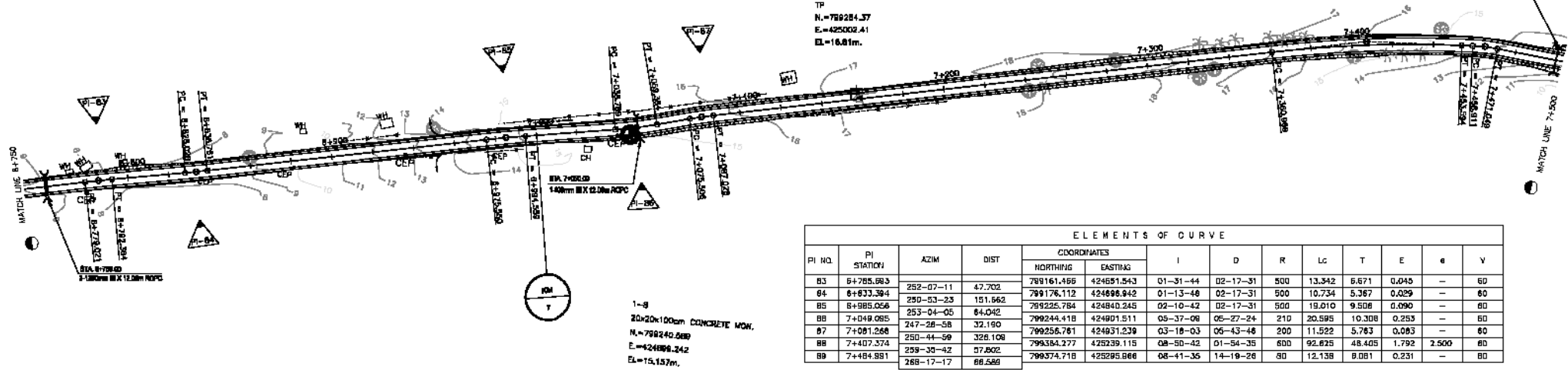
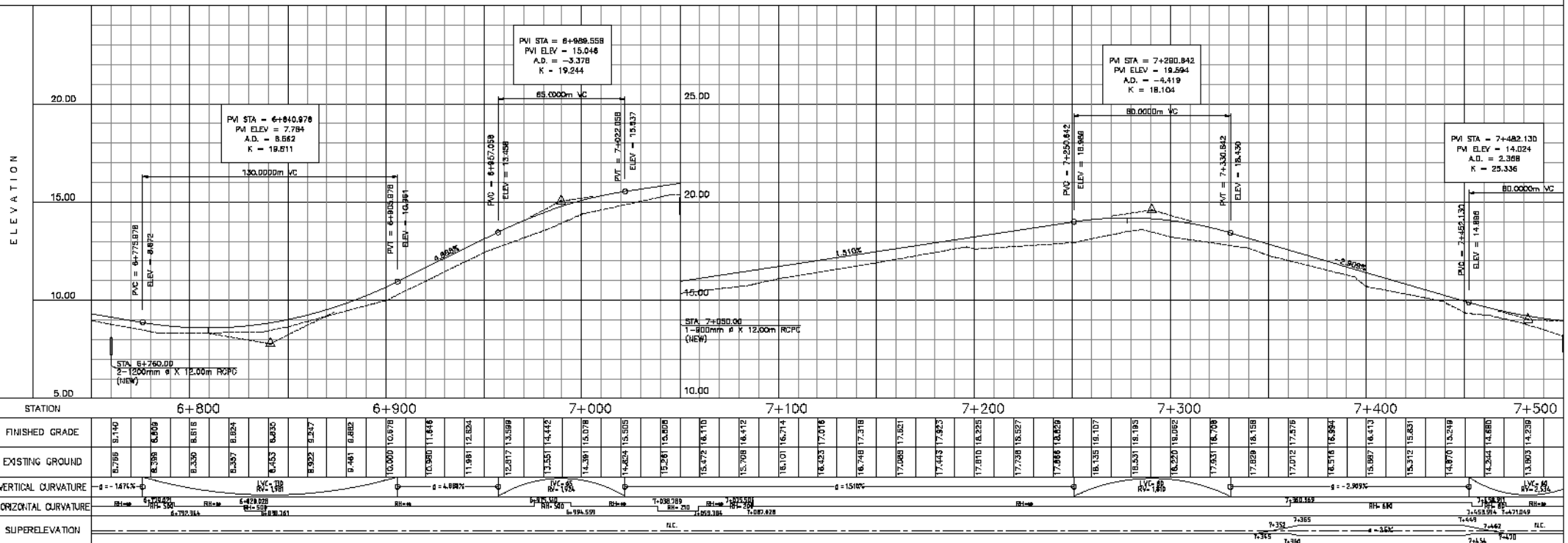


BRGY. IBD110EN
MUN. OF SULTAN KUDARAT



ELEMENTS OF CURVE													
PI NO.	PI STATION	AZIM	DIST	COORDINATES		I	D	R	Lc	T	E	e	V
				NORTHING	EASTING								
B3	6+785.693	282-07-11	47.702	799161.466	424651.543	01-31-44	02-17-31	500	13.342	6.671	0.045	-	60
B4	6+833.394	290-03-23	151.662	799176.112	424696.942	01-13-46	02-17-31	500	10.734	5.367	0.029	-	60
B5	6+885.056	253-04-05	64.042	799225.784	424840.245	02-10-42	02-17-31	500	19.010	9.508	0.090	-	60
B6	7+049.085	247-26-58	32.190	799244.418	424901.511	05-37-09	05-27-24	210	20.595	10.308	0.253	-	60
B7	7+081.268	250-44-59	326.106	799256.761	424931.239	03-18-03	05-43-46	200	11.522	5.763	0.083	-	60
B8	7+407.374	259-35-42	57.602	799384.277	425239.115	08-50-42	01-54-35	600	92.625	48.405	1.792	2.500	60
B9	7+484.981	268-17-17	86.580	799374.718	425295.666	06-41-35	14-19-26	60	12.138	6.081	0.231	-	60



STATION	6+800	6+900	7+000	7+100	7+200	7+300	7+400	7+500
FINISHED GRADE	8.140	8.009	8.616	8.824	8.930	9.247	9.461	9.682
EXISTING GROUND	8.785	8.399	8.350	8.387	8.453	8.922	9.461	10.000
VERTICAL CURVATURE	d = -1.674%		d = 4.997%		d = 15.00%		d = -2.93%	
HORIZONTAL CURVATURE	R1=10000		R1=10000		R1=10000		R1=10000	
SUPERELEVATION	0.000		0.000		0.000		0.000	

JICA JAPAN INTERNATIONAL COOPERATION AGENCY

CTI CTI Engineering International Co., Ltd.

DPWH DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS-ARMM

YEO Yachiyo Engineering Co., Ltd.

RECOMMENDED APPROVAL:

PROJECT DIRECTOR: _____ DATE: _____

REGIONAL DIRECTOR: _____ DATE: _____

DIRECTOR BDO: _____ DATE: _____

UNDERSECRETARY: _____ DATE: _____

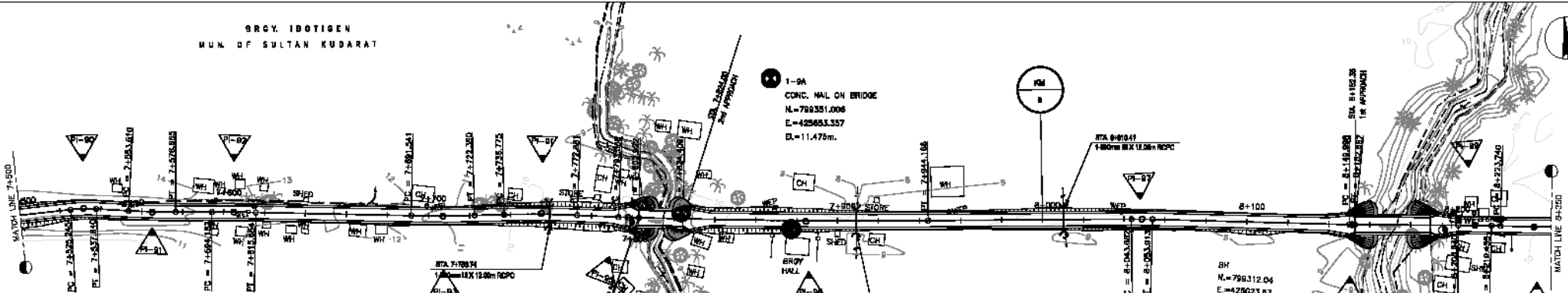
APPROVED: _____

PROJECT & LOCATION: THE STUDY ON INFRASTRUCTURE (ROAD NETWORK) DEVELOPMENT PLAN FOR THE AUTONOMOUS REGION IN MUSLIM MINDANAO (ARMM) IN THE REPUBLIC OF THE PHILIPPINES PROVINCE OF MAGUINDANAO

SHEET CONTENTS: PHARANG-SIMSIMAN PLAN AND PROFILE STA. 6+750 TO STA. 7+500

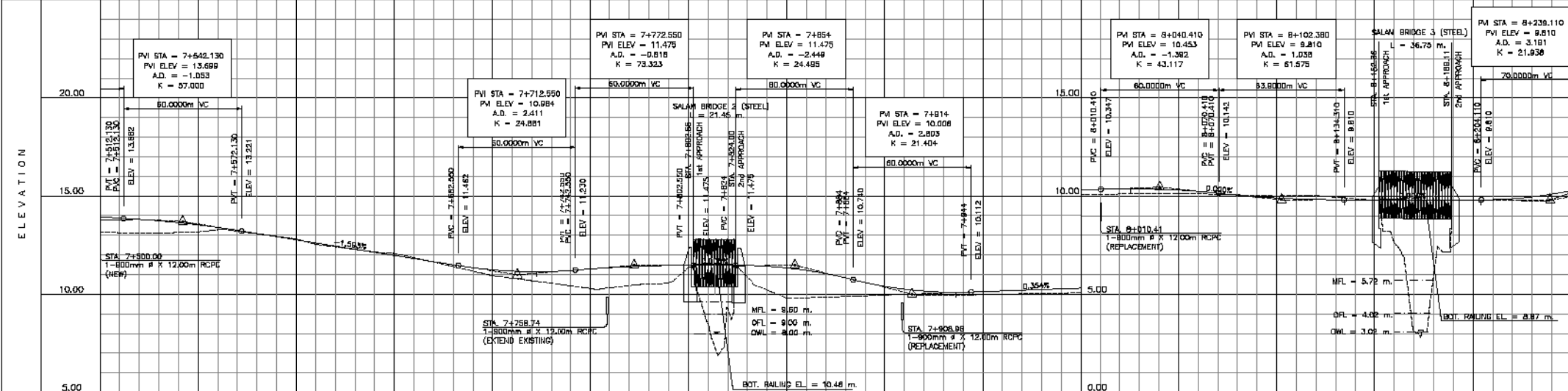
SET NO.

SHEET NO.



ELEMENTS OF CURVE

P. NO.	PI STATION	AZIM	DIST	COORDINATES		I	D	R	Lc	T	E	e	V
				NORTHING	EASTING								
90	7+531.557			799376.705	425362.525	09-37-19	15-16-44	75	12.595	6.312	0.285	-	60
91	7+585.091	277-54-36	53.535	799372.087	425395.789	03-19-00	02-51-53	400	23.155	11.591	0.168	-	60
92	7+604.823	274-35-36	39.839	799366.999	425435.480	01-13-58	01-08-45	1000	21.821	10.761	0.099	-	60
93	7+706.989	275-49-35	102.048	799356.537	425536.999	02-43-09	01-45-47	850	30.546	15.427	0.183	-	60
94	7+754.838	273-08-26	47.873	799355.542	425584.602	04-08-15	02-17-31	500	38.106	18.061	0.325	-	60
95	7+787.980	277-14-41	43.159	799350.488	425627.617	01-18-01	02-39-54	430	9.894	4.842	0.028	-	60
96	7+884.292	275-55-40	88.313	799341.000	425713.468	01-40-40	00-19-48	4390	119.766	59.887	0.438	-	60
97	8+048.798	274-15-06	184.514	799329.363	425877.530	01-57-14	03-48-11	300	10.231	5.116	0.044	-	60
98	8+151.343	276-12-16	102.546	799318.311	425978.475	01-15-45	09-23-34	122	2.898	1.344	0.007	-	60
99	8+211.333	274-56-29	59.890	799313.144	426039.243	01-19-30	01-38-13	700	16.209	8.103	0.047	-	60
100	8+240.130	278-16-04	28.798	799310.000	426067.969	02-20-51	01-25-57	600	32.777	16.391	0.185	-	60
		273-55-14	32.702										60



STATION	7+500	7+600	7+700	7+800	7+900	8+000	8+100	8+200
FINISHED GRADE	13.958	13.814	13.663	13.492	13.308	12.777	12.459	12.140
EXISTING GROUND	13.154	13.121	13.088	13.055	13.022	12.989	12.956	12.923
VERTICAL CURVATURE	VC=60 RV=2.50	VC=60 RV=2.50	VC=60 RV=2.50	VC=60 RV=2.50	VC=60 RV=2.50	VC=60 RV=2.50	VC=60 RV=2.50	VC=60 RV=2.50
HORIZONTAL CURVATURE	R=500	R=500	R=500	R=500	R=500	R=500	R=500	R=500
SUPERELEVATION	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

JAPAN INTERNATIONAL COOPERATION AGENCY
CTI Engineering International Co., Ltd.
Yeo Yachiyo Engineering Co., Ltd.

RECOMMENDING APPROVAL:

PROJECT DIRECTOR: _____ DATE: _____

REGIONAL DIRECTOR: _____ DATE: _____

DIRECTOR BID: _____ DATE: _____

UNDERSECRETARY: _____ DATE: _____

APPROVED:

SECRETARY: _____ DATE: _____

PROJECT & LOCATION: THE STUDY ON INFRASTRUCTURE (ROAD NETWORK) DEVELOPMENT PLAN FOR THE AUTONOMOUS REGION IN MUSLIM MINDANAO (ARMM) IN THE REPUBLIC OF THE PHILIPPINES PROVINCE OF MAGUIRINDAO

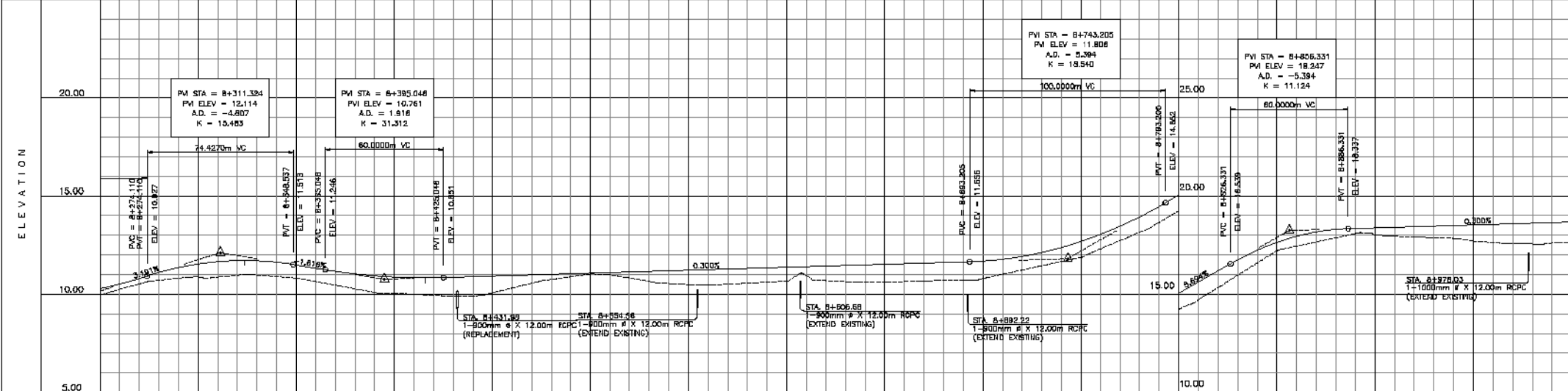
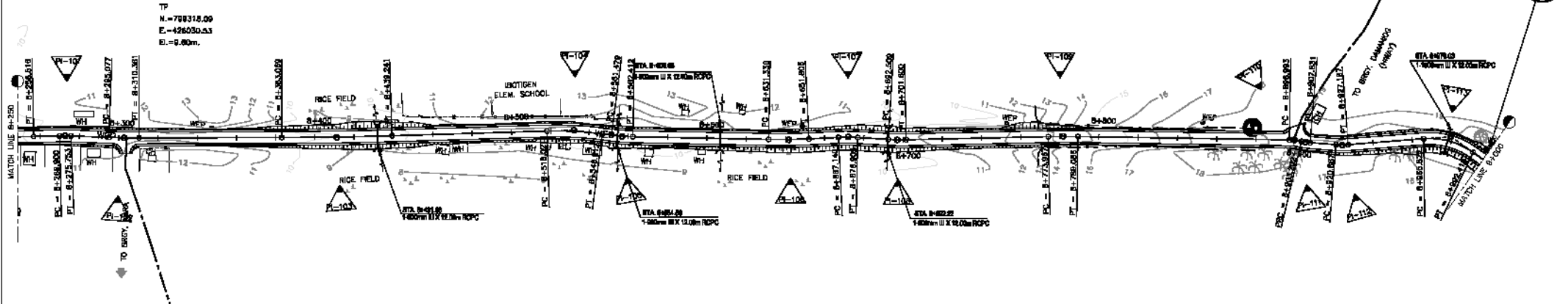
SHEET CONTENTS: PIHARING-SIMSIMAN PLAN AND PROFILE STA. 7+500 TO STA. 8+250

SET NO.

SHEET NO.

ELEMENTS OF CURVE													
PI NO.	PI STATION	AZIM	DIST	COORDINATES		I	D	R	Lc	T	E	e	V
				NORTHING	EASTING								
101	8+272.827			799307.784	428100.484	03-21-14	11-27-33	100	5.854	2.828	0.043	-	80
102	8+302.720	277-16-27	29.894	798303.878	428130.147	02-11-21	02-51-53	400	15.283	7.643	0.073	-	80
103	8+411.157	273-05-06	106.439	799294.367	428238.160	01-36-33	06-34-23	2000	56.171	28.087	0.197	-	80
104	8+532.447	273-28-33	121.294	799287.014	428359.231	09-09-02	06-21-58	180	26.791	4.426	0.577	-	80
105	8+556.851	292-36-25	24.565	798281.638	428385.200	08-15-52	11-27-33	100	10.834	3.472	0.150	-	80
106	8+641.575	278-22-34	84.635	788272.239	428467.312	03-54-34	03-48-11	300	20.470	0.239	0.175	-	40
107	8+872.027	278-40-58	25.040	799270.928	428497.744	06-12-59	12-43-57	90	9.765	4.887	0.133	-	40

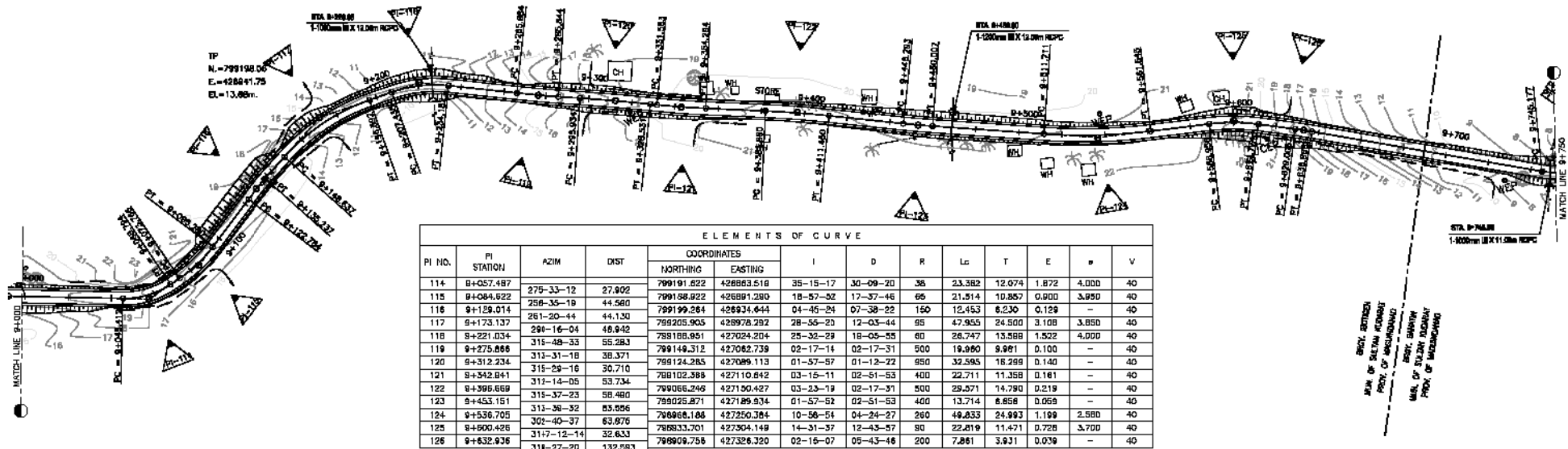
ELEMENTS OF CURVE													
PI NO.	PI STATION	AZIM	DIST	COORDINATES		I	D	R	Lc	T	E	e	V
				NORTHING	EASTING								
108	8+897.057			799267.148	428522.487	04-44-07	10-25-03	110	9.081	4.548	0.084	-	40
109	8+781.527	273-05-52	84.475	799281.332	428608.771	02-08-58	02-51-53	400	15.118	7.580	0.071	-	40
110	8+900.109	278-08-48	116.584	799248.703	428724.880	11-01-29	36-11-50	30	6.208	3.115	0.161	-	40
111	8+903.202	287-59-18	3.118	799247.742	428727.844	00-00-00	37-01-20	31	0.000	0.000	0.000	-	40
112	8+924.038	287-58-18	2.218	799243.866	428748.109	08-04-02	28-38-52	40	8.330	3.172	0.126	-	40
113	8+979.691	270-42-20	55.665	799243.210	428630.771	40-06-09	30-09-20	38	26.597	13.689	2.452	4.000	40



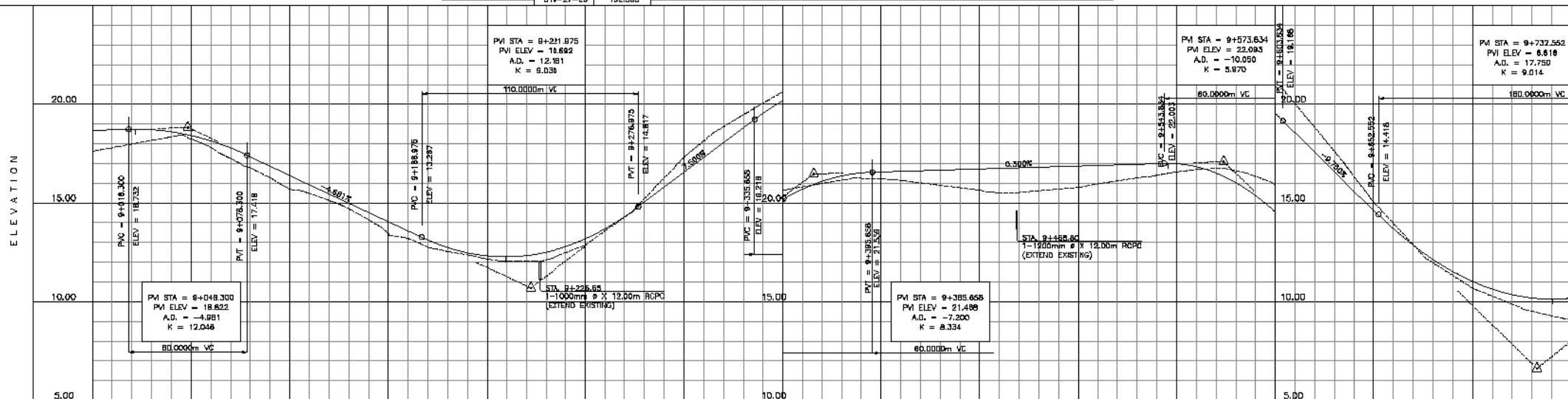
STATION	8+300	8+400	8+500	8+600	8+700	8+800	8+900	9+000
FINISHED GRADE	10.527	11.104	11.536	11.771	11.827	12.327	12.000	12.818
EXISTING GROUND	10.715	11.104	11.536	11.771	11.827	12.327	12.000	12.818
VERTICAL CURVATURE	[Graphical representation of vertical curves with labels like LVC 70, LVC 60, LVC 50]							
HORIZONTAL CURVATURE	[Graphical representation of horizontal curves with labels like R=100, R=150, R=200]							
SUPERELEVATION	[Graphical representation of super-elevation with labels like 0.5%, 0.4%, 0.3%]							

RECOMMENDING APPROVAL:	APPROVED:
PROJECT DIRECTOR	SECRETARY
REGIONAL DIRECTOR	
DIRECTOR BID	
UNDERSECRETARY	

PROJECT & LOCATION : THE STUDY ON INFRASTRUCTURE (ROAD NETWORK) DEVELOPMENT PLAN FOR THE AUTONOMOUS REGION IN MUSLIM MINDANAO (ARMM) IN THE REPUBLIC OF THE PHILIPPINES PROVINCE OF MAGUIRINDAO
 SHEET CONTENTS : PINARING-SIMSAN PLAN AND PROFILE STA. 8+250 TO STA. 9+000
 SHEET NO. :
 SHEET ID. : PS-14



PI NO.	PI STATION	AZIM	DNST	COORDINATES		I	D	R	Lc	T	E	S	V
				NORTHING	EASTING								
114	9+057.487	275-33-12	27.902	799191.622	426863.518	35-15-17	30-09-20	38	23.382	12.074	1.872	4.000	40
115	9+084.622	258-35-19	44.560	799156.622	426881.280	18-57-32	17-37-46	66	21.514	10.857	0.900	3.950	40
116	9+128.014	261-20-44	44.130	799199.264	426934.644	04-46-24	07-38-22	150	12.453	6.230	0.129	-	40
117	9+173.034	290-16-04	49.942	799205.905	426978.292	28-56-20	12-03-44	95	47.955	24.600	3.108	3.850	40
118	9+221.034	315-48-33	55.283	799168.951	427024.204	25-32-29	18-05-55	60	26.747	13.998	1.522	4.000	40
119	9+275.666	311-31-18	38.371	799148.312	427062.739	02-17-14	02-17-31	500	19.980	9.991	0.100	-	40
120	9+312.234	315-29-16	30.710	799124.285	427089.113	01-57-57	01-12-22	950	32.595	16.299	0.140	-	40
121	9+342.841	315-14-05	53.734	799102.388	427110.642	03-15-11	02-51-53	400	22.711	11.358	0.161	-	40
122	9+396.669	315-37-23	58.480	799066.246	427150.427	03-23-19	02-17-31	500	29.571	14.790	0.219	-	40
123	9+453.151	311-38-32	83.586	799025.871	427189.934	01-57-52	02-51-53	400	13.714	6.856	0.059	-	40
124	9+536.705	302-40-37	63.676	798968.188	427250.384	10-58-54	04-24-27	260	49.833	24.993	1.199	2.580	40
125	9+600.426	317-12-14	32.633	798933.701	427304.149	14-31-37	12-43-57	80	22.819	11.471	0.728	3.700	40
126	9+632.936	317-27-20	132.583	798908.758	427326.320	02-16-07	05-43-48	200	7.861	3.931	0.039	-	40



STATION	9+000	9+100	9+200	9+300	9+400	9+500	9+600	9+700
FINISHED GRADE	17.831	18.078	17.988	18.736	18.562	17.787	18.136	18.785
EXISTING GROUND	16.564	16.652	15.705	16.462	15.127	15.466	14.530	14.530
VERTICAL CURVATURE	g = 4.300%	LVC=60 R=126	g = -4.58%	LVC=110 R=71	g = 7.50%	LVC=60 R=126	g = 4.30%	LVC=110 R=71
HORIZONTAL CURVATURE	R1=1445.27	R1=1445.27	R1=1445.27	R1=1445.27	R1=1445.27	R1=1445.27	R1=1445.27	R1=1445.27
SUPERELEVATION	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%

DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS-ARMM
REPUBLIC OF THE PHILIPPINES

RECOMMENDING APPROVAL:

PROJECT DIRECTOR _____ DATE: _____

REGIONAL DIRECTOR _____ DATE: _____

DIRECTOR BID _____ DATE: _____

UNDERSecretARY _____ DATE: _____

APPROVED:

SECRETARY _____ DATE: _____

PROJECT & LOCATION :

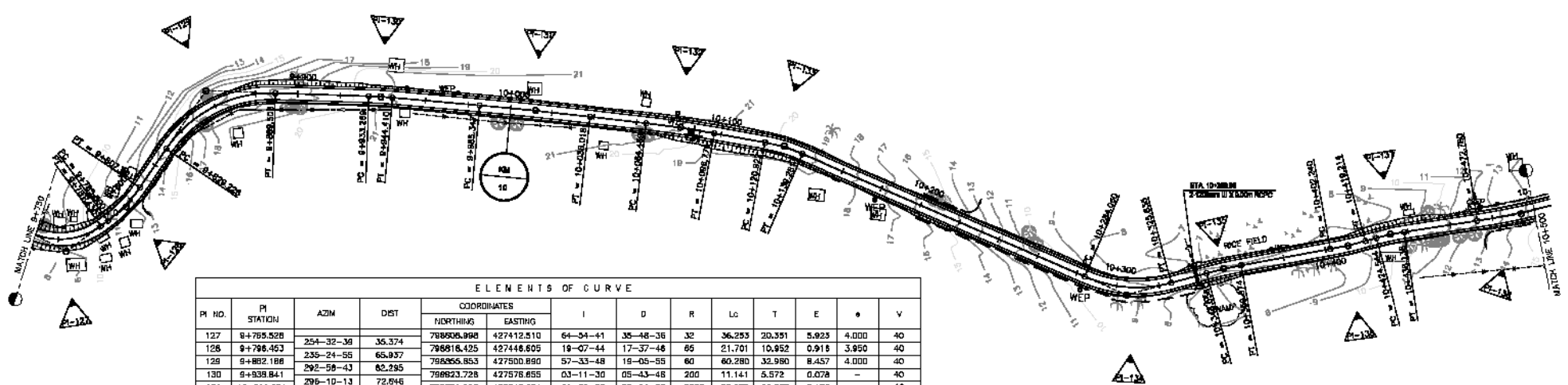
THE STUDY ON INFRASTRUCTURE (ROAD NETWORK) DEVELOPMENT PLAN FOR THE AUTONOMOUS REGION IN MUSLIM MINDANAO (ARMM) IN THE REPUBLIC OF THE PHILIPPINES PROVINCE OF MAGUIRANAO

SHEET CONTENTS :

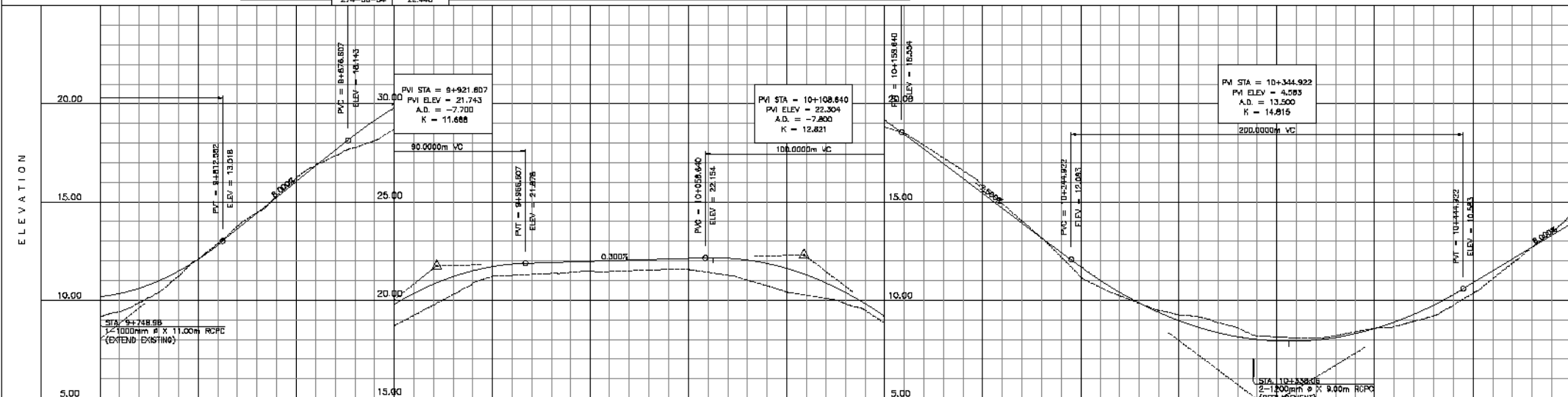
PIVARING-SIMSAN PLAN AND PROFILE STA. 9+000 TO STA. 9+700

SHEET NO.

PS-15



PI NO.	PI STATION	AZIM	DIST	COORDINATES				I	D	R	Lc	T	E	* V
				NORTHINGS	EASTING									
127	9+795.528	254-32-38	35.374	798506.998	427412.510	64-04-41	38-46-36	32	36.253	20.351	5.923	4.000	40	
126	9+796.463	235-24-55	65.957	798616.425	427446.605	19-07-44	17-37-46	65	21.701	10.952	0.915	3.950	40	
129	9+882.186	292-58-43	82.295	798855.853	427500.890	57-33-48	19-05-55	60	40.280	32.980	8.457	4.000	40	
130	9+939.841	299-10-13	72.846	798923.728	427576.655	03-11-30	05-43-48	200	11.141	5.572	0.678	-	40	
131	10+011.684	297-40-46	68.948	798781.599	427842.034	01-30-32	00-34-23	2000	52.670	26.337	0.173	-	40	
132	10+080.629	301-22-54	49.524	798758.570	427703.092	03-42-09	02-17-31	500	32.310	16.151	0.251	-	40	
133	10+130.142	314-31-47	175.714	798733.782	427745.371	13-08-54	14-19-26	80	18.358	9.220	0.530	3.800	40	
134	10+305.775	275-55-30	47.251	798610.557	427870.635	38-38-17	18-26-57	62	41.774	21.715	3.895	3.800	40	
135	10+351.371	280-41-07	59.371	798605.679	427817.634	04-45-37	05-43-46	200	15.617	8.313	0.173	-	40	
136	10+410.732	275-49-21	20.626	798594.671	427975.675	04-51-46	05-43-46	200	16.974	8.492	0.190	-	40	
137	10+431.348	282-18-47	63.886	798582.579	427996.485	06-29-98	09-32-57	120	13.635	6.825	0.194	-	40	
138	10+495.220	274-58-34	22.440	798578.954	428058.812	07-20-13	03-16-27	350	44.818	22.440	0.719	-	40	



STATION	9+800	9+900	10+000	10+100	10+200	10+300	10+400	10+500	
FINISHED GRADE	8.328 10.346	10.417 11.002	12.081 12.101	13.767 13.674	15.285 15.214	16.885 16.674	17.768 18.408	18.688 19.780	20.408 20.626
EXISTING GROUND	8.328 10.346	10.417 11.002	12.081 12.101	13.767 13.674	15.285 15.214	16.885 16.674	17.768 18.408	18.688 19.780	20.408 20.626
VERTICAL CURVATURE	LVC = 100 RVC = 100		LVC = 100 RVC = 100		LVC = 100 RVC = 100		LVC = 100 RVC = 100		LVC = 100 RVC = 100
HORIZONTAL CURVATURE	R1 = 32 R2 = 55		R1 = 64 R2 = 55		R1 = 504 R2 = 504		R1 = 504 R2 = 504		R1 = 504 R2 = 504
SUPERELEVATION	4.8%		4.8%		4.8%		4.8%		4.8%

DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS (ARMM)
REPUBLIC OF THE PHILIPPINES

RECOMMENDING APPROVAL:

PROJECT DIRECTOR _____ DATE: _____

REGIONAL DIRECTOR _____ DATE: _____

DIRECTOR BUD _____ DATE: _____

UNDERSECRETARY _____ DATE: _____

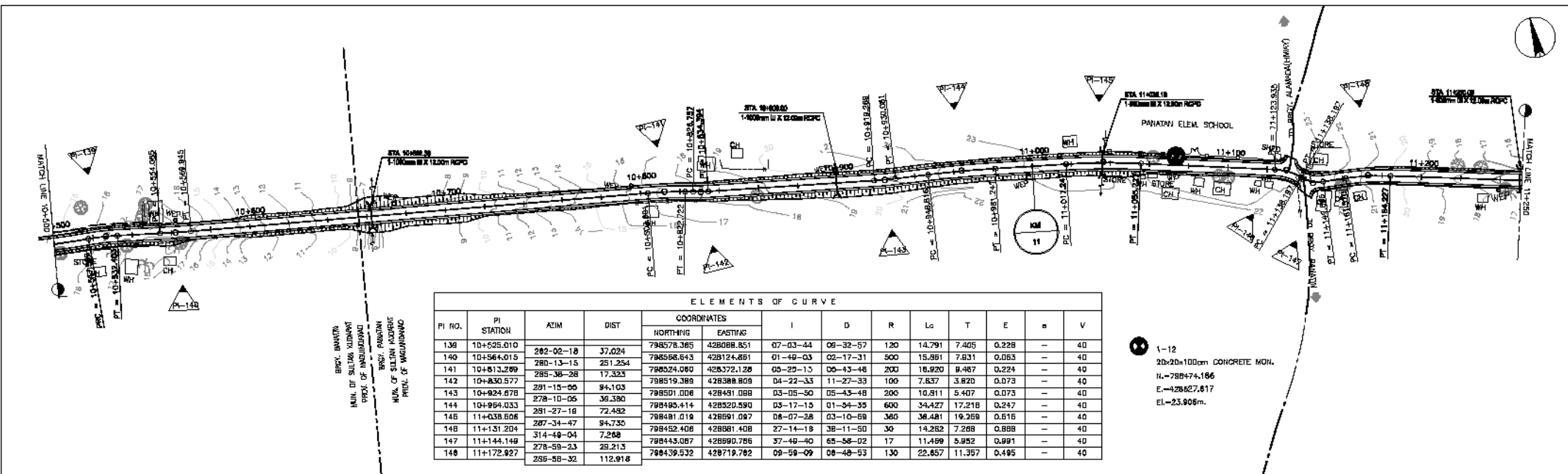
APPROVED:

SECRETARY _____ DATE: _____

PROJECT & LOCATION :
THE STUDY ON INFRASTRUCTURE (ROAD NETWORK) DEVELOPMENT PLAN FOR THE AUTONOMOUS REGION IN MUSLIM MINDANAO (ARMM) IN THE REPUBLIC OF THE PHILIPPINES PROVINCE OF MAGUIPINDANAO

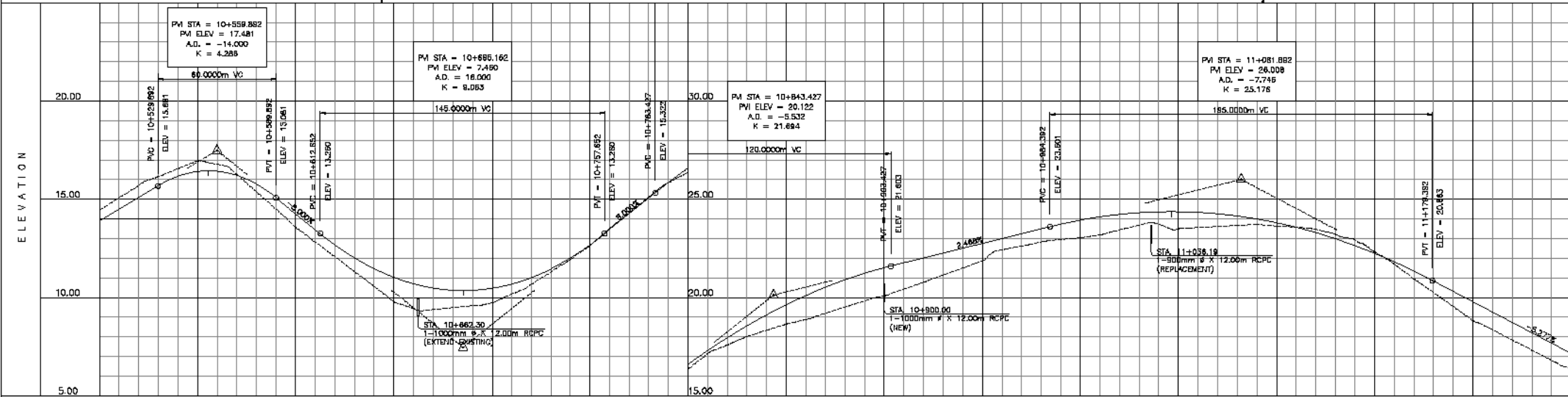
SHEET CONTENTS :
BIMARANING-SIMSIMAN PLAN AND PROFILE STA. 9+750 TO STA. 10+500

SHEET NO. 16 SET NO. PS-16



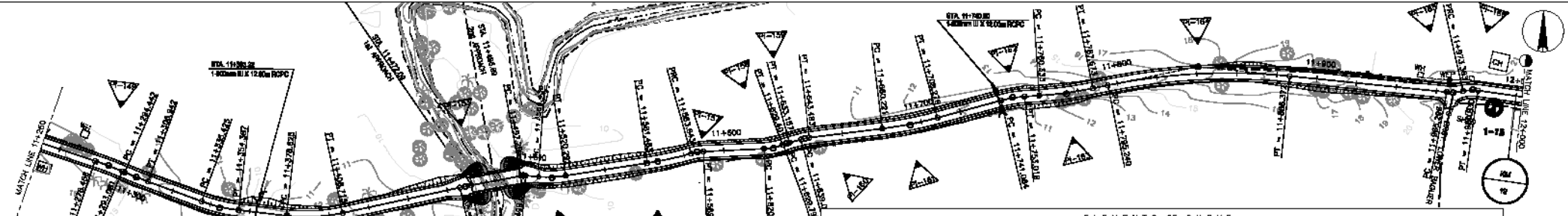
PI NO.	PI STATION	AZIM	DIST	COORDINATES		I	D	R	Lc	T	E	a	V
				NORTHING	EASTING								
138	10+525.010	282-02-18	37.024	798578.365	428088.851	07-03-44	06-32-57	120	14.791	7.405	0.228	-	40
140	10+564.015	280-13-15	251.254	798566.643	428124.861	01-49-03	02-17-31	500	15.951	7.631	0.053	-	40
141	10+613.289	285-38-28	17.333	798524.060	428372.128	05-25-13	05-43-46	200	16.920	6.467	0.224	-	40
142	10+630.577	285-38-28	17.333	798519.389	428388.809	04-22-33	11-27-33	100	7.837	3.820	0.073	-	40
143	10+924.678	291-15-05	94.103	798501.006	428481.088	03-05-50	05-43-48	200	10.811	5.407	0.073	-	40
144	10+964.033	278-10-05	39.580	798495.414	428520.590	03-17-15	01-54-35	600	34.427	17.218	0.247	-	40
145	11+038.606	291-27-18	72.482	798481.018	428591.097	06-07-28	03-10-59	360	36.481	19.268	0.516	-	40
148	11+131.204	287-34-47	94.735	798452.408	428591.408	27-14-18	38-11-50	30	14.262	7.268	0.888	-	40
147	11+144.148	314-49-04	7.268	798443.087	428590.785	37-49-40	65-58-02	17	11.499	5.952	0.891	-	40
148	11+172.927	285-58-32	112.918	798439.532	428719.782	09-59-09	08-49-53	130	22.657	11.357	0.495	-	40

1-12
 20x20x100mm CONCRETE MDR.
 N.-798474.166
 E.-428627.617
 EL.-23.906m

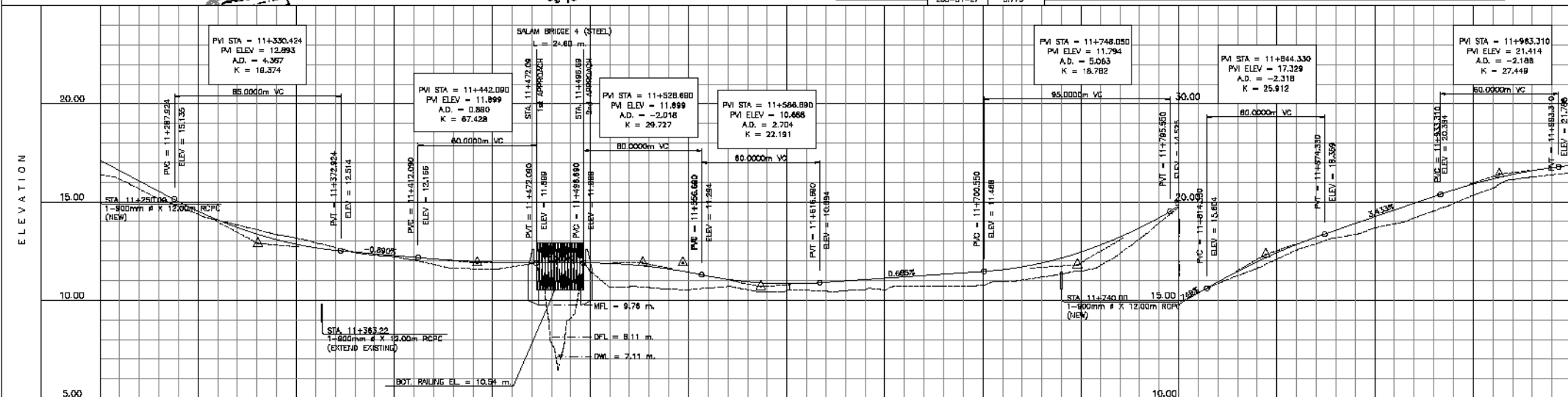


STATION	10+500	10+600	10+700	10+800	10+900	11+000	11+100	11+200
FINISHED GRADE	13.887	15.067	16.166	16.305	15.798	14.372	12.762	11.485
EXISTING GROUND	13.441	13.718	13.887	13.959	13.948	13.848	13.608	13.248
VERTICAL CURVATURE	g = -0.00%		LVC = 50 RV = 98		g = -0.00%		LVC = 105 RV = 215	
HORIZONTAL CURVATURE	R = 1500		R = 1500		R = 1500		R = 1500	
SUPERELEVATION	N.C.							

	RECOMMENDING APPROVAL:	APPROVED:	PROJECT & LOCATION:	SHEET CONTENTS:	SET NO.	SHEET NO.
	PROJECT DIRECTOR _____ REGIONAL DIRECTOR _____ DIRECTOR BUD _____ UNDERSECRETARY _____	DATE _____ DATE _____ DATE _____ DATE _____	SECRETARY _____ DATE _____	THE STUDY ON INFRASTRUCTURE (ROAD NETWORK) DEVELOPMENT PLAN FOR THE AUTONOMOUS REGION IN MUSLIM MINDANAO (ARMM) IN THE REPUBLIC OF THE PHILIPPINES PROVINCE OF MAGUINDANAO	PINARIC-SIMSHAN PLAN AND PROFILE STA. 10+500 TO STA. 11+250	



PI NO.	PI STATION	AZIM	DIST	COORDINATES		I	D	R	L _s	T	E	e	V
				NORTHING	EASTING								
				149	11+285.786								
150	10+300.663	288-48-23	44.260	798401.069	428841.844	02-51-53	04-35-01	250	12.500	6.251	0.078	-	40
151	11+344.851	375-10-34	47.838	798388.837	428883.554	13-34-50	14-19-28	80	16.892	8.526	0.565	3.900	40
152	11+392.789	256-14-31	76.766	789400.749	428931.299	18-59-03	13-28-53	65	28.088	14.174	1.174	3.750	40
153	11+499.309	297-53-19	29.177	788408.261	428905.851	01-38-46	05-43-46	200	5.748	2.874	0.021	-	40
154	11+499.468	272-97-36	14.923	788408.261	428946.292	15-04-17	127-18-28	9	2.367	1.191	0.078	-	40
155	11+513.365	258-43-43	59.234	788416.980	428946.292	13-13-54	19-05-55	80	13.856	6.959	0.402	-	40
156	11+572.567	292-40-08	11.104	788416.980	429107.277	07-03-37	05-21-08	100	22.181	11.094	0.342	-	40
157	11+583.843	292-40-08	11.104	788416.980	429116.177	00-00-03	42-38-25	27	0.000	0.000	0.000	-	40
158	11+624.773	292-40-08	11.104	788423.349	429156.065	17-49-32	38-11-50	30	9.333	4.705	0.367	-	60
159	11+631.348	248-03-32	6.781	788426.182	429156.385	04-48-47	28-36-82	40	3.360	1.691	0.035	-	60
160	11+641.851	292-52-18	6.775	788429.041	429174.797	08-32-87	38-11-60	30	4.472	2.240	0.064	-	60
161	11+694.272	281-24-46	53.028	788438.978	428227.161	08-02-14	05-43-46	200	28.056	14.051	0.483	-	60
162	11+747.071	263-22-32	62.845	788452.098	428277.798	11-23-52	19-05-55	80	11.836	5.888	0.265	-	60
163	11+774.024	284-46-24	26.983	788454.289	428304.678	07-49-57	05-43-46	200	27.341	13.692	0.488	-	60
164	11+841.159	256-58-27	67.178	788468.737	428370.118	17-24-19	03-46-11	300	81.132	45.920	3.484	-	60
165	11+898.265	274-20-45	126.913	788456.868	428496.660	18-28-18	45-50-12	25	8.087	4.088	0.329	-	60
166	11+973.363	256-51-27	3.775	789450.942	492302.406	00-00-00	05-49-49	21	0.000	0.000	0.000	-	60



STATION	11+300	11+400	11+500	11+600	11+700	11+800	11+900	12+000
FINISHED GRADE	16.140	15.554	14.536	13.708	13.087	12.673	12.431	12.274
EXISTING GROUND	16.140	15.554	14.536	13.708	13.087	12.673	12.431	12.274
VERTICAL CURVATURE	g = 5.277%							
HORIZONTAL CURVATURE	R ₁ = 112.810m, R ₂ = 112.810m, R ₃ = 112.810m, R ₄ = 112.810m, R ₅ = 112.810m, R ₆ = 112.810m, R ₇ = 112.810m, R ₈ = 112.810m							
SUPERELEVATION	N/C							

RECOMMENDING APPROVAL:

PROJECT DIRECTOR: _____ DATE: _____

REGIONAL DIRECTOR: _____ DATE: _____

DIRECTOR B/D: _____ DATE: _____

UNDERSecretARY: _____ DATE: _____

APPROVED:

SECRETARY: _____ DATE: _____

PROJECT & LOCATION:

THE STUDY ON INFRASTRUCTURE (ROAD NETWORK) DEVELOPMENT PLAN FOR THE AUTONOMOUS REGION IN MUSLIM MINDANAO (ARMN) IN THE REPUBLIC OF THE PHILIPPINES PROVINCE OF MAGUIRINDANAO

SHEET CONTENTS:

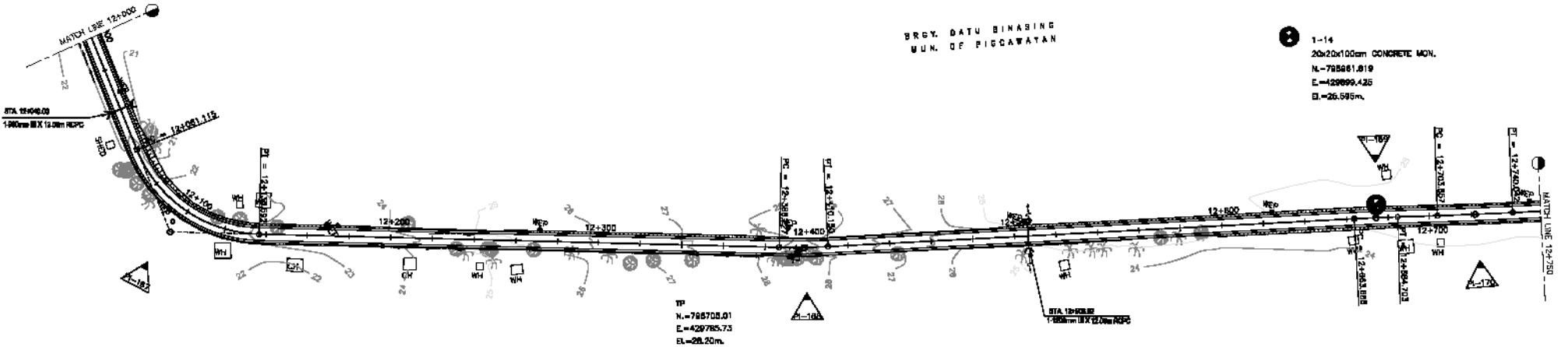
PIHARING-SIMSILAN PLAN AND PROFILE STA. 11+250 TO STA. 12+000

SHEET NO. 18

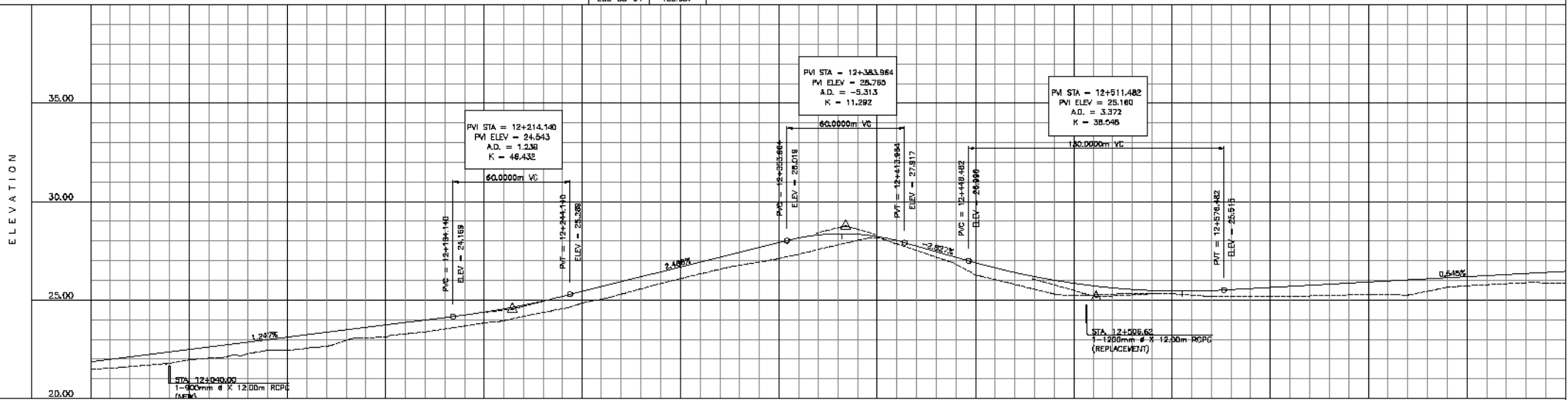
SHEET NO. PS-18

BRGY. DATU BINASING
MUN. OF PICAWATAN

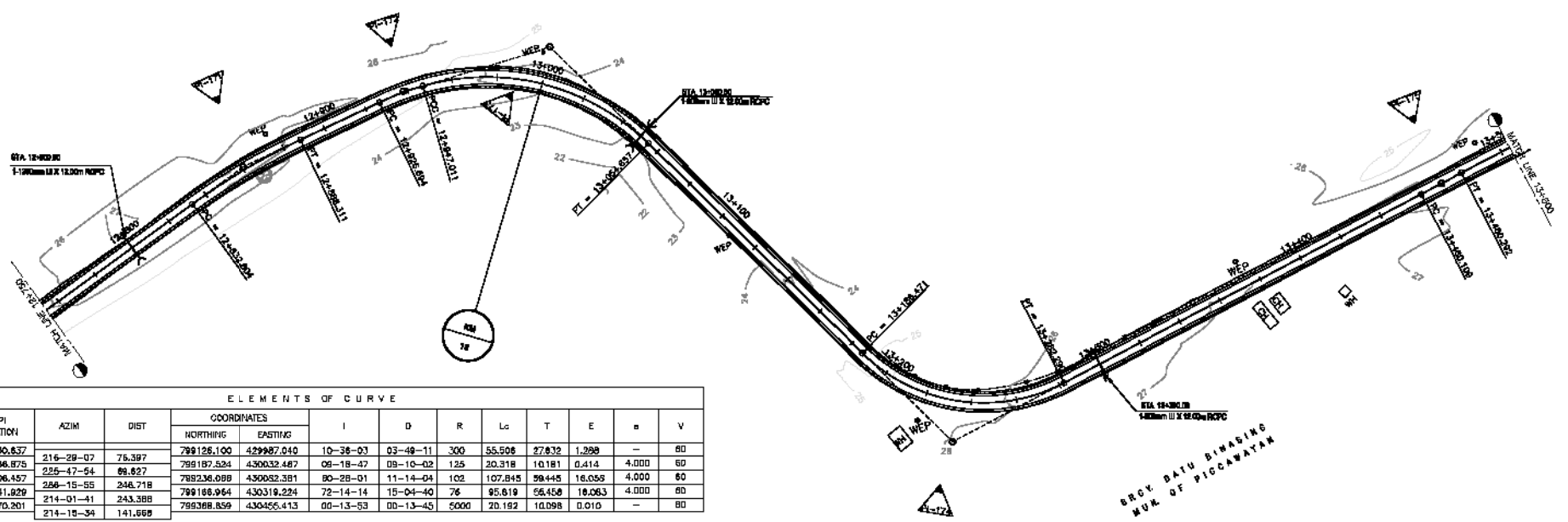
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N=798881.819
E=429899.426
EL.=26.095m



PI NO.	PI STATION	AZIM	DIST	COORDINATES		I	D	R	Lc	T	E	e	V
				NORTHING	EASTING								
				167	12+103.756								
168	12+108.444	205-43-01	275.784	794710.268	429785.212	04-28-25	03-49-11	300	23.424	11.718	0.229	-	60
169	12+147.198	208-55-18	47.755	794858.746	429804.573	01-12-15	01-09-40	1000	21.017	10.508	0.095	-	60
170	12+172.890	205-53-04	138.687	799001.326	429925.495	07-02-12	00-34-23	2000	36.185	18.094	0.082	-	60

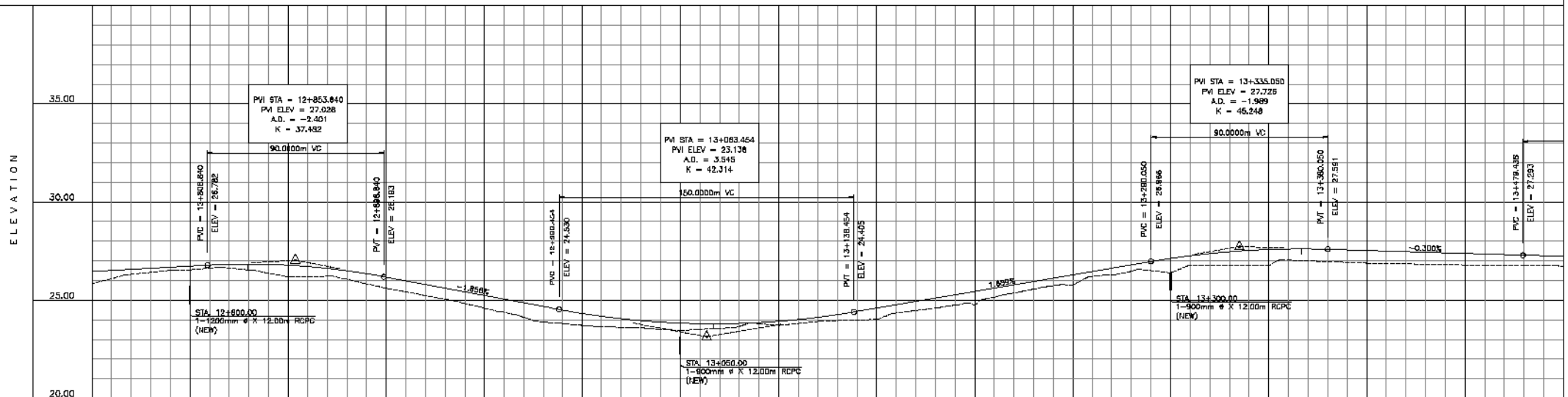


STATION	12+000	12+100	12+200	12+300	12+400	12+500	12+600	12+700	
FINISHED GRADE	21.560	21.872	21.633	22.131	21.781	22.371	22.020	22.620	
EXISTING GROUND	21.781	22.371	22.020	22.620	22.270	22.870	22.520	23.120	
VERTICAL CURVATURE	g = 1.843%								
HORIZONTAL CURVATURE	RH=16								
SUPERELEVATION	e = 4.4%								



ELEMENTS OF CURVE

PI NO.	PI STATION	AZIM	DIST	COORDINATES		I	D	R	L _s	T	E	α	V
				NORTHING	EASTING								
171	12+860.637	216-28-07	76.397	799126.100	429987.040	10-36-03	03-49-11	300	55.506	27.832	1.298	-	60
172	12+936.875	255-47-54	69.627	799187.524	430032.487	08-18-47	08-10-02	125	20.318	10.181	0.414	4.000	60
173	13+006.457	266-15-55	236.218	799236.089	430082.381	00-28-01	11-14-04	102	107.845	96.445	16.055	4.000	60
174	13+241.829	214-01-41	243.388	799186.964	430319.224	72-14-14	15-04-40	76	95.819	56.458	16.063	4.000	60
175	13+470.201	214-18-34	141.659	799388.859	430456.413	00-13-53	00-13-45	5000	20.192	10.098	0.010	-	60



STATION	12+800	12+900	13+000	13+100	13+200	13+300	13+400	13+500
FINISHED GRADE	26.103	26.516	26.824	27.131	27.438	27.745	28.052	28.359
EXISTING GROUND	25.421	26.025	26.629	27.233	27.837	28.441	29.045	29.649
VERTICAL CURVATURE	g = 0.545%		g = -1.850%		g = 1.6225%		g = 0.300%	
HORIZONTAL CURVATURE	R1=300		R1=102		R1=76		R1=500	
SUPERELEVATION	H.C.		H.C.		H.C.		H.C.	

JAPAN INTERNATIONAL COOPERATION AGENCY
CTI Engineering International Co., Ltd.
YEO Yachiyo Engineering Co., Ltd.
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS (ARMM)
REPUBLIC OF THE PHILIPPINES

RECOMMENDED APPROVAL:
 PROJECT DIRECTOR _____ DATE: _____
 REGIONAL DIRECTOR _____ DATE: _____
 DIRECTOR BID _____ DATE: _____
 UNDERSECRETARY _____ DATE: _____

APPROVED:
 SECRETARY _____ DATE: _____

PROJECT & LOCATION:
 THE STUDY ON INFRASTRUCTURE (ROAD NETWORK) DEVELOPMENT PLAN FOR THE AUTONOMOUS REGION IN MUSLIM MINDANAO (ARMM) IN THE REPUBLIC OF THE PHILIPPINES PROVINCE OF MAGUIPINDANAO

SHEET CONTENTS:
 PINARING-SIMSIPAN PLAN AND PROFILE STA. 12+750 TO STA. 13+500

SHEET NO. 10 **SHEET ID.** PS-20