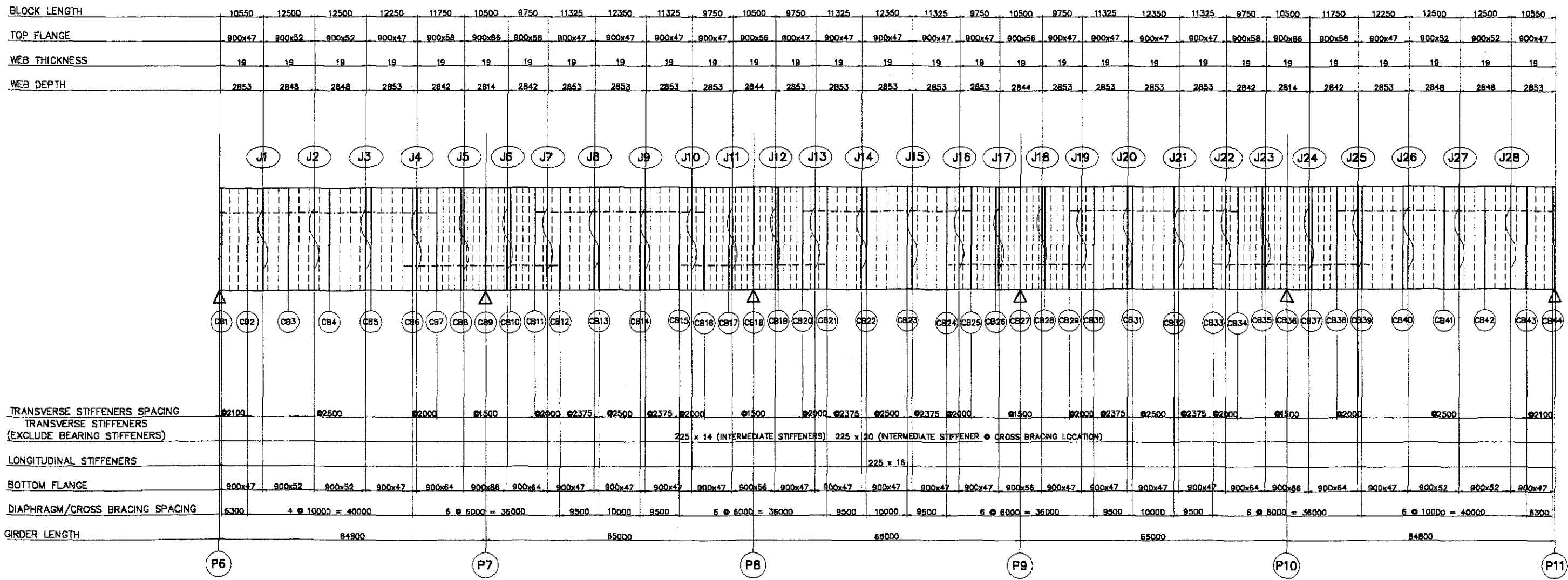


MAIN BRIDGE

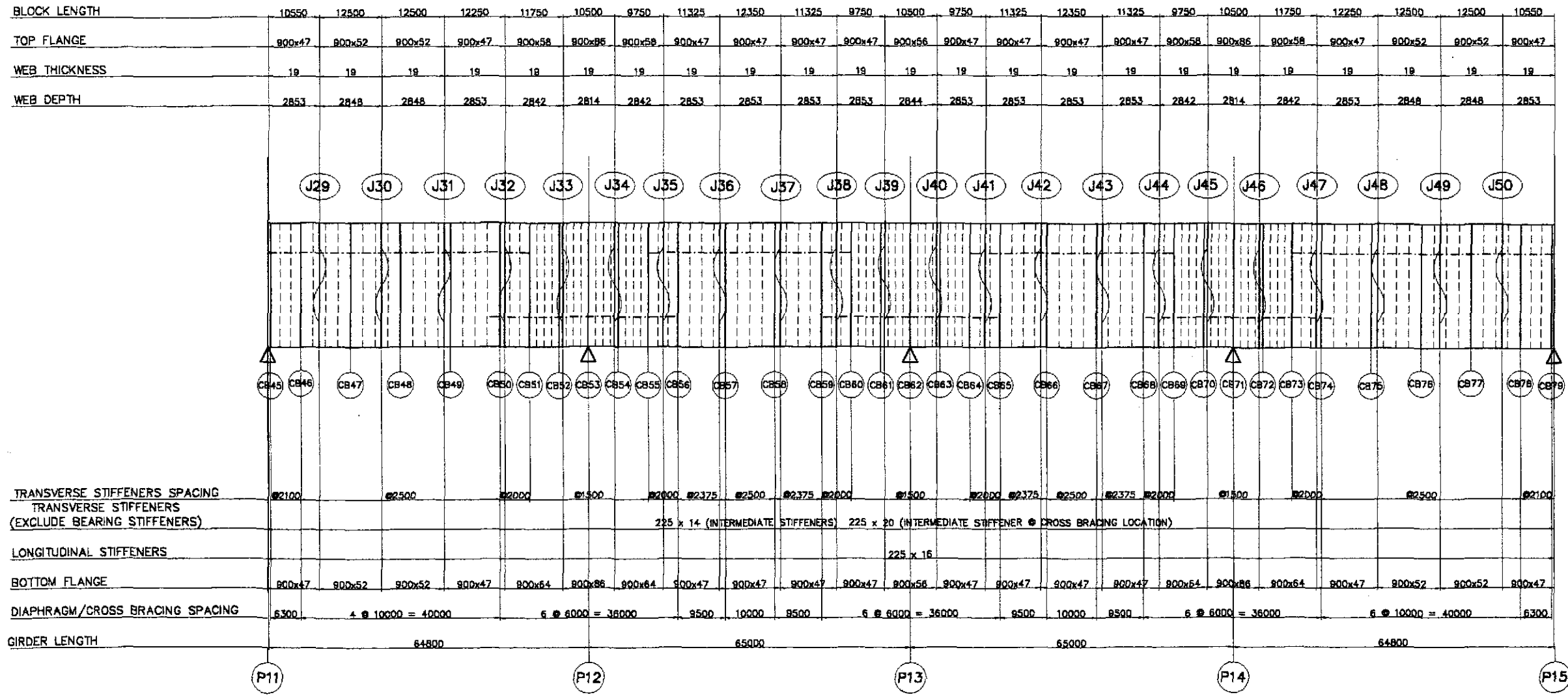
SUPERSTRUCTURE - PLATE GIRDERS



NOTE :
 1. ALL STEEL SHALL BE SMA 490W/GRADE 50W CONFORMING TO ASTM A709M UNLESS OTHERWISE NOTED.

1 MAIN GIRDER COMPONENT (PIER 6 to PIER 11)
 SCALE 1:500

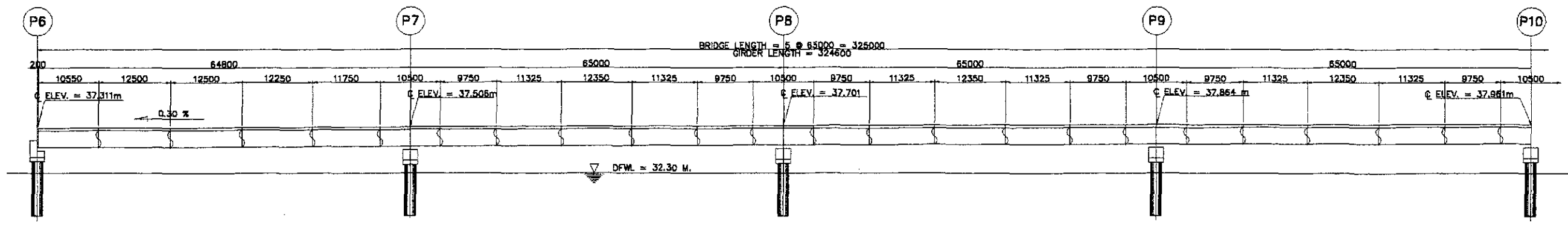
	DESIGNED	DATE	SIGNATURE		REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS				PROJECT AND LOCATION : THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Pinaridel, Cabanatuan and San Jose Bypasses) CABANATUAN BYPASS - CONTRACT PACKAGE III	SCALE : AS SHOWN FULL SIZE A1	SHEET CONTENTS : BRIDGE NO. 10 PAMPANGA RIVER BRIDGE MAIN GIRDER COMPONENT (PIER 6 to PIER 11) (ULTIMATE STAGE)	SHEET NO. : B10M-01
	CHECKED	10/17/02	J. E. SANTOS		BUREAU OF DESIGN							
	SUBMITTED	10/19/02	M. N. NUBAN		Submitted By:	Revised By:	Recommended By:	Recommended By:				
					DANILO C. TRAJANO	ADRIANO M. DOROY	GILBERTO S. REYES	MANUEL M. BONDAN	SIMEON A. DATUMANONG			
					Project Director	Chief, Bridge Division	Director IV (DC)	Undersecretary	Secretary			



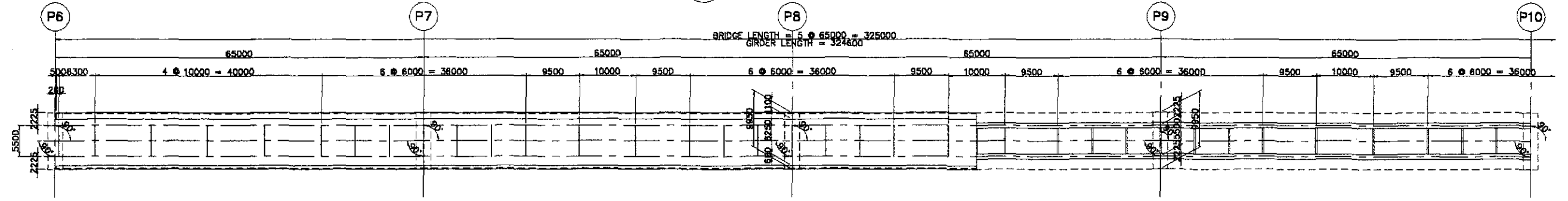
NOTE :
 1. ALL STEEL SHALL BE SMA 490W/GRADE 50W CONFORMING TO ASTM A709M UNLESS OTHERWISE NOTED.

1 MAIN GIRDER COMPONENT (PIER 11 to PIER 15)
 SCALE 1 : 500

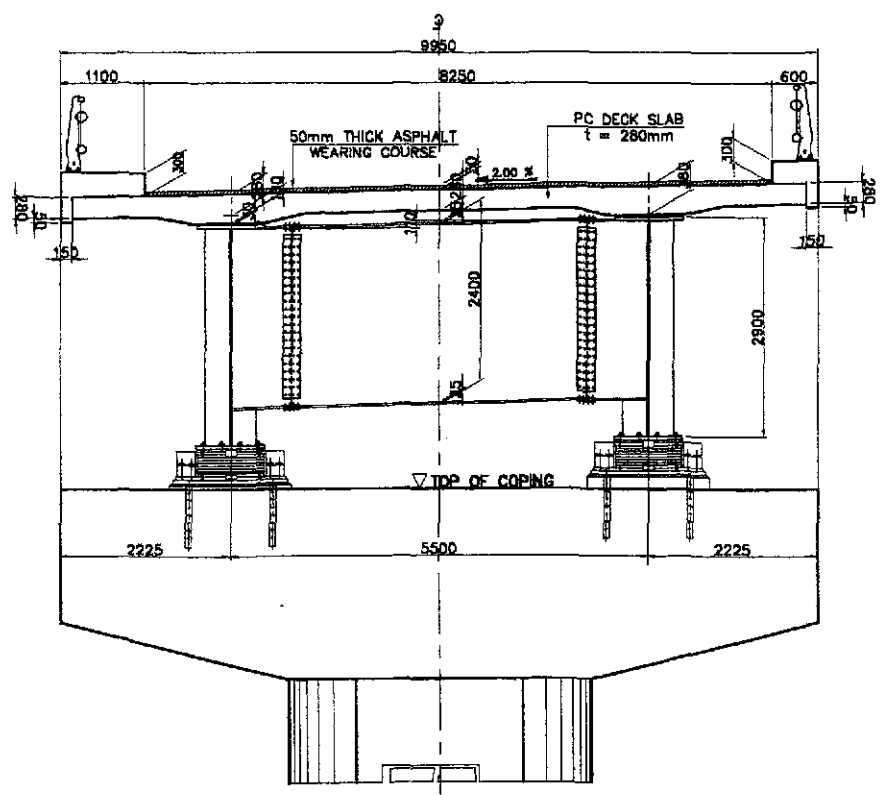
	DATE	SIGNATURE	REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS				PROJECT AND LOCATION :	SCALE :	SHEET CONTENTS :	SHEET NO. :	
	DESIGNED	10/16/02	<i>[Signature]</i>	BUREAU OF DESIGN				THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Plaridel, Cabanatuan and San Jose Bypasses)	AS SHOWN	BRIDGE NO. 10 PAMPANGA RIVER BRIDGE MAIN GIRDER COMPONENT (PIER 11 to PIER 15) (ULTIMATE STAGE)	B10M-02
	CHECKED	10/17/02	J. E. SANTOS	Submitted By:	Reviewed By:	Recommended By:	Approved By:				
SUBMITTED	10/19/02	<i>[Signature]</i>	DANILO C. TRAJANO Project Director	ADRIANO M. DOROY Chief, Bridge Division	GILBERTO S. REYES Director IV (D/C)	MANUEL M. BONOAN Undersecretary	SIMEON A. DATUMANONG Secretary	CABANATUAN BYPASS - CONTRACT PACKAGE III			



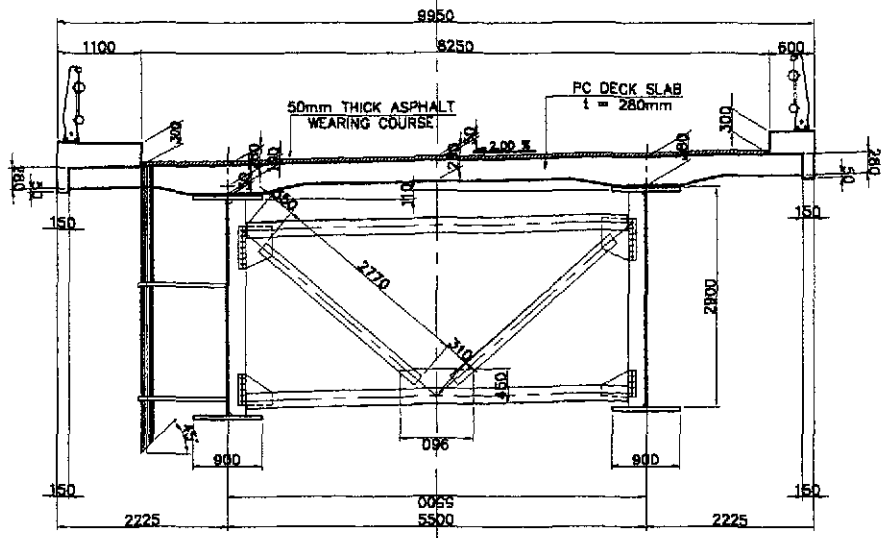
A ELEVATION
SCALE 1:400



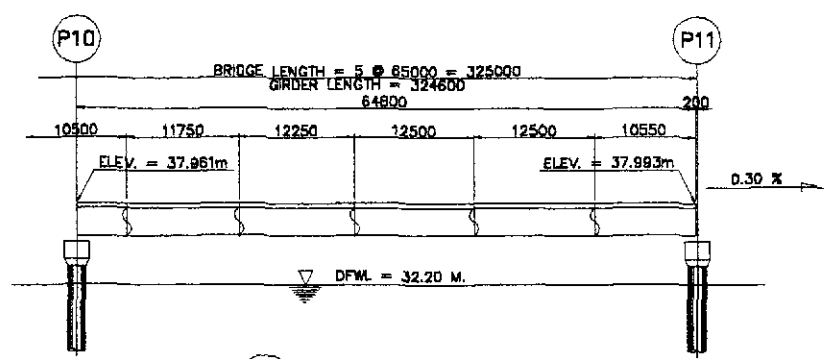
B PLAN
SCALE 1:400



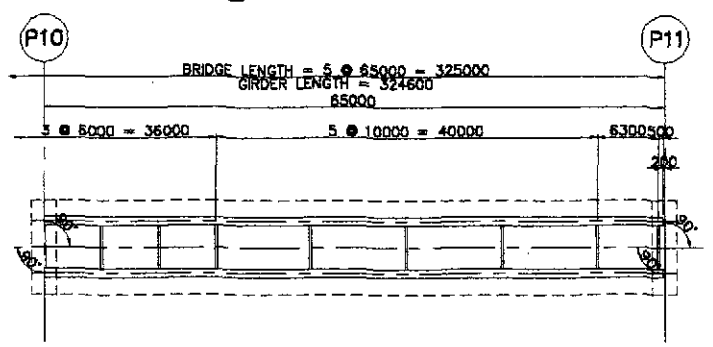
C SECTION @ END SUPPORT
SCALE 1:60



D SECTION @ INTERMEDIATE CROSS BRACING
SCALE 1:50



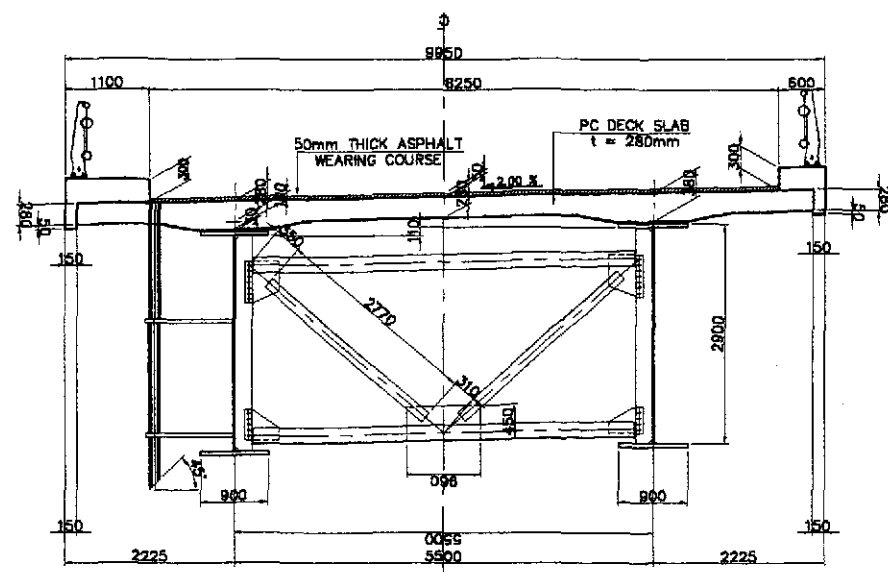
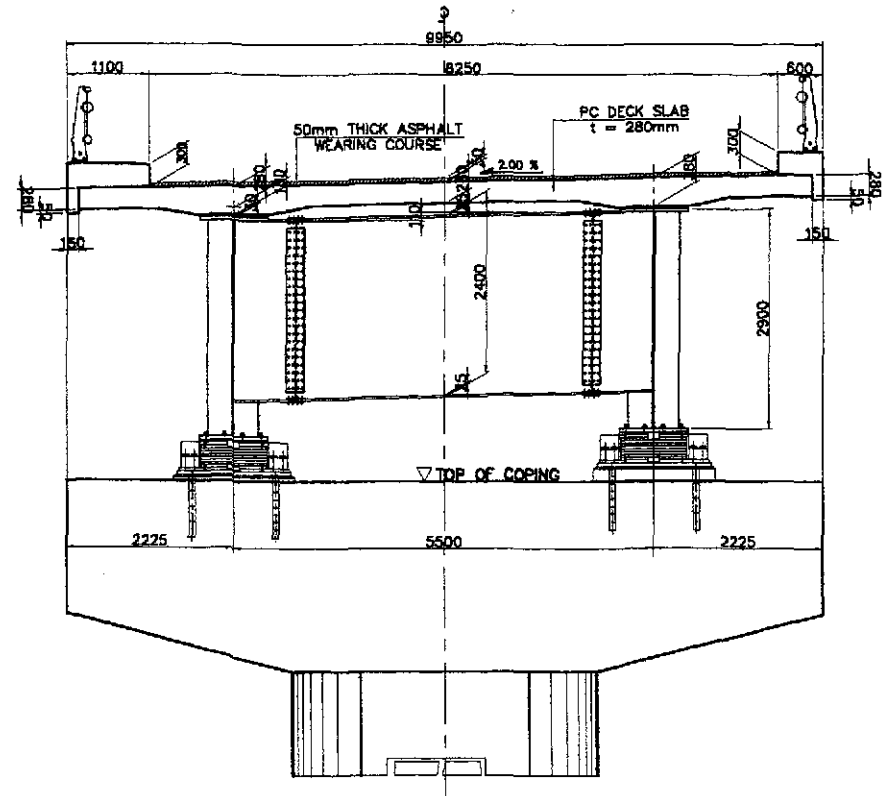
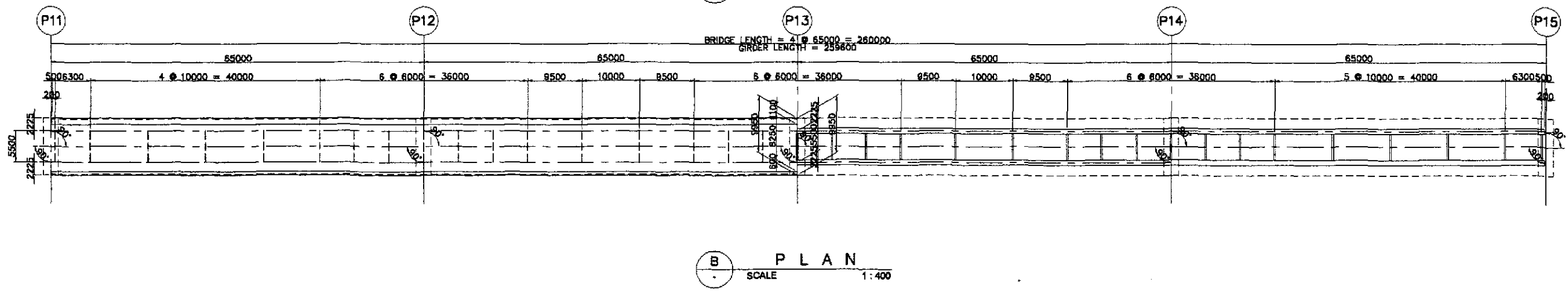
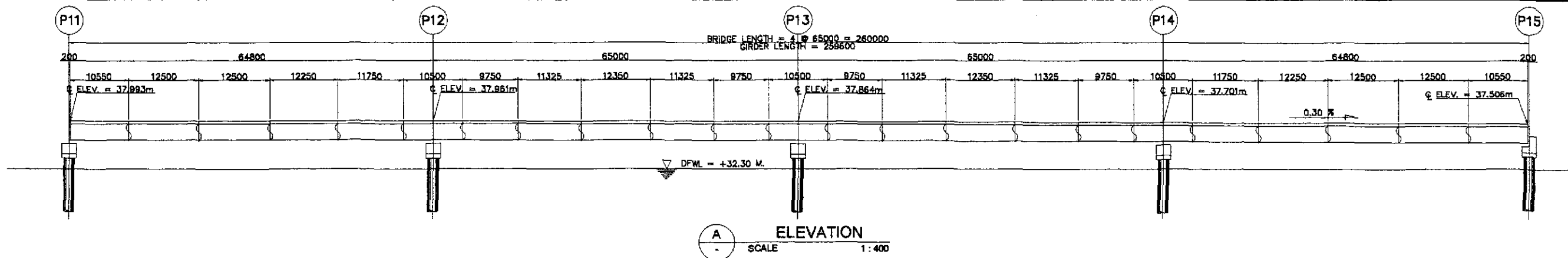
A-1 PLAN
SCALE 1:400



B-1 PLAN
SCALE 1:400

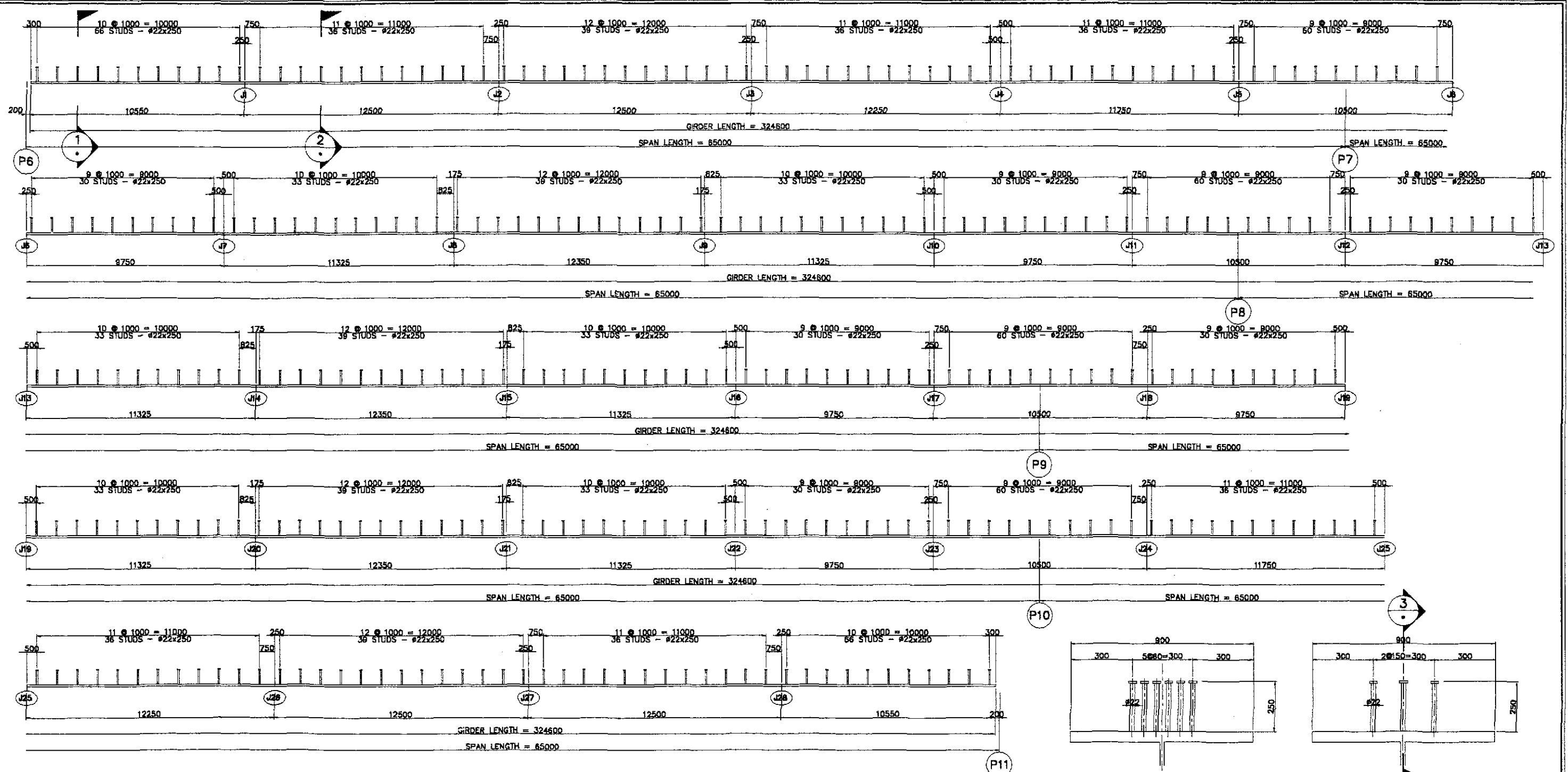
1 MAIN GIRDER ARRANGEMENT (PIER 6 to PIER 11)
SCALE AS SHOWN

	DESIGNED	10/14/02		<p>REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS</p>	PROJECT AND LOCATION :			SCALE :	SHEET CONTENTS :	SHEET NO. :
	CHECKED	10/17/02			<p>THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Plaridel, Cabanatuan and San Jose Bypasses)</p>			AS SHOWN	BRIDGE NO. 10 PAMPANGA RIVER BRIDGE MAIN GIRDER ARRANGEMENT (PIER 6 to PIER 11) (ULTIMATE STAGE)	B10M-03
SUBMITTED	10/19/02		<p>F.U.L. - PMO Submitted By: DANILO C. TRAJANO Project Director</p>	<p>BUREAU OF DESIGN Reviewed By: ADRIANO M. DORCY Chief, Bridges Division</p>	<p>OFFICE OF THE SECRETARY Recommended By: GILBERTO S. REYES Director IV (OIC)</p>	<p>Approved By: MANUEL M. BONDAN Undersecretary</p>	<p>Approved By: SIMEON A. DATUMANONG Secretary</p>	<p>CABANATUAN BYPASS - CONTRACT PACKAGE III</p>	FULL SIZE A1	



1 MAIN GIRDER ARRANGEMENT (PIER 11 to PIER 15)
SCALE AS SHOWN

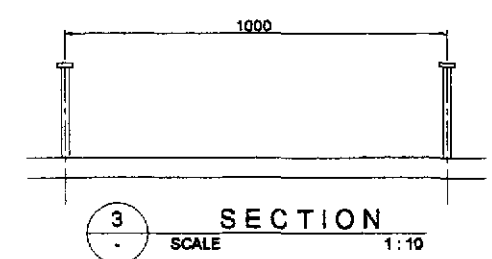
	DESIGNED	DATE	SIGNATURE		REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS				PROJECT AND LOCATION : THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Plaridel, Cabanatuan and San Jose Bypasses) CABANATUAN BYPASS - CONTRACT PACKAGE III	SCALE : AS SHOWN FULL SIZE A1	SHEET CONTENTS : BRIDGE NO. 10 PAMPANGA RIVER BRIDGE MAIN GIRDER ARRANGEMENT (PIER 11 to PIER 15) (ULTIMATE STAGE)	SHEET NO. : B10M-04
	CHECKED	10/17/02	J. C. SANTOS		BUREAU OF DESIGN Submitted By: DANIL C. TRAJANO (Project Director) Reviewed By: ADRIANO M. DOROY (Chief, Bridges Division) Recommended By: GILBERTO S. REYES (Director IV (DCC)) Office of the Secretary Recommended By: MANUEL M. BONDAN (Undersecretary) Approved By: SIMEON A. DATUMANONG (Secretary)							
	SUBMITTED	10/19/02	Team Leader									



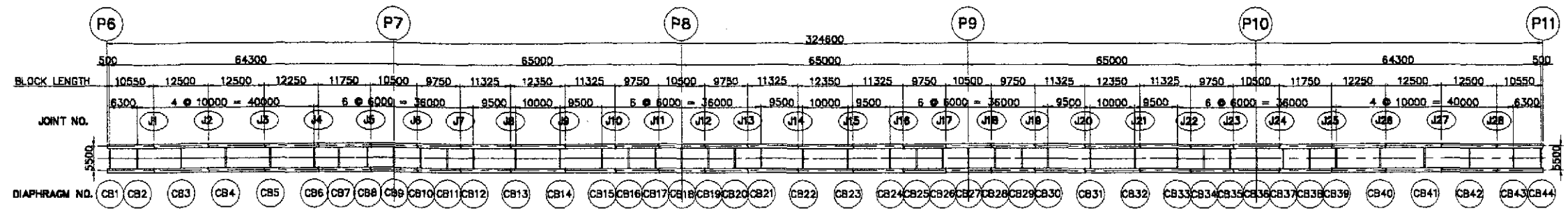
A SHEAR STUD DETAILS (PIER 6 to PIER 11)
SCALE 1:100

1 STUD DETAIL AT SUPPORT
SCALE 1:10

2 SECTION
SCALE 1:10

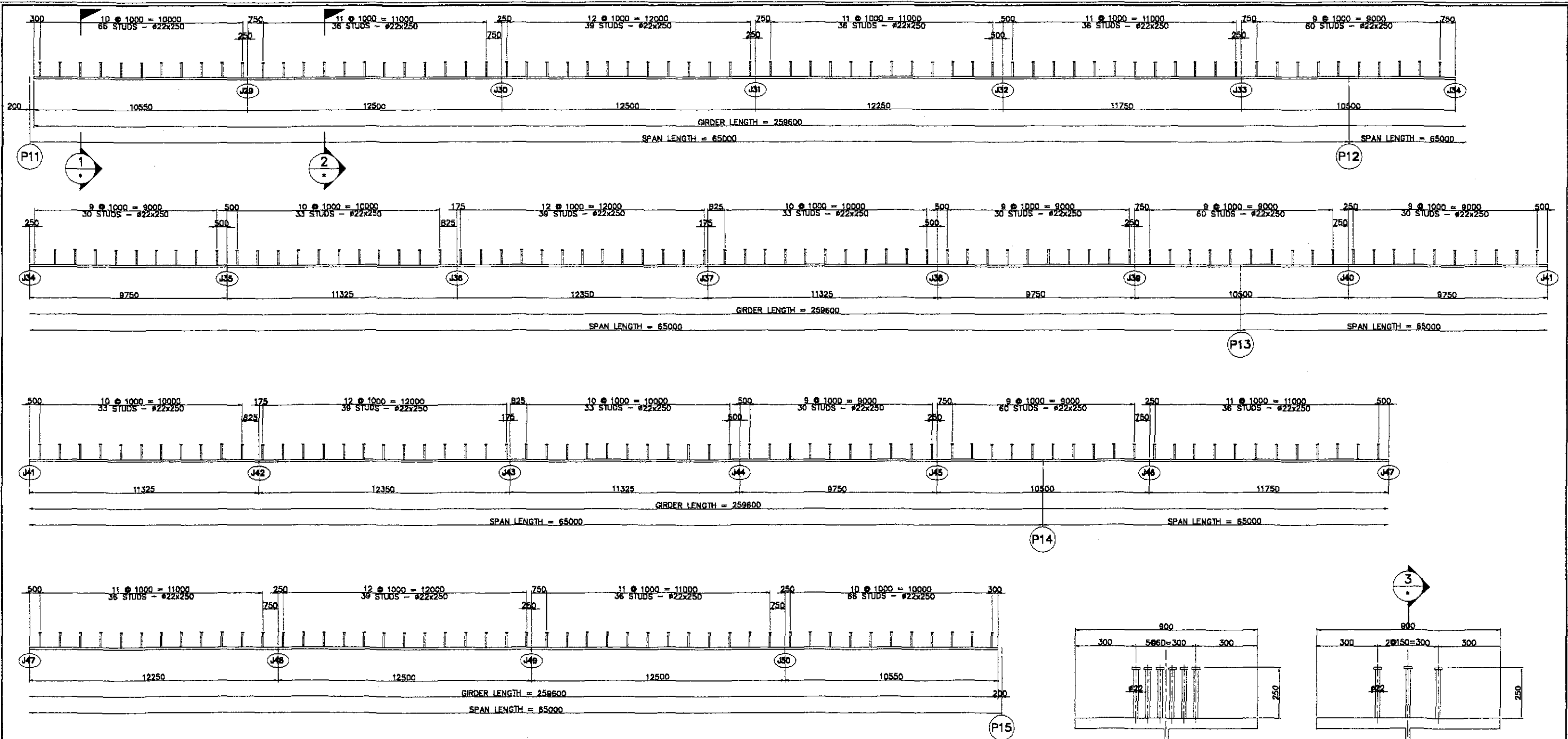


3 SECTION
SCALE 1:10



B KEY PLAN
SCALE 1:600

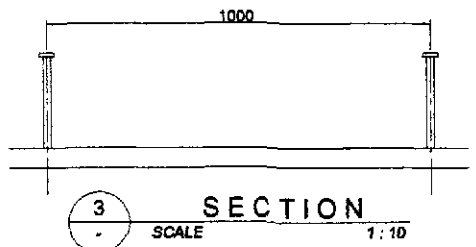
	DATE: DESIGNED: CHECKED: SUBMITTED:	SIGNATURE: F. M. SALAS J. C. SANTOS TEAM LEADER	REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS BUREAU OF DESIGN OFFICE OF THE SECRETARY	PROJECT AND LOCATION: THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Pilaridel, Cabanatuan and San Jose Bypasses) CABANATUAN BYPASS - CONTRACT PACKAGE III	SCALE: AS SHOWN FULL SIZE A1	SHEET CONTENTS: BRIDGE NO. 10 PAMPANGA RIVER BRIDGE SHEAR STUD DETAILS (PIER 6 to PIER 11) (ULTIMATE STAGE)	SHEET NO.: B10M-05	
	DESIGNED BY: CHECKED BY: SUBMITTED BY:	SUBMITTED BY: DANILLO C. TRAJANO Project Director	REVIEWED BY: ADRIANO M. DOROY Chief, Bridges Division	RECOMMENDED BY: GILBERTO S. REYES Director IV (DIC)	RECOMMENDED BY: MANUEL M. BONOAN Undersecretary	RECOMMENDED BY: SIMEON A. DATUMANONG Secretary		
	JICA JAPAN INTERNATIONAL COOPERATION AGENCY			KATAHIRA & ENGINEERS INTERNATIONAL			YEO YACHIYO ENGINEERING CO., LTD.	



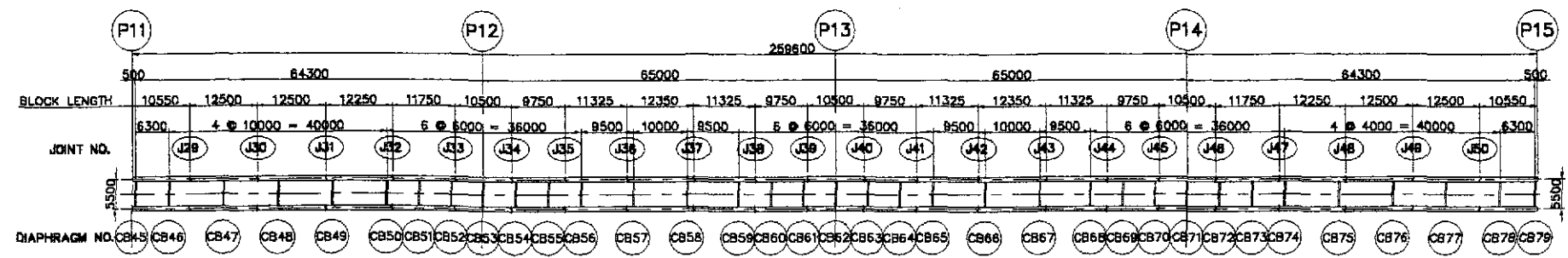
A SHEAR STUD DETAILS (PIER 11 to PIER 15)
SCALE 1:100

1 STUD DETAIL AT SUPPORT
SCALE 1:10

2 SECTION
SCALE 1:10

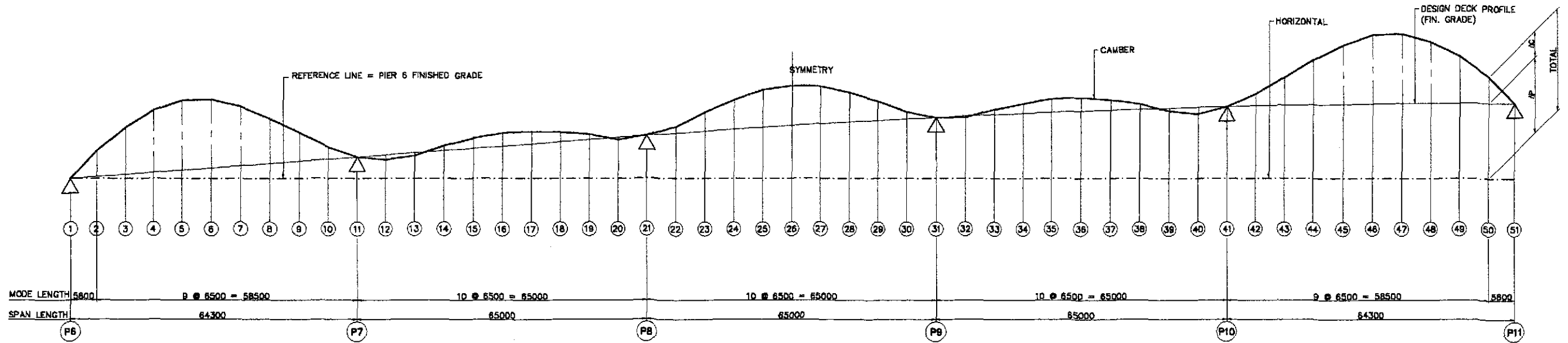


3 SECTION
SCALE 1:10



B KEY PLAN
SCALE 1:600

	DESIGNED	DATE	SIGNATURE		REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS				PROJECT AND LOCATION :	SCALE :	SHEET CONTENTS :	SHEET NO. :
	CHECKED	11/14/02	F. M. ALAS		BUREAU OF DESIGN				THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Plaridel, Cabanatuan and San Jose Bypasses)	AS SHOWN	BRIDGE NO. 10 PAMPANGA RIVER BRIDGE SHEAR STUD DETAILS (PIER 11 to PIER 15) (ULTIMATE STAGE)	B10M-06
	SUBMITTED	10/19/02	R. R. SANTIAGO		Submitted By:	Reviewed By:	Recommended By:	Recommended By:	CABANATUAN BYPASS - CONTRACT PACKAGE III	FULL SIZE A1		
			TEAM LEADER	DANILO C. TRAJANO Project Director	ADRIANO M. DORCY Chief, Bridge Division	GILBERTO S. REYES Director IV (OIC)	MANUEL M. BONJAN Undersecretary	SIMEON A. DATUMANONG Secretary				



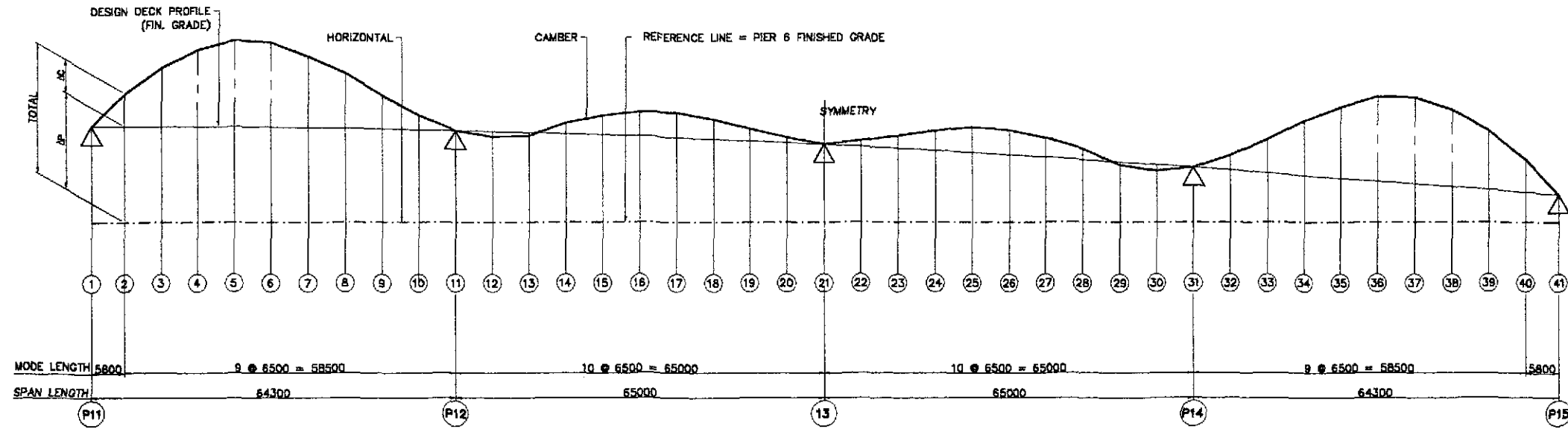
1 MAIN GIRDER CAMBER DIAGRAM

SECTION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51
STEEL	0	11	20	28	29	29	25	19	12	5	0	-2	-1	2	4	5	5	4	2	-1	0	3	8	12	15	16	15	12	8	3	0	-1	2	4	5	5	4	2	-1	-2	0	5	12	19	25	28	29	25	20	11	0
DECK SLAB AND HAUNCH	0	33	60	79	89	88	76	57	35	15	0	-5	-2	5	12	17	15	12	6	-1	0	9	24	37	48	51	48	37	24	9	0	-1	6	12	16	17	12	5	-2	-5	0	15	35	57	76	88	89	79	60	33	0
SIDEWALK SLAB	0	9	16	20	23	22	19	15	9	4	0	-2	-1	2	4	5	4	3	2	-1	0	3	6	10	12	13	12	10	6	3	0	-1	2	3	4	5	4	2	-1	-2	0	4	9	15	19	22	23	20	15	9	0
RAILING	0	2	4	5	5	5	4	3	2	1	0	-1	-1	1	1	1	1	1	1	-1	0	1	2	2	3	3	3	2	2	1	0	-1	1	1	1	1	1	1	-1	-1	0	1	2	3	4	5	5	5	4	2	0
ADJUSTING ASPHALT	0	4	7	10	11	11	9	7	5	2	0	-1	-1	1	2	2	2	2	1	-1	0	2	3	5	6	6	6	5	3	2	0	-1	1	2	2	2	2	1	-1	-1	0	2	5	7	9	11	11	10	7	4	0
SUB TOTAL (ΔC)	0	59	106	140	157	155	133	107	63	27	0	-11	-6	11	23	30	28	22	12	-5	0	15	43	66	84	89	84	66	43	15	0	-5	12	22	28	30	23	11	-6	-11	0	27	63	101	133	155	157	140	106	59	0
ΔP	0	18	37	57	76	96	115	135	154	174	193	213	232	252	271	291	310	330	349	369	388	407	426	444	461	478	493	509	523	537	551	563	575	587	597	608	617	626	634	641	648	654	660	665	668	672	675	678	679	680	681
TOTAL (ΔP + ΔC)	0	77	143	197	233	251	248	238	217	201	193	202	226	263	294	321	338	352	361	364	388	422	469	510	545	567	577	575	566	552	551	558	587	608	625	638	640	637	628	630	648	681	723	766	802	827	832	818	785	739	681

NOTES :

ΔC = CAMBER (MM)
 ΔP = DESIGN DECK PROFILE (FINISHED GRADE) IN MM.

	DESIGNED	DATE	SIGNATURE		REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS				PROJECT AND LOCATION : THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Pinaridel, Cabanatuan and San Jose Bypasses) CABANATUAN BYPASS - CONTRACT PACKAGE III	SCALE : AS SHOWN FULL SIZE A1	SHEET CONTENTS : BRIDGE NO. 10 PAMPANGA RIVER BRIDGE MAIN GIRDER CAMBER DIAGRAM (PIER 6 to PIER 11) (ULTIMATE STAGE)	SHEET NO. : B10M-07
	CHECKED	10/17/02	J. C. SANTOS		BUREAU OF DESIGN							
	SUBMITTED	10/19/02	M. B. BACALAN		Submitted By:	Reviewed By:	Recommended By:	Approved By:				
				DANILO C. TRAJANO Project Director	ADRIANO M. DOROY Chief, Bridges Division	GILBERTO S. REYES Director IV (OIC)	MANUEL M. BONOAN Undersecretary	SIMEON A. DATUMANONG Secretary				



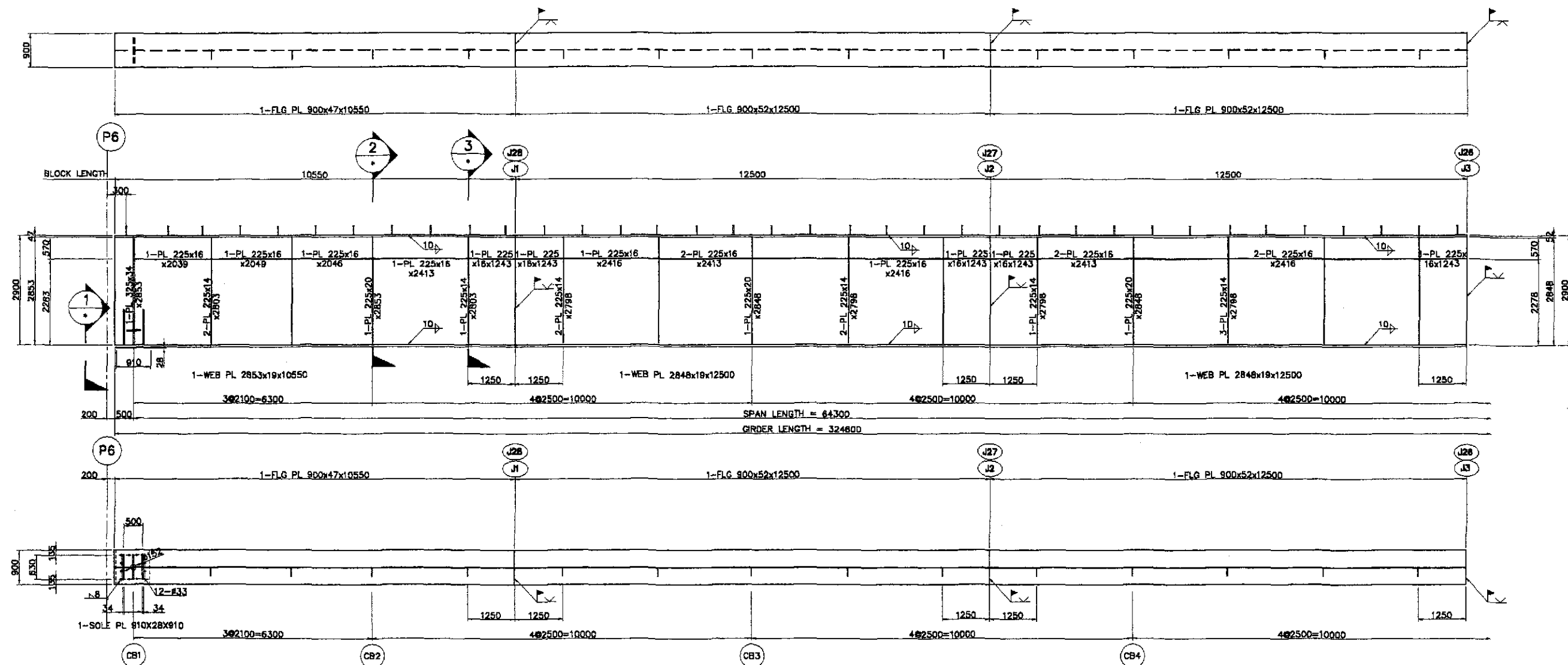
1 MAIN GIRDER CAMBER DIAGRAM

SECTION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
STEEL	0	11	19	25	28	28	24	18	11	5	0	-2	1	3	6	8	8	6	4	2	0	2	4	6	8	8	6	3	1	-2	0	5	11	18	24	28	28	25	19	11	0	
DECK SLAB AND HAUNCH	0	32	59	77	87	85	73	55	33	14	0	-4	2	10	19	24	24	20	12	4	0	4	12	20	24	24	19	10	2	-4	0	14	33	55	73	85	87	77	59	32	0	
SIDEWALK SLAB	0	9	15	20	22	22	19	14	9	4	0	-1	1	3	5	6	7	5	3	1	0	1	3	5	7	6	5	3	1	-1	0	4	9	14	19	22	22	20	15	9	0	
RAILING	0	2	4	5	5	5	4	3	2	1	0	-1	1	1	1	2	2	1	1	1	0	1	1	1	2	2	1	1	1	-1	0	1	2	3	4	5	5	5	4	2	0	
ADJUSTING ASPHALT	0	4	7	9	11	10	9	7	4	2	0	-1	1	2	3	3	3	3	2	1	0	1	2	3	3	3	3	2	1	-1	0	2	4	7	9	10	11	9	7	4	0	
SUB TOTAL (ΔC)	0	58	104	136	153	150	129	97	59	26	0	-9	6	19	34	43	44	35	22	9	0	9	22	35	44	43	34	19	6	-9	0	26	59	97	129	150	153	136	104	58	0	
ΔP	681	680	678	678	675	672	669	665	660	654	648	641	634	626	617	608	597	587	575	563	551	537	523	508	493	478	461	444	426	407	388	369	349	330	310	291	271	252	232	213	195	
TOTAL (ΔP + ΔC)	681	738	783	814	828	822	798	762	719	680	648	632	640	645	651	651	641	622	597	572	551	546	545	544	537	521	495	463	432	398	388	395	408	427	439	441	424	388	336	271	195	

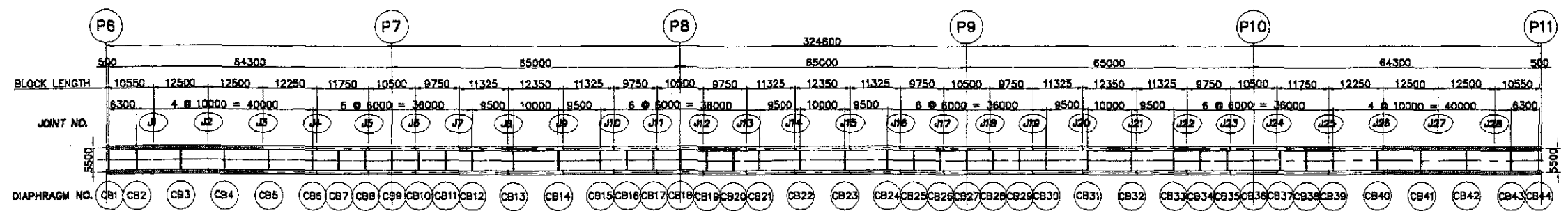
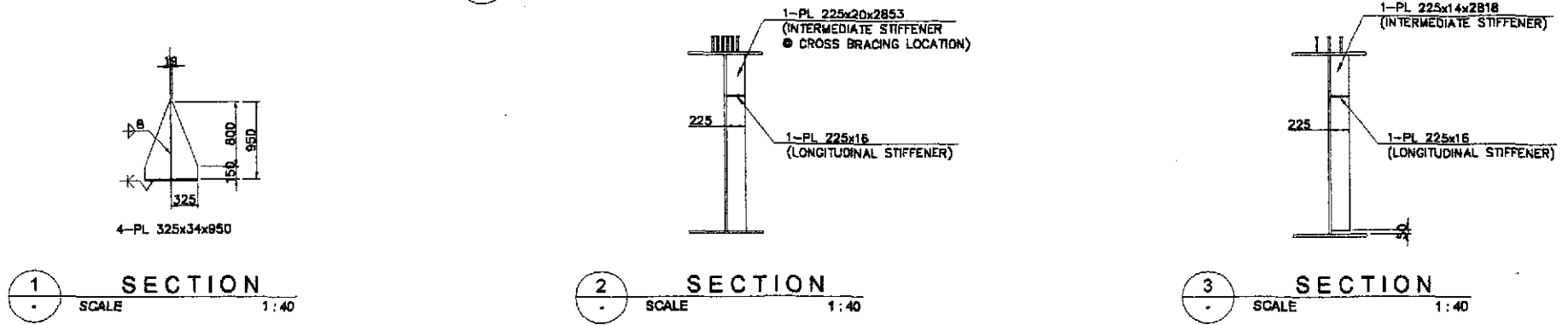
NOTES :

ΔC = CAMBER (MM)
 ΔP = DESIGN DECK PROFILE (FINISHED GRADE) IN MM.

	DESIGNED	DATE	SIGNATURE		REPUBLIC OF THE PHILIPPINES				PROJECT AND LOCATION :				SCALE :	SHEET CONTENTS :				SHEET NO. :
	CHECKED	10/17/02	[Signature]		DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS				THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Plaridel, Cabanatuan and San Jose Bypasses)				AS SHOWN	BRIDGE NO. 10 PAMPANGA RIVER BRIDGE MAIN GIRDER CAMBER DIAGRAM (PIER 11 to PIER 15) (ULTIMATE STAGE)				B10M-08
	SUBMITTED	10/19/02	[Signature]		BUREAU OF DESIGN				CABANATUAN BYPASS - CONTRACT PACKAGE III				FULL SIZE A1					
			Submitted By:	Reviewed By:		Recommended By:		Approved By:										
			DANILO C. TRAJANO Project Director	ADRIANO M. DORAY Chief, Bridges Division		BILBERTO S. REYES Director IV (DIC)		MANUEL M. BONOAN Undersecretary		SIMEON A. DATUMANONG Secretary								



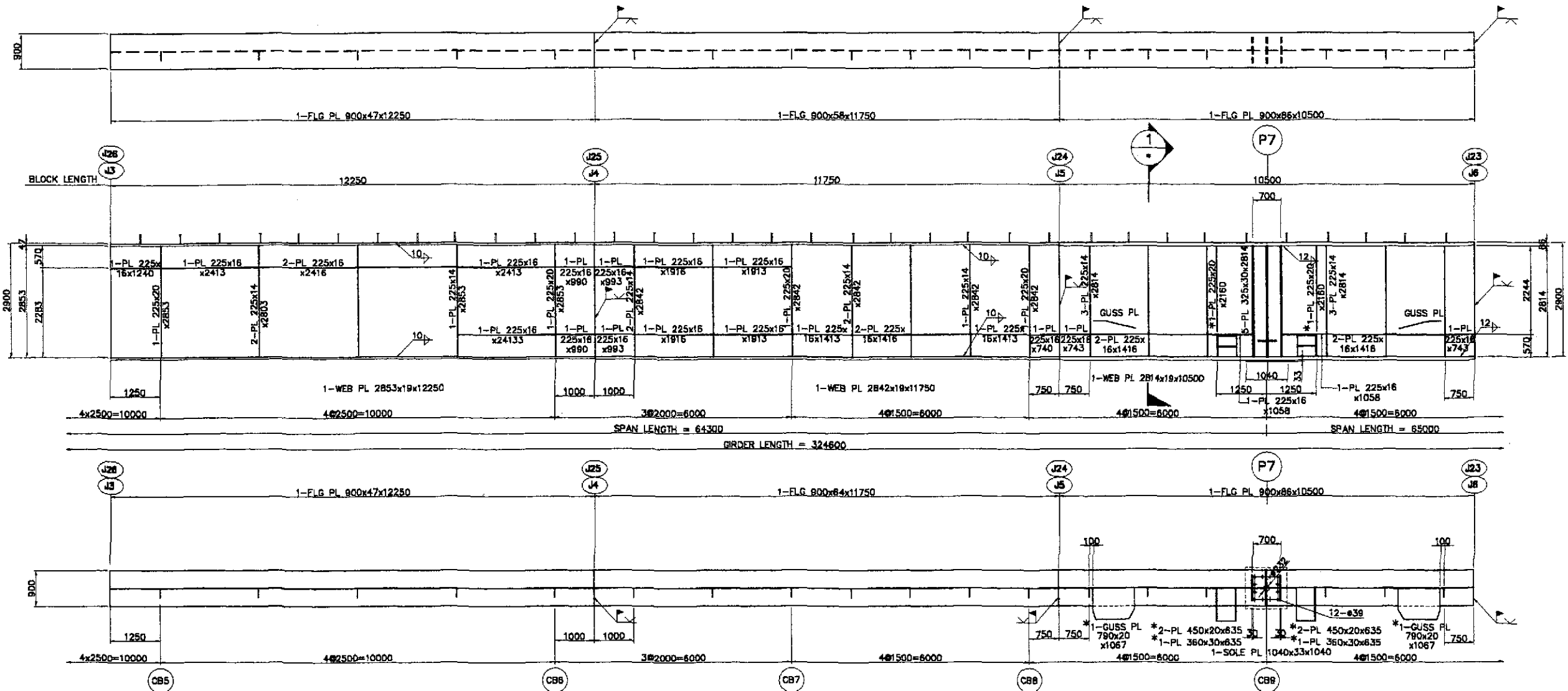
A STIFFENER LAYOUT AND DETAILS (P6-P11)
SCALE 1:60



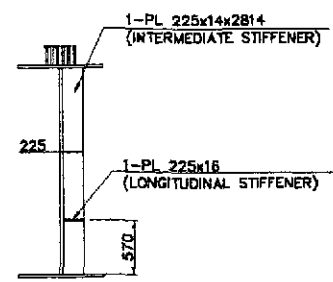
B KEY PLAN
SCALE 1:600

- NOTES:**
- STRUCTURAL STEEL SHALL BE SMA 490W/ GRADE S0W CONFORMING TO ASTM A 709M UNLESS OTHERWISE NOTED.
 - FOR STUD SHEAR DETAILS, SEE DWG. NO. 810M-05

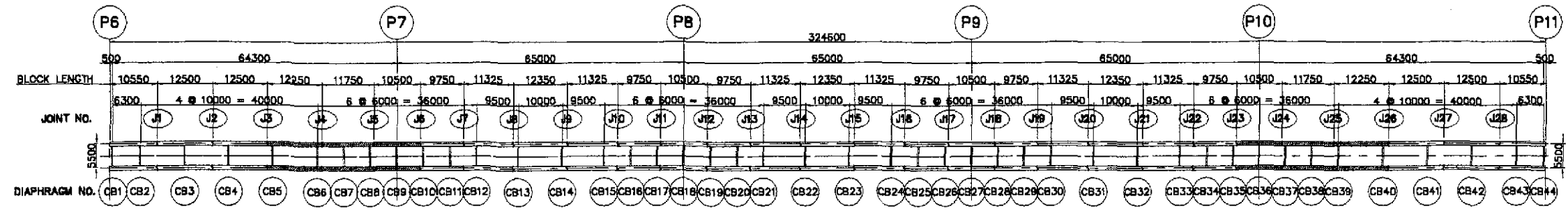
	DATE	SIGNATURE	REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS				PROJECT AND LOCATION :	SCALE :	SHEET CONTENTS :	SHEET NO. :	
	DESIGNED	10/14/02	<i>[Signature]</i>	BUREAU OF DESIGN				THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Piradid, Cabanatuan and San Jose Bypasses) CABANATUAN BYPASS - CONTRACT PACKAGE III	AS SHOWN	BRIDGE NO. 10 PAMPANGA RIVER BRIDGE STIFFENER LAYOUT AND DETAILS (PIER 6 TO PIER 11) - 1 OF 5 (ULTIMATE STAGE)	B10M-09
	CHECKED	10/17/02	<i>[Signature]</i>	Submitted By:	Reviewed By:	Recommended By:	Office of the Secretary				
	SUBMITTED	10/19/02	<i>[Signature]</i>	DANILO C. TRAJANO Project Director	ADRIANO M. DORAY Chief, Bridges Division	GILBERTO S. REYES Director IV (OC)	MANUEL M. BONONAN Undersecretary				
SCALE : FULL SIZE A1											



A STIFFENER LAYOUT AND DETAILS (P6-P11)
SCALE 1:60



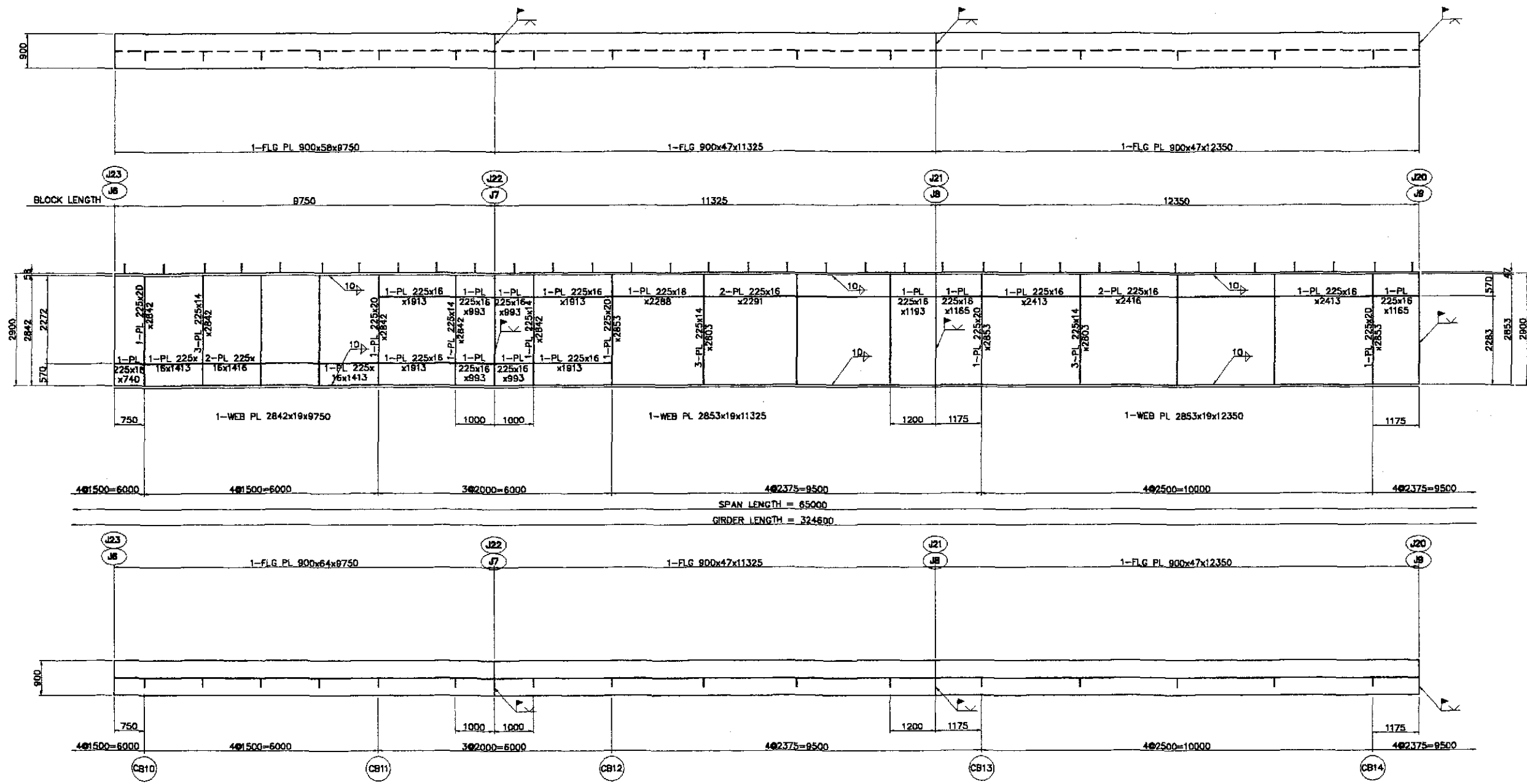
SECTION 1
SCALE 1:40



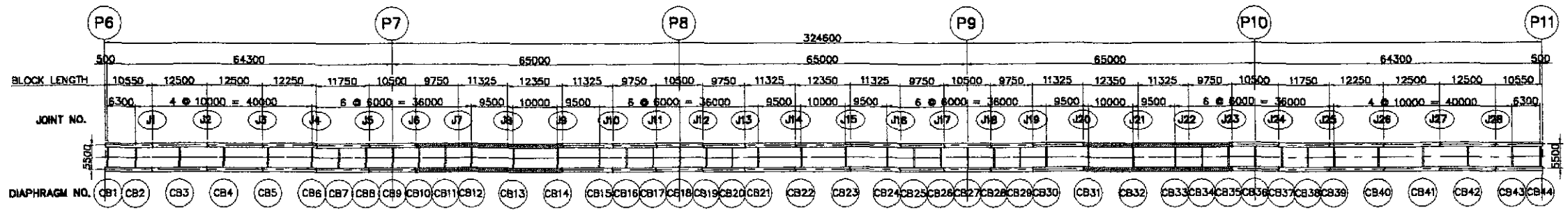
B KEY PLAN
SCALE 1:600

- NOTES:**
- STRUCTURAL STEEL SHALL BE SMA 490W/ GRADE 50W CONFORMING TO ASTM A 709M UNLESS OTHERWISE NOTED.
 - FOR STUD SHEAR DETAILS, SEE DWG. NO. B10M-05

		REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS BUREAU OF DESIGN				PROJECT AND LOCATION : THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Pardel, Cabanatuan and San Jose Bypasses) CABANATUAN BYPASS - CONTRACT PACKAGE III		SCALE : AS SHOWN FULL SIZE A1	SHEET CONTENTS : BRIDGE NO. 10 PAMPANGA RIVER BRIDGE STIFFENER LAYOUT AND DETAILS (PIER 6 TO PIER 11) - 2 of 5 (ULTIMATE STAGE)	SHEET NO. : B10M-10
DESIGNED	DATE	SIGNATURE	Submitted By:	Reviewed By:	Recommended By:	Approved By:				
CHECKED			DANILO C. TRAMANO Project Director	ADRIANO M. DOROS Chief, Bridge Division	GILBERTO S. REYES Director IV (D/C)	MANUEL M. BONOAN Undersecretary	SIMEON A. DATUMANONG Secretary			
SUBMITTED										



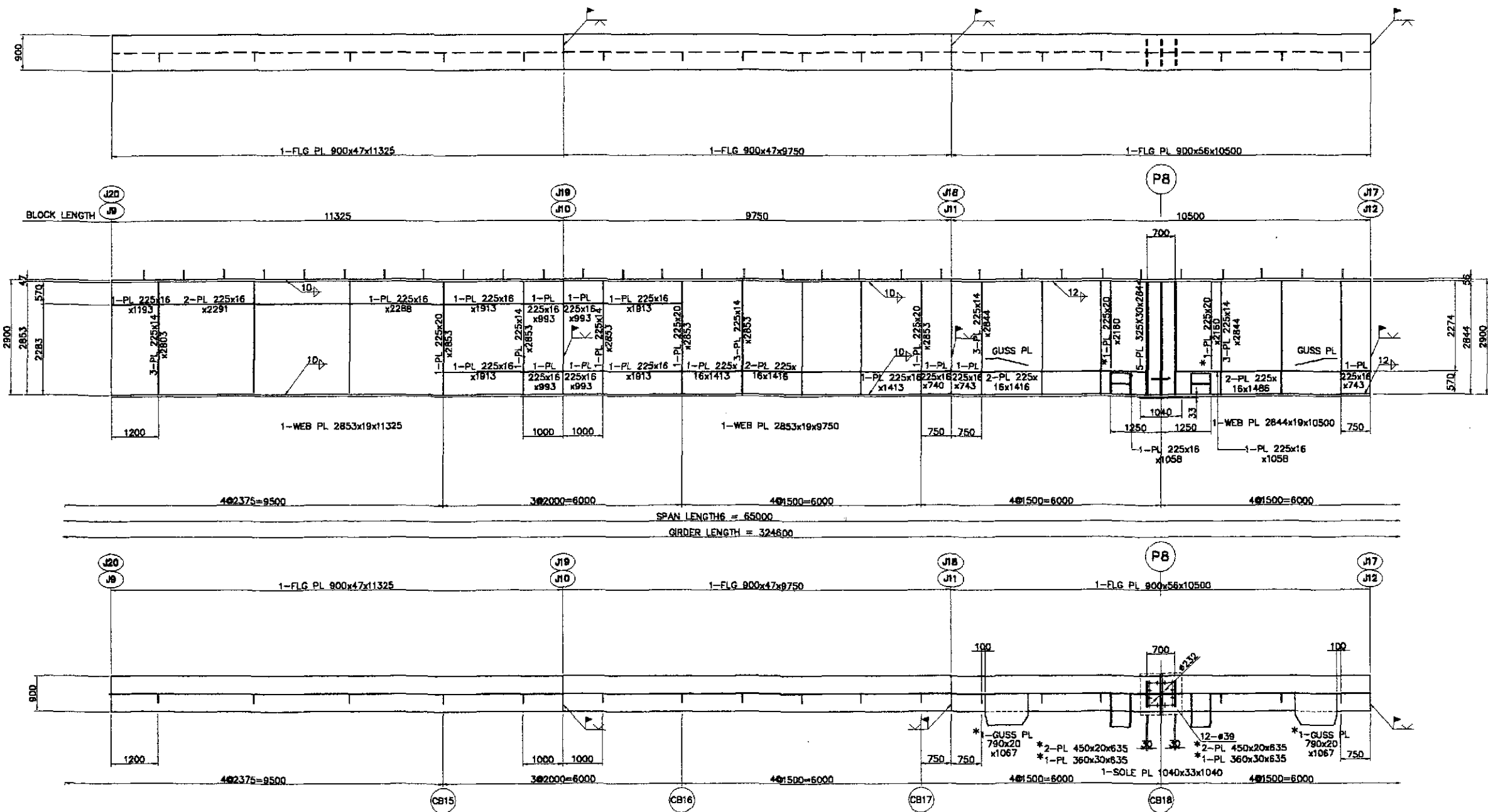
A STIFFENER LAYOUT AND DETAILS (P6-P11)
SCALE 1:60



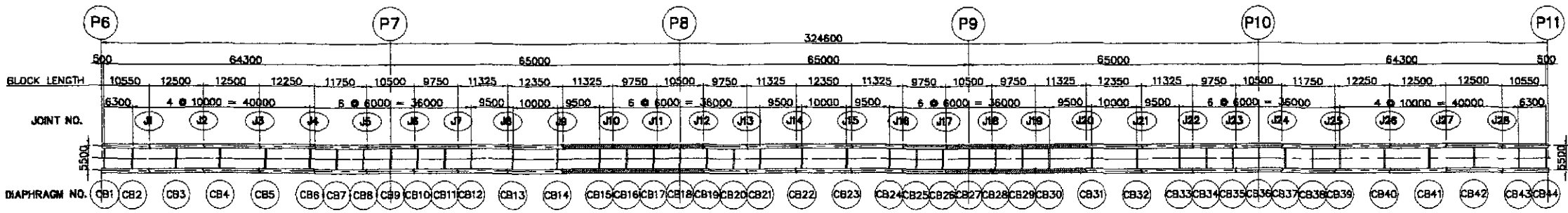
B KEY PLAN
SCALE 1:600

- NOTES:**
- STRUCTURAL STEEL SHALL BE SMA 490W/ GRADE 50W CONFORMING TO ASTM A 709M UNLESS OTHERWISE NOTED.
 - FOR STUD SHEAR DETAILS, SEE DWG. NO. B10M-05

	DESIGNED	DATE	SIGNATURE		REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS				PROJECT AND LOCATION : THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Plaridel, Cabanatuan and San Jose Bypasses) CABANATUAN BYPASS - CONTRACT PACKAGE III	SCALE : AS SHOWN FULL SIZE A1	SHEET CONTENTS : BRIDGE NO. 10 PAMPANGA RIVER BRIDGE STIFFENER LAYOUT AND DETAILS (PIER 6 TO PIER 11) - 3 OF 5 (ULTIMATE STAGE)	SHEET NO. : B10M-11
	CHECKED	DATE	SIGNATURE		BUREAU OF DESIGN Submitted By: DANIL C. TRAJANO Project Director Reviewed By: ADRIANO M. DOROY Chief, Bridges Division Recommended By: GILBERTO S. REYES Director IV (DC) Recommended By: MANUEL M. BONOAN Undersecretary Approved By: SIMEON A. DATUMANONG Secretary							



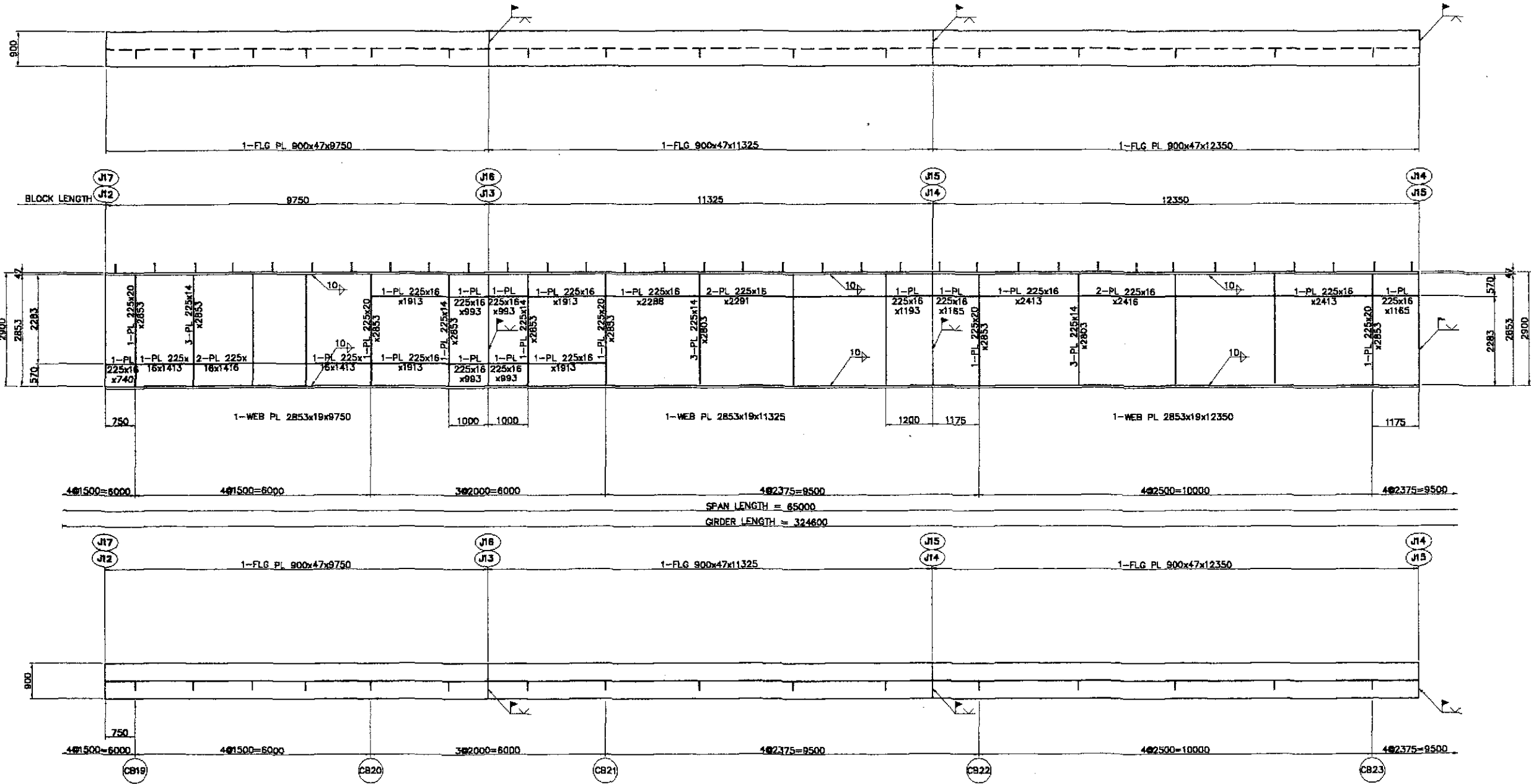
A STIFFENER LAYOUT AND DETAILS (P6-P11)
SCALE 1:60



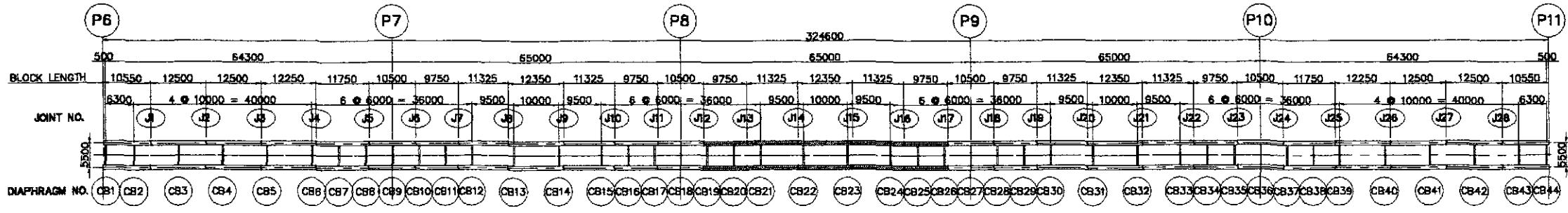
B KEY PLAN
SCALE 1:600

- NOTES:**
1. STRUCTURAL STEEL SHALL BE SMA 490W/ GRADE S0W CONFORMING TO ASTM A 709M UNLESS OTHERWISE NOTED.
 2. FOR STUD SHEAR DETAILS, SEE DWG. NO. B10M-05

	DESIGNED	DATE	SIGNATURE		REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS				PROJECT AND LOCATION :	SCALE :	SHEET CONTENTS :	SHEET NO. :
	CHECKED	10/17/02	<i>[Signature]</i>		SUBMITTED BY: DANILO C. TRAJANO Project Director	REVIEWED BY: ADRIANO M. DOROY Chief, Bridges Division	RECOMMENDED BY: GILBERTO S. REYES Director IV (D/C)	RECOMMENDED BY: MANUEL M. BONOAN Undersecretary	APPROVED BY: SIMEON A. DATUMANONG Secretary	THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Piaridel, Cabanatuan and San Jose Bypasses) CABANATUAN BYPASS - CONTRACT PACKAGE III	AS SHOWN	BRIDGE NO. 10 PAMPANGA RIVER BRIDGE STIFFENER LAYOUT AND DETAILS (PIER 6 TO PIER 11) - 4 OF 5 (ULTIMATE STAGE)
SUBMITTED	10/19/02		<i>[Signature]</i>						FULL SIZE A1			



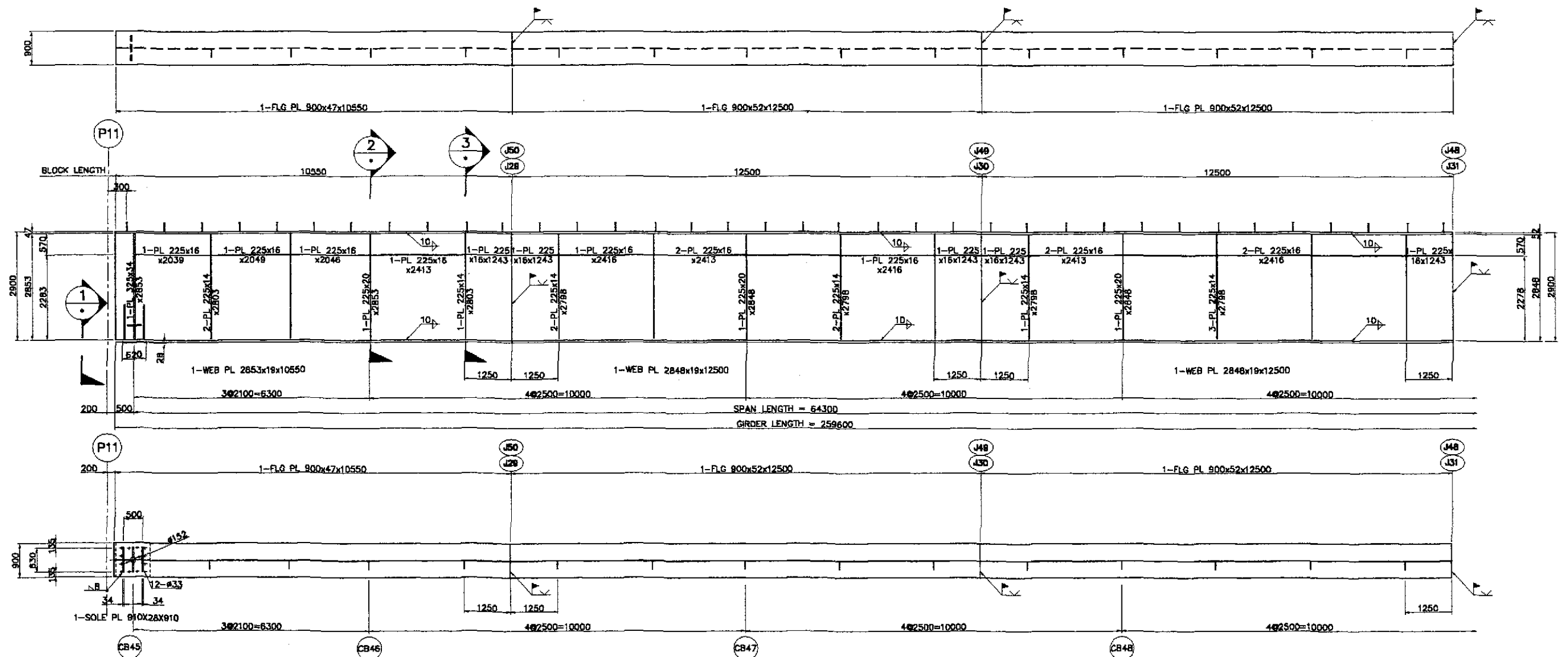
A STIFFENER LAYOUT AND DETAILS (P6-P11)
SCALE 1:60



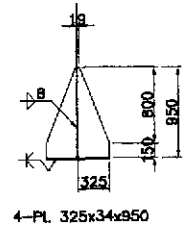
B KEY PLAN
SCALE 1:60

- NOTES:**
- STRUCTURAL STEEL SHALL BE SMA 480W/ GRADE S0W CONFORMING TO ASTM A 709M UNLESS OTHERWISE NOTED.
 - FOR STUD SHEAR DETAILS, SEE DWG. NO. B10M-05

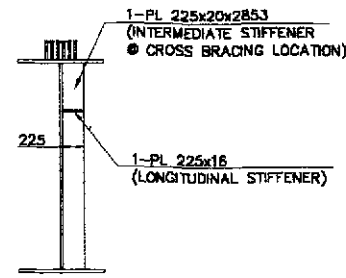
	DESIGNED	DATE	SIGNATURE		PROJECT AND LOCATION : THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Pinaridel, Cabanatuan and San Jose Bypasses) CABANATUAN BYPASS - CONTRACT PACKAGE III				SCALE :	SHEET CONTENTS : BRIDGE NO. 10 PAMPANGA RIVER BRIDGE STIFFENER LAYOUT AND DETAILS (PIER 6 TO PIER 11) - 5 OF 5 (ULTIMATE STAGE)	SHEET NO. : B10M-13
	CHECKED	10/17/02	J. V. PALAS		BUREAU OF DESIGN Submitted By: DANILLO C. TRAJANO, Project Director Reviewed By: ADRIANO M. DOROY, Chief, Bridge Division Recommended By: GILBERTO S. REYES, Director IV (OIC) Recommended By: MANUEL M. BONDAN, Undersecretary Approved By: SIMEON A. DATUMANONG, Secretary				AS SHOWN		
	SUBMITTED	10/19/02	TEAM LEADER						FULL SIZE A1		



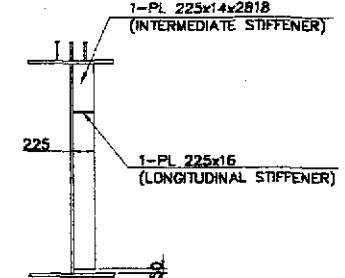
A STIFFENER LAYOUT AND DETAILS (P11-P15)
SCALE 1:60



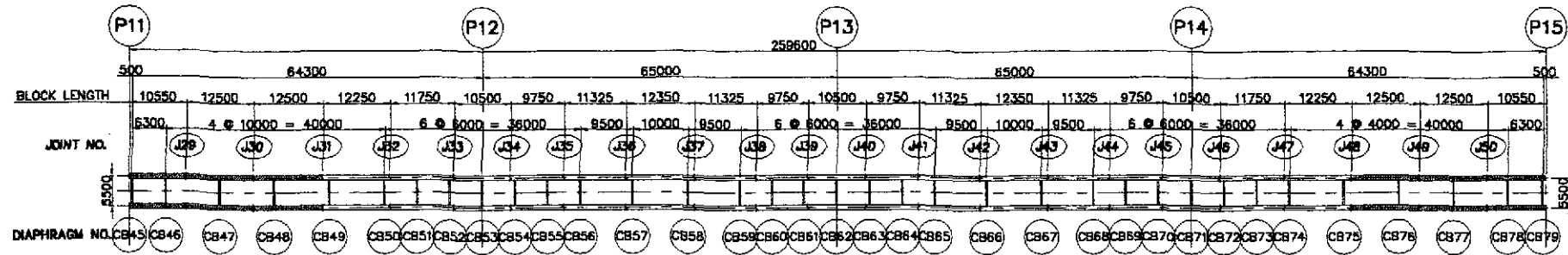
1 SECTION
SCALE 1:40



2 SECTION
SCALE 1:40



3 SECTION
SCALE 1:40

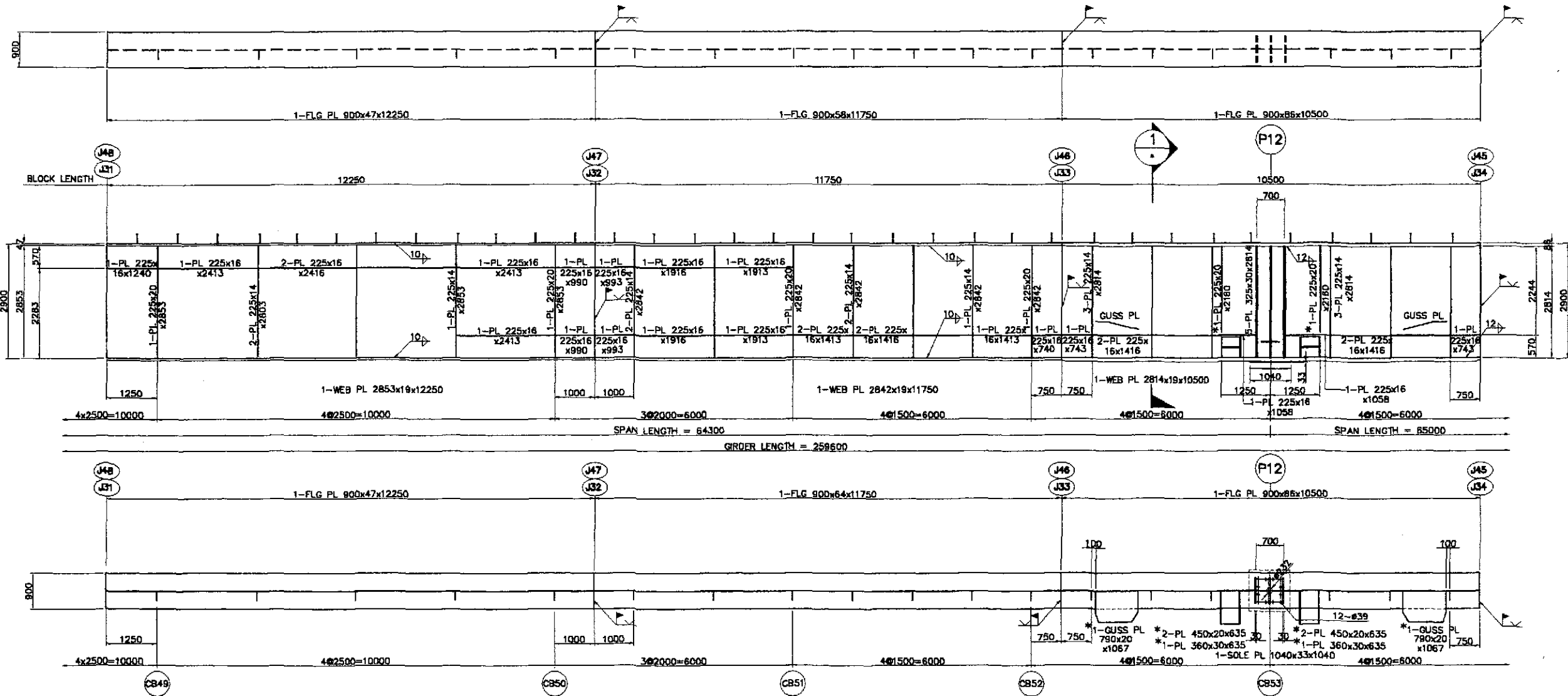


B KEY PLAN
SCALE 1:600

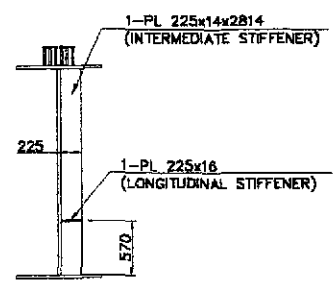
NOTES:

- STRUCTURAL STEEL SHALL BE SMA 490W/ GRADE 50W CONFORMING TO ASTM A 709M UNLESS OTHERWISE NOTED.
- FOR STUD SHEAR DETAILS, SEE DWG. NO. B10M-06

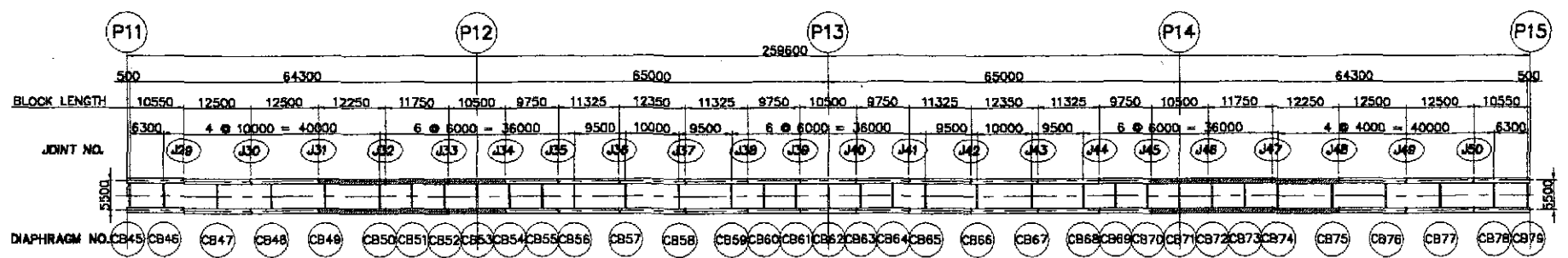
	DATE	SIGNATURE	REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS				PROJECT AND LOCATION :	SCALE :	SHEET CONTENTS :	SHEET NO. :
	DESIGNED	10/14/02	<i>[Signature]</i>	BUREAU OF DESIGN Submitted By: DANILLO C. TRAJANO Chief, Bridge Division				THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Plaridel, Cabanatuan and San Jose Bypasses) CABANATUAN BYPASS - CONTRACT PACKAGE III	AS SHOWN	BRIDGE NO. 10 PAMPANGA RIVER BRIDGE STIFFENER LAYOUT AND DETAILS (PIER 11 TO PIER 15) - 1 of 4 (ULTIMATE STAGE)
CHECKED	10/17/02	<i>[Signature]</i>	OFFICE OF THE SECRETARY Recommended By: MANUEL M. BONOAN Undersecretary				FULL SIZE A1			
SUBMITTED	10/19/02	<i>[Signature]</i>	Approved By: SIMEON A. DATUMANONG Secretary							



A STIFFENER LAYOUT AND DETAILS (P11-P15)
SCALE 1:60



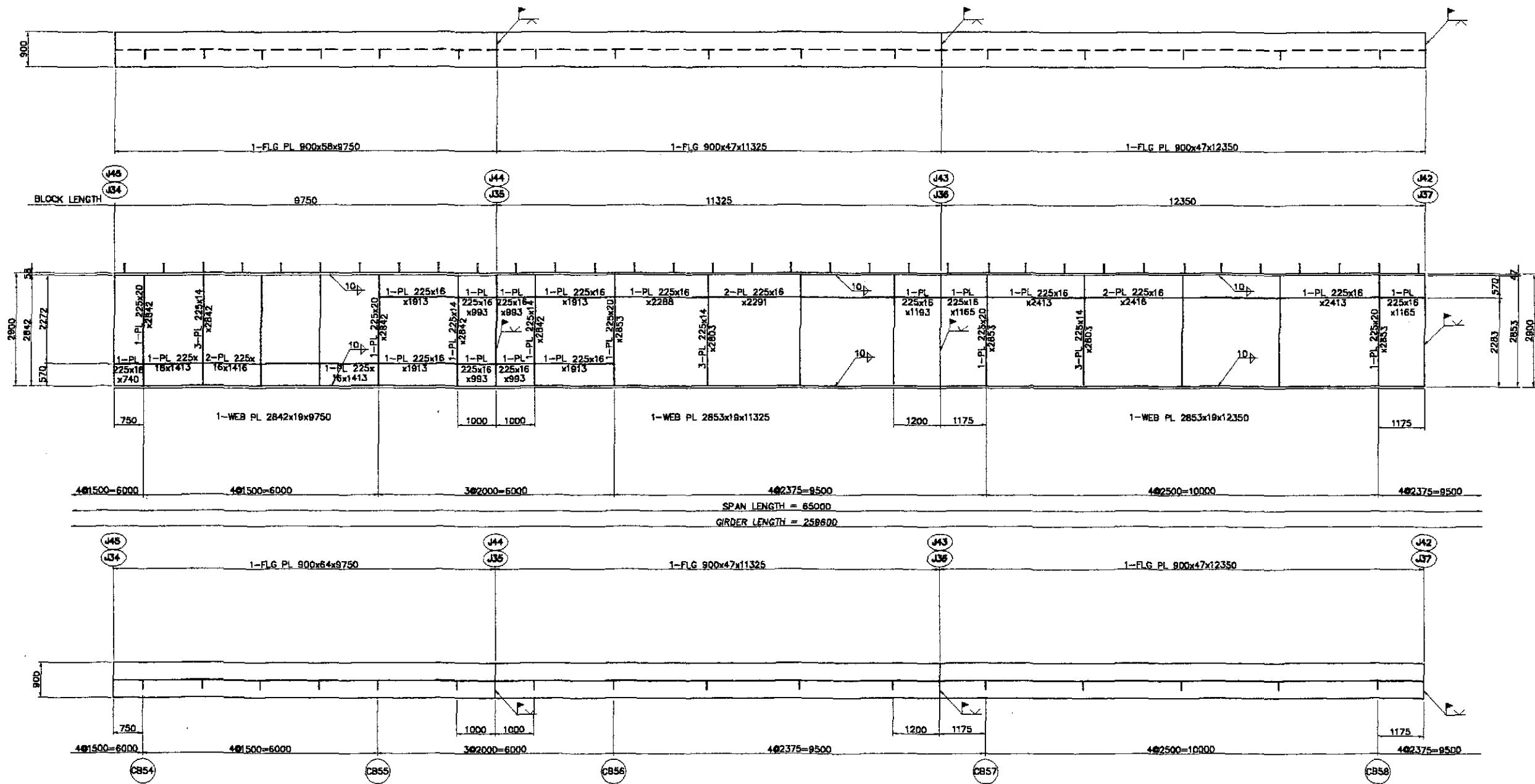
1 SECTION
SCALE 1:40



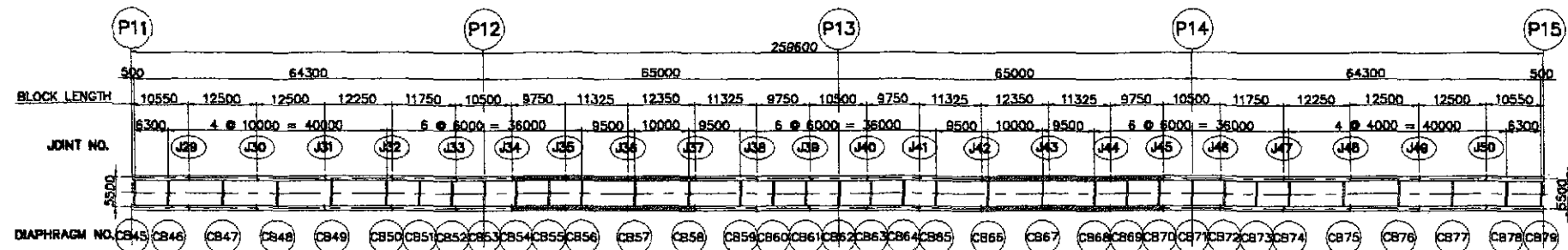
B KEY PLAN
SCALE 1:600

- NOTES:**
- STRUCTURAL STEEL SHALL BE SMA 490W/ GRADE 50W CONFORMING TO ASTM A 708M UNLESS OTHERWISE NOTED.
 - FOR STUD SHEAR DETAILS, SEE DWG. NO. B10M-06

		REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS BUREAU OF DESIGN				PROJECT AND LOCATION : THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Pinaridel, Cabanatuan and San Jose Bypasses) CABANATUAN BYPASS - CONTRACT PACKAGE III		SCALE : AS SHOWN FULL SIZE A1	SHEET CONTENTS : BRIDGE NO. 10 PAMPANGA RIVER BRIDGE STIFFENER LAYOUT AND DETAILS (PIER 11 TO PIER 15) - 2 OF 4 (ULTIMATE STAGE)	SHEET NO. : B10M-15
DESIGNED	DATE	SIGNATURE	Submitted By:	Reviewed By:	Recommended By:	Recommended By:	Approved By:			
CHECKED	10/17/02	J. C. SANTOS	DANILO C. TRAJANO	ADRIANO M. DOROY	GILBERTO S. REYES	MANUEL M. BONDAN	SIMEON A. DATUMANONG			
SUBMITTED	10/19/02	M. R. RIVERA	Project Director	Chief, Bridge Division	Director IV (D/C)	Undersecretary	Secretary			



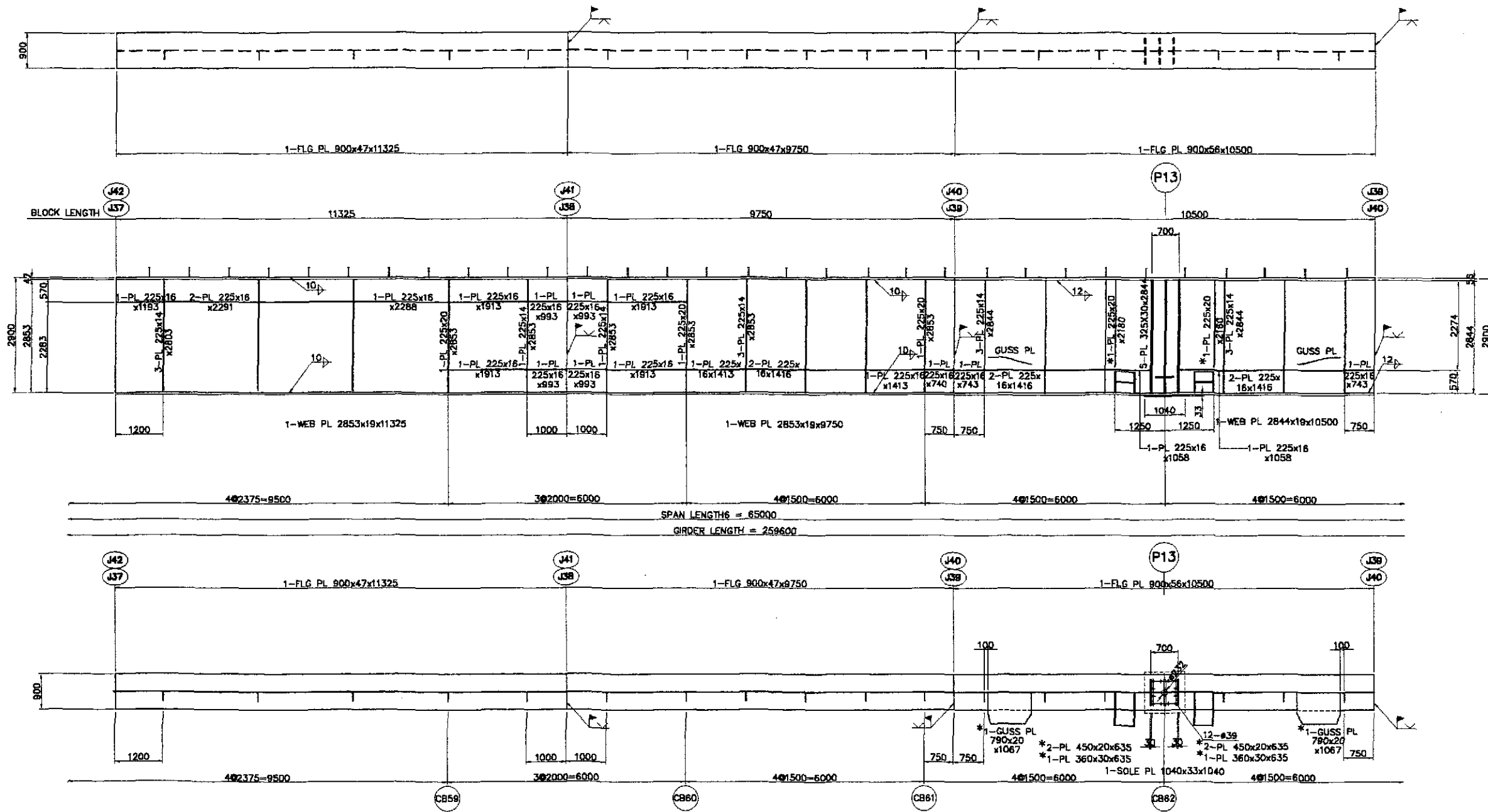
A STIFFENER LAYOUT AND DETAILS (P11-P15)
SCALE 1:60



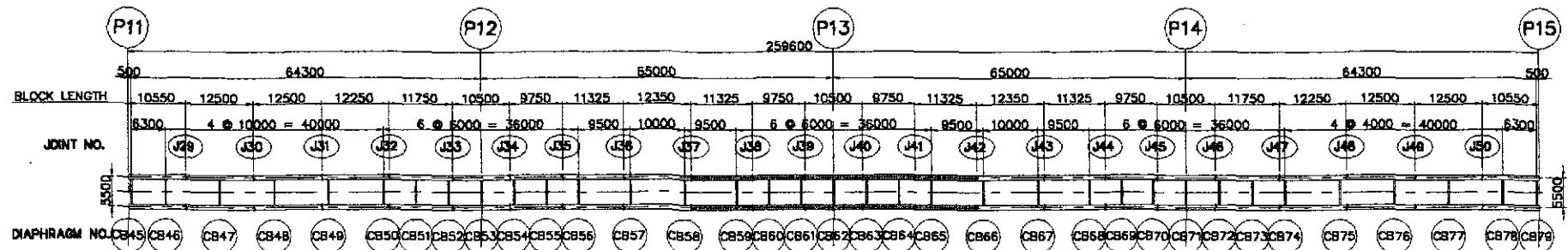
B KEY PLAN
SCALE 1:600

- NOTES:**
- STRUCTURAL STEEL SHALL BE SMA 490W/ GRADE S0W CONFORMING TO ASTM A 709M UNLESS OTHERWISE NOTED.
 - FOR STUD SHEAR DETAILS, SEE DWG. NO. B10M-06

	DATE	SIGNATURE	REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS				PROJECT AND LOCATION :	SCALE :	SHEET CONTENTS :	SHEET NO. :	
	DESIGNED	10/14/02	<i>[Signature]</i>	BUREAU OF DESIGN				THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Plaridel, Cabanatuan and San Jose Bypasses) CABANATUAN BYPASS - CONTRACT PACKAGE III	AS SHOWN	BRIDGE NO. 10 PAMPANGA RIVER BRIDGE STIFFENER LAYOUT AND DETAILS (PIER 11 TO PIER 15) - 3 OF 4 (ULTIMATE STAGE)	B10M-16
	CHECKED	10/17/02	J. C. SANTOS	Submitted By:	Reviewed By:	Recommended By:	Office of the Secretary				
SUBMITTED	10/19/02	<i>[Signature]</i>	DANILO C. TRAJANO Project Director	ADRIANO M. DOROY Chief, Bridges Division	GILBERTO S. REYES Director IV (OIC)	MANUEL M. BONDAN Undersecretary	SIMEON A. DATUMANONG Secretary				
							FULL SIZE A1				



A STIFFENER LAYOUT AND DETAILS (P11-P15)
SCALE 1:60

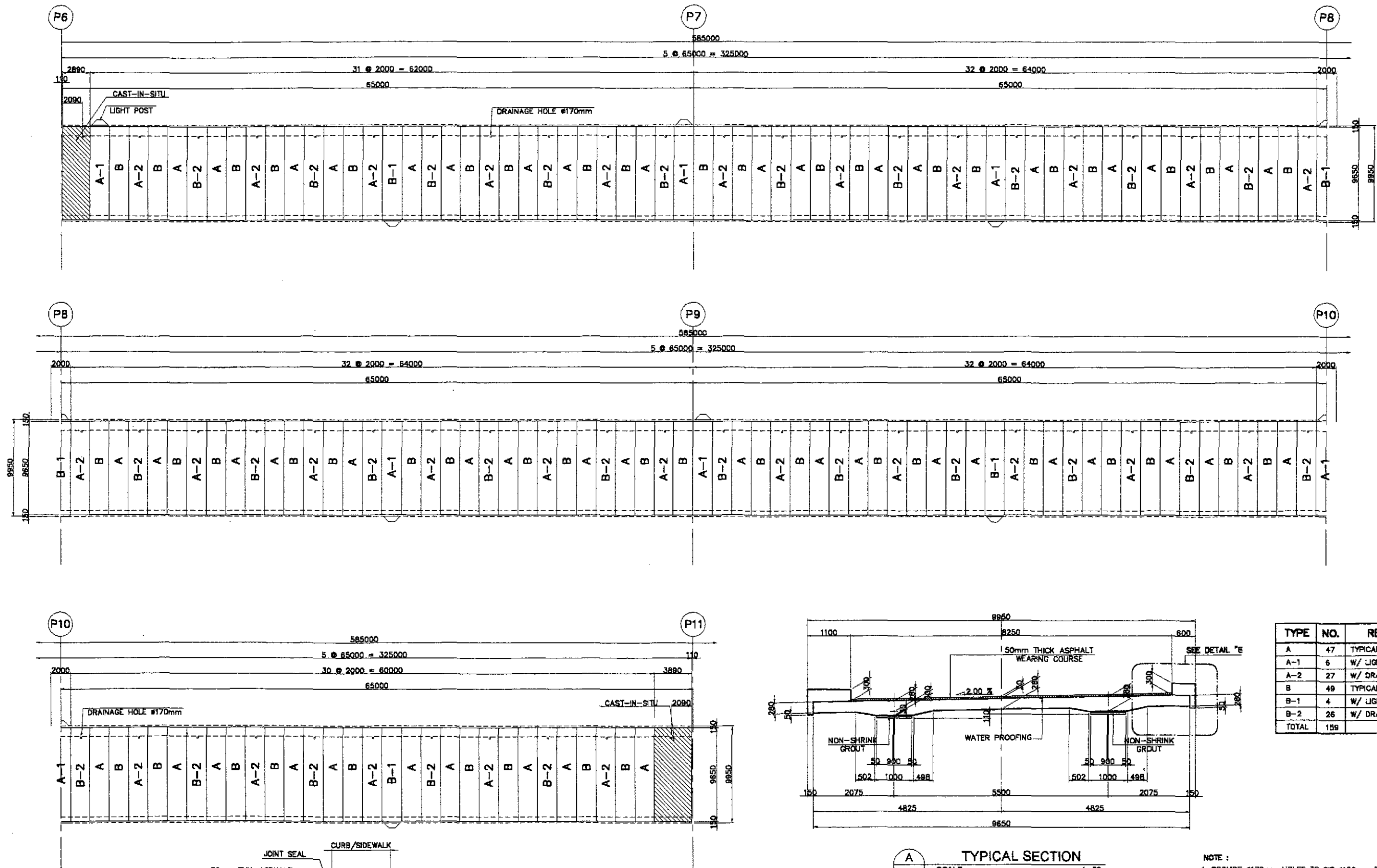


B KEY PLAN
SCALE 1:600

- NOTES:**
1. STRUCTURAL STEEL SHALL BE SMA 490W/ GRADE S0W CONFORMING TO ASTM A 709M UNLESS OTHERWISE NOTED.
 2. FOR STUD SHEAR DETAILS, SEE DWG. NO. B10M-06

 JICA JAPAN INTERNATIONAL COOPERATION AGENCY		 REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS		PROJECT AND LOCATION : THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Plaridel, Cabanatuan and San Jose Bypasses) CABANATUAN BYPASS - CONTRACT PACKAGE III		SCALE : AS SHOWN FULL SIZE A1	SHEET CONTENTS : BRIDGE NO. 10 PAMPANGA RIVER BRIDGE STIFFENER LAYOUT AND DETAILS (PIER 11 TO PIER 15) - 4 OF 4 (ULTIMATE STAGE)	SHEET NO. : B10M-17
DESIGNED 10/14/05 F. M. SALAS	CHECKED 10/17/05 J. C. SANTOS	SUBMITTED 10/19/05 M. R. B.	P.W. - P.M.O. Submitted By: DANILLO C. TRAJANO Project Director	BUREAU OF DESIGN Reviewed By: ADRIANO M. DORAY Chief, Bridge Division	OFFICE OF THE SECRETARY Recommended By: GILBERTO S. REYES Director IV (OIC)	Approved By: MANUEL M. BONOAN Undersecretary	Approved By: SIMON A. DATUMANONG Secretary	

SUPERSTRUCTURE - PC SLAB



TYPE	NO.	REMARKS
A	47	TYPICAL
A-1	6	W/ LIGHT POST
A-2	27	W/ DRAINAGE HOLE
B	49	TYPICAL
B-1	4	W/ LIGHT POST
B-2	26	W/ DRAINAGE HOLE
TOTAL	159	

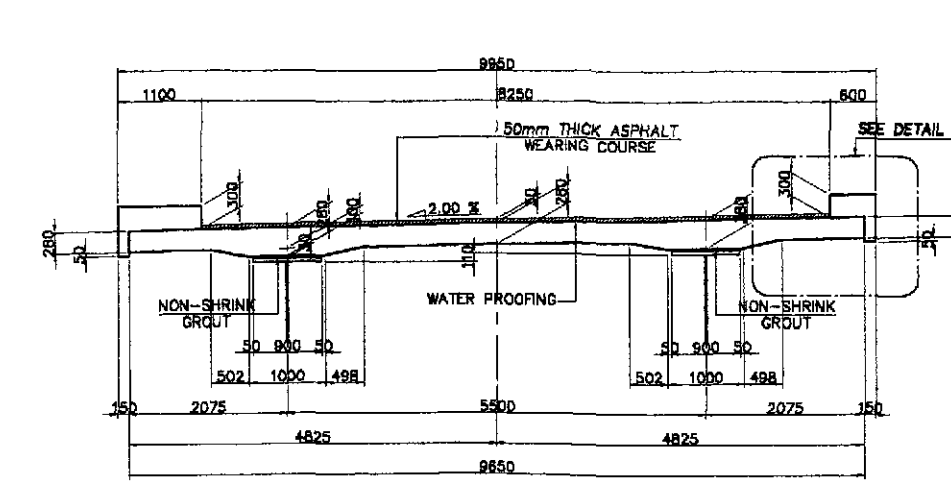
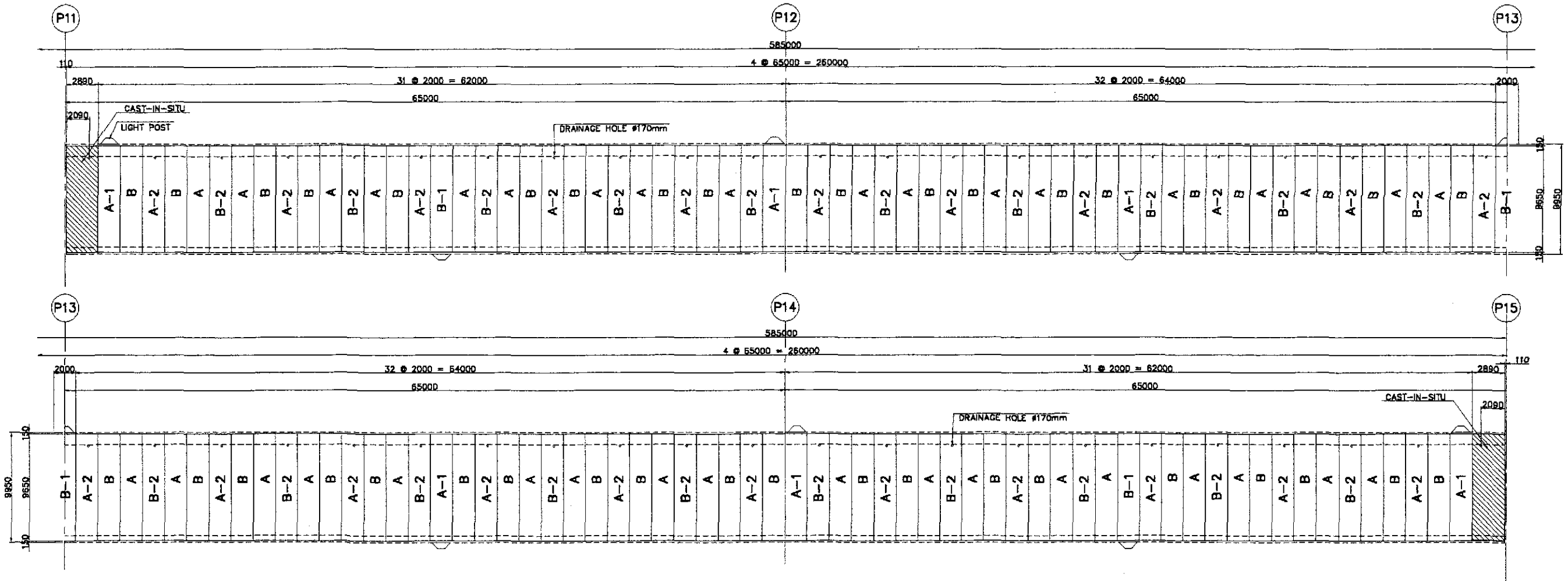
1 DECK SLAB LAYOUT PLAN (PIER 6 TO PIER 11)
SCALE 1:200

B DECK WATER PROOFING DETAILS
SCALE 1:20

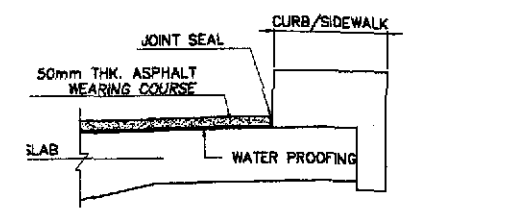
A TYPICAL SECTION
SCALE 1:50

NOTE:
 1. PROVIDE #170mm HOLES TO FIT #150mm DRAINAGE PIPES. THE CONTRACTOR SHOULD PROVIDE SEAL TO FIT THE DRAINAGE PIPES TO THE HOLE PROVIDED.
 2. DECK SLAB WATER PROOFING AS DISCUSSED IN THE SPECIFICATIONS SHALL BE APPLIED TO THE CONCRETE SLAB FOR THE MAIN BRIDGE PRIOR TO ASPHALT WEARING COURSE.
 WATER PROOFING AREA = 2682 Sq.M.

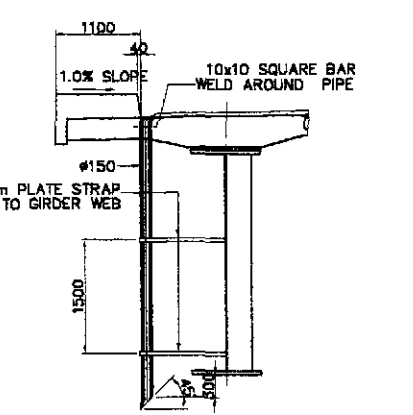
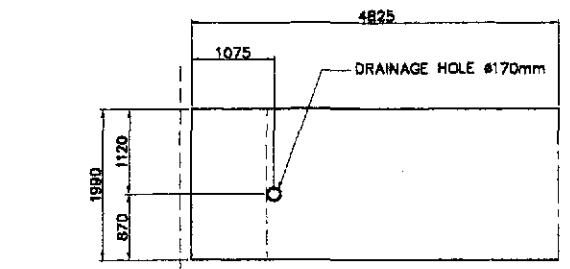
	DESIGNED	DATE	SIGNATURE		PROJECT AND LOCATION :			SCALE :	SHEET CONTENTS :	SHEET NO. :
	CHECKED	10/17/02	F. M. SALAS		THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Pinaridel, Cabanatuan and San Jose Bypasses) CABANATUAN BYPASS - CONTRACT PACKAGE III			AS SHOWN	BRIDGE NO. 10 PAMPANGA RIVER BRIDGE PC SLAB LAYOUT PLAN (PIER 6 to PIER 11) (ULTIMATE STAGE)	B10M-31
SUBMITTED 10/19/02 DANILLO C. TRAJANO Project Director				P.H.L. - PMO Reviewed By: ADRIANO M. DORAY Chief, Bridges Division		BUREAU OF DESIGN Recommended By: GILBERTO S. REYES Director IV (CIC)		OFFICE OF THE SECRETARY Approved By: MANUEL M. BONGAN Undersecretary		



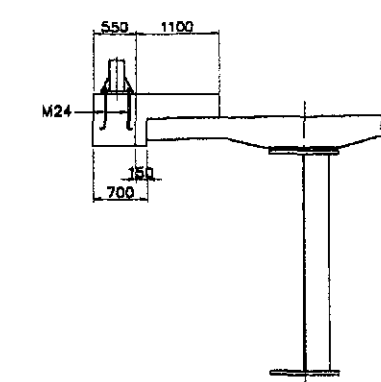
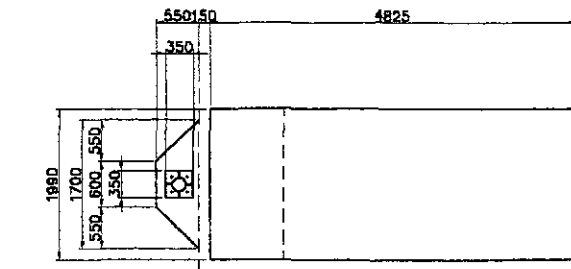
A TYPICAL SECTION
SCALE 1:50



B DECK WATER PROOFING DETAILS
SCALE 1:20



C WITH DRAINAGE HOLE
SCALE 1:50



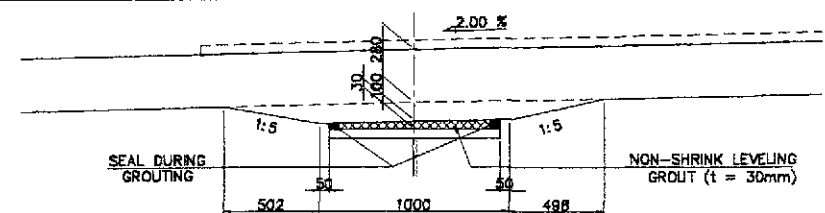
D WITH LIGHT POST
SCALE 1:50

1 DECK SLAB LAYOUT PLAN (PIER 11 TO PIER 15)
SCALE 1:200

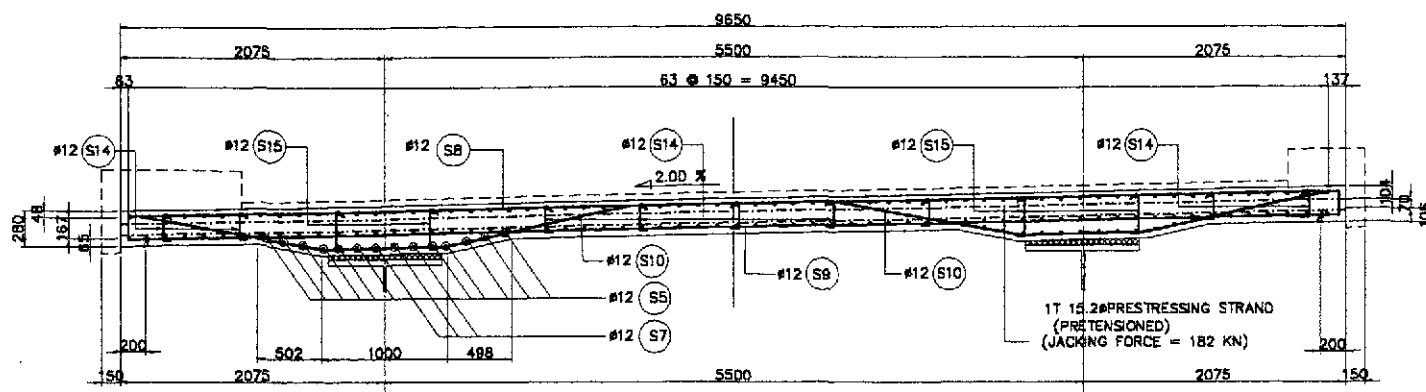
TYPE	NO.	REMARKS
A	36	TYPICAL
A-1	6	W/ LIGHT POST
A-2	22	W/ DRAINAGE HOLE
B	40	TYPICAL
B-1	3	W/ LIGHT POST
B-2	20	W/ DRAINAGE HOLE
TOTAL	127	

NOTE:
 1. PROVIDE #170MM HOLES TO FIT #150MM DRAINAGE PIPES. THE CONTRACTOR SHOULD PROVIDE SEAL TO FIT THE DRAINAGE PIPES TO THE HOLE PROVIDED.
 2. DECK SLAB WATER PROOFING AS DISCUSSED IN THE SPECIFICATIONS SHALL BE APPLIED TO THE CONCRETE SLAB FOR THE MAIN BRIDGE PRIOR TO ASPHALT WEARING COURSE.
 WATER PROOFING AREA = 2145 Sq.M.

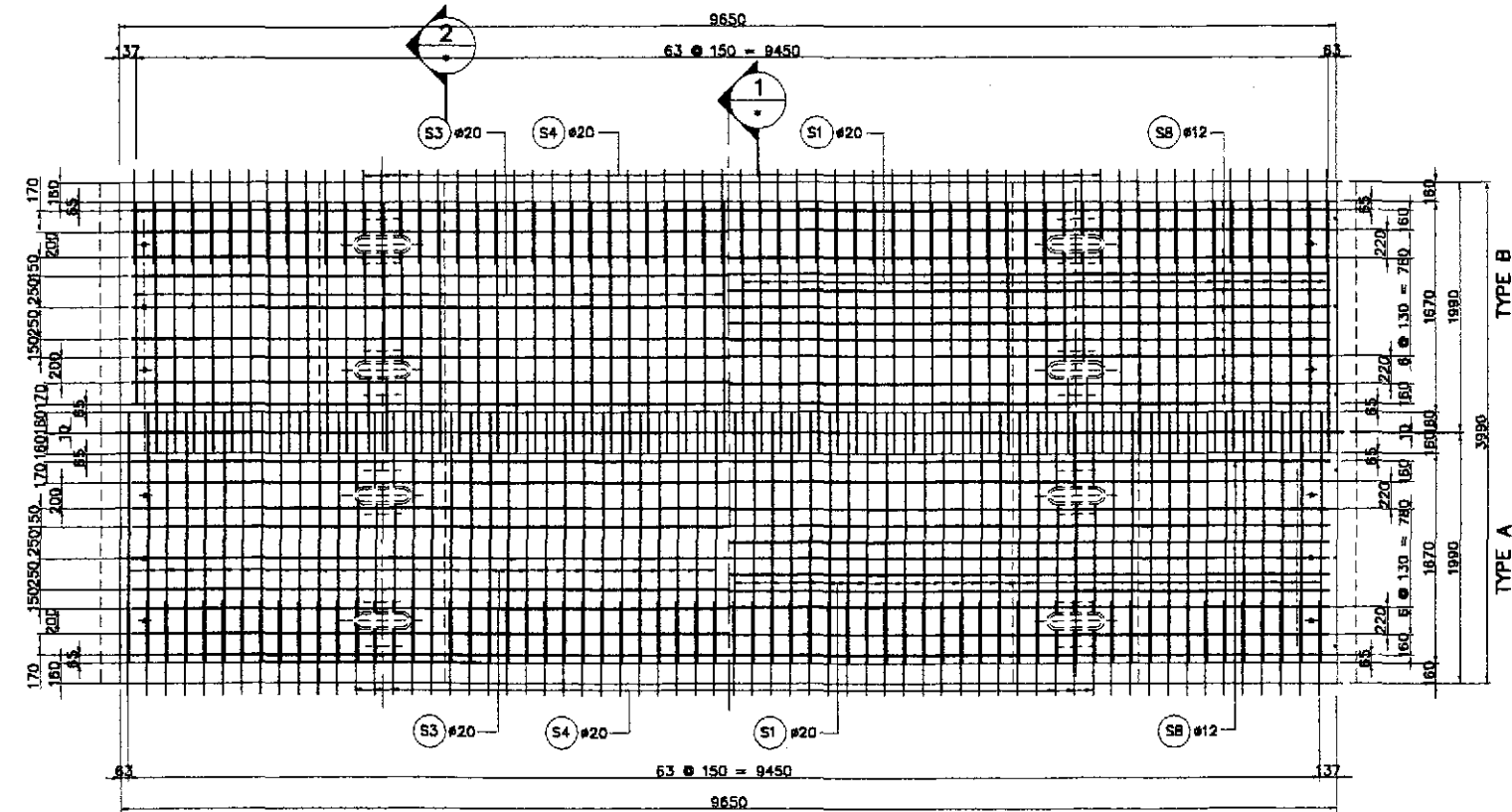
	DESIGNED	DATE	SIGNATURE		REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS			PROJECT AND LOCATION : THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Pinaridel, Cabanatuan and San Jose Bypasses) CABANATUAN BYPASS - CONTRACT PACKAGE III	SCALE : AS SHOWN FULL SIZE A1	SHEET CONTENTS : BRIDGE NO. 10 PAMPANGA RIVER BRIDGE PC SLAB LAYOUT PLAN (PIER 11 TO PIER 15) (ULTIMATE STAGE)	SHEET NO. : B10M-32
	CHECKED	10/11/02	F. M. SALAS		BUREAU OF DESIGN Submitted By: DANILO C. TRAJANO Project Director	Reviewed By: ADRIANO M. DORCOY Chief, Bridge Division	Recommended By: GILBERTO S. REYES Director IV (D/C)				



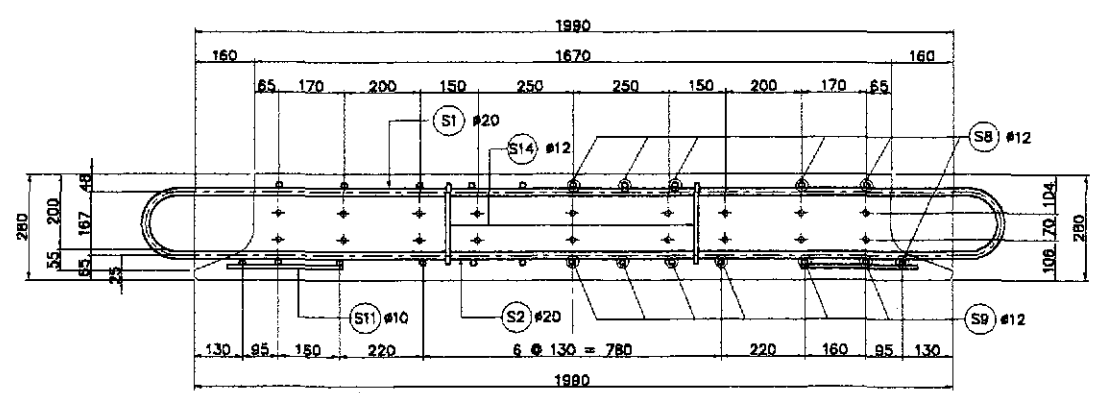
2 DETAIL OF HAUNCH
SCALE 1:20



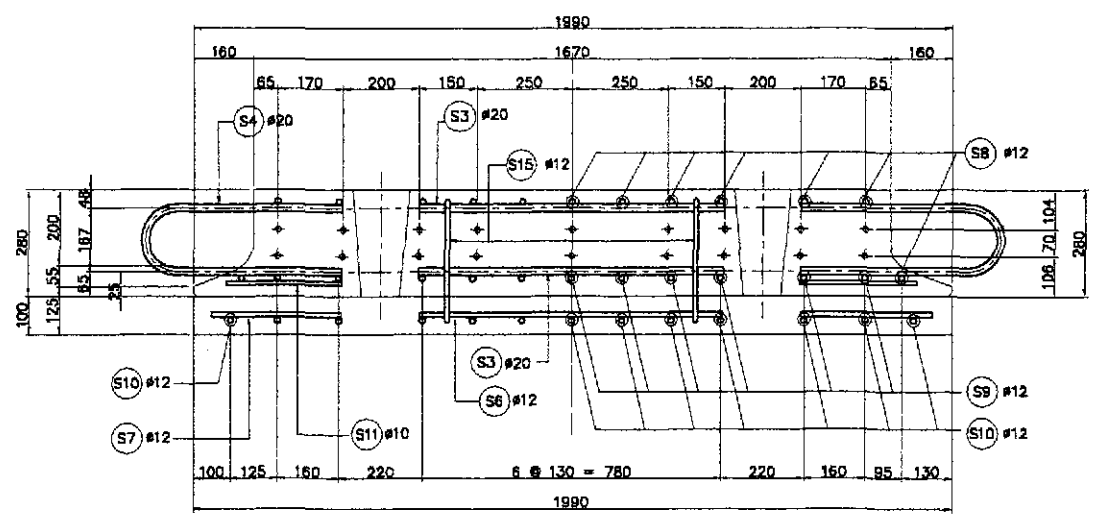
B ELEVATION
SCALE 1:30



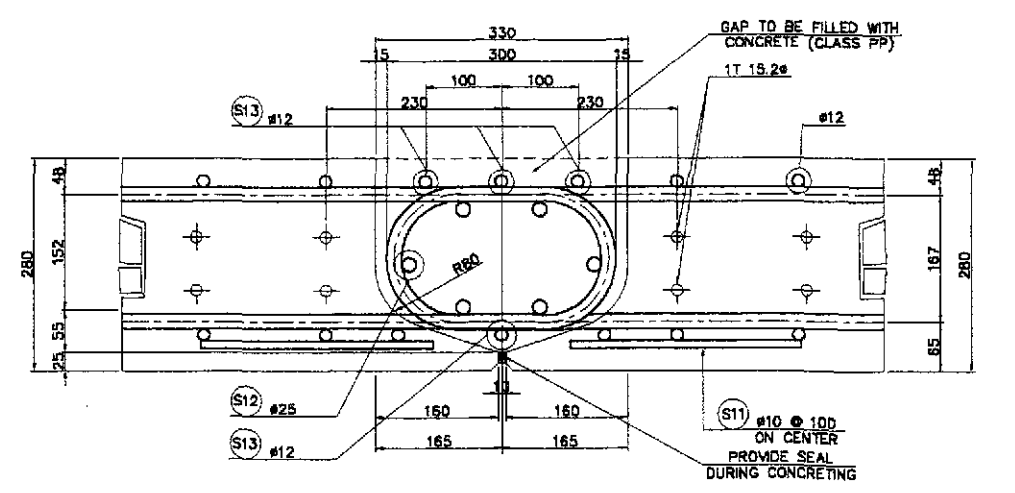
A PLAN
SCALE 1:100



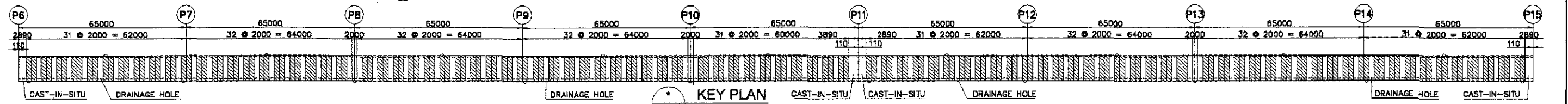
1 SECTION
SCALE 1:10



2 SECTION
SCALE 1:10



1 DETAIL OF CONNECTION BET. SLAB PANELS
SCALE 1:5



KEY PLAN
SCALE NTS

		REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS				PROJECT AND LOCATION : THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Plaridel, Cabanatuan and San Jose Bypasses)		SCALE : AS SHOWN FULL SIZE A1	SHEET CONTENTS : BRIDGE NO. 10 PAMPANGA RIVER BRIDGE PRECAST PC SLAB DETAILS (TYPE A & B, A-1 & B-1) (ULTIMATE STAGE)	SHEET NO. : B10M-34
DESIGNED	DATE	SIGNATURE	BUREAU OF DESIGN Submitted By: DANILLO C. TRAJANO Project Director		OFFICE OF THE SECRETARY Recommended By: GILBERTO S. REYES Director IV (DG)		Approved By: MANUEL M. BONOAN Undersecretary		CABANATUAN BYPASS - CONTRACT PACKAGE III	
CHECKED	DATE	SIGNATURE	Reviewed By: ADRIANO M. DOROS Chief, Bridges Division		Approved By: SIMEON A. DATUMANONG Secretary					
SUBMITTED	DATE	SIGNATURE								

BAR BENDING DIAGRAM														
A			B			C			D					
E			F			G			H					
SCHEDULE OF REINFORCEMENT														
LOCATION	BAR MARK	SIZE (mm)	BEND TYPE	DIMENSION(mm) OUT TO OUT						LENGTH (mm)	NO. REQ'D.	UNIT WEIGHT (kg/m)	WEIGHT (kg.)	
				a	b	c	d	e	f				GRADE 40	GRADE 80
TYPE A & TYPE B TYPE A-1 & TYPE B-1	S1	20	A	1830						1830	59	2.466		238
	S2	20	B	708	262	2084				4030	59	2.466		587
	S3	20	A	793						1600	10	2.466		40
	S4	20	C	429	262					2240	10	2.466		56
	S5	12	A	1890						1890	20	0.888	34	
	S6	12	A	793						800	6	0.888	5	
	S7	12	A	342						350	12	0.888	4	
	S8	12	A	9550						9550	13	0.888	111	
	S9	12	D	165	9550					9880	11	0.888	97	
	S10	12	E	1581	993					4160	26	0.888	97	
	S11	10	A	310						310	192	0.617	37	
	S12	25	A	9550						9550	6	3.854		221
	S13	12	A	9550						9550	4	0.888	34	
	S14	12	F	130	230	110				470	18	0.888	8	
	S15	12	F	130	330	110				570	8	0.888	5	
TOTAL =												432 kgs.	1,142 kgs.	

THE REINFORCEMENT SHOWN ON THIS TABLE IS FOR REFERENCE ONLY. THE CONTRACTOR SHOULD CHECK AND VERIFY ALL DIMENSIONS, SIZES AND QUANTITIES OF REINFORCEMENT.

SCHEDULE OF PRESTRESSING STRANDS								
PANEL TYPE	STRAND DIAMETER (mm)	JACKING FORCE PER STRAND (kN)	STRANDS PER PANEL (pcs)	LENGTH OF STRANDS (m)	UNIT WEIGHT PER STRANDS (kg/m)	WEIGHT PER PANEL (kg/panel)	NO. OF PANELS (pcs)	WEIGHT (kg)
A	15.20	182	18	9.650	1.10	191.07	83	15.859
A-1	15.20	182	18	9.650	1.10	191.07	12	2.293
A-2	15.20	182	18	9.650	1.10	191.07	49	9.363
B	15.20	182	18	9.650	1.10	191.07	89	17.008
B-1	15.20	182	18	9.650	1.10	191.07	7	1.338
B-2	15.20	182	18	9.650	1.10	191.07	46	8.790
TOTAL =								54,848 kgs.

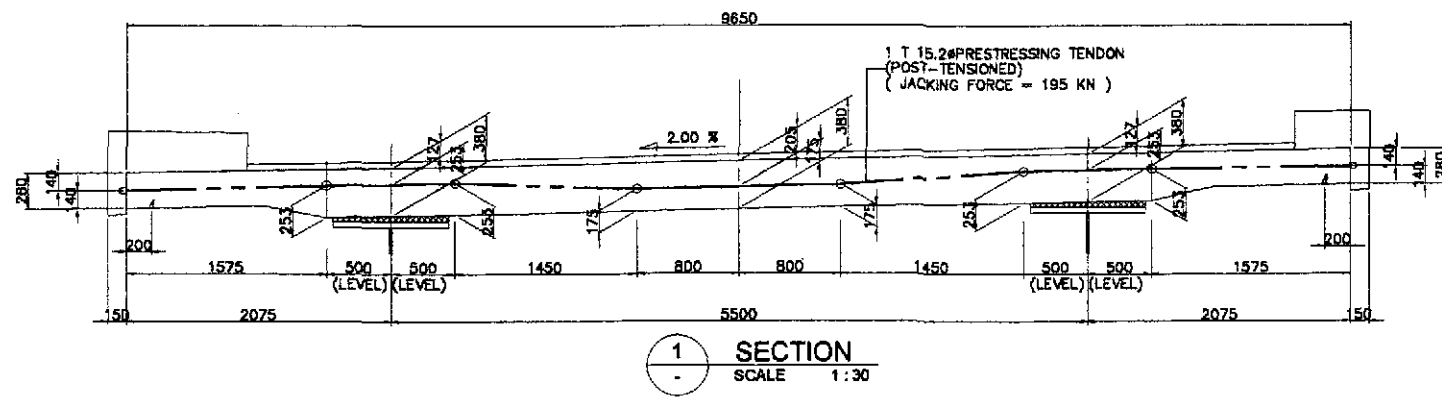
NOTE :

PRESTRESSING STEEL SHALL BE SEVEN-WIRE UNCOATED STRESS-RELIEVED STRANDS AND SHALL CONFORM TO AASTHO M203 (ASTM A 146) WITH MINIMUM ULTIMATE STRENGTH OF $F_y = 1880 \text{ MPa}$ (270 ksi).

BAR BENDING DIAGRAM														
A			B			C			D			E		
F			G			H			I			J		
SCHEDULE OF REINFORCEMENT														
LOCATION	BAR MARK	SIZE (mm)	BEND TYPE	DIMENSION(mm) OUT TO OUT						LENGTH (mm)	NO. REQ'D.	UNIT WEIGHT (kg/m)	WEIGHT (kg.)	
				a	b	c	d	e	f				GRADE 40	GRADE 80
TYPE A-2 & TYPE B-2	S1	20	A	1830						1830	59	2.466		238
	S2	20	B	708	262	2084				4030	59	2.466		587
	S3	20	A	793						1600	10	2.466		40
	S4	20	A	429	262					2240	10	2.466		56
	S5	12	A	1890						1890	20	0.888	34	
	S6	12	A	793						800	6	0.888	5	
	S7	12	A	342						350	12	0.888	4	
	S8	12	A	9550						9550	12	0.888	111	
	S9	12	D	165	9550					9880	10	0.888	88	
	S10	12	E	1581	993					4160	26	0.888	93	
	S11	10	A	310						310	192	0.617	37	
	S12	25	A	9550						9550	6	3.854		221
	S13	12	A	9550						9550	4	0.888	34	
	S14	20	A	590						590	4	2.466		6
	S15	20	A	790						790	4	2.466		8
	S16	20	F	708	262	1042				2020	2	2.466		10
	S17	20	G	708	262	842				1820	2	2.466		9
	S18	12	A	8475						8480	1	0.888	8	
	S19	12	A	875						880	1	0.888	1	
	S20	12	A	8475						8480	1	0.888	8	
	S21	12	A	875						880	1	0.888	1	
	S22	12	H	1071	357	993	1581			4010	1	0.888	4	
	S23	16	A	800						600	16	1.579	16	
	S24	12	I	130	230	110				470	18	0.888	8	
	S25	12	I	130	230	110				480	8	0.888	5	
TOTAL =												457 kgs.	1,175 kgs.	

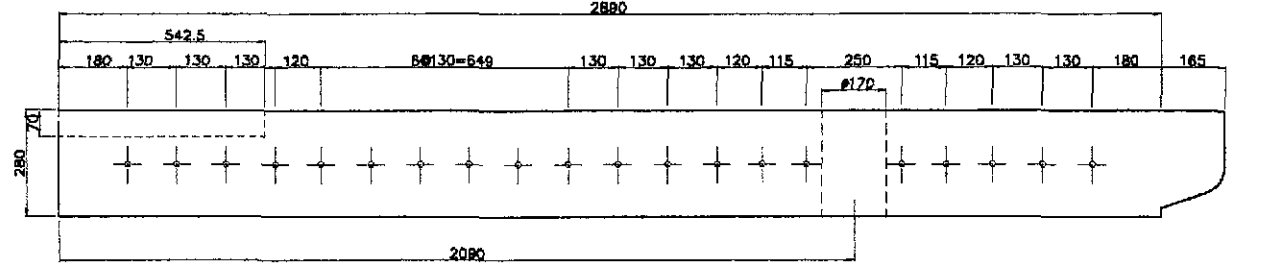
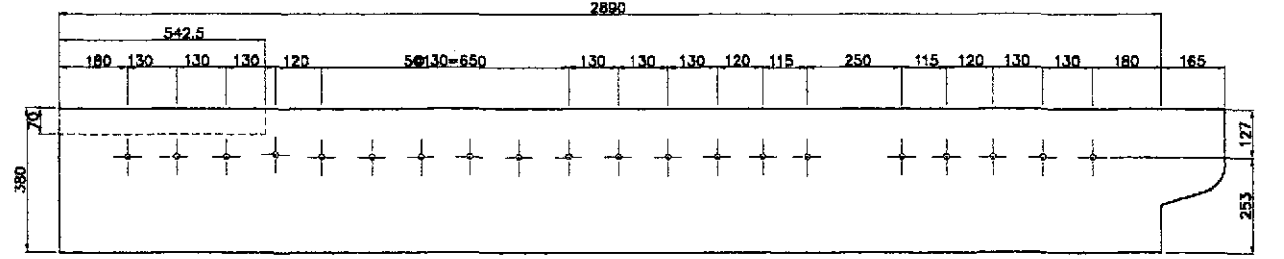
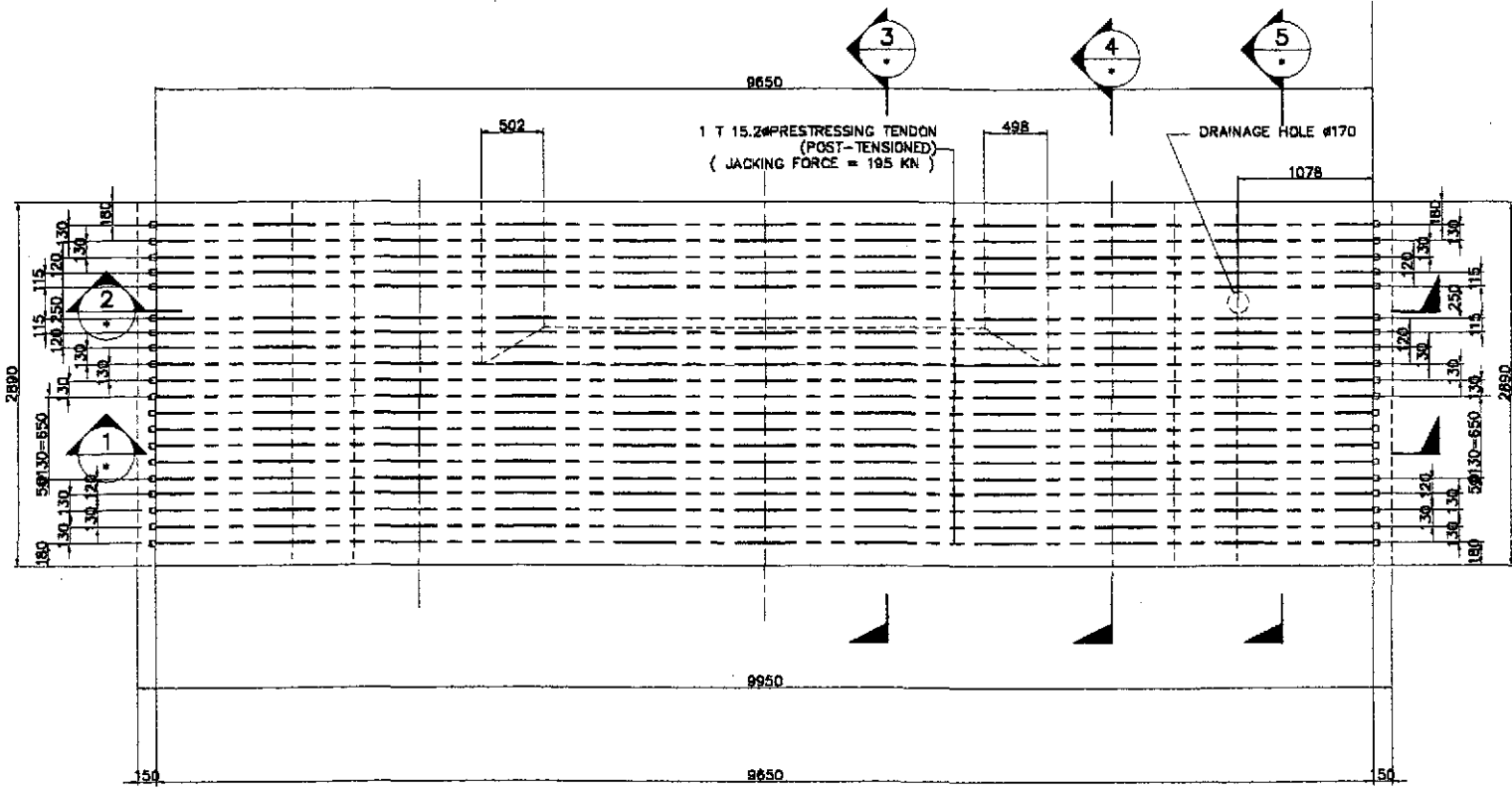
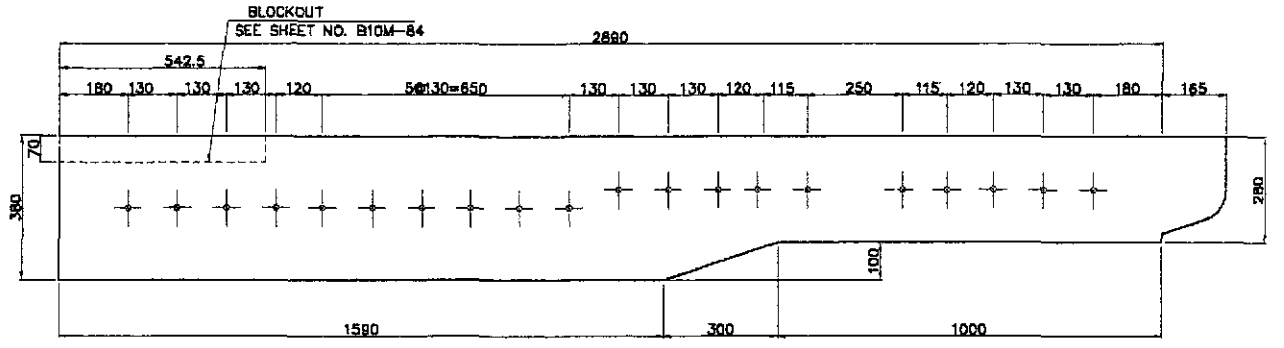
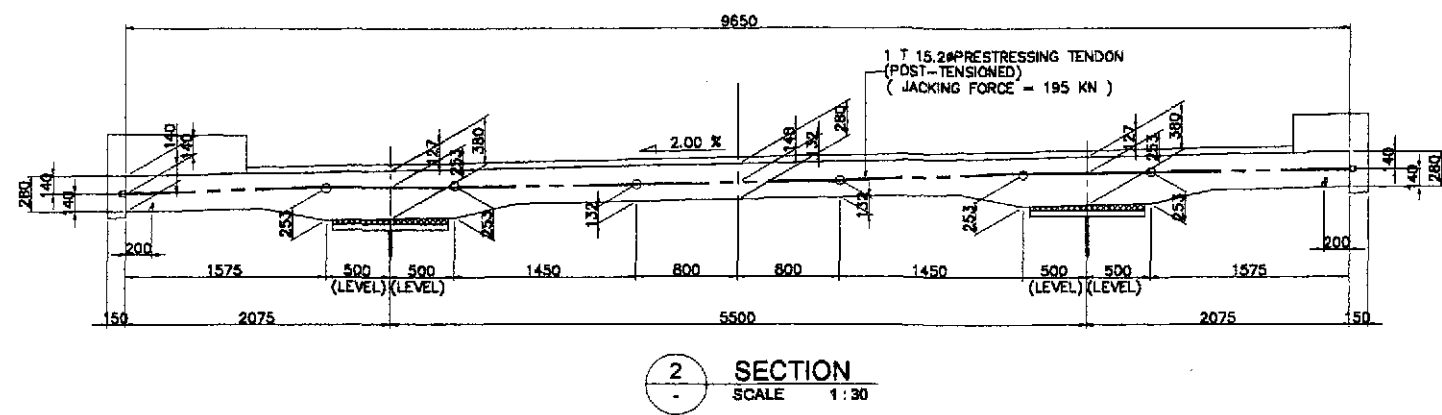
THE REINFORCEMENT SHOWN ON THIS TABLE IS FOR REFERENCE ONLY. THE CONTRACTOR SHOULD CHECK AND VERIFY ALL DIMENSIONS, SIZES AND QUANTITIES OF REINFORCEMENT.

	DESIGNED	DATE	SIGNATURE		REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS				PROJECT AND LOCATION : THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Plaridel, Cabanatuan and San Jose Bypasses) CABANATUAN BYPASS - CONTRACT PACKAGE III	SCALE : AS SHOWN FULL SIZE A1	SHEET CONTENTS : BRIDGE NO. 10 PAMPANGA RIVER BRIDGE SCHEDULE OF REINFORCEMENT (TYPE A & B, A-1 & B-1, A-2 & B-2) (ULTIMATE STAGE)	SHEET NO. : B10M-36
	CHECKED	10/17/02	J. Z. SANTOS		BUREAU OF DESIGN Submitted By: DANIL C. TRAJANO Project Director	Reviewed By: ADRIANO M. DOROY Chief, Bridge Division	Recommended By: GILBERTO S. REYES Director IV (DIC)	Office of the Secretary Recommended By: MANUEL M. BONDAN Undersecretary				



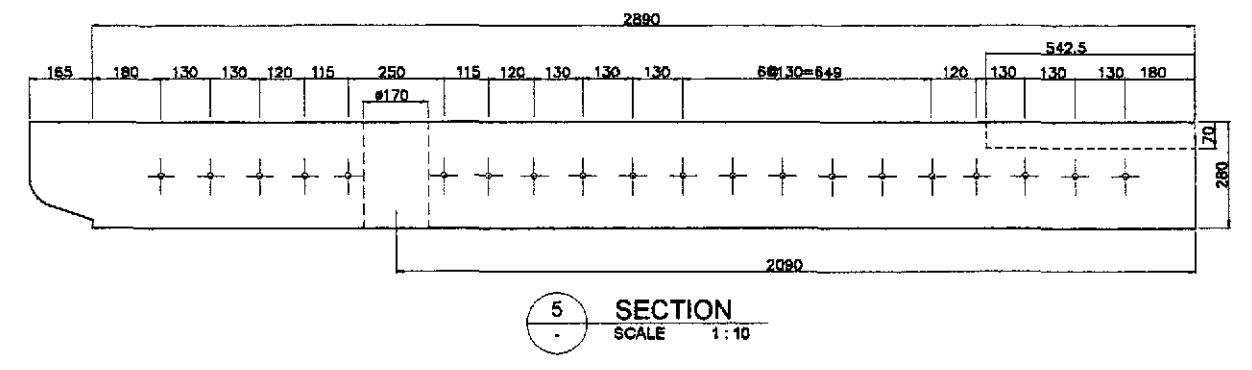
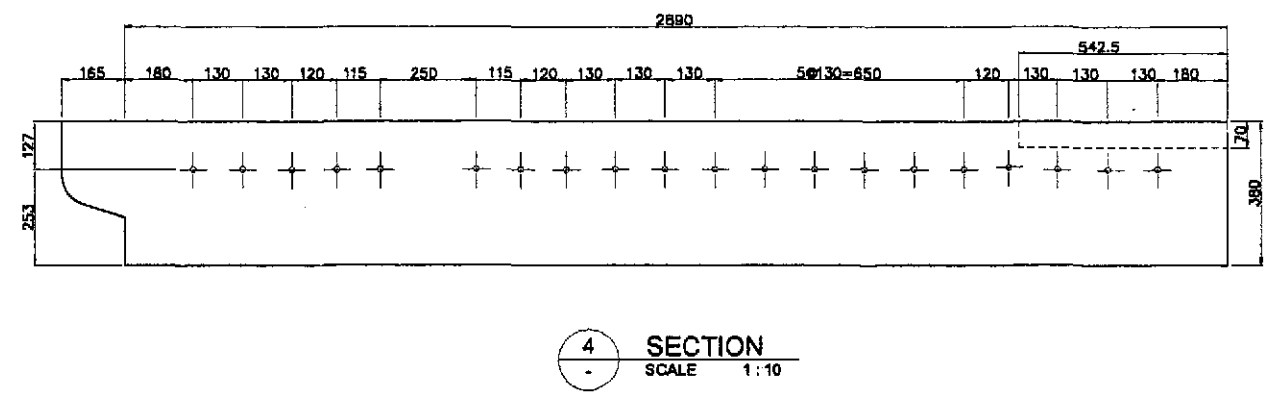
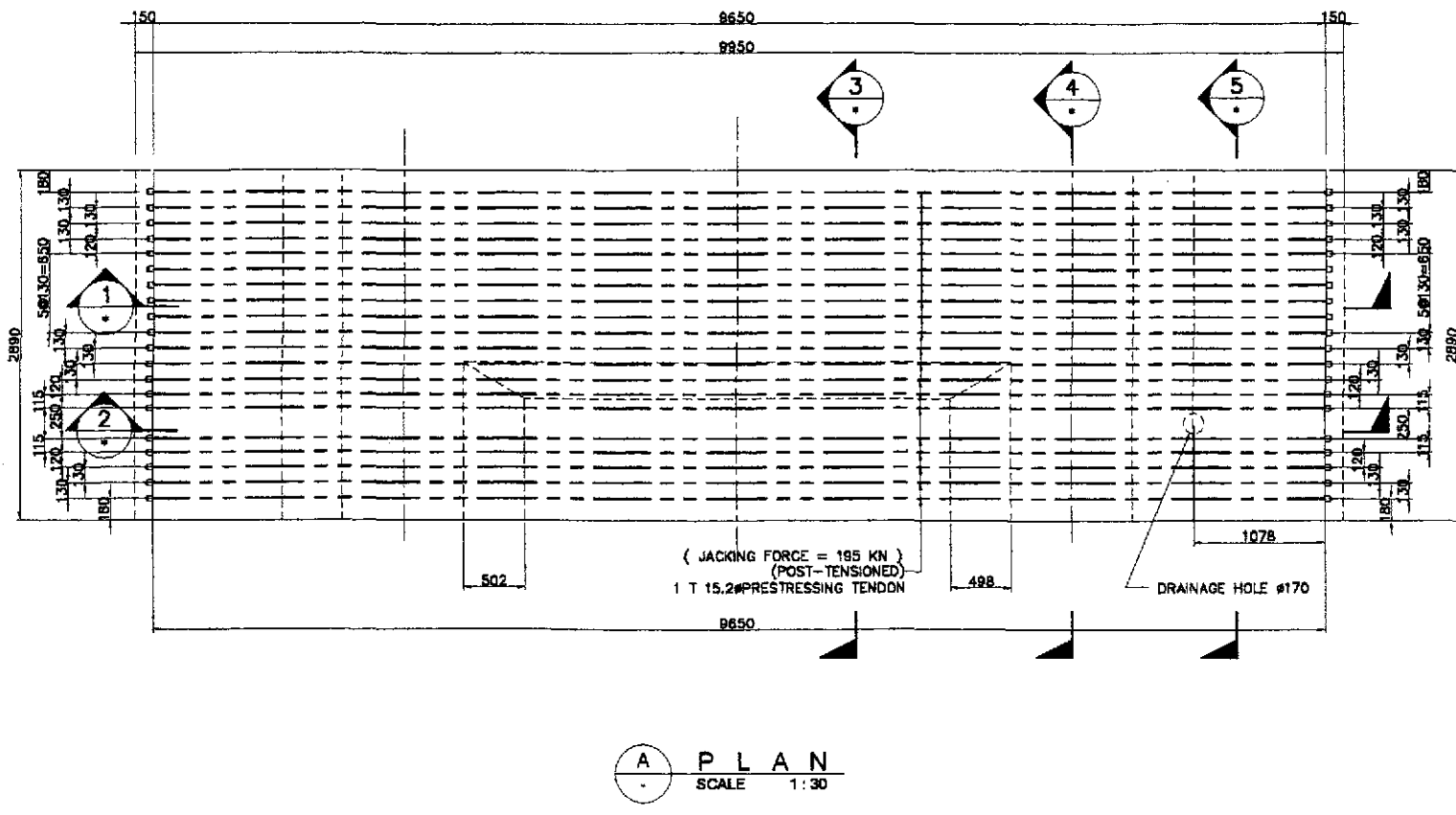
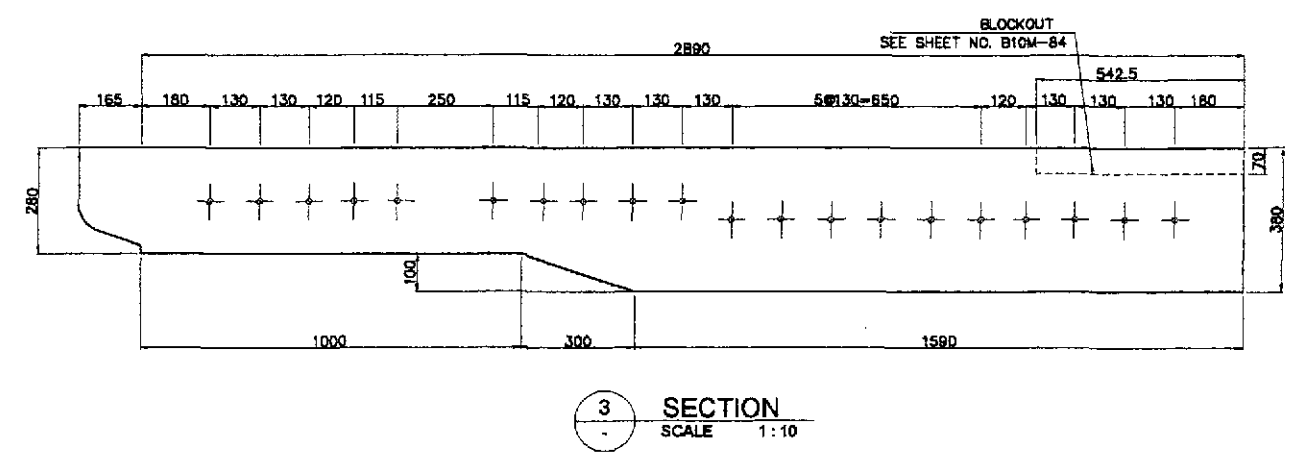
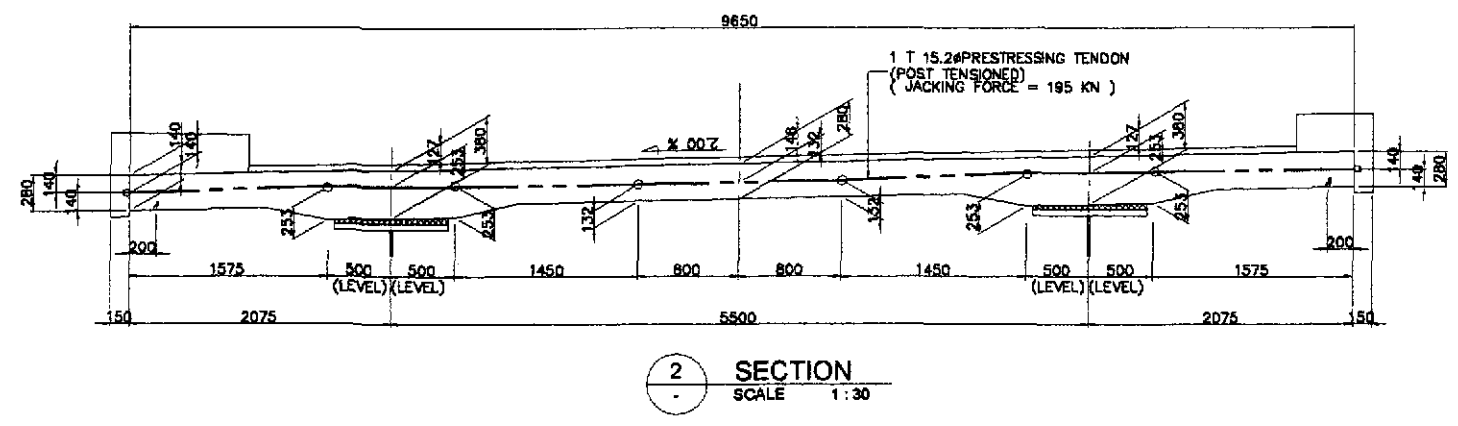
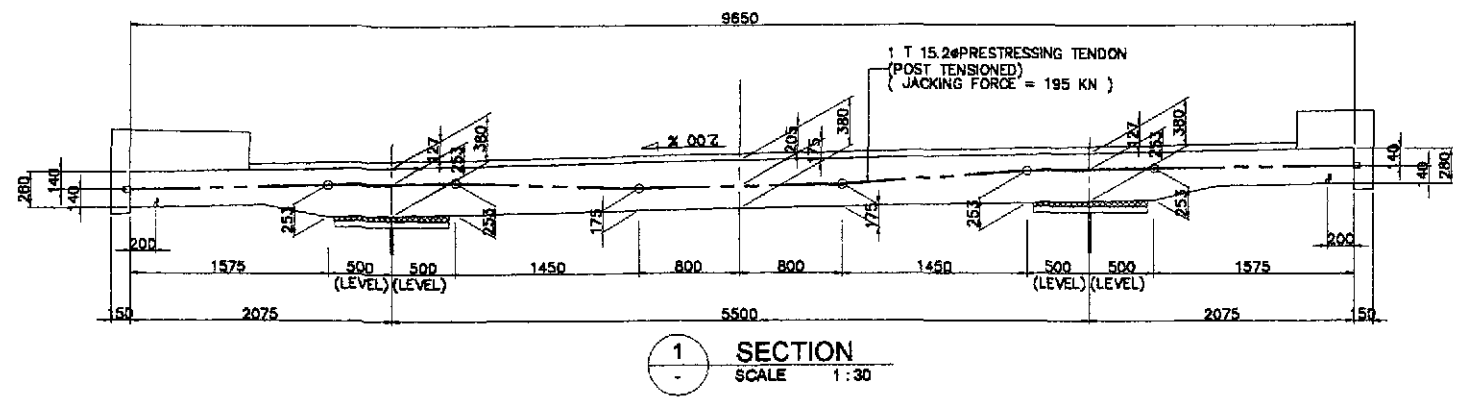
1 DETAILS OF TENDON
SCALE NTS

A DETAIL
SCALE 1:10



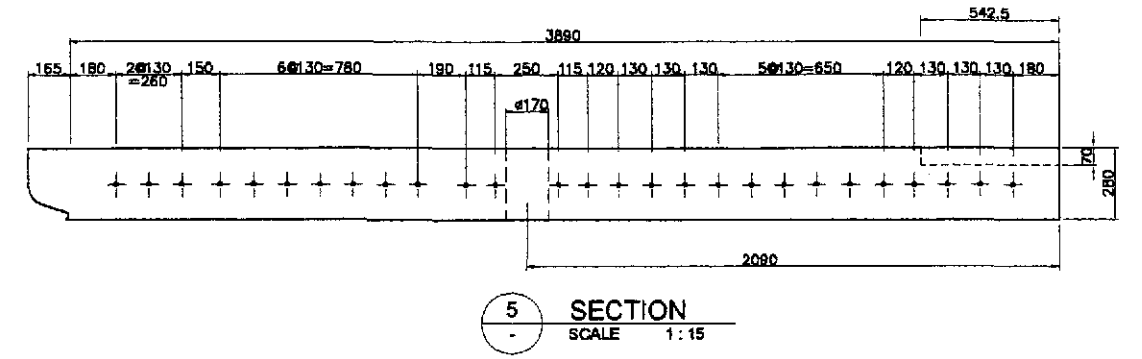
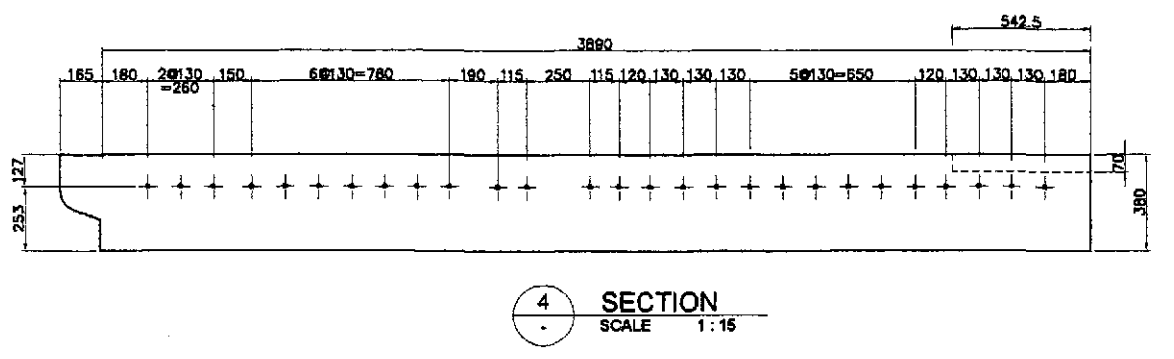
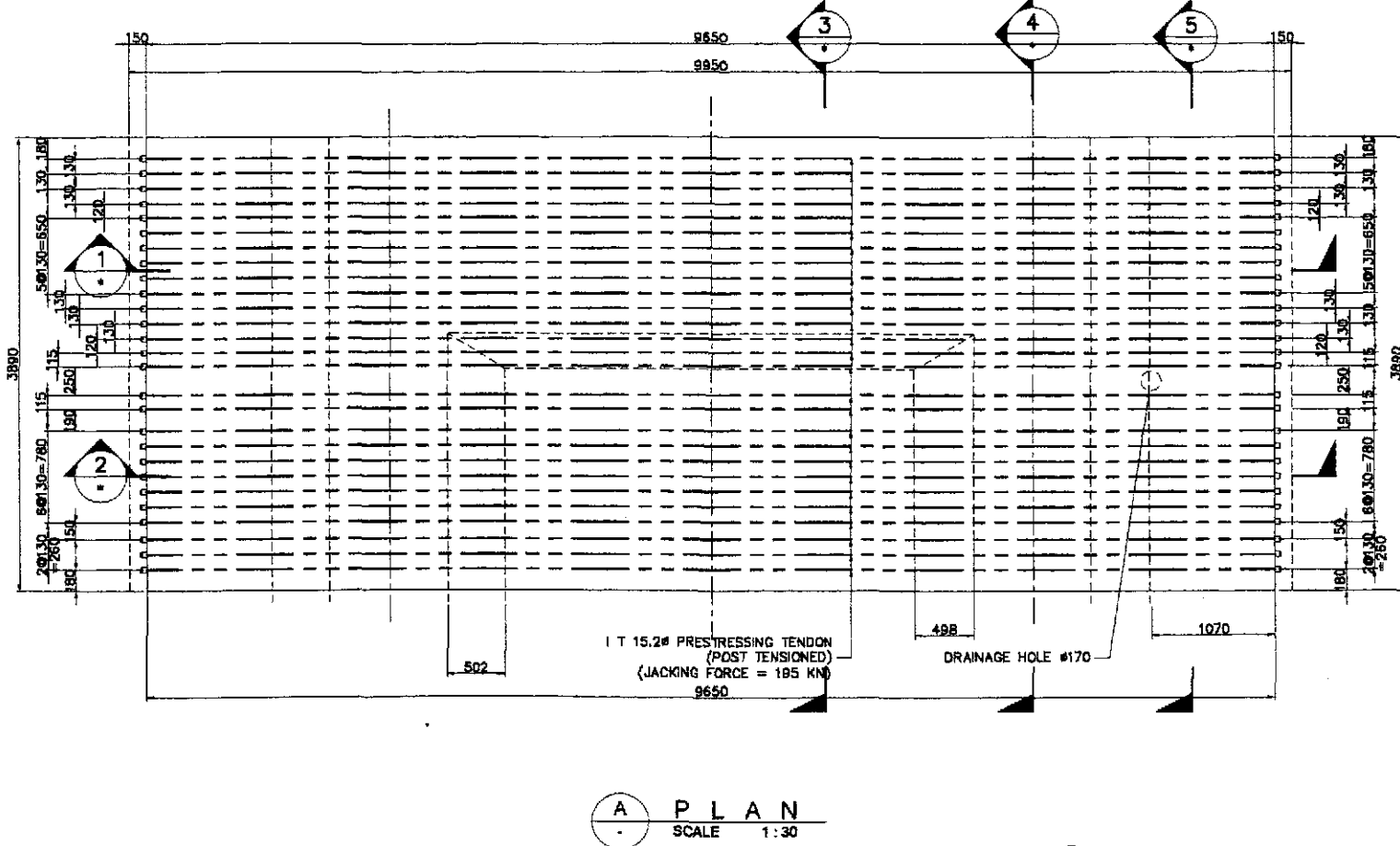
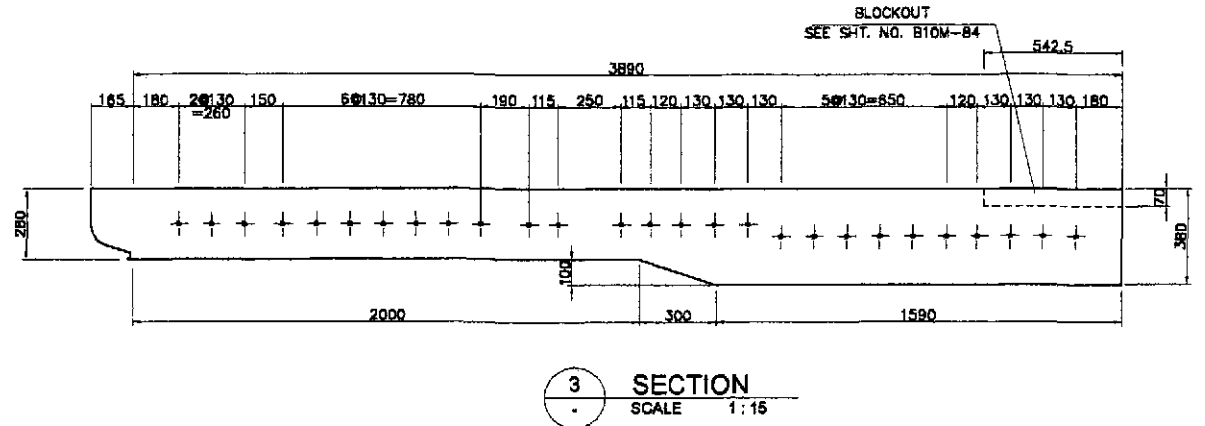
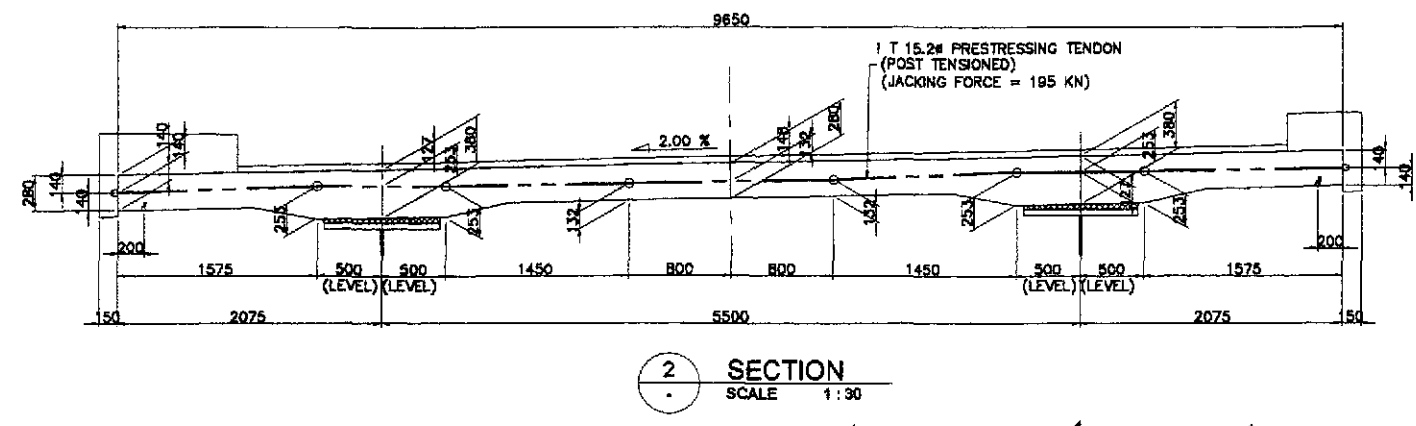
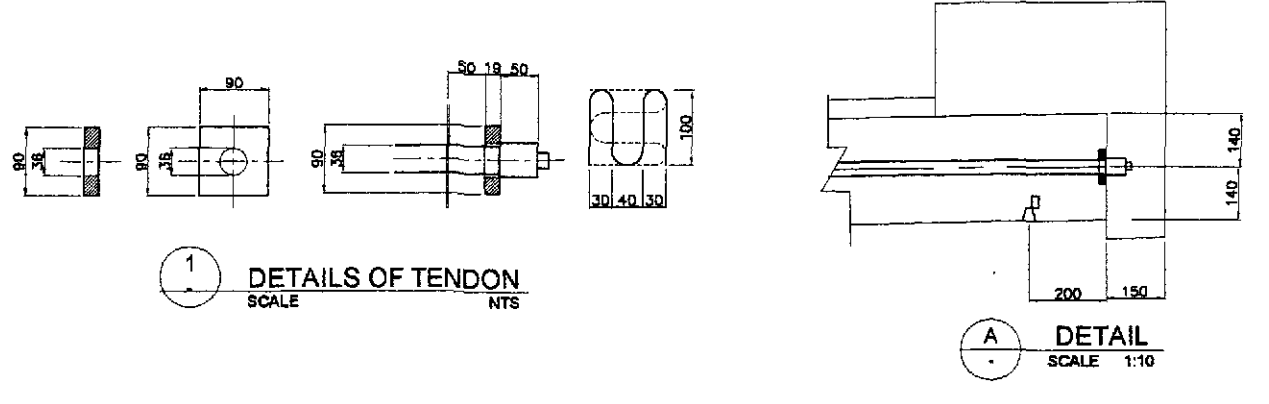
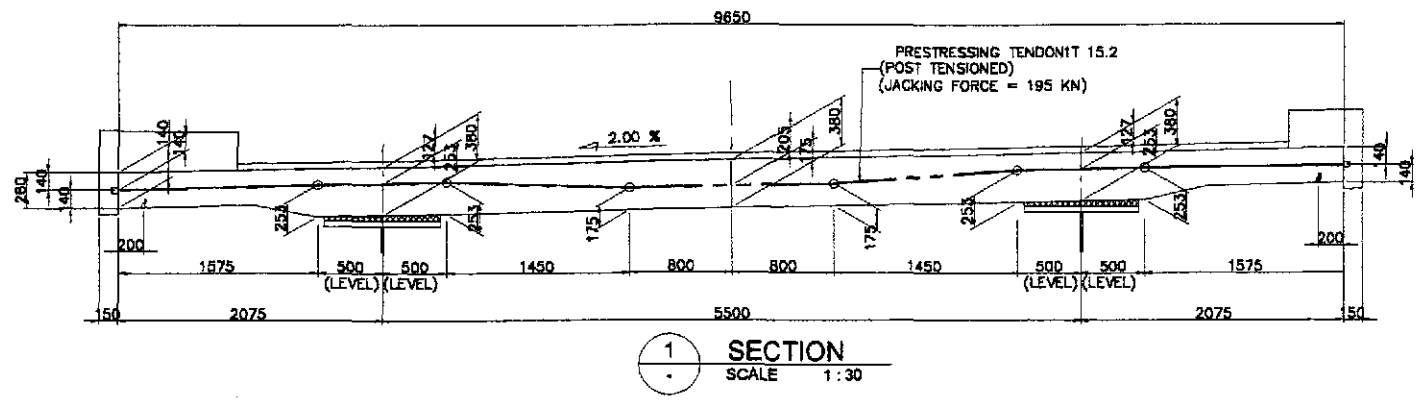
1 CAST-IN-SITU DECK SLAB AT PIER 6-R & PIER 11-R (TENDON LAYOUT)
SCALE 1:200

	DATE	SIGNATURE	REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS				PROJECT AND LOCATION :	SCALE :	SHEET CONTENTS :	SHEET NO. :	
	DESIGNED	10/11/02	<i>[Signature]</i>	BUREAU OF DESIGN				THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Plaridel, Cabanatuan and San Jose Bypasses) CABANATUAN BYPASS - CONTRACT PACKAGE III	AS SHOWN FULL SIZE A1	BRIDGE NO. 10 PAMPANGA RIVER BRIDGE CAST-IN-SITU DECK SLAB AT PIER 6-R & PIER 11-R (TENDON LAYOUT) (ULTIMATE STAGE)	B10M-37
	CHECKED	10/17/02	<i>[Signature]</i>	OFFICE OF THE SECRETARY							
	SUBMITTED	10/19/02	<i>[Signature]</i>	Submitted By:	Reviewed By:	Recommended By:	Approved By:				
			DANILO C. TRAJANO Project Director	ADRIANO M. DORCY Chief, Bridges Division	GILBERTO S. REYES Director IV (DC)	MANUEL M. BONDAN Undersecretary	SIMEON A. DATUMANONG Secretary				



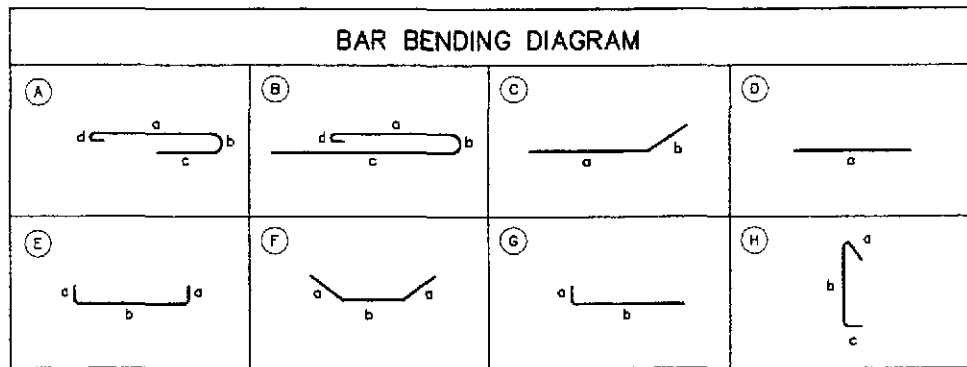
1 CAST-IN-SITU DECK SLAB AT PIER 15-L (TENDON LAYOUT)
SCALE 1:200

	DESIGNED	DATE	SIGNATURE		REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS				PROJECT AND LOCATION :	SCALE :	SHEET CONTENTS :	SHEET NO. :
	CHECKED	10/17/02	F. S. SALAS		BUREAU OF DESIGN Submitted By: DANILLO C. TRAJANO (Project Director) Reviewed By: ADRIANO M. DOROY (Chief, Bridge Division) Recommended By: GILBERTO S. REYES (Director IV (R/C))	OFFICE OF THE SECRETARY Recommended By: MANUEL M. BONDAN (Undersecretary) Approved By: SIMEON A. DATUMANONG (Secretary)	THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Piaridel, Cabanatuan and San Jose Bypasses) CABANATUAN BYPASS - CONTRACT PACKAGE III	AS SHOWN FULL SIZE A1	BRIDGE NO. 10 PAMPANGA RIVER BRIDGE CAST-IN-SITU DECK SLAB AT PIER 15-L (TENDON LAYOUT) (ULTIMATE STAGE)	B10M-38		



1 CAST-IN-SITU DECK SLAB AT PIER 11-L (TENDON LAYOUT)
SCALE 1:200

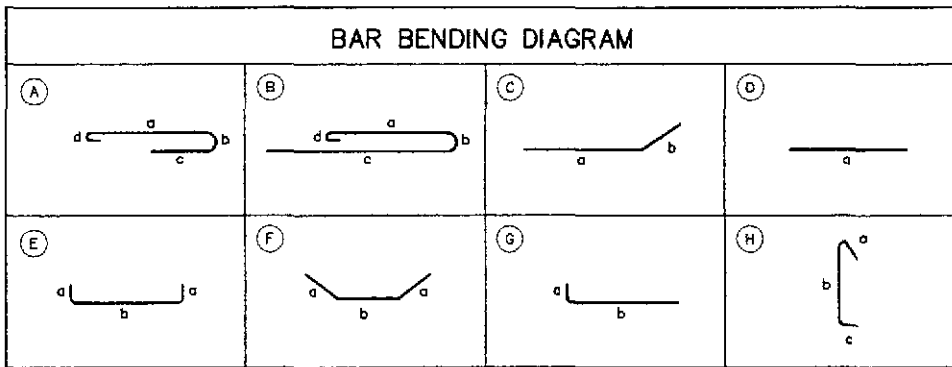
	DESIGNED	DATE	SIGNATURE		REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS				PROJECT AND LOCATION : THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Paridel, Cabanatuan and San Jose Bypasses) CABANATUAN BYPASS - CONTRACT PACKAGE III	SCALE : AS SHOWN FULL SIZE A1	SHEET CONTENTS : BRIDGE NO. 10 PAMPANGA RIVER BRIDGE CAST-IN-SITU DECK SLAB AT PIER 11-L (TENDON LAYOUT) (ULTIMATE STAGE)	SHEET NO. : B10M-39
	CHECKED	10/17/02	F. M. SEAS		BUREAU OF DESIGN Submitted By: DANILLO C. TRAJANO Project Director	Reviewed By: ADRIANO M. DORON Chief, Bridges Division	Recommended By: GILBERTO S. REYES Director IV (DC)	Office of the Secretary Recommended By: MANUEL M. BONDAN Undersecretary				



SCHEDULE OF REINFORCEMENT

LOCATION	BAR MARK	SIZE (mm)	BEND TYPE	DIMENSION(mm) OUT TO OUT					LENGTH (mm)	NO. REQ'D.	UNIT WEIGHT (kg/m)	WEIGHT (kg)	
				a	b	c	d	e				GRADE 40	GRADE 60
CAST-IN-SITU DECK SLAB (L = 2890) PIER 6-R & PIER 11-R	S1	20	A	2298	262	1557	270		4390	30	2.466		325
	S2	20	B	2298	262	2872	270		5710	32	2.466		451
	S3	20	C	1515	980				2500	30	2.466		185
	S4	12	D	2850					2850	48	0.888	122	
	S5	12	D	9550					9550	21	0.888	179	
	S6	12	E	165	9550				9880	10	0.888	88	
	S7	12	D	9550					9550	2	0.888	17	
	S8	12	F	1581	993				4160	20	0.888	74	
	S9	12	F	1581	6500				9670	12	0.888	104	
	S10	12	G	165	2525				2690	22	0.888	53	
	S11	20	B	757	262				1780	2	2.466		9
	S12	20	D	2000					2000	4	2.466		20
	S13	25	D	9550					9550	6	3.854		221
	S14	12	D	9550					9550	3	0.888	26	
	S15	16	D	600					600	16	1.579	16	
	S16	12	D	770					770	30	0.888	21	
	S17	12	H	130	230	110			470	26	0.888	11	
	S18	12	H	130	330	110			570	26	0.888	14	
TOTAL =											725 kgs.	1,211 kgs.	

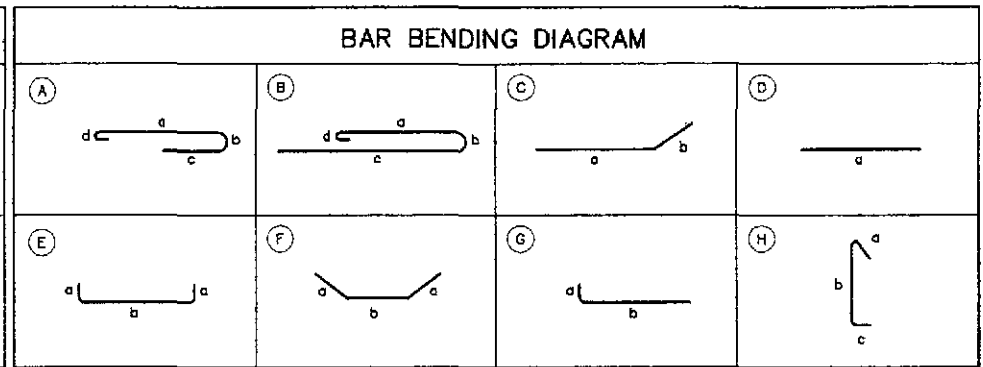
THE REINFORCEMENT SHOWN ON THIS TABLE IS FOR REFERENCE ONLY. THE CONTRACTOR SHOULD CHECK AND VERIFY ALL DIMENSIONS, SIZES AND QUANTITIES OF REINFORCEMENT.



SCHEDULE OF REINFORCEMENT

LOCATION	BAR MARK	SIZE (mm)	BEND TYPE	DIMENSION(mm) OUT TO OUT					LENGTH (mm)	NO. REQ'D.	UNIT WEIGHT (kg/m)	WEIGHT (kg)	
				a	b	c	d	e				GRADE 40	GRADE 60
CAST-IN-SITU DECK SLAB (L = 2890) PIER 11-L	S1	20	A	2298	262	1557	270		4390	30	2.466		325
	S2	20	B	2298	262	2872	270		5710	32	2.466		451
	S3	20	C	1515	980				2500	30	2.466		185
	S4	12	D	2850					2850	48	0.888	122	
	S5	12	D	9550					9550	21	0.888	179	
	S6	12	E	165	9550				9880	10	0.888	88	
	S7	12	D	9550					9550	2	0.888	17	
	S8	12	F	1581	993				4160	20	0.888	74	
	S9	12	F	1581	6500				9670	12	0.888	104	
	S10	12	G	165	2525				2690	22	0.888	53	
	S11	20	B	757	262				1780	2	2.466		9
	S12	20	D	2000					2000	4	2.466		20
	S13	25	D	9550					9550	6	3.854		221
	S14	12	D	9550					9550	3	0.888	26	
	S15	16	D	600					600	16	1.579	16	
	S16	12	D	770					770	30	0.888	21	
	S17	12	H	130	230	110			470	26	0.888	11	
	S18	12	H	130	330	110			570	26	0.888	14	
TOTAL =											725 kgs.	1,211 kgs.	

THE REINFORCEMENT SHOWN ON THIS TABLE IS FOR REFERENCE ONLY. THE CONTRACTOR SHOULD CHECK AND VERIFY ALL DIMENSIONS, SIZES AND QUANTITIES OF REINFORCEMENT.



SCHEDULE OF REINFORCEMENT

LOCATION	BAR MARK	SIZE (mm)	BEND TYPE	DIMENSION(mm) OUT TO OUT					LENGTH (mm)	NO. REQ'D.	UNIT WEIGHT (kg/m)	WEIGHT (kg)	
				a	b	c	d	e				GRADE 40	GRADE 60
CAST-IN-SITU DECK SLAB (L = 3890) PIER 11-L	S1	20	A	3298	262	2507	270		6340	30	2.466		470
	S2	20	B	3298	262	3872	270		7710	32	2.466		609
	S3	20	C	1515	980				2500	30	2.466		185
	S4	12	D	3850					3850	48	0.888	165	
	S5	12	D	9550					9550	28	0.888	238	
	S6	12	E	165	9550				9880	17	0.888	150	
	S7	12	D	9550					9550	2	0.888	17	
	S8	12	F	1581	993				4160	34	0.888	126	
	S9	12	F	1581	6500				9670	12	0.888	104	
	S10	12	G	165	2525				2690	22	0.888	53	
	S11	20	B	1757	262				3780	2	2.466		19
	S12	20	D	2000					2000	4	2.466		20
	S13	25	D	9550					9550	6	3.854		221
	S14	12	D	9550					9550	3	0.888	26	
	S15	16	D	600					600	16	1.579	16	
	S16	12	D	770					770	30	0.888	21	
	S17	12	H	130	230	110			470	44	0.888	19	
	S18	12	H	130	330	110			570	34	0.888	18	
TOTAL =											953 kgs.	1,524 kgs.	

THE REINFORCEMENT SHOWN ON THIS TABLE IS FOR REFERENCE ONLY. THE CONTRACTOR SHOULD CHECK AND VERIFY ALL DIMENSIONS, SIZES AND QUANTITIES OF REINFORCEMENT.

SCHEDULE OF PRESTRESSING TENDONS

CAST-IN-SITU DECK SLAB	TYPE-SIZE	JACKING FORCE PER TENDON (kN)	ELONGATION OF TENDON		NO. OF TENDONS (PCS.)	LENGTH OF TENDON (m)	UNIT WEIGHT PER TENDON (kg/m)	WEIGHT (kg)
			LEFT (mm)	RIGHT (mm)				
6-R (2890)	1-15.2#	195	35	35	20	12.362	1.10	272
11-L (3890)	1-15.2#	195	35	35	27	12.362	1.10	368
11-R (2890)	1-15.2#	195	35	35	20	12.362	1.10	272
15-L (2890)	1-15.2#	195	35	35	20	12.362	1.10	272
TOTAL =								1,184 kgs.

THE PRESTRESSING TENDONS SHOWN ON THIS TABLE IS FOR REFERENCE ONLY. THE CONTRACTOR SHOULD CHECK AND VERIFY ALL DIMENSIONS, SIZES AND QUANTITIES OF PRESTRESSING TENDONS.

- NOTE :
- PRESTRESSING STEEL SHALL BE SEVEN-WIRE UNCOATED STRESS-RELIEVED STRANDS AND SHALL CONFORM TO AASTHO M203 (ASTM A 146) WITH MINIMUM ULTIMATE STRENGTH OF $F_y = 1860 \text{ MPa}$ (270 ksi).
 - FORCES IN TENDONS AND ELONGATIONS OF TENDONS SHALL BE CALCULATED ASSUMING THE FOLLOWING CHARACTERISTICS :
 - ANCHORAGE SLIP = 6 MM (AFTER LOCK-OFF)
 - WOBBLE COEFFICIENT = 0.002/METER GALVANIZED STEEL SHEATING
 - CURVATURE COEFFICIENT = 0.30 PER RADIAN
 - AN ADDITIONAL 1.35 M IS ADDED AT BOTH ENDS OF JACKING FOR TENDON LENGTH.
 - THE ELONGATION SHOWN IN THE TABLE IS FOR REFERENCE ONLY. THE CONTRACTOR SHOULD SUBMIT CALCULATION OF ELONGATIONS BASED ON THE PARAMETERS GIVEN.

	DESIGNED	DATE	SIGNATURE		REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS			PROJECT AND LOCATION : THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Plaridel, Cabanatuan and San Jose Bypasses)	SCALE : AS SHOWN	SHEET CONTENTS : BRIDGE NO. 10 PAMPANGA RIVER BRIDGE SCHEDULE OF REINFORCEMENT (CAST-IN-SITU DECK SLAB) (ULTIMATE STAGE)	SHEET NO. : B10M-43
	CHECKED	10/17/02	F. M. SALAS		BUREAU OF DESIGN OFFICE OF THE SECRETARY						
SUBMITTED	11/19/02	C. SANTOS	DANILO C. TRAJANO Project Director	ADRIANO M. BORDY Chief, Bridge Division	GILBERTO S. REYES Director IV (CIC)	MANUEL M. BONGON Undersecretary	SIMEON A. DATUMANONG Secretary				