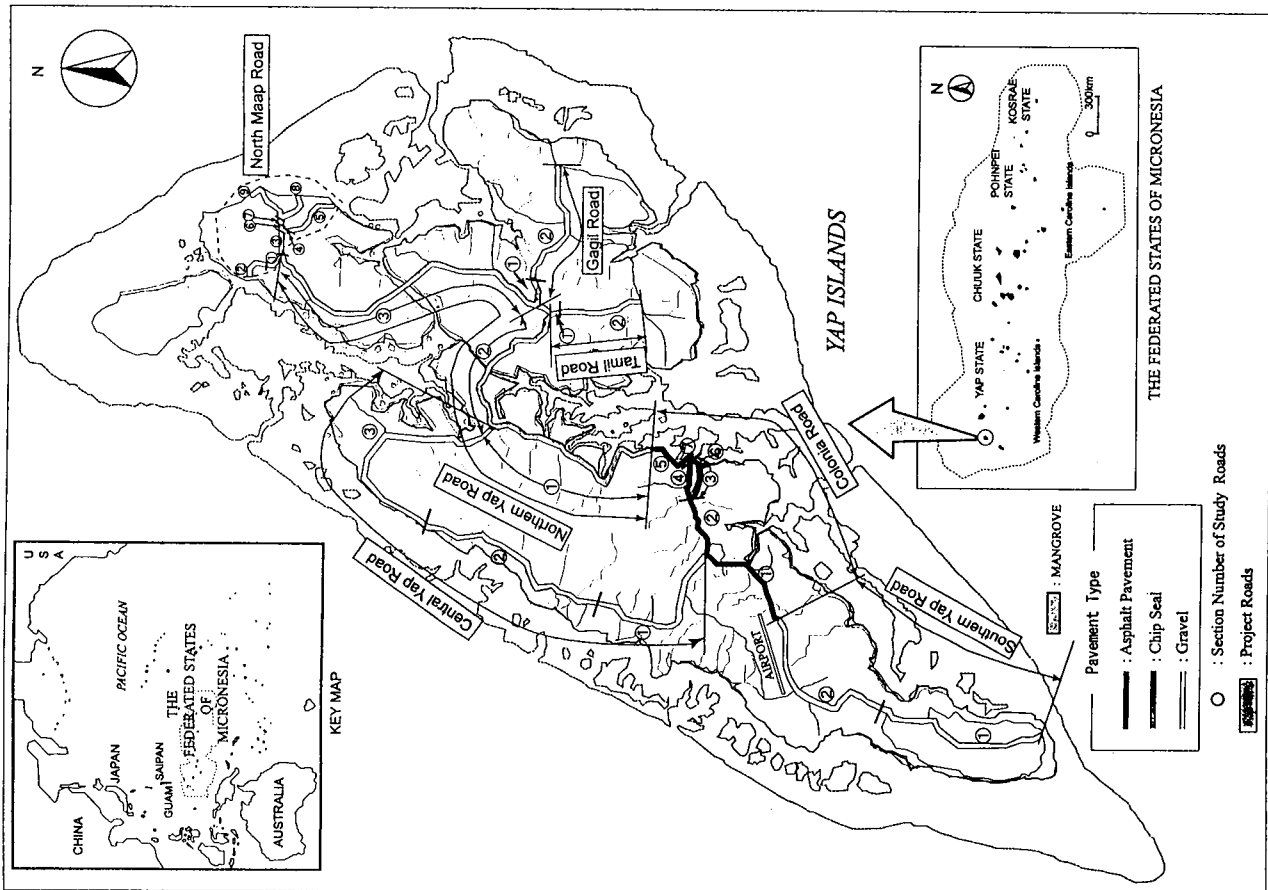


APPENDIX 12

DRAWINGS

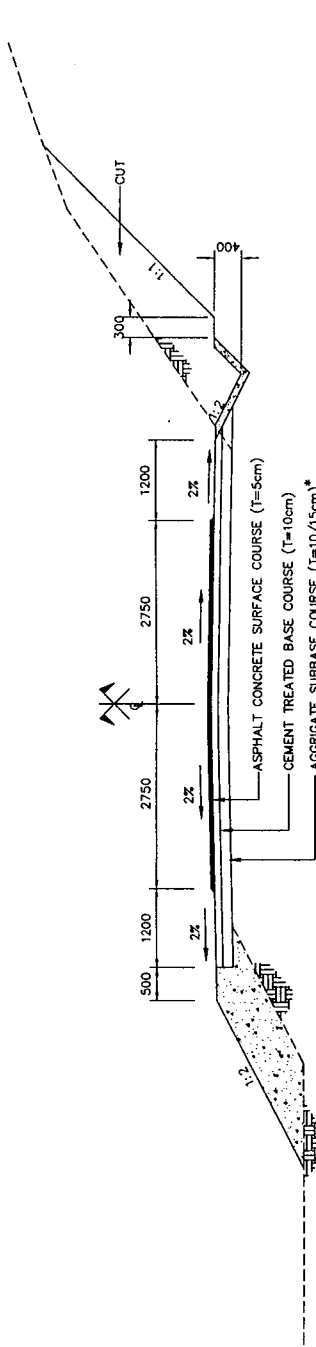
CONTENTS OF DRAWINGS

DRAWING NO.	DRAWING TITLE	DRAWING NO.	DRAWING TITLE
G-1	TYPICAL CROSS SECTION	C-1	CROSS SECTION OF CENTRAL ROAD (STA.0+000 - STA.1+400)
P-1	PLAN & PROFILE OF CENTRAL ROAD (STA.0+000 - STA.0+875)	C-2	CROSS SECTION OF CENTRAL ROAD (STA.1+500 - STA.2+900)
P-2	PLAN & PROFILE OF CENTRAL ROAD (STA.0+875 - STA.1+325)	C-3	CROSS SECTION OF CENTRAL ROAD (STA.3+000 - STA.4+400)
P-3	PLAN & PROFILE OF CENTRAL ROAD (STA.1+325 - STA.1+975)	C-4	CROSS SECTION OF CENTRAL ROAD (STA.4+500 - STA.5+900)
P-4	PLAN & PROFILE OF CENTRAL ROAD (STA.1+975 - STA.2+625)	C-5	CROSS SECTION OF CENTRAL ROAD (STA.6+000 - STA.7+400)
P-5	PLAN & PROFILE OF CENTRAL ROAD (STA.2+625 - STA.3+275)	C-6	CROSS SECTION OF CENTRAL ROAD (STA.7+500 - STA.8+900)
P-6	PLAN & PROFILE OF CENTRAL ROAD (STA.3+275 - STA.3+925)	C-7	CROSS SECTION OF CENTRAL ROAD (STA.9+000 - STA.10+400)
P-7	PLAN & PROFILE OF CENTRAL ROAD (STA.3+925 - STA.4+575)	C-8	CROSS SECTION OF CENTRAL ROAD (STA.10+500 - STA.11+900)
P-8	PLAN & PROFILE OF CENTRAL ROAD (STA.4+575 - STA.5+225)	C-9	CROSS SECTION OF CENTRAL ROAD (STA.12+000 - STA.13+400)
P-9	PLAN & PROFILE OF CENTRAL ROAD (STA.5+225 - STA.5+875)	C-10	CROSS SECTION OF CENTRAL ROAD (STA.13+500 - STA.14+900)
P-10	PLAN & PROFILE OF CENTRAL ROAD (STA.5+875 - STA.6+525)	D-1	CROSS SECTION OF CENTRAL ROAD (STA.4+483 - STA.7+791.50)
P-11	PLAN & PROFILE OF CENTRAL ROAD (STA.6+525 - STA.7+175)	D-2	STANDARD REINFORCED CONCRETE PIPE CULVERT DETAILS
P-12	PLAN & PROFILE OF CENTRAL ROAD (STA.7+175 - STA.7+825)	D-3	STANDARD HEADWALL FOR REINFORCED CONCRETE CULVERT
P-13	PLAN & PROFILE OF CENTRAL ROAD (STA.7+825 - STA.8+475)	B-1	TWO-CELL BOX CULVERT DETAILS
P-14	PLAN & PROFILE OF CENTRAL ROAD (STA.8+475 - STA.9+125)	B-2	TWO-CELL BOX CULVERT DETAILS
P-15	PLAN & PROFILE OF CENTRAL ROAD (STA.9+125 - STA.9+775)	B-3	TWO-CELL BOX CULVERT DETAILS
P-16	PLAN & PROFILE OF CENTRAL ROAD (STA.9+775 - STA.10+425)	M-1	TYPICAL DETAILS OF INTERSECTION
P-17	PLAN & PROFILE OF CENTRAL ROAD (STA.10+425 - STA.11+075)	M-2	STANDARD PAVEMENT MARKING
P-18	PLAN & PROFILE OF CENTRAL ROAD (STA.11+075 - STA.11+725)	M-3	STANDARD ROAD SIGNS
P-19	PLAN & PROFILE OF CENTRAL ROAD (STA.11+725 - STA.12+375)		
P-20	PLAN & PROFILE OF CENTRAL ROAD (STA.12+375 - STA.13+025)		
P-21	PLAN & PROFILE OF CENTRAL ROAD (STA.13+025 - STA.13+675)		
P-22	PLAN & PROFILE OF CENTRAL ROAD (STA.13+675 - STA.14+325)		
P-23	PLAN & PROFILE OF CENTRAL ROAD (STA.14+325 - STA.14+975)		

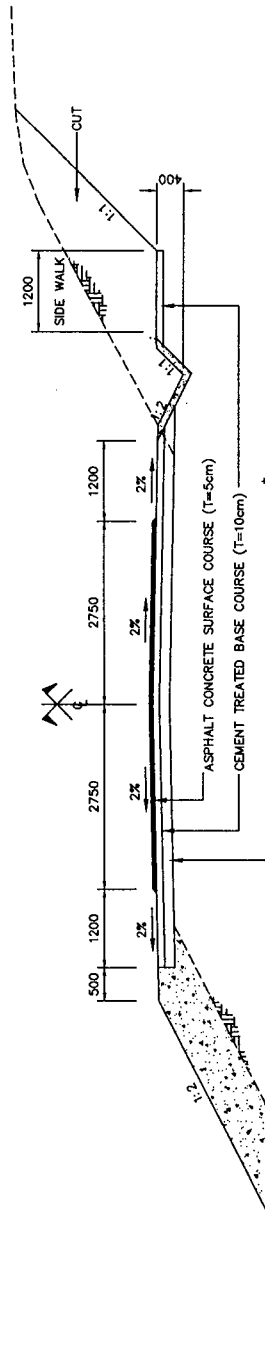


PROJECT LOCALITY MAP

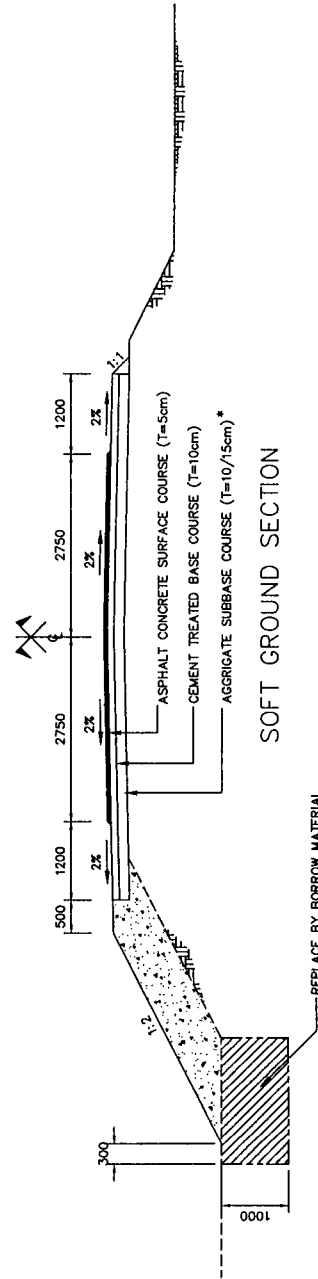
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION STATE OF YAP FEDERATED STATES OF MICRONESIA	BASIC DESIGN STUDY ON THE ROAD IMPROVEMENT PROJECT FOR THE STATE OF YAP IN THE FEDERATED STATES OF MICRONESIA	JAPAN INTERNATIONAL COOPERATION AGENCY INTERNATIONAL ENGINEERS	TITLE: CROSS SECTION OF CENTRAL ROAD (STA.13+500 - STA.14+900)	SCALE:	DRAWING No.	Rv.
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WITHOUT SIDE WALK



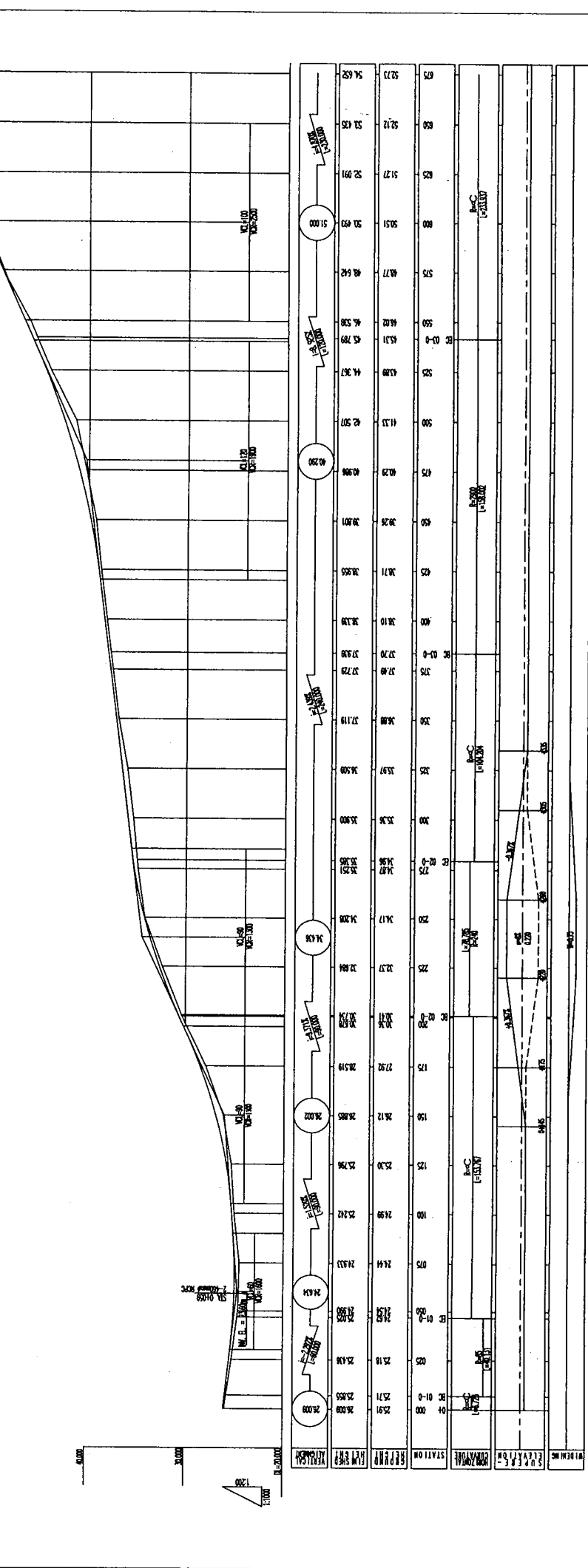
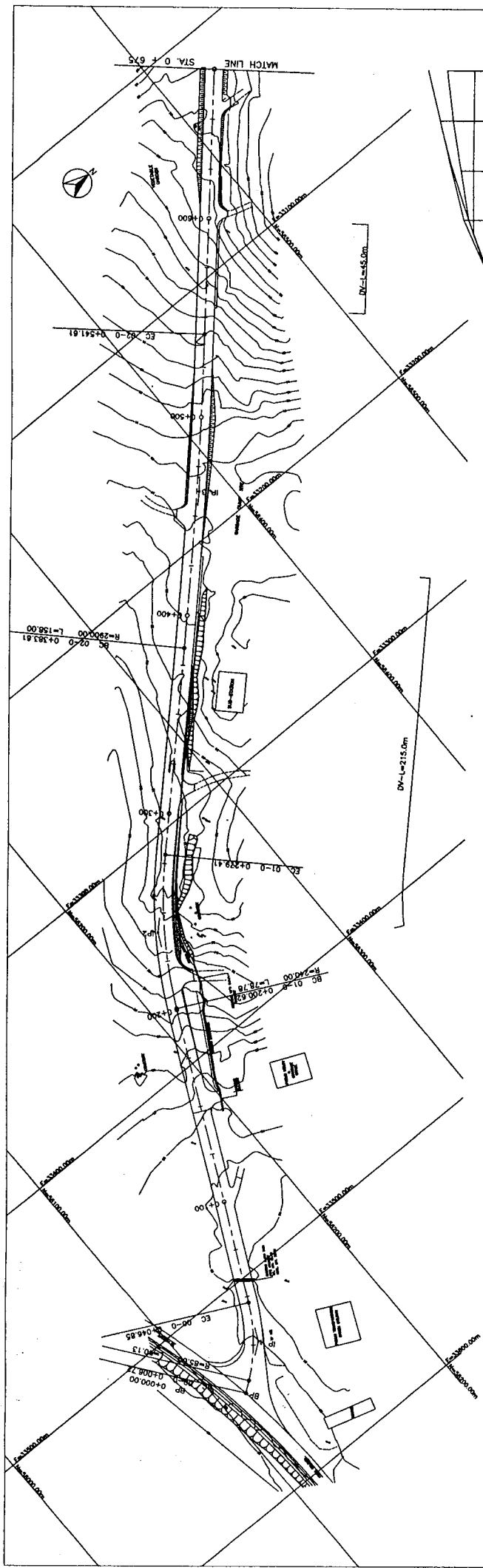
WITH SIDE WALK



SOFT GROUND SECTION

NOTE:
 * SECTION 1 & 3 (T=10cm)
 SECTION 2 (T=15cm)

DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION STATE OF YAP, FEDERATED STATES OF MICRONESIA	BASIC DESIGN STUDY ON THE ROAD IMPROVEMENT PROJECT FOR THE STATE OF YAP IN THE FEDERATED STATES OF MICRONESIA	JAPAN INTERNATIONAL COOPERATION AGENCY MATHIARA & ENGINEERS INTERNATIONAL	TITLE: TYPICAL CROSS SECTION	SCALE: 1:80	DRAWING NO: G-1
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DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
 STATE OF YAP, FEDERATED STATES OF MICRONESIA

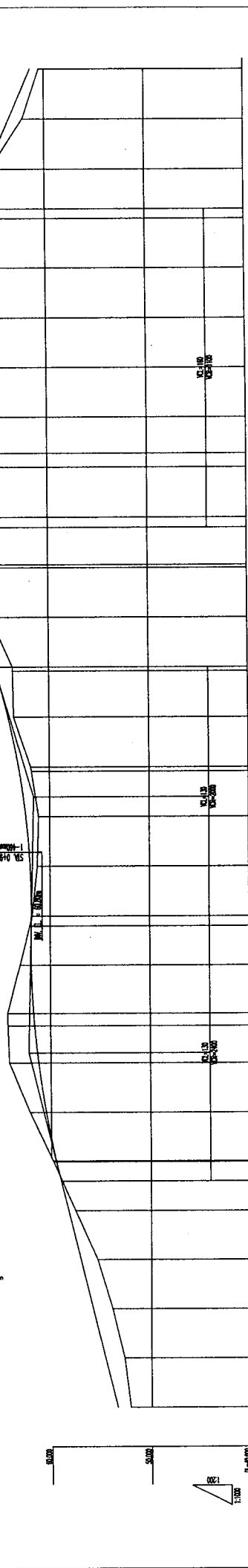
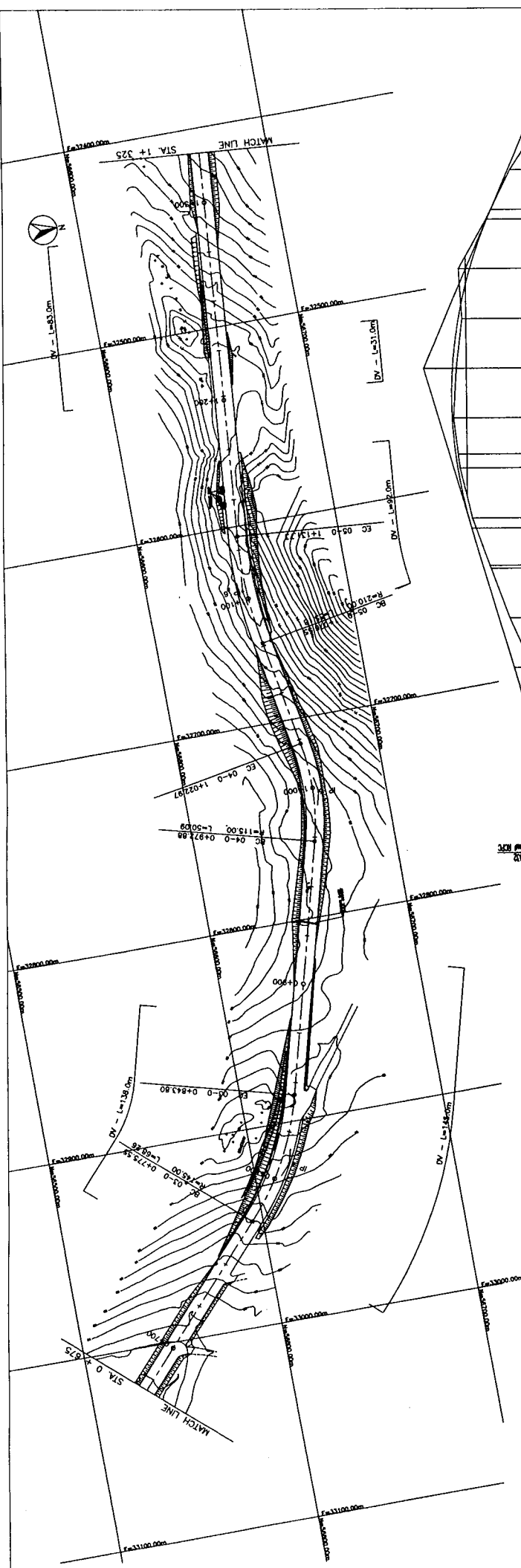
BASIC DESIGN STUDY ON THE ROAD IMPROVEMENT PROJECT
 FOR THE STATE OF YAP
 IN THE FEDERATED STATES OF MICRONESIA

JAPAN INTERNATIONAL COOPERATION AGENCY
 MATSUI & ENGINEERS INTERNATIONAL

TITLE: PLAN & PROFILE OF CENTRAL ROAD
 (STA. 0 + 000 - STA. 0 + 675)

SCALE: H = 1 : 1000
 V = 1 : 200

DRAWING No: P - 1



STATION	EXISTING ELEVATION	PROPOSED ELEVATION	VERTICAL CURVE DATA
675	53.45	52.12	
680	54.82	52.72	
685	55.87	53.27	
690	57.07	54.41	
695	54.30	57.81	
700	58.28	58.28	
705	58.28	58.28	
710	58.28	58.28	
715	58.28	58.28	
720	58.28	58.28	
725	58.28	58.28	
730	58.28	58.28	
735	58.28	58.28	
740	58.28	58.28	
745	58.28	58.28	
750	58.28	58.28	
755	58.28	58.28	
760	58.28	58.28	
765	58.28	58.28	
770	58.28	58.28	
775	58.28	58.28	
780	58.28	58.28	
785	58.28	58.28	
790	58.28	58.28	
795	58.28	58.28	
800	58.28	58.28	
805	58.28	58.28	
810	58.28	58.28	
815	58.28	58.28	
820	58.28	58.28	
825	58.28	58.28	
830	58.28	58.28	
835	58.28	58.28	
840	58.28	58.28	
845	58.28	58.28	
850	58.28	58.28	
855	58.28	58.28	
860	58.28	58.28	
865	58.28	58.28	
870	58.28	58.28	
875	58.28	58.28	
880	58.28	58.28	
885	58.28	58.28	
890	58.28	58.28	
895	58.28	58.28	
900	58.28	58.28	
905	58.28	58.28	
910	58.28	58.28	
915	58.28	58.28	
920	58.28	58.28	
925	58.28	58.28	
930	58.28	58.28	
935	58.28	58.28	
940	58.28	58.28	
945	58.28	58.28	
950	58.28	58.28	
955	58.28	58.28	
960	58.28	58.28	
965	58.28	58.28	
970	58.28	58.28	
975	58.28	58.28	
980	58.28	58.28	
985	58.28	58.28	
990	58.28	58.28	
995	58.28	58.28	
1000	58.28	58.28	

DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
 STATE OF YAP, FEDERATED STATES OF MICRONESIA

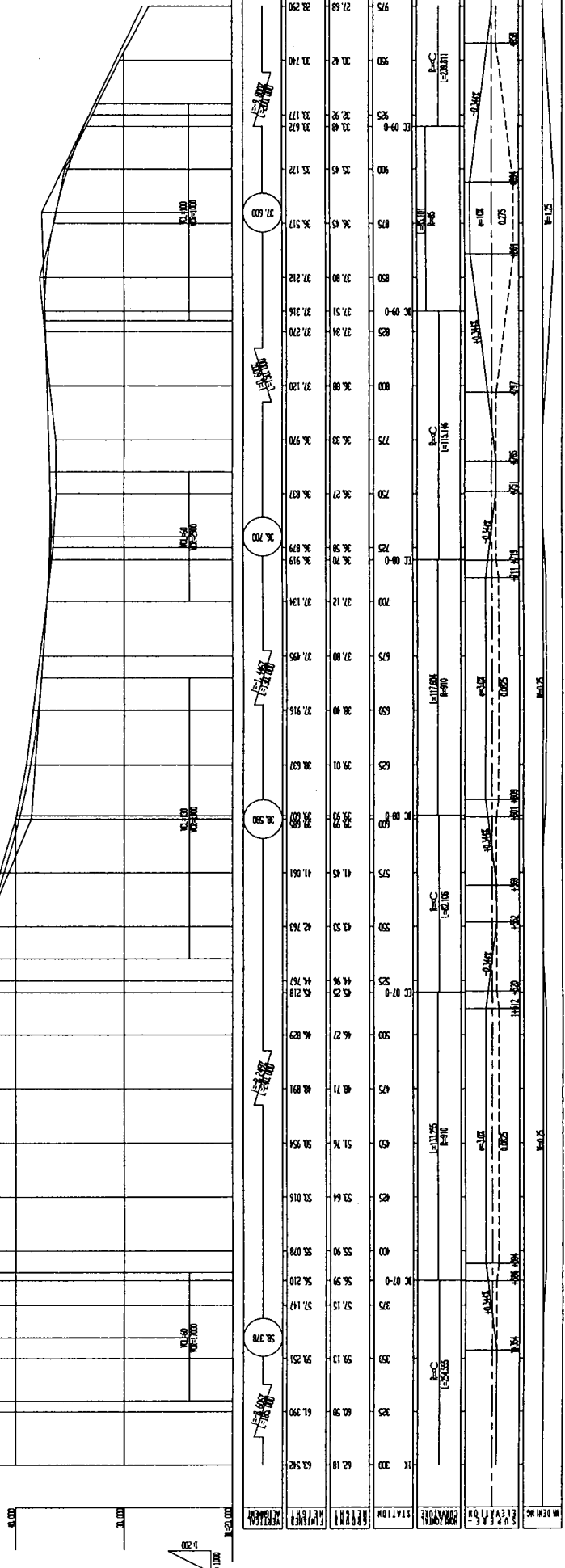
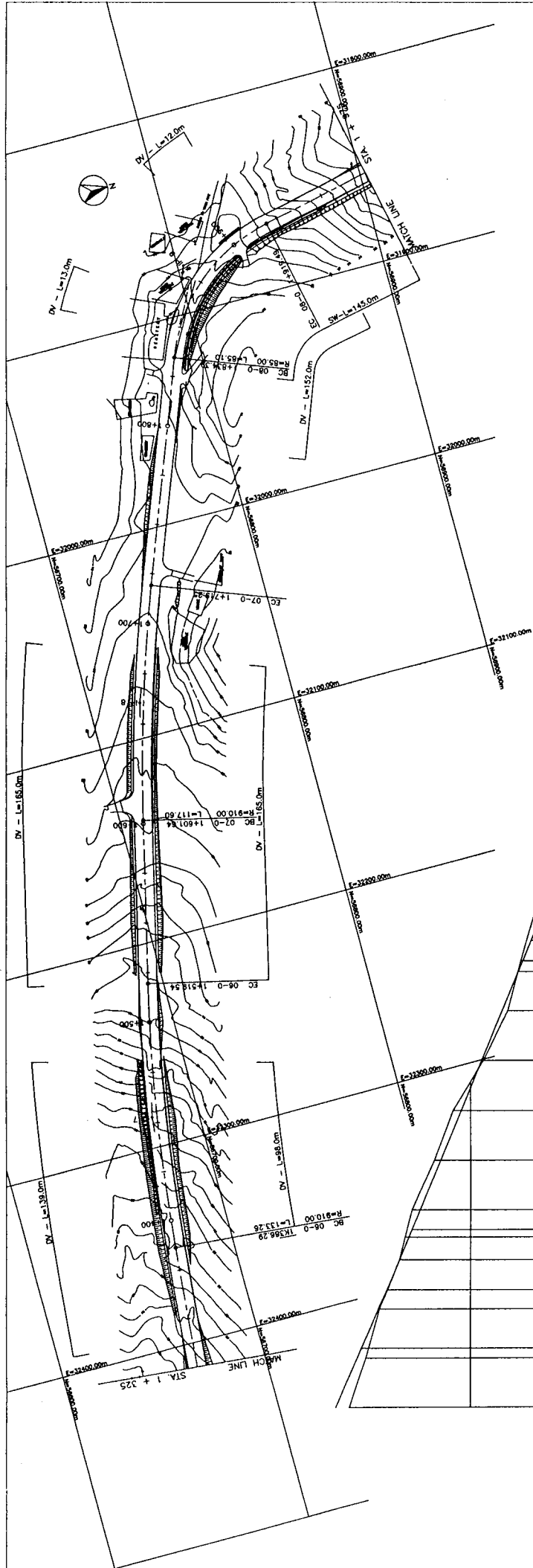
BASIC DESIGN STUDY ON THE ROAD IMPROVEMENT PROJECT
 FOR THE STATE OF YAP
 IN THE FEDERATED STATES OF MICRONESIA

JAPAN INTERNATIONAL COOPERATION AGENCY
 KATAHARA & ENGINEERS INTERNATIONAL

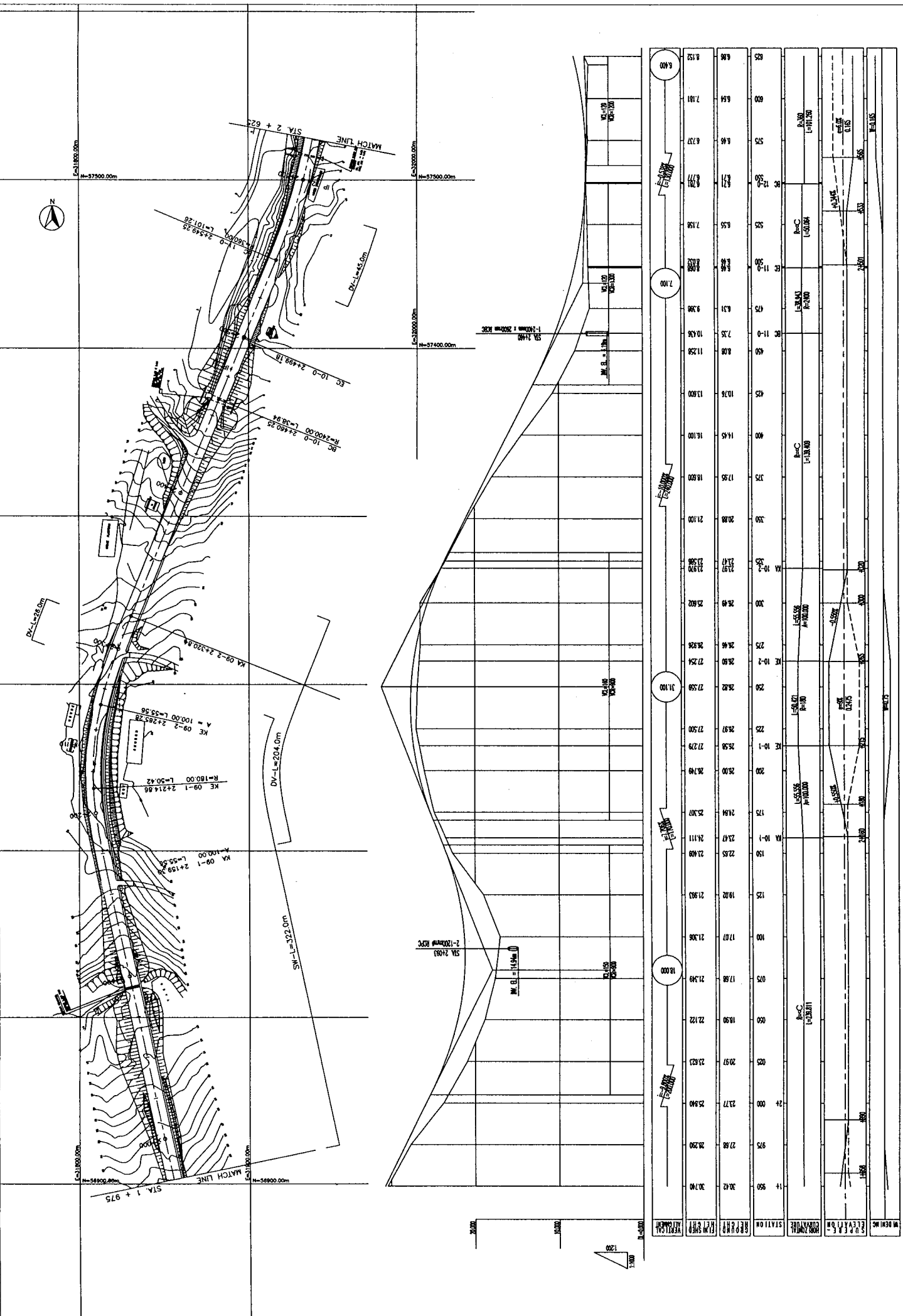
TITLE:
 PLAN & PROFILE OF CENTRAL ROAD
 (STA. 0 + 675 - STA. 1 + 325)

SCALE:
 H = 1:1000
 V = 1:200

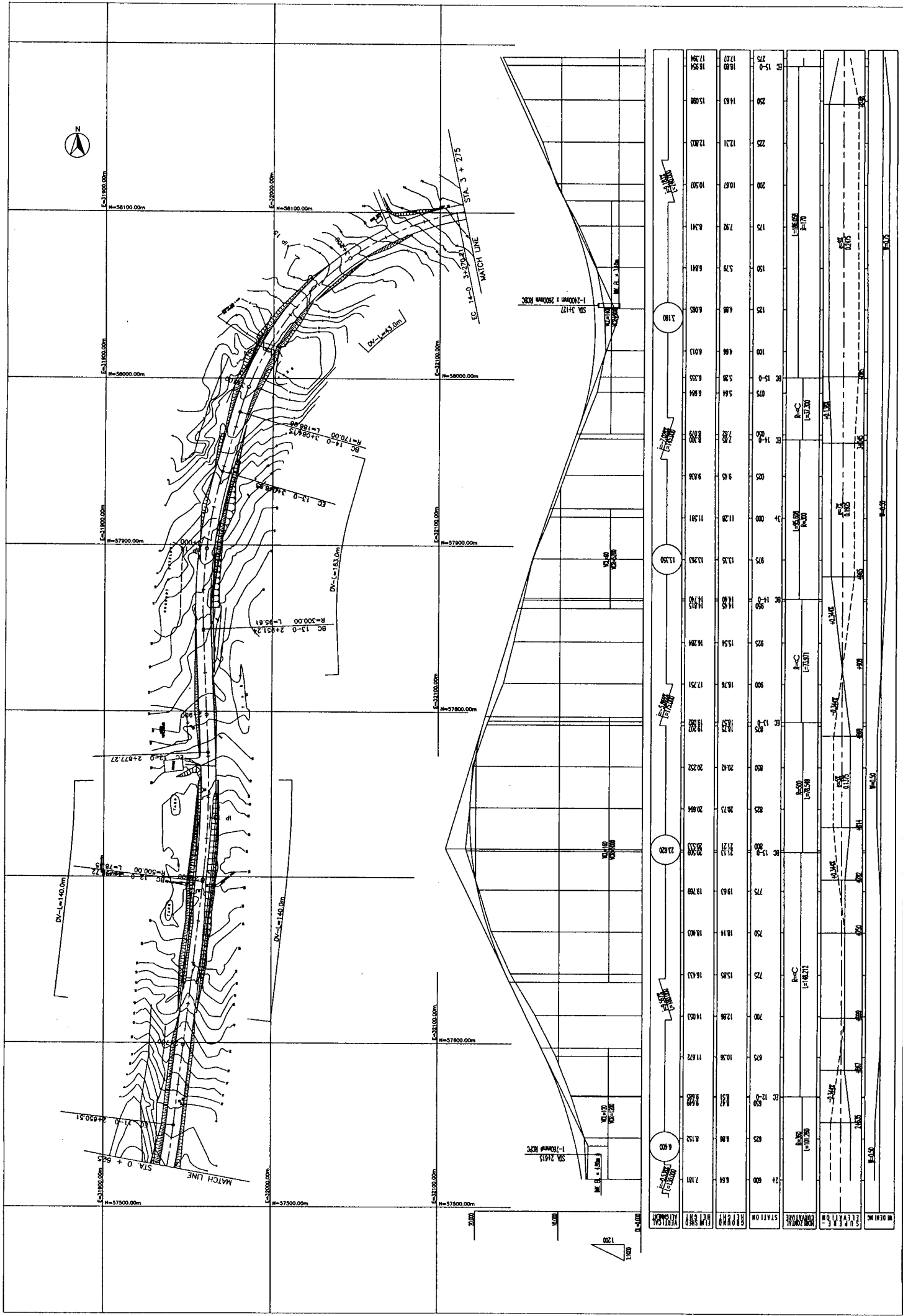
DRAWING No:
 P - 2



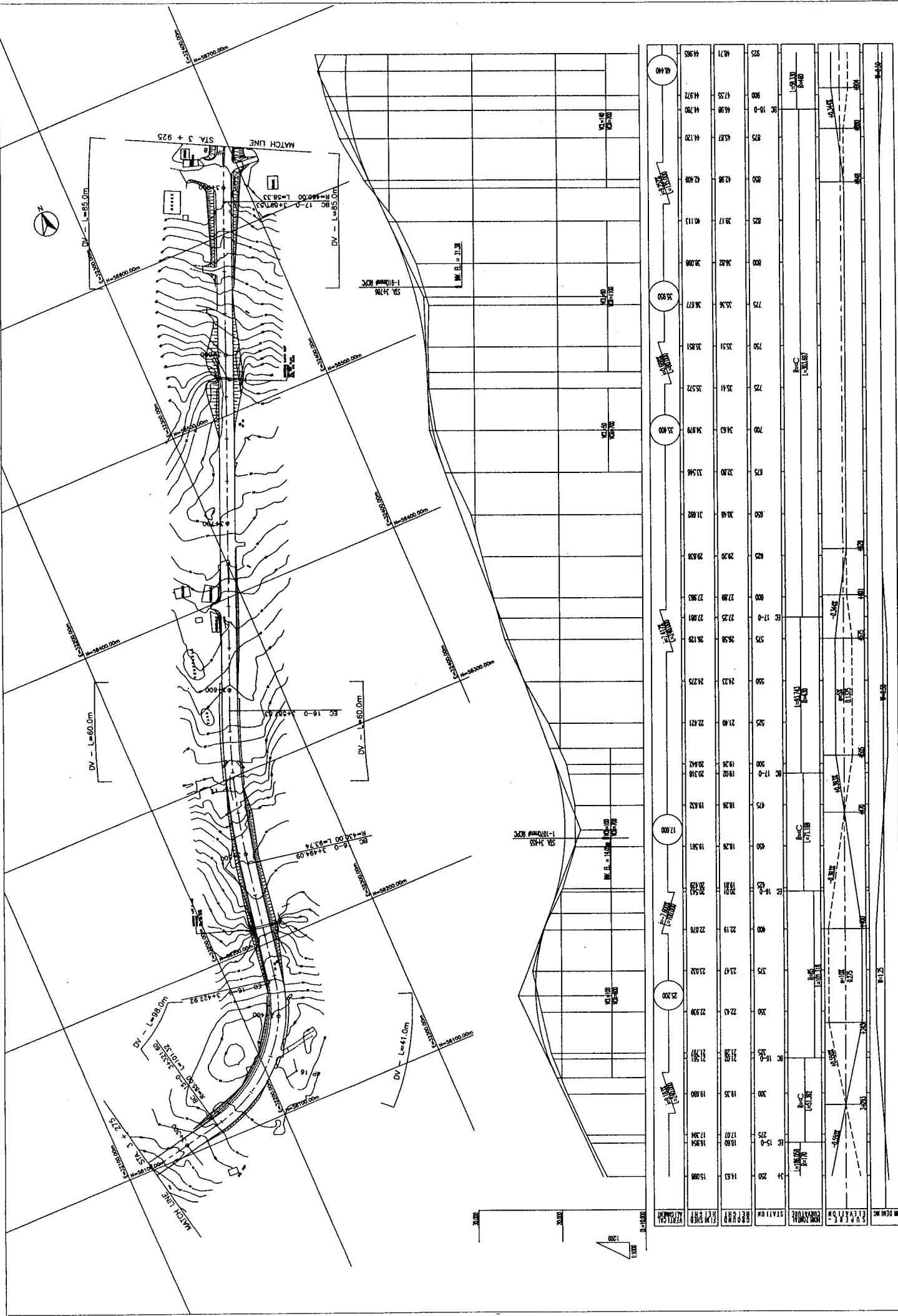
STATION	ELEVATION	PROPOSED ELEVATION	GRADE	VERTICAL CURVE DATA
27.00	27.00	27.00		
27.05	27.05	27.05		
27.10	27.10	27.10		
27.15	27.15	27.15		
27.20	27.20	27.20		
27.25	27.25	27.25		
27.30	27.30	27.30		
27.35	27.35	27.35		
27.40	27.40	27.40		
27.45	27.45	27.45		
27.50	27.50	27.50		
27.55	27.55	27.55		
27.60	27.60	27.60		
27.65	27.65	27.65		
27.70	27.70	27.70		
27.75	27.75	27.75		
27.80	27.80	27.80		
27.85	27.85	27.85		
27.90	27.90	27.90		
27.95	27.95	27.95		
28.00	28.00	28.00		
28.05	28.05	28.05		
28.10	28.10	28.10		
28.15	28.15	28.15		
28.20	28.20	28.20		



STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION
1+975	1100	2+000	1150	3+000	1200	4+000	1250
1+980	1105	2+010	1155	3+010	1205	4+010	1255
1+990	1110	2+020	1160	3+020	1210	4+020	1260
1+995	1115	2+030	1165	3+030	1215	4+030	1265
2+000	1120	2+040	1170	3+040	1220	4+040	1270
2+005	1125	2+050	1175	3+050	1225	4+050	1275
2+010	1130	2+060	1180	3+060	1230	4+060	1280
2+015	1135	2+070	1185	3+070	1235	4+070	1285
2+020	1140	2+080	1190	3+080	1240	4+080	1290
2+025	1145	2+090	1195	3+090	1245	4+090	1295
2+030	1150	2+100	1200	3+100	1250	4+100	1300
2+035	1155	2+110	1205	3+110	1255	4+110	1305
2+040	1160	2+120	1210	3+120	1260	4+120	1310
2+045	1165	2+130	1215	3+130	1265	4+130	1315
2+050	1170	2+140	1220	3+140	1270	4+140	1320
2+055	1175	2+150	1225	3+150	1275	4+150	1325
2+060	1180	2+160	1230	3+160	1280	4+160	1330
2+065	1185	2+170	1235	3+170	1285	4+170	1335
2+070	1190	2+180	1240	3+180	1290	4+180	1340
2+075	1195	2+190	1245	3+190	1295	4+190	1345
2+080	1200	2+200	1250	3+200	1300	4+200	1350
2+085	1205	2+210	1255	3+210	1305	4+210	1355
2+090	1210	2+220	1260	3+220	1310	4+220	1360
2+095	1215	2+230	1265	3+230	1315	4+230	1365
2+100	1220	2+240	1270	3+240	1320	4+240	1370
2+105	1225	2+250	1275	3+250	1325	4+250	1375
2+110	1230	2+260	1280	3+260	1330	4+260	1380
2+115	1235	2+270	1285	3+270	1335	4+270	1385
2+120	1240	2+280	1290	3+280	1340	4+280	1390
2+125	1245	2+290	1295	3+290	1345	4+290	1395
2+130	1250	2+300	1300	3+300	1350	4+300	1400
2+135	1255	2+310	1305	3+310	1355	4+310	1405
2+140	1260	2+320	1310	3+320	1360	4+320	1410
2+145	1265	2+330	1315	3+330	1365	4+330	1415
2+150	1270	2+340	1320	3+340	1370	4+340	1420
2+155	1275	2+350	1325	3+350	1375	4+350	1425
2+160	1280	2+360	1330	3+360	1380	4+360	1430
2+165	1285	2+370	1335	3+370	1385	4+370	1435
2+170	1290	2+380	1340	3+380	1390	4+380	1440
2+175	1295	2+390	1345	3+390	1395	4+390	1445
2+180	1300	2+400	1350	3+400	1400	4+400	1450
2+185	1305	2+410	1355	3+410	1405	4+410	1455
2+190	1310	2+420	1360	3+420	1410	4+420	1460
2+195	1315	2+430	1365	3+430	1415	4+430	1465
2+200	1320	2+440	1370	3+440	1420	4+440	1470
2+205	1325	2+450	1375	3+450	1425	4+450	1475
2+210	1330	2+460	1380	3+460	1430	4+460	1480
2+215	1335	2+470	1385	3+470	1435	4+470	1485
2+220	1340	2+480	1390	3+480	1440	4+480	1490
2+225	1345	2+490	1395	3+490	1445	4+490	1495
2+230	1350	2+500	1400	3+500	1450	4+500	1500
2+235	1355	2+510	1405	3+510	1455	4+510	1505
2+240	1360	2+520	1410	3+520	1460	4+520	1510
2+245	1365	2+530	1415	3+530	1465	4+530	1515
2+250	1370	2+540	1420	3+540	1470	4+540	1520
2+255	1375	2+550	1425	3+550	1475	4+550	1525
2+260	1380	2+560	1430	3+560	1480	4+560	1530
2+265	1385	2+570	1435	3+570	1485	4+570	1535
2+270	1390	2+580	1440	3+580	1490	4+580	1540
2+275	1395	2+590	1445	3+590	1495	4+590	1545
2+280	1400	2+600	1450	3+600	1500	4+600	1550
2+285	1405	2+610	1455	3+610	1505	4+610	1555
2+290	1410	2+620	1460	3+620	1510	4+620	1560
2+295	1415	2+630	1465	3+630	1515	4+630	1565
2+300	1420	2+640	1470	3+640	1520	4+640	1570
2+305	1425	2+650	1475	3+650	1525	4+650	1575
2+310	1430	2+660	1480	3+660	1530	4+660	1580
2+315	1435	2+670	1485	3+670	1535	4+670	1585
2+320	1440	2+680	1490	3+680	1540	4+680	1590
2+325	1445	2+690	1495	3+690	1545	4+690	1595
2+330	1450	2+700	1500	3+700	1550	4+700	1600
2+335	1455	2+710	1505	3+710	1555	4+710	1605
2+340	1460	2+720	1510	3+720	1560	4+720	1610
2+345	1465	2+730	1515	3+730	1565	4+730	1615
2+350	1470	2+740	1520	3+740	1570	4+740	1620
2+355	1475	2+750	1525	3+750	1575	4+750	1625
2+360	1480	2+760	1530	3+760	1580	4+760	1630
2+365	1485	2+770	1535	3+770	1585	4+770	1635
2+370	1490	2+780	1540	3+780	1590	4+780	1640
2+375	1495	2+790	1545	3+790	1595	4+790	1645
2+380	1500	2+800	1550	3+800	1600	4+800	1650
2+385	1505	2+810	1555	3+810	1605	4+810	1655
2+390	1510	2+820	1560	3+820	1610	4+820	1660
2+395	1515	2+830	1565	3+830	1615	4+830	1665
2+400	1520	2+840	1570	3+840	1620	4+840	1670
2+405	1525	2+850	1575	3+850	1625	4+850	1675
2+410	1530	2+860	1580	3+860	1630	4+860	1680
2+415	1535	2+870	1585	3+870	1635	4+870	1685
2+420	1540	2+880	1590	3+880	1640	4+880	1690
2+425	1545	2+890	1595	3+890	1645	4+890	1695
2+430	1550	2+900	1600	3+900	1650	4+900	1700
2+435	1555	2+910	1605	3+910	1655	4+910	1705
2+440	1560	2+920	1610	3+920	1660	4+920	1710
2+445	1565	2+930	1615	3+930	1665	4+930	1715
2+450	1570	2+940	1620	3+940	1670	4+940	1720
2+455	1575	2+950	1625	3+950	1675	4+950	1725
2+460	1580	2+960	1630	3+960	1680	4+960	1730
2+465	1585	2+970	1635	3+970	1685	4+970	1735
2+470	1590	2+980	1640	3+980	1690	4+980	1740
2+475	1595	2+990	1645	3+990	1695	4+990	1745
2+480	1600	3+000	1650	3+000	1700	4+000	1750
2+485	1605	3+010	1655	3+010	1705	4+010	1755
2+490	1610	3+020	1660	3+020	1710	4+020	1760
2+495	1615	3+030	1665	3+030	1715	4+030	1765
2+500	1620	3+040	1670	3+040	1720	4+040	1770
2+505	1625	3+050	1675	3+050	1725	4+050	1775
2+510	1630	3+060	1680	3+060	1730	4+060	1780
2+515	1635	3+070	1685	3+070	1735	4+070	1785
2+520	1640	3+080	1690	3+080	1740	4+080	1790
2+525	1645	3+090	1695	3+090	1745	4+090	1795
2+530	1650	3+100	1700	3+100	1750	4+100	1800
2+535	1655	3+110	1705	3+110	1755	4+110	1805
2+540	1660	3+120	1710	3+120	1760	4+120	1810
2+545	1665	3+130	1715	3+130	1765	4+130	1815
2+550	1670	3+140	1720	3+140	1770	4+140	1820
2+555	1675	3+150	1725	3+150	1775	4+150	1825
2+560	1680	3+160	1730	3+160	1780	4+160	1830
2+565	1685	3+170	1735	3+170	1785	4+170	1835
2+570	1690	3+180	1740	3+180	1790	4+180	1840
2+575	1695	3+190	1745	3+190	1795	4+190	1845
2+580	1700	3+200	1750	3+200	1800	4+200	1850
2+585	1705	3+210	1755	3+210	1805	4+210	1855
2+590	1710	3+220	1760	3+220	1810	4+220	1860
2+595	1715	3+230	1765	3+230	1815	4+230	1865
2+600	1720	3+240	1770	3+240	1820	4+240	1870
2+605	1725	3+250	1775	3+250	1825	4+250	1875
2+610	1730	3+260	1780	3+260	1830	4+260	1880
2+615	1735	3+270	1785	3+270	1835	4+270	1885
2+620	1740	3+280	1790	3+280	1840	4+280	1890
2+625	1745	3+290	1795	3+290	1845	4+290	1895
2+630	1750	3+300	1800	3+300	1850	4+300	1900
2+635	1755	3+310	1805	3+310	1855	4+310	1905
2+640	1760	3+320	1810	3+320	1860	4+320	1910
2+645	1765	3+330	1815	3+330	1865	4+330	1915
2+650	1770	3+340	1820	3+340	1870	4+340	1920
2+655	1775	3+350	1825	3+350	1875	4+350	1925
2+660	1780	3+360	1830	3+360	1880	4+360	1930
2+665	1785	3+370	1835	3+370	1885	4+370	1935
2+670	1790	3+380	1840	3+380	1890	4+380	1940
2+675	1795	3+390	1845	3+390	1895	4+390	1945
2+680	1800	3+400	1850	3+400	1900	4+400	1950
2+685	1805	3+410	1855	3+410	1905	4+410	1955
2+690	1810	3+420	1860	3+420	1910	4+420	1960
2+695	1815	3+430	1865	3+430	1915	4+430	1965
2+700	1820	3+440	1870	3+440	1920	4+440	1970
2+705	1825	3+450	1875	3+450	1925	4+450	1975
2+710	1830	3+460	1880	3+460	1930	4+460	1980
2+715	1835	3+470	1885	3+470	1935	4+470	1985
2+720	1840	3+480	1890	3+480	1940	4+480	1990
2+725	1845	3+490	1895	3+490	1945		



DRAWING NO:	P - 5
	SCALE: H = 1:1000 V = 1:200
TITLE:	PLAN & PROFILE OF CENTRAL ROAD (STA. 2 + 625 - STA. 3 + 275)
JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	
BASIC DESIGN STUDY ON THE ROAD IMPROVEMENT PROJECT FOR THE STATE OF YAP IN THE FEDERATED STATES OF MICRONESIA	
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION STATE OF YAP, FEDERATED STATES OF MICRONESIA	



DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
 STATE OF YAP, FEDERATED STATES OF MICRONESIA

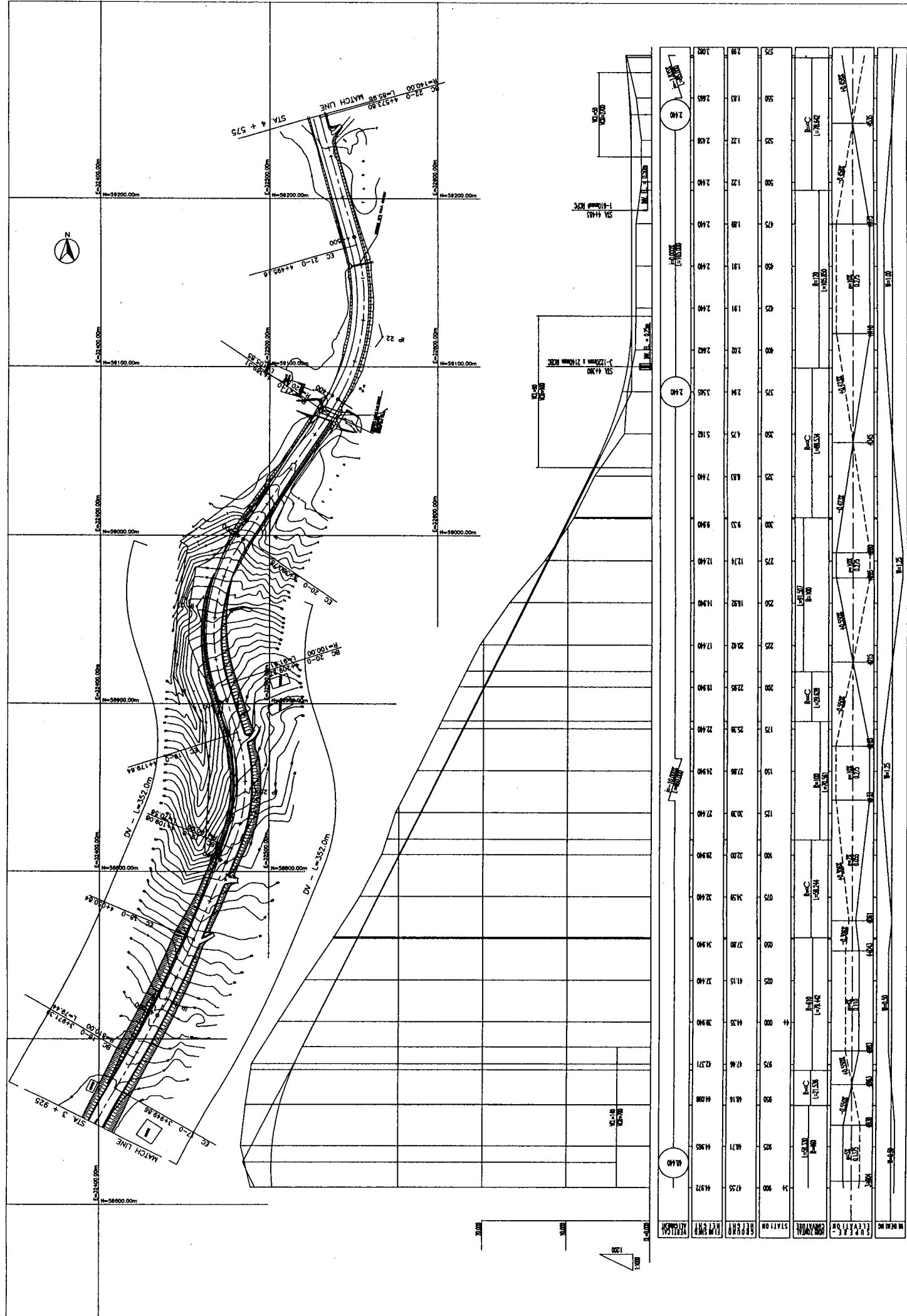
BASIC DESIGN STUDY ON THE ROAD IMPROVEMENT PROJECT
 FOR THE STATE OF YAP
 IN THE FEDERATED STATES OF MICRONESIA

JAPAN INTERNATIONAL COOPERATION AGENCY
 MATSUHARA & ENGINEERS INTERNATIONAL

TITLE: PLAN & PROFILE OF CENTRAL ROAD
 (STA. 3 + 275 - STA. 3 + 925)

SCALE: H = 1:1000
 V = 1:200

DRAWING NO: P - 6



DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
STATE OF YAP, FEDERATED STATES OF MICRONESIA

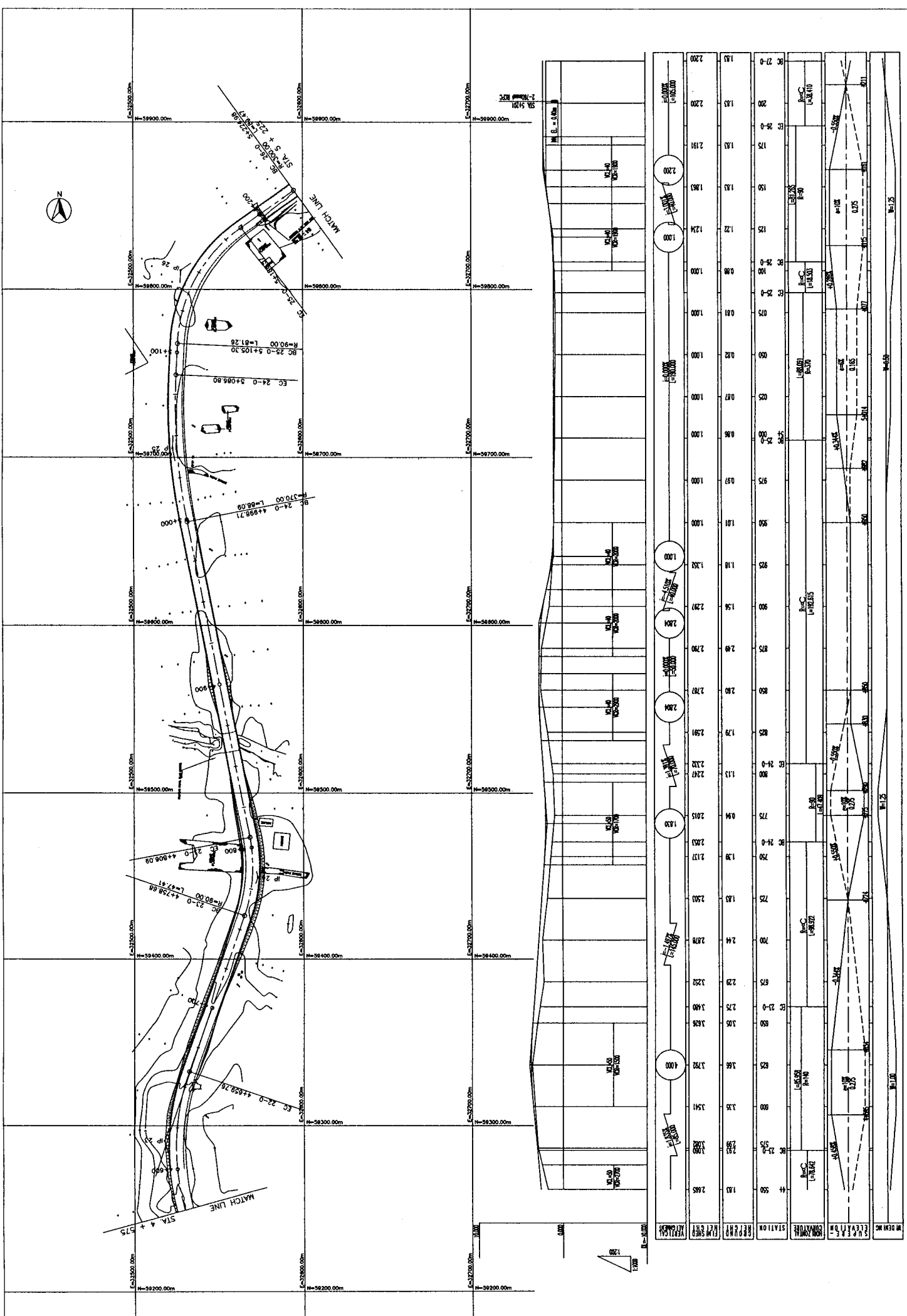
BASIC DESIGN STUDY ON THE ROAD IMPROVEMENT PROJECT
FOR THE STATE OF YAP
IN THE FEDERATED STATES OF MICRONESIA

JAPAN INTERNATIONAL COOPERATION AGENCY
MATSUMURA & ENGINEERS INTERNATIONAL

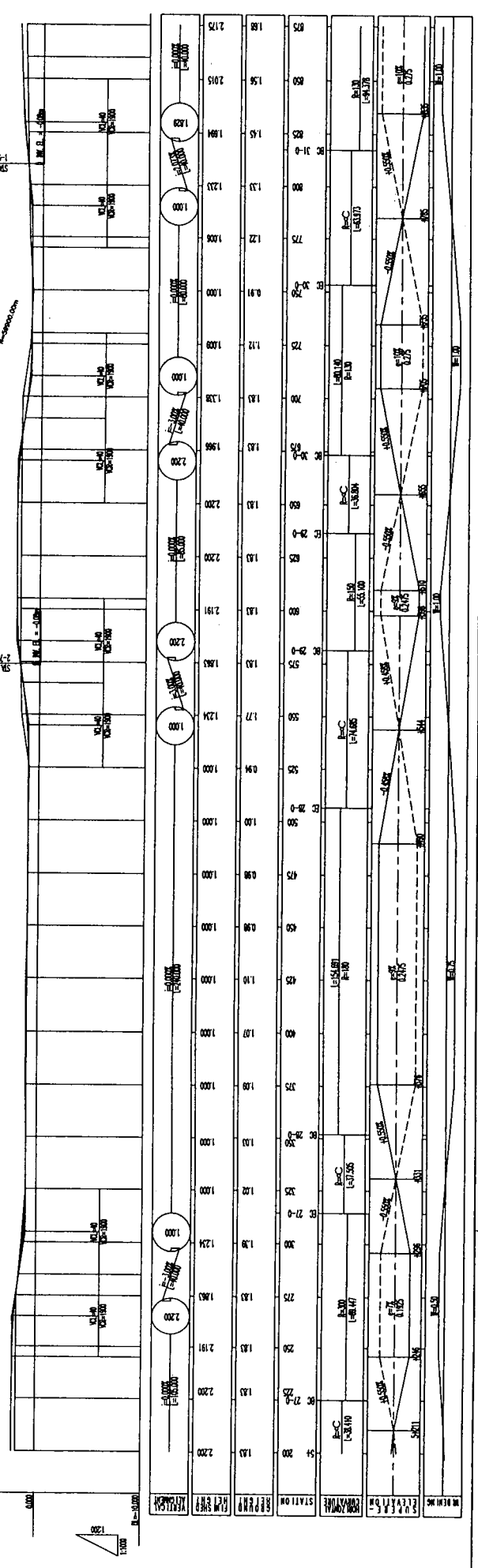
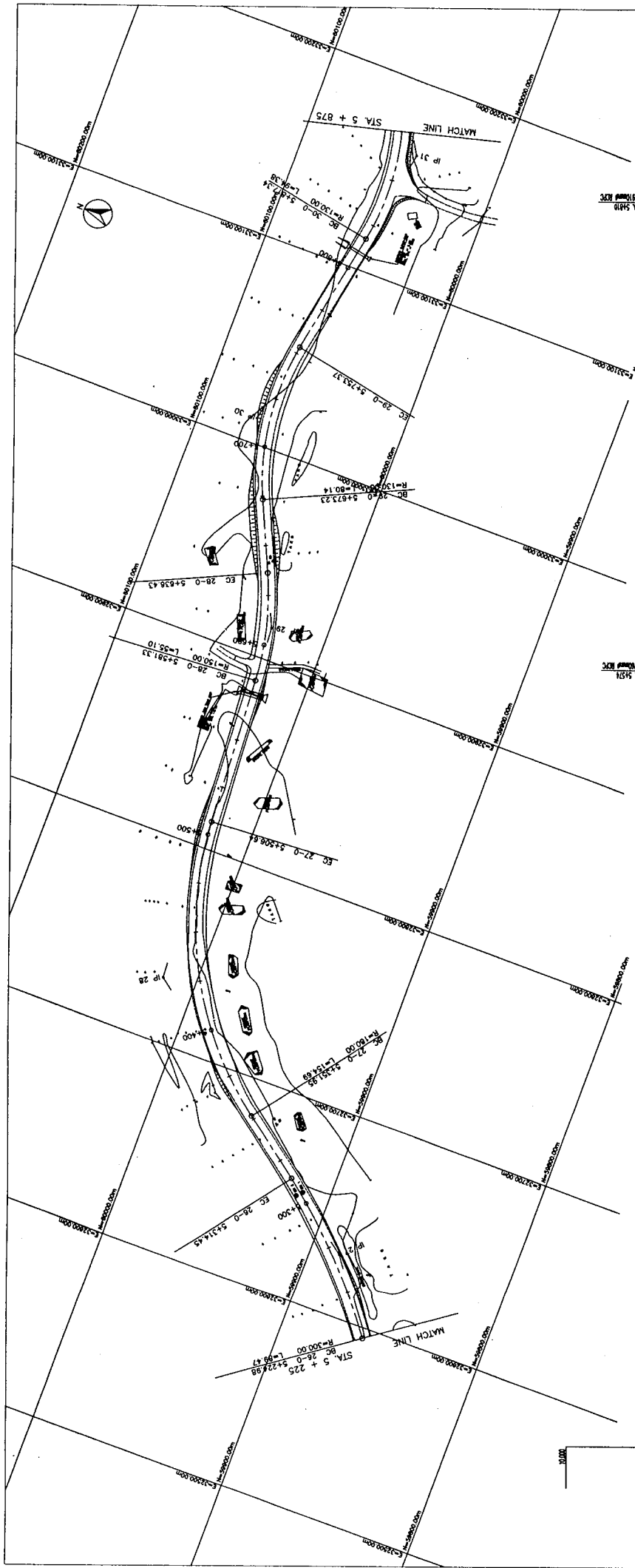
TITLE:
PLAN & PROFILE OF CENTRAL ROAD
(STA. 3 + 925 - STA. 4 + 575)

SCALE:
H = 1:1000
V = 1:200

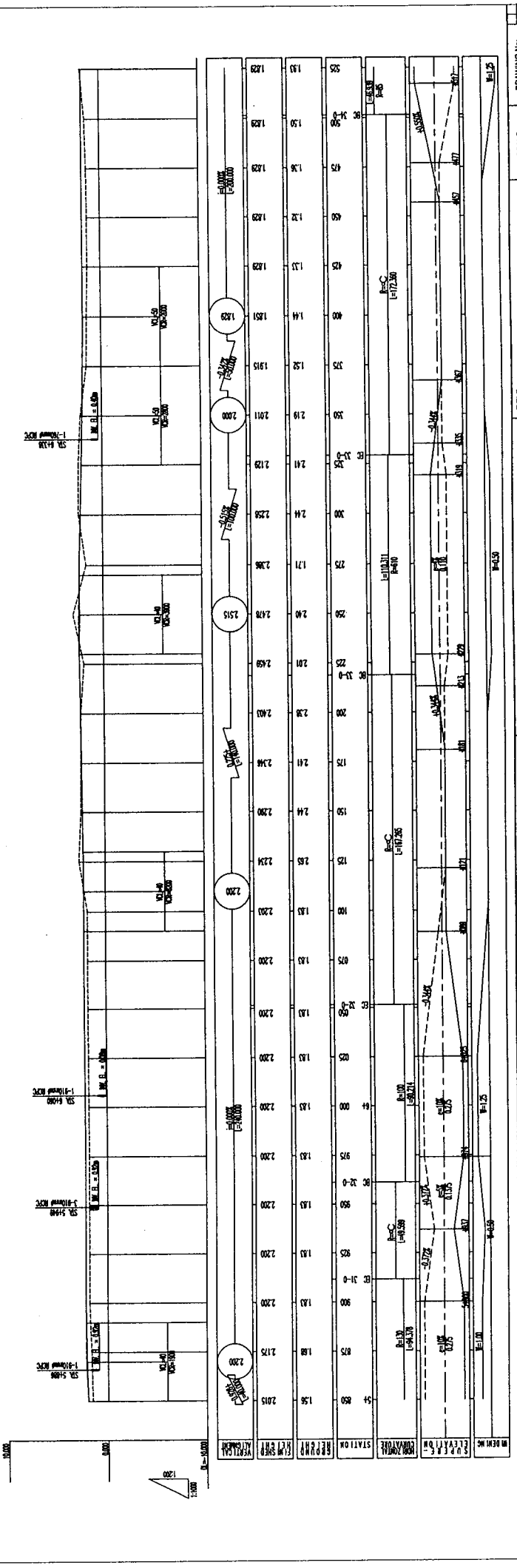
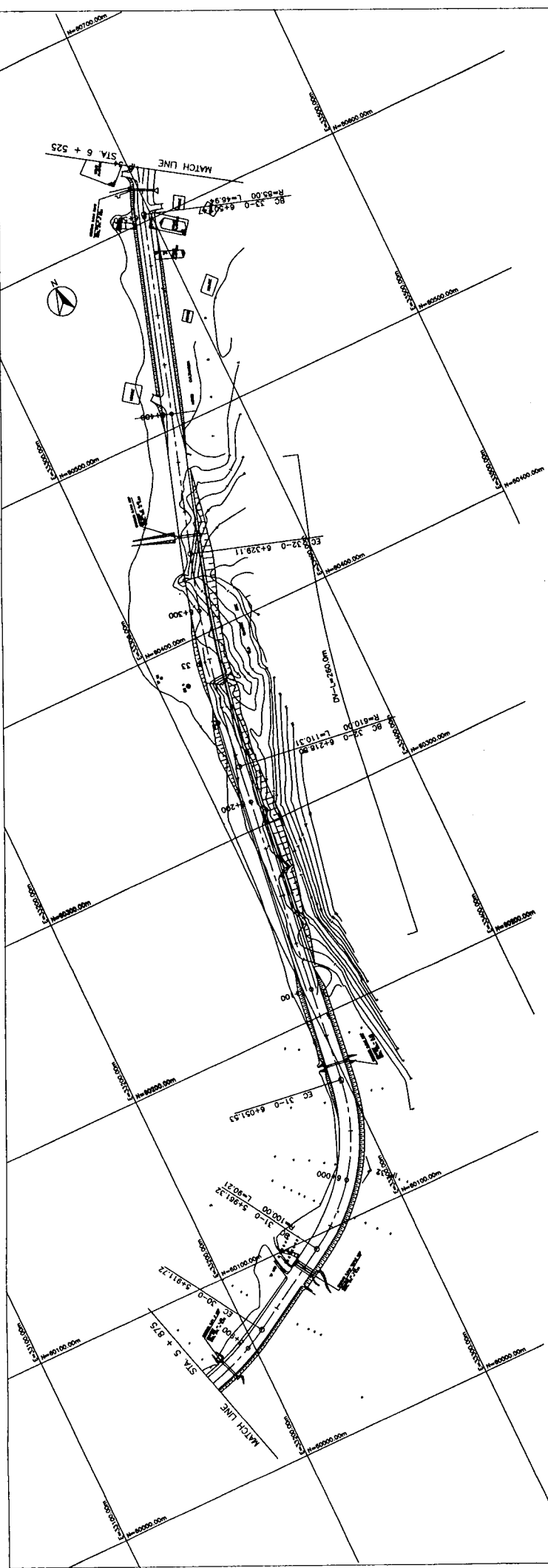
DRAWING NO:
P - 7



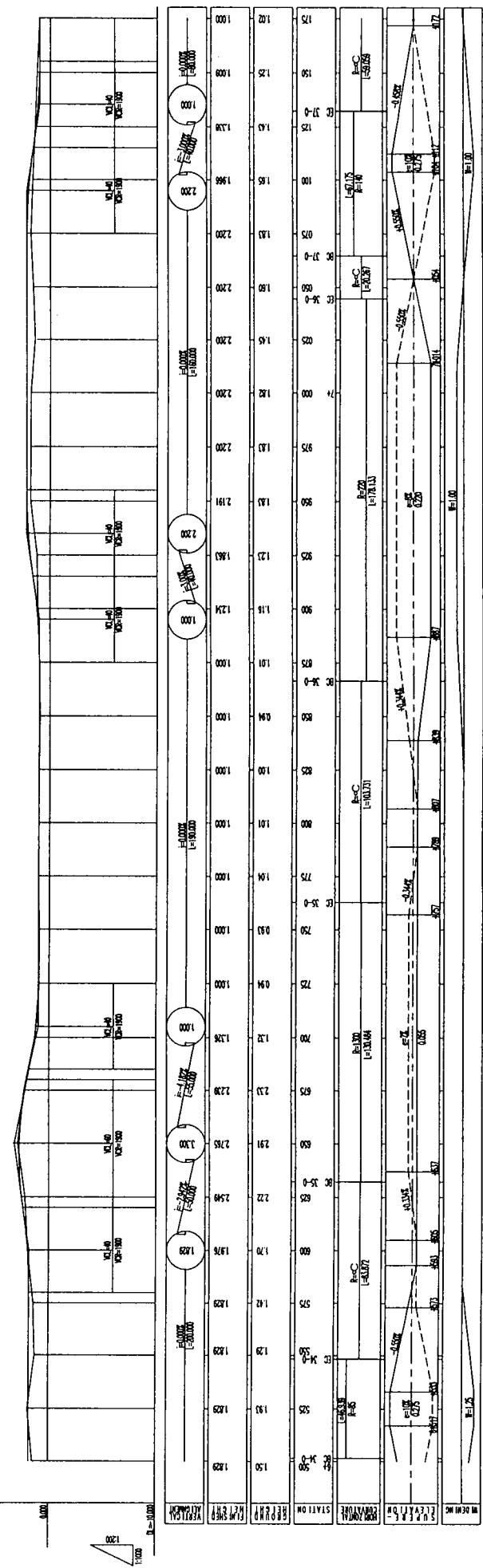
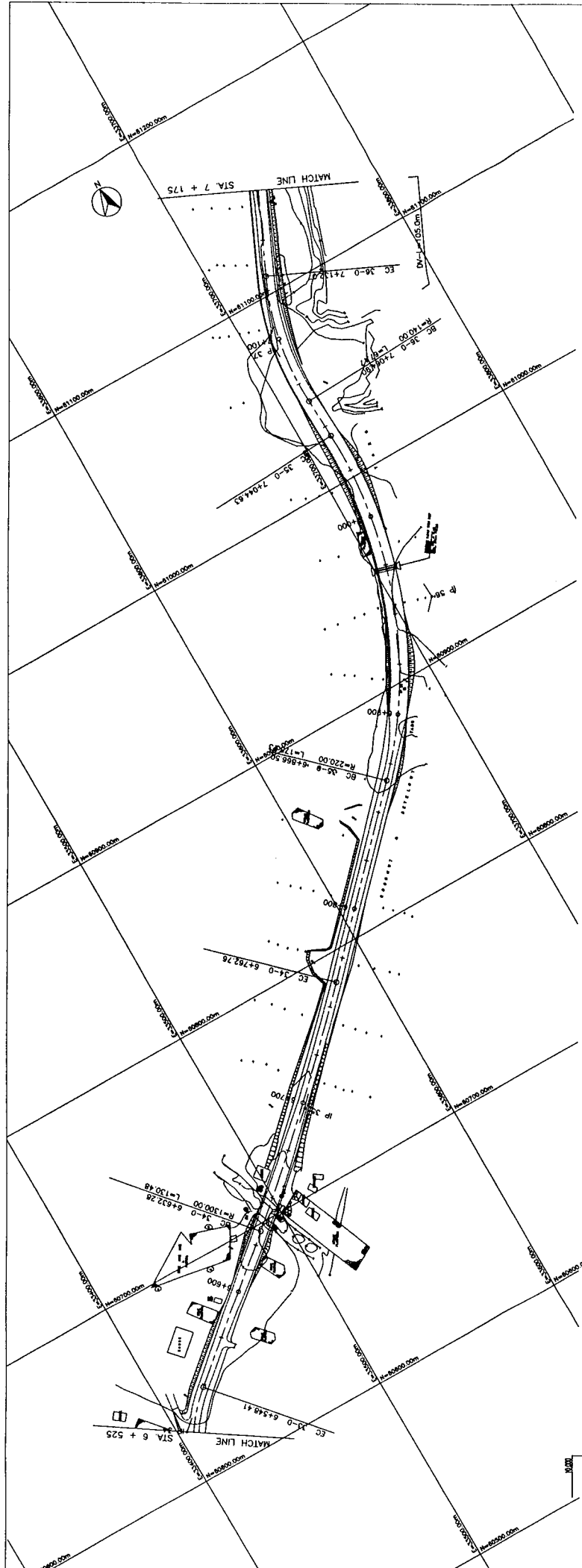
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION STATE OF YAP, FEDERATED STATES OF MICRONESIA	BASIC DESIGN STUDY ON THE ROAD IMPROVEMENT PROJECT FOR THE STATE OF YAP IN THE FEDERATED STATES OF MICRONESIA	JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	TITLE:	PLAN & PROFILE OF CENTRAL ROAD (STA. 4 + 575 - STA. 5 + 225)	DRAWING NO:	P - 8
			SCALE:	H = 1:1000 V = 1:200		



DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION STATE OF YAP, FEDERATED STATES OF MICRONESIA	BASIC DESIGN STUDY ON THE ROAD IMPROVEMENT PROJECT FOR THE STATE OF YAP IN THE FEDERATED STATES OF MICRONESIA	JAPAN INTERNATIONAL COOPERATION AGENCY MATSUIHARA & ENGINEERS INTERNATIONAL	TITLE: PLAN & PROFILE OF CENTRAL ROAD (STA. 5 + 225 - STA. 5 + 875)	SCALE: H = 1 : 1000 V = 1 : 200	DRAWING NO: P - 9
			PLAN & PROFILE OF CENTRAL ROAD (STA. 5 + 225 - STA. 5 + 875)	SCALE: H = 1 : 1000 V = 1 : 200	DRAWING NO: P - 9



DRAWING NO: P-10
 SCALE: H=1:1000, V=1:200
 TITLE: PLAN & PROFILE OF CENTRAL ROAD (STA. 5 + 875 - STA. 6 + 525)
 JAPAN INTERNATIONAL COOPERATION AGENCY
 MATSUHARA ENGINEERS INTERNATIONAL
 BASIC DESIGN STUDY ON THE ROAD IMPROVEMENT PROJECT FOR THE STATE OF YAP IN THE FEDERATED STATES OF MICRONESIA
 DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
 STATE OF YAP, FEDERATED STATES OF MICRONESIA



DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
STATE OF YAP, FEDERATED STATES OF MICRONESIA

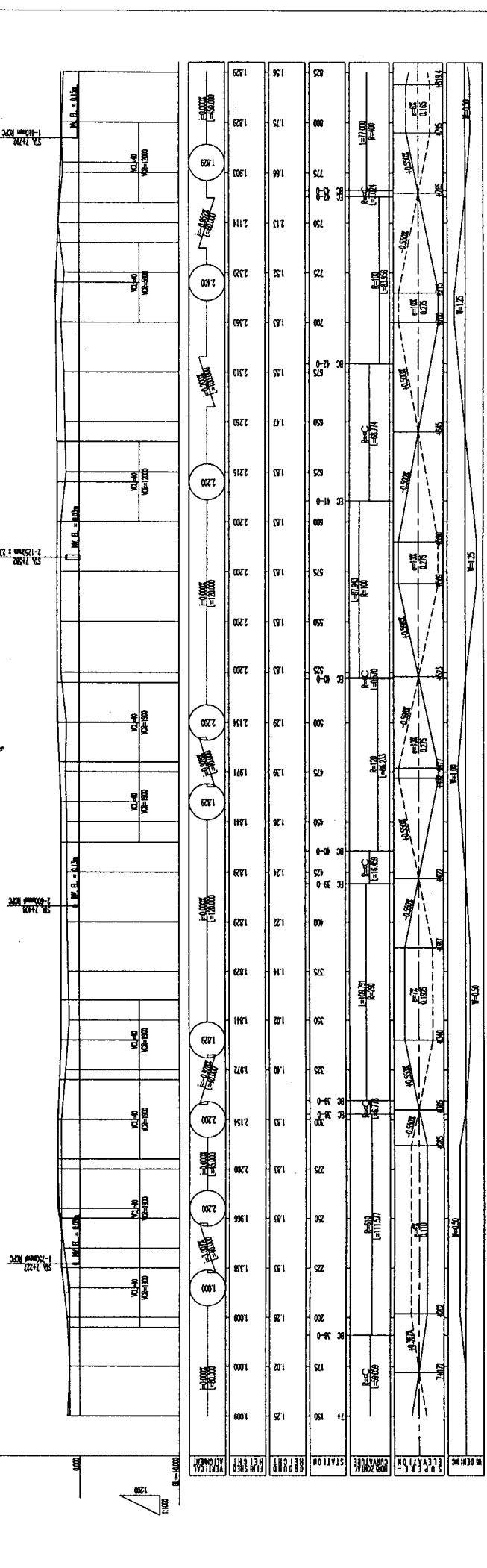
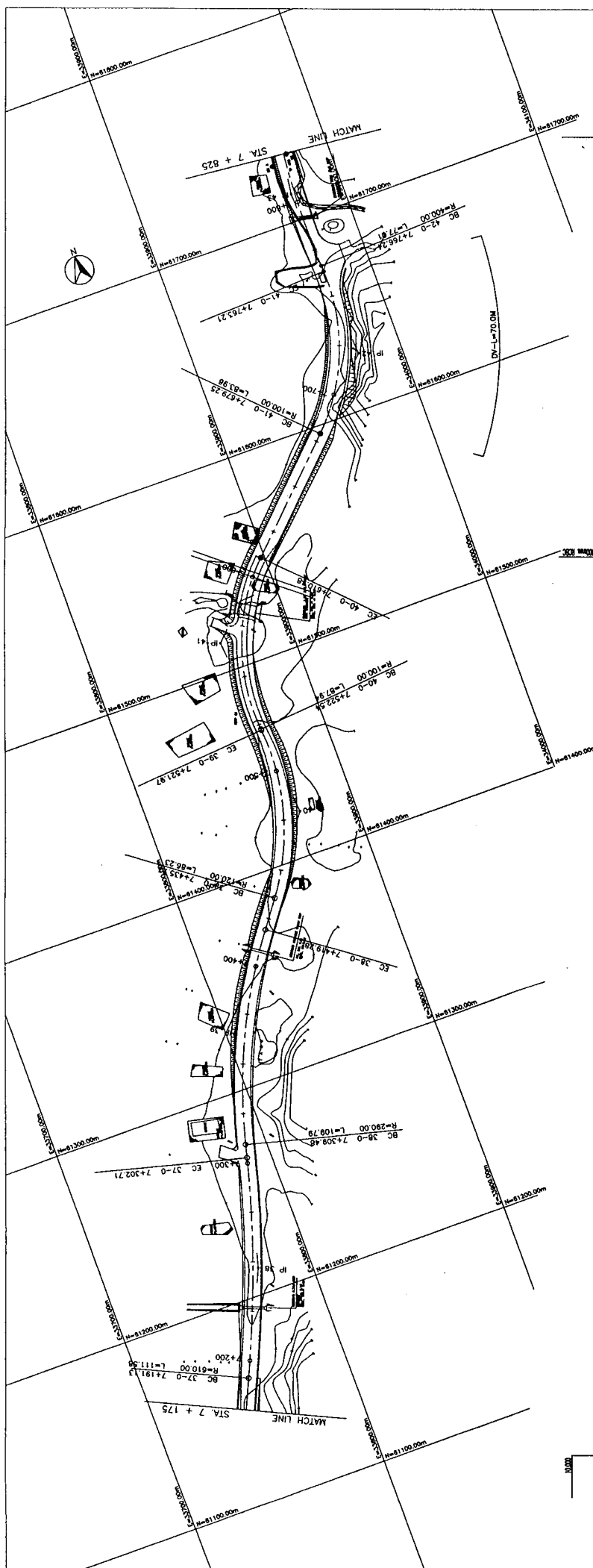
BASIC DESIGN STUDY ON THE ROAD IMPROVEMENT PROJECT
FOR THE STATE OF YAP
IN THE FEDERATED STATES OF MICRONESIA

JAPAN INTERNATIONAL COOPERATION AGENCY
KATAHIRA & ENGINEERS INTERNATIONAL

TITLE:
PLAN & PROFILE OF CENTRAL ROAD
(STA. 6 + 525 - STA. 7 + 175)

SCALE:
H = 1:1000
V = 1:200

DRAWING NO:
P - 11



DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
STATE OF YAP, FEDERATED STATES OF MICRONESIA

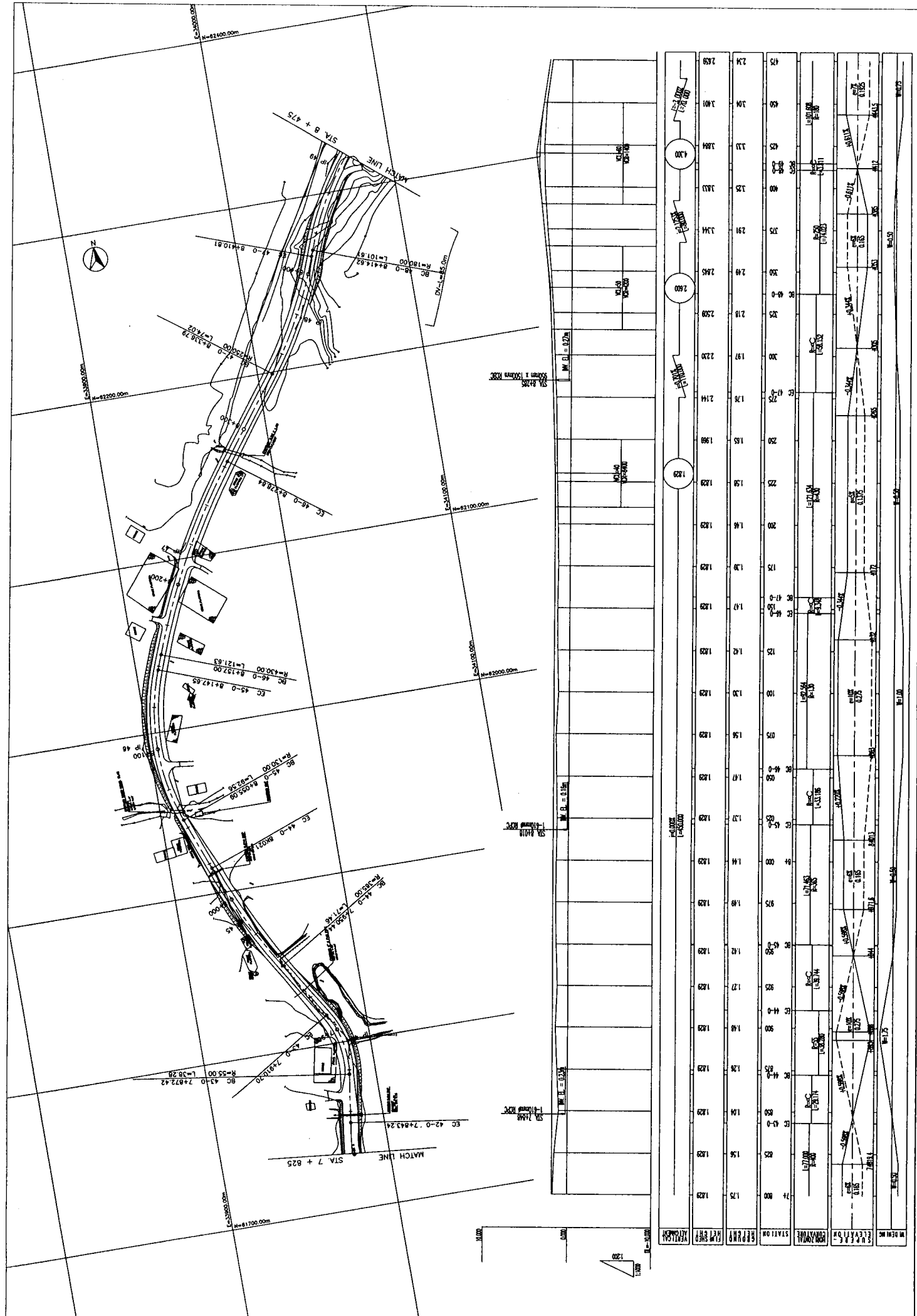
BASIC DESIGN STUDY ON THE ROAD IMPROVEMENT PROJECT
FOR THE STATE OF YAP
IN THE FEDERATED STATES OF MICRONESIA

JAPAN INTERNATIONAL COOPERATION AGENCY
HATAHARA & ENGINEERS INTERNATIONAL

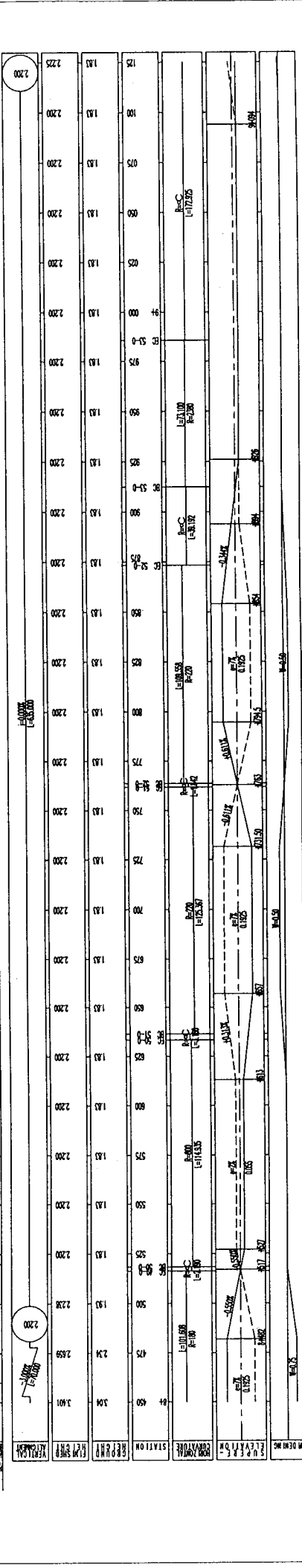
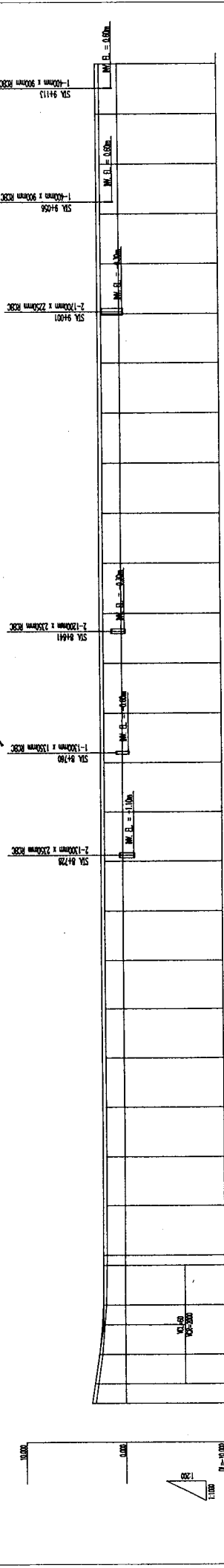
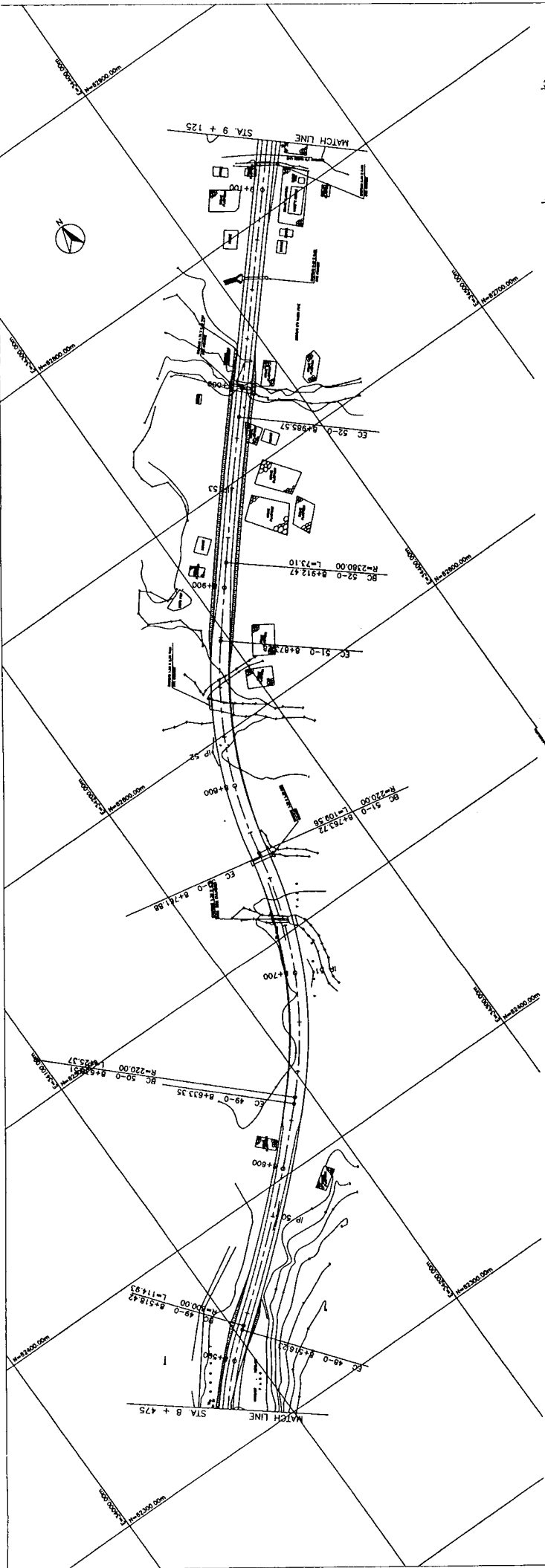
TITLE: PLAN & PROFILE OF CENTRAL ROAD
(STA. 7 + 175 - STA. 7 + 825)

SCALE: H = 1:1000
V = 1:200

DRAWING No: P - 12



DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION STATE OF YAP, FEDERATED STATES OF MICRONESIA	BASIC DESIGN STUDY ON THE ROAD IMPROVEMENT PROJECT FOR THE STATE OF YAP IN THE FEDERATED STATES OF MICRONESIA	JAPAN INTERNATIONAL COOPERATION AGENCY KATAHARA & ENGINEERS INTERNATIONAL	TITLE:	PLAN & PROFILE OF CENTRAL ROAD (STA. 7 + 825 - STA. 8 + 475)
			SCALE:	H = 1 : 1000 V = 1 : 200
			DRAWING NO.:	P - 13



DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
 STATE OF YAP, FEDERATED STATES OF MICRONESIA

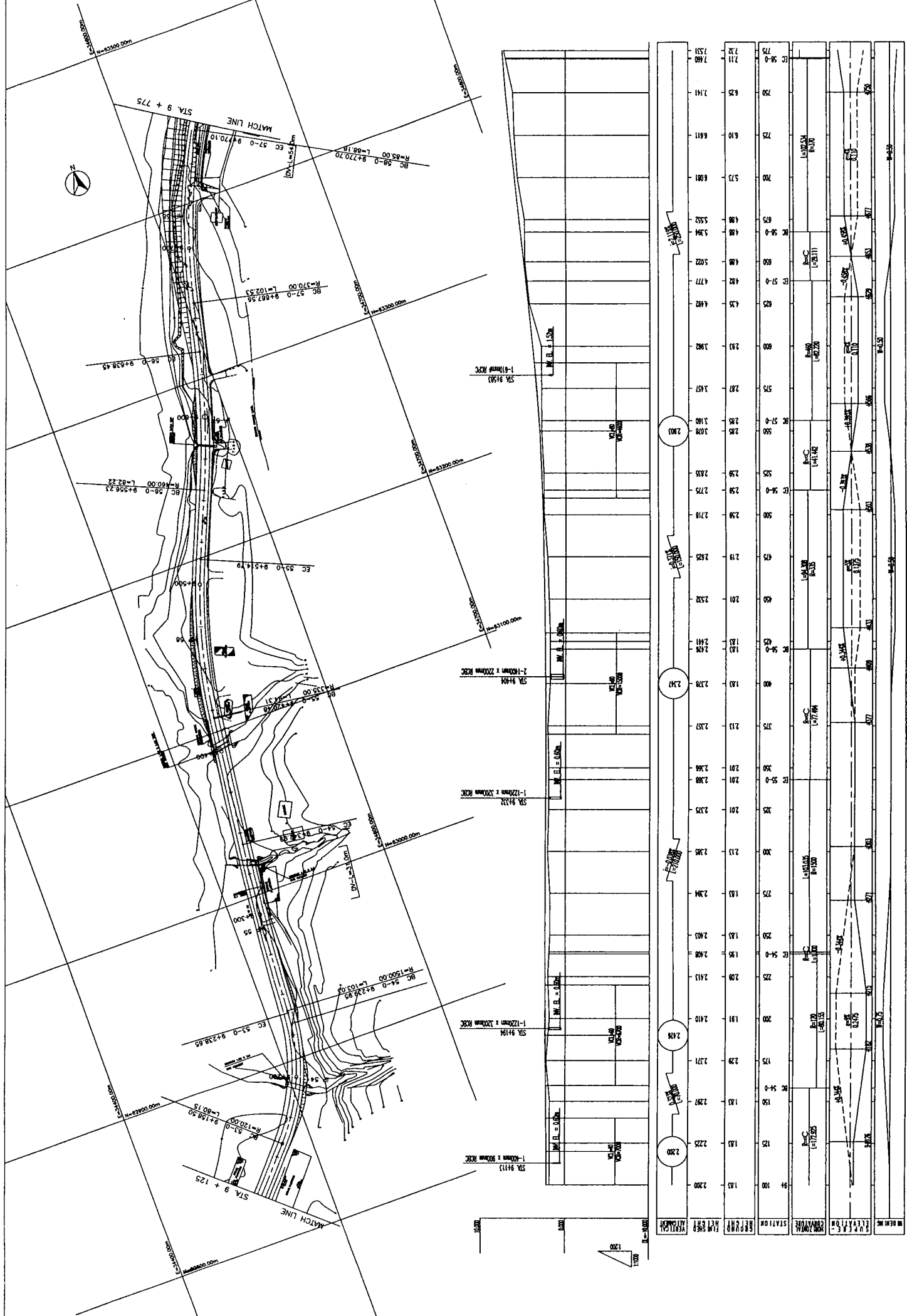
BASIC DESIGN STUDY ON THE ROAD IMPROVEMENT PROJECT
 FOR THE STATE OF YAP
 IN THE FEDERATED STATES OF MICRONESIA

JAPAN INTERNATIONAL COOPERATION AGENCY
 MATSUHARA & ENGINEERS INTERNATIONAL

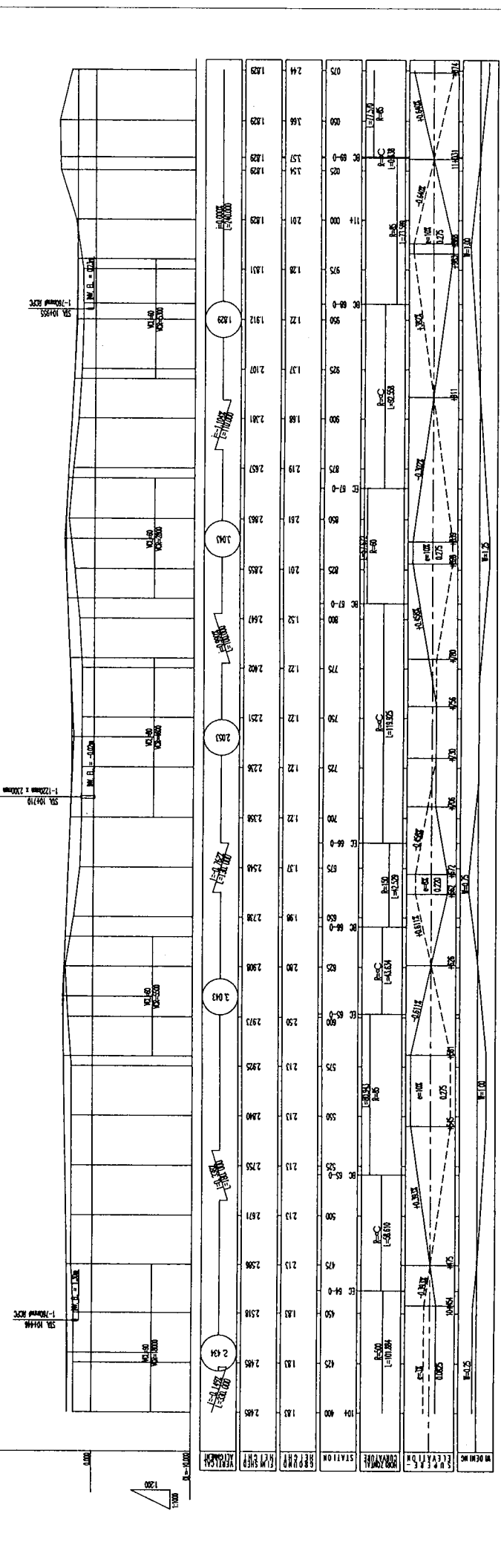
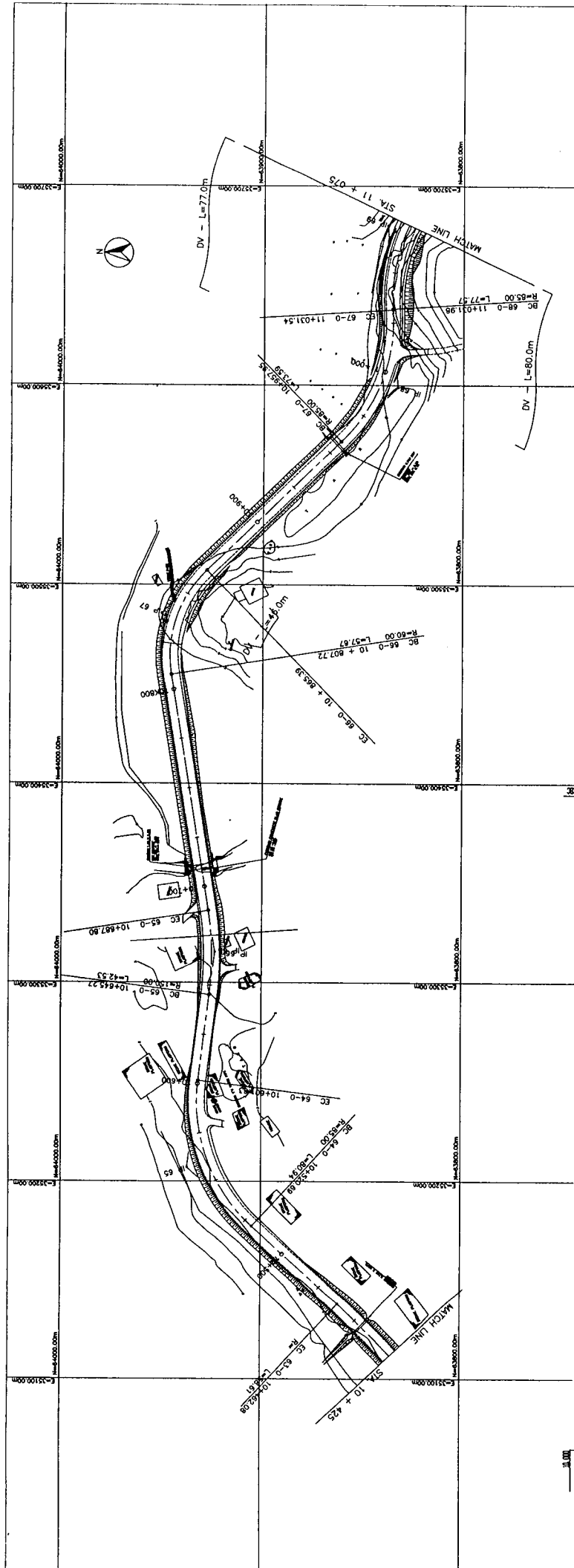
TITLE:
 PLAN & PROFILE OF CENTRAL ROAD
 (STA. 8 + 475 - STA. 9 + 125)

SCALE:
 H = 1:1000
 V = 1:200

DRAWING No:
 P - 14



DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION STATE OF YAP, FEDERATED STATES OF MICRONESIA	BASIC DESIGN STUDY ON THE ROAD IMPROVEMENT PROJECT FOR THE STATE OF YAP IN THE FEDERATED STATES OF MICRONESIA	JAPAN INTERNATIONAL COOPERATION AGENCY KATHIRIP & ENGINEERS INTERNATIONAL	TITLE: PLAN & PROFILE OF CENTRAL ROAD (STA. 9 + 125 - STA. 9 + 775)	SCALE: H = 1:1000 V = 1:200	DRAWING NO: P - 15
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DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
STATE OF YAP, FEDERATED STATES OF MICRONESIA

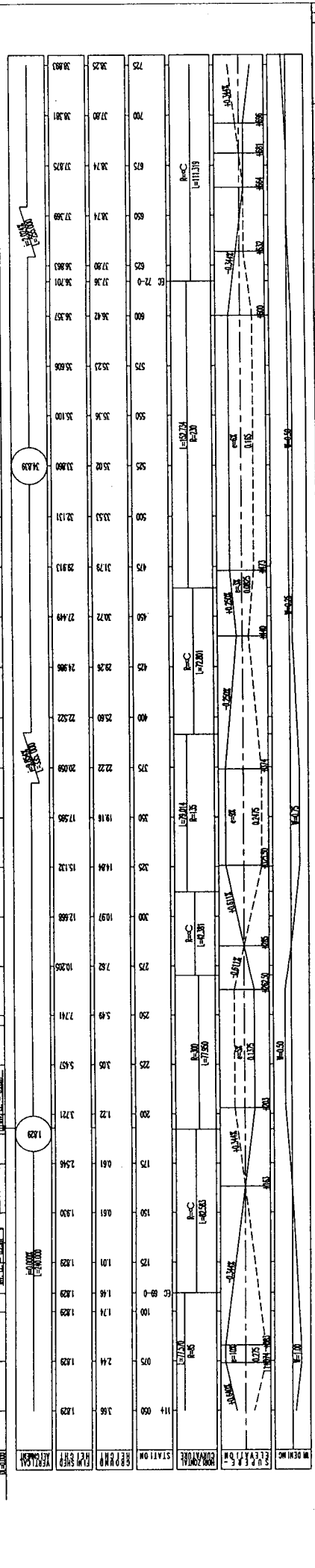
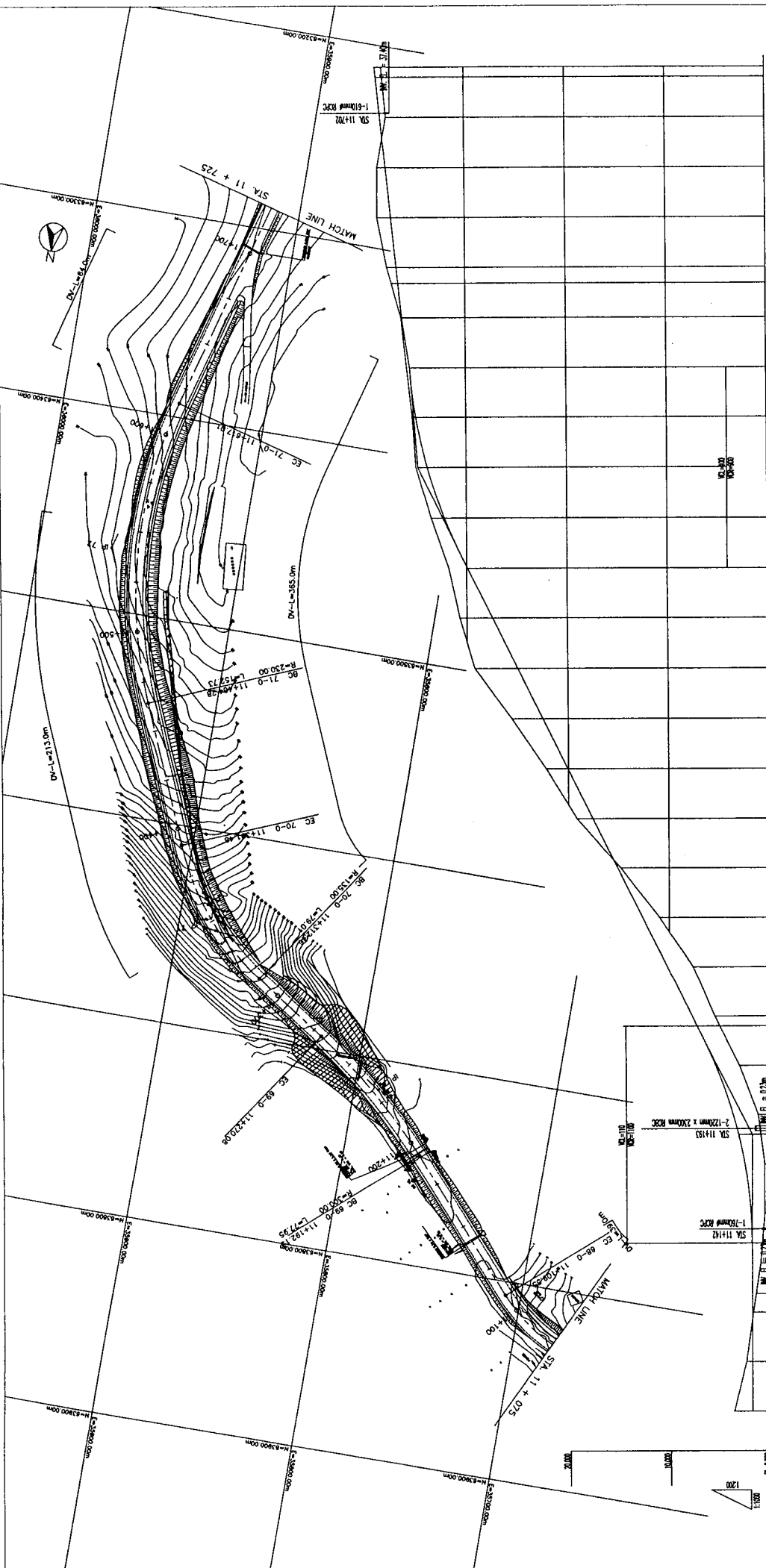
BASIC DESIGN STUDY ON THE ROAD IMPROVEMENT PROJECT
FOR THE STATE OF YAP
IN THE FEDERATED STATES OF MICRONESIA

JAPAN INTERNATIONAL COOPERATION AGENCY
MITSUBISHI ENGINEERS INTERNATIONAL

TITLE: PLAN & PROFILE OF CENTRAL ROAD
(STA. 10 + 425 - STA. 11 + 075)

SCALE: H = 1:1000
V = 1:200

DRAWING No: P - 17



DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
 STATE OF YAP, FEDERATED STATES OF MICRONESIA

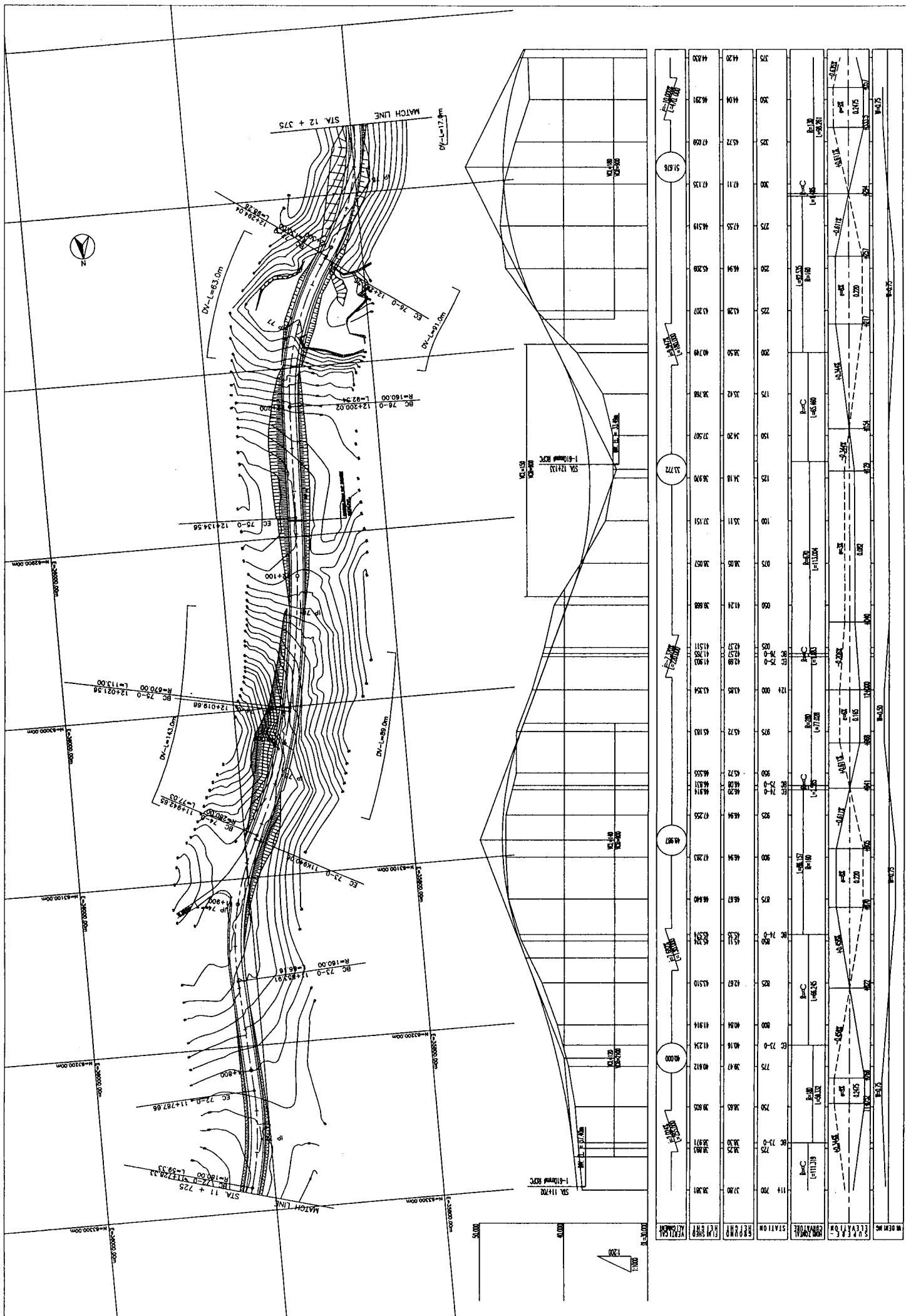
BASIC DESIGN STUDY ON THE ROAD IMPROVEMENT PROJECT
 FOR THE STATE OF YAP
 IN THE FEDERATED STATES OF MICRONESIA

JAPAN INTERNATIONAL COOPERATION AGENCY
 HATAHARA & ENGINEERS INTERNATIONAL

TITLE:
 PLAN & PROFILE OF CENTRAL ROAD
 (STA. 11 + 075- STA. 11 + 725)

DRAWING NO:
 P - 18

SCALE:
 H = 1:1000
 V = 1:200



STATION	ELEVATION	VERTICAL CURVE DATA
11+700	37.00	B=C (P=11.19)
11+725	38.85	B=C (P=11.19)
11+750	39.41	B=C (P=11.19)
11+775	40.16	B=C (P=11.19)
11+800	41.24	B=C (P=11.19)
11+825	41.91	B=C (P=11.19)
11+850	42.81	B=C (P=11.19)
11+875	43.52	B=C (P=11.19)
11+900	43.52	B=C (P=11.19)
11+925	43.54	B=C (P=11.19)
11+950	43.88	B=C (P=11.19)
11+975	44.14	B=C (P=11.19)
12+000	44.55	B=C (P=11.19)
12+025	44.84	B=C (P=11.19)
12+050	44.99	B=C (P=11.19)
12+075	45.02	B=C (P=11.19)
12+100	45.02	B=C (P=11.19)
12+125	45.02	B=C (P=11.19)
12+150	45.02	B=C (P=11.19)
12+175	45.02	B=C (P=11.19)
12+200	45.02	B=C (P=11.19)
12+225	45.02	B=C (P=11.19)
12+250	45.02	B=C (P=11.19)
12+275	45.02	B=C (P=11.19)
12+300	45.02	B=C (P=11.19)
12+325	45.02	B=C (P=11.19)
12+350	45.02	B=C (P=11.19)
12+375	45.02	B=C (P=11.19)

DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
STATE OF YAP, FEDERATED STATES OF MICRONESIA

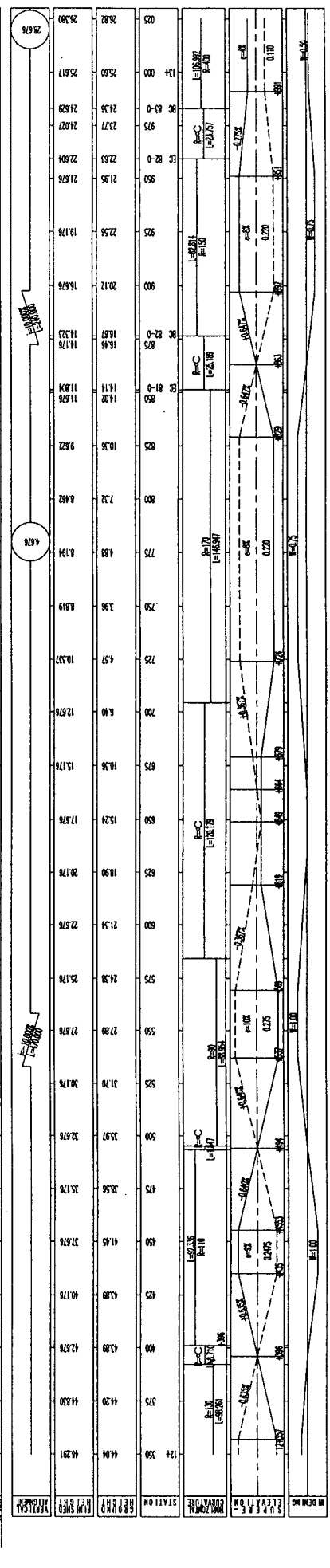
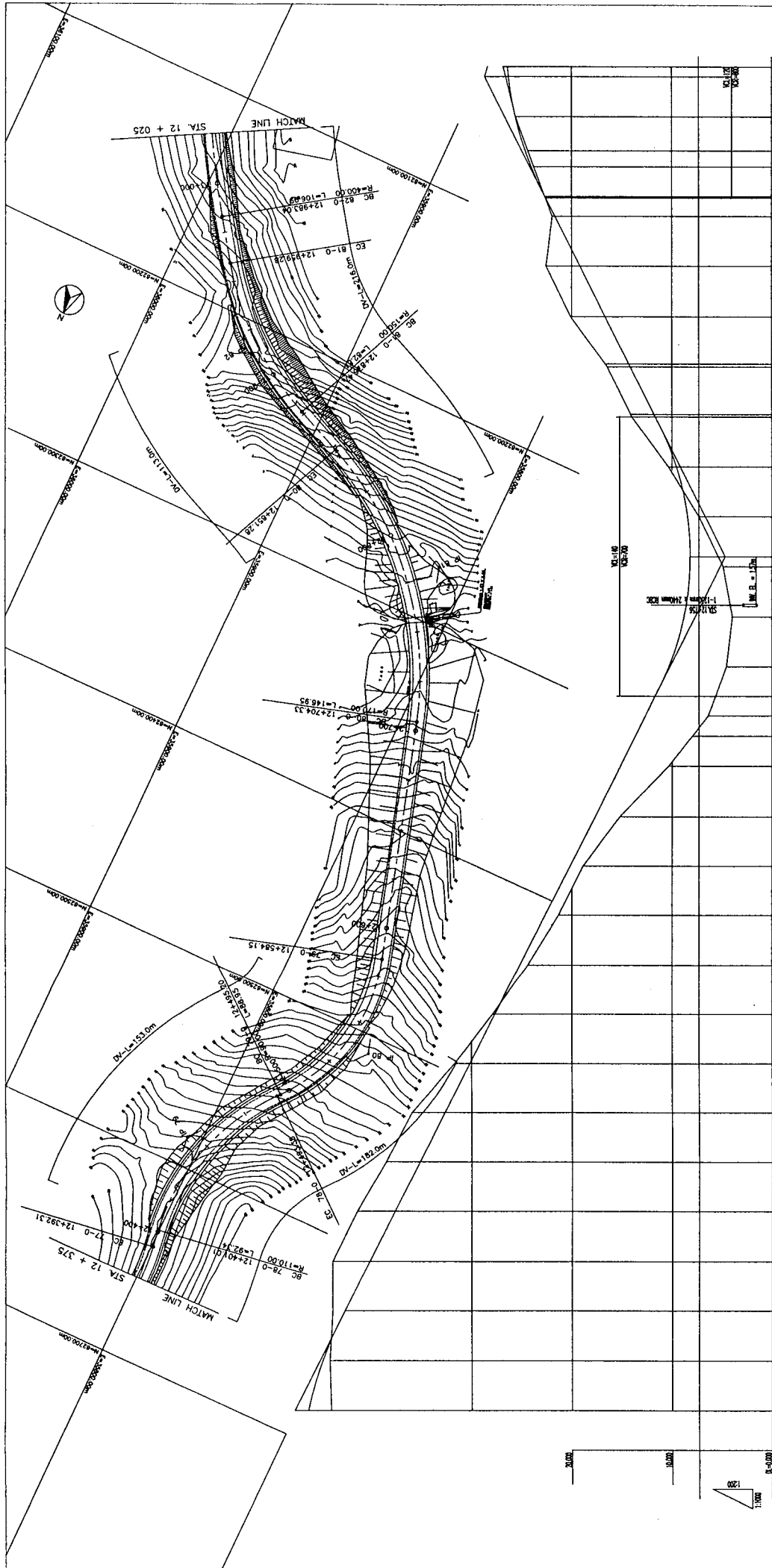
BASIC DESIGN STUDY ON THE ROAD IMPROVEMENT PROJECT
FOR THE STATE OF YAP
IN THE FEDERATED STATES OF MICRONESIA

JAPAN INTERNATIONAL COOPERATION AGENCY
KATAHARA & ENGINEERS INTERNATIONAL

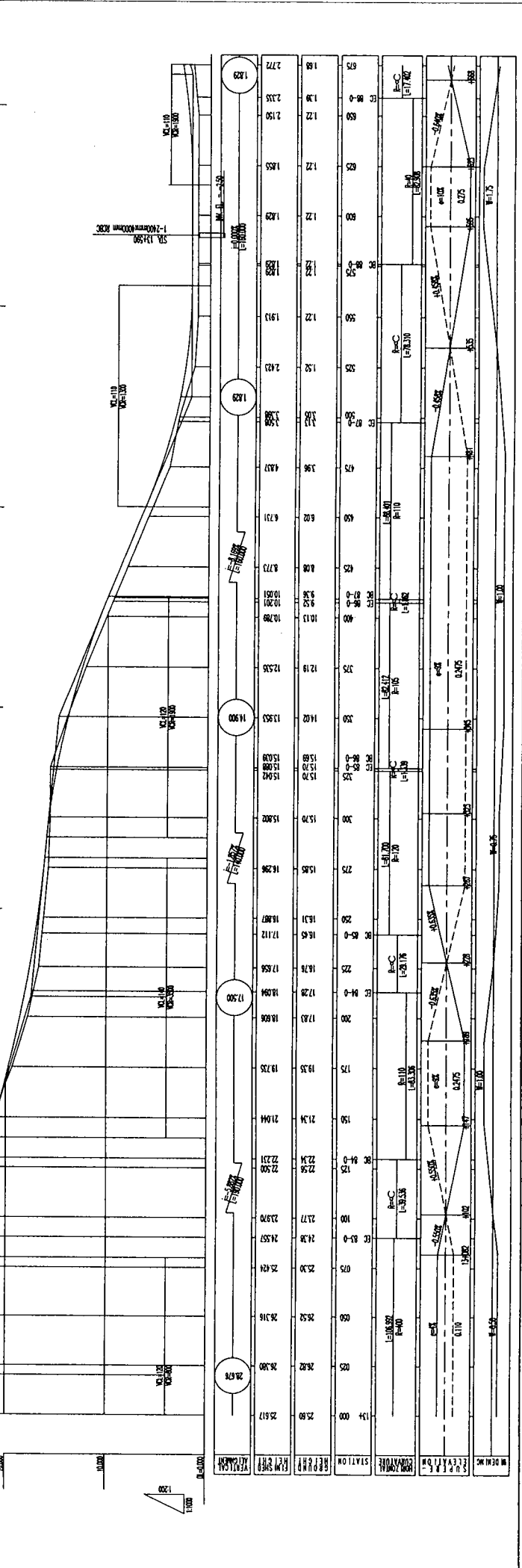
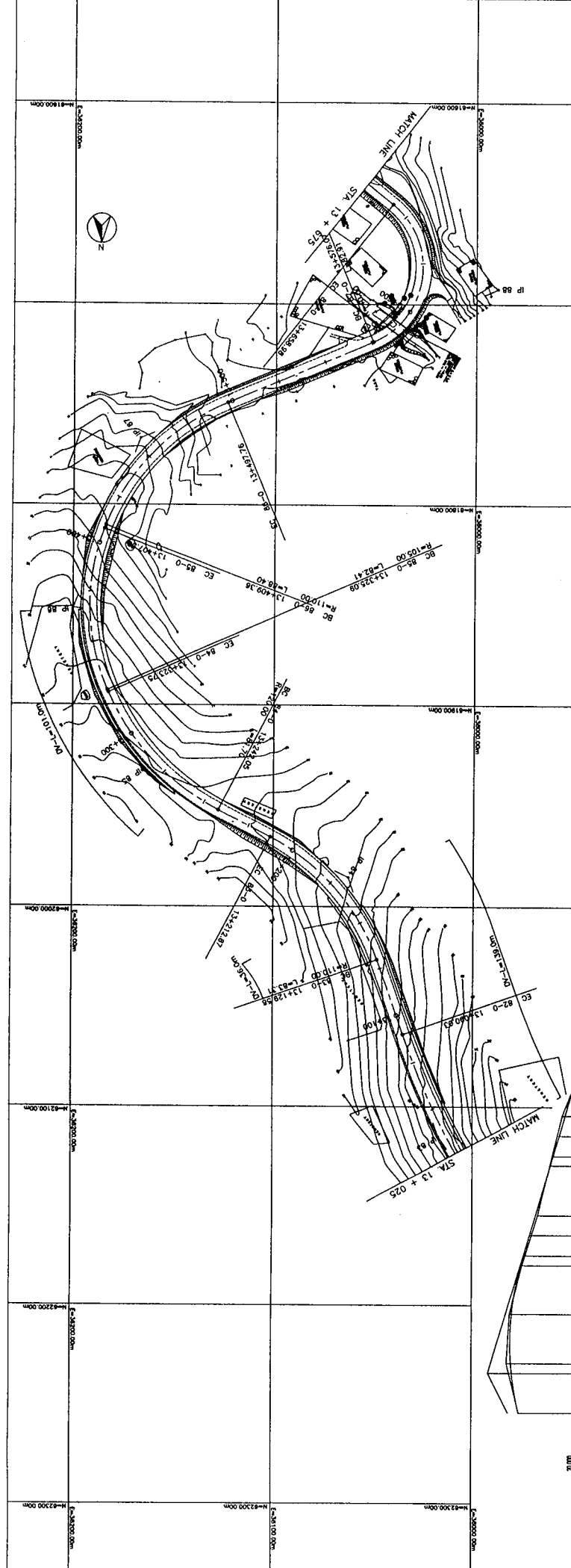
PLAN AND PROFILE OF CENTRAL ROAD
(STA. 11 + 725 - STA. 12 + 375)

SCALE: H=1:1000 V=1:200

DRAWING NO: P - 19



DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION STATE OF YAP, FEDERATED STATES OF MICRONESIA	BASIC DESIGN STUDY ON THE ROAD IMPROVEMENT PROJECT FOR THE STATE OF YAP IN THE FEDERATED STATES OF MICRONESIA	JAPAN INTERNATIONAL COOPERATION AGENCY HATAHIRA & ENGINEERS INTERNATIONAL	TITLE:	PLAN & PROFILE OF CENTRAL ROAD (STA. 12 + 375 - STA. 13 + 025)	SCALE:	H = 1 : 1000 V = 1 : 200	DRAWING NO:	P - 20



DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
STATE OF YAP, FEDERATED STATES OF MICRONESIA

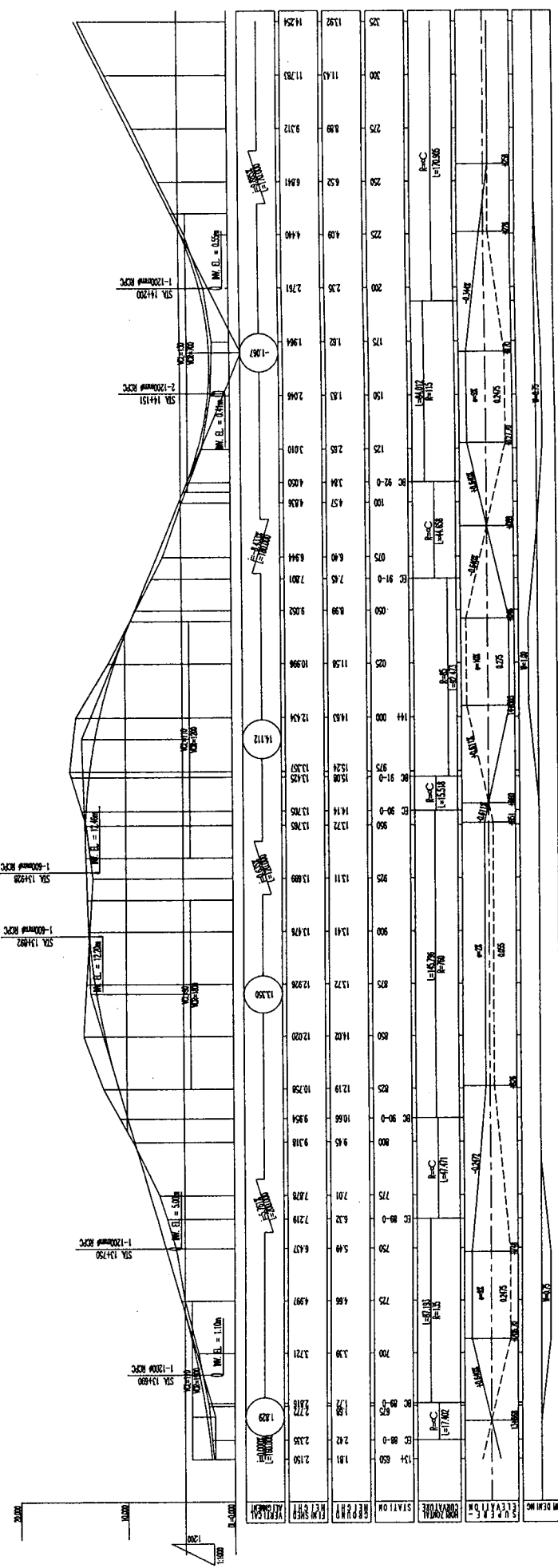
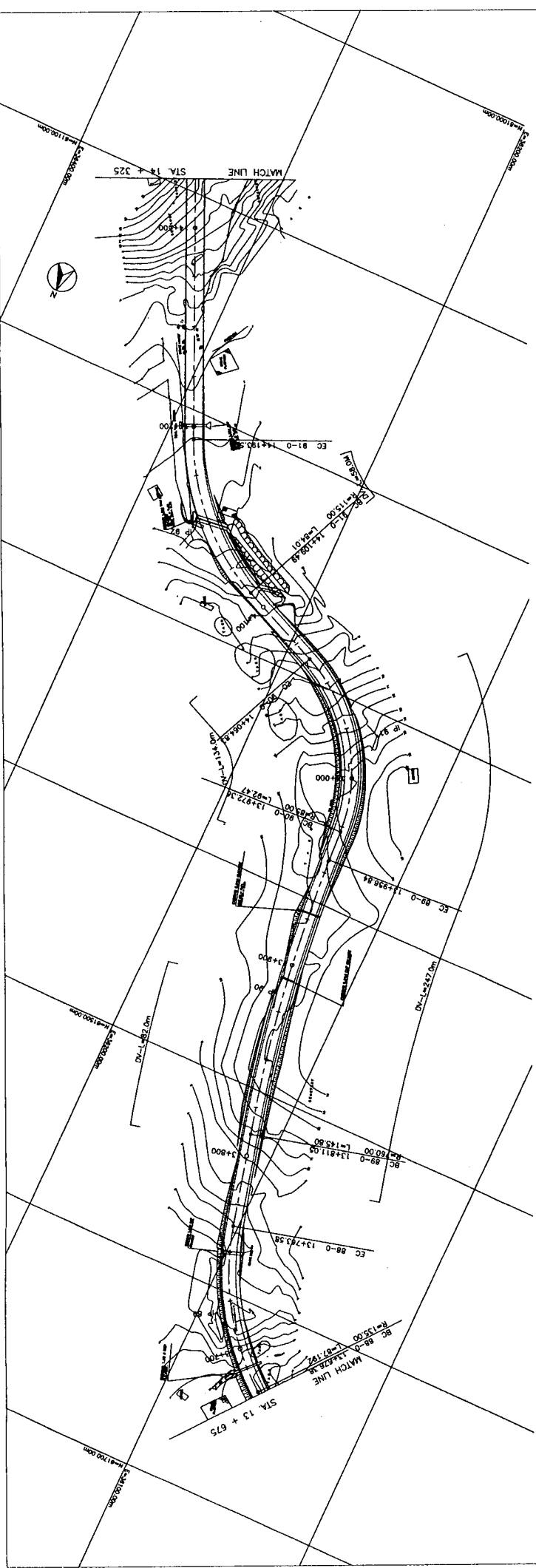
BASIC DESIGN STUDY ON THE ROAD IMPROVEMENT PROJECT
FOR THE STATE OF YAP
IN THE FEDERATED STATES OF MICRONESIA

JAPAN INTERNATIONAL COOPERATION AGENCY
KATAHARA & ENGINEERS INTERNATIONAL

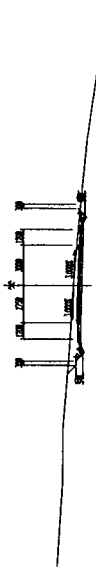
PLAN & PROFILE OF CENTRAL ROAD
(STA. 13 + 025 - STA. 13 + 675)

SCALE: H=1:1000 V=1:200

DRAWING No. P-21



DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION STATE OF YAP, FEDERATED STATES OF MICRONESIA	BASIC DESIGN STUDY ON THE ROAD IMPROVEMENT PROJECT FOR THE STATE OF YAP IN THE FEDERATED STATES OF MICRONESIA	JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	TITLE: PLAN & PROFILE OF CENTRAL ROAD (STA. 13 + 675 - STA. 14 + 325)	DRAWING No: P - 22
			SCALE: H = 1:1000 V = 1:200	



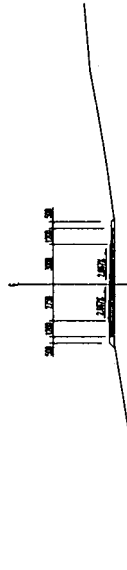
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STA. 0 + 000
HP=50.00



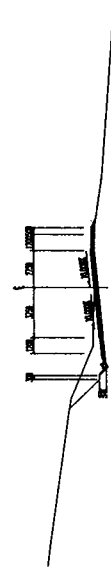
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STA. 0 + 200
HP=50.00



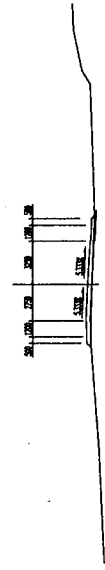
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STA. 0 + 300
HP=50.00



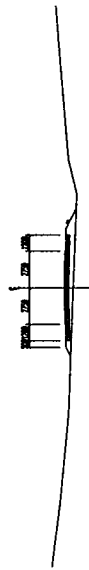
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STA. 0 + 500
HP=50.00



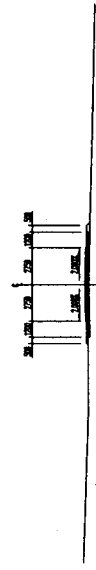
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STA. 0 + 700
HP=50.00



DL=50.00

STA. 0 + 700
HP=50.00



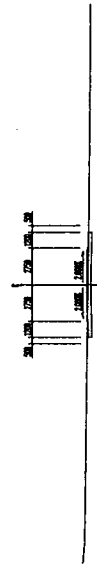
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STA. 0 + 900
HP=20.00



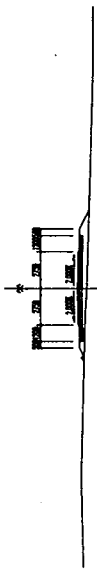
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STA. 0 + 900
HP=40.00



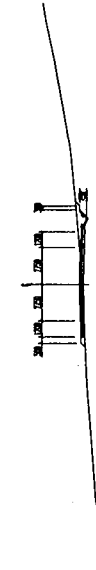
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STA. 0 + 900
HP=20.00



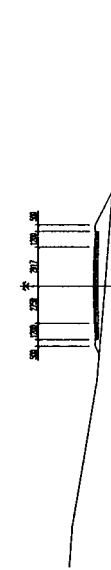
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HP=40.00



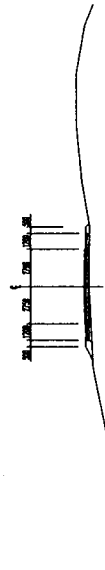
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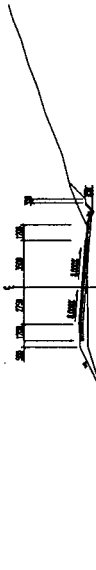
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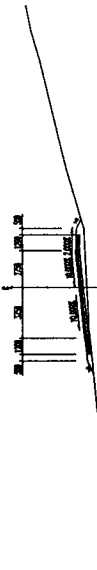
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HP=50.00



DL=50.00

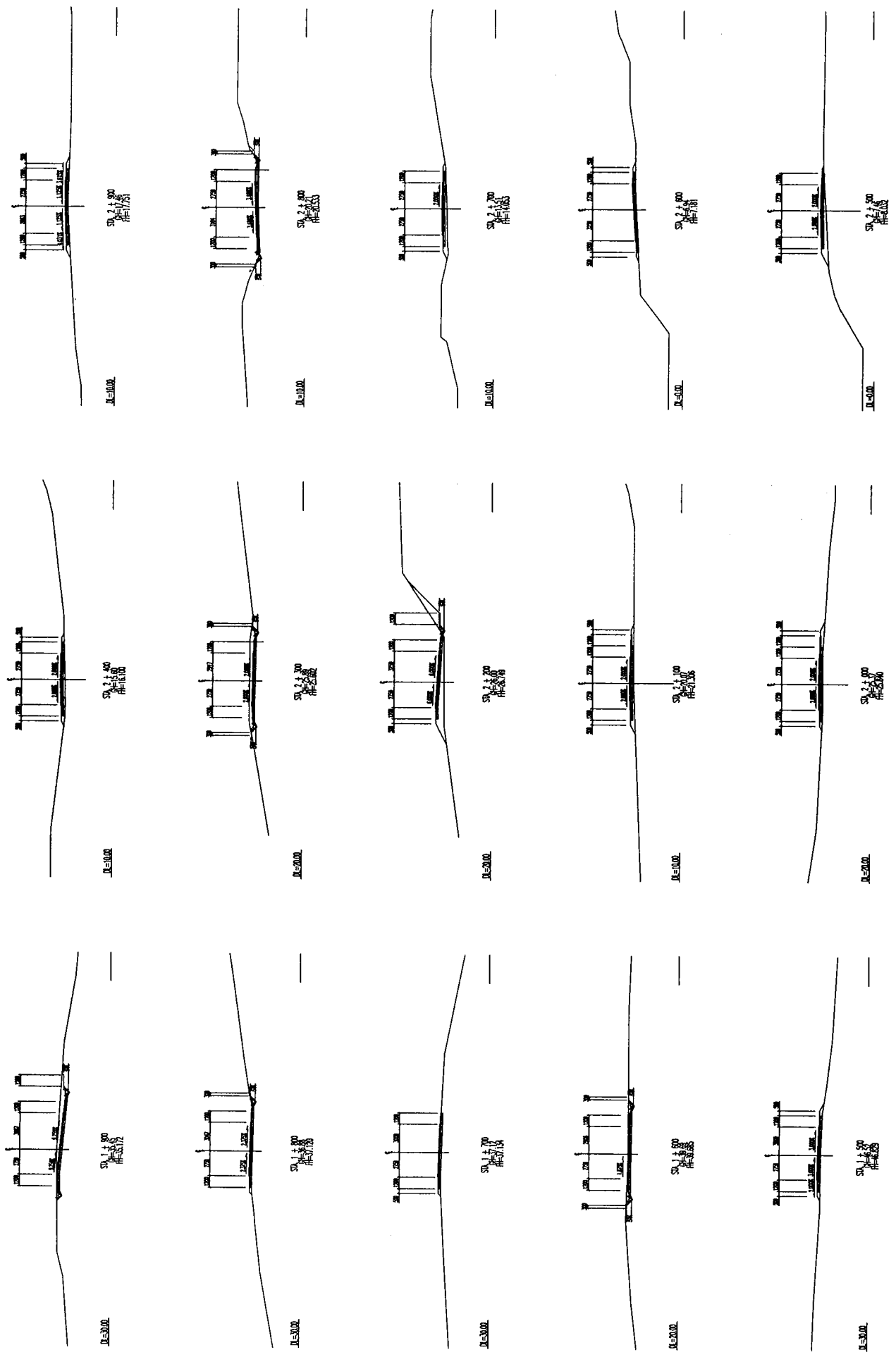
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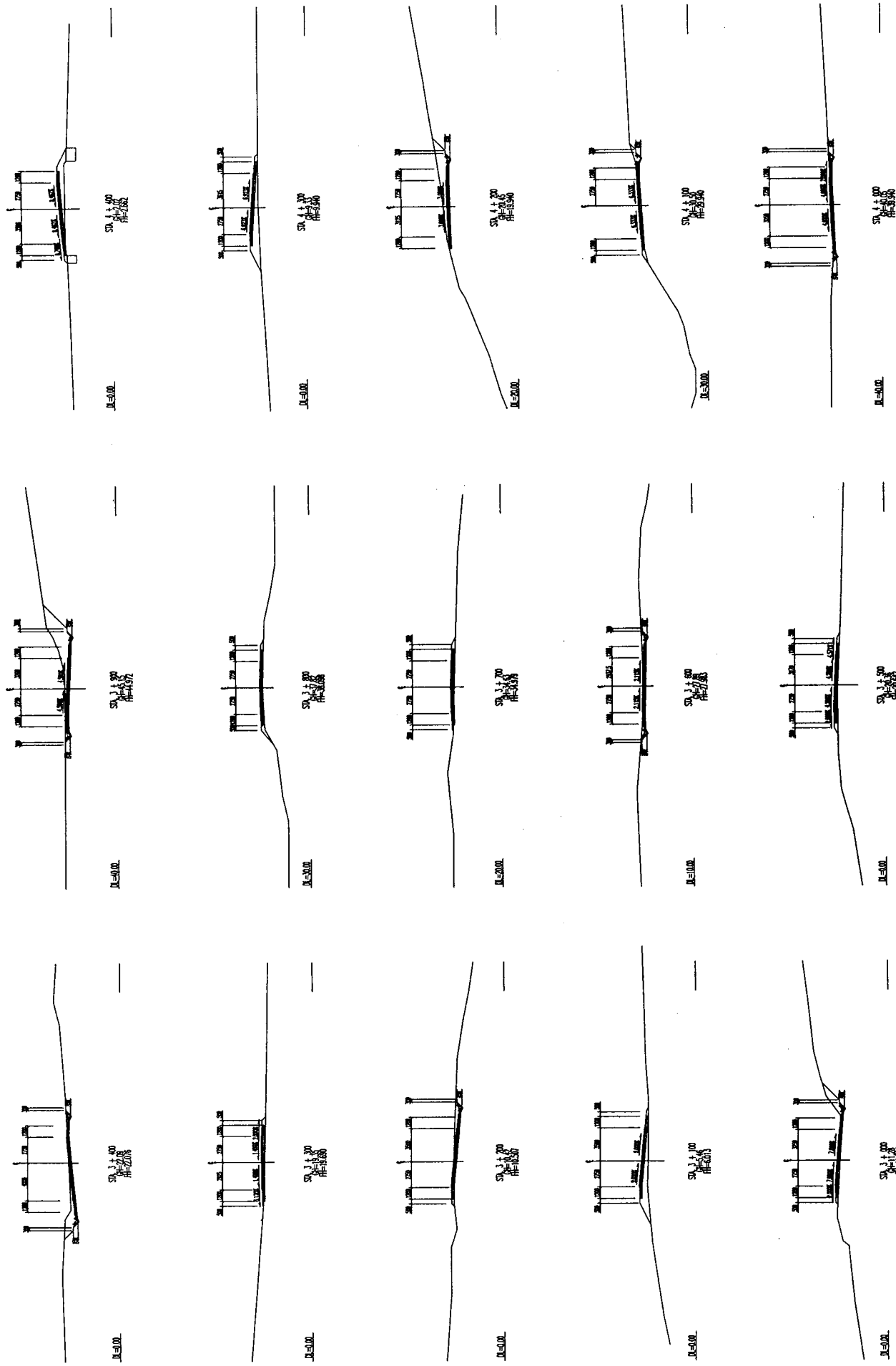
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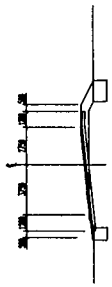
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION STATE OF YAP, FEDERATED STATES OF MICRONESIA	BASIC DESIGN STUDY ON THE ROAD IMPROVEMENT PROJECT FOR THE STATE OF YAP IN THE FEDERATED STATES OF MICRONESIA	JAPAN INTERNATIONAL COOPERATION AGENCY MATSUHARA & ENGINEERS INTERNATIONAL	TITLE: CROSS SECTION OF CENTRAL ROAD (STA. 0 + 000 - STA. 1 + 400)	SCALE: 1:200 DRAWING No: C-1
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DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION STATE OF YAP, FEDERATED STATES OF MICRONESIA	BASIC DESIGN STUDY ON THE ROAD IMPROVEMENT PROJECT FOR THE STATE OF YAP IN THE FEDERATED STATES OF MICRONESIA	JAPAN INTERNATIONAL COOPERATION AGENCY MATAHARA & ENGINEERS INTERNATIONAL	TITLE: CROSS SECTION OF CENTRAL ROAD (STA. 1 + 500 - STA. 2 + 900)	SCALE: 1 : 200 DRAWING NO: C - 2
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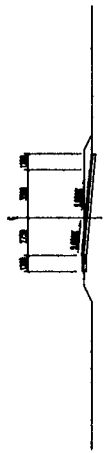


<p>DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION STATE OF YAP, FEDERATED STATES OF MICRONESIA</p>	<p>BASIC DESIGN STUDY ON THE ROAD IMPROVEMENT PROJECT FOR THE STATE OF YAP IN THE FEDERATED STATES OF MICRONESIA</p>	<p>JAPAN INTERNATIONAL COOPERATION AGENCY MATHIHARA & ENGINEERS INTERNATIONAL</p>	<p>TITLE: CROSS SECTION OF CENTRAL ROAD (STA. 3 + 000 - STA. 4 + 400)</p>	<p>SCALE: 1:200</p>	<p>DRAWING NO: C-3</p>
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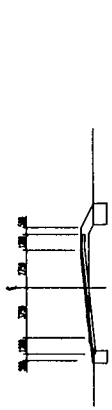
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STA. 4 + 500
PREF. 1/50



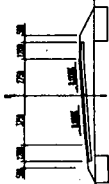
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PREF. 1/50



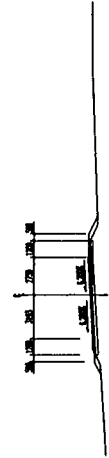
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PREF. 1/50



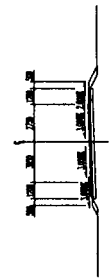
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STA. 4 + 500
PREF. 1/50



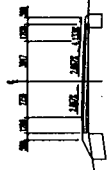
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PREF. 1/50



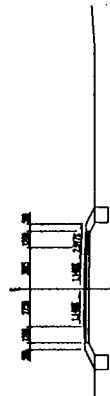
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PREF. 1/50



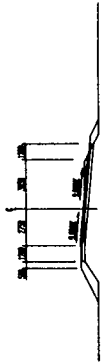
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STA. 4 + 700
PREF. 1/50



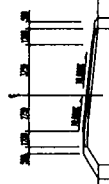
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STA. 5 + 600
PREF. 1/50



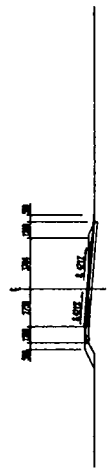
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PREF. 1/50



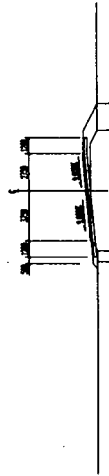
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STA. 4 + 800
PREF. 1/50



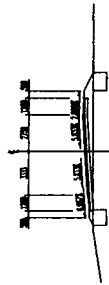
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PREF. 1/50



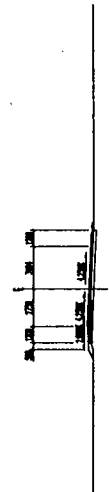
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PREF. 1/50



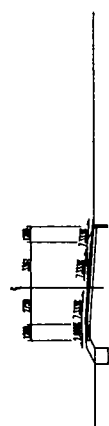
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STA. 4 + 500
PREF. 1/50



JL=5.00L

STA. 5 + 600
PREF. 1/50



JL=5.00L

STA. 5 + 800
PREF. 1/50

DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
STATE OF YAP, FEDERATED STATES OF MICRONESIA

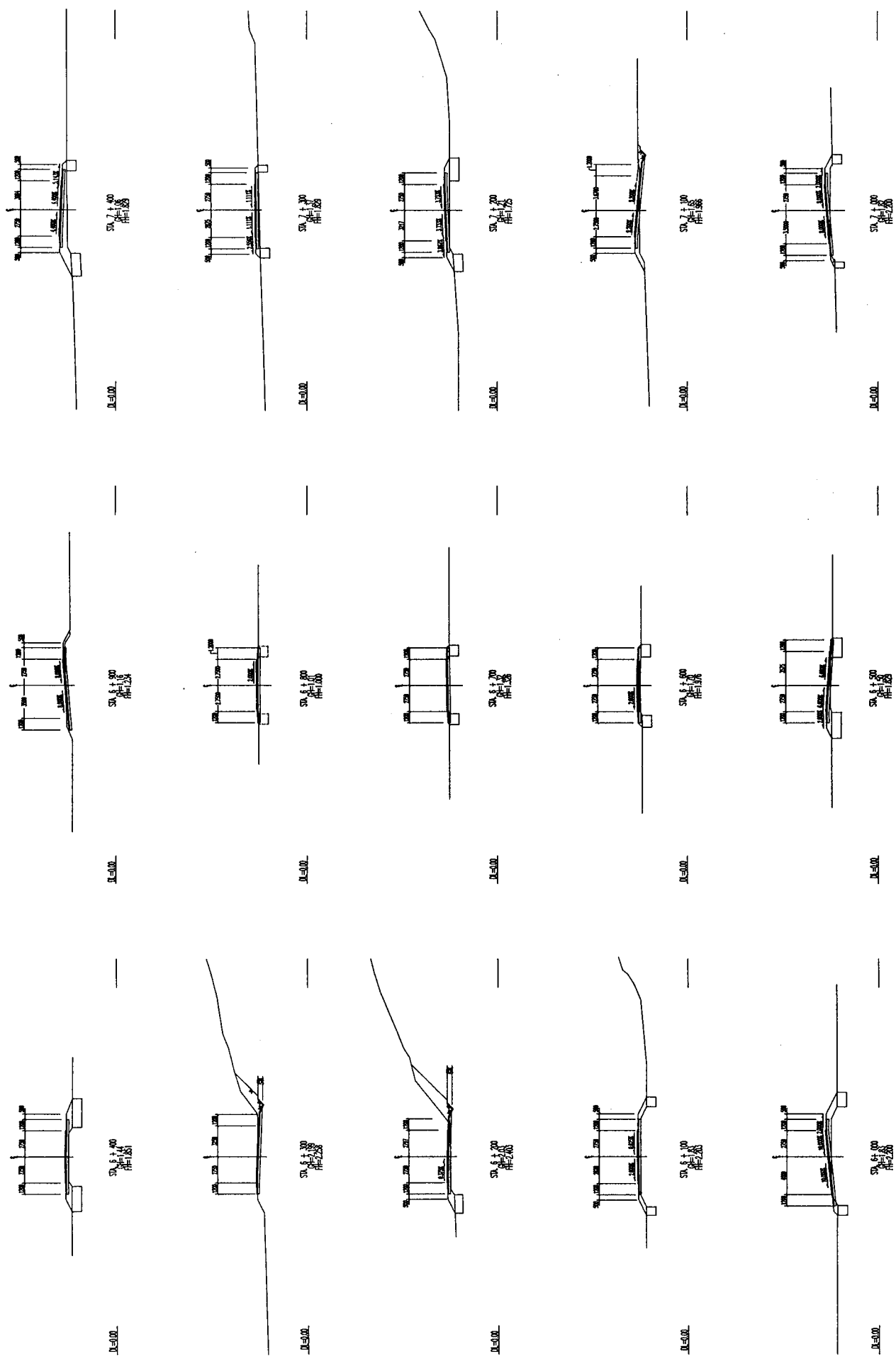
BASIC DESIGN STUDY ON THE ROAD IMPROVEMENT PROJECT
FOR THE STATE OF YAP
IN THE FEDERATED STATES OF MICRONESIA

JAPAN INTERNATIONAL COOPERATION AGENCY
KATAHARA & ENGINEERS INTERNATIONAL

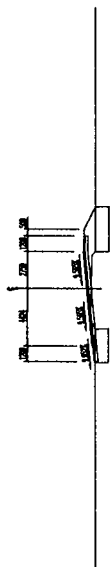
TITLE:
CROSS SECTION OF CENTRAL ROAD
(STA. 4 + 500 - STA. 5 + 900)

SCALE:
1 : 200

DRAWING No:
C - 4

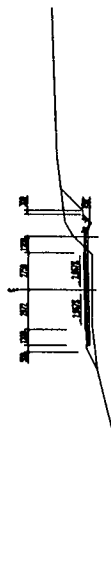


<p>DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION STATE OF YAP, FEDERATED STATES OF MICRONESIA</p>	<p>BASIC DESIGN STUDY ON THE ROAD IMPROVEMENT PROJECT FOR THE STATE OF YAP IN THE FEDERATED STATES OF MICRONESIA</p>	<p>JAPAN INTERNATIONAL COOPERATION AGENCY KATAHARA & ENGINEERS INTERNATIONAL</p>	<p>TITLE: CROSS SECTION OF CENTRAL ROAD (STA. 6 + 000 - STA. 7 + 400)</p>	<p>SCALE: 1 : 200</p>	<p>DRAWING No: C - 5</p>
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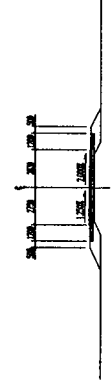
12.00

STA. 7 + 500
HP=2.25
PF=2.25



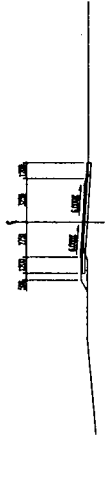
12.00

STA. 8 + 100
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PF=2.25



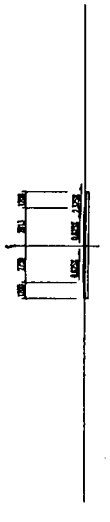
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PF=2.25



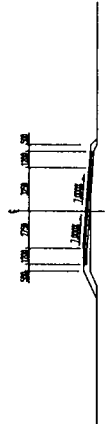
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STA. 7 + 200
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PF=2.25



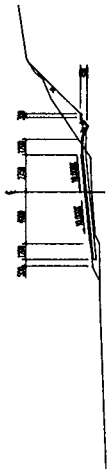
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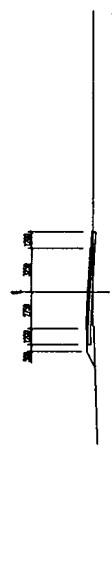
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STA. 8 + 800
HP=2.25
PF=2.25



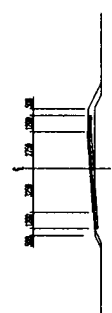
12.00

STA. 7 + 700
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PF=2.25



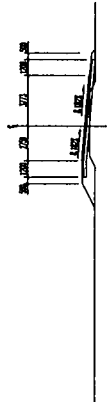
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STA. 8 + 700
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PF=2.25



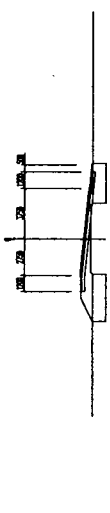
12.00

STA. 8 + 700
HP=2.25
PF=2.25



12.00

STA. 7 + 800
HP=2.25
PF=2.25



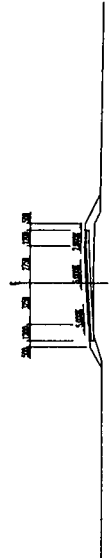
12.00

STA. 8 + 100
HP=2.25
PF=2.25



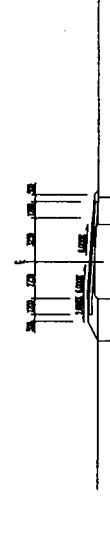
12.00

STA. 8 + 800
HP=2.25
PF=2.25



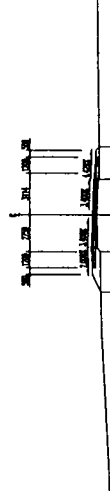
12.00

STA. 7 + 500
HP=2.25
PF=2.25



12.00

STA. 8 + 100
HP=2.25
PF=2.25



12.00

STA. 8 + 500
HP=2.25
PF=2.25

DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
STATE OF YAP, FEDERATED STATES OF MICRONESIA

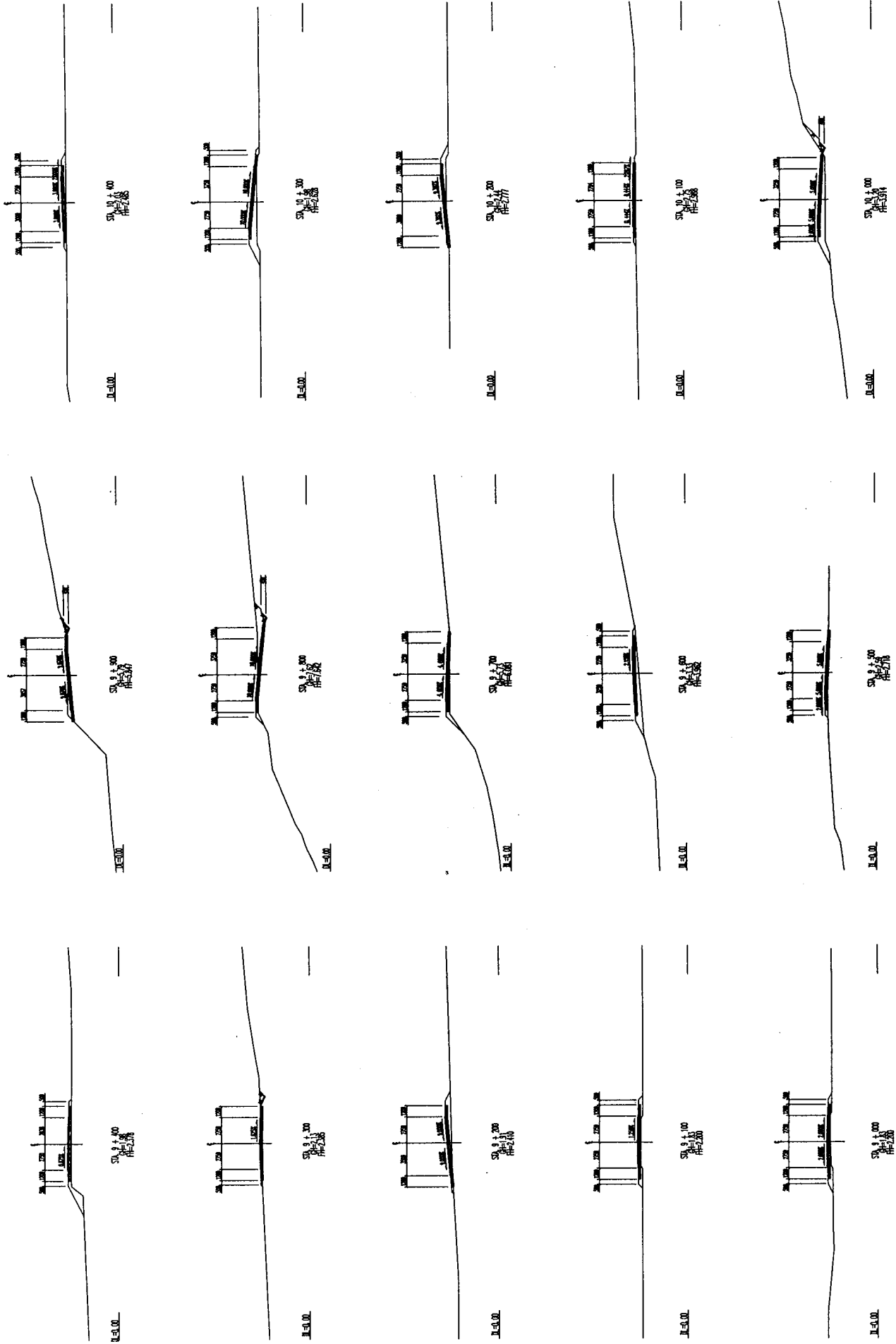
BASIC DESIGN STUDY ON THE ROAD IMPROVEMENT PROJECT
FOR THE STATE OF YAP
IN THE FEDERATED STATES OF MICRONESIA

JAPAN INTERNATIONAL COOPERATION AGENCY
KATAHIRA & ENGINEERS INTERNATIONAL

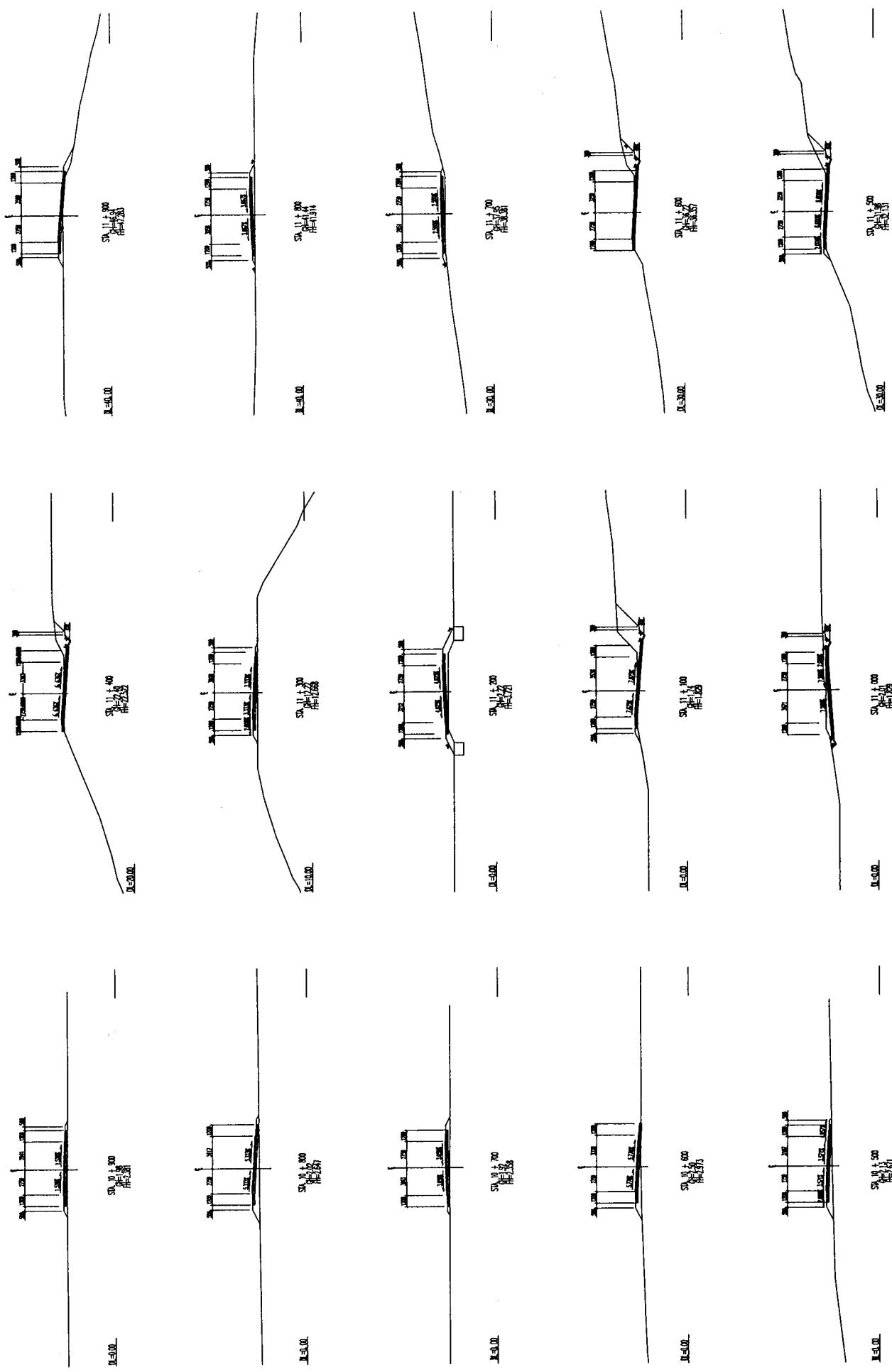
TITLE:
CROSS SECTION OF CENTRAL ROAD
(STA. 7 + 500 - STA. 8 + 900)

SCALE:
1:200

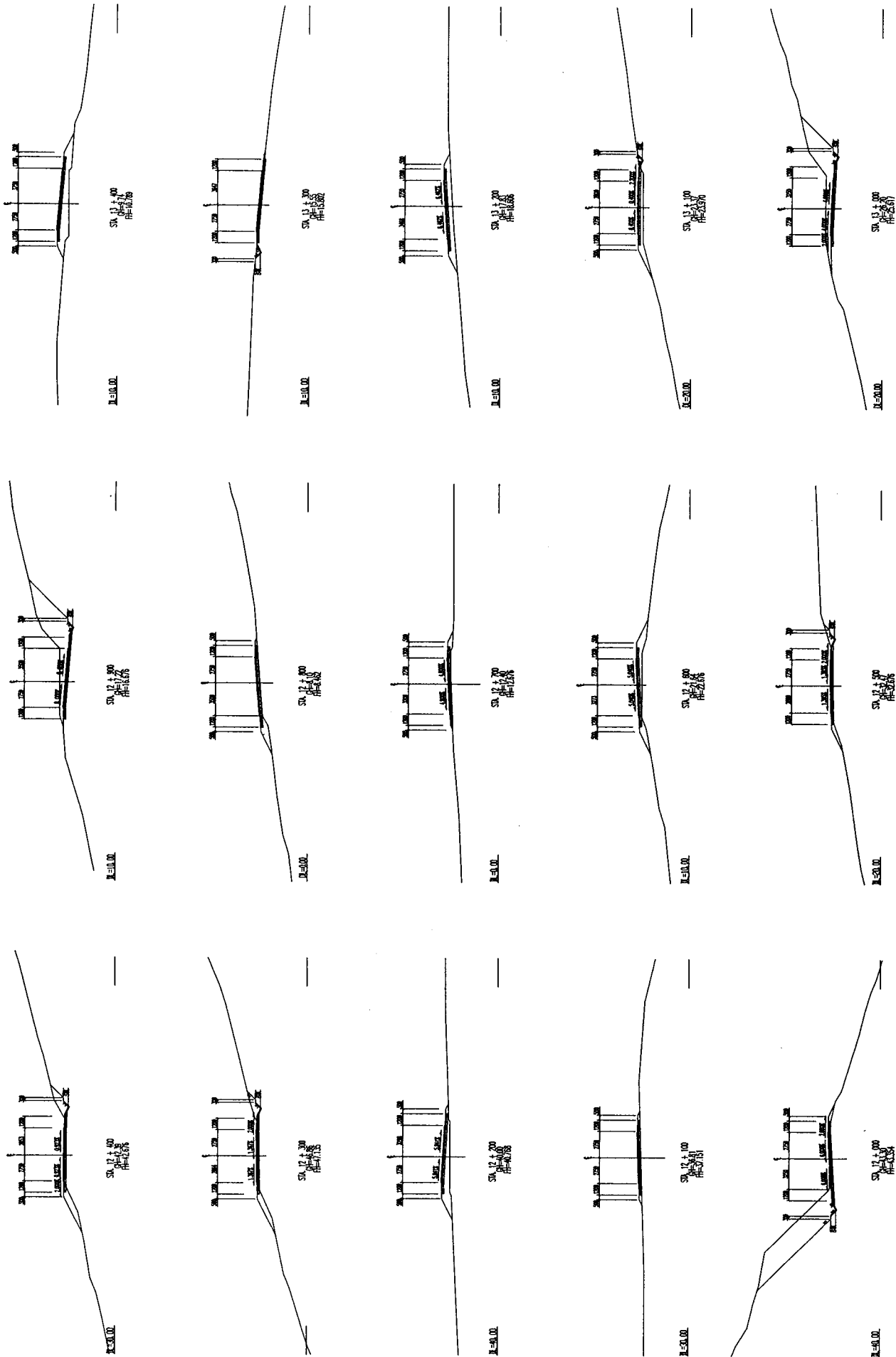
DRAWING NO:
C - 6



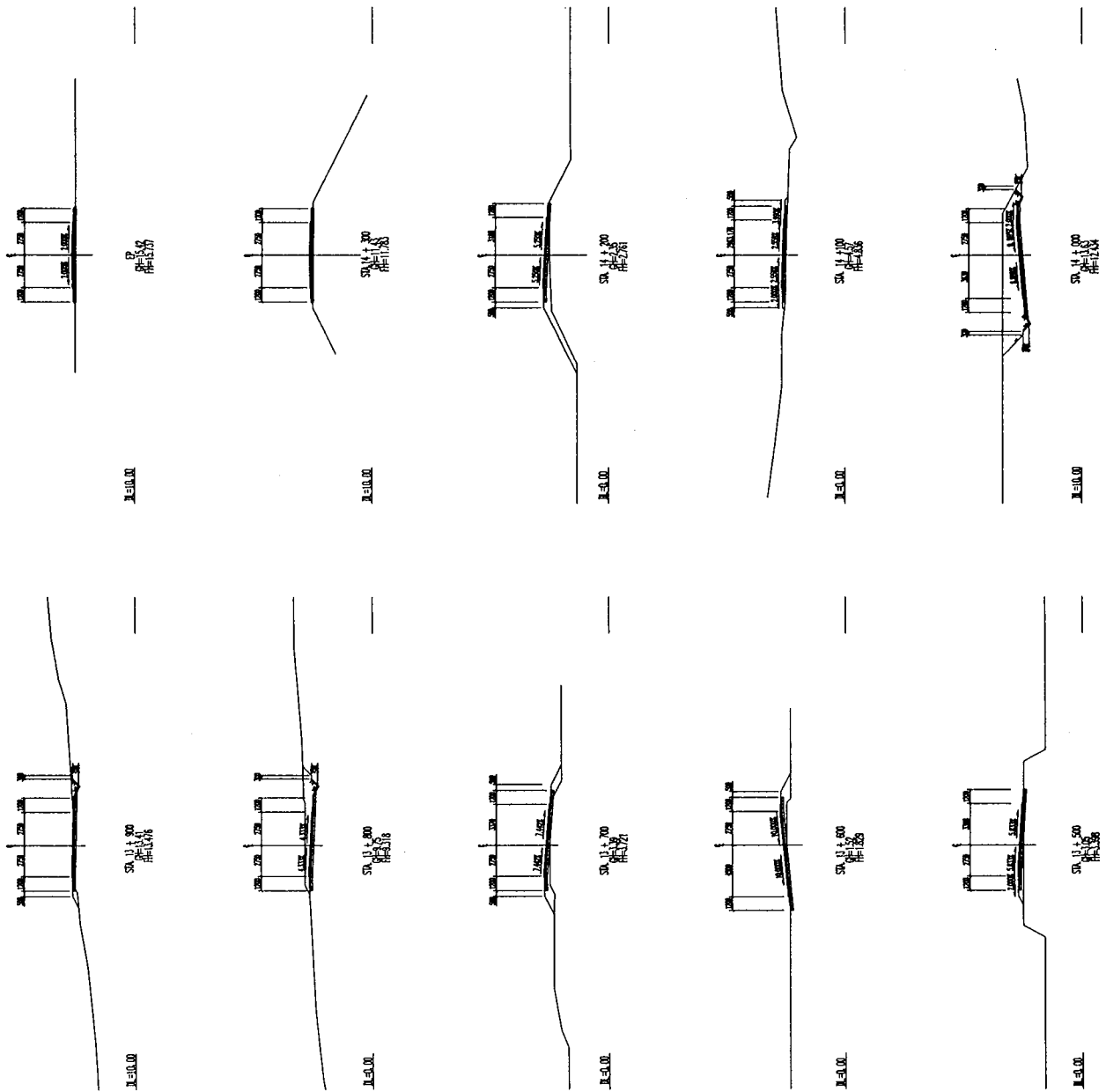
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION STATE OF YAP, FEDERATED STATES OF MICRONESIA	BASIC DESIGN STUDY ON THE ROAD IMPROVEMENT PROJECT FOR THE STATE OF YAP IN THE FEDERATED STATES OF MICRONESIA	JAPAN INTERNATIONAL COOPERATION AGENCY MATSUI & ENGINEERS INTERNATIONAL	TITLE: CROSS SECTION OF CENTRAL ROAD (STA. 9 + 000 - STA. 10 + 400)	SCALE: 1:200	DRAWING No: C - 7
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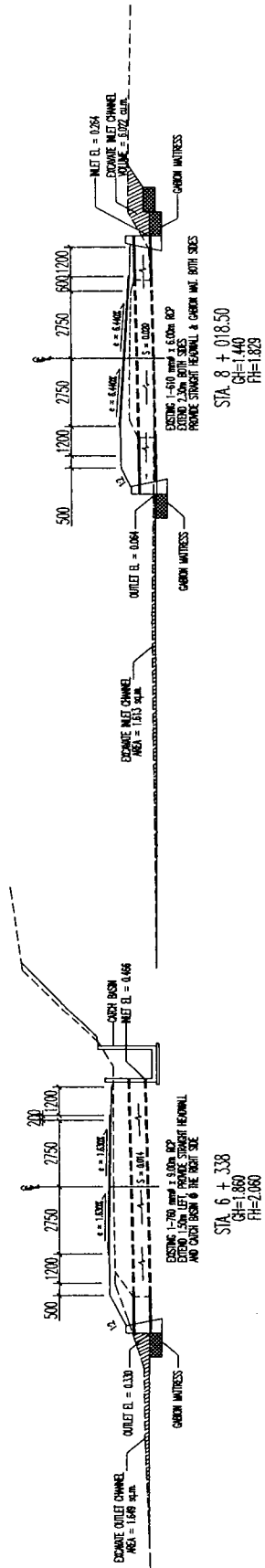
<p>DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION STATE OF YAP, FEDERATED STATES OF MICRONESIA</p>	<p>BASIC DESIGN STUDY ON THE ROAD IMPROVEMENT PROJECT FOR THE STATE OF YAP IN THE FEDERATED STATES OF MICRONESIA</p>	<p>JAPAN INTERNATIONAL COOPERATION AGENCY KATAHARA & ENGINEERS INTERNATIONAL</p>	<p>TITLE: CROSS SECTION OF CENTRAL ROAD (STA. 10 + 500 - STA. 11 + 900)</p>	<p>SCALE: 1: 200</p>	<p>DRAWING No: C - 8</p>
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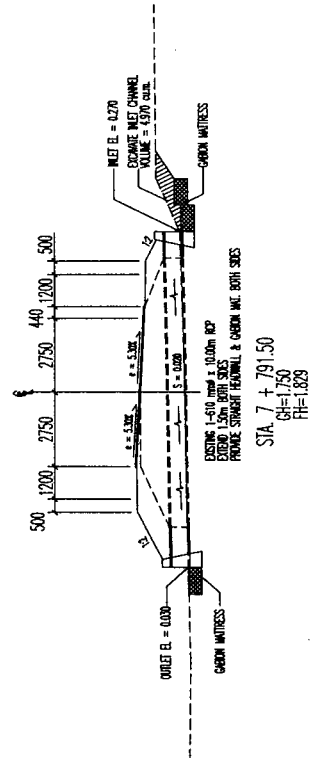
<p>DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION STATE OF YAP, FEDERATED STATES OF MICRONESIA</p>	<p>BASIC DESIGN STUDY ON THE ROAD IMPROVEMENT PROJECT FOR THE STATE OF YAP IN THE FEDERATED STATES OF MICRONESIA</p>	<p>JAPAN INTERNATIONAL COOPERATION AGENCY KATAHARA & ENGINEERS INTERNATIONAL</p>	<p>TITLE: CROSS SECTION OF CENTRAL ROAD (STA.12 + 000 - STA.13 + 400)</p>	<p>SCALE: 1:200</p>	<p>DRAWING No: C - 9</p>
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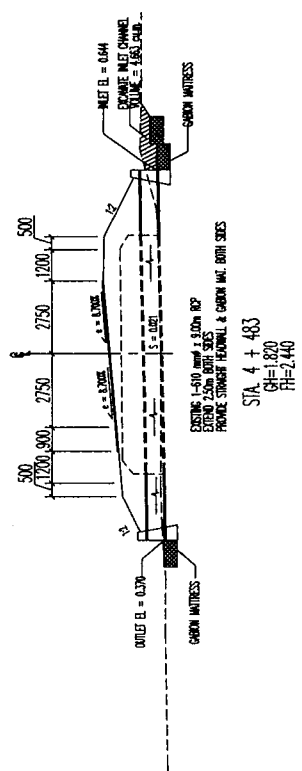
<p>DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION STATE OF YAP, FEDERATED STATES OF MICRONESIA</p>	<p>BASIC DESIGN STUDY ON THE ROAD IMPROVEMENT PROJECT FOR THE STATE OF YAP IN THE FEDERATED STATES OF MICRONESIA</p>	<p>JAPAN INTERNATIONAL COOPERATION AGENCY MATAHARA & ENGINEERS INTERNATIONAL</p>	<p>TITLE: CROSS SECTION OF CENTRAL ROAD (STA.13 + 500 - STA.EP)</p>	<p>SCALE: 1:200</p>	<p>DRAWING No: C - 10</p>
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STA. 8 + 018.50
CH=1.440
FH=1.829

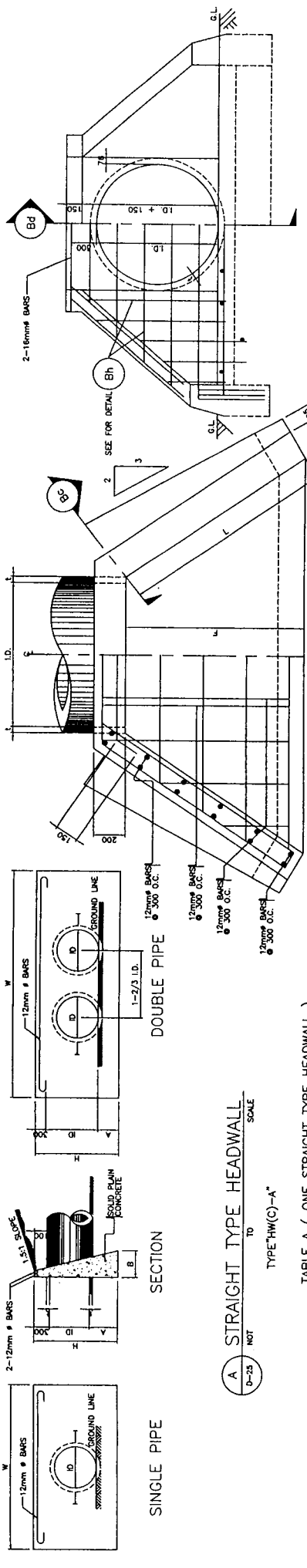


STA. 7 + 791.50
CH=1.750
FH=1.829



STA. 4 + 483
CH=1.820
FH=2.440

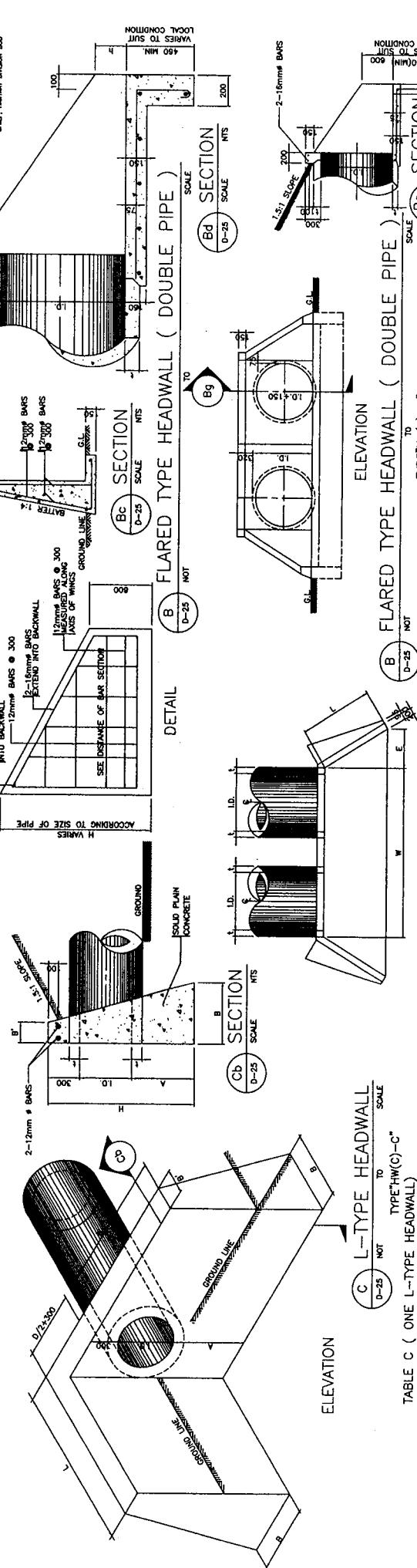
DRAWING NO: D-1	SCALE: H = 1:100 V = 1:100	TITLE: CROSS SECTION OF CENTRAL ROAD (STA. 4 + 483 - STA. 7 + 791.50)	JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	BASIC DESIGN STUDY ON THE ROAD IMPROVEMENT PROJECT FOR THE STATE OF YAP IN THE FEDERATED STATES OF MICRONESIA
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A STRAIGHT TYPE HEADWALL
 TYPE "HW(C)-A"
 TO SCALE

TABLE A (ONE STRAIGHT TYPE HEADWALL)

INTERNAL DIAMETER (I.D.)	SINGLE PIPE			DOUBLE PIPE			TRIPLE PIPE																	
	A	B	H	W	AREA OF WATERWAY (m ²)	CONCRETE (M.M. H.M.)	REFIN. STEEL (kg.)	W (mm)	AREA OF WATERWAY (m ²)	CONCRETE (M.M. H.M.)	REFIN. STEEL (kg.)													
460	310	350	1070	1500	0.15	0.46	0.15	3.48	2600	0.33	0.63	0.60	450	460	1500	0.87	1.16	5200	0.87	1.51	1.692	8.43		
610	410	450	1320	2400	0.28	0.87	0.85	4.55	3500	0.56	1.20	1.16	6.50	610	5200	1.50	2.02	3.09	8.10	760	6800	1.95	3.73	12.36
760	510	550	1570	3000	0.45	1.50	1.47	5.61	4400	0.80	2.16	2.09	8.10	8000	1.85	3.16	3.97	6.10	6800	1.95	3.85	3.73	12.36	
910	610	650	1820	3600	0.65	2.28	2.52	6.65	5200	1.30	3.16	3.09	9.52	910	6800	2.34	4.81	8900	2.34	4.81	8900	2.34	4.81	16.14
1220	110	810	2350	4800	1.17	4.43	—	8.81	8900	2.34	6.70	—	12.54	1220	8700	3.53	11.93	—	15.56	—	—	—	—	—
1520	127	—	1010	980	2650	1.81	2.90	—	10.84	9800	3.83	11.93	—	15.56	1520	—	—	—	—	—	—	—	—	—



C L-TYPE HEADWALL
 TYPE "HW(C)-C"
 TO SCALE

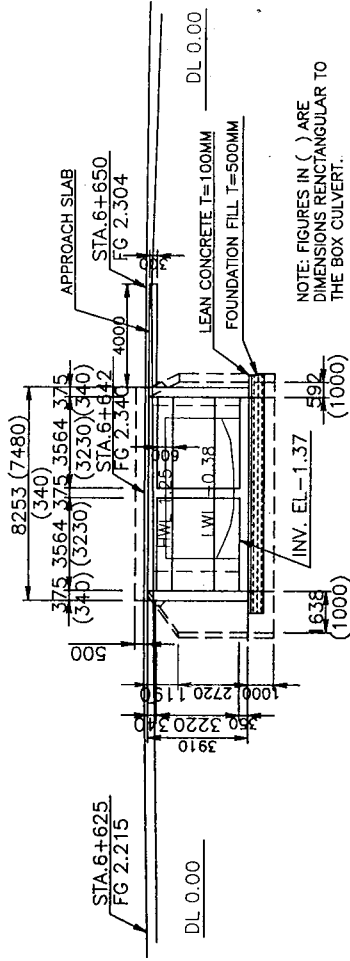
TABLE C (ONE L-TYPE HEADWALL)

INTERNAL DIAMETER (I.D.)	SINGLE PIPE			DOUBLE PIPE			TRIPLE PIPE																	
	A	B	H	W	AREA OF WATERWAY (m ²)	CONCRETE (M.M. H.M.)	REFIN. STEEL (kg.)	W (mm)	AREA OF WATERWAY (m ²)	CONCRETE (M.M. H.M.)	REFIN. STEEL (kg.)													
460	310	350	1070	1070	0.15	0.46	0.15	3.48	2600	0.33	0.63	0.60	450	460	1500	0.87	1.16	5200	0.87	1.51	1.692	8.43		
610	410	450	1320	2400	0.28	0.87	0.85	4.55	3500	0.56	1.20	1.16	6.50	610	5200	1.50	2.02	3.09	8.10	760	6800	1.95	3.73	12.36
760	510	550	1570	3000	0.45	1.50	1.47	5.61	4400	0.80	2.16	2.09	8.10	8000	1.85	3.16	3.97	6.10	6800	1.95	3.85	3.73	12.36	
910	610	650	1820	3600	0.65	2.28	2.52	6.65	5200	1.30	3.16	3.09	9.52	910	6800	2.34	4.81	8900	2.34	4.81	8900	2.34	4.81	16.14
1220	110	810	2350	4800	1.17	4.43	—	8.81	8900	2.34	6.70	—	12.54	1220	8700	3.53	11.93	—	15.56	—	—	—	—	—
1520	127	—	1010	980	2650	1.81	2.90	—	10.84	9800	3.83	11.93	—	15.56	1520	—	—	—	—	—	—	—	—	—

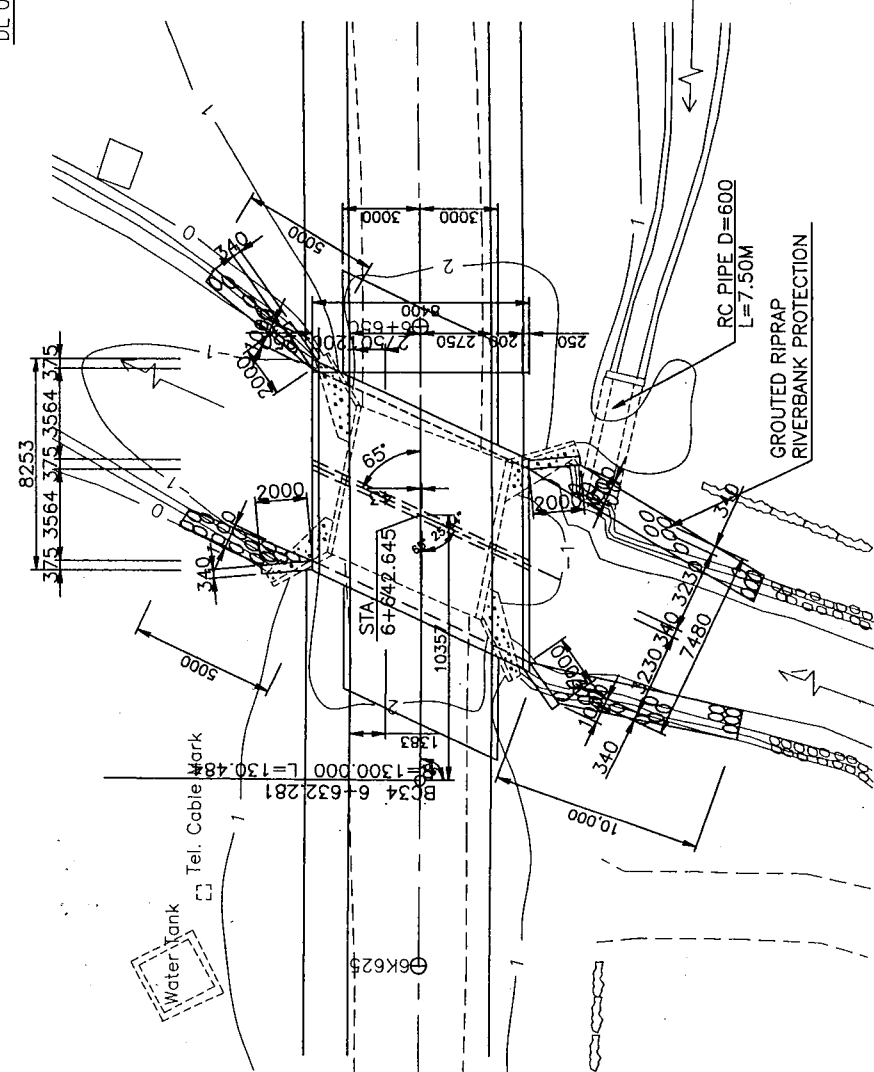
TABLE B (ONE FLARED TYPE HEADWALL, 1:5:1)

INTERNAL DIAMETER (I.D.)	SINGLE PIPE			DOUBLE PIPE			TRIPLE PIPE				
	L	E	F	h	AREA OF WATERWAY (m ²)	CONCRETE (M.M. H.M.)	REFIN. STEEL (kg.)	W (mm)	AREA OF WATERWAY (m ²)	CONCRETE (M.M. H.M.)	REFIN. STEEL (kg.)
460	890	530	800	0	0.29	760	0.82	38.46	1760	1.16	48.39
610	84	80	840	0	0.29	760	0.82	38.46	1760	1.16	48.39
760	86	114	1310	840	0.65	1070	1.55	68.92	2590	2.22	92.61
910	110	114	1510	1840	1.20	1350	2.96	110.27	3400	3.71	124.77
1220	127	127	2540	1410	2.11	1860	5.83	174.74	4228	5.87	228.18

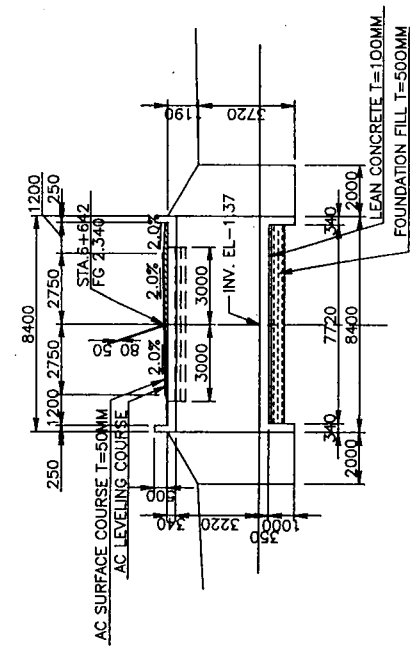
Note : Pipe Diameter, φ610 and φ760 shall be applicable for, and the others are reference only.



ELEVATION

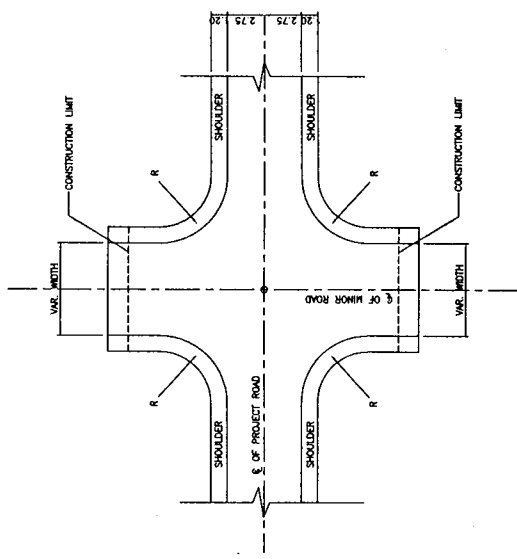


PLAN

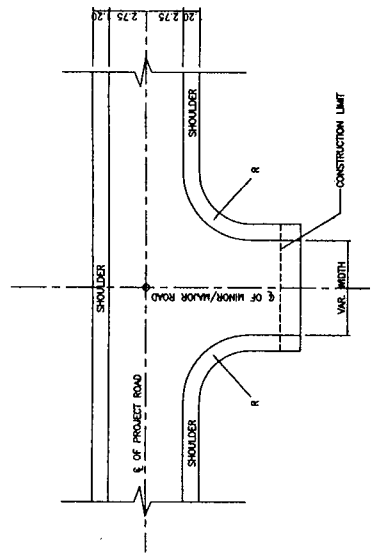


CROSS SECTION

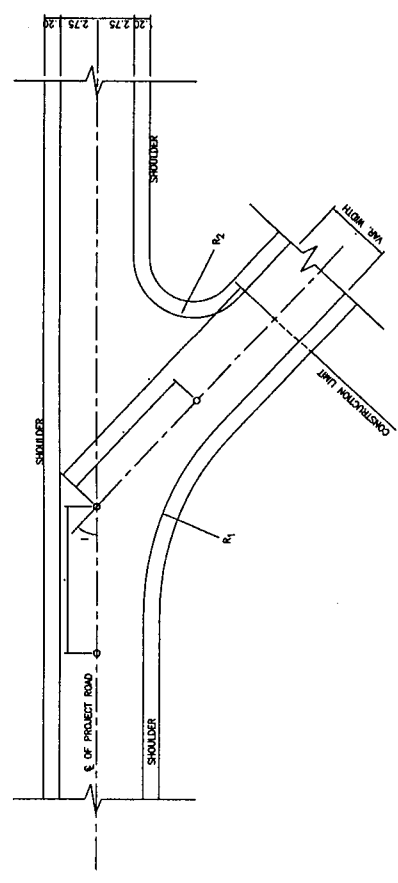
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION STATE OF YAP, FEDERATED STATES OF MICRONESIA	BASIC DESIGN STUDY ON THE ROAD IMPROVEMENT PROJECT FOR THE STATE OF YAP IN THE FEDERATED STATES OF MICRONESIA	JAPAN INTERNATIONAL COOPERATION AGENCY MATTHIAS ENGINEERS INTERNATIONAL	TITLE: TWO-CELL BOX CULVERT DETAILS	SCALE: 1:100	DRAWING NO: B-1
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D TYPICAL DETAIL OF 4-LEG INTERSECTION
B-2 SCALE 1:200



F TYPICAL DETAIL OF T-INTERSECTION
B-2 SCALE 1:200



E TYPICAL DETAIL OF Y-INTERSECTION
B-2 SCALE 1:200

TYPE OF ROAD	WIDTH OF CARRIAGEWAY	RADIUS IN METER
MINOR ROAD	< 6.00m.	5.00
MAJOR ROAD	≥ 6.00m.	10.00

FOR W=5.00m., R₂ =5.00m.

ANGLE OF TURN (θ) (DEGREE)	R ₁ (M)	L (M)
45	20.00	19.52
60	10.00	14.14
75	5.12	10.81

FOR VARYING W,

$$L = \frac{W}{2 \tan \frac{\theta}{2}} + \frac{3.50}{\sin \frac{\theta}{2}} + \frac{R_1}{\tan \frac{\theta}{2}}$$

$$T = \frac{W}{2 \tan \frac{\theta}{2}} + \frac{5.00}{\sin \frac{\theta}{2}}$$

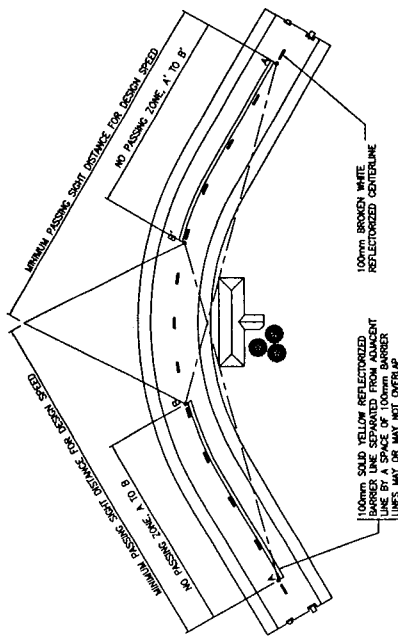
$$R_2 = \frac{T}{\tan \frac{\theta}{2}} - \frac{W}{2}$$

WHERE :

- L = DISTANCE OF THE CONSTRUCTION LIMIT FROM THE CENTRELINE OF THE PROJECT ROAD
- T = TANGENT DISTANCE FROM ROAD CENTRELINE
- R = RADIUS OF CIRCULAR CURVE AT EDGE OF PAVEMENT
- W = WIDTH OF MINOR ROAD

NOTES :

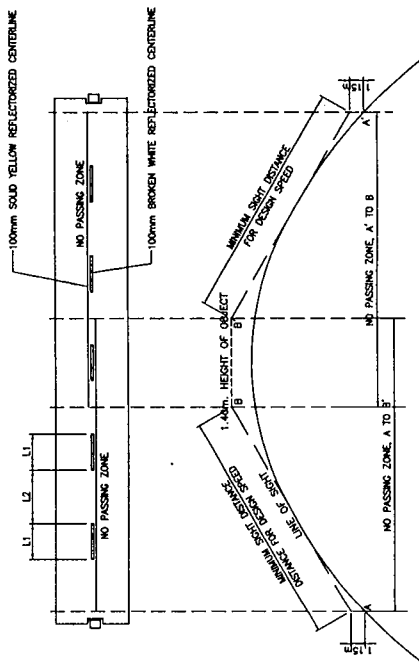
- (1) FOR ANGLE OF TURN (θ) = 90° SEE TABLE FOR T-INTERSECTION
- (2) CONSTRUCTION LIMIT SHALL BE DETERMINED AND APPROVED BY THE ENGINEER.
- (3) FINAL LOCATION OF ROAD INTERSECTION SHALL BE APPROVED BY THE ENGINEER.
- (4) ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SPECIFIED.



A, A' BEGIN NO - PASSING ZONE
 POINTS AS MEASURED BETWEEN
 POINTS ON CENTERLINE.

B, B' END NO - PASSING ZONE
 POINTS AS MEASURED BETWEEN
 POINTS ON CENTERLINE.

METHOD OF LOCATING AND DETERMINING THE LIMIT OF NO - PASSING ZONES ON HORIZONTAL CURVES

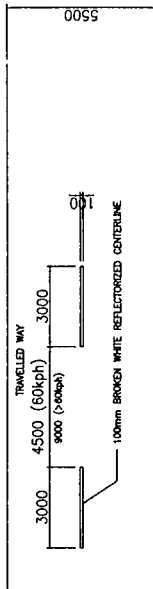


A, A' BEGIN NO PASSING ZONE
 POINTS AS MEASURED BETWEEN
 POINTS 1.40m ABOVE PAVEMENT

B, B' END NO PASSING ZONE
 POINTS AS MEASURED BETWEEN
 POINTS AT REQUIRED LENGTH

NO PASSING ZONES IN OPPOSITE DIRECTIONS
 SHALL BE MEASURED TO THE
 VERTICAL ALIGNMENT

METHOD OF LOCATING AND DETERMINING THE LIMIT OF NO - PASSING ZONES ON VERTICAL CURVES



CENTER & EDGE LINE MARKINGS RURAL HIGHWAY, TWO LANE

NOTES :

1. ALL DIMENSIONS SHOWN ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
2. SOLID YELLOW BARRIER LINES SHALL BE REFLECTORIZED.
3. OBJECTS THAT MAY OR MAY NOT BE ON THE ROADWAY BUT SO CLOSE TO THE EDGE OF THE ROADWAY WHICH CONSTITUTE A DEFINITE HAZARD SUCH AS POSTS, PILES, BRUSH, BUSHES AND CULVERTS HEADWALL SHALL BE PAINTED IN YELLOW. SIGNAGE SHALL BE IN ACCORDANCE WITH THE WHITE PAINT OR THE DIAGONAL STRIPE DESIGN.
4. OTHER ADVISORY OBJECTS LIKE GUARDRAILS, TREES AND ROCKS MAY BE PAINTED WITH SOLID WHITE.
5. PAVEMENT MARKING SHALL BE PLACE IN ACCORDANCE WITH THE LATEST PAVEMENT MARKING MANUAL ON PAVEMENT MARKINGS. IT SHALL BE THERMOPLASTIC WATERBASE.

DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION STATE OF YAP, FEDERATED STATES OF MICRONESIA	BASIC DESIGN STUDY ON THE ROAD IMPROVEMENT PROJECT FOR THE STATE OF YAP IN THE FEDERATED STATES OF MICRONESIA	JAPAN INTERNATIONAL COOPERATION AGENCY KATHIRIA & ENGINEERS INTERNATIONAL	TITLE: STANDARD PAVEMENT MARKINGS	SCALE: M-2	DRAWING NO: M-2
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