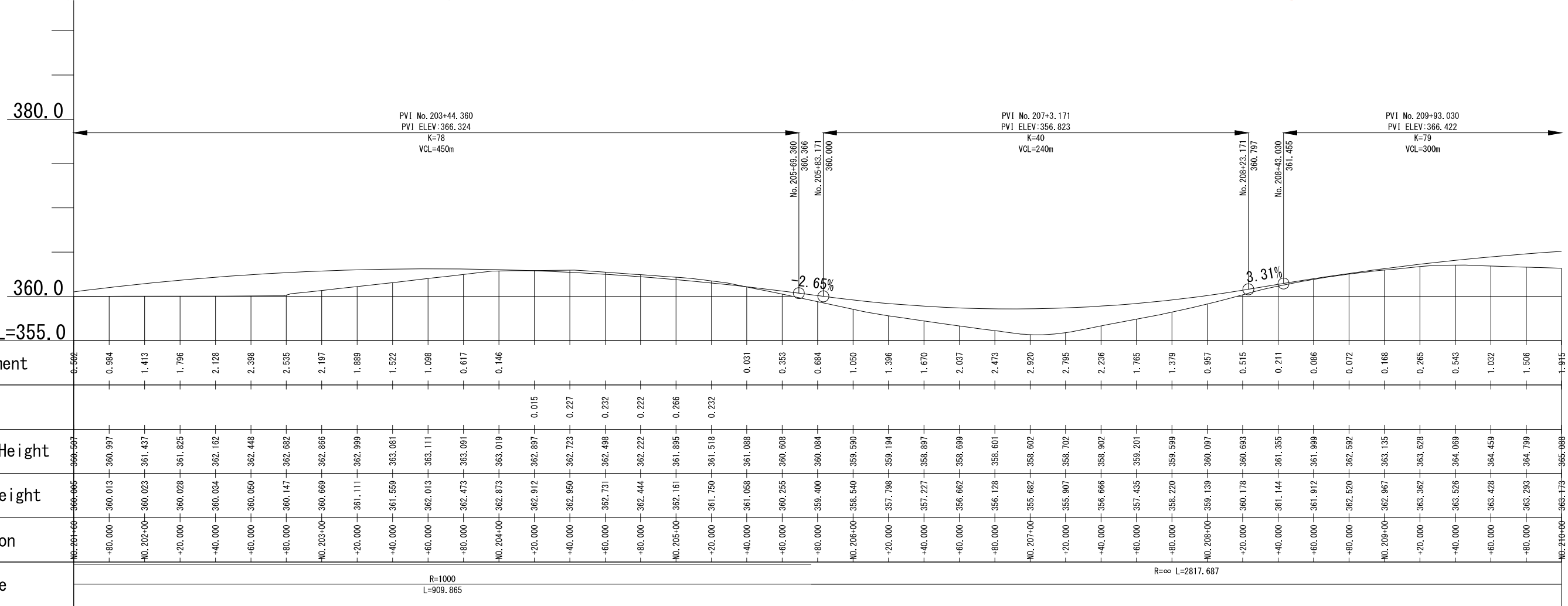
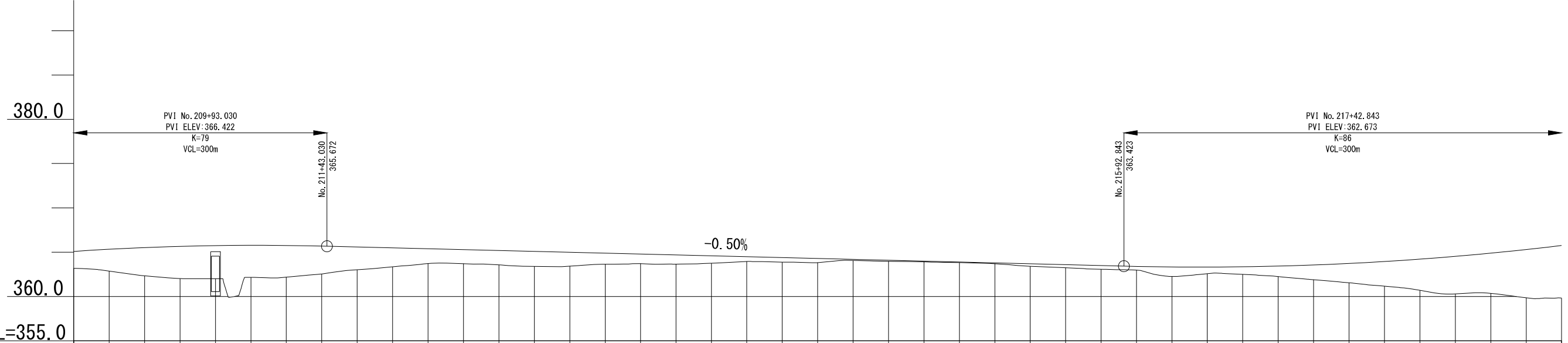


Japan International Cooperation Agency National Road Administration (ANE)	Oriental Consultants Global Co., Ltd. Eight-Japan Engineering Consultants Inc. Kokusai Kogyo Co., Ltd.	PREPARED BY	CHECKED BY	APPROVED BY	PROJECT TITLE: <b>Preparatory Survey for Nacala Corridor          Road Network Upgrading Project          (Nampula Southern Bypass Road)</b>	DRAWING TITLE: <b>Completion Stage Plan and Profile</b>			
		NAME				SCALE	SHEET NO.	DRAWING NO.	REV. NO.
		SIGNATURE				1/2500		C-25	
		DATE							

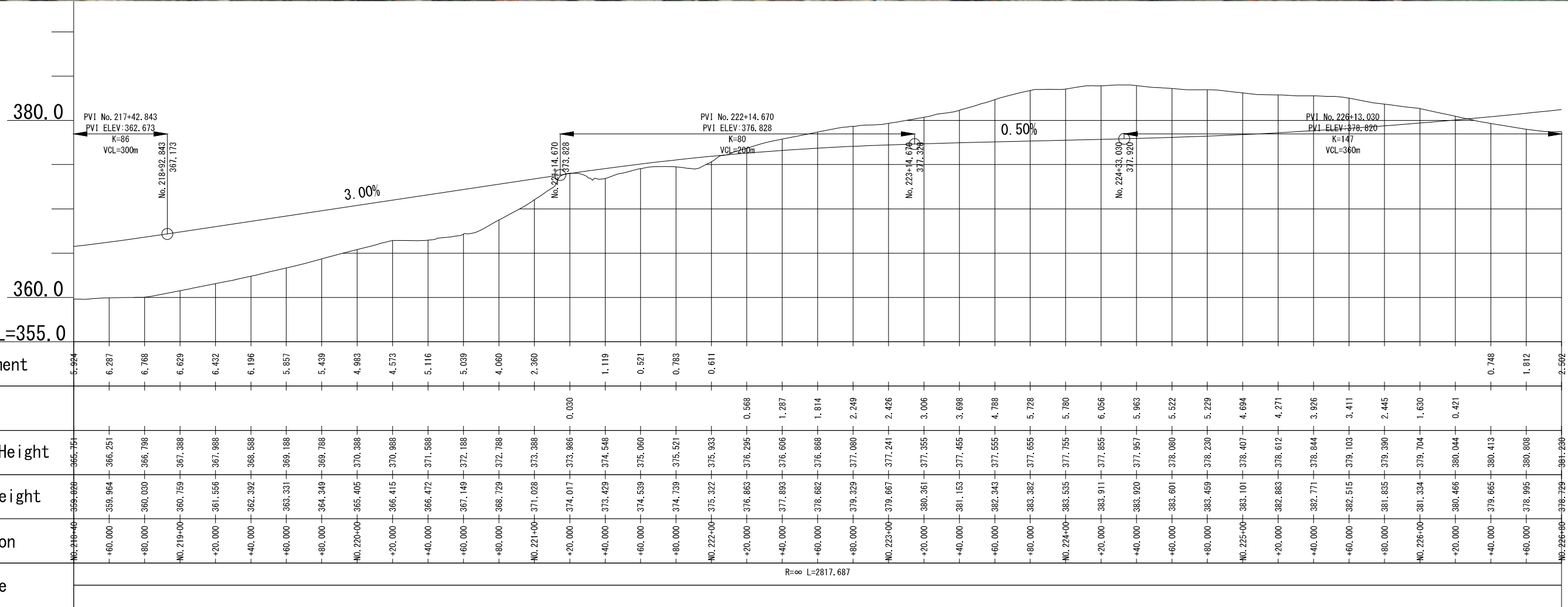


Japan International Cooperation Agency National Road Administration (ANE)	Oriental Consultants Global Co., Ltd. Eight-Japan Engineering Consultants Inc. Kokusai Kogyo Co., Ltd.	PREPARED BY	CHECKED BY	APPROVED BY	PROJECT TITLE: <b>Preparatory Survey for Nacala Corridor          Road Network Upgrading Project          (Nampula Southern Bypass Road)</b>	DRAWING TITLE: <b>Completion Stage Plan and Profile</b>			
		NAME				SCALE	SHEET NO.	DRAWING NO.	REV. NO.
		SIGNATURE				1/2500		C-26	
		DATE							

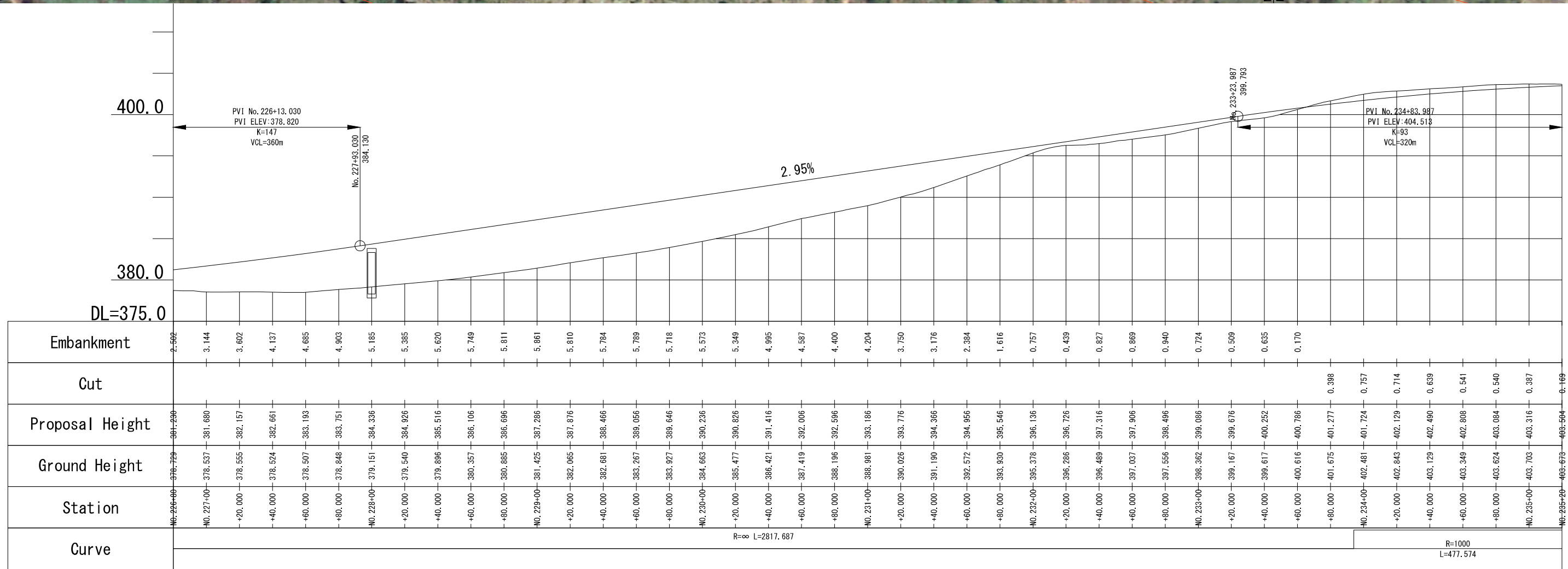


Station	Ground Height	Proposal Height	Cut	Embankment
No. 210+00	365.173	365.988		1.915
+20,000	362.862	365.326		2.464
+40,000	362.337	365.513		3.177
+60,000	362.020	365.650		3.630
+80,000	362.006	365.735		3.729
No. 211+00	362.162	365.770		3.608
+20,000	362.188	365.754		3.566
+40,000	362.541	365.687		3.146
+60,000	363.013	365.588		2.575
+80,000	363.345	365.488		2.143
No. 212+00	363.716	365.388		1.672
+20,000	363.705	365.288		1.583
+40,000	363.565	365.188		1.622
+60,000	363.406	365.088		1.681
+80,000	363.422	364.988		1.566
No. 213+00	363.648	364.888		1.240
+20,000	363.719	364.788		1.069
+40,000	363.651	364.688		1.036
+60,000	363.753	364.588		0.834
+80,000	363.948	364.488		0.539
No. 214+00	363.883	364.388		0.505
+20,000	363.822	364.288		0.466
+40,000	364.061	364.188		0.127
+60,000	363.977	364.088		0.111
+80,000	363.896	363.988		0.092
No. 215+00	363.817	363.888		0.071
+20,000	363.695	363.788		0.093
+40,000	363.410	363.688		0.277
+60,000	363.242	363.588		0.346
+80,000	363.076	363.488		0.412
No. 216+00	362.981	363.391		0.410
+20,000	362.258	363.331		1.072
+40,000	362.569	363.317		0.748
+60,000	362.500	363.351		0.851
+80,000	362.249	363.431		1.181
No. 217+00	361.896	363.557		1.662
+20,000	361.547	363.731		2.184
+40,000	361.162	363.951		2.789
+60,000	360.688	364.218		3.530
+80,000	360.297	364.531		4.234
No. 218+00	360.357	364.891		4.534
+20,000	359.855	365.298		5.443
No. 219+00	359.828	365.751		5.924

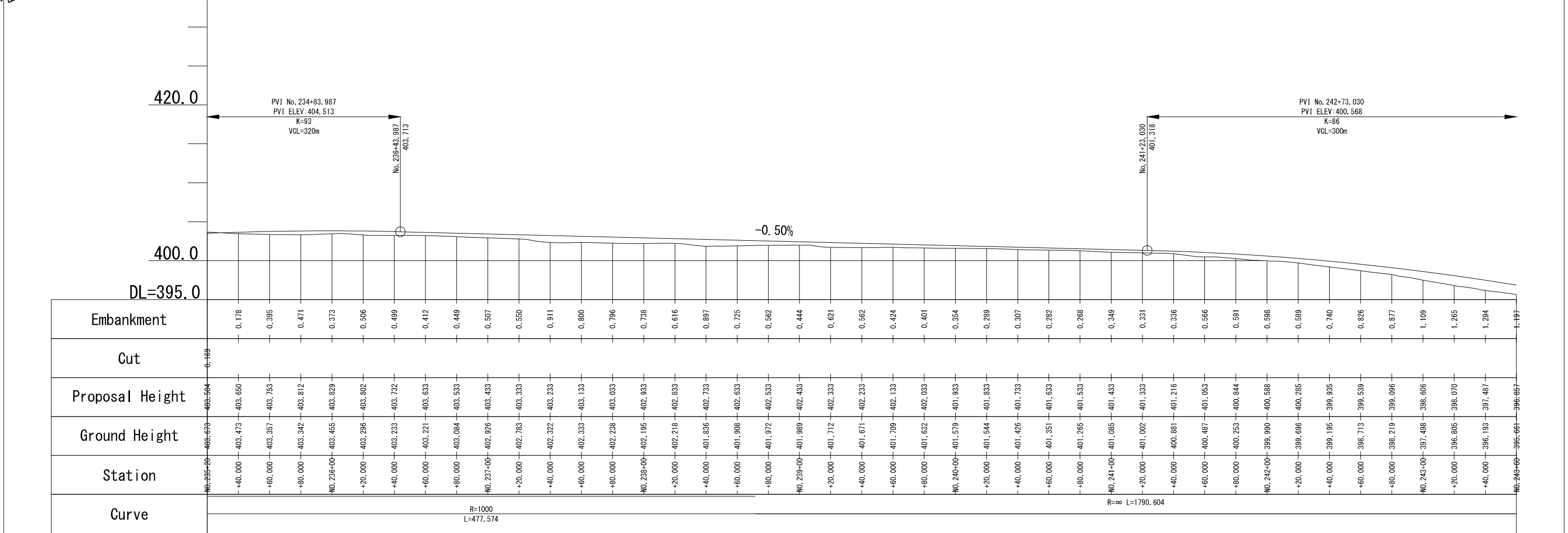
Japan International Cooperation Agency National Road Administration (ANE)	Oriental Consultants Global Co., Ltd. Eight-Japan Engineering Consultants Inc. Kokusai Kogyo Co., Ltd.	PREPARED BY	CHECKED BY	APPROVED BY	PROJECT TITLE: <b>Preparatory Survey for Nacala Corridor          Road Network Upgrading Project          (Nampula Southern Bypass Road)</b>	DRAWING TITLE: <b>Completion Stage Plan and Profile</b>			
		NAME				SCALE	SHEET NO.	DRAWING NO.	REV. NO.
		DATE				1/2500		C-27	



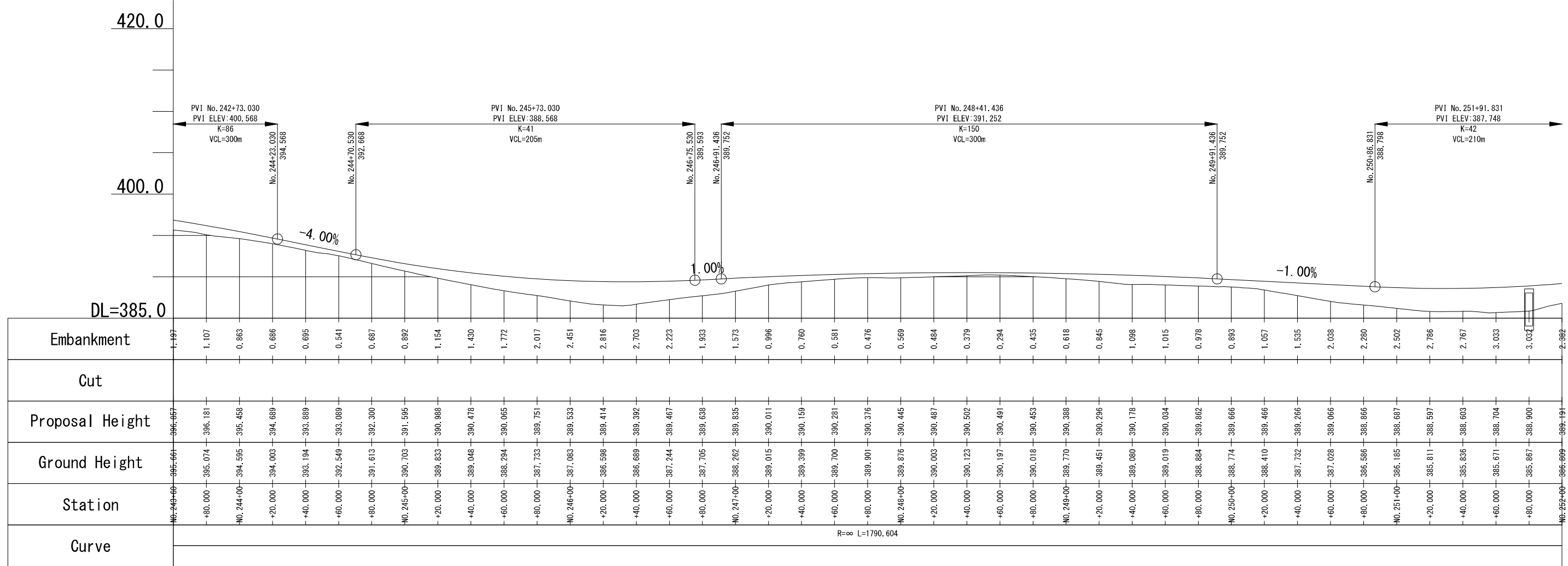
Japan International Cooperation Agency National Road Administration (ANE)	Oriental Consultants Global Co., Ltd. Eight-Japan Engineering Consultants Inc. Kokusai Kogyo Co., Ltd.	PREPARED BY	CHECKED BY	APPROVED BY	PROJECT TITLE: <b>Preparatory Survey for Nacala Corridor          Road Network Upgrading Project          (Nampula Southern Bypass Road)</b>	DRAWING TITLE: <b>Completion Stage Plan and Profile</b>			
		NAME				SCALE	SHEET NO.	DRAWING NO.	REV. NO.
		SIGNATURE				1/2500		C-28	
		DATE							



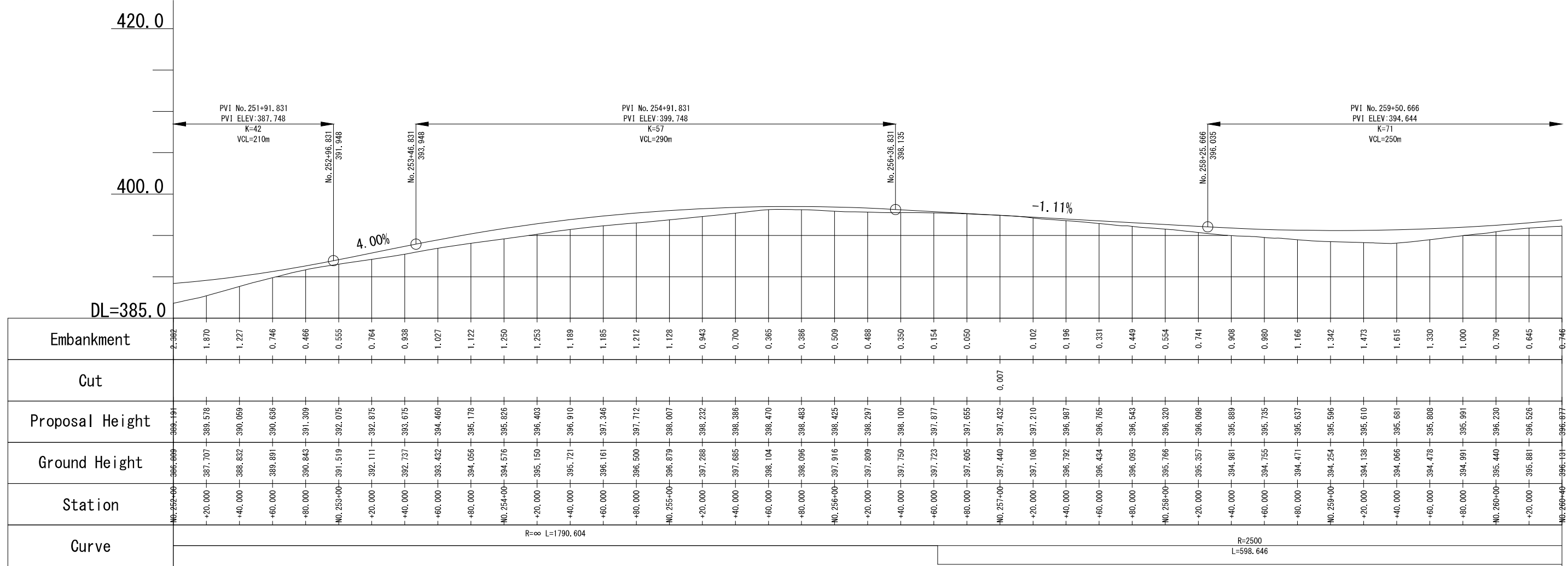
Japan International Cooperation Agency National Road Administration (ANE)	Oriental Consultants Global Co., Ltd. Eight-Japan Engineering Consultants Inc. Kokusai Kogyo Co., Ltd.	PREPARED BY	CHECKED BY	APPROVED BY	PROJECT TITLE: <b>Preparatory Survey for Nacala Corridor          Road Network Upgrading Project          (Nampula Southern Bypass Road)</b>	DRAWING TITLE: <b>Completion Stage Plan and Profile</b>			
		NAME				SCALE	SHEET NO.	DRAWING NO.	REV. NO.
		SIGNATURE				1/2500		C-29	
		DATE							



	Oriental Consultants Global Co., Ltd. Eight-Japan Engineering Consultants Inc. Kokusai Kogyo Co., Ltd.	PREPARED BY	CHECKED BY	APPROVED BY	PROJECT TITLE: <b>Preparatory Survey for Nacala Corridor          Road Network Upgrading Project          (Nampula Southern Bypass Road)</b>	DRAWING TITLE: <b>Completion Stage Plan and Profile</b>			
		NAME				SCALE	SHEET NO.	DRAWING NO.	REV. NO.
		SIGNATURE				1/2500		C-30	
		DATE							

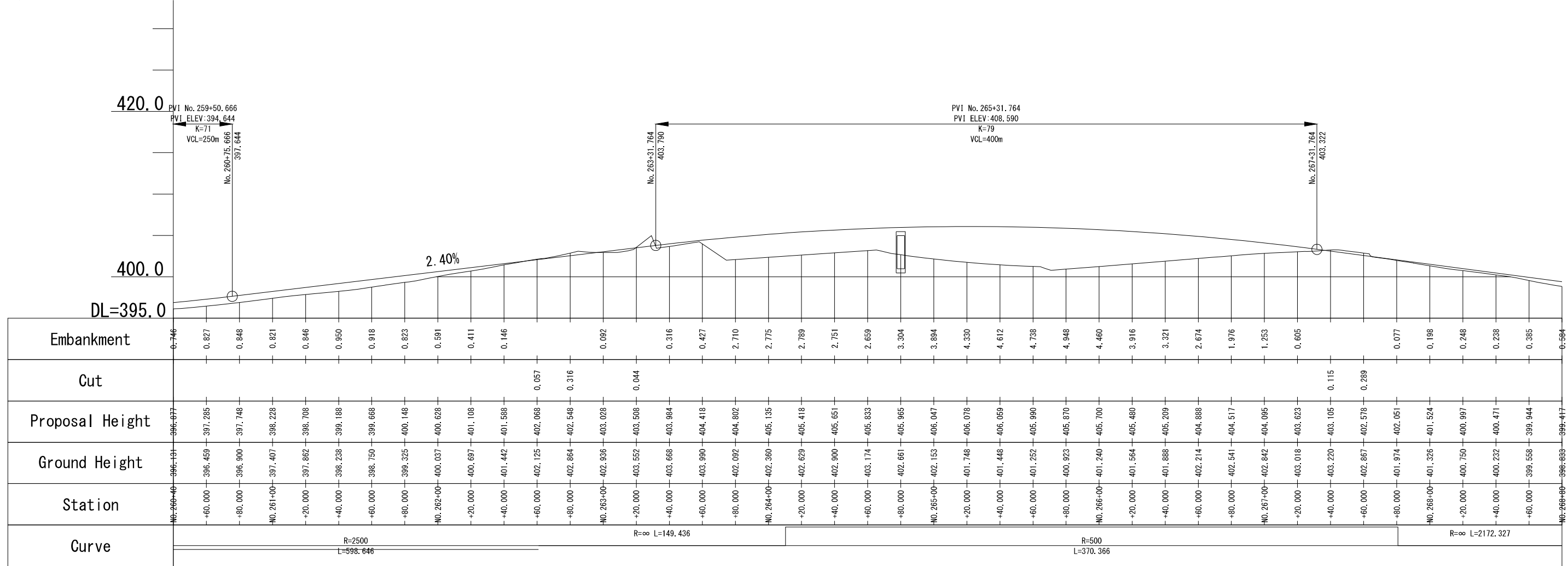
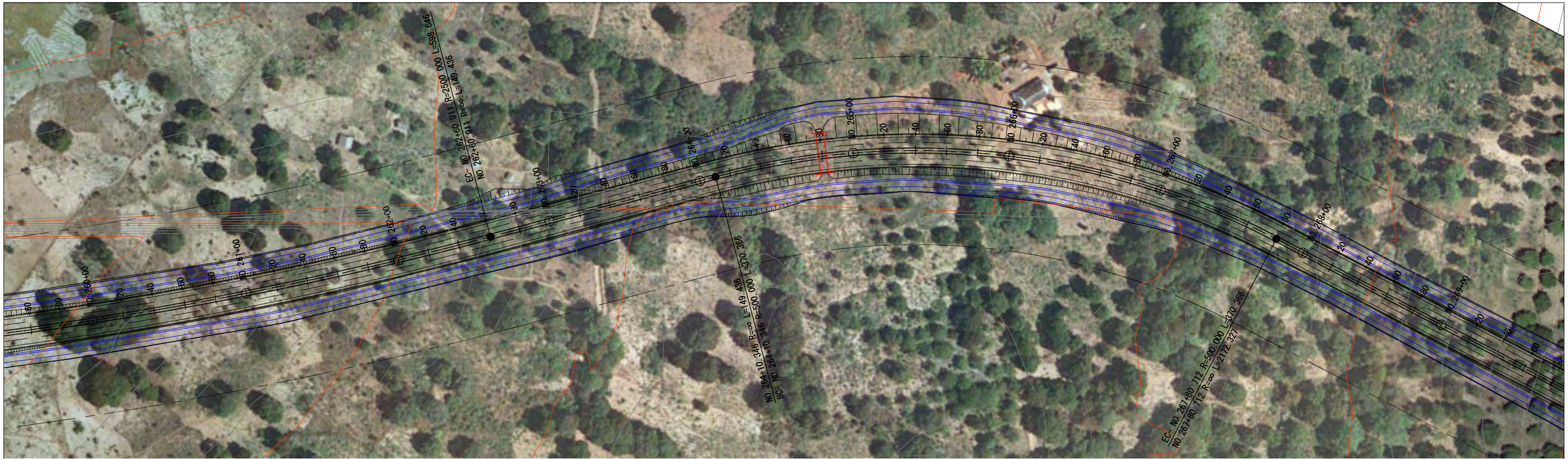


Japan International Cooperation Agency National Road Administration (ANE)	Oriental Consultants Global Co., Ltd. Eight-Japan Engineering Consultants Inc. Kokusai Kogyo Co., Ltd.	PREPARED BY	CHECKED BY	APPROVED BY	PROJECT TITLE: <b>Preparatory Survey for Nacala Corridor          Road Network Upgrading Project          (Nampula Southern Bypass Road)</b>	DRAWING TITLE: <b>Completion Stage Plan and Profile</b>			
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		SIGNATURE				1/2500		C-31	
		DATE							

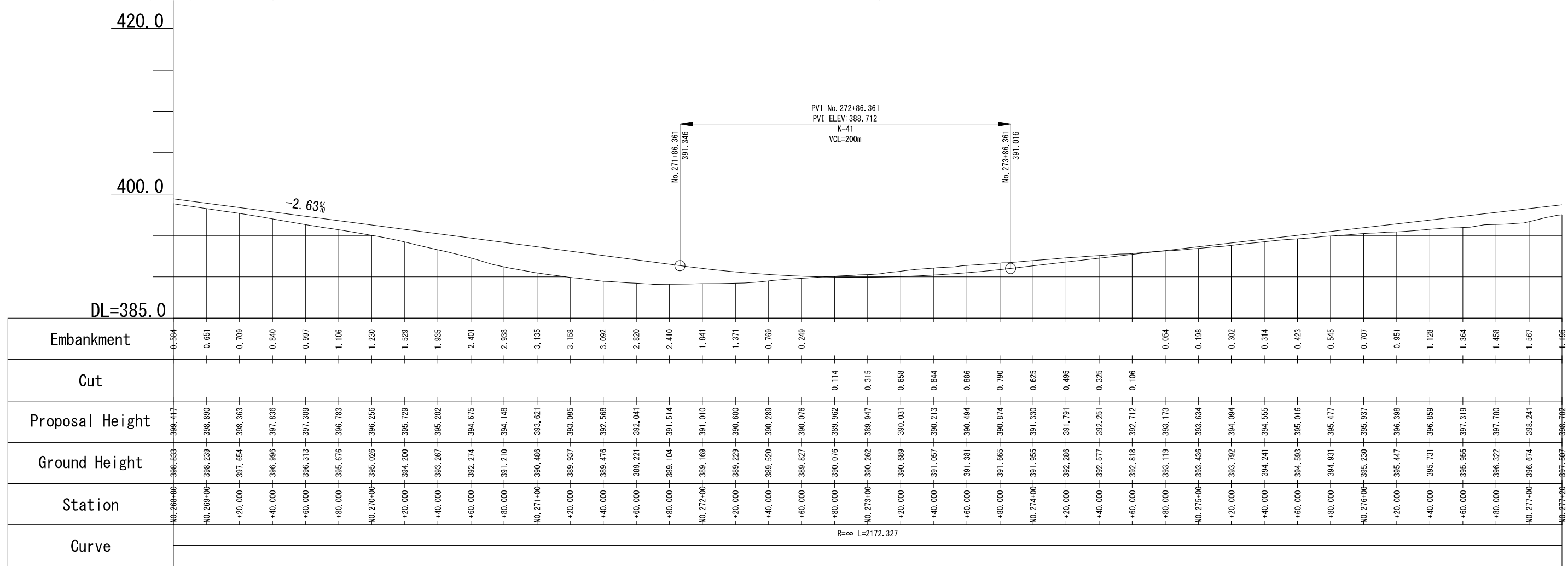


Japan International Cooperation Agency National Road Administration (ANE)	Oriental Consultants Global Co., Ltd. Eight-Japan Engineering Consultants Inc. Kokusai Kogyo Co., Ltd.	PREPARED BY	CHECKED BY	APPROVED BY	PROJECT TITLE: <b>Preparatory Survey for Nacala Corridor          Road Network Upgrading Project          (Nampula Southern Bypass Road)</b>	DRAWING TITLE: <b>Completion Stage Plan and Profile</b>			
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		SIGNATURE				1/2500		C-32	
		DATE							

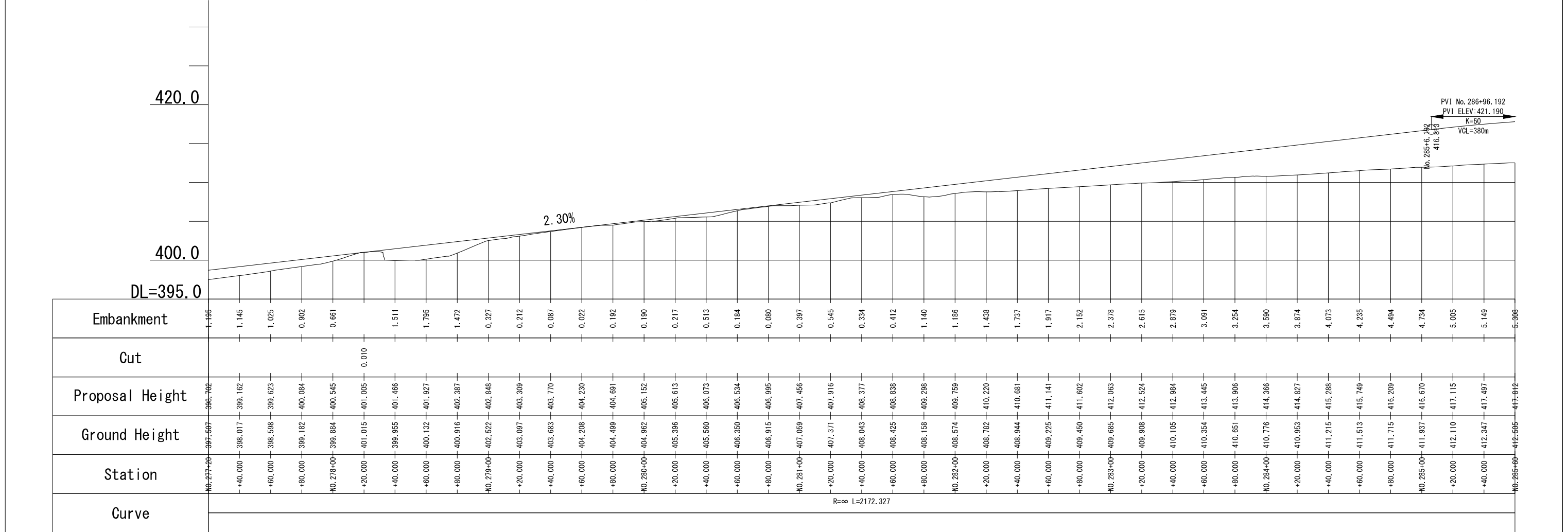




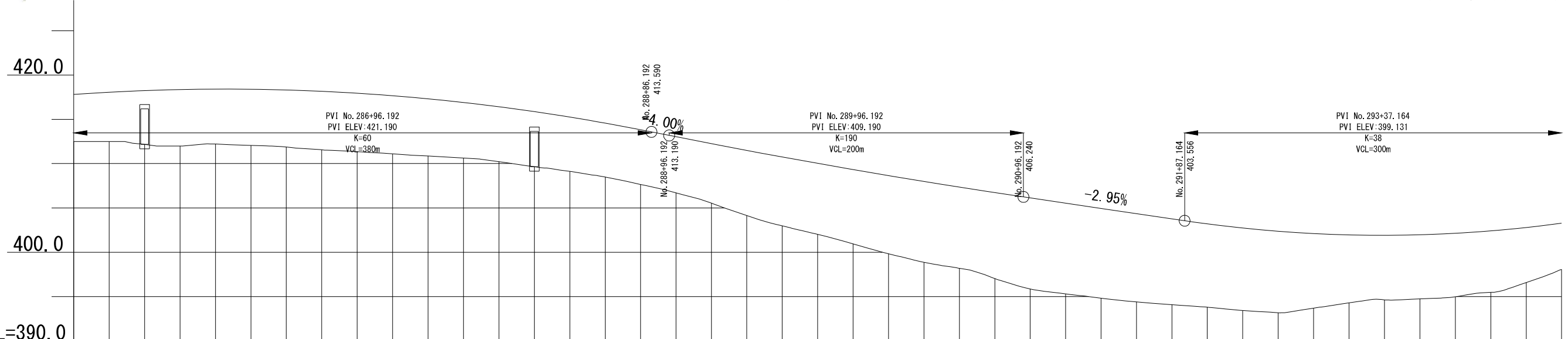
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		NAME				SCALE	SHEET NO.	DRAWING NO.	REV. NO.
		SIGNATURE				1/2500		C-33	
		DATE							



Japan International Cooperation Agency National Road Administration (ANE)	Oriental Consultants Global Co., Ltd. Eight-Japan Engineering Consultants Inc. Kokusai Kogyo Co., Ltd.	PREPARED BY	CHECKED BY	APPROVED BY	PROJECT TITLE: <b>Preparatory Survey for Nacala Corridor          Road Network Upgrading Project          (Nampula Southern Bypass Road)</b>	DRAWING TITLE: <b>Completion Stage Plan and Profile</b>			
		NAME				SCALE	SHEET NO.	DRAWING NO.	REV. NO.
		DATE				1/2500		C-34	

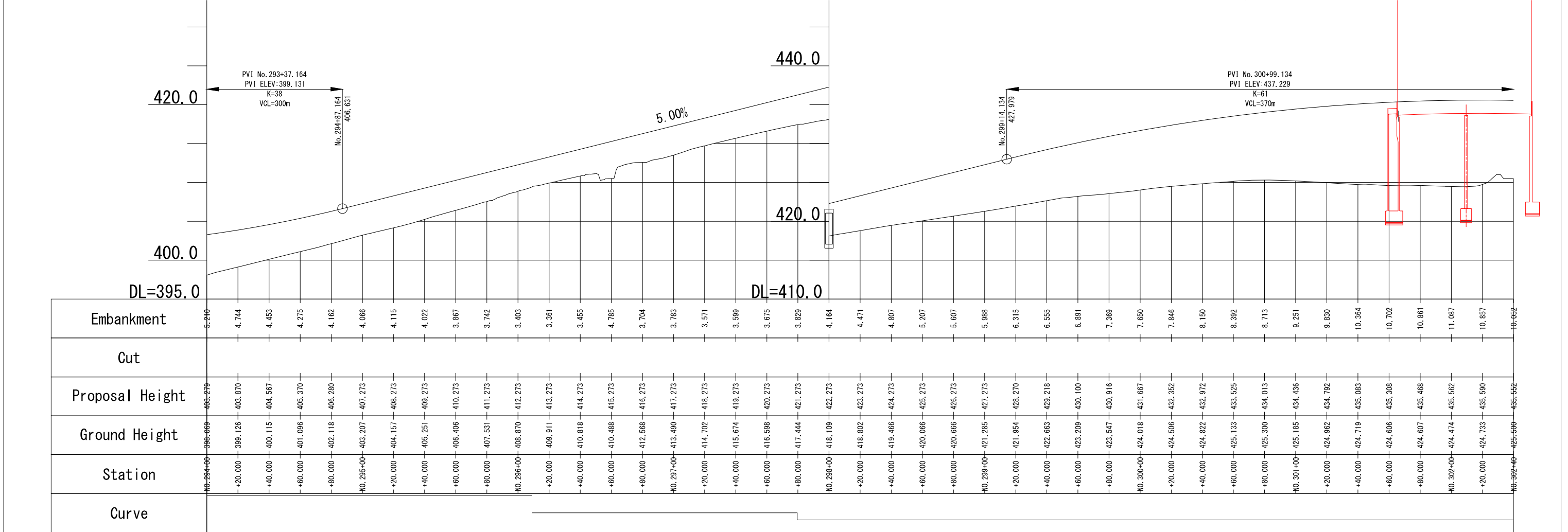


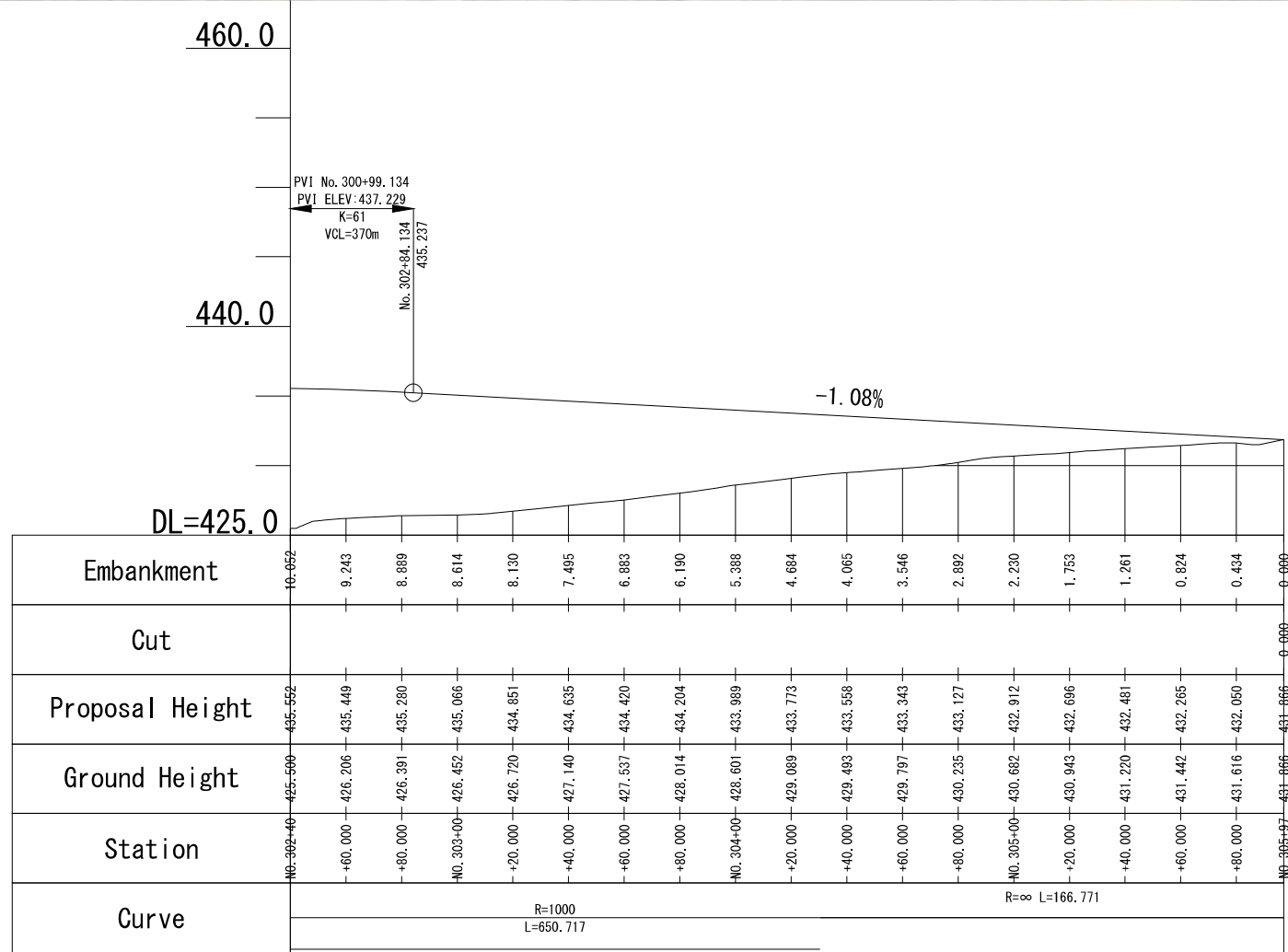
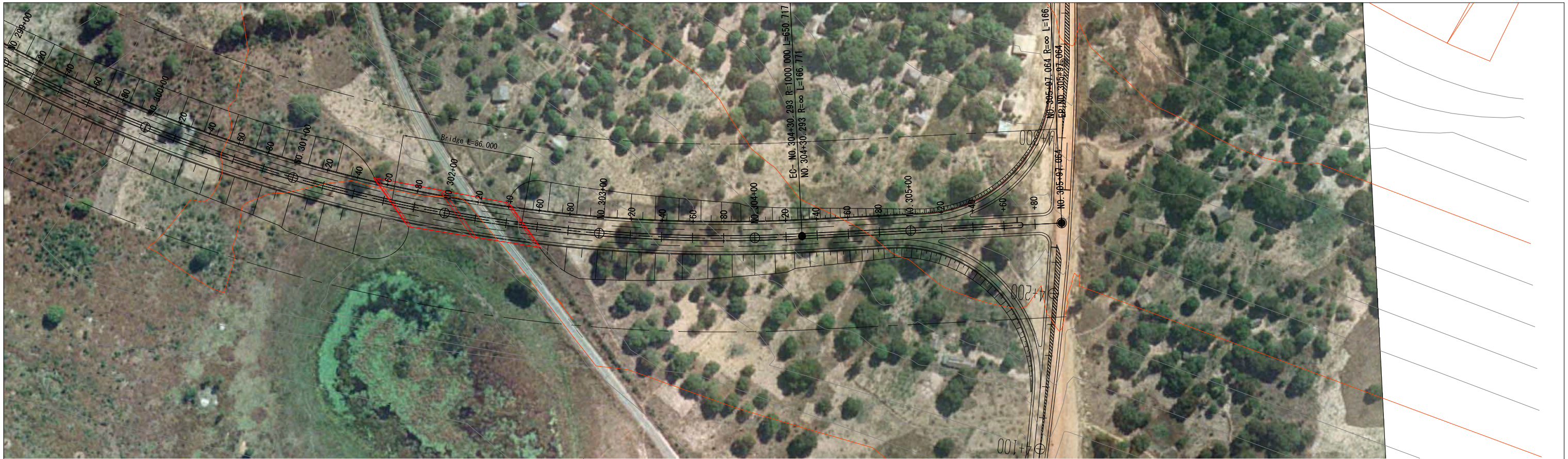
Japan International Cooperation Agency National Road Administration (ANE)	Oriental Consultants Global Co., Ltd. Eight-Japan Engineering Consultants Inc. Kokusai Kogyo Co., Ltd.	PREPARED BY	CHECKED BY	APPROVED BY	PROJECT TITLE: <b>Preparatory Survey for Nacala Corridor          Road Network Upgrading Project          (Nampula Southern Bypass Road)</b>	DRAWING TITLE: <b>Completion Stage Plan and Profile</b>			
		NAME				SCALE	SHEET NO.	DRAWING NO.	REV. NO.
		SIGNATURE				1/2500		C-35	
		DATE							








Station	DL=390.0	Ground Height	Proposal Height	Cut	Embankment
No. 285+00	412.595	417.812	5.996		
+20.000	412.500	418.061	5.561		
+40.000	412.180	418.244	6.064		
+60.000	412.000	418.360	6.360		
+80.000	412.221	418.410	6.189		
+100.000	412.070	418.394	6.324		
+120.000	411.882	418.311	6.429		
+140.000	411.573	418.162	6.589		
+160.000	411.365	417.946	6.582		
+180.000	411.114	417.665	6.551		
+200.000	410.863	417.316	6.454		
+220.000	410.625	416.902	6.277		
+240.000	410.206	416.421	6.215		
+260.000	409.642	415.874	6.232		
+280.000	409.117	415.260	6.143		
+300.000	408.477	414.580	6.103		
+320.000	407.646	413.834	6.188		
+340.000	406.698	413.038	6.339		
+360.000	405.534	412.252	6.718		
+380.000	404.137	411.488	7.351		
+400.000	402.976	410.744	7.768		
+420.000	402.013	410.022	8.009		
+440.000	400.940	409.320	8.380		
+460.000	399.827	408.640	8.812		
+480.000	398.861	407.980	9.119		
+500.000	398.189	407.342	9.153		
+520.000	397.025	406.724	9.700		
+540.000	395.860	406.127	10.267		
+560.000	395.306	405.537	10.232		
+580.000	394.820	404.947	10.127		
+600.000	394.397	404.357	9.960		
+620.000	394.088	403.767	9.679		
+640.000	393.802	403.199	9.397		
+660.000	393.432	402.730	9.298		
+680.000	393.181	402.367	9.187		
+700.000	393.697	402.110	8.413		
+720.000	394.293	401.959	7.666		
+740.000	394.631	401.914	7.284		
+760.000	394.741	401.975	7.234		
+780.000	394.985	402.142	7.158		
+800.000	395.474	402.415	6.941		
+820.000	396.585	402.794	6.209		
+840.000	398.069	403.279	5.210		

Japan International Cooperation Agency National Road Administration (ANE)	Oriental Consultants Global Co., Ltd. Eight-Japan Engineering Consultants Inc. Kokusai Kogyo Co., Ltd.	PREPARED BY	CHECKED BY	APPROVED BY	PROJECT TITLE: <b>Preparatory Survey for Nacala Corridor          Road Network Upgrading Project          (Nampula Southern Bypass Road)</b>	DRAWING TITLE: <b>Completion Stage Plan and Profile</b>			
		NAME				SCALE	SHEET NO.	DRAWING NO.	REV. NO.
		SIGNATURE				1/2500		C-36	
		DATE							





 Japan International Cooperation Agency  
 National Road Administration (ANE)

 Oriental Consultants Global Co., Ltd.  
 Eight-Japan Engineering Consultants Inc.  
 Kokusai Kogyo Co., Ltd.

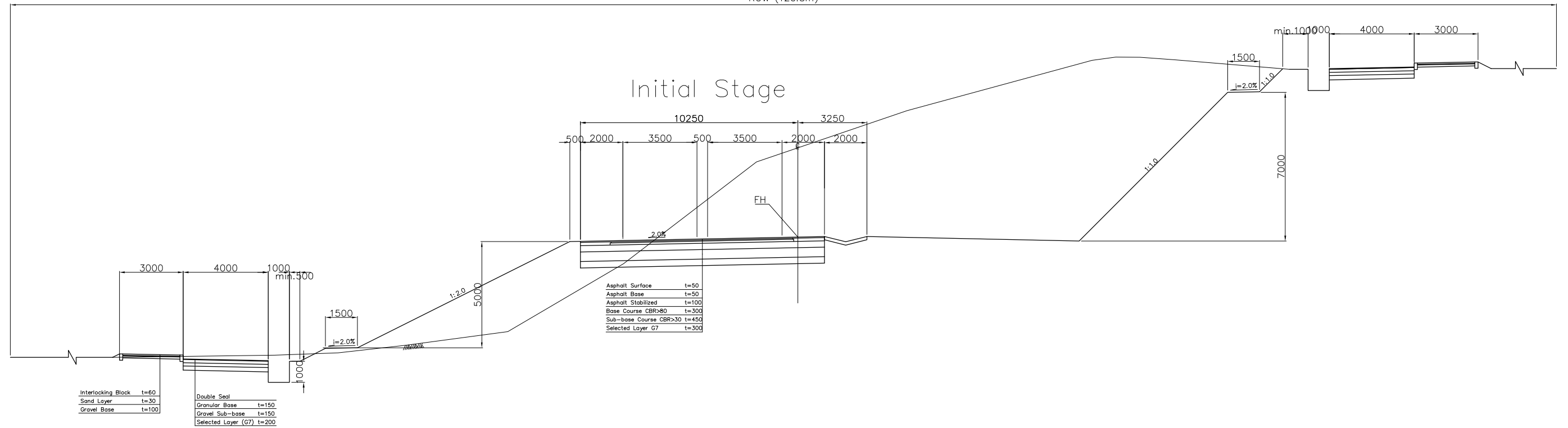
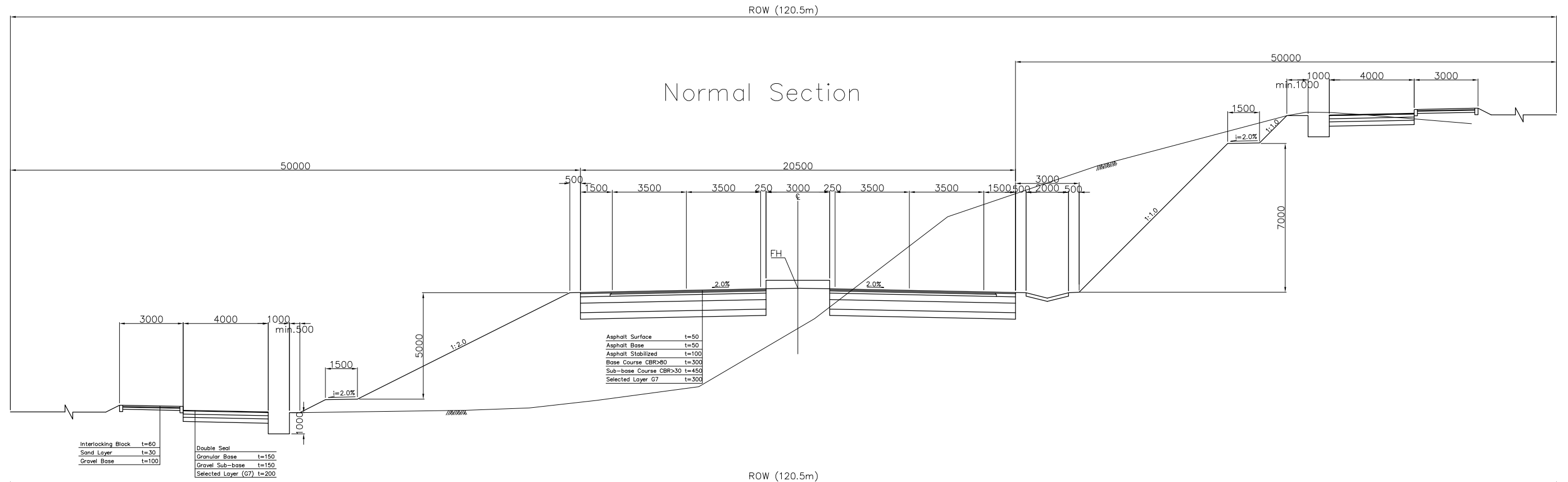
PREPARED BY	CHECKED BY	APPROVED BY
NAME		
SIGNATURE		
DATE		

PROJECT TITLE:  
**Preparatory Survey for Nacala Corridor  
 Road Network Upgrading Project  
 (Nampula Southern Bypass Road)**

DRAWING TITLE: Completion Stage Plan and Profile			
SCALE	SHEET NO.	DRAWING NO.	REV. NO.
1/2500		C-38	

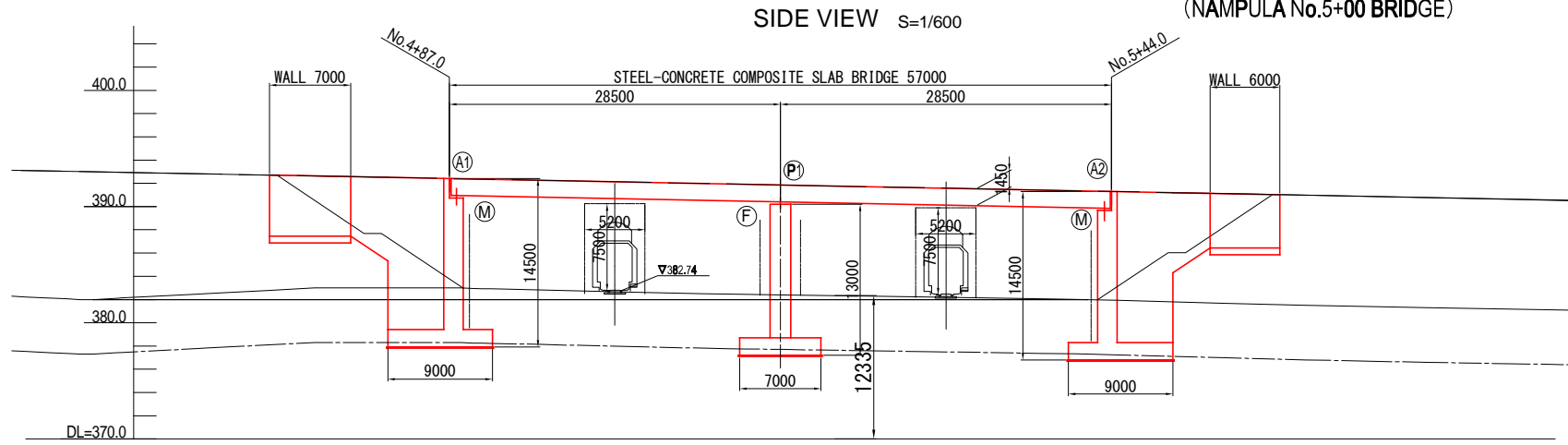
# NAMPULA SOUTHERN BYPASS ROAD

## Typical Cross Section

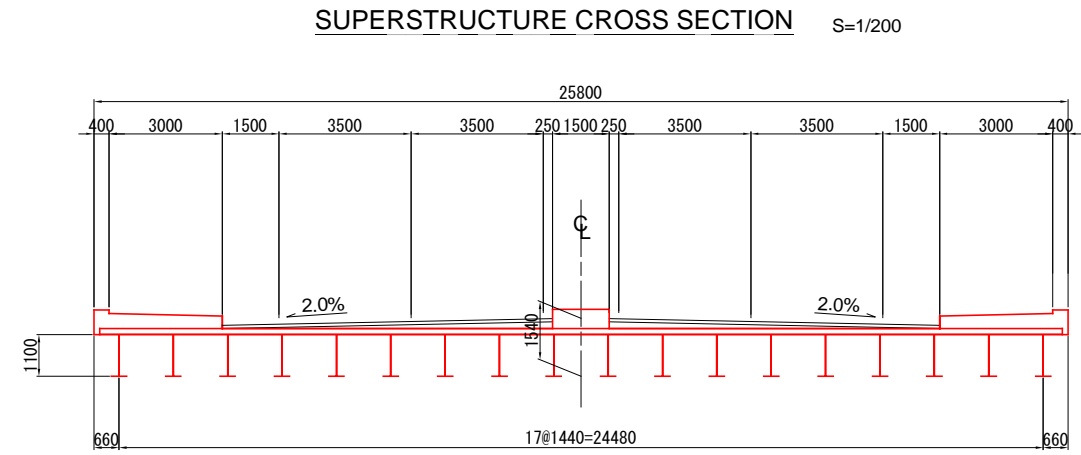


Japan International Cooperation Agency	Oriental Consultants Global Co., Ltd. Eight-Japan Engineering Consultants Inc. Kokusai Kogyo Co., Ltd.	PREPARED BY	CHECKED BY	APPROVED BY	PROJECT TITLE: <b>Preparatory Survey for Nacala Corridor          Road Network Upgrading Project          (NAMPULA SOUTHERN BYPASS ROAD)</b>	DRAWING TITLE: <b>Completion Stage</b>			
		NAME				Typical Cross Section			
National Road Administration (ANE)		SIGNATURE				SCALE	SHEET NO.	DRAWING NO.	REV. NO.
		DATE				1/200		C-39	

# GENERAL VIEW (NAMPULA No.5+00 BRIDGE)

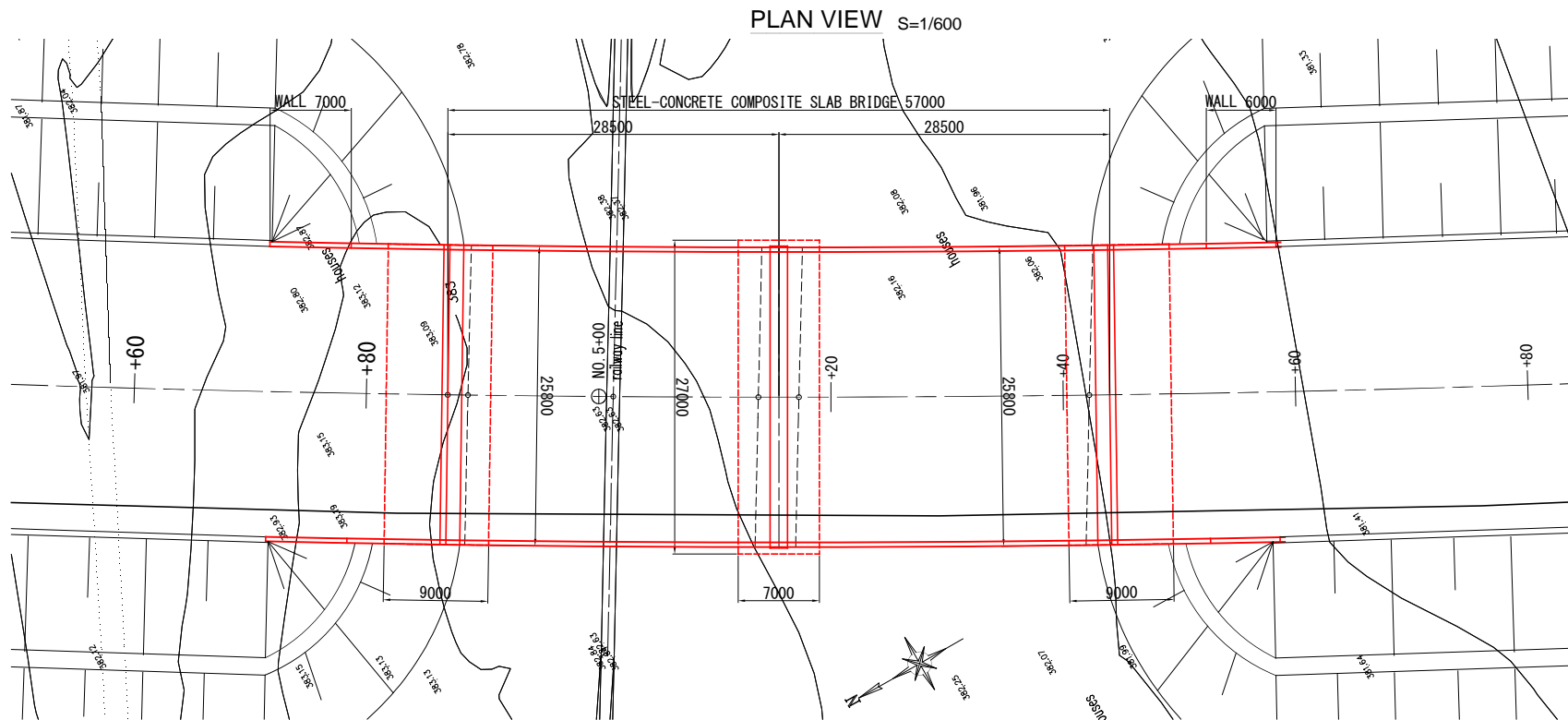


GRADIENT	$i = -1.930\%$ $L = 342.741m$									
PROPOSED HEIGHT		392.535	392.400	392.149	391.850	391.763	391.377	391.300	390.989	390.570
GROUND HEIGHT		383.000	383.000	382.710	382.402	382.335	382.031	381.946	381.519	381.147
DISTANCE		20,000	7,000	13,000	15,500	4,500	20,000	4,000	16,000	20,000
STATION		NO.4 +80.000	A1 +87.000	NO.5 +0.000	P1 +15.5000	+20.000	+40.000	A2 +44.000	+60.000	+80.000
CURVE ELEMENT	$R = 2000$ $L = 603.524$									



### DESIGN CONDITION

TOTAL BRIDGE LENGTH	57.000m
GIRDER LENGTH	56.800m
SPAN	28.000m
WIDTH	---
ANGEL OF SKEW	90°00'00"
RADIUS OF CURVATURE	R=2000
LONGITUDINAL SLOPE	-1.930%
COMPRESSIVE STRENGTH	Floor Slab : $\sigma_{ck} = 36N/mm^2$

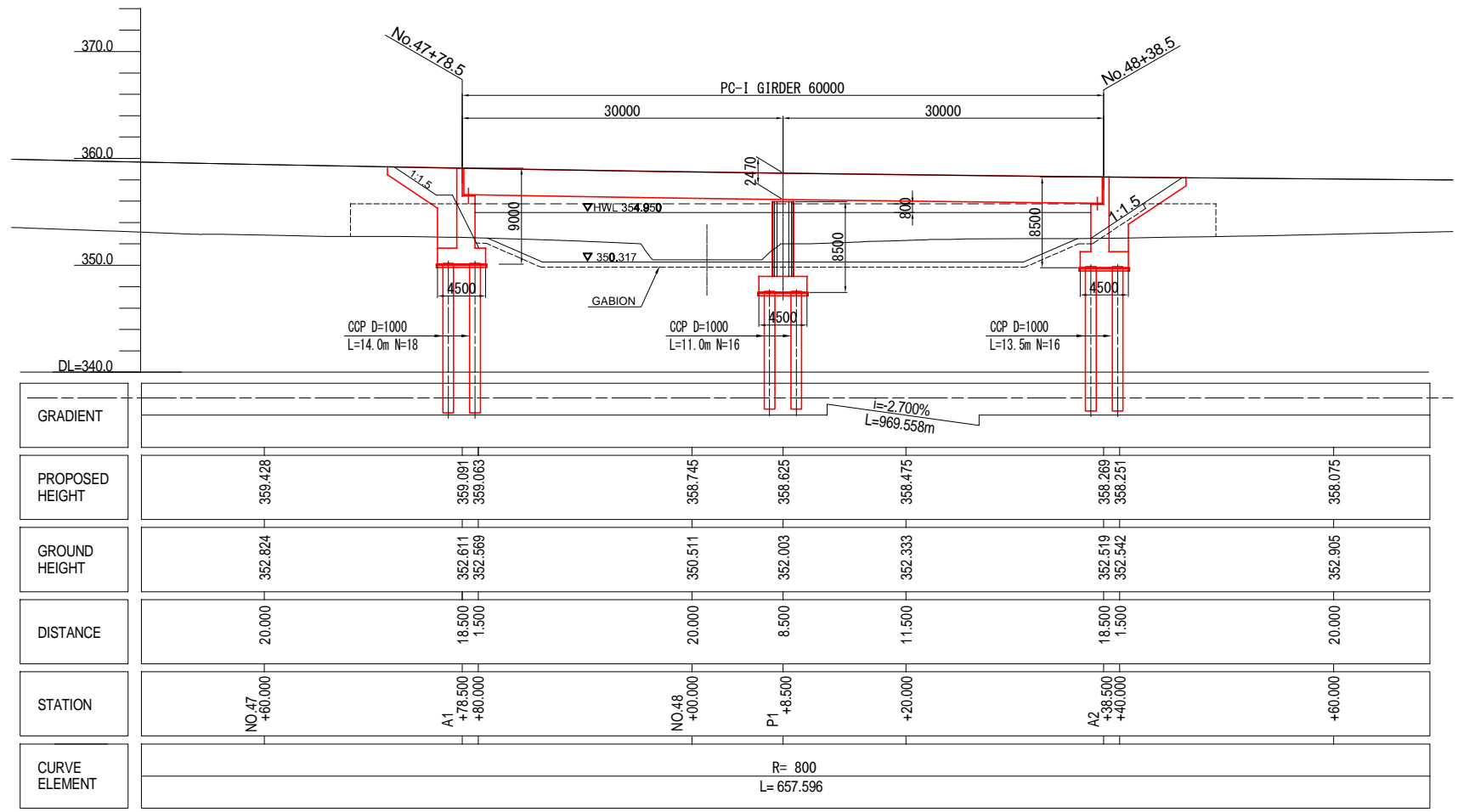


Japan International Cooperation Agency National Road Administration (ANE)	Oriental Consultants Global Co., Ltd. Eight-Japan Engineering Consultants Inc. Kokusai Kogyo Co., Ltd.	PREPARED BY	CHECKED BY	APPROVED BY	PROJECT TITLE: <b>Preparatory Survey for Nacala Corridor Road Network Upgrading Project (Nampula Southern Bypass Road)</b>	DRAWING TITLE: <b>Completion Stage</b>			
		NAME				GENERAL VIEW (NAMPULA No.5+00 BRIDGE)			
		SIGNATURE			SCALE	SHEET NO.	DRAWING NO.	REV. NO.	
		DATE					C-40		

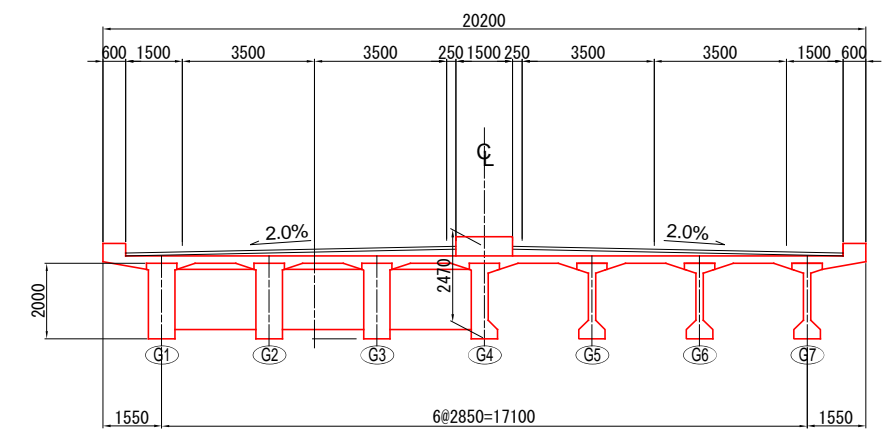


**GENERAL VIEW**  
(NAMPULA No.47+80 BRIDGE)

**SIDE VIEW** S=1/600



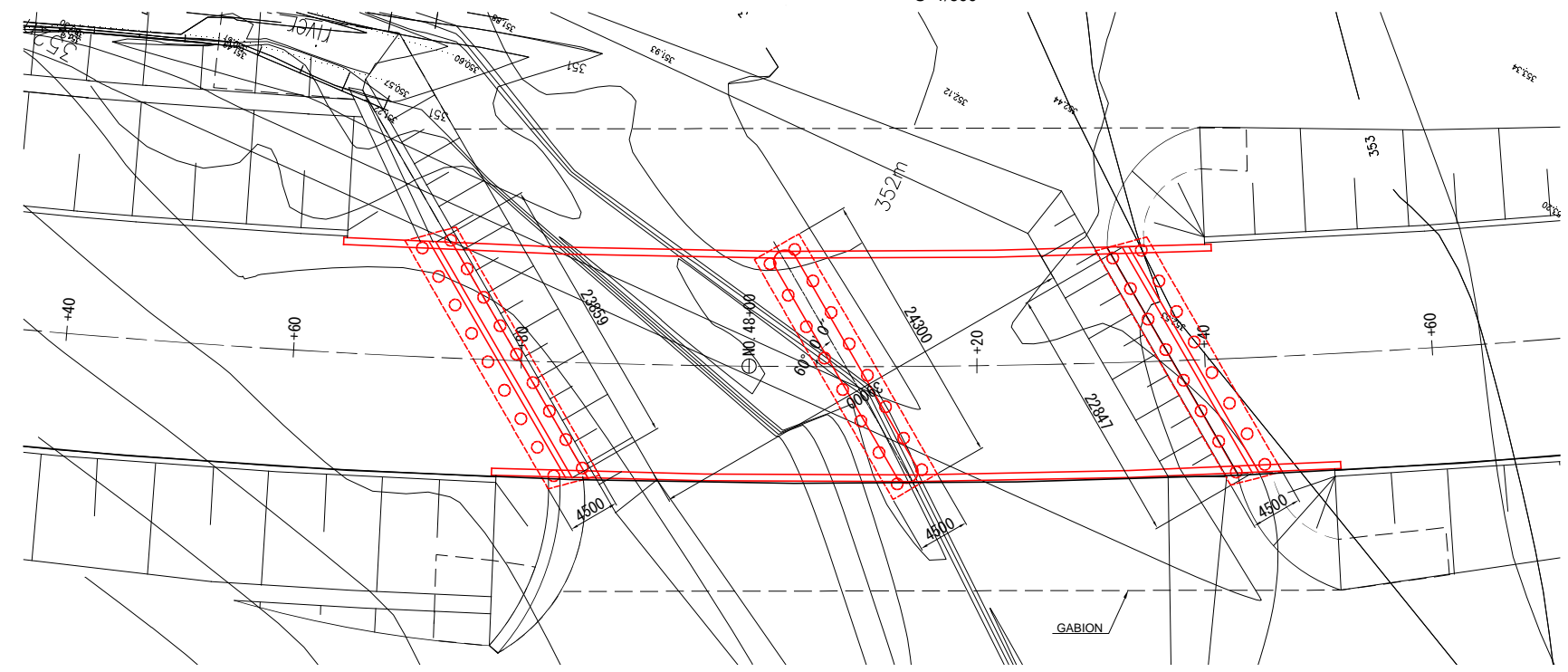
**SUPERSTRUCTURE CROSS SECTION** S=1/200



**DESIGN CONDITION**

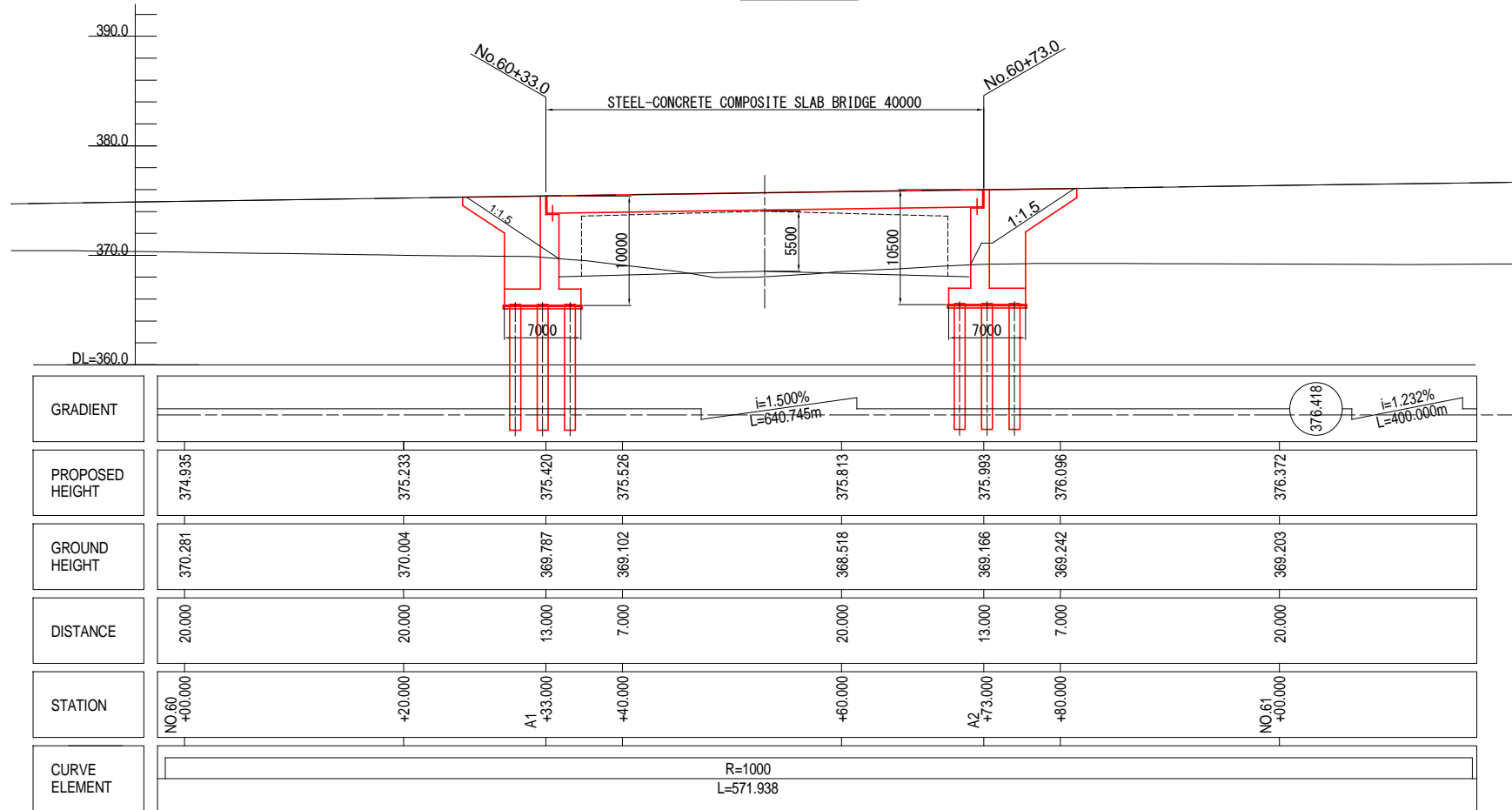
TOTAL BRIDGE LENGTH	90.000m
GIRDER LENGTH	2@29.850m
SPAN	2@29.050m
WIDTH	20.200m
ANGEL OF SKEW	60°00'00"
RADIUS OF CURVATURE	R= 800
LONGITUDINAL SLOPE	-2.700%
COMPRESSIVE STRENGTH	Main Girder :ack=40N/mm <sup>2</sup>
	Floor Slab :ack=30N/mm <sup>2</sup>

**PLAN VIEW** S=1/600

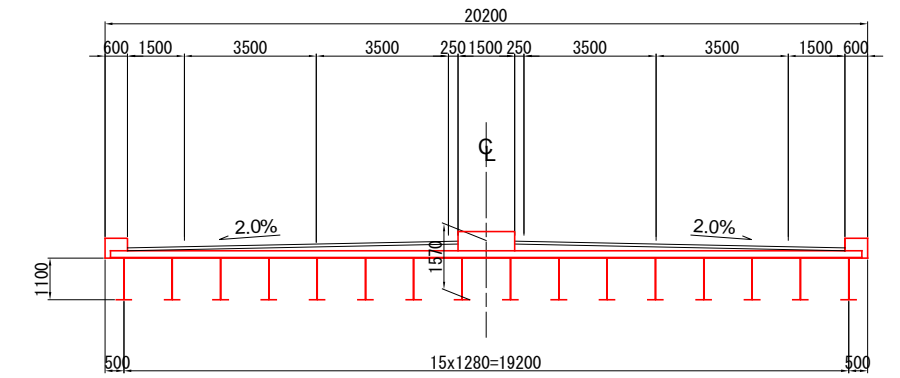


# GENERAL VIEW (NAMPULA R686 OVER BRIDGE)

SIDE VIEW S=1/600



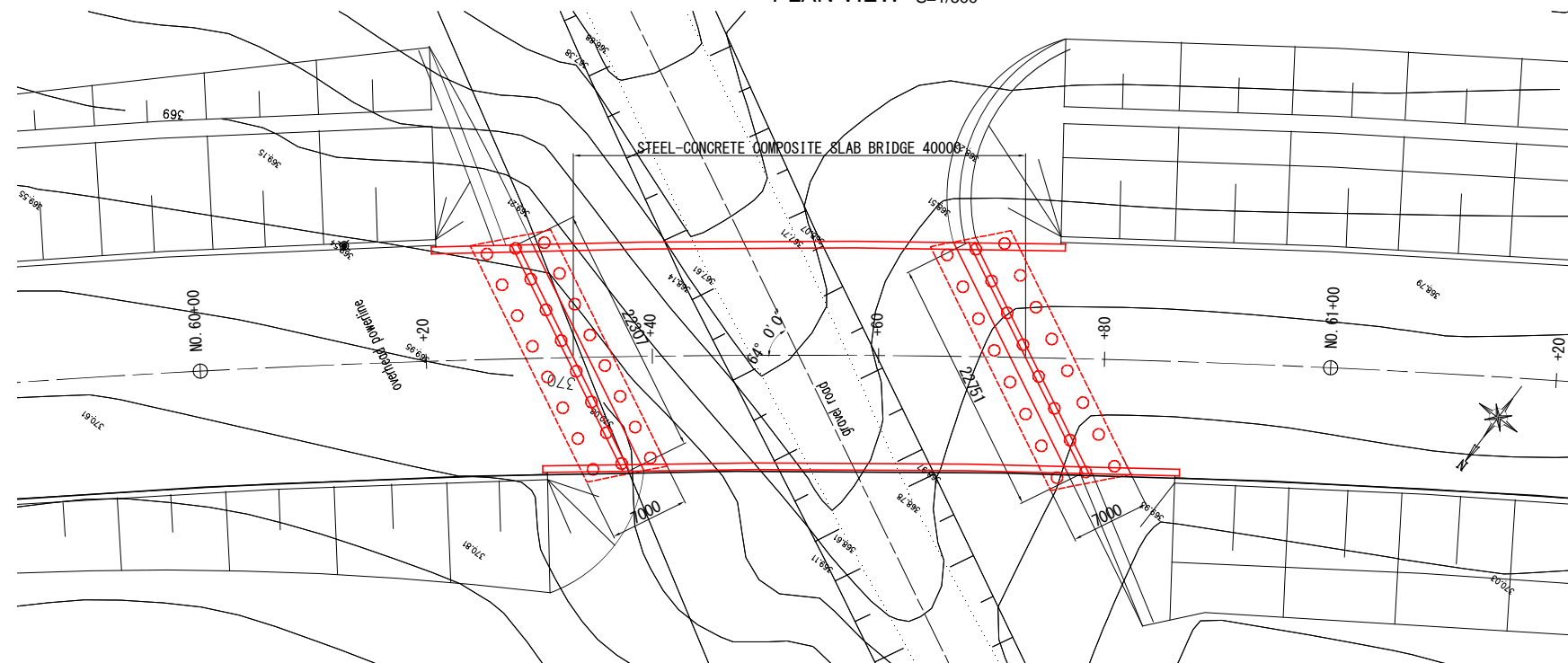
SUPERSTRUCTURE CROSS SECTION S=1/200



## DESIGN CONDITION

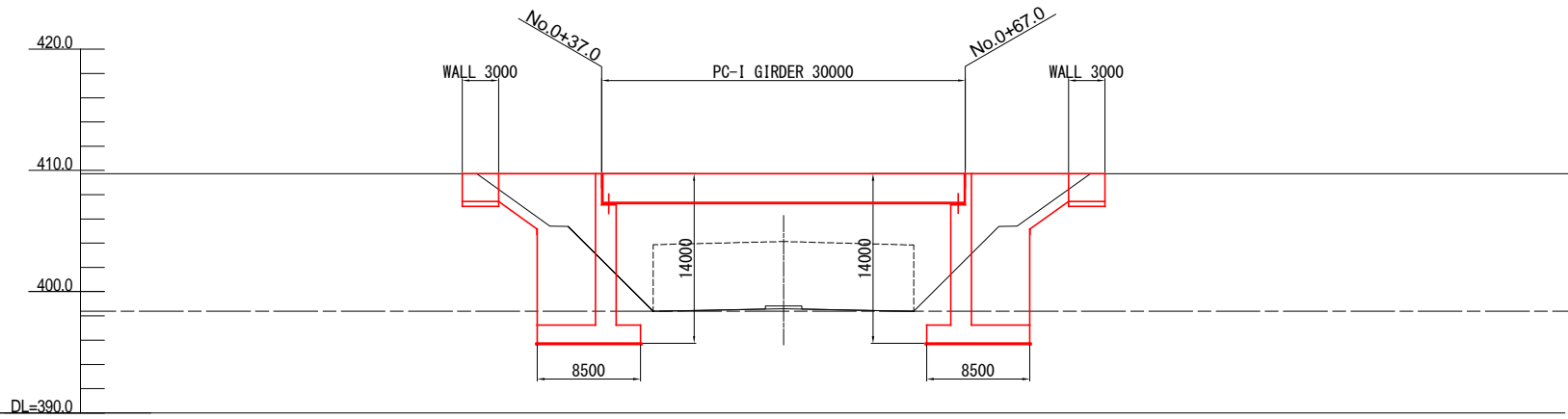
TOTAL BRIDGE LENGTH	40.000m
GIRDER LENGTH	39.800m
SPAN	39.000m
WIDTH	20.200m
ANGEL OF SKEW	64°00'00"
RADIUS OF CURVATURE	R=100
LONGITUDINAL SLOPE	1.500%
COMPRESSIVE STRENGTH	Floor Slab : $\sigma_{ck}=36\text{N/mm}^2$

PLAN VIEW S=1/600



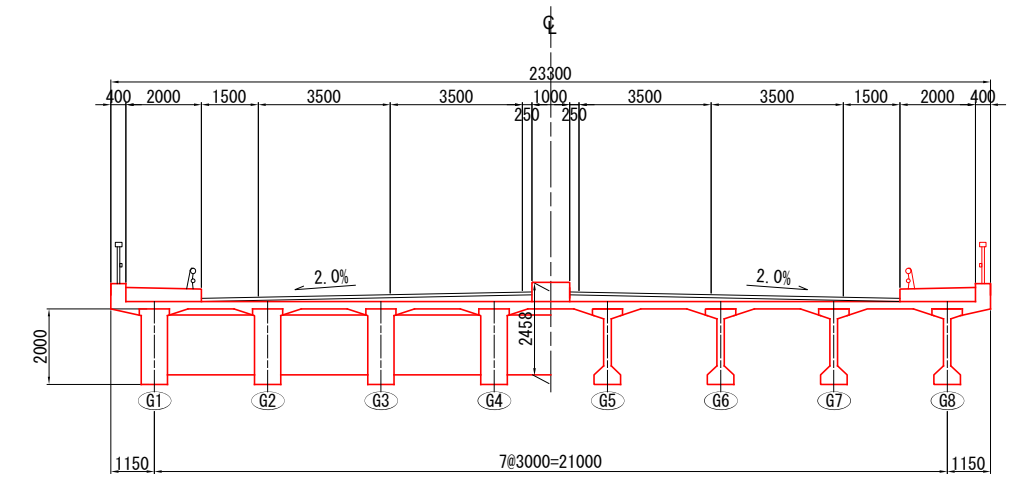
# GENERAL VIEW (NAMPULA N104 OVER BRIDGE)

SIDE VIEW S=1/300



GRADIENT	LEVEL							
PROPOSED HEIGHT	409.735	409.735	409.735	409.735	409.735	409.735	409.735	409.735
GROUND HEIGHT	409.601	409.690	409.746	409.748	409.721	409.712	409.695	409.663
DISTANCE	00.000	20.000	17.000	3.000	20.000	7.000	13.000	20.000
STATION	NO.0 +00.000	+20.000	A1 +37.000	+40.000	+60.000	A2 +67.000	+80.000	NO.1 +00.000
CURVE ELEMENT	R= 4700 L= 350.000							

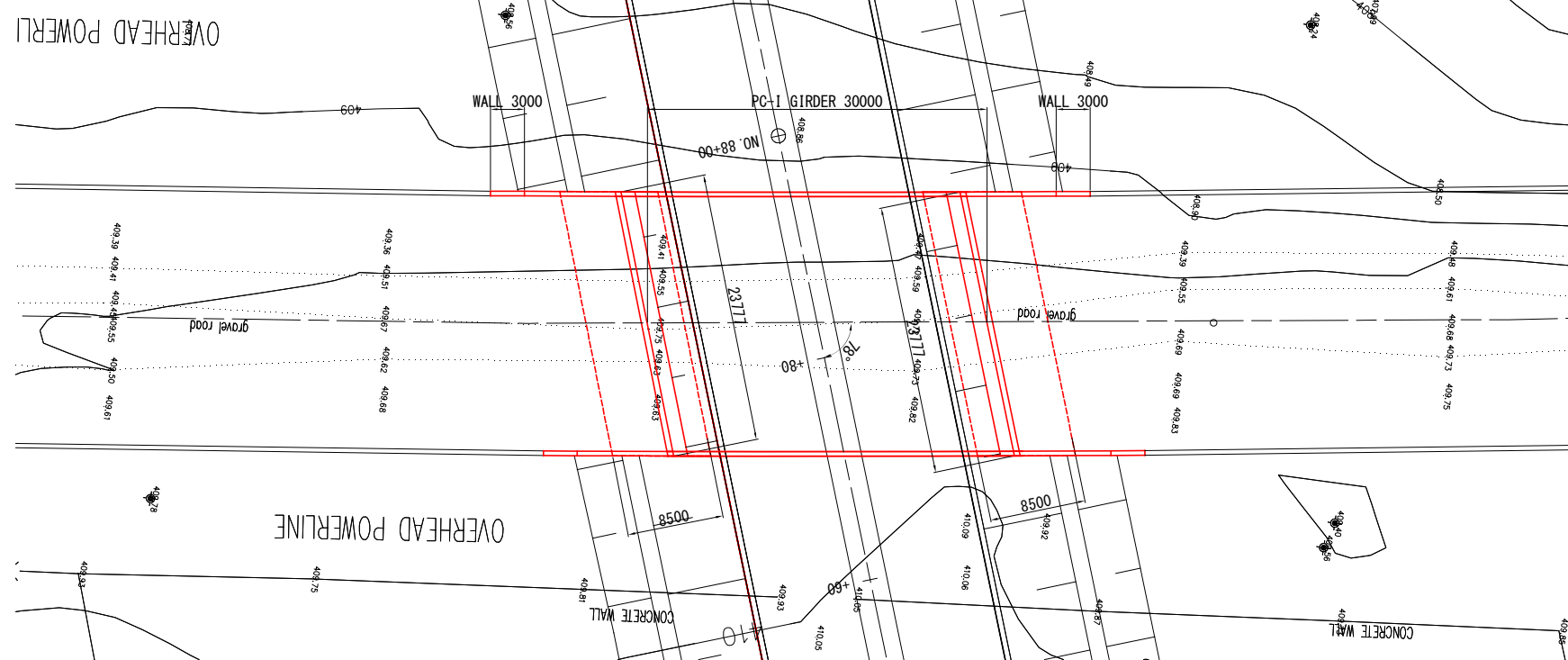
SUPERSTRUCTURE CROSS SECTION S=1/100



## DESIGN CONDITION

TOTAL BRIDGE LENGTH	30.000m
GIRDER LENGTH	29.900m
SPAN	29.100m
WIDTH	23.300m
ANGLE OF SKEW	78°00'00"
RADIUS OF CURVATURE	R=4700
LONGITUDINAL SLOPE	LEVEL
COMPRESSIVE STRENGTH	Main Girder: $\sigma_{ck}=40\text{N/mm}^2$ Floor Slab: $\sigma_{ck}=30\text{N/mm}^2$

PLAN VIEW S=1/300



**JICA** Japan International Cooperation Agency  
**ANE** National Road Administration (ANE)

Oriental Consultants Global Co., Ltd.  
Eight-Japan Engineering Consultants Inc.  
Kokusai Kogyo Co., Ltd.

PREPARED BY	CHECKED BY	APPROVED BY
NAME		
SIGNATURE		
DATE		

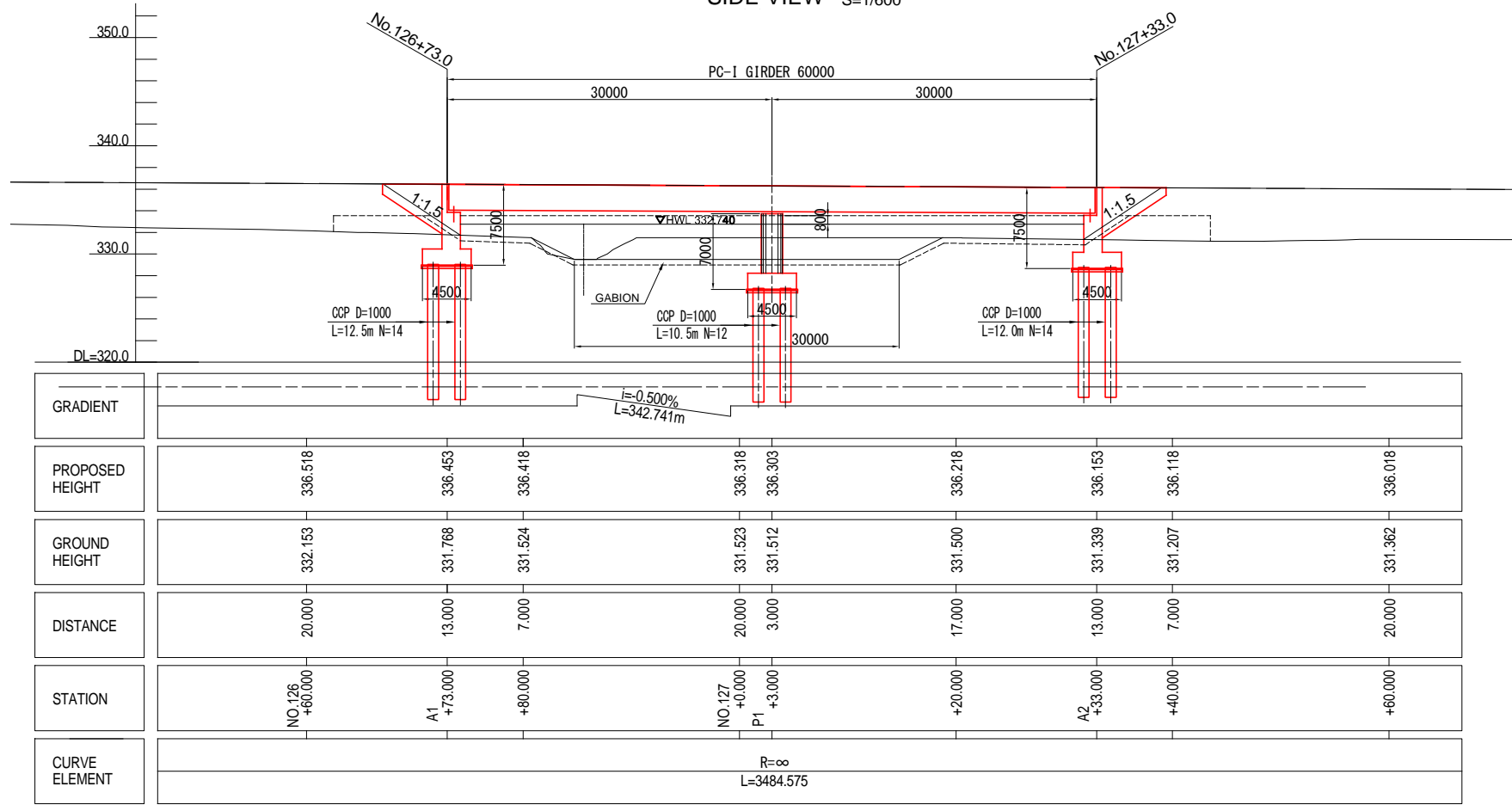
PROJECT TITLE:  
**Preparatory Survey for Nacala Corridor  
Road Network Upgrading Project  
(Nampula Southern Bypass Road)**

DRAWING TITLE: **Completion Stage  
GENERAL VIEW (NAMPULA N104 OVER BRIDGE)**

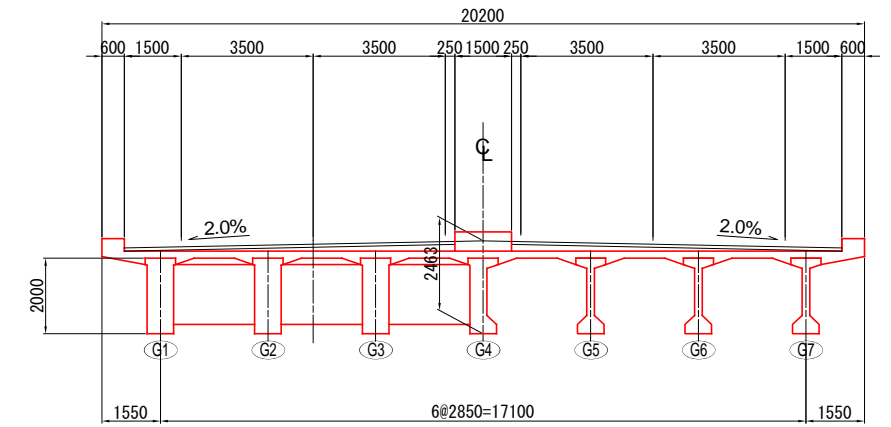
SCALE	SHEET NO.	DRAWING NO.	REV. NO.
		C-43	

# GENERAL VIEW (NAMPULA No.126+70 BRIDGE)

SIDE VIEW S=1/600



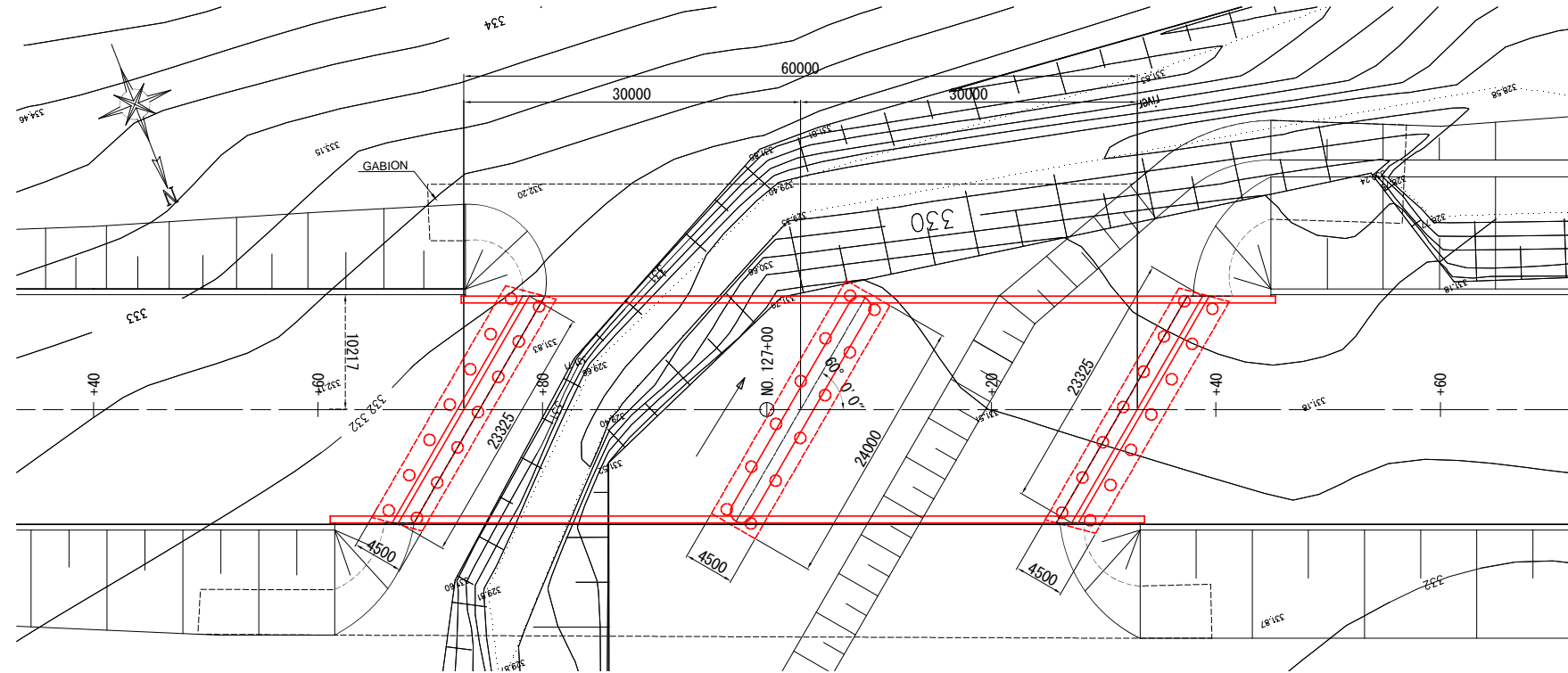
SUPERSTRUCTURE CROSS SECTION S=1/200



### DESIGN CONDITION

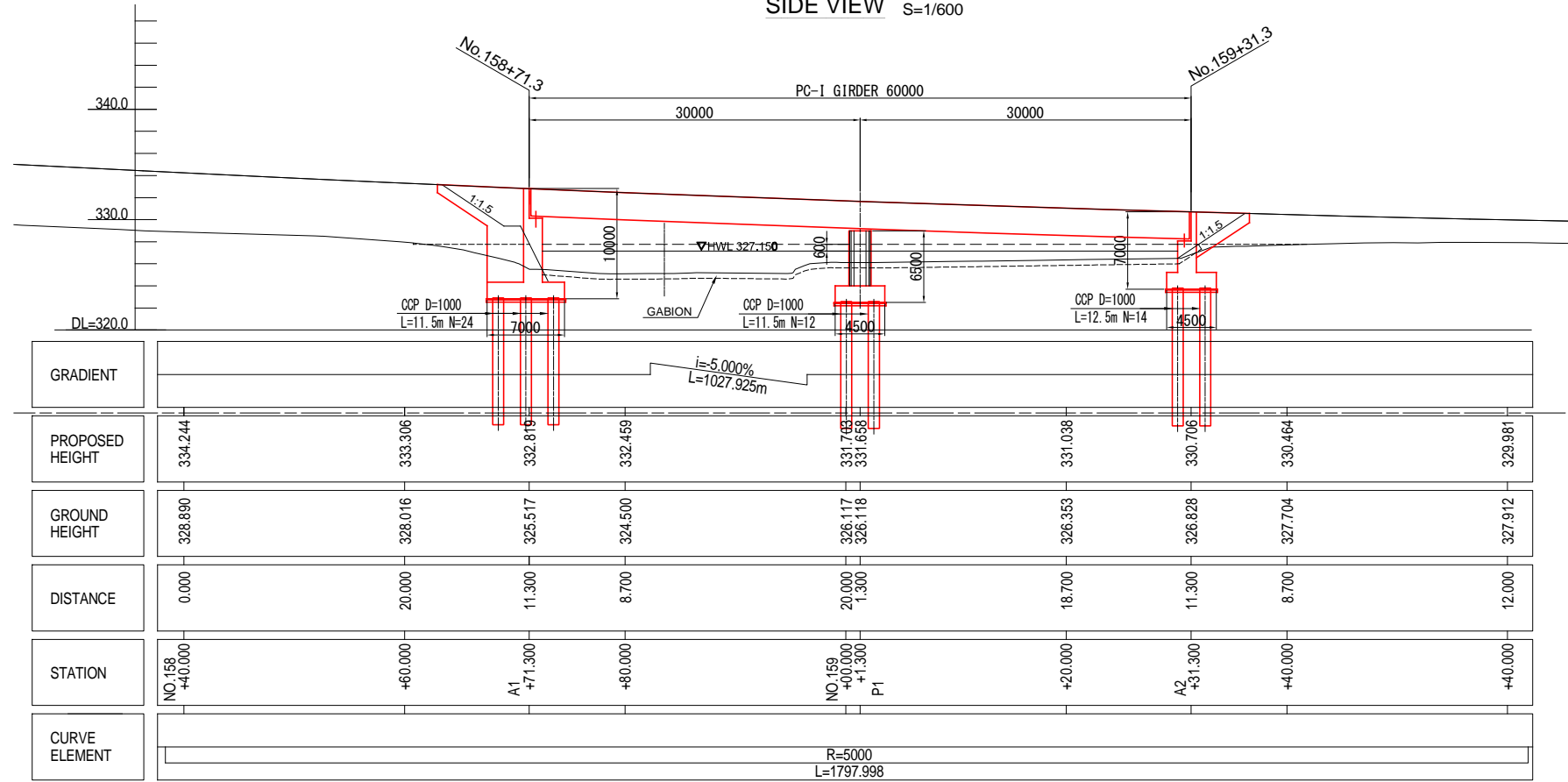
TOTAL BRIDGE LENGTH	60.000m
GIRDER LENGTH	2@29.850m
SPAN	2@29.050m
WIDTH	20.200m
ANGLE OF SKEW	60°00'00"
RADIUS OF CURVATURE	R=∞
LONGITUDINAL SLOPE	-0.500%
COMPRESSIVE STRENGTH	Main Girder: σ <sub>ck</sub> =40N/mm <sup>2</sup> Floor Slab: σ <sub>ck</sub> =30N/mm <sup>2</sup>

PLAN VIEW S=1/600

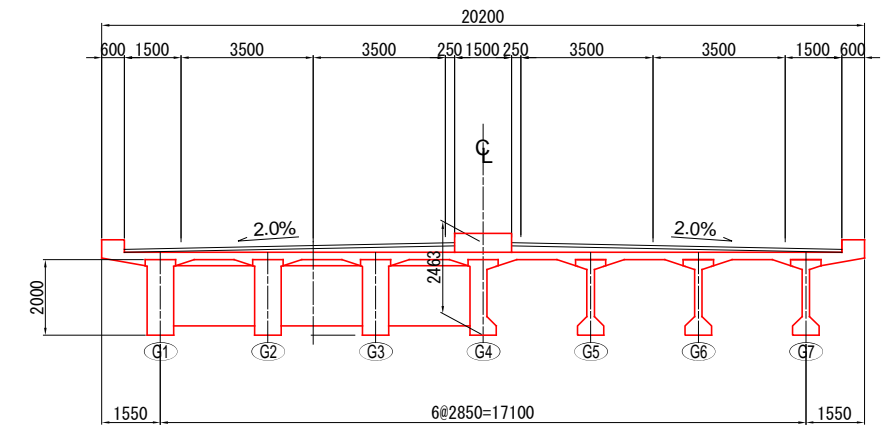


# GENERAL VIEW (NAMPULA No.158+70 BRIDGE)

SIDE VIEW S=1/600



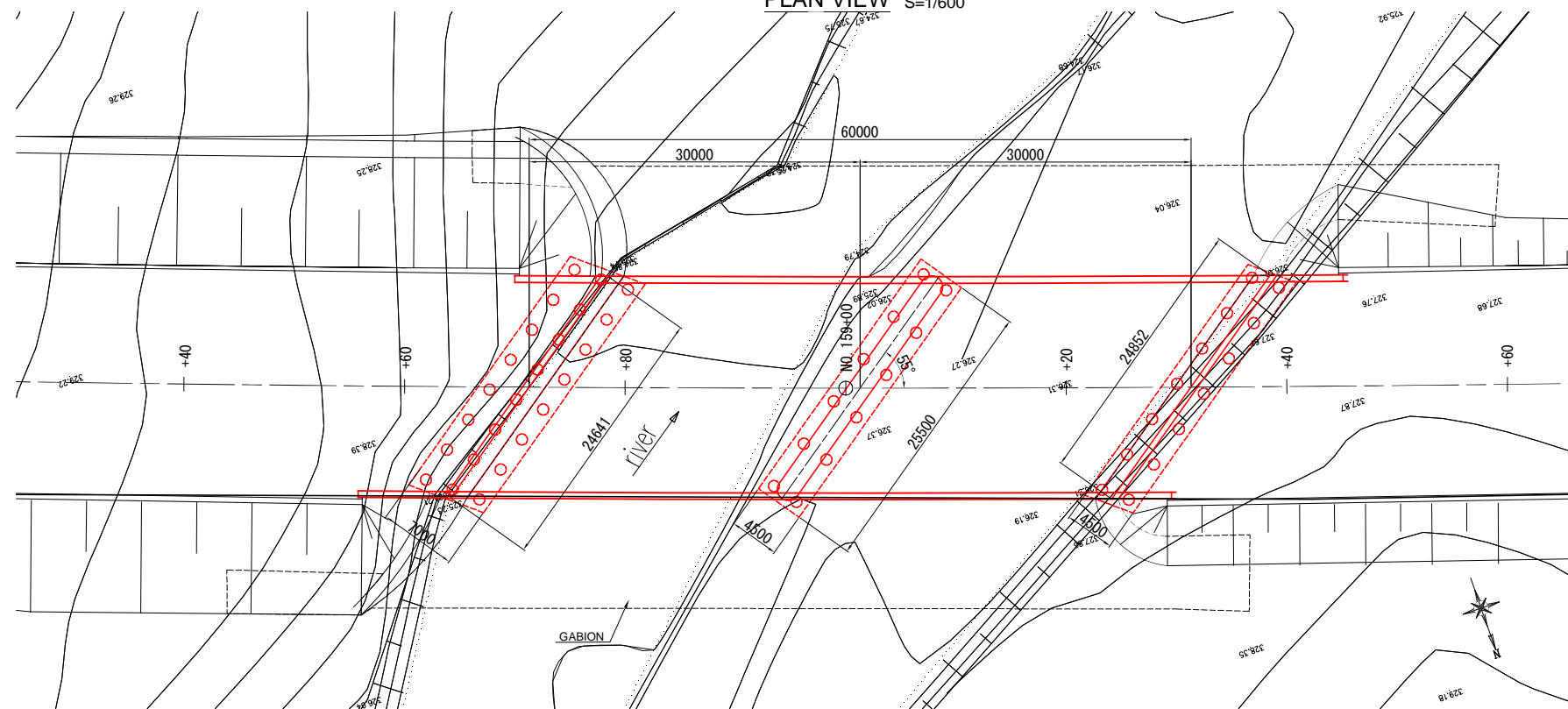
SUPERSTRUCTURE CROSS SECTION S=1/200








### DESIGN CONDITION

TOTAL BRIDGE LENGTH	90.000m
GIRDER LENGTH	2@29.850m
SPAN	2@29.050m
WIDTH	20.200m
ANGLE OF SKEW	60°00'00"
RADIUS OF CURVATURE	R= 800
LONGITUDINAL SLOPE	-2.700%
COMPRESSIVE STRENGTH	Main Girder:σck=40N/mm <sup>2</sup>
	Floor Slab :σck=30N/mm <sup>2</sup>

PLAN VIEW S=1/600



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 Eight-Japan Engineering Consultants Inc.  
 Kokusai Kogyo Co., Ltd.

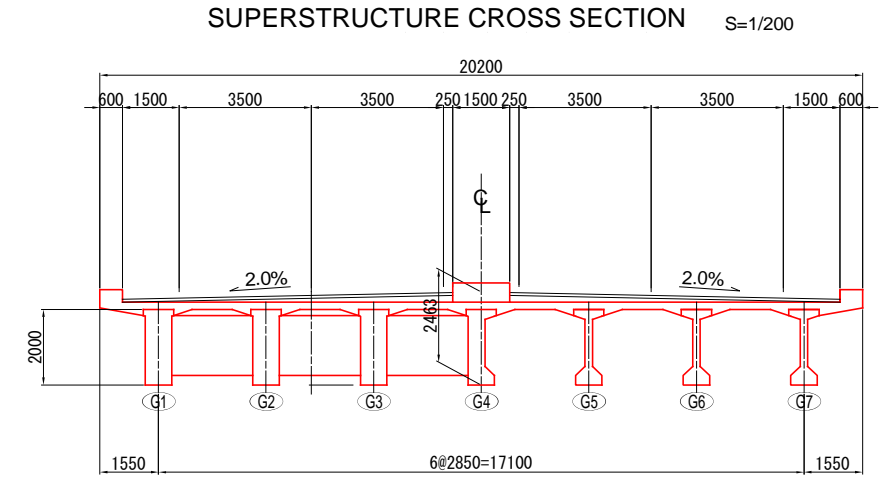
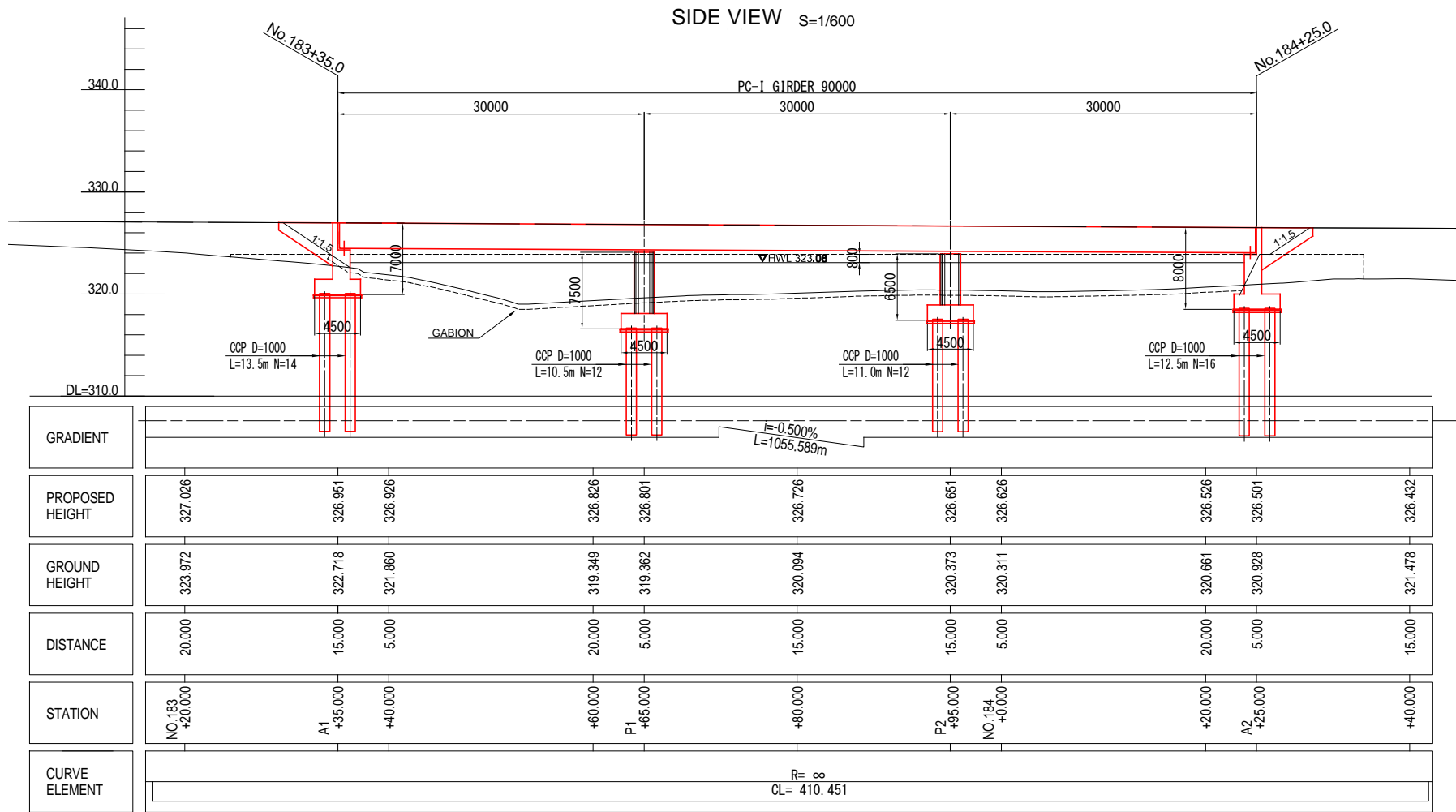
NAME	PREPARED BY	CHECKED BY	APPROVED BY
SIGNATURE			
DATE			

PROJECT TITLE:  
**Preparatory Survey for Nacala Corridor  
Road Network Upgrading Project  
(Nampula Southern Bypass Road)**

DRAWING TITLE: **Completion Stage  
GENERAL VIEW (NAMPULA No.158+70 BRIDGE)**

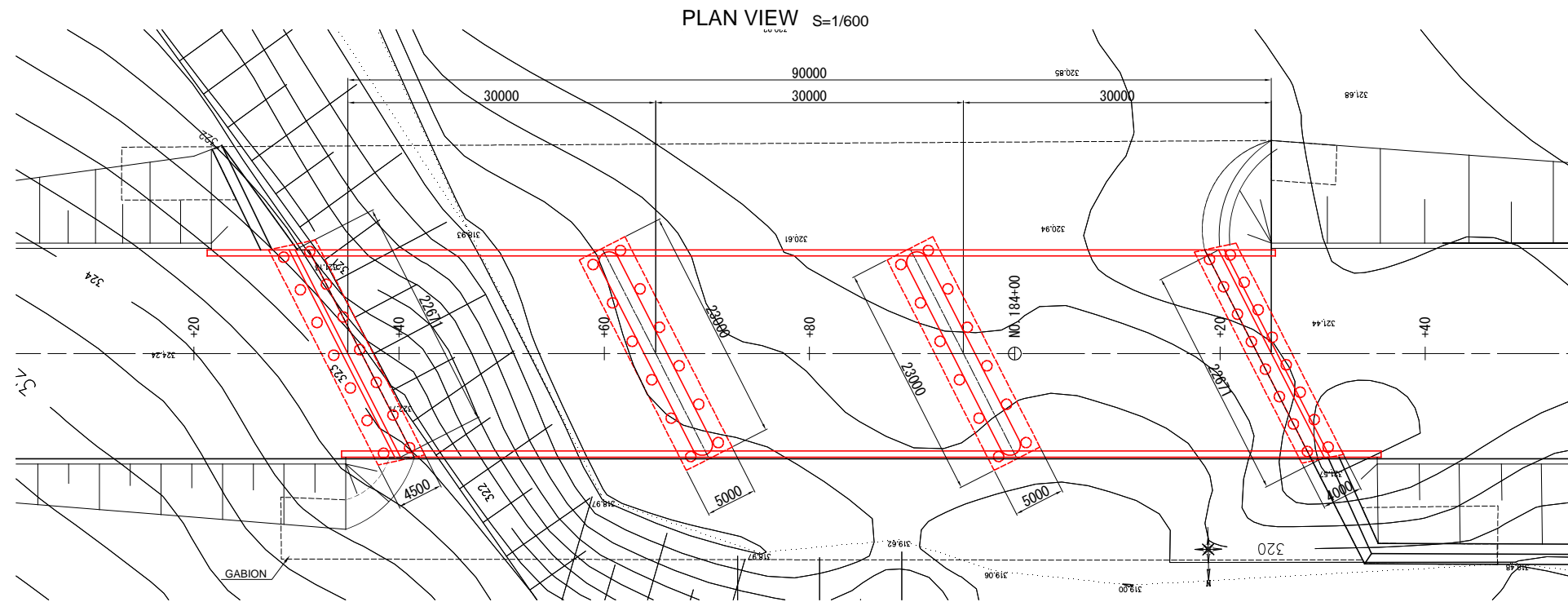
SCALE	SHEET NO.	DRAWING NO.	REV. NO.
		C-45	

# GENERAL VIEW (NAMPULA No.183+30 BRIDGE)



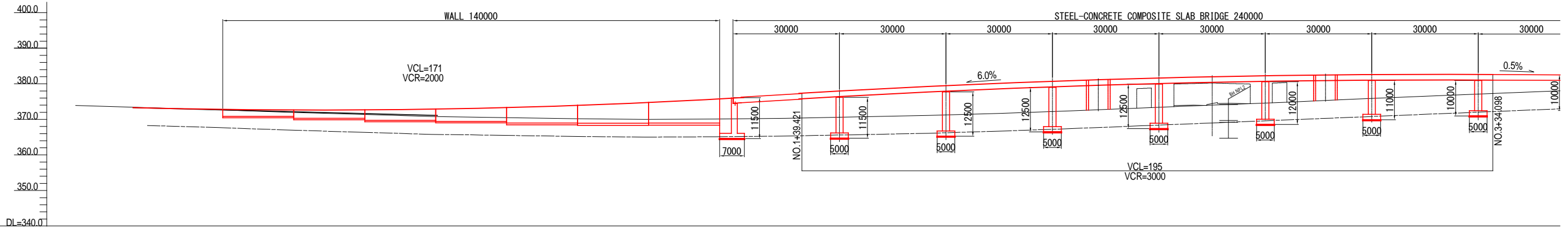
### DESIGN CONDITION

TOTAL BRIDGE LENGTH	90.000m
GIRDER LENGTH	29.850m+29.800m+29.850m
SPAN	29.050m+29.000m+29.050m
WIDTH	20.200m
ANGLE OF SKEW	90°00'00"
RADIUS OF CURVATURE	R=∞
LONGITUDINAL SLOPE	-0.500%
COMPRESSIVE STRENGTH	Main Girder: σ <sub>ck</sub> =40N/mm <sup>2</sup>
	Floor Slab: σ <sub>ck</sub> =30N/mm <sup>2</sup>



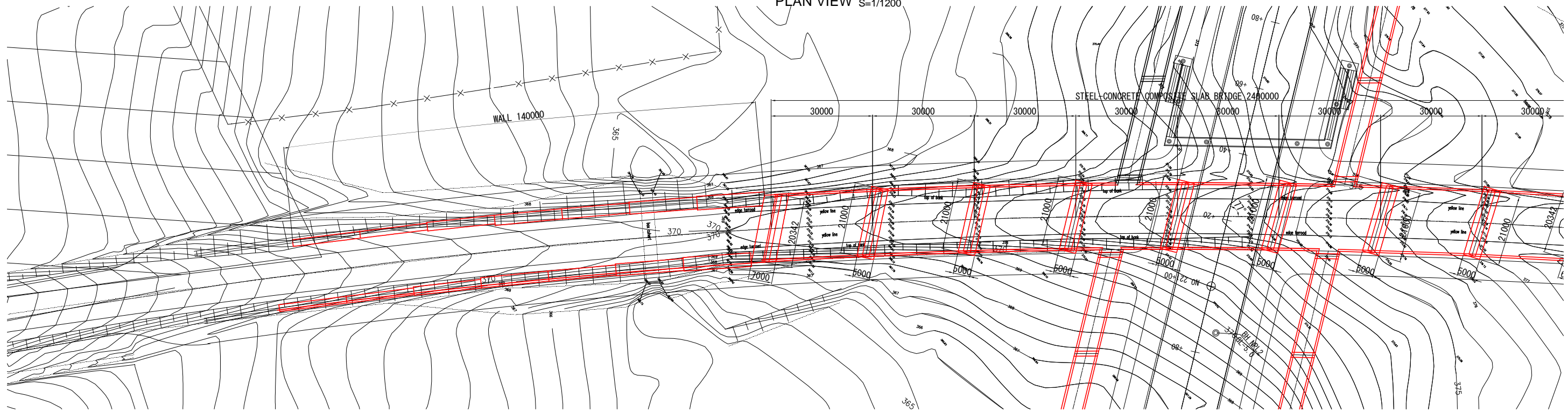
# GENERAL VIEW 1-2 (NAMPULA N1 OVER BRIDGE)

SIDE VIEW S=1/1200



GRADIENT	$i = -2.578\%$ $L = 85.722m$																				$i = 6.000\%$ $L = 200.000m$																				$i = -0.500\%$ $L = 105.821m$																			
PROPOSED HEIGHT	371.525	371.525	371.525	372.642	371.525	371.095	373.468	374.144	375.020	376.096	377.295	377.876	378.424	379.419	380.281	380.661	381.009	381.603	382.064	382.244	382.391	382.585	382.646	382.626	382.579																																			
GROUND HEIGHT	371.250	371.250	371.250	371.850	371.250	370.775	370.425	370.150	370.025	370.150	370.400	370.600	370.800	371.250	371.875	372.225	372.600	373.400	374.200	374.600	375.025	375.900	376.700	377.100	377.500																																			
DISTANCE	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	10,000	10,000	20,000	20,000	10,000	10,000	20,000	20,000	10,000	10,000	20,000	20,000	10,000	10,000																																			
STATION	+20,000	+20,000	+20,000	NO.0 +00,000	+20,000	+40,000	+60,000	+80,000	NO.1 +00,000	A1 +20,000	+40,000	P1 +50,000	+60,000	P2 +80,000	NO.2 +00,000	P3 -10,000	+20,000	P4 +40,000	+60,000	P5 -70,000	+80,000	P6 NO.3 +00,000	+20,000	P7 +30,000	+40,000																																			
CURVE ELEMENT	$R = 1978$ $CL = 400.000$																																																											

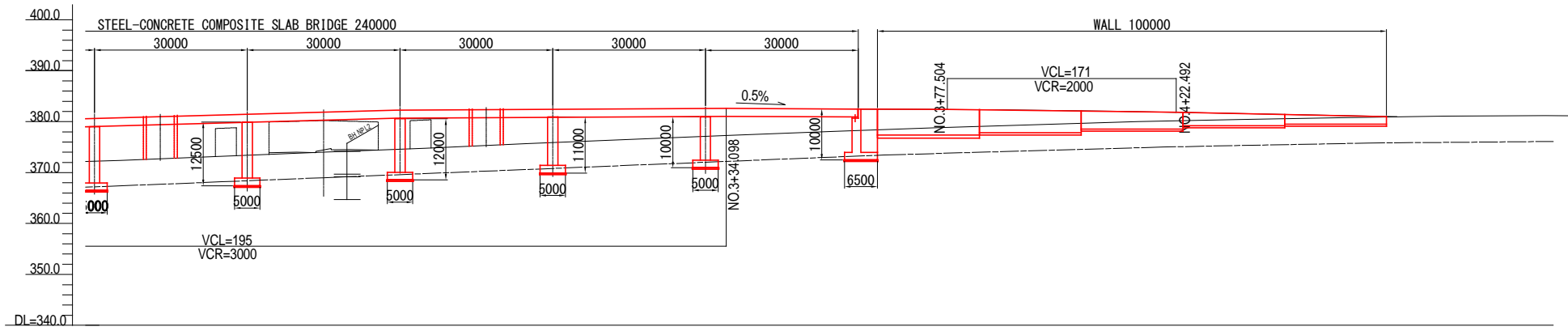
PLAN VIEW S=1/1200



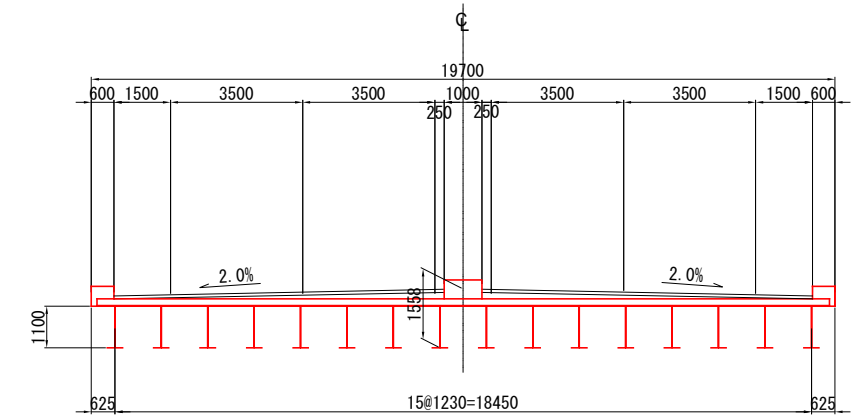
	Oriental Consultants Global Co., Ltd. Eight-Japan Engineering Consultants Inc. Kokusai Kogyo Co., Ltd.	PREPARED BY CHECKED BY APPROVED BY	PROJECT TITLE: <b>Preparatory Survey for Nacala Corridor Road Network Upgrading Project (Nampula Southern Bypass Road)</b>	DRAWING TITLE: <b>Completion Stage GENERAL VIEW-1/2 (NAMPULA N1 OVER BRIDGE)</b>	SCALE SHEET NO. DRAWING NO. REV. NO.
	NAME SIGNATURE DATE	C-47	C-47		

# GENERAL VIEW 2-2 (NAMPULA N1 OVER BRIDGE)

SIDE VIEW S=1/1200



N1 CROSS SECTION S=1/200

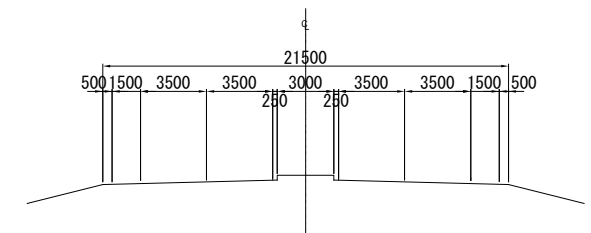


GRADIENT																	
PROPOSED HEIGHT	380.661	381.009	381.603	382.064	382.244	382.391	382.585	382.646	382.626	382.579	382.479	382.378	382.194	381.878	381.479	381.079	
GROUND HEIGHT	372.225	372.600	373.400	374.200	374.600	375.025	375.900	376.700	377.100	377.500	378.275	378.950	379.550	380.100	380.500	380.875	
DISTANCE	10.000	10.000	20.000	20.000	10.000	10.000	20.000	20.000	10.000	10.000	20.000	20.000	20.000	20.000	20.000	20.000	
STATION	-10.000	+20.000	P4 +40.000	+60.000	P5 -70.000	+80.000	P6 NO.3 +00.000	+20.000	P7 +30.000	+40.000	A2 +60.000	+80.000	NO.4 +00.000	+20.000	+40.000	+60.000	+80.000
CURVE ELEMENT	R= 1978 CL= 400.000																

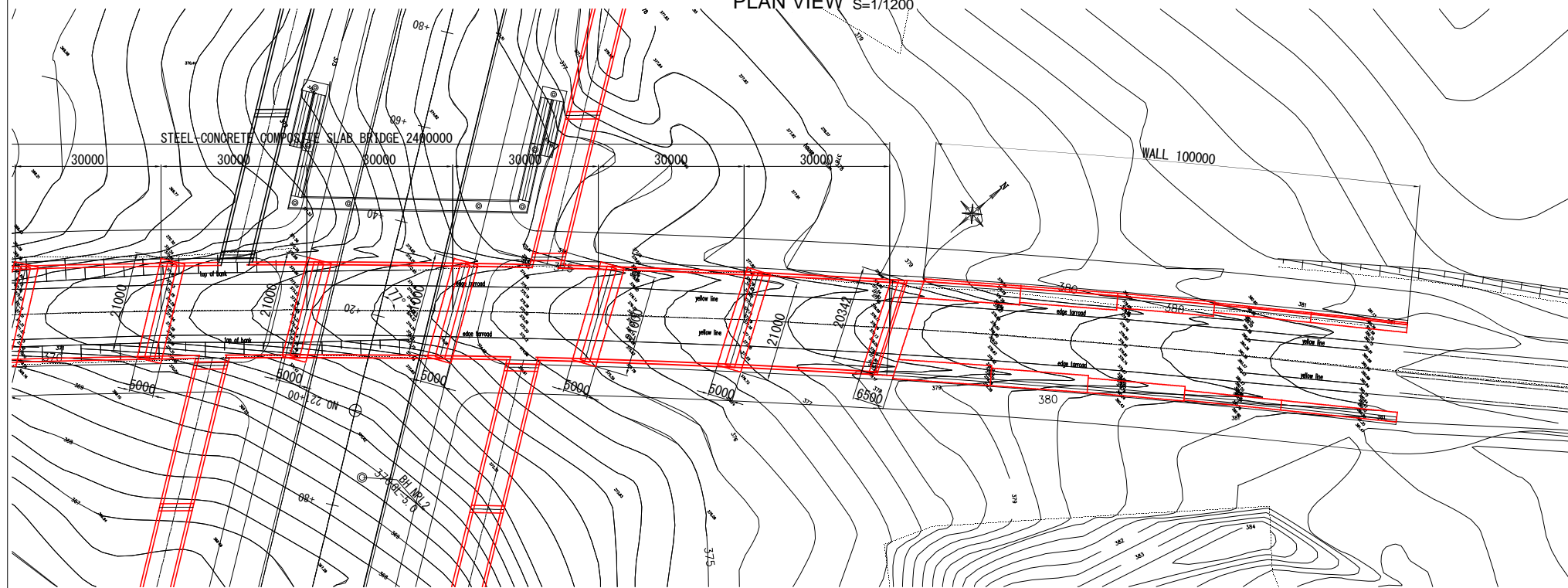
## DESIGN CONDITION

TOTAL BRIDGE LENGTH	240.000m
GIRDER LENGTH	239.600m
SPAN	30.000m
WIDTH	19.700m
SPECIAL LOAD SNOW	---
ANGEL OF SKEW	90°00'00"
RADIUS OF CURVATURE	R=∞
LONGITUDINAL SLOPE	6.000% / -0.500%
COMPRESSIVE STRENGTH	Main Girder: σ <sub>ck</sub> =30N/mm <sup>2</sup>
	Floor Slab: σ <sub>ck</sub> =24N/mm <sup>2</sup>

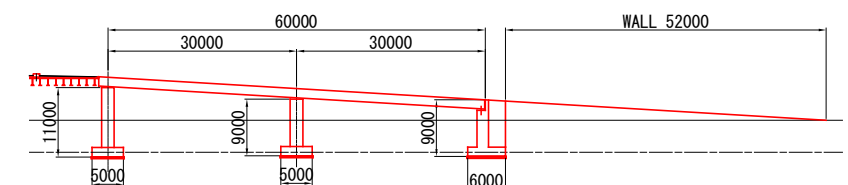
NAMUPLA BYPASS CROSS SECTION S=1/400



PLAN VIEW S=1/1200



RAMP SIDE VIEW S=1/1200

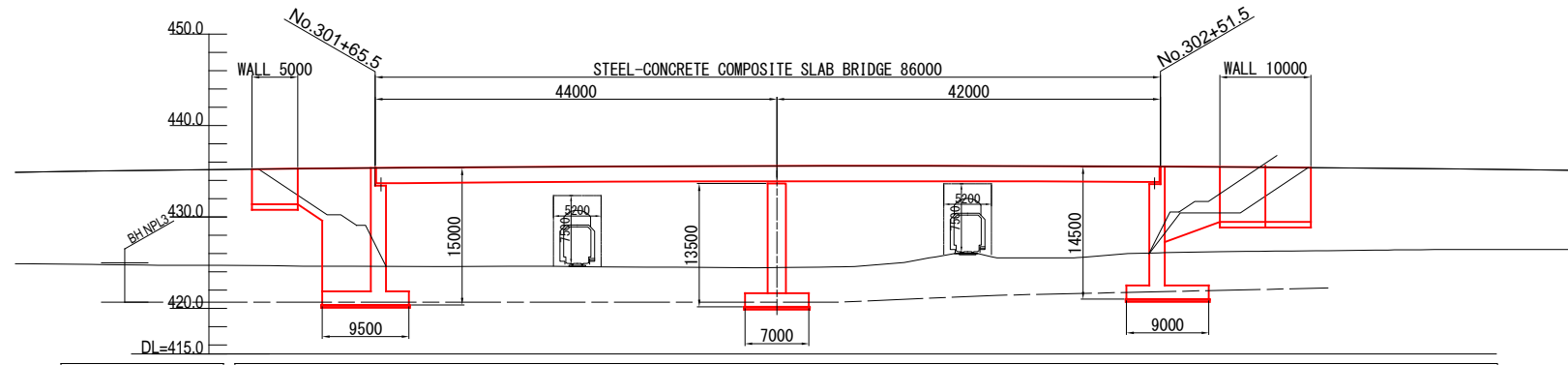


		PREPARED BY	CHECKED BY	APPROVED BY	<b>PROJECT TITLE:</b> Preparatory Survey for Nacala Corridor Road Network Upgrading Project (Nampula Southern Bypass Road)	<b>DRAWING TITLE:</b> Completion Stage GENERAL VIEW-2/2 (NAMPULA N1 OVER BRIDGE)			
		NAME					SCALE	SHEET NO.	DRAWING NO.
		SIGNATURE							
		DATE						C-48	



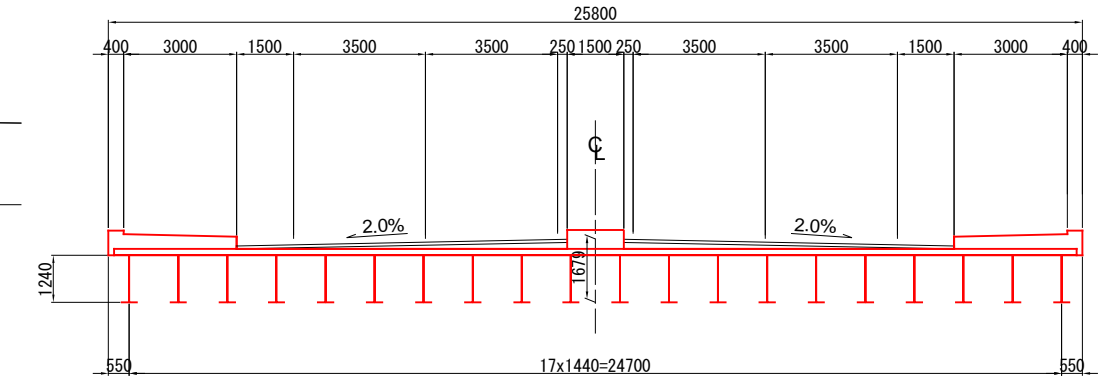
## GENERAL VIEW (NAMPULA No.301+60 BRIDGE)

SIDE VIEW S=1/800



GRADIENT	$i = -1.077\%$ $L = 497.932m$									
PROPOSED HEIGHT	435.308	435.357	435.468	435.562	435.581	435.590	435.552	435.489	435.449	435.277
GROUND HEIGHT	424.606	424.589	424.607	424.474	424.453	424.733	425.500	426.073	426.206	426.391
DISTANCE	20.000	5.500	14.500	20.000	9.500	10.500	20.000	11.500	8.500	20.000
STATION	NO.301 +60.000	A1 +65.500	+80.000	NO.302 +0.000	P1 +9.500	+20.000	+40.000	A2 +51.500	+60.000	+80.000
CURVE ELEMENT	R= 1000 CL= 650.717									

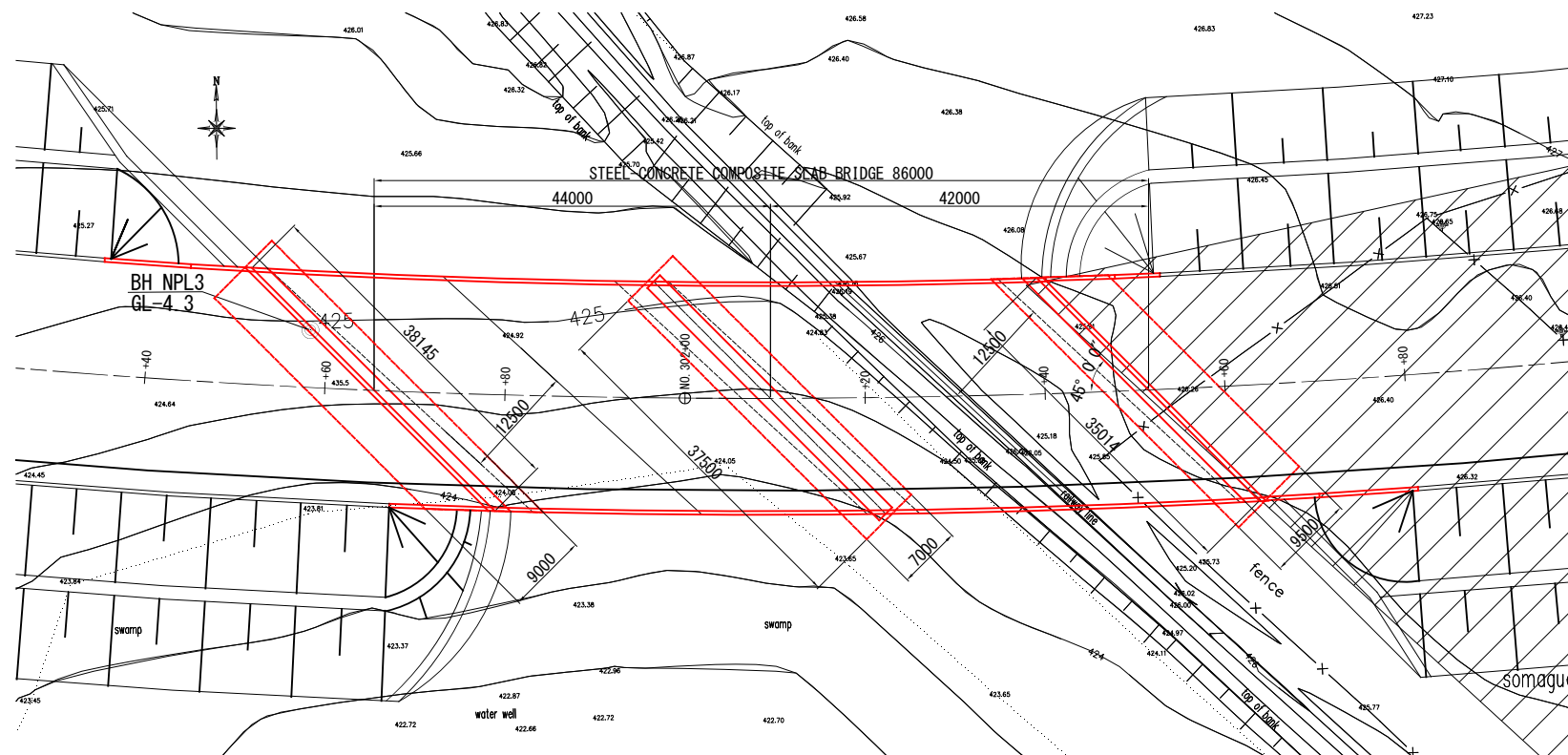
SUPERSTRUCTURE CROSS SECTION S=1/200



### DESIGN CONDITION

TOTAL BRIDGE LENGTH	86.000m
GIRDER LENGTH	43.900m+41.900m
SPAN	43.500m+41.500m
WIDTH	26.500m
ANGLE OF SKEW	45°00'00"
RADIUS OF CURVATURE	R=1000
LONGITUDINAL SLOPE	-1.077%
COMPRESSIVE STRENGTH	Floor Slab : $\sigma_{ck}$ =36N/mm <sup>2</sup>

PLAN VIEW S=1/800



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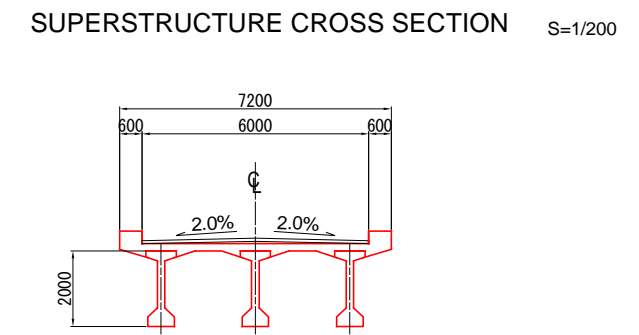
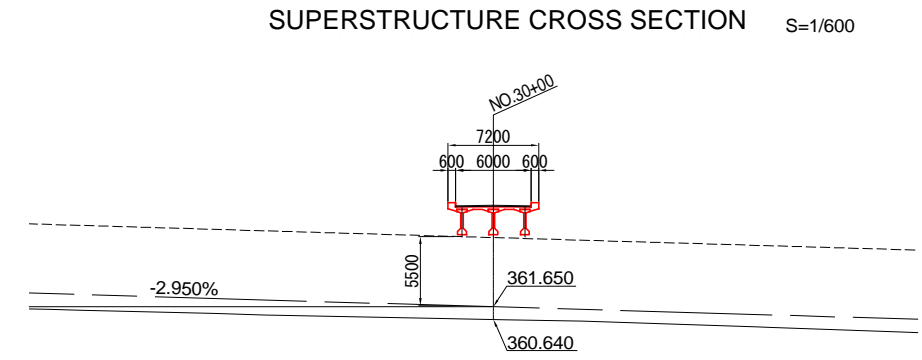
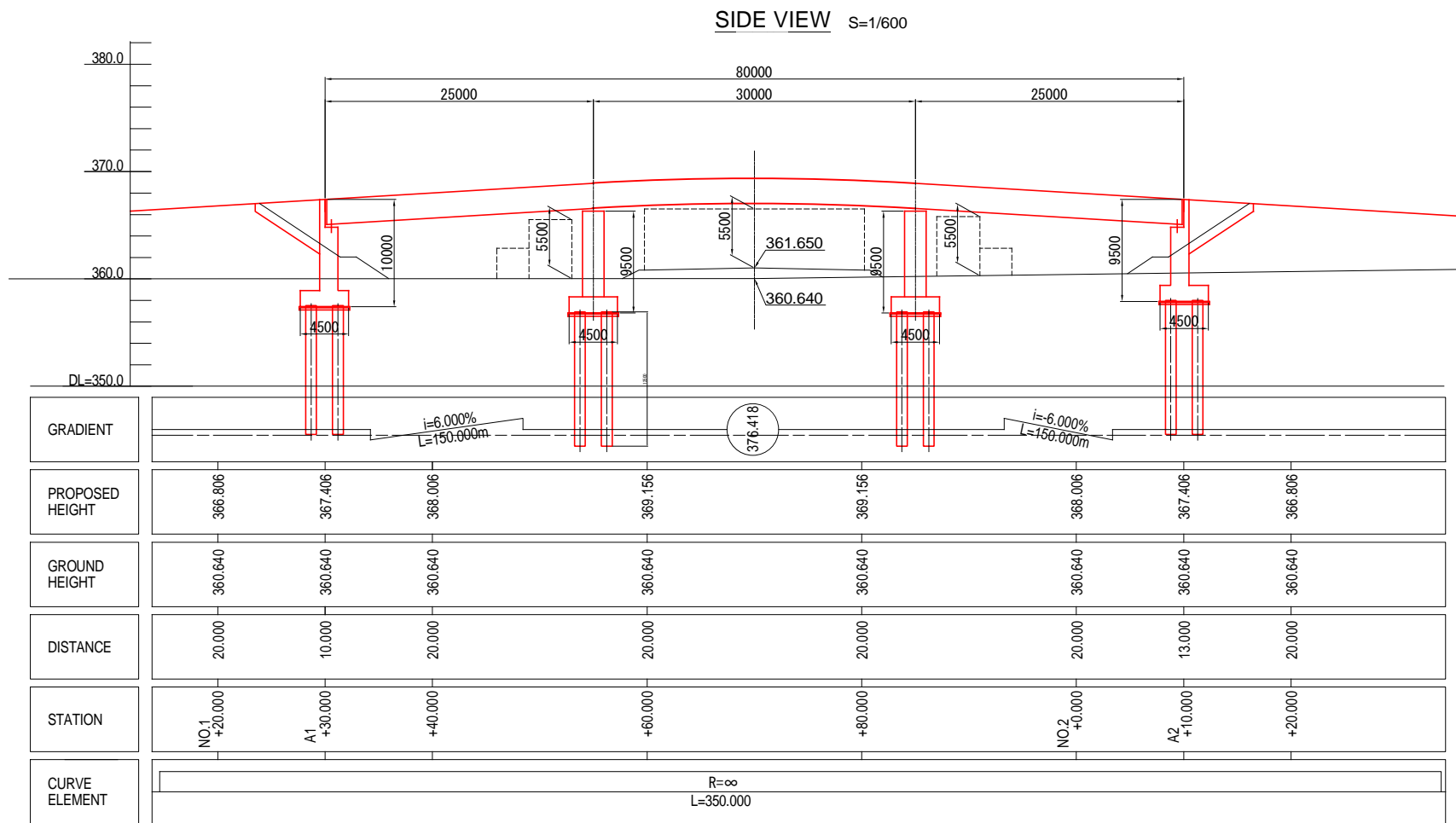
PREPARED BY	CHECKED BY	APPROVED BY
NAME		
SIGNATURE		
DATE		

PROJECT TITLE:  
**Preparatory Survey for Nacala Corridor  
Road Network Upgrading Project  
(Nampula Southern Bypass Road)**

DRAWING TITLE: **Completion Stage  
GENERAL VIEW (NAMPULA No.301+60 BRIDGE)**

SCALE	SHEET NO.	DRAWING NO.	REV. NO.
		C-49	

# GENERAL VIEW (COMPENSATION BRIDGE NAMPULA No.30+00)



### DESIGN CONDITION

TOTAL BRIDGE LENGTH	80.000m
GIRDER LENGTH	24.850+29.800+24.850m
SPAN	24.050+29.500+24.050m
WIDTH	7.200m
ANGLE OF SKEW	90°00'00"
RADIUS OF CURVATURE	$R = \infty$
LONGITUDINAL SLOPE	$\begin{matrix} 6.000\% & -6.000\% \end{matrix}$
COMPRESSIVE STRENGTH	Main Girder: $\sigma_{ck} = 40N/mm^2$
	Floor Slab: $\sigma_{ck} = 30N/mm^2$

