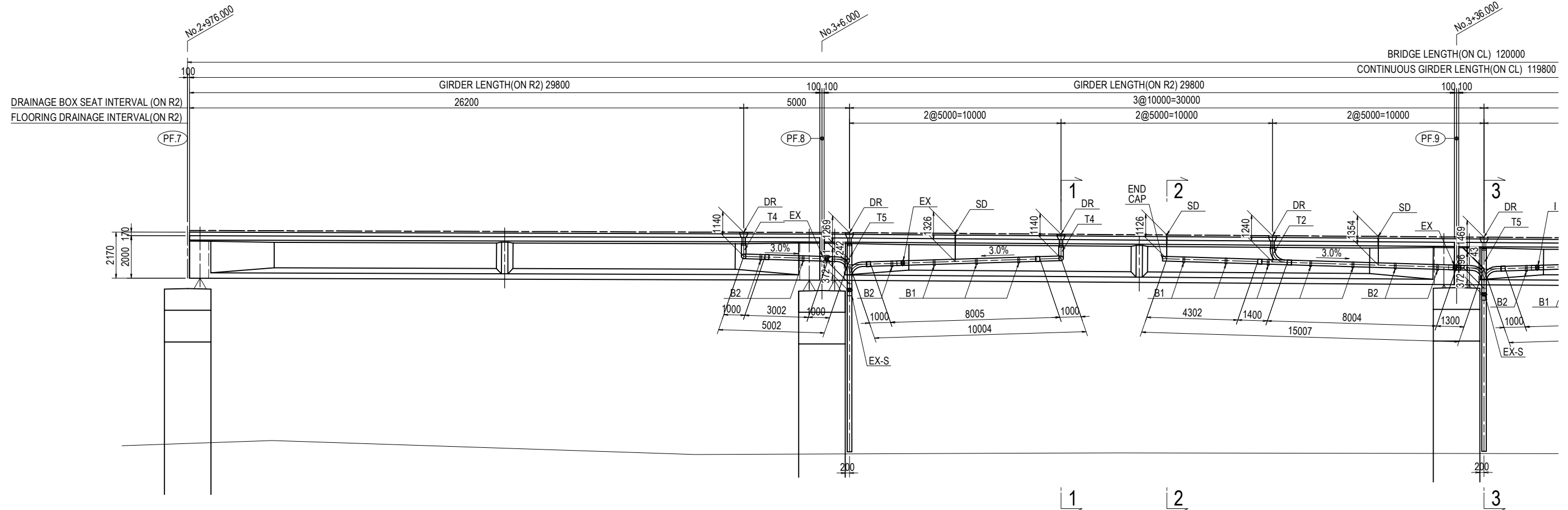
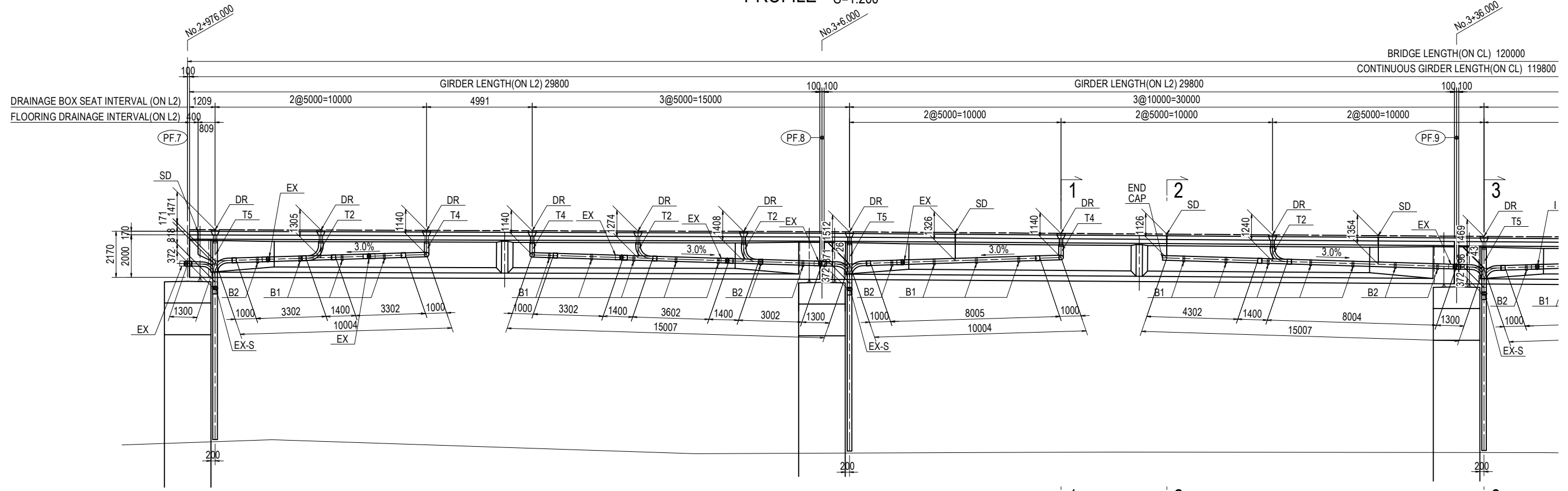


DR	: 6
SD	: 9
SUPPORT B1	: 19
SUPPORT B2	: 4
SUPPORT S1	: 2
SPECIAL PIPET T1	: 2
SPECIAL PIPET T2	: 3
SPECIAL PIPET T4	: 1
CAP	: 2
EX	: 3
EX-S	: 2

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 BRIDGE DRAINAGE LAYOUT (PF5-PF7) (2)	PACKAGE	
				PREPARED BY	Y. SUZUKI			14 Jul. 2017	3
				CHECKED BY	T. HAYAKAWA			20 Jul. 2017	DWG No.
				APPROVED BY	Y. SANO			25 Jul. 2017	P3-FO-3007

# BRIDGE DRAINAGE LAYOUT (PF7-PF11) (1)

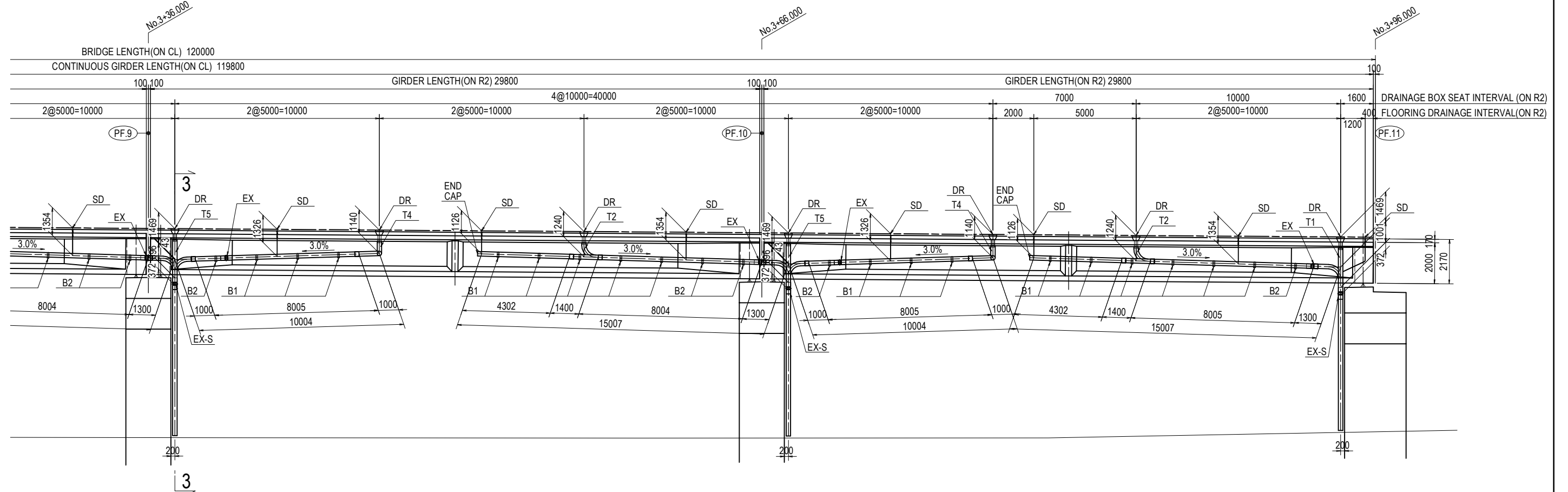
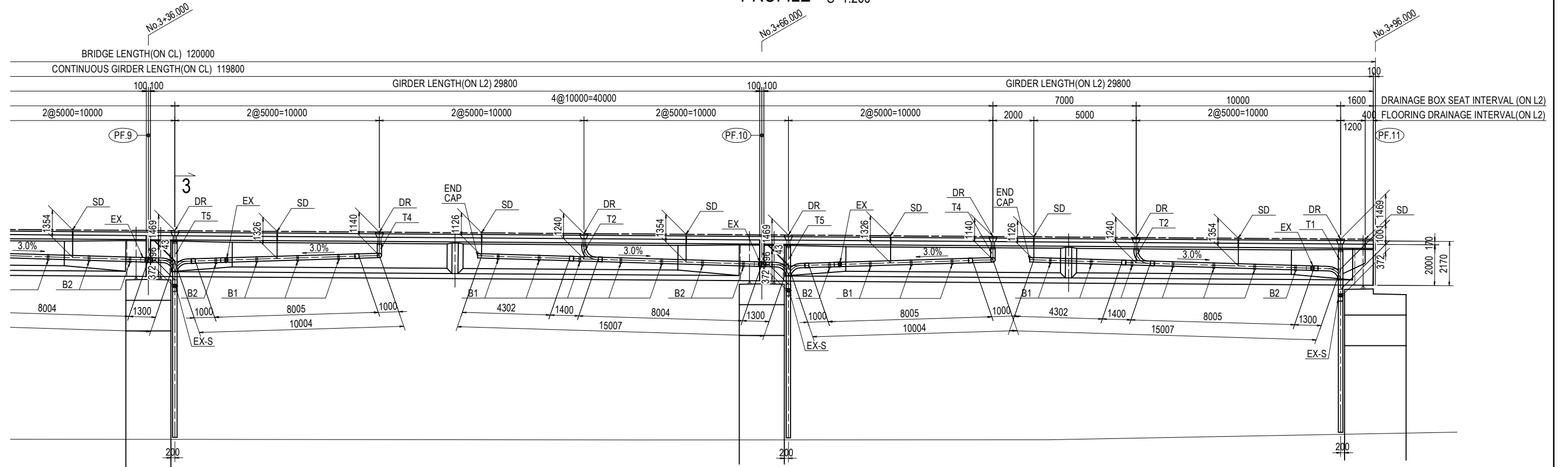
PROFILE S=1:200



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	PACKAGE			
				PREPARED BY	Y. SUZUKI				14 Jul. 2017	BRIDGE DRAINAGE LAYOUT (PF7-PF11) (1)	3
				CHECKED BY	T. HAYAKAWA				20 Jul. 2017		DWG No.
				APPROVED BY	Y. SANO				25 Jul. 2017		P3-FO-3008

# BRIDGE DRAINAGE LAYOUT (PF7-PF11) (2)

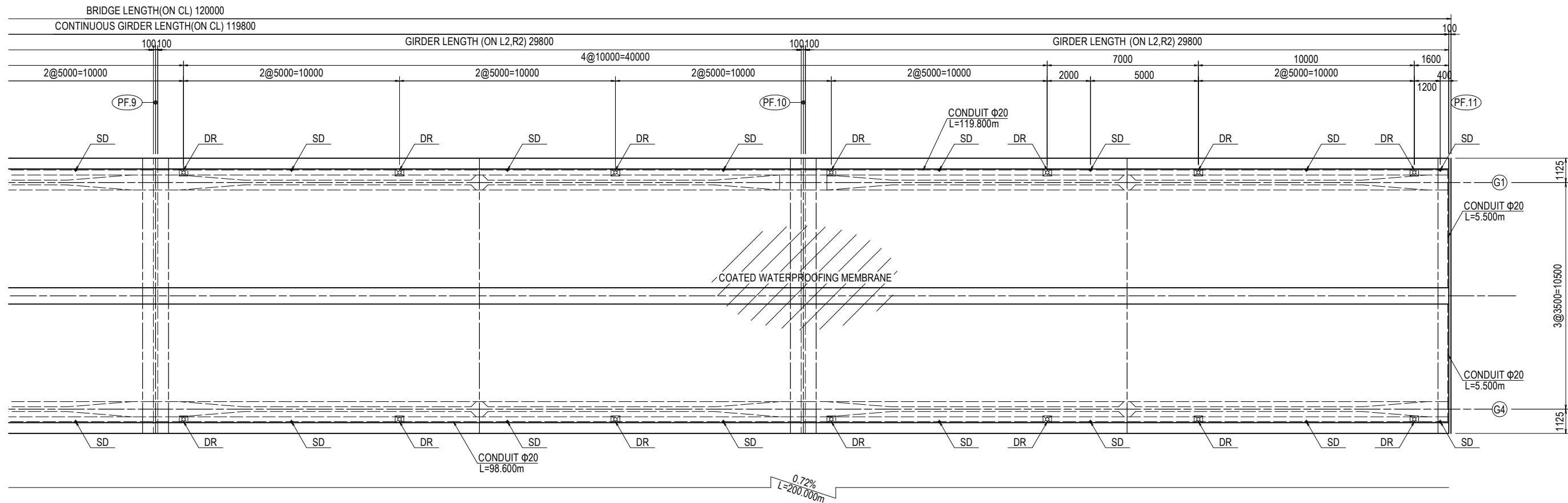
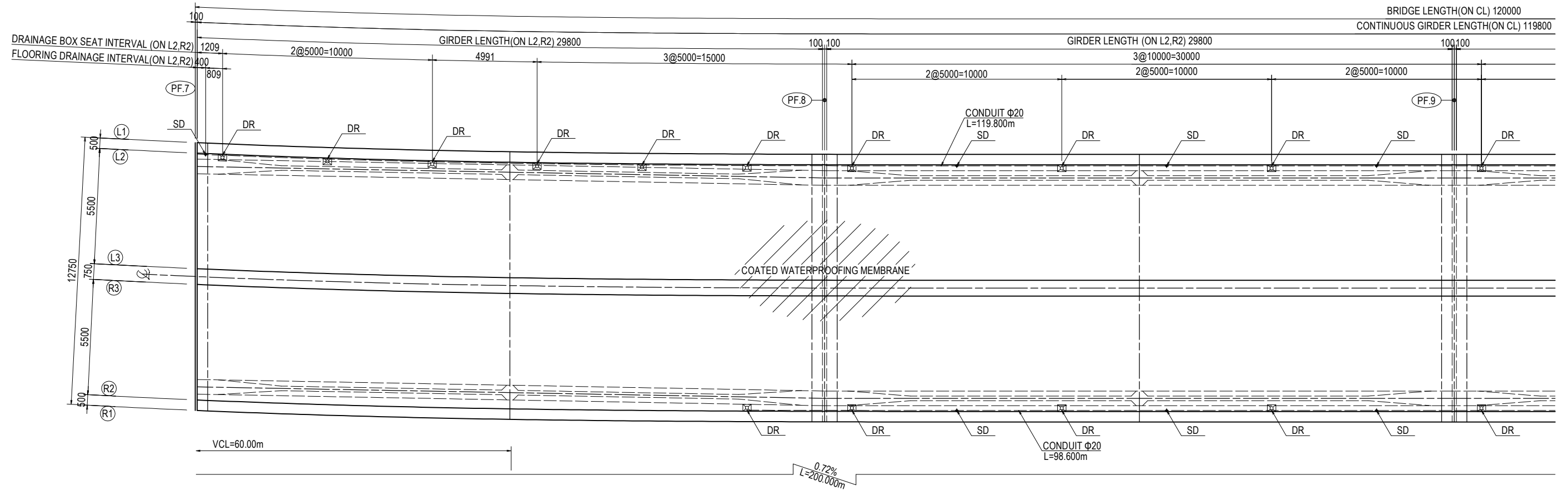
PROFILE S=1:200



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 BRIDGE DRAINAGE LAYOUT (PF7-PF11) (2)	PACKAGE 3 DWG No. P3-FO-3009	
				PREPARED BY	Y. SUZUKI				14 Jul. 2017
				CHECKED BY	T. HAYAKAWA				20 Jul. 2017
				APPROVED BY	Y. SANO				25 Jul. 2017

# BRIDGE DRAINAGE LAYOUT (PF7-PF11) (3)

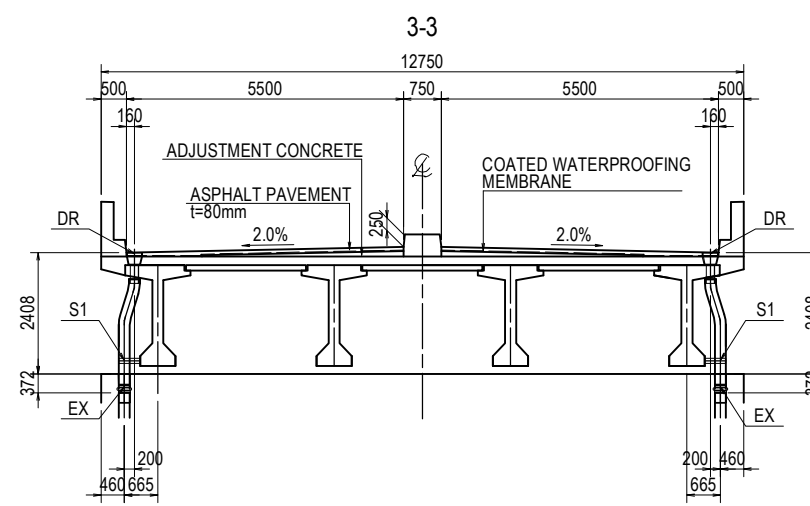
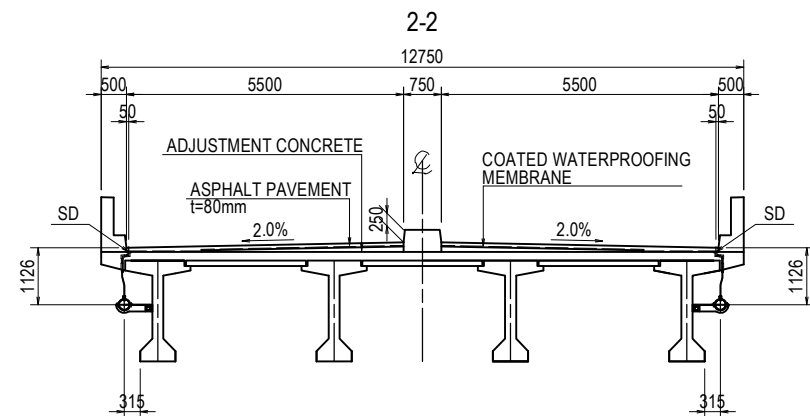
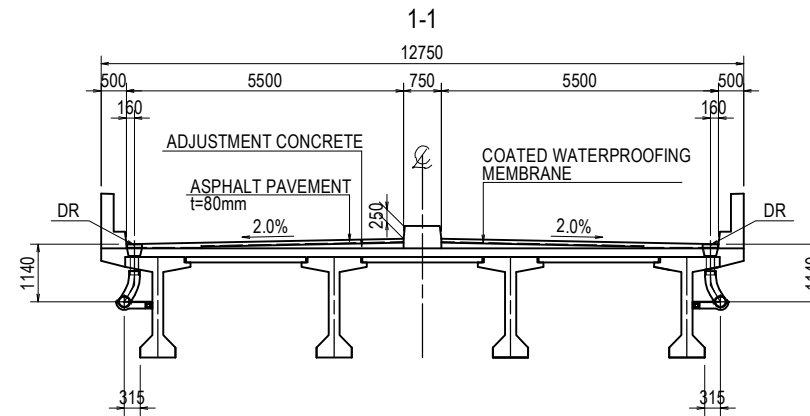
PLAN S=1:200



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 BRIDGE DRAINAGE LAYOUT (PF7-PF11) (3)	PACKAGE	
				PREPARED BY	Y. SUZUKI			14 Jul. 2017	DWG No.
				CHECKED BY	T. HAYAKAWA			20 Jul. 2017	P3-FO-3010
				APPROVED BY	Y. SANO			25 Jul. 2017	

# BRIDGE DRAINAGE LAYOUT (PF7-PF11) (4)

## DRAINAGE SECTION S=1:150

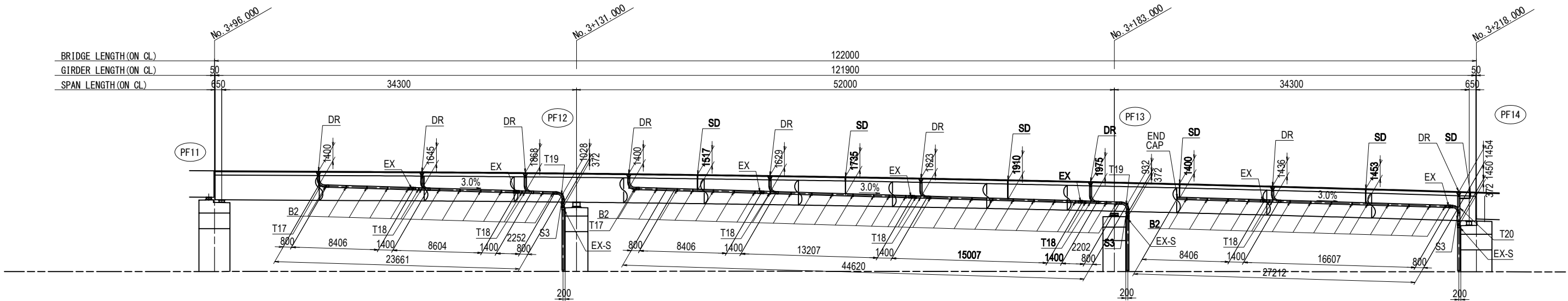


PF.7 - PF.9		PF.9 - PF.11	
DR	: 13	DR	: 14
SD	: 7	SD	: 14
SUPPORT B1	: 24	SUPPORT B1	: 34
SUPPORT B2	: 11	SUPPORT B2	: 10
SUPPORT S1	: 3	SUPPORT S1	: 6
SPECIAL PIPET T2	: 5	SPECIAL PIPET T1	: 2
SPECIAL PIPET T4	: 5	SPECIAL PIPET T2	: 4
SPECIAL PIPET T5	: 3	SPECIAL PIPET T4	: 4
CAP	: 2	SPECIAL PIPET T5	: 4
EX	: 11	CAP	: 4
EX-S	: 3	EX	: 8
		EX-S	: 6

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.	PREPARED BY Y. SUZUKI	<i>YS</i>	14 Jul. 2017	BRIDGE DRAINAGE LAYOUT (PF7-PF11) (4)	3
				CHECKED BY T. HAYAKAWA	<i>平川知平</i>	20 Jul. 2017		DWG No.
				APPROVED BY Y. SANO	<i>佐野 祐一</i>	25 Jul. 2017		P3-FO-3011

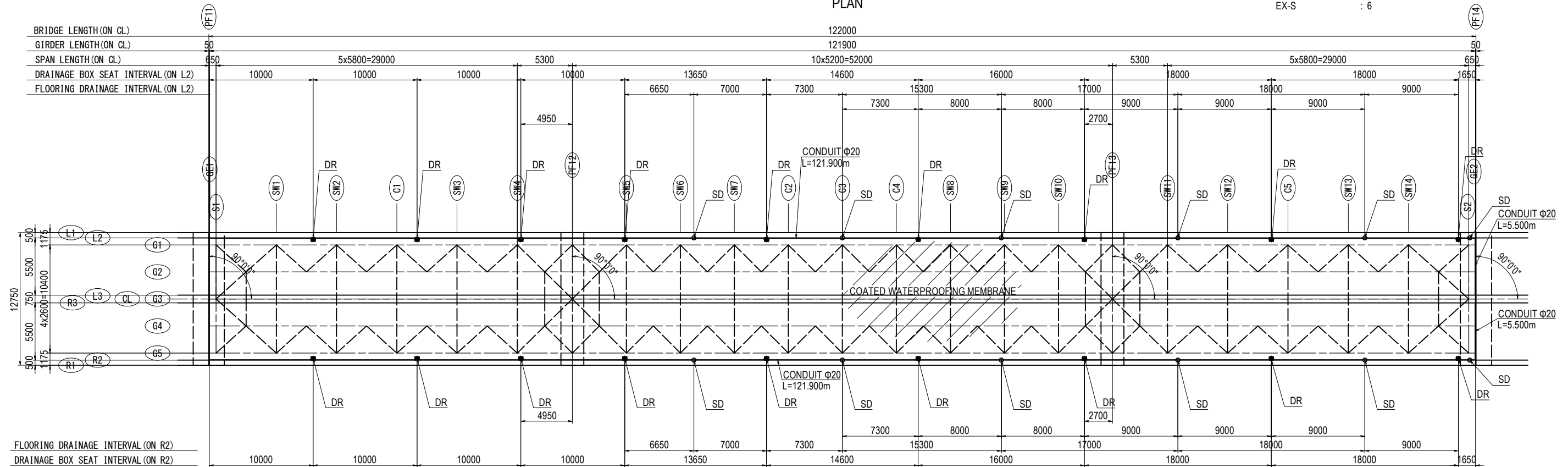
# BRIDGE DRAINAGE LAYOUT (PF11-PF14) (1) S=1:400

PROFILE(G1,G2)



DR	: 18
SD	: 12
SUPPORT B2	: 108
SUPPORT S3	: 6
SPECIAL PIPET T17	: 4
SPECIAL PIPET T18	: 12
SPECIAL PIPET T19	: 4
SPECIAL PIPET T20	: 2
CAP	: 2
EX	: 14
EX-S	: 6

PLAN



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	Y. SUZUKI		14 Jul. 2017
CHECKED BY	T. HAYAKAWA		20 Jul. 2017
APPROVED BY	Y. SANO		25 Jul. 2017

DRAWING TITLE  
BRIDGE DRAINAGE LAYOUT (PF11-PF14) (1)

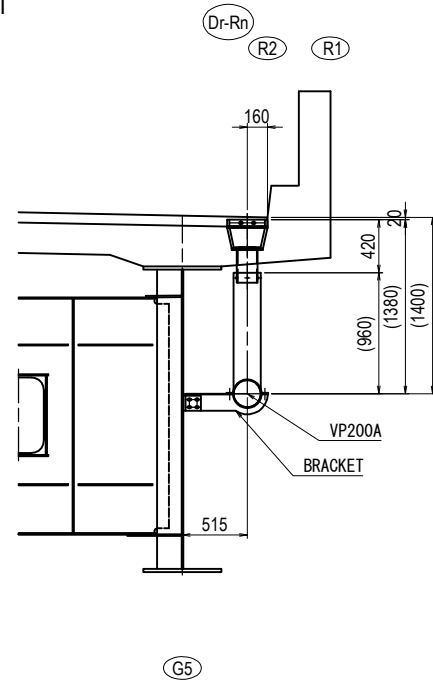
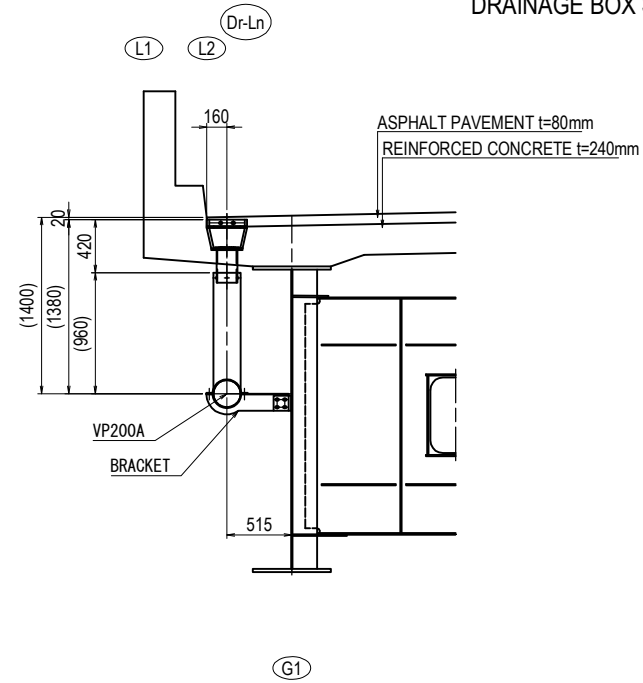
PACKAGE  
3  
DWG No.  
P3-FO-3012



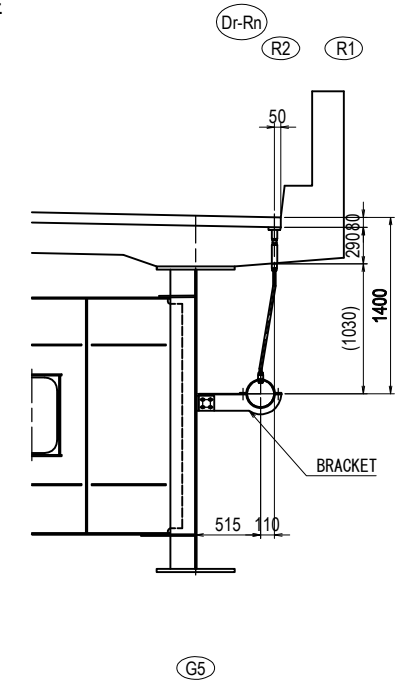
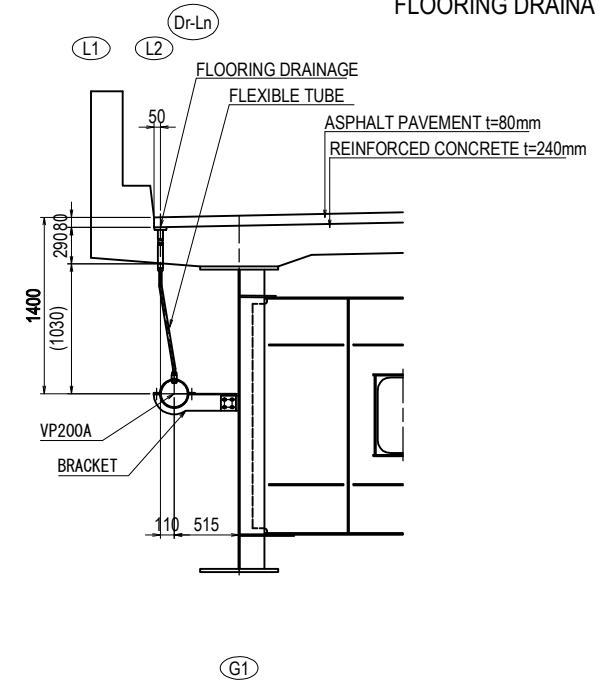
# BRIDGE DRAINAGE LAYOUT (PF11-PF14) (2) S=1:60

## DRAINAGE SECTION

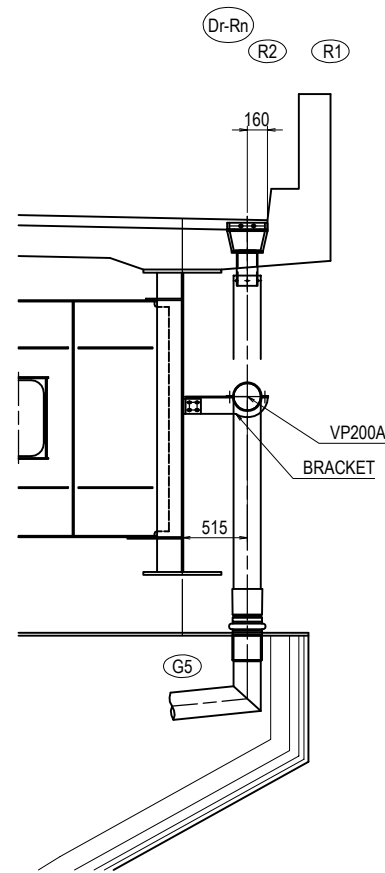
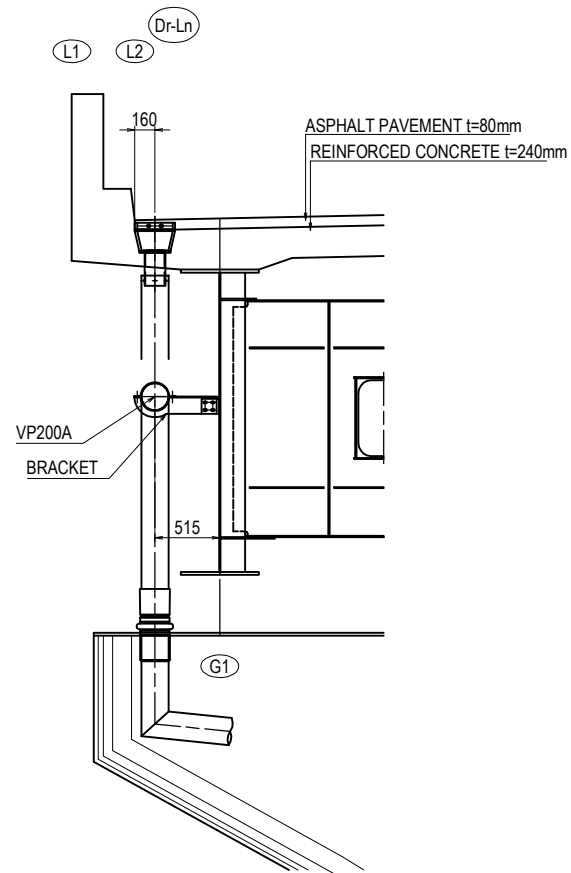
DRAINAGE BOX SEAT



FLOORING DRAINAGE



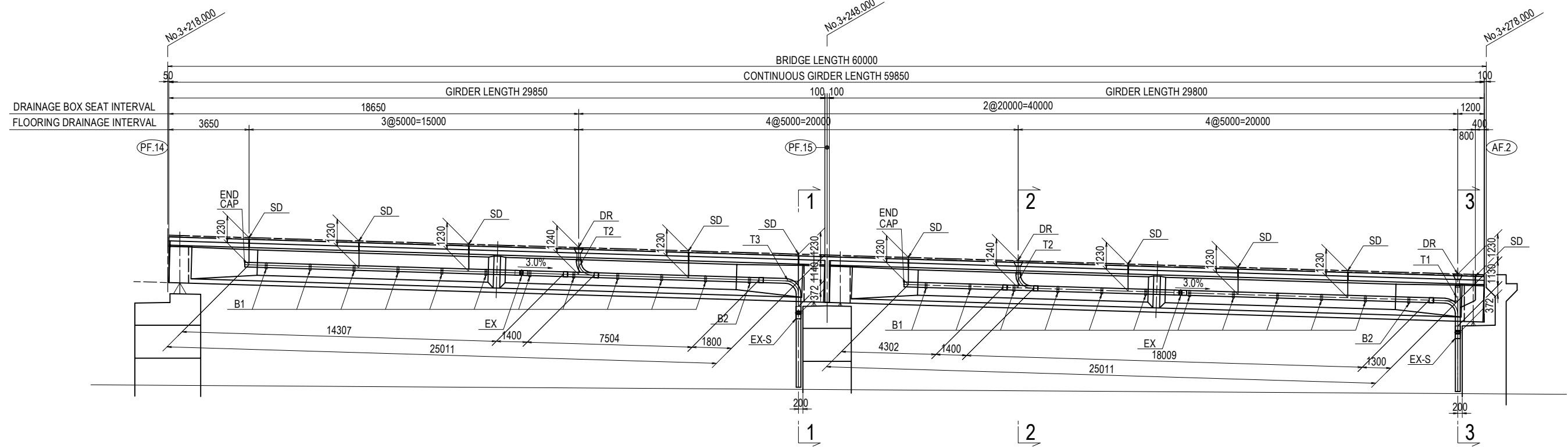
PIRE



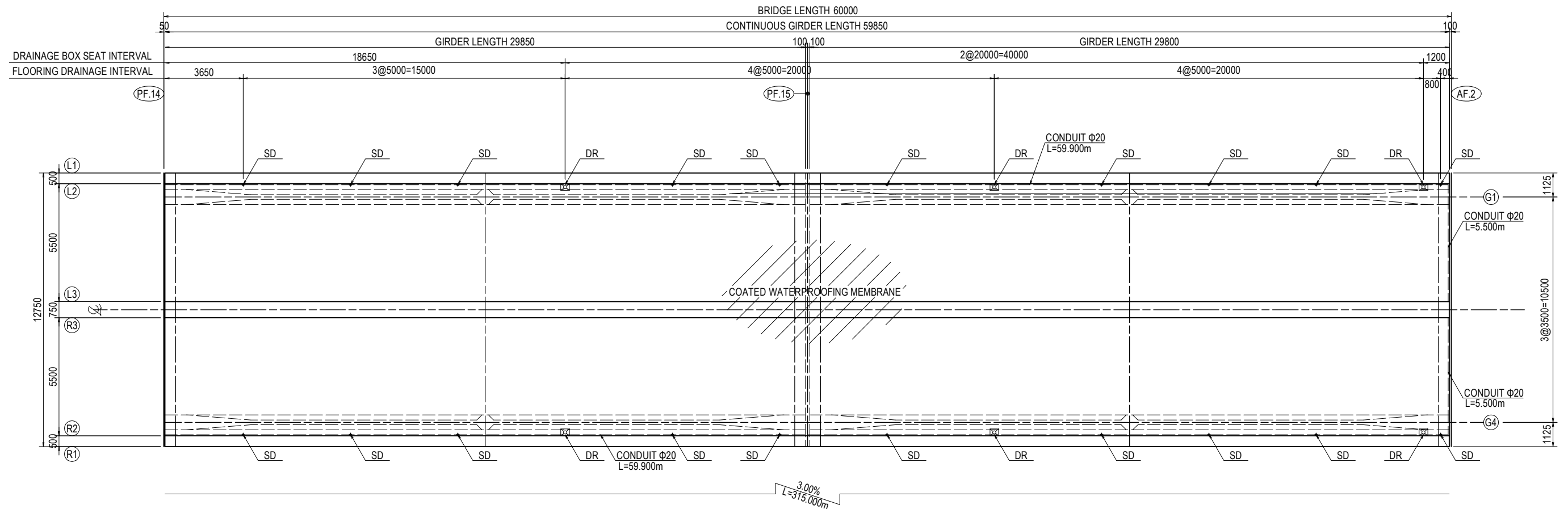
PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	PREPARED BY CHECKED BY APPROVED BY	Y. SUZUKI T. HAYAKAWA Y. SANO	14 Jul. 2017 20 Jul. 2017 25 Jul. 2017	BRIDGE DRAINAGE LAYOUT (PF11-PF14) (2)	3 DWG No. P3-FO-3013

# BRIDGE DRAINAGE LAYOUT (PF14-AF2) (1)

PROFILE S=1:200



PLAN S=1:200

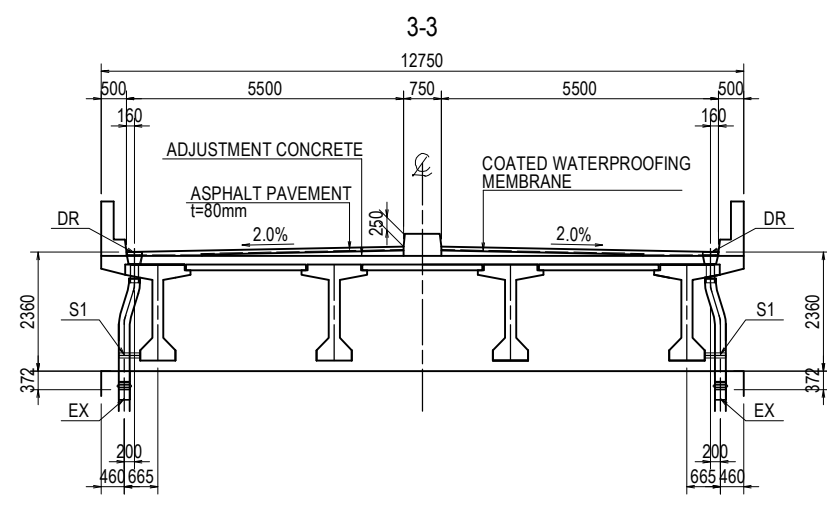
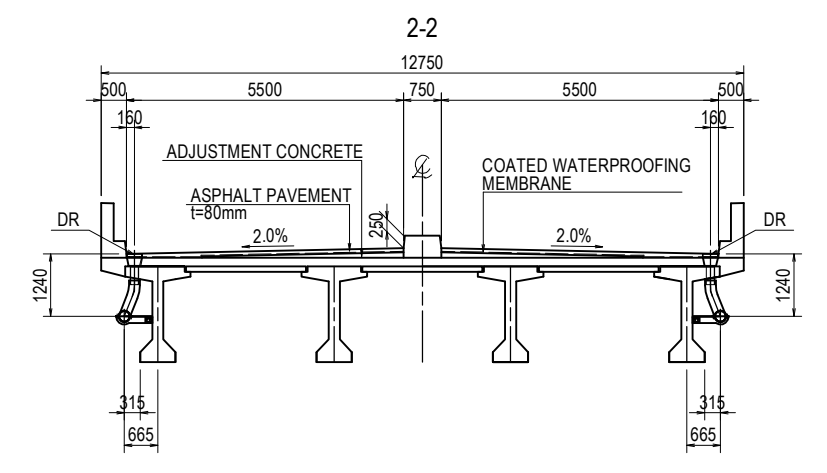
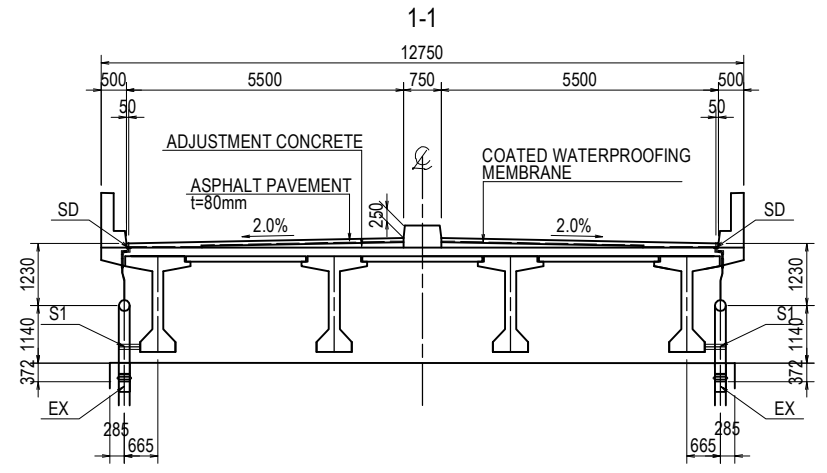


PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE	
				PREPARED BY	Y. SUZUKI				14 Jul. 2017
				CHECKED BY	T. HAYAKAWA				20 Jul. 2017
				APPROVED BY	Y. SANO				25 Jul. 2017
							BRIDGE DRAINAGE LAYOUT (PF14-AF2) (1)	3	
								DWG No.	
								P3-FO-3014	



# BRIDGE DRAINAGE LAYOUT (PF14-AF2) (2)

## DRAINAGE SECTION S=1:150



DR	: 6
SD	: 20
SUPPORT B1	: 44
SUPPORT B2	: 4
SUPPORT S1	: 4
SPECIAL PIPET T1	: 2
SPECIAL PIPET T2	: 4
SPECIAL PIPET T3	: 2
CAP	: 4
EX	: 4
EX-S	: 4

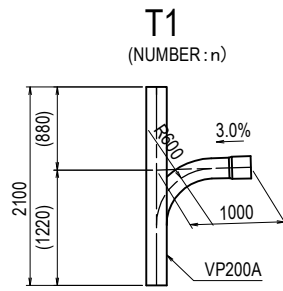
1. All Materials should be SS400 Unless Otherwise Noted.

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 BRIDGE DRAINAGE LAYOUT (PF14-AF2) (2)	PACKAGE	
				PREPARED BY	Y. SUZUKI			14 Jul. 2017	3
				CHECKED BY	T. HAYAKAWA			20 Jul. 2017	DWG No.
				APPROVED BY	Y. SANO			25 Jul. 2017	P3-FO-3015

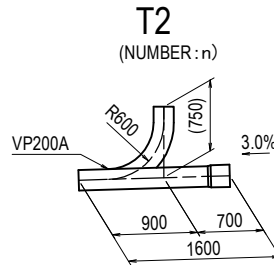
# BRIDGE DRAINAGE DETAIL (1)

S=1:80

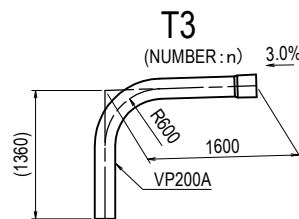
## ELBOW AND BRANCH CONNECTIONS (VP200A)



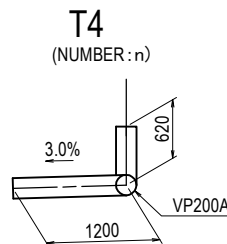
BRIDGE	n
AF.1-PF.2	1
PF.5-PF.7	2
PF.7-PF.11	2
PF.14-AF.2	2



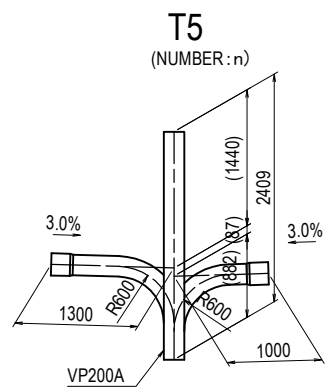
BRIDGE	n
AF.1-PF.2	2
PF.5-PF.7	3
PF.7-PF.11	9
PF.14-AF.2	4



BRIDGE	n
AF.1-PF.2	1
PF.5-PF.7	-
PF.7-PF.11	-
PF.14-AF.2	2



BRIDGE	n
AF.1-PF.2	-
PF.5-PF.7	1
PF.7-PF.11	9
PF.14-AF.2	-



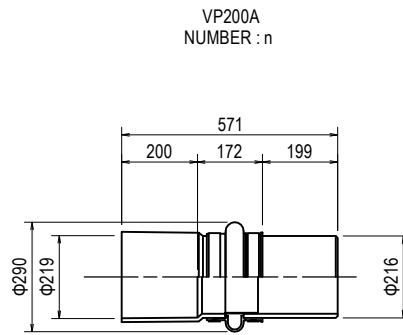
BRIDGE	n
AF.1-PF.2	-
PF.5-PF.7	-
PF.7-PF.11	7
PF.14-AF.2	-

( ) THE SIZE IS AVERAGE LENGTH.

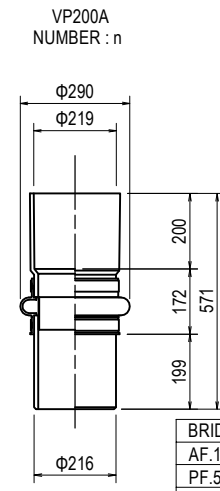
## PC-I GIRDER EXPANSIVE PIPE

S=1:20

EX(HORIZONTAL PULLING)      EX-S(VERTICAL PULLING)



BRIDGE	n
AF.1-PF.2	2
PF.5-PF.7	3
PF.7-PF.11	19
PF.14-AF.2	4

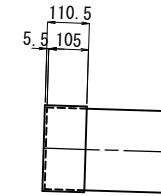


BRIDGE	n
AF.1-PF.2	1
PF.5-PF.7	2
PF.7-PF.11	9
PF.14-AF.2	4

## END CAP (VU-ACP VP200A)

S=1:20

NUMBER : n

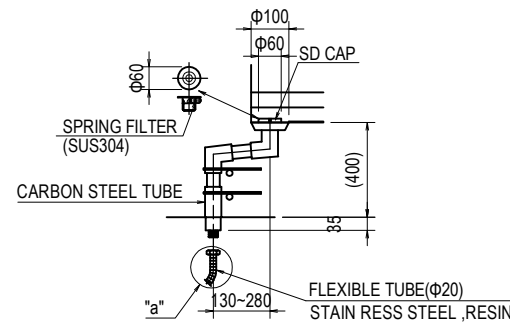


BRIDGE	n
AF.1-PF.2	2
PF.5-PF.7	2
PF.7-PF.11	6
PF.14-AF.2	4

## SLAB DRAIN (SD)

S=1:20

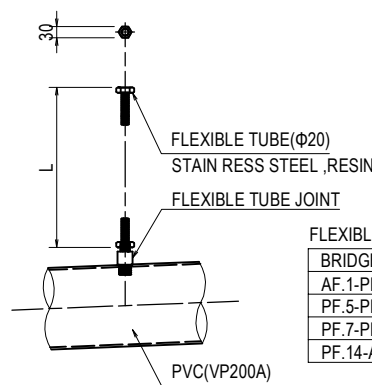
NUMBER : n



BRIDGE	n
AF.1-PF.2	10
PF.5-PF.7	9
PF.7-PF.11	21
PF.14-AF.2	20

## "a" Details

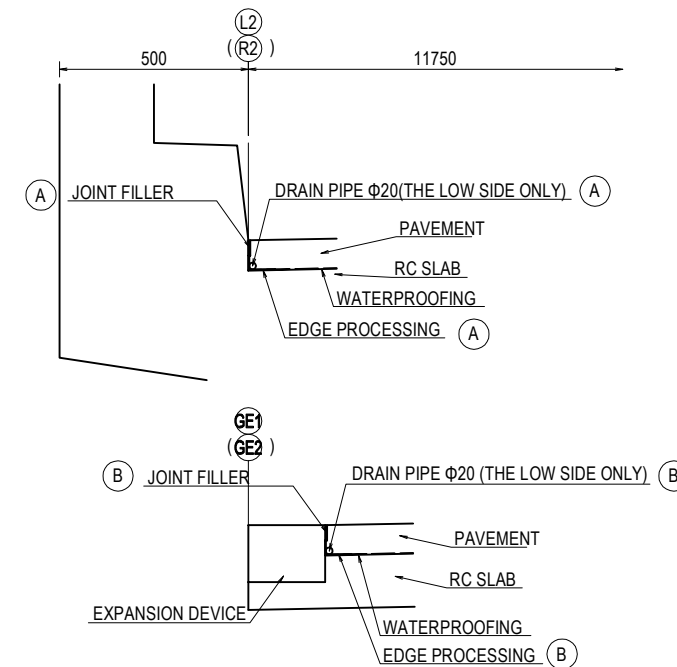
S=1:20



FLEXIBLE TUBE JOINT (NUMBER : n)	
BRIDGE	n
AF.1-PF.2	10
PF.5-PF.7	9
PF.7-PF.11	21
PF.14-AF.2	20

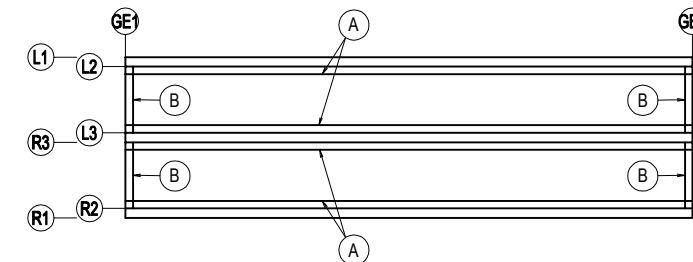
## PREVENTION WATER LAYER DETAIL

S=1:20



NAME	UNIT	QUANTITY				TOTAL	REMARKS
		AF.1-PF.2	PF.5-PF.7	PF.7-PF.11	PF.14-AF.2		
CONDUIT	m	70.9	81.9	229.4	130.8	513.0	(SPIRAL DRAIN Φ20)
JOINT FILLER	m	261.6	261.6	501.2	261.6	1286.0	
EDGE PROCESSING	m	261.6	261.6	501.2	261.6	1286.0	
WATERPROOFING	m2	658.4	658.9	1317.8	658.4	3293.4	

## PC-I GIRDER LENGTH



# BRIDGE DRAINAGE DETAIL (2)

## STEEL BOX GIRDER, STEEL I GIRDER

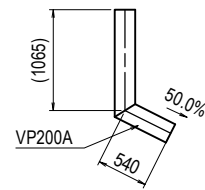
### EXPANSIVE PIPE S=1:20

S=1:80

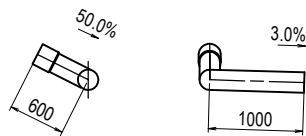
### ELBOW AND BRANCH CONNECTIONS (VP200A)

STEEL BOX GIRDER

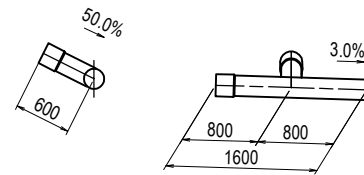
T11 (NUMBER: 17)



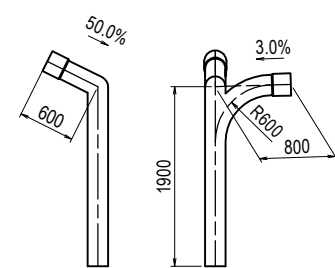
T12 (NUMBER: 4)



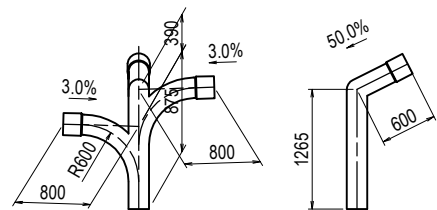
T13 (NUMBER: 11)



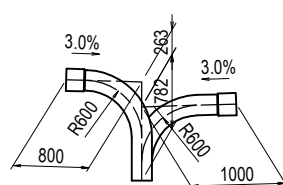
T14 (NUMBER: 1)



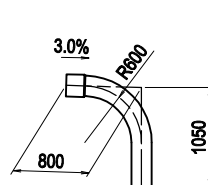
T15 (NUMBER: 1)



T16 (NUMBER: 1)

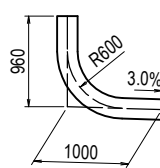


T19 (NUMBER: 1)

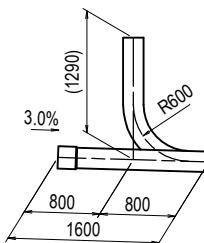


STEEL I GIRDER

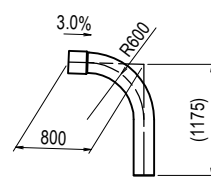
T17 (NUMBER: 4)



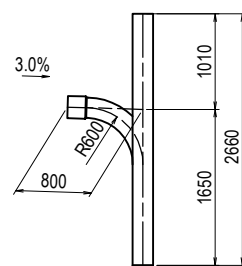
T18 (NUMBER: 12)



T19 (NUMBER: 4)



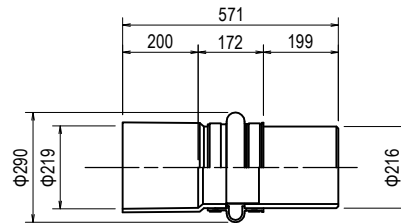
T20 (NUMBER: 2)



( ) THE SIZE IS AVERAGE LENGTH.

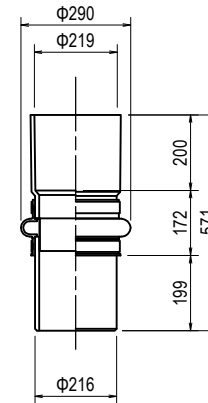
EX(HORIZONTAL PULLING)

VP200A  
NUMBER: 15(BOX)  
NUMBER: 14( I )

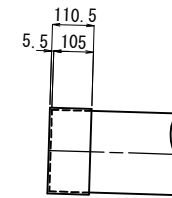


EX-S(VERTICAL PULLING)

VP200A  
NUMBER: 4(BOX)  
NUMBER: 6( I )



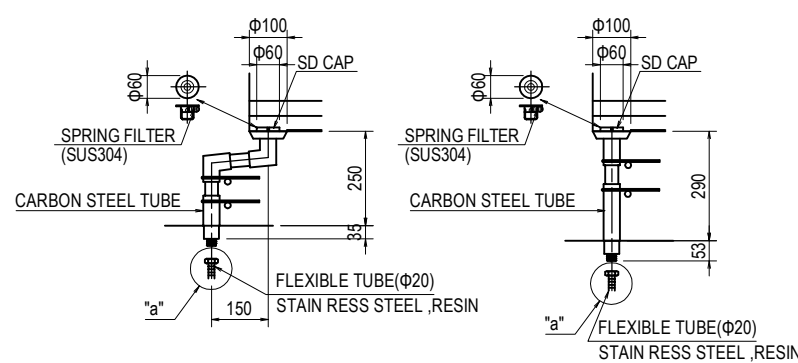
### END CAP S=1:20 (VU-ACP VP200A)



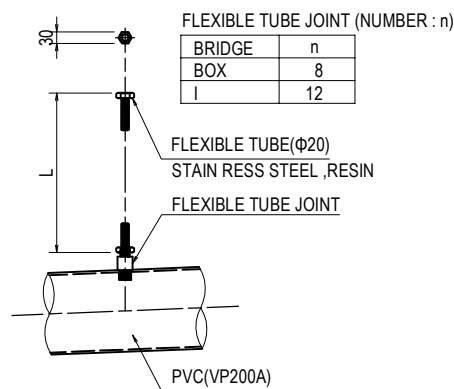
### SLAB DRAIN S=1:20

NUMBER: 8(BOX)

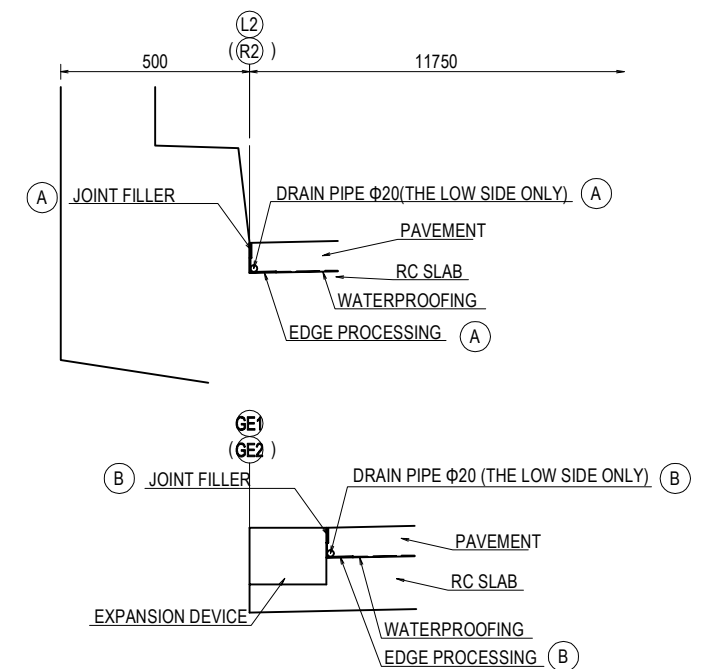
NUMBER: 12( I )



### "a" Details S=1:20

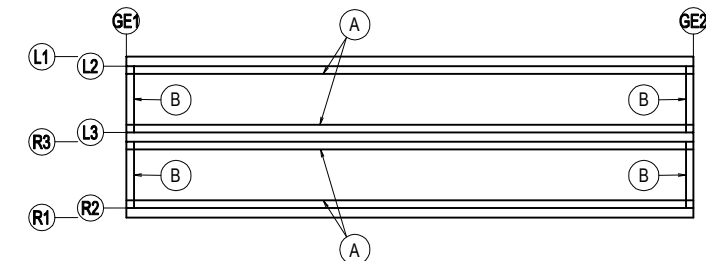


### PREVENTION WATER LAYER DETAIL S=1:20



NAME	UNIT	QUANTITY			REMARKS
		BOX	I	TOTAL	
CONDUIT	m	198.8	254.8	453.6	(SPIRAL DRAIN φ20)
JOINT FILLER	m	740.8	509.6	1250.4	
EDGE PROCESSING	m	740.8	509.6	1250.4	
WATERPROOFING	m2	1976.7	1340.9	3317.6	

### GIRDER LENGTH

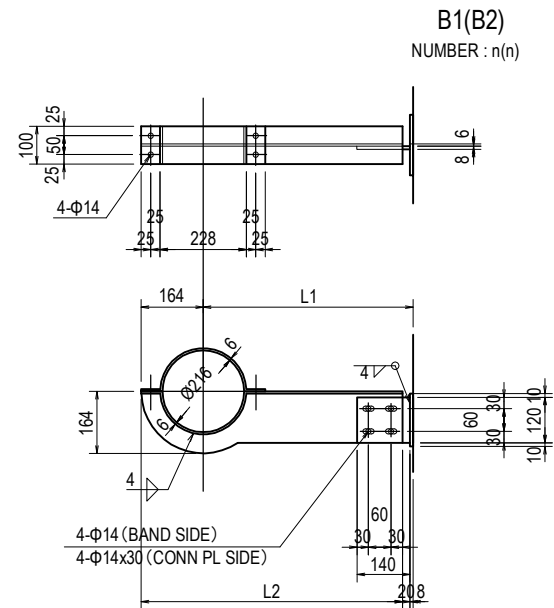


# BRIDGE DRAINAGE DETAIL (3)

## PC - I GIRDER

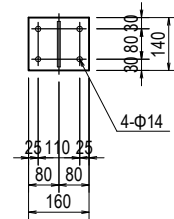
S=1:20

### SUPPORT FOR DRAINAGE PIPE

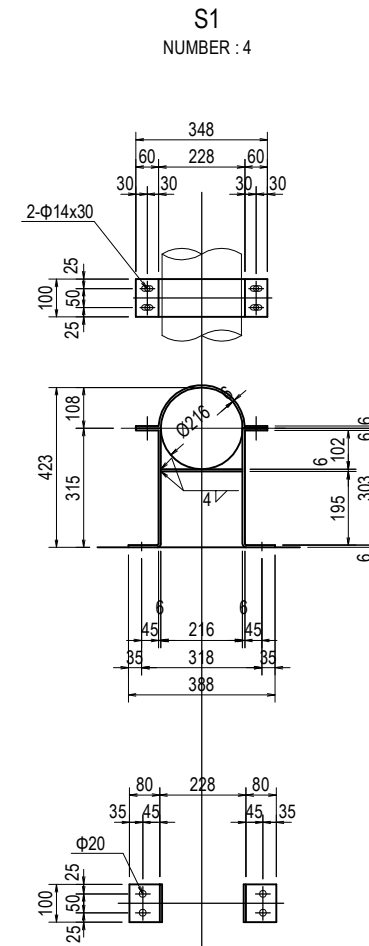


	L1	L2	L3
B1	555	691	815
B2	315	451	575

- \* 1-PL 120 x 8 x 140(SM400A)
- \* 1-PL 140 x 8 x 160(SM400A)
- \* 1-FB 100 x 6 x 452
- \* 1-PL 100 x 6 x L3(SM400A)
- \* 1-PL 158 x 6 x L2(SM400A)
- \* 8-BN M12 x 40(2-W)
- \* 4-INSERT ANCHOR M12 x 100



BRIDGE	n	
	B1	B2
AF.1-PF.2	22	2
PF.5-PF.7	19	4
PF.7-PF.11	58	21
PF.14-AF.2	44	4
TOTAL	143	31



BRIDGE	n
AF.1-PF.2	2
PF.5-PF.7	2
PF.7-PF.11	9
PF.14-AF.2	4
TOTAL	17

- \* 1-FB 100 x 6 x 469
- \* 2-PL 100 x 6 x 467(SM400A)
- \* 1-PL 100 x 6 x 216(SM400A)
- \* 4-BN M12 x 35(2-W)
- \* 4-INSERT ANCHOR M16 x 100

Note  
 1. All Materials should be SS400 Unless Otherwise Noted.  
 2. \* All mark parts are made molten zinc plating.  
 The mass of deposit per unit area of zinc is made JIS H8641 HDZ35-HDZ55.

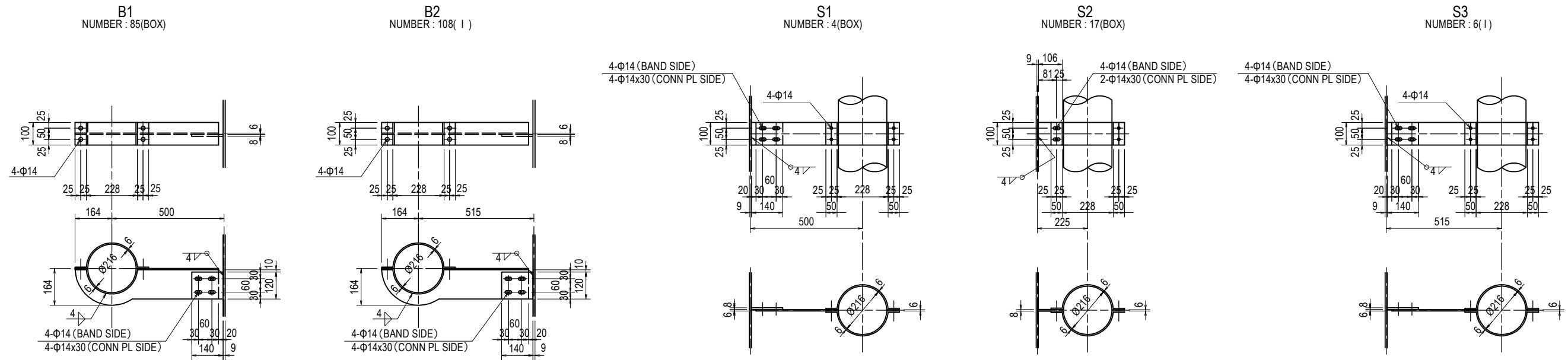
PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO.,LTD.	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>NAME</th> <th>SIGNATURE</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY</td> <td>Y. SUZUKI</td> <td><i>YS</i></td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY</td> <td>T. HAYAKAWA</td> <td><i>Hayakawa</i></td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY</td> <td>Y. SANO</td> <td><i>Y. Sano</i></td> <td>25 Jul. 2017</td> </tr> </tbody> </table>		NAME	SIGNATURE	DATE	PREPARED BY	Y. SUZUKI	<i>YS</i>	14 Jul. 2017	CHECKED BY	T. HAYAKAWA	<i>Hayakawa</i>	20 Jul. 2017	APPROVED BY	Y. SANO	<i>Y. Sano</i>	25 Jul. 2017	DRAWING TITLE <h3 style="text-align: center;">BRIDGE DRAINAGE DETAIL (3)</h3>	PACKAGE 3 DWG No. P3-FO-3018
	NAME	SIGNATURE	DATE																			
PREPARED BY	Y. SUZUKI	<i>YS</i>	14 Jul. 2017																			
CHECKED BY	T. HAYAKAWA	<i>Hayakawa</i>	20 Jul. 2017																			
APPROVED BY	Y. SANO	<i>Y. Sano</i>	25 Jul. 2017																			

# BRIDGE DRAINAGE DETAIL (4)

## STEEL BOX GIRDER, STEEL I GIRDER

S=1:20

### SUPPORT FOR DRAINAGE PIPE



- B1**  
NUMBER : 85(BOX)
- 1-PL 120x8x140(SM400A)
  - \* 1-FB 100x6x452
  - \* 1-PL 100x6x762(SM400A)
  - \* 1-PL 158x6x640(SM400A)
  - \* 8-BN M12x40(2-W)

- B2**  
NUMBER : 108( I )
- 1-PL 120x8x140(SM400A)
  - \* 1-FB 100x6x452
  - \* 1-PL 100x6x777(SM400A)
  - \* 1-PL 158x6x655(SM400A)
  - \* 8-BN M12x40(2-W)

- S1**  
NUMBER : 4(BOX)
- 1-PL 100x8x140(SM400A)
  - \* 2-FB 100x6x446
  - \* 1-FB 100x6x361
  - \* 4-BN M12x40(2-W)
  - \* 4-BN M12x45(2-W)

- S2**  
NUMBER : 17(BOX)
- 1-PL 100x8x106(SM400A)
  - \* 2-FB 100x6x446
  - \* 4-BN M12x40(2-W)

- S3**  
NUMBER : 6( I )
- 1-PL 100x8x140(SM400A)
  - \* 2-FB 100x6x446
  - \* 1-FB 100x6x376
  - \* 4-BN M12x40(2-W)
  - \* 4-BN M12x45(2-W)

**Note**  
 1. All Materials should be SS400 Unless Otherwise Noted.  
 2. \* All mark parts are made molten zinc plating.  
 The mass of deposit per unit area of zinc is made JIS H8641 HDZ35-HDZ55.

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 Y. SUZUKI T. HAYAKAWA Y. SANO	SIGNATURE   	DATE 14 Jul. 2017 20 Jul. 2017 25 Jul. 2017	DRAWING TITLE BRIDGE DRAINAGE DETAIL (4)	PACKAGE 3 DWG No. P3-FO-3019
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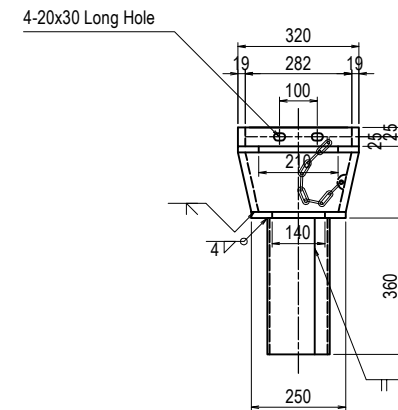
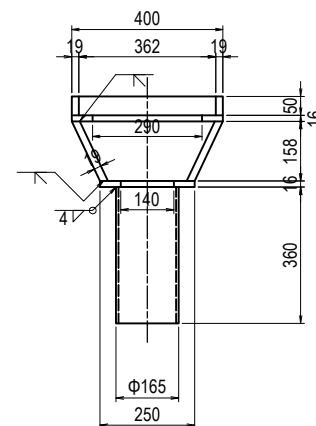
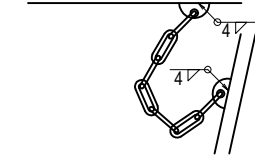
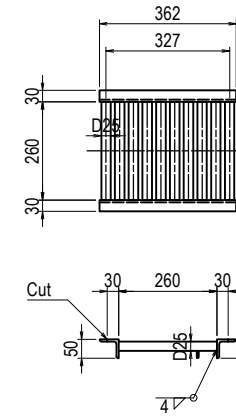
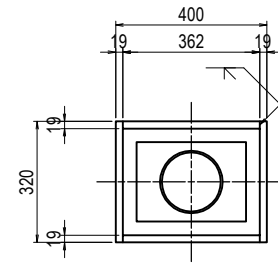
# BRIDGE DRAINAGE DETAIL (5)

S=1:20

## CATCH PIT TYPE1 PC-I GIRDER

(NUMBER : 42)

Detail of Chain



	n
AF.1-PF.2	3
PF.5-PF.7	6
PF.7-PF.11	27
PF.14-AF.2	6
TOTAL	42

- \* 2 - PL 50 x 19 x 362
- \* 2 - PL 50 x 19 x 320
- \* 1 - PL 320 x 16 x 400
- \* 2 - PL 184 x 19 x 320
- \* 2 - PL 166 x 19 x 358
- \* 1 - PL 250 x 16 x 250
- \* 1 - PL 519 x 6 x 360
- \* 1 - Chain 5Φ x 250(SUS304)
- \* 2 - L 50 x 50 x 6 x 362(SS400)
- \* 9 - RB D25 x 260(SS400)

Note  
 1. All Materials should be SM400A Unless Otherwise Noted.  
 2. \* All mark parts are made molten zinc plating.  
 The mass of deposit per unit area of zinc is made JIS H8641 HDZ35-HDZ55.

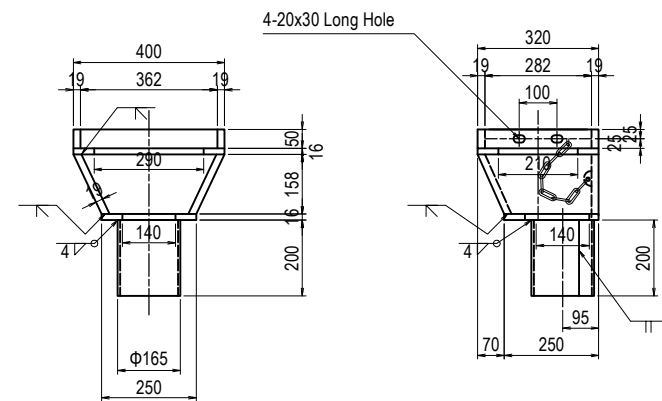
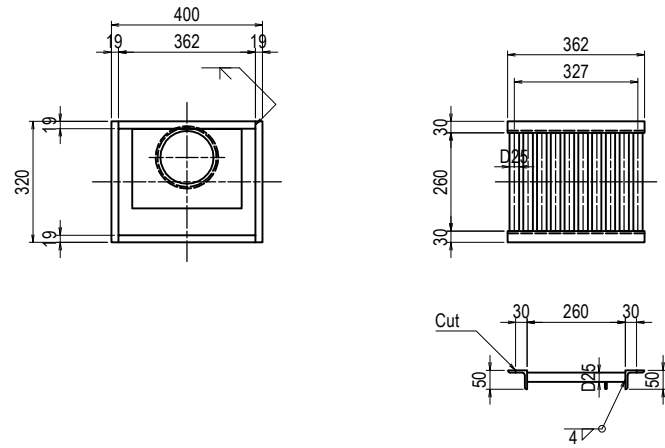
PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	PREPARED BY Y. SUZUKI	<i>YS</i>	14 Jul. 2017	BRIDGE DRAINAGE DETAIL (5)	3
				CHECKED BY T. HAYAKAWA	<i>平川知邦</i>	20 Jul. 2017		DWG No.
				APPROVED BY Y. SANO	<i>佐野 祐一</i>	25 Jul. 2017		P3-FO-3020

# BRIDGE DRAINAGE DETAIL (6)

S=1:20

## CATCH PIT TYPE2 STEEL BOX GIRDER

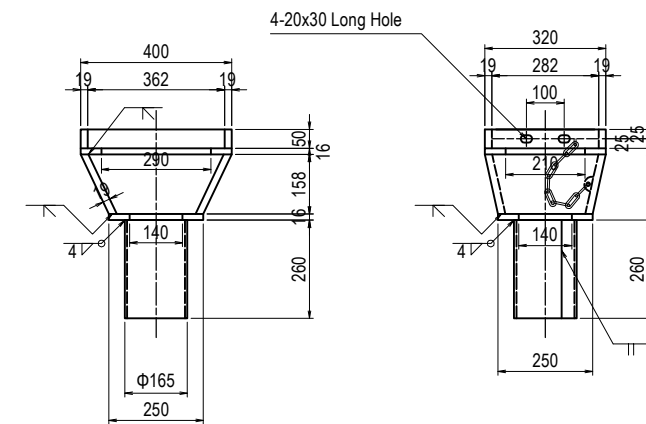
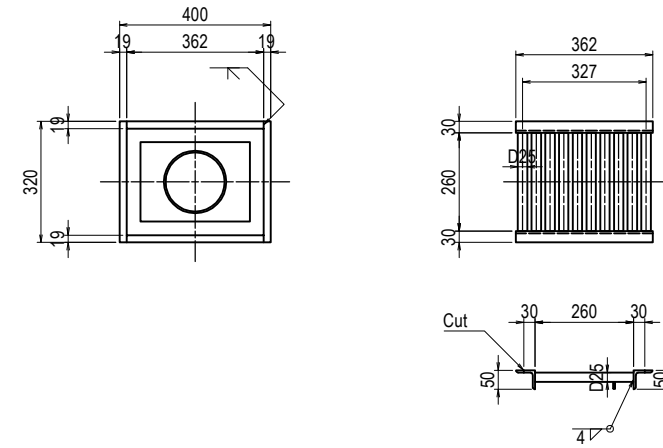
(NUMBER : 17)



- \* 2 - PL 50 x 19 x 362
- \* 2 - PL 50 x 19 x 320
- \* 1 - PL 320 x 16 x 400
- \* 2 - PL 184 x 19 x 320
- \* 1 - PL 181 x 19 x 358
- \* 1 - PL 158 x 19 x 358
- \* 1 - PL 250 x 16 x 250
- \* 1 - PL 519 x 6 x 200
- \* 1 - Chain 5Φ x 250(SUS304)
- \* 2 - L 50 x 50 x 6 x 362(SS400)
- \* 9 - RB D25 x 260(SS400)

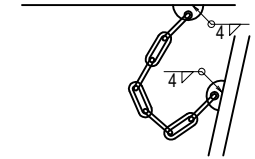
## CATCH PIT TYPE3 STEEL I GIRDER

(NUMBER : 18)



- \* 2 - PL 50 x 19 x 362
- \* 2 - PL 50 x 19 x 320
- \* 1 - PL 320 x 16 x 400
- \* 2 - PL 184 x 19 x 320
- \* 2 - PL 166 x 19 x 358
- \* 1 - PL 250 x 16 x 250
- \* 1 - PL 519 x 6 x 260
- \* 1 - Chain 5Φ x 250(SUS304)
- \* 2 - L 50 x 50 x 6 x 362(SS400)
- \* 9 - RB D25 x 260(SS400)

Detail of Chain

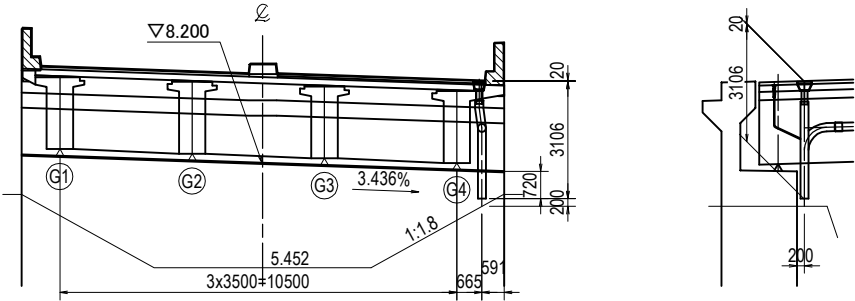


Note  
 1. All Materials should be SM400A Unless Otherwise Noted.  
 2. \* All mark parts are made molten zinc plating.  
 The mass of deposit per unit area of zinc is made JIS H8641 HDZ35-HDZ55.

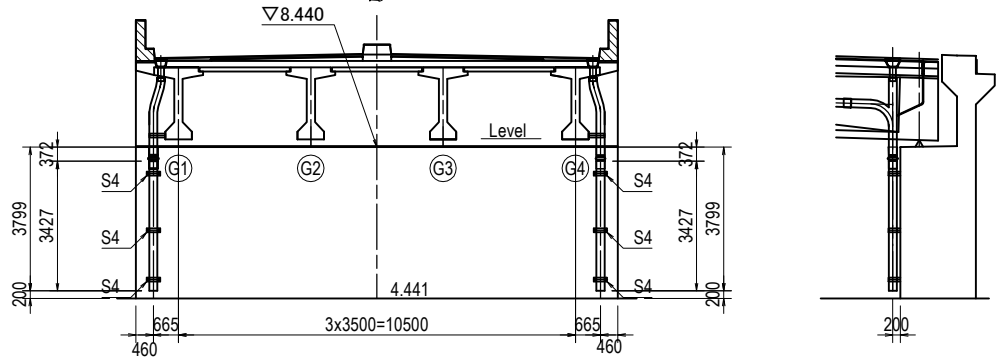
PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY jica JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	NAME	SIGNATURE	DATE	DRAWING TITLE BRIDGE DRAINAGE DETAIL (6)	PACKAGE
				PREPARED BY	Y. SUZUKI	14 Jul. 2017		3
				CHECKED BY	T. HAYAKAWA	20 Jul. 2017		DWG No.
				APPROVED BY	Y. SANO	25 Jul. 2017		P3-FO-3021

# BRIDGE DRAINAGE LAYOUT OF SUBSTRUCTURE (1) S=1:200

AF.1

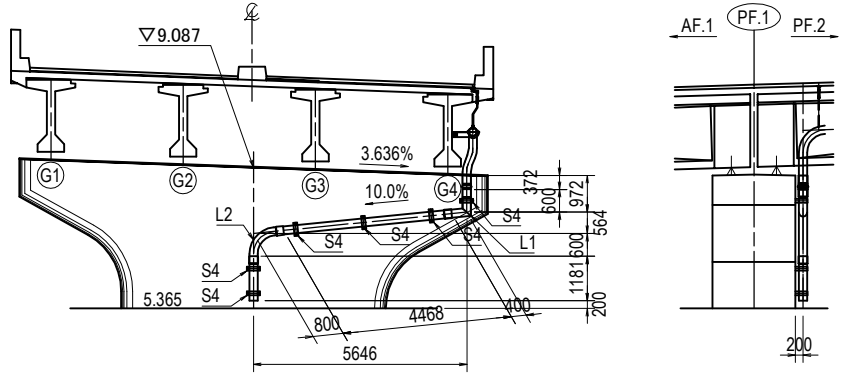


AF.2



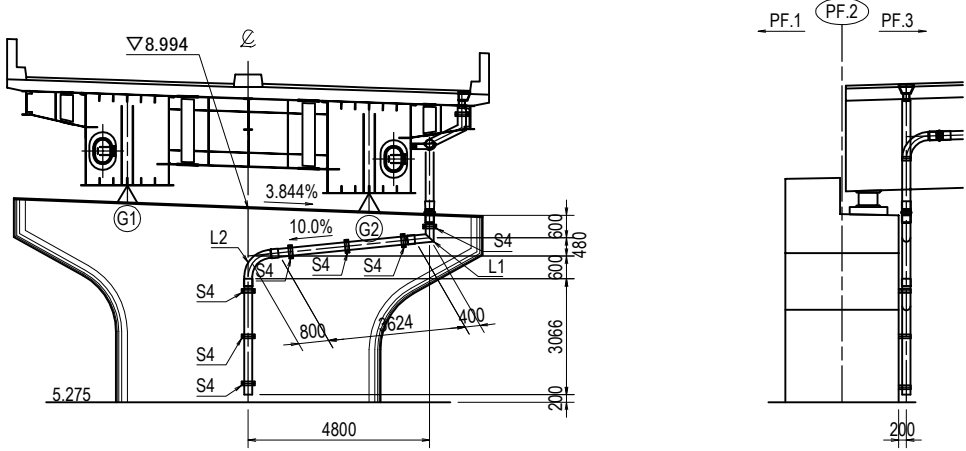
SUPPORT S4 : 6

PF.1



SUPPORT S4 : 6  
SPECIAL PIPET L1 : 1  
SPECIAL PIPET L2 : 1

PF.2



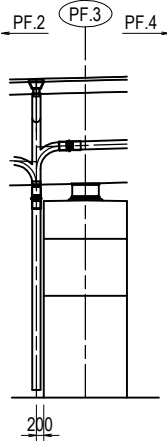
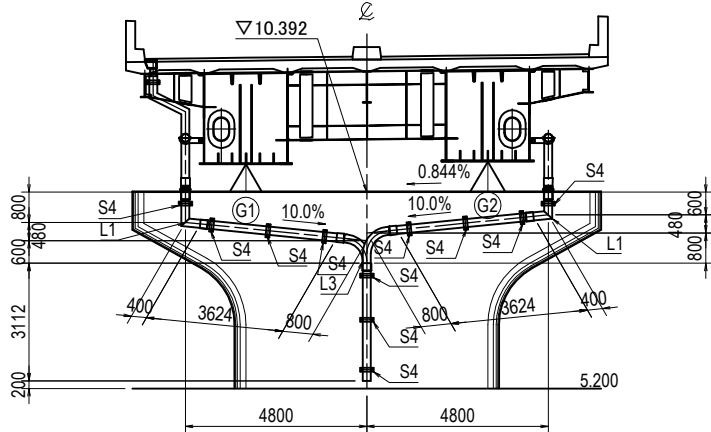
SUPPORT S4 : 7  
SPECIAL PIPET L1 : 1  
SPECIAL PIPET L2 : 1

<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%;"></th> <th style="width: 20%;">NAME</th> <th style="width: 20%;">SIGNATURE</th> <th style="width: 10%;">DATE</th> </tr> </thead> <tbody> <tr> <td>PREPARED BY</td> <td>Y. SUZUKI</td> <td></td> <td>14 Jul. 2017</td> </tr> <tr> <td>CHECKED BY</td> <td>T. HAYAKAWA</td> <td></td> <td>20 Jul. 2017</td> </tr> <tr> <td>APPROVED BY</td> <td>Y. SANO</td> <td></td> <td>25 Jul. 2017</td> </tr> </tbody> </table>		NAME	SIGNATURE	DATE	PREPARED BY	Y. SUZUKI		14 Jul. 2017	CHECKED BY	T. HAYAKAWA		20 Jul. 2017	APPROVED BY	Y. SANO		25 Jul. 2017	<p>DRAWING TITLE <b>BRIDGE DRAINAGE LAYOUT OF SUBSTRUCTURE (1)</b></p>	<p>PACKAGE 3 DWG No. P3-FO-3022</p>
	NAME	SIGNATURE	DATE																			
PREPARED BY	Y. SUZUKI		14 Jul. 2017																			
CHECKED BY	T. HAYAKAWA		20 Jul. 2017																			
APPROVED BY	Y. SANO		25 Jul. 2017																			



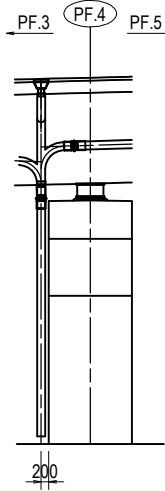
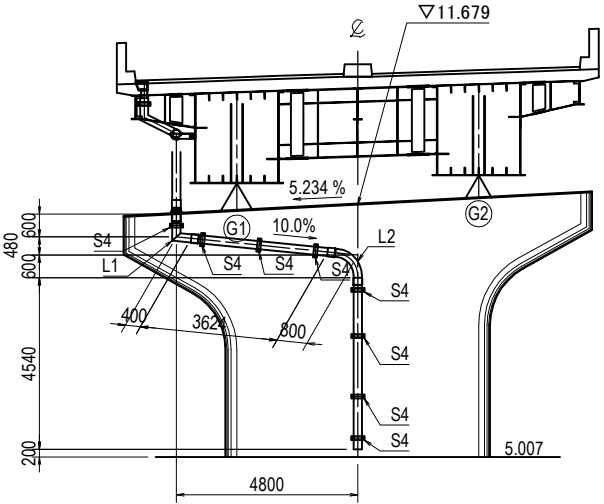
# BRIDGE DRAINAGE LAYOUT OF SUBSTRUCTURE (2) S=1:200

PF.3



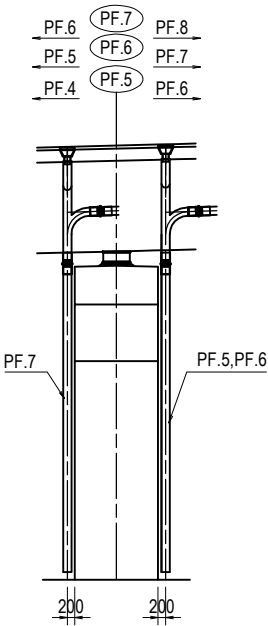
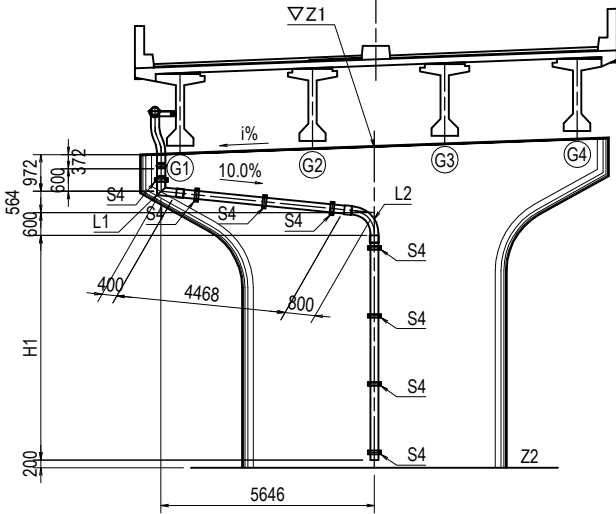
SUPPORT S4 : 11  
SPECIAL PIPET L1 : 2  
SPECIAL PIPET L3 : 1

PF.4



SUPPORT S4 : 8  
SPECIAL PIPET L1 : 1  
SPECIAL PIPET L2 : 1

PF.5 , PF.6 , PF.7

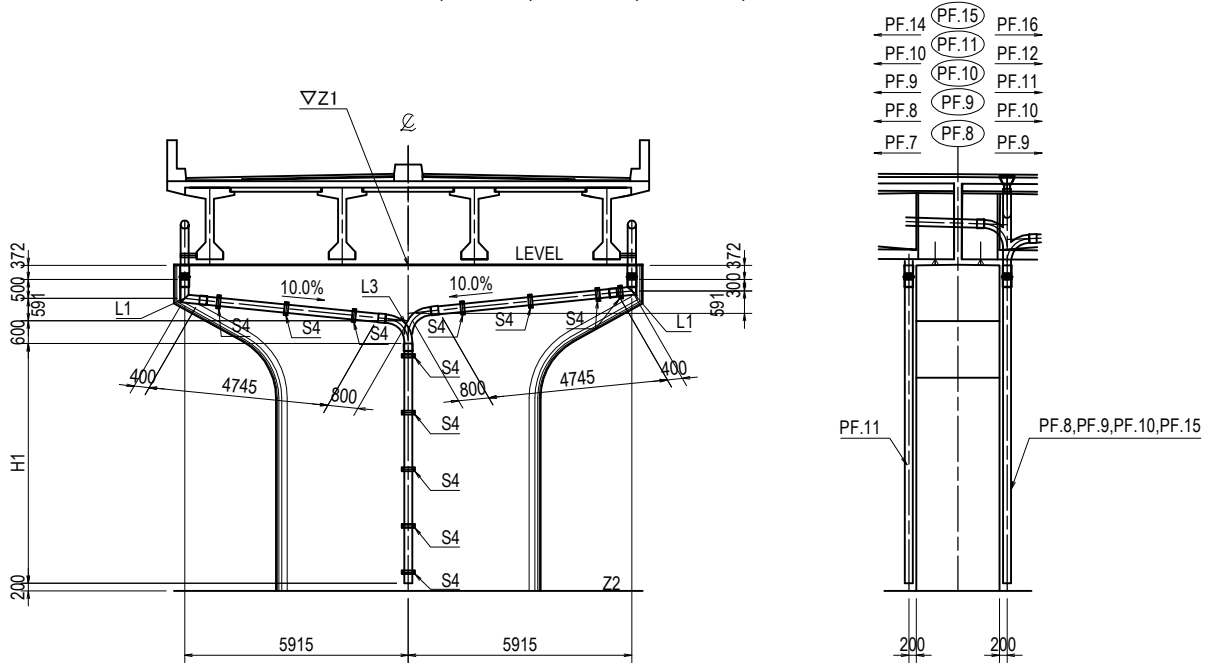


SUPPORT S4 : 8  
SPECIAL PIPET L1 : 1  
SPECIAL PIPET L2 : 1

AXIS	i(%)	Z1(m)	Z2(m)	H1(mm)
PF.5	4.797 ↘	13.194	4.711	5942
PF.6	4.795 ↘	13.337	4.550	6246
PF.7	4.782 ↘	13.031	4.390	6100

# BRIDGE DRAINAGE LAYOUT OF SUBSTRUCTURE (3) S=1:200

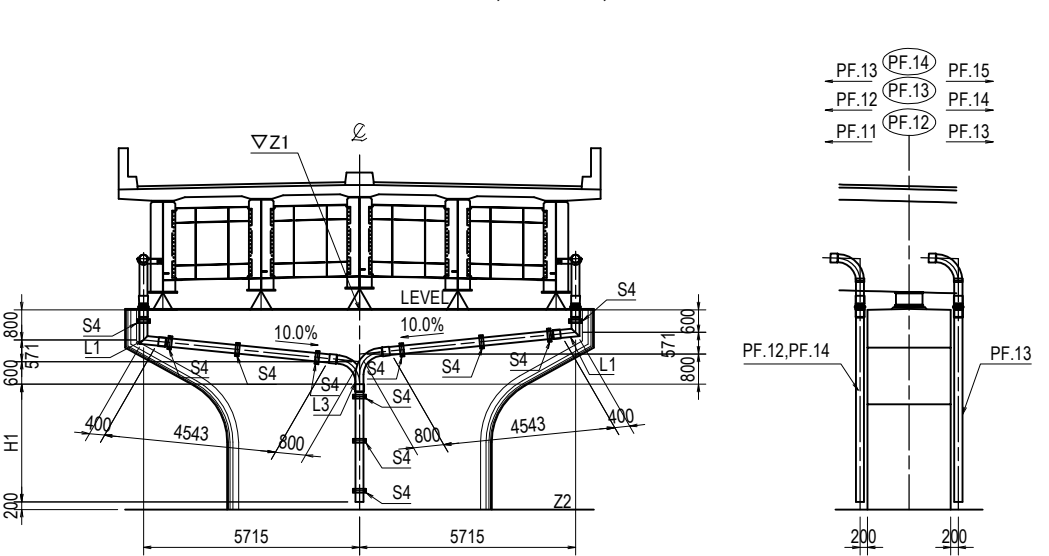
PF.8 , PF.9 , PF.10 , PF.11 , PF.15



SUPPORT S4 : n  
SPECIAL PIPET L1 : 2  
SPECIAL PIPET L3 : 1

AXIS	Z1(m)	Z2(m)	H1(mm)	n
PF.8	12.984	4.378	6343	12
PF.9	12.770	4.534	5973	12
PF.10	12.555	4.695	5597	12
PF.11	11.499	4.856	4380	11
PF.15	9.330	4.634	2433	10

PF.12 , PF.13 , PF.14



SUPPORT S4 : 11  
SPECIAL PIPET L1 : 2  
SPECIAL PIPET L3 : 1

AXIS	Z1(m)	Z2(m)	H1(mm)
PF.12	11.107	5.044	3892
PF.13	10.177	5.052	2987
PF.14	9.323	4.827	2325

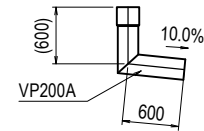
# BRIDGE DRAINAGE DETAIL OF SUBSTRUCTURE

S=1:80

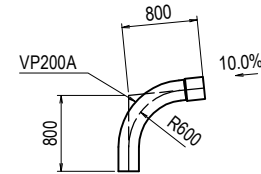
## ELBOW AND BRANCH CONNECTIONS (VP200A)

## SUPPORT FOR DRAINAGE PIPE

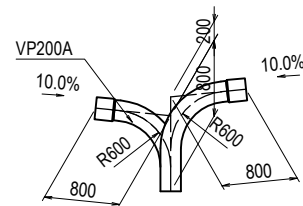
L1  
(NUMBER: 24)



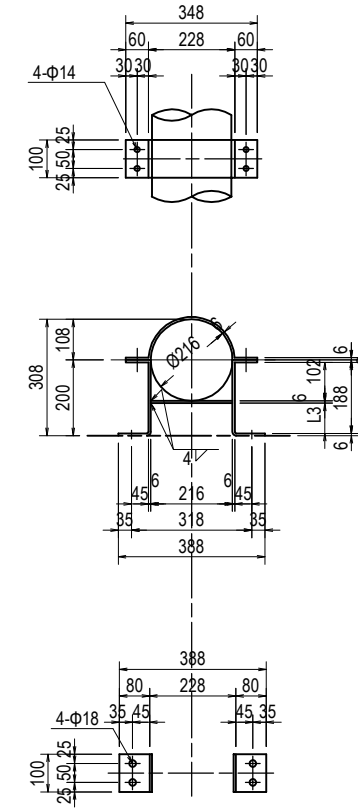
L2  
(NUMBER: 6)



L3  
(NUMBER: 9)



S4  
NUMBER: 152



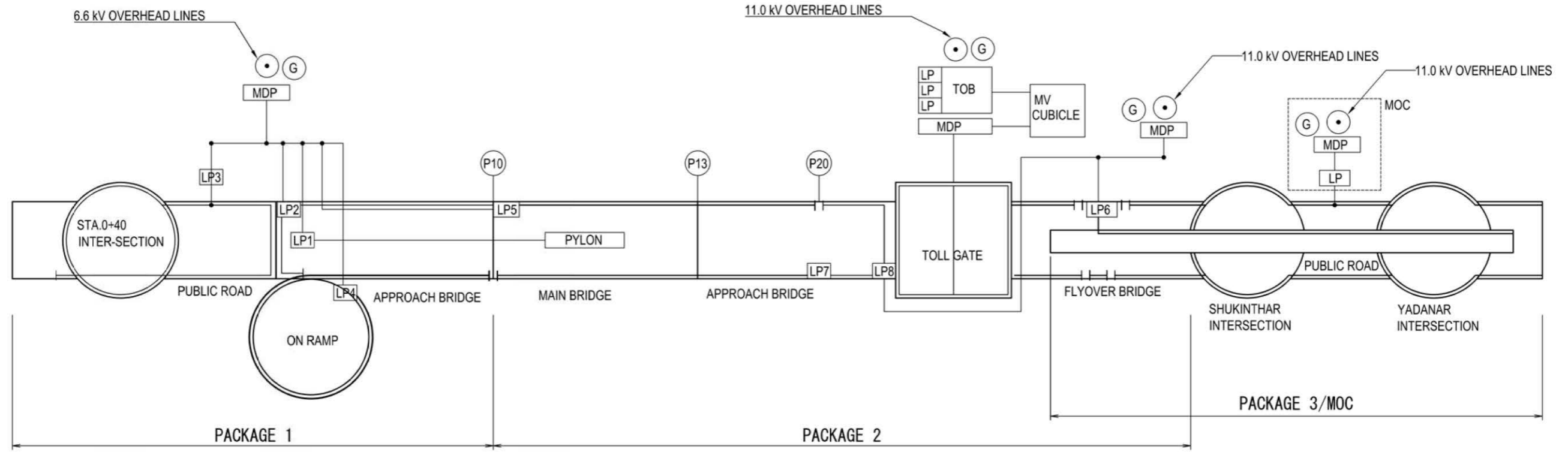
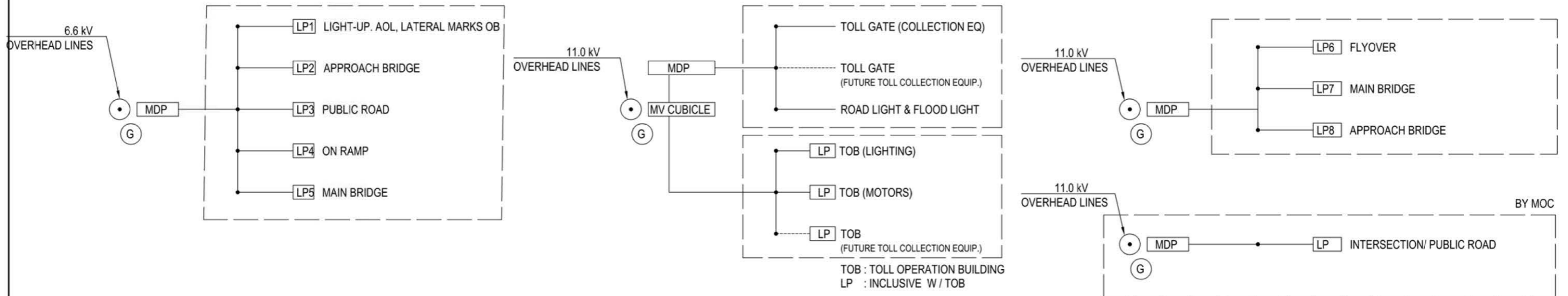
- 1-FB 100x6x469
- 2-PL 100x6x340(SM400A)
- 1-PL 100x6x216(SM400A)
- 4-BN M12x35(2-W)
- 4-INSERT ANCHOR M16 x 100

Note  
 1. All Materials should be SS400 Unless Otherwise Noted.  
 2. \* All mark parts are made molten zinc plating.  
 The mass of deposit per unit area of zinc is made JIS H8641 HDZ35-HDZ55.

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 <b>BRIDGE DRAINAGE DETAIL OF SUBSTRUCTURE</b>	PACKAGE	
				PREPARED BY	Y. SUZUKI			14 Jul. 2017	3
				CHECKED BY	T. HAYAKAWA			20 Jul. 2017	DWG No.
				APPROVED BY	Y. SANO			25 Jul. 2017	P3-FO-3025

## **D. LIGHTING**

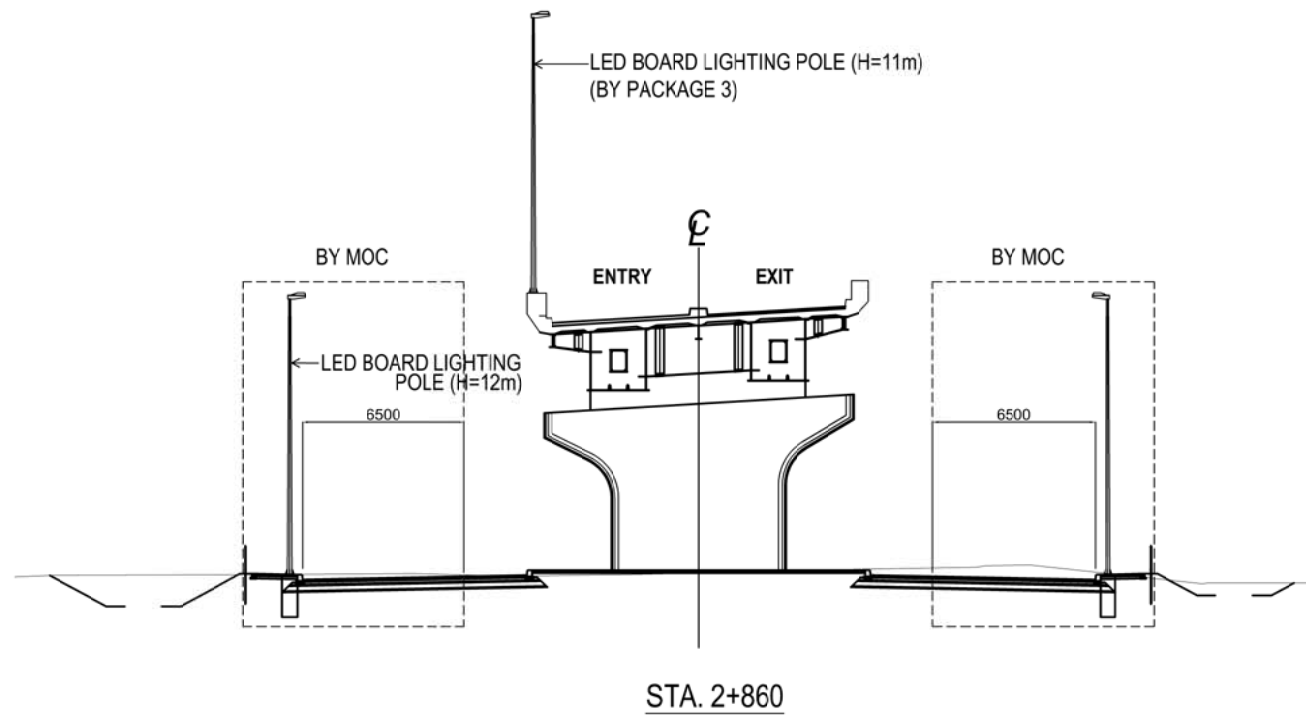
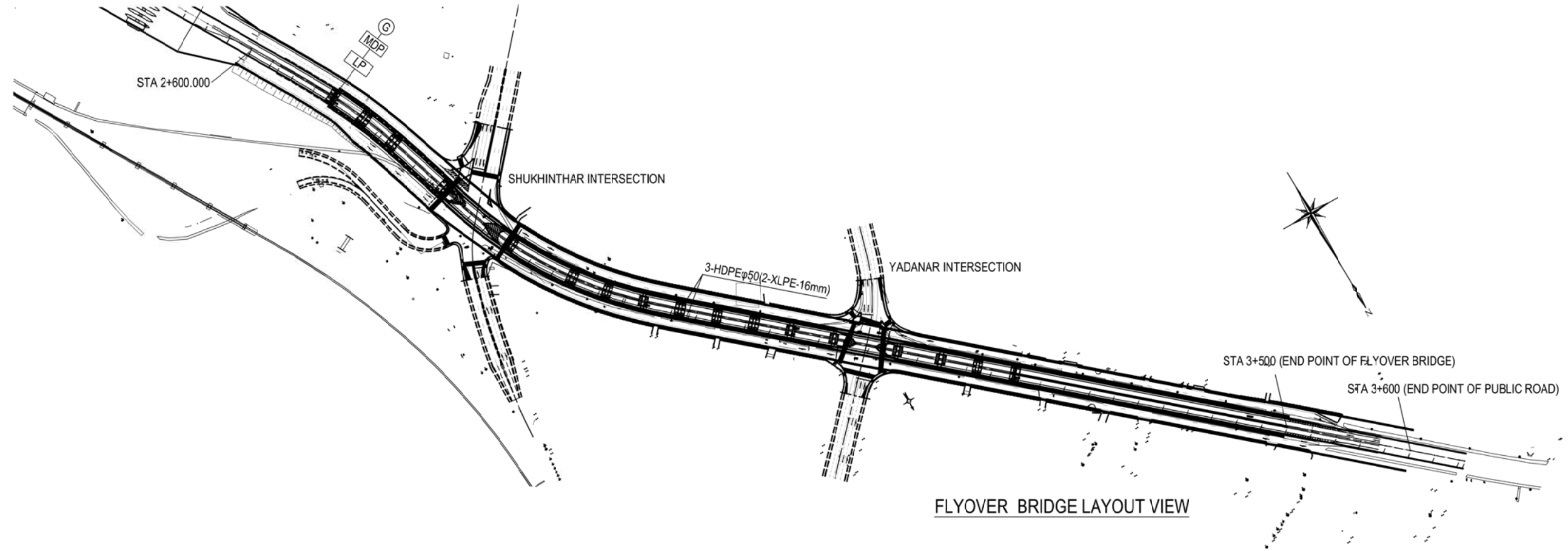
# TYPICAL POWER DISTRIBUTION PLAN



POWER DISTRIBUTION DIAGRAM

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	PACKAGE	
				PREPARED BY	K. MORIMATA				29 Sep. 2017
				CHECKED BY	T. HAYAKAWA				3 Oct. 2017
				APPROVED BY	Y. SANO				6 Oct. 2017
TYPICAL POWER DISTRIBUTION PLAN							3	P3-EL-0001	

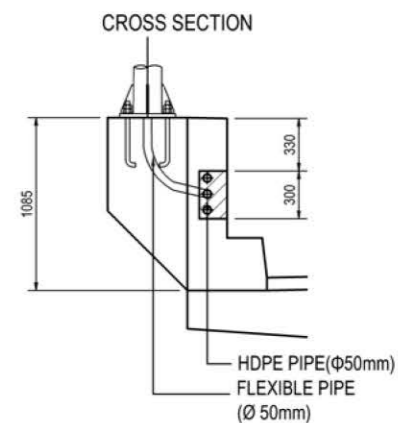
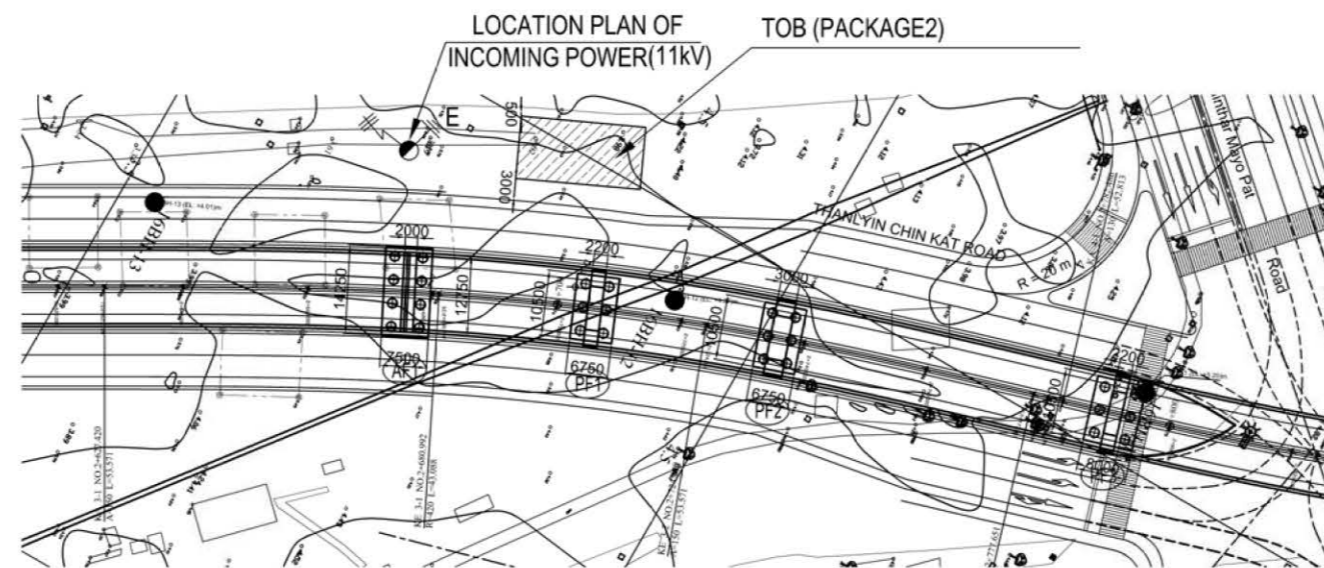
# TYPICAL WIRING PLAN FOR FLYOVER BRIDGE



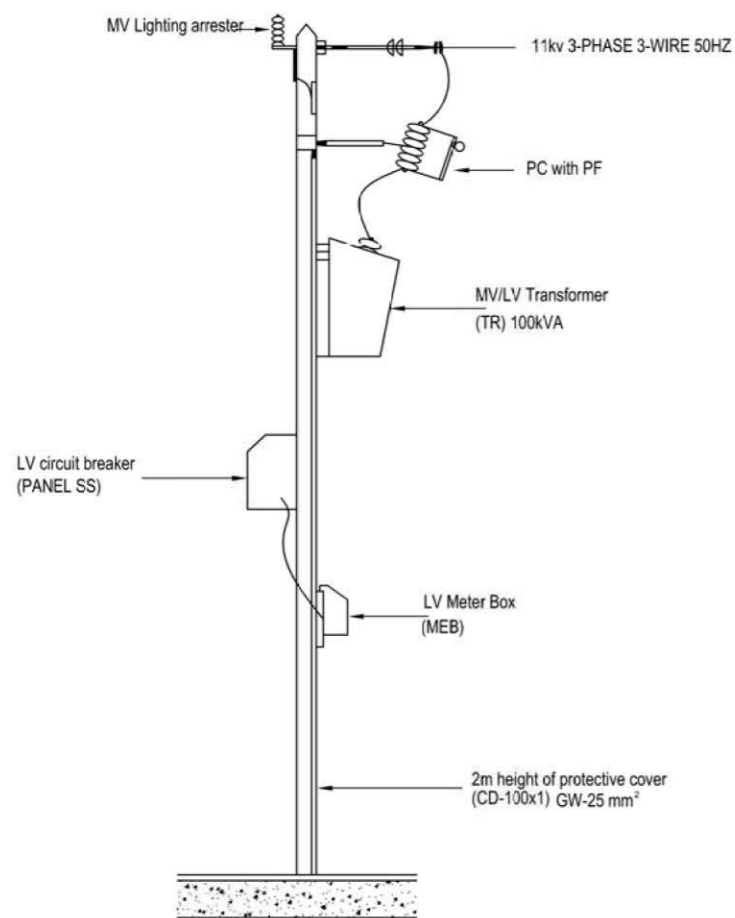
PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE	
				PREPARED BY	K. MORIMATA				29 Sep. 2017
				CHECKED BY	T. HAYAKAWA				3 Oct. 2017
				APPROVED BY	Y. SANO				6 Oct. 2017
							TYPICAL WIRING PLAN FOR FLYOVER BRIDGE	P3-EL-0002	



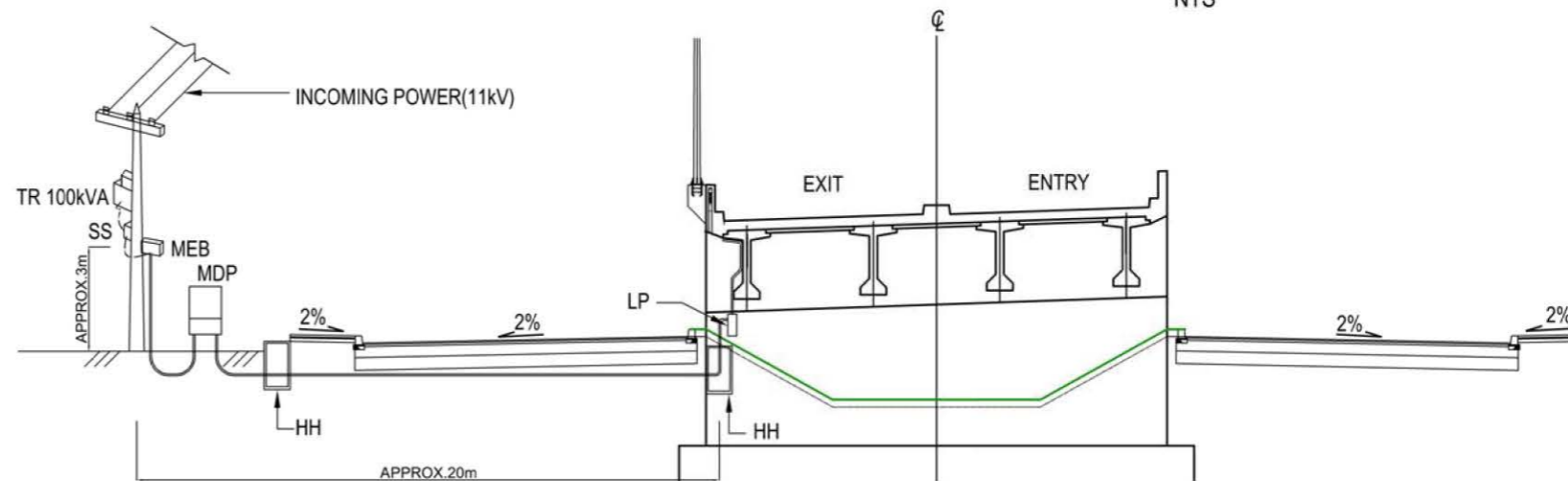
# (REFERENCE) INCOMING POWER RECEIVING FOR ROAD LIGHTING



PIPING LAYOUT IN CONCRETE BARRIER  
NTS

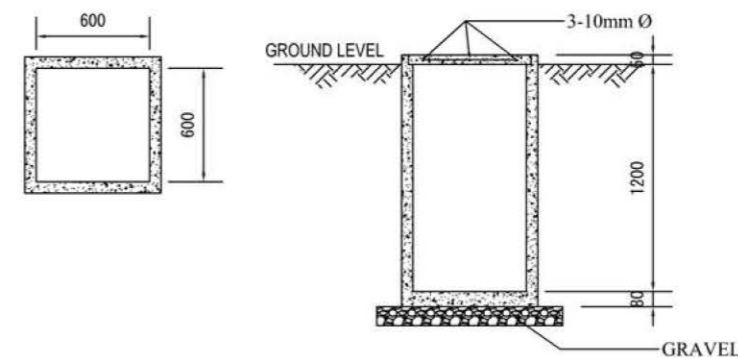


OUTLINE OF INCOMING RECEIVING



CONCEPTUAL PLAN BETWEEN MDP AND LIGHTING POLE AT AF1

NOTE : THE CONCEPTUAL POWER SUPPLY TO MDP IS ONLY PUPOSE OF CONST ESTIMATION IN THE DESIGN STAGE.

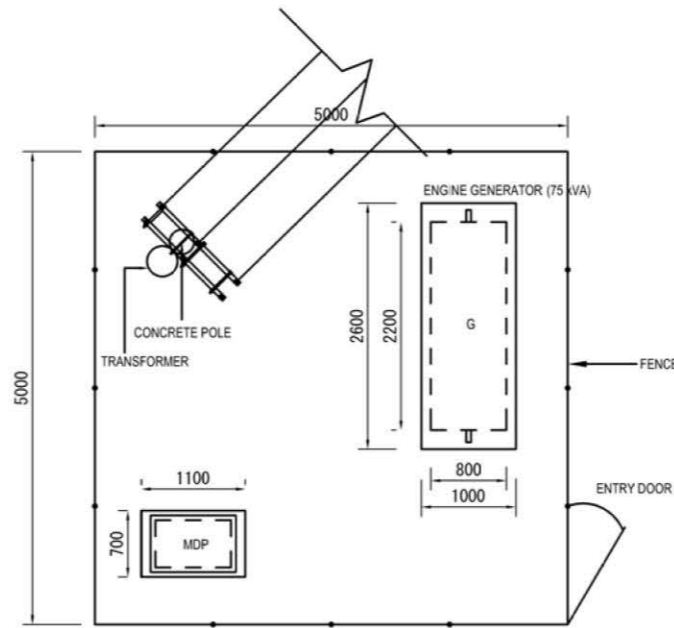
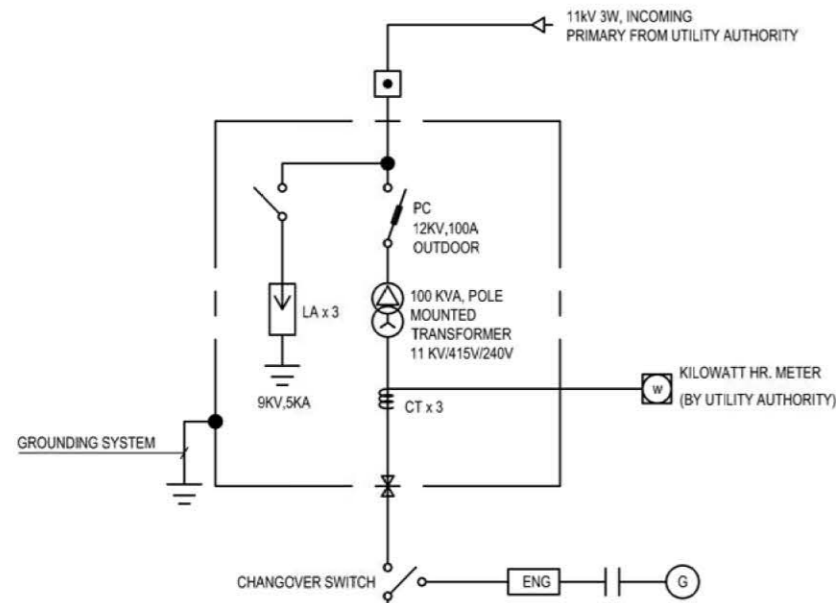


TYPICAL DETAIL OF HAND HOLE 1:40

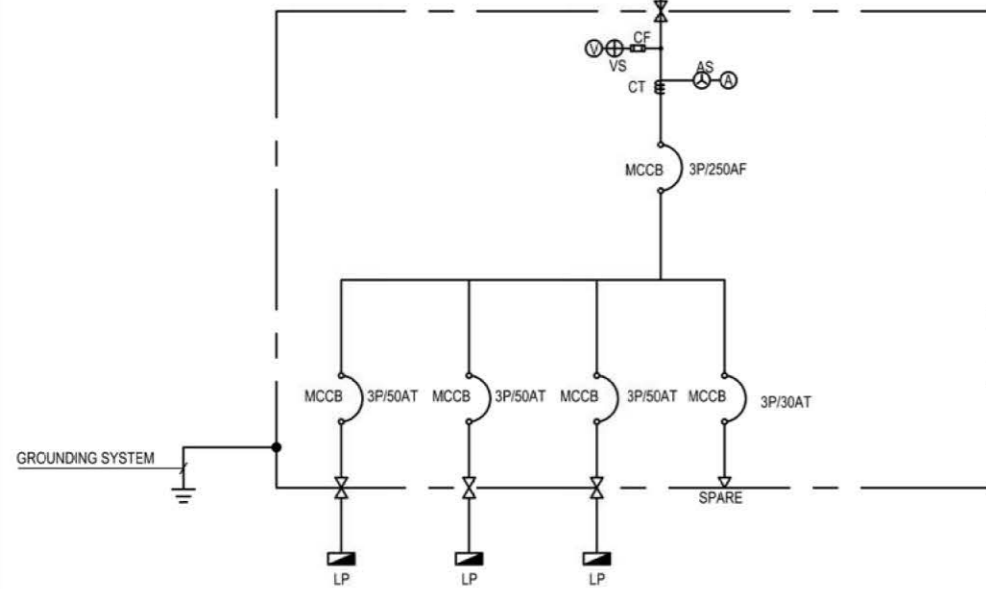
NOTE : INCOMING RECIEVING SYSTEM (SITE SUBSTATION) FOR PACKAGE 3 SHALL BE INSTALLED BY MOC BEFORE THE COMMENCEMENT OF THIS CONTRACT

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) INCOMING POWER RECEIVING FOR ROAD LIGHTING	PACKAGE	
				PREPARED BY	K. MORIMATA			29 Sep. 2017	3
				CHECKED BY	T. HAYAKAWA			3 Oct. 2017	DWG No.
				APPROVED BY	Y. SANO			6 Oct. 2017	P3-EL-0003

# TYPICAL MV SITE SUBSTATION



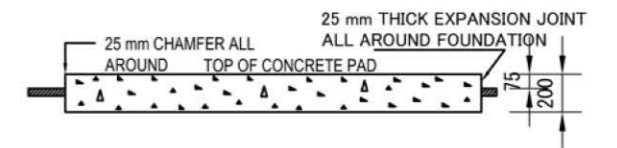
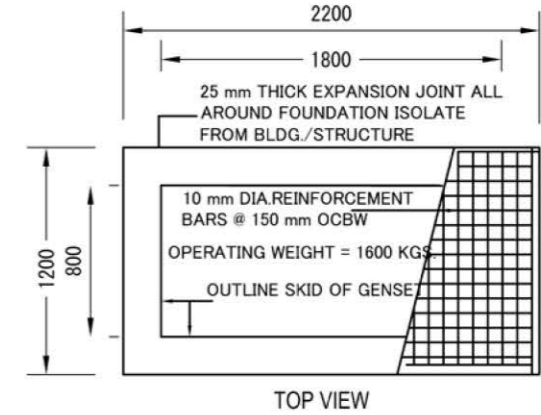
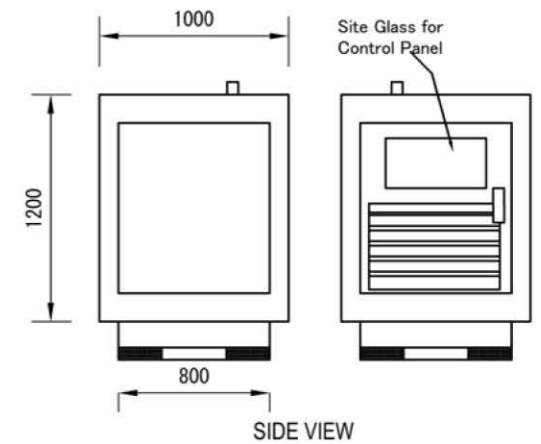
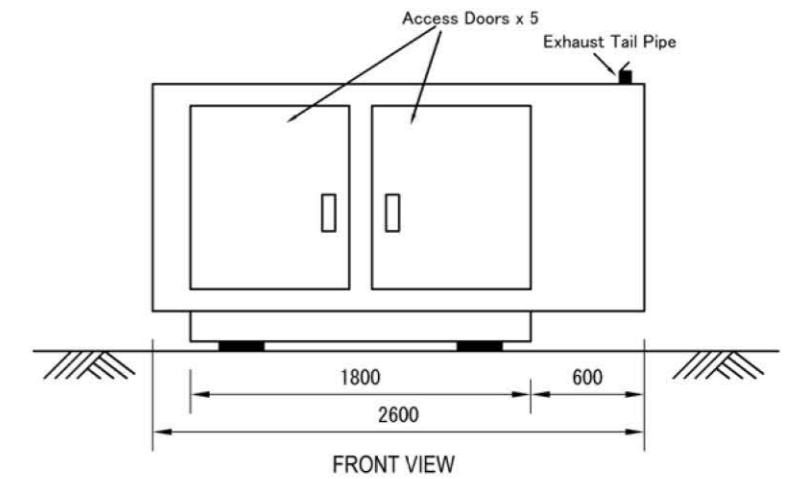
SITE LAYOUT OF INCOMING POWER STATION S=1:80



SINGLE LINE DIAGRAM

**LEGEND**

- ☐ - LIGHTING PANEL
- - MOLDED CASE CIRCUIT BREAKER (MCCB)
- ⬇ - GROUNDING
- ⊙ - KILOWATT HR.METER
- ⊗ - POWER TRANSFORMER
- ⚡ - PRIMARY CUTOUT (PC) WITH POWER FUSE (PF)
- ⚡ - LIGHTING ARRESTER (LA)
- ⊙ - GENERATOR
- ENG - ENGINE
- AS - AMMETER CHANGE OVER SWITCH
- CF - CURRENT FUSE
- VS - VOLTAGE CHANGE OVER SWITCH
- CT - CURRENT TRANSFORMER
- MDP - MAIN DISTRIBUTION PANEL
- PF - POWER FUSE



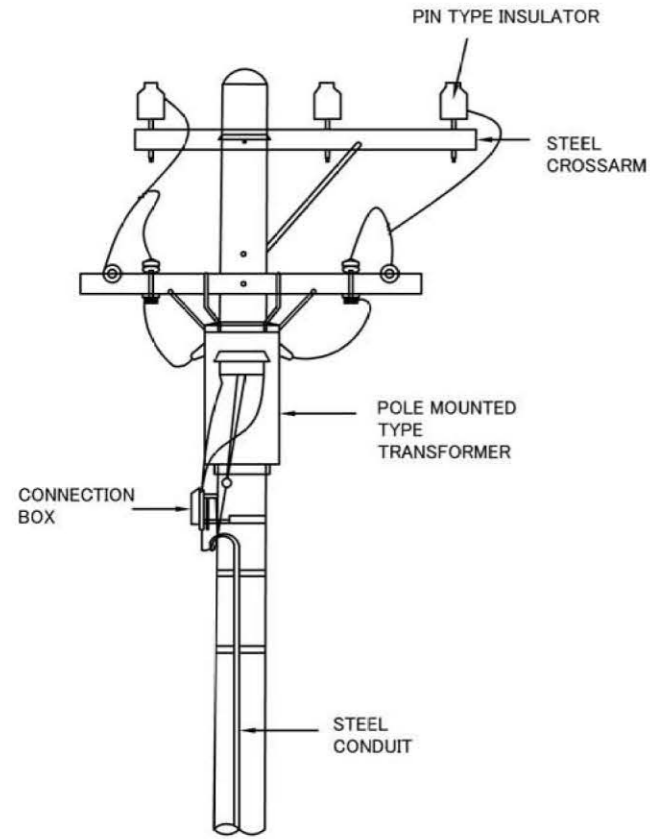
CONCRETE FOUNDATION

REFERENCE LAYOUT OF ENGINE GENERATOR S=1:40

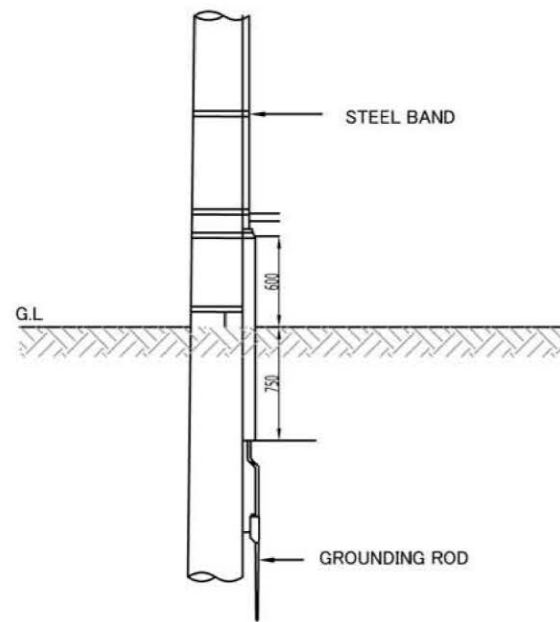
PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	NAME	SIGNATURE	DATE	DRAWING TITLE TYPICAL MV SITE SUBSTATION	PACKAGE	
				PREPARED BY	K. MORIMATA			29 Sep. 2017	3
				CHECKED BY	T. HAYAKAWA			3 Oct. 2017	DWG No.
				APPROVED BY	Y. SANO			6 Oct. 2017	P3-EL-0004



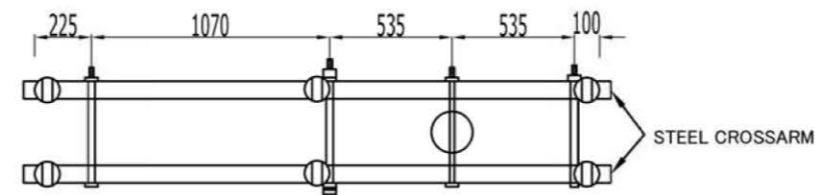
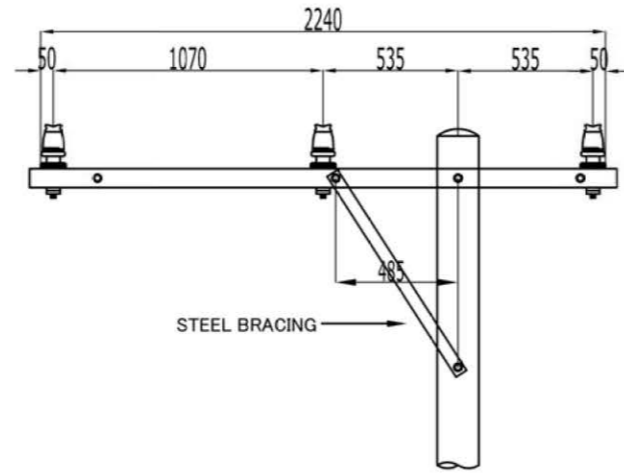
# TYPICAL ELECTRIC POLE ASSEMBLING (11kv USE)



TYPICAL POLE ASSEMBLING FOR POLE MOUNTED TRANSFORMER

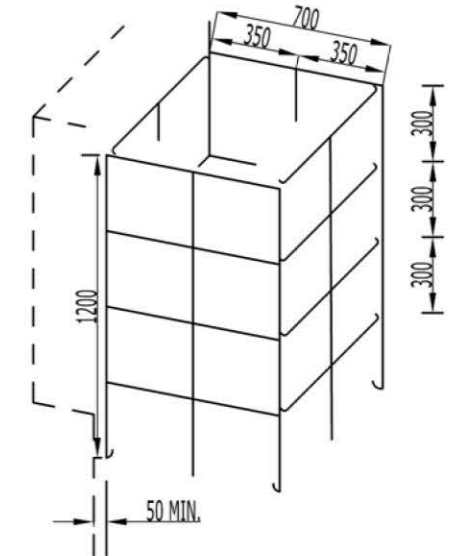
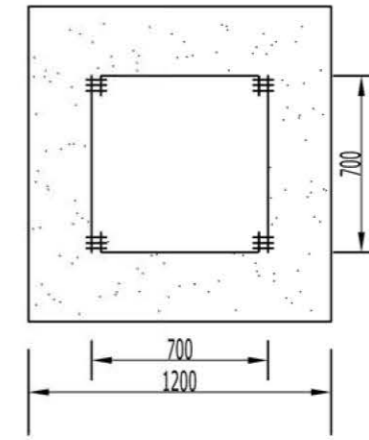


TYPICAL GROUNDING SYSTEM



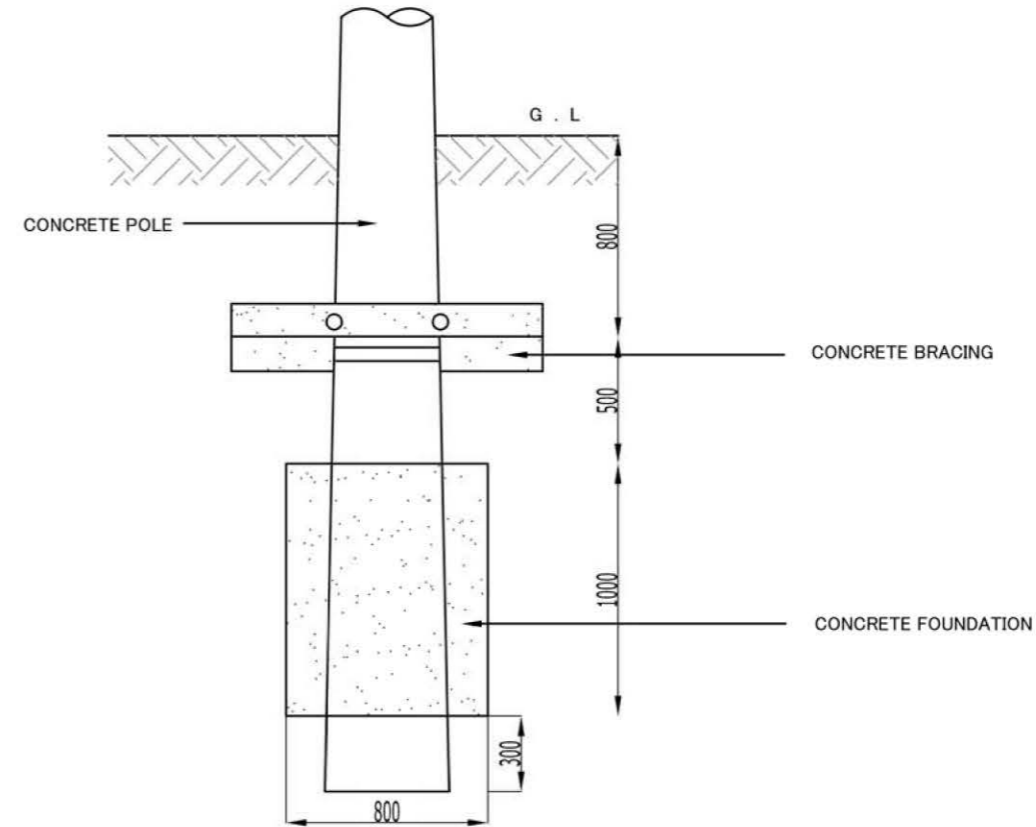
TYPICAL POLE ASSEMBLING FOR EXTENDED OVERHEAD LINES

UNIT: mm



NOTE : REINFORCEMENT BAR WITH MORE THAN 10MM DIA. SHALL BE ARRANGED.

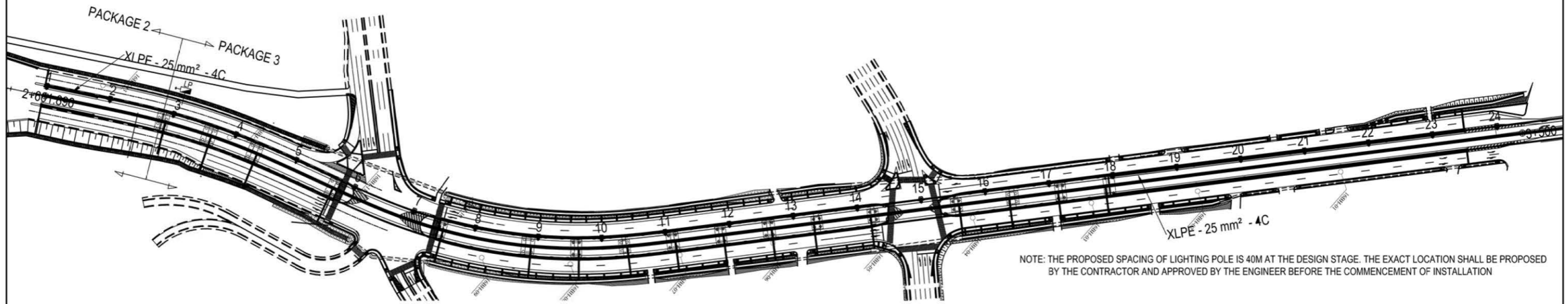
TYPICAL CONCRETE FOUNDATION AND RE-BAR ARRANGEMENT



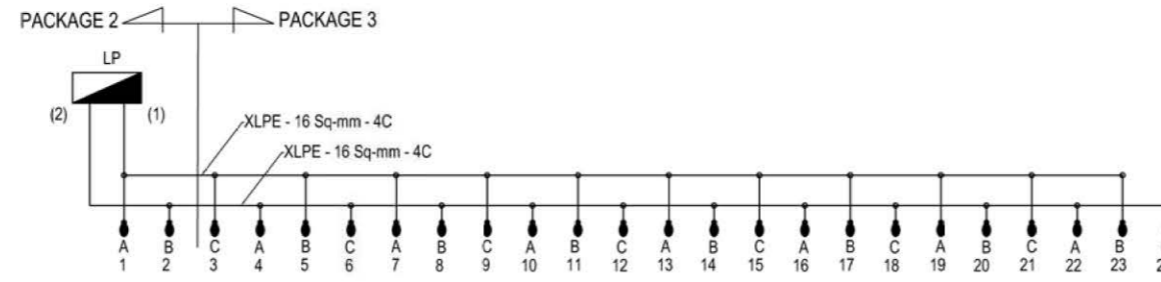
TYPICAL POLE CONCRETE BRACING

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.	K. MORIMATA		29 Sep. 2017	TYPICAL ELECTRIC POLE ASSEMBLING (11kv USE)	3
				T. HAYAKAWA		3 Oct. 2017		DWG No.
				Y. SANO		6 Oct. 2017		P3-EL-0005

# TYPICAL LIGHTING PLAN FOR FLYOVER BRIDGE



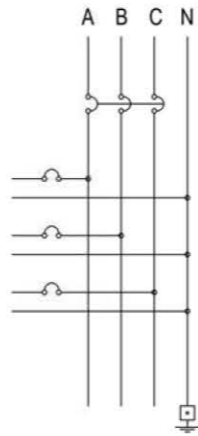
LIGHTING PLAN FOR FLYOVER BRIDGE



WIRING DIAGRAM

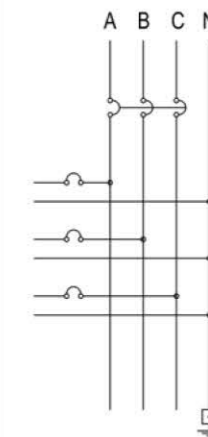
CKT = LP (1)

DESCRIPTION	CONNECTED LOAD (VA)			CKT, BRK, SIZE, WP			
	TOTAL	A	B	C	P	AF	AT
FLYOVER	165	165			1	25	15
	165			165			
	165		165				
	165	165					
	165			165			
	165		165				
	165	165					
	165			165			
	165		165				
	165	165					
	165			165			
	165		165				
	165	165					
	165			165			
SPARE	1,000				3		
SUBTOTAL	2,980	660	660	660		25	15



CKT = LP (2)

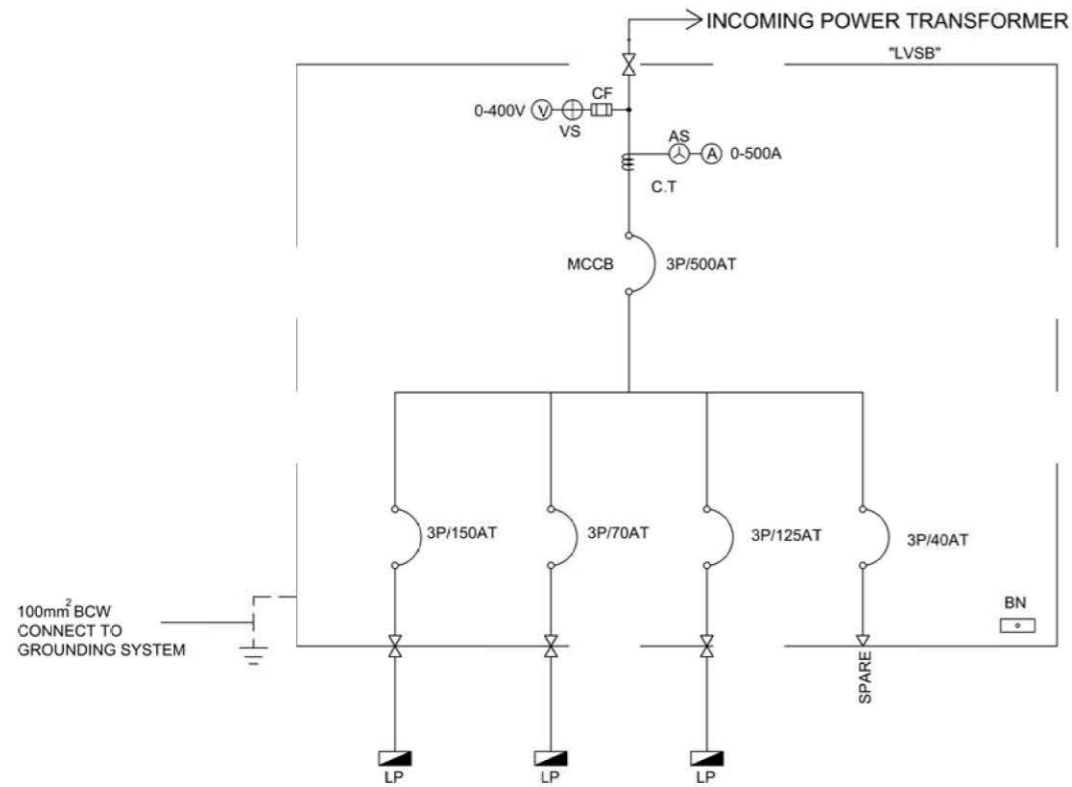
DESCRIPTION	CONNECTED LOAD (VA)			CKT, BRK, SIZE, WP			
	TOTAL	A	B	C	P	AF	AT
FLYOVER	165		165		1	25	15
	165	165					
	165			165			
	165		165				
	165	165					
	165			165			
	165		165				
	165	165					
	165			165			
	165		165				
	165	165					
	165			165			
	165		165				
	165	165					
	165			165			
SPARE	1,000				3		
SUBTOTAL	2,980	660	660	660		25	15



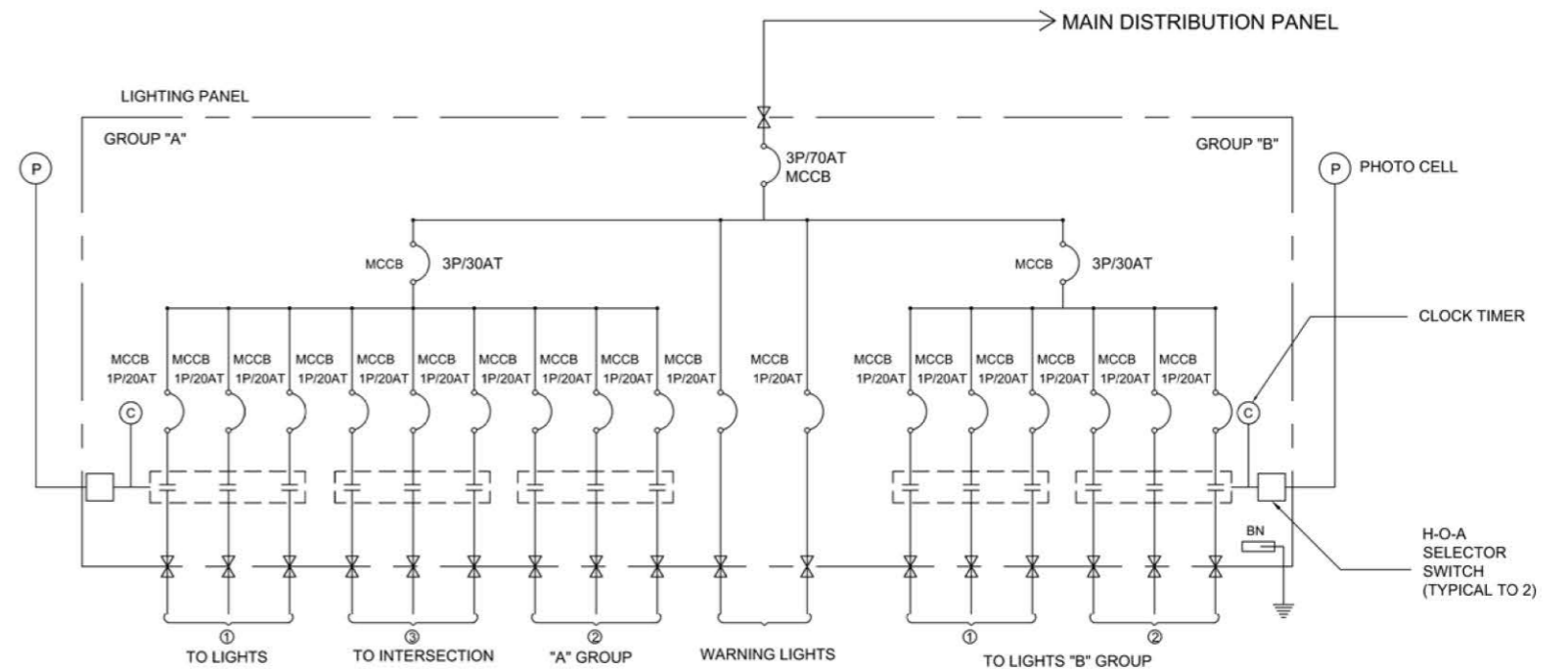
LOAD SCHEDULE



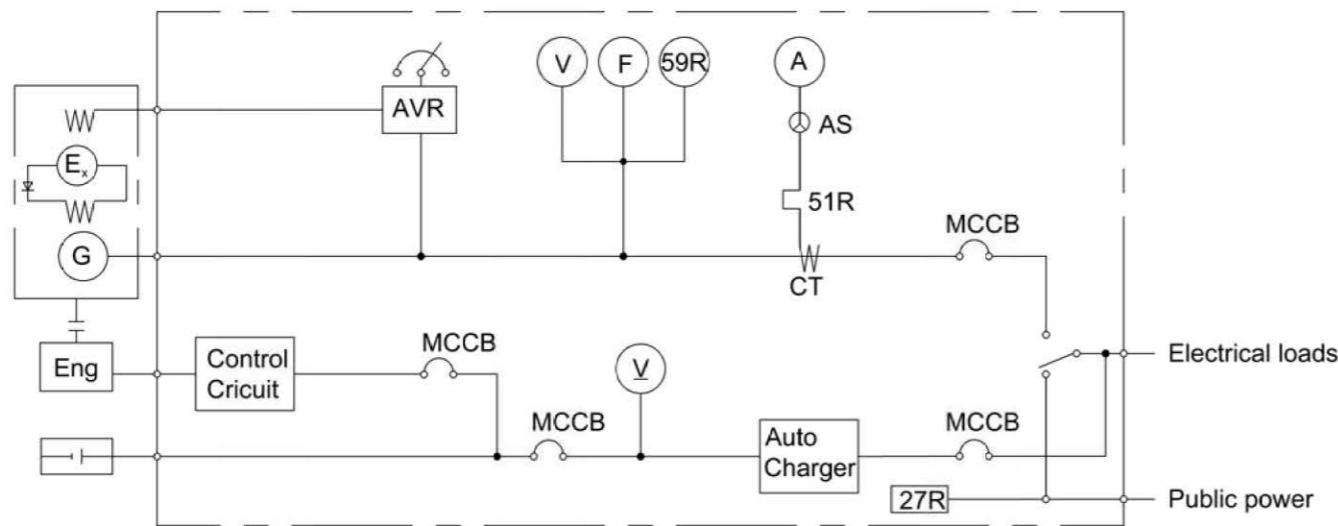
# (REFERENCE) SINGLE LINE DIAGRAM FOR PANELS



SINGLE LINE DIAGRAM FOR MAIN DISTRIBUTION PANEL



SINGLE LINE DIAGRAM FOR LIGHTING PANEL



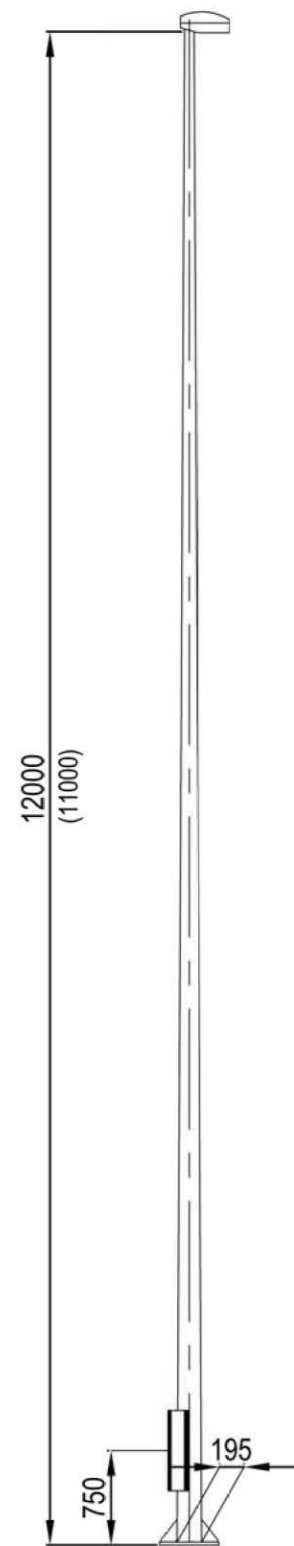
SINGLE LINE DIAGRAM FOR ENGINE GENERATOR CONTROL PANEL

## LEGEND

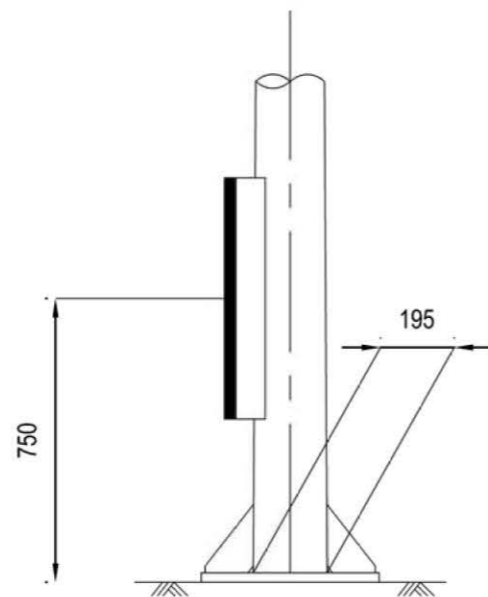
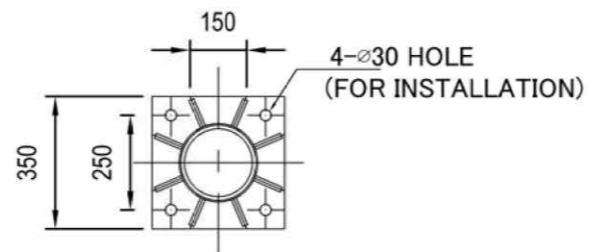
- |    |                                |     |                               |
|----|--------------------------------|-----|-------------------------------|
|    | : MOLDED CASE CIRCUIT BREAKER  |     | : DIESEL ENGINE               |
| AT | : AMPERE TRIPPING              |     | : GENERATOR                   |
|    | : GROUNDING                    |     | : EXITER                      |
|    | : CONTACTOR                    |     | : AMPERE METER                |
| VS | : VOLTMETER CHANGE OVER SWITCH |     | : VOLTAGE METER               |
| AS | : AMMETER CHANGOVER SWITCH     |     | : FREQUENCY METER             |
| CT | : CURRENT TRANSFORMER          |     | : BATTERY                     |
|    |                                |     | : AUTOMATIC VOLTAGE LEGULATOR |
|    |                                | 27R | : LOW VOLTAGE RELAY           |
|    |                                | 59G | : OVER VOLTAGE                |
|    |                                | 51R | : OVERCURRENT RELAY           |

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) SINGLE LINE DIAGRAM FOR PANELS	PACKAGE	
				PREPARED BY	K. MORIMATA			29 Sep. 2017	3
				CHECKED BY	T. HAYAKAWA			3 Oct. 2017	DWG No.
				APPROVED BY	Y. SANO			6 Oct. 2017	P3-EL-0007

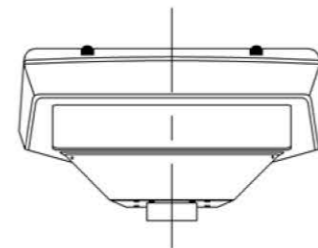
# TYPICAL LED LUMINAIR AND POLE



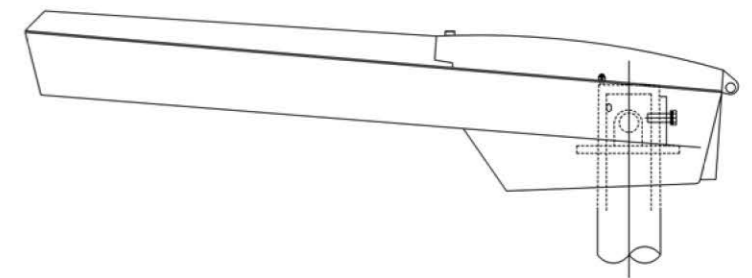
NOTE: ( ): FOR FLYOVER  
OUTLINE OF LIGHTING POLE



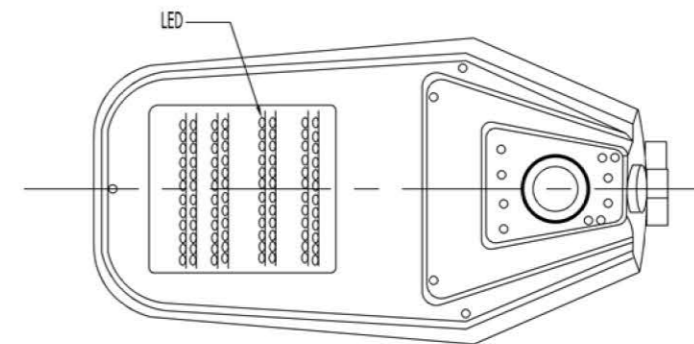
MAINTENANCE OPENING  
REFERENCE FOR LIGHTING POLE  
 NTS



FRONT VIEW



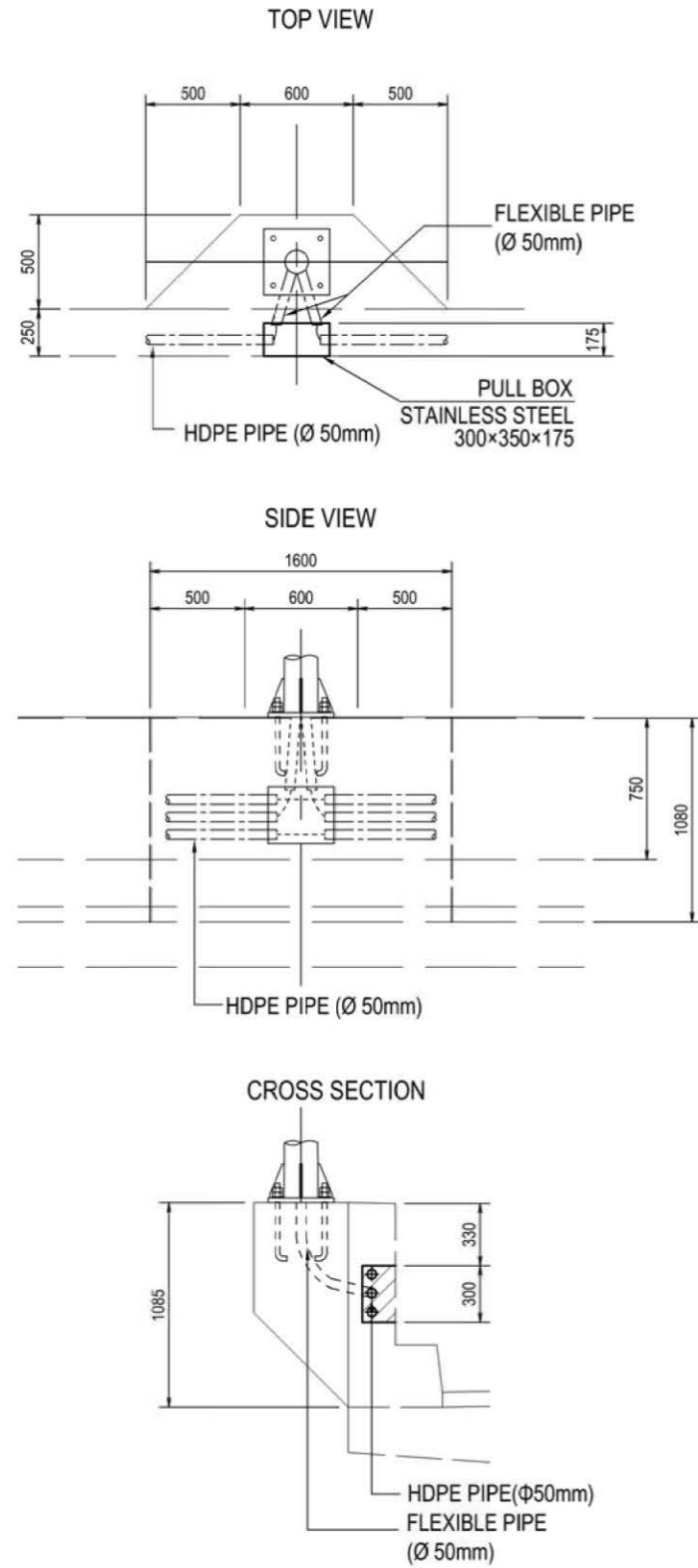
SIDE VIEW



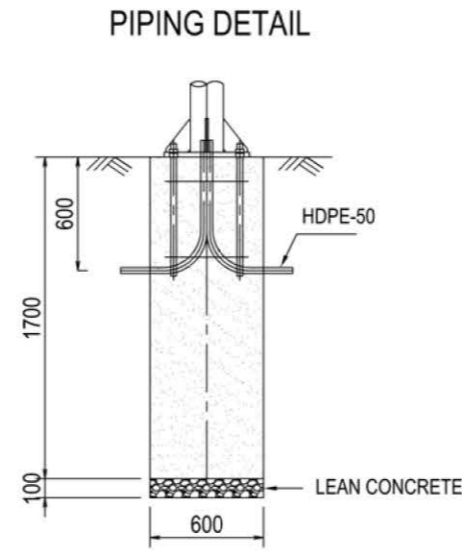
FACE VIEW

REFERENCE FOR LED LUMINAIR  
 NTS

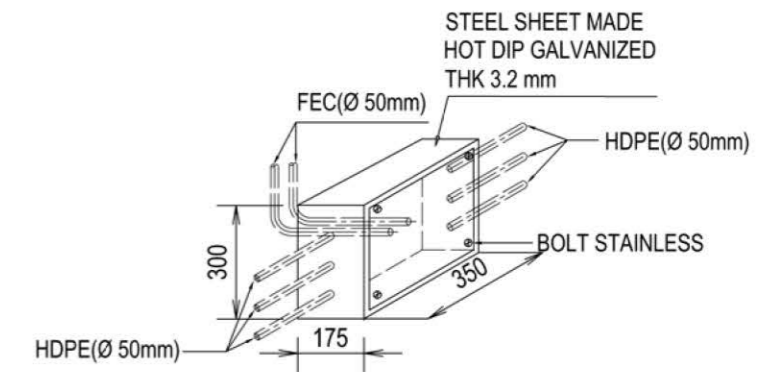
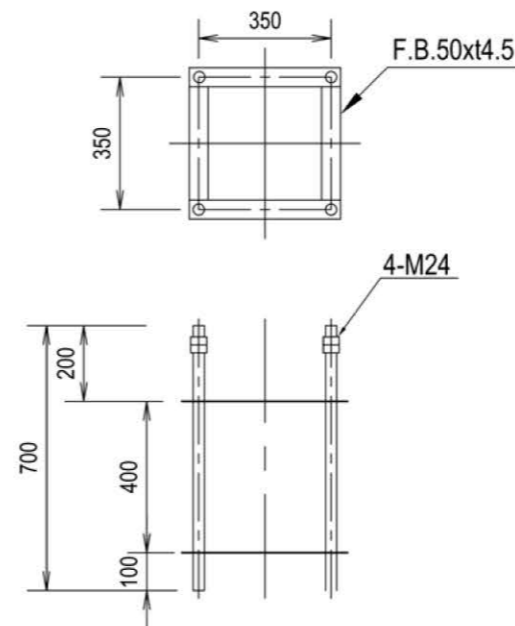
# TYPICAL FOUNDATION DETAILS FOR LIGHTING POLE



FLYOVER BRIDGE S=1:40



DETAIL OF ANCHOR BOLT



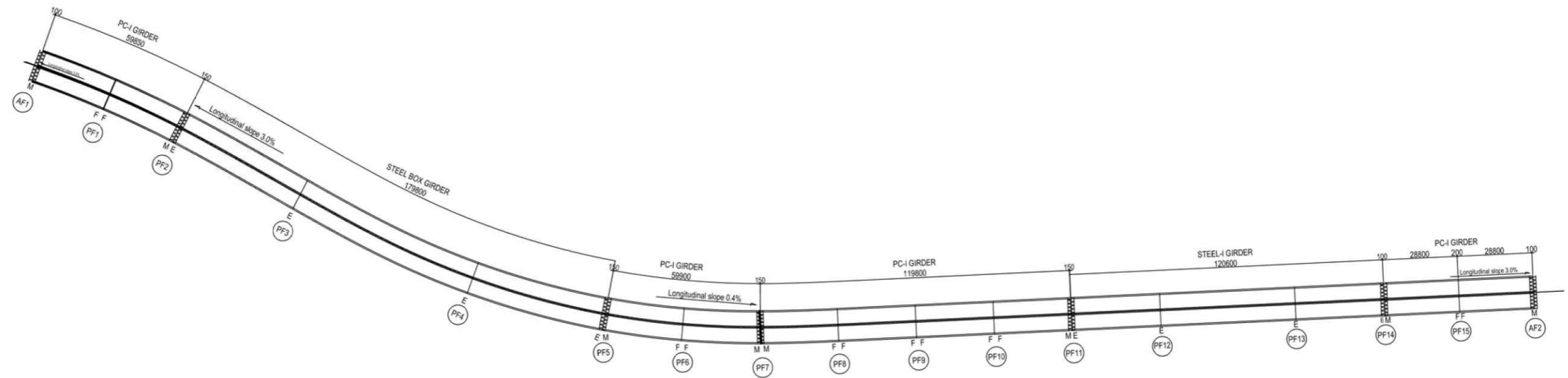
TYPICAL LAYOUT OF PULL BOX AND CONDUITS S=1:20

FOR THANLYIN CHIN KAT ROAD LIGHTING POLE S=1:20

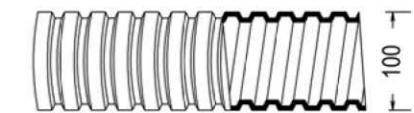
PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM 	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE	
				PREPARED BY	K. MORIMATA				29 Sep. 2017
				CHECKED BY	T. HAYAKAWA				3 Oct. 2017
				APPROVED BY	Y. SANO				6 Oct. 2017
TYPICAL FOUNDATION DETAILS FOR LIGHTING POLE							3	DWG No.	
								P3-EL-0009	



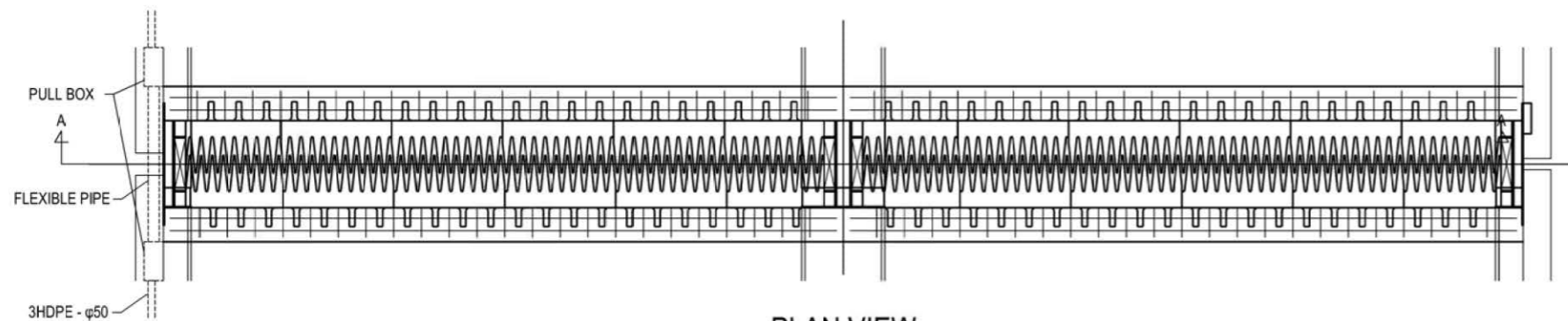
# (REFERENCE) INSTALLATION DETAIL FOR FLEXIBLE PIPE



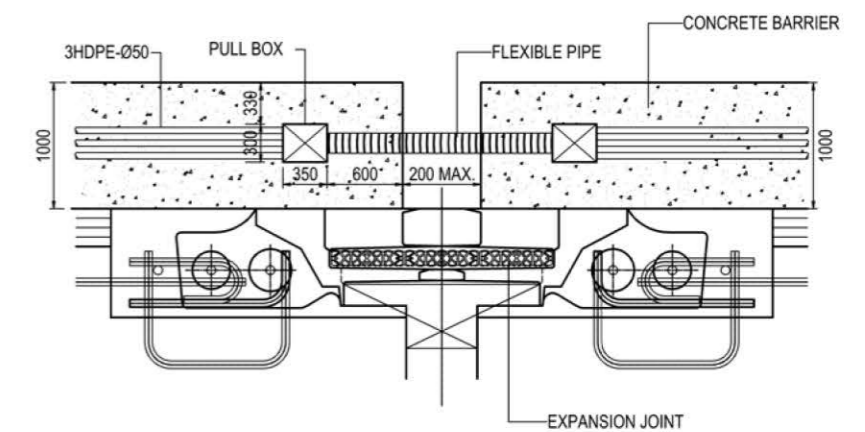
LAYOUT OF EXPANSION JOINTS



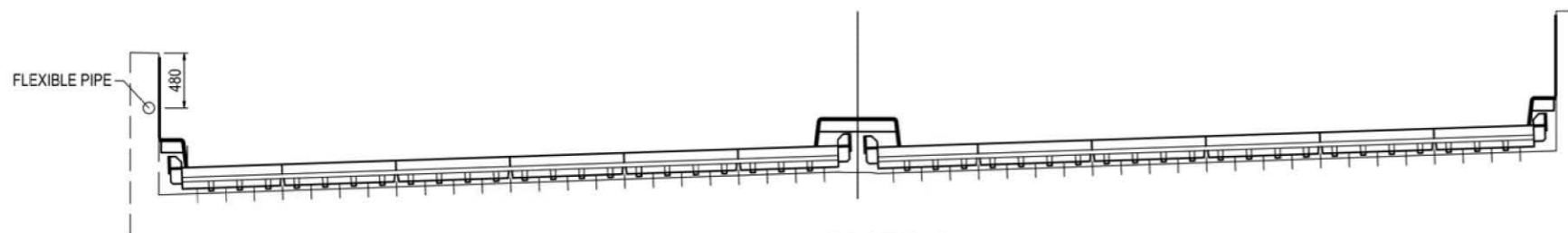
DIAMETER OF FLEXIBLE PIPE



PLAN VIEW S=1:60



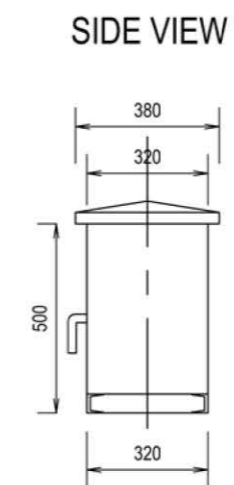
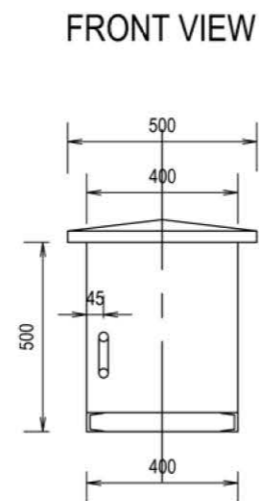
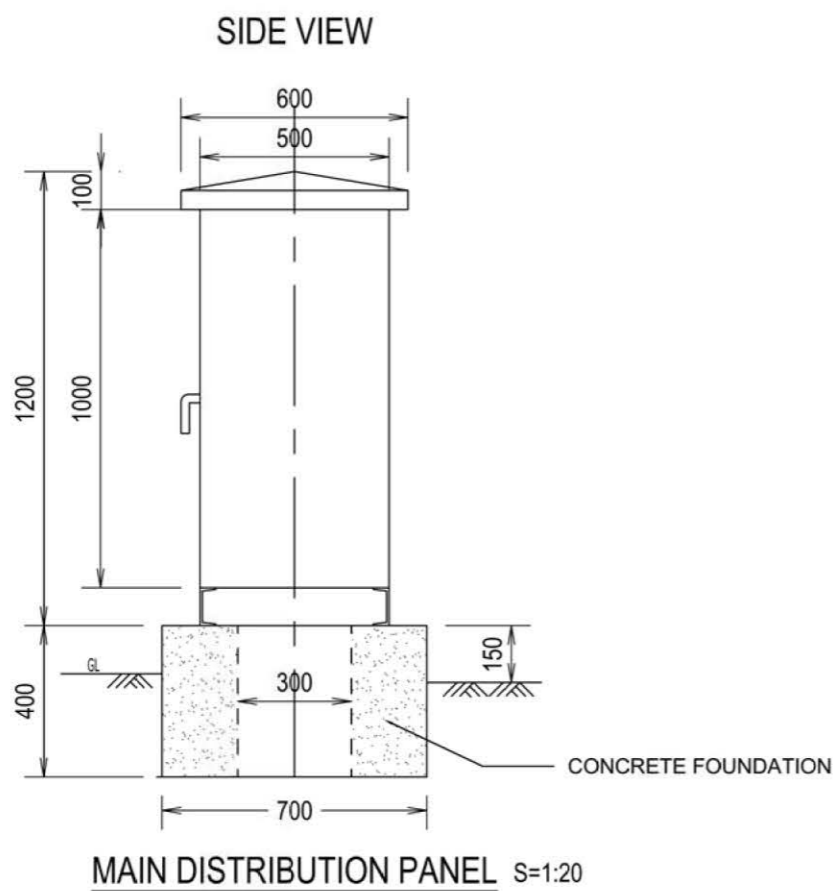
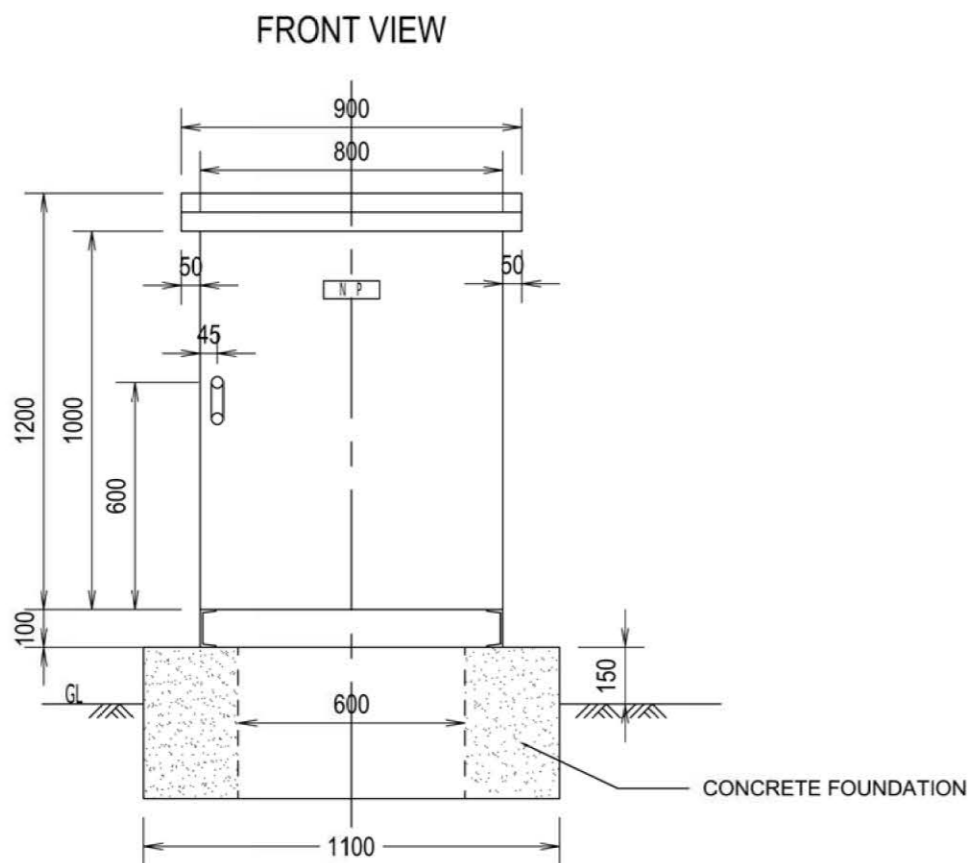
TYPICAL INSTALLATION DETAIL OF FLEXIBLE PIPE S=1:60



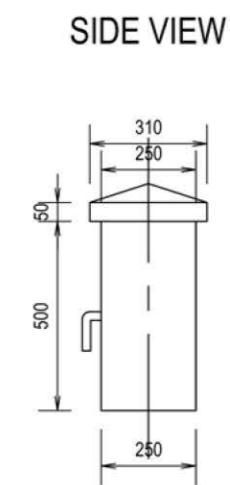
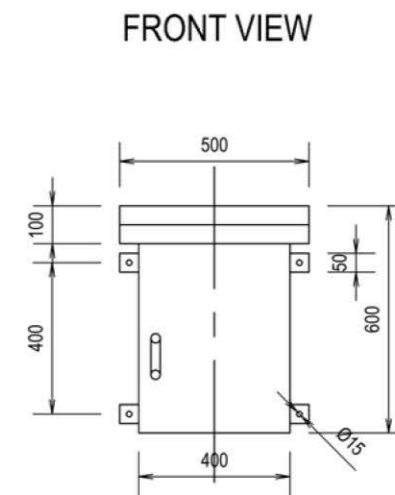
A-A SECTION S=1:60

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 <b>(REFERENCE) INSTALLATION DETAIL FOR FLEXIBLE PIPE</b>	PACKAGE	
				PREPARED BY	K. MORIMATA			29 Sep. 2017	3
				CHECKED BY	T. HAYAKAWA			3 Oct. 2017	DWG No.
				APPROVED BY	Y. SANO			6 Oct. 2017	P3-EL-0010

# (REFERENCE) OUTLINE OF ELECTRIC PANELS



**LIGHTING PANEL S=1:20**

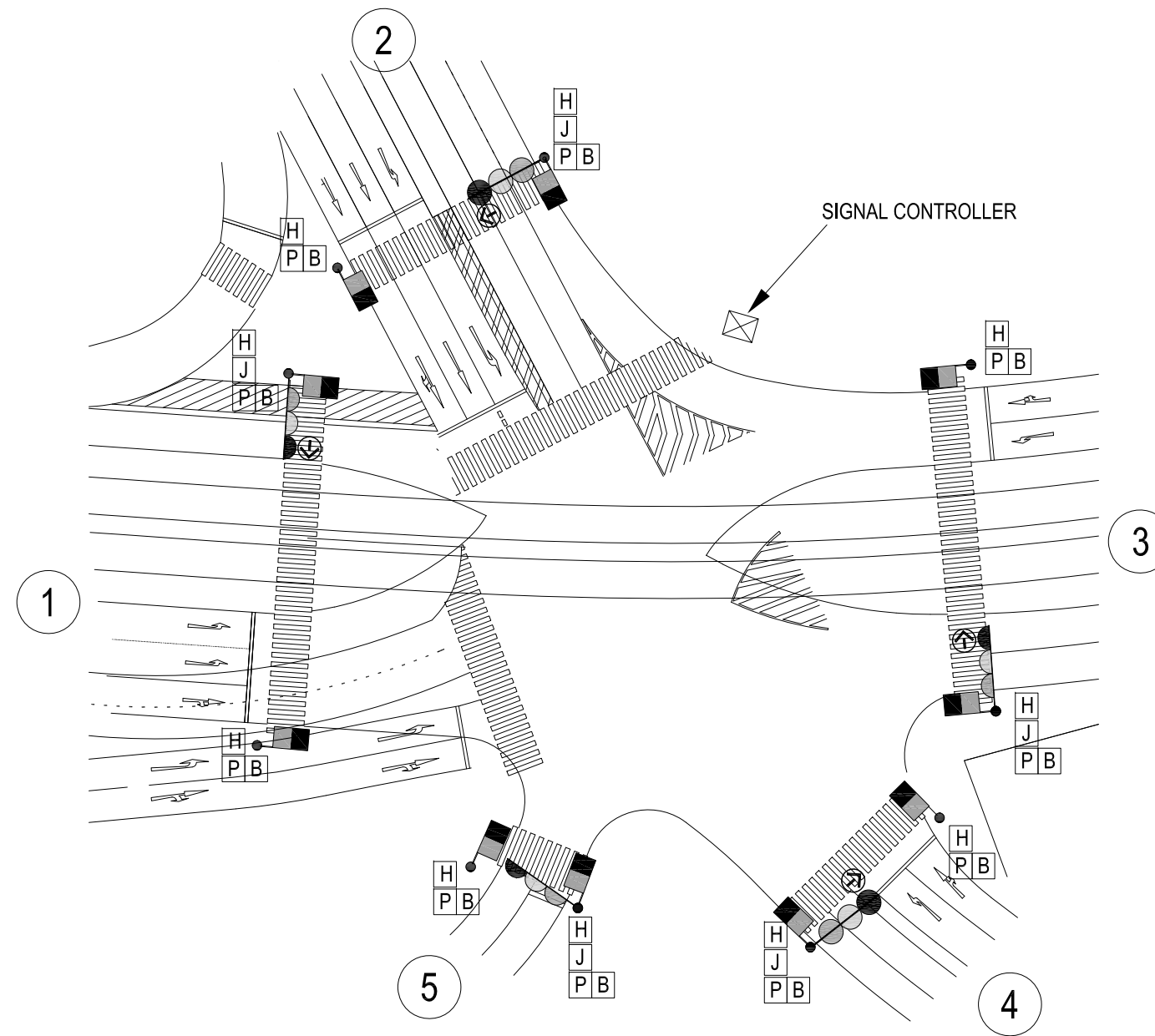


**POLE MOUNTED TYPE PANEL S=1:20**

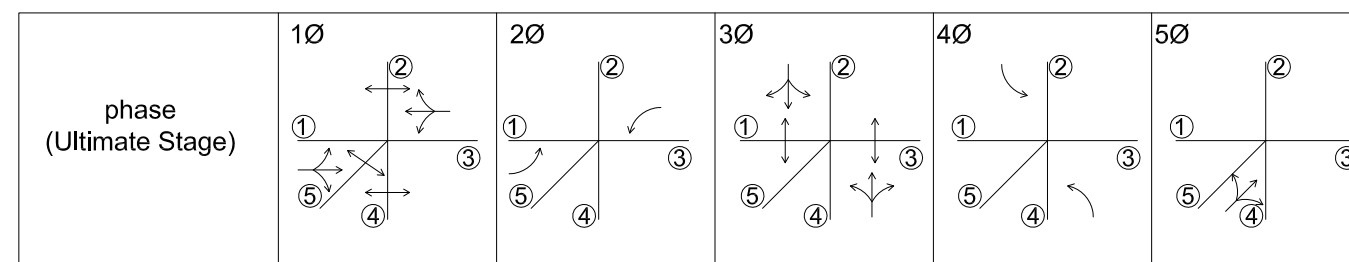
# TYPICAL TRAFFIC SIGNAL CONTROL SYSTEM PLAN AND WIRING PLAN FOR SHUKHINTHAR INTERSECTION

## LEGEND

- : Concrete pole
- : Steel pole
- ⊠ : Traffic signal controller
- : Vehicle traffic signal with steel pole
- ➔ : Arrow sign traffic signal
- : Pedestrian signal with steel pole
- P B : Push-button switch
- J : Junction box
- S : Power supply box
- P : Pull box
- H : Hand hole
- ⬆ : Raising underground pipe
- ⚡ : Cable
- : Underground piping
- SVV : Control -use vinyl insulated vinyl sheathed cable
- IV : Indoor PVC
- E : Grounding
- : LAYOUT OF INTERSECTION BY MOC'S CONSTRUCTION



TYPICAL TRAFFIC SYSTEM CONTROL PLAN



VEHICLE AND PEDESTRIAN PHASING DIAGRAM

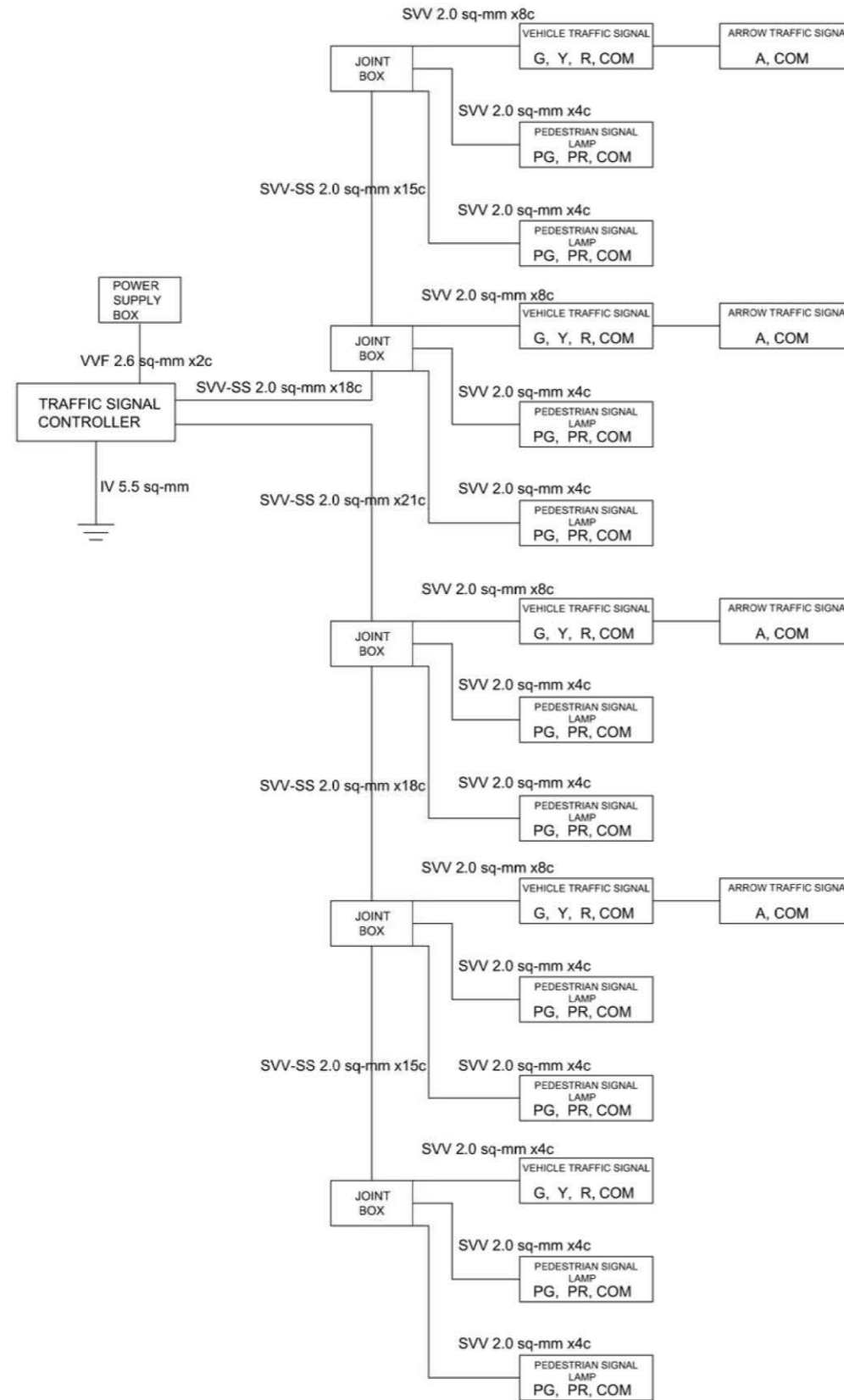
PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	NAME	SIGNATURE	DATE	DRAWING TITLE TYPICAL TRAFFIC SIGNAL SYSTEM PLAN AND WIRING PLAN FOR SHUKHINTHAR INTERSECTION	PACKAGE	
				PREPARED BY	K. MORIMATA			29 Sep. 2017	3
				CHECKED BY	T. HAYAKAWA			3 Oct. 2017	DWG No.
				APPROVED BY	Y. SANO			6 Oct. 2017	P3-EL- 0012



# TYPICAL TRAFFIC SIGNAL CONTROL SYSTEM DIAGRAM FOR SHUKINTHAR INTERSECTION

## LEGND

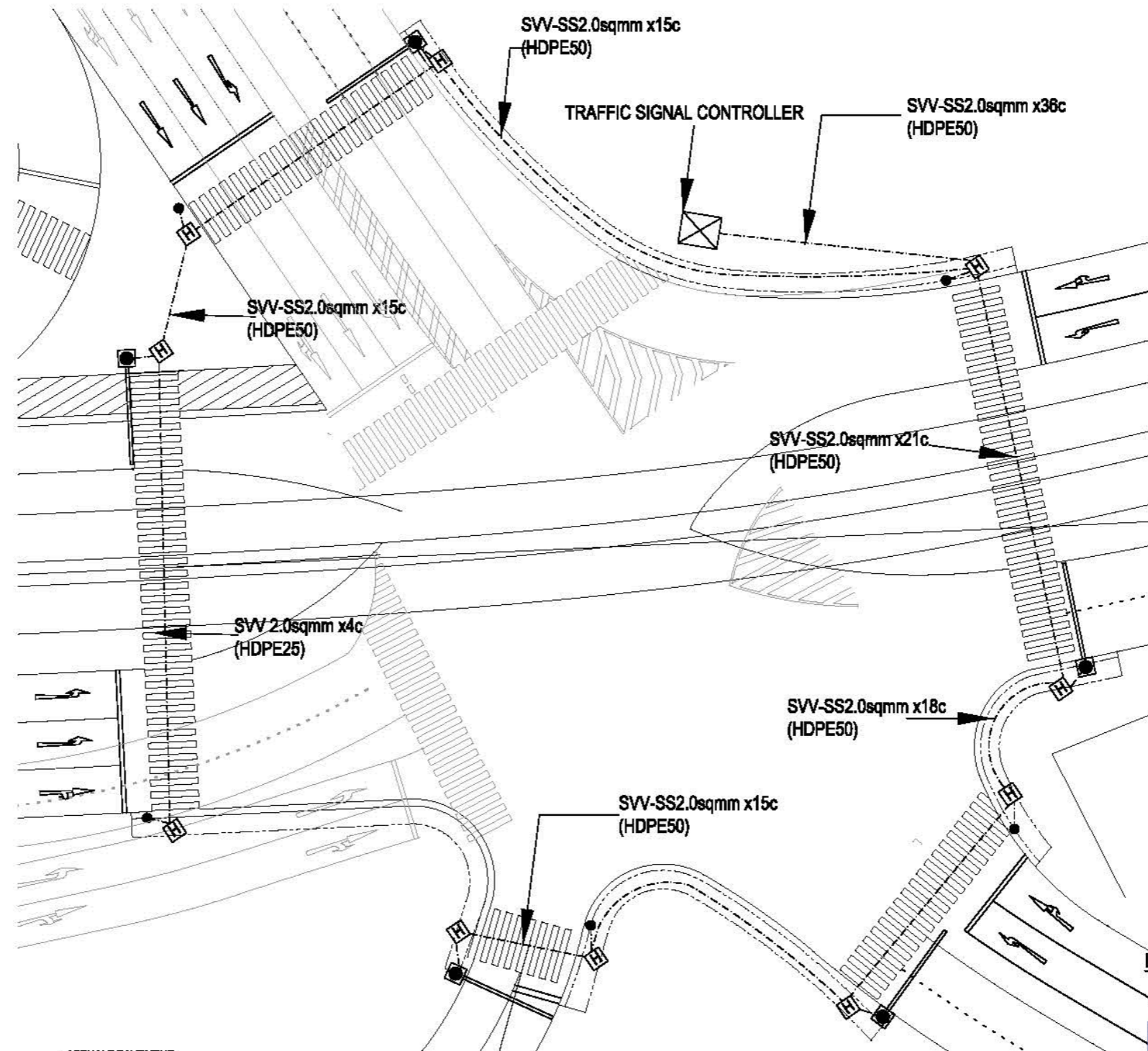
- G : Vehicle traffic signal : Green light
- Y : Vehicle traffic signal : Yellow light
- R : Vehicle traffic signal : Red light
- A : Arrow traffic signal : Green light
- PG : Pedestrian signal lamp : Green light
- PR : Pedestrian signal lamp : Red light
- COM : Common for all indication
- : Concrete Pole (H=12m)
- : Overhead Cable



TYPICAL TRAFFIC SIGNAL CONTROL SYSTEM DIAGRAM FOR SHUKHINTHAR INTERSECTION

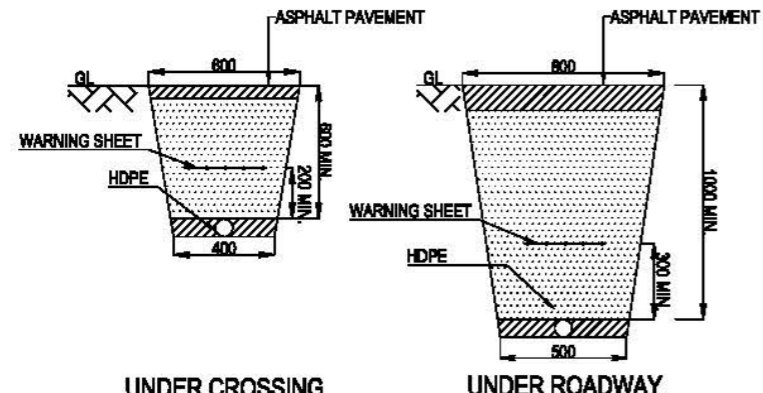
PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	NAME	SIGNATURE	DATE	DRAWING TITLE TYPICAL TRAFFIC SIGNAL CONTROL SYSTEM DIAGRAM FOR SHUKINTHAR INTERSECTION	PACKAGE 3 DWG No. P3-EL-0013	
				PREPARED BY	K. MORIMATA				29 Sep. 2017
				CHECKED BY	T. HAYAKAWA				3 Oct. 2017
				APPROVED BY	Y. SANO				6 Oct. 2017

# TYPICAL UNDERGROUND WIRING PLAN FOR SHUKHINTHAR INTERSECTION



TYPICAL WIRING PLAN

- LEGEND**
- :BASE MOUNTED POLE SIGNAL HEAD POLE (WITH ARM)
  - :PEDESTRIAN SIGNAL HEAD POLE (WITH PUSH-BUTTON)
  - :UNDERGROUND WIRING
  - :LAYOUT OF INTERSECTION BY MOC'S CONSTRUCTION

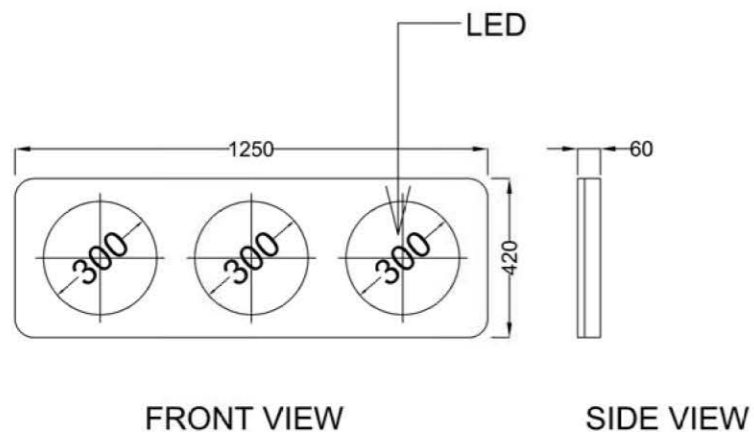


UNDERGROUND WIRING DEPTH

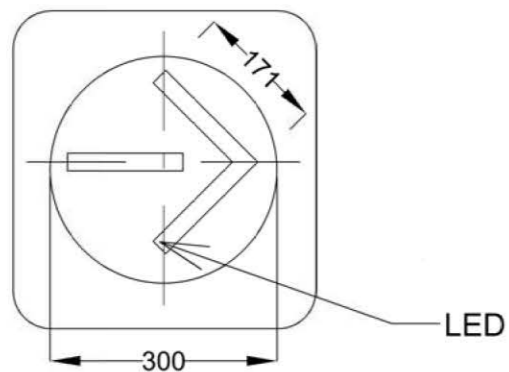
PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE	
				PREPARED BY	K. MORIMATA		29 Sep. 2017	TYPICAL UNDERGROUND WIRING PLAN FOR SHUKHINTHAR INTERSECTION	3
				CHECKED BY	T. HAYAKAWA		3 Oct. 2017		DWG No.
				APPROVED BY	Y. SANO		6 Oct. 2017		P3-EL- 0014



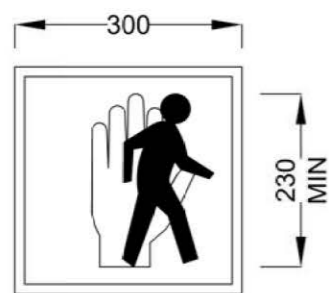
# (REFERENCE) TRAFFIC SIGNAL HEAD AND POLES



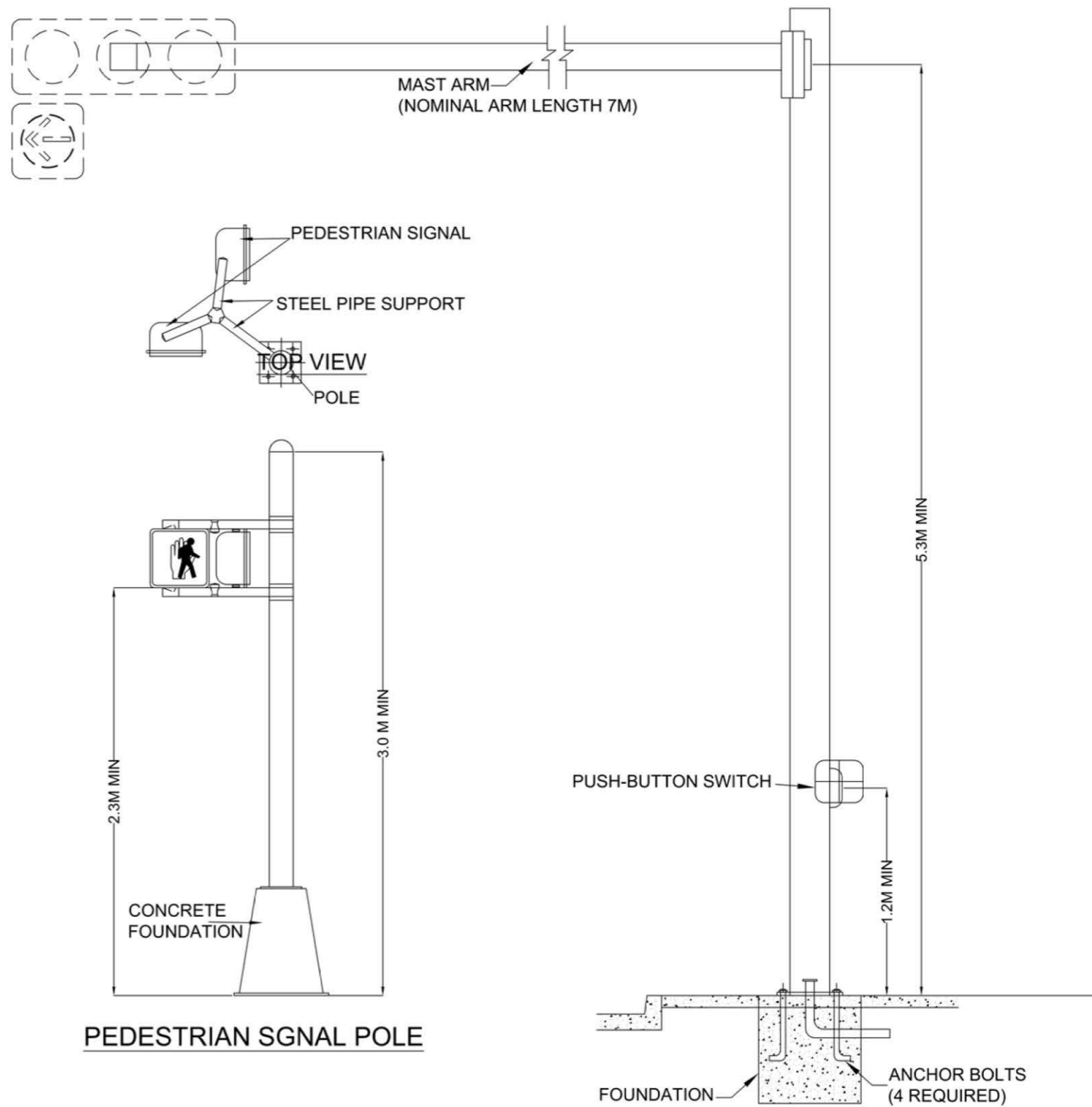
FRONT VIEW SIDE VIEW  
TYPICAL SIGNAL HEAD S=1:20



TYPICAL ARROW SIGNAL DETAIL S=1:10



TYPICAL PEDESTRIAN SIGNAL S=1:10

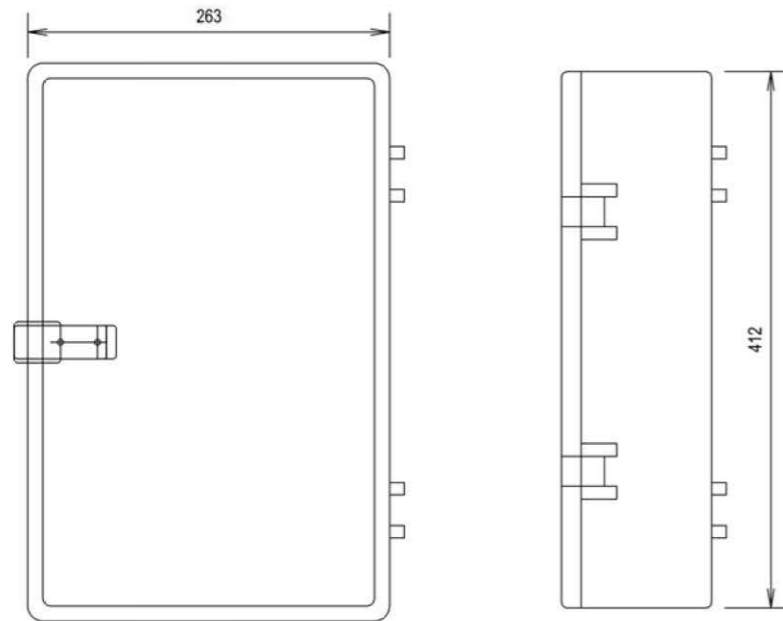


PEDESTRIAN SIGNAL POLE

TRAFFIC SIGNAL HEAD POLE

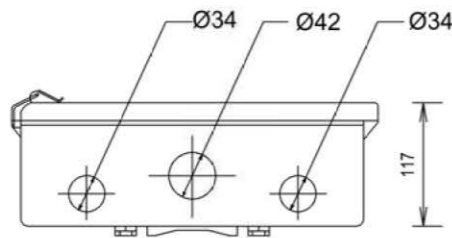
PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	NAME	SIGNATURE	DATE	DRAWING TITLE (REFERENCE) TRAFFIC SIGNAL HEAD AND POLES	PACKAGE	
				PREPARED BY	K. MORIMATA			29 Sep. 2017	3
				CHECKED BY	T. HAYAKAWA			3 Oct. 2017	DWG No.
				APPROVED BY	Y. SANO			6 Oct. 2017	P3-EL-0015

# (REFERENCE) OUTLINE OF TRAFFIC SIGNAL CONTROLLER AND JUNCTION BOX



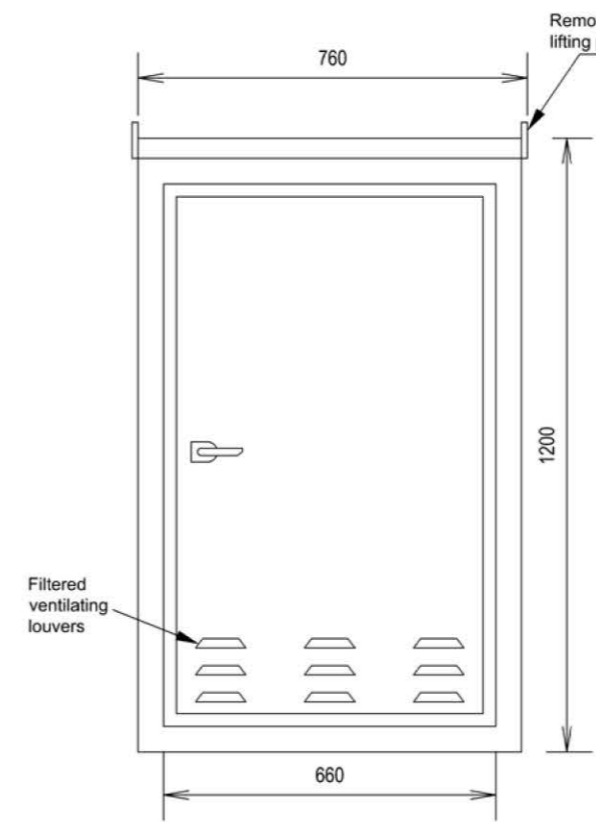
FRONT VIEW  
UNIT : mm

SIDE VIEW  
UNIT : mm

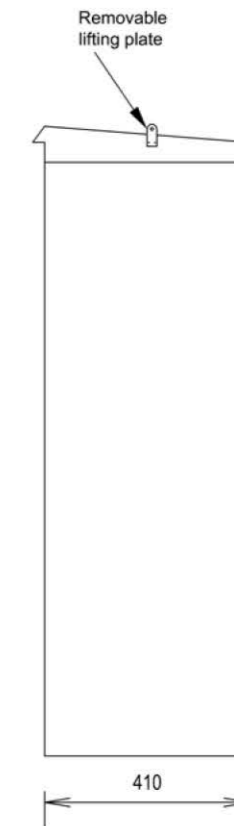


BOTTOM VIEW  
UNIT : mm

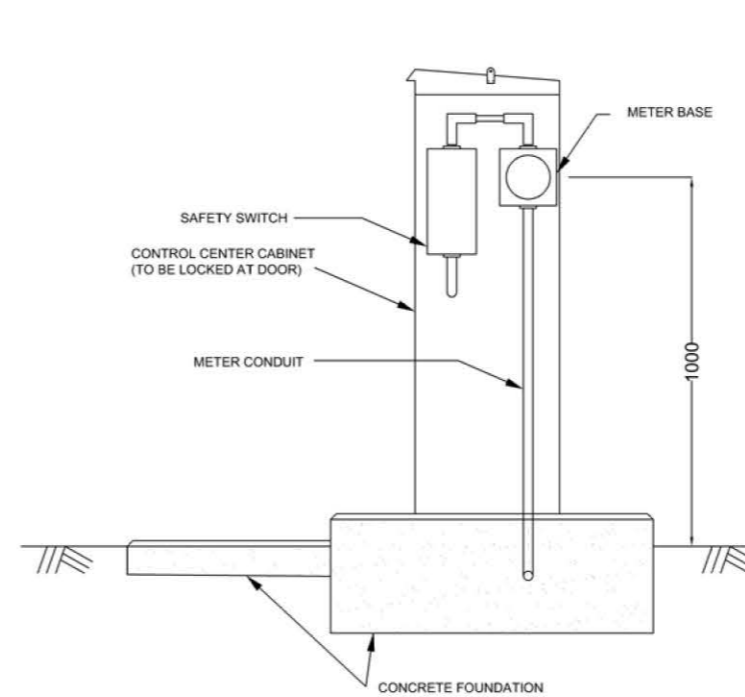
TYPICAL OUTLINE OF JUNCTION BOX  
NTS



FRONT VIEW



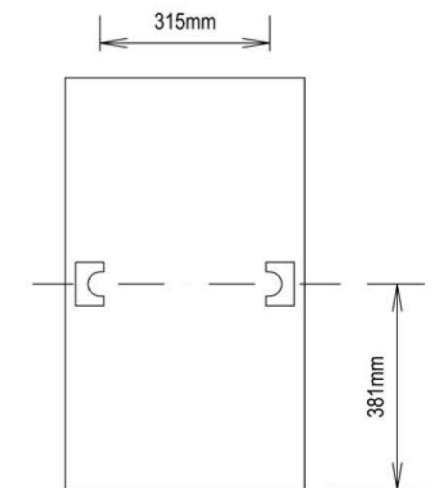
SIDE VIEW



SIDE VIEW

UNIT : mm

TYPICAL TRAFFIC SIGNAL CONTROLLER



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.	K. MORIMATA	<i>[Signature]</i>	29 Sep. 2017	(REFERENCE) OUTLINE OF TRAFFIC SIGNAL CONTROLLER AND JUNCTION BOX	3
				T. HAYAKAWA	<i>[Signature]</i>	3 Oct. 2017		DWG No.
				Y. SANO	<i>[Signature]</i>	6 Oct. 2017		P3-EL-0016

## QUANTITY TABLE OF LIGHTING AND ELECTRICAL WORKS (REFERENCE DRAWING)

### QUANTITY OF ROAD LIGHTING SYSTEM

Item Description	Unit	Total
Lighting Pole Type A (Mounted Type, H=11m)	No.	22.0
LED Lamp (140W)	No.	22.0
Lighting Panel Type A (17 branches)	No.	2.0
Pull Box Type D (300 x 350 x 175)	No.	36.0
Grounding Plate	No.	3.0
4 Core/XLPE 35 sq. mm Electric Wire Cable	m	300.0
4 Core/XLPE 25 sq. mm Electric Wire Cable	m	200.0
4 Core/XLPE 16 sq. mm Electric Wire Cable	m	1,848.0
HDPE Pipe (50mm dia.)	m	3,320.0
FEP Pipe (100mm dia.)	m	54.0
Steel Conduit (100mm dia.)	m	300.0
Handhole (600 x 600 x 600)	No.	3.0
Incoming Power Receiving Pole (H=15m)	No.	1.0
Power Receiving Panel (100kVA)	No.	1.0
Emergency Engine Generator (50kVA)	No.	1.0
Main Power Distribution Panel (300AF / 50AF)	No.	1.0
Boundary Fence (H=1.2m)	m	20.0

### QUANTITY OF TRAFFIC SIGNAL CONTROL SYSTEM

Item Description	Unit	Total
Traffic Signal Pole	No.	5.0
Pedestrian Signal Pole	No.	5.0
Traffic Signal Head (LED)	No.	5.0
Arrow Signal Head (LED)	No.	4.0
Pedestrian Signal Head and Push Button	No.	10.0
Distribution Panel (3branches)	No.	1.0
Handhole (600 x 600 x 800)	No.	14.0
Traffic Signal Controller	No.	1.0
HDPE Pipe (50mm dia.)	m	309.0
HDPE Pipe (25mm dia.)	m	208.0
SVV-SS 2.0 sq.mm x 15c	m	161.0
SVV-SS 2.0 sq.mm x 18c	m	44.0
SVV-SS 2.0 sq.mm x 21c	m	56.0
SVV-SS 2.0 sq.mm x 36c	m	71.0
SVV 2.0 sq.mm x 4c	m	201.0
SVV 2.0 sq.mm x 8c	m	60.0
Joint Box (36terminal)	No.	5.0

NOTE)THE QUANTITY SHOWN IN THE LIST IS A BIT DATA ONLY.