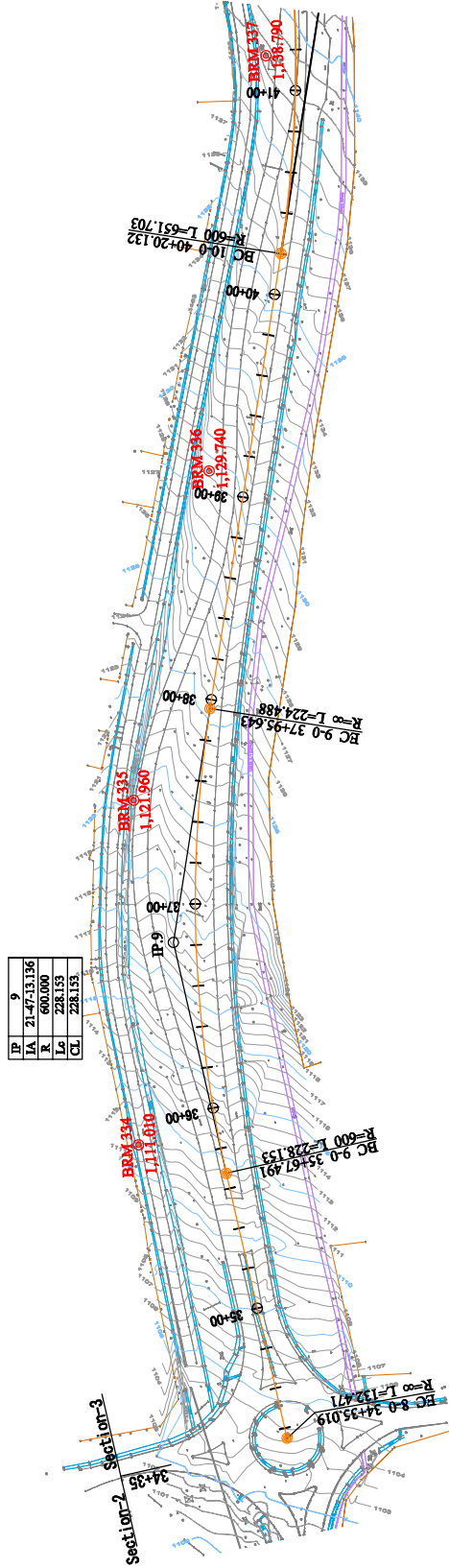


**KEY PLAN (1)**      S=1:2500  
 (CHIPEMBE HIGHWAY AND LIVINGSTONE AVENUE)

MARK	X-Coordinate	Y-Coordinate	Elevation
<b>BENCHMARKS</b>			
BRM 334	52,273.960	18,235.060	1,111.010
BRM 335	52,214.890	18,392.100	1,121.960
BRM 336	52,120.940	18,527.810	1,129.740
BRM 337	52,020.690	18,705.890	1,138.790

TP	9
IA	21.47-13.136
R	600.000
L <sub>o</sub>	228.153
CL	228.153



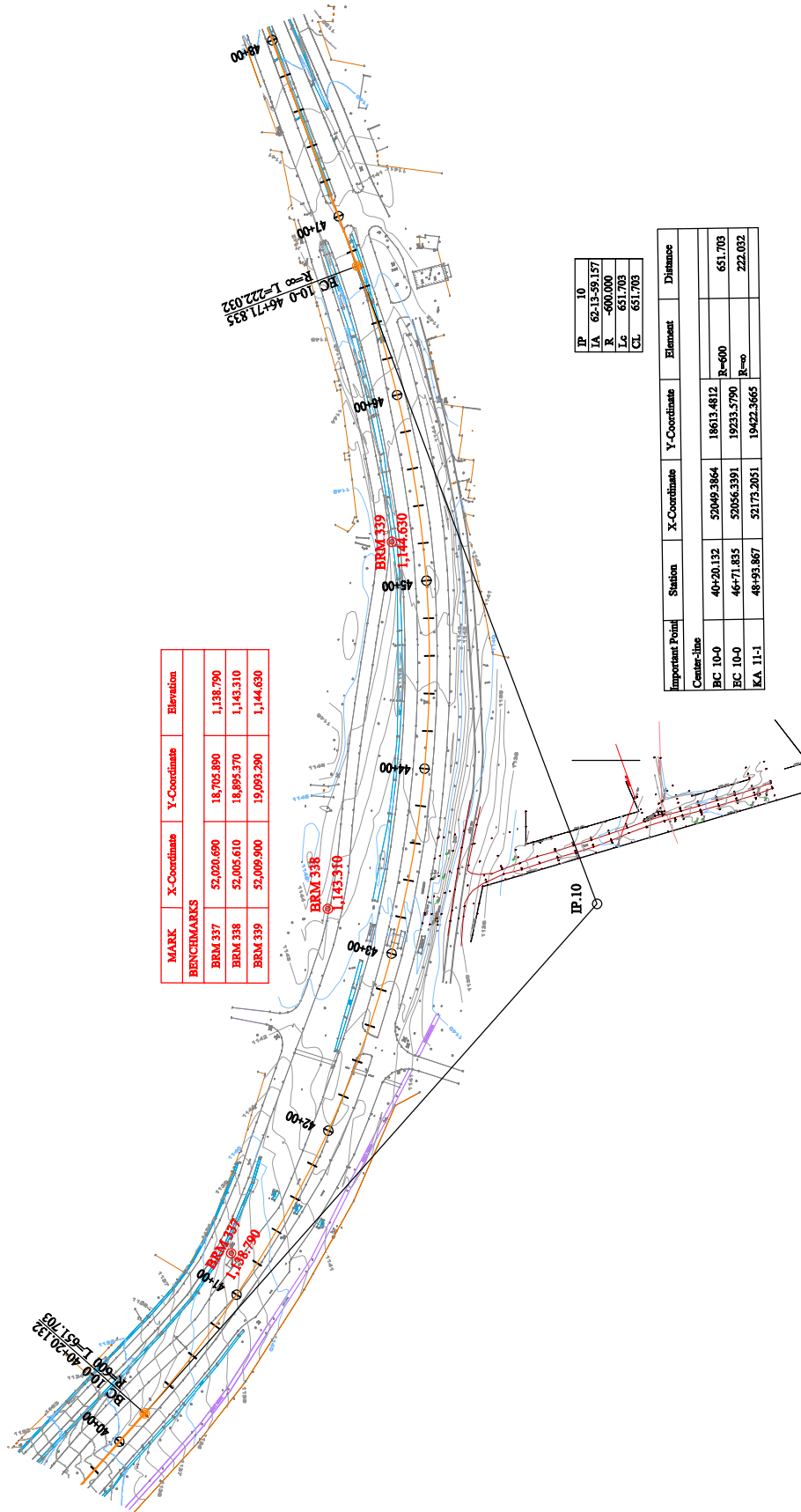
Important Point	Station	X-Coordinate	Y-Coordinate	Element	Distance
<b>Center-Line</b>					
BC 8-0	34+35.019	52239.2458	18075.3866	R=∞	132.471
BC 9-0	35+67.491	52239.2374	18206.3380	R=600	228.153
BC 9-0	37+95.643	52163.2356	18420.0041	R=∞	224.488
BC 10-0	40+20.132	52049.3864	18613.4812	R=600	651.703
BC 10-0	46+71.835	52056.3391	19233.5790	R=∞	

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TITLE: <b>KEY PLAN(1/7)</b>		Drawing No.      6 - 2 SCALE             S=1:2500 DATE

# KEY PLAN (2)

S=1:2500

(CHIPEMBERE HIGHWAY AND LIVINGSTONE AVENUE)



BLANTYRE CITY ASSEMBLY  
THE REPUBLIC OF MALAWI

JAPAN INTERNATIONAL  
COOPERATION AGENCY  
KATAHIRA & ENGINEERS INTERNATIONAL

THE PREPARATORY SURVEY  
ON THE PROJECT FOR THE IMPROVEMENT  
OF BLANTYRE CITY ROADS  
IN  
THE REPUBLIC OF MALAWI

KEY PLAN(2/7)

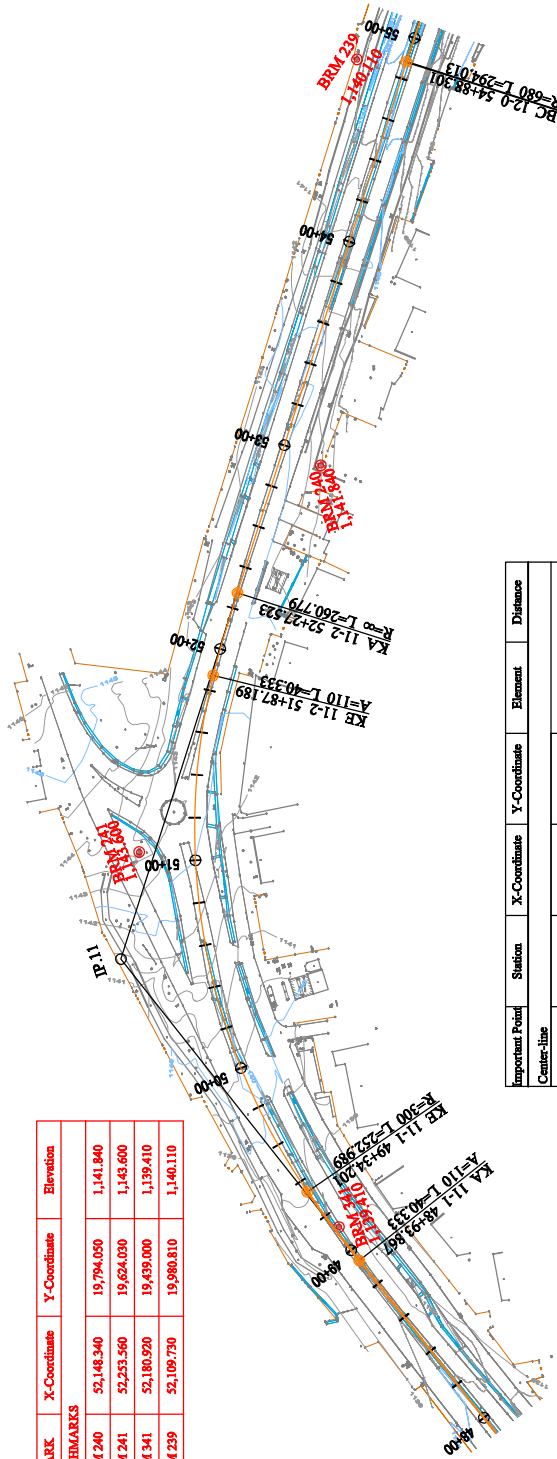
Drawing No. 6 - 3  
SCALE S=1:2500  
DATE

# KEI PLAN (3)

S=1:2500  
(CHIPEMBERE HIGHWAY AND LIVINGSTONE AVENUE)

IP	11-1	11-2	Y	0.903	0.903
King	56-00-13.289	CL	252.989		
JA	300.000	D	179.865		
R	40.333	S	40.325		
L	0.226	W	135.701		
AK	0.164	A	110.000		
X	40.313				

MARK	X-Coordinate	Y-Coordinate	Elevation
BRM 240	52,148.340	19,794.050	1,141.840
BRM 241	52,253.560	19,624.030	1,143.600
BRM 341	52,180.920	19,439.000	1,139.410
BRM 239	52,109.730	19,980.810	1,146.110



Important Point	Station	X-Coordinate	Y-Coordinate	Element	Distance
<b>Center-line</b>					
EC 10-0	46+71.835	52056.3391	19233.5790	R=500	222.032
KA 11-1	48+93.867	52173.2051	19422.5665	A=110	40.333
KE 11-1	49+34.201	52193.6566	19457.1207	R=500	252.989
KE 11-2	51+87.189	52209.7116	19702.1539	A=110	40.333
KA 11-2	52+27.523	52193.9698	19739.2797	R=500	260.779
BC 12-0	54+88.301	52086.8157	19977.0262		

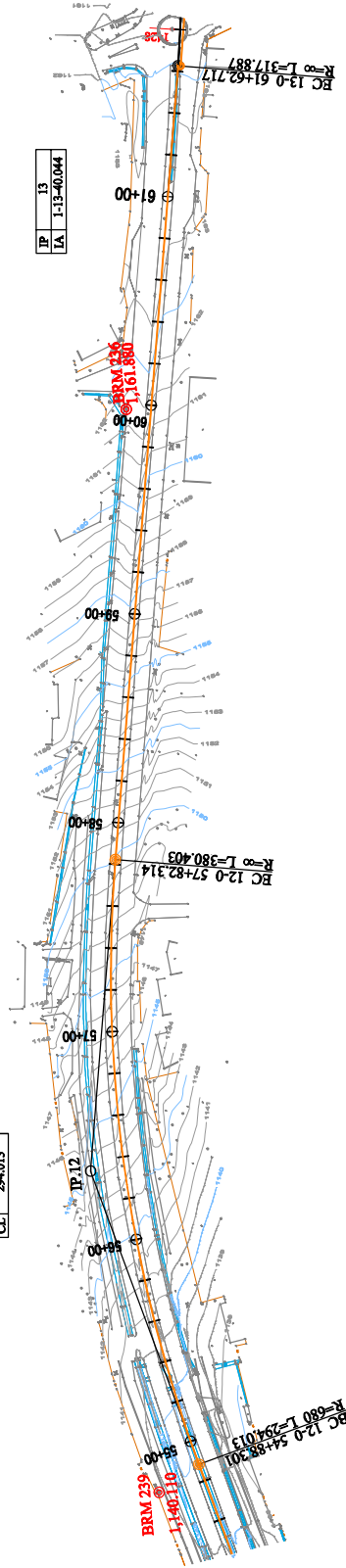
BLANTYRE CITY ASSEMBLY THE REPUBLIC OF MALAWI	JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	THE PREPARATORY SURVEY ON THE PROJECT FOR THE IMPROVEMENT OF BLANTYRE CITY ROADS IN THE REPUBLIC OF MALAWI
TITLE: KEY PLAN(3/7)		Drawing No. 6 - 4 SCALE S=1:2500 DATE

**KEY PLAN (4)**      S=1:2500  
 (CHIPEMBERE HIGHWAY AND LIVINGSTONE AVENUE)

Section-3      Section-4

MARK	X-Coordinates	Y-Coordinates	Elevation
BRM 236	51,758.130	20,340.800	1,161.880
BRM 239	52,109.730	19,980.810	1,140.110

IP	12	24,623.164
IA	13	680.000
LC		294.013
CL		294.013



Important Point	Station	X-Coordinates	Y-Coordinates	Element	Distance
Center-line					
KA 11-2	52+27.523	52193.9698	19739.2797		260.779
BC 12-0	54+88.301	52086.8137	19977.0262	R=680	294.013
EC 12-0	57+82.314	51912.6841	20211.0851	R=680	380.403
IC 13-0	61+62.717	51625.4402	20460.4787	R=680	317.867
CA 14-1	64+80.604	51389.9226	20673.9826		

BLANTYRE CITY ASSEMBLY THE REPUBLIC OF MALAWI	JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	THE PREPARATORY SURVEY ON THE PROJECT FOR THE IMPROVEMENT OF BLANTYRE CITY ROADS IN THE REPUBLIC OF MALAWI
TITLE: KEY PLAN(4/7)		Drawing No.      6 - 5 SCALE            S=1:2500 DATE

# KEY PLAN (5)

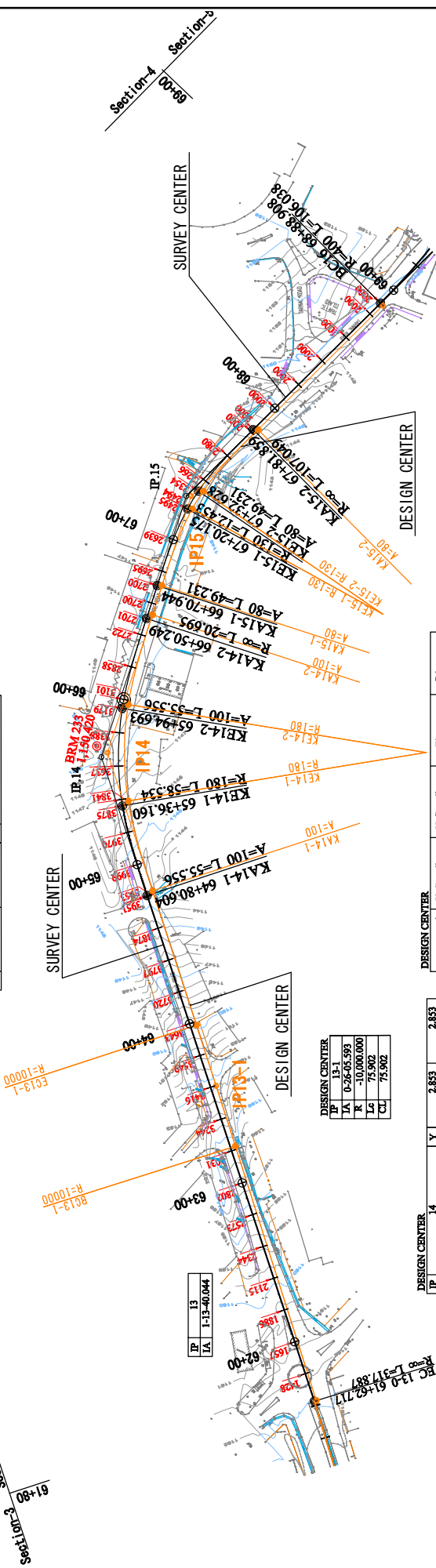
S=1:2500  
(CH IPEMBERE HIGHWAY AND LIVINGSTONE AVENUE)

SURVEY CENTER					
Station	X-Coordinates	Y-Coordinates	Element	Distance	
Centre-line					
BC 13-0	61+62.717	51623.4402	20460.4787	R=∞	317.887
KA 14-1	64+80.604	51389.9226	20679.9826	A=100	55.556
KB 14-1	65+36.160	51346.9442	20709.0931	R=180	58.534
KB 14-2	65+94.694	51293.7209	20732.8291	A=100	55.556
KA 14-2	66+50.249	51238.8810	20741.3425	R=∞	20.695
KA 15-1	66+70.944	51218.2951	20743.4616	A=80	49.231
KB 15-1	67+20.175	51169.1810	20745.4019	R=130	12.453
KB 15-2	67+32.628	51158.8453	20743.7306	A=80	49.231
KA 15-2	67+81.859	51110.0181	20728.7918	R=∞	107.049
BC 16-0	68+88.908	51010.2872	20689.8905	R=∞	106.038
EC 16-0	69+94.946	50907.5735	20664.8241	R=∞	

SURVEY CENTER					
Station	X-Coordinates	Y-Coordinates	Element	Distance	
Centre-line					
BC 13-0	61+62.717	51623.4402	20460.4787	R=∞	317.887
KA 14-1	64+80.604	51389.9226	20679.9826	A=100	55.556
KB 14-1	65+36.160	51346.9442	20709.0931	R=180	58.534
KB 14-2	65+94.694	51293.7209	20732.8291	A=100	55.556
KA 14-2	66+50.249	51238.8810	20741.3425	R=∞	20.695
KA 15-1	66+70.944	51218.2951	20743.4616	A=80	49.231
KB 15-1	67+20.175	51169.1810	20745.4019	R=130	12.453
KB 15-2	67+32.628	51158.8453	20743.7306	A=80	49.231
KA 15-2	67+81.859	51110.0181	20728.7918	R=∞	107.049
BC 16-0	68+88.908	51010.2872	20689.8905	R=∞	106.038
EC 16-0	69+94.946	50907.5735	20664.8241	R=∞	

SURVEY CENTER					
Station	X-Coordinates	Y-Coordinates	Element	Distance	
Centre-line					
BC 13-0	61+62.717	51623.4402	20460.4787	R=∞	317.887
KA 14-1	64+80.604	51389.9226	20679.9826	A=100	55.556
KB 14-1	65+36.160	51346.9442	20709.0931	R=180	58.534
KB 14-2	65+94.694	51293.7209	20732.8291	A=100	55.556
KA 14-2	66+50.249	51238.8810	20741.3425	R=∞	20.695
KA 15-1	66+70.944	51218.2951	20743.4616	A=80	49.231
KB 15-1	67+20.175	51169.1810	20745.4019	R=130	12.453
KB 15-2	67+32.628	51158.8453	20743.7306	A=80	49.231
KA 15-2	67+81.859	51110.0181	20728.7918	R=∞	107.049
BC 16-0	68+88.908	51010.2872	20689.8905	R=∞	106.038
EC 16-0	69+94.946	50907.5735	20664.8241	R=∞	

MARK	X-Coordinate	Y-Coordinate	Elevation
BRM 233	51,320.510	20,737.560	1,150.420



DESIGN CENTER					
Station	X-Coordinates	Y-Coordinates	Element	Distance	
Centre-line					
BC 13-0	61+62.717	51623.4402	20460.4787	R=∞	317.887
KA 14-1	64+80.604	51389.9226	20679.9826	A=100	55.556
KB 14-1	65+36.160	51346.9442	20709.0931	R=180	58.534
KB 14-2	65+94.694	51293.7209	20732.8291	A=100	55.556
KA 14-2	66+50.249	51238.8810	20741.3425	R=∞	20.695
KA 15-1	66+70.944	51218.2951	20743.4616	A=80	49.231
KB 15-1	67+20.175	51169.1810	20745.4019	R=130	12.453
KB 15-2	67+32.628	51158.8453	20743.7306	A=80	49.231
KA 15-2	67+81.859	51110.0181	20728.7918	R=∞	107.049
BC 16-0	68+88.908	51010.2872	20689.8905	R=∞	106.038
EC 16-0	69+94.946	50907.5735	20664.8241	R=∞	

DESIGN CENTER					
Station	X-Coordinates	Y-Coordinates	Element	Distance	
Centre-line					
BC 13-0	61+62.717	51623.4402	20460.4787	R=∞	317.887
KA 14-1	64+80.604	51389.9226	20679.9826	A=100	55.556
KB 14-1	65+36.160	51346.9442	20709.0931	R=180	58.534
KB 14-2	65+94.694	51293.7209	20732.8291	A=100	55.556
KA 14-2	66+50.249	51238.8810	20741.3425	R=∞	20.695
KA 15-1	66+70.944	51218.2951	20743.4616	A=80	49.231
KB 15-1	67+20.175	51169.1810	20745.4019	R=130	12.453
KB 15-2	67+32.628	51158.8453	20743.7306	A=80	49.231
KA 15-2	67+81.859	51110.0181	20728.7918	R=∞	107.049
BC 16-0	68+88.908	51010.2872	20689.8905	R=∞	106.038
EC 16-0	69+94.946	50907.5735	20664.8241	R=∞	

DESIGN CENTER					
Station	X-Coordinates	Y-Coordinates	Element	Distance	
Centre-line					
BC 13-0	61+62.717	51623.4402	20460.4787	R=∞	317.887
KA 14-1	64+80.604	51389.9226	20679.9826	A=100	55.556
KB 14-1	65+36.160	51346.9442	20709.0931	R=180	58.534
KB 14-2	65+94.694	51293.7209	20732.8291	A=100	55.556
KA 14-2	66+50.249	51238.8810	20741.3425	R=∞	20.695
KA 15-1	66+70.944	51218.2951	20743.4616	A=80	49.231
KB 15-1	67+20.175	51169.1810	20745.4019	R=130	12.453
KB 15-2	67+32.628	51158.8453	20743.7306	A=80	49.231
KA 15-2	67+81.859	51110.0181	20728.7918	R=∞	107.049
BC 16-0	68+88.908	51010.2872	20689.8905	R=∞	106.038
EC 16-0	69+94.946	50907.5735	20664.8241	R=∞	

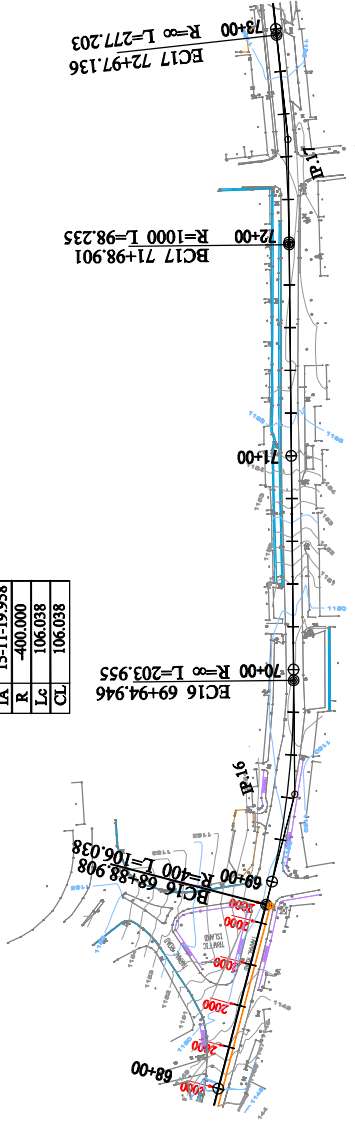
DESIGN CENTER					
Station	X-Coordinates	Y-Coordinates	Element	Distance	
Centre-line					
BC 13-0	61+62.717	51623.4402	20460.4787	R=∞	317.887
KA 14-1	64+80.604	51389.9226	20679.9826	A=100	55.556
KB 14-1	65+36.160	51346.9442	20709.0931	R=180	58.534
KB 14-2	65+94.694	51293.7209	20732.8291	A=100	55.556
KA 14-2	66+50.249	51238.8810	20741.3425	R=∞	20.695
KA 15-1	66+70.944	51218.2951	20743.4616	A=80	49.231
KB 15-1	67+20.175	51169.1810	20745.4019	R=130	12.453
KB 15-2	67+32.628	51158.8453	20743.7306	A=80	49.231
KA 15-2	67+81.859	51110.0181	20728.7918	R=∞	107.049
BC 16-0	68+88.908	51010.2872	20689.8905	R=∞	106.038
EC 16-0	69+94.946	50907.5735	20664.8241	R=∞	

BLANTYRE CITY ASSEMBLY THE REPUBLIC OF MALAWI	JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	THE PREPARATORY SURVEY ON THE PROJECT FOR THE IMPROVEMENT OF BLANTYRE CITY ROADS IN THE REPUBLIC OF MALAWI
TITLE:		KEY PLAN(5/7)
		Drawing No. 6 - 6 SCALE S=1:2500 DATE

**KEY PLAN (6)**      S=1:2500  
 (CHIPEMBE HIGHWAY AND LIVINGSTONE AVENUE)

Section-4      Section-5  
 69+00

IP	16
IA	15-11-19.958
R	-400.000
Lc	106.038
CL	106.038



IP	17
IA	5-37-42.475
R	-1000.000
Lc	98.235
CL	98.235

IP	17
IA	5-37-42.475
R	-1000.000
Lc	98.235
CL	98.235

Important Point	Station	X-Coordinate	Y-Coordinate	Element	Distance
<b>Center-line</b>					
EC 16-0	68+88.908	51010.2872	20689.8905		
BC 16-0	69+94.946	50907.5735	20664.8241	R=400	106.038
BC 17-0	71+98.901	50704.7810	20645.0801	R=∞	205.955
EC 17-0	72+97.137	50606.7486	20637.4177	R=1000	98.235
K.A. 18-1	75+74.339	50299.5563	20635.0395	R=∞	277.203

BLANTYRE CITY ASSEMBLY  
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 ON THE PROJECT FOR THE IMPROVEMENT  
 OF BLANTYRE CITY ROADS  
 IN  
 THE REPUBLIC OF MALAWI

TITLE:  
 KEY PLAN(6/7)

Drawing No.	6 - 7
SCALE	S=1:2500
DATE	

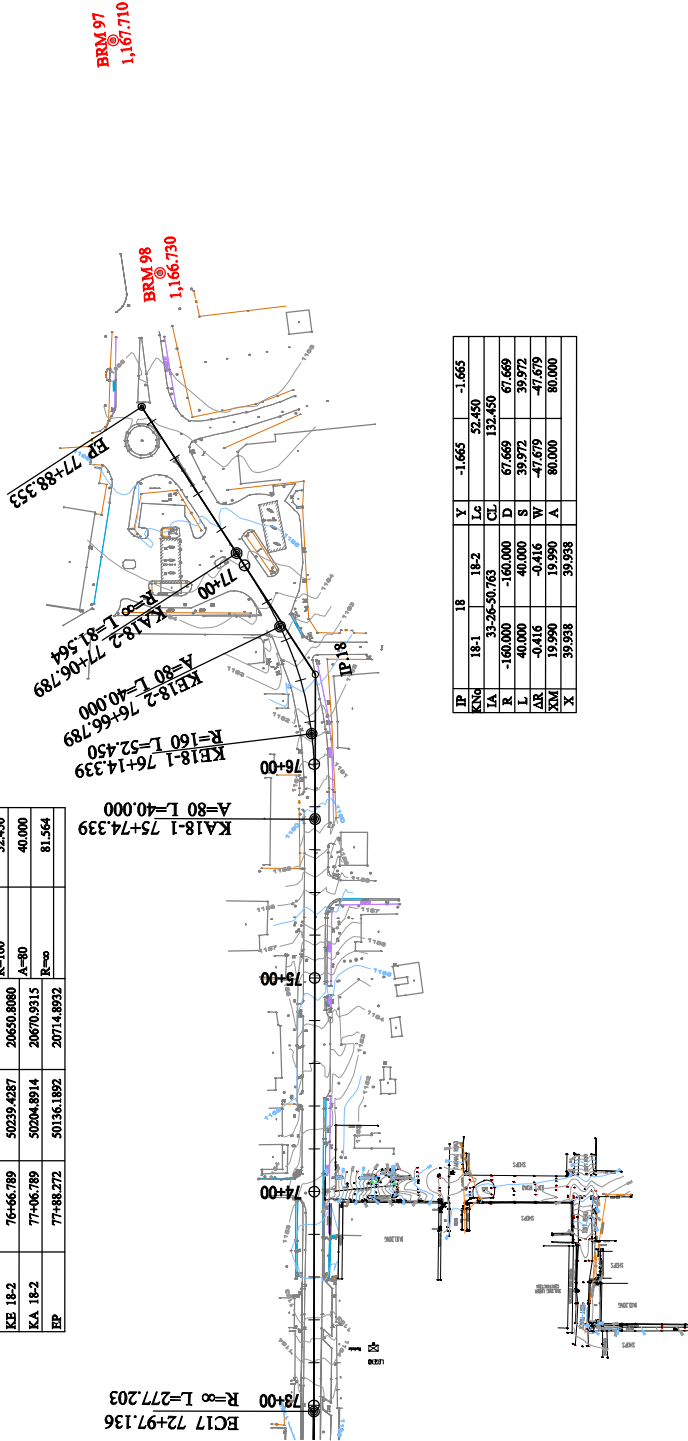
# KEY PLAN (7)

S=1:2500

(CHIPEMBERE HIGHWAY AND LIVINGSTONE AVENUE)

Important Point	Station	X-Coordinate	Y-Coordinate	Element	Distance
<b>Center-Line</b>					
EC 17-0	72+97.137	50606.7486	20637.4177	R=∞	277.203
KA 18-1	75+74.339	50229.5563	20635.0395	A=80	40.000
KB 18-1	76+14.339	50289.6060	20636.3616	R=160	52.450
KE 18-2	76+66.789	50239.4287	20650.8080	A=80	40.000
KA 18-2	77+06.789	50204.8914	20670.9315	R=∞	81.564
EP	77+88.272	50156.1892	20714.8932		

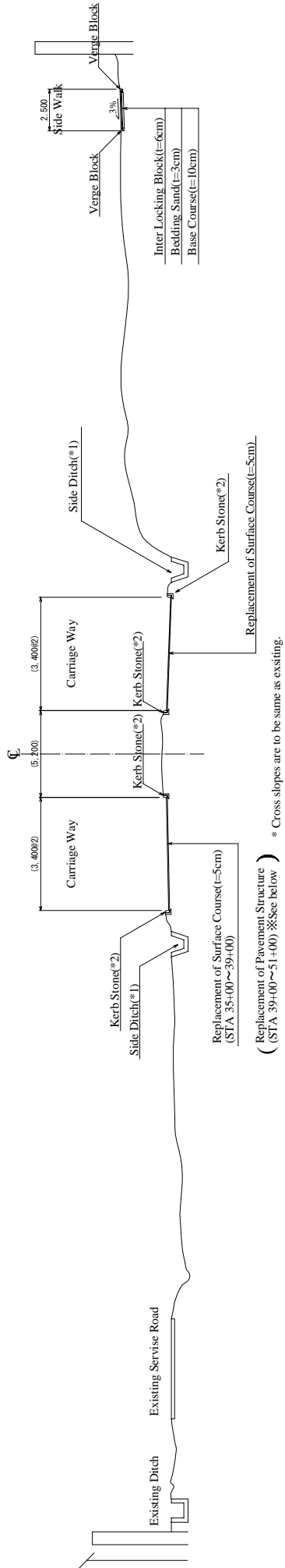
MARK	X-Coordinate	Y-Coordinate	Elevation
<b>BENCHMARKS</b>			
BRM 97	49,964.630	20,727.160	1,167.710
BRM 98	50,073.570	20,705.940	1,166.730



IP	18	Y	-1.665	-1.665
KL	18-1	18-2	L=6	52.450
LA	33-26-50.763	CL	132.450	
R	-160.000	D	67.669	67.669
L	40.000	S	39.972	39.972
ΔR	-0.416	W	-47.679	-47.679
ΔX	19.990	A	80.000	80.000
X	39.938			39.938

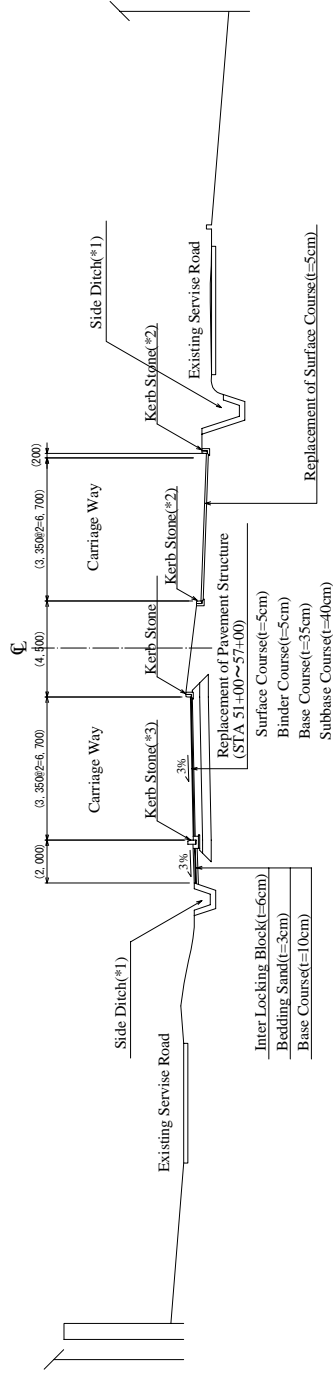
BLANTYRE CITY ASSEMBLY THE REPUBLIC OF MALAWI	JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	THE PREPARATORY SURVEY ON THE PROJECT FOR THE IMPROVEMENT OF BLANTYRE CITY ROADS IN THE REPUBLIC OF MALAWI
TITLE:		KEY PLAN(7/7)
Drawing No.	6 - 8	
SCALE	S=1:2500	
DATE		

Chichiri RA to Maselema RA (SECTION-3)  
STA 34+35 ~ 51+00



\* Cross slopes are to be same as existing.

Maselema RA to Yianikis RA (SECTION-3)  
STA 51+00 ~ 61+80



( Replacement of Surface Course(=5cm) ( STA 57+00~61+80) ※ See Above )

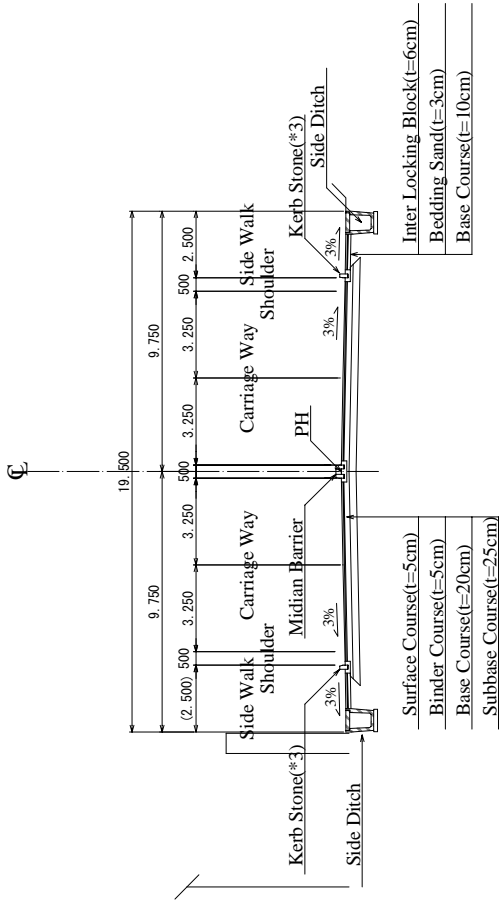
Notes:

1. Figure in ( ) shows a dimension of the existing road.
2. Existing side ditches are to be utilized for those shown with \*1 by cleaning or repairing if existing side ditches are damaged.
3. Existing kerb stones are to be utilized for those shown with \*2 by painting. Where existing kerb stones are damaged or missing, new kerb stone are to be installed.
4. Flat type kerb stones are to be installed for those shown with \*3.
5. The section from 34+35 to 35+00 is not included in the Project.

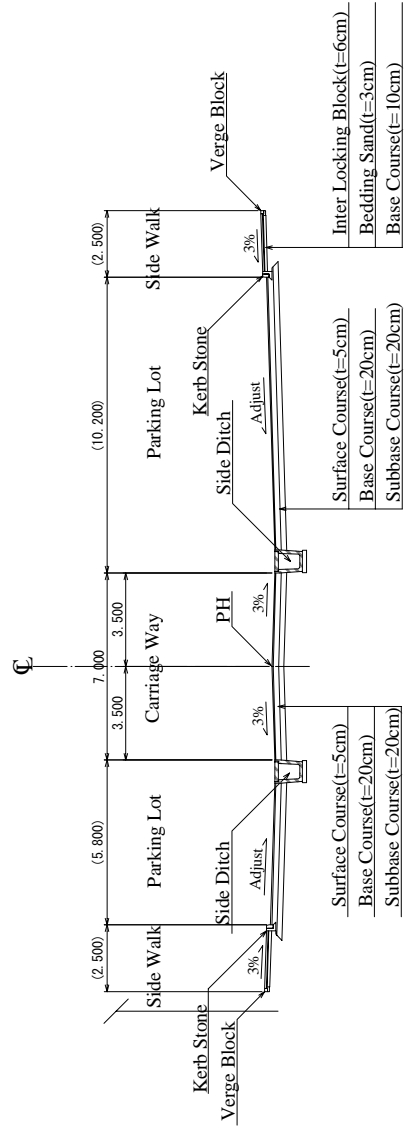
BLANTYRE CITY ASSEMBLY THE REPUBLIC OF MALAWI	JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	THE PREPARATORY SURVEY ON THE PROJECT FOR THE IMPROVEMENT OF BLANTYRE CITY ROADS IN THE REPUBLIC OF MALAWI		TITLE:	TYPICAL CROSS SECTION (1)	Drawing No.	6 - 9
						SCALE	S=1:250
						DATE	



**Yianikis RA to Standard Bank IC(Section-4)**  
**STA 61+80~69+00**  
**(Widening to 4 lane)**



**Standard Bank IC to Illovo RA(Section-5)**  
**STA 69+00~77+89**



**Notes:**

1. Figure in ( ) shows a dimension of existing road.
2. Flat type kerb stones are to be installed for those shown with \*3.

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					SCALE	S=1:200
				DATE		