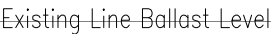
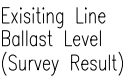
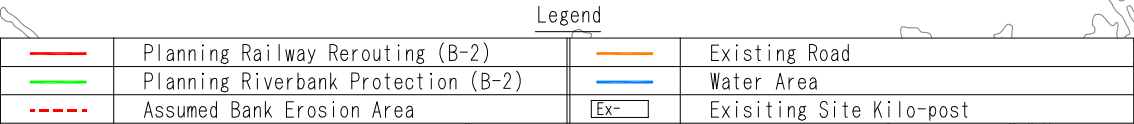


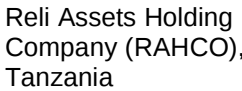
```
A1[H=1:2,500 V=1:250]  A3[H=1:5,000 V=1:500]
```



Existing Line Ballast Level (Survey Result)	
---	--

Existing Line CurvKilometrage (Re-Setting)Kilometrage (Site Kilo F)[illegible]

GOVERNMENT AGENCIES:



JICA STUDY TEAM:

PADECO Co., Ltd.,
Nippon Koei Co., Ltd.,
Japan International Consultants
for Transportation Co., Ltd., and
Fukken Engineering Co., Ltd.

PROJECT & LOCATION:

Preparatory Survey on Flood Protection Measures for Central Railway Line in the United Republic of Tanzania

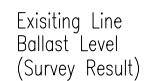
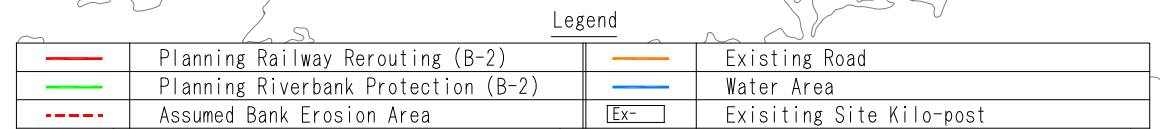
SHEET CONTENTS:

DWG NUM

53

60

A1[H=1:2,500 V=1:250] A3[H=1:5,000 V=1:500]



Japan International
Cooperation Agency

 Reli Assets Holding
Company (RAHCO),
Tanzania

JICA STUDY TEAM:

PADECO Co., Ltd.,
Nippon Koei Co., Ltd.,
Japan International Consultants
for Transportation Co., Ltd., and
Fukken Engineering Co., Ltd.

PROJECT & LOCATION

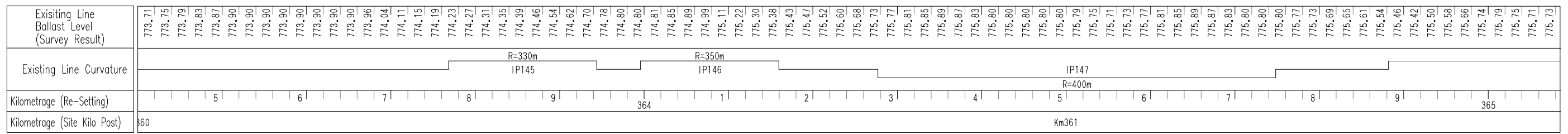
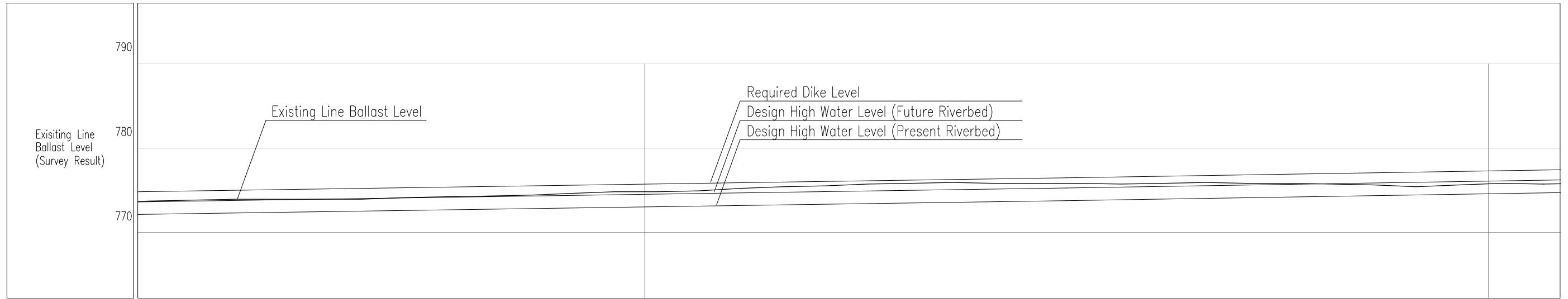
Preparatory Survey on
Flood Protection
Measures for Central
Railway Line in the United
Republic of Tanzania

SHEET CONTENTS:

DWG NUM

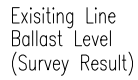
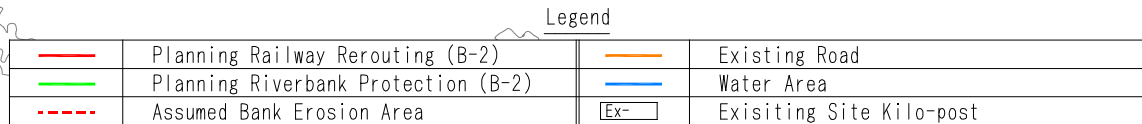
DWG NUM	Count
54	54
60	60

```
A1[H=1:2,500 V=1:250]  A3[H=1:5,000 V=1:500]
```



GOVERNMENT AGENCIES:		JICA STUDY TEAM:	PROJECT & LOCATION:	SHEET CONTENTS:	DWG NUM
 Japan International Cooperation Agency	 Reli Assets Holding Company (RAHCO), Tanzania	PADECO Co., Ltd., Nippon Koei Co., Ltd., Japan International Consultants for Transportation Co., Ltd., and Fukken Engineering Co., Ltd.	Preparatory Survey on Flood Protection Measures for Central Railway Line in the United Republic of Tanzania		55 60

A1[H=1:2,500 V=1:250] A3[H=1:5,000 V=1:500]

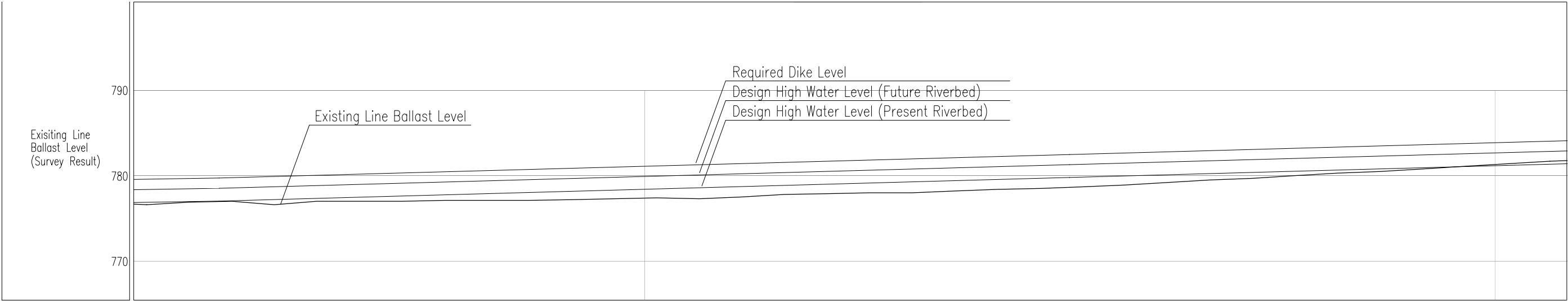
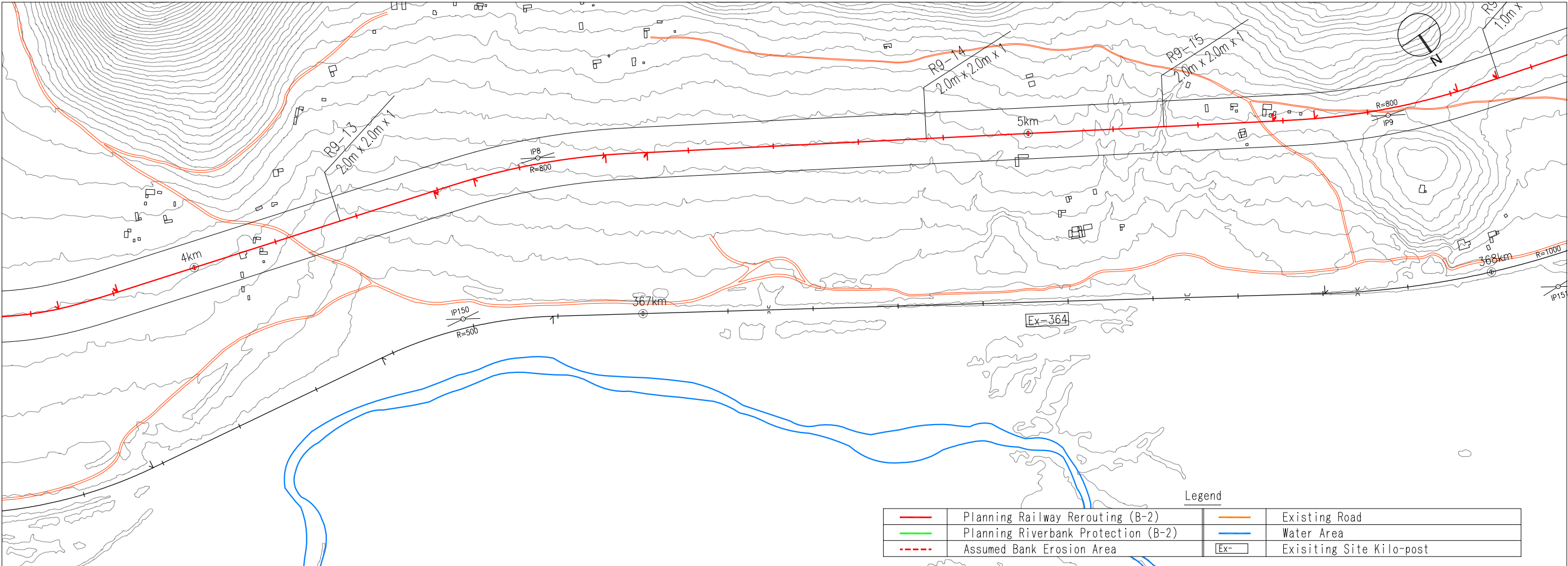


Existing Line
Ballast Level
(Survey Result)



Existing Railway Line

A1[H=1:2,500 V=1:250] A3[H=1:5,000 V=1:500]



Existing Line Ballast Level (Survey Result)	776.63	776.75	776.87	776.93	776.97	776.96	776.80	776.64	776.72	776.88	777.00	777.00	777.00	777.00	777.01	777.05	777.09	777.10	777.10	777.10	777.10	777.13	777.17	777.21	777.25	777.29	777.33	777.37	777.39	777.35	777.31	777.36	777.44	777.53	777.65	777.77	777.83	777.87	777.91	777.95	777.99	778.00	778.00	778.02	778.10	778.18	778.26	778.34	778.41	778.45	778.49	778.56	778.64	778.72	778.80	778.88	778.99	779.11	779.23	779.35	779.47	779.56	779.64	779.73	779.85	779.97	780.09	780.21	780.32	780.40	780.48	780.59	780.71	780.83	780.95	781.07	781.19	781.31	781.43	781.55	781.67	781.76
Existing Line Curvature	R=500m																																				IP150										IP151										R=1000																									
Kilometrage (Re-Setting)	5 6 7 8 9 367 1 2 3 4 5 6 7 8 9 368																																																																																	
Kilometrage (Site Kilo Post)	Km363																					Km364																																																												

GOVERNMENT AGENCIES:

JICA STUDY TEAM:

PROJECT & LOCATION:

SHEET CONTENTS:

DWG NUM



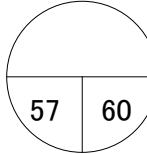
Japan International
Cooperation Agency



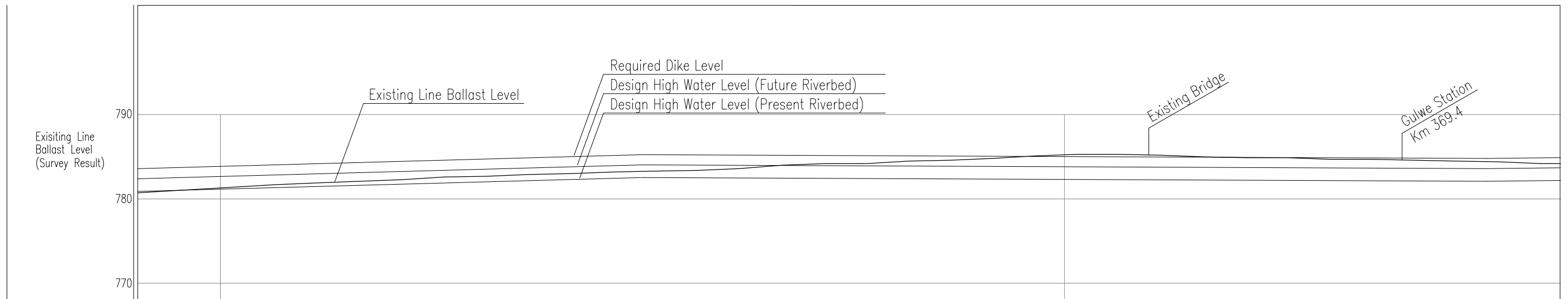
Reli Assets Holding
Company (RAHCO),
Tanzania

PADECO Co., Ltd.,
Nippon Koei Co., Ltd.,
Japan International Consultants
for Transportation Co., Ltd., and
Fukken Engineering Co., Ltd.

Preparatory Survey on
Flood Protection
Measures for Central
Railway Line in the United
Republic of Tanzania



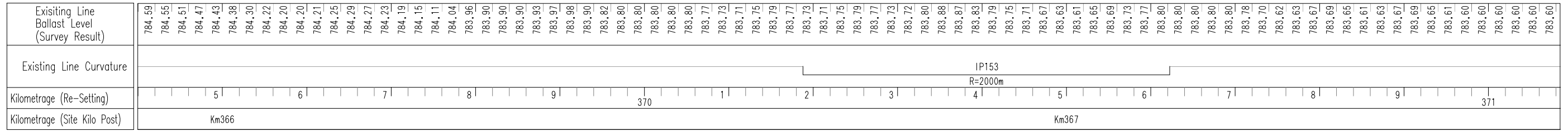
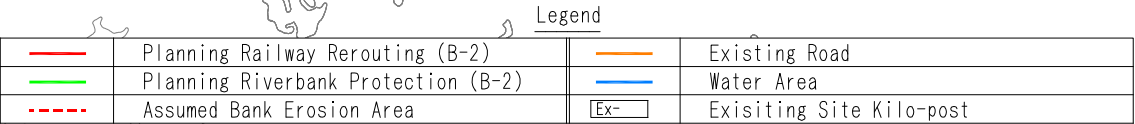
A1[H=1:2,500 V=1:250] A3[H=1:5,000 V=1:500]



Existing Line Ballast Level (Survey Result)	780.83	780.95	781.07	781.19	781.31	781.43	781.55	781.67	781.76	781.84	781.92	782.00	782.08	782.16	782.24	782.33	782.45	782.57	782.63	782.67	782.72	782.80	782.88	782.93	782.97	783.02	783.10	783.18	783.23	783.27	783.31	783.35	783.39	783.46	783.54	783.64	783.80	783.96	784.06	784.14	784.20	784.20	784.29	784.41	784.51	784.55	784.59	784.66	784.74	784.83	784.95	785.07	785.16	785.24	785.30	785.30	785.30	785.30	785.27	785.23	785.18	785.10	785.02	784.97	784.93	784.90	784.90	784.84	784.76	784.70	784.70	784.70	784.67	784.63	784.59	784.55	784.51	784.47	784.43	784.38	784.30	784.22	784.20
Existing Line Curvature	</																																																																																		

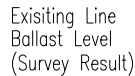
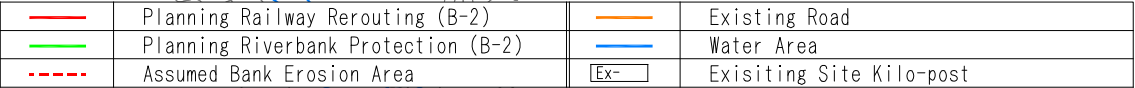
GOVERNMENT AGENCIES:		JICA STUDY TEAM:	PROJECT & LOCATION:	SHEET CONTENTS:	DWG NUM
 Japan International Cooperation Agency	 Reli Assets Holding Company (RAHCO), Tanzania	PADECO Co., Ltd., Nippon Koei Co., Ltd., Japan International Consultants for Transportation Co., Ltd., and Fukken Engineering Co., Ltd.	Preparatory Survey on Flood Protection Measures for Central Railway Line in the United Republic of Tanzania		58 60

```
A1[H=1:2,500 V=1:250]  A3[H=1:5,000 V=1:500]
```



GOVERNMENT AGENCIES:		JICA STUDY TEAM:	PROJECT & LOCATION:	SHEET CONTENTS:	DWG NUM
 Japan International Cooperation Agency	 Reli Assets Holding Company (RAHCO), Tanzania	PADECO Co., Ltd., Nippon Koei Co., Ltd., Japan International Consultants for Transportation Co., Ltd., and Fukken Engineering Co., Ltd.	Preparatory Survey on Flood Protection Measures for Central Railway Line in the United Republic of Tanzania		59 60

```
A1[H=1:2,500 V=1:250] A3[H=1:5,000 V=1:500]
```



Existing Line

IP	Coorginates of Horizontal		Direction	Radius	Transition Length		Remarks
	Northing	Easting			In	Out	
	(m)	(m)			(m)	(m)	
BP	9244530.842	278225.324					
IP1	9244374.330	276787.624	Right	280	-	-	
IP2	9244429.962	276565.391	Right	250	-	-	
IP3	9244583.719	276463.173	Right	600	-	-	
IP4	9244683.606	276412.547	Left	320	-	-	
IP5	9244867.988	276287.105	Left	320	-	-	
IP6	9244941.951	276116.135	Right	250	-	-	
IP7	9245135.161	275882.098	Right	250	-	-	
IP8	9245474.390	275658.129	Right	300	-	-	
IP9	9245783.993	275681.367	Left	300	-	-	
IP10	9245965.911	275460.987	Right	300	-	-	
IP11	9246222.606	275355.318	Right	550	-	-	
IP12	9246572.365	275330.136	Right	550	-	-	
IP13	9247019.537	275386.989	Left	350	-	-	
IP14	9247250.675	275199.297	Right	320	-	-	
IP15	9247763.501	275007.693	Left	280	-	-	
IP16	9247929.076	274794.165	Right	260	-	-	
IP17	9248304.913	274728.465	Left	300	-	-	
IP18	9248353.543	274393.362	Left	350	-	-	
IP19	9248266.714	273466.066	Right	260	-	-	
IP20	9248741.159	273456.442	Left	400	-	-	
IP21	9249042.977	273323.268	Right	400	-	-	
IP22	9249324.023	273399.678	Left	300	-	-	
IP23	9249631.762	273390.099	Left	300	-	-	
IP24	9249782.980	273301.276	Right	450	-	-	
IP25	9249965.607	273230.236	Right	800	-	-	
IP26	9250062.438	273201.071	Left	220	-	-	
IP27	9250320.847	273043.488	Right	400	-	-	
IP28	9250541.645	272974.524	Left	300	-	-	
IP29	9250641.737	272800.419	Right	250	-	-	
IP30	9251101.636	272362.345	Right	400	-	-	
IP31	9251323.475	272193.745	Right	400	-	-	
IP32	9251573.060	272090.225	Right	600	-	-	
IP33	9251896.509	272034.517	Left	300	-	-	
IP34	9252078.386	271755.316	Left	400	-	-	
IP35	9252102.544	271322.168	Right	500	-	-	

Existing Line

IP	Coorginates of Horizontal		Direction	Radius	Transition Length		Remarks
	Northing	Easting			In	Out	
	(m)	(m)			(m)	(m)	
IP36	9252522.617	269915.127	Right	350	-	-	
IP37	9253411.216	269874.083	Left	550	-	-	
IP38	9253932.899	269645.575	Left	300	-	-	
IP39	9254193.775	268886.982	Left	400	-	-	
IP40	9253844.105	268025.677	Right	380	-	-	
IP41	9254207.292	266564.649	Left	300	-	-	
IP42	9254157.195	266309.393	Right	400	-	-	
IP43	9254281.869	265873.198	Left	900	-	-	
IP44	9254242.880	265554.583	Left	900	-	-	
IP45	9253742.346	263922.907	Right	600	-	-	
IP46	9253950.395	263088.362	Right	350	-	-	
IP47	9254122.705	262870.890	Right	600	-	-	
IP48	9254345.689	262643.624	Left	300	-	-	
IP49	9254467.252	262235.631	Right	500	-	-	
IP50	9254606.266	262058.570	Left	300	-	-	
IP51	9254693.711	261777.120	Right	250	-	-	
IP52	9255342.831	261699.907	Left	1000	-	-	
IP53	9256895.714	261173.257	Left	300	-	-	
IP54	9257086.321	260890.601	Left	300	-	-	
IP55	9257116.697	260654.560	Right	300	-	-	
IP56	9257394.300	260370.025	Right	300	-	-	
IP57	9257702.650	260351.303	Left	300	-	-	
IP58	9258109.653	259903.169	Left	400	-	-	
IP59	9258253.249	259229.311	Right	500	-	-	
IP60	9258451.030	258868.618	Left	300	-	-	
IP61	9258247.670	258373.012	Right	1000	-	-	
IP62	9258348.586	257681.196	Right	500	-	-	
IP63	9258833.130	256463.230	Left	300	-	-	
IP64	9258787.899	256239.904	Right	300	-	-	
IP65	9258855.274	256042.538	Left	300	-	-	
IP66	9258848.447	255840.135	Right	300	-	-	
IP67	9259004.395	255611.909	Left	300	-	-	
IP68	9258956.381	255257.696	Right	300	-	-	
IP69	9259254.901	255009.143	Left	300	-	-	
IP70	9259286.649	254676.480	Right	350	-	-	
IP71	9259488.428	254292.757	Right	400	-	-	

Existing Line

IP	Coorginates of Horizontal		Direction	Radius	Transition Length		Remarks
	Northing	Easting			In	Out	
	(m)	(m)			(m)	(m)	
IP72	9259580.672	254173.228	Left	400	-	-	
IP73	9259678.104	253985.715	Left	400	-	-	
IP74	9259711.859	253885.522	Right	400	-	-	
IP75	9259897.364	253523.322	Right	240	-	-	
IP76	9260214.196	253318.027	Left	300	-	-	
IP77	9260096.865	252793.022	Right	400	-	-	
IP78	9260529.094	252113.253	Left	300	-	-	
IP79	9260531.991	251899.827	Right	300	-	-	
IP80	9260704.378	251522.977	Right	300	-	-	
IP81	9261513.512	251277.558	Left	300	-	-	
IP82	9261551.197	250833.395	Right	300	-	-	
IP83	9262038.077	250563.117	Left	500	-	-	
IP84	9262105.971	249816.136	Left	400	-	-	
IP85	9261902.540	249081.021	Right	290	-	-	
IP86	9262970.208	249224.082	Left	300	-	-	
IP87	9262975.366	248669.744	Right	300	-	-	
IP88	9263302.076	248351.334	Left	400	-	-	
IP89	9263164.641	247697.704	Right	500	-	-	
IP90	9263309.289	246940.885	Right	750	-	-	
IP91	9264227.910	246323.748	Right	400	-	-	
IP92	9265063.678	246340.488	Left	300	-	-	
IP93	9265512.093	245659.544	Left	300	-	-	
IP94	9265578.167	245034.661	Right	500	-	-	
IP95	9266930.100	245060.152	Left	300	-	-	
IP96	9266958.556	244275.354	Right	500	-	-	
IP97	9267275.530	243876.881	Left	300	-	-	
IP98	9267590.867	242835.863	Right	500	-	-	
IP99	9268318.701	242389.843	Left	500	-	-	
IP100	9268353.010	241427.476	Right	500	-	-	
IP101	9269460.274	241666.397	Left	500	-	-	
IP102	9270035.968	240926.216	Right	400	-	-	
IP103	9270761.418	241457.387	Left	300	-	-	
IP104	9271051.451	241120.986	Left	400	-	-	
IP105	9271200.794	240811.996	Right	320	-	-	
IP106	9271643.698	240718.069	Left	300	-	-	
IP107	9271757.889	240276.558	Right	250	-	-	

Existing Line

IP	Coorginates of Horizontal		Direction	Radius	Transition Length		Remarks
	Northing	Easting			In	Out	
	(m)	(m)			(m)	(m)	
IP108	9271857.889	240144.665	Right	300	-	-	
IP109	9271973.761	239782.943	Right	300	-	-	
IP110	9272236.718	239716.886	Left	300	-	-	
IP111	9272385.439	239609.891	Left	300	-	-	
IP112	9272706.315	239193.961	Left	300	-	-	
IP113	9272722.902	239008.328	Left	250	-	-	
IP114	9272617.194	238620.080	Right	500	-	-	
IP115	9273038.434	238085.132	Left	400	-	-	
IP116	9273530.016	237120.182	Right	750	-	-	
IP117	9274270.746	236951.405	Left	1000	-	-	
IP118	9274752.039	236466.867	Left	1000	-	-	
IP119	9275047.946	235979.588	Right	1000	-	-	
IP120	9275445.073	235662.103	Left	1000	-	-	
IP121	9275936.604	234932.426	Right	500	-	-	
IP122	9276468.294	234508.253	Left	300	-	-	
IP123	9276132.156	234125.567	Right	300	-	-	
IP124	9276089.900	233617.555	Right	300	-	-	
IP125	9276191.631	233372.970	Left	300	-	-	
IP126	9276160.496	233129.785	Left	300	-	-	
IP127	9276044.781	232909.109	Right	300	-	-	
IP128	9276177.517	232322.250	Left	400	-	-	
IP129	9276057.427	232006.151	Right	300	-	-	
IP130	9276167.827	231697.456	Left	400	-	-	
IP131	9276165.106	231399.872	Right	300	-	-	
IP132	9276419.909	231141.727	Left	300	-	-	
IP133	9276381.721	230810.989	Right	300	-	-	
IP134	9278538.753	227803.768	Left	2000	-	-	
IP135	9279186.056	226757.960	Left	450	-	-	
IP136	9279313.728	225947.900	Right	600	-	-	
IP137	9280676.865	225305.343	Left	1500	-	-	
IP138	9281392.368	223998.781	Left	1000	-	-	
IP139	9282117.692	221978.330	Left	800	-	-	
IP140	9281910.670	221353.849	Right	300	-	-	
IP141	9282288.155	221013.027	Left	400	-	-	
IP142	9282115.396	220144.542	Right	600	-	-	
IP143	9282391.558	219125.731	Right	1000	-	-	

Existing Line

IP	Coorinates of Horizontal		Direction	Radius	Transition Length		Remarks
	Northing	Easting			In	Out	
	(m)	(m)			(m)	(m)	
IP144	9283007.972	218623.681	Left	750	-	-	
IP145	9283356.209	217971.512	Right	330	-	-	
IP146	9283548.327	217854.067	Right	350	-	-	
IP147	9284015.008	217816.527	Left	400	-	-	
IP148	9284255.704	217071.807	Right	1000	-	-	
IP149	9285059.305	216602.154	Left	550	-	-	
IP150	9285160.680	215943.801	Right	500	-	-	
IP151	9285856.233	214859.539	Left	1000	-	-	
IP152	9285877.868	214237.698	Right	600	-	-	
IP153	9286999.599	212912.754	Left	2000	-	-	
IP154	9287466.754	212027.024	Right	500	-	-	
EP	9289315.013	211076.735					

Existing Line

Chainage	Coordinates of Horizontal		Ballast Level
(m)	Northing (m)	Easting (m)	(m)
281,800	9,244,527.031	278,190.315	489.011
281,900	9,244,516.209	278,090.902	489.100
282,000	9,244,505.386	277,991.490	489.241
282,100	9,244,494.564	277,892.077	489.400
282,200	9,244,483.742	277,792.664	489.641
282,300	9,244,472.919	277,693.252	489.859
282,400	9,244,462.097	277,593.839	489.870
282,500	9,244,451.274	277,494.426	490.070
282,600	9,244,440.452	277,395.014	490.100
282,700	9,244,429.630	277,295.601	490.270
282,800	9,244,418.807	277,196.188	490.130
282,900	9,244,407.985	277,096.776	490.070
283,000	9,244,397.163	276,997.363	490.200
283,100	9,244,386.340	276,897.950	490.441
283,200	9,244,378.237	276,798.369	491.293
283,300	9,244,396.202	276,700.252	492.463
283,400	9,244,426.807	276,605.357	493.652
283,500	9,244,488.988	276,527.891	494.600
283,600	9,244,571.610	276,471.646	494.430
283,700	9,244,659.814	276,424.605	494.511
283,800	9,244,744.279	276,371.269	495.111
283,900	9,244,825.206	276,312.677	495.570
284,000	9,244,887.977	276,235.355	495.611
284,100	9,244,929.705	276,144.545	495.970
284,200	9,244,986.219	276,062.513	495.959
284,300	9,245,049.883	275,985.397	496.070
284,400	9,245,113.565	275,908.296	496.370
284,500	9,245,190.740	275,845.403	496.330
284,600	9,245,274.192	275,790.306	496.341
284,700	9,245,357.644	275,735.208	496.511
284,800	9,245,444.304	275,685.791	497.352
284,900	9,245,541.692	275,665.218	498.282
285,000	9,245,641.501	275,670.413	498.811
285,100	9,245,740.157	275,657.192	498.800
285,200	9,245,829.056	275,612.418	498.630
285,300	9,245,899.284	275,541.700	498.741
285,400	9,245,968.872	275,470.309	498.930

Existing Line

Chainage	Coordinates of Horizontal		Ballast Level
(m)	Northing (m)	Easting (m)	(m)
285,500	9,246,056.863	275,423.546	499.041
285,600	9,246,149.363	275,385.551	500.023
285,700	9,246,245.254	275,357.666	500.411
285,800	9,246,344.552	275,346.538	500.741
285,900	9,246,444.294	275,339.357	500.941
286,000	9,246,544.071	275,332.804	501.511
286,100	9,246,643.746	275,339.211	502.582
286,200	9,246,742.948	275,351.824	503.393
286,300	9,246,842.149	275,364.436	503.559
286,400	9,246,941.773	275,369.884	502.959
286,500	9,247,039.053	275,348.231	502.289
286,600	9,247,126.286	275,300.038	501.589
286,700	9,247,204.044	275,237.163	501.070
286,800	9,247,289.018	275,185.193	501.030
286,900	9,247,382.618	275,150.000	501.482
287,000	9,247,476.293	275,115.001	502.623
287,100	9,247,569.969	275,080.001	503.923
287,200	9,247,663.644	275,045.002	504.641
287,300	9,247,753.241	275,001.438	504.970
287,400	9,247,823.239	274,930.655	505.100
287,500	9,247,885.662	274,852.585	505.511
287,600	9,247,967.021	274,795.505	505.711
287,700	9,248,063.538	274,770.660	506.041
287,800	9,248,159.868	274,745.034	506.430
287,900	9,248,243.099	274,690.442	506.470
288,000	9,248,303.887	274,611.622	507.111
288,100	9,248,335.539	274,517.251	507.841
288,200	9,248,349.537	274,418.241	508.241
288,300	9,248,346.532	274,318.487	507.648
288,400	9,248,337.209	274,218.923	505.866
288,500	9,248,327.886	274,119.358	505.130
288,600	9,248,318.563	274,019.794	505.170
288,700	9,248,309.240	273,920.229	505.541
288,800	9,248,299.918	273,820.665	505.941
288,900	9,248,291.662	273,721.033	506.341
289,000	9,248,310.396	273,623.430	506.641
289,100	9,248,364.383	273,539.987	506.982

Existing Line

Chainage	Coordinates of Horizontal		Ballast Level
(m)	Northing (m)	Easting (m)	(m)
289,200	9,248,445.734	273,482.896	507.811
289,300	9,248,542.562	273,460.499	508.030
289,400	9,248,642.541	273,458.442	507.870
289,500	9,248,741.791	273,448.162	507.941
289,600	9,248,835.807	273,414.679	508.441
289,700	9,248,927.411	273,374.579	508.670
289,800	9,249,023.992	273,349.677	508.430
289,900	9,249,123.732	273,349.443	508.500
290,000	9,249,221.110	273,371.698	508.270
290,100	9,249,318.144	273,395.567	509.193
290,200	9,249,417.987	273,396.753	510.282
290,300	9,249,517.939	273,393.642	510.911
290,400	9,249,617.231	273,384.016	511.330
290,500	9,249,708.784	273,344.858	511.470
290,600	9,249,796.329	273,296.660	511.770
290,700	9,249,889.323	273,259.910	511.830
290,800	9,249,983.047	273,225.097	511.930
290,900	9,250,077.123	273,191.803	512.241
291,000	9,250,162.635	273,139.969	512.300
291,100	9,250,248.013	273,087.904	512.682
291,200	9,250,335.811	273,040.331	513.111
291,300	9,250,430.791	273,009.145	513.441
291,400	9,250,519.365	272,963.730	513.852
291,500	9,250,588.203	272,891.835	514.182
291,600	9,250,640.321	272,806.559	514.641
291,700	9,250,710.196	272,735.209	515.211
291,800	9,250,782.604	272,666.237	515.782
291,900	9,250,855.012	272,597.265	516.311
292,000	9,250,927.420	272,528.294	517.011
292,100	9,250,999.828	272,459.322	517.611
292,200	9,251,072.236	272,390.350	518.270
292,300	9,251,148.961	272,326.377	517.577
292,400	9,251,228.577	272,265.868	517.059
292,500	9,251,308.960	272,206.427	517.723
292,600	9,251,398.639	272,162.569	518.382
292,700	9,251,491.009	272,124.257	518.300
292,800	9,251,585.125	272,090.734	518.541

Existing Line

Chainage	Coordinates of Horizontal		Ballast Level
(m)	Northing (m)	Easting (m)	(m)
292,900	9,251,683.164	272,071.262	519.282
293,000	9,251,781.649	272,053.948	520.182
293,100	9,251,873.890	272,016.541	520.882
293,200	9,251,948.815	271,951.011	521.200
293,300	9,252,004.831	271,868.231	521.270
293,400	9,252,053.786	271,781.238	521.059
293,500	9,252,080.617	271,685.175	520.859
293,600	9,252,087.859	271,585.475	520.800
293,700	9,252,093.427	271,485.630	520.800
293,800	9,252,098.996	271,385.785	520.870
293,900	9,252,113.546	271,287.016	521.000
294,000	9,252,141.686	271,191.063	521.000
294,100	9,252,170.293	271,095.242	521.170
294,200	9,252,198.900	270,999.421	521.200
294,300	9,252,227.508	270,903.600	521.230
294,400	9,252,256.115	270,807.780	521.130
294,500	9,252,284.722	270,711.959	521.341
294,600	9,252,313.330	270,616.138	521.770
294,700	9,252,341.937	270,520.317	522.000
294,800	9,252,370.544	270,424.497	522.441
294,900	9,252,399.152	270,328.676	522.770
295,000	9,252,427.759	270,232.855	523.111
295,100	9,252,456.753	270,137.156	523.470
295,200	9,252,502.869	270,048.808	523.782
295,300	9,252,572.017	269,977.039	524.330
295,400	9,252,658.589	269,927.669	524.370
295,500	9,252,755.566	269,904.700	524.670
295,600	9,252,855.440	269,899.754	524.800
295,700	9,252,955.333	269,895.140	525.300
295,800	9,253,055.227	269,890.526	525.230
295,900	9,253,155.120	269,885.912	525.400
296,000	9,253,255.014	269,881.298	526.082
296,100	9,253,354.768	269,874.798	527.052
296,200	9,253,452.223	269,853.004	527.170
296,300	9,253,544.878	269,815.536	528.052
296,400	9,253,636.476	269,775.415	528.570
296,500	9,253,728.074	269,735.293	529.011

Existing Line

Chainage	Coordinates of Horizontal		Ballast Level
(m)	Northing (m)	Easting (m)	(m)
296,600	9,253,819.629	269,695.074	530.023
296,700	9,253,901.436	269,638.370	530.582
296,800	9,253,960.187	269,558.021	530.959
296,900	9,253,995.192	269,464.436	530.970
297,000	9,254,027.712	269,369.872	530.889
297,100	9,254,060.232	269,275.307	530.630
297,200	9,254,092.752	269,180.743	530.870
297,300	9,254,125.273	269,086.178	531.041
297,400	9,254,155.957	268,991.049	531.741
297,500	9,254,166.730	268,891.893	531.830
297,600	9,254,152.636	268,793.154	532.182
297,700	9,254,117.678	268,699.540	532.611
297,800	9,254,080.062	268,606.885	533.111
297,900	9,254,042.446	268,514.229	533.752
298,000	9,254,004.830	268,421.574	534.752
298,100	9,253,967.214	268,328.918	535.211
298,200	9,253,929.598	268,236.263	536.123
298,300	9,253,891.982	268,143.607	536.982
298,400	9,253,866.022	268,047.332	537.641
298,500	9,253,865.982	267,947.620	537.230
298,600	9,253,887.755	267,850.082	537.341
298,700	9,253,911.879	267,753.036	537.230
298,800	9,253,936.003	267,655.989	537.030
298,900	9,253,960.127	267,558.942	537.100
299,000	9,253,984.252	267,461.896	537.200
299,100	9,254,008.376	267,364.849	537.370
299,200	9,254,032.500	267,267.803	537.941
299,300	9,254,056.624	267,170.756	538.511
299,400	9,254,080.748	267,073.710	539.141
299,500	9,254,104.872	266,976.663	539.711
299,600	9,254,128.996	266,879.617	540.311
299,700	9,254,153.120	266,782.570	540.811
299,800	9,254,177.245	266,685.524	541.511
299,900	9,254,198.469	266,587.899	542.593
300,000	9,254,192.351	266,488.521	543.230
300,100	9,254,173.323	266,390.351	543.311
300,200	9,254,169.875	266,290.671	543.611

Existing Line

Chainage	Coordinates of Horizontal		Ballast Level
(m)	Northing (m)	Easting (m)	(m)
300,300	9,254,190.460	266,193.010	544.382
300,400	9,254,217.942	266,096.860	545.082
300,500	9,254,244.087	266,000.355	545.611
300,600	9,254,260.740	265,901.803	545.741
300,700	9,254,266.363	265,802.013	546.211
300,800	9,254,260.887	265,702.215	546.570
300,900	9,254,248.282	265,603.017	546.941
301,000	9,254,227.315	265,505.293	547.752
301,100	9,254,198.396	265,409.569	548.441
301,200	9,254,169.068	265,313.967	548.911
301,300	9,254,139.741	265,218.364	549.482
301,400	9,254,110.414	265,122.761	549.941
301,500	9,254,081.087	265,027.158	550.441
301,600	9,254,051.760	264,931.555	551.052
301,700	9,254,022.432	264,835.952	551.570
301,800	9,253,993.105	264,740.349	552.011
301,900	9,253,963.778	264,644.746	552.411
302,000	9,253,934.451	264,549.143	552.700
302,100	9,253,905.123	264,453.540	552.700
302,200	9,253,875.796	264,357.937	552.870
302,300	9,253,846.469	264,262.335	553.141
302,400	9,253,817.142	264,166.732	553.170
302,500	9,253,787.923	264,071.096	553.641
302,600	9,253,768.579	263,973.103	554.352
302,700	9,253,765.759	263,873.259	554.459
302,800	9,253,779.543	263,774.330	554.370
302,900	9,253,803.584	263,677.264	554.400
303,000	9,253,827.773	263,580.233	554.530
303,100	9,253,851.963	263,483.203	554.741
303,200	9,253,876.152	263,386.173	555.070
303,300	9,253,900.341	263,289.143	555.482
303,400	9,253,924.530	263,192.112	556.152
303,500	9,253,955.139	263,097.136	556.741
303,600	9,254,009.620	263,013.615	557.382
303,700	9,254,071.722	262,935.235	557.982
303,800	9,254,135.401	262,858.178	558.670
303,900	9,254,205.322	262,786.687	559.282

Existing Line

Chainage	Coordinates of Horizontal		Ballast Level
(m)	Northing (m)	Easting (m)	(m)
304,000	9,254,275.357	262,715.307	559.911
304,100	9,254,338.387	262,638.103	560.711
304,200	9,254,374.964	262,545.372	561.411
304,300	9,254,403.518	262,449.536	561.982
304,400	9,254,432.073	262,353.699	562.482
304,500	9,254,465.507	262,259.575	563.082
304,600	9,254,516.273	262,173.613	563.541
304,700	9,254,577.709	262,094.715	564.070
304,800	9,254,622.633	262,005.891	564.652
304,900	9,254,653.274	261,910.729	565.270
305,000	9,254,708.695	261,828.291	565.270
305,100	9,254,791.843	261,773.943	565.670
305,200	9,254,889.418	261,753.841	565.959
305,300	9,254,988.718	261,742.029	566.000
305,400	9,255,088.018	261,730.217	566.200
305,500	9,255,187.317	261,718.405	566.030
305,600	9,255,286.463	261,705.449	566.211
305,700	9,255,384.089	261,683.982	566.911
305,800	9,255,479.344	261,653.610	566.970
305,900	9,255,574.045	261,621.492	567.200
306,000	9,255,668.747	261,589.375	567.441
306,100	9,255,763.449	261,557.257	567.982
306,200	9,255,858.151	261,525.140	568.470
306,300	9,255,952.853	261,493.022	568.470
306,400	9,256,047.555	261,460.904	568.600
306,500	9,256,142.257	261,428.787	568.911
306,600	9,256,236.959	261,396.669	569.100
306,700	9,256,331.661	261,364.552	569.070
306,800	9,256,426.363	261,332.434	568.859
306,900	9,256,521.065	261,300.317	568.970
307,000	9,256,615.767	261,268.199	569.482
307,100	9,256,710.469	261,236.082	570.252
307,200	9,256,805.154	261,203.915	571.052
307,300	9,256,891.919	261,155.134	571.811
307,400	9,256,958.097	261,080.747	572.582
307,500	9,257,014.007	260,997.837	572.911
307,600	9,257,067.438	260,913.417	573.852

Existing Line

Chainage	Coordinates of Horizontal		Ballast Level
(m)	Northing (m)	Easting (m)	(m)
307,700	9,257,095.668	260,817.966	574.300
307,800	9,257,110.504	260,719.134	574.811
307,900	9,257,150.456	260,627.966	575.341
308,000	9,257,216.035	260,552.742	575.841
308,100	9,257,285.868	260,481.165	576.141
308,200	9,257,359.778	260,414.139	576.470
308,300	9,257,450.291	260,372.725	576.670
308,400	9,257,549.329	260,360.612	577.082
308,500	9,257,648.082	260,346.825	577.500
308,600	9,257,737.472	260,303.038	577.330
308,700	9,257,809.326	260,233.846	577.911
308,800	9,257,876.558	260,159.820	578.200
308,900	9,257,943.790	260,085.794	578.300
309,000	9,258,011.022	260,011.768	578.541
309,100	9,258,074.624	259,934.768	579.211
309,200	9,258,118.824	259,845.357	579.570
309,300	9,258,142.651	259,748.320	579.459
309,400	9,258,163.492	259,650.516	579.811
309,500	9,258,184.334	259,552.712	580.311
309,600	9,258,205.175	259,454.908	580.841
309,700	9,258,226.017	259,357.104	581.341
309,800	9,258,248.635	259,259.731	582.082
309,900	9,258,287.096	259,167.604	582.711
310,000	9,258,335.168	259,079.916	583.241
310,100	9,258,383.240	258,992.229	584.223
310,200	9,258,415.245	258,897.977	585.182
310,300	9,258,414.649	258,798.441	585.841
310,400	9,258,383.373	258,703.732	586.241
310,500	9,258,345.533	258,611.169	586.782
310,600	9,258,313.786	258,516.386	587.582
310,700	9,258,291.660	258,418.907	588.182
310,800	9,258,279.376	258,319.706	589.323
310,900	9,258,277.057	258,219.775	590.011
311,000	9,258,284.726	258,120.111	590.652
311,100	9,258,298.999	258,021.136	591.482
311,200	9,258,313.433	257,922.183	592.041
311,300	9,258,327.867	257,823.230	592.130

Existing Line

Chainage	Coordinates of Horizontal		Ballast Level
(m)	Northing (m)	Easting (m)	(m)
311,400	9,258,342.529	257,724.313	592.100
311,500	9,258,369.658	257,628.236	592.000
311,600	9,258,406.621	257,535.318	592.241
311,700	9,258,443.586	257,442.401	592.100
311,800	9,258,480.551	257,349.484	592.170
311,900	9,258,517.516	257,256.567	592.782
312,000	9,258,554.482	257,163.650	593.511
312,100	9,258,591.447	257,070.733	594.041
312,200	9,258,628.412	256,977.816	594.582
312,300	9,258,665.377	256,884.899	595.623
312,400	9,258,702.342	256,791.982	596.482
312,500	9,258,739.308	256,699.065	597.282
312,600	9,258,776.273	256,606.148	598.011
312,700	9,258,811.263	256,512.534	598.711
312,800	9,258,820.582	256,413.434	599.352
312,900	9,258,803.151	256,315.038	600.011
313,000	9,258,801.362	256,215.516	600.470
313,100	9,258,828.973	256,119.585	601.093
313,200	9,258,852.541	256,022.742	601.911
313,300	9,258,851.639	255,922.803	602.711
313,400	9,258,869.929	255,824.960	603.270
313,500	9,258,918.342	255,737.846	603.770
313,600	9,258,969.090	255,651.961	604.111
313,700	9,258,991.137	255,554.896	604.441
313,800	9,258,983.182	255,455.413	604.730
313,900	9,258,977.109	255,355.871	604.741
314,000	9,259,002.100	255,259.522	604.789
314,100	9,259,057.241	255,176.653	605.011
314,200	9,259,132.576	255,110.993	605.711
314,300	9,259,204.644	255,042.035	606.382
314,400	9,259,251.948	254,954.456	606.941
314,500	9,259,269.487	254,856.312	607.341
314,600	9,259,278.987	254,756.765	607.941
314,700	9,259,299.426	254,659.198	608.059
314,800	9,259,343.008	254,569.301	607.900
314,900	9,259,389.550	254,480.792	608.130
315,000	9,259,436.093	254,392.284	608.200

Existing Line

Chainage	Coordinates of Horizontal		Ballast Level
(m)	Northing (m)	Easting (m)	(m)
315,100	9,259,483.178	254,304.073	608.682
315,200	9,259,542.024	254,223.307	609.452
315,300	9,259,597.700	254,140.457	610.111
315,400	9,259,643.807	254,051.721	610.711
315,500	9,259,686.290	253,961.313	611.241
315,600	9,259,721.134	253,867.665	611.982
315,700	9,259,766.616	253,778.608	613.052
315,800	9,259,812.202	253,689.602	613.952
315,900	9,259,857.787	253,600.597	614.852
316,000	9,259,913.763	253,518.410	615.441
316,100	9,259,994.809	253,460.181	615.882
316,200	9,260,076.543	253,402.786	616.782
316,300	9,260,138.472	253,324.858	617.041
316,400	9,260,171.494	253,230.958	617.300
316,500	9,260,171.975	253,131.422	617.570
316,600	9,260,150.659	253,033.728	617.682
316,700	9,260,129.302	252,936.042	617.530
316,800	9,260,124.638	252,836.412	618.211
316,900	9,260,144.768	252,738.724	619.041
317,000	9,260,188.416	252,649.039	619.441
317,100	9,260,242.073	252,564.653	619.811
317,200	9,260,295.729	252,480.267	620.511
317,300	9,260,349.386	252,395.881	620.941
317,400	9,260,403.042	252,311.495	621.341
317,500	9,260,456.699	252,227.109	621.641
317,600	9,260,506.698	252,140.675	622.182
317,700	9,260,529.628	252,043.814	622.800
317,800	9,260,532.009	251,943.857	622.970
317,900	9,260,556.084	251,847.275	623.382
318,000	9,260,597.638	251,756.318	623.982
318,100	9,260,639.237	251,665.381	624.341
318,200	9,260,689.792	251,579.530	624.541
318,300	9,260,765.095	251,514.436	625.011
318,400	9,260,857.287	251,476.598	625.270
318,500	9,260,952.982	251,447.573	625.641
318,600	9,261,048.677	251,418.548	625.970
318,700	9,261,144.372	251,389.522	626.200

Existing Line

Chainage	Coordinates of Horizontal		Ballast Level
(m)	Northing (m)	Easting (m)	(m)
318,800	9,261,240.067	251,360.497	626.670
318,900	9,261,335.601	251,330.977	627.611
319,000	9,261,421.980	251,281.516	628.182
319,100	9,261,487.421	251,206.514	629.152
319,200	9,261,524.719	251,114.229	630.082
319,300	9,261,535.795	251,014.927	630.641
319,400	9,261,554.150	250,916.994	631.130
319,500	9,261,602.773	250,830.140	631.341
319,600	9,261,677.138	250,763.977	631.300
319,700	9,261,764.353	250,715.067	632.123
319,800	9,261,850.419	250,664.259	632.970
319,900	9,261,926.144	250,599.202	633.611
320,000	9,261,987.434	250,520.397	634.623
320,100	9,262,031.846	250,430.986	635.523
320,200	9,262,057.610	250,334.534	636.352
320,300	9,262,067.892	250,235.086	636.982
320,400	9,262,076.944	250,135.496	638.052
320,500	9,262,085.996	250,035.907	638.882
320,600	9,262,095.048	249,936.317	639.582
320,700	9,262,100.694	249,836.567	640.311
320,800	9,262,084.392	249,738.160	641.111
320,900	9,262,057.721	249,641.782	642.052
321,000	9,262,031.050	249,545.404	642.911
321,100	9,262,009.886	249,447.886	643.330
321,200	9,262,019.768	249,348.872	643.600
321,300	9,262,062.538	249,259.028	643.700
321,400	9,262,133.160	249,188.930	644.041
321,500	9,262,223.321	249,146.831	644.541
321,600	9,262,322.406	249,137.688	645.423
321,700	9,262,421.566	249,150.567	646.593
321,800	9,262,520.681	249,163.848	647.682
321,900	9,262,619.795	249,177.129	648.541
322,000	9,262,719.372	249,178.082	649.152
322,100	9,262,813.839	249,146.716	650.411
322,200	9,262,892.843	249,086.168	651.082
322,300	9,262,947.688	249,003.103	652.011
322,400	9,262,972.335	248,906.665	652.782

Existing Line

Chainage	Coordinates of Horizontal		Ballast Level
(m)	Northing (m)	Easting (m)	(m)
322,500	9,262,974.092	248,806.698	653.582
322,600	9,262,987.804	248,708.075	654.311
322,700	9,263,032.801	248,619.288	655.182
322,800	9,263,101.503	248,546.812	656.123
322,900	9,263,171.684	248,475.640	657.052
323,000	9,263,225.805	248,391.861	657.911
323,100	9,263,257.517	248,297.297	658.782
323,200	9,263,264.848	248,197.827	659.582
323,300	9,263,249.065	248,099.216	660.593
323,400	9,263,228.488	248,001.356	661.482
323,500	9,263,207.912	247,903.496	662.252
323,600	9,263,187.335	247,805.636	663.323
323,700	9,263,174.772	247,706.587	664.452
323,800	9,263,182.039	247,607.019	665.352
323,900	9,263,200.748	247,508.785	666.323
324,000	9,263,219.521	247,410.563	667.252
324,100	9,263,238.294	247,312.341	668.182
324,200	9,263,257.852	247,214.281	669.282
324,300	9,263,287.549	247,118.870	670.152
324,400	9,263,329.667	247,028.254	670.911
324,500	9,263,383.457	246,944.041	671.782
324,600	9,263,447.965	246,867.727	672.923
324,700	9,263,522.046	246,800.665	673.852
324,800	9,263,603.750	246,743.064	675.082
324,900	9,263,686.757	246,687.299	676.052
325,000	9,263,769.765	246,631.534	677.123
325,100	9,263,852.772	246,575.769	677.330
325,200	9,263,935.780	246,520.003	677.330
325,300	9,264,018.787	246,464.238	677.030
325,400	9,264,101.795	246,408.473	677.070
325,500	9,264,188.290	246,358.665	677.141
325,600	9,264,284.126	246,331.035	677.300
325,700	9,264,383.868	246,326.872	677.200
325,800	9,264,483.848	246,328.874	677.400
325,900	9,264,583.828	246,330.877	677.130
326,000	9,264,683.808	246,332.879	677.200
326,100	9,264,783.788	246,334.882	677.370

Existing Line

Chainage	Coordinates of Horizontal		Ballast Level
(m)	Northing (m)	Easting (m)	(m)
326,200	9,264,883.768	246,336.885	677.370
326,300	9,264,982.834	246,326.737	677.500
326,400	9,265,073.228	246,285.064	676.577
326,500	9,265,145.012	246,216.108	676.089
326,600	9,265,200.405	246,132.861	675.489
326,700	9,265,255.403	246,049.343	675.089
326,800	9,265,310.401	245,965.826	674.689
326,900	9,265,365.399	245,882.308	674.089
327,000	9,265,420.397	245,798.790	673.489
327,100	9,265,475.341	245,715.237	673.130
327,200	9,265,513.641	245,623.363	672.730
327,300	9,265,526.399	245,524.248	672.359
327,400	9,265,541.246	245,425.455	671.959
327,500	9,265,574.328	245,331.262	671.630
327,600	9,265,625.464	245,245.519	671.359
327,700	9,265,692.615	245,171.644	670.859
327,800	9,265,773.104	245,112.583	670.459
327,900	9,265,863.722	245,070.690	670.330
328,000	9,265,960.857	245,047.635	670.270
328,100	9,266,060.656	245,043.758	670.400
328,200	9,266,160.638	245,045.644	670.200
328,300	9,266,260.620	245,047.529	670.541
328,400	9,266,360.602	245,049.414	670.982
328,500	9,266,460.585	245,051.299	671.682
328,600	9,266,560.567	245,053.184	672.341
328,700	9,266,660.539	245,054.009	672.500
328,800	9,266,757.412	245,031.132	672.400
328,900	9,266,841.468	244,977.817	672.400
329,000	9,266,903.452	244,899.935	672.370
329,100	9,266,936.542	244,806.058	672.430
329,200	9,266,942.929	244,706.350	672.270
329,300	9,266,946.552	244,606.415	672.370
329,400	9,266,950.176	244,506.481	672.259
329,500	9,266,954.901	244,406.611	672.241
329,600	9,266,975.000	244,308.822	672.300
329,700	9,267,014.126	244,216.975	672.530
329,800	9,267,070.536	244,134.583	672.500

Existing Line

Chainage	Coordinates of Horizontal		Ballast Level
(m)	Northing (m)	Easting (m)	(m)
329,900	9,267,132.789	244,056.323	672.400
330,000	9,267,195.042	243,978.064	672.400
330,100	9,267,256.243	243,899.019	672.470
330,200	9,267,296.425	243,807.900	672.400
330,300	9,267,325.416	243,712.194	672.300
330,400	9,267,354.406	243,616.488	672.230
330,500	9,267,383.397	243,520.783	672.230
330,600	9,267,412.387	243,425.077	672.130
330,700	9,267,441.377	243,329.372	672.270
330,800	9,267,470.368	243,233.666	672.330
330,900	9,267,499.358	243,137.960	672.300
331,000	9,267,528.348	243,042.255	672.370
331,100	9,267,562.563	242,948.420	672.352
331,200	9,267,614.162	242,862.955	672.330
331,300	9,267,681.711	242,789.444	672.630
331,400	9,267,762.455	242,730.713	672.600
331,500	9,267,847.719	242,678.463	672.530
331,600	9,267,932.982	242,626.213	672.600
331,700	9,268,018.246	242,573.963	672.700
331,800	9,268,103.373	242,521.495	672.870
331,900	9,268,180.884	242,458.576	673.582
332,000	9,268,244.349	242,381.512	674.111
332,100	9,268,291.239	242,293.375	674.723
332,200	9,268,319.685	242,197.680	675.341
332,300	9,268,329.096	242,098.252	675.770
332,400	9,268,333.339	241,998.352	676.582
332,500	9,268,351.981	241,900.274	677.241
332,600	9,268,389.736	241,807.855	677.811
332,700	9,268,445.100	241,724.779	677.930
332,800	9,268,515.864	241,654.359	677.900
332,900	9,268,599.209	241,599.400	677.870
333,000	9,268,691.810	241,562.095	677.970
333,100	9,268,789.977	241,543.931	677.730
333,200	9,268,889.796	241,545.632	677.970
333,300	9,268,987.956	241,564.482	678.141
333,400	9,269,085.706	241,585.574	678.852
333,500	9,269,183.641	241,605.718	679.852

Existing Line

Chainage	Coordinates of Horizontal		Ballast Level
(m)	Northing (m)	Easting (m)	(m)
333,600	9,269,283.347	241,610.744	680.552
333,700	9,269,382.065	241,595.861	681.323
333,800	9,269,475.858	241,561.662	682.252
333,900	9,269,560.988	241,509.511	683.152
334,000	9,269,634.059	241,441.487	683.982
334,100	9,269,696.155	241,363.120	684.782
334,200	9,269,757.549	241,284.185	685.582
334,300	9,269,820.127	241,206.228	686.100
334,400	9,269,896.597	241,142.194	686.130
334,500	9,269,986.532	241,099.070	686.200
334,600	9,270,084.341	241,079.536	686.300
334,700	9,270,183.941	241,084.809	686.200
334,800	9,270,279.141	241,114.558	686.200
334,900	9,270,364.274	241,166.600	686.200
335,000	9,270,444.959	241,225.677	686.200
335,100	9,270,525.643	241,284.754	686.441
335,200	9,270,612.457	241,333.553	686.741
335,300	9,270,710.340	241,351.625	687.041
335,400	9,270,808.749	241,336.676	687.441
335,500	9,270,896.850	241,290.351	688.111
335,600	9,270,966.774	241,219.200	688.470
335,700	9,271,031.569	241,143.045	688.970
335,800	9,271,082.314	241,057.132	688.859
335,900	9,271,125.830	240,967.096	689.141
336,000	9,271,178.931	240,882.785	689.370
336,100	9,271,255.109	240,818.630	689.641
336,200	9,271,347.321	240,781.003	689.941
336,300	9,271,445.128	240,760.180	690.170
336,400	9,271,539.577	240,728.557	690.470
336,500	9,271,618.728	240,668.201	690.741
336,600	9,271,673.774	240,585.269	691.041
336,700	9,271,702.760	240,489.712	691.270
336,800	9,271,727.799	240,392.898	691.711
336,900	9,271,754.555	240,296.601	692.311
337,000	9,271,806.913	240,211.899	692.882
337,100	9,271,861.072	240,128.163	693.382
337,200	9,271,893.462	240,033.614	693.741

Existing Line

Chainage	Coordinates of Horizontal		Ballast Level
(m)	Northing (m)	Easting (m)	(m)
337,300	9,271,923.989	239,938.388	694.341
337,400	9,271,970.700	239,850.491	694.711
337,500	9,272,043.600	239,782.717	695.211
337,600	9,272,134.662	239,742.525	695.641
337,700	9,272,230.296	239,713.849	696.282
337,800	9,272,314.758	239,660.742	697.082
337,900	9,272,392.534	239,598.196	697.982
338,000	9,272,454.793	239,519.992	698.952
338,100	9,272,515.876	239,440.815	700.052
338,200	9,272,576.958	239,361.638	700.541
338,300	9,272,638.040	239,282.461	700.870
338,400	9,272,691.092	239,198.104	701.130
338,500	9,272,714.588	239,101.372	701.270
338,600	9,272,718.206	239,001.660	701.230
338,700	9,272,694.654	238,904.576	701.270
338,800	9,272,671.535	238,807.357	701.741
338,900	9,272,666.341	238,707.659	702.070
339,000	9,272,681.058	238,608.916	702.311
339,100	9,272,715.099	238,515.066	702.500
339,200	9,272,767.106	238,429.849	702.430
339,300	9,272,828.900	238,351.227	702.100
339,400	9,272,890.766	238,272.661	702.370
339,500	9,272,952.632	238,194.095	702.430
339,600	9,273,014.498	238,115.529	702.600
339,700	9,273,066.379	238,030.279	702.530
339,800	9,273,111.771	237,941.175	702.400
339,900	9,273,157.164	237,852.071	702.370
340,000	9,273,202.557	237,762.967	702.530
340,100	9,273,247.950	237,673.863	702.770
340,200	9,273,293.343	237,584.759	703.070
340,300	9,273,338.736	237,495.656	703.541
340,400	9,273,384.648	237,406.825	703.941
340,500	9,273,439.194	237,323.100	704.341
340,600	9,273,504.385	237,247.368	704.530
340,700	9,273,579.066	237,180.975	705.000
340,800	9,273,661.910	237,125.100	705.170
340,900	9,273,751.446	237,080.734	705.300

Existing Line

Chainage	Coordinates of Horizontal		Ballast Level
(m)	Northing (m)	Easting (m)	(m)
341,000	9,273,846.086	237,048.664	705.330
341,100	9,273,943.474	237,025.975	705.400
341,200	9,274,040.619	237,002.320	705.370
341,300	9,274,135.233	236,970.072	705.441
341,400	9,274,226.155	236,928.540	705.330
341,500	9,274,312.476	236,878.139	705.400
341,600	9,274,393.334	236,819.371	705.470
341,700	9,274,467.922	236,752.825	705.370
341,800	9,274,538.432	236,681.915	705.611
341,900	9,274,608.904	236,610.967	706.041
342,000	9,274,679.290	236,539.934	706.852
342,100	9,274,744.934	236,464.551	707.411
342,200	9,274,802.723	236,382.991	707.241
342,300	9,274,854.811	236,297.629	707.811
342,400	9,274,906.717	236,212.155	708.582
342,500	9,274,958.633	236,126.687	709.211
342,600	9,275,015.139	236,044.233	709.811
342,700	9,275,079.595	235,967.832	710.341
342,800	9,275,151.356	235,898.247	710.982
342,900	9,275,228.802	235,835.002	711.711
343,000	9,275,306.910	235,772.558	712.382
343,100	9,275,383.154	235,707.901	713.182
343,200	9,275,452.761	235,636.162	713.641
343,300	9,275,514.858	235,557.831	714.111
343,400	9,275,571.038	235,475.108	714.611
343,500	9,275,626.907	235,392.170	715.141
343,600	9,275,682.777	235,309.233	715.511
343,700	9,275,738.646	235,226.295	716.041
343,800	9,275,794.515	235,143.357	716.470
343,900	9,275,850.384	235,060.420	717.152
344,000	9,275,906.666	234,977.769	718.023
344,100	9,275,973.808	234,903.887	718.982
344,200	9,276,051.409	234,840.837	719.982
344,300	9,276,129.580	234,778.473	720.811
344,400	9,276,207.752	234,716.109	721.823
344,500	9,276,278.329	234,645.813	722.752
344,600	9,276,322.509	234,556.618	723.711

Existing Line

Chainage	Coordinates of Horizontal		Ballast Level
(m)	Northing (m)	Easting (m)	(m)
344,700	9,276,335.073	234,457.876	724.523
344,800	9,276,314.638	234,360.459	725.382
344,900	9,276,263.453	234,275.090	726.082
345,000	9,276,197.481	234,199.938	726.982
345,100	9,276,145.125	234,115.283	727.852
345,200	9,276,123.222	234,018.166	728.682
345,300	9,276,114.933	233,918.510	729.070
345,400	9,276,106.644	233,818.854	729.311
345,500	9,276,098.355	233,719.198	729.641
345,600	9,276,098.446	233,619.507	730.041
345,700	9,276,128.605	233,524.498	730.230
345,800	9,276,166.616	233,432.011	730.441
345,900	9,276,183.885	233,333.983	730.770
346,000	9,276,173.911	233,234.568	730.870
346,100	9,276,157.394	233,136.076	731.652
346,200	9,276,116.146	233,045.207	732.311
346,300	9,276,074.603	232,954.458	733.252
346,400	9,276,061.985	232,855.723	734.123
346,500	9,276,079.099	232,757.381	734.641
346,600	9,276,101.160	232,659.845	735.182
346,700	9,276,123.221	232,562.308	736.023
346,800	9,276,145.281	232,464.772	736.370
346,900	9,276,160.510	232,366.131	736.582
347,000	9,276,151.678	232,266.783	736.559
347,100	9,276,120.407	232,171.927	735.718
347,200	9,276,086.641	232,077.854	735.700
347,300	9,276,078.145	231,978.680	736.141
347,400	9,276,101.859	231,881.913	736.311
347,500	9,276,135.534	231,787.753	736.441
347,600	9,276,162.394	231,691.629	736.400
347,700	9,276,166.862	231,591.879	736.400
347,800	9,276,167.730	231,491.931	736.500
347,900	9,276,193.949	231,395.909	736.330
348,000	9,276,250.144	231,313.751	736.230
348,100	9,276,320.371	231,242.560	736.441
348,200	9,276,377.004	231,160.704	736.882
348,300	9,276,403.738	231,064.824	737.441

Existing Line

Chainage	Coordinates of Horizontal		Ballast Level
(m)	Northing (m)	Easting (m)	(m)
348,400	9,276,399.525	230,965.182	738.111
348,500	9,276,394.173	230,865.551	738.682
348,600	9,276,419.175	230,769.204	739.482
348,700	9,276,472.281	230,684.735	740.011
348,800	9,276,530.566	230,603.477	740.711
348,900	9,276,588.851	230,522.219	740.830
349,000	9,276,647.136	230,440.961	740.723
349,100	9,276,705.421	230,359.703	740.800
349,200	9,276,763.706	230,278.445	740.800
349,300	9,276,821.991	230,197.187	740.941
349,400	9,276,880.276	230,115.930	740.970
349,500	9,276,938.561	230,034.672	740.930
349,600	9,276,996.846	229,953.414	741.070
349,700	9,277,055.131	229,872.156	740.930
349,800	9,277,113.416	229,790.898	740.930
349,900	9,277,171.701	229,709.640	740.870
350,000	9,277,229.986	229,628.382	741.070
350,100	9,277,288.272	229,547.124	741.441
350,200	9,277,346.557	229,465.866	742.211
350,300	9,277,404.842	229,384.608	743.052
350,400	9,277,463.127	229,303.350	743.952
350,500	9,277,521.412	229,222.092	744.952
350,600	9,277,579.697	229,140.834	745.952
350,700	9,277,637.982	229,059.576	746.923
350,800	9,277,696.267	228,978.318	748.023
350,900	9,277,754.552	228,897.060	748.882
351,000	9,277,812.837	228,815.802	749.882
351,100	9,277,871.122	228,734.544	750.482
351,200	9,277,929.407	228,653.286	751.182
351,300	9,277,987.692	228,572.029	751.911
351,400	9,278,045.977	228,490.771	752.611
351,500	9,278,104.262	228,409.513	752.870
351,600	9,278,162.547	228,328.255	753.100
351,700	9,278,220.832	228,246.997	753.241
351,800	9,278,279.117	228,165.739	753.741
351,900	9,278,337.402	228,084.481	754.100
352,000	9,278,395.687	228,003.223	754.470

Existing Line

Chainage	Coordinates of Horizontal		Ballast Level
(m)	Northing (m)	Easting (m)	(m)
352,100	9,278,453.972	227,921.965	754.711
352,200	9,278,512.154	227,840.633	755.011
352,300	9,278,567.447	227,757.323	755.030
352,400	9,278,620.115	227,672.317	755.000
352,500	9,278,672.744	227,587.287	754.970
352,600	9,278,725.374	227,502.256	755.000
352,700	9,278,778.003	227,417.226	755.130
352,800	9,278,830.633	227,332.196	755.100
352,900	9,278,883.262	227,247.166	755.100
353,000	9,278,935.892	227,162.135	755.000
353,100	9,278,988.521	227,077.105	755.070
353,200	9,279,041.151	226,992.075	755.100
353,300	9,279,093.780	226,907.045	755.000
353,400	9,279,146.184	226,821.878	755.000
353,500	9,279,185.863	226,730.311	754.930
353,600	9,279,205.839	226,632.440	754.800
353,700	9,279,221.408	226,533.660	754.900
353,800	9,279,236.976	226,434.879	755.041
353,900	9,279,252.545	226,336.098	755.100
354,000	9,279,268.616	226,237.404	755.241
354,100	9,279,296.303	226,141.433	755.100
354,200	9,279,339.527	226,051.386	755.200
354,300	9,279,397.091	225,969.757	755.200
354,400	9,279,467.399	225,898.809	755.170
354,500	9,279,548.503	225,840.508	755.170
354,600	9,279,637.605	225,795.231	755.200
354,700	9,279,728.059	225,752.592	755.030
354,800	9,279,818.513	225,709.954	755.200
354,900	9,279,908.967	225,667.315	755.030
355,000	9,279,999.422	225,624.677	755.170
355,100	9,280,089.876	225,582.039	755.100
355,200	9,280,180.330	225,539.400	755.341
355,300	9,280,270.561	225,496.299	755.252
355,400	9,280,358.304	225,448.366	755.393
355,500	9,280,442.658	225,394.695	755.870
355,600	9,280,523.250	225,335.523	755.970
355,700	9,280,599.720	225,271.114	756.170

Existing Line

Chainage	Coordinates of Horizontal		Ballast Level
(m)	Northing (m)	Easting (m)	(m)
355,800	9,280,671.730	225,201.754	756.270
355,900	9,280,738.960	225,127.750	756.300
356,000	9,280,801.110	225,049.433	756.370
356,100	9,280,857.905	224,967.149	756.500
356,200	9,280,909.092	224,881.264	756.600
356,300	9,280,957.130	224,793.558	756.559
356,400	9,281,005.162	224,705.849	756.670
356,500	9,281,053.194	224,618.139	756.700
356,600	9,281,101.225	224,530.430	756.670
356,700	9,281,149.257	224,442.720	756.630
356,800	9,281,197.289	224,355.011	756.670
356,900	9,281,245.320	224,267.301	756.770
357,000	9,281,293.352	224,179.592	756.770
357,100	9,281,341.384	224,091.882	757.141
357,200	9,281,387.101	224,002.977	757.682
357,300	9,281,424.187	223,910.147	758.482
357,400	9,281,457.975	223,816.028	759.111
357,500	9,281,491.763	223,721.909	759.852
357,600	9,281,525.550	223,627.790	760.711
357,700	9,281,559.338	223,533.671	761.582
357,800	9,281,593.126	223,439.552	762.382
357,900	9,281,626.914	223,345.433	763.111
358,000	9,281,660.702	223,251.314	763.952
358,100	9,281,694.490	223,157.195	764.852
358,200	9,281,728.278	223,063.077	765.652
358,300	9,281,762.066	222,968.958	766.452
358,400	9,281,795.853	222,874.839	767.211
358,500	9,281,829.641	222,780.720	767.982
358,600	9,281,863.429	222,686.601	768.682
358,700	9,281,897.217	222,592.482	769.300
358,800	9,281,931.005	222,498.363	769.441
358,900	9,281,964.793	222,404.244	769.500
359,000	9,281,998.581	222,310.125	769.700
359,100	9,282,032.039	222,215.891	769.800
359,200	9,282,057.018	222,119.128	769.800
359,300	9,282,069.738	222,020.006	769.800
359,400	9,282,070.000	221,920.072	769.630

Existing Line

Chainage	Coordinates of Horizontal		Ballast Level
(m)	Northing (m)	Easting (m)	(m)
359,500	9,282,057.802	221,820.884	769.630
359,600	9,282,033.332	221,723.991	769.600
359,700	9,282,001.905	221,629.058	769.600
359,800	9,281,970.492	221,534.120	769.700
359,900	9,281,957.204	221,435.474	769.730
360,000	9,281,976.925	221,337.909	769.689
360,100	9,282,027.482	221,252.167	769.741
360,200	9,282,099.728	221,183.154	769.800
360,300	9,282,169.167	221,111.450	769.841
360,400	9,282,219.442	221,025.309	769.730
360,500	9,282,246.843	220,929.406	769.730
360,600	9,282,249.665	220,829.707	769.600
360,700	9,282,232.115	220,731.306	769.570
360,800	9,282,212.605	220,633.227	769.530
360,900	9,282,193.096	220,535.149	769.530
361,000	9,282,173.586	220,437.071	769.500
361,100	9,282,154.076	220,338.992	769.470
361,200	9,282,136.053	220,240.654	769.600
361,300	9,282,131.851	220,140.859	769.700
361,400	9,282,144.262	220,041.748	769.770
361,500	9,282,169.486	219,944.996	769.941
361,600	9,282,195.648	219,848.479	770.000
361,700	9,282,221.810	219,751.962	770.370
361,800	9,282,247.972	219,655.445	770.482
361,900	9,282,274.134	219,558.928	770.770
362,000	9,282,300.297	219,462.411	771.070
362,100	9,282,329.007	219,366.651	771.341
362,200	9,282,366.791	219,274.109	771.570
362,300	9,282,413.625	219,185.802	771.670
362,400	9,282,469.041	219,102.611	771.970
362,500	9,282,532.485	219,025.368	771.900
362,600	9,282,603.324	218,954.844	772.070
362,700	9,282,680.066	218,890.750	772.170
362,800	9,282,757.603	218,827.599	772.411
362,900	9,282,835.140	218,764.448	772.641
363,000	9,282,912.344	218,700.898	772.870
363,100	9,282,982.863	218,630.101	773.070

Existing Line

Chainage	Coordinates of Horizontal		Ballast Level
(m)	Northing (m)	Easting (m)	(m)
363,200	9,283,043.345	218,550.558	773.300
363,300	9,283,093.258	218,463.960	773.470
363,400	9,283,140.360	218,375.748	773.670
363,500	9,283,187.462	218,287.536	773.870
363,600	9,283,234.565	218,199.324	773.900
363,700	9,283,281.667	218,111.112	774.041
363,800	9,283,330.080	218,023.654	774.270
363,900	9,283,397.082	217,949.936	774.541
364,000	9,283,480.789	217,895.386	774.800
364,100	9,283,572.833	217,857.177	775.111
364,200	9,283,671.818	217,844.133	775.470
364,300	9,283,771.431	217,835.462	775.770
364,400	9,283,867.752	217,809.572	775.830
364,500	9,283,954.674	217,760.658	775.800
364,600	9,284,026.792	217,691.759	775.770
364,700	9,284,079.622	217,607.160	775.830
364,800	9,284,113.105	217,513.011	775.730
364,900	9,284,144.014	217,417.909	775.459
365,000	9,284,181.151	217,325.105	775.741
365,100	9,284,227.367	217,236.472	775.770
365,200	9,284,282.200	217,152.896	775.800
365,300	9,284,345.104	217,075.212	775.670
365,400	9,284,415.448	217,004.196	775.700
365,500	9,284,492.531	216,940.557	775.700
365,600	9,284,575.582	216,884.932	775.800
365,700	9,284,661.887	216,834.419	775.830
365,800	9,284,748.223	216,783.961	775.870
365,900	9,284,834.558	216,733.501	775.870
366,000	9,284,915.667	216,675.245	776.000
366,100	9,284,984.905	216,603.282	776.170
366,200	9,285,039.990	216,519.987	776.511
366,300	9,285,079.106	216,428.104	776.670
366,400	9,285,101.107	216,330.684	776.659
366,500	9,285,116.326	216,231.849	776.970
366,600	9,285,131.545	216,133.014	776.882
366,700	9,285,146.971	216,034.213	777.000
366,800	9,285,174.731	215,938.316	777.100

Existing Line

Chainage	Coordinates of Horizontal		Ballast Level
(m)	Northing (m)	Easting (m)	(m)
366,900	9,285,220.963	215,849.829	777.170
367,000	9,285,274.958	215,765.659	777.370
367,100	9,285,328.953	215,681.490	777.441
367,200	9,285,382.947	215,597.320	777.870
367,300	9,285,436.942	215,513.150	778.000
367,400	9,285,490.937	215,428.980	778.341
367,500	9,285,544.932	215,344.810	778.641
367,600	9,285,598.927	215,260.641	779.111
367,700	9,285,652.922	215,176.471	779.641
367,800	9,285,706.916	215,092.301	780.211
367,900	9,285,756.801	215,005.680	780.711
368,000	9,285,797.790	214,914.512	781.311
368,100	9,285,829.473	214,819.708	781.841
368,200	9,285,851.533	214,722.214	782.241
368,300	9,285,863.750	214,623.005	782.670
368,400	9,285,867.938	214,523.099	782.970
368,500	9,285,871.839	214,423.180	783.270
368,600	9,285,887.326	214,324.503	783.541
368,700	9,285,918.969	214,229.764	784.141
368,800	9,285,965.891	214,141.586	784.411
368,900	9,286,026.489	214,062.153	784.741
369,000	9,286,091.104	213,985.832	785.241
369,100	9,286,155.719	213,909.512	785.230
369,200	9,286,220.334	213,833.191	784.930
369,300	9,286,284.949	213,756.870	784.759
369,400	9,286,349.565	213,680.549	784.630
369,500	9,286,414.180	213,604.228	784.430
369,600	9,286,478.795	213,527.907	784.200
369,700	9,286,543.410	213,451.586	784.230
369,800	9,286,608.025	213,375.265	783.959
369,900	9,286,672.641	213,298.944	783.970
370,000	9,286,737.256	213,222.624	783.800
370,100	9,286,801.871	213,146.303	783.730
370,200	9,286,866.458	213,069.958	783.730
370,300	9,286,928.669	212,991.679	783.730
370,400	9,286,986.890	212,910.387	783.830
370,500	9,287,040.975	212,826.288	783.630

Existing Line

Chainage	Coordinates of Horizontal		Ballast Level
(m)	Northing (m)	Easting (m)	(m)
370,600	9,287,090.789	212,739.590	783.770
370,700	9,287,137.550	212,651.197	783.800
370,800	9,287,184.202	212,562.746	783.670
370,900	9,287,230.853	212,474.295	783.670
371,000	9,287,277.504	212,385.843	783.600
371,100	9,287,324.156	212,297.392	783.600
371,200	9,287,370.807	212,208.940	783.800
371,300	9,287,419.795	212,121.826	783.900
371,400	9,287,483.276	212,044.775	783.900
371,500	9,287,560.799	211,981.871	783.930
371,600	9,287,648.341	211,933.661	783.670
371,700	9,287,737.274	211,887.935	783.600
371,800	9,287,826.208	211,842.210	783.530
371,900	9,287,915.141	211,796.484	783.630
372,000	9,288,004.075	211,750.759	783.500
372,100	9,288,093.008	211,705.033	783.459
372,200	9,288,181.942	211,659.308	783.500
372,300	9,288,270.875	211,613.582	783.430
372,400	9,288,359.809	211,567.857	783.470

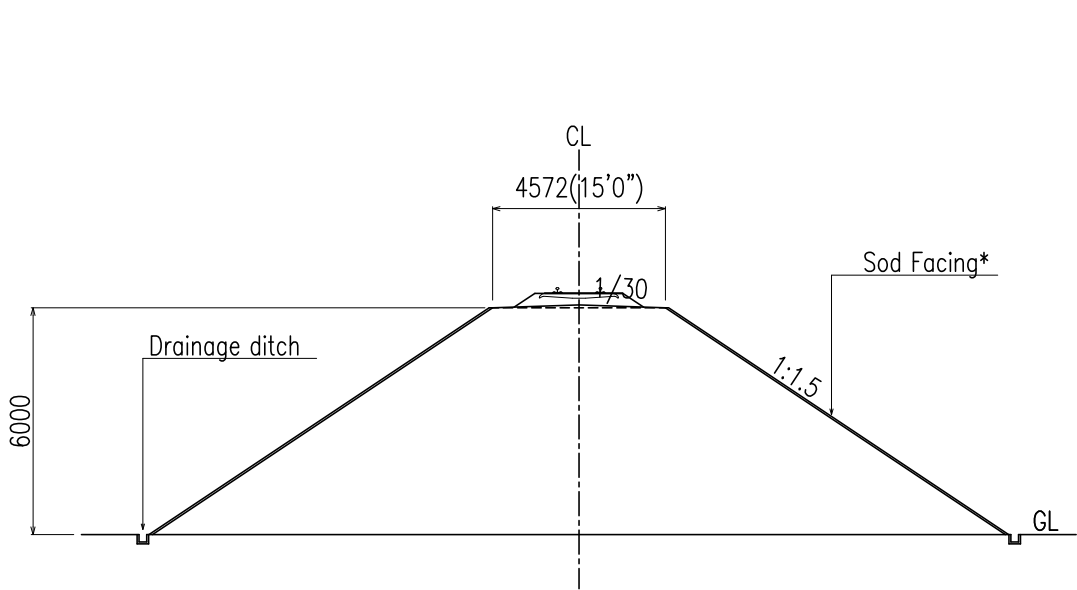
APPENDIX Y

PRELIMINARY DESIGN DRAWINGS (RAILWAY)

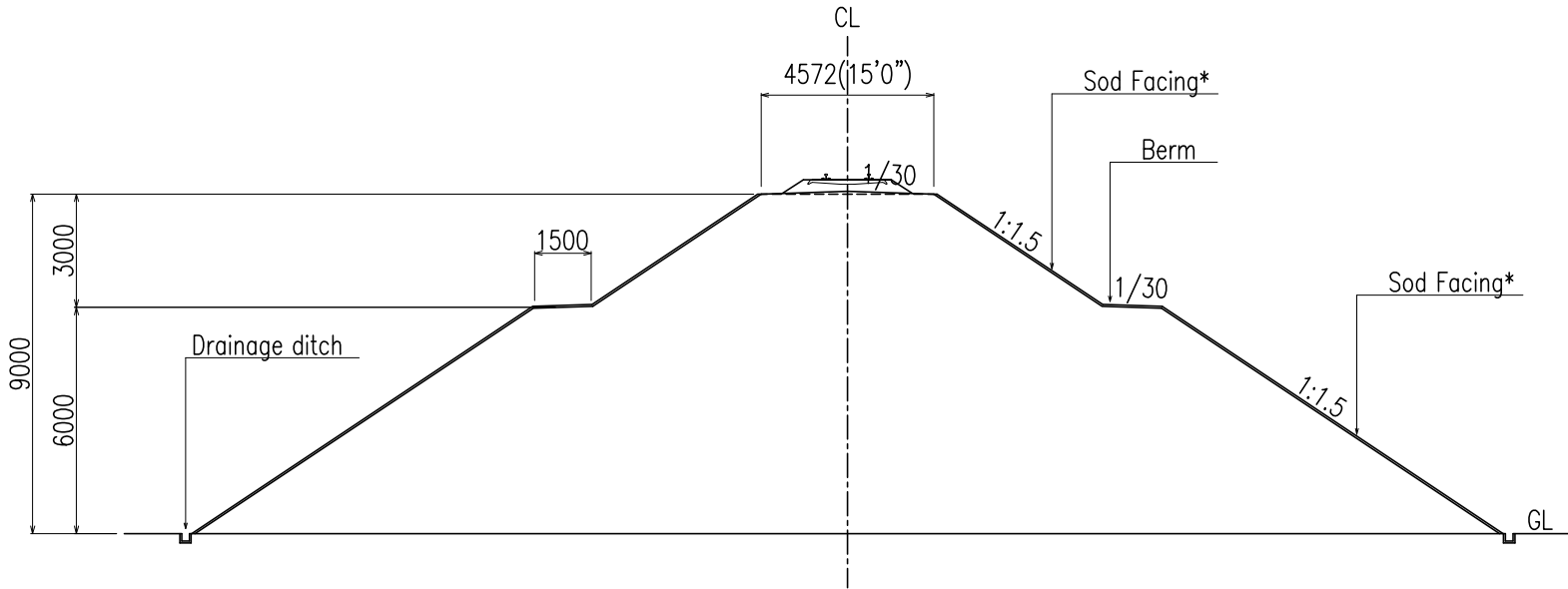
General Embankment

Scale : A1-1/100, A3-1/200

Bank Height ≤ 6.0 m

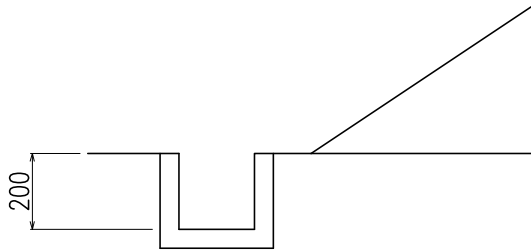


Bank Height > 6.0 m

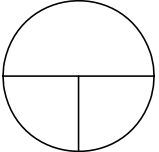


Drainage ditch

Scale : A1-1/10, A3-1/20



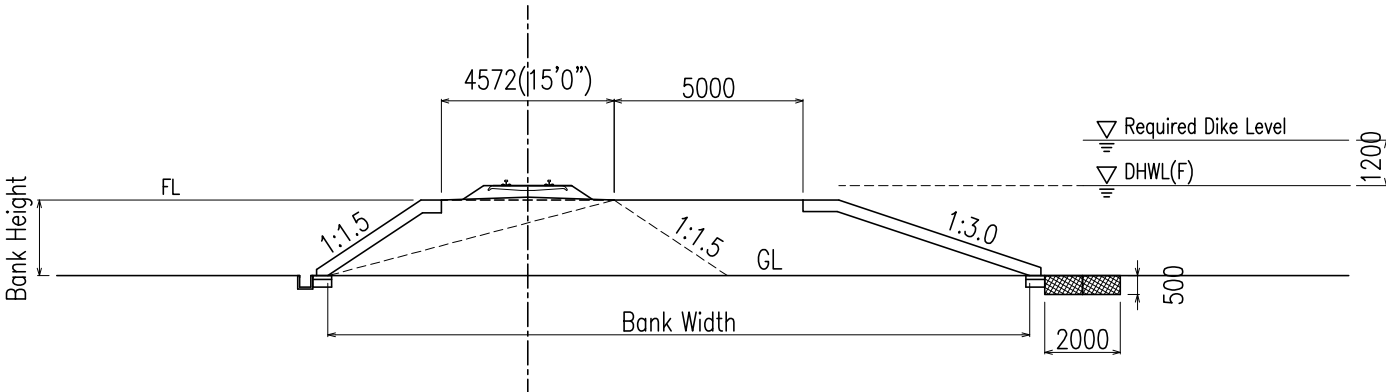
* Note: If necessary, slope protection should be installed.

GOVERNMENT AGENCIES:		JICA STUDY TEAM:	PROJECT & LOCATION:	SHEET CONTENTS:	DWG NUM
 Japan International Cooperation Agency	 Reli Assets Holding Company (RAHCO), Tanzania	PADECO Co., Ltd., Nippon Koei Co., Ltd., Japan International Consultants for Transportation Co., Ltd., and Fukken Engineering Co., Ltd.	Preparatory Survey on Flood Protection Measures for Central Railway Line in the United Republic of Tanzania		

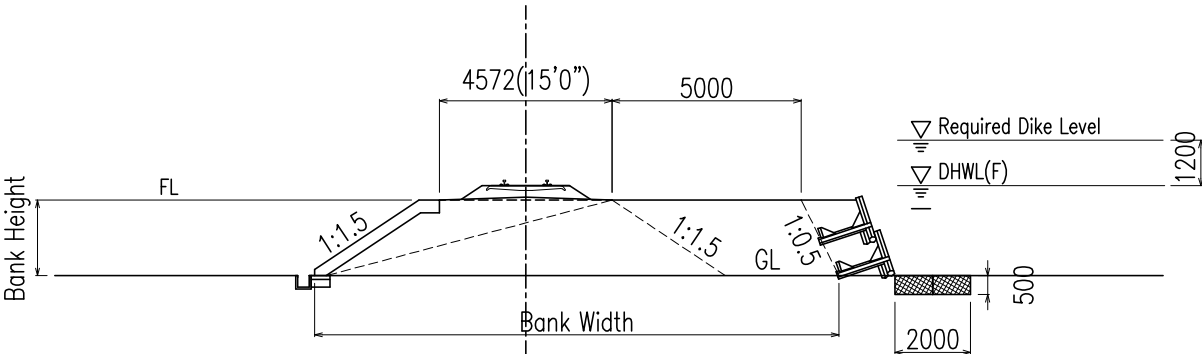
General Embankment (with Protection against River Water)

Ordinary Method

Bank Height < DHWL(F)

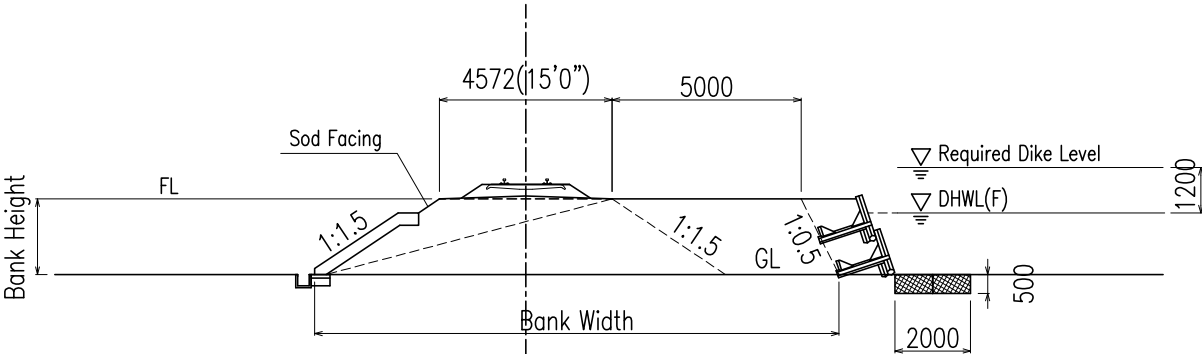
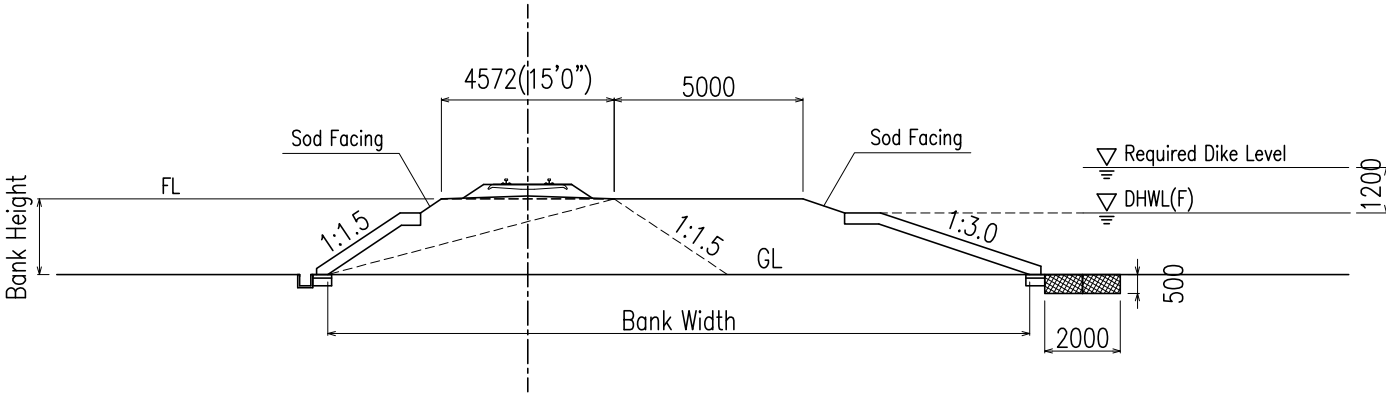


Using Japanese Technology
(on Section 2, 9)



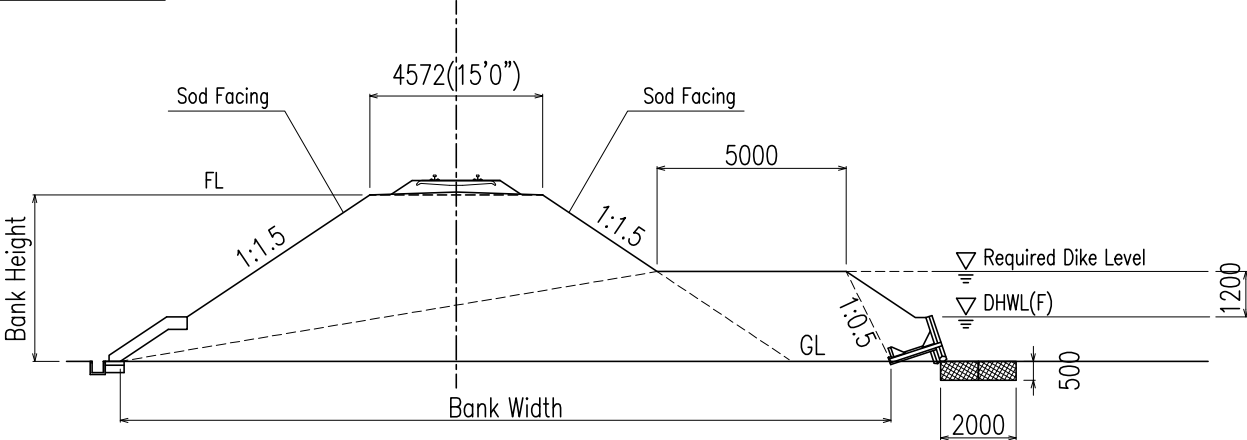
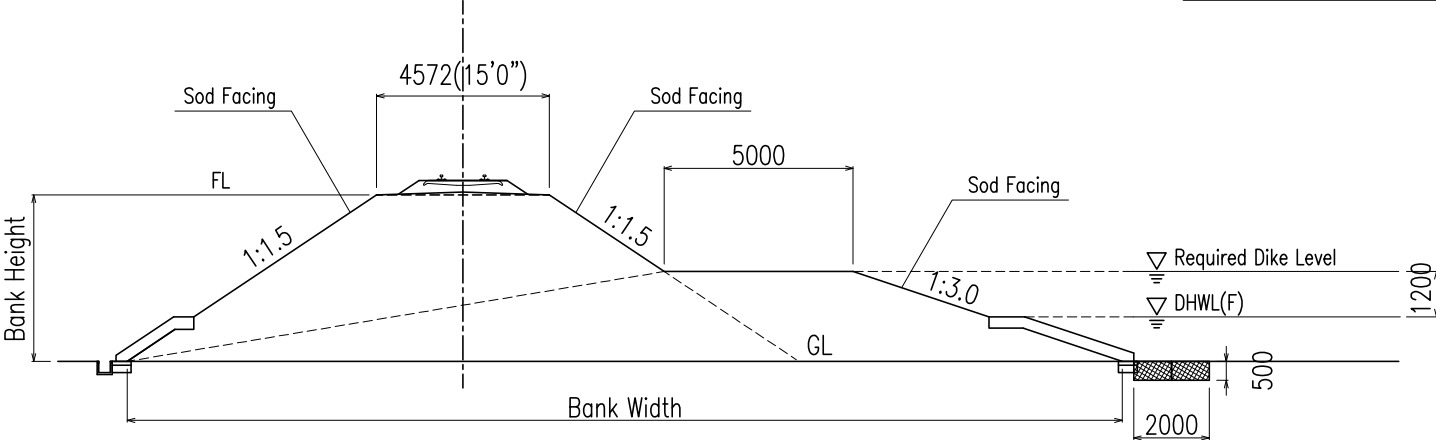
* Bank Width should have 7 times of Bank Height.

Bank Height < Required Dike Level



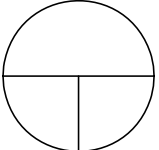
* Bank Width should have 7 times of DHWL(F)-GL.

Bank Height > Required Dike Level



* Bank Width should have 7 times of DHWL(F)-GL.

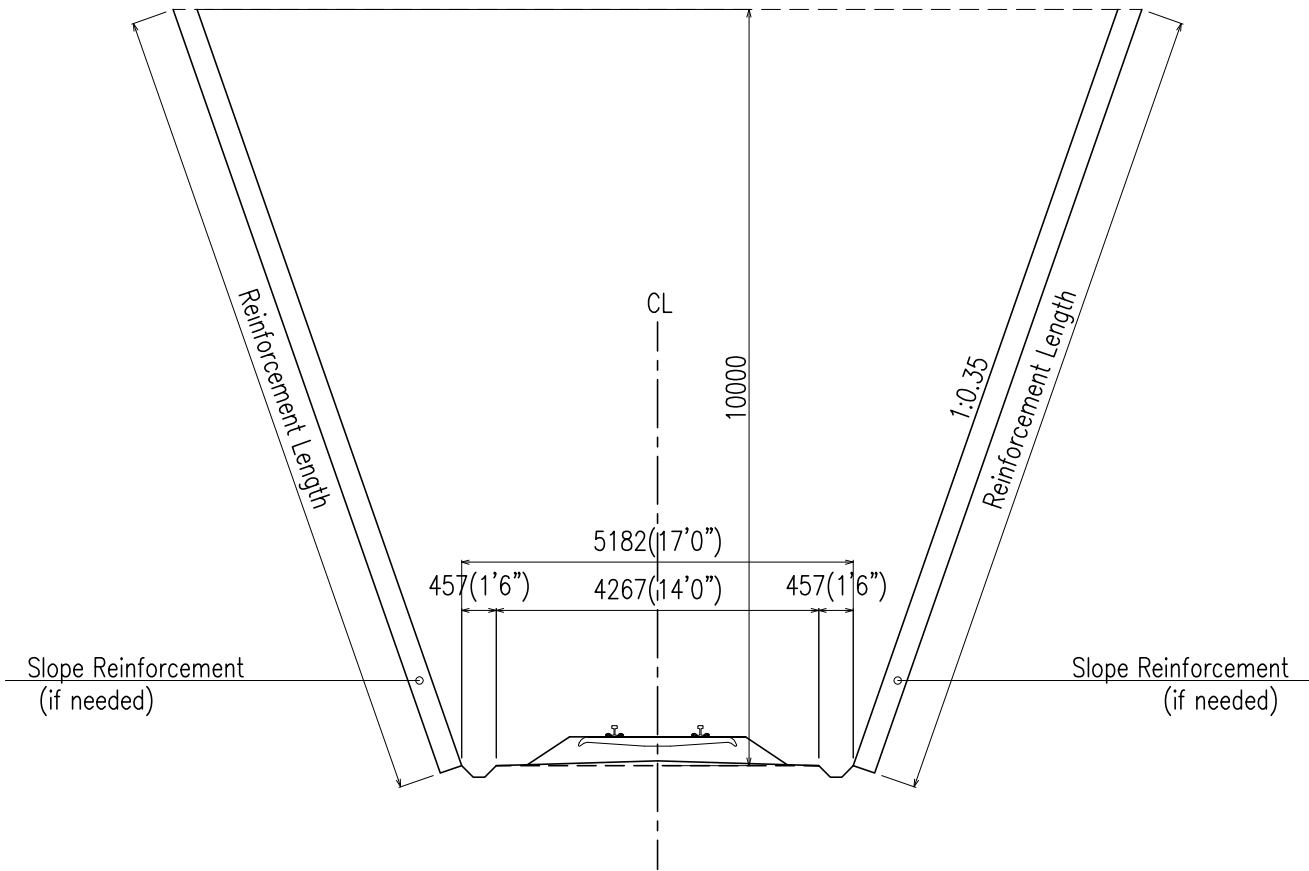
[Note]
DHWL(F): Design High Water Level for Future Riverbed Level (Riverbed rising due to sediment deposit)
DHWL(P): Design High Water Level for Present Riverbed Level

GOVERNMENT AGENCIES:		JICA STUDY TEAM:	PROJECT & LOCATION:	SHEET CONTENTS:	DWG NUM
 Japan International Cooperation Agency	 Reli Assets Holding Company (RAHCO), Tanzania	PADECO Co., Ltd., Nippon Koei Co., Ltd., Japan International Consultants for Transportation Co., Ltd., and Fukken Engineering Co., Ltd.	Preparatory Survey on Flood Protection Measures for Central Railway Line in the United Republic of Tanzania	General Embankment (with Protection against River Water)	

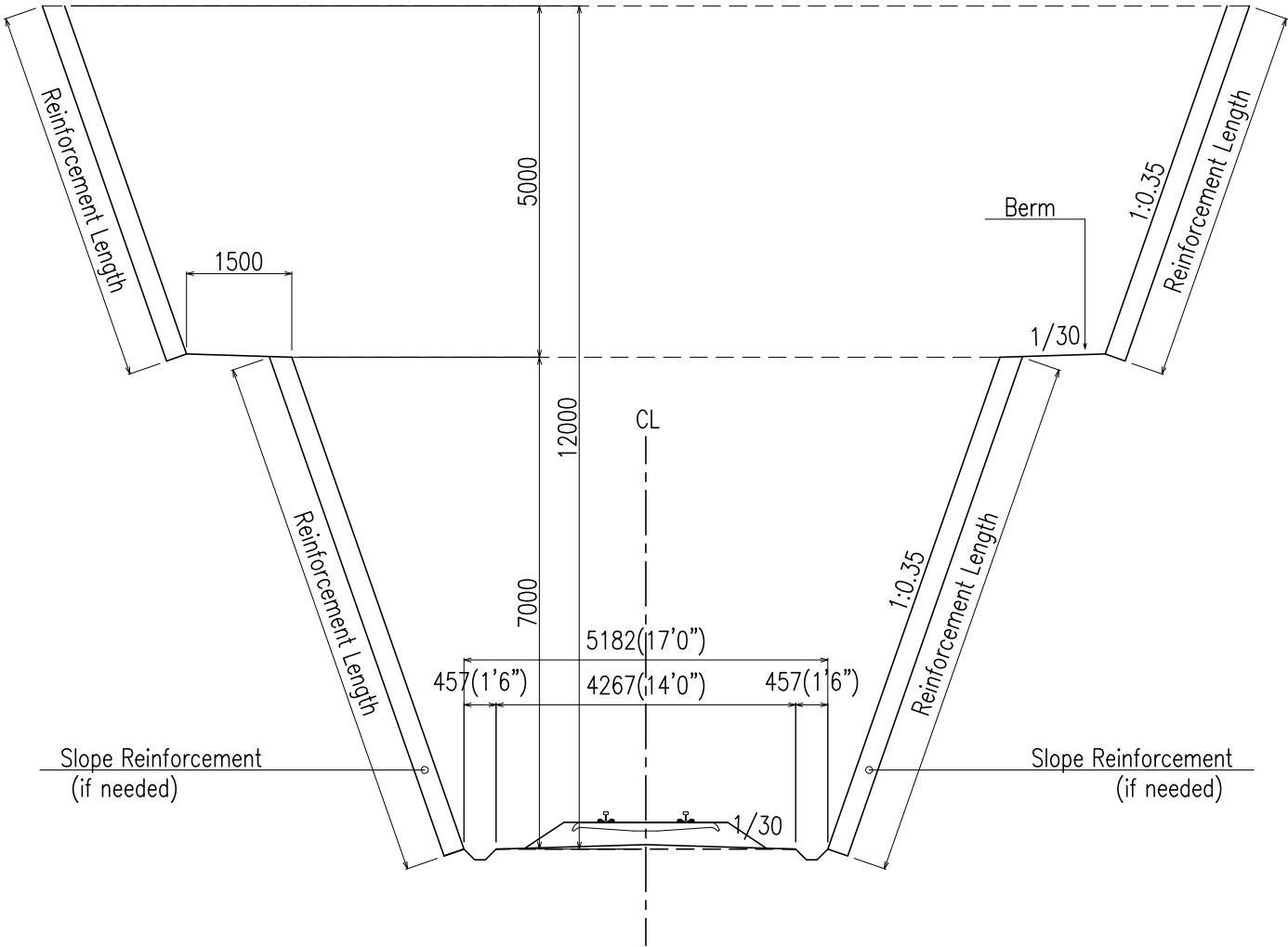
General Cutting

Scale : A1-1/50, A3-1/100

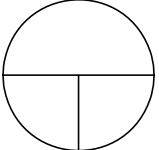
Cutting Height ≤ 10.0 m



Cutting Height >10.0 m

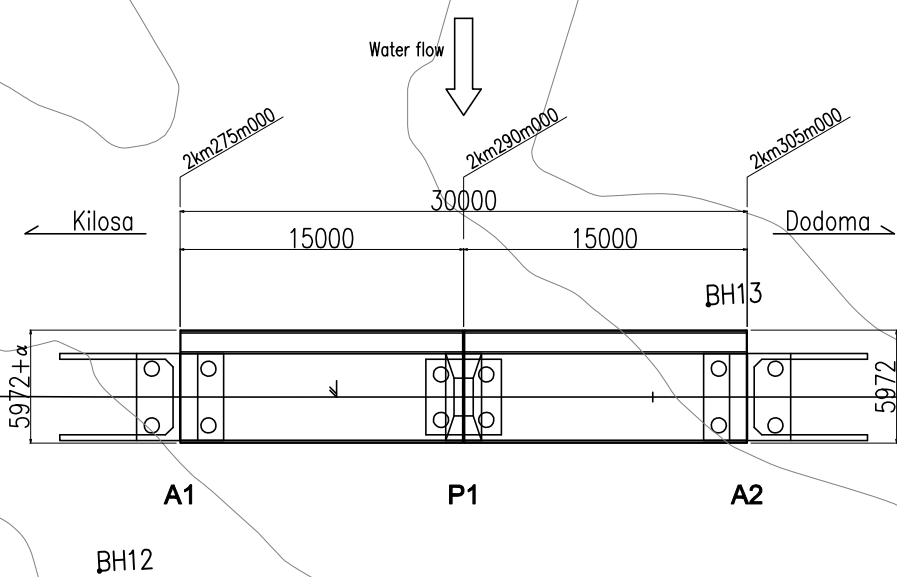
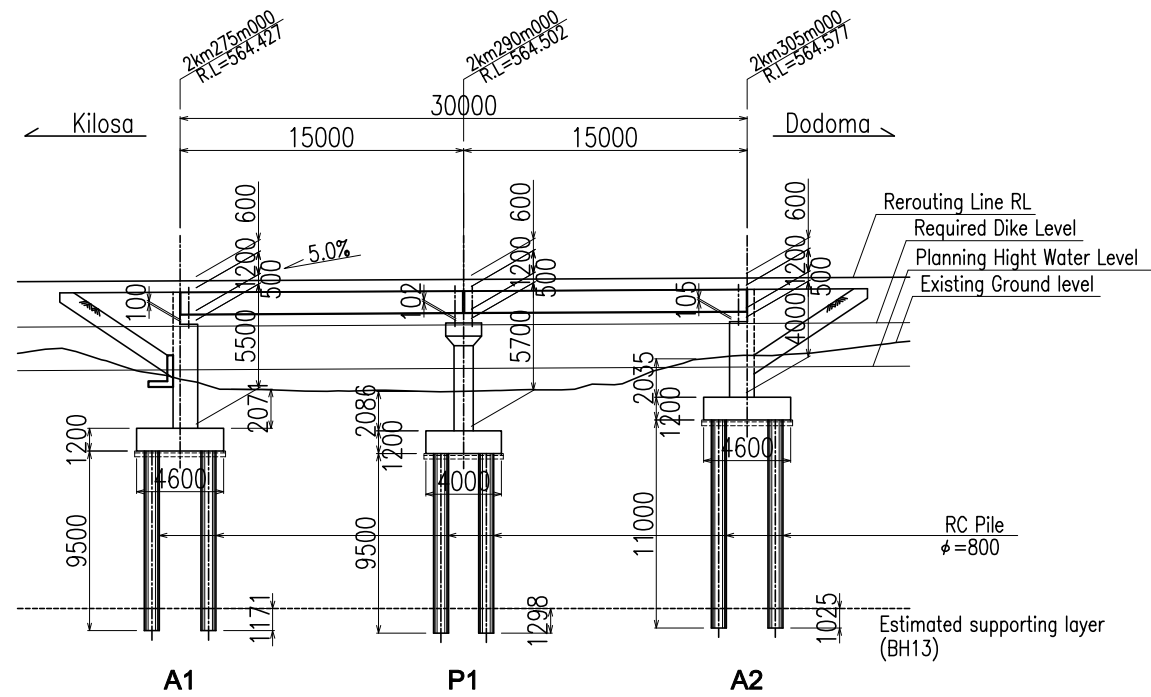


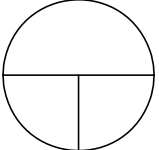
Note:
1) It's assumed that Cutting is in firm rock.
2) Berm should be set per every 7 m height.

GOVERNMENT AGENCIES:		JICA STUDY TEAM:	PROJECT & LOCATION:	SHEET CONTENTS:	DWG NUM
 Japan International Cooperation Agency	 Reli Assets Holding Company (RAHCO), Tanzania	PADECO Co., Ltd., Nippon Koei Co., Ltd., Japan International Consultants for Transportation Co., Ltd., and Fukken Engineering Co., Ltd.	Preparatory Survey on Flood Protection Measures for Central Railway Line in the United Republic of Tanzania	General Cutting	

Km 304 Bridge (1/2)

Scale : A1-1/200, A3-1/400

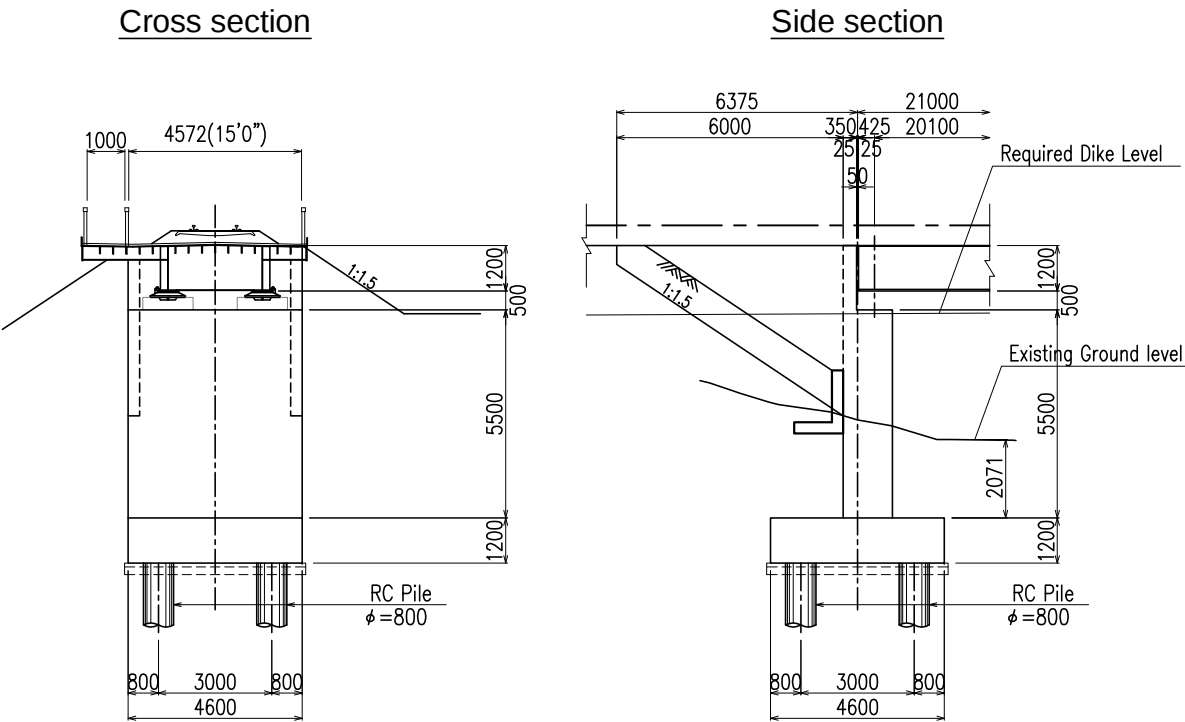


GOVERNMENT AGENCIES:		JICA STUDY TEAM:	PROJECT & LOCATION:	SHEET CONTENTS:	DWG NUM
 Japan International Cooperation Agency	 Reli Assets Holding Company (RAHCO), Tanzania	PADECO Co., Ltd., Nippon Koei Co., Ltd., Japan International Consultants for Transportation Co., Ltd., and Fukken Engineering Co., Ltd.	Preparatory Survey on Flood Protection Measures for Central Railway Line in the United Republic of Tanzania	Km304 Bridge (1/2)	

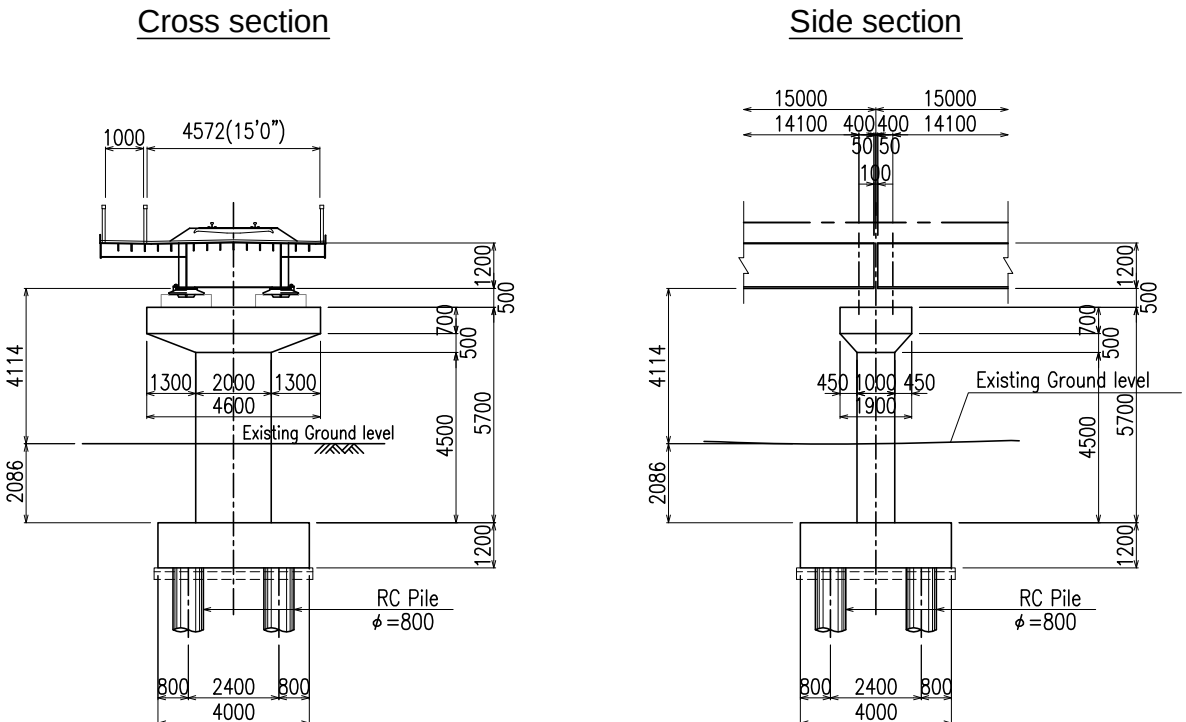
Km 304 Bridge (2/2)

Scale : A1-1/100, A3-1/200

Abutment (A1)

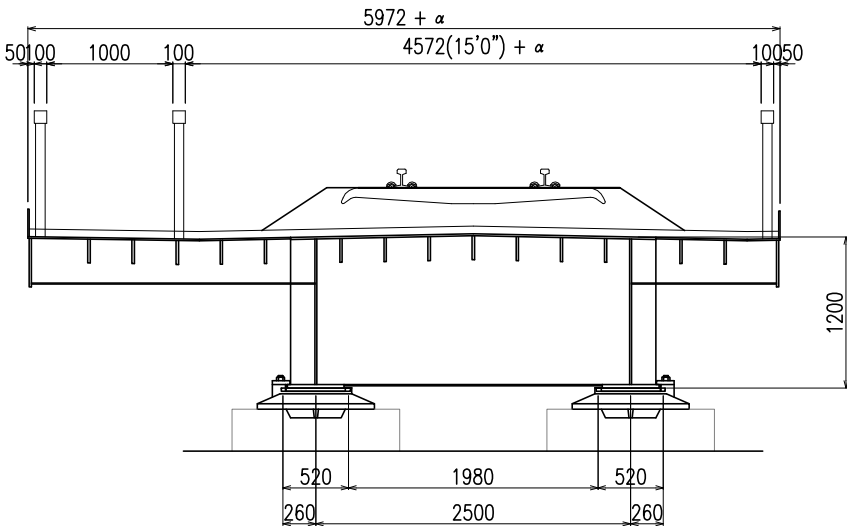


Pier (P1)

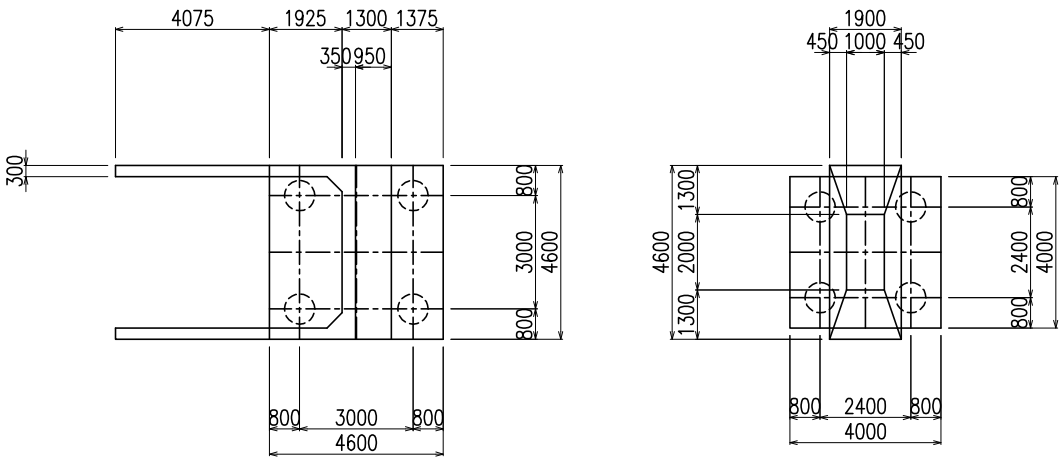


Superstructure cross section

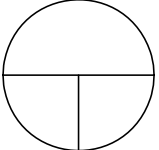
Scale : A1-1/30, A3-1/60



Plan View (foundation)

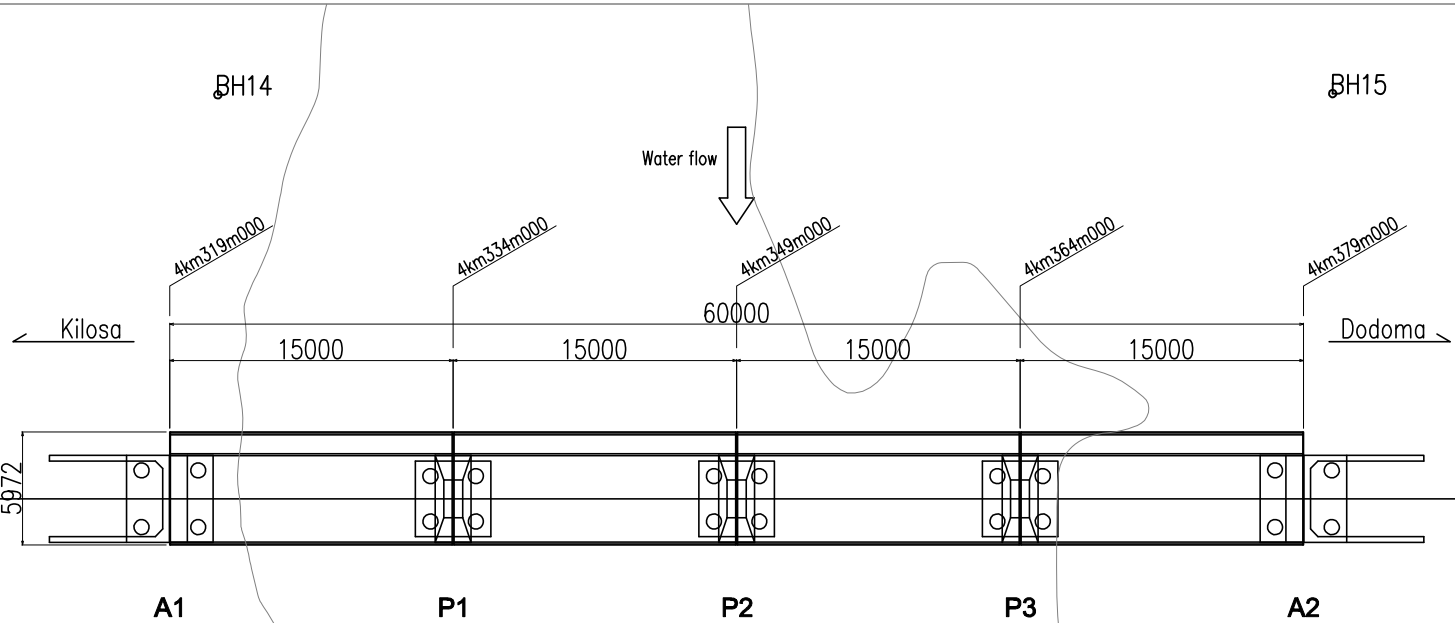
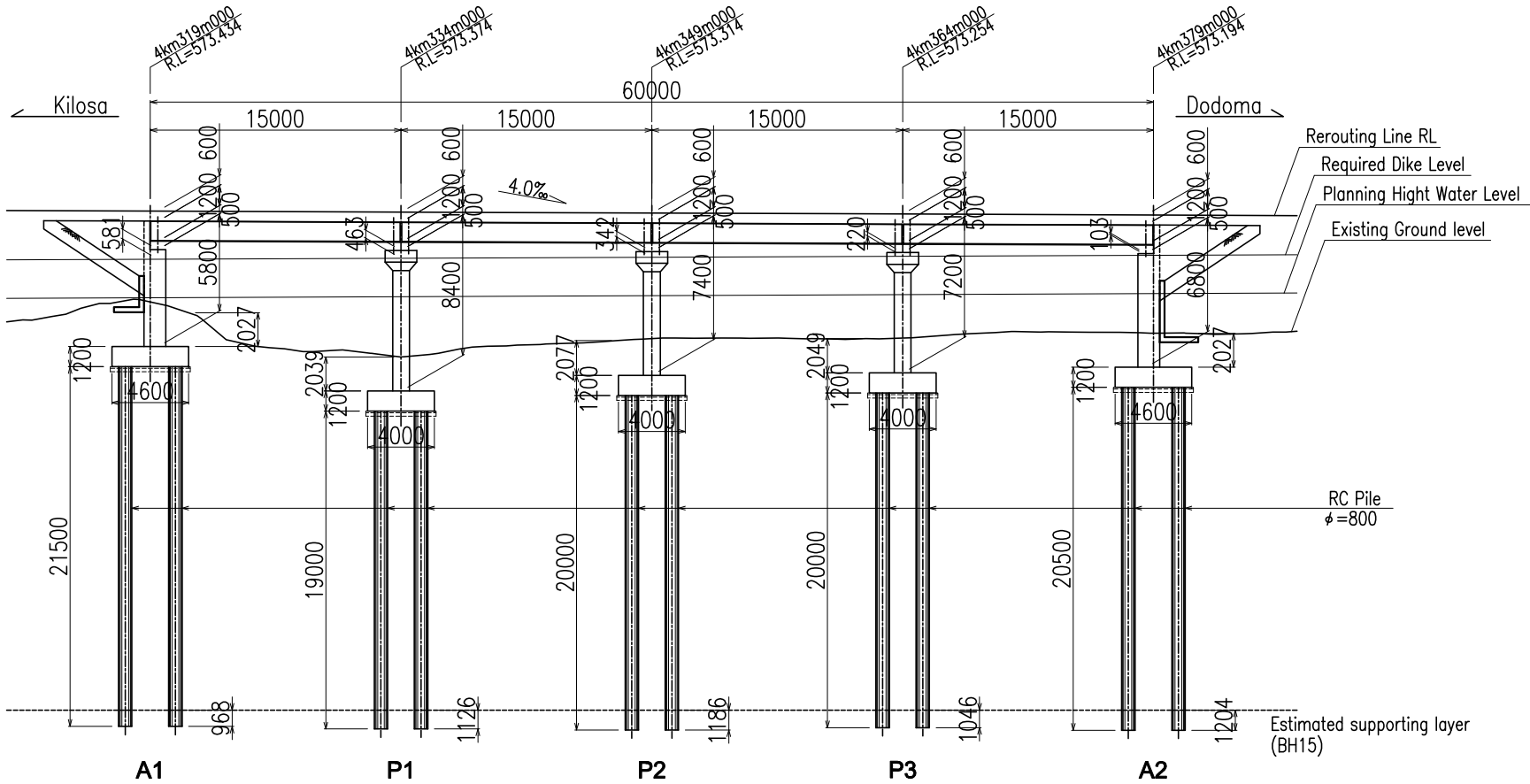


Note : Value of α should depend on a calculation of shift.

GOVERNMENT AGENCIES:		JICA STUDY TEAM:	PROJECT & LOCATION:	SHEET CONTENTS:	DWG NUM
 Japan International Cooperation Agency	 Reli Assets Holding Company (RAHCO), Tanzania	PADECO Co., Ltd., Nippon Koei Co., Ltd., Japan International Consultants for Transportation Co., Ltd., and Fukken Engineering Co., Ltd.	Preparatory Survey on Measures for Central Railway Line in the United Republic of Tanzania	Km304 Bridge (2/2)	

Km 306 Bridge (1/2)

Scale : A1-1/200, A3-1/400



GOVERNMENT AGENCIES:



Japan International
Cooperation Agency



Reli Assets Holding
Company (RAHCO),
Tanzania

JICA STUDY TEAM:

PADECO Co., Ltd.,
Nippon Koei Co., Ltd.,
Japan International Consultants
for Transportation Co., Ltd., and
Fukken Engineering Co., Ltd.

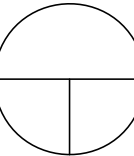
PROJECT & LOCATION:

Preparatory Survey on
Flood Protection
Measures for Central
Railway Line in the United
Republic of Tanzania

SHEET CONTENTS:

Km306 Bridge (1/2)

DWG NUM

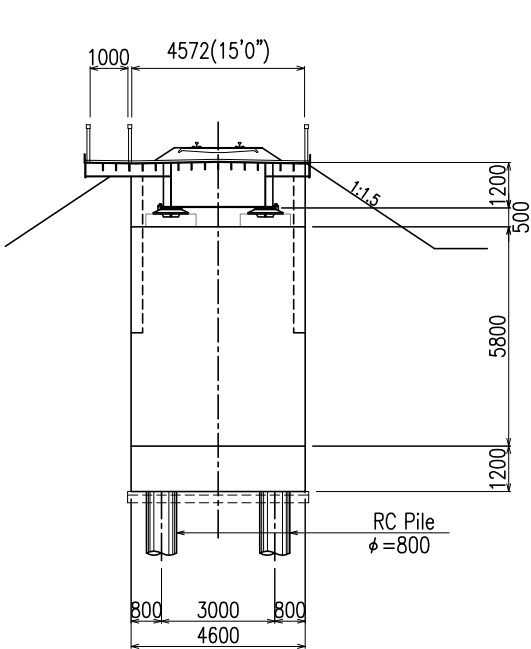


Km 306 Bridge (2/2)

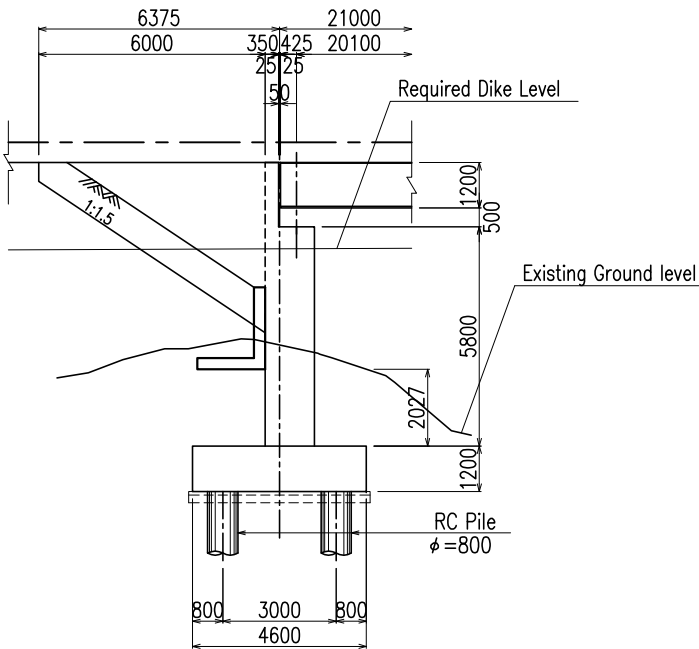
Scale : A1-1/100, A3-1/200

Abutment (A1)

Cross section

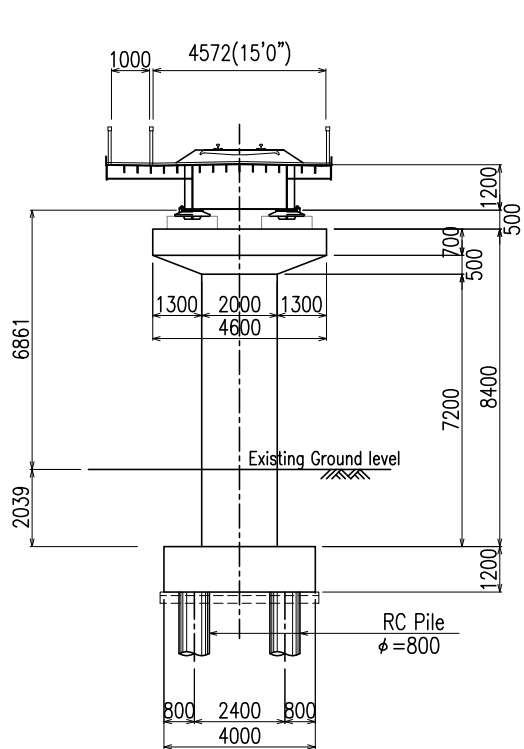


Side section

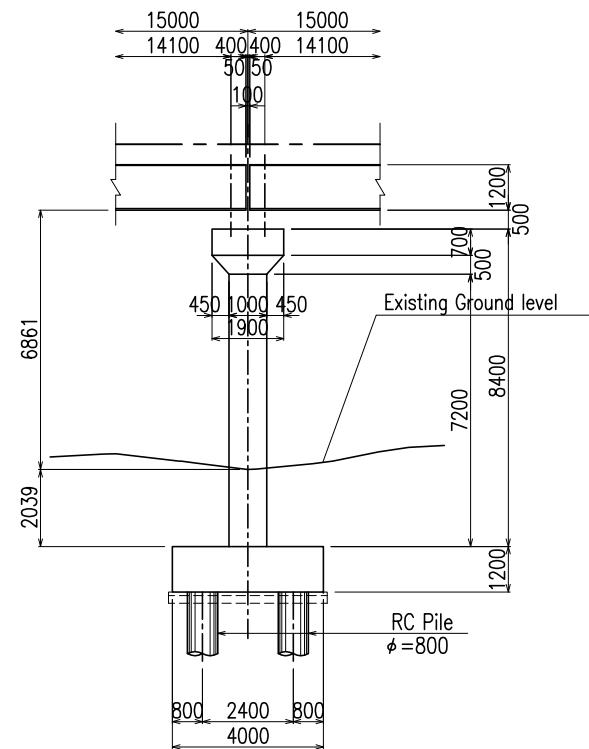


Pier (P1)

Cross section

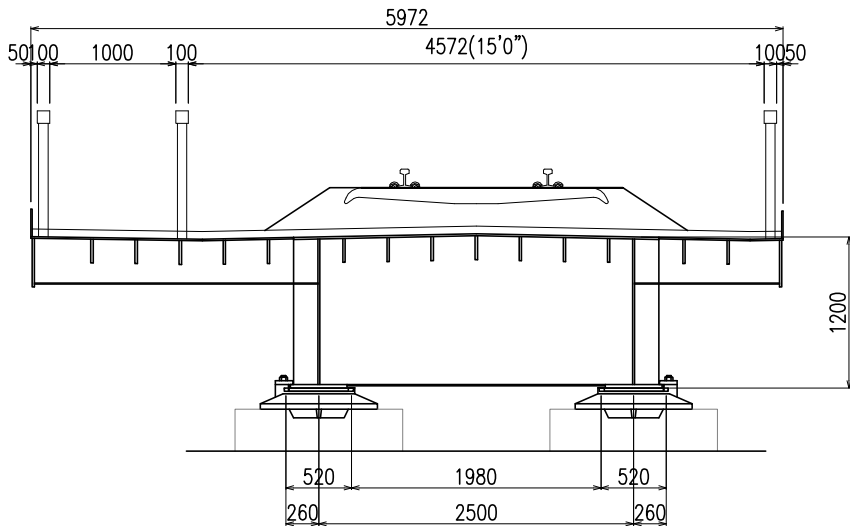


Side section

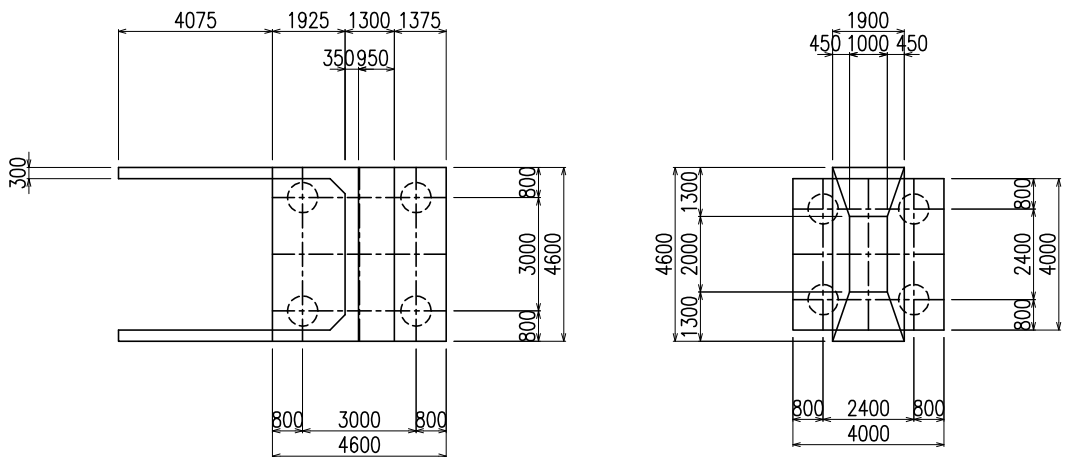


Superstructure cross section

Scale : A1-1/30, A3-1/60



Plan View (foundation)



GOVERNMENT AGENCIES:



Japan International
Cooperation Agency



Reli Assets Holding
Company (RAHCO),
Tanzania

JICA STUDY TEAM:

PADECO Co., Ltd.,
Nippon Koei Co., Ltd.,
Japan International Consultants
for Transportation Co., Ltd., and
Fukken Engineering Co., Ltd.

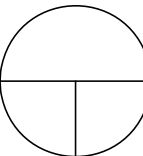
PROJECT & LOCATION:

Preparatory Survey on
Measures for Central
Railway Line in the United
Republic of Tanzania

SHEET CONTENTS:

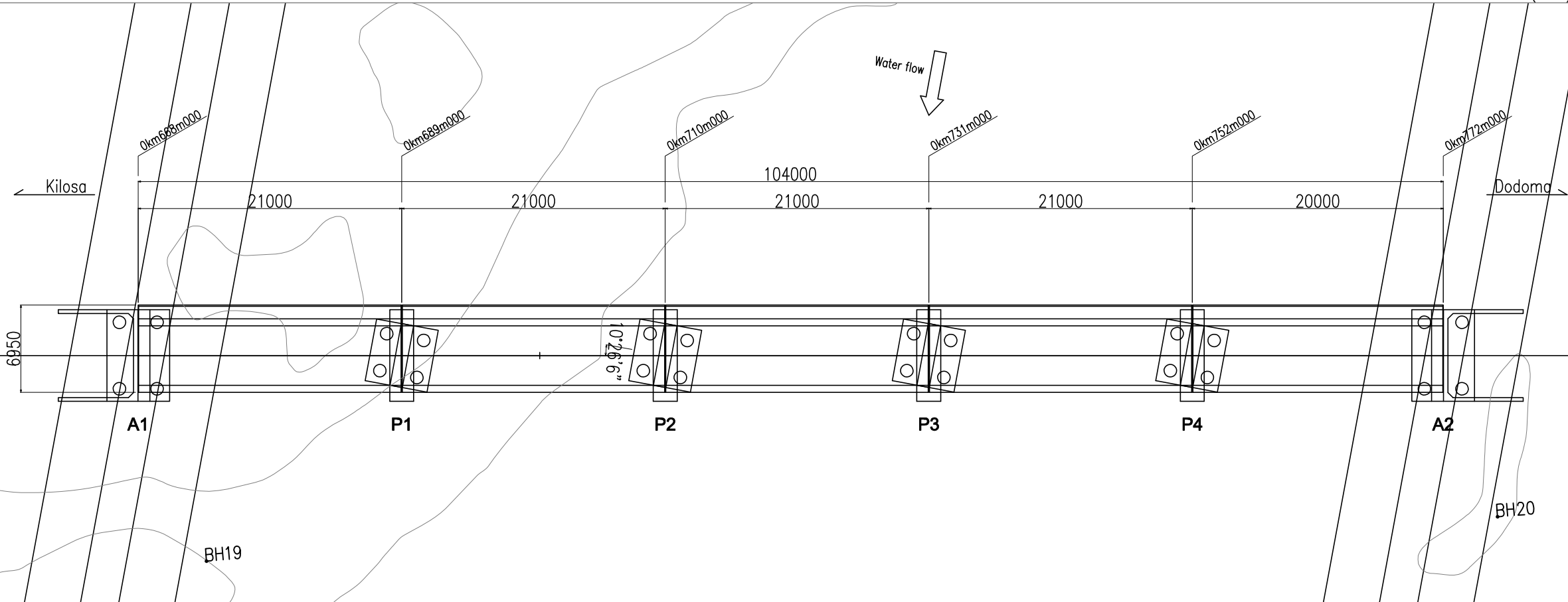
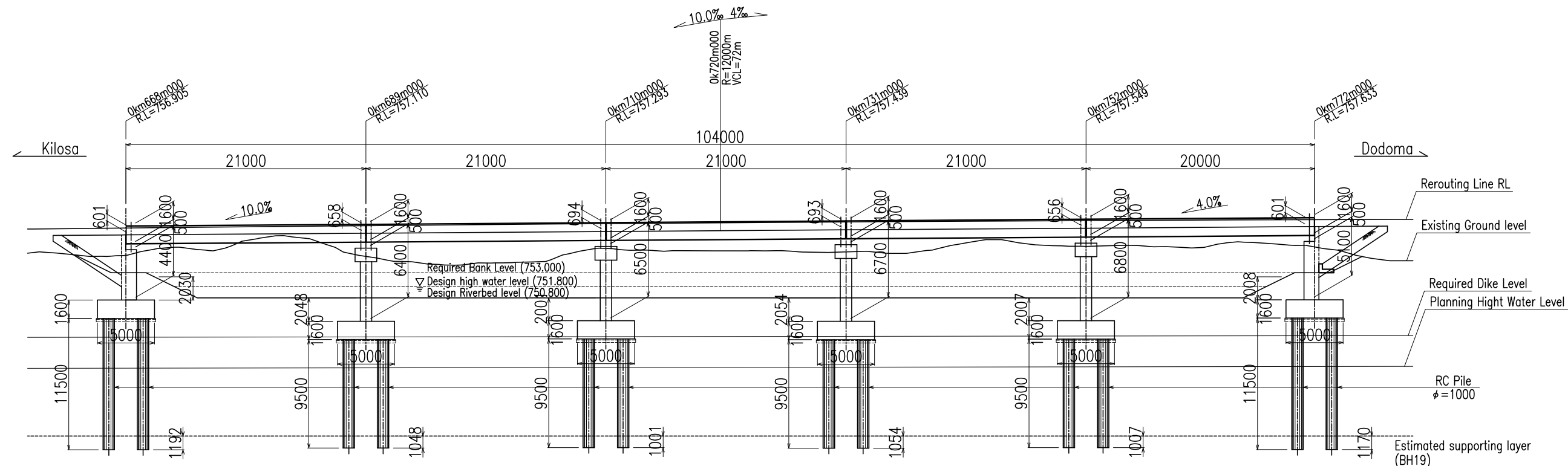
Km306 Bridge (2/2)

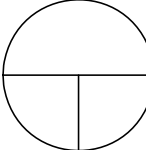
DWG NUM



Maswala River Bridge (1/2)

Scale : A1-1/200, A3-1/400



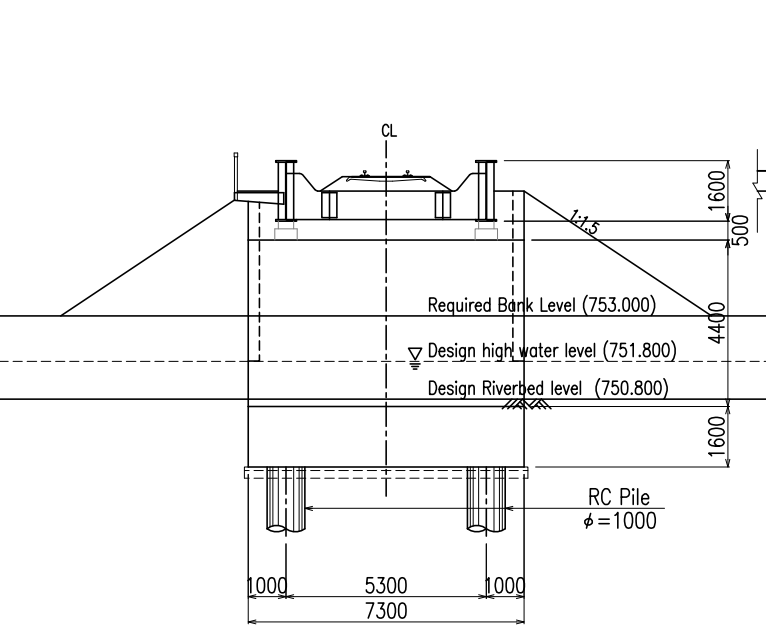
GOVERNMENT AGENCIES:		JICA STUDY TEAM:	PROJECT & LOCATION:	SHEET CONTENTS:	DWG NUM
 Japan International Cooperation Agency	 Reli Assets Holding Company (RAHCO), Tanzania	PADECO Co., Ltd., Nippon Koei Co., Ltd., Japan International Consultants for Transportation Co., Ltd., and Fukken Engineering Co., Ltd.	Preparatory Survey on Flood Protection Measures for Central Railway Line in the United Republic of Tanzania	Maswala River Bridge (1/2)	

Maswala River Bridge (2/2)

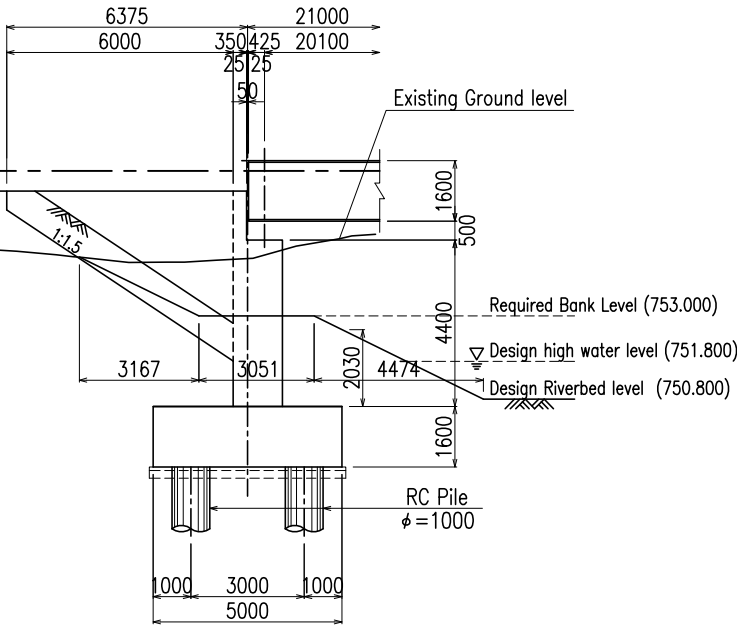
Scale : A1-1/100, A3-1/200

Abutment (A1)

Cross section

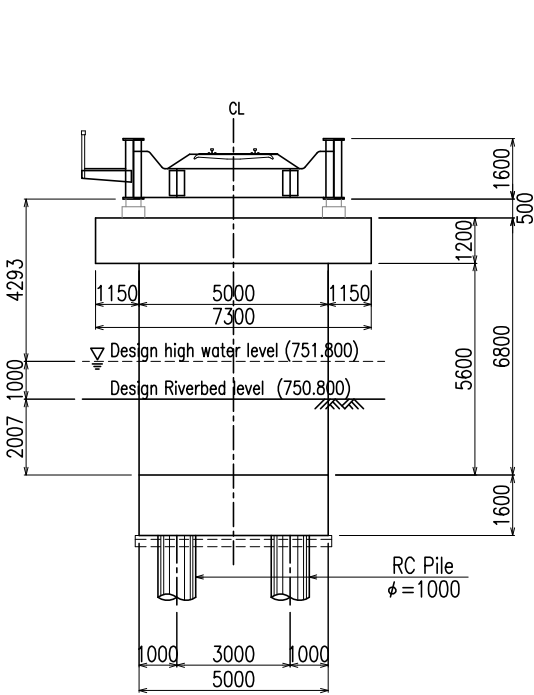


Side section

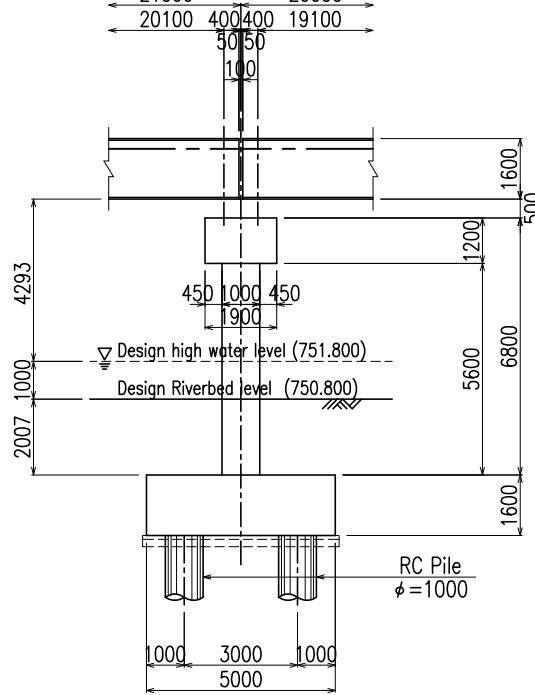


Pier (P4)

Cross section

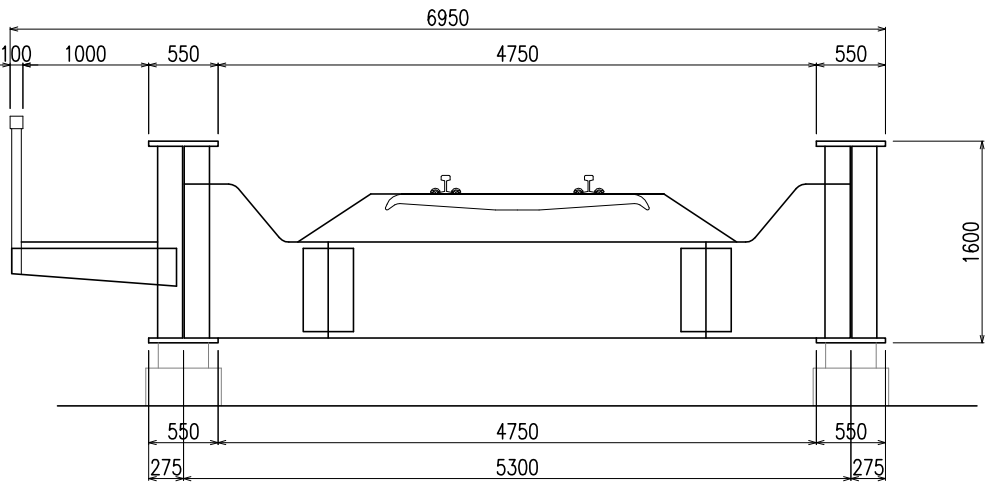


Side section

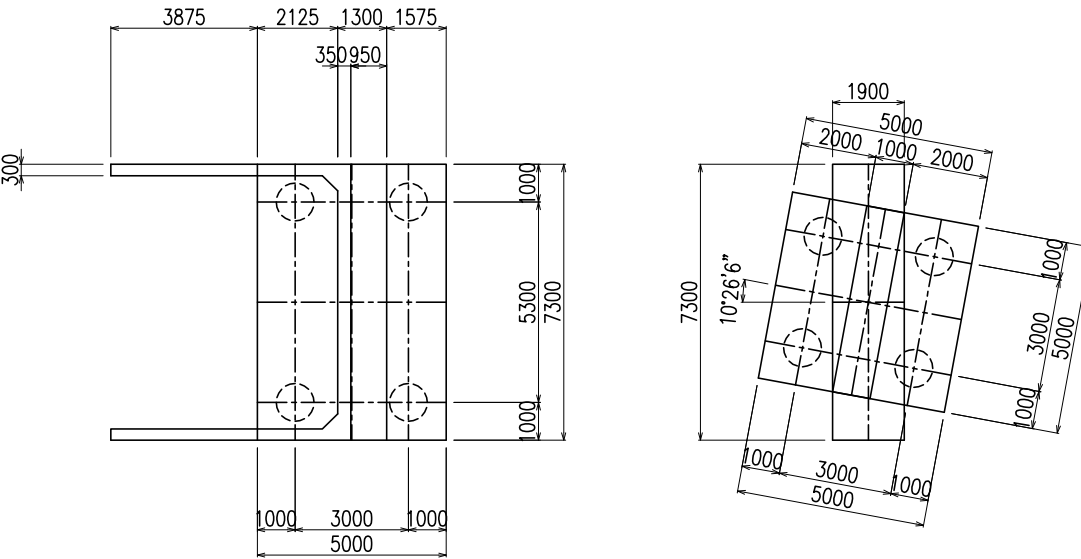


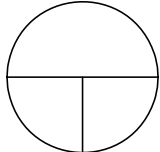
Superstructure cross section

Scale : A1-1/30, A3-1/60

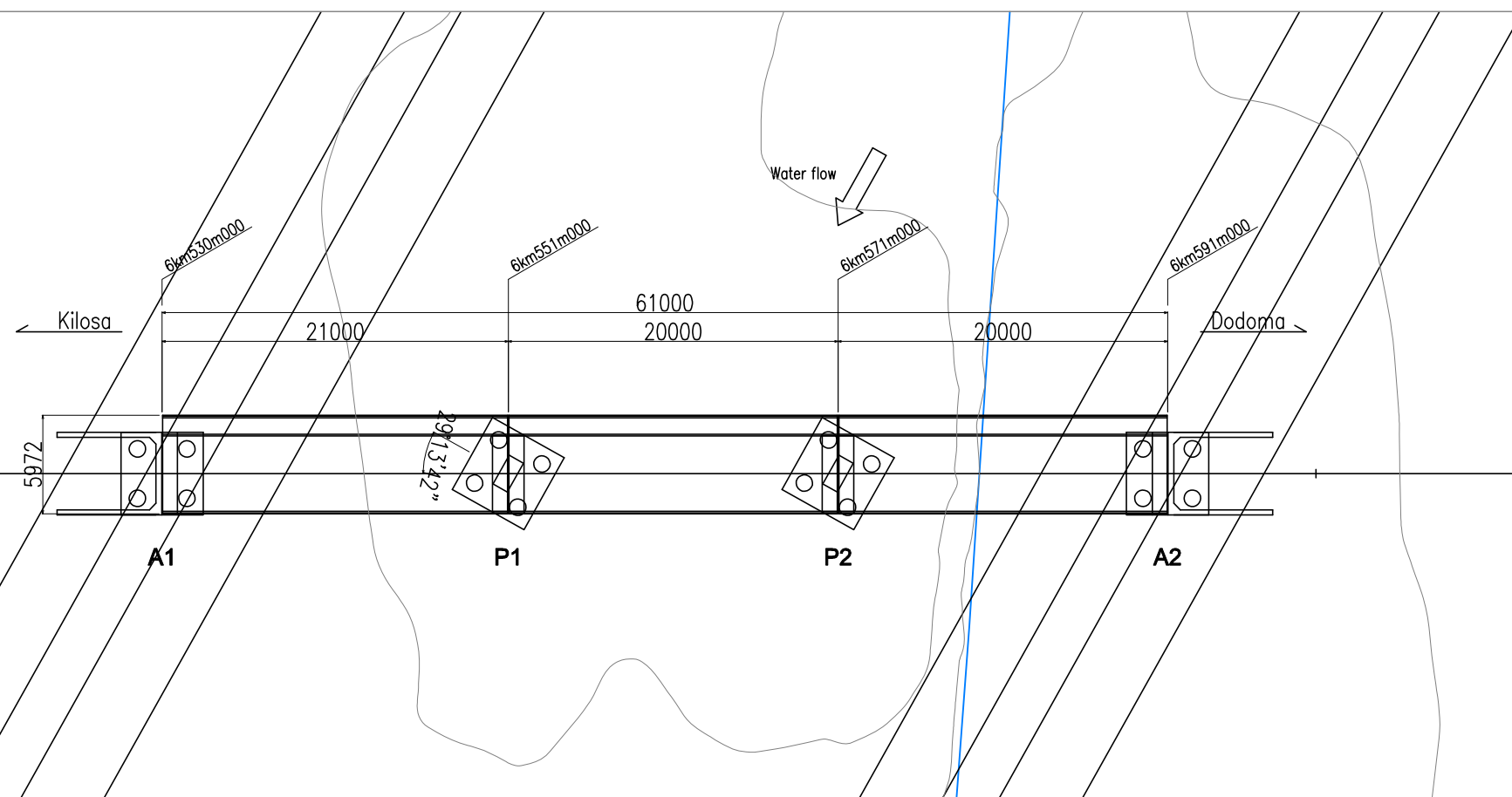


Plan View (foundation)



GOVERNMENT AGENCIES:		JICA STUDY TEAM:	PROJECT & LOCATION:	SHEET CONTENTS:	DWG NUM
 Japan International Cooperation Agency	 Reli Assets Holding Company (RAHCO), Tanzania	PADECO Co., Ltd., Nippon Koei Co., Ltd., Japan International Consultants for Transportation Co., Ltd., and Fukken Engineering Co., Ltd.	Preparatory Survey on Measures for Central Railway Line in the United Republic of Tanzania	Maswala River Bridge (2/2)	

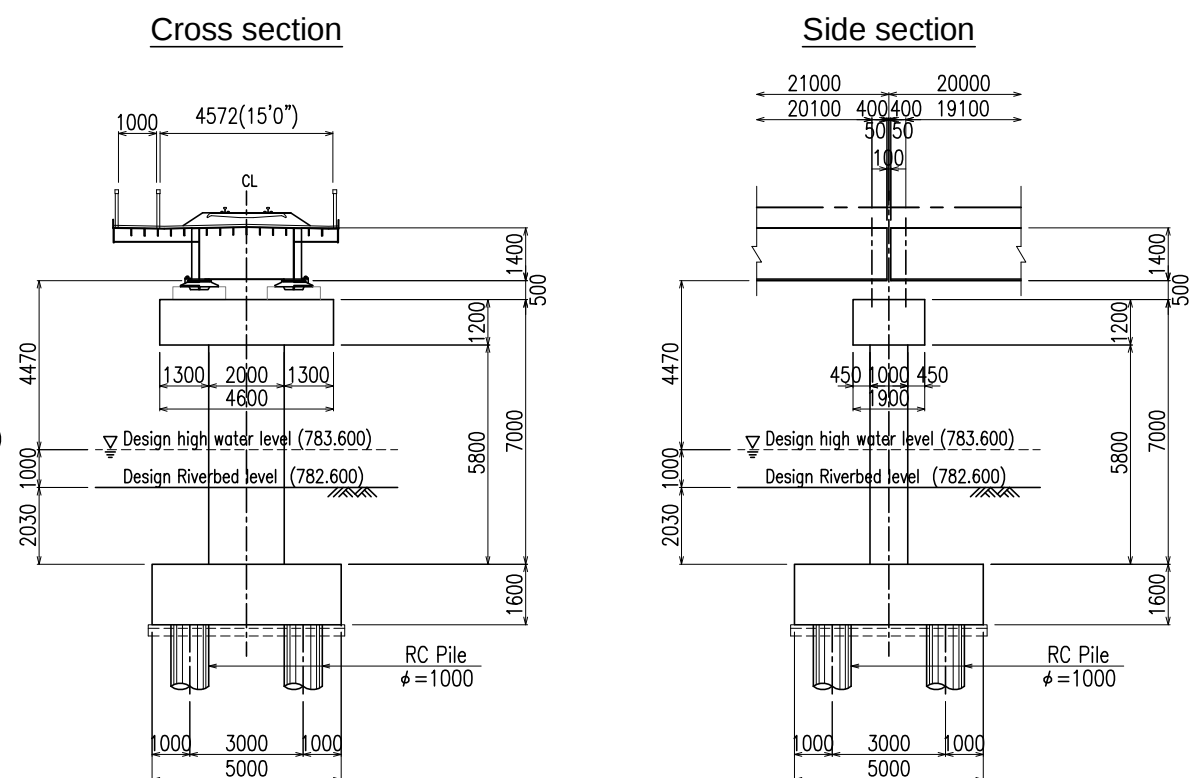
Scale : A1-1/200. A3-1/400



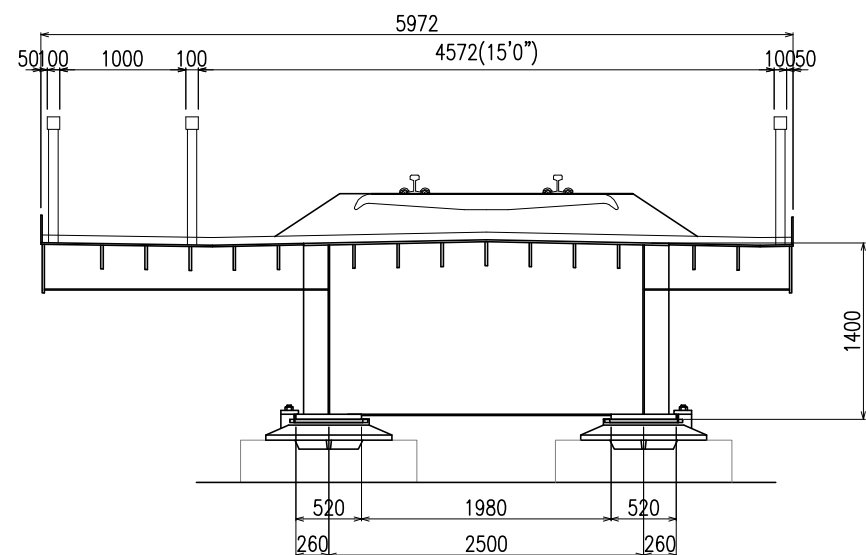
GOVERNMENT AGENCIES:		JICA STUDY TEAM:	PROJECT & LOCATION:	SHEET CONTENTS:	DWG NUM
 Japan International Cooperation Agency	 Reli Assets Holding Company (RAHCO), Tanzania	PADECO Co., Ltd., Nippon Koei Co., Ltd., Japan International Consultants for Transportation Co., Ltd., and Fukken Engineering Co., Ltd.	Preparatory Survey on Flood Protection Measures for Central Railway Line in the United Republic of Tanzania	Mzase River Bridge (1/2)	

Scale : A1-1/100, A3-1/200

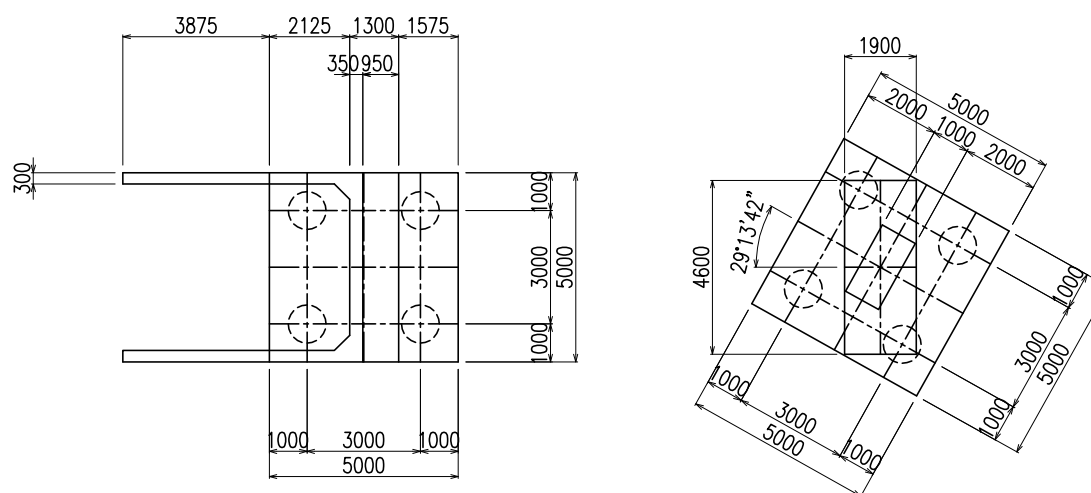
Pier (P1)



Scale : A1-1/30, A3-1/60



Plan View (foundation)

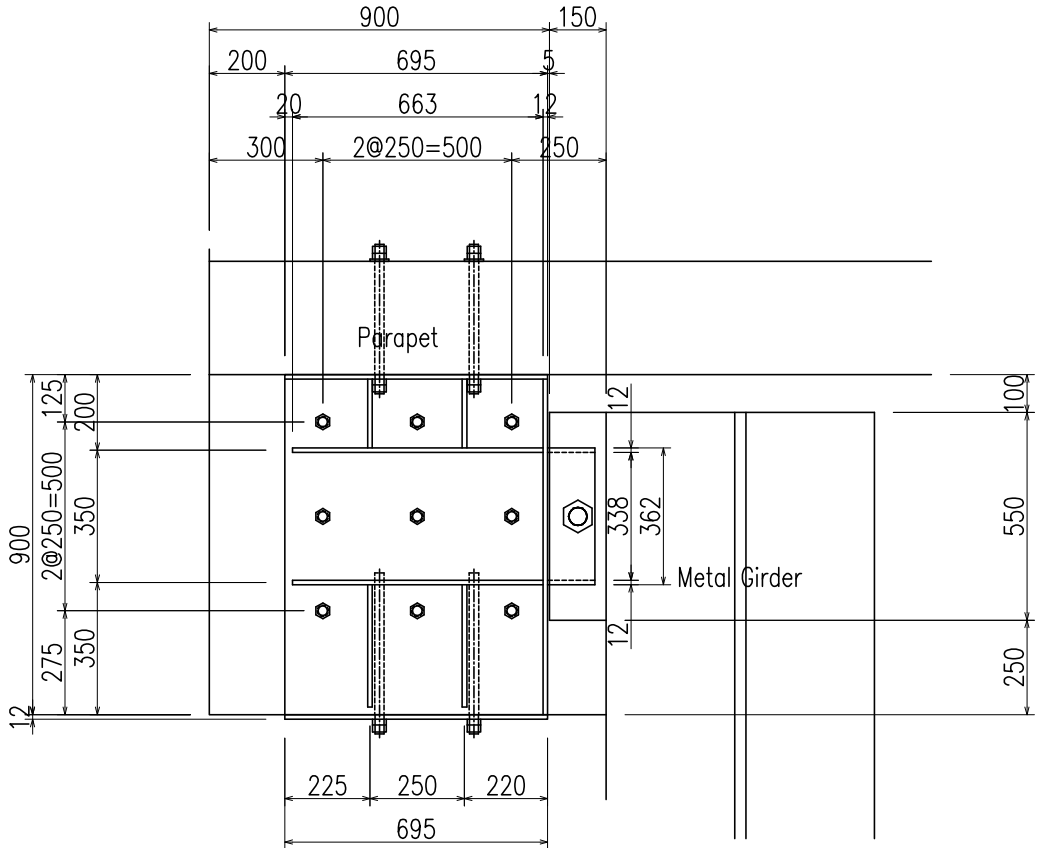


GOVERNMENT AGENCIES:		JICA STUDY TEAM:	PROJECT & LOCATION:	SHEET CONTENTS:	DWG NUM
 Japan International Cooperation Agency	 Reli Assets Holding Company (RAHCO), Tanzania	PADECO Co., Ltd., Nippon Koei Co., Ltd., Japan International Consultants for Transportation Co., Ltd., and Fukken Engineering Co., Ltd.	Preparatory Survey on Measures for Central Railway Line in the United Republic of Tanzania	Mzase River Bridge (2/2)	

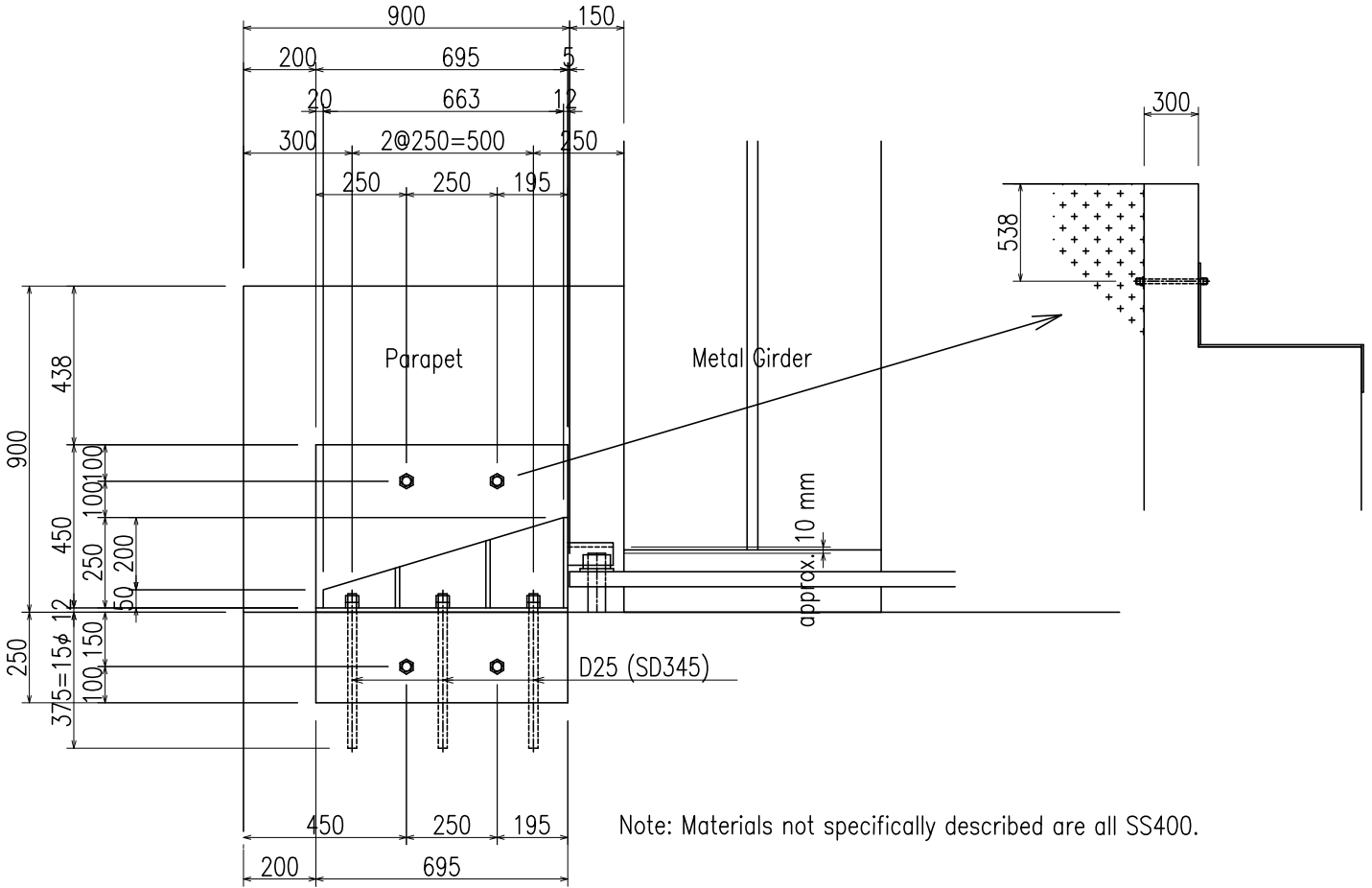
Device for prevention of bridge collapse (for existing bridge near Km 293)

Scale : A1-1/10, A3-1/20

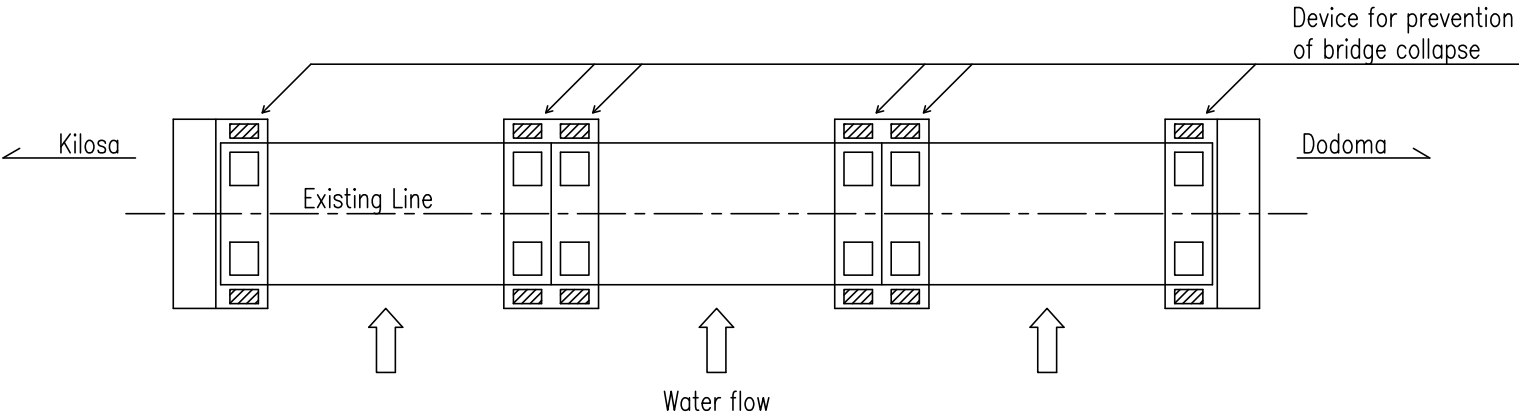
Plan view

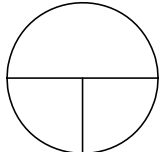


Cross section



Key plan

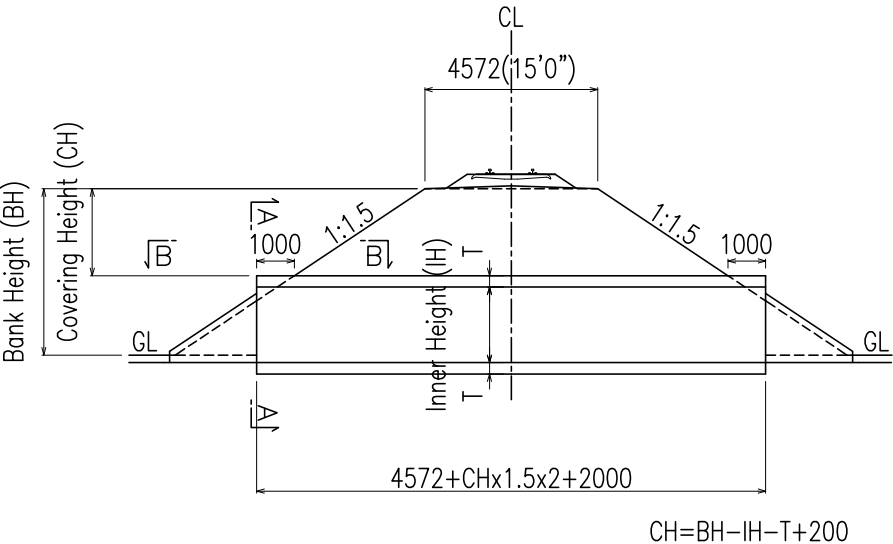


GOVERNMENT AGENCIES:		JICA STUDY TEAM:	PROJECT & LOCATION:	SHEET CONTENTS:	DWG NUM
 Japan International Cooperation Agency	 Reli Assets Holding Company (RAHCO), Tanzania	PADECO Co., Ltd., Nippon Koei Co., Ltd., Japan International Consultants for Transportation Co., Ltd., and Fukken Engineering Co., Ltd.	Preparatory Survey on Flood Protection Measures for Central Railway Line in the United Republic of Tanzania		

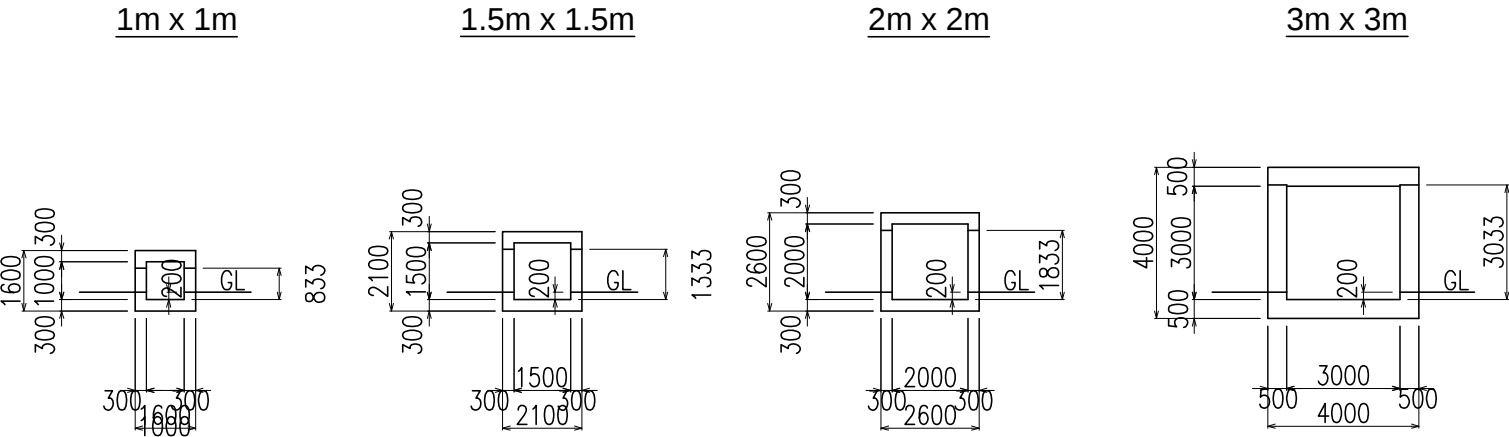
General Culvert

Scale : A1-1/100, A3-1/200

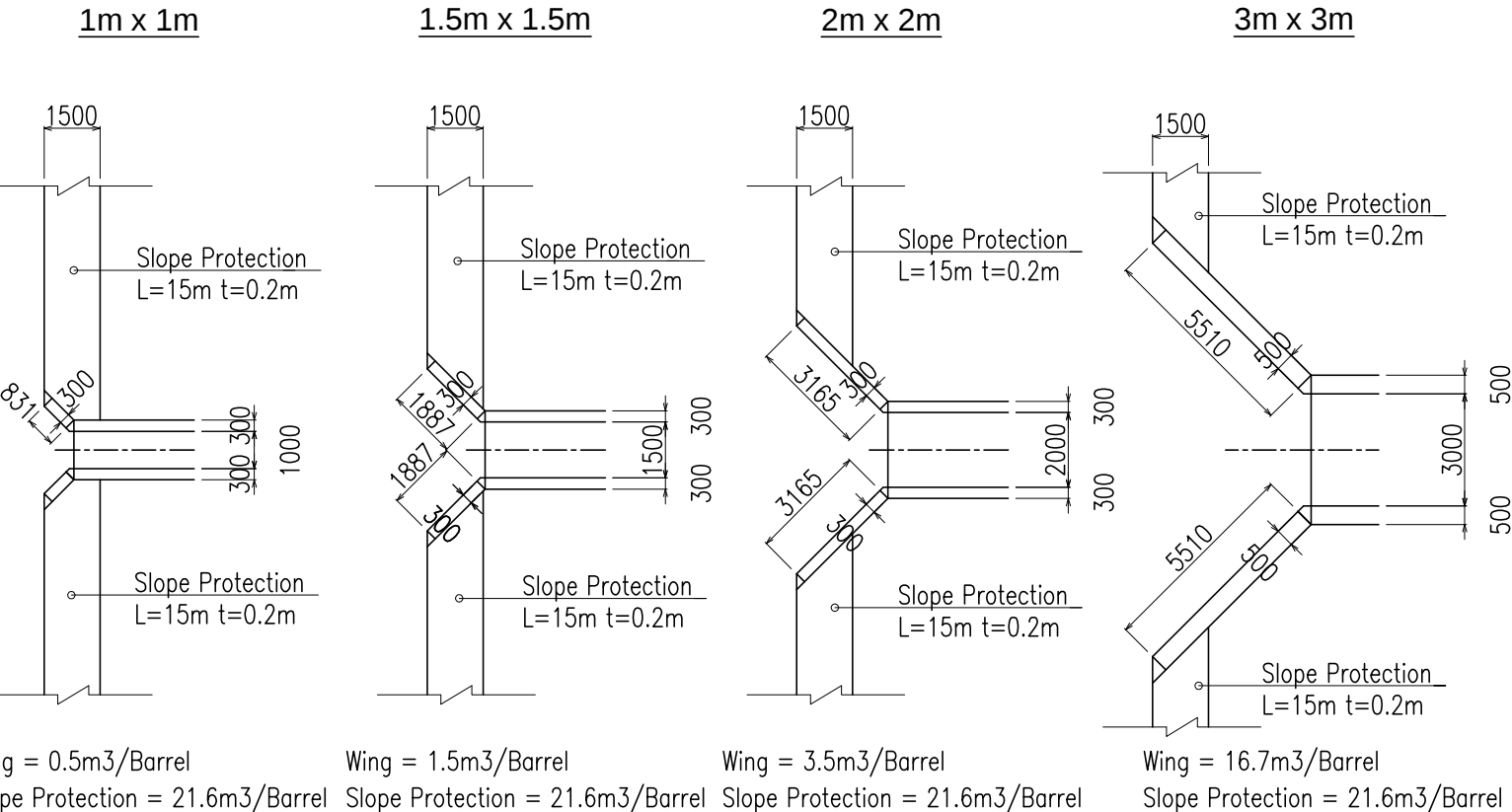
General Culvert



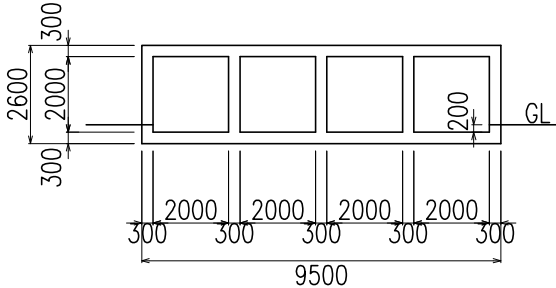
Section A - A



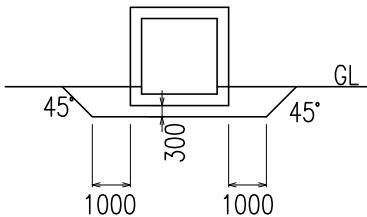
Section B - B

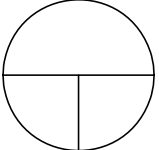


In case of Multiple Barrel



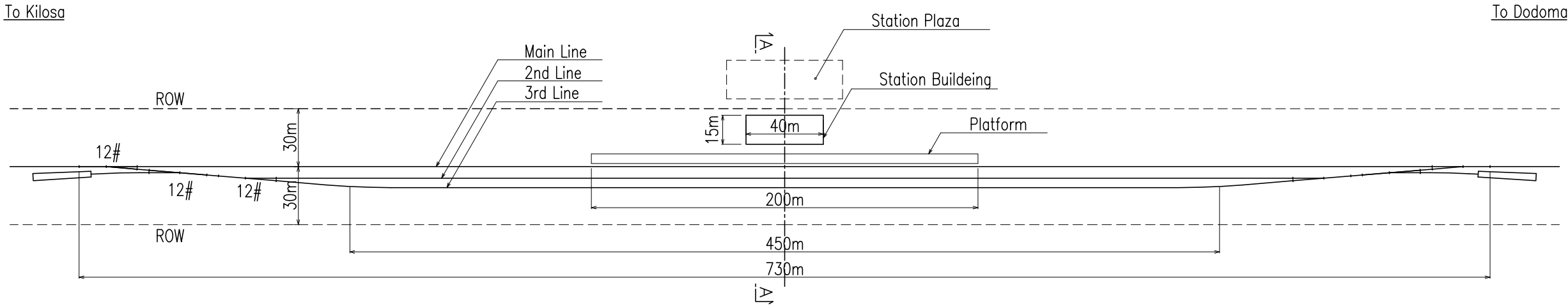
Shaple of Digging



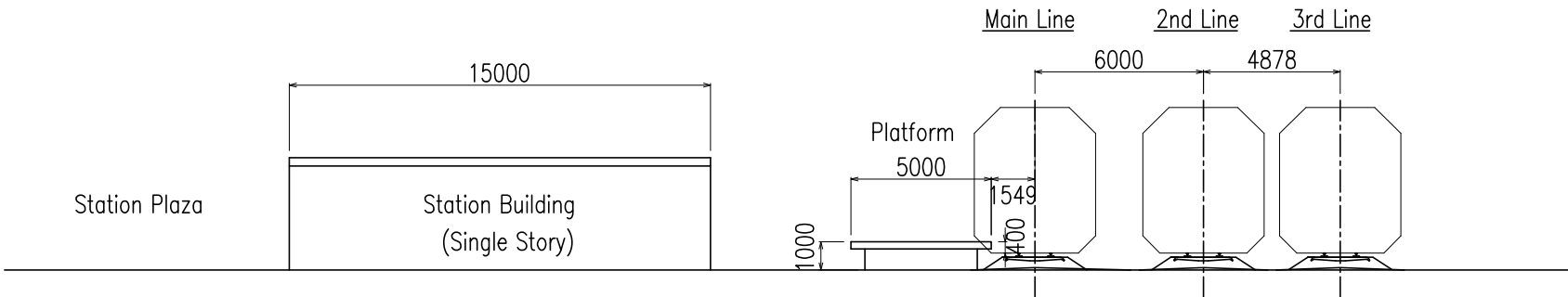
GOVERNMENT AGENCIES:		JICA STUDY TEAM:	PROJECT & LOCATION:	SHEET CONTENTS:	DWG NUM
 Japan International Cooperation Agency	 Reli Assets Holding Company (RAHCO), Tanzania	PADECO Co., Ltd., Nippon Koei Co., Ltd., Japan International Consultants for Transportation Co., Ltd., and Fukken Engineering Co., Ltd.	Preparatory Survey on Flood Protection Measures for Central Railway Line in the United Republic of Tanzania	General Culvert	

New Gulwe Station

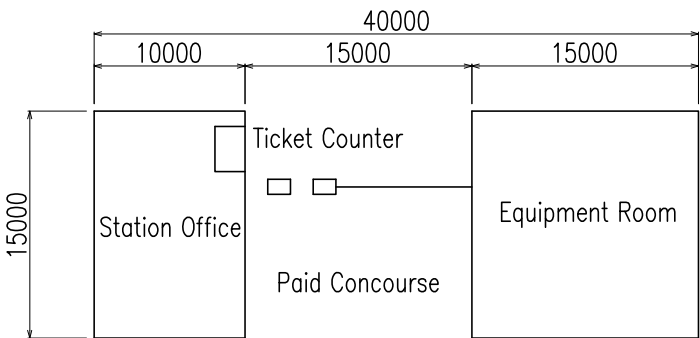
Plan View 1:2,500

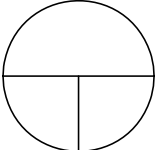


Section A - A 1:250



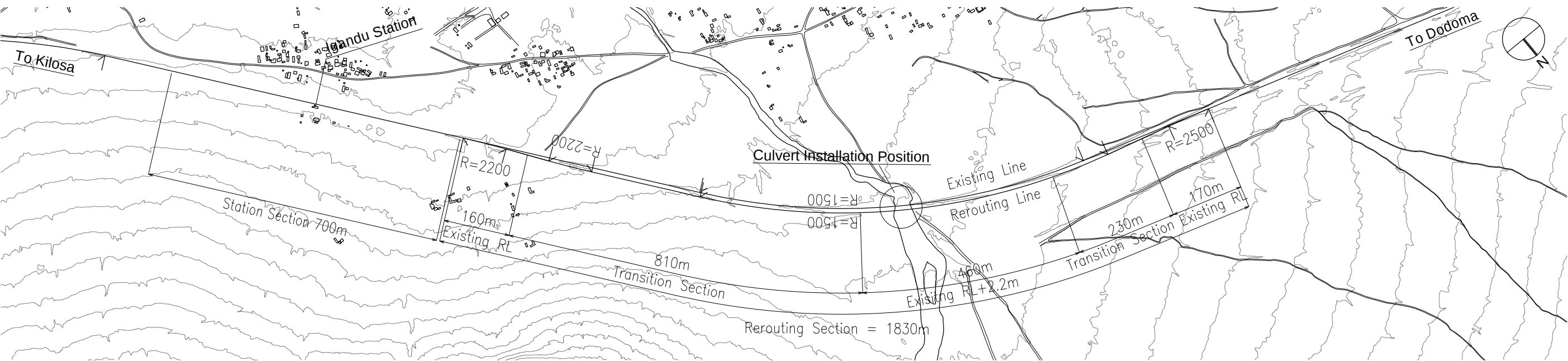
Plan View of Station Building 1:500



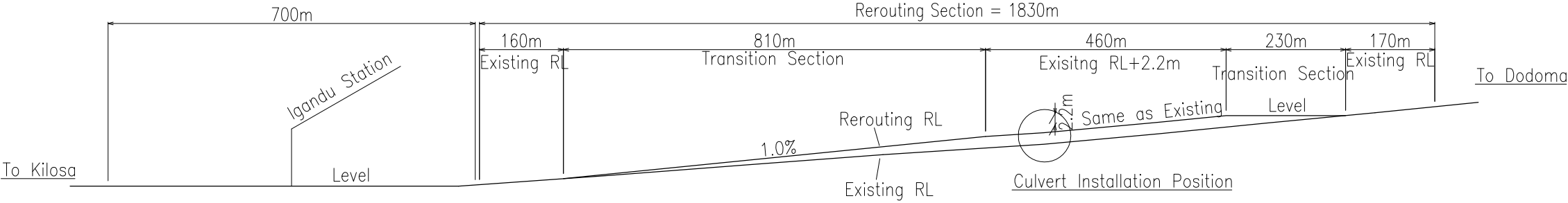
GOVERNMENT AGENCIES:		JICA STUDY TEAM:	PROJECT & LOCATION:	SHEET CONTENTS:	DWG NUM
 Japan International Cooperation Agency	 Reli Assets Holding Company (RAHCO), Tanzania	PADECO Co., Ltd., Nippon Koei Co., Ltd., Japan International Consultants for Transportation Co., Ltd., and Fukken Engineering Co., Ltd.	Preparatory Survey on Flood Protection Measures for Central Railway Line in the United Republic of Tanzania	New Gulwe Station	

Proposed measures on Igandu

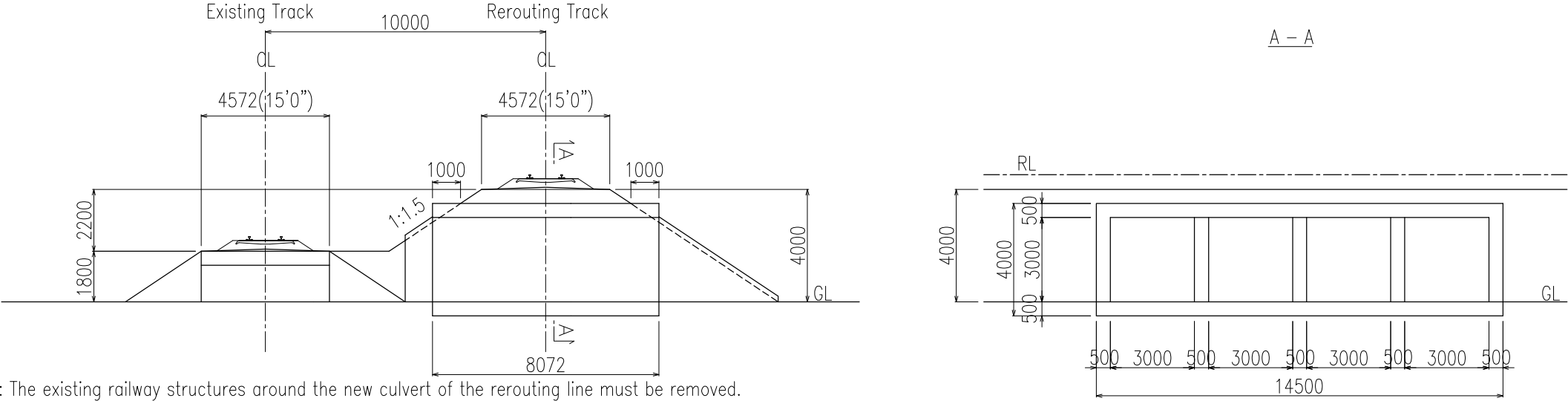
Plan View 1:10,000



Profile H: 1:10,000
V: 1:1,000



Structural View 1:200



Note: The existing railway structures around the new culvert of the rerouting line must be removed.

GOVERNMENT AGENCIES:		JICA STUDY TEAM:	PROJECT & LOCATION:	SHEET CONTENTS:	DWG NUM
 Japan International Cooperation Agency	 Reli Assets Holding Company (RAHCO), Tanzania	PADECO Co., Ltd., Nippon Koei Co., Ltd., Japan International Consultants for Transportation Co., Ltd., and Fukken Engineering Co., Ltd.	Preparatory Survey on Flood Protection Measures for Central Railway Line in the United Republic of Tanzania	Proposed Measures on Igandu	