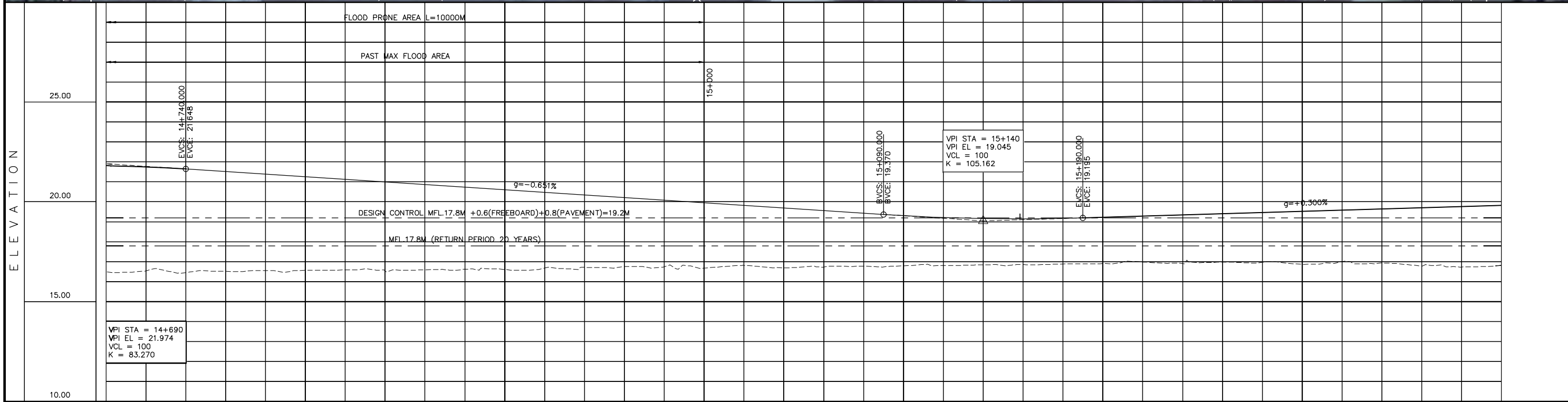
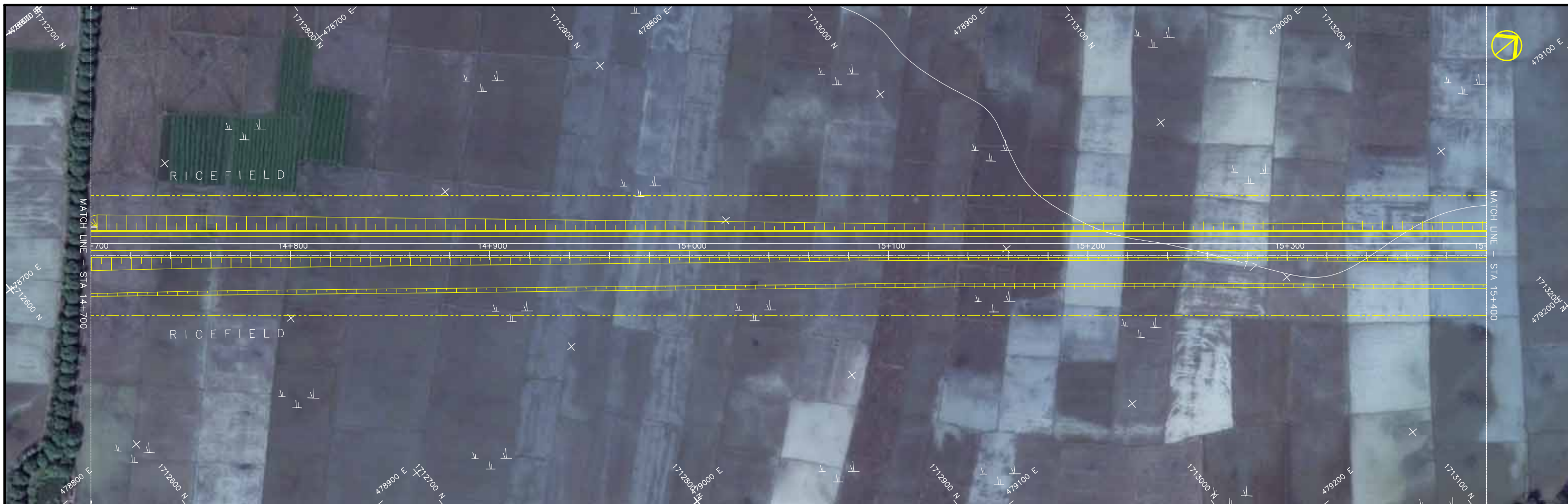


STATION	14+000	14+100	14+200	14+300	14+400	14+500	14+600	14+700
FINISHED GRADE ELEVATION	20.369	20.329	20.269	20.209	20.149	20.089	20.029	19.969
EXISTING GROUND ELEVATION	15.865	15.912	15.923	15.956	16.032	16.036	16.024	15.994
VERTICAL CURVATURE	-0.300% L=490.000		0.000% L=3126.287		+0.550% L=330.000		0.000%	
HORIZONTAL CURVATURE	R=3500.000 L=3126.287				R=∞			

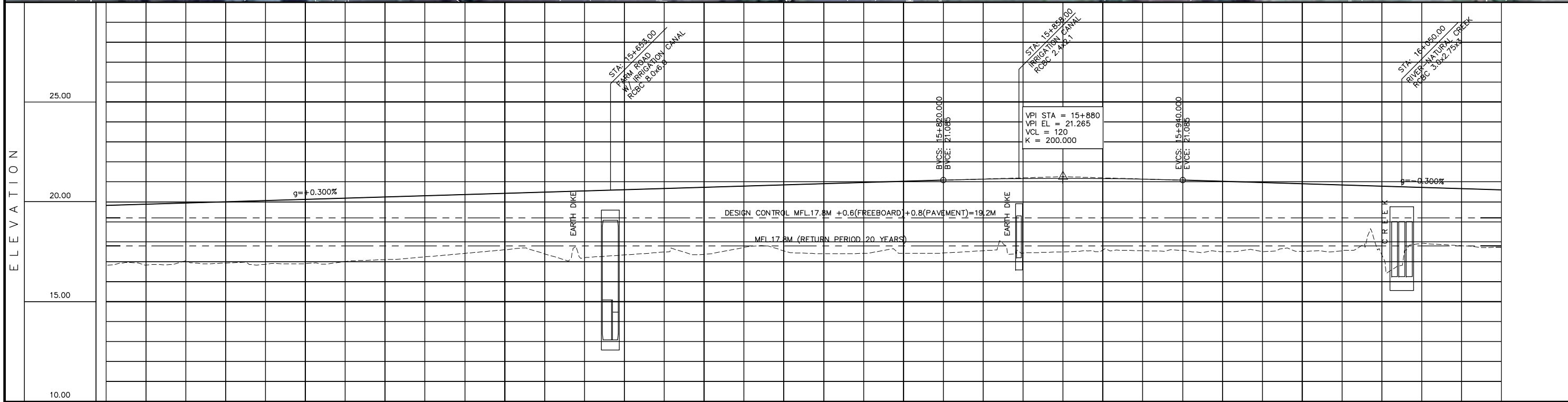
PROJECT TITLE	SCALE	SHEET CONTENT	DRAWING NO.
Preparatory survey for expressway project in Mega Manila Region CLLEX ( TARLAC - CABANATUAN )	V = 200 H = 2000	PACKAGE 2 - INTERIM 2 LANES PLAN AND PROFILE STA 14+000.000-STA 14+700.000	E-65 SHEET NO. 21 OF 44



STATION	14+700	14+800	14+900	15+000	15+100	15+200	15+300	15+400
FINISHED GRADE ELEVATION	21.813	21.754	21.646	21.518	21.388	21.258	21.128	20.997
EXISTING GROUND ELEVATION	16.500	16.542	16.454	16.516	16.594	16.594	16.621	16.611
VERTICAL CURVATURE								
HORIZONTAL CURVATURE								

PROJECT TITLE	SCALE	SHEET CONTENT	DRAWING NO.
Preparatory survey for expressway project in Mega Manila Region CLLEX ( TARLAC - CABANATUAN )	V = 200 H = 2000	PACKAGE 2 - INTERIM 2 LANES PLAN AND PROFILE STA 14+700.000-STA 15+400.000	E-66
			SHEET NO. 22 OF 44

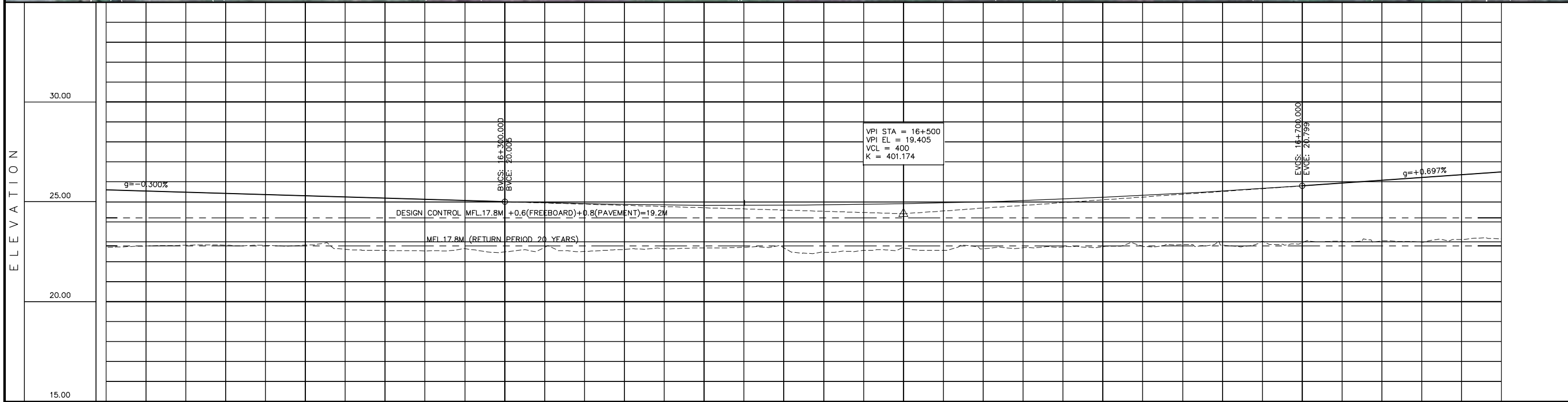
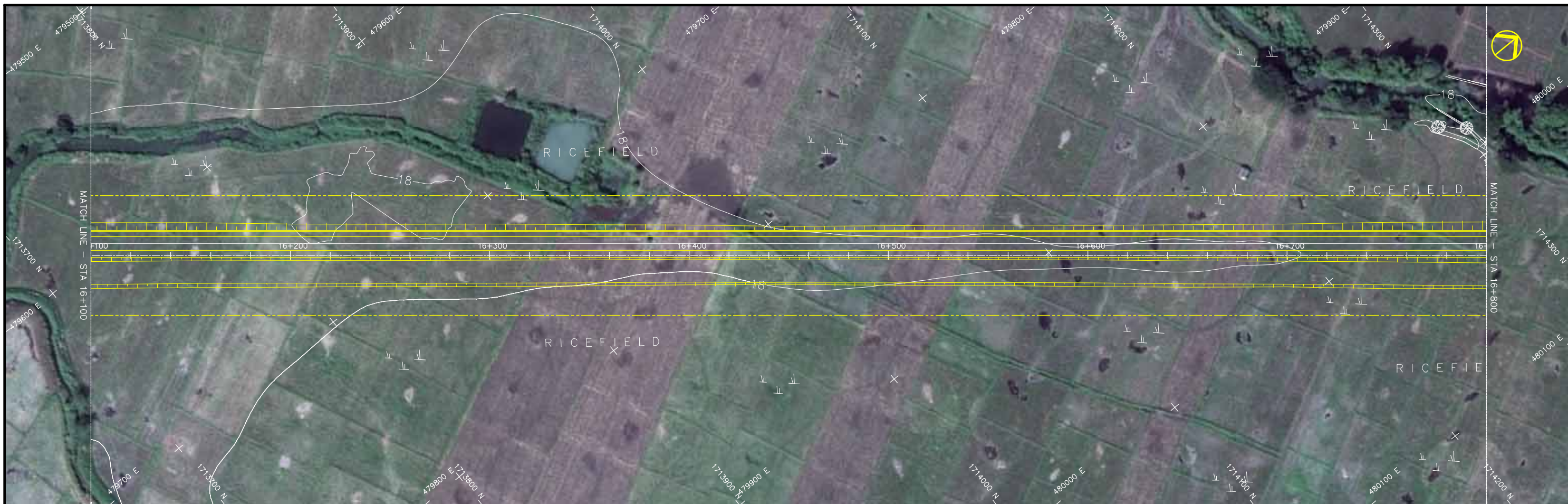




STATION	15+400	15+500	15+600	15+700	15+800	15+900	16+000	16+100
FINISHED GRADE ELEVATION	19.825	19.885	19.945	20.005	20.065	20.125	20.185	20.245
EXISTING GROUND ELEVATION	16.818	16.834	17.049	16.931	16.873	16.903	17.007	17.104
VERTICAL CURVATURE	+0.300% L=630.000						-0.300% L=360.000	
HORIZONTAL CURVATURE	R=∞							

PROJECT TITLE	SCALE	SHEET CONTENT	DRAWING NO.
Preparatory survey for expressway project in Mega Manila Region <b>CLLEX ( TARLAC - CABANATUAN )</b>	V = 200 H = 2000	<b>PACKAGE 2 - INTERIM 2 LANES</b> PLAN AND PROFILE STA 15+400.000-STA 16+100.000	E-67 SHEET NO. 23 OF 44

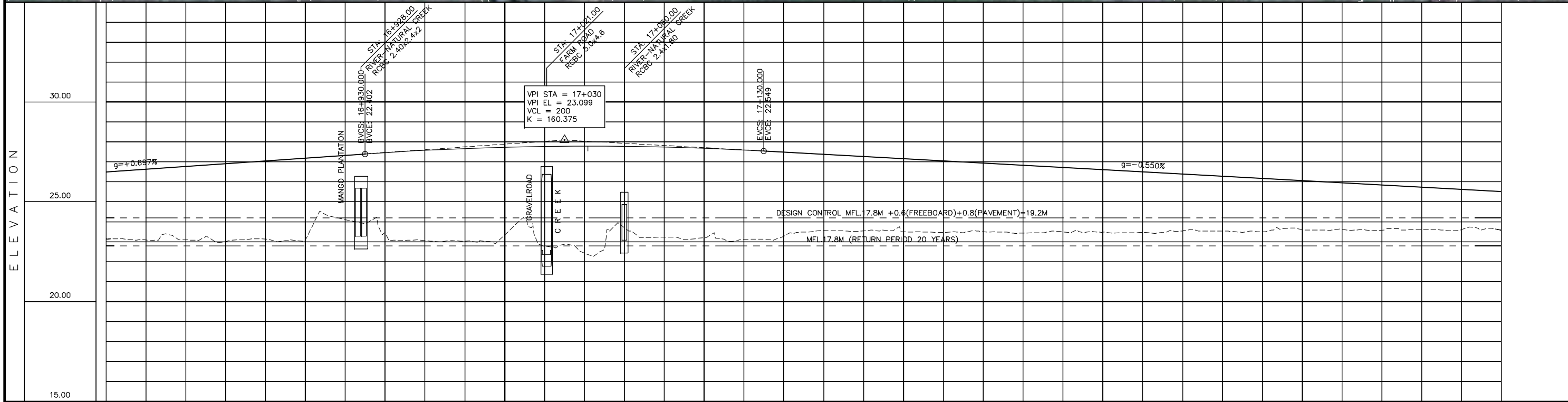




STATION	16+100	16+200	16+300	16+400	16+500	16+600	16+700	16+800
FINISHED GRADE ELEVATION	20.605	20.545	20.485	20.425	20.365	20.305	20.245	20.185
EXISTING GROUND ELEVATION	17.724	17.786	17.827	17.830	17.816	17.832	17.822	17.816
VERTICAL CURVATURE	g = -0.300%		BVC: 16+300.000 EVC: 16+500.000		VPI STA = 16+500 VPI EL = 19.405 VCL = 400 K = 401.174		g = +0.697%	
HORIZONTAL CURVATURE	R = ∞							

PROJECT TITLE	SCALE	SHEET CONTENT	DRAWING NO.
Preparatory survey for expressway project in Mega Manila Region CLLEX ( TARLAC - CABANATUAN )	V = 200 H = 2000	PACKAGE 2 - INTERIM 2 LANES PLAN AND PROFILE STA 16+100.000-STA 16+800.000	E-68 SHEET NO. 24 OF 44

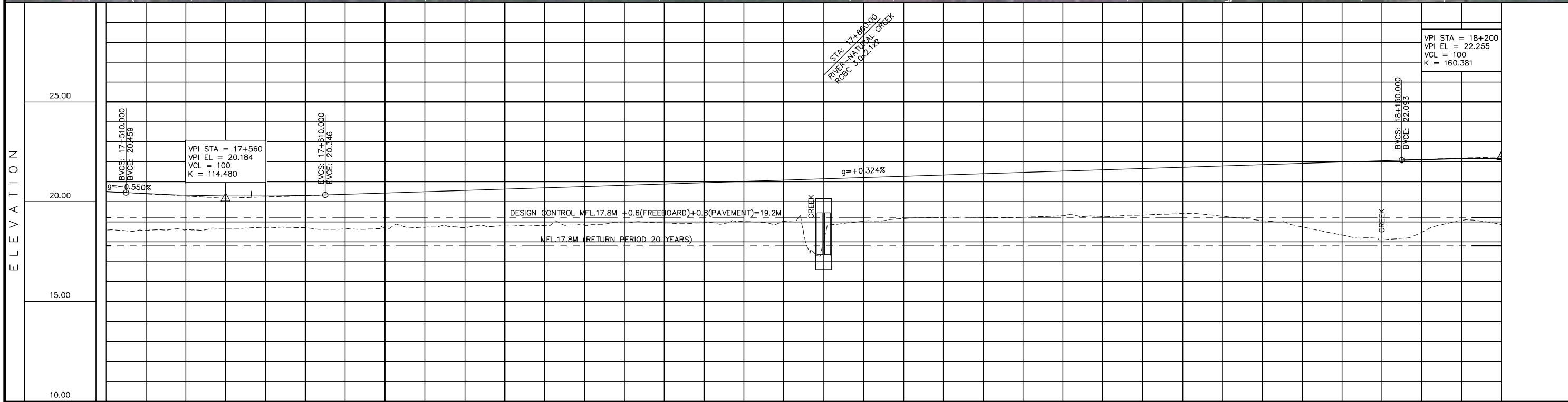




STATION	16+800	16+900	17+000	17+100	17+200	17+300	17+400	17+500																																																																
FINISHED GRADE ELEVATION	18.147	21.496	18.090	21.635	18.100	21.775	18.007	21.914	18.132	22.053	18.063	22.193	19.113	22.332	18.473	22.469	18.057	22.583	18.036	22.673	18.336	22.737	17.778	22.777	17.431	22.792	18.706	22.781	18.234	22.746	18.206	22.686	18.107	22.601	18.276	22.494	18.572	22.384	18.543	22.274	18.502	22.164	18.471	22.054	18.497	21.944	18.433	21.834	18.498	21.724	18.491	21.614	18.466	21.504	18.542	21.394	18.535	21.284	18.506	21.174	18.603	21.064	18.620	20.954	18.585	20.844	18.627	20.734	18.609	20.624	18.594	20.514
EXISTING GROUND ELEVATION	18.147	21.496	18.090	21.635	18.100	21.775	18.007	21.914	18.132	22.053	18.063	22.193	19.113	22.332	18.473	22.469	18.057	22.583	18.036	22.673	18.336	22.737	17.778	22.777	17.431	22.792	18.706	22.781	18.234	22.746	18.206	22.686	18.107	22.601	18.276	22.494	18.572	22.384	18.543	22.274	18.502	22.164	18.471	22.054	18.497	21.944	18.433	21.834	18.498	21.724	18.491	21.614	18.466	21.504	18.542	21.394	18.535	21.284	18.506	21.174	18.603	21.064	18.620	20.954	18.585	20.844	18.627	20.734	18.609	20.624	18.594	20.514
VERTICAL CURVATURE	+0.667% L=230.000																-0.550% L=360.000																																																							
HORIZONTAL CURVATURE	R=∞																	CS A=447 L=100.000m SC 17+129.875 17+229.875																																																						

PROJECT TITLE	SCALE	SHEET CONTENT	DRAWING NO.
Preparatory survey for expressway project in Mega Manila Region CLLEX ( TARLAC - CABANATUAN )	V = 200 H = 2000	PACKAGE 2 - INTERIM 2 LANES PLAN AND PROFILE STA 16+800.000-STA 17+500.000	E-69 SHEET NO. 25 OF 44





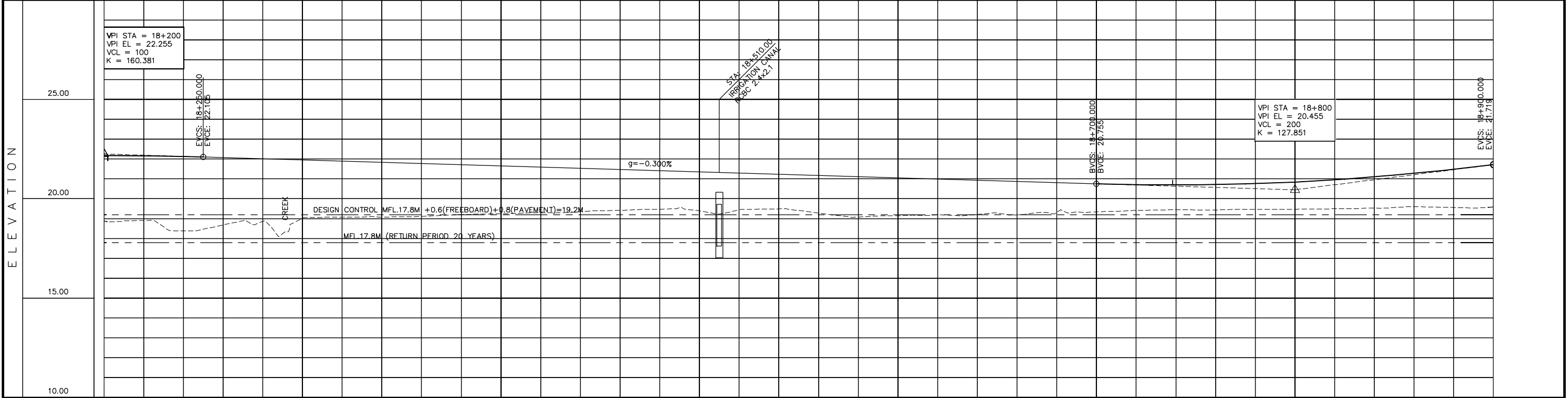
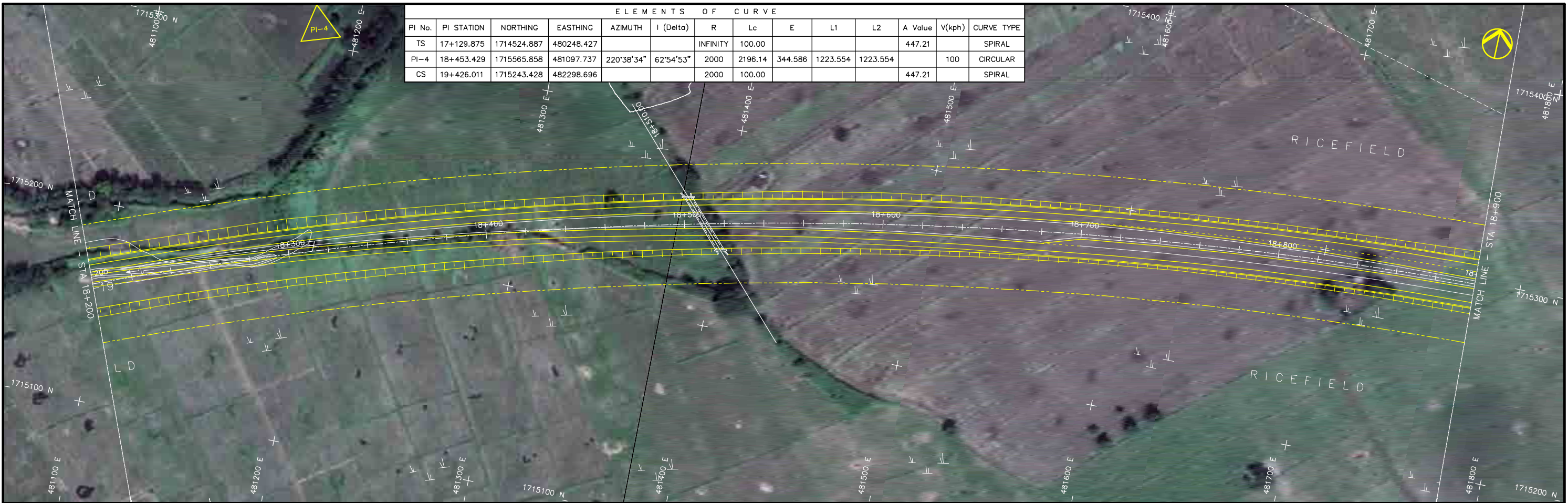
STATION	17+500	17+600	17+700	17+800	17+900	18+000	18+100	18+200																												
FINISHED GRADE ELEVATION	18.594	20.514	20.408	20.333	20.293	20.288	20.318	20.378	20.443	20.508	20.572	20.637	20.702	20.766	20.831	20.896	20.961	21.025	21.090	21.155	21.219	21.284	21.349	21.413	21.478	21.543	21.608	21.672	21.737	21.802	21.866	21.931	21.996	22.060	22.122	22.177
EXISTING GROUND ELEVATION	18.594	18.575	18.595	18.672	18.727	18.701	18.645	18.704	18.728	18.710	18.797	18.815	18.842	18.940	18.948	18.951	19.014	19.023	18.027	19.032	19.164	19.221	19.221	19.229	19.303	19.256	19.340	19.413	19.281	19.059	18.743	18.332	18.098	18.472	19.075	18.879
VERTICAL CURVATURE	18.055 17+560		22.255 18+200																																	
HORIZONTAL CURVATURE																																				

R=2000.000  
L=2196.136

PROJECT TITLE	SCALE	SHEET CONTENT	DRAWING NO.
Preparatory survey for expressway project in Mega Manila Region CLLEX ( TARLAC - CABANATUAN )	V = 200 H = 2000	PACKAGE 2 - INTERIM 2 LANES PLAN AND PROFILE STA 17+500.000-STA 18+200.000	E-70
			SHEET NO.
			26 OF 44



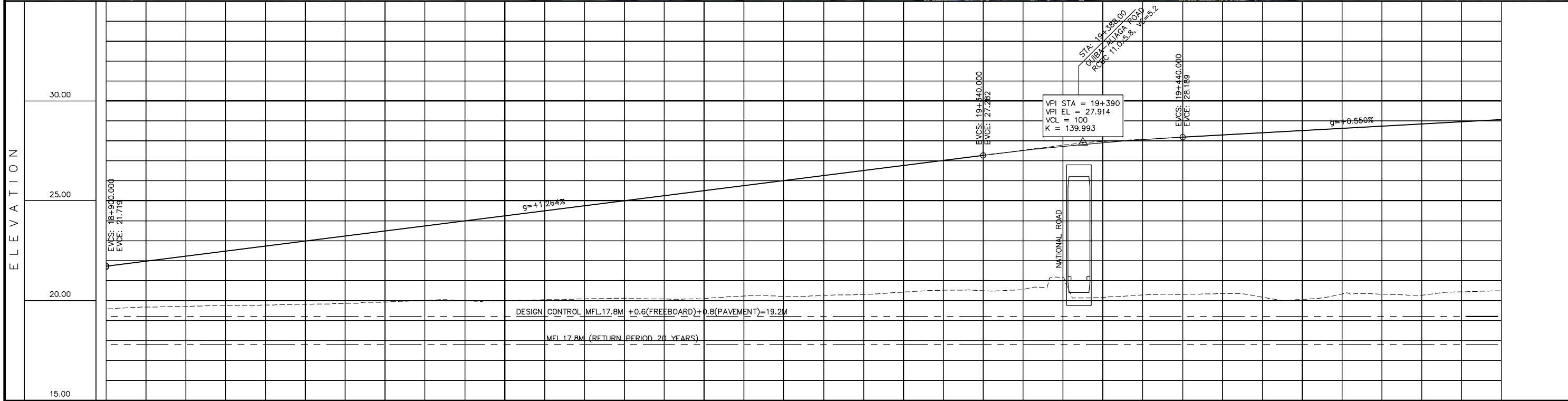
ELEMENTS OF CURVE													
PI No.	PI STATION	NORTHING	EASTING	AZIMUTH	I (Delta)	R	Lc	E	L1	L2	A Value	V(kph)	CURVE TYPE
TS	17+129.875	1714524.887	480248.427			INFINITY	100.00				447.21		SPIRAL
PI-4	18+453.429	1715565.858	481097.737	220°38'34"	62°54'53"	2000	2196.14	344.586	1223.554	1223.554		100	CIRCULAR
CS	19+426.011	1715243.428	482298.696			2000	100.00				447.21		SPIRAL



STATION	18+200	18+300	18+400	18+500	18+600	18+700	18+800	18+900																												
FINISHED GRADE ELEVATION	22.177	22.167	22.131	22.075	22.015	21.955	21.895	21.835	21.775	21.715	21.655	21.595	21.535	21.475	21.415	21.355	21.295	21.235	21.175	21.115	21.055	20.995	20.935	20.875	20.815	20.755	20.710	20.697	20.687	20.675	20.646	20.658	20.626	20.582	20.582	
EXISTING GROUND ELEVATION	18.879	18.908	18.377	18.680	18.866	19.018	19.077	19.084	19.113	19.203	19.245	19.296	19.354	19.416	19.474	19.395	19.445	19.493	19.281	19.080	19.144	19.194	19.215	19.195	19.312	19.342	19.421	19.447	19.435	19.467	19.475	19.497	19.531	19.602	19.558	19.582
VERTICAL CURVATURE																																				
HORIZONTAL CURVATURE																																				

PROJECT TITLE	SCALE	SHEET CONTENT	DRAWING NO.
Preparatory survey for expressway project in Mega Manila Region CLLEX ( TARLAC - CABANATUAN )	V = 200 H = 2000	PACKAGE 2 - INTERIM 2 LANES PLAN AND PROFILE STA 18+200.000-STA 18+900.000	E-71 SHEET NO. 27 OF 44

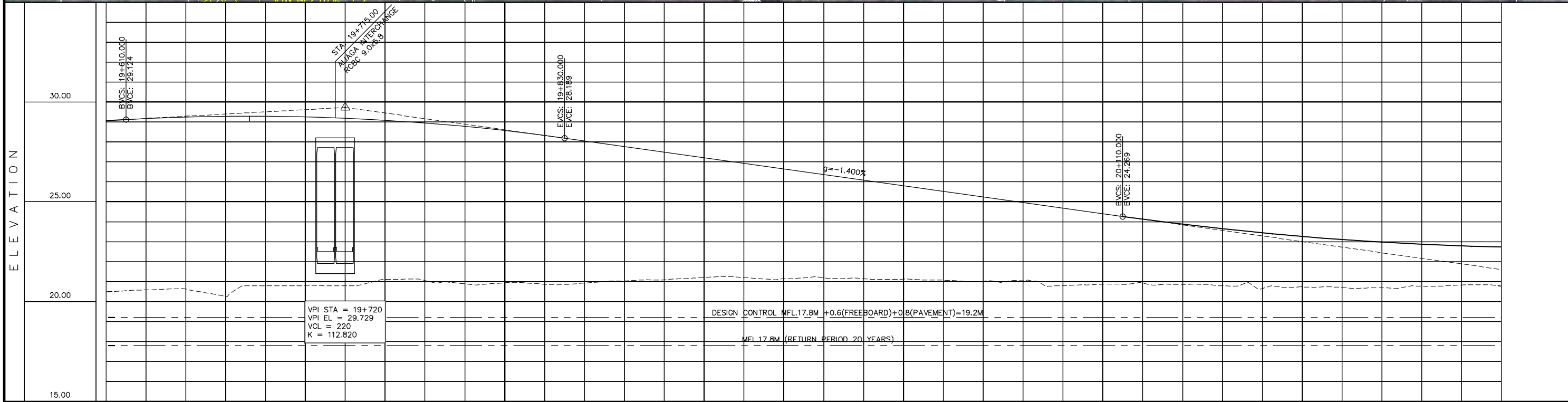




STATION	18+900	19+000	19+100	19+200	19+300	19+400	19+500	19+600
FINISHED GRADE ELEVATION	21.719							
EXISTING GROUND ELEVATION	19.582	19.677, 19.709, 19.749, 19.778	19.816, 19.858, 19.930	20.011, 20.092, 20.112, 20.078, 20.101, 20.236	20.211, 20.258, 20.300, 20.426, 20.519, 20.502, 20.559	21.160, 20.165, 20.284, 20.311, 20.349	20.171, 20.063, 20.334, 20.325	20.274, 20.441, 20.495
VERTICAL CURVATURE			+1.264% L=440.000			27.914 19+390	+0.550% L=170.000	
HORIZONTAL CURVATURE				R=2000.000 L=2196.136		CS 19+426.011	A=447 L=100.000m SC 19+526.011	R=∞

PROJECT TITLE	SCALE	SHEET CONTENT	DRAWING NO.
Preparatory survey for expressway project in Mega Manila Region <b>CLLEX ( TARLAC - CABANATUAN )</b>	V = 200 H = 2000	<b>PACKAGE 2 - INTERIM 2 LANES</b> PLAN AND PROFILE STA 18+900.000-STA 19+600.000	E-72 SHEET NO. 28 OF 44

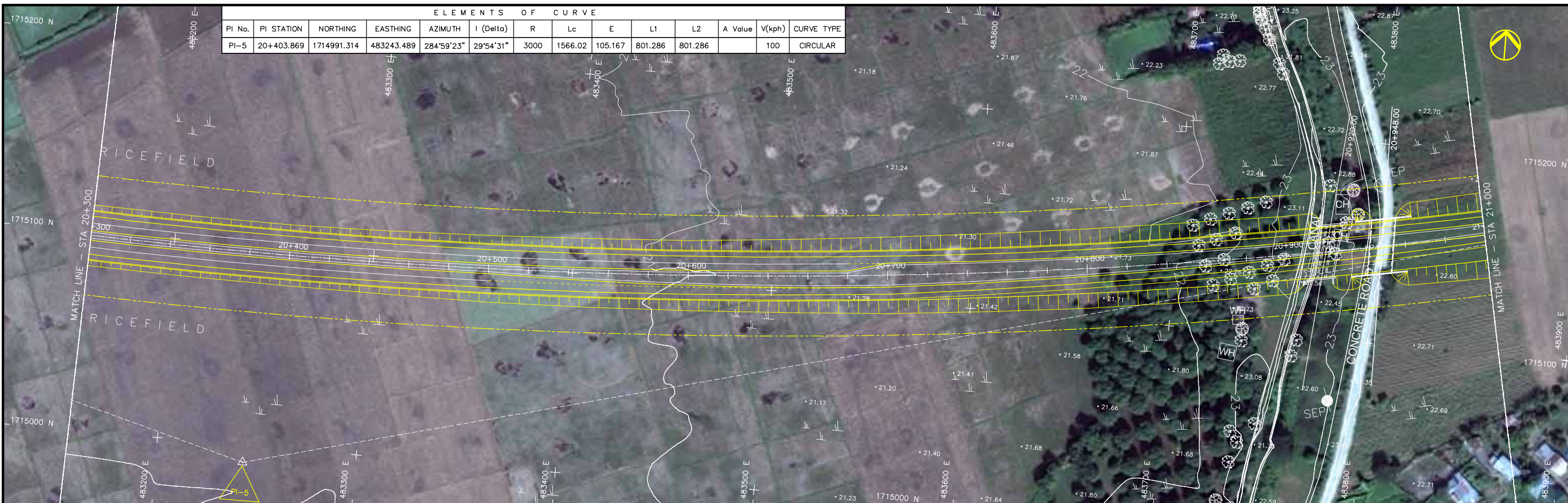




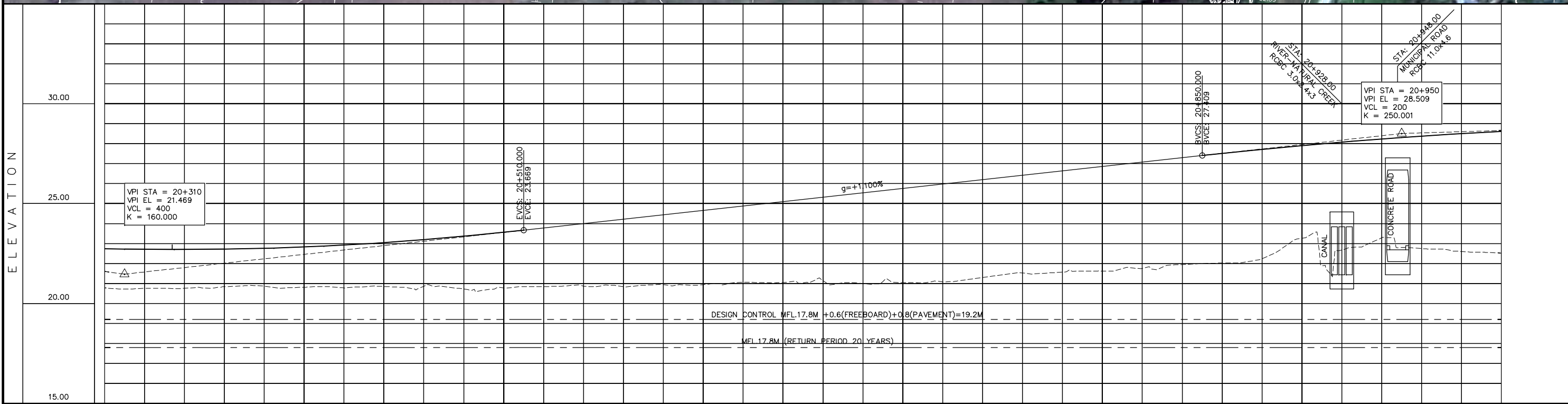
STATION	19+600	19+700	19+800	19+900	20+000	20+100	20+200	20+300
FINISHED GRADE ELEVATION	20.495	20.609	20.715	20.821	20.927	21.033	21.139	21.245
EXISTING GROUND ELEVATION	20.495	20.589	20.629	20.715	20.791	20.857	20.913	20.960
VERTICAL CURVATURE	⊕		⊕		⊕		⊕	
HORIZONTAL CURVATURE	R=3000.000		L=1566.015		R=3000.000		L=1566.015	

<b>PROJECT TITLE</b> Preparatory survey for expressway project in Mega Manila Region <b>CLLEX ( TARLAC - CABANATUAN )</b>	<b>SCALE</b> V = 200 H = 2000	<b>SHEET CONTENT</b> PACKAGE 2 - INTERIM 2 LANES PLAN AND PROFILE STA 19+600.000-STA 20+300.000	<b>DRAWING NO.</b> E-73
			<b>SHEET NO.</b> 29 OF 44





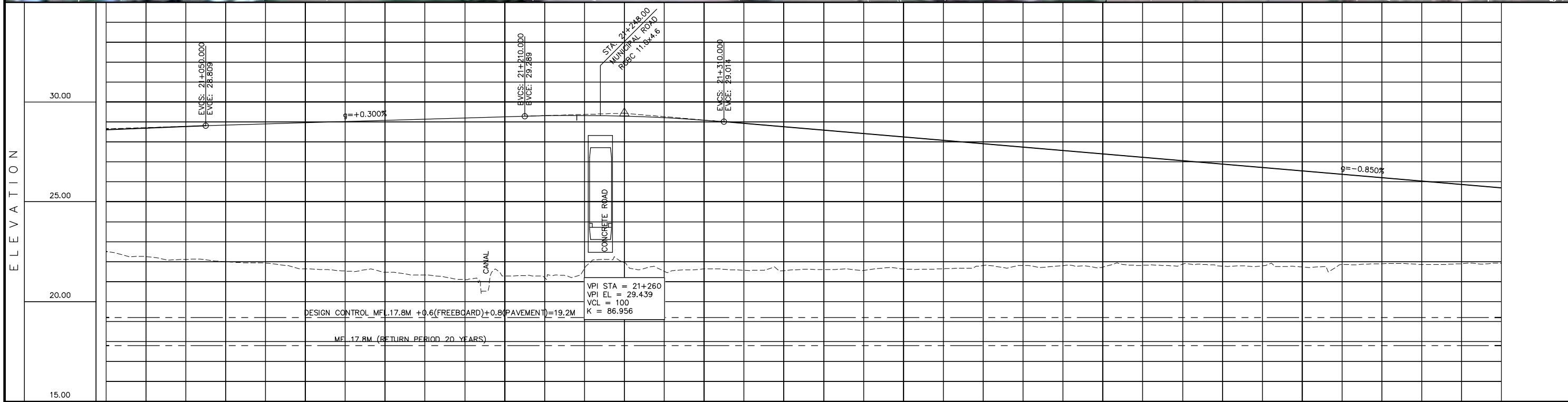
ELEMENTS OF CURVE													
PI No.	PI STATION	NORTHING	EASTING	AZIMUTH	I (Delta)	R	Lc	E	L1	L2	A Value	V(kph)	CURVE TYPE
PI-5	20+403.869	1714991.314	483243.489	284°59'23"	29°54'31"	3000	1566.02	105.167	801.286	801.286		100	CIRCULAR



STATION	20+300	20+400	20+500	20+600	20+700	20+800	20+900	21+000		
FINISHED GRADE ELEVATION	20.781	22.737	22.702	22.722	22.767	22.837	22.932	23.052		
EXISTING GROUND ELEVATION	20.781	20.765	20.799	22.702	20.844	22.722	20.873	22.767		
VERTICAL CURVATURE	21.469 20+310						28.509 20+950			
HORIZONTAL CURVATURE	R=3000.000 L=1566.015									

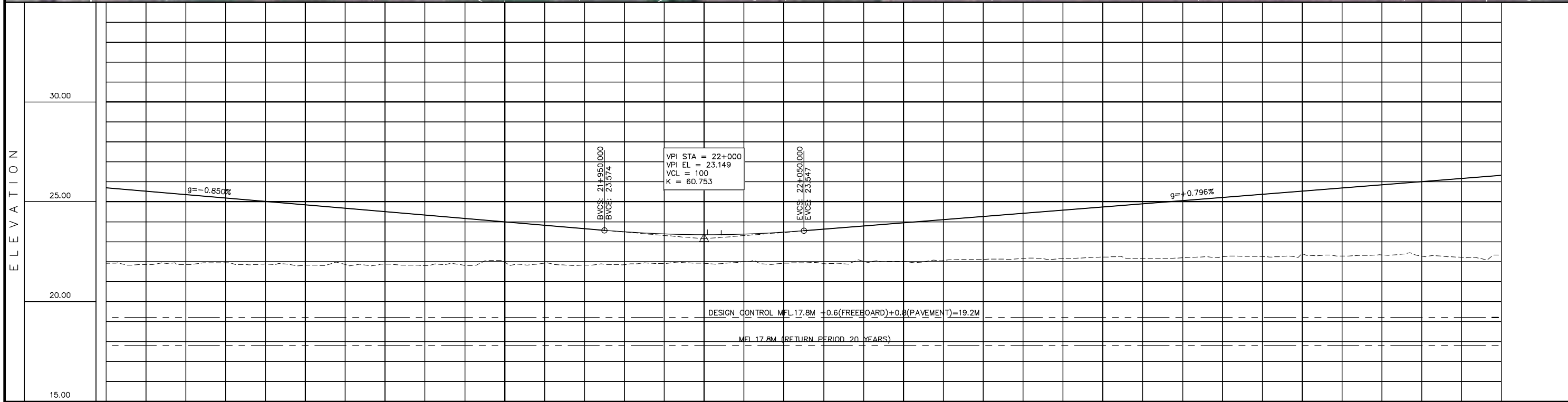
PROJECT TITLE	SCALE	SHEET CONTENT	DRAWING NO.
Preparatory survey for expressway project in Mega Manila Region CLLEX ( TARLAC - CABANATUAN )	V = 200 H = 2000	PACKAGE 2 - INTERIM 2 LANES PLAN AND PROFILE STA 20+300.000-STA 21+000.000	E-74 SHEET NO. 30 OF 44





STATION	21+000	21+100	21+200	21+300	21+400	21+500	21+600	21+700
FINISHED GRADE ELEVATION	28.609	28.701	28.777	28.839	28.899	28.959	29.019	29.079
EXISTING GROUND ELEVATION	22.513	22.260	22.119	21.998	21.931	21.899	21.841	21.809
VERTICAL CURVATURE	+0.300%		-0.300%		-0.850%		-0.850%	
HORIZONTAL CURVATURE	R=168.599		R=∞		R=∞		R=∞	

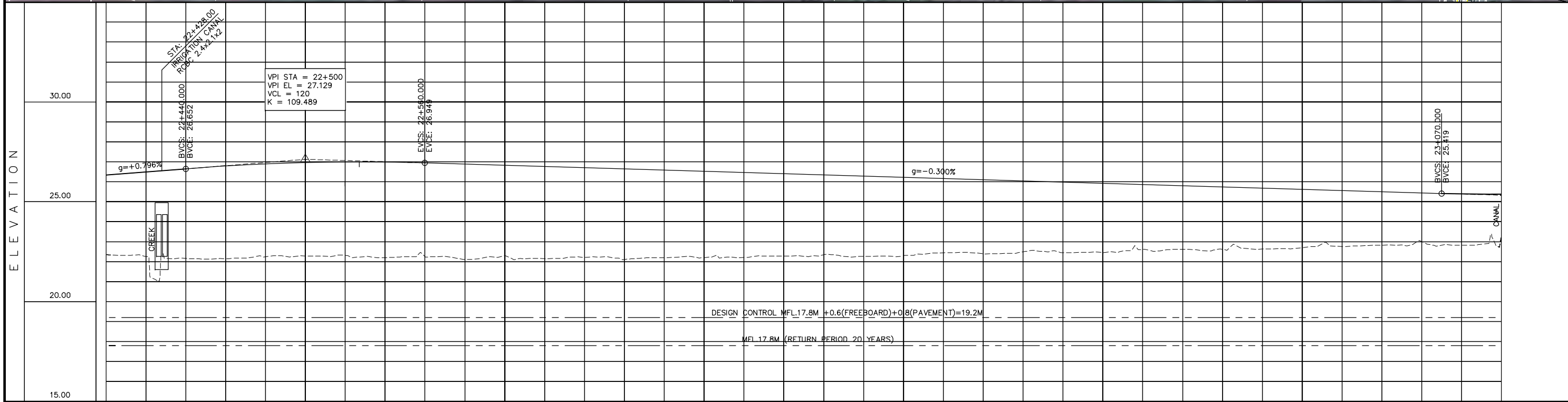
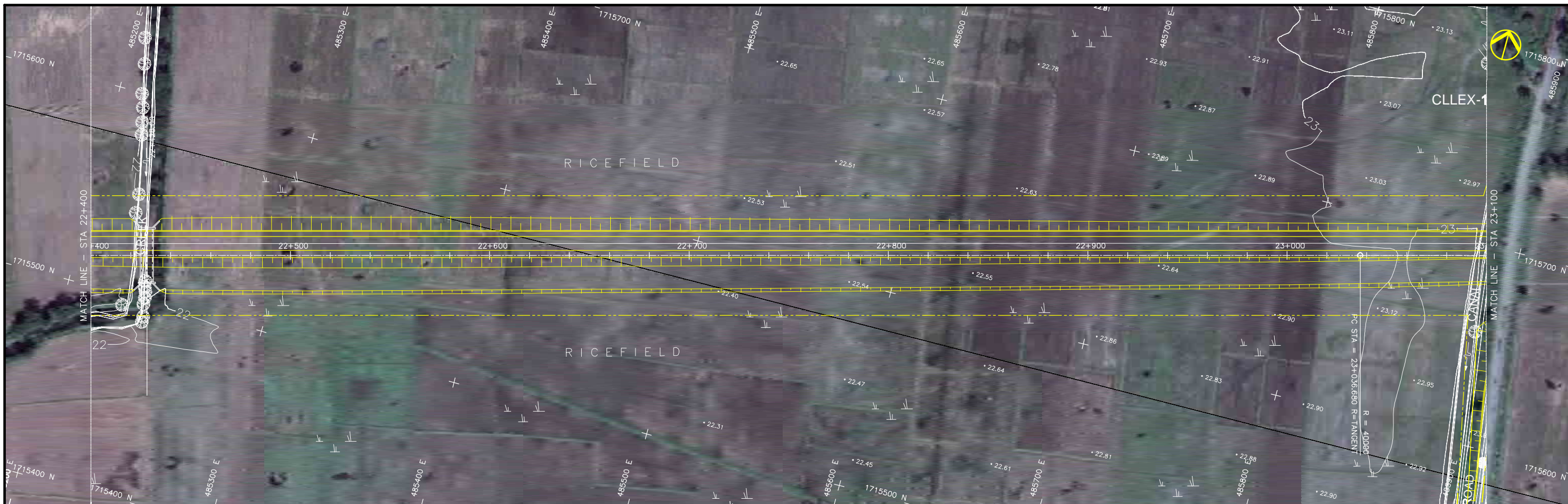
PROJECT TITLE	SCALE	SHEET CONTENT	DRAWING NO.
Preparatory survey for expressway project in Mega Manila Region CLLEX ( TARLAC - CABANATUAN )	V = 200 H = 2000	PACKAGE 2 - INTERIM 2 LANES PLAN AND PROFILE STA 21+000.000-STA 21+700.000	E-75 SHEET NO. 31 OF 44



STATION	21+700	21+800	21+900	22+000	22+100	22+200	22+300	22+400
FINISHED GRADE ELEVATION	21.925	25.699						
EXISTING GROUND ELEVATION	21.856	25.529	21.860	25.359	21.945	25.189	21.899	25.019
VERTICAL CURVATURE	-0.850% L=640.000		23.149 22+000		+0.796% L=390.000			
HORIZONTAL CURVATURE	R=∞							

PROJECT TITLE	SCALE	SHEET CONTENT	DRAWING NO.
Preparatory survey for expressway project in Mega Manila Region CLLEX ( TARLAC - CABANATUAN )	V = 200 H = 2000	PACKAGE 2 - INTERIM 2 LANES PLAN AND PROFILE STA 21+700.000-STA 22+400.000	E-76 SHEET NO. 32 OF 44





STATION	22+400	22+500	22+600	22+700	22+800	22+900	23+000	23+100
FINISHED GRADE ELEVATION	26.533	26.492	26.652	26.792	26.897	26.965	26.991	26.949
EXISTING GROUND ELEVATION	22.346	22.262	22.166	22.155	22.252	22.319	22.205	22.258
VERTICAL CURVATURE	g = +0.796%		VPI STA = 22+500 VPI EL = 27.129 VCL = 120 K = 109.489		g = -0.300%			
HORIZONTAL CURVATURE	R = ∞							

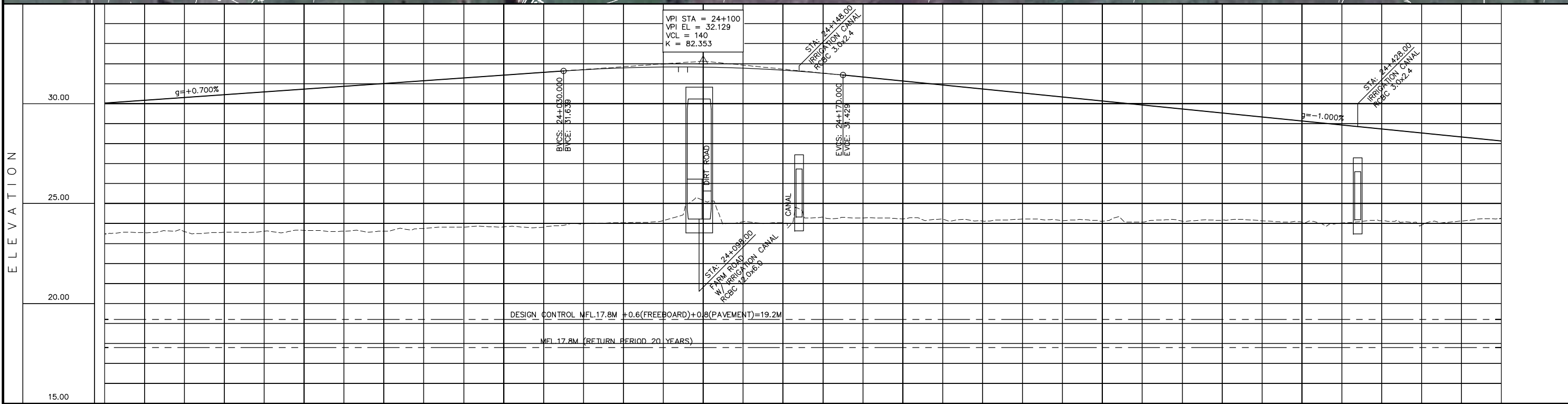
PROJECT TITLE	SCALE	SHEET CONTENT	DRAWING NO.
Preparatory survey for expressway project in Mega Manila Region CLLEX ( TARLAC - CABANATUAN )	V = 200 H = 2000	PACKAGE 2 - INTERIM 2 LANES PLAN AND PROFILE STA 22+400.000-STA 23+100.000	E-77 SHEET NO. 33 OF 44







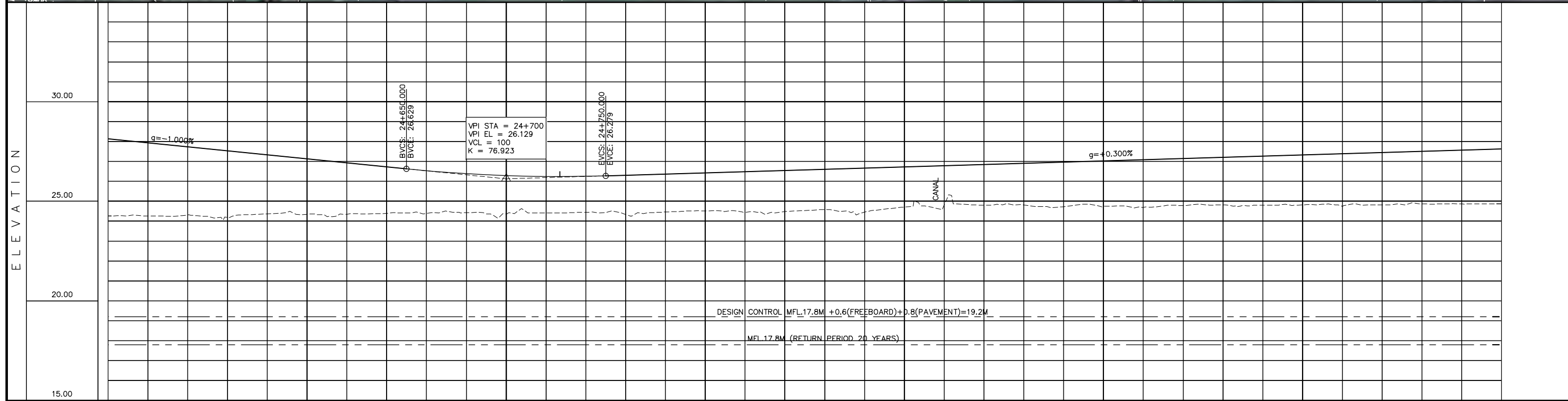
ELEMENTS OF CURVE													
PI No.	PI STATION	NORTHING	EASTING	AZIMUTH	I (Delta)	R	Lc	E	L1	L2	A Value	V(kph)	CURVE TYPE
PI-6	24+133.414	1715960.900	486882.641	255°04'52"	3°08'28"	40000	2192.92	15.033	1096.734	1096.734		100	CIRCULAR



STATION	23+800	23+900	24+000	24+100	24+200	24+300	24+400	24+500
FINISHED GRADE ELEVATION	30.029	30.169	30.309	30.449	30.589	30.729	30.869	31.009
EXISTING GROUND ELEVATION	23.476	23.544	23.598	23.664	23.728	23.794	23.858	23.922
VERTICAL CURVATURE	+0.700% L=860.000						-1.000% L=460.000	
HORIZONTAL CURVATURE					R=40000.000 L=2192.919			

PROJECT TITLE	SCALE	SHEET CONTENT	DRAWING NO.
Preparatory survey for expressway project in Mega Manila Region <b>CLLEX ( TARLAC - CABANATUAN )</b>	V = 200 H = 2000	PACKAGE 2 - INTERIM 2 LANES PLAN AND PROFILE STA 23+800.000-STA 24+500.000	E-79 SHEET NO. 35 OF 44

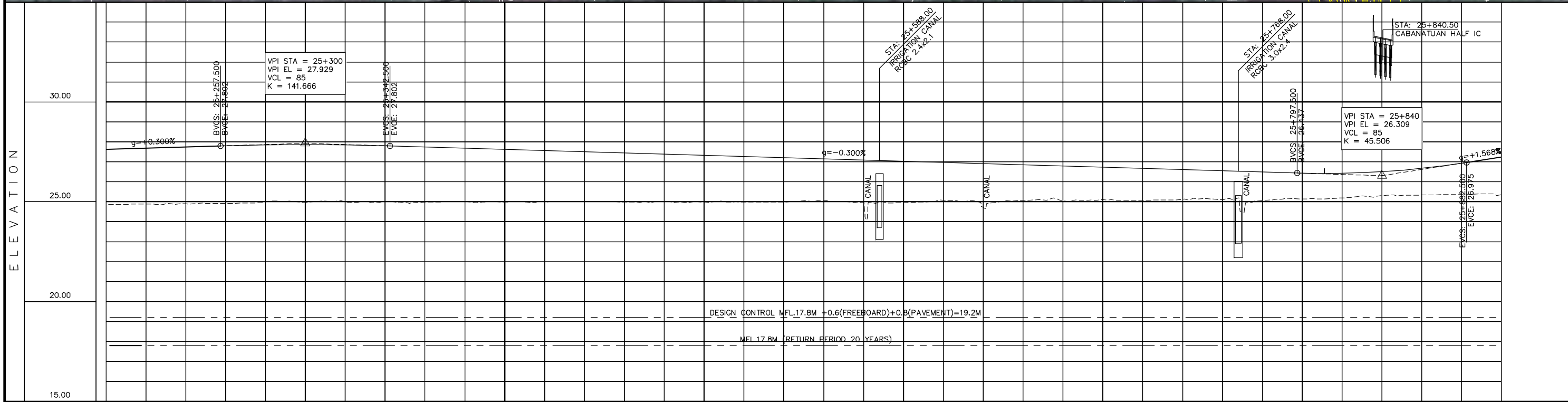




STATION	24+500	24+600	24+700	24+800	24+900	25+000	25+100	25+200
FINISHED GRADE ELEVATION	24.263	24.265	24.314	24.279	24.189	24.529	24.371	24.729
EXISTING GROUND ELEVATION	24.263	24.265	24.314	24.279	24.189	24.529	24.371	24.729
VERTICAL CURVATURE	$g = -1.000\%$		$R = 40000.000$ $L = 2192.919$		$g = +0.300\%$		$R = 4000$ $L = 218$	
HORIZONTAL CURVATURE								

PROJECT TITLE	SCALE	SHEET CONTENT	DRAWING NO.
Preparatory survey for expressway project in Mega Manila Region CLLEX ( TARLAC - CABANATUAN )	V = 200 H = 2000	PACKAGE 2 - INTERIM 2 LANES PLAN AND PROFILE STA 24+500.000-STA 25+200.000	E-80 SHEET NO. 36 OF 44

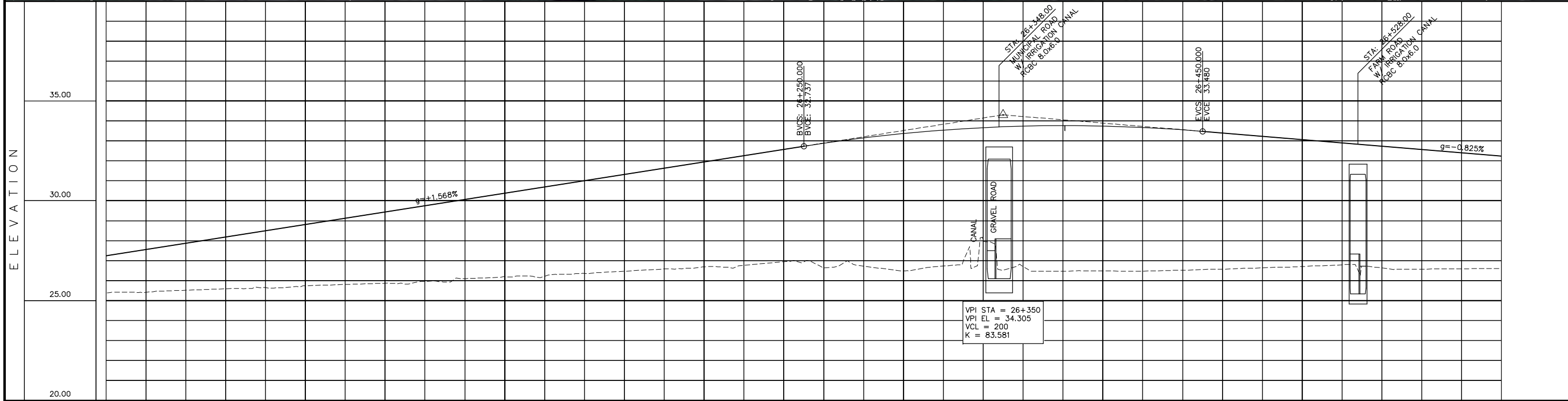
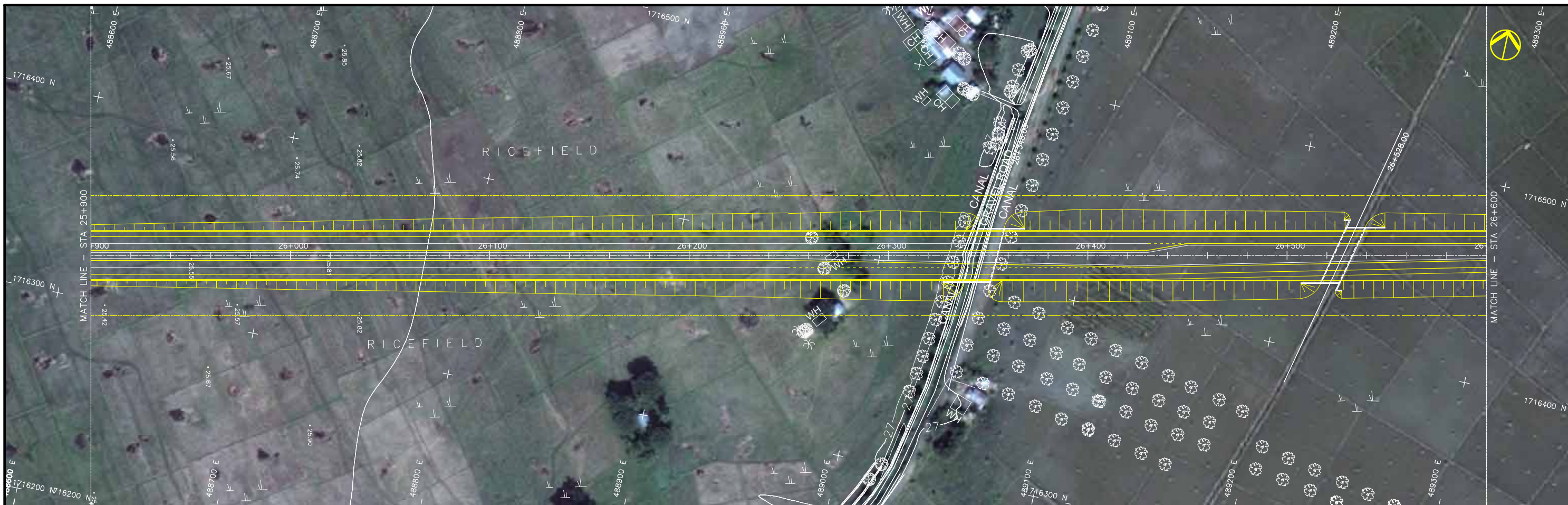




STATION	25+200	25+300	25+400	25+500	25+600	25+700	25+800	25+900
FINISHED GRADE ELEVATION	27.629	27.865	27.869	27.869	27.869	27.869	27.869	27.869
EXISTING GROUND ELEVATION	24.869	24.887	24.901	24.920	24.920	24.920	24.920	24.920
VERTICAL CURVATURE	-0.300%		0.000%		-0.300%		+1.568%	
HORIZONTAL CURVATURE	R=40000.000 L=2192.919 25+229.599		R=∞		R=∞		R=∞	

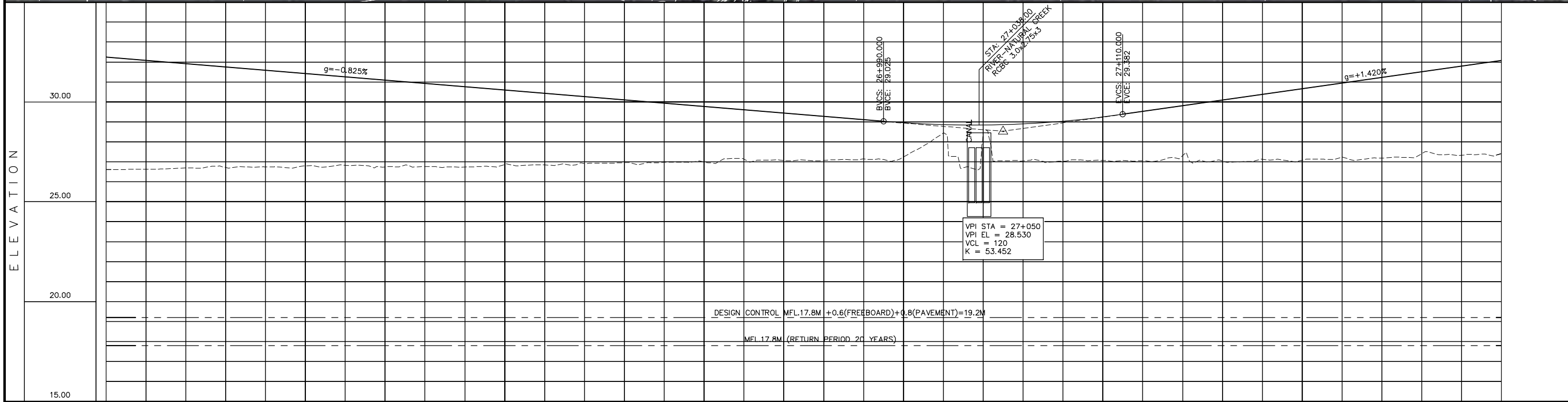
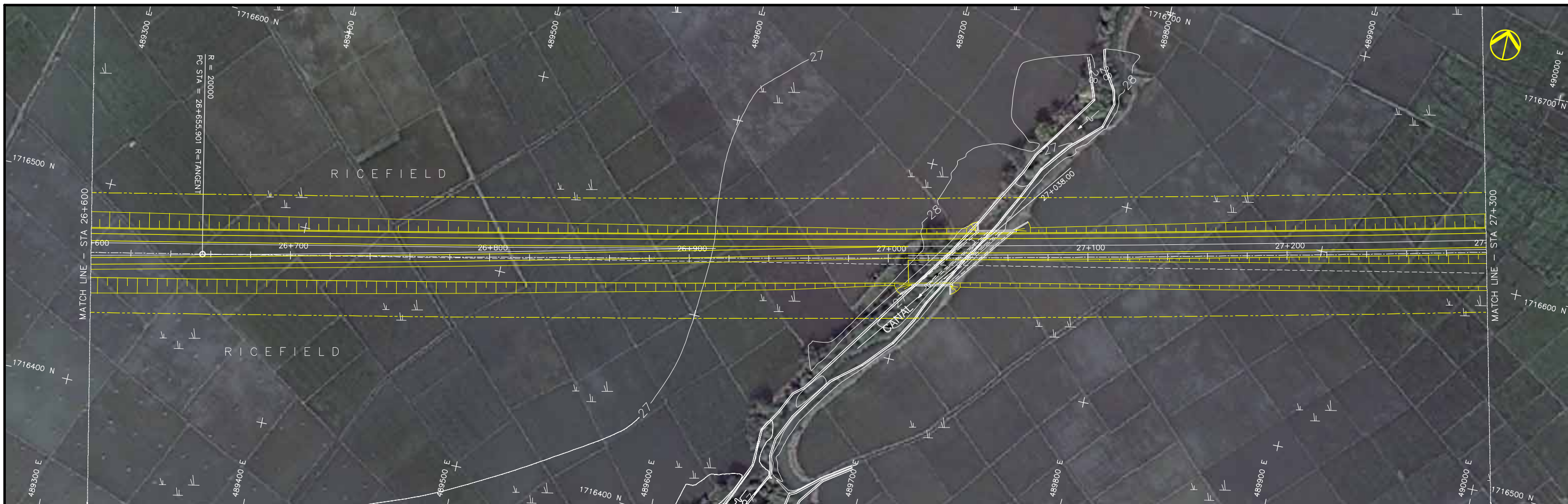
PROJECT TITLE	SCALE	SHEET CONTENT	DRAWING NO.
Preparatory survey for expressway project in Mega Manila Region CLLEX ( TARLAC - CABANATUAN )	V = 200 H = 2000	PACKAGE 2 - INTERIM 2 LANES PLAN AND PROFILE STA 25+200.000-STA 25+900.000	E-81 SHEET NO. 37 OF 44





STATION	25+900	26+000	26+100	26+200	26+300	26+400	26+500	26+600																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
FINISHED GRADE ELEVATION	25.371	27.250	27.563	27.877	28.191	28.504	28.818	29.131	29.445	29.758	30.072	30.386	30.699	31.013	31.326	31.640	31.953	32.267	32.581	32.895	33.208	33.522	33.835	34.149	34.462	34.776	35.089	35.403	35.716	36.030	36.343	36.657	36.970	37.284	37.597	37.911	38.224	38.538	38.851	39.165	39.478	39.792	40.105	40.419	40.732	41.046	41.359	41.673	41.986	42.300	42.613	42.927	43.240	43.554	43.867	44.181	44.494	44.808	45.121	45.435	45.748	46.062	46.375	46.689	47.002	47.316	47.629	47.943	48.256	48.570	48.883	49.197	49.510	49.824	50.137	50.451	50.764	51.078	51.391	51.705	52.018	52.332	52.645	52.959	53.272	53.586	53.900	54.213	54.527	54.840	55.154	55.467	55.781	56.094	56.408	56.721	57.035	57.348	57.662	57.975	58.289	58.602	58.916	59.229	59.543	59.856	60.170	60.483	60.797	61.110	61.424	61.737	62.051	62.364	62.678	62.991	63.305	63.618	63.932	64.245	64.559	64.872	65.186	65.500	65.813	66.127	66.440	66.754	67.067	67.381	67.694	68.008	68.321	68.635	68.948	69.262	69.575	69.889	70.202	70.516	70.829	71.143	71.456	71.770	72.083	72.397	72.710	73.024	73.337	73.651	73.964	74.278	74.591	74.905	75.218	75.532	75.845	76.159	76.472	76.786	77.099	77.413	77.726	78.040	78.353	78.667	78.980	79.294	79.607	79.921	80.234	80.548	80.861	81.175	81.488	81.802	82.115	82.429	82.742	83.056	83.369	83.683	83.996	84.310	84.623	84.937	85.250	85.564	85.877	86.191	86.504	86.818	87.131	87.445	87.758	88.072	88.385	88.699	89.012	89.326	89.639	89.953	90.266	90.580	90.893	91.207	91.520	91.834	92.147	92.461	92.774	93.088	93.401	93.715	94.028	94.342	94.655	94.969	95.282	95.596	95.909	96.223	96.536	96.850	97.163	97.477	97.790	98.104	98.417	98.731	99.044	99.358	99.671	99.985	100.298	100.612	100.925	101.239	101.552	101.866	102.179	102.493	102.806	103.120	103.433	103.747	104.060	104.374	104.687	105.001	105.314	105.628	105.941	106.255	106.568	106.882	107.195	107.509	107.822	108.136	108.449	108.763	109.076	109.390	109.703	110.017	110.330	110.644	110.957	111.271	111.584	111.898	112.211	112.525	112.838	113.152	113.465	113.779	114.092	114.406	114.719	115.033	115.346	115.660	115.973	116.287	116.600	116.914	117.227	117.541	117.854	118.168	118.481	118.795	119.108	119.422	119.735	120.049	120.362	120.676	120.989	121.303	121.616	121.930	122.243	122.557	122.870	123.184	123.497	123.811	124.124	124.438	124.751	125.065	125.378	125.692	126.005	126.319	126.632	126.946	127.259	127.573	127.886	128.200	128.513	128.827	129.140	129.454	129.767	130.081	130.394	130.708	131.021	131.335	131.648	131.962	132.275	132.589	132.902	133.216	133.529	133.843	134.156	134.470	134.783	135.097	135.410	135.724	136.037	136.351	136.664	136.978	137.291	137.605	137.918	138.232	138.545	138.859	139.172	139.486	139.799	140.113	140.426	140.740	141.053	141.367	141.680	141.994	142.307	142.621	142.934	143.248	143.561	143.875	144.188	144.502	144.815	145.129	145.442	145.756	146.069	146.383	146.696	147.010	147.323	147.637	147.950	148.264	148.577	148.891	149.204	149.518	149.831	150.145	150.458	150.772	151.085	151.399	151.712	152.026	152.339	152.653	152.966	153.280	153.593	153.907	154.220	154.534	154.847	155.161	155.474	155.788	156.101	156.415	156.728	157.042	157.355	157.669	157.982	158.296	158.609	158.923	159.236	159.550	159.863	160.177	160.490	160.804	161.117	161.431	161.744	162.058	162.371	162.685	163.000	163.312	163.626	163.939	164.253	164.566	164.880	165.193	165.507	165.820	166.134	166.447	166.761	167.074	167.388	167.701	168.015	168.328	168.642	168.955	169.269	169.582	169.896	170.209	170.523	170.836	171.150	171.463	171.777	172.090	172.404	172.717	173.031	173.344	173.658	173.971	174.285	174.598	174.912	175.225	175.539	175.852	176.166	176.479	176.793	177.106	177.420	177.733	178.047	178.360	178.674	178.987	179.301	179.614	179.928	180.241	180.555	180.868	181.182	181.495	181.809	182.122	182.436	182.749	183.063	183.376	183.690	184.003	184.317	184.630	184.944	185.257	185.571	185.884	186.198	186.511	186.825	187.138	187.452	187.765	188.079	188.392	188.706	189.019	189.333	189.646	189.960	190.273	190.587	190.900	191.214	191.527	191.841	192.154	192.468	192.781	193.095	193.408	193.722	194.035	194.349	194.662	194.976	195.289	195.603	195.916	196.230	196.543	196.857	197.170	197.484	197.797	198.111	198.424	198.738	199.051	199.365	199.678	199.992	200.305	200.619	200.932	201.246	201.559	201.873	202.186	202.500	202.813	203.127	203.440	203.754	204.067	204.381	204.694	205.008	205.321	205.635	205.948	206.262	206.575	206.889	207.202	207.516	207.829	208.143	208.456	208.770	209.083	209.397	209.710	210.024	210.337	210.651	210.964	211.278	211.591	211.905	212.218	212.532	212.845	213.159	213.472	213.786	214.099	214.413	214.726	215.040	215.353	215.667	215.980	216.294	216.607	216.921	217.234	217.548	217.861	218.175	218.488	218.802	219.115	219.429	219.742	220.056	220.369	220.683	220.996	221.310	221.623	221.937	222.250	222.564	222.877	223.191	223.504	223.818	224.131	224.445	224.758	225.072	225.385	225.699	226.012	226.326	226.639	226.953	227.266	227.580	227.893	228.207	228.520	228.834	229.147	229.461	229.774	230.088	230.401	230.715	231.028	231.342	231.655	231.969	232.282	232.596	232.909	233.223	233.536	233.850	234.163	234.477	234.790	235.104	235.417	235.731	236.044	236.358	236.671	236.985	237.298	237.612	237.925	238.239	238.552	238.866	239.179	239.493	239.806	240.120	240.433	240.747	241.060	241.374	241.687	242.001	242.314	242.628	242.941	243.255	243.568	243.882	244.195	244.509	244.822	245.136	245.449	245.763	246.076	246.390	246.703	247.017	247.330	247.644	247.957	248.271	248.584	248.898	249.211	249.525	249.838	250.152	250.465	250.779	251.092	251.406	251.719	252.033	252.346	252.660	252.973	253.287	253.600	253.914	254.227	254.541	254.854	255.168	255.481	255.795	256.108	256.422	256.735	257.049	257.362	257.676	257.989	258.303	258.616	258.930	259.243	259.557	259.870	260.184	260.497	260.811	261.124	261.438	261.751	262.065	262.378	262.692	263.005	263.319	263.632	263.946	264.259	264.573	264.886	265.200	265.513	265.827	266.140	266.454	266.767	267.081	267.394	267.708	268.021	268.335	268.648	268.962	269.275	269.589	269.902	270.216	270.529	270.843	271.156	271.470	271.783	272.097	272.410	272.724	273.037	273.351	273.664	273.978	274.291	274.605	274.918	275.232	275.545	275.859	276.172	276.486	276.799	277.113	277.426	277.740	278.053	278.367	278.680	278.994	279.307	279.621	279.934	280.248	280.561	280.875	281.188	281.502	281.815	282.129	282.442	282.756	283.069	283.383	283.696	284.010	284.323	284.637	284.950	285.264	285.577	285.891	286.204	286.518	286.831	287.145	287.458	287.772	288.085	288.399	288.712	289.026	289.339	289.653	289.966	290.280	290.593	290.907	291.220	291.534	291.847	292.161	292.474	292.788	293.101	293.415	293.728	294.042	294.355	294.669	294.982	295.296	295.609	295.923	296.236	296.550	296.863	297.177	297.490	297.804	298.117	298.431	298.744	299.058	299.371	299.685	299.998	300.312	300.625	300.939	301.252	301.566	301.879	302.193	302.506	302.820	303.133	303.447	303.760	304.074	304.387	304.701	305.014	305.328	305.641	305.955	306.268	306.582	306.895	307.209	307.522	307.836	308.149	308.463	308.776	309.090	309.403	309.717	310.030	310.344	310.657	310.971	311.284	311.598	311.911	312.225	312.538	312.852	313.165	313.479	313.792	314.106	314.419	314.733	315.046	315.360	315.673	315.987	316.300	316.614	316.927	317.241	317.554	317.868	318.181	318.495	318.808	319.122	319.435	319.749	320.062	320.376	320.689

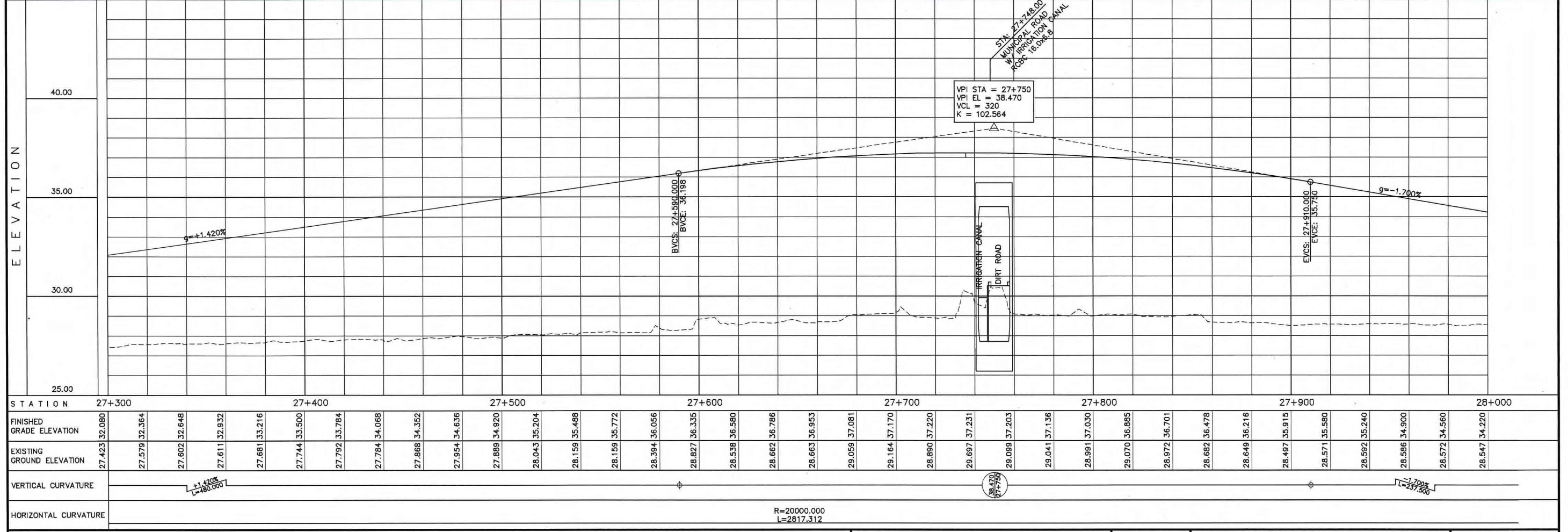




STATION	26+600	26+700	26+800	26+900	27+000	27+100	27+200	27+300
FINISHED GRADE ELEVATION	26.612	26.628	26.693	26.718	26.748	26.757	26.798	26.831
EXISTING GROUND ELEVATION	32.243	32.078	31.913	31.748	31.583	31.418	31.253	31.088
VERTICAL CURVATURE	-0.825%		+1.420%					
HORIZONTAL CURVATURE	R=∞		R=20000.000		L=2817.312			

<b>PROJECT TITLE</b> Preparatory survey for expressway project in Mega Manila Region <b>CLLEX ( TARLAC - CABANATUAN )</b>	<b>SCALE</b> V = 200 H = 2000	<b>SHEET CONTENT</b> PACKAGE 2 - INTERIM 2 LANES PLAN AND PROFILE STA 26+600.000-STA 27+300.000	<b>DRAWING NO.</b> E-83
			<b>SHEET NO.</b> 39 OF 44



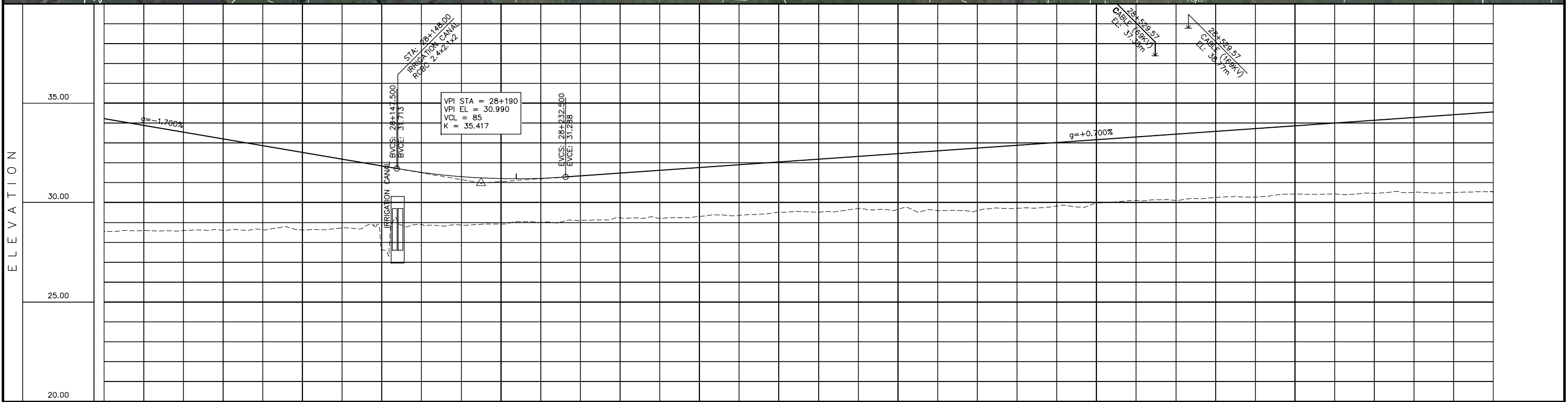
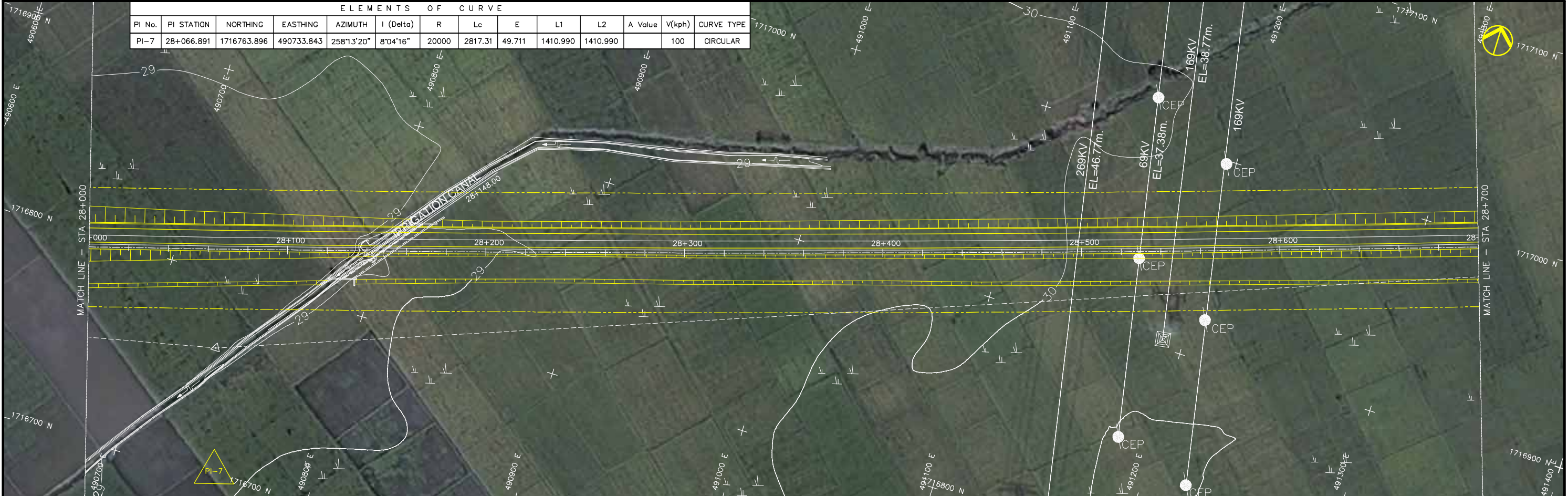


STATION	27+300	27+400	27+500	27+600	27+700	27+800	27+900	28+000
FINISHED GRADE ELEVATION	32.080	32.364	32.648	32.932	33.216	33.500	33.784	34.068
EXISTING GROUND ELEVATION	27.423	27.579	27.602	27.611	27.661	27.744	27.792	27.784
VERTICAL CURVATURE	+1.420% L=480.000						-1.700% L=237.500	
HORIZONTAL CURVATURE	R=20000.000 L=2817.312							

PROJECT TITLE	SCALE	SHEET CONTENT	DRAWING NO.
Preparatory survey for expressway project in Mega Manila Region <b>CLLEX ( TARLAC - CABANATUAN )</b>	V = 200 H = 2000	PACKAGE 2 - INTERIM 2 LANES PLAN AND PROFILE STA 27+300.000-STA 28+000.000	E-84 SHEET NO. 40 OF 44



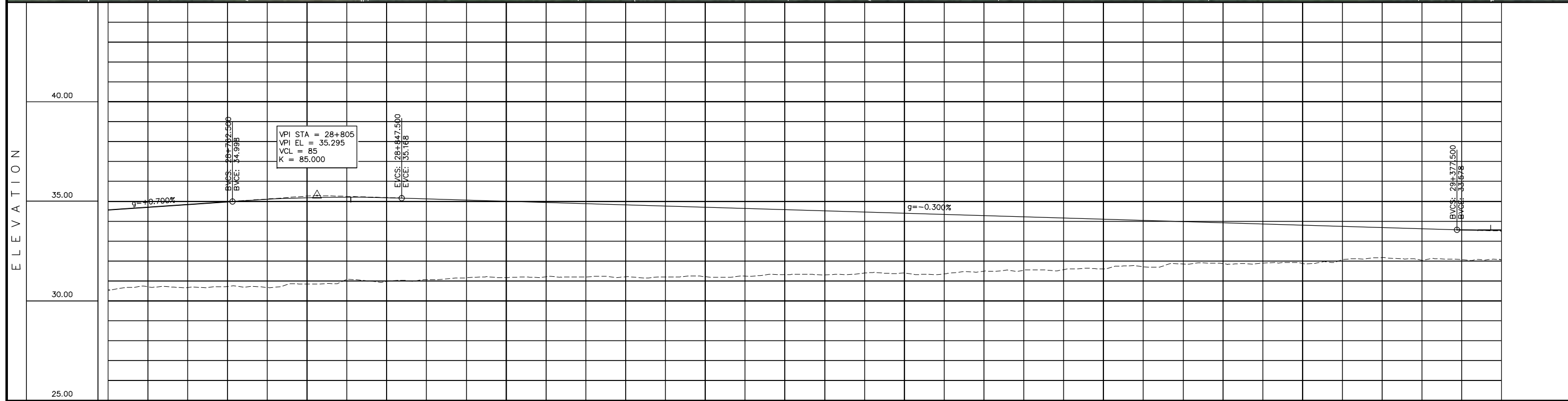
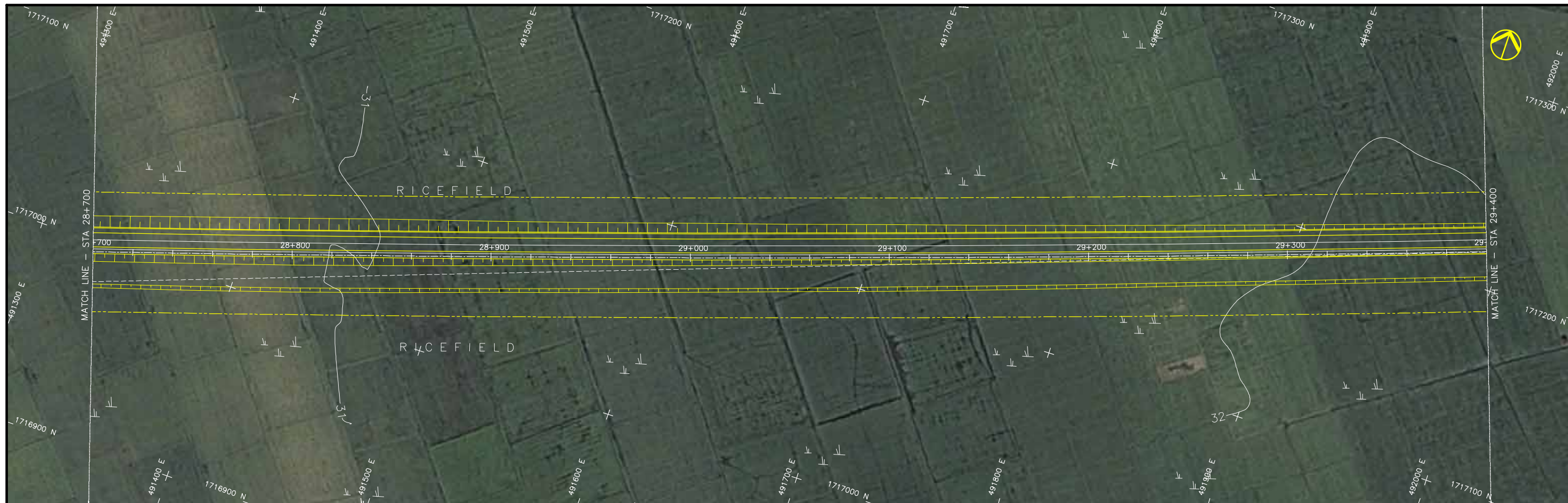
ELEMENTS OF CURVE													
PI No.	PI STATION	NORTHING	EASTING	AZIMUTH	I (Delta)	R	Lc	E	L1	L2	A Value	V(kph)	CURVE TYPE
PI-7	28+066.891	1716763.896	490733.843	258°13'20"	8°04'16"	20000	2817.31	49.711	1410.990	1410.990		100	CIRCULAR



STATION	28+000	28+100	28+200	28+300	28+400	28+500	28+600	28+700
FINISHED GRADE ELEVATION	28.547	34.220	33.880	33.540	33.200	32.860	32.520	32.180
EXISTING GROUND ELEVATION	28.597	33.880	33.540	33.200	32.860	32.520	32.180	27.631
VERTICAL CURVATURE	-1.700% L=237.500		30.990 28+190		+0.700% L=330.000			
HORIZONTAL CURVATURE	R=20000.000 L=2817.312							

PROJECT TITLE	SCALE	SHEET CONTENT	DRAWING NO.
Preparatory survey for expressway project in Mega Manila Region CLLEX ( TARLAC - CABANATUAN )	V = 200 H = 2000	PACKAGE 2 - INTERIM 2 LANES PLAN AND PROFILE STA 28+000.000-STA 28+700.000	E-85 SHEET NO. 41 OF 44

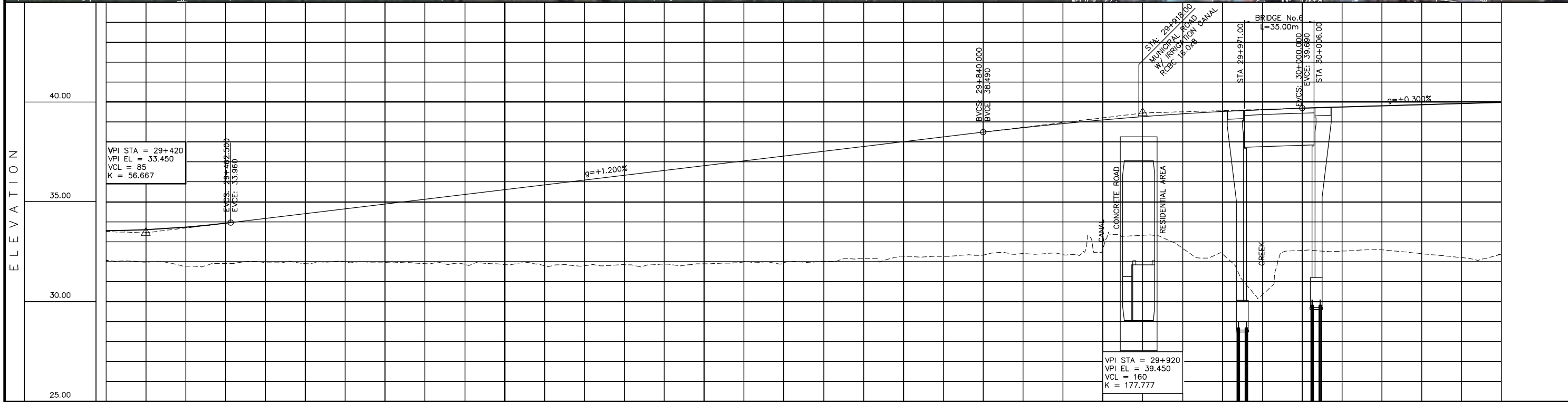




STATION	28+700	28+800	28+900	29+000	29+100	29+200	29+300	29+400		
FINISHED GRADE ELEVATION	34.560									
EXISTING GROUND ELEVATION	30.546	30.713 34.700 30.672 34.840 30.729 34.980 30.674 35.102	30.846 35.178 31.076 35.206	30.977 35.187 31.064 35.130 31.160 35.070	31.172 35.010 31.219 34.950	31.205 34.890 31.214 34.830 31.203 34.770	31.216 34.710 31.247 34.650 31.326 34.590 31.301 34.530	31.399 34.470 31.398 34.410 31.358 34.350 31.492 34.290 31.540 34.230	31.568 34.170 31.609 34.110 31.712 34.050 31.851 33.990 31.874 33.930 31.899 33.870 31.881 33.810 32.074 33.750 32.169 33.690 32.042 33.630 32.068 33.571	32.068 33.555
VERTICAL CURVATURE	+0.700% L=850.000		35.295 28+805		-0.300% L=530.000					
HORIZONTAL CURVATURE	R=20000.000 L=2817.312									

PROJECT TITLE	SCALE	SHEET CONTENT	DRAWING NO.
Preparatory survey for expressway project in Mega Manila Region CLLEX ( TARLAC - CABANATUAN )	V = 200 H = 2000	PACKAGE 2 - INTERIM 2 LANES	E-86
		PLAN AND PROFILE STA 28+700.000-STA 29+400.000	SHEET NO. 42 OF 44

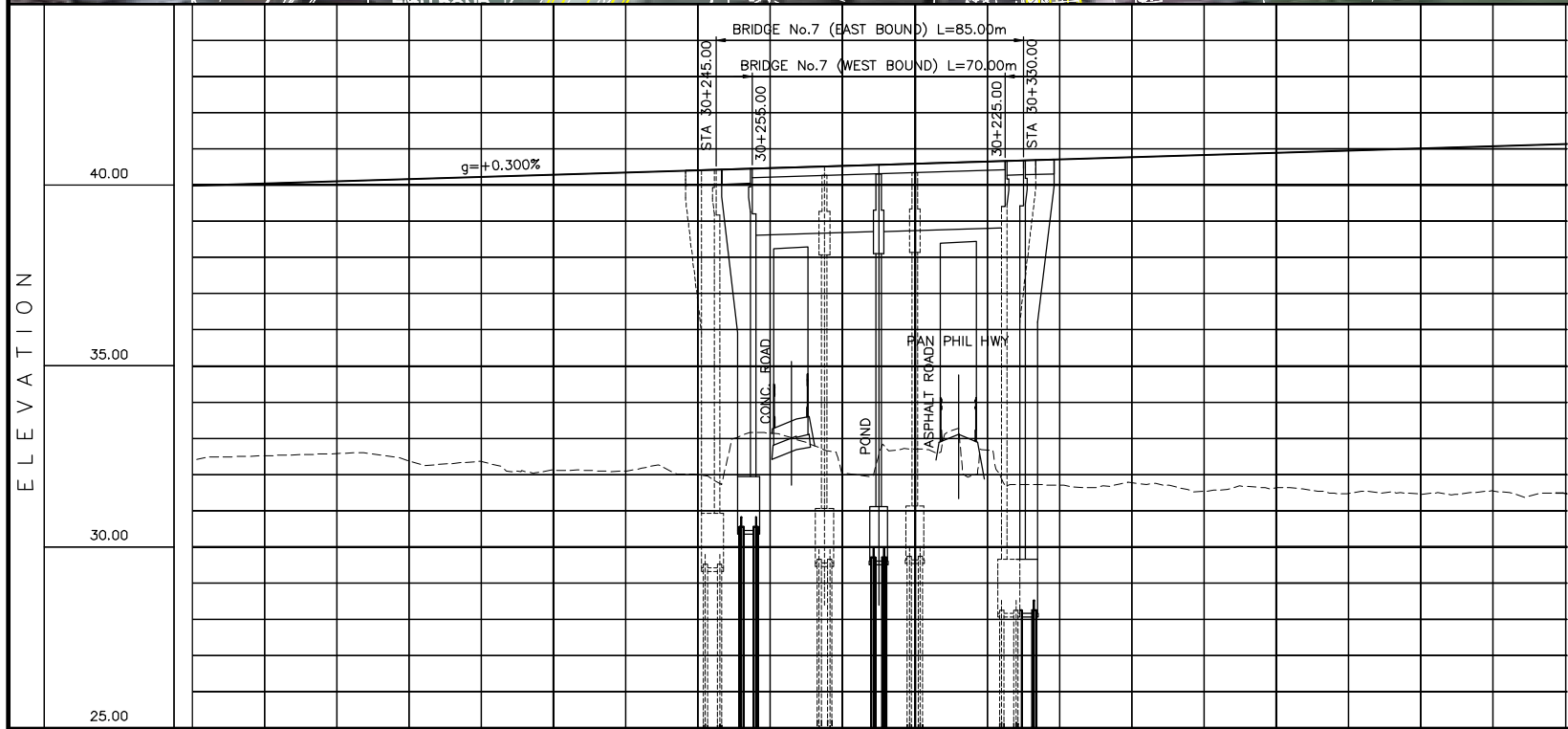
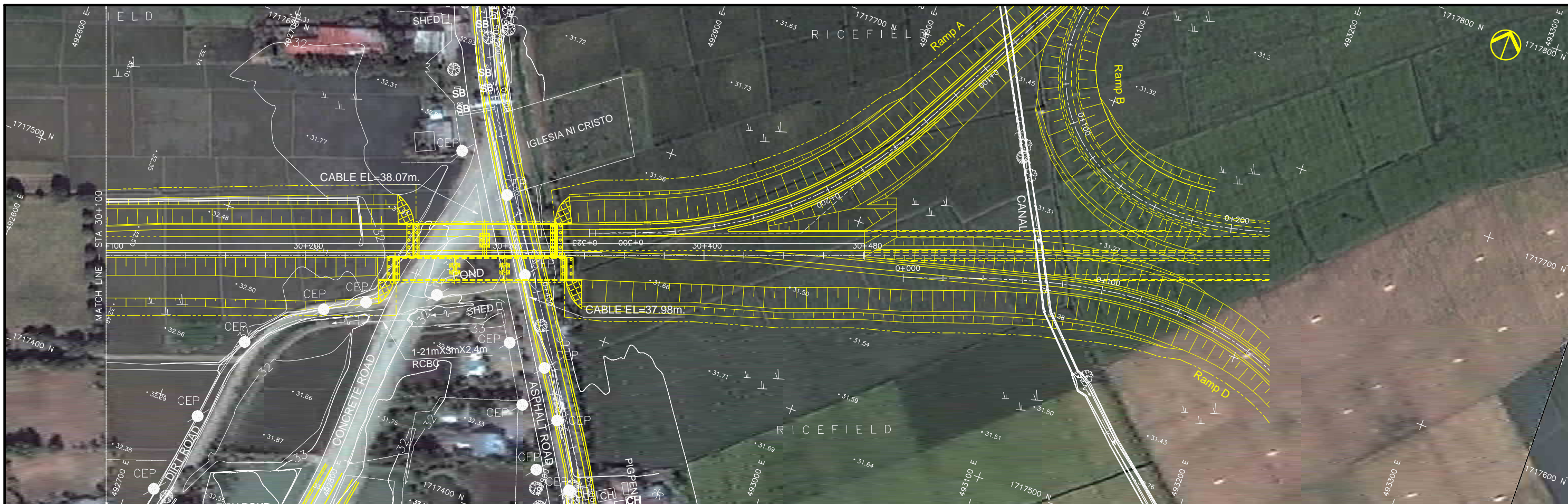




STATION	29+400	29+500	29+600	29+700	29+800	29+900	30+000	30+100
FINISHED GRADE ELEVATION	33.555							
EXISTING GROUND ELEVATION	32.069	31.986	31.779	31.909	31.951	31.910	31.992	31.971
VERTICAL CURVATURE	R=20000.000 L=2817.312		+1.200% L=377.500		R=0		+0.300% L=480.814	

<b>PROJECT TITLE</b> Preparatory survey for expressway project in Mega Manila Region <b>CLLEX ( TARLAC - CABANATUAN )</b>	<b>SCALE</b> V = 200 H = 2000	<b>SHEET CONTENT</b> PACKAGE 2 - INTERIM 2 LANES PLAN AND PROFILE STA 29+400.000-STA 30+100.000	<b>DRAWING NO.</b> E-87
			<b>SHEET NO.</b> 43 OF 44





ELEMENTS OF CURVE													
PI No.	PI STATION	NORTHING	EASTING	AZIMUTH	I (Delta)	R	Lc	E	L1	L2	A Value	V(kph)	CURVE TYPE
END	30+480.409	1717584.962	493008.371										

STATION	30+100	30+200	30+300	30+400	30+481
FINISHED GRADE ELEVATION	39.990	40.050	40.110	40.170	40.230
EXISTING GROUND ELEVATION	32.382	32.519	32.582	32.379	32.361
VERTICAL CURVATURE	$+0.300\%$ $L=480.876$				
HORIZONTAL CURVATURE	$R=\infty$				

PROJECT TITLE	SCALE	SHEET CONTENT	DRAWING NO.
Preparatory survey for expressway project in Mega Manila Region CLLEX ( TARLAC - CABANATUAN )	V = 200 H = 2000	PACKAGE 2 - INTERIM 2 LANES PLAN AND PROFILE STA 30+100.000-STA 30+480.409	E-88 SHEET NO. 44 OF 44