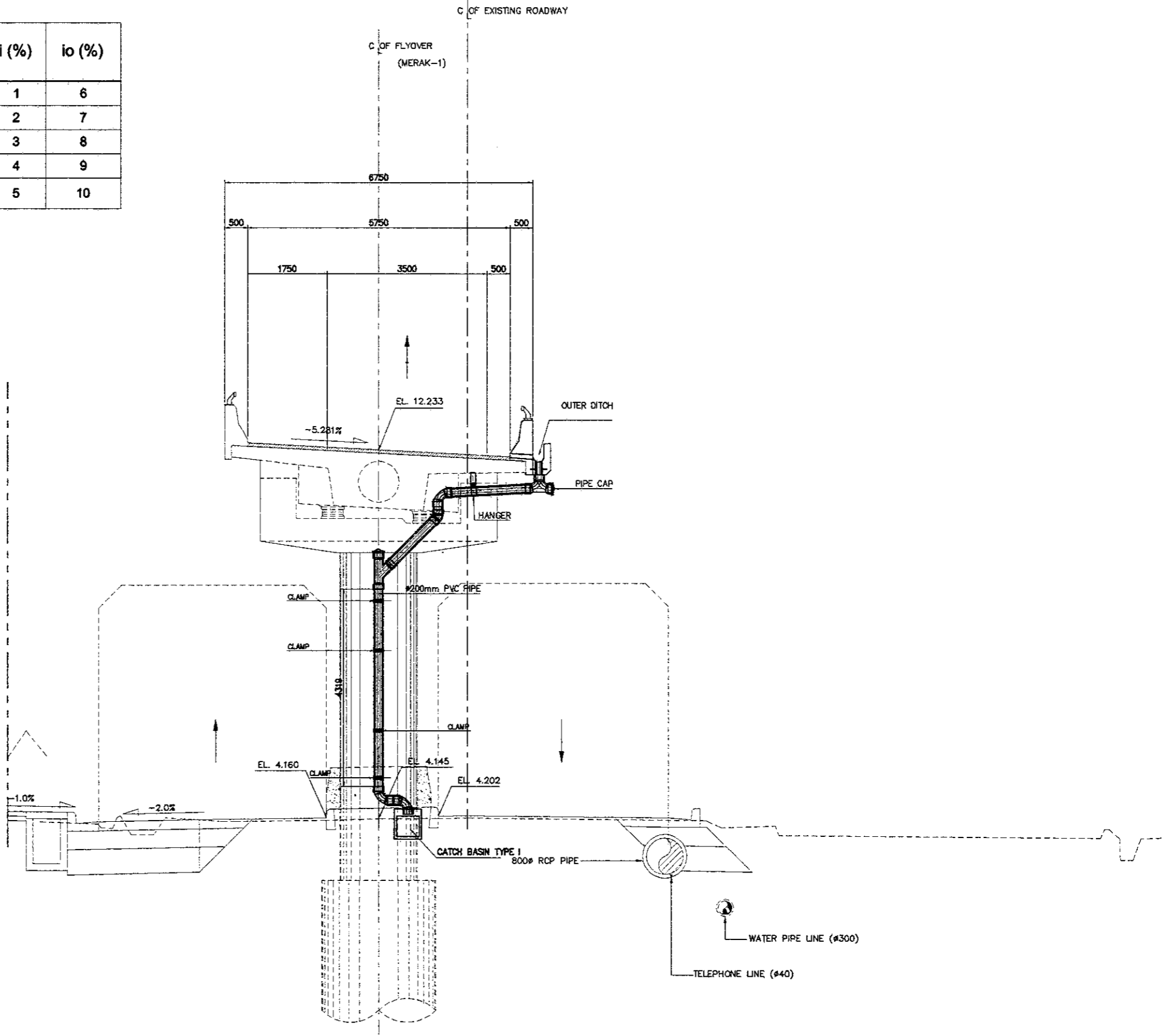
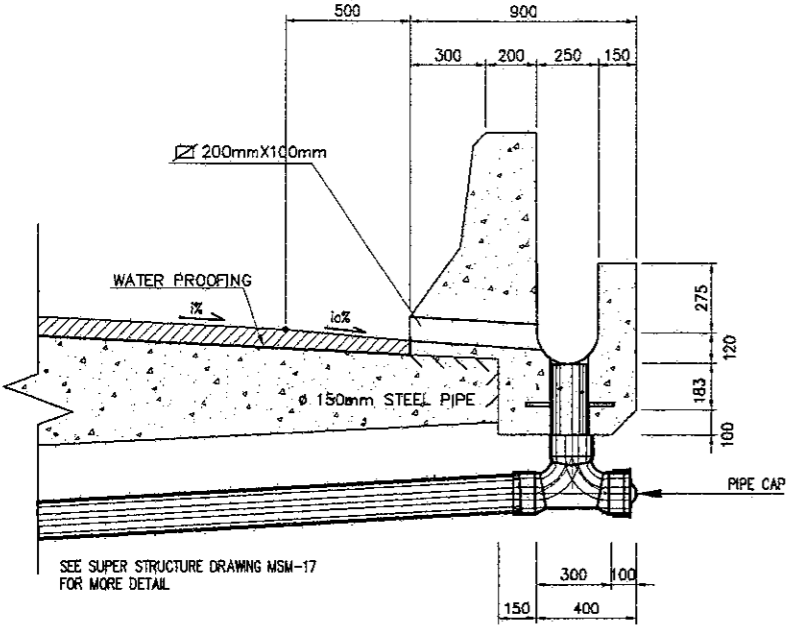


**DETAIL OF SURFACE DOWN**
  
 SCALE 1:30

i (%)	io (%)
1	6
2	7
3	8
4	9
5	10

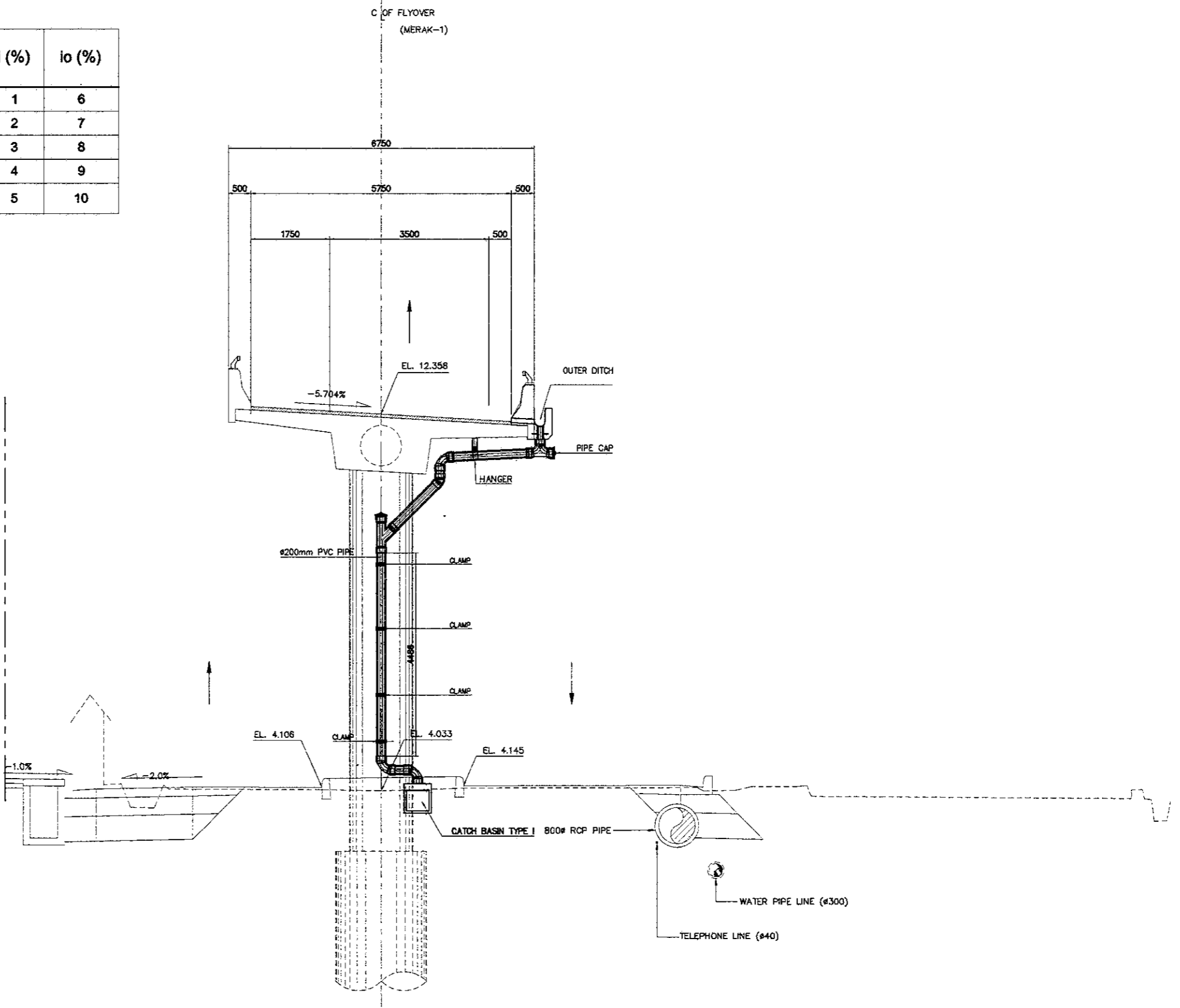


**1 P4 SECTION (STA. 0 + 942.50)**
  
 SCALE 1:100

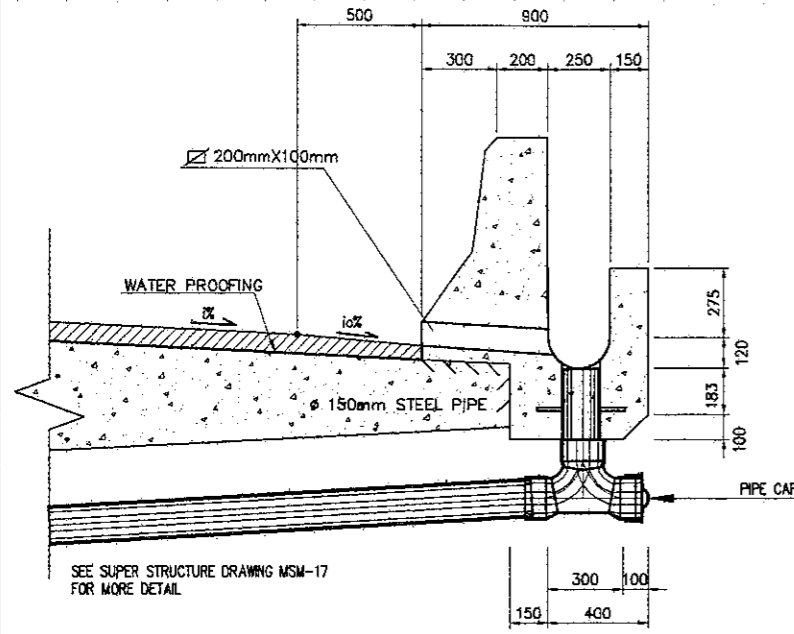


DETAIL OF SURFACE DOWN  
 SCALE 1:30

i (%)	io (%)
1	6
2	7
3	8
4	9
5	10

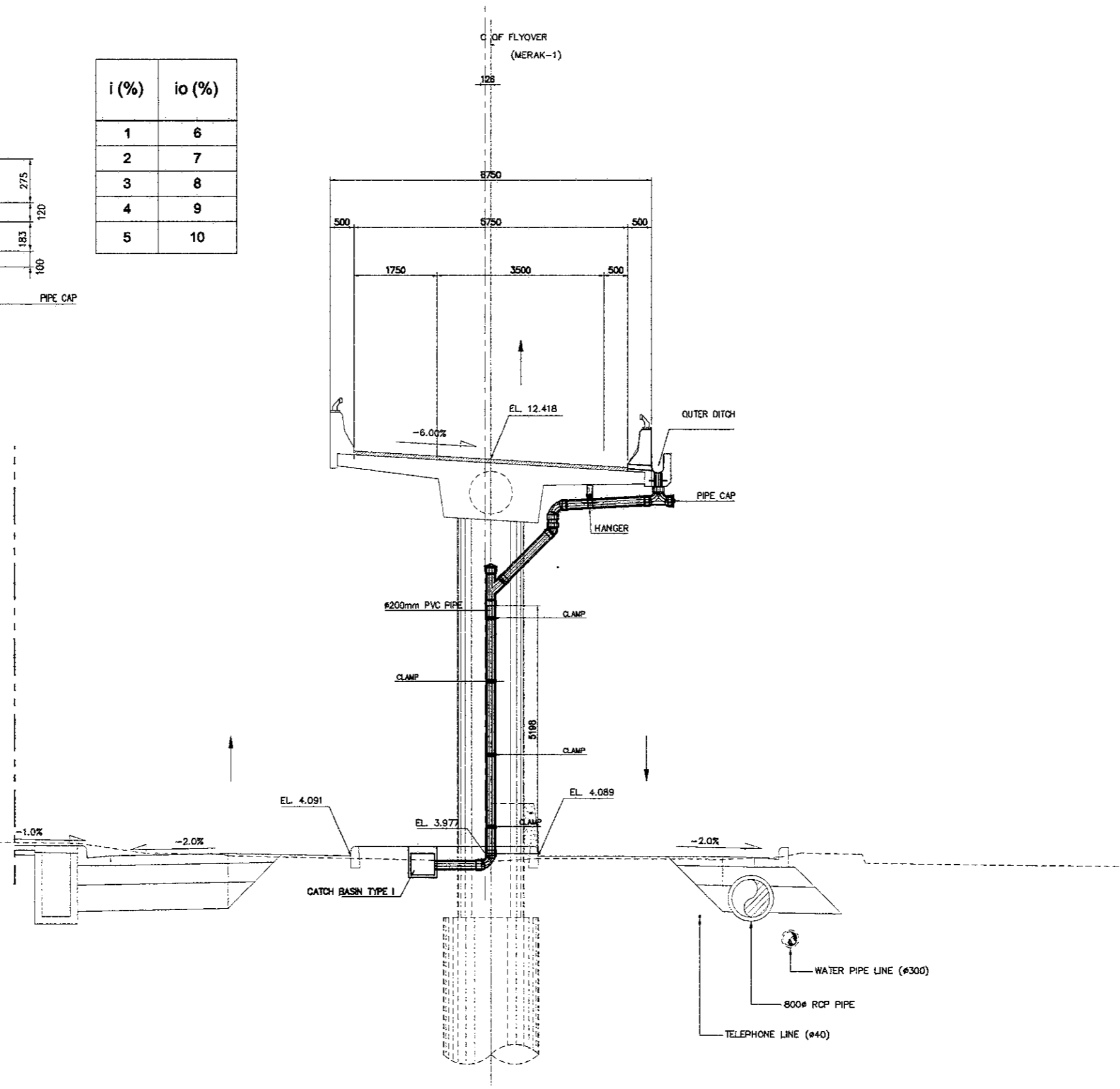


1 P5 SECTION (STA. 0 + 962.50)  
 SCALE 1:100

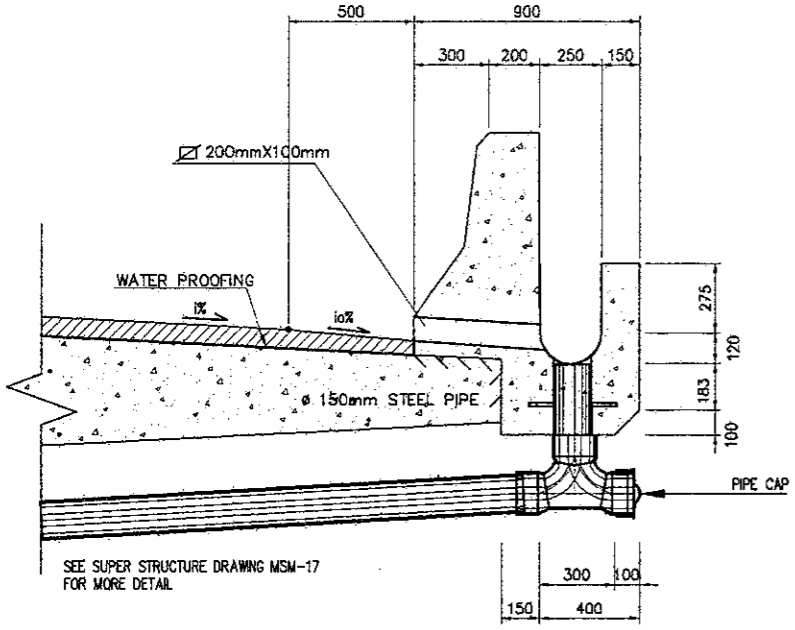


**DETAIL OF SURFACE DOWN**  
 SCALE 1:30

i (%)	io (%)
1	6
2	7
3	8
4	9
5	10

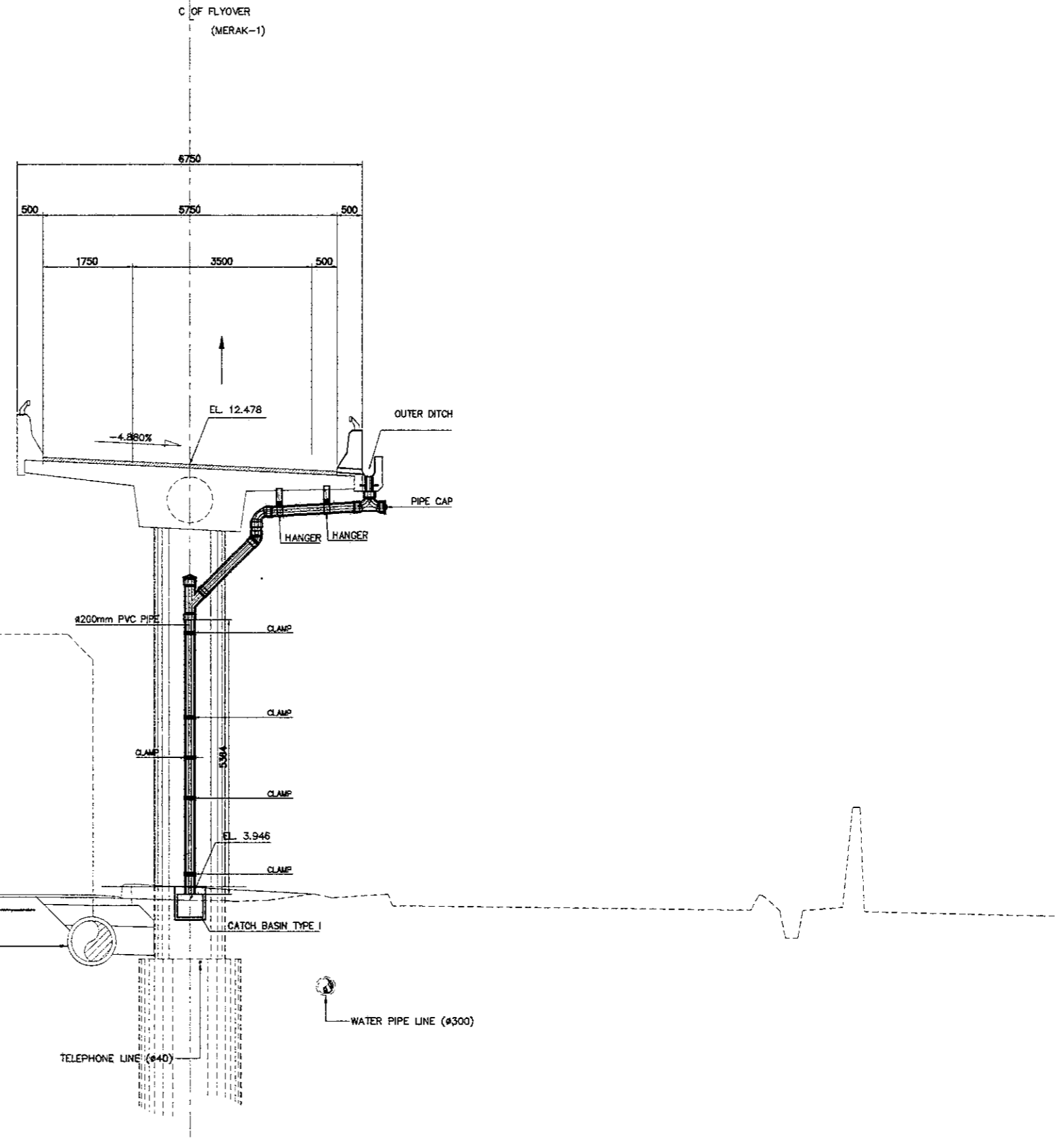


**P6 SECTION (STA. 0 + 982.50)**  
 SCALE 1:100



**DETAIL OF SURFACE DOWN**  
 SCALE 1:30

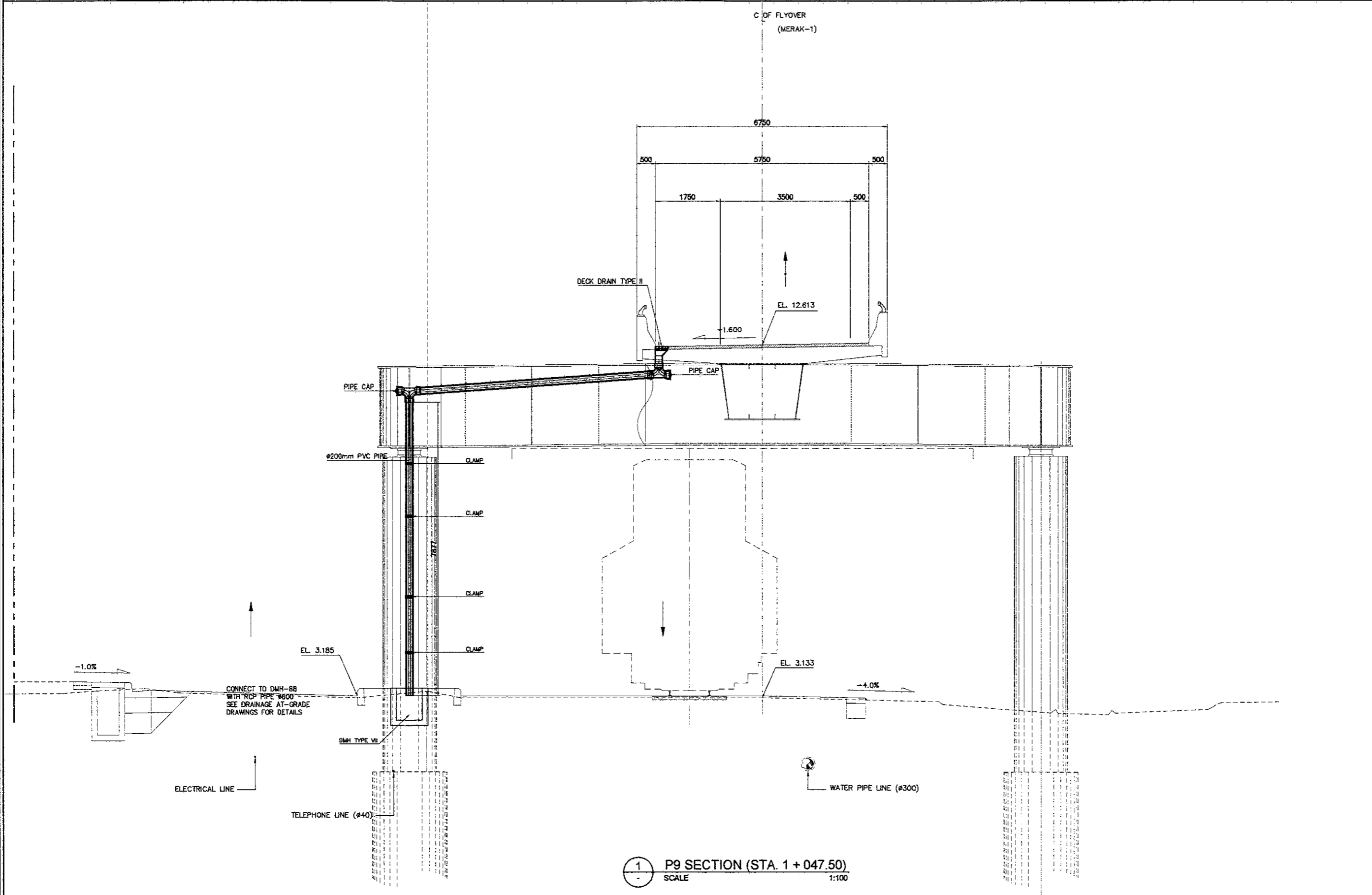
i (%)	io (%)
1	6
2	7
3	8
4	9
5	10



**1 P7 SECTION (STA. 1 + 002.50)**  
 1:100

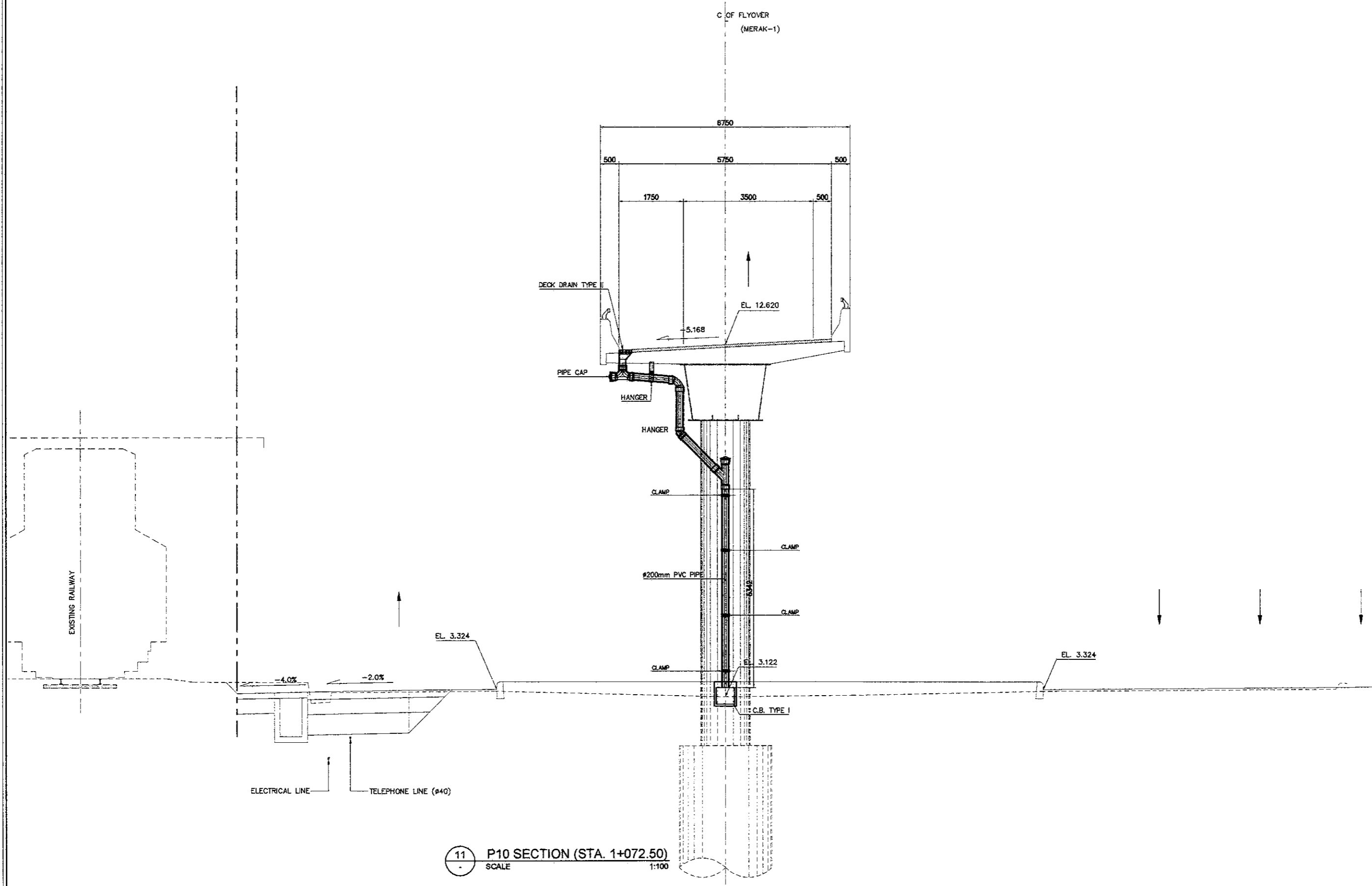


DESIGNED BY		CHECKED BY		SUBMITTED BY	
Name	R. UENO	Name	T. OKUMURA	Name	M. KIUCHI
Sign		Sign		Sign	
Date		Date		Date	



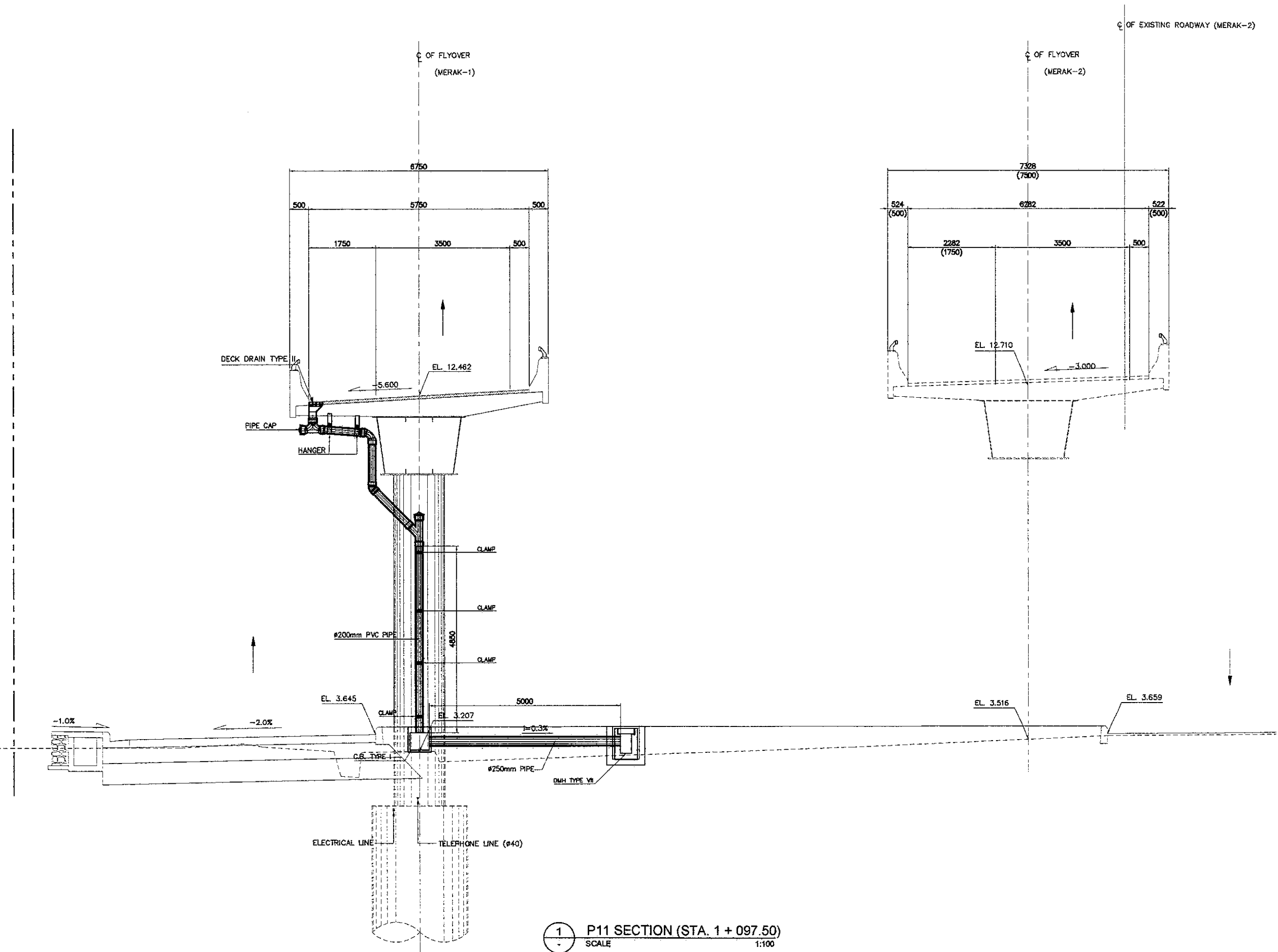
1 P9 SECTION (STA. 1 + 047.50)  
 SCALE 1:100

DESIGNED BY		CHECKED BY		SUBMITTED BY	
Name	R. UENO	Name	T. OKUMURA	Name	M. KIUCHI
Sign		Sign		Sign	
Date		Date		Date	



11 P10 SECTION (STA. 1+072.50)
   
 SCALE 1:100

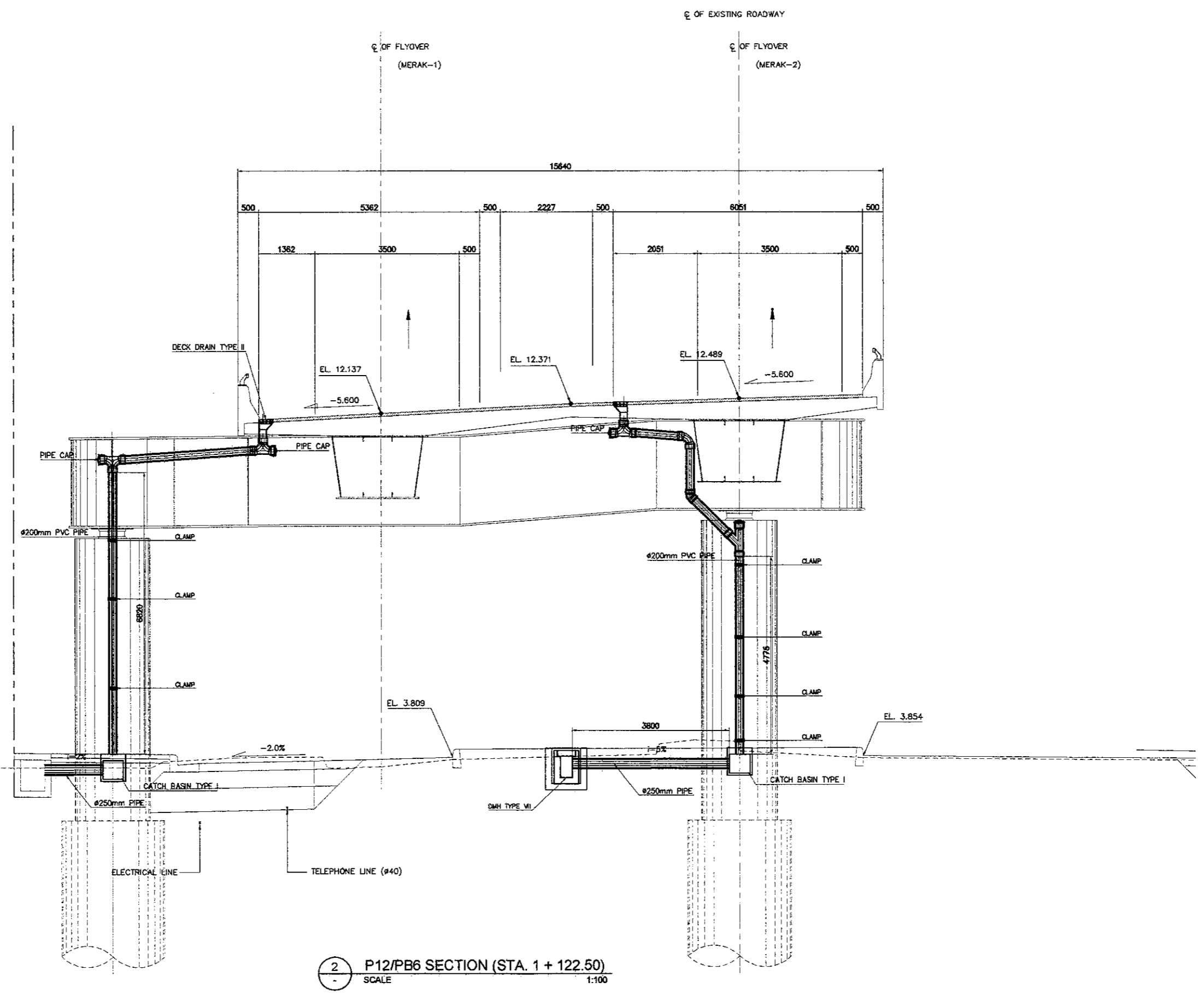
DESIGNED BY		CHECKED BY		SUBMITTED BY	
Name	R. UENO	Name	T. OKUMURA	Name	M. KIUCHI
Sign		Sign		Sign	
Date		Date		Date	



1 P11 SECTION (STA. 1 + 097.50)  
 SCALE 1:100

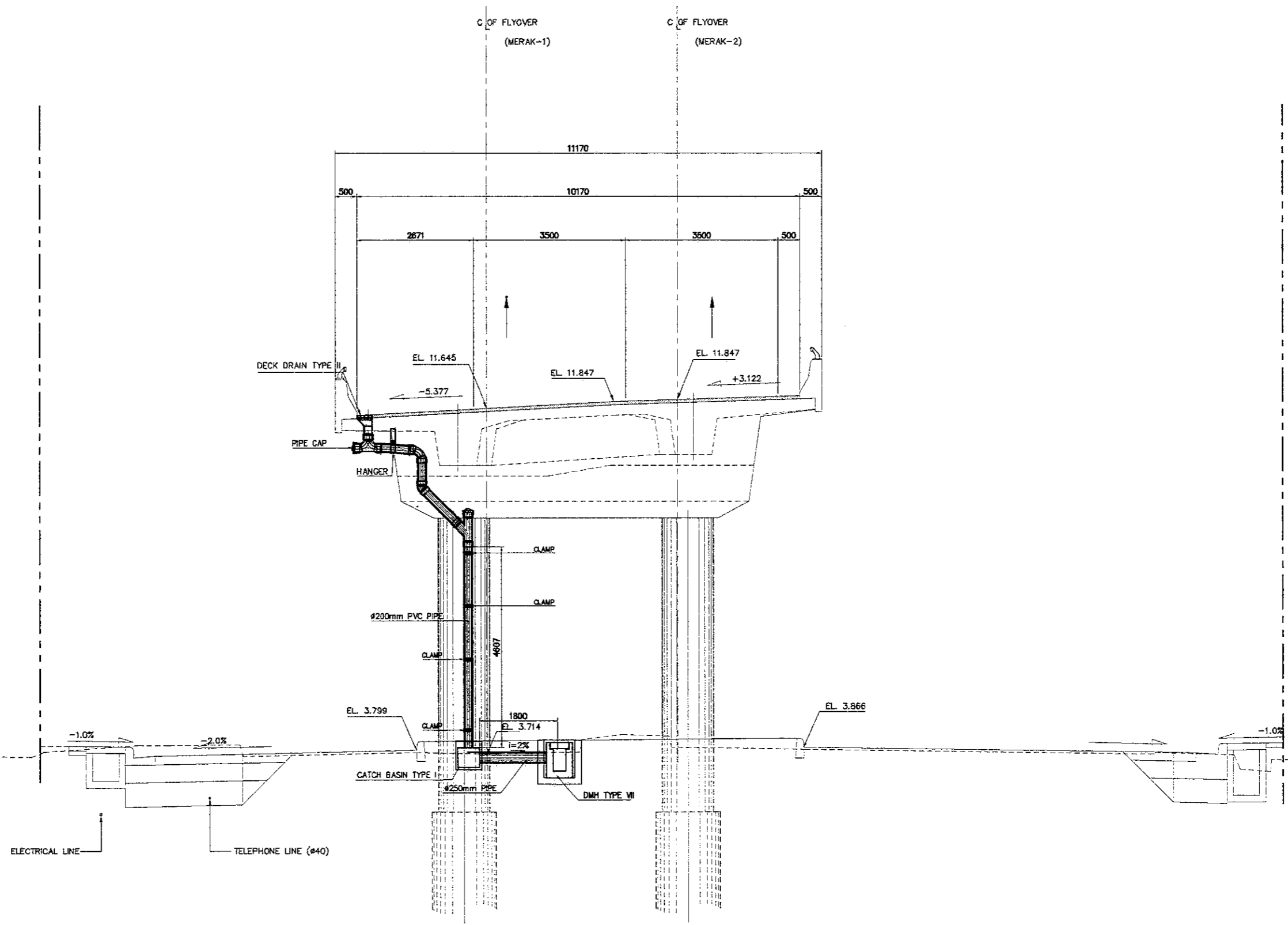


DESIGNED BY		CHECKED BY		SUBMITTED BY	
Name	R. UENO	Name	T. OKUMURA	Name	M. KIUCHI
Sign		Sign		Sign	
Date		Date		Date	



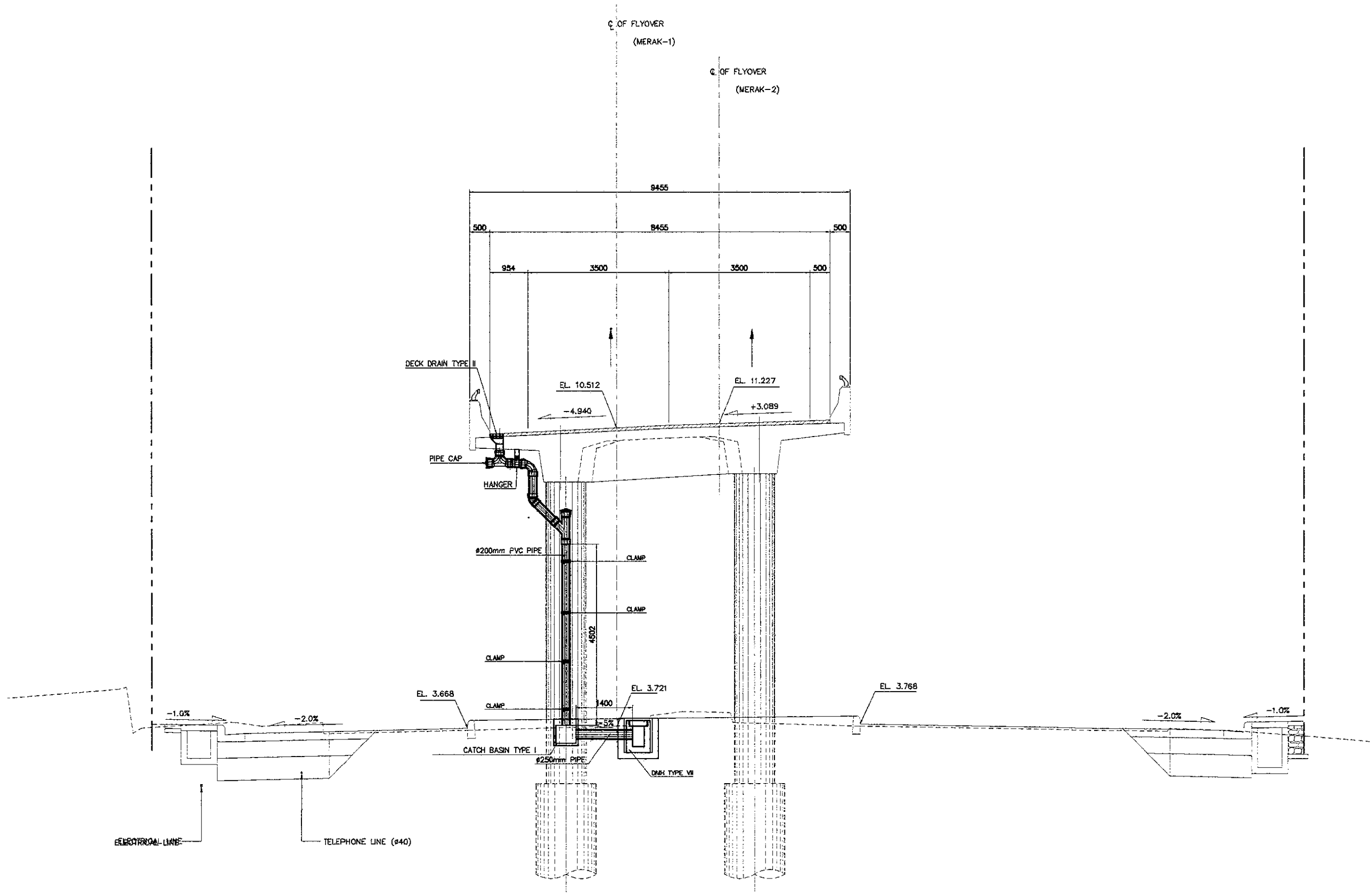
2 P12/PB6 SECTION (STA. 1 + 122.50)  
 SCALE 1:100

DESIGNED BY		CHECKED BY		SUBMITTED BY	
Name	R. UENO	Name	T. OKUMURA	Name	M. KIUCHI
Sign		Sign		Sign	
Date		Date		Date	



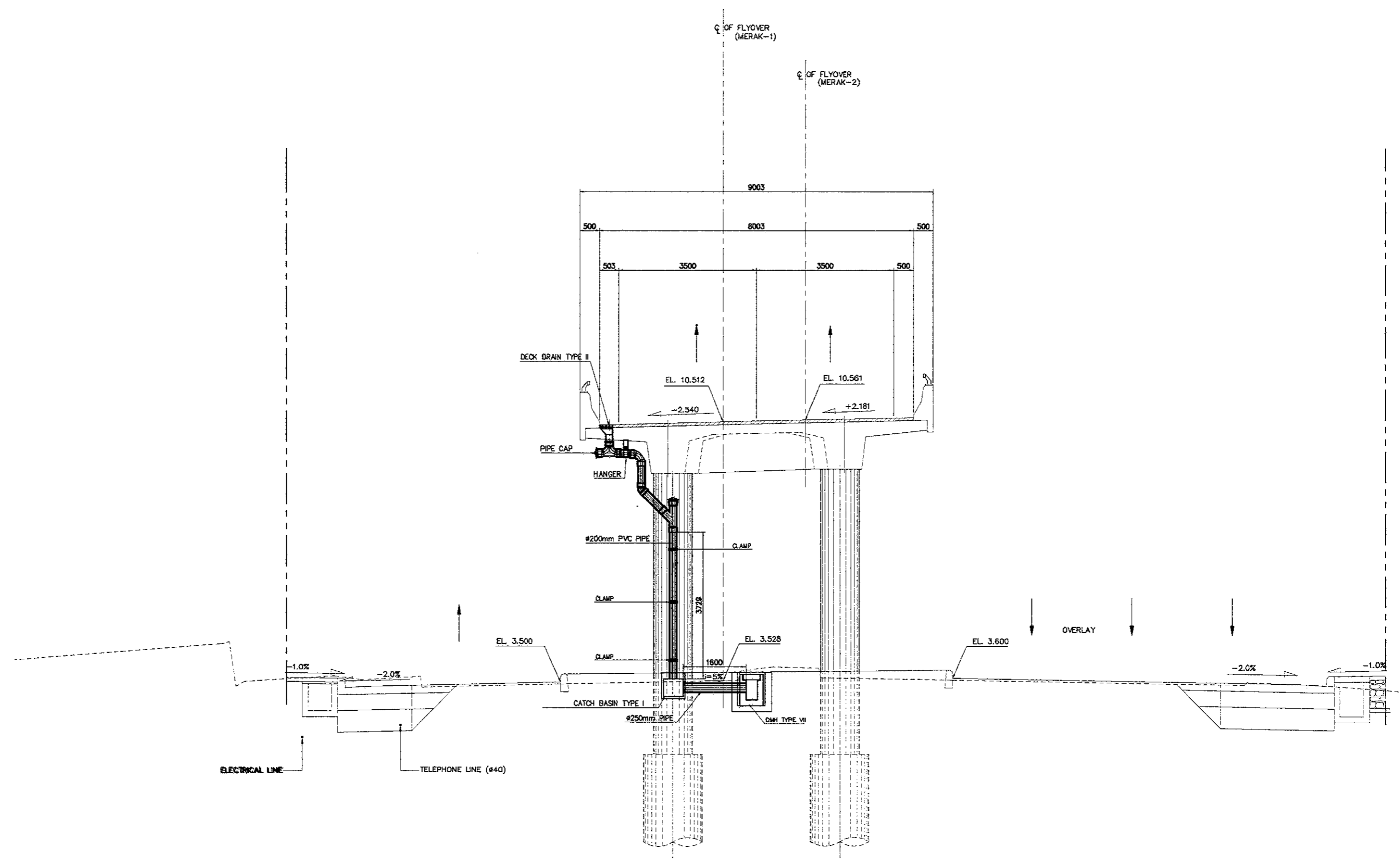
3 P13/PB7 SECTION (STA. 1 + 147.50)  
 SCALE 1:100

DESIGNED BY		CHECKED BY		SUBMITTED BY	
Name	R. UENO	Name	T. OKUMURA	Name	M. KIUCHI
Sign		Sign		Sign	
Date		Date		Date	



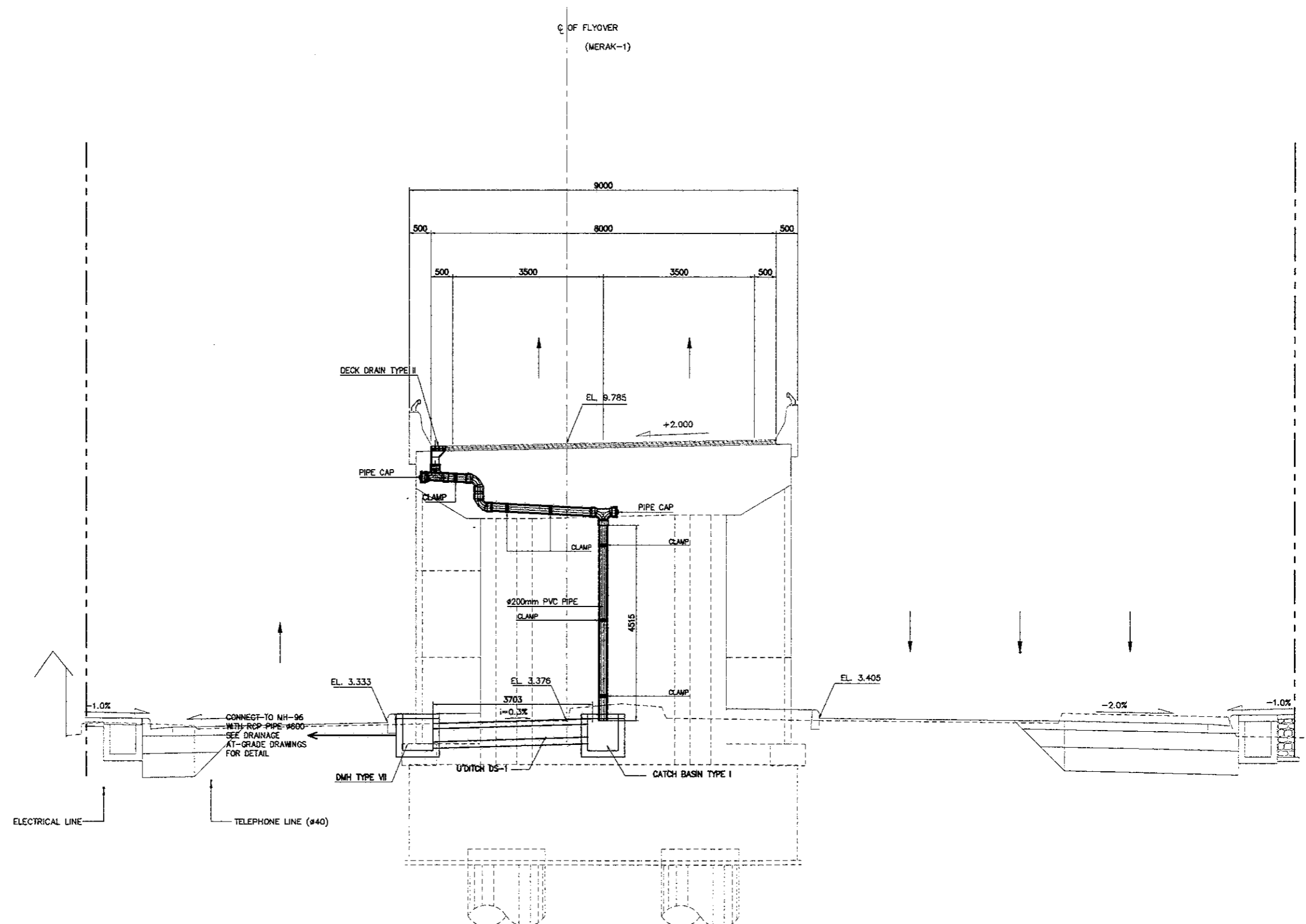
4 P14/PB8 SECTION (STA. 1 + 167.50)  
 1:100

DESIGNED BY		CHECKED BY		SUBMITTED BY	
Name	R. UENO	Name	T. OKUMURA	Name	M. KIUCHI
Sign		Sign		Sign	
Date		Date		Date	



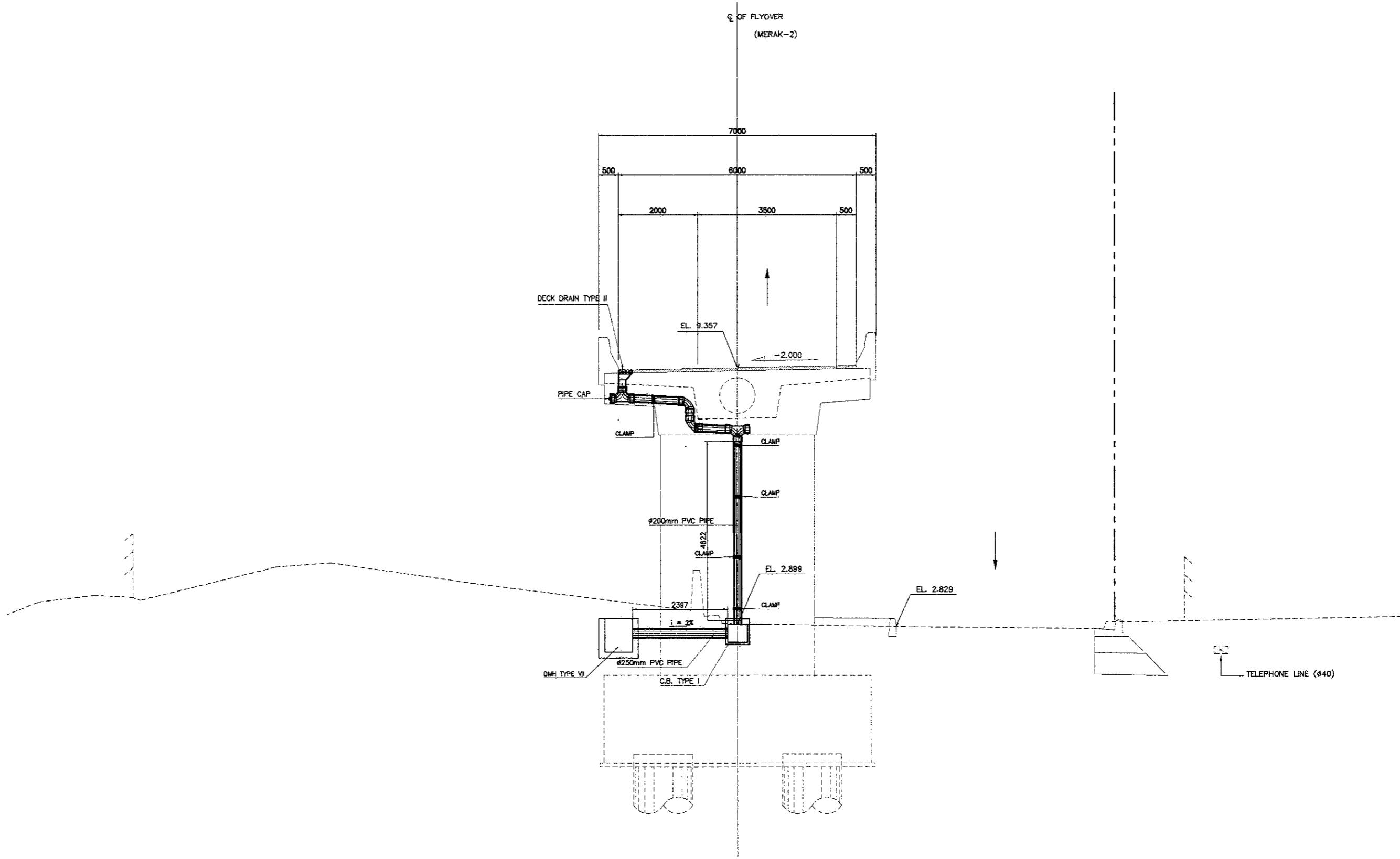
5 P15/PB9 SECTION (STA. 1 + 187.50)
   
 SCALE 1:100

DESIGNED BY		CHECKED BY		SUBMITTED BY	
Name	R. UENO	Name	T. OKUMURA	Name	M. KIUCHI
Sign		Sign		Sign	
Date		Date		Date	



6 A2/AB2 SECTION (STA. 1 + 207.50)
   
 SCALE 1:100

DESIGNED BY		CHECKED BY		SUBMITTED BY	
Name	R. UENO	Name	T. OKUMURA	Name	M. KIUCHI
Sign		Sign		Sign	
Date		Date		Date	



7 AB1 SECTION (STA. 0 + 288.861)
   
 SCALE 1:100

DESIGNED BY		CHECKED BY		SUBMITTED BY	
Name	R. UENO	Name	T. OKUMURA	Name	M. KIUCHI
Sign		Sign		Sign	
Date		Date		Date	

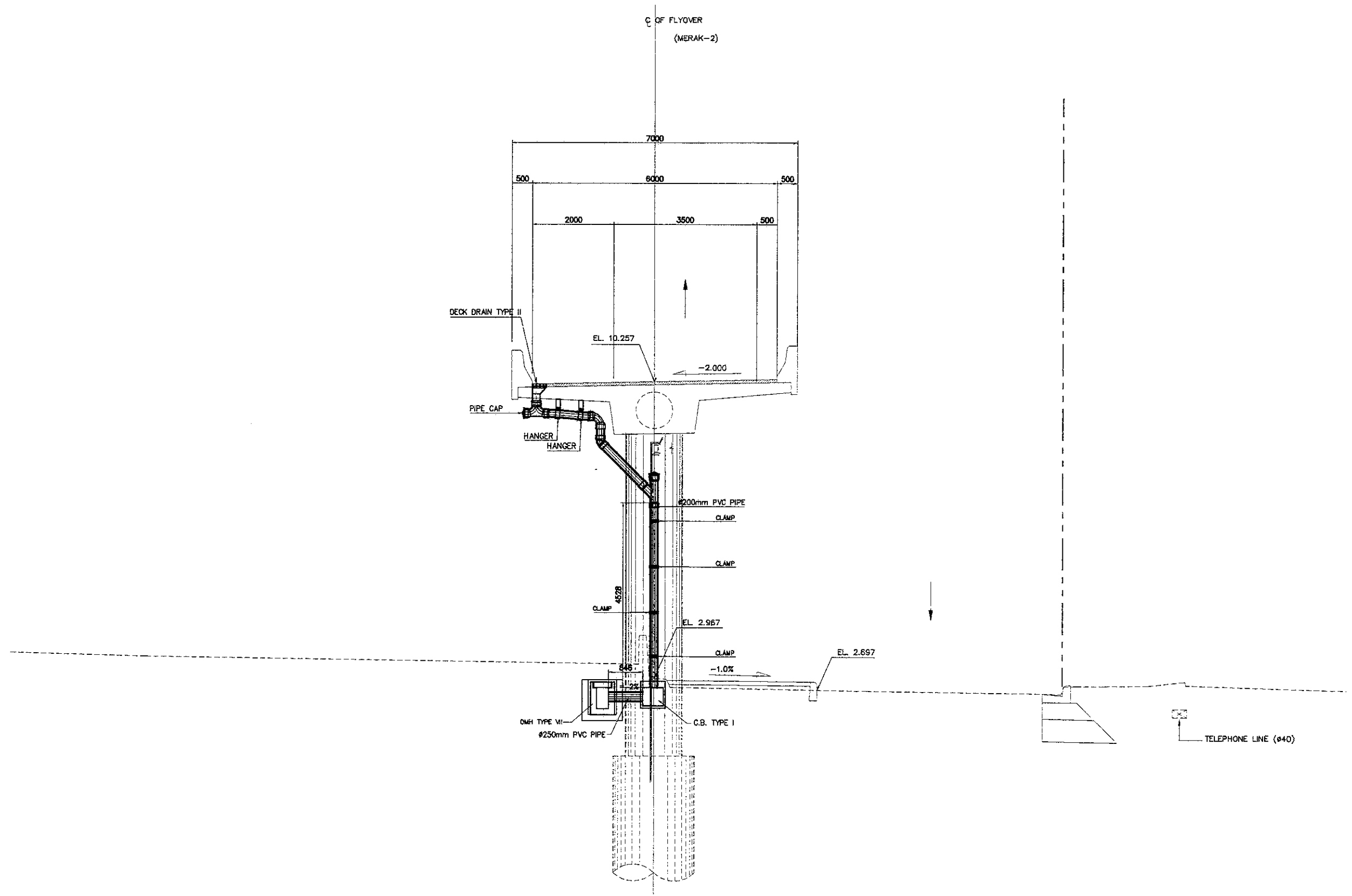
PROJECT AND LOCATION :
   
 DETAILED DESIGN STUDY OF
   
 NORTH JAVA CORRIDOR FLYOVER PROJECT
   
 MERAK FLYOVER - CONTRACT PACKAGE 1
   
 ( MERAK - BALARAJA )
   
 BANTEN PROVINCE

SCALE :
   
 1 : 100
   
 FULL SIZE A3

DRAWING TITLE :
   
 ABUTMENT AND PIER SECTIONS
   
 SHOWING DOWNSPOUT PIPE
   
 19 OF 23

DRAWING NO :
   
 MDV-035
   
 SHEET NO :
   
 35 / 56

APPROVED BY Ir. HERRY VAZA M,Eng.Sc
   
 NIP. : 110038400



8 PB1 SECTION (STA. 0 + 308.861)
   
 1:100

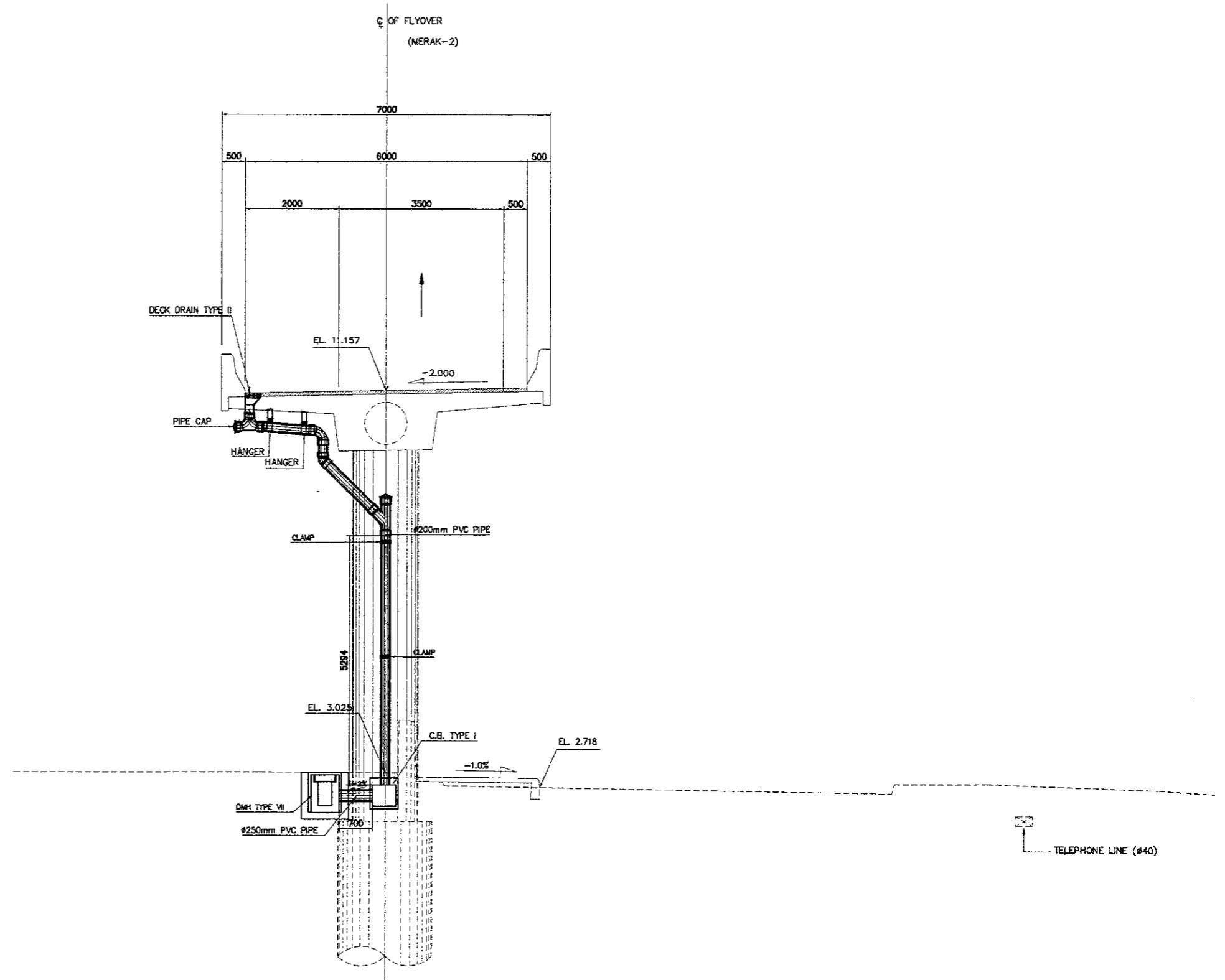
DESIGNED BY		CHECKED BY		SUBMITTED BY	
Name	R. UENO	Name	T. OKUMURA	Name	M. KIUCHI
Sign		Sign		Sign	
Date		Date		Date	

APPROVED BY

Ir. HERRY VAZA M,Eng.Sc	Sign	
NIP. : 110038400	Date	

SCALE :

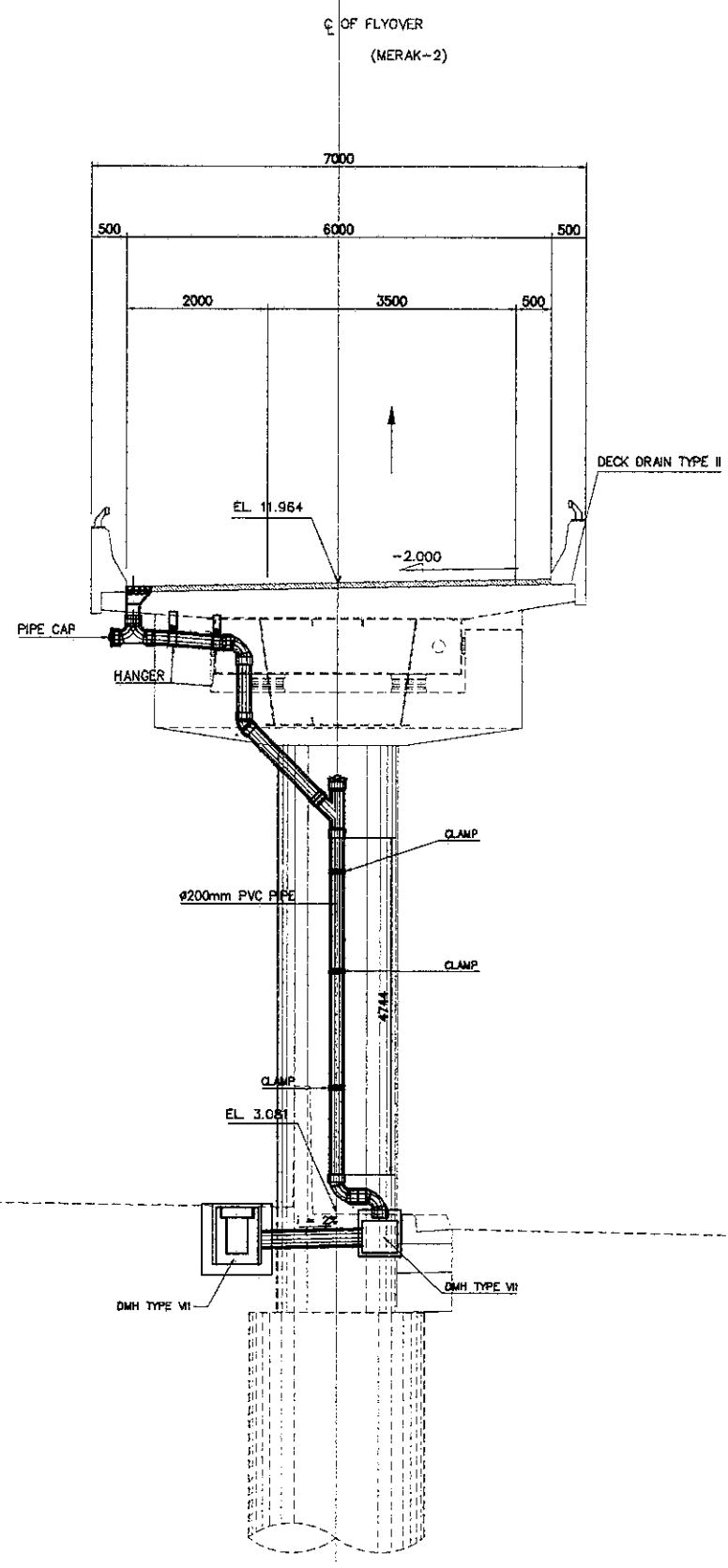
1 : 100
FULL SIZE A3



9 PB2 SECTION (STA. 0 + 328.861)
   
 SCALE 1:100

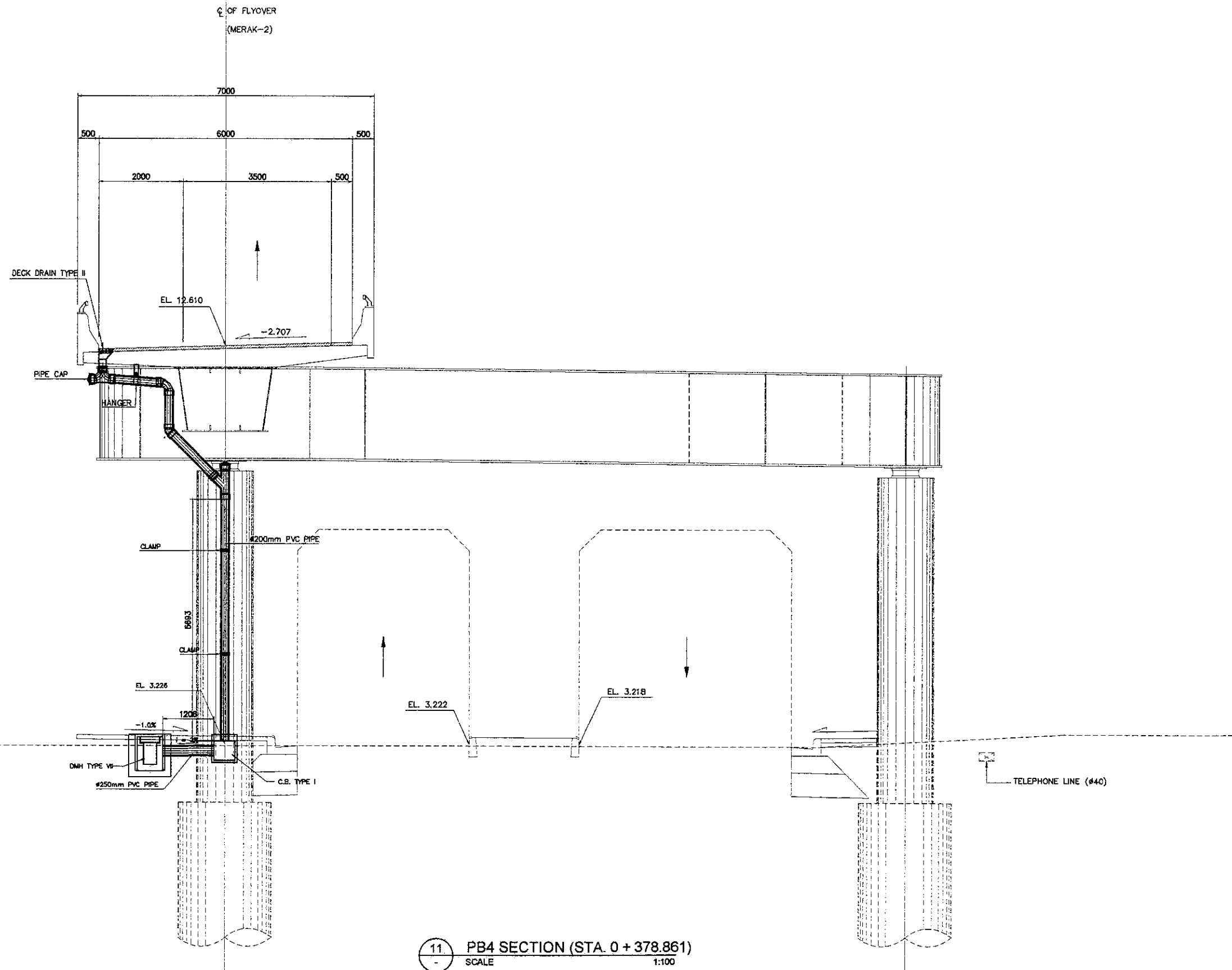


DESIGNED BY		CHECKED BY		SUBMITTED BY	
Name	R. UENO	Name	T. OKUMURA	Name	M. KIUCHI
Sign		Sign		Sign	
Date		Date		Date	



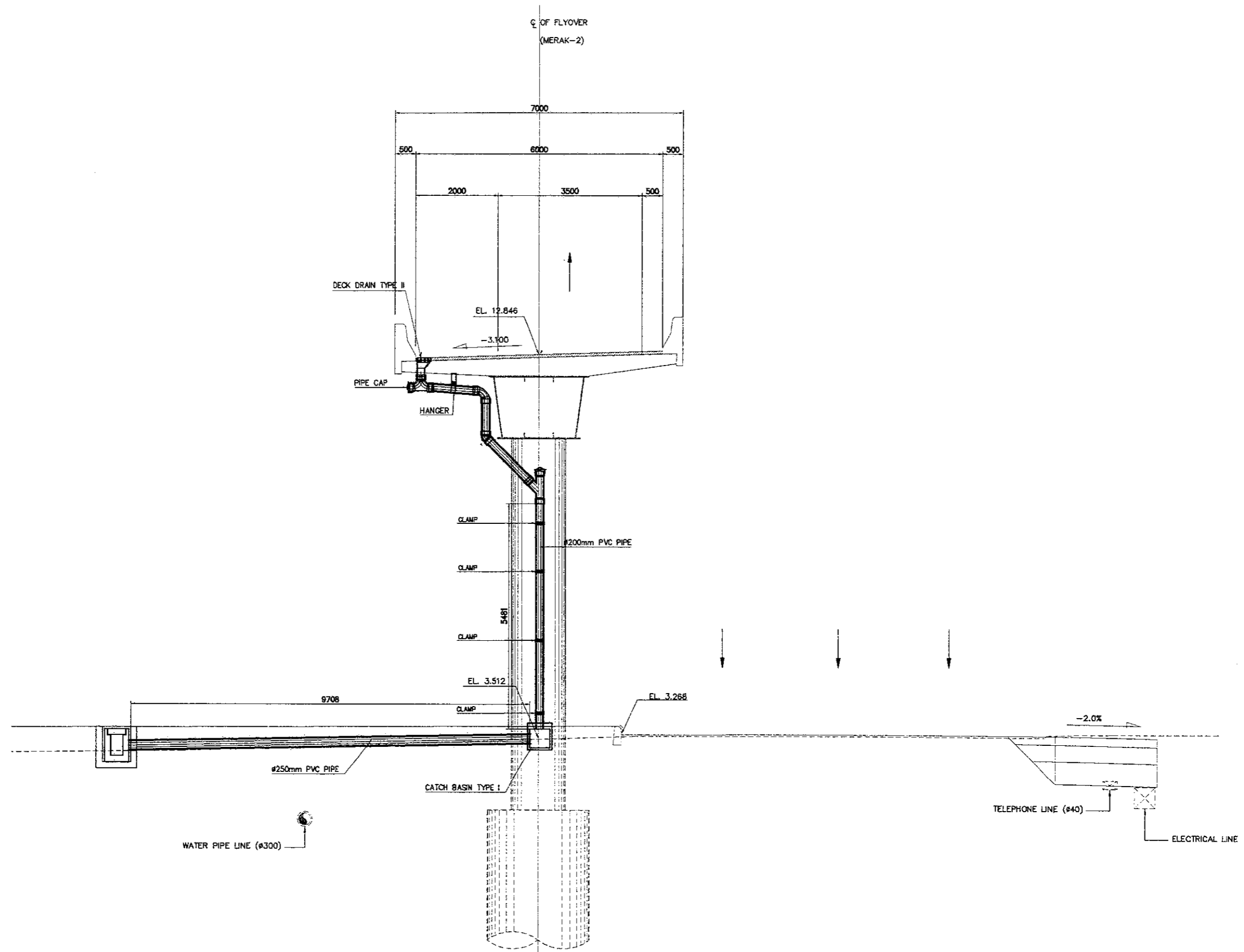
10 PB3 SECTION (STA. 0 + 348.861)
   
 SCALE 1:100

DESIGNED BY		CHECKED BY		SUBMITTED BY	
Name	R. UENO	Name	T. OKUMURA	Name	M. KIUCHI
Sign		Sign		Sign	
Date		Date		Date	

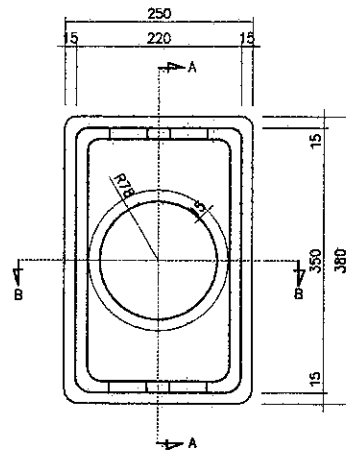


11 PB4 SECTION (STA. 0 + 378.861)
   
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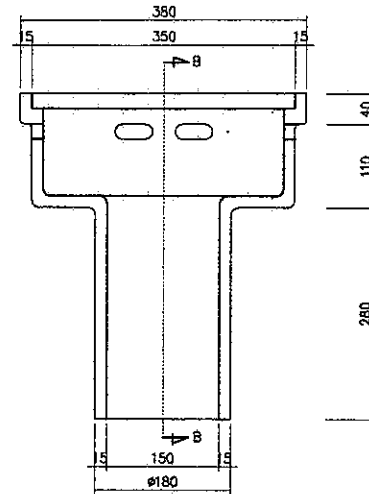
DESIGNED BY		CHECKED BY		SUBMITTED BY	
Name	R. UENO	Name	T. OKUMURA	Name	M. KIUCHI
Sign		Sign		Sign	
Date		Date		Date	



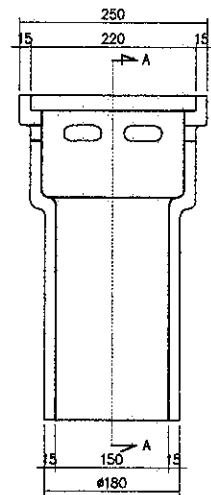
11 PB5 SECTION (STA. 0 + 403.361)  
 SCALE 1:100



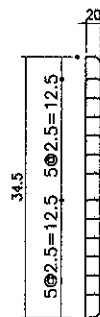
DRAIN BOX  
 SCALE 1:10



SECTION A  
 SCALE 1:10



SECTION B  
 SCALE 1:10

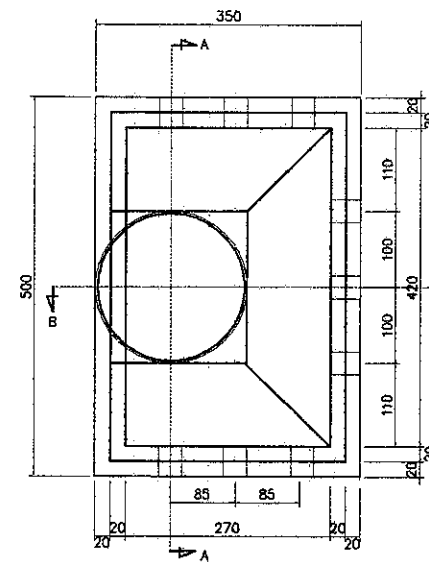


SCREEN  
 SCALE 1:10

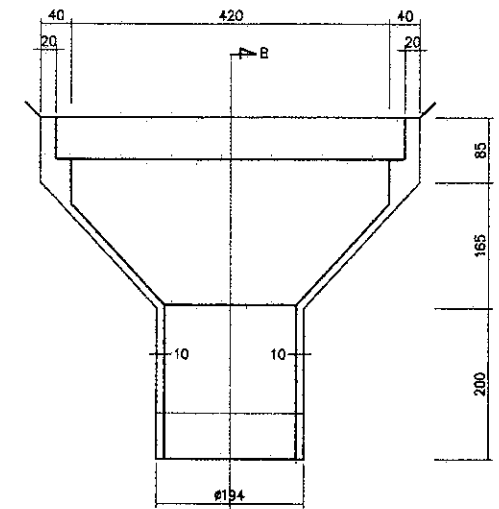
LIST OF DECK DRAIN ( PER ONE )

NO	NAME	QUALITY	EACH	WEIGHT
①	BOX	CAST IRON FC 25	1	40.9
②	SCREEN	SC 46	1	7.4
③	CHAIN	SS 41	1	0.1
④	WIRE NET	-	1	0.6
TOTAL WEIGHT				49.0 kg

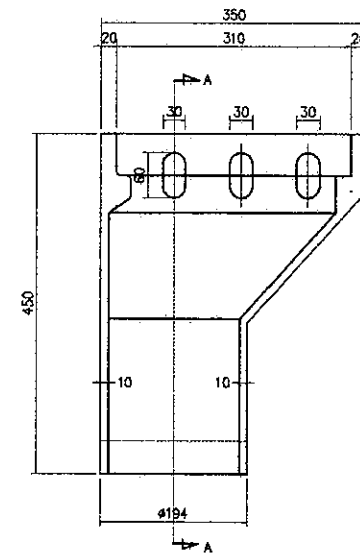
DECK DRAIN TYPE 1  
 SCALE 1:10



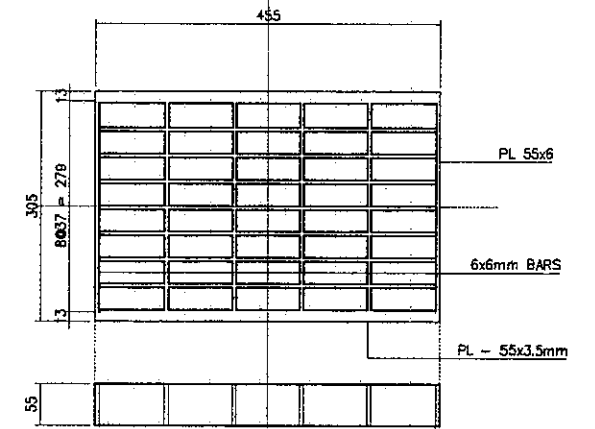
DRAIN BOX  
 SCALE 1:10



SECTION A  
 SCALE 1:10



SECTION B  
 SCALE 1:10

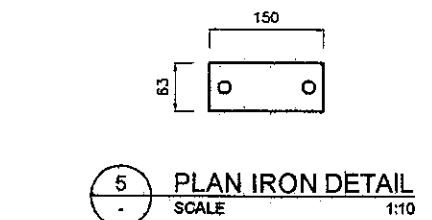
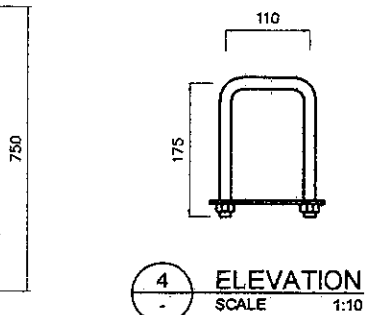
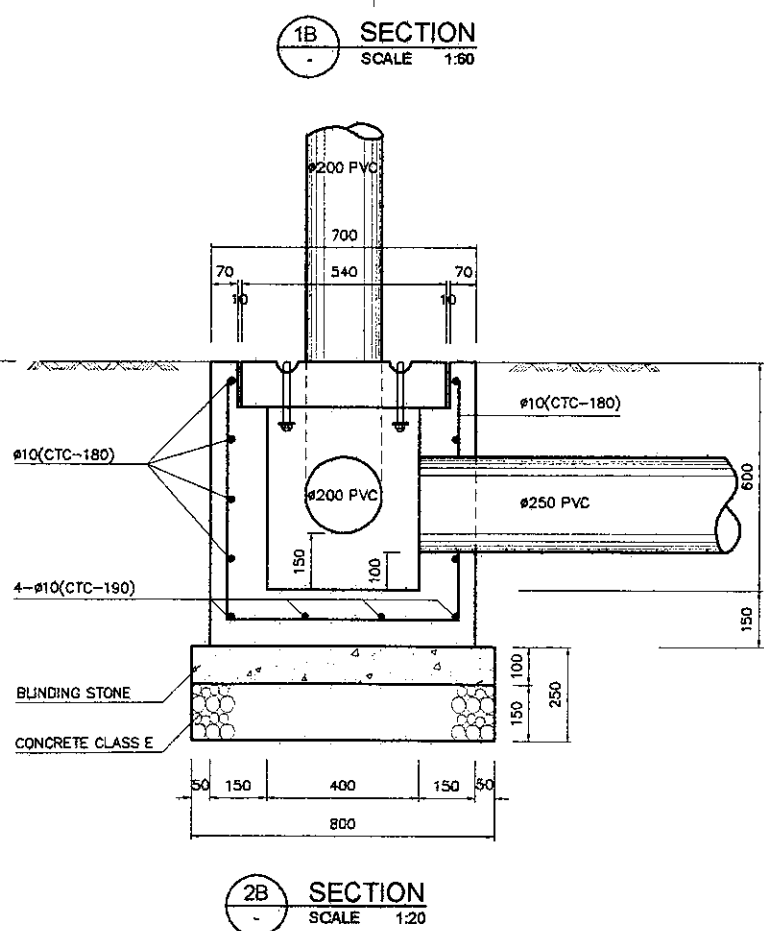
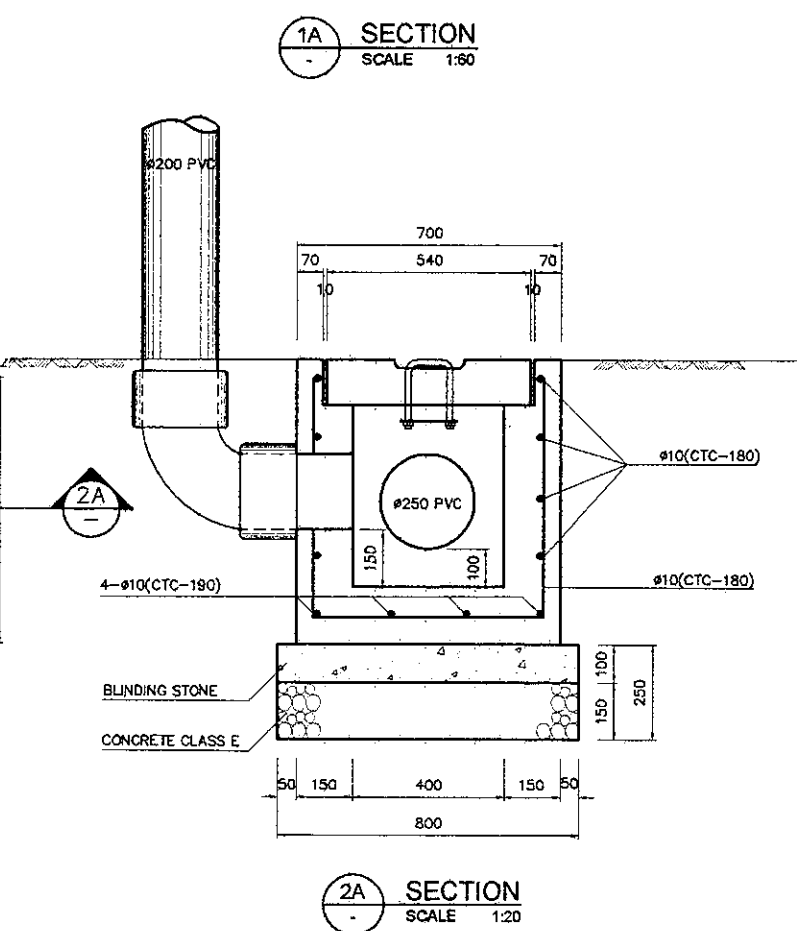
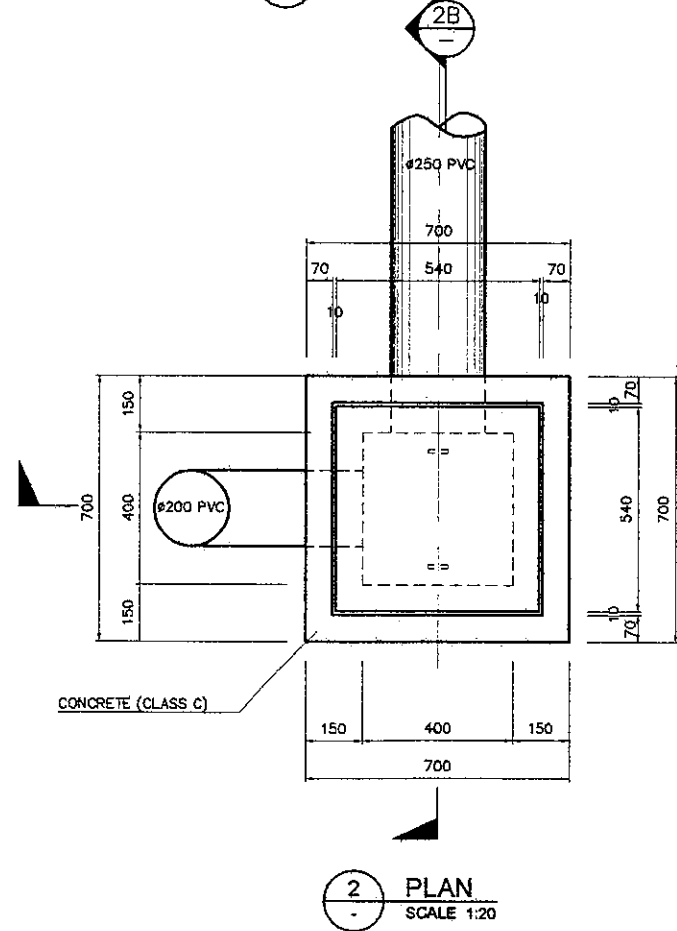
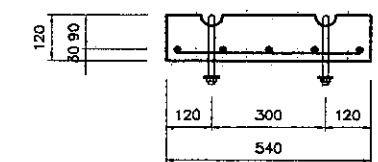
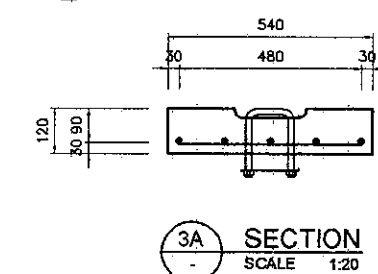
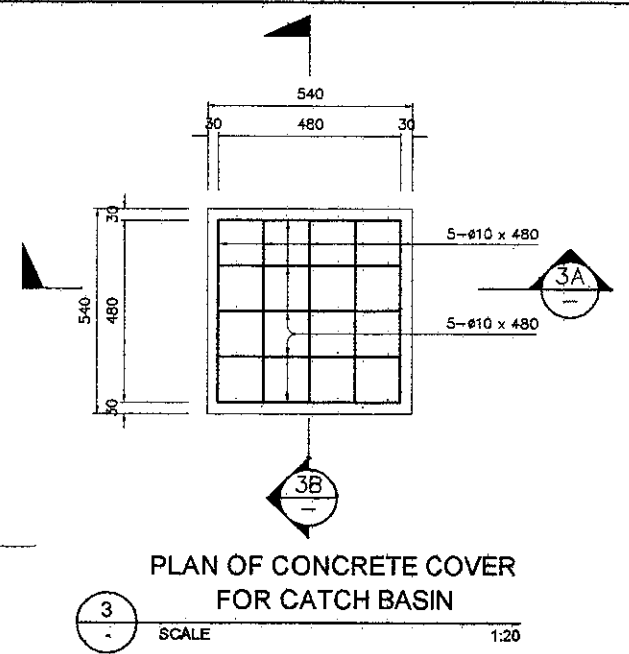
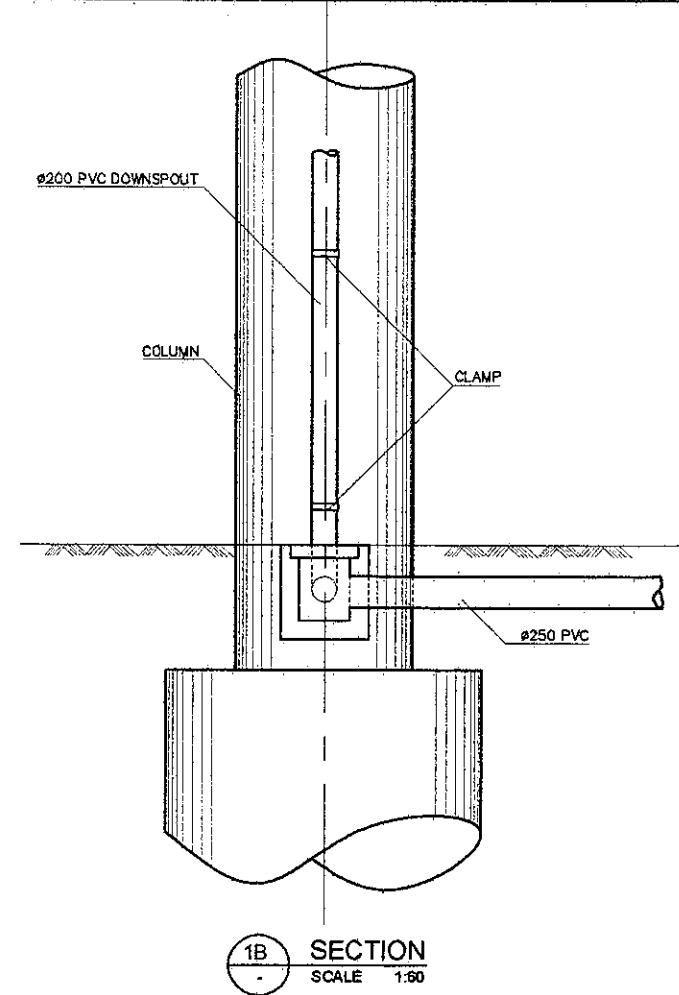
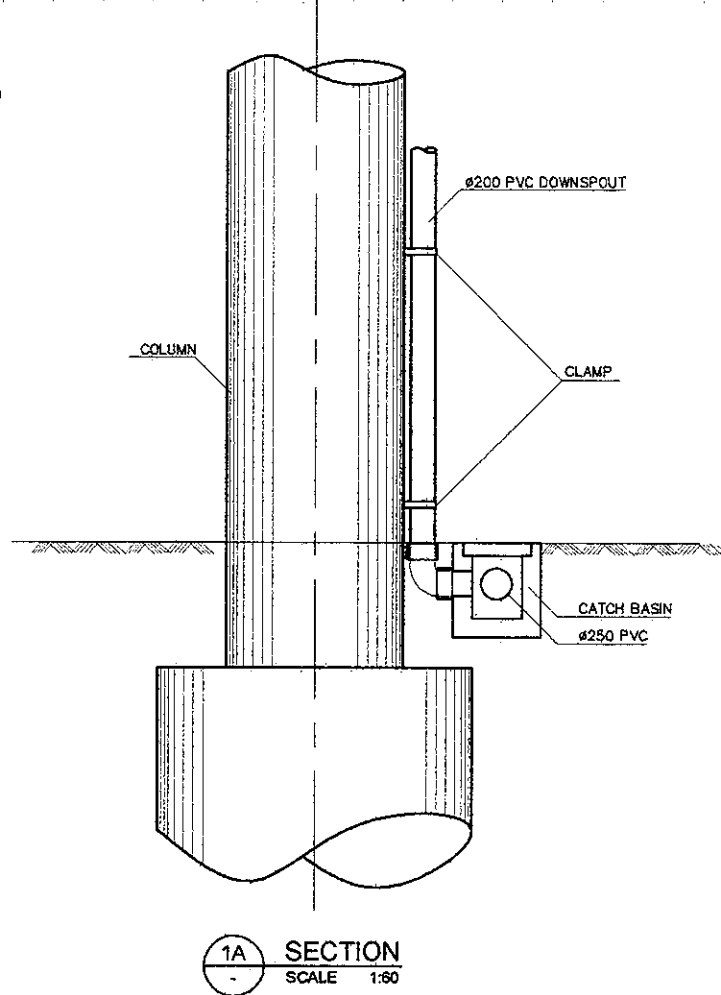
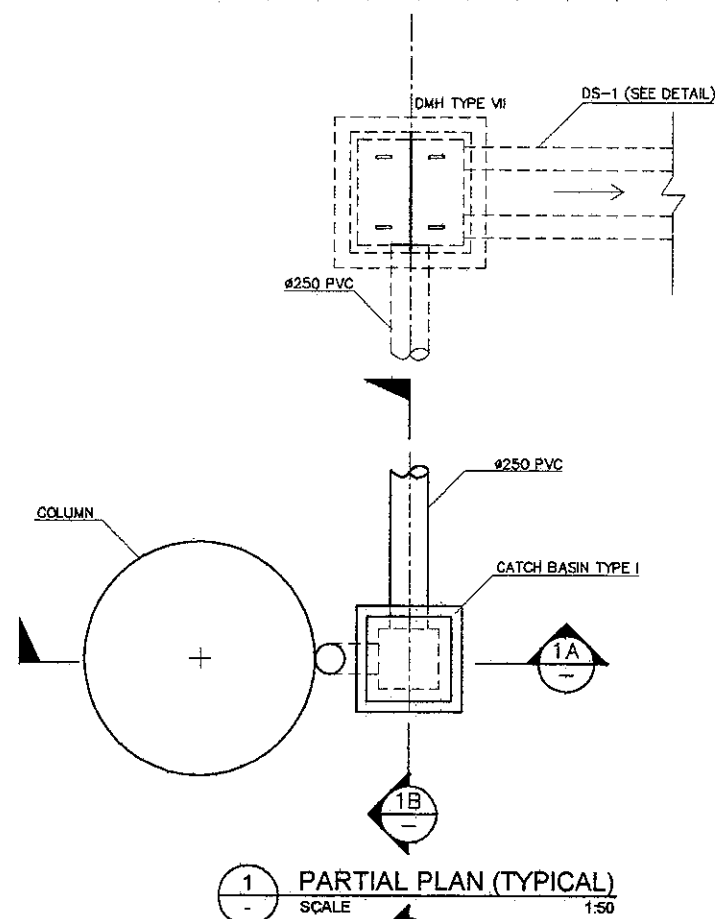


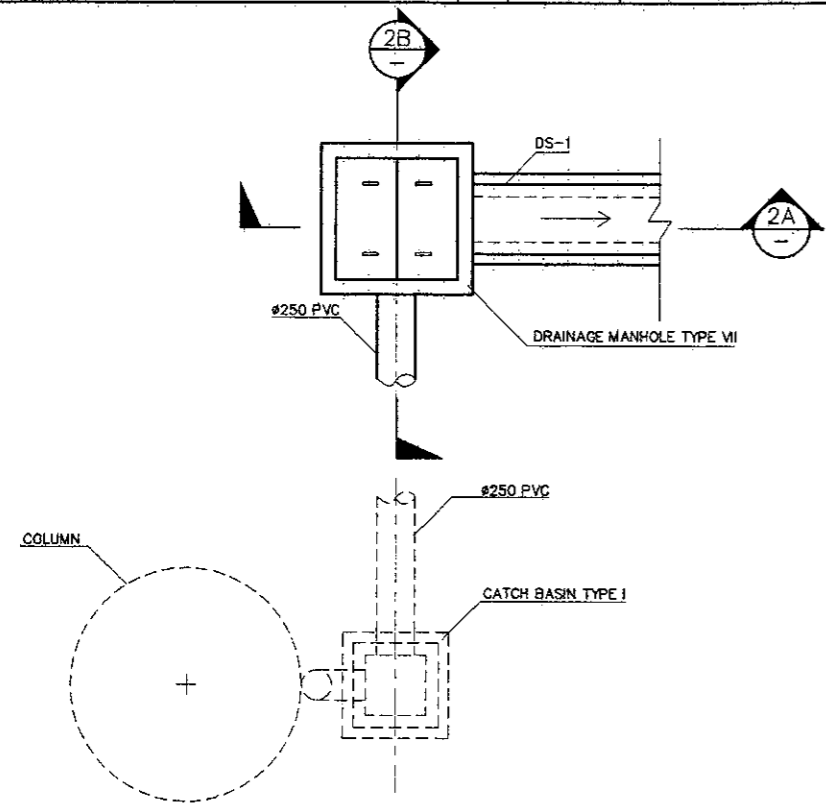
SCREEN  
 SCALE 1:10

LIST OF DECK DRAIN ( PER ONE )

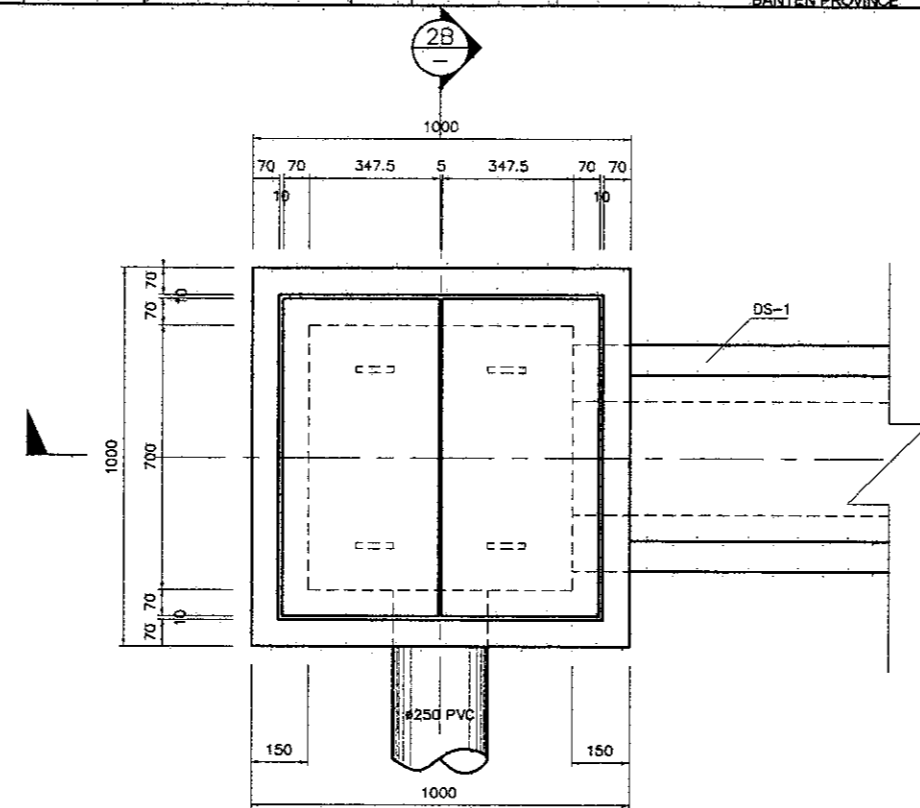
NO	NAME	QUALITY	EACH	WEIGHT
①	BOX	CAST IRON FC 25	1	
②	SCREEN	SC 46	1	
③	CHAIN	SS 41	1	
④	WIRE NET	-	1	
TOTAL WEIGHT				55.0 kg

DECK DRAIN TYPE 2  
 SCALE 1:10

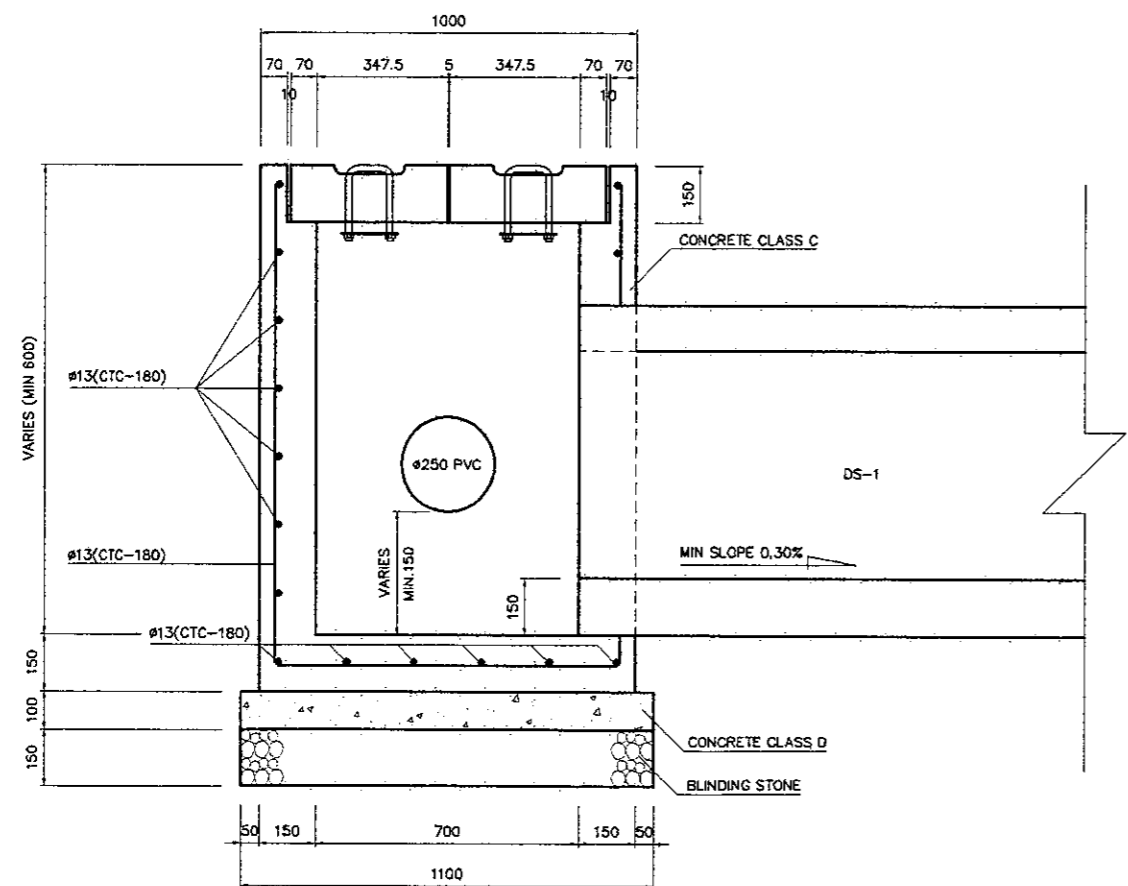




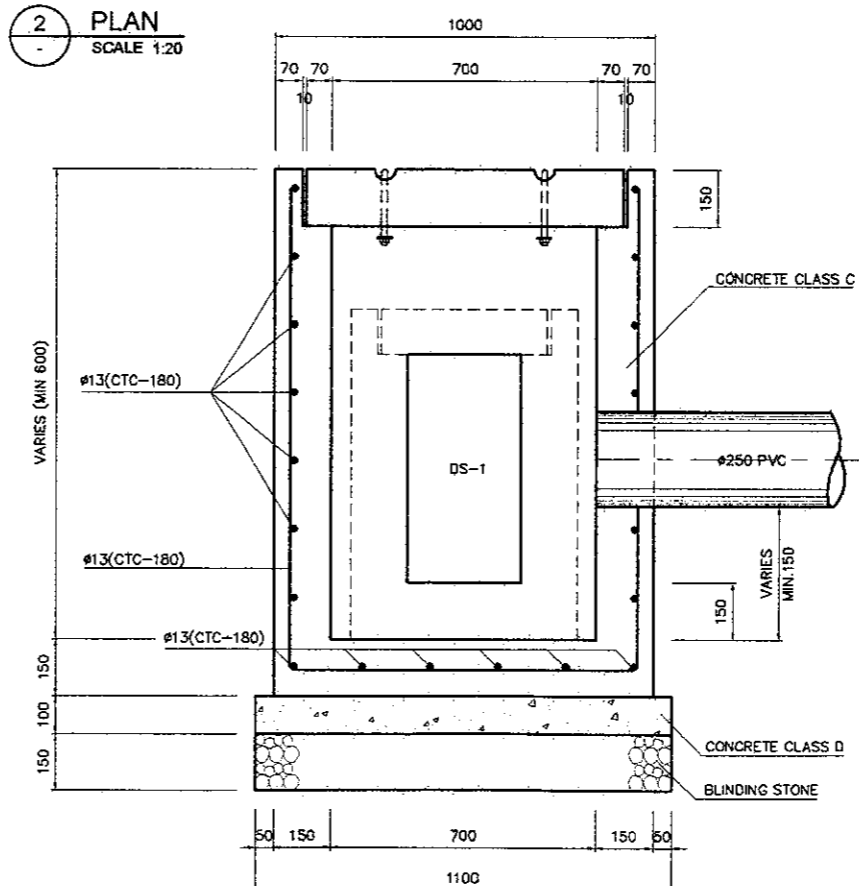
**1 PARTIAL PLAN (TYPICAL)**  
 SCALE 1:50



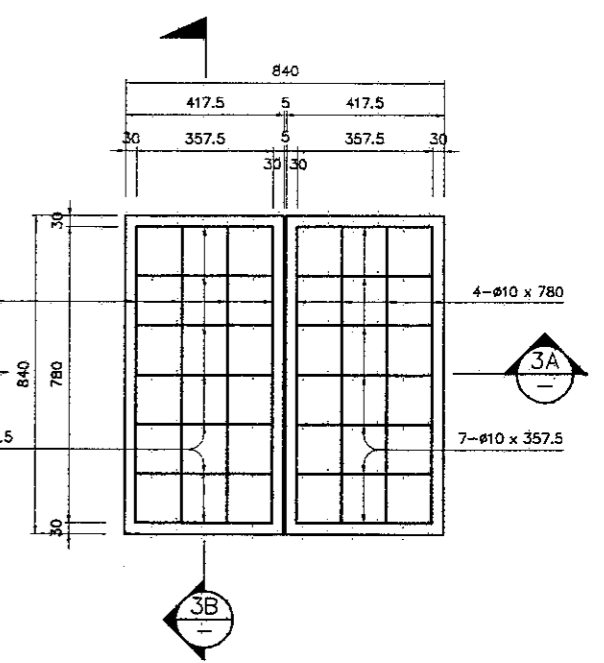
**2 PLAN**  
 SCALE 1:20



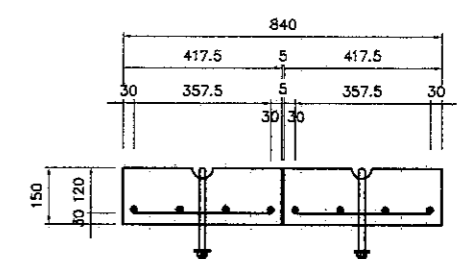
**2A SECTION**  
 SCALE 1:20



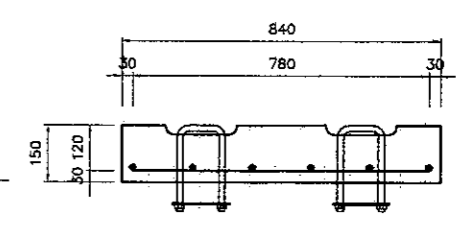
**2B SECTION**  
 SCALE 1:20



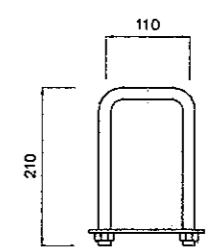
**3 PLAN**  
 SCALE 1:20



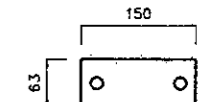
**3A SECTION**  
 SCALE 1:20



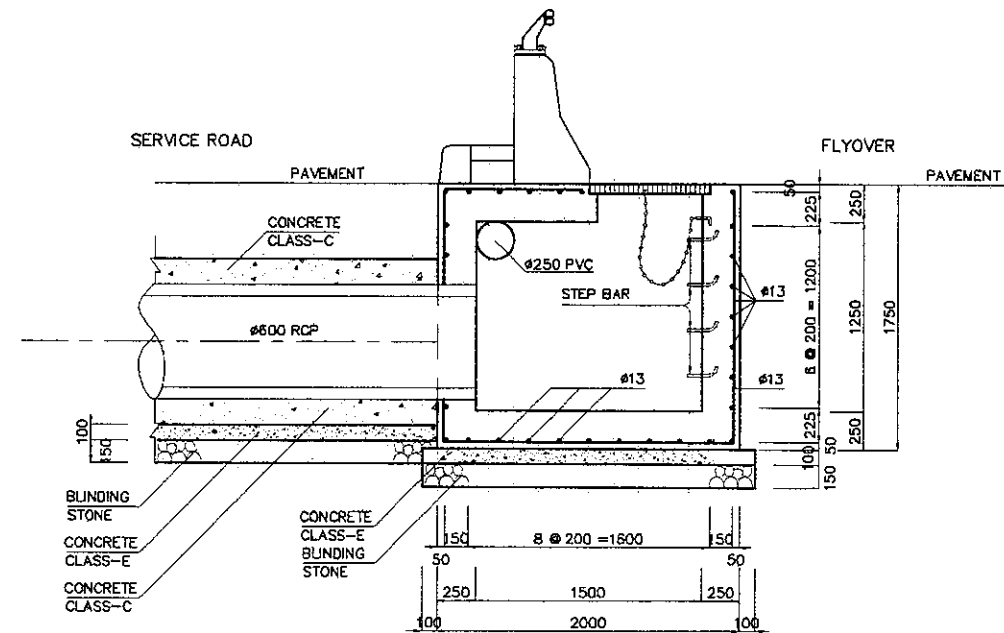
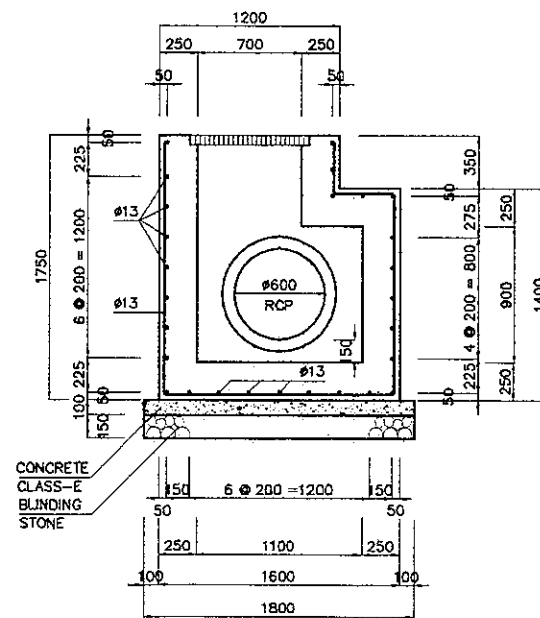
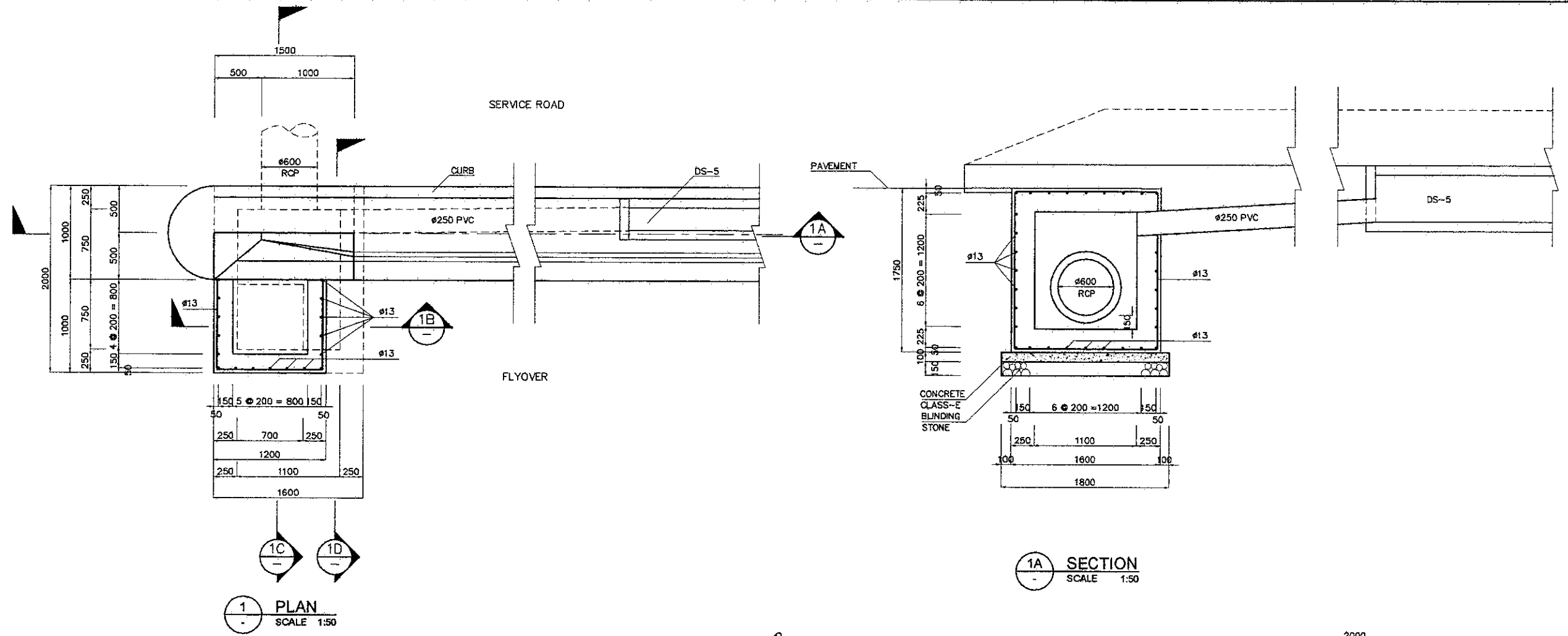
**3B SECTION**  
 SCALE 1:20



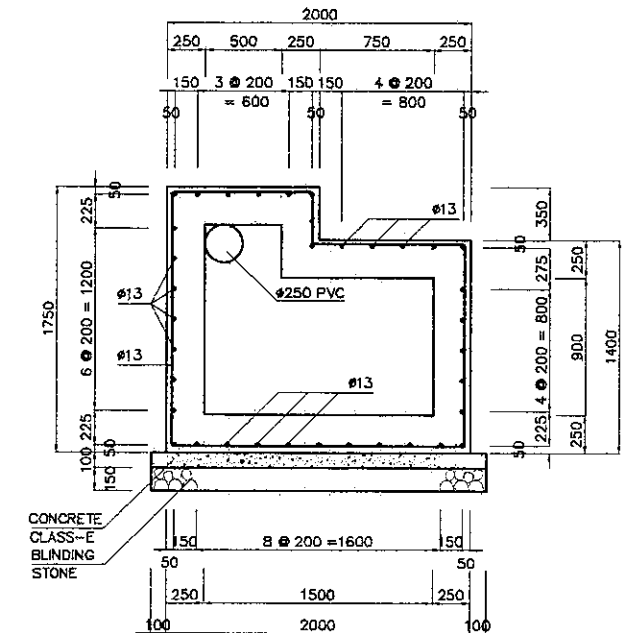
**3C ELEVATION**  
 SCALE 1:10



**3D PLAN IRON DETAIL**  
 SCALE 1:10



**1A SECTION**  
 SCALE 1:50

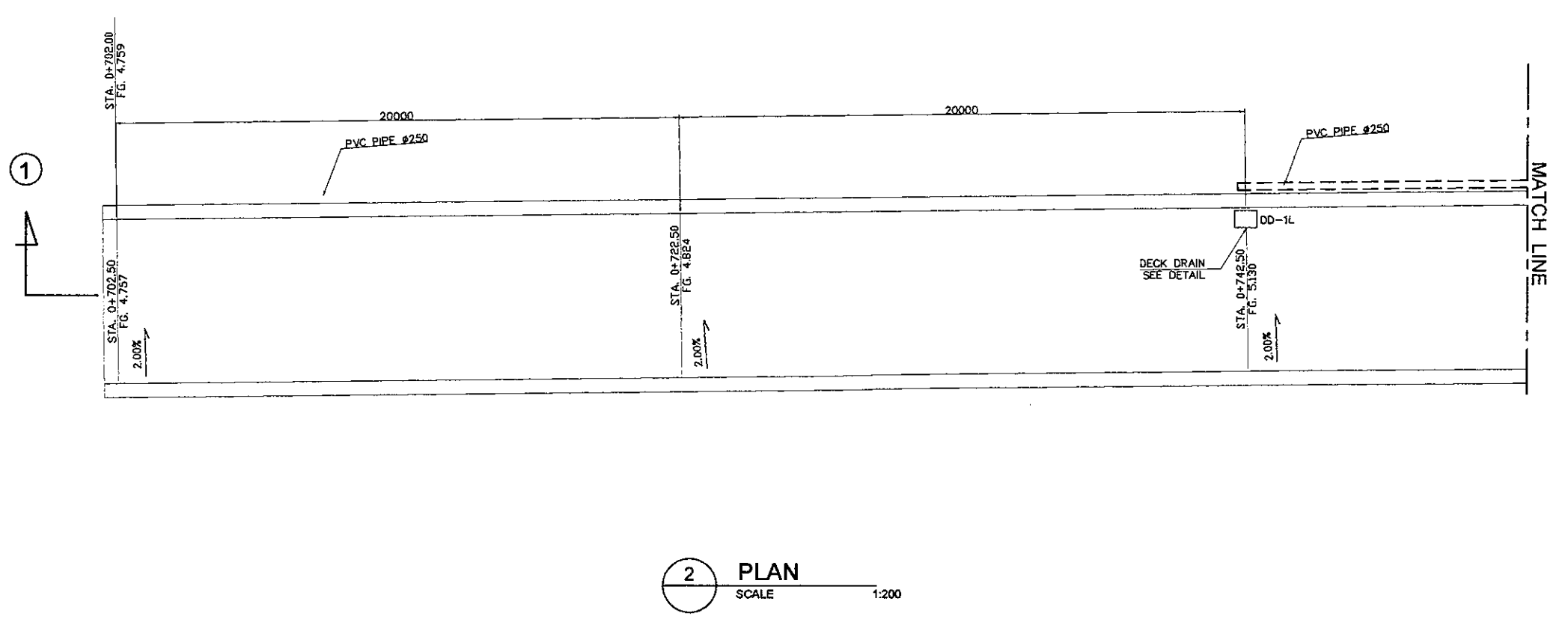
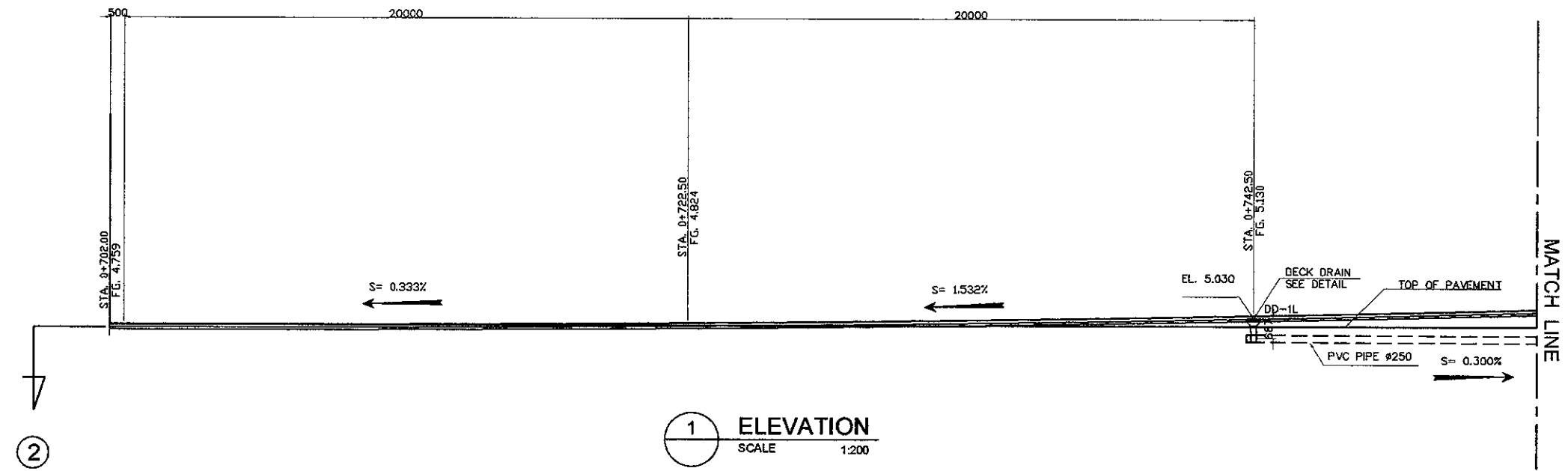






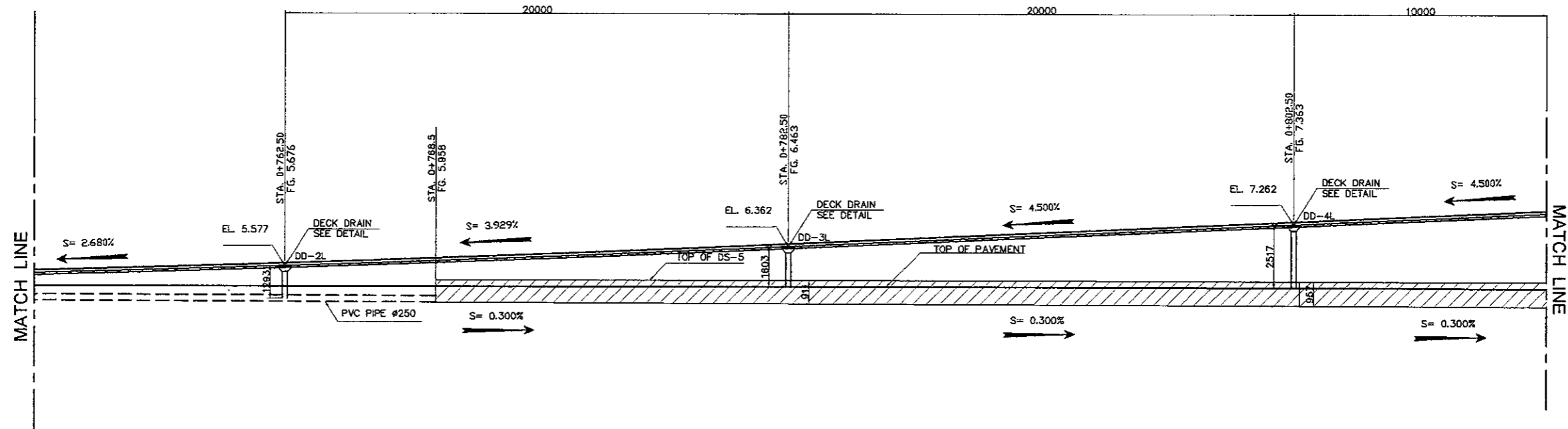


DESIGNED BY		CHECKED BY		SUBMITTED BY	
Name	R. UENO	Name	T. OKUMURA	Name	M. KIUCHI
Sign		Sign		Sign	
Date		Date		Date	

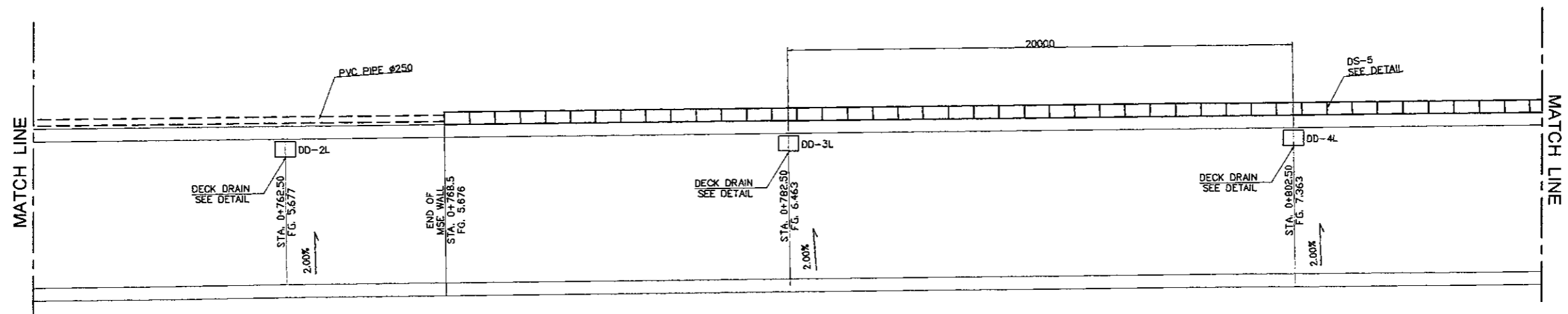


DESIGNED BY		CHECKED BY		SUBMITTED BY	
Name	R. UENO	Name	T. OKUMURA	Name	M. KIUCHI
Sign		Sign		Sign	
Date		Date		Date	

APPROVED BY	
Ir. HERRY VAZA M.Eng.Sc	Sign
NIP. : 110038400	Date

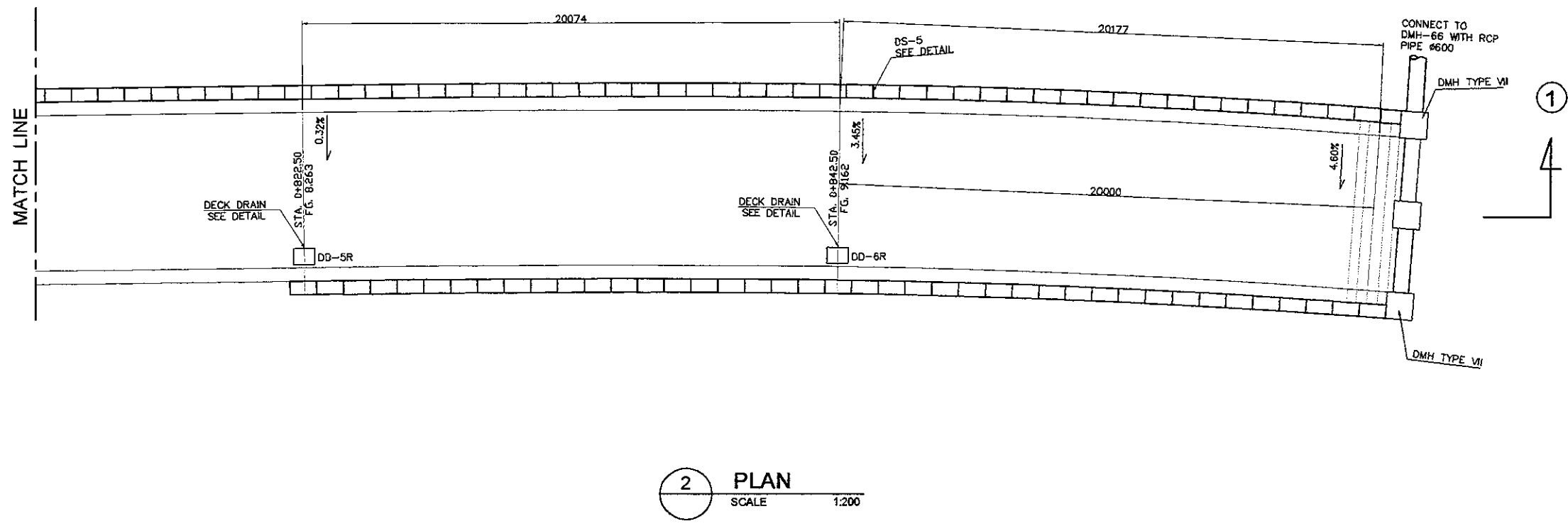
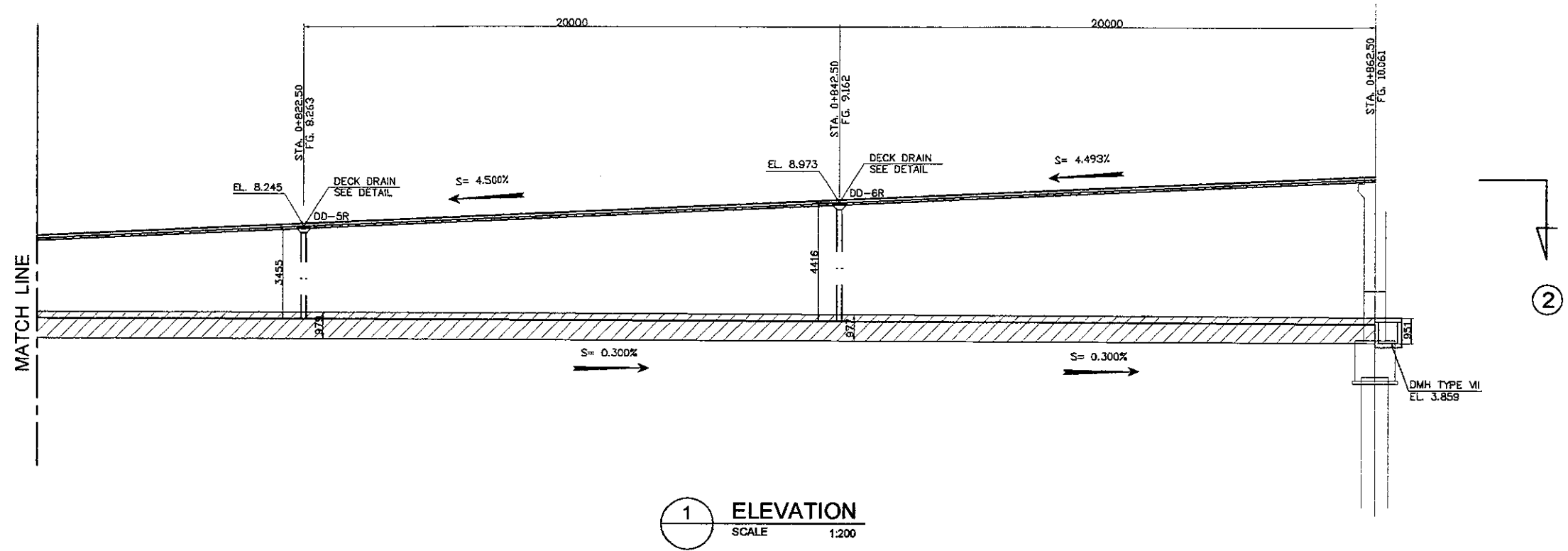


1 ELEVATION  
 SCALE 1:200



2 PLAN  
 SCALE 1:200

DESIGNED BY		CHECKED BY		SUBMITTED BY	
Name	R. UENO	Name	T. OKUMURA	Name	M. KIUCHI
Sign		Sign		Sign	
Date		Date		Date	



DESIGNED BY		CHECKED BY		SUBMITTED BY	
Name	R. UENO	Name	T. OKUMURA	Name	M. KIUCHI
Sign		Sign		Sign	
Date		Date		Date	

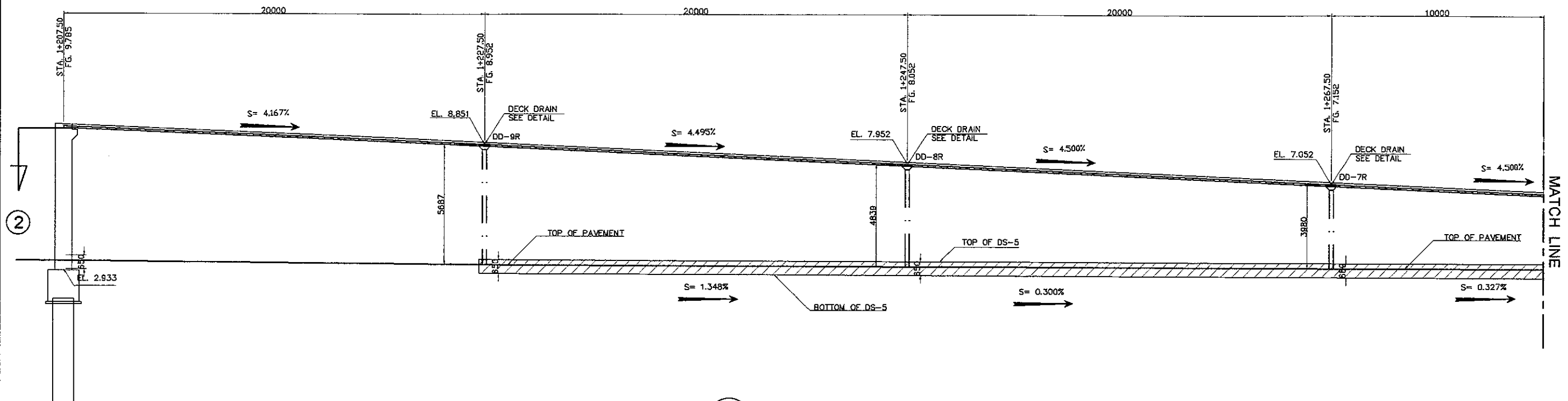
APPROVED BY Ir. HERRY VAZA M.Eng.Sc  
 NIP. : 110038400

PROJECT AND LOCATION :
   
 DETAILED DESIGN STUDY OF
   
 NORTH JAVA CORRIDOR FLYOVER PROJECT
   
 MERAK FLYOVER - CONTRACT PACKAGE 1
   
 (MERAK - BALARAJA)
   
 BANTEN PROVINCE

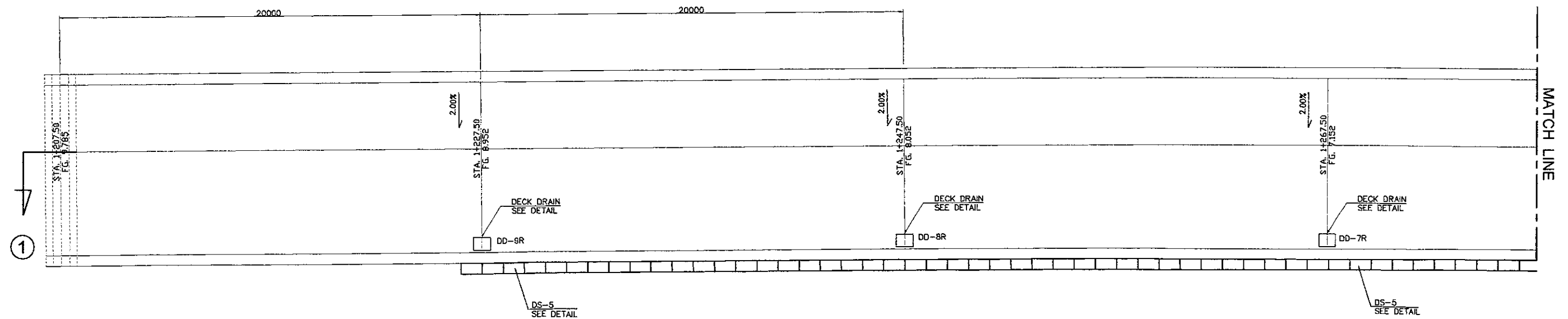
SCALE :
   
 1 : 200
   
 FULL SIZE A3

DRAWING TITLE :
   
 PLAN AND ELEVATION OF VIADUCT
   
 ALONG APPROACH
   
 (MERAK-1) 4 OF 9

DRAWING NO :
   
 MDV-049
   
 SHEET NO :
   
 49 / 56

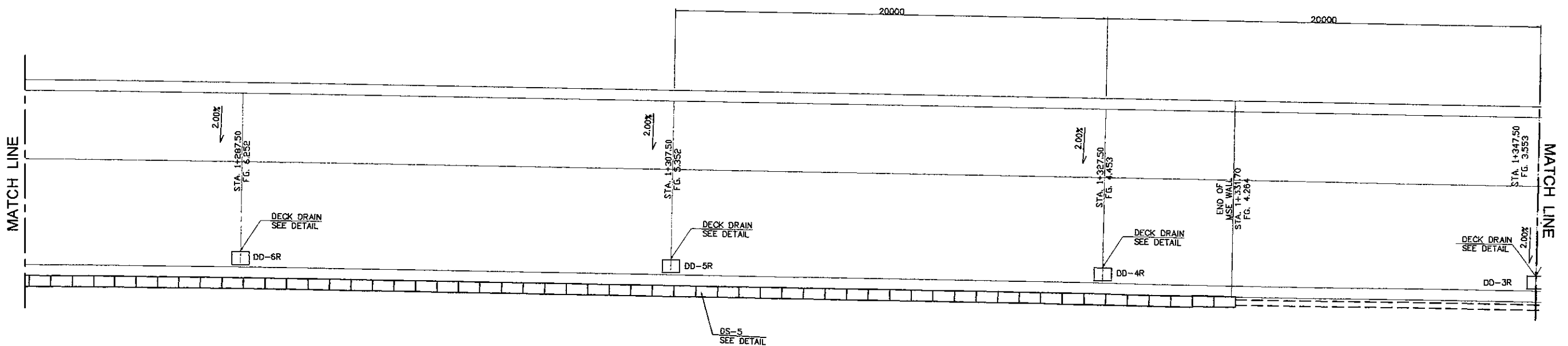
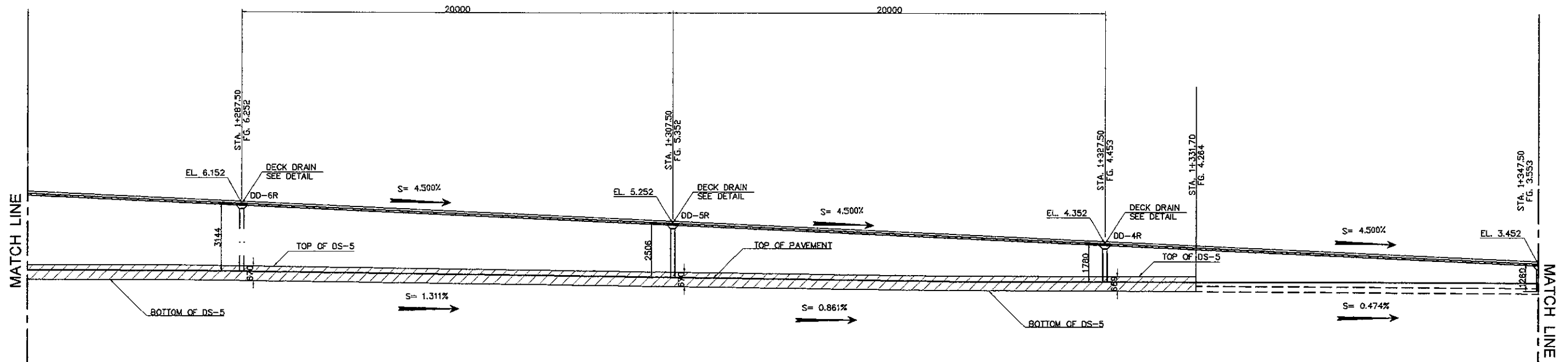


1 ELEVATION
   
 SCALE 1:200

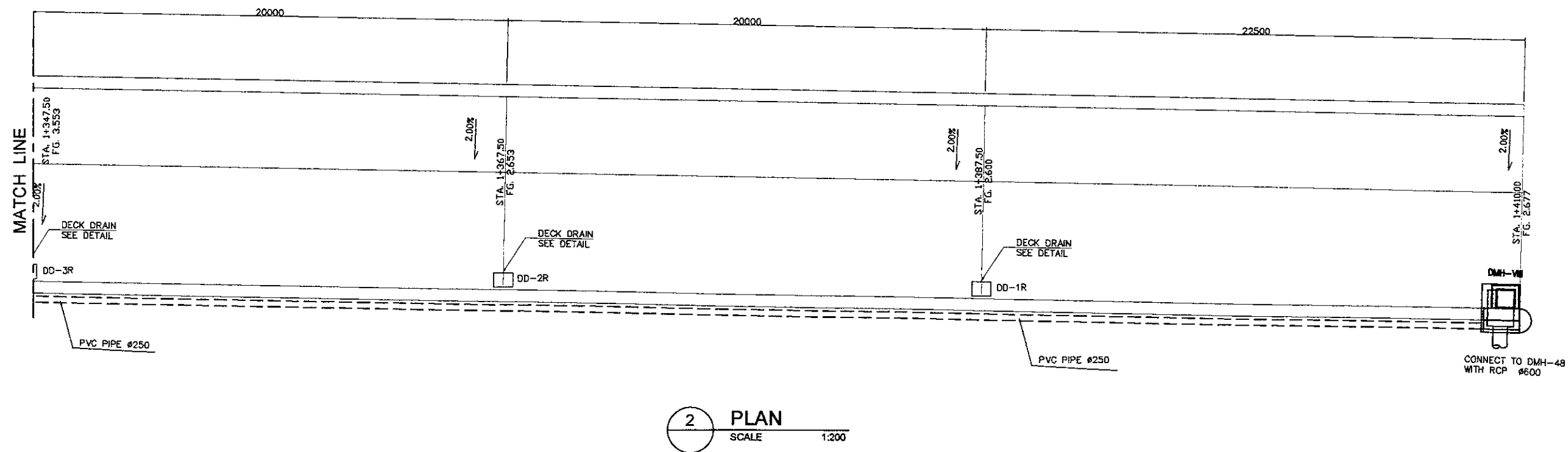
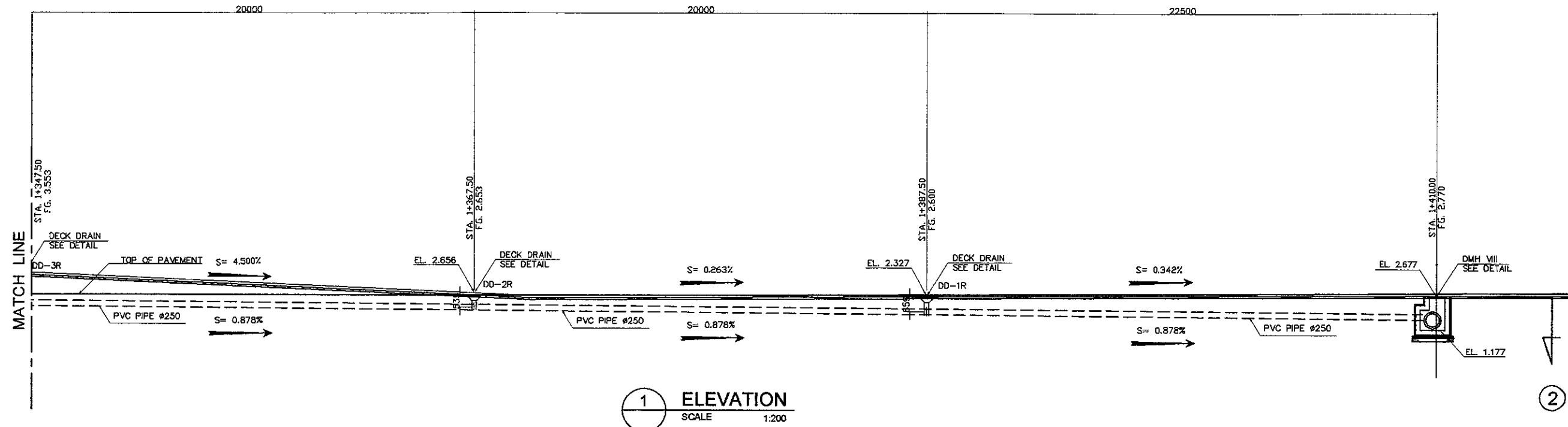


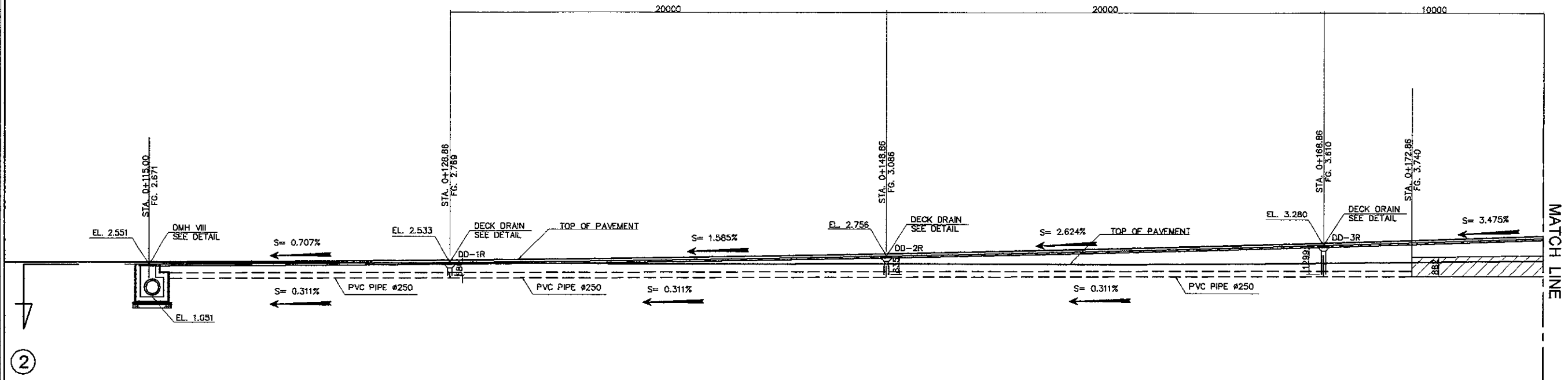
2 PLAN
   
 SCALE 1:200

DESIGNED BY		CHECKED BY		SUBMITTED BY	
Name	R. UENO	Name	T. OKUMURA	Name	M. KIUCHI
Sign		Sign		Sign	
Date		Date		Date	

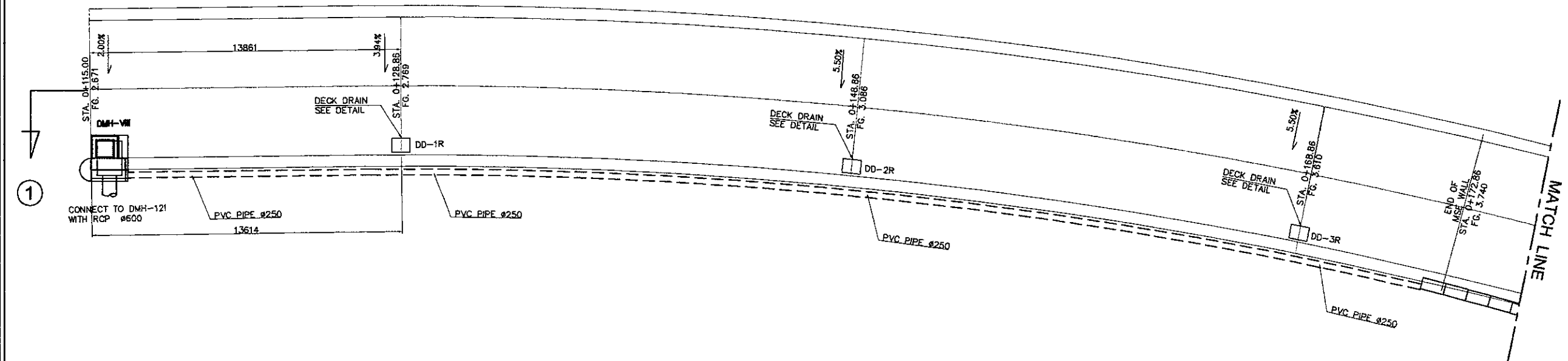


DESIGNED BY		CHECKED BY		SUBMITTED BY	
Name	R. UENO	Name	T. OKUMURA	Name	M. KIUCHI
Sign		Sign		Sign	
Date		Date		Date	





**1 ELEVATION**  
 SCALE 1:200

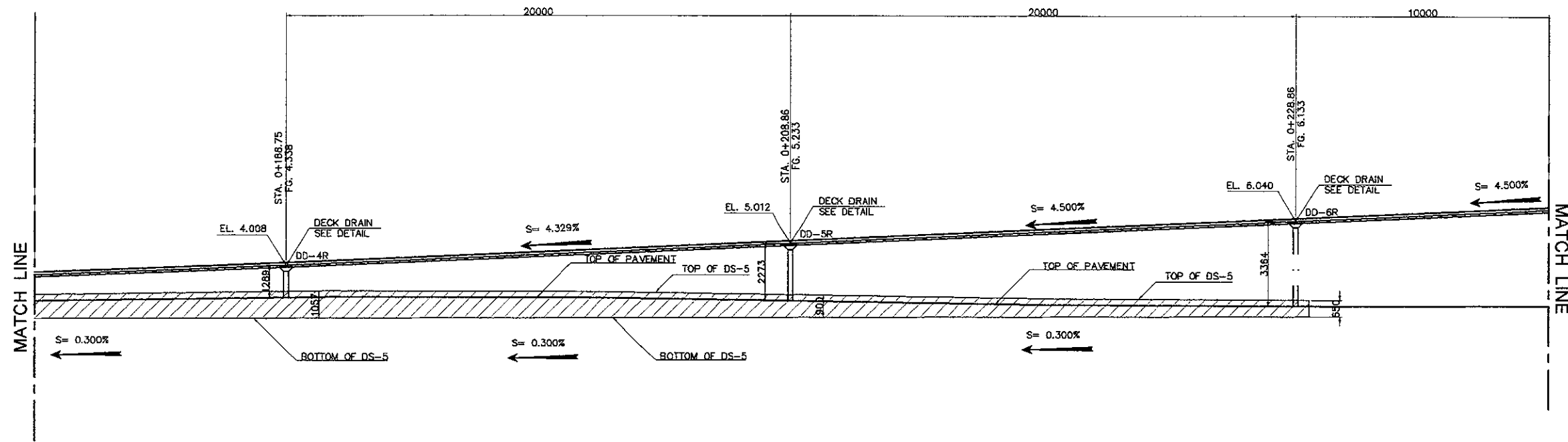


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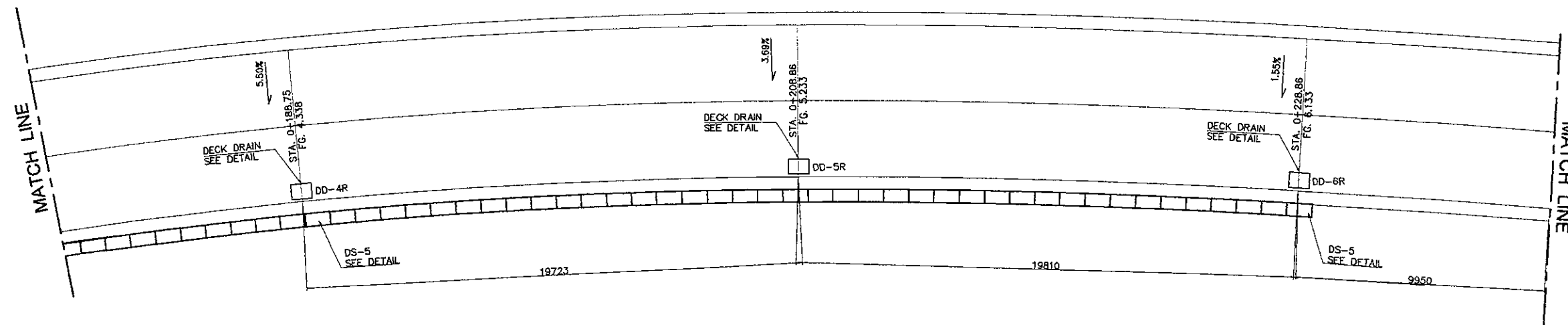


DESIGNED BY		CHECKED BY		SUBMITTED BY	
Name	R. UENO	Name	T. OKUMURA	Name	M. KIUCHI
Sign		Sign		Sign	
Date		Date		Date	

APPROVED BY	
Name	Ir. HERRY VAZA M,Eng.Sc
Sign	
Date	



1 ELEVATION
   
 SCALE 1:200



2 PLAN
   
 SCALE 1:200

DESIGNED BY		CHECKED BY		SUBMITTED BY	
Name	R. UENO	Name	T. OKUMURA	Name	M. KIUCHI
Sign		Sign		Sign	
Date		Date		Date	

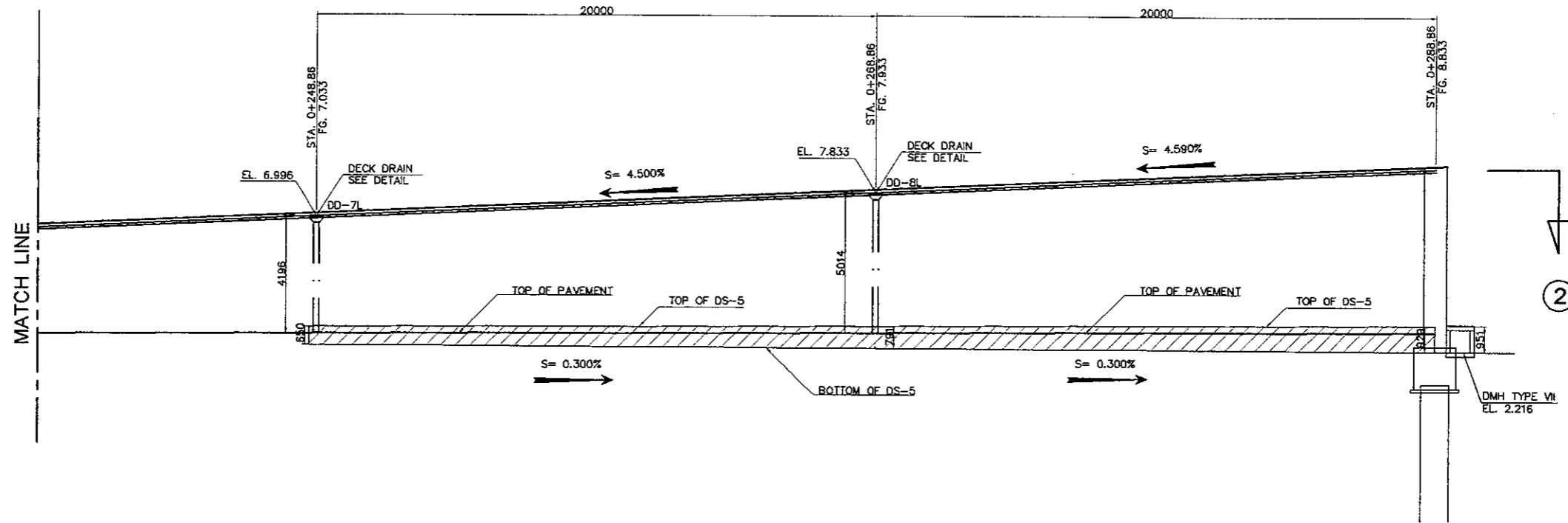
APPROVED BY: Ir. HERRY VAZA M,Eng.Sc  
 NIP. : 110038400

PROJECT AND LOCATION :  
 DETAILED DESIGN STUDY OF  
 NORTH JAVA CORRIDOR FLYOVER PROJECT  
 MERAK FLYOVER - CONTRACT PACKAGE 1  
 (MERAK - BALARAJA)  
 BANTEN PROVINCE

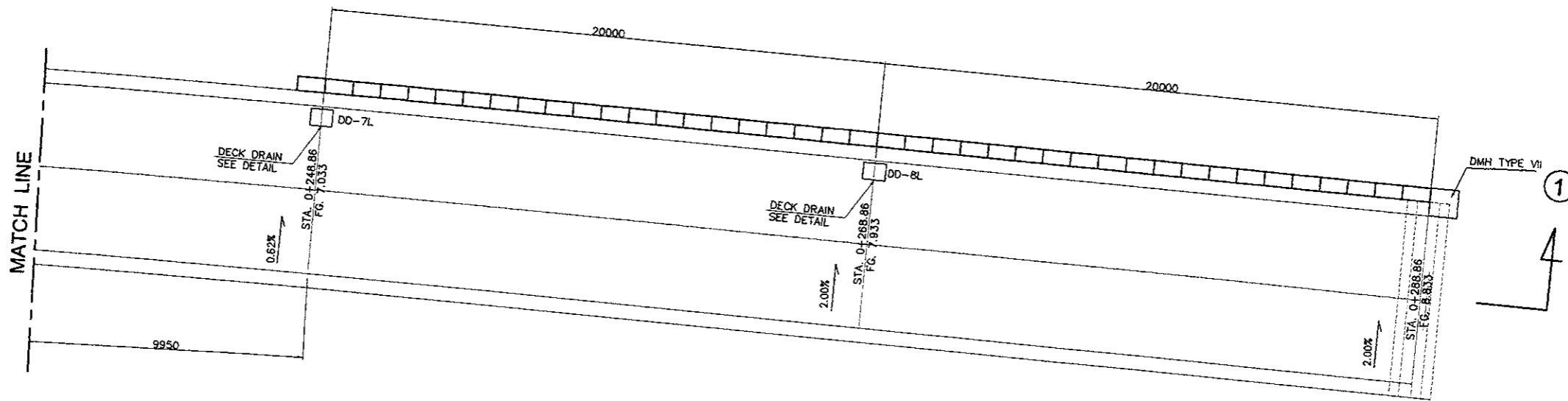
SCALE :  
 1 : 200  
 FULL SIZE A3

DRAWING TITLE :  
 PLAN AND ELEVATION OF VIADUCT  
 ALONG APPROACH  
 (MERAK-2) 9 OF 9

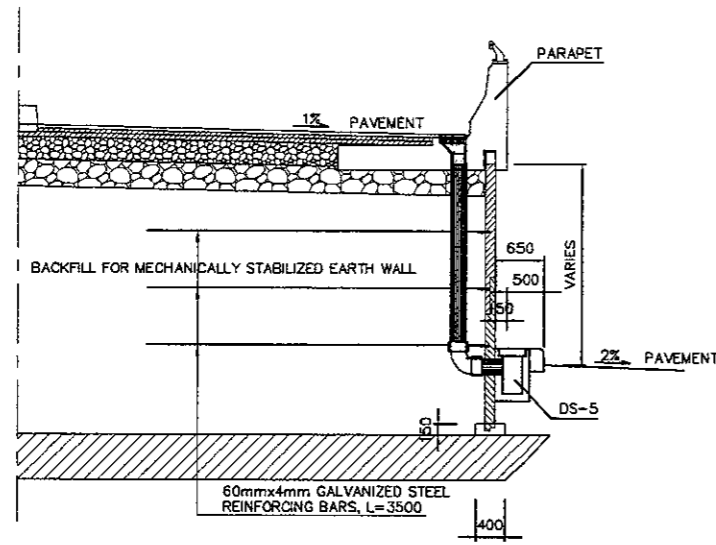
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 SHEET NO :  
 54 / 56



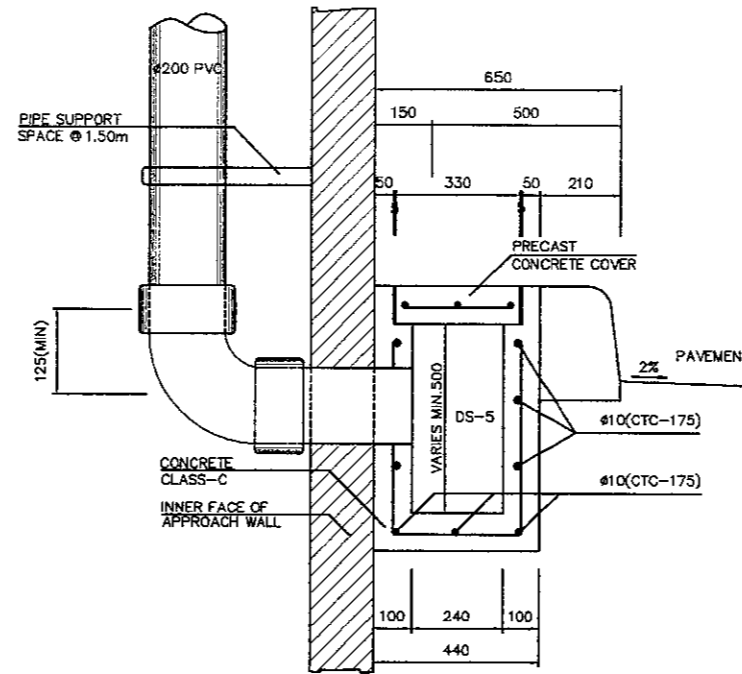
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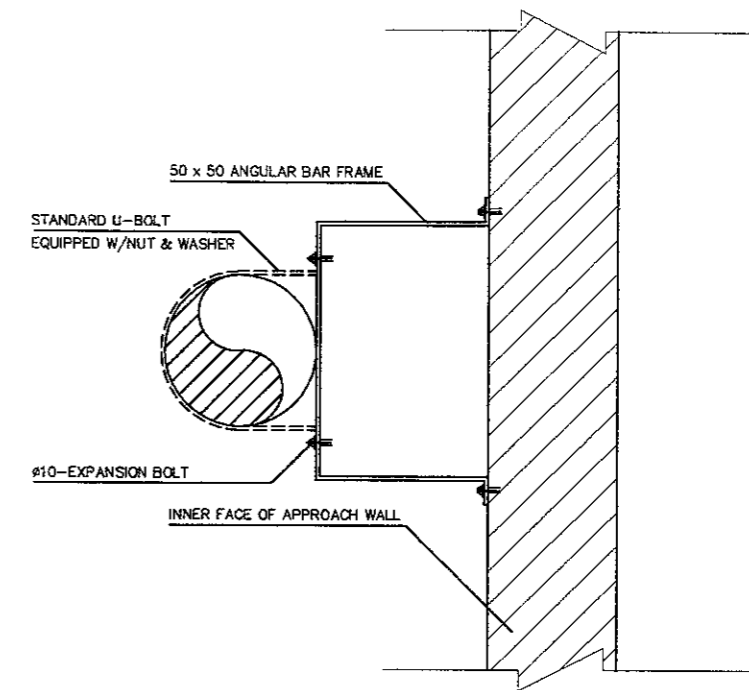
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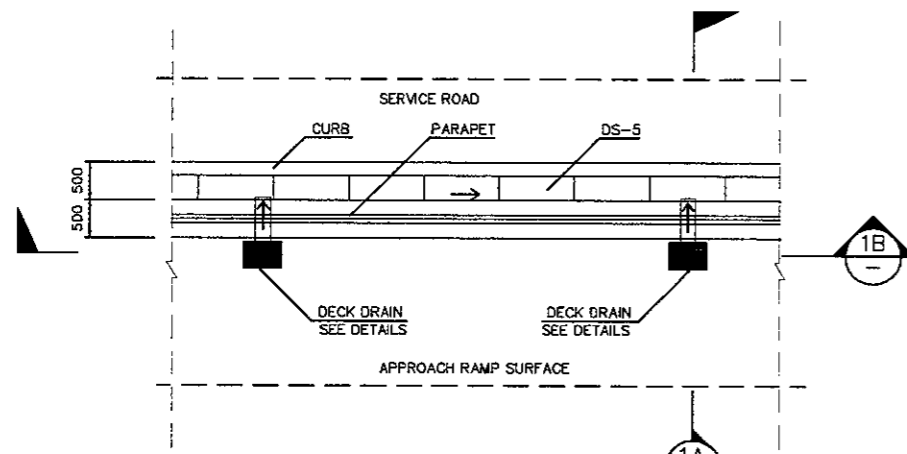
**1A ELEVATION**  
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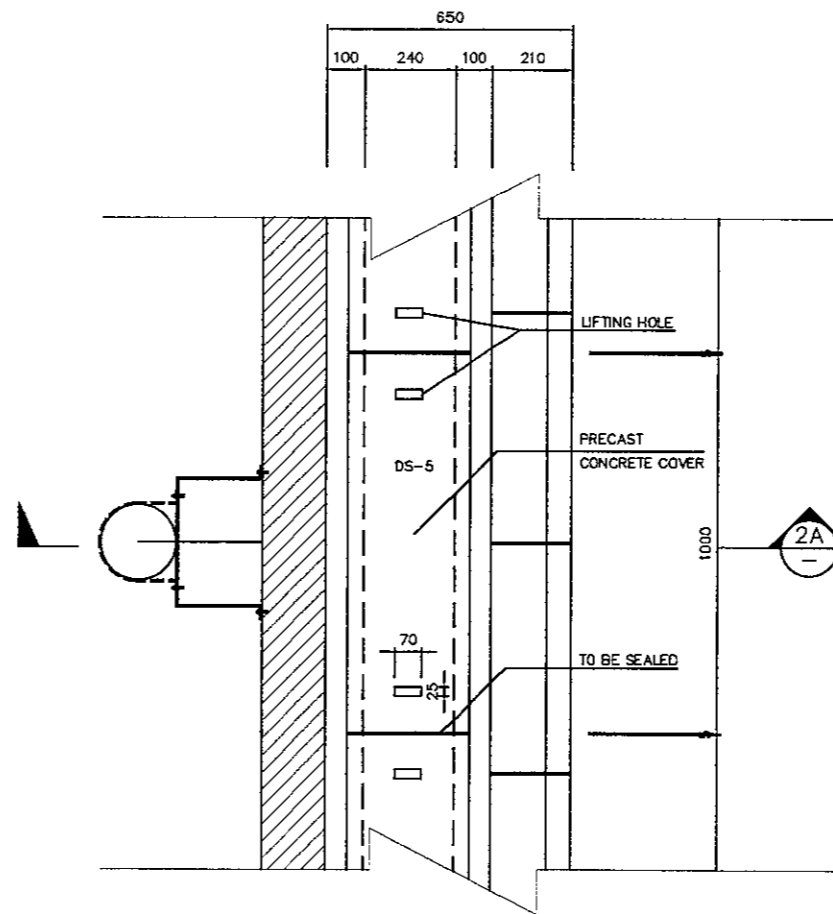
**2A DS-5 DETAILS**  
 SCALE 1:20



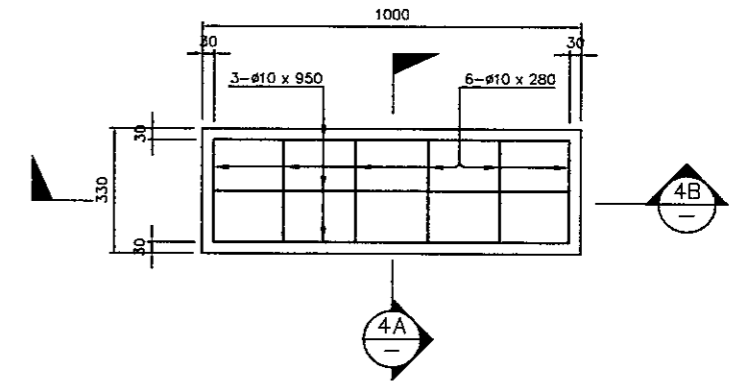
**3 PIPE SUPPORT DETAIL**  
 NO TO SCALE



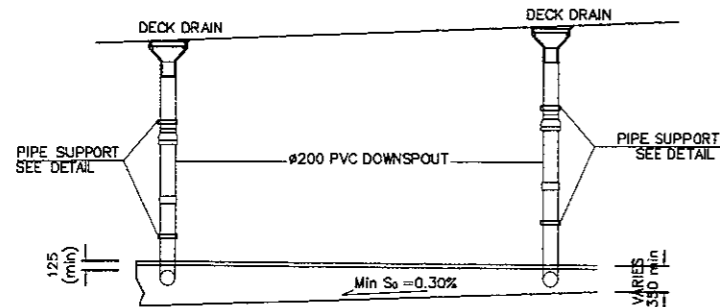
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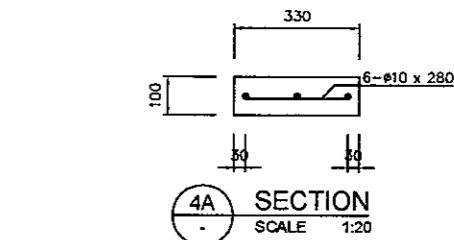
**2 PLAN**  
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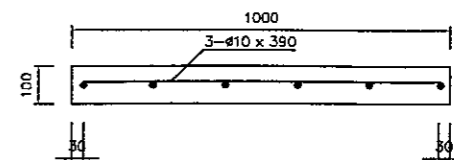
**4 PLAN AT DS-5 COVER**  
 SCALE 1:20



**1B SECTION**  
 SCALE 1:100

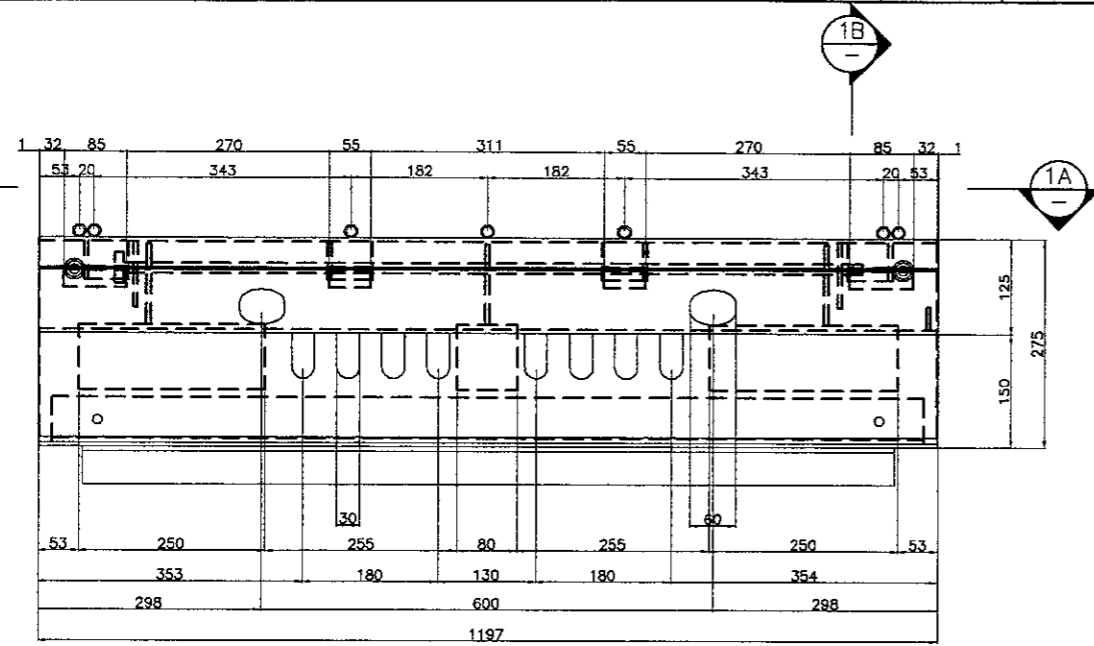


**4A SECTION**  
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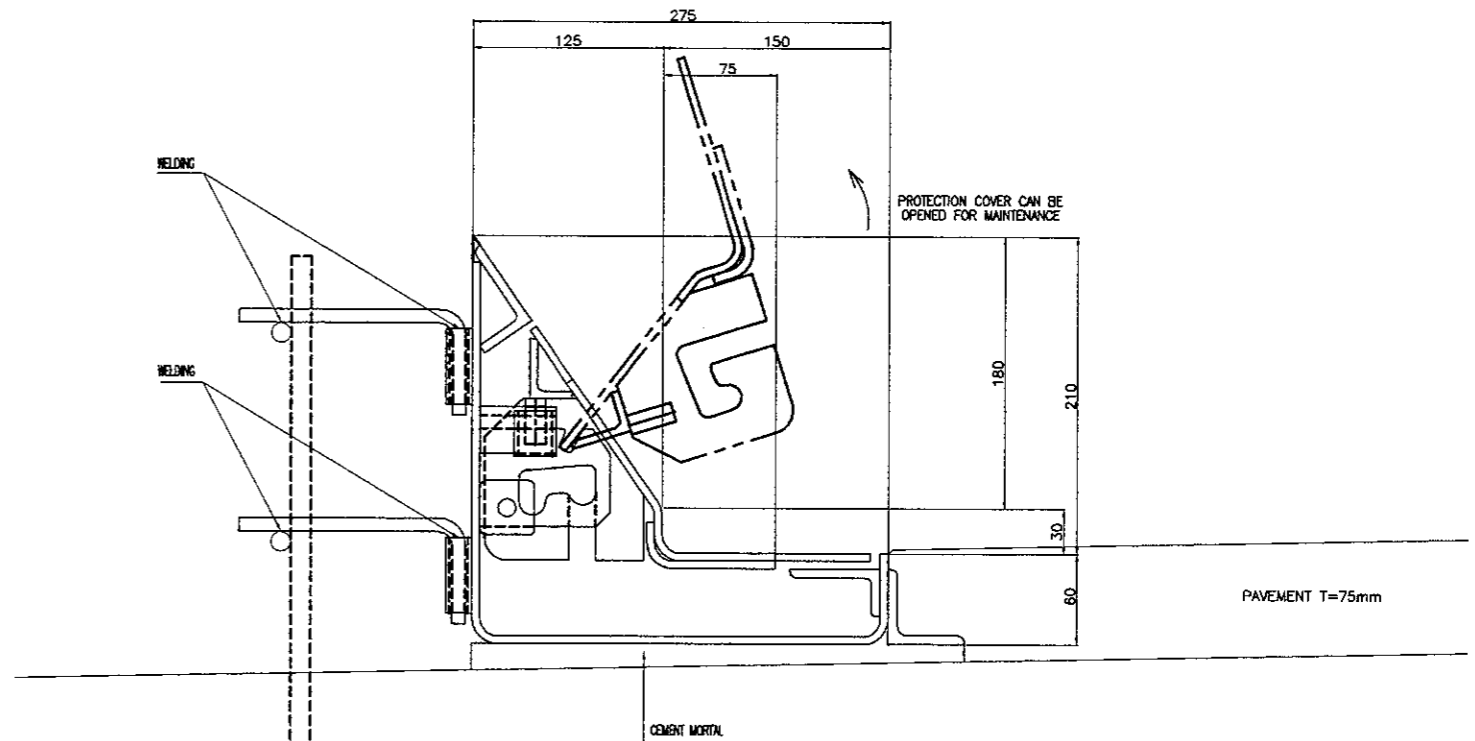


**4B SECTION**  
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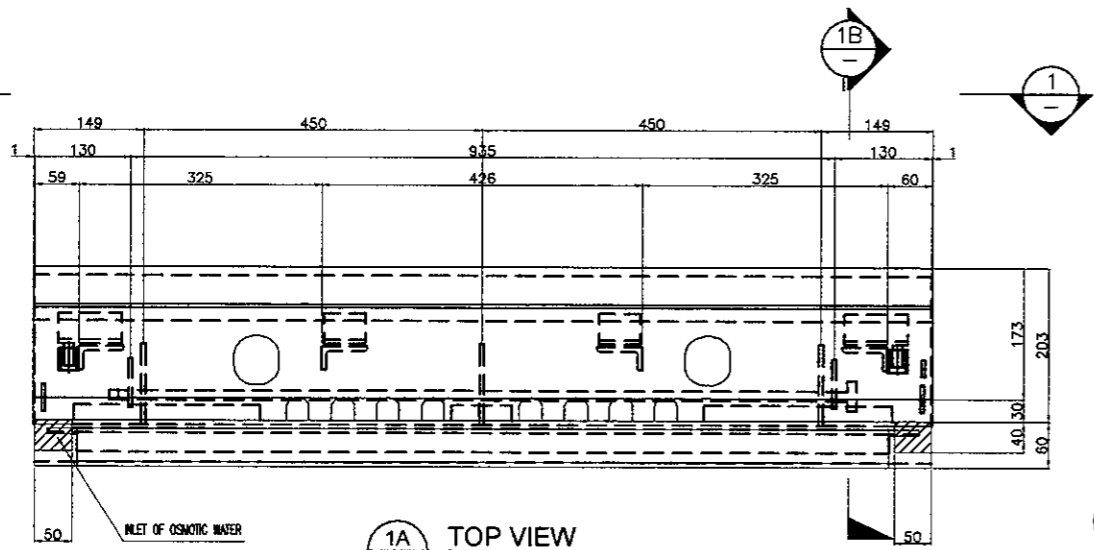
DESIGNED BY		CHECKED BY		SUBMITTED BY	
Name	R. UENO	Name	T. OKUMURA	Name	M. KIUCHI
Sign		Sign		Sign	
Date		Date		Date	



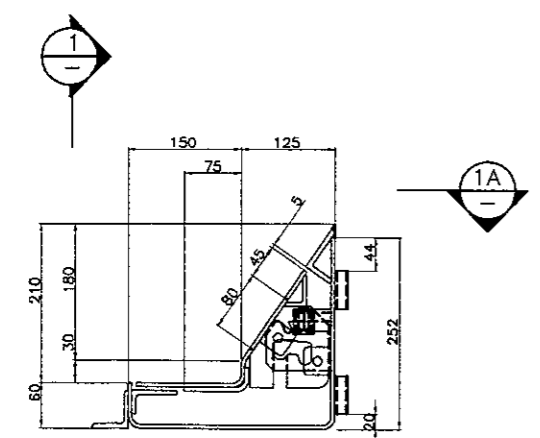
**1 STEEL GUTTER DETAIL**  
 SCALE 1:10



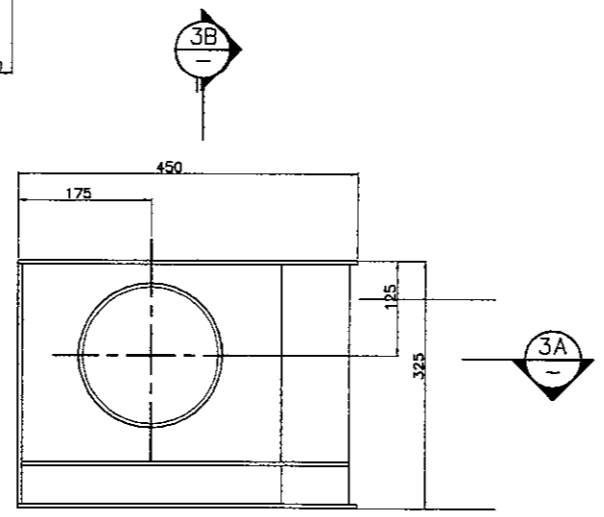
**2 TYPICAL CROSS SECTION**  
 SCALE 1:5



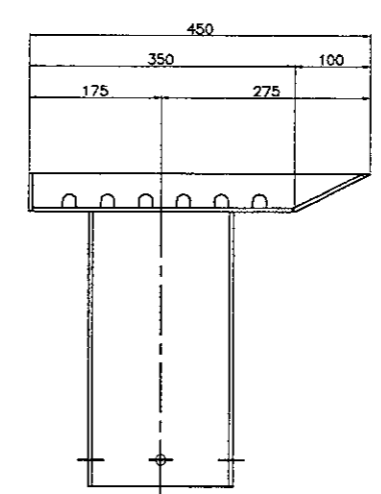
**1A TOP VIEW**  
 SCALE 1:10



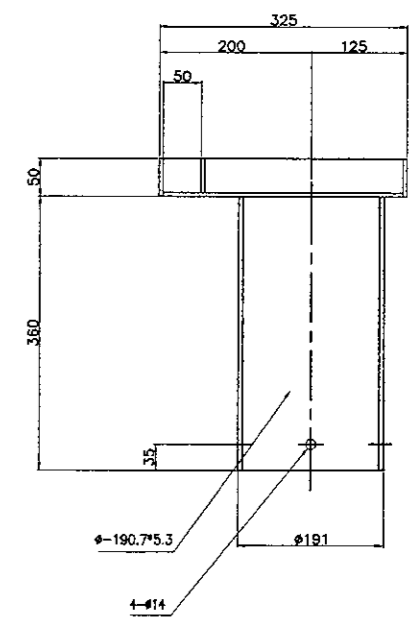
**1B SECTION 1B**  
 SCALE 1:10



**3 STEEL GUTTER DOWNSPOUT**  
 SCALE 1:10



**3A SECTION 3A**  
 SCALE 1:10



**3B SECTION 3B**  
 SCALE 1:10



JAPAN INTERNATIONAL  
COOPERATION AGENCY



DIRECTORATE GENERAL OF HIGHWAY  
MINISTRY OF PUBLIC WORKS  
REPUBLIC OF INDONESIA

# STRUCTURES

 **KEI** KATAHIRA & ENGINEERS INTERNATIONAL



JAPAN INTERNATIONAL  
COOPERATION AGENCY

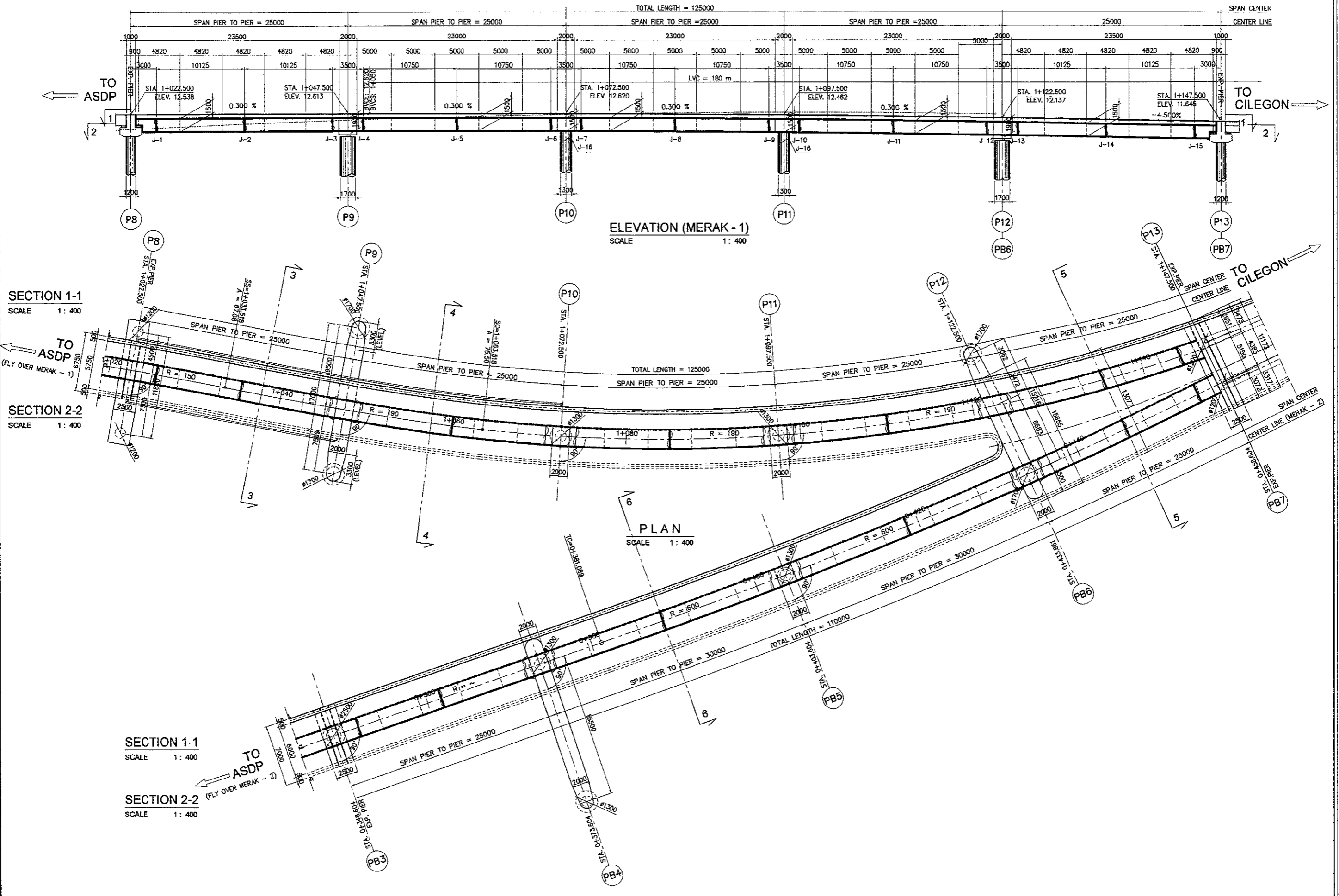


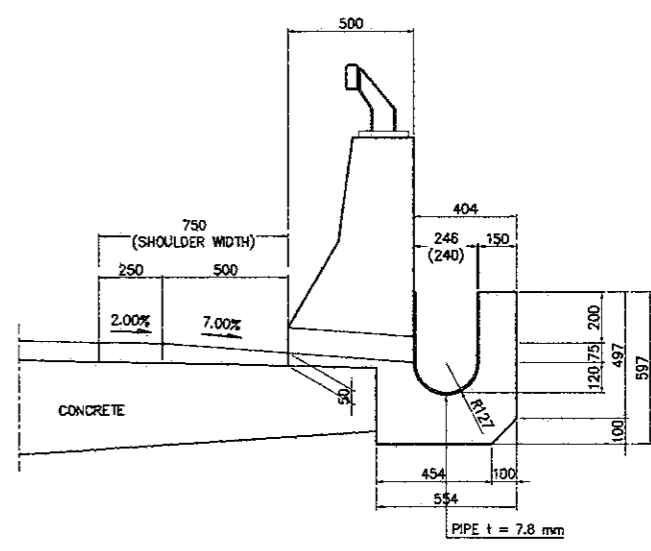
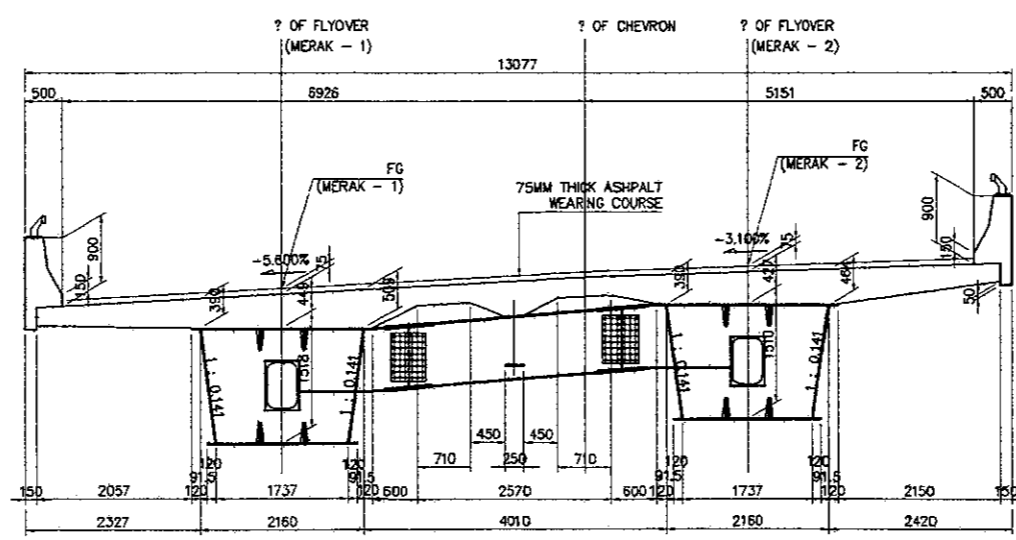
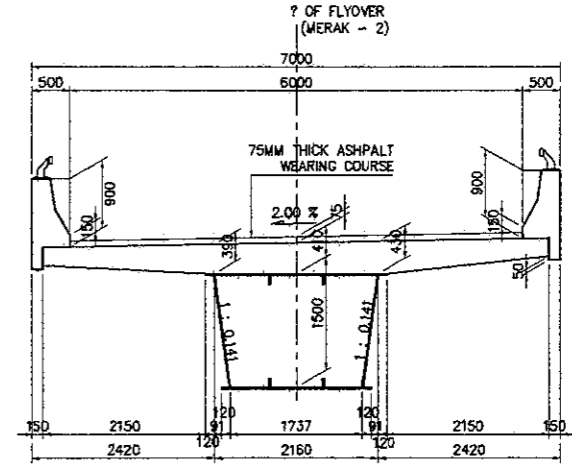
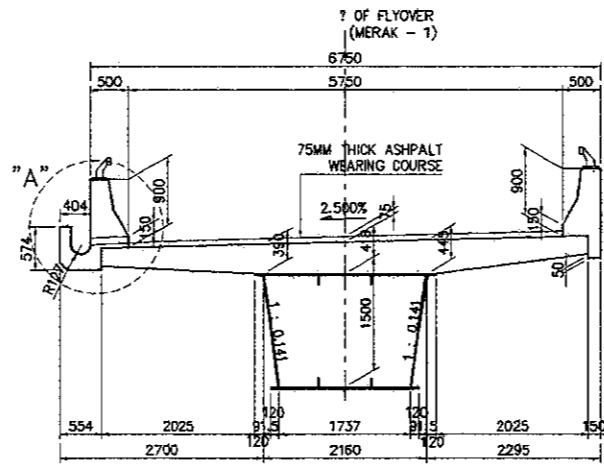
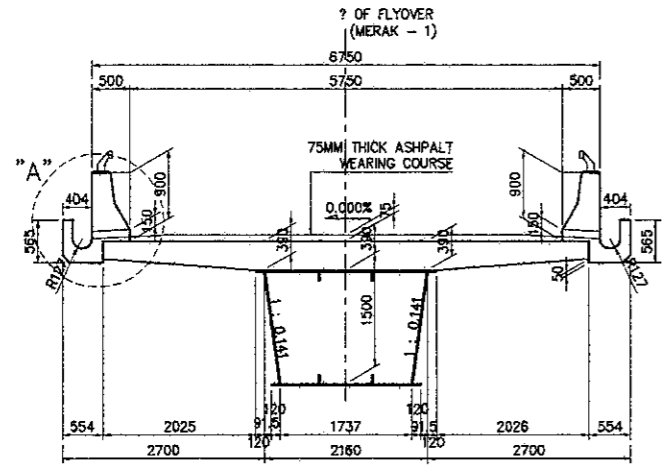
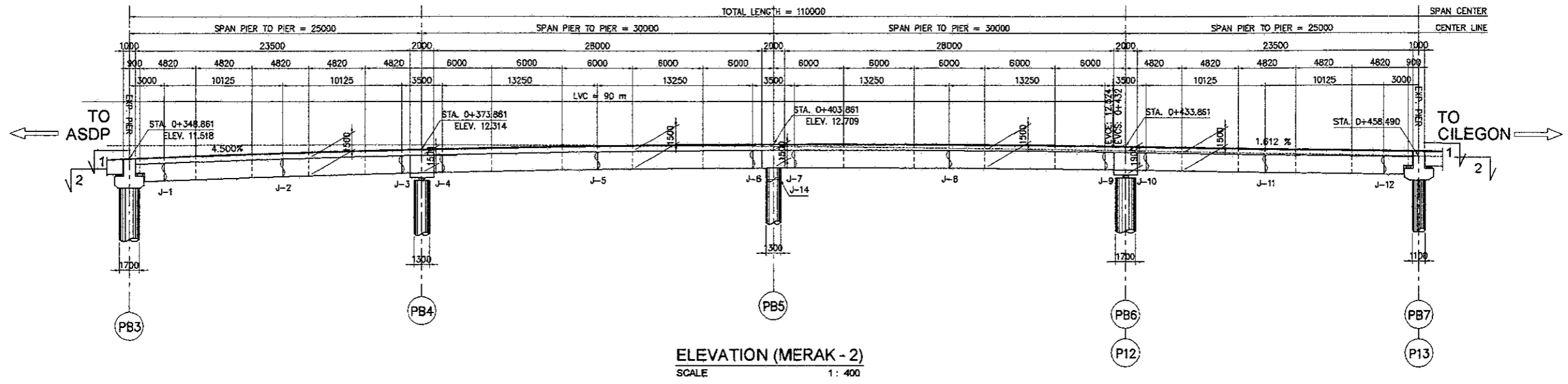
DIRECTORATE GENERAL OF HIGHWAY  
MINISTRY OF PUBLIC WORKS  
REPUBLIC OF INDONESIA

# STEEL SUPERSTRUCTURE

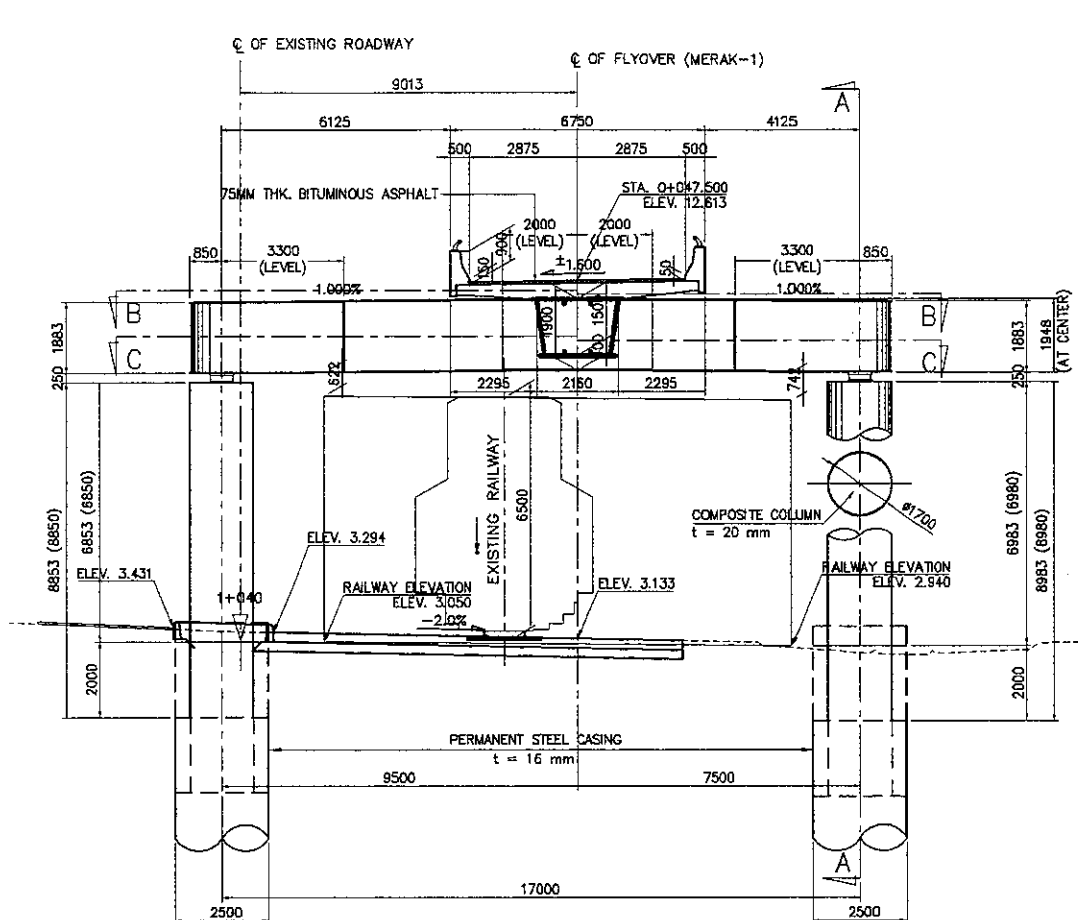
 **KEI** KATAHIRA & ENGINEERS INTERNATIONAL

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

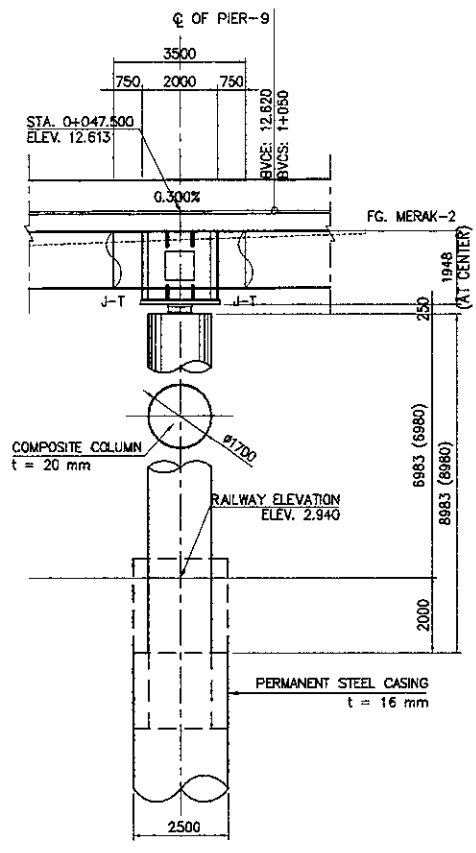




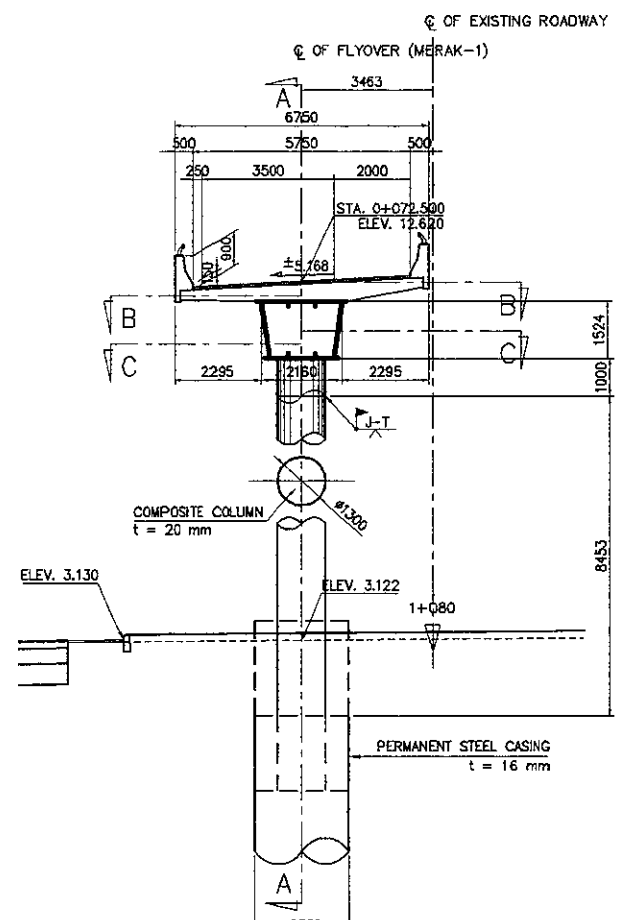




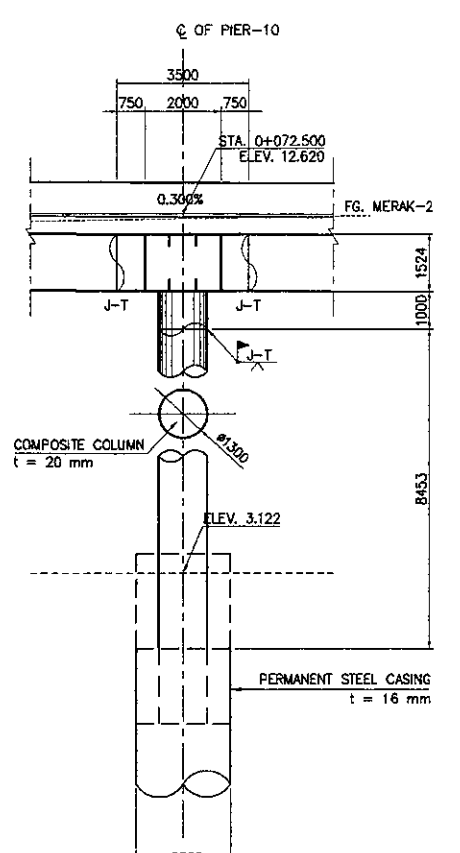
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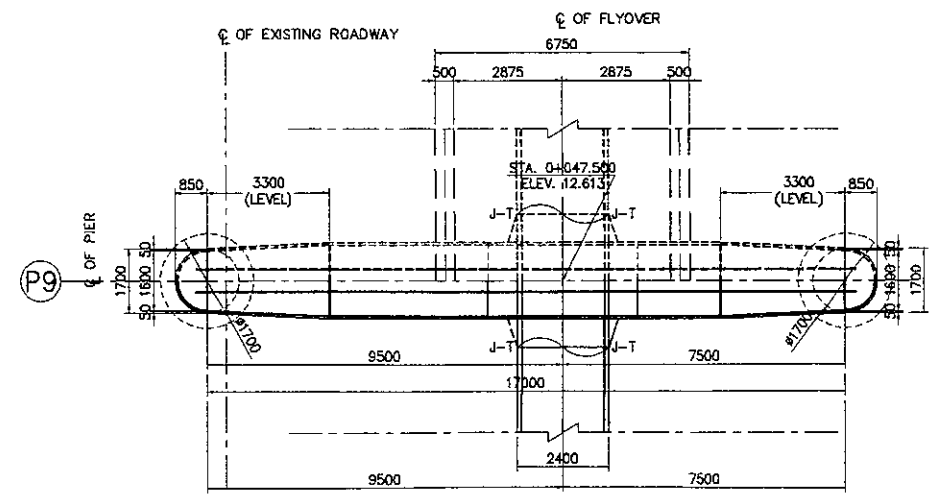
**SECTION A-A**  
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**SECTION OF PIER - 10**  
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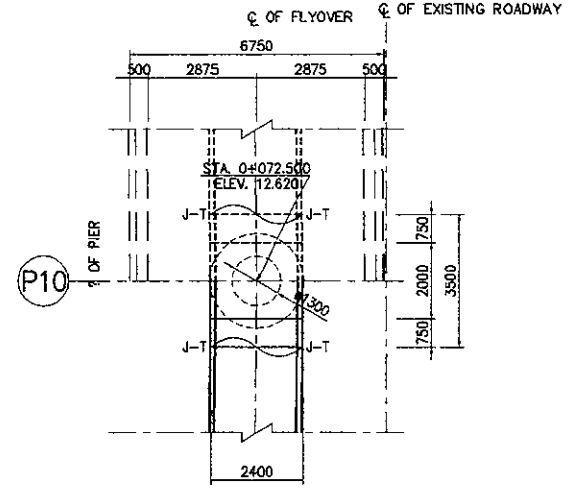


**SECTION A-A**  
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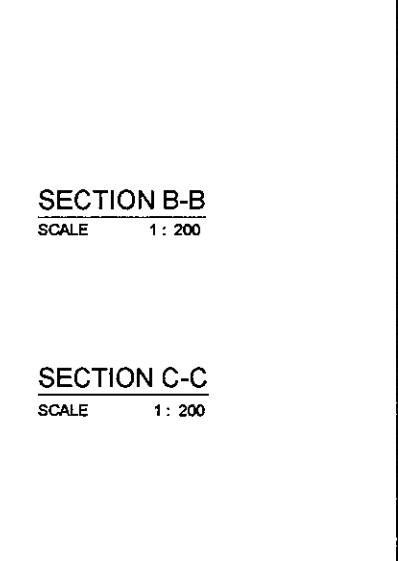
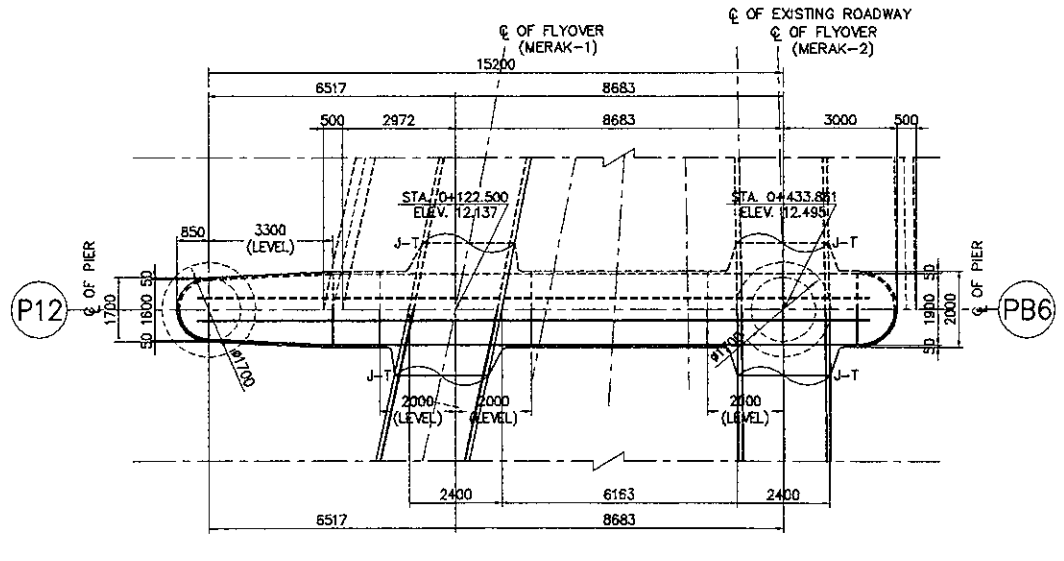
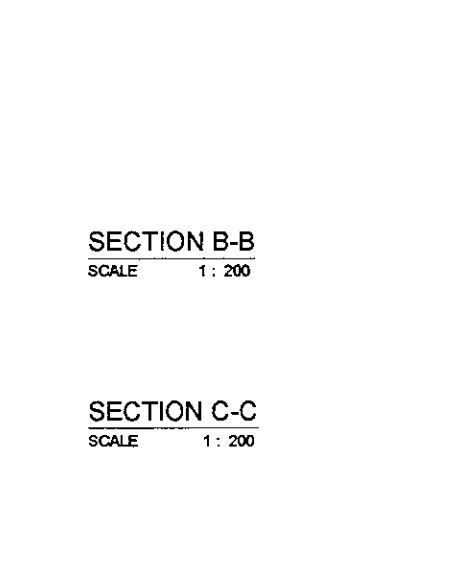
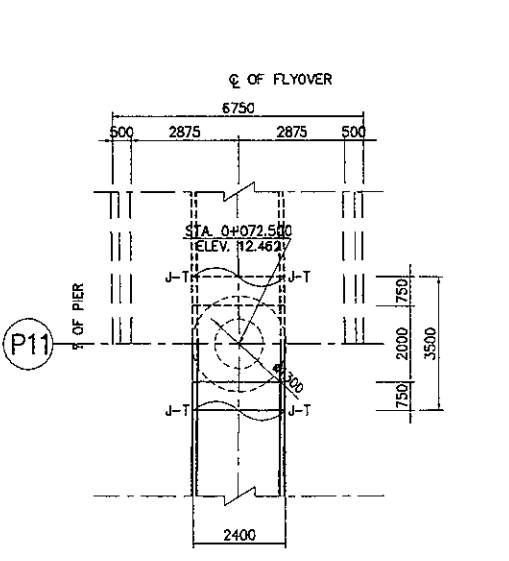
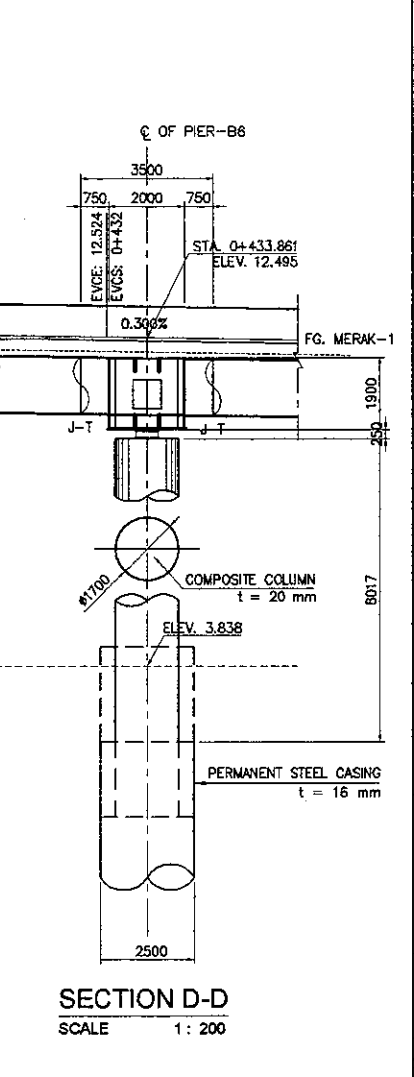
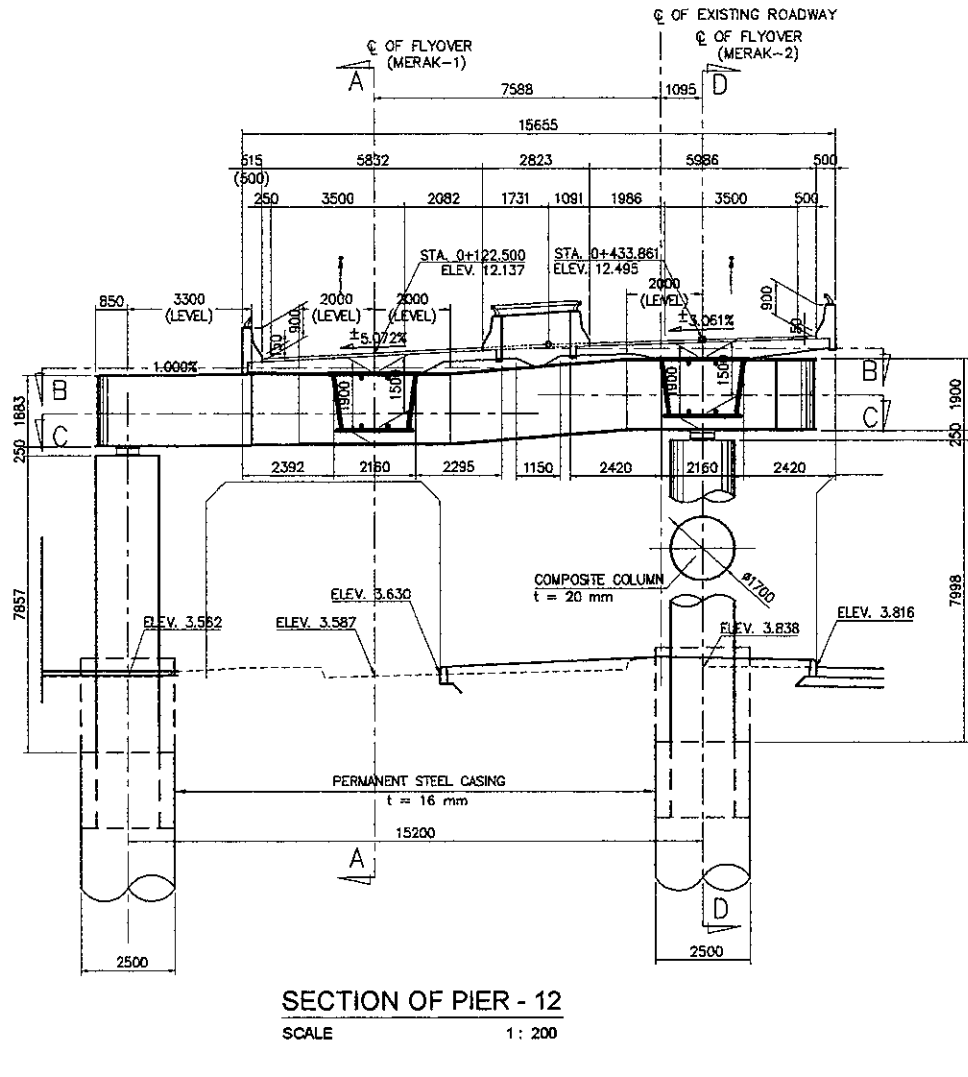
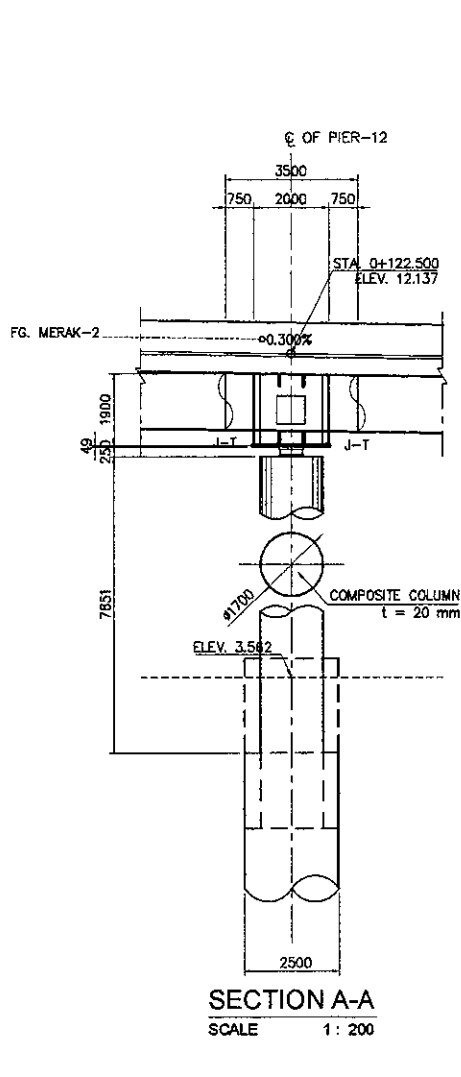
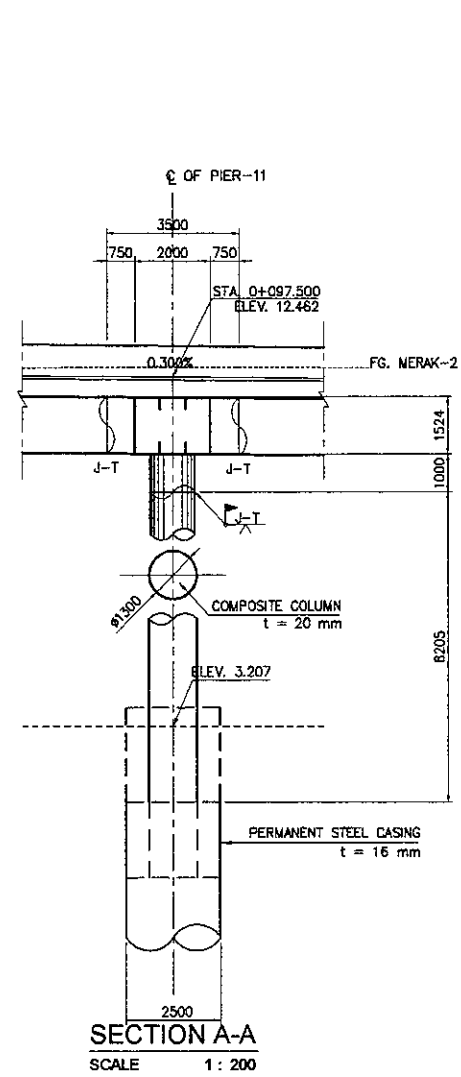
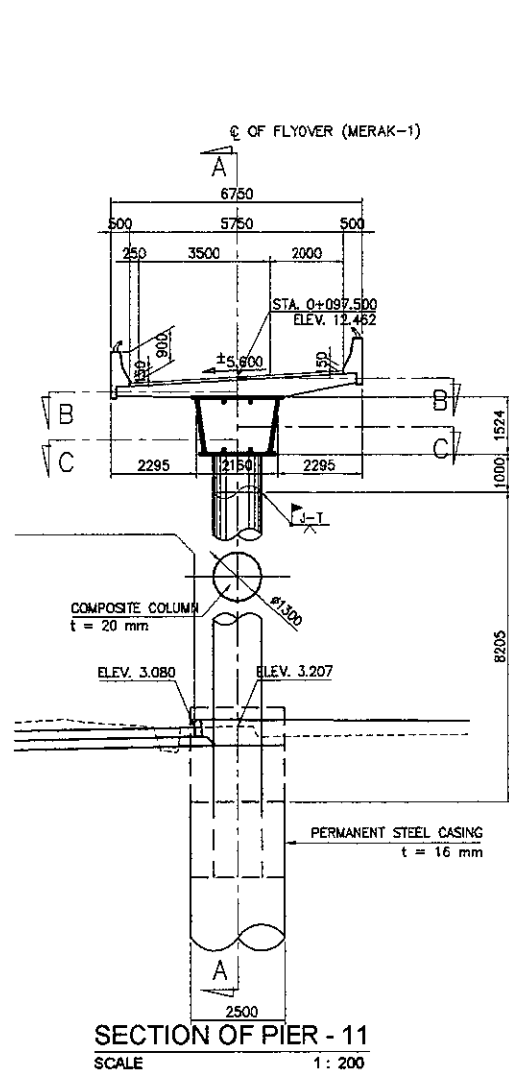
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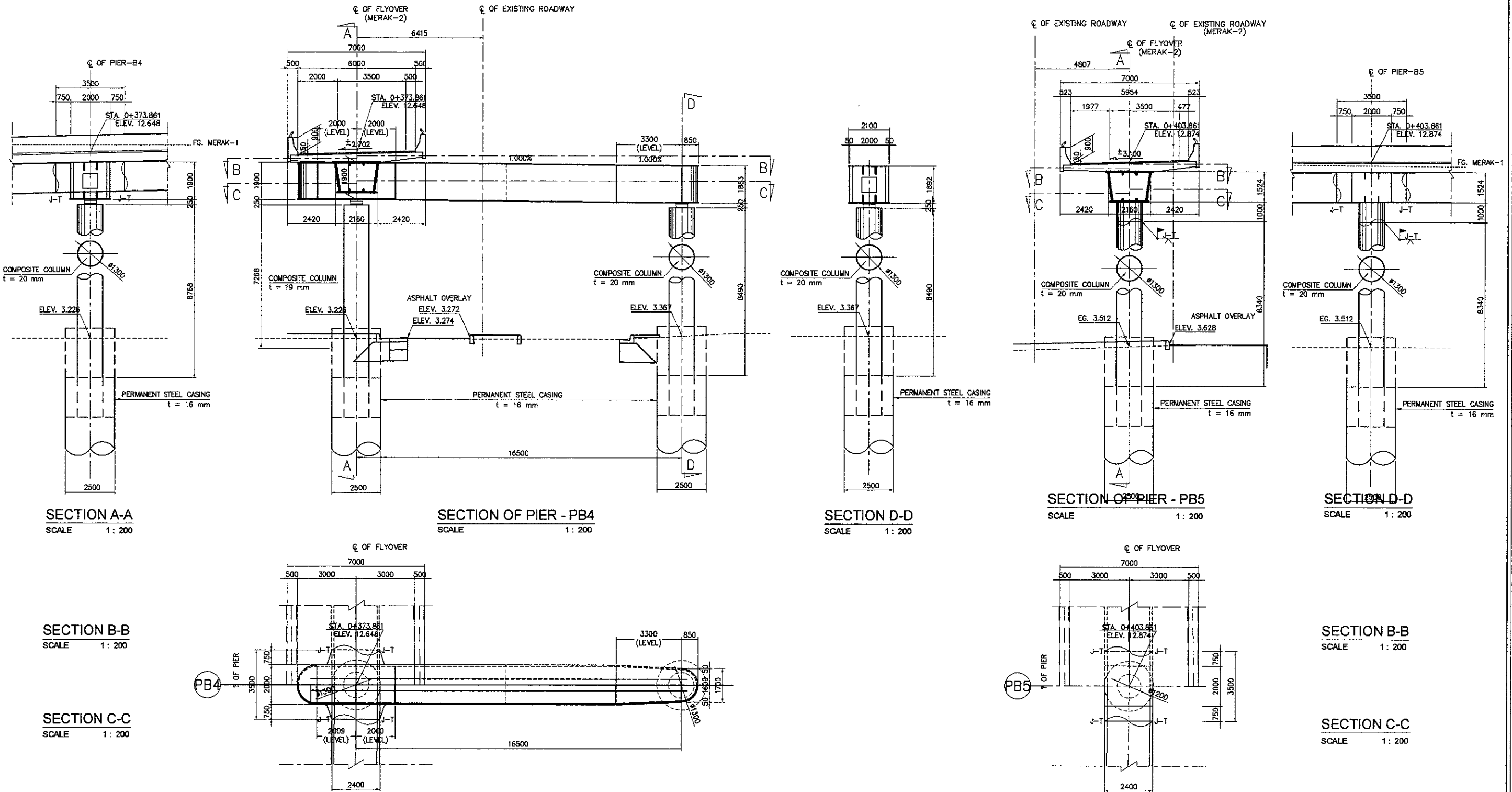
**SECTION C-C**  
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**SECTION B-B**  
 SCALE 1 : 200

**SECTION C-C**  
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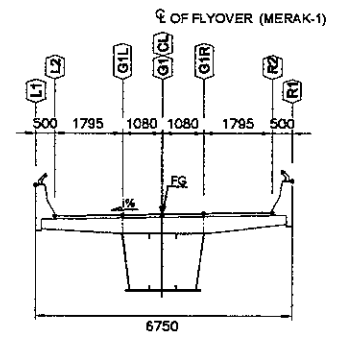
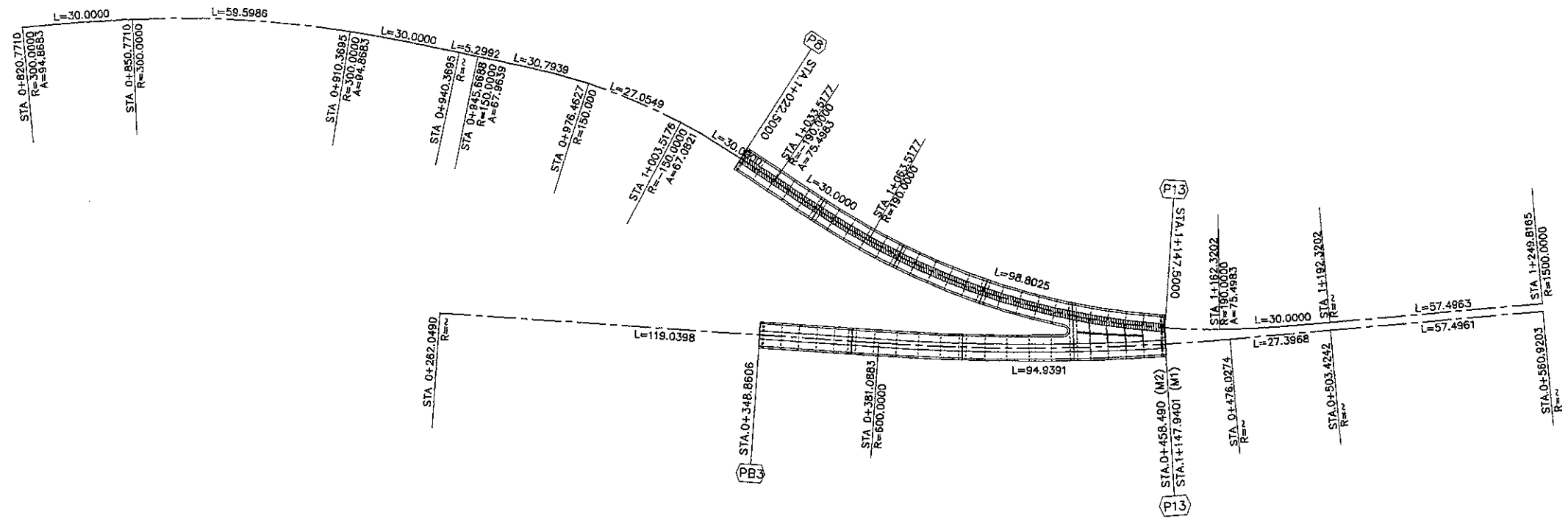




**COORDINATES AND ELEVATION**

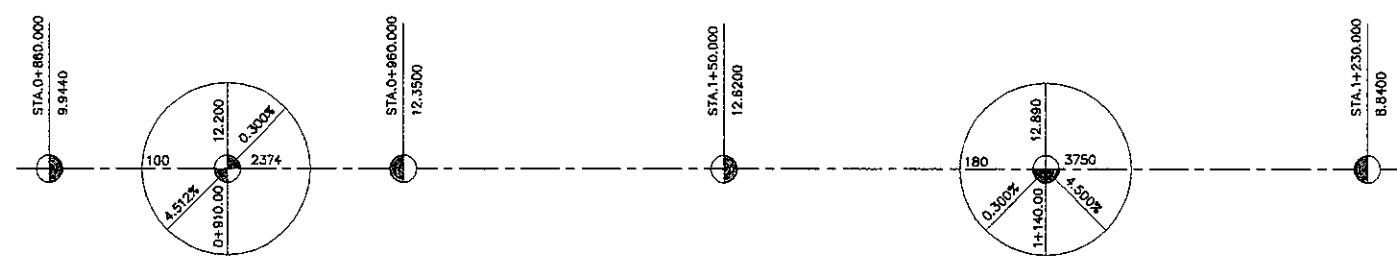
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L1 X	0.6524	1.3882	1.7314	6.4486	11.1372	15.8090	20.4712	24.1458	25.1275	26.1095	29.9950	34.8624	39.7313	44.6066	48.4891	49.4955	50.4924	54.3950	59.3017	64.2121	69.1228	73.0317	74.0306	75.0292	78.9319	83.8234	88.7017	93.5634	96.5971	97.6114	98.6232	103.0111	107.5915	112.1428	116.6618	120.7872	121.1201	121.8329
L1 Y	3.3113	3.1657	3.0975	2.1335	1.1492	0.1656	-0.7979	-1.5318	-1.7227	-1.9112	-2.6286	-3.4510	-4.1685	-4.7627	-5.1440	-5.2284	-5.3074	-5.3652	-5.7730	-5.8517	-5.8011	-5.6684	-5.6213	-5.5698	-5.3124	-4.8747	-4.3084	-3.6139	-3.1142	-2.9356	-2.7813	-1.8824	-0.8524	0.2978	1.5672	2.8392	2.9467	3.1791
L1 Z	13.4123	13.4117	13.4114	13.4074	13.4035	13.3985	13.3955	13.3923	13.3915	13.3907	13.3859	13.3735	13.3545	13.3288	13.3036	13.2890	13.2657	13.2407	13.2090	13.1707	13.1254	13.1257	13.1157	13.0740	13.0157	12.9507	12.8790	12.8307	12.8140	12.7970	12.7193	12.6315	12.5373	12.4368	12.3386	12.3305	12.3128	
L2 X	0.5558	1.2915	1.6348	6.3477	11.0339	15.7066	20.3716	24.0510	25.0326	26.0147	29.9073	34.7839	39.6643	44.5527	48.4582	49.4547	50.4515	54.3673	59.2871	64.2106	69.1346	73.0566	74.0555	75.0541	78.9699	83.8745	88.7659	93.6406	96.8052	97.8192	98.8308	103.1136	107.7063	112.2698	116.8011	120.9903	121.3232	122.0358
L2 Y	2.8208	2.6751	2.6067	1.6440	0.6599	-0.3238	-1.2878	-2.0227	-2.2136	-2.4021	-3.1209	-3.9448	-4.6640	-5.2598	-5.6423	-5.7267	-5.8057	-6.0644	-6.2728	-6.3517	-6.3009	-6.1677	-6.1207	-6.0682	-5.8110	-5.3721	-4.8042	-4.1079	-3.5855	-3.4062	-3.2214	-2.3718	-1.3390	-0.1858	1.0869	2.3793	2.4869	2.7195
L2 Z	12.5873	12.5867	12.5864	12.5824	12.5785	12.5745	12.5705	12.5673	12.5665	12.5657	12.5609	12.5485	12.5295	12.5038	12.4785	12.4714	12.4640	12.4407	12.4157	12.3840	12.3457	12.3103	12.3007	12.2907	12.2490	12.1907	12.1257	12.0540	12.0037	11.9870	11.9700	11.8943	11.8065	11.7123	11.6118	11.5123	11.5042	11.4865
G1L X	0.2088	0.9445	1.2878	5.9822	10.6632	15.3389	20.0140	23.7104	24.6921	25.6741	29.5922	34.5022	39.4239	44.3590	48.3116	49.3080	50.3049	54.2677	59.2347	64.2055	69.1767	73.1459	74.1448	75.1434	79.1064	84.0590	88.9963	93.9178	97.5522	98.5652	99.5759	103.4827	108.1218	112.7334	117.3147	121.7503	122.0839	122.7981
G1L Y	1.0596	0.9140	0.8456	-0.1134	-1.0964	-2.0807	-3.0468	-3.7851	-3.9760	-4.1645	-4.8880	-5.7175	-6.4429	-7.0443	-7.4313	-7.5157	-7.5948	-7.8567	-8.0671	-8.1467	-8.0954	-7.9606	-7.9134	-7.8610	-7.6008	-7.1577	-6.5844	-5.8814	-5.2770	-5.0956	-4.9088	-4.1333	-3.1003	-1.9510	-0.6860	0.6583	0.7642	0.9932
G1L Z	12.5562	12.5574	12.5579	12.5654	12.5728	12.5803	12.5878	12.5937	12.5952	12.5968	12.6020	12.6025	12.5964	12.5836	12.5686	12.5642	12.5585	12.5412	12.5162	12.4845	12.4462	12.4108	12.4012	12.3913	12.3495	12.2912	12.2262	12.1545	12.0971	12.0804	12.0635	11.9951	11.9079	11.8145	11.7152	11.6123	11.6043	11.5871
G1 X	0.0000	0.7357	1.0790	5.7622	10.4402	15.1177	19.7988	23.5055	24.4872	25.4692	29.4027	34.3328	39.2792	44.2424	48.2233	49.2198	50.2166	54.2078	59.2032	64.2024	69.2020	73.1996	74.1985	75.1971	79.1885	84.1684	89.1349	94.0846	98.0014	99.0139	100.0240	103.7041	108.3697	113.0077	117.6152	122.1892	122.5227	123.2367
G1 Y	0.0000	-0.1456	-0.2140	-1.1708	-2.1531	-3.1378	-4.1052	-4.8455	-5.0364	-5.2249	-5.9513	-6.7841	-7.5131	-8.1180	-8.5077	-8.5921	-8.6712	-8.9350	-9.1466	-9.2267	-9.1751	-9.0392	-8.9921	-8.9397	-8.6777	-8.2320	-7.6555	-6.9485	-6.2943	-6.1115	-5.9234	-5.1903	-4.1514	-2.9955	-1.7233	-0.3356	-0.2295	0.0000
G1 Z	12.5375	12.5388	12.5408	12.5551	12.5695	12.5838	12.5982	12.6095	12.6125	12.6155	12.6267	12.6350	12.6367	12.6317	12.6229	12.6200	12.6169	12.6017	12.5767	12.5450	12.5067	12.4712	12.4617	12.4519	12.4100	12.3517	12.2867	12.2150	12.1533	12.1367	12.1197	12.0555	11.9683	11.8750	11.7756	11.6701	11.5622	11.6450
CL X	0.0000	0.7357	1.0790	5.7622	10.4402	15.1177	19.7988	23.5055	24.4872	25.4692	29.4027	34.3328	39.2792	44.2424	48.2233	49.2198	50.2166	54.2078	59.2032	64.2024	69.2020	73.1996	74.1985	75.1971	79.1885	84.1684	89.1349	94.0846	98.0014	99.0139	100.0240	103.7041	108.3697	113.0077	117.6152	122.1892	122.5227	123.2367
CL Y	0.0000	-0.1456	-0.2140	-1.1708	-2.1531	-3.1378	-4.1052	-4.8455	-5.0364	-5.2249	-5.9513	-6.7841	-7.5131	-8.1180	-8.5077	-8.5921	-8.6712	-8.9350	-9.1466	-9.2267	-9.1751	-9.0392	-8.9921	-8.9397	-8.6777	-8.2320	-7.6555	-6.9485	-6.2943	-6.1115	-5.9234	-5.1903	-4.1514	-2.9955	-1.7233	-0.3356	-0.2295	0.0000
CL Z	12.5375	12.5388	12.5408	12.5551	12.5695	12.5838	12.5982	12.6095	12.6125	12.6155	12.6267	12.6350	12.6367	12.6317	12.6229	12.6200	12.6169	12.6017	12.5767	12.5450	12.5067	12.4712	12.4617	12.4519	12.4100	12.3517	12.2867	12.2150	12.1533	12.1367	12.1197	12.0555	11.9683	11.8750	11.7756	11.6701	11.5622	11.6450
G1R X	-0.2088	0.5269	0.8702	5.5423	10.2172	14.8964	19.5836	23.3007	24.2823	25.2643	29.2132	34.1633	39.1346	44.1259	48.1351	49.1315	50.1284	54.1479	59.1717	64.1993	69.2273	73.2534	74.2523	75.2509	79.2706	84.2788	89.2736	94.2513	98.4505	99.4623	100.4719	103.9256	108.6177	113.2821	117.9157	122.6280	122.9615	123.6753
G1R Y	-1.0596	-1.2053	-1.2737	-2.2282	-3.2098	-4.1949	-5.1635	-5.9058	-6.0968	-6.2853	-7.0145	-7.8508	-8.5834	-9.1917	-9.5841	-9.6685	-9.7476	-10.0134	-10.2261	-10.3067	-10.2549	-10.1179	-10.0708	-10.0184	-9.7545	-9.3064	-8.7266	-8.0155	-7.3112	-7.1271	-6.9377	-6.2474	-5.2026	-4.0401	-2.7607	-1.3294	-0.9932	
G1R Z	12.5188	12.5221	12.5237	12.5449	12.5661	12.5873	12.6086	12.6254	12.6298	12.6342	12.6514	12.6675	12.6769	12.6797	12.6758	12.6742	12.6621	12.6371	12.6055	12.5671	12.5316	12.5221	12.5124	12.4705	12.4121	12.3471	12.2755	12.2096	12.1929	12.1761	12.1160	12.0288	11.9355	11.8361	11.7280	11.7200	11.7029	
R2 X	-0.5558	0.1789	0.5232	5.1767	9.8465	14.5287	19.2259	22.9601	23.9417	24.9238	28.8981	33.8816	38.8842	43.9322	47.9884	48.9848	49.9817	54.0484	59.1194	64.1942	69.2695	73.3427	74.3416	75.3402	79.4070	84.4823	89.5040	94.5285										
R2 Y	-2.8208	-2.9664	-3.0348	-3.9855	-4.9661	-5.9518	-6.9225	-7.6683	-7.8592	-8.0477	-8.7816	-9.6235	-10.3622	-10.9762	-11.3732	-11.4575	-11.5366	-11.8056	-12.0204	-12.1016	-12.0494	-11.9107	-11.8635	-11.8112	-11.5443	-11.0920	-10.5067	-9.7890										
R2 Z	12.4877	12.4928	12.4952	12.5278	12.5605	12.5932	12.6258	12.6517	12.6585	12.6653	12.6824	12.7215	12.7438	12.7595	12.7673	12.7686	12.7698	12.7627	12.7377	12.7060	12.6677	12.6321	12.6227	12.6130	12.5710	12.5127	12.4477	12.3760										
R1 X	-0.6524	0.0833	0.4265	5.0749	9.7432	14.4263	19.1263	22.8652	23.8469	24.8289	28.8104	33.8032	38.8272	43.8782	47.9475	48.9440	49.9408	54.0207	59.1048	64.1928	69.2812	73.3676	74.3664	75.3651	79.4450	84.5135	89.5682	94.6057										
R1 Y	-3.3113	-3.4570	-3.5254	-4.4751	-5.4553	-6.4412	-7.4125	-8.1592	-8.3501	-8.5386	-9.2739	-10.1173	-10.8577	-11.4733	-11.8715	-11.9558	-12.0348	-12.3048	-12.5202	-12.6016	-12.5492	-12.4101	-12.3629	-12.3106	-12.0429	-11.5893	-11.0026	-10.2830										
R1 Z	13.3127	13.3178	13.3202	13.3528	13.3855	13.4182	13.4508	13.4767	13.4835	13.4903	13.5174	13.5465	13.5688	13.5845	13.5923	13.5936	13.5946	13.5877	13.56																			

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

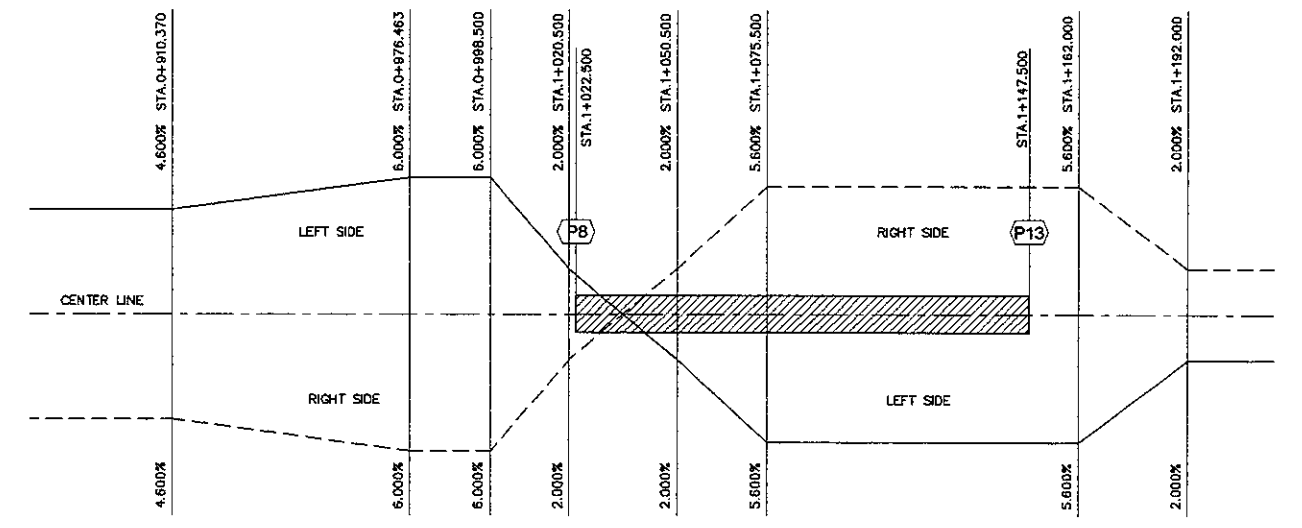


**KEY PLAN**  
 SCALE 1:1500

**SECTION VIEW**  
 SCALE 1:200



**ELEMENT OF VERTICAL ALIGNMENT**  
 NOT TO SCALE



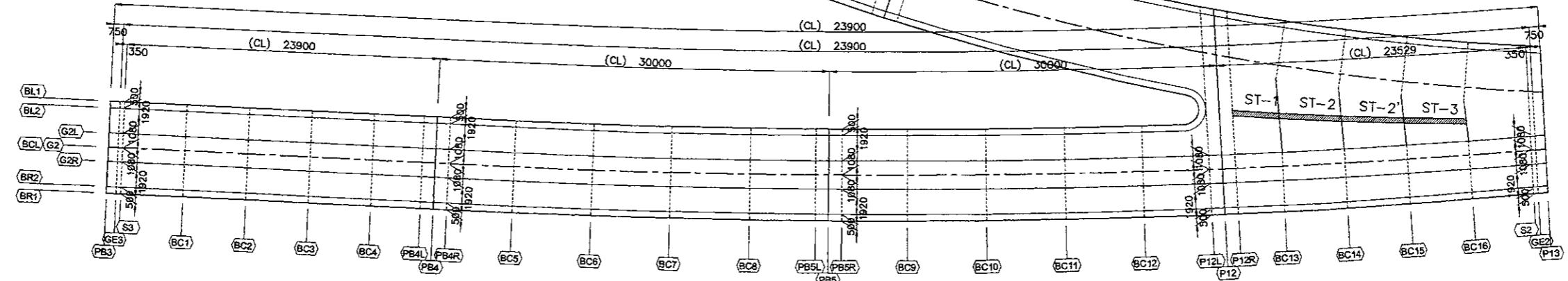
**SUPER ELEVATION**  
 NOT TO SCALE

**COORDINATES AND ELEVATION**

SECTION LINE	PB3	GE3	S3	BC1	BC2	BC3	BC4	PB4L	PB4R	BC5	BC6	BC7	BC8	PB5L	PB5R	BC9	BC10	BC11	BC12	P12L	P12R	BC13	BC14	BC15	BC16	S2	GE2	P13			
BL1	X 21.3181	22.0320	22.3651	26.8148	31.4646	36.0143	40.5641	44.1620	45.1138	46.0656	50.8248	56.5034	62.1569	67.7910	72.4655	73.4053	74.3446	78.9993	84.5722	90.1237	95.6530										
	Y -38.8733	-38.7433	-38.6360	-37.1703	-35.7046	-34.2389	-32.7732	-31.6141	-31.3075	-31.0008	-29.4677	-27.6185	-25.7160	-23.7572	-22.0838	-21.7421	-21.3987	-19.6708	-17.5438	-15.3612	-13.1231										
	Z 12.7270	12.7530	12.7650	12.9204	13.0601	13.1841	13.2925	13.3672	13.3853	13.4027	13.4796	13.5505	13.5972	13.6191	13.6186	13.6165	13.6136	13.5892	13.5372	13.4606	13.3593										
BL2	X 21.4714	22.1853	22.5184	27.0682	31.6179	36.1676	40.7174	44.3153	45.2671	46.2189	50.9781	56.6605	62.3187	67.9576	72.6368	73.5766	74.5158	79.1752	84.7529	90.3089	95.8429										
	Y -39.4492	-39.2192	-39.1119	-37.6482	-36.1805	-34.7148	-33.2491	-32.0800	-31.7834	-31.4768	-29.9436	-28.0932	-26.1891	-24.2286	-22.5536	-22.2118	-21.8685	-20.1389	-18.0101	-15.8258	-13.5857										
	Z 11.9020	11.9280	11.9400	12.0954	12.2351	12.3581	12.4675	12.5422	12.5603	12.5777	12.6546	12.7255	12.7722	12.7941	12.7936	12.7815	12.7886	12.7642	12.7122	12.6356	12.5343										
G2L	X 22.0602	22.7740	23.1072	27.6569	32.2066	36.7564	41.3061	44.9040	45.8559	46.8077	51.5668	57.2638	62.9402	68.5972	73.2945	74.2342	75.1735	79.8508	85.4465	91.0204	96.5721	101.1633	102.0850	103.0060	106.3215	110.6668	115.0047	119.3337	123.5807	128.8557	134.1707
	Y -41.2767	-41.0468	-40.9394	-39.4737	-38.0080	-36.5423	-35.0766	-33.9175	-33.6109	-33.3043	-31.7711	-29.9159	-28.0058	-26.0390	-24.3574	-24.0157	-23.6724	-21.9361	-19.8004	-17.6089	-15.3618	-13.4544	-13.0661	-12.6762	-11.2578	-9.3628	-7.4301	-5.4600	-3.4867	-1.5028	
	Z 11.9559	11.9820	11.9940	12.1502	12.2907	12.4156	12.5249	12.6002	12.6185	12.6361	12.7139	12.7850	12.8317	12.8537	12.8532	12.8510	12.8482	12.8237	12.7717	12.6951	12.5938	12.4747	12.4521	12.4292	12.3443	12.2272	12.1039	11.9750	11.8434	11.8120	
G2R	X 22.3913	23.1052	23.4383	27.9881	32.5378	37.0875	41.6373	45.2352	46.1870	47.1388	51.8980	57.5931	63.2897	68.9569	73.6644	74.6042	75.5434	80.2309	85.8366	91.4206	96.9823	101.5996	102.5213	103.4423	106.7493	111.1026	115.4481	119.7849	124.0711	128.3321	132.5807
	Y -42.3047	-42.0747	-41.9674	-40.5017	-39.0360	-37.5703	-36.1046	-34.9455	-34.6389	-34.3322	-32.7991	-30.9412	-29.0276	-27.0573	-25.3721	-25.0303	-24.6870	-22.9470	-20.8075	-18.6120	-16.3608	-14.4425	-14.0542	-13.6643	-12.2494	-10.3510	-8.4149	-6.4412	-4.4749	-2.5069	
	Z 11.9861	12.0123	12.0244	12.1811	12.3211	12.4475	12.5572	12.6329	12.6513	12.6690	12.7472	12.8185	12.8652	12.8871	12.8866	12.8845	12.8816	12.8572	12.8052	12.7286	12.6273	12.5042	12.4816	12.4587	12.3741	12.2571	12.1339	12.0052	11.8745	11.8432	
BCL	X 22.3913	23.1052	23.4383	27.9881	32.5378	37.0875	41.6373	45.2352	46.1870	47.1388	51.8980	57.5931	63.2897	68.9569	73.6644	74.6042	75.5434	80.2309	85.8366	91.4206	96.9823	101.5996	102.5213	103.4423	106.7493	111.1026	115.4481	119.7849	124.0711	128.3321	132.5807
	Y -42.3047	-42.0747	-41.9674	-40.5017	-39.0360	-37.5703	-36.1046	-34.9455	-34.6389	-34.3322	-32.7991	-30.9412	-29.0276	-27.0573	-25.3721	-25.0303	-24.6870	-22.9470	-20.8075	-18.6120	-16.3608	-14.4425	-14.0542	-13.6643	-12.2494	-10.3510	-8.4149	-6.4412	-4.4749	-2.5069	
	Z 11.9861	12.0123	12.0244	12.1811	12.3211	12.4475	12.5572	12.6329	12.6513	12.6690	12.7472	12.8185	12.8652	12.8871	12.8866	12.8845	12.8816	12.8572	12.8052	12.7286	12.6273	12.5042	12.4816	12.4587	12.3741	12.2571	12.1339	12.0052	11.8745	11.8432	
G2R	X 22.7225	23.4364	23.7695	28.3192	32.8690	37.4187	41.9684	45.5664	46.5182	47.4700	52.2291	57.9242	63.6393	69.3167	74.0343	74.9741	75.9133	80.6110	86.2268	91.8208	97.3925	102.9360	102.9576	103.8786	107.1771	111.5382	115.8916	120.2362	124.4535	128.685	132.8436
	Y -43.3327	-43.1027	-42.9954	-41.5297	-40.0640	-38.5983	-37.1326	-35.9735	-35.6668	-35.3602	-33.8270	-31.9666	-30.0495	-28.0756	-26.3868	-26.0450	-25.7017	-23.9579	-21.8146	-19.6152	-17.3599	-15.4308	-15.0422	-14.6524	-13.2411	-11.3363	-9.3996	-7.4224	-5.4631	-3.5151	
	Z 12.0164	12.0426	12.0548	12.2119	12.3534	12.4793	12.5895	12.6655	12.6840	12.7018	12.7806	12.8520	12.8986	12.9206	12.9201	12.9180	12.9151	12.8906	12.8387	12.7621	12.6608	12.5336	12.5111	12.4882	12.4040	12.2870	12.1640	12.0354	11.9056	11.8744	
BR2	X 23.3112	24.0251	24.3582	28.9080	33.4577	38.0075	42.5572	46.1551	47.1069	48.0588	52.8179	58.5157	64.2607	69.9563	74.6920	75.6318	76.5710	81.2867	86.9203	92.5322	98.1218	102.8115	103.7329	104.6534	107.9343	112.3035	116.6617	121.0079	125.1857	129.1896	133.1221
	Y -45.1602	-44.9302	-44.8229	-43.3572	-41.8915	-40.4258	-38.9601	-37.8010	-37.4944	-37.1878	-35.6546	-33.7893	-31.8662	-29.8859	-28.1906	-27.8489	-27.5056	-25.7551	-23.6049	-21.3984	-19.1360	-17.1868	-16.7978	-16.4069	-14.9964	-13.0753	-11.1099	-9.1003	-7.1213	-5.1708	
	Z 12.0702	12.0966	12.1088	12.2668	12.4091	12.5358	12.6469	12.7236	12.7423	12.7602	12.8399	12.9115	12.9582	12.9801	12.9796	12.9775	12.9747	12.9502	12.8982	12.8216	12.7203	12.5961	12.5735	12.4871	12.3457	12.1988	12.0471	11.8904	11.7284	11.5616	
BR1	X 23.4845	24.1984	24.5315	29.0813	33.6310	38.1807	42.7304	46.3283	47.2801	48.2319	52.9910	58.6888	64.4338	70.1828	74.9277	75.8675	76.8067	81.5224	87.1560	92.7777	98.3873	103.9849	104.9064	108.1874	112.5566	116.9258	121.2950	125.5878	129.8017	133.9366	
	Y -45.6361	-45.4062	-45.2988	-43.8331	-42.3674	-40.9017	-39.4360	-38.2769	-37.9703	-37.6637	-36.1305	-34.2640	-32.3393	-30.3574	-28.6604	-28.3186	-27.9753	-26.2231	-24.0711	-21.8629	-19.5985	-17.6443	-17.2552	-16.8643	-15.4555	-13.5329	-11.5658	-9.5546	-7.5789	-5.6424	
	Z 12.8952	12.9216	12.9338	13.0918	13.2341	13.3608	13.4719	13.5486	13.5673	13.5852	13.6649	13.7365	13.7832	13.8051	13.8046	13.8025	13.7997	13.7752	13.7232	13.6466	13.5453	13.4092	13.3867	13.3639	13.2804	13.1632	13.0397	12.9106	12.7817	12.7506	

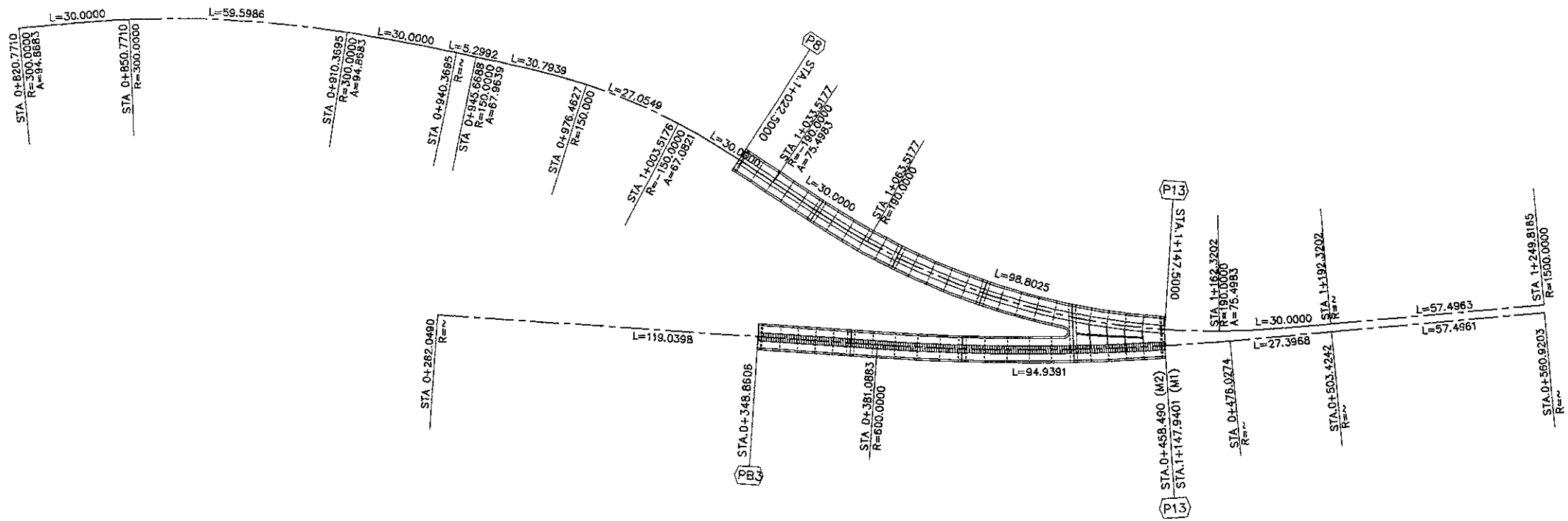


**ELEVATION REFERENCE**  
 NOT TO SCALE

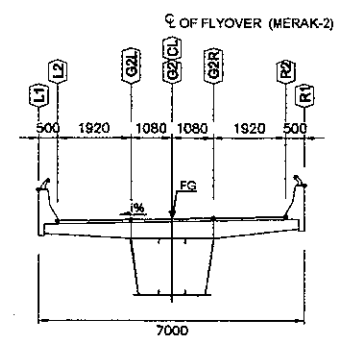


**PLAN VIEW**  
 SCALE 1:400

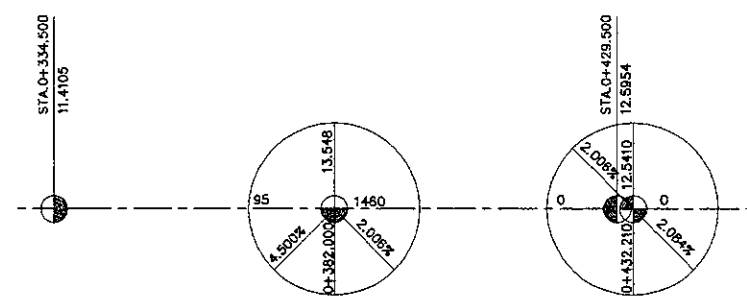
DESIGNED BY		CHECKED BY		SUBMITTED BY	
Name	S. MATSUI	Name	T. OKUMURA	Name	M. KIUCHI
Sign		Sign		Sign	
Date		Date		Date	



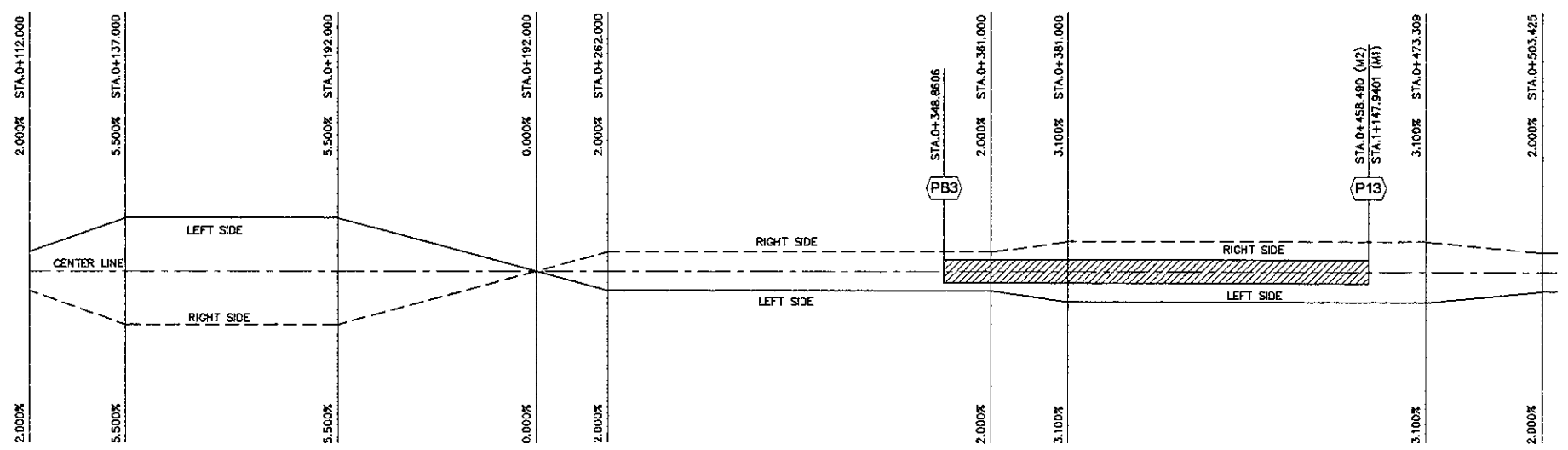
**KEY PLAN**  
 SCALE 1:1500



**SECTION VIEW**  
 SCALE 1:200



**ELEMENT OF VERTICAL ALIGNMENT**  
 NOT TO SCALE



**SUPER ELEVATION**  
 NOT TO SCALE

**MAIN GIRDER**

KIND	MATERIAL	PLATE THICKNESS (mm)	P8/PB4-P13			
			MAIN GIRDER (kg)	TOTAL (kg)		
PL	SM490YB	38	15,536	15,536		
		36	2,208	2,208		
		32	2,063	2,063		
		30	18,802	18,802		
		28	27,375	27,375		
		27	1,470	1,470		
		25	31,226	31,226		
		24	1,585	1,585		
		23	2,976	2,976		
		22	16,641	16,641		
		21	180	180		
		20	17,278	17,278		
		19	24,438	24,438		
		18	51,172	51,172		
		17	29,431	29,431		
		SM490YB SUB - TOTAL			242,381	242,381
		SM490YA	SM490YA	16	74,633	74,633
				15	60,019	60,019
				14	305	305
				13	1,523	1,523
				12	4,167	4,167
11	1,844			1,844		
10	10,021			10,021		
9	4,821			4,821		
SM490YA SUB - TOTAL				157,333	157,333	
SM490B	SM490B			39	506	506
		32	172	172		
		31	139	139		
		SM490B SUB - TOTAL			817	817
		SM490A	SM490A	16	11	11
				38	124	124
		SM400B	SM400B	30	2,467	2,467
				24	351	351
				20	1,719	1,719
				16	666	666
14	95			95		
13	3,903			3,903		
12	7,359			7,359		
11	3,374			3,374		
10	916			916		
9	9,022			9,022		
6	7	7				
SM400A SUB - TOTAL			29,879	29,879		
SS400	SS400	19	252	252		
		18	153	153		
		16	56	56		
		15	262	262		
		13	57	57		
		12	211	211		
		10	59	59		
		9	390	390		
		7	26	26		
		6	188	188		
4.5	230	230				
3.2	129	129				
2.3	308	308				
SS400 SUB - TOTAL			2,321	2,321		
PL TOTAL			432,866	432,866		
STK	STK	267.4x6.6	90	90		
STK	STK400	101.6x4.2	18	18		
STK TOTAL			108	108		
SGP	SGP	20A	9	9		
PIPE	SM490YB	1300x20	4,093	4,093		
PIPE	STK400	101.6x4.2	72	72		
PIPE TOTAL			4,165	4,165		
STUD	SS400	ø22x150	6	6		
RB	SR235	ø13	6	6		
BN	SS400	M16	2	2		
TOTAL 1			437,162	437,162		
STUD	SS400	ø22x150	992	992		
TCB	S10T	M22	9,932	9,932		
BN	SS400	M16	11	11		
TOTAL 2			10,935	10,935		
GRAND TOTAL			448,097	448,097		

**BOLT NUMBER**

KIND	MATERIAL	DIMENSION (mm)	P8/PB4-P13	
			MAIN GIRDER	TOTAL (nos)
TCB	S10T	M22 x 110	232	232
		M22 x 105	140	140
		M22 x 100	660	660
		M22 x 95	1,208	1,208
		M22 x 90	560	560
		M22 x 85	1,248	1,248
		M22 x 80	4,664	4,664
		M22 x 75	5,330	5,330
		M22 x 70	3,910	3,910
		M22 x 55	98	98
		S10T SUB TOTAL		
BN	SS400	M16 x 65	12	12
		M16 x 45	72	72
BN TOTAL			84	84
GRAND TOTAL			18,134	18,134

**PORTAL-TYPE GIRDER P9**

KIND	MATERIAL	PLATE THICKNESS (mm)	PORTAL P9				
			P8L (kg)	P9R (kg)	TOTAL		
PL	SM490YB	38		7,521	7,521		
		30	1,941	3,776	5,717		
		28		1,503	1,503		
		22	157	3,623	3,780		
		20	2,344		2,344		
		18	2,110	6,139	8,249		
		17		1,196	1,196		
		SM490YB SUB - TOTAL			6,552	23,758	30,310
		SM490YA	SM490YA	16	3,895		3,895
				15	394		394
				11	97		97
				10	357		357
				9	79		79
				SM490YA SUB - TOTAL			4,822
		SM490B	SM490B	32	86		86
				31		139	139
		SM490B SUB - TOTAL			86	139	225
SM400A	SM400A	20	663	663	663		
		16	491		491		
		12	296	708	1,004		
		11	80		80		
		10	45	178	223		
		SM400A SUB - TOTAL			912	1,549	2,461
		SS400	SS400	18	79		79
				4.5	19		19
		SS400 SUB - TOTAL			98		98
		PL TOTAL			12,470	25,446	37,916
TCB	S10T	M 22	434		434		
GRAND TOTAL			12,904	25,446	38,350		

**PORTAL-TYPE GIRDER P12**

KIND	MATERIAL	PLATE THICKNESS (mm)	PORTAL GIRDER P12				
			P12L (kg)	P12R (kg)	TOTAL		
PL	SM490YB	38	7,015	1,000	8,015		
		32		864	864		
		30	3,575	2,004	5,579		
		28	1,518	1,464	2,982		
		25		4,065	4,065		
		22	7,110		7,110		
		20	91		91		
		18	2,765		2,765		
		17	1,256	1,234	2,490		
		SM490YB SUB - TOTAL			23,330	10,731	34,061
		SM490YA	SM490YA	16	90	3,699	3,789
				15	236	1,907	2,143
				11	97		97
				10	345		345
				9	42		42
				SM490YA SUB - TOTAL			810
		SM490B	SM490B	39		253	253
32				86	86		
SM490B SUB - TOTAL			86	253	339		
SM400A	SM400A	20	640		640		
		14	95		95		
		12	580	947	1,527		
		10	178	178	356		
		SM400A SUB - TOTAL			1,503	1,125	2,628
		SS400	SS400	13	57		57
3.2	64				64		
SS400 SUB - TOTAL			121		121		
PL TOTAL			25,850	17,715	43,565		
TCB	S10T	M 22	376		376		
GRAND TOTAL			26,226	17,715	43,941		

**PORTAL-TYPE GIRDER PB4**

KIND	MATERIAL	PLATE THICKNESS (mm)	PORTAL GIRDER PB4				
			PB4L (kg)	PB4R (kg)	TOTAL		
PL	SM490YB	32	1,099		1,099		
		30	2,894		2,894		
		25	1,336		1,336		
		22	5,040		5,040		
		SM490YB SUB - TOTAL			10,369		10,369
		SM490YA	SM490YA	16	5,406		5,406
				15	3,598		3,598
		SM490YA SUB - TOTAL			9,004		9,004
		SM490B	SM490B	39		253	253
				16		11	11
		SM400A	SM400A	30		2,467	2,467
				13		150	150
				12		3,903	3,903
				11	299	4,519	4,818
				11	123	82	205
				10	134	89	223
		SM400A SUB - TOTAL			556	11,210	11,766
SS400	SS400	16	56		56		
		15	162		162		
		10	22		22		
		9	281		281		
		3.2	7		7		
SS400 SUB - TOTAL			549		549		
PL TOTAL			20,731	11,221	31,952		
TCB	S10T	M 22	211		211		
GRAND TOTAL			20,942	11,221	32,163		

**CROSS BEAM AND STRINGER**

KIND	MATERIAL	PLATE THICKNESS (mm)	CROSS BEAM (kg)	STRINGER (kg)	TOTAL		
PL	SM490YB	36	1,240		1,240		
		25	1,789	16	1,805		
		22	711		711		
		21	180		180		
		20	1,523		1,523		
		19		1,299	1,299		
		SM490YB SUB - TOTAL			5,443	1,315	6,758
		SM490YA	SM490YA	16	1,784		1,784
				15		147	147
				13	363		363
				12	1,729		1,729
				10	152	156	308
				9	180	840	1,020
		SM490YA SUB - TOTAL			4,208	1,143	5,351
SM400B	SM400B	38	124		124		
		9	31		31		
SS400	SS400	9		10	10		
				10	10		
PL			9,816	2,458	12,274		
STK	STK400	101.6x4.2	18		18		
STUD	SS400	ø22x150	6		6		
BN	SS400	M16	2		2		
TOTAL 1			9,842	2,458	12,300		
STUD	SS400	ø22x150		16	16		
TCB	S10T	M22	489	174	663		
TOTAL 2			489	190	679		
GRAND TOTAL			10,331	2,648	12,979		

**DECK SLAB, WATERPROOFING AND PAVEMENT**

ITEM	UNIT	QUANTITY	NOTES
DECK SLAB : - CONCRETE	m <sup>2</sup>	536.34	
- PC. CABLE	kg	13,784.77	
- REINFORCEMENT	kg	90,945.32	
WATERPROOFING	m <sup>2</sup>	1,405.89	
PAVEMENT	m <sup>2</sup>	-	HIGHWAY PORTION

**PAINT AREA**

ITEM	UNIT	QUANTITY	NOTES
INNER AREA	m <sup>2</sup>	3,540.15	
OUTER AREA	m <sup>2</sup>	1911.34	
CONCRETE CONTACT AREA	m <sup>2</sup>	554.69	