

Daang Hari Road: Loop 1

Traverse Station	True Azimuth	Distance	Coordinates		Elevation
			Northings	Eastings	
CL-4			1589988.200	277783.350	25.630
DH-3	63-56-14	223.396	1589890.050	277582.670	37.050
CL-04A	41-01-30	75.609	1589833.010	277533.041	37.080
DH-3A	39-23-11	216.359	1589665.791	277395.752	37.280
T-19A	68-00-14	579.588	1589448.712	276858.352	36.700
T-14	86-45-42	339.021	1589429.561	276519.872	36.770
T-12	108-19-60	167.734	1589482.321	276360.652	36.600
T-10	72-30-50	108.263	1589449.791	276257.392	36.500
T-7	92-57-59	314.962	1589466.091	275942.852	34.170
T-5	94-45-17	500.763	1589507.600	275443.812	34.970
T-2A	95-33-36	513.044	1589557.308	274933.181	33.410
M-2	102-57-39	327.124	1589630.678	274614.391	32.980
M-8D	95-53-38	533.078	1589685.418	274084.131	27.300
M-8B	100-12-23	565.245	1589785.577	273527.831	28.200
M-10	75-41-20	468.271	1589669.828	273074.091	26.690
L-9	86-01-15	365.611	1589644.457	272709.361	26.950
L-10	72-23-12	288.872	1589557.047	272434.031	25.910
H-2	77-34-17	762.980	1589392.838	271688.931	22.500
H-22	81-29-19	279.518	1589351.468	271412.491	24.560
H-25	84-45-56	189.520	1589334.178	271223.761	25.560
H-28	81-11-41	314.557	1589286.027	270912.911	25.240
D-11D	86-34-41	357.037	1589264.716	270556.511	13.930
D-8A	108-37-44	326.602	1589369.046	270247.021	24.660
L-4	130-03-33	210.510	1589504.527	270085.900	25.360
DH-6	113-44-45	949.264	1589886.780	269217.000	22.510

Daang Hari Road: Loop 2

Traverse Station	True Azimuth	Distance	Coordinates		Elevation
			Northings	Eastings	
DH-6	99-11-59	725.492	1589886.780	269217.000	22.510
T-32			1590002.770	268500.842	21.370
DH-6A	9-39-37	99.815	1589904.370	268484.092	21.370
T-30	111-37-41	336.426	1590028.371	268171.353	17.710
T-29	127-29-59	124.220	1590103.991	268072.802	18.860
T-8	98-18-18	267.303	1590142.601	267808.303	12.760
T-14	122-27-31	666.396	1590500.251	267246.013	11.390
G-6	105-50-52	241.427	1590566.181	267013.764	8.260
G-4	67-11-15	294.159	1590452.131	266742.615	10.580
G-2	142-41-39	292.862	1590685.079	266565.120	6.800
DH-7	159-59-30	227.469	1590898.820	266487.290	7.570

CALA Expressway: Loop 1

Traverse Station	True Azimuth	Distance	Coordinates		Elevation
			Northings	Eastings	
CL-29A			1577161.410	295108.840	42.879
T-294	62-47-24	561.969	1576904.427	294609.074	43.020
T-291	67-08-50	149.690	1576846.288	294471.138	44.720
T-290	340-45-49	19.969	1576827.432	294477.718	44.880
T-292	252-48-50	154.231	1576873.000	294625.067	43.060
T-293	307-57-53	26.459	1576856.722	294645.927	43.660
CL-29	237-07-30	442.233	1577096.750	295017.350	40.940

CALA Expressway: Loop 2

Traverse Station	True Azimuth	Distance	Coordinates		Elevation
			Northings	Eastings	
CALA-3			1575116.466	289657.882	106.980
T-4	61-05-13	315.060	1574964.141	289382.092	118.720
T-9	57-20-25	259.654	1574824.021	289163.492	126.730
T-10	58-57-57	209.754	1574715.883	288983.762	135.540
A-1	65-31-44	228.370	1574621.285	288775.906	144.020
T-14	63-46-42	266.823	1574503.391	288536.542	152.820
T-17	50-40-44	293.026	1574317.713	288309.855	166.160
M4	77-42-46	234.855	1574267.733	288080.380	173.530
C5C-1V	62-16-41	391.850	1574085.453	287733.508	197.330
C5C-1P	77-46-59	254.880	1574031.518	287484.400	189.740
C5-C	83-43-18	278.123	1574001.103	287207.945	196.880
C5B4	79-34-19	152.246	1573973.546	287058.215	213.560
C5B7	69-30-21	94.545	1573940.445	286969.654	216.840
S-10	96-38-18	181.276	1573961.401	286789.593	223.130
K-5	88-20-17	207.882	1573955.372	286581.797	228.110
C.6A8	94-30-24	204.701	1573971.457	286377.729	251.110
T-2	105-28-00	689.676	1574155.380	285713.030	264.600
G5	106-14-06	683.673	1574346.521	285056.619	272.020
T-1	105-07-57	193.558	1574397.050	284869.773	271.980
T-9	95-06-25	459.817	1574437.981	284411.781	281.400
T-15	92-08-58	294.588	1574449.030	284117.400	287.630
L-4	89-21-32	335.190	1574445.279	283782.230	296.650
L2	103-12-55	250.684	1574502.589	283538.185	295.230
CALA-4	124-10-32	293.879	1574667.671	283295.053	289.740

CALA Expressway: Loop 3

Traverse Station	True Azimuth	Distance	Coordinates		Elevation
			Northings	Eastings	
CALA-4			1574667.671	283295.053	289.740
T-1	116-12-24	168.266	1574741.979	283144.084	286.350
T-5	118-10-38	531.948	1574993.168	282675.177	277.120
A2	115-00-55	553.516	1575227.230	282173.585	276.790
CALA-5	102-33-46	493.612	1575334.596	281691.792	277.510

CALA Expressway: Loop 4

Traverse Station	True Azimuth	Distance	Coordinates		Elevation
			Northings	Eastings	
CALA-5			1575334.596	281691.792	277.510
5A-11	124-45-26	693.634	1575730.038	281121.920	266.390
5A-19	121-21-51	406.113	1575941.411	280775.150	242.760
J24	126-22-28	278.268	1576106.441	280551.100	266.900
J3411	118-13-04	418.927	1576304.521	280181.960	257.020
J3768	111-58-34	663.647	1576552.872	279566.534	247.320
CALA-6A	105-30-48	448.411	1576672.805	279134.460	241.880
CALA-6	79-24-28	58.446	1576662.062	279077.010	242.630

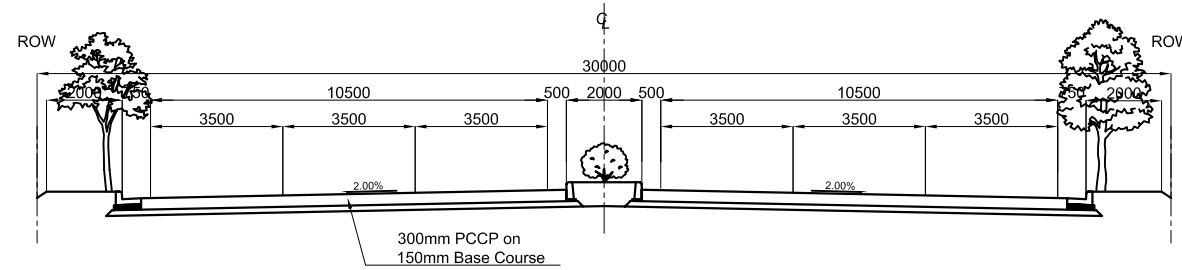
CALA Expressway: Loop 5

Traverse Station	True Azimuth	Distance	Coordinates		Elevation
			Northings	Eastings	
CALA-6			1576662.062	279077.010	242.630
S6	109-11-08	518.750	1576832.535	278587.072	288.730
CL-11	87-27-42	380.569	1576815.680	278206.878	234.480
T4	138-06-39	418.867	1577127.495	277927.204	220.680
T9	124-25-21	486.381	1577402.437	277525.993	206.630
T16	143-28-28	217.823	1577577.475	277396.349	199.890
CALA-7	167-42-54	251.407	1577823.120	277342.856	195.910

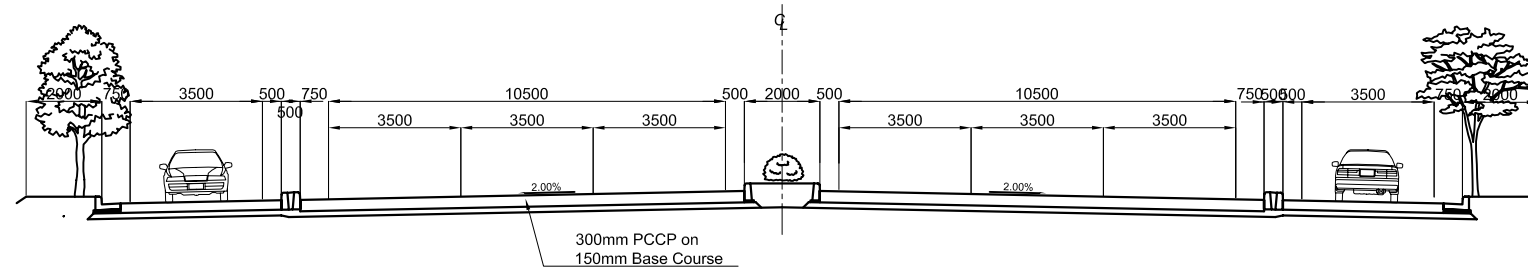
CALA Expressway: Loop 6

Traverse Station	True Azimuth	Distance	Coordinates		Elevation
			Northings	Eastings	
CALA-7			1577823.120	277342.856	195.910
C-47	129-33-18	658.619	1578242.541	276835.058	189.240
C.41	161-36-14	716.289	1578922.227	276609.011	172.140
C-39	165-11-54	624.973	1579526.461	276449.349	157.290
C-37	172-13-25	287.613	1579811.430	276410.433	154.070
C.4	170-23-06	699.068	1580500.678	276293.671	140.570
CALA-8	150-21-56	646.477	1581062.596	275974.015	139.140

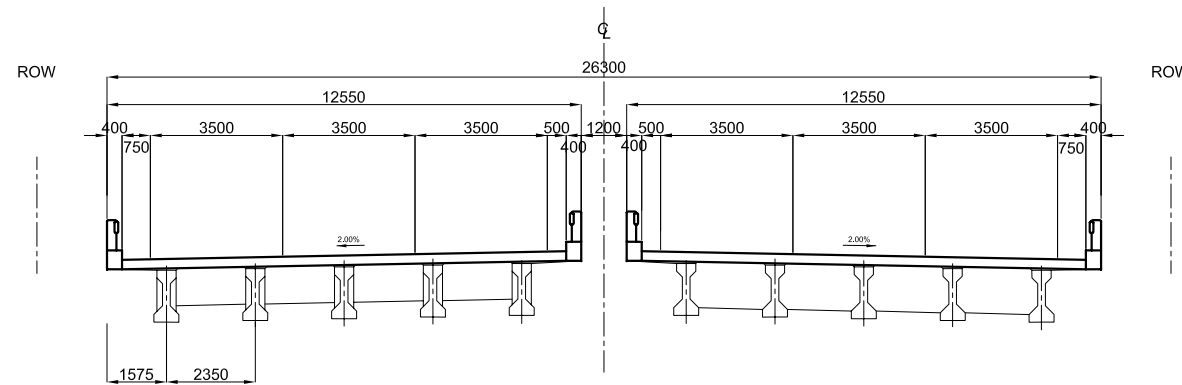
North-South Road
Typical Cross Section of Dual 3-Lane with Sidewalks



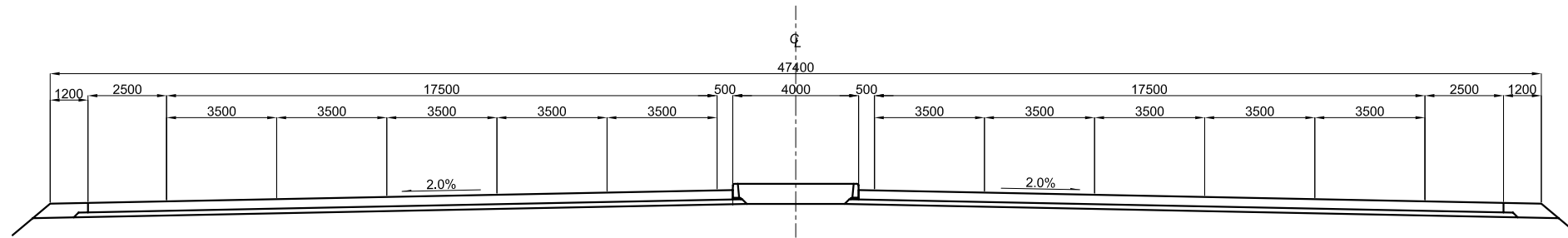
North-South Road
Dual 3-Lane with Service Roads



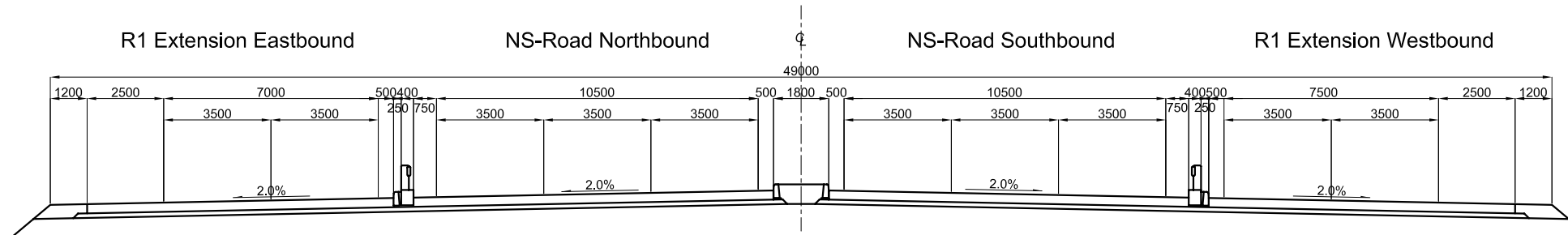
North-South Road
Typical Cross Section of Bridge/Flyover



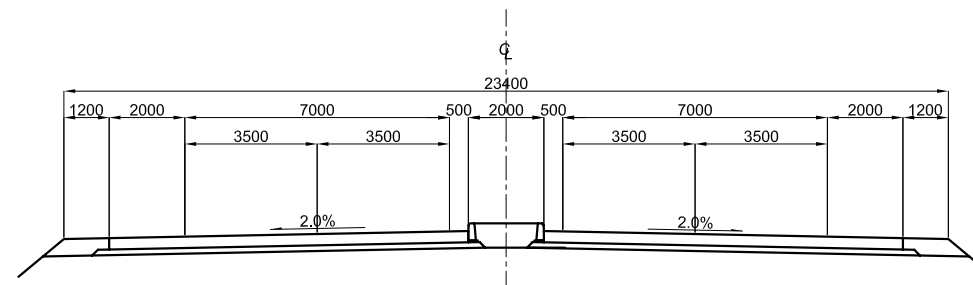
North-South Road, NS-1 Beginning Section
Manila-Cavite Toll Expressway Improving Section



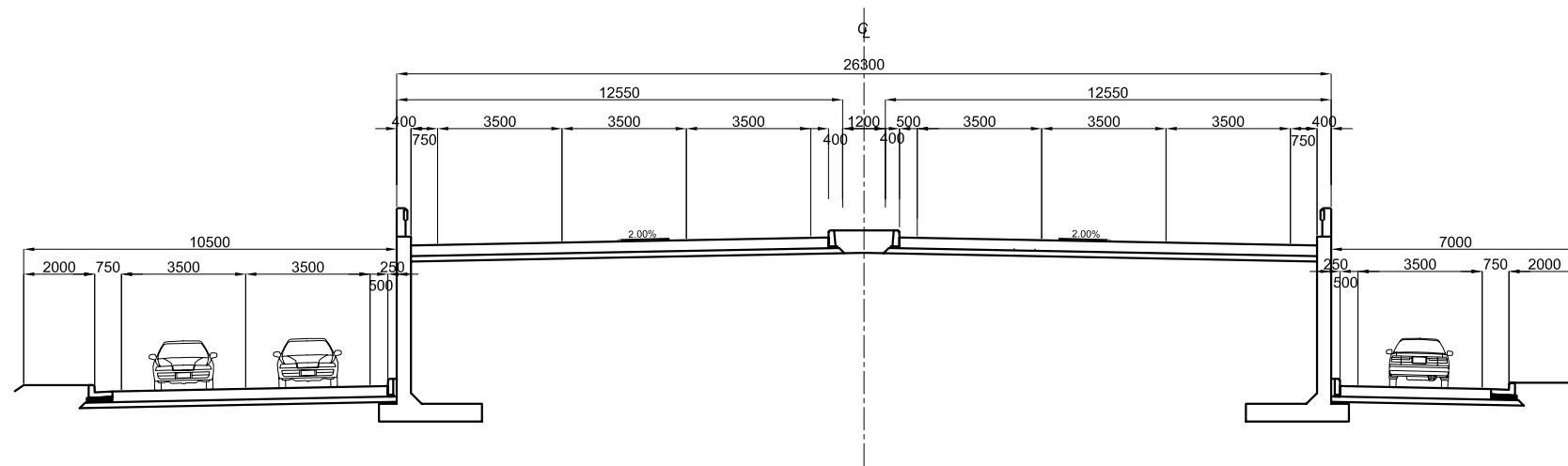
North-South road, NS-1 Beginning Section
Diverging/Merging Section of NS-Road from/to R1 Extension



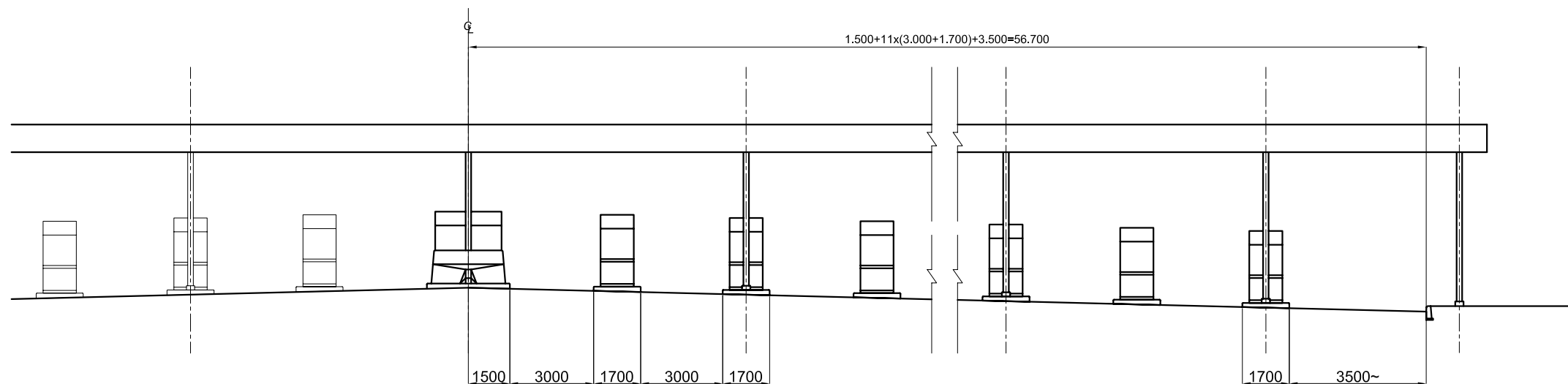
North-South Road, NS-1 Beginning Section
Zapote Interchange Dual 2-Lane Ramp Section



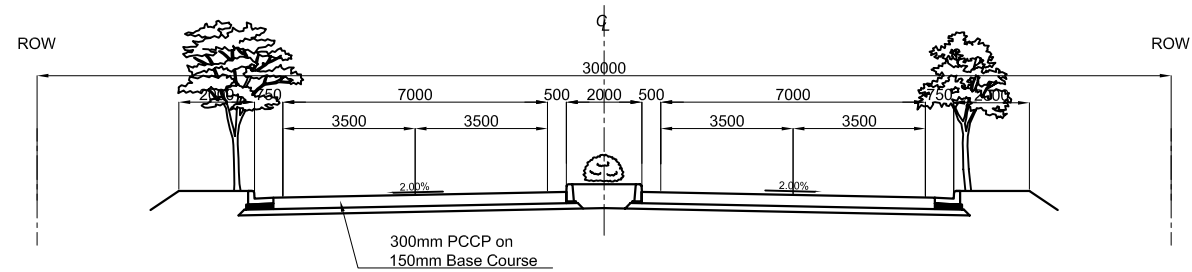
North-South Road
 Typical Cross Section at Grade Separation with One Lane or two Lanes Approach Roads



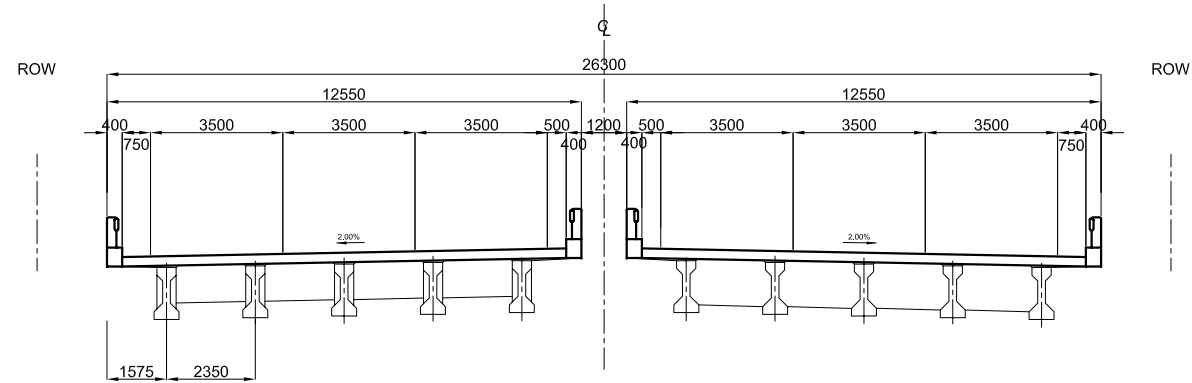
North-South Road
 Typical Cross Section of Tollgate



Daang Hari Road
Typical Cross Section of Dual 2-Lane with Sidewalks

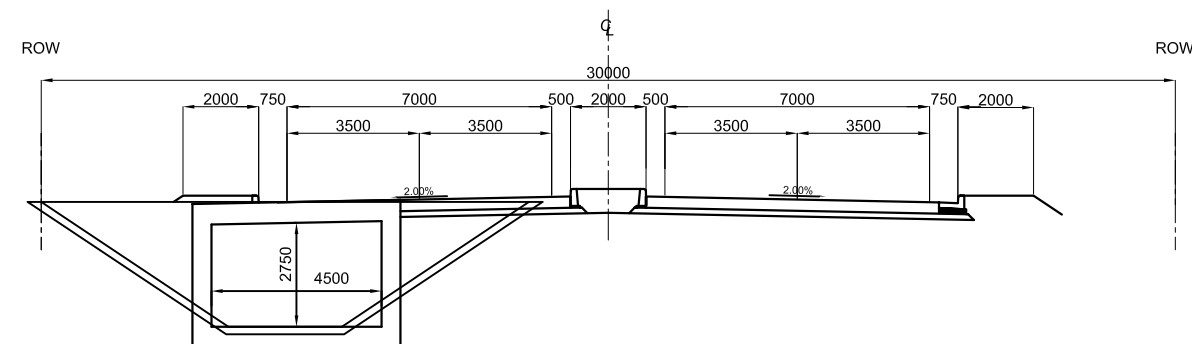


Daang Hari Road
Typical Cross Section of Bridge

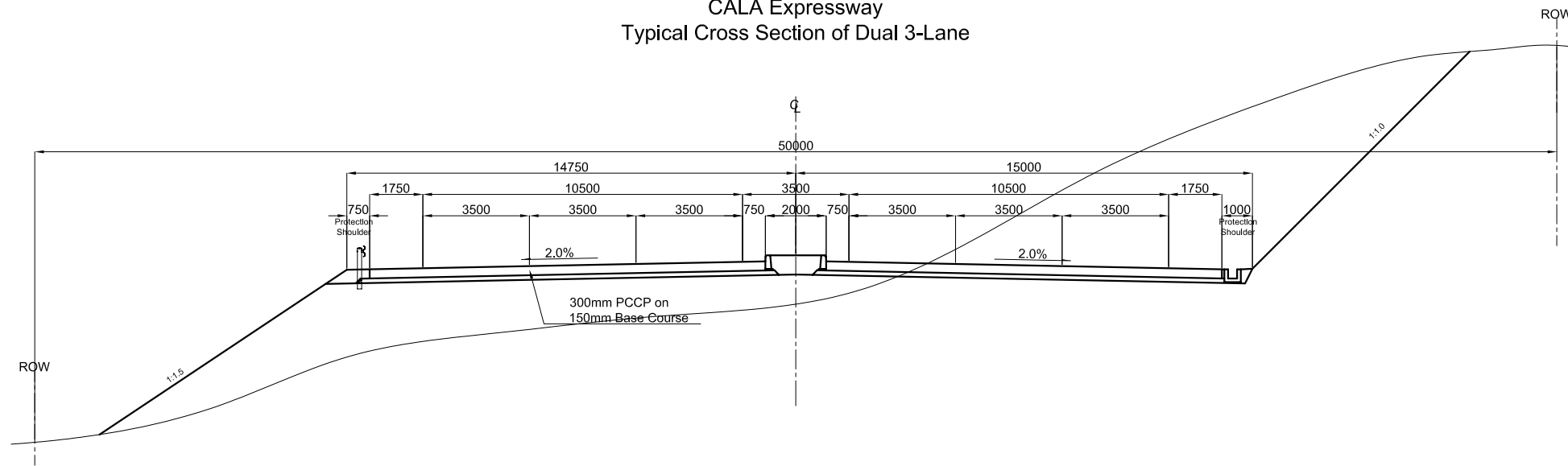


Remark: The bridge of Daang Hari Road is recommended to accommodate the dual 3-lane highway for future expansion from dual 2-lane to dual 3-lane. The proposed cross section of bridge is, consequently, the same as the proposed section for North-South Road.

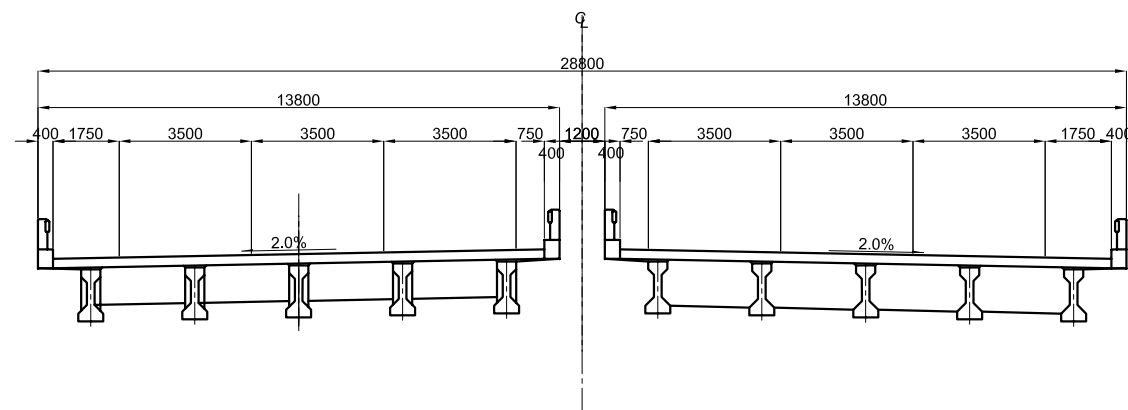
Daang Hari Road
Typical Cross Section utilizing NIA Canal as a part of Highway, replacing Open Channel with Concrete Conduit.



CALA Expressway
Typical Cross Section of Dual 3-Lane



CALA Expressway
Typical Cross Section of Bridge/Flyover



CALA Expressway
Typical Cross Section of Ramp

