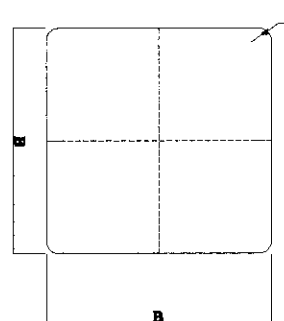
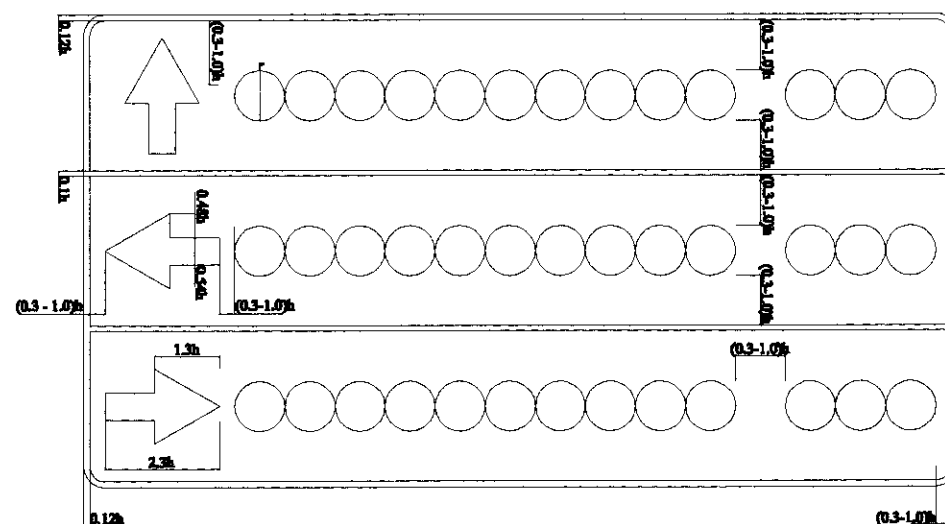


SIGN NUMBER	TYPE SIZE	A	r
1.A, 1.10, 1.21	II	900	46



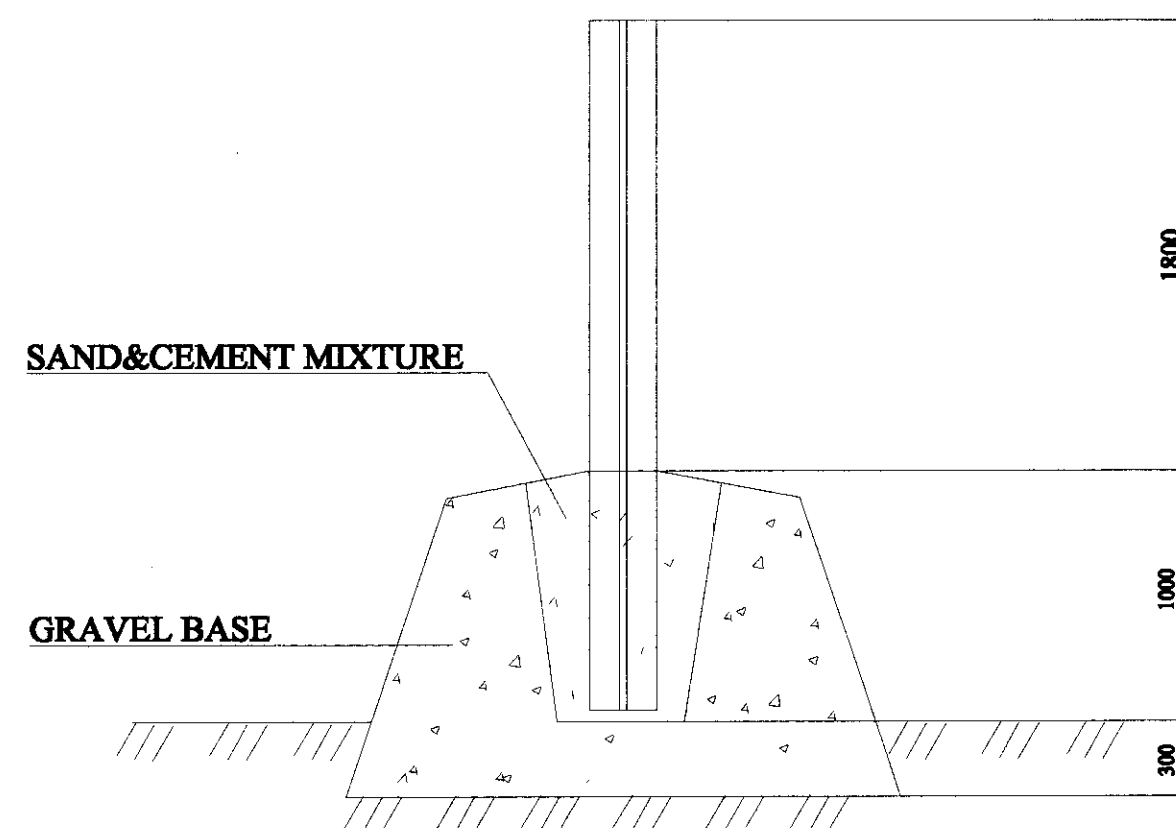
SIGN NUMBER	TYPE SIZE	B	r
5.14	II	700	40

1 Regulatory and Warning Signs
A SCALE Not to Scale



SIGN NUMBER	TYPE SIZE	h	r
5.38.B	II	200	80

1 Guide Sign (At 4 Legs Intersection)
B SCALE Not to Scale



1 Placement of Road Sign Post
C SCALE 1:30

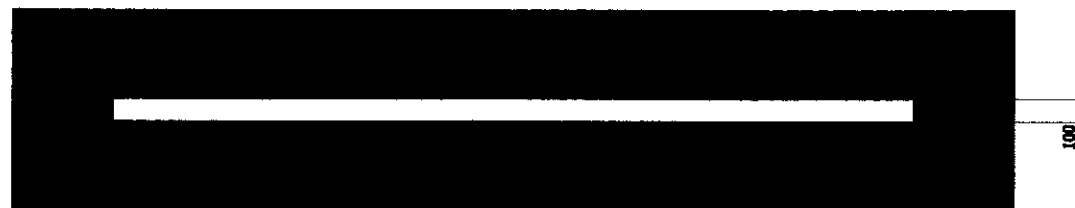
A ROAD SIGNS
D - 01 SCALE As Shown

- NOTES: 1. All dimensions are in millimetres unless otherwise noted.
2. All road signs shall satisfy the requirements stipulated in Mongolian National Standard MNS 4596-98 and 4597-98.
3. Sign numbers shall be referred to Mongolian National Standard.

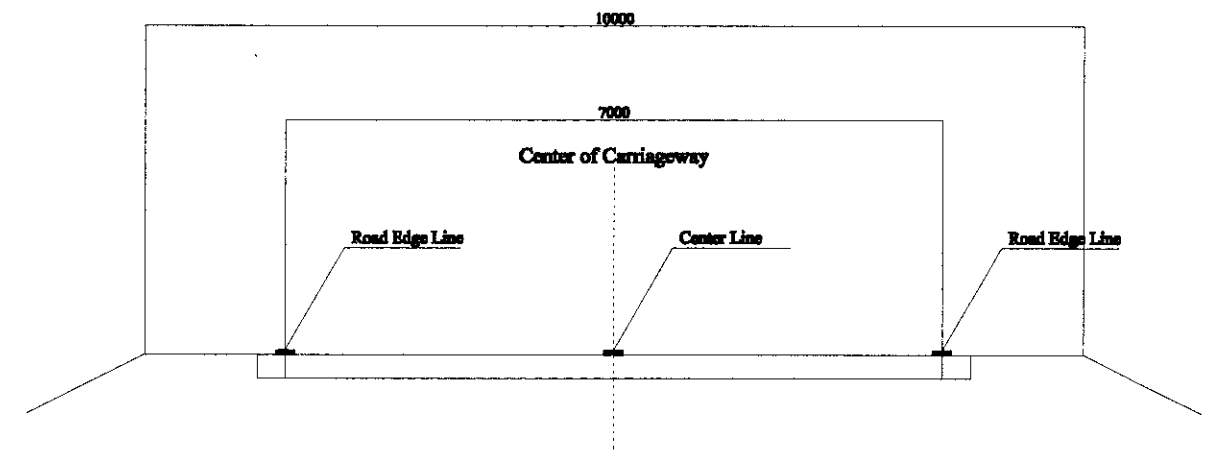
THE FEASIBILITY STUDY ON CONSTRUCTION OF EASTERN ARTERIAL ROAD IN MONGOLIA		
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	DEPARTMENT OF ROADS, MINISTRY OF INFRASTRUCTURE, THE GOVERNMENT OF MONGOLIA	
PACIFIC CONSULTANTS INTERNATIONAL JAPAN OVERSEAS CONSULTANTS		
Drawing title	Scale	No.
ROAD SIGNS	As Shown	D - 01



1 Centre Line (7.4)
A SCALE 1:30



2 Road Edge Line (7.1)
A SCALE 1:30

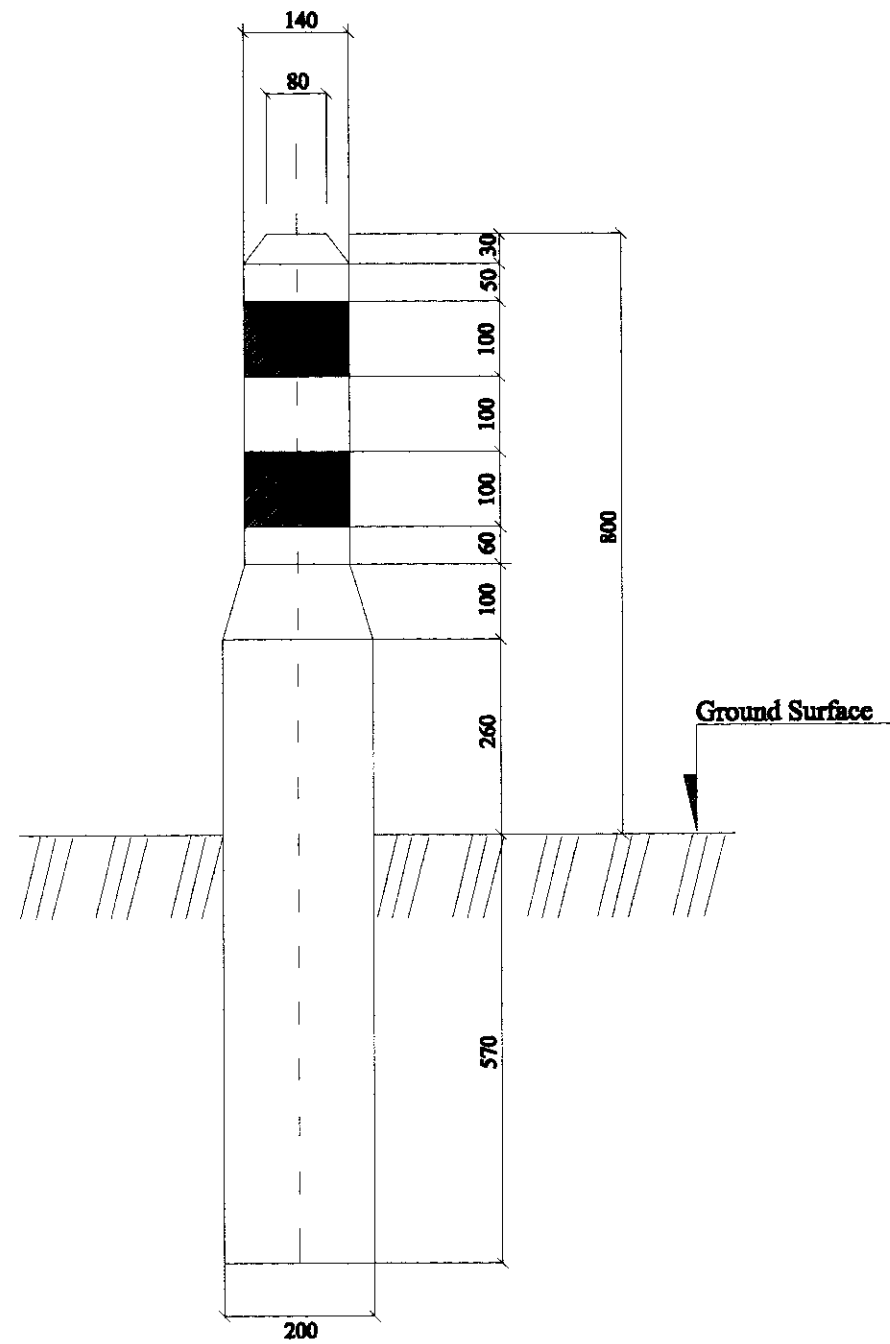


3 Placement on Road Cross Section
A SCALE 1:8

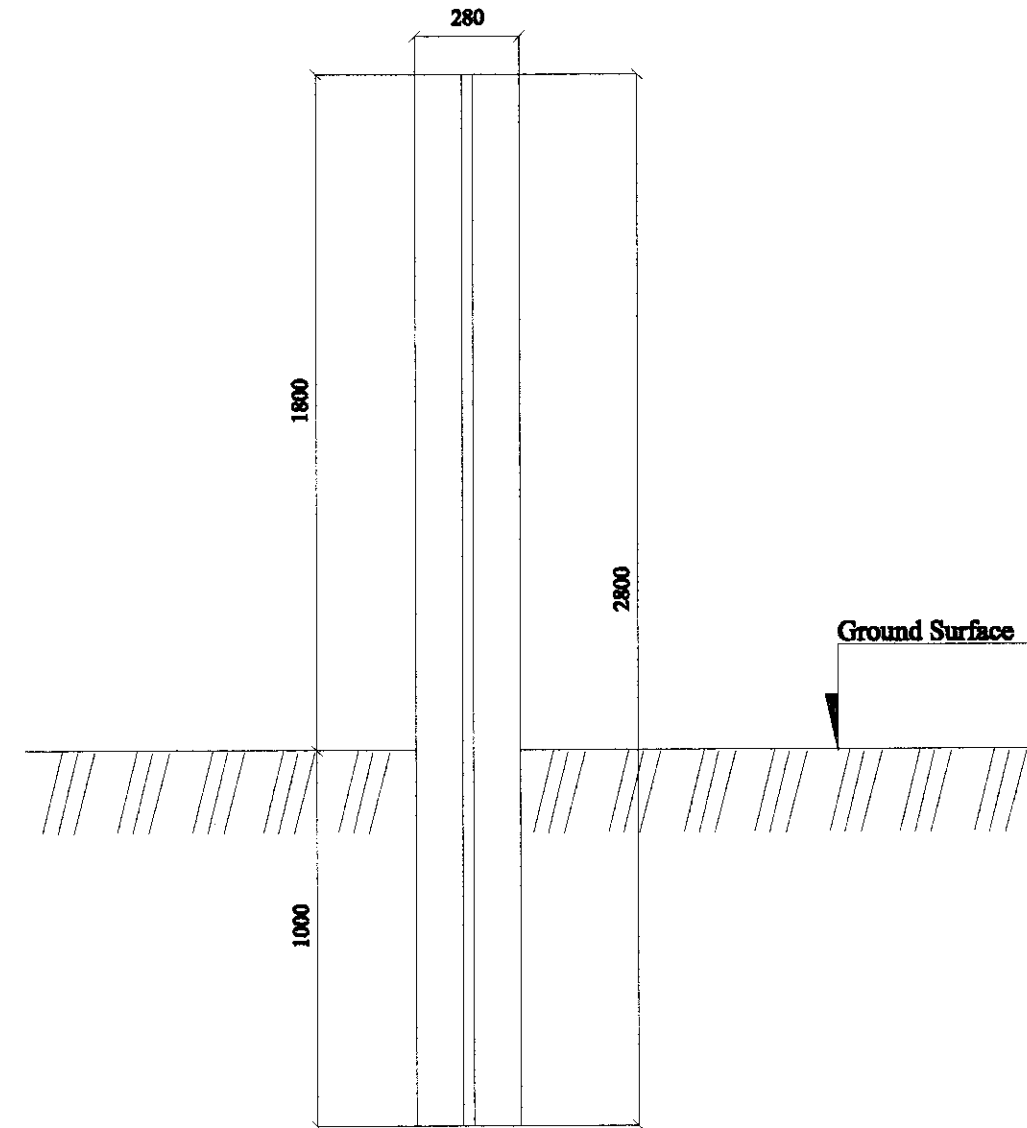
A ROAD MARKINGS
D-02 SCALE As Shown

NOTES: 1. All dimensions are in millimetres unless otherwise noted.
2. All road marking shall satisfy the requirements stipulated
in Mongolian National Standard MNS 4596-98 and 4759-99.

THE FEASIBILITY STUDY ON CONSTRUCTION OF EASTERN ARTERIAL ROAD IN MONGOLIA		
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	DEPARTMENT OF ROADS, MINISTRY OF INFRASTRUCTURE, THE GOVERNMENT OF MONGOLIA	
PACIFIC CONSULTANTS INTERNATIONAL JAPAN OVERSEAS CONSULTANTS		
Drawing title	Scale	No.
Road Markings	As Shown	D - 02

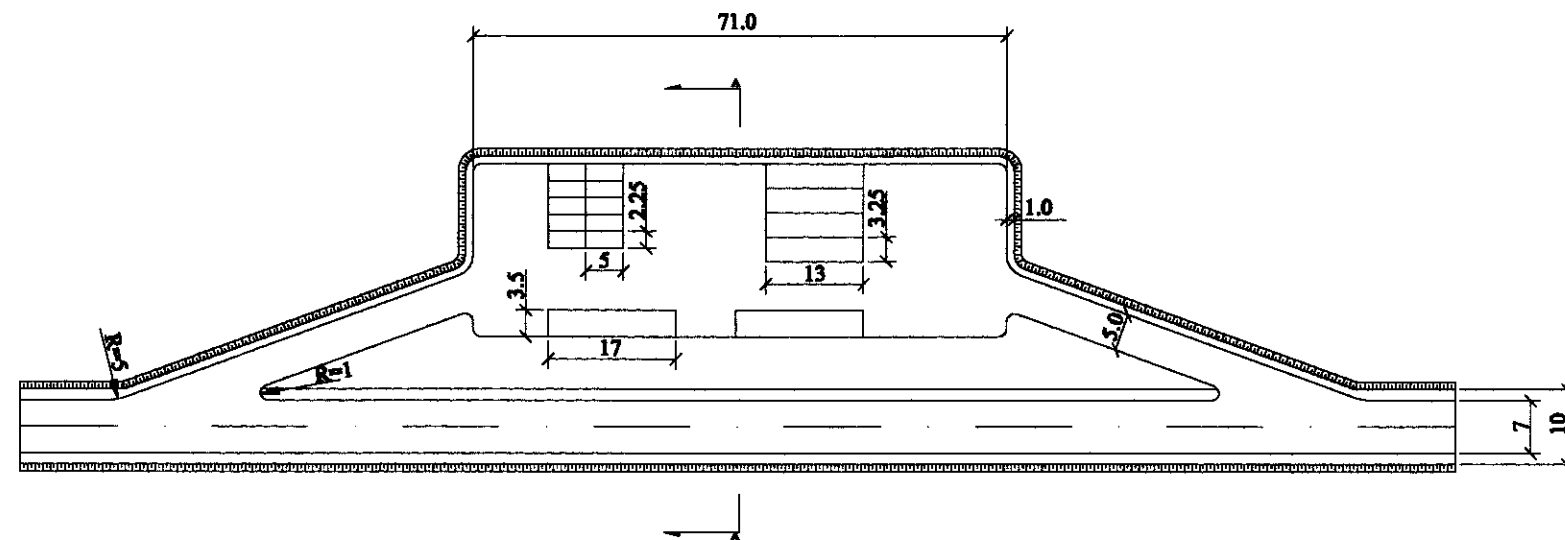


A **PLACEMENT & COLOR OF POST GUARD**
D-03 SCALE 1:100

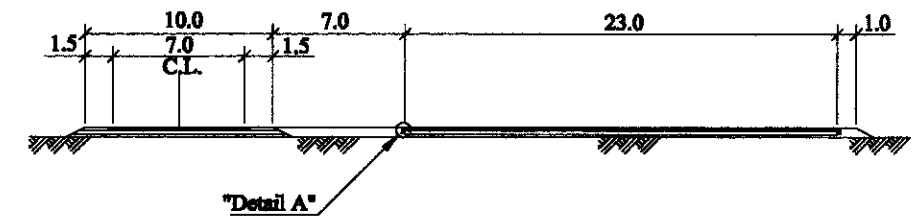


B **PLACEMENT & SIZE OF TRAFFIC SIGN POST**
D-03 SCALE 1:200

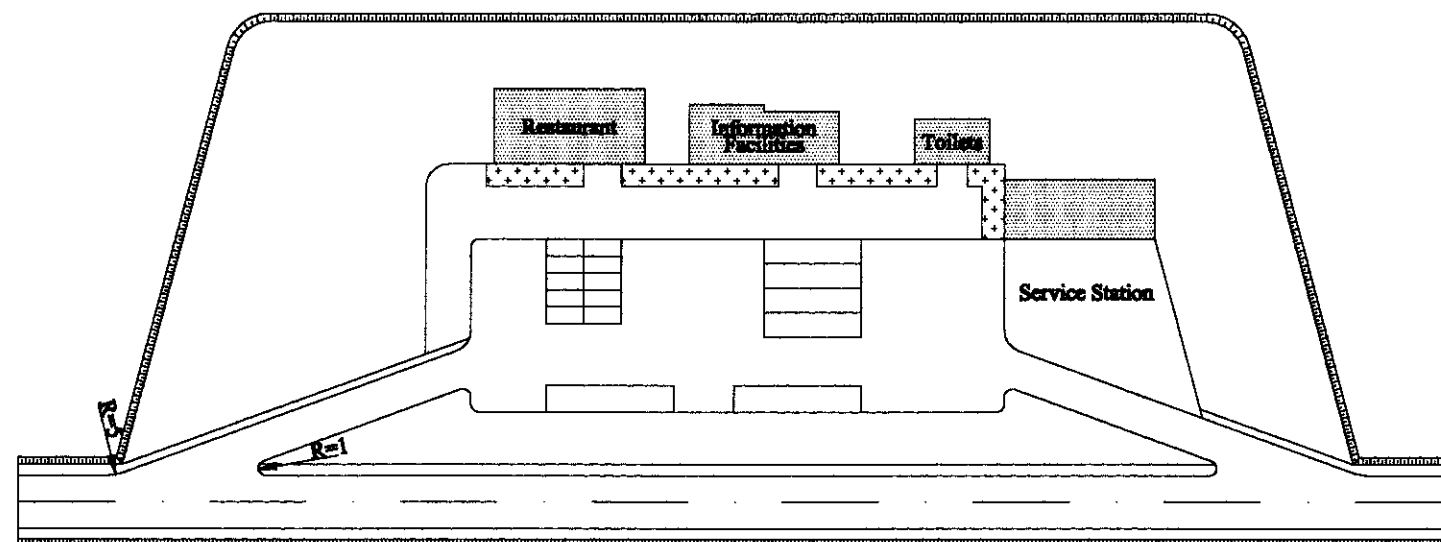
THE FEASIBILITY STUDY ON CONSTRUCTION OF EASTERN ARTERIAL ROAD IN MONGOLIA		
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	DEPARTMENT OF ROADS, MINISTRY OF INFRASTRUCTURE, THE GOVERNMENT OF MONGOLIA	
PACIFIC CONSULTANTS INTERNATIONAL JAPAN OVERSEAS CONSULTANTS		
Drawing title	Scale	No.
Guard Post and Kilometer Post	As Shown	D - 03



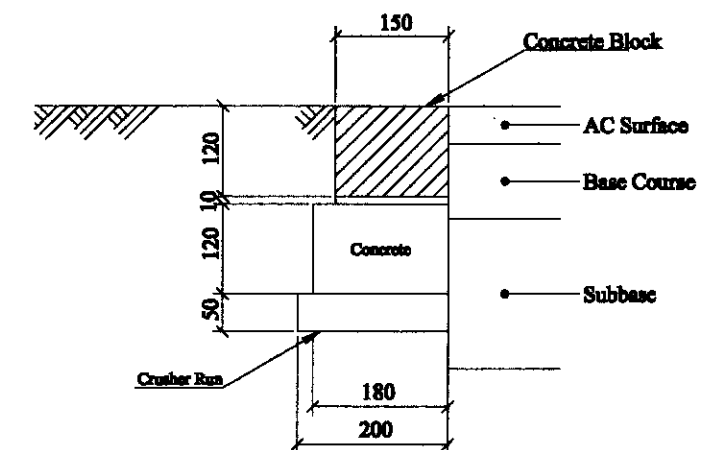
1
A SCALE PLAN 1:100



3
A CROSS SECTION A-A SCALE 1:40



2
A SCALE PLAN (SAMPLE) 1:100



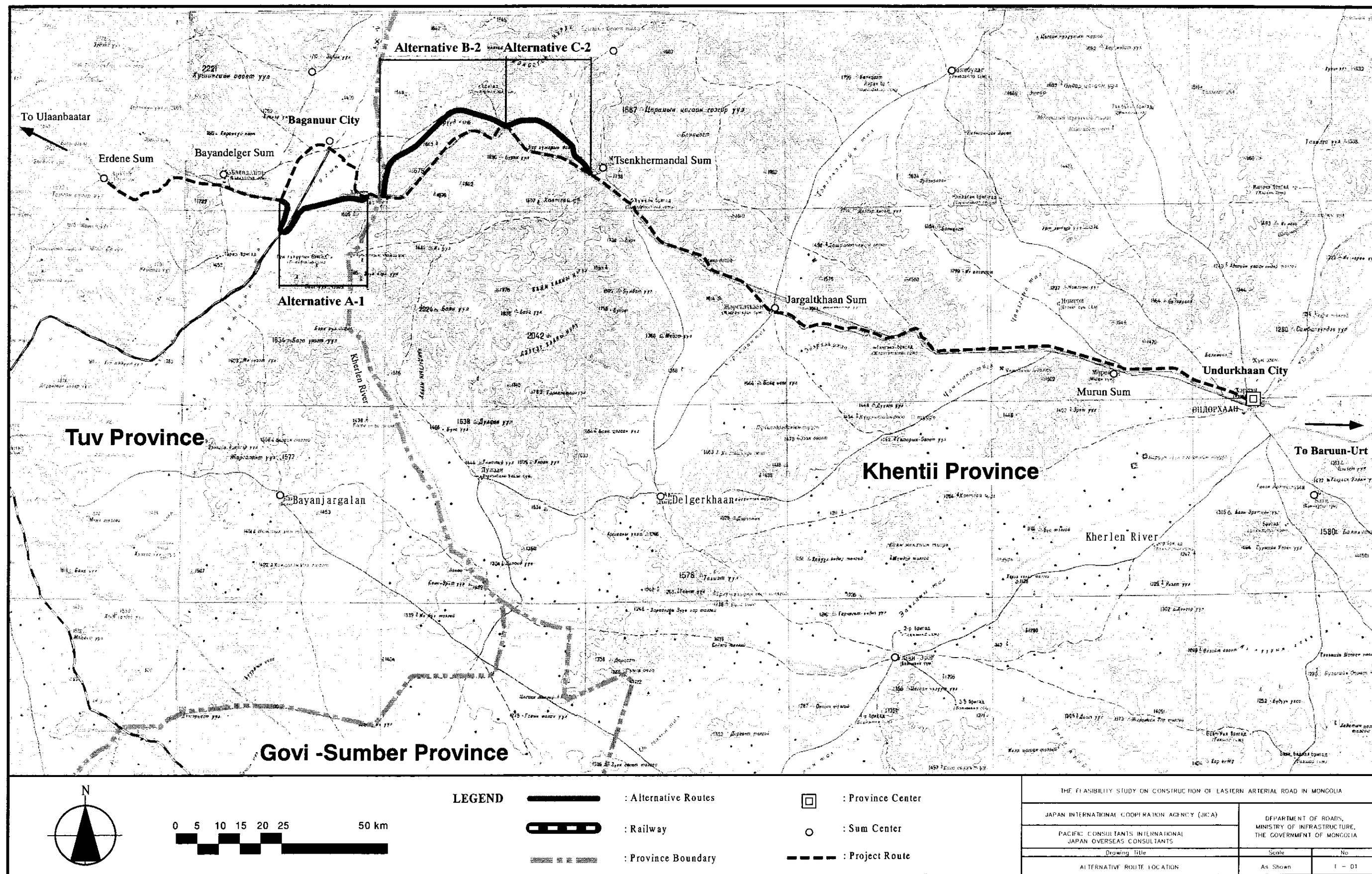
4
A DETAIL A SCALE 1:10

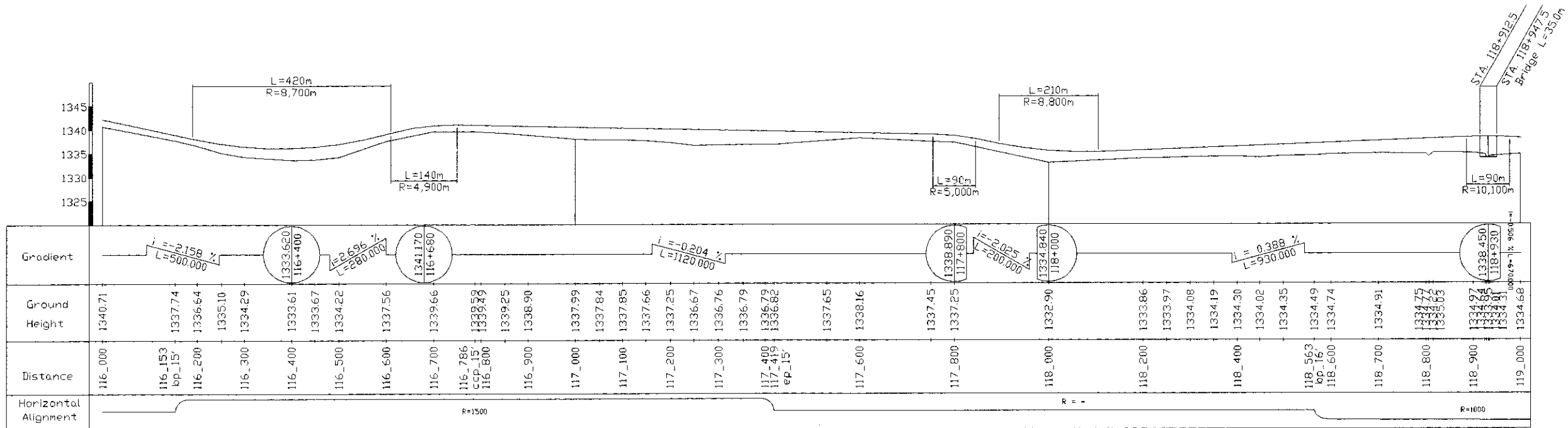
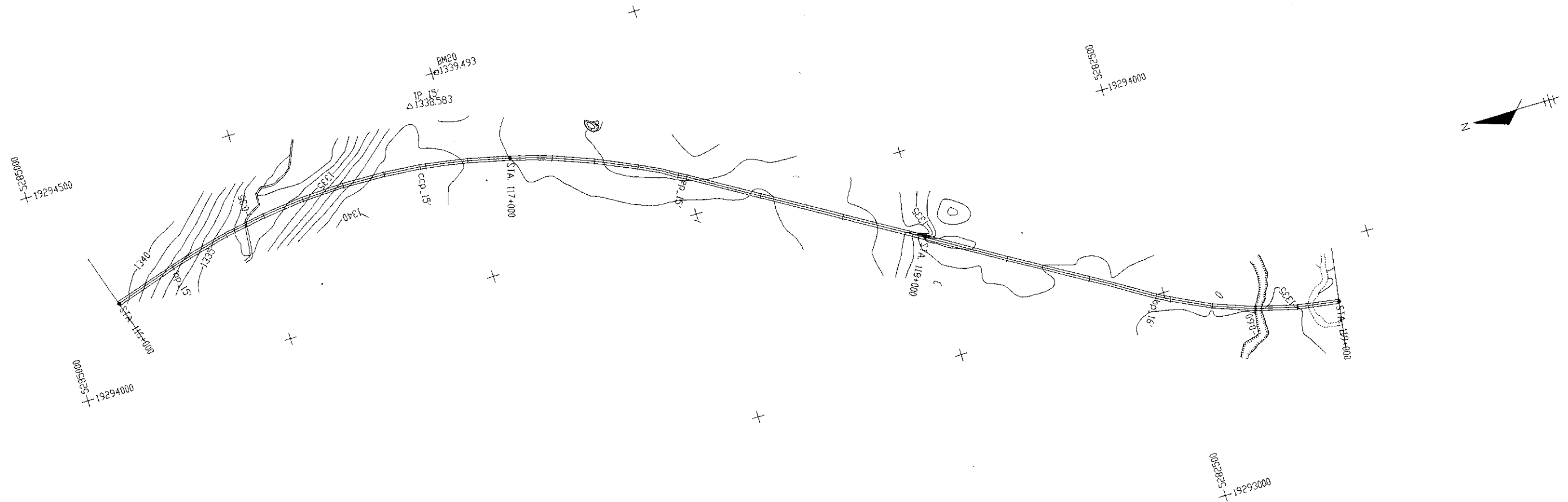
A
D-04 SCALE ROAD STATION As Shown

THE FEASIBILITY STUDY ON CONSTRUCTION OF EASTERN ARTERIAL ROAD IN MONGOLIA		
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	DEPARTMENT OF ROADS, MINISTRY OF INFRASTRUCTURE, THE GOVERNMENT OF MONGOLIA	
PACIFIC CONSULTANTS INTERNATIONAL JAPAN OVERSEAS CONSULTANTS	Drawing title	No.
ROAD STATION (SAMPLE)	As Shown	D - 04

DRAWING SCHEDULE

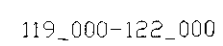
Title	Drawing No.
E. ALTERNATIVE ROUTE STUDY	
1. General	
1.1 Alternative Route Location	E-01
2. Plan and Profile	
2.1 Alternative A-1 Route	E-02
2.2 Alternative B-2 Route	E-11
2.3 Alternative C-2 Route	E-23
3. Structure	
3.1 General View for Bridges on Alternative Route	
3.1.1 General View of TAL BULAG RIVER BRIDGE (B'-1)	E-31
3.1.2 General View of TAL BULAG, KHUJIRT RIVER BRIDGE (B'-2)	E-32
3.1.3 General View of KHUTSAA, NARIIN RIVER BRIDGE (B'-3)	E-33
3.1.4 General View of UST VALLEY BRIDGE (B'-4)	E-34
3.1.5 General View of BOR KHUJIR VALLEY BRIDGE (B'-5)	E-35
3.2 General View for Box and Pipe Culverts	
3.2.1 General View of Pipe Culverts	E-36
3.2.2 General View of Box Culverts	E-37





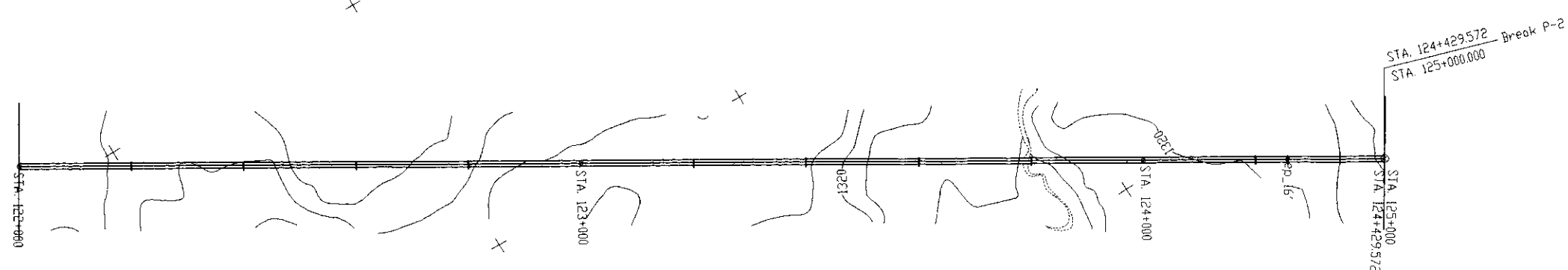
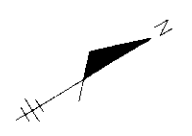
116_000-119_000

THE FEASIBILITY STUDY ON CONSTRUCTION OF EASTERN ARTERIAL ROAD IN MONGOLIA		
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	DEPARTMENT OF ROADS, MINISTRY OF INFRASTRUCTURE, THE GOVERNMENT OF MONGOLIA	
PACIFIC CONSULTANTS INTERNATIONAL JAPAN OVERSEAS CONSULTANTS		
Drawing title	Scale	No.
PLAN AND PROFILE (Alternative A-1)	H=1:10,000 V=1:1,000	E-03



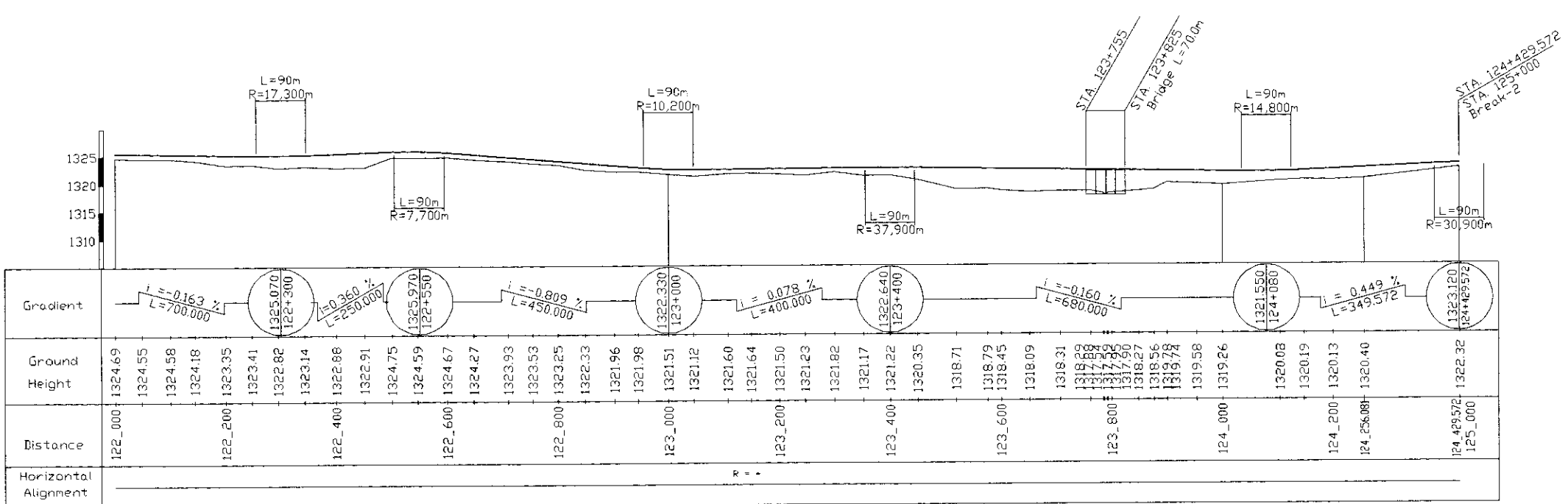
THE FEASIBILITY STUDY ON CONSTRUCTION OF EASTERN ARTERIAL ROAD IN MONGOLIA		
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	DEPARTMENT OF ROADS, MINISTRY OF INFRASTRUCTURE, THE GOVERNMENT OF MONGOLIA	
PACIFIC CONSULTANTS INTERNATIONAL JAPAN OVERSEAS CONSULTANTS		
Drawing title	Scale	No.
PLAN AND PROFILE (Alternative A-1)	H=1:10,000 V=1:1,000	E- 04

00056261+5281500



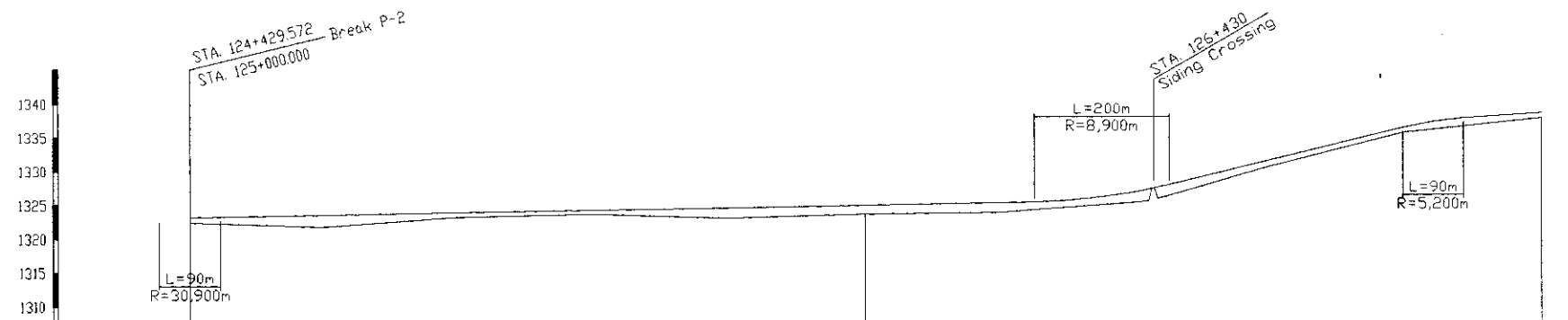
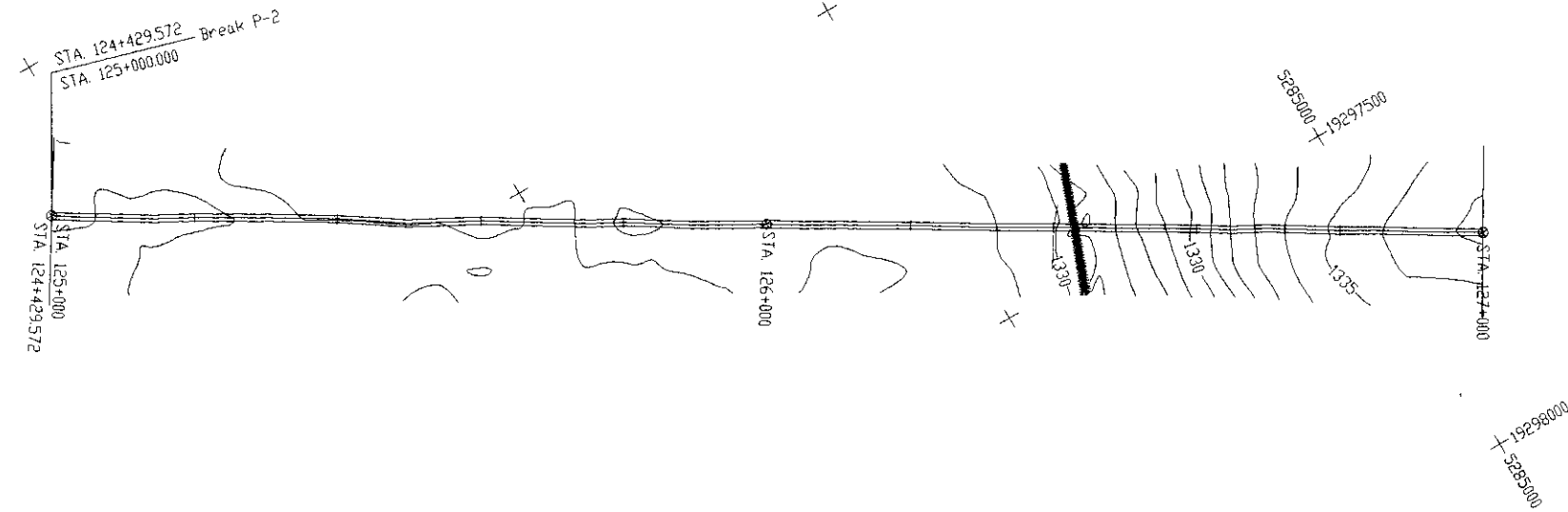
00096361+5281500

00056261+5281500



122_000-125_000

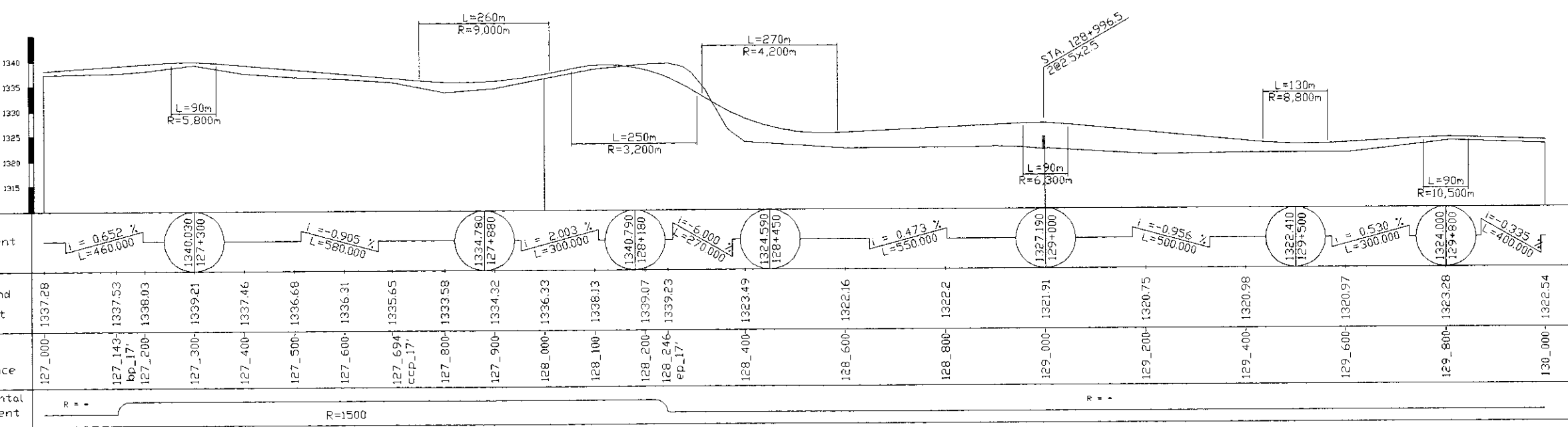
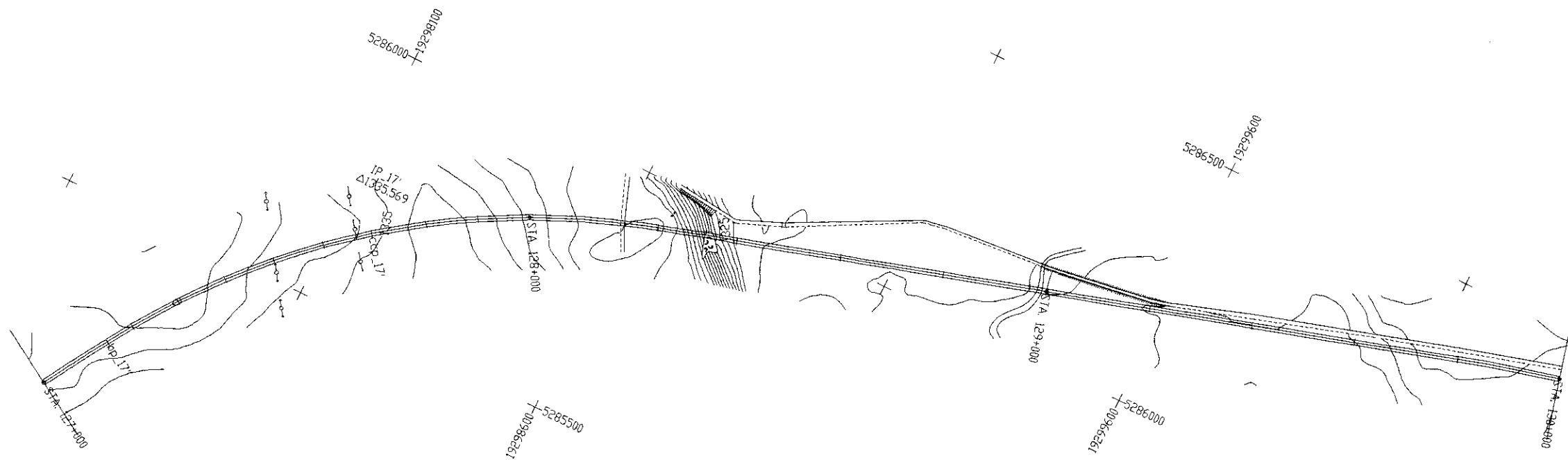
THE FEASIBILITY STUDY ON CONSTRUCTION OF EASTERN ARTERIAL ROAD IN MONGOLIA		
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	DEPARTMENT OF ROADS, MINISTRY OF INFRASTRUCTURE, THE GOVERNMENT OF MONGOLIA	
PACIFIC CONSULTANTS INTERNATIONAL JAPAN OVERSEAS CONSULTANTS		
Drawing title	Scale	No.
PLAN AND PROFILE (Alternative A-1)	H=1:10,000 V=1:1,000	E-05



Gradient												
Ground Height	1322.32	1321.65	1323.03	1323.49	1322.89	1323.33	1323.52	1324.96	1330.22	1335.22	1337.28	
Distance	125_000	125_200	125_400	125_600	125_800	126_000	126_200	126_400	126_600	126_800	127_000	
Horizontal Alignment	R = -											

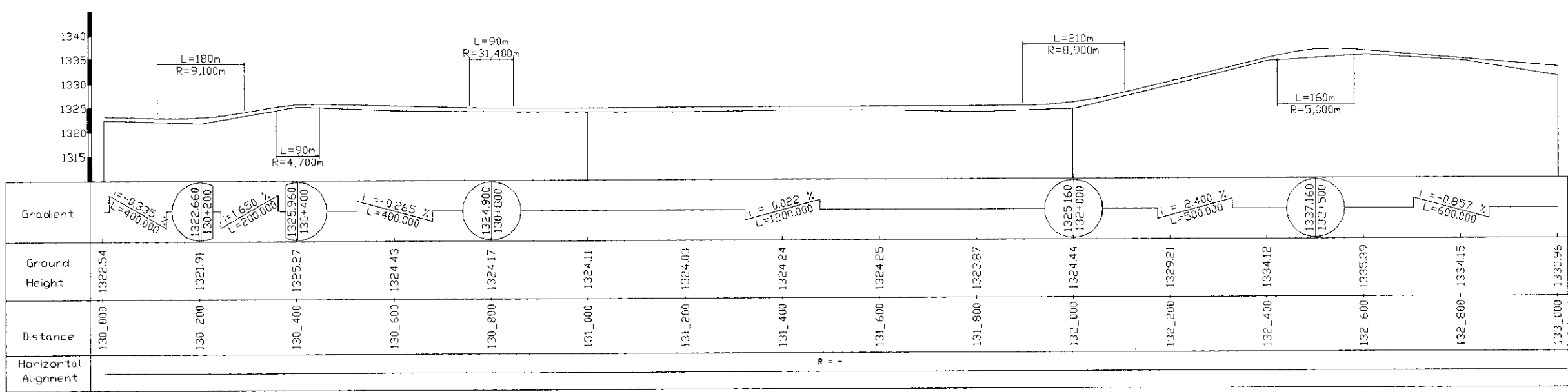
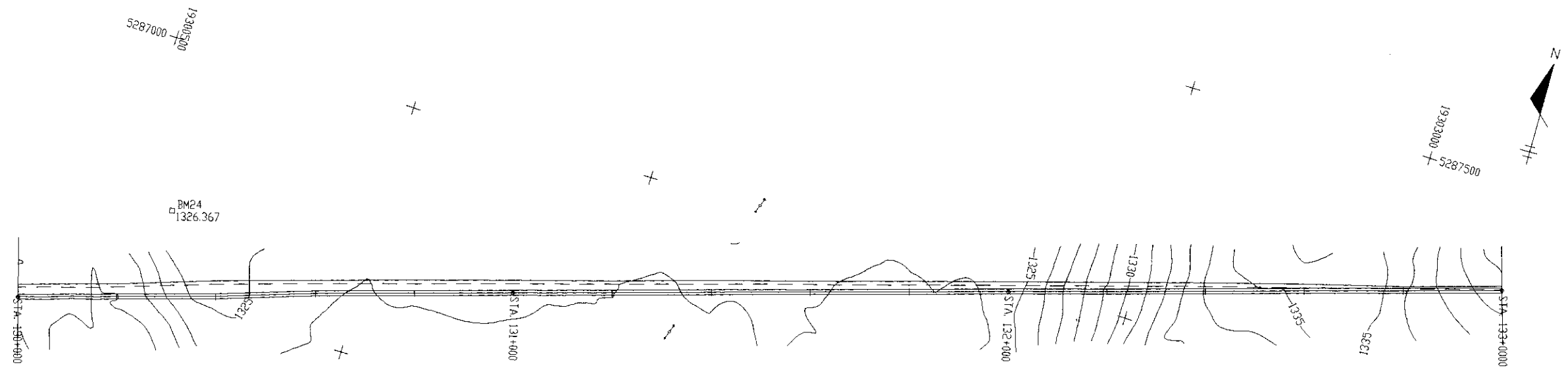
125_000 - 127_000

THE FEASIBILITY STUDY ON CONSTRUCTION OF EASTERN ARTERIAL ROAD IN MONGOLIA		
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	DEPARTMENT OF ROADS, MINISTRY OF INFRASTRUCTURE, THE GOVERNMENT OF MONGOLIA	
PACIFIC CONSULTANTS INTERNATIONAL JAPAN OVERSEAS CONSULTANTS		
Drawing title	Scale	No.
PLAN AND PROFILE (Alternative A-1)	H=1:10,000 V=1:1,000	E-06



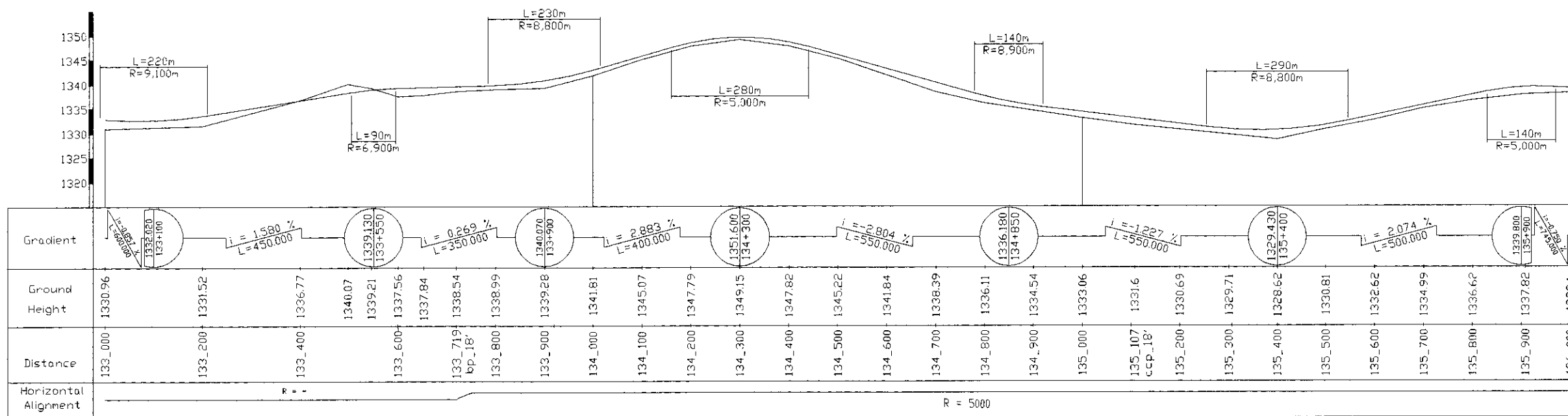
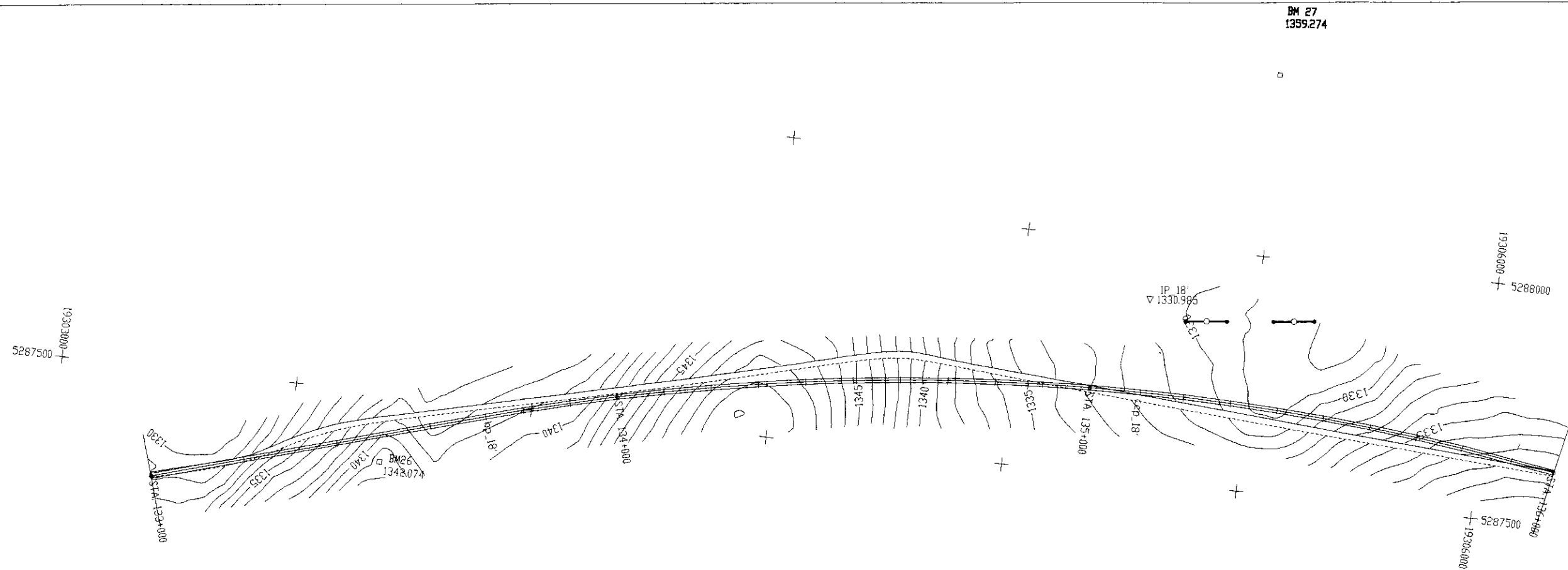
127_000 -130_000

THE FEASIBILITY STUDY ON CONSTRUCTION OF EASTERN ARTERIAL ROAD IN MONGOLIA		
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	DEPARTMENT OF ROADS, MINISTRY OF INFRASTRUCTURE, THE GOVERNMENT OF MONGOLIA	
PACIFIC CONSULTANTS INTERNATIONAL JAPAN OVERSEAS CONSULTANTS		
Drawing title	Scale	No.
PLAN AND PROFILE (Alternative A-1)	H=1:10,000 V=1:1,000	E-07



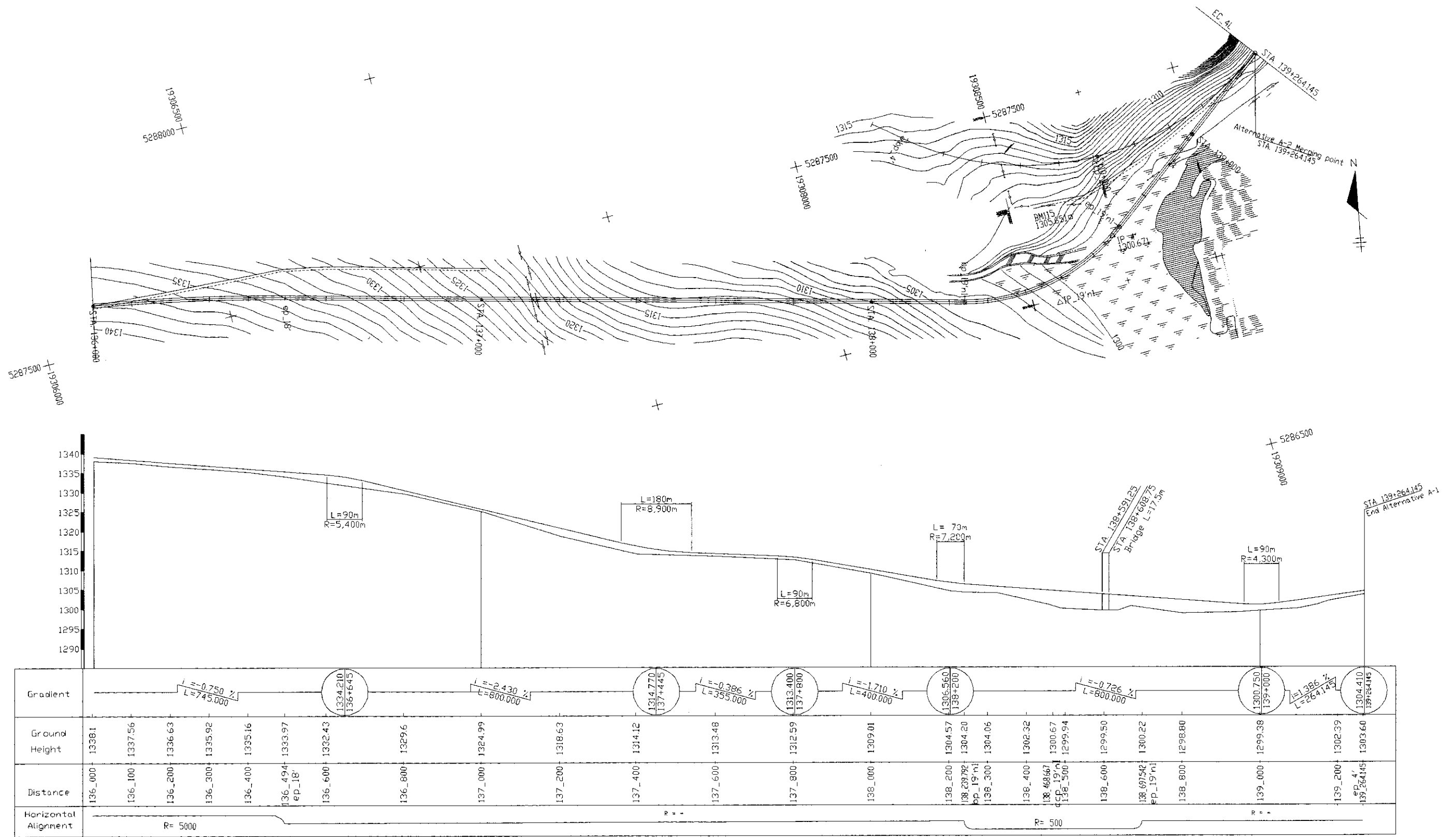
130_000 - 133_000

THE FEASIBILITY STUDY ON CONSTRUCTION OF EASTERN ARTERIAL ROAD IN MONGOLIA		
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	DEPARTMENT OF ROADS, MINISTRY OF INFRASTRUCTURE, THE GOVERNMENT OF MONGOLIA	
PACIFIC CONSULTANTS INTERNATIONAL JAPAN OVERSEAS CONSULTANTS		
Drawing title	Scale	No.
PLAN AND PROFILE (Alternative A-1)	H=1:10,000 V=1:1,000	E-08



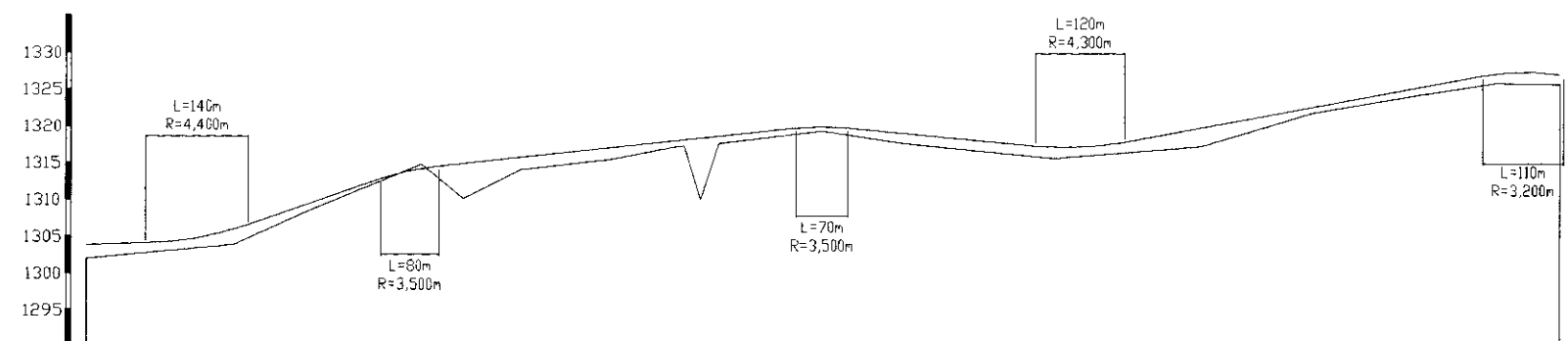
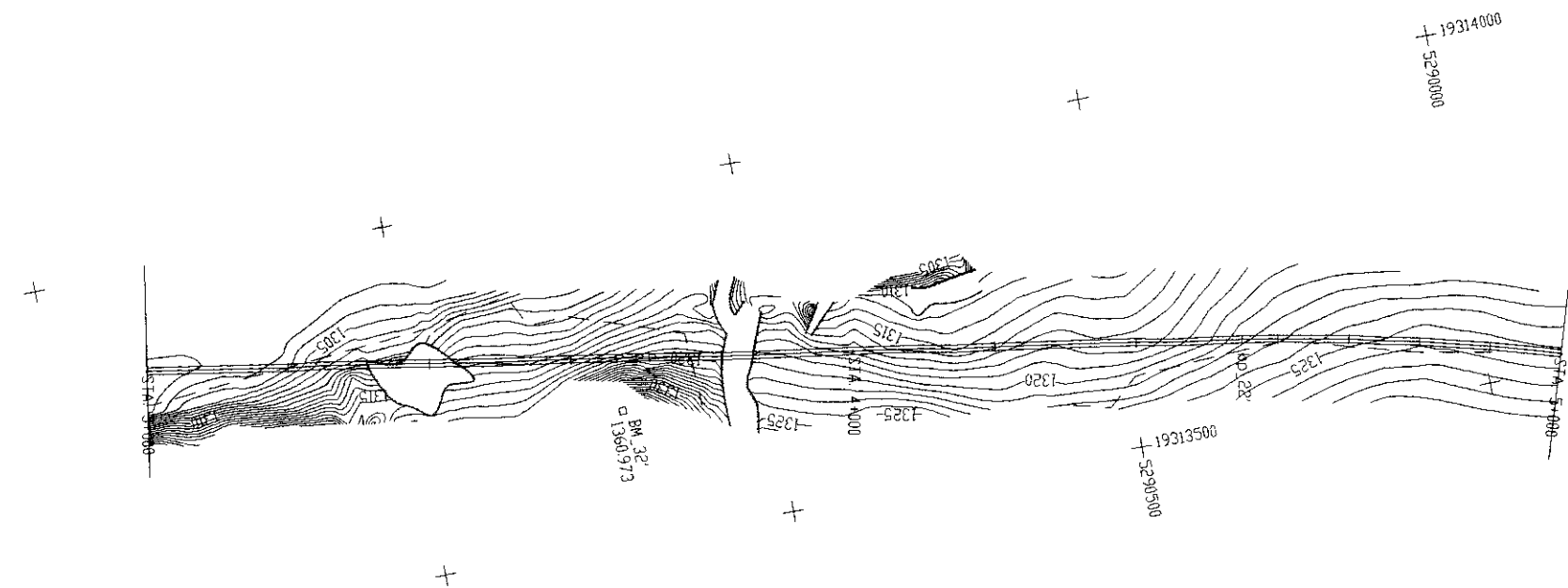
133_000 - 136_000

THE FEASIBILITY STUDY ON CONSTRUCTION OF EASTERN ARTERIAL ROAD IN MONGOLIA		
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	DEPARTMENT OF ROADS, MINISTRY OF INFRASTRUCTURE, THE GOVERNMENT OF MONGOLIA	
PACIFIC CONSULTANTS INTERNATIONAL JAPAN OVERSEAS CONSULTANTS		
Drawing title	Scale	No.
PLAN AND PROFILE (Alternative A-1)	H=1:10,000 V=1:1,000	E-09



136_000 - 139_264.145

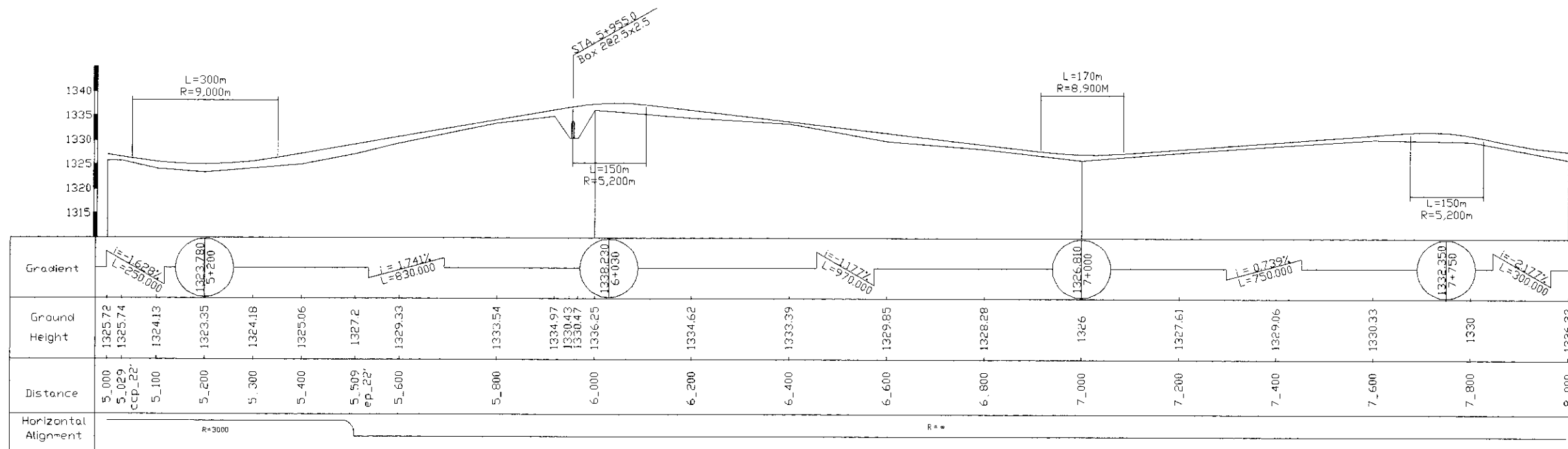
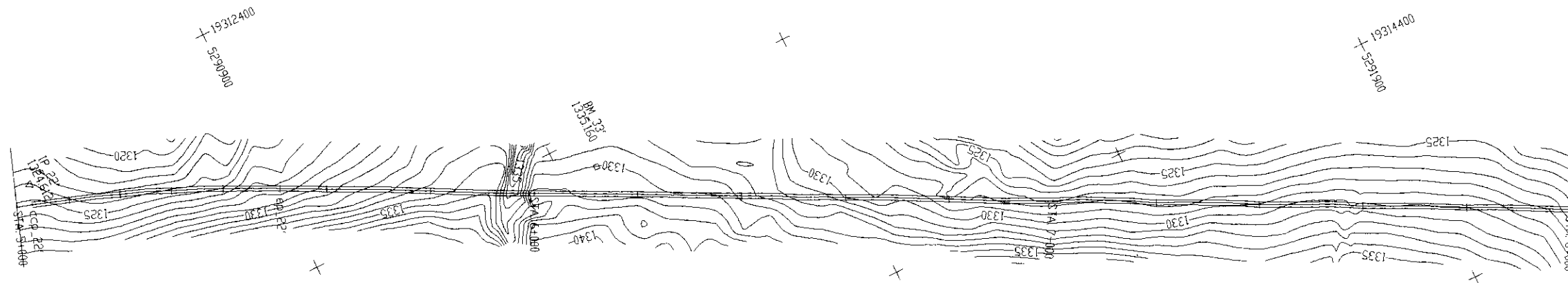
THE FEASIBILITY STUDY ON CONSTRUCTION OF EASTERN ARTERIAL ROAD IN MONGOLIA		
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		DEPARTMENT OF ROADS, MINISTRY OF INFRASTRUCTURE, THE GOVERNMENT OF MONGOLIA
PACIFIC CONSULTANTS INTERNATIONAL JAPAN OVERSEAS CONSULTANTS		
Drawing title	Scale	No.
PLAN AND PROFILE (Alternative A-1)	H=1:10,000 V=1:1,000	E-10



Gradient	<div><div><div>1304.200 3+150</div><div><div><div>i = 3.421%</div><div>L = 290.000</div></div></div></div><div><div>1314.120 3+440</div><div><div><div>i = 1.075%</div><div>L = 560.000</div></div></div></div><div><div>1320.140 4+000</div><div><div><div>i = -0.971%</div><div>L = 350.000</div></div></div></div><div><div>1316.740 4+350</div><div><div><div>i = 1.852%</div><div>L = 600.000</div></div></div></div><div><div>1327.850 4+950</div></div></div>																						
Ground Height	1301.95	1303.87	1308.83	1310.09	1314.76	1313.99	1315.46	1319.25	1319.43	1312.15	1319.76	1317.61	1315.64	1317.22	1321.77	1322.67	1324.33	1325.86	1325.69	1325.72			
Distance	3_000	3_200	3_400	3_600	3_800	4_000	4_200	4_400	4_549	4_600	4_700	4_800	4_900	5_000									
Horizontal Alignment	R = ∞										R = 3000												

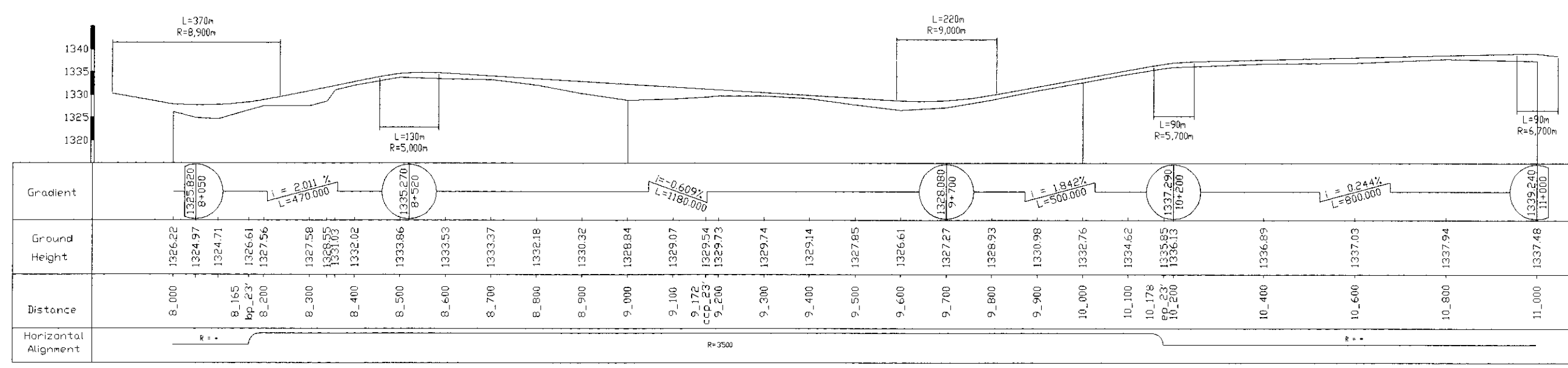
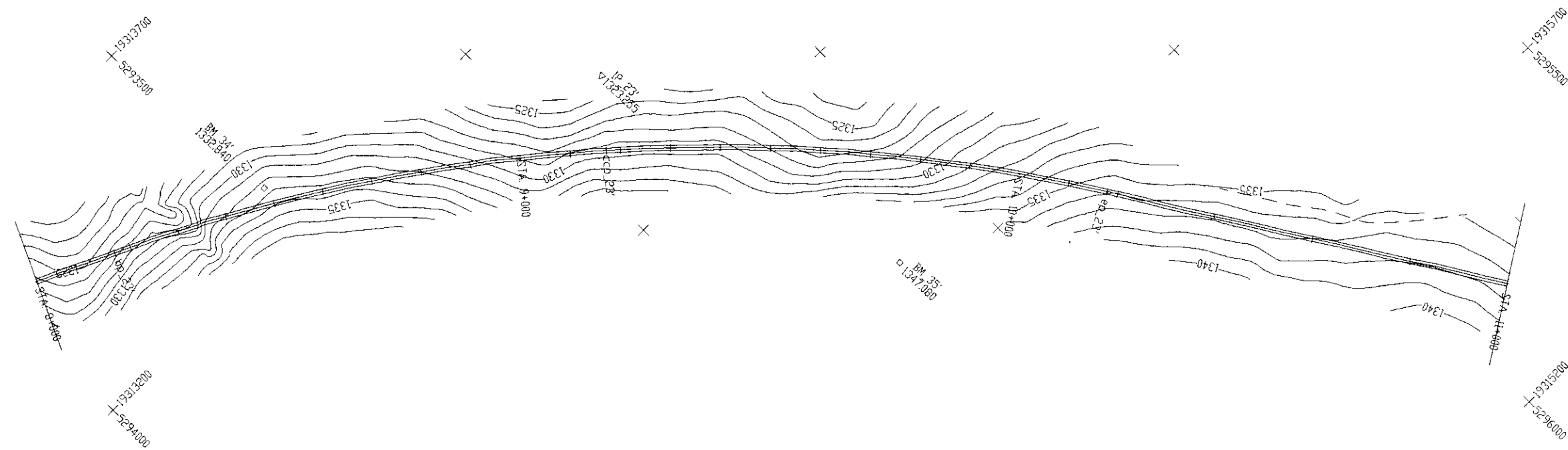
3_000-5_000

THE FEASIBILITY STUDY ON CONSTRUCTION OF EASTERN ARTERIAL ROAD IN MONGOLIA		
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	DEPARTMENT OF ROADS, MINISTRY OF INFRASTRUCTURE, THE GOVERNMENT OF MONGOLIA	
PACIFIC CONSULTANTS INTERNATIONAL JAPAN OVERSEAS CONSULTANTS		
Drawing title	Scale	No.
PLAN AND PROFILE (Alternative B-2)	H=1:10,000 V=1:1,000	E-12



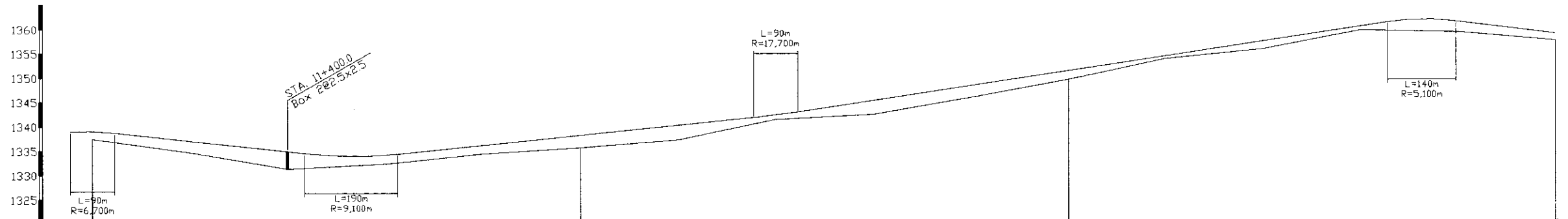
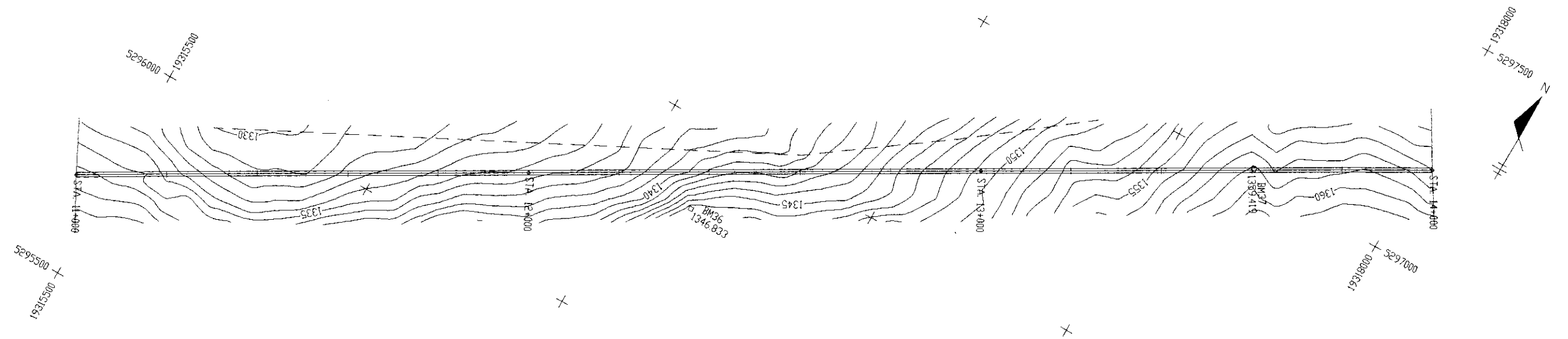
5_000-8_000

THE FEASIBILITY STUDY ON CONSTRUCTION OF EASTERN ARTERIAL ROAD IN MONGOLIA		
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	DEPARTMENT OF ROADS, MINISTRY OF INFRASTRUCTURE, THE GOVERNMENT OF MONGOLIA	
PACIFIC CONSULTANTS INTERNATIONAL JAPAN OVERSEAS CONSULTANTS		
Drawing title	Scale	No
PLAN AND PROFILE (Alternative B-2)	H=1:10,000 V=1:1,000	E-13



8_000-11_000

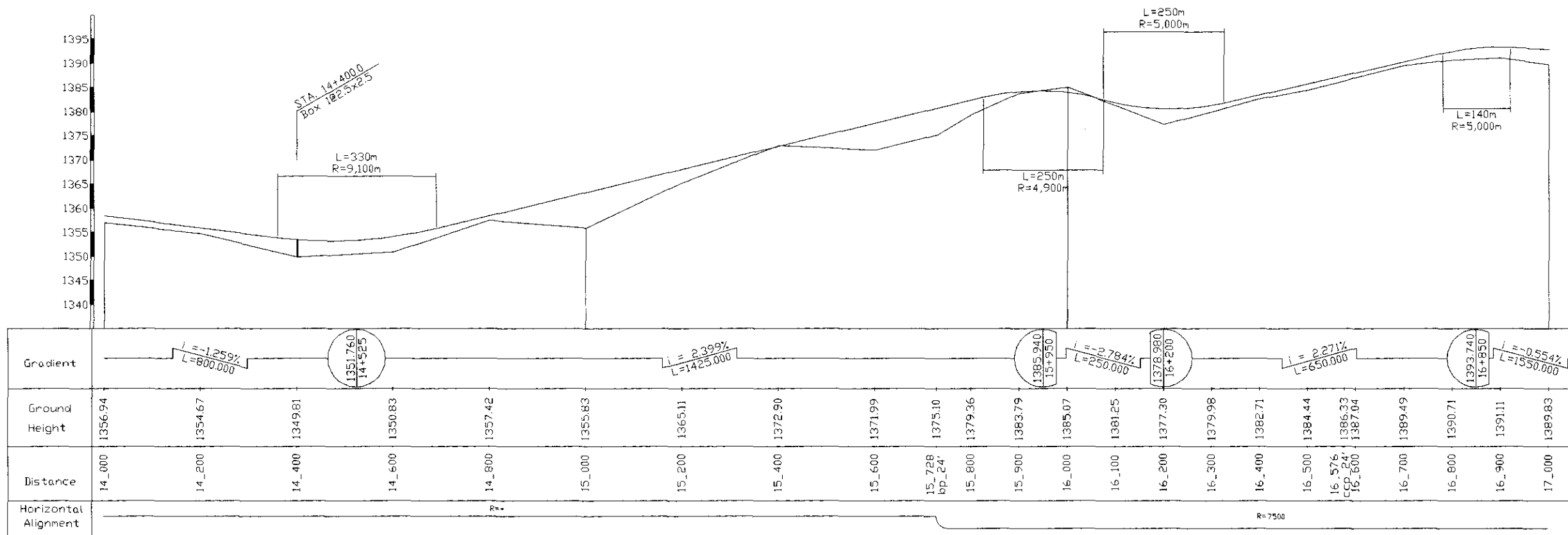
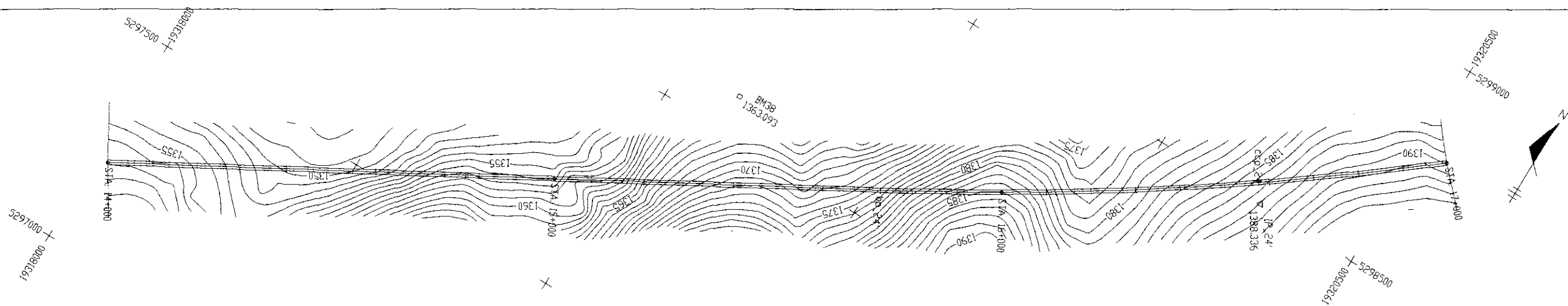
THE FEASIBILITY STUDY ON CONSTRUCTION OF EASTERN ARTERIAL ROAD IN MONGOLIA		
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	DEPARTMENT OF ROADS, MINISTRY OF INFRASTRUCTURE, THE GOVERNMENT OF MONGOLIA	
PACIFIC CONSULTANTS INTERNATIONAL JAPAN OVERSEAS CONSULTANTS		
Drawing title	Scale	No.
PLAN AND PROFILE (Alternative B-2)	H=1:10,000 V=1:1,000	E-14



Gradient	<div style="display: flex; justify-content: space-between;"> <div> $\frac{1339.240}{11+000}$ $i = -1.115\%$ $L = 530.000$ </div> <div> $\frac{1333.330}{11+530}$ </div> <div> $i = 0.991\%$ $L = 870.000$ </div> <div> $\frac{1341.950}{12+400}$ </div> <div> $i = 1.500\%$ $L = 1325.000$ </div> <div> $\frac{1361.830}{13+725}$ $i = -1.259\%$ $L = 800.000$ </div> </div>															
Ground Height	1337.48	1334.68	1331.23	1332.26	1334.22	1335.41	1336.95	1341.15	1342.10	1345.54	1349.17	1353.43	1355.32	1359.14	1358.74	1356.94
Distance	11_000	11_200	11_400	11_600	11_800	12_000	12_200	12_400	12_600	12_800	13_000	13_200	13_400	13_600	13_800	14_000
Horizontal Alignment	R = ∞															

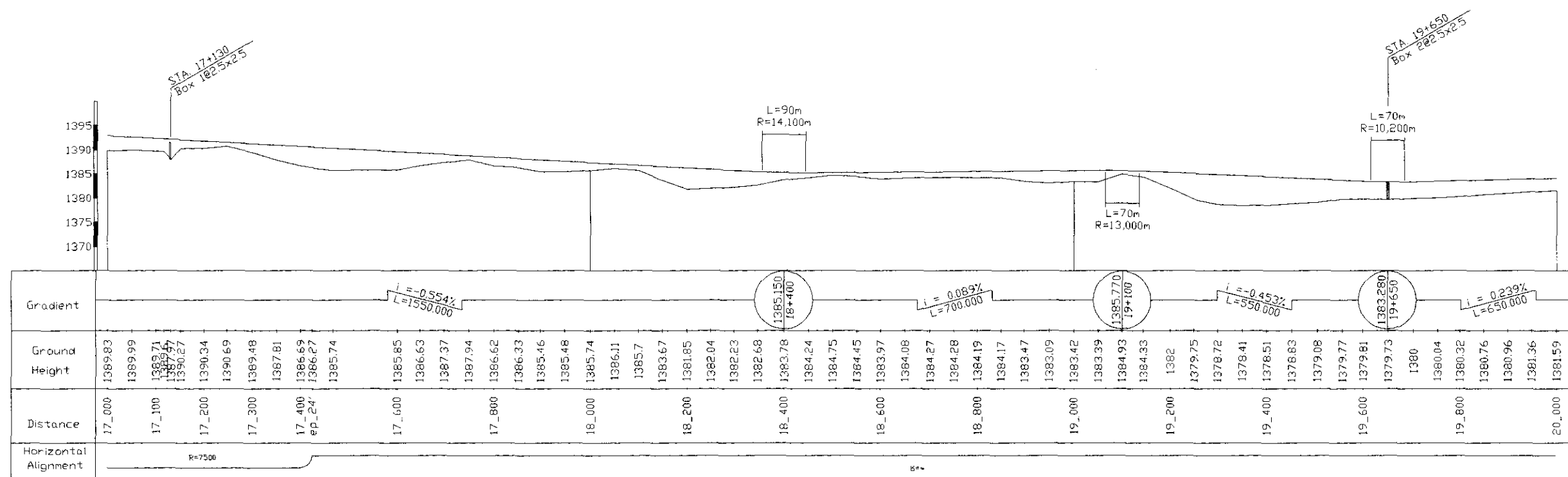
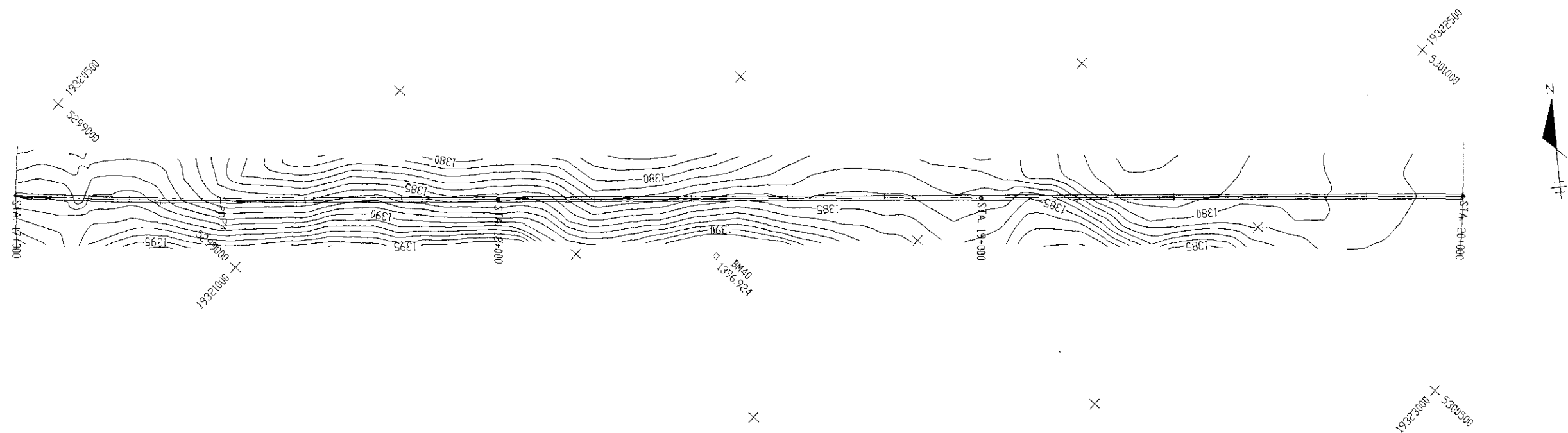
11_000 - 14_000

THE FEASIBILITY STUDY ON CONSTRUCTION OF EASTERN ARTERIAL ROAD IN MONGOLIA		
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	DEPARTMENT OF ROADS, MINISTRY OF INFRASTRUCTURE, THE GOVERNMENT OF MONGOLIA	
PACIFIC CONSULTANTS INTERNATIONAL JAPAN OVERSEAS CONSULTANTS		
Drawing title	Scale	No.
PLAN AND PROFILE (Alternative B-2)	H=1:10,000 V=1:1,000	E-15



14_000 - 17_000

THE FEASIBILITY STUDY ON CONSTRUCTION OF EASTERN ARTERIAL ROAD IN MONGOLIA		
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	DEPARTMENT OF ROADS, MINISTRY OF INFRASTRUCTURE, THE GOVERNMENT OF MONGOLIA	
PACIFIC CONSULTANTS INTERNATIONAL JAPAN OVERSEAS CONSULTANTS		
Drawing title	Scale	No.
PLAN AND PROFILE (Alternative B-2)	H=1:10,000 V=1:1,000	E-16



17_000-20_000

THE FEASIBILITY STUDY ON CONSTRUCTION OF EASTERN ARTERIAL ROAD IN MONGOLIA		
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	DEPARTMENT OF ROADS, MINISTRY OF INFRASTRUCTURE, THE GOVERNMENT OF MONGOLIA	
PACIFIC CONSULTANTS INTERNATIONAL JAPAN OVERSEAS CONSULTANTS		
Drawing title	Scale	No.
PLAN AND PROFILE (Alternative B-2)	M=1:10,000 V=1:1,000	E-17

530000 + 1932500

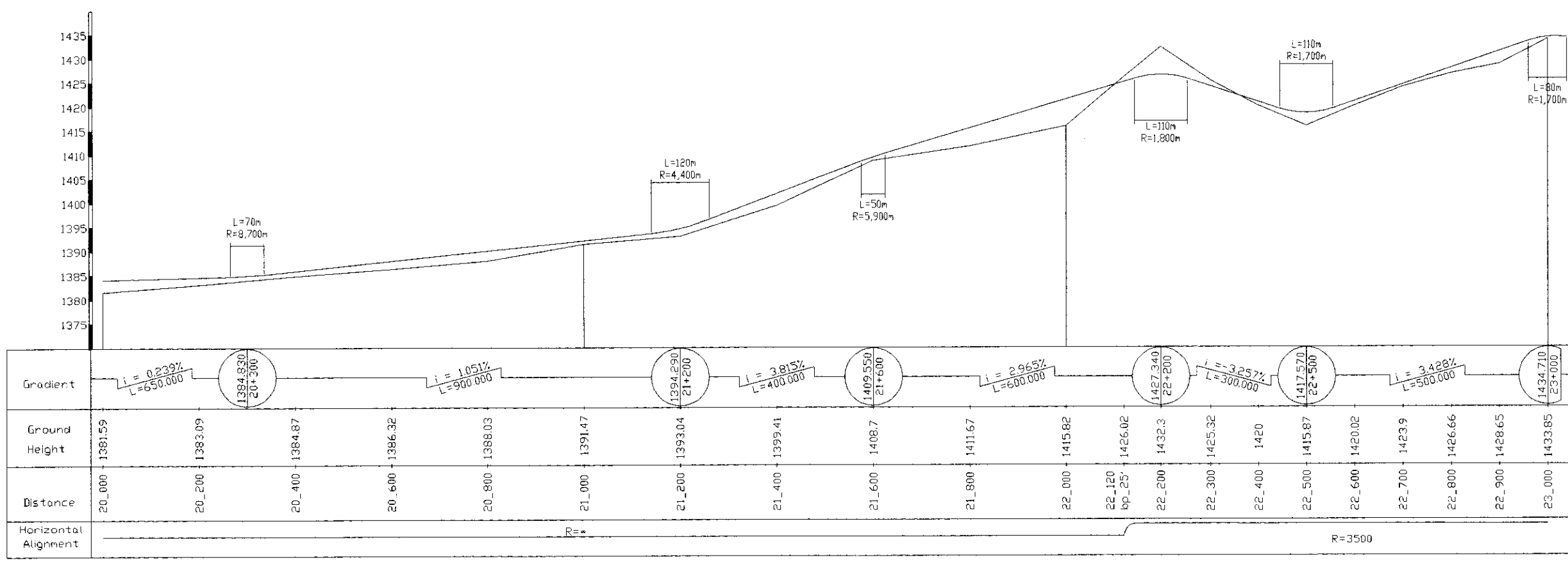
bm41
1395.626

1932500 + 5300500



1932500 + 5300500

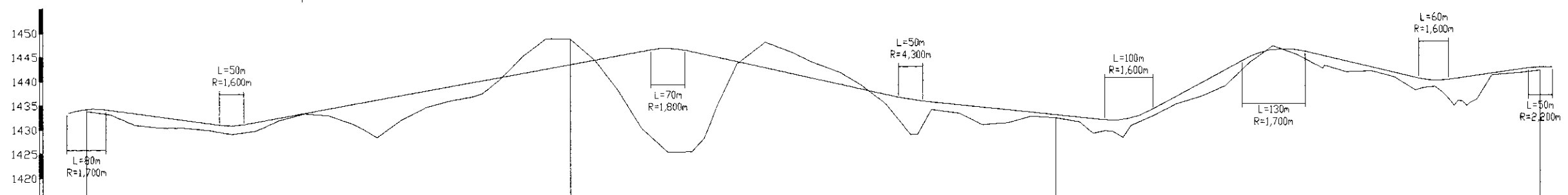
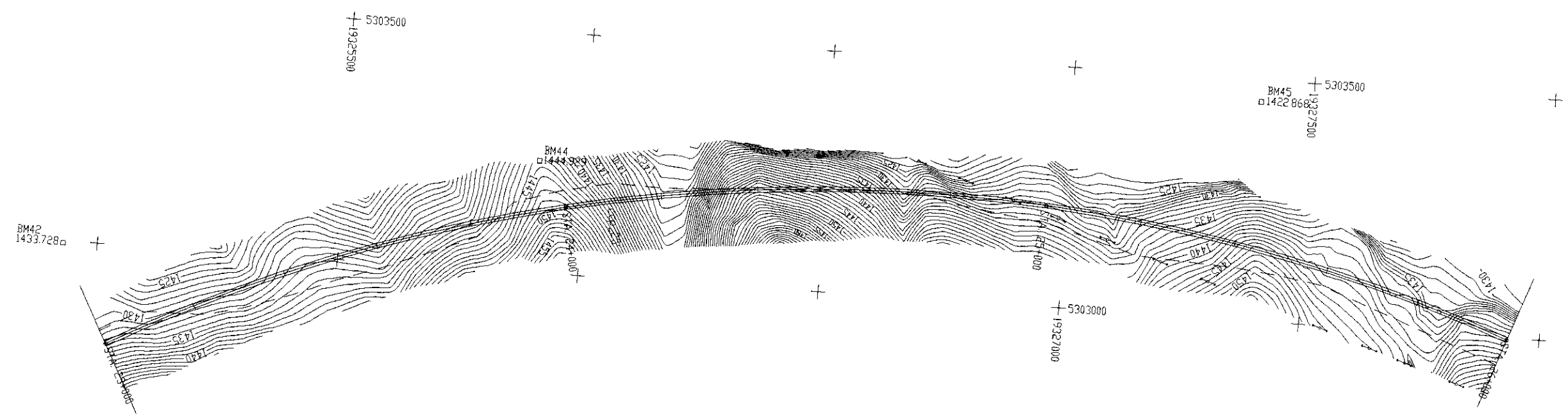
1932500 + 5302500



20_000 - 23_000

THE FEASIBILITY STUDY ON CONSTRUCTION OF EASTERN ARTERIAL ROAD IN MONGOLIA		
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	DEPARTMENT OF ROADS, MINISTRY OF INFRASTRUCTURE, THE GOVERNMENT OF MONGOLIA	
PACIFIC CONSULTANTS INTERNATIONAL JAPAN OVERSEAS CONSULTANTS		
Drawing title	Scale	No.
PLAN AND PROFILE (Alternative B-2)	H=1:10,000 V=1:1,000	E-18

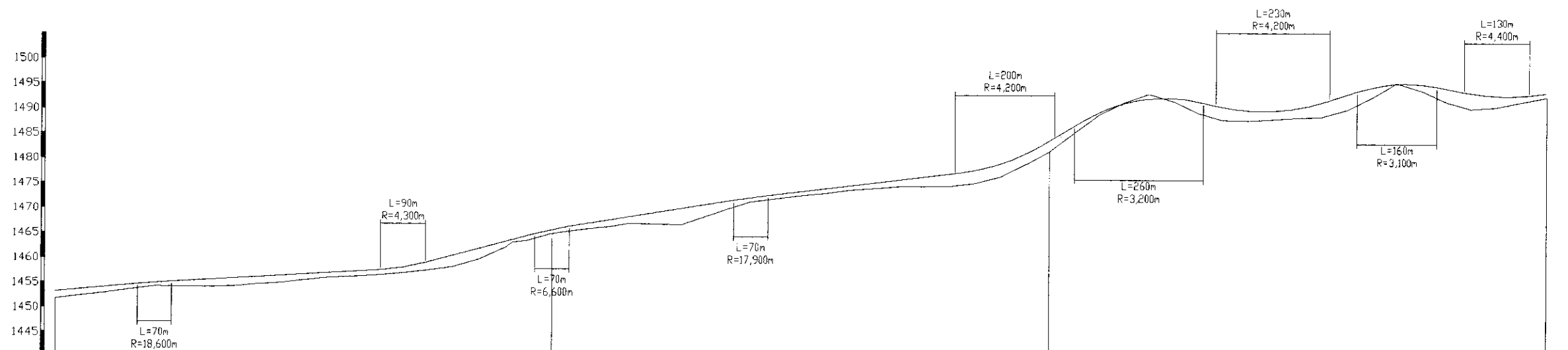
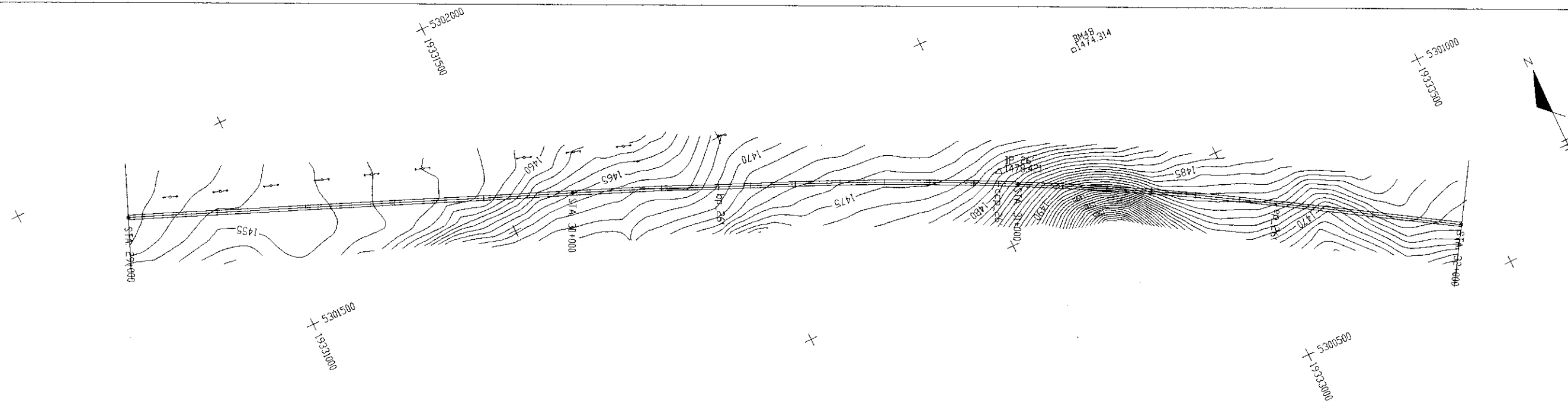
IP 25
1413.248



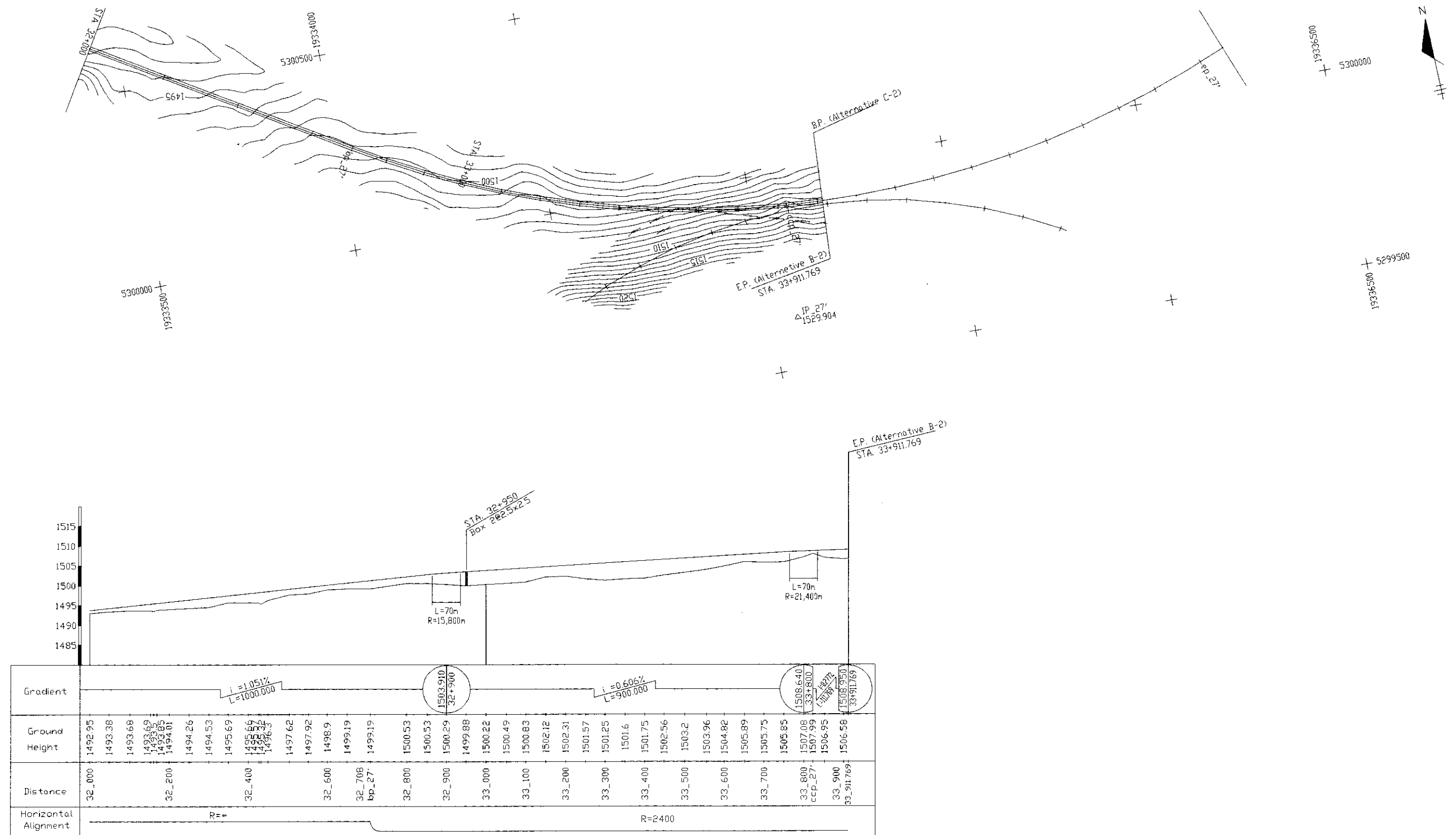
Gradient	1434.710 23+000	1430.560 23+300	1446.970 24+200	1435.860 24+700	1431.130 25+150	1447.300 25+450	1439.400 25+780	1442.690 26+000
Ground Height	1433.95 1433.17 1430.94 1430.4 1430.35 1429.82 1428.99 1429.65 1431.87 1433.27 1432.81 1431.16 1429.93 1428.26 1431.80 1434.43 1435.75 1436.67 1440.05 1444.89 1448.67 1448.60 1444.26 1438.43 1430.11 1425.13 1425.22 1428.06 1434.31 1443.19 1447.76 1445.97 1443.54 1441.42 1438.82 1435.13 1428.65 1433.84 1433.04 1430.73 1431.04 1431.60 1432.35 1432.03 1431.21 1428.88 1429.35 1428.60 1430.74 1432.41 1434.88 1436.48 1438.54 1443.43 1446.89 1444.98 1442.22 1442.78 1441.43 1441.58 1440.31 1437.68 1438.16 1438.42 1435.42 1435.32 1435.73 1440.77 1441.18 1441.68	$i = -1.383\%$ $L = 300.000$	$i = 1.823\%$ $L = 900.000$	$i = -2.222\%$ $L = 500.000$	$i = -1.051\%$ $L = 450.000$	$i = 5.390\%$ $L = 300.000$	$i = -2.394\%$ $L = 330.000$	$i = 1.496\%$ $L = 220.000$
Distance	23_000 23_100 23_200 23_300 23_400 23_500 23_600 23_700 23_800 23_900 24_000 24_100 24_200 24_300 24_400 24_500 24_600 24_700 24_800 24_900 25_000 25_100 25_200 25_300 25_400 25_500 25_600 25_700 25_800 25_900 26_000							
Horizontal Alignment	R=3500							

23_000 - 26_000

THE FEASIBILITY STUDY ON CONSTRUCTION OF EASTERN ARTERIAL ROAD IN MONGOLIA		
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		DEPARTMENT OF ROADS, MINISTRY OF INFRASTRUCTURE, THE GOVERNMENT OF MONGOLIA
PACIFIC CONSULTANTS INTERNATIONAL JAPAN OVERSEAS CONSULTANTS		
Drawing title		Scale
PLAN AND PROFILE (Alternative B-2)		No.
		H=1:10,000 V=1:1,000
		E-19



Gradient	$i = -0.954\%$ $L = 690.000$		$i = 0.576\%$ $L = 500.000$		$i = 2.683\%$ $L = 300.000$		$i = 1.610\%$ $L = 400.000$		$i = 1.218\%$ $L = 510.000$		$i = 6.000\%$ $L = 270.000$		$i = -2.319\%$ $L = 270.000$		$i = 3.260\%$ $L = 250.000$		$i = -1.950\%$ $L = 200.000$		$i = 1.051\%$ $L = 1000.000$																																								
Ground Height	1451.63	1452.22	1452.89	1453.53	1454.21	1454.89	1455.56	1456.05	1456.23	1456.54	1457.01	1457.63	1458.29	1459.76	1462.20	1463.30	1463.59	1465.03	1465.80	1466.31	1467.09	1466.99	1466.86	1469.14	1470.07	1471.48	1472.05	1472.73	1473.25	1473.92	1474.26	1474.73	1474.70	1474.75	1475.39	1476.65	1479.38	1481.85	1485.62	1489.26	1491.71	1493.43	1491.98	1489.60	1488.23	1488.13	1488.44	1488.74	1488.94	1489.93	1490.39	1492.79	1495.81	1494.29	1491.96	1490.64	1490.98	1492.02	1492.95
Distance	29_000				29_200				29_600				29_800				30_000				30_200			30_327 bp_26'	30_400		30_500		30_600		30_700		30_800		30_900	30_955 ccp_26'	31_000		31_100		31_200		31_300		31_400		31_500	31_584 ep_26'	31_600		31_800		32_000						
Horizontal Alignment	R=∞										R=7500										R=∞																																						



32_000-33_911.769

THE FEASIBILITY STUDY ON CONSTRUCTION OF EASTERN ARTERIAL ROAD IN MONGOLIA		
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	DEPARTMENT OF ROADS, MINISTRY OF INFRASTRUCTURE, THE GOVERNMENT OF MONGOLIA	
PACIFIC CONSULTANTS INTERNATIONAL JAPAN OVERSEAS CONSULTANTS	Drawing title	Scale
PLAN AND PROFILE (Alternative B-2)	H=1:10,000 V=1:1,000	No. E-22