

Appendix 5-6. Basic Design Drawings

List of Basic Design Drawings

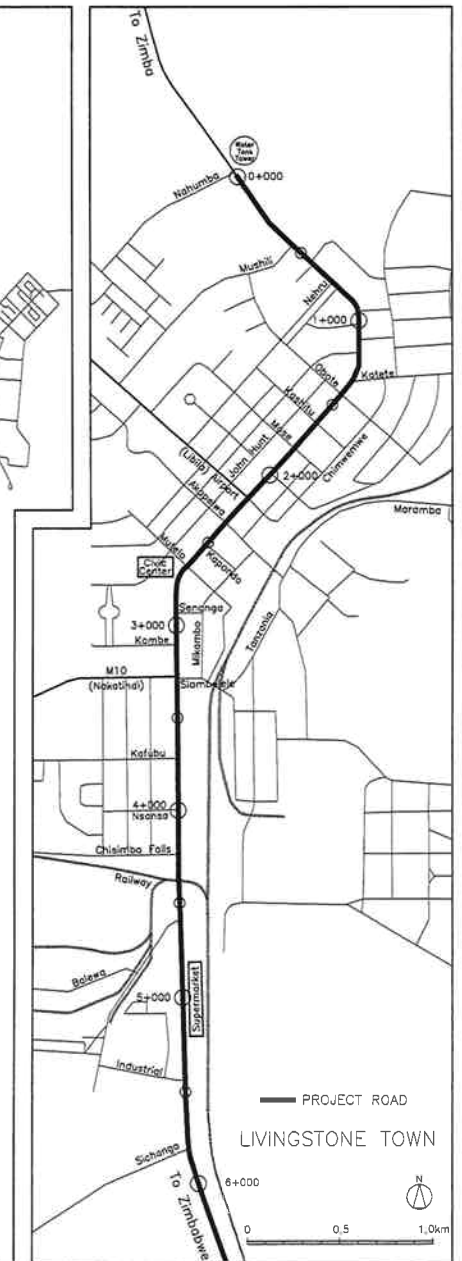
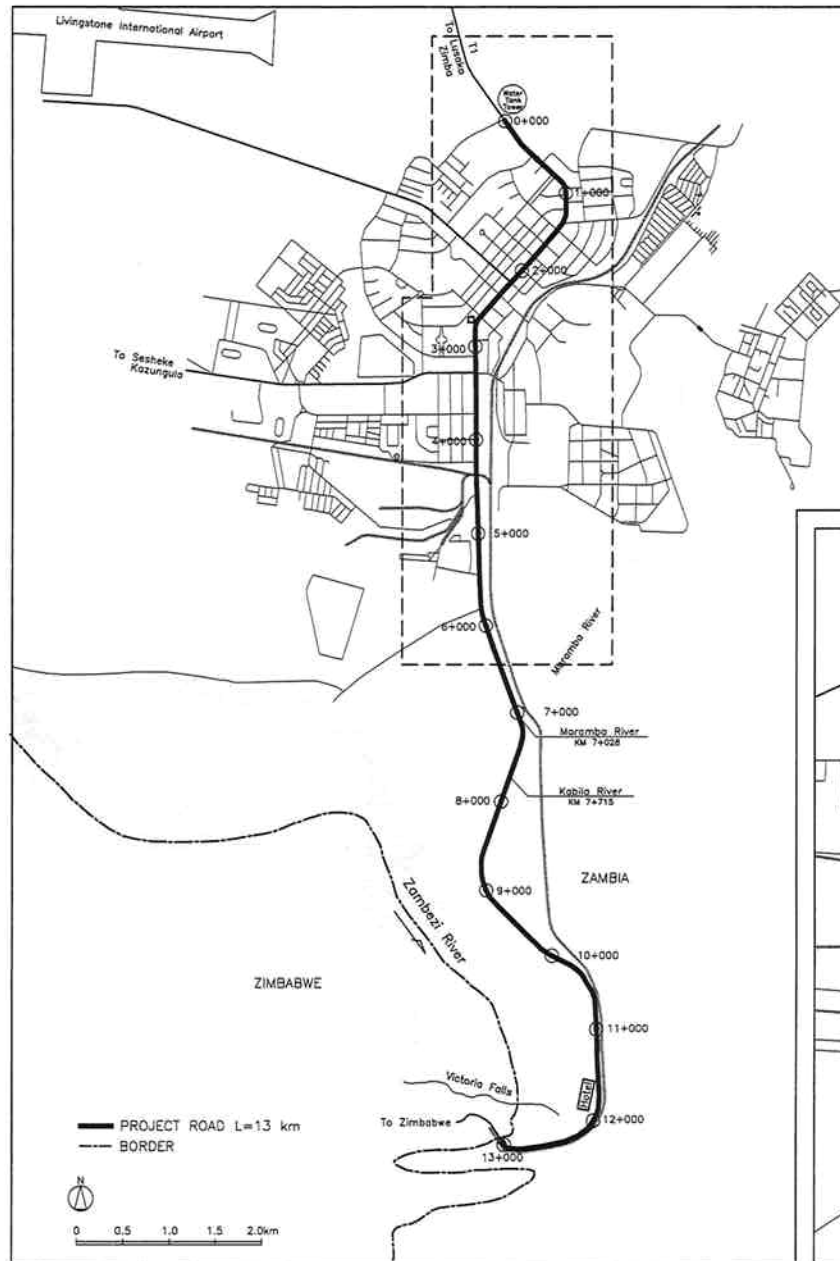
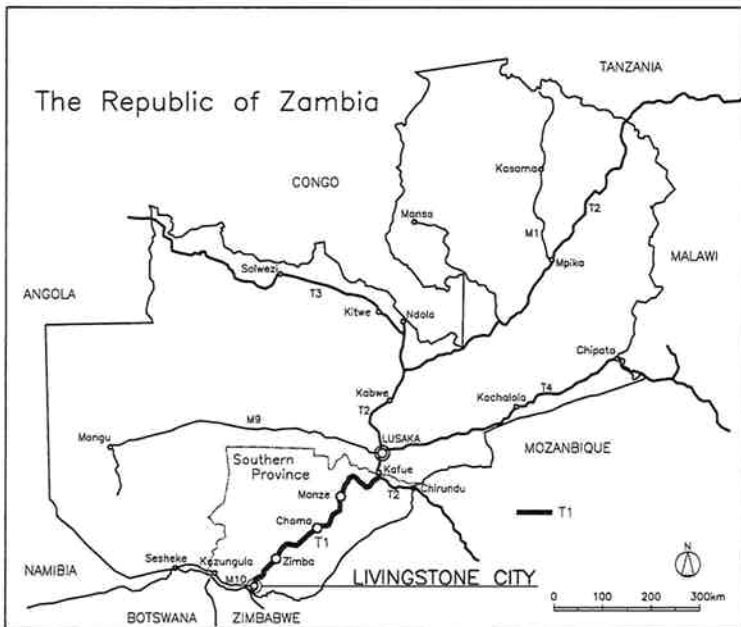
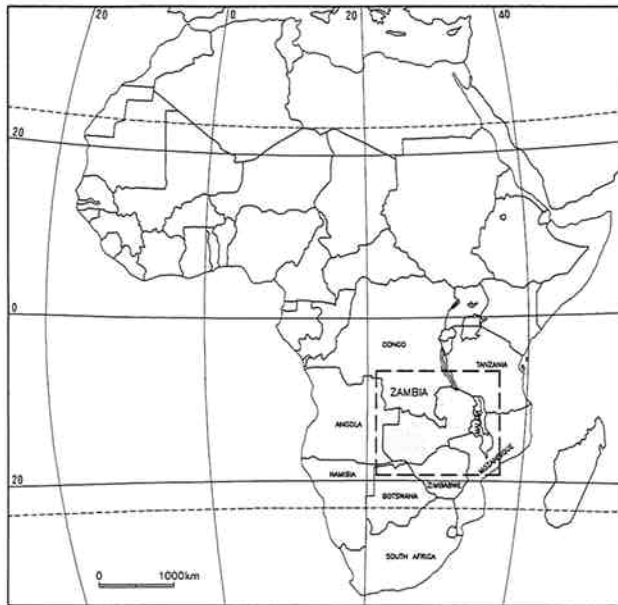
Drawing No.	Description	No. of Drawings
ZL BD A-1	INDEX OF DRAWINGS	1
ZL BD B-1	PROJECT LOCATION MAP	1
ZL BD B-2	LAYOUT MAP	1
ZL BD C-1	TYPICAL CROSS SECTION FOR 2-LANE SECTION	1
ZL BD C-2	TYPICAL CROSS SECTION FOR 4-LANE SECTION	1
ZL BD D-1 to D-20	PLAN AND PROFILE (1/20) - (20/20)	20
ZL BD E-1	DRAINAGE U-DRAIN	1
ZL BD E-2	DRAINAGE CONCRETE PIPE	1
ZL BD E-3	DRAINAGE CATCH PIT	1
ZL BD F-1	INCIDENTAL WORKS-1 (WALKWAY ACCES)	1
ZL BD F-3	INCIDENTAL WORKS-2 (KERBSTONE)	1
ZL BD F-3	INCIDENTAL WORKS-3 (STRUCTURES)	1
ZL BD F-4	INCIDENTAL WORKS-4 ROAD MARKING)	1
ZL BD F-5	INCIDENTAL WORKS-5 (JUNCTION LAYOUT AND MARKING)	1
ZL BD F-6	INCIDENTAL WORKS-6 (HUMPS)	1
ZL BD F-7	INCIDENTAL WORKS-7 (STREET LIGHT)	1
ZL BD G-1	MAJOR JUNCTION DETAIL (M10 JUNCTION)	1
TOTAL		36

BASIC DESIGN STUDY
ON
THE PROJECT FOR IMPROVEMENT OF LIVINGSTONE CITY ROADS
IN
THE REPUBLIC OF ZAMBIA

DRAWINGS

May, 2008

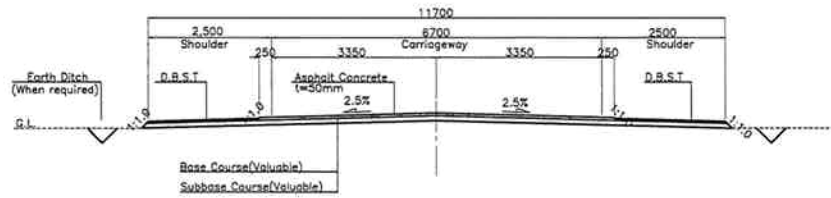
JAPAN INTERNATIONAL COOPERATION AGENCY
CONSTRUCTION PROJECT CONSULTANTS, INC



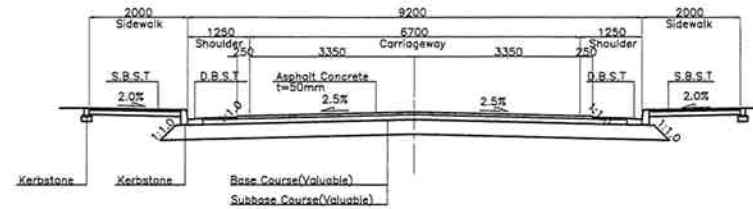
<ul style="list-style-type: none"> • The Ministry of Local Government and Housing of The Republic of Zambia • Japan International Cooperation Agency 	CONSULTANTS:	PROJECT NAME:	DRAWING TITLE:	Date: March 2008	DRAWING No.:
	Construction Project Consultants, INC. (CPC)	THE PROJECT FOR IMPROVEMENT OF LIVINGSTONE CITY ROADS	PROJECT LOCATION MAP	Prepared by: Checked by:	ZL BD B-1

TYPICAL CROSS SECTION FOR 2-LANE SECTION

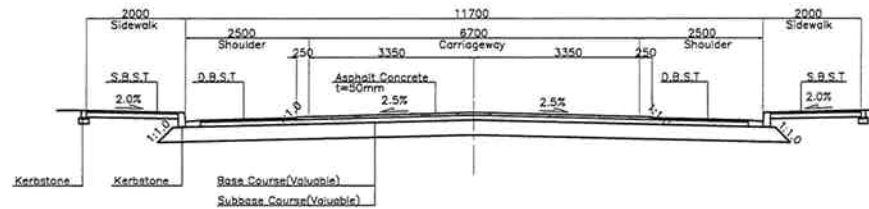
2-A



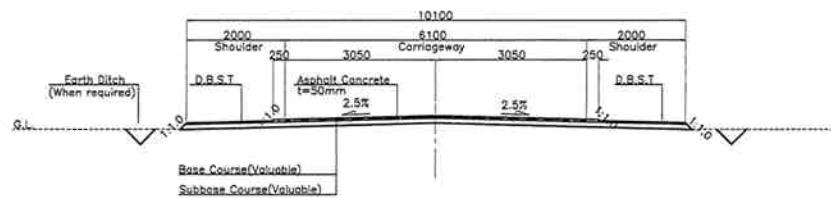
2-B



2-C



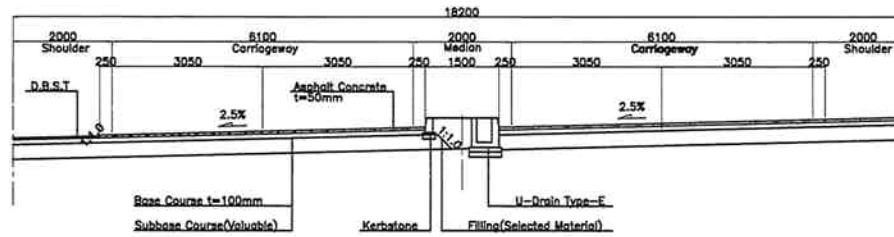
2-D



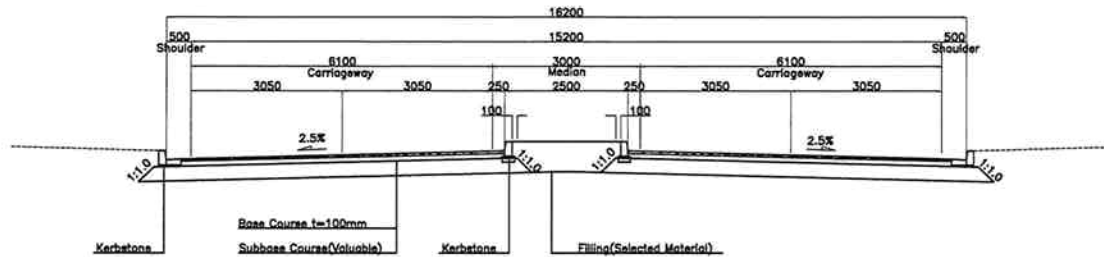
<ul style="list-style-type: none"> The Ministry of Local Government and Housing of The Republic of Zambia Japan International Cooperation Agency 	CONSULTANTS:	PROJECT NAME:	DRAWING TITLE:	Date: March 2008	DRAWING No.:
	Construction Project Consultants, INC. (CPC)	THE PROJECT FOR IMPROVEMENT OF LIVINGSTONE CITY ROADS	TYPICAL CROSS SECTION FOR 2-LANE SECTION	Prepared by: Checked by:	ZL BD C-1

TYPICAL CROSS SECTION FOR 4-LANE SECTION

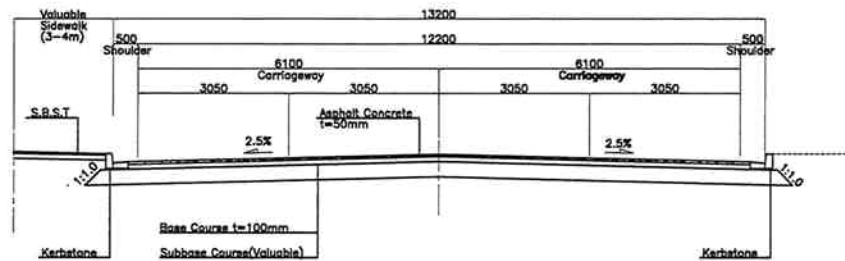
4-A



4-B



4-C



- The Ministry of Local Government and Housing of The Republic of Zambia
- Japan International Cooperation Agency

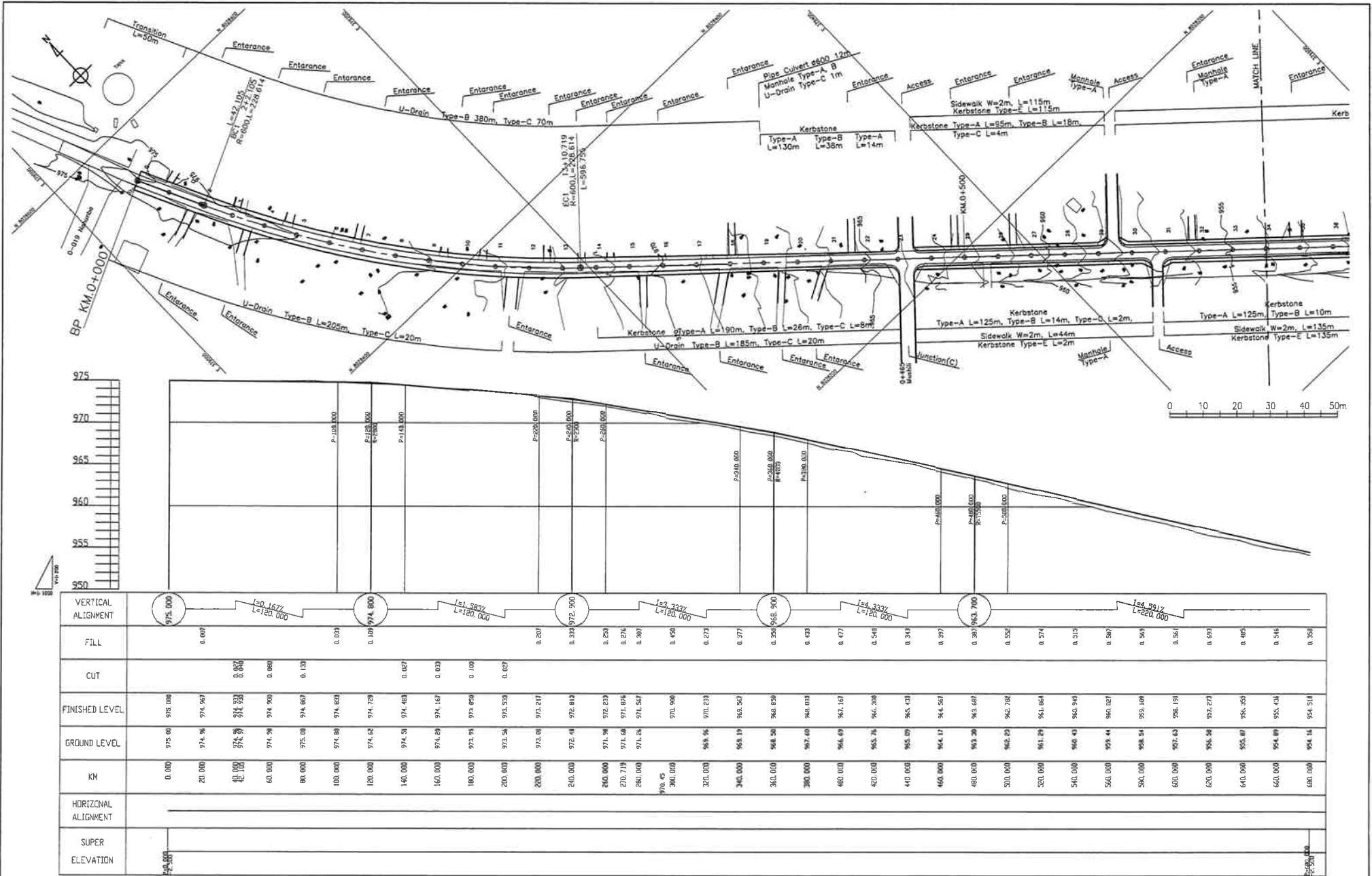
CONSULTANTS:
Construction Project Consultants, INC. (CPC)

PROJECT NAME:
THE PROJECT FOR IMPROVEMENT OF LIVINGSTONE CITY ROADS

DRAWING TITLE:
TYPICAL CROSS SECTION FOR 4-LANE SECTION

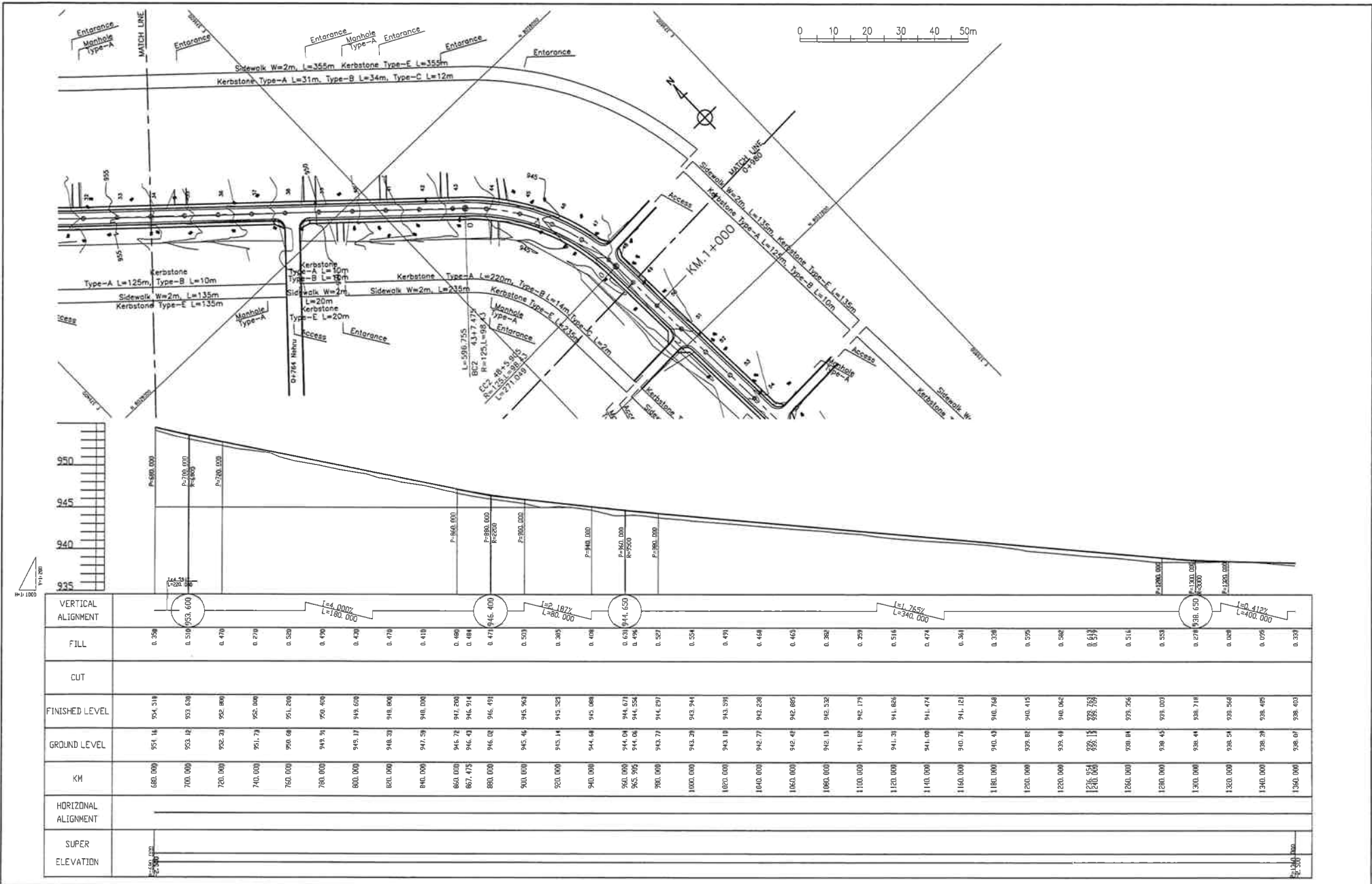
Date: March 2008
Prepared by:
Checked by:

DRAWING No.:
ZL BD C-2

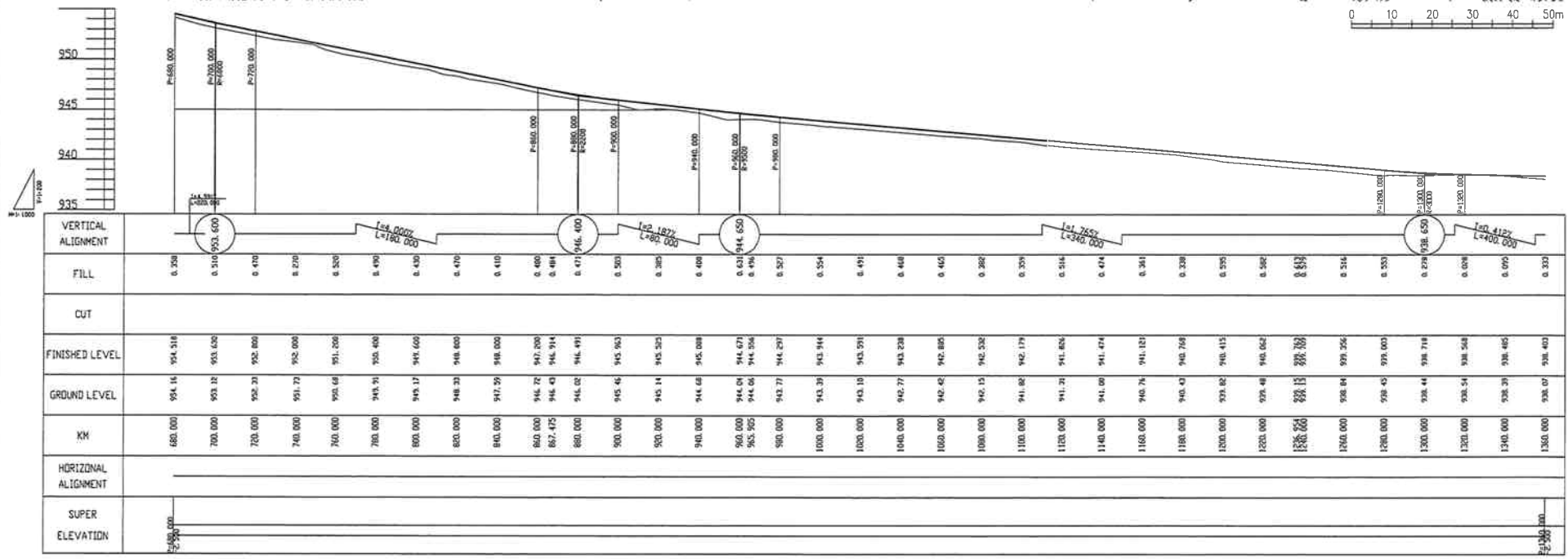
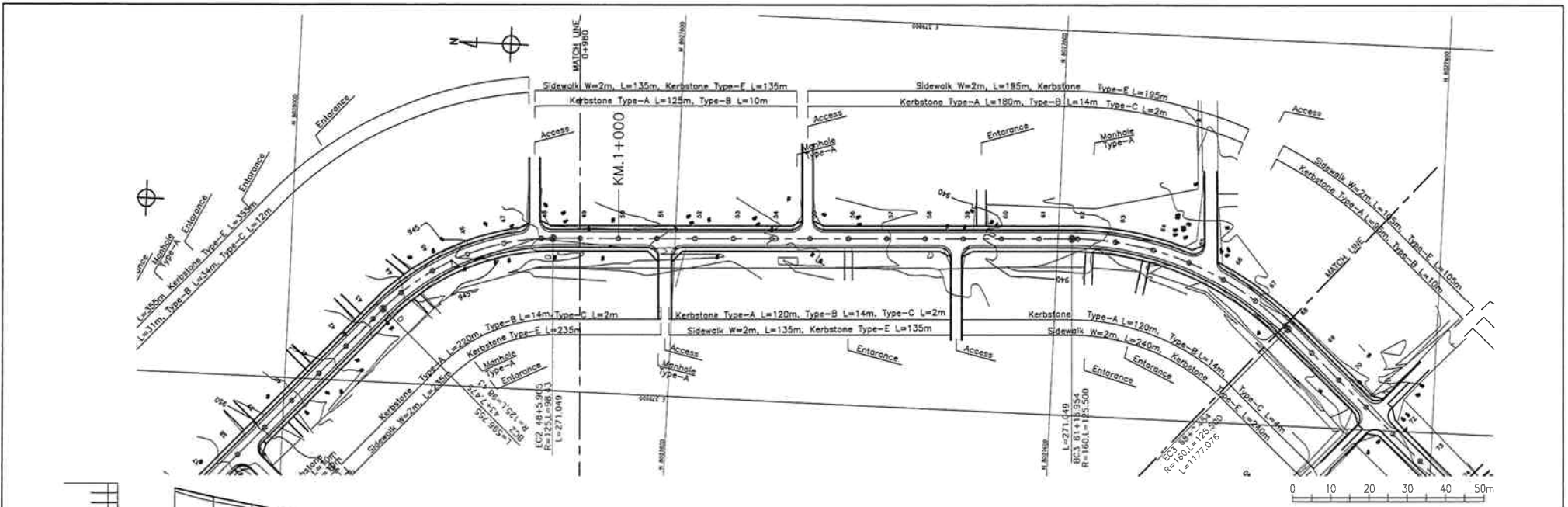


- The Ministry of Local Government and Housing of The Republic of Zambia
- Japan International Cooperation Agency

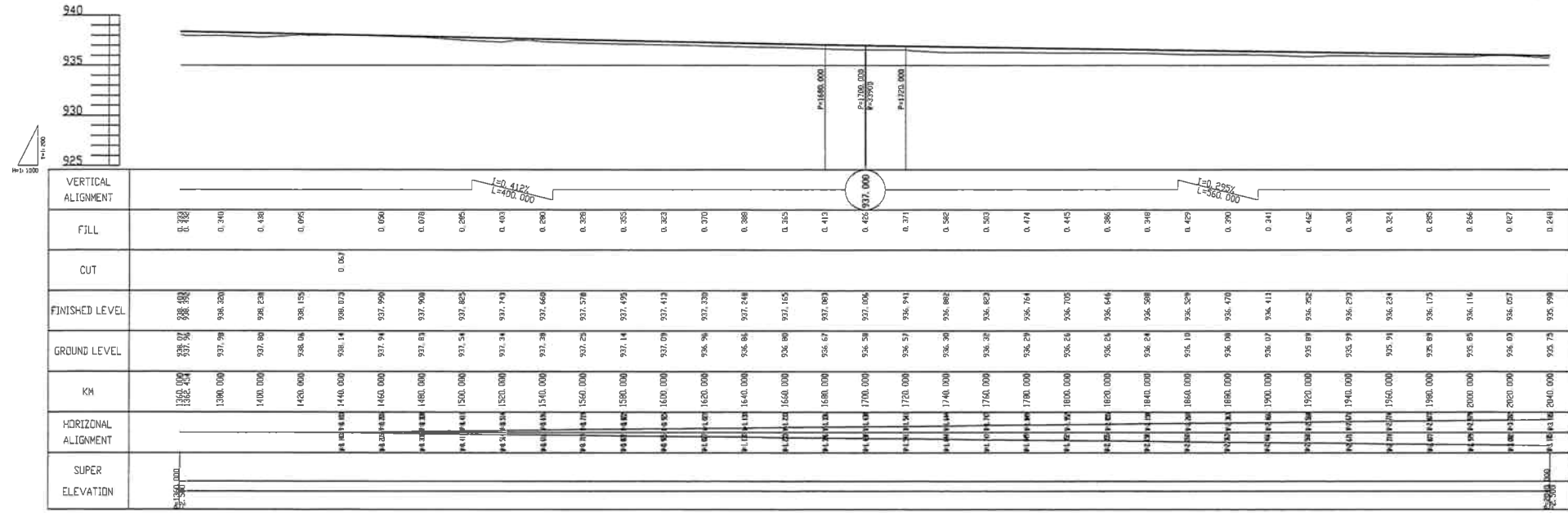
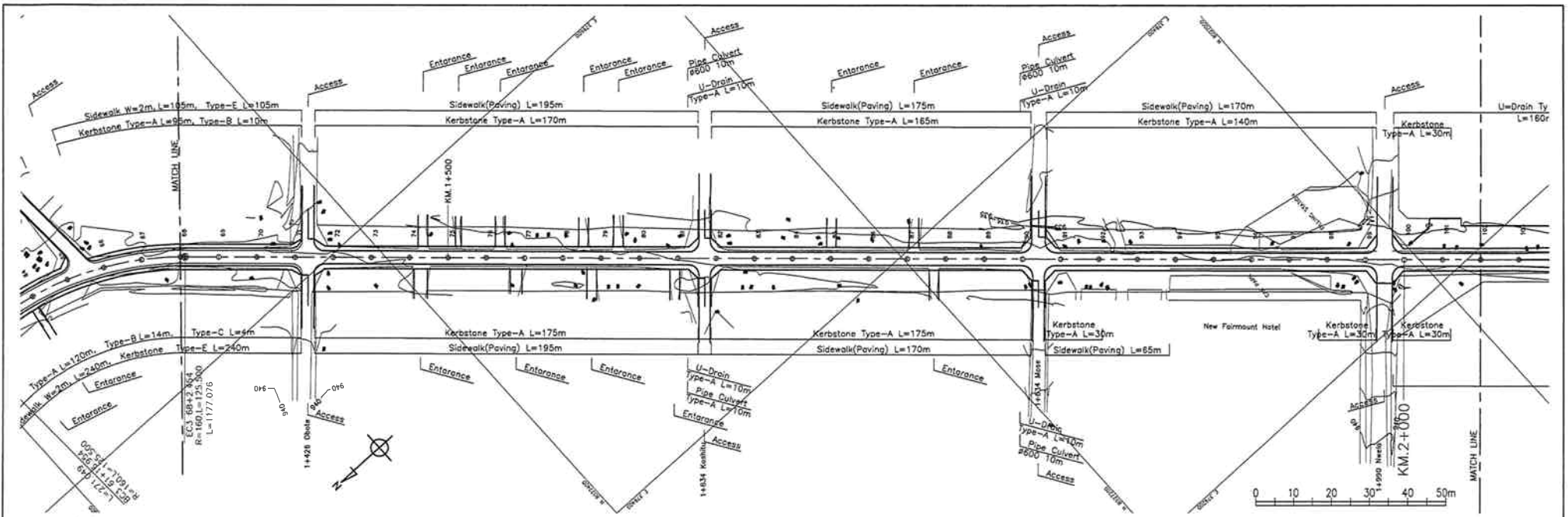
CONSULTANTS: Construction Project Consultants, Inc. (CPC)	PROJECT NAME: THE PROJECT FOR IMPROVEMENT OF LIVINGSTONE CITY ROADS	DRAWING TITLE: PLAN AND PROFILE (1/20) KM 0+000 - KM 0+680	Date: March 2008	DRAWING No.: ZL BD D-1
			Prepared by:	
			Checked by:	



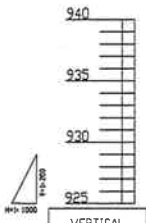
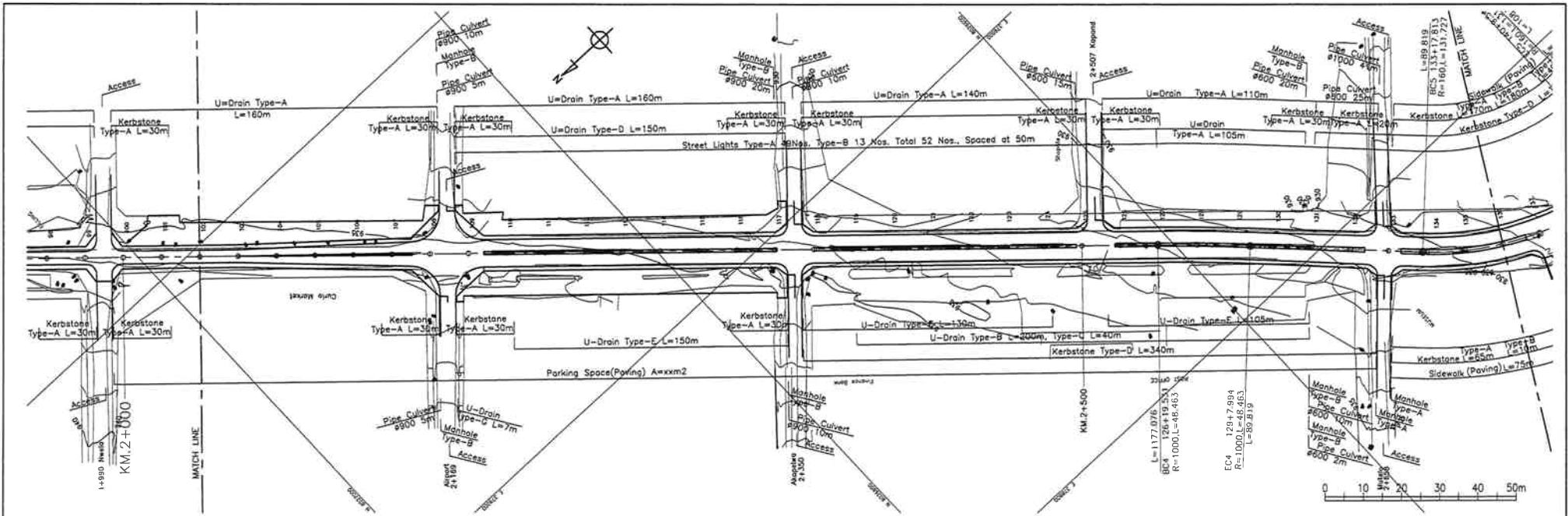
<ul style="list-style-type: none"> The Ministry of Local Government and Housing of The Republic of Zambia Japan International Cooperation Agency 	CONSULTANTS:	PROJECT NAME:	DRAWING TITLE:	Date: March 2008	DRAWING No.:
	Construction Project Consultants, Inc. (CPC)	THE PROJECT FOR IMPROVEMENT OF LIVINGSTONE CITY ROADS	PLAN AND PROFILE (2/20)	Prepared by:	ZL BD D-2
			KM 0+680 - KM 0+960	Checked by:	



<ul style="list-style-type: none"> The Ministry of Local Government and Housing of The Republic of Zambia Japan International Cooperation Agency 	CONSULTANTS:	PROJECT NAME:	DRAWING TITLE:	Date: March 2008	DRAWING No.:
	Construction Project Consultants, Inc. (CPC)	THE PROJECT FOR IMPROVEMENT OF LIVINGSTONE CITY ROADS	PLAN AND PROFILE (3/20) KM 0+980 - KM 1+360	Prepared by:	ZL BD D-3
				Checked by:	

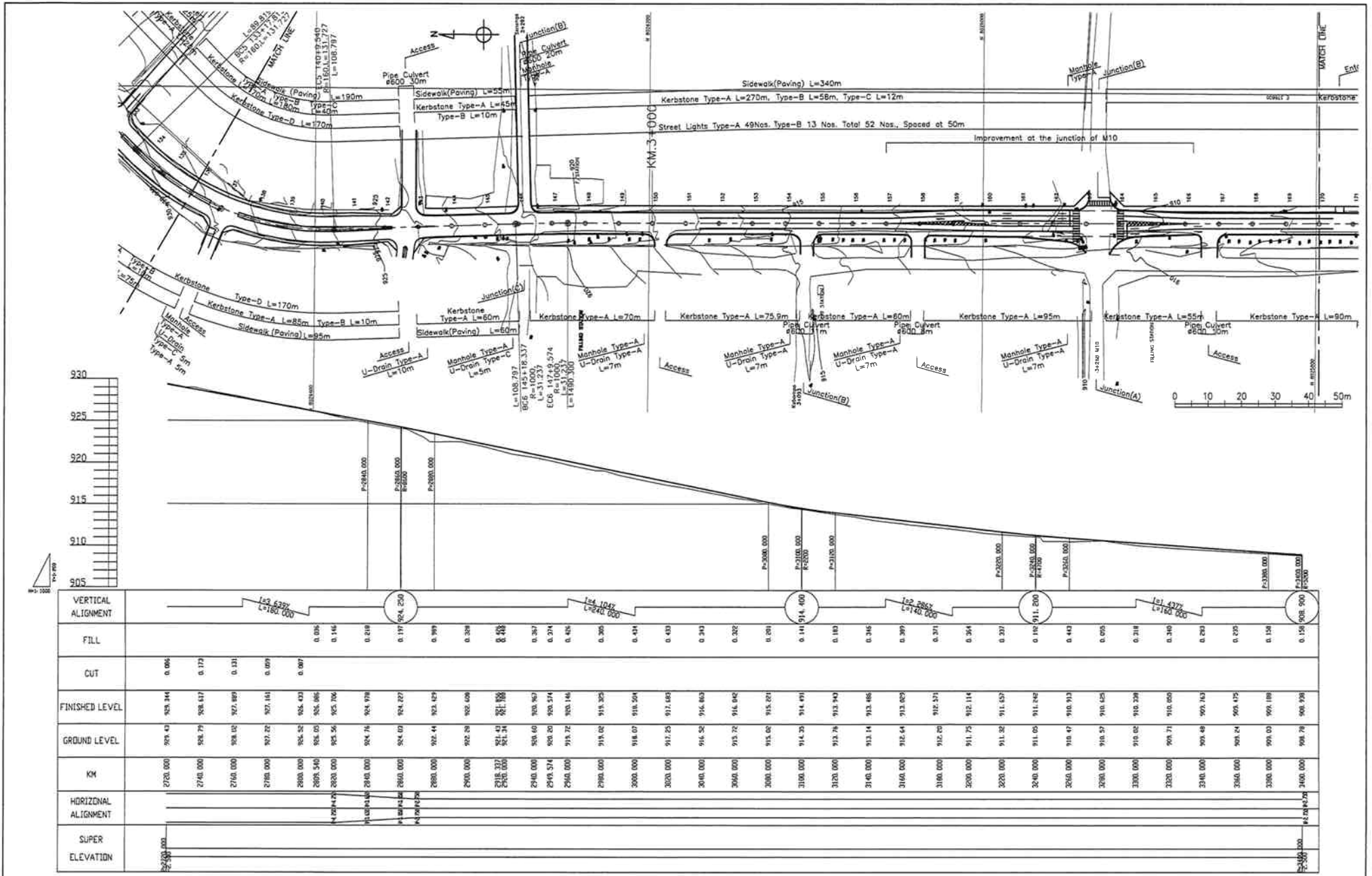


<ul style="list-style-type: none"> The Ministry of Local Government and Housing of The Republic of Zambia Japan International Cooperation Agency 	CONSULTANTS:	PROJECT NAME:	DRAWING TITLE:	Date: March 2008	DRAWING No.:
	Construction Project Consultants, INC. (CPC)	THE PROJECT FOR IMPROVEMENT OF LIVINGSTONE CITY ROADS	PLAN AND PROFILE (4/20)	Prepared by:	ZL BD D-4
			KM 1+360 - KM 2+040	Checked by:	



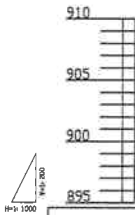
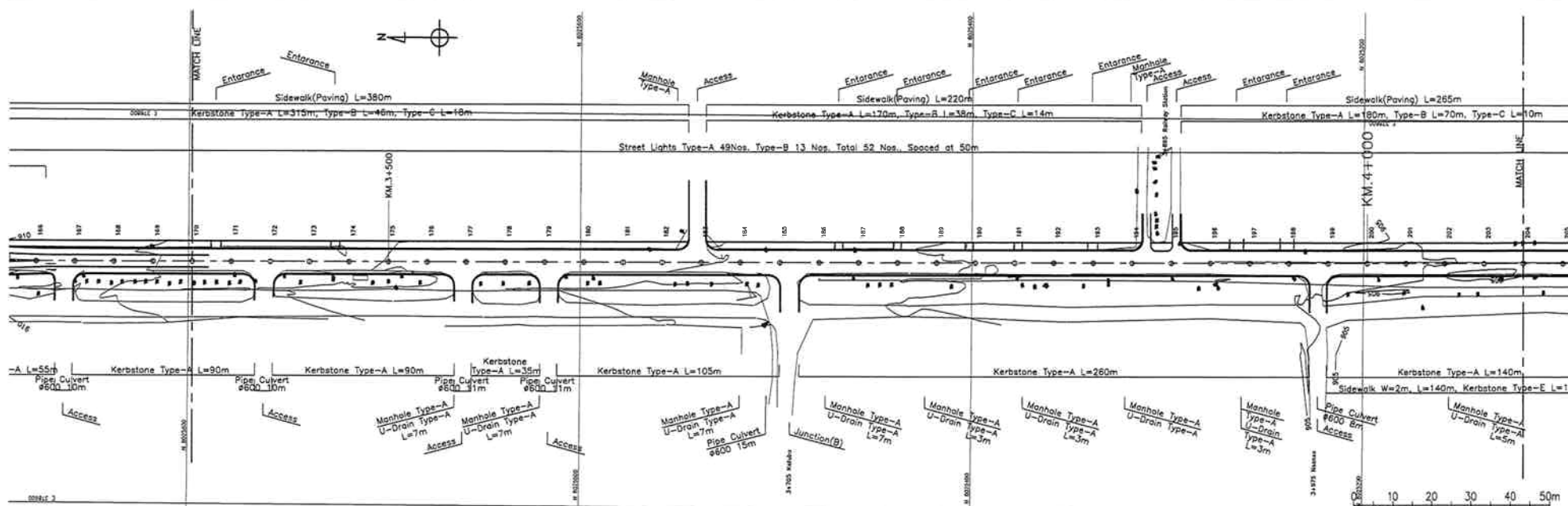
VERTICAL ALIGNMENT	Profile Line with Vertical Curves																																			
FILL	0.216	0.271	0.186	0.171	0.223	0.204	0.233	0.446	0.307	0.306	0.306	0.307	0.453	0.437	0.420	0.333	0.177	0.340	0.313	0.237	0.200	0.363	0.227	0.438	0.403	0.237	0.416	0.423	0.457	0.497	0.206	0.503	0.487	0.092	0.092	
CUT																																				0.084
FINISHED LEVEL	935.796	935.939	935.890	935.821	935.767	935.704	935.645	935.596	935.527	935.468	935.409	935.311	935.137	934.917	934.700	934.483	934.267	934.050	933.833	933.617	933.400	933.183	932.967	932.750	932.533	932.317	932.100	931.883	931.794	931.657	931.500	931.333	931.167	930.917	930.744	
GROUND LEVEL	935.79	935.64	935.70	935.63	935.51	935.50	935.29	935.14	935.25	935.14	935.09	935.01	934.68	934.48	934.28	934.15	934.04	934.05	933.25	933.25	933.38	933.26	932.64	932.35	932.19	932.08	931.64	931.44	931.31	931.17	931.17	931.13	931.00	930.51	930.07	929.98
KM	2040.000	2040.000	2050.000	2100.000	2120.000	2140.000	2160.000	2190.000	2200.000	2220.000	2240.000	2260.000	2280.000	2300.000	2320.000	2340.000	2360.000	2380.000	2400.000	2420.000	2440.000	2460.000	2480.000	2500.000	2520.000	2540.000	2560.000	2580.000	2600.000	2620.000	2640.000	2660.000	2680.000	2700.000	2720.000	
HORIZONTAL ALIGNMENT	[Diagrammatic representation of horizontal alignment]																																			
SUPER ELEVATION	[Diagrammatic representation of super elevation]																																			

<ul style="list-style-type: none"> The Ministry of Local Government and Housing of The Republic of Zambia Japan International Cooperation Agency 	CONSULTANTS:	PROJECT NAME:	DRAWING TITLE:	Date: March 2008	DRAWING No.:
	Construction Project Consultants, INC. (CPC)	THE PROJECT FOR IMPROVEMENT OF LIVINGSTONE CITY ROADS	PLAN AND PROFILE (5/20) KM 2+040 - KM 2+720	Prepared by:	ZL BD D-5
				Checked by:	



- The Ministry of Local Government and Housing of The Republic of Zambia
- Japan International Cooperation Agency

CONSULTANTS: Construction Project Consultants, INC. (CPC)	PROJECT NAME: THE PROJECT FOR IMPROVEMENT OF LIVINGSTONE CITY ROADS	DRAWING TITLE: PLAN AND PROFILE (6/20) KM 2+720 - KM 3+400	Date: March 2008 Prepared by: Checked by:	DRAWING No.: ZL BD D-6
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VERTICAL ALIGNMENT	FILL	CUT	FINISHED LEVEL	GROUND LEVEL	KM	HORIZONTAL ALIGNMENT	SUPER ELEVATION
908.900	0.150		908.538	908.781	3400.000		
908.426	0.426		908.165	908.34	3420.000		
908.280	0.280		908.020	908.25	3440.000		
908.275	0.275		908.455	908.25	3460.000		
908.426	0.426		908.367	907.94	3480.000		
908.285	0.285		908.229	907.94	3500.000		
908.276	0.276		908.096	907.82	3520.000		
908.245	0.245		907.950	907.71	3540.000		
908.216	0.216		907.824	907.58	3560.000		
908.189	0.189		907.685	907.50	3580.000		
908.230	0.230		907.520	907.32	3600.000		
908.180	0.180		907.506	907.16	3620.000		
908.085	0.085		907.145	907.16	3640.000		
908.196	0.196		906.977	906.87	3660.000		
908.240	0.240		906.740	906.50	3700.000		
908.145	0.145		906.620	906.46	3720.000		
908.316	0.316		906.470	906.14	3740.000		
908.315	0.315		906.355	906.02	3760.000		
908.211	0.211		906.211	906.00	3780.000		
908.251	0.251		906.111	905.86	3800.000		
908.331	0.331		906.021	905.67	3840.000		
908.336	0.336		905.922	905.43	3860.000		
908.132	0.132		905.842	905.69	3880.000		
908.133	0.133		905.759	905.42	3900.000		
908.153	0.153		905.667	905.51	3920.000		
908.114	0.114		905.574	905.46	3940.000		
908.204	0.204		905.464	905.28	3960.000		
908.225	0.225		905.395	905.17	3980.000		
908.169	0.169		905.300	905.12	4000.000		
908.156	0.156		905.214	905.06	4020.000		
908.186	0.186		905.124	904.94	4040.000		
908.037	0.037		905.037	905.00	4060.000		
904.947	0.077		904.947	904.87	4080.000		

• The Ministry of Local Government and Housing of The Republic of Zambia
 • Japan International Cooperation Agency

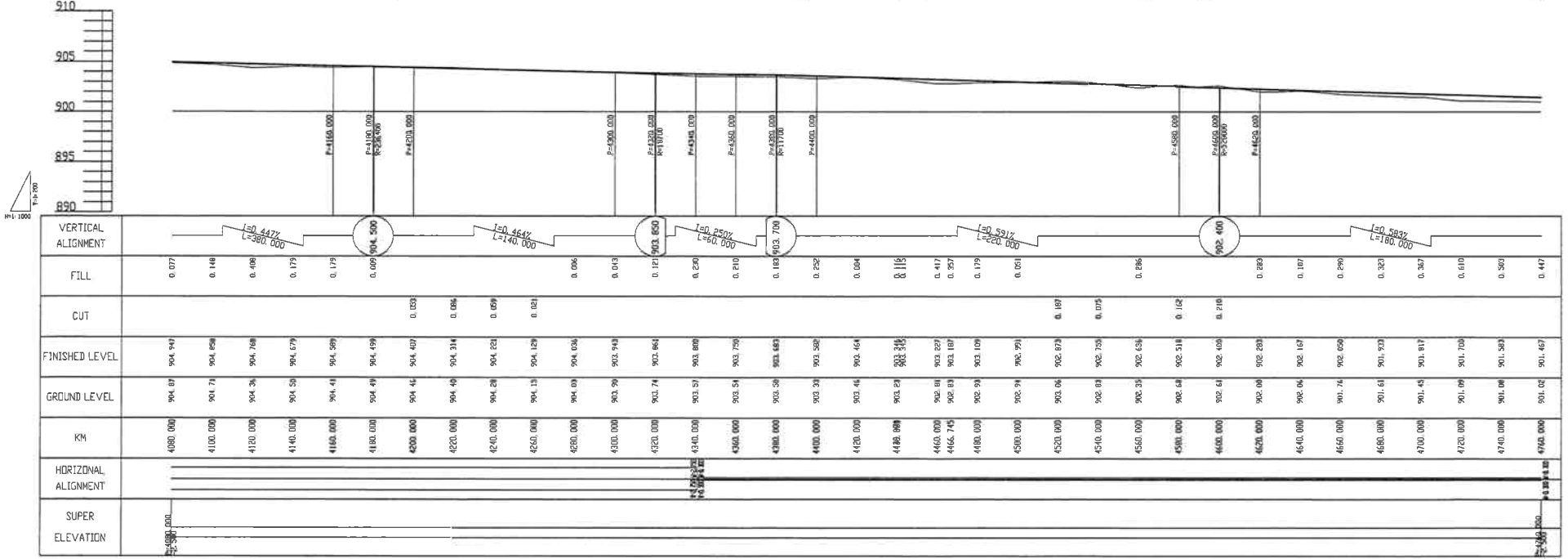
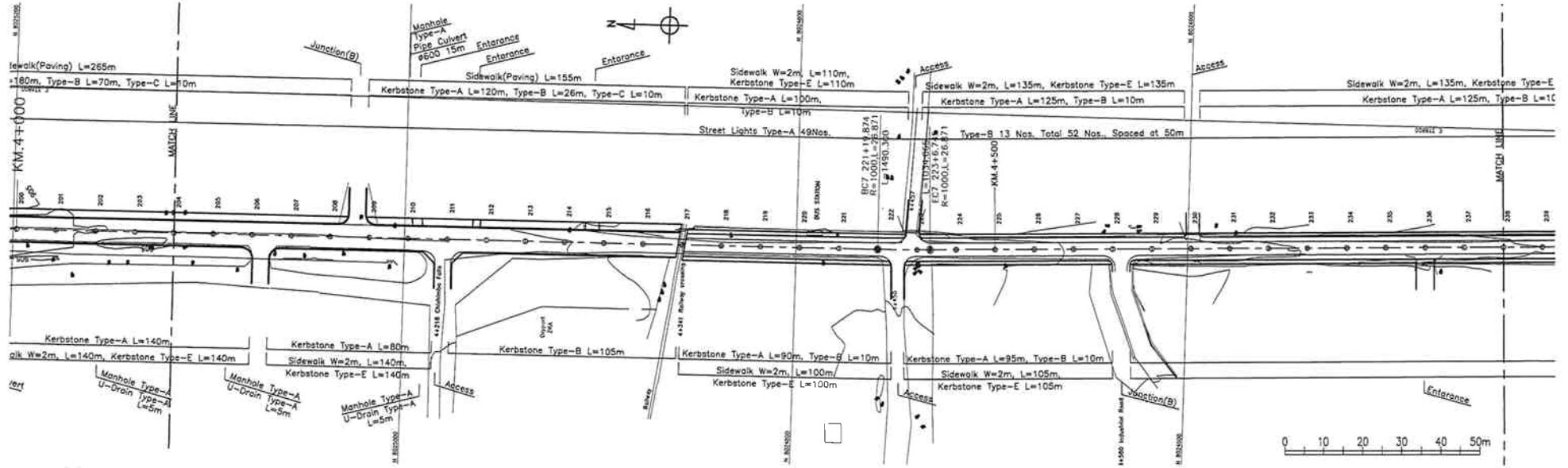
CONSULTANTS:
 Construction Project Consultants, INC. (CPC)

PROJECT NAME:
 THE PROJECT FOR IMPROVEMENT OF LIVINGSTONE CITY ROADS

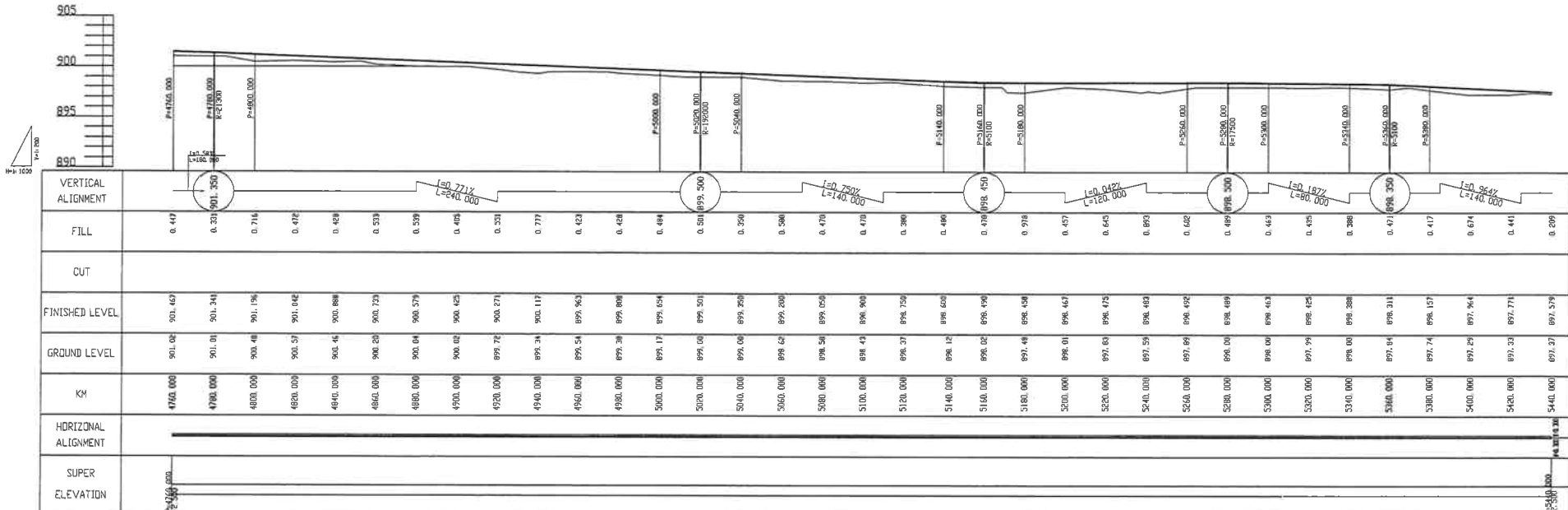
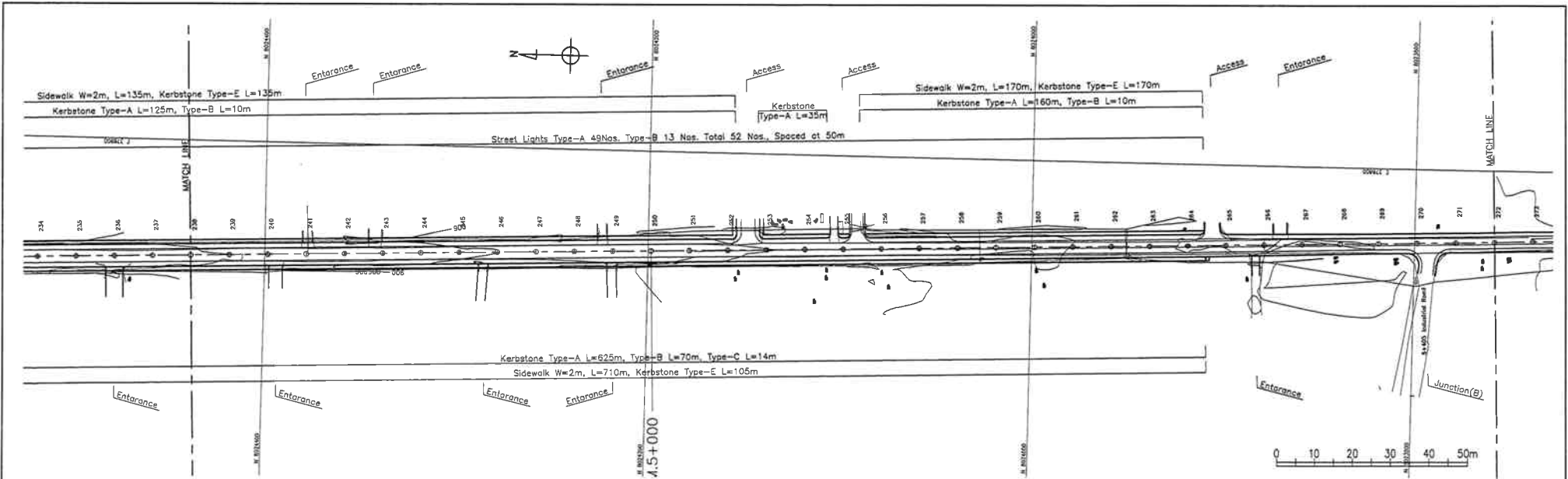
DRAWING TITLE:
 PLAN AND PROFILE (7/20)
 KM 3+400 - KM 4+080

Date: March 2008
 Prepared by:
 Checked by:

DRAWING No.:
 ZL BD D-7

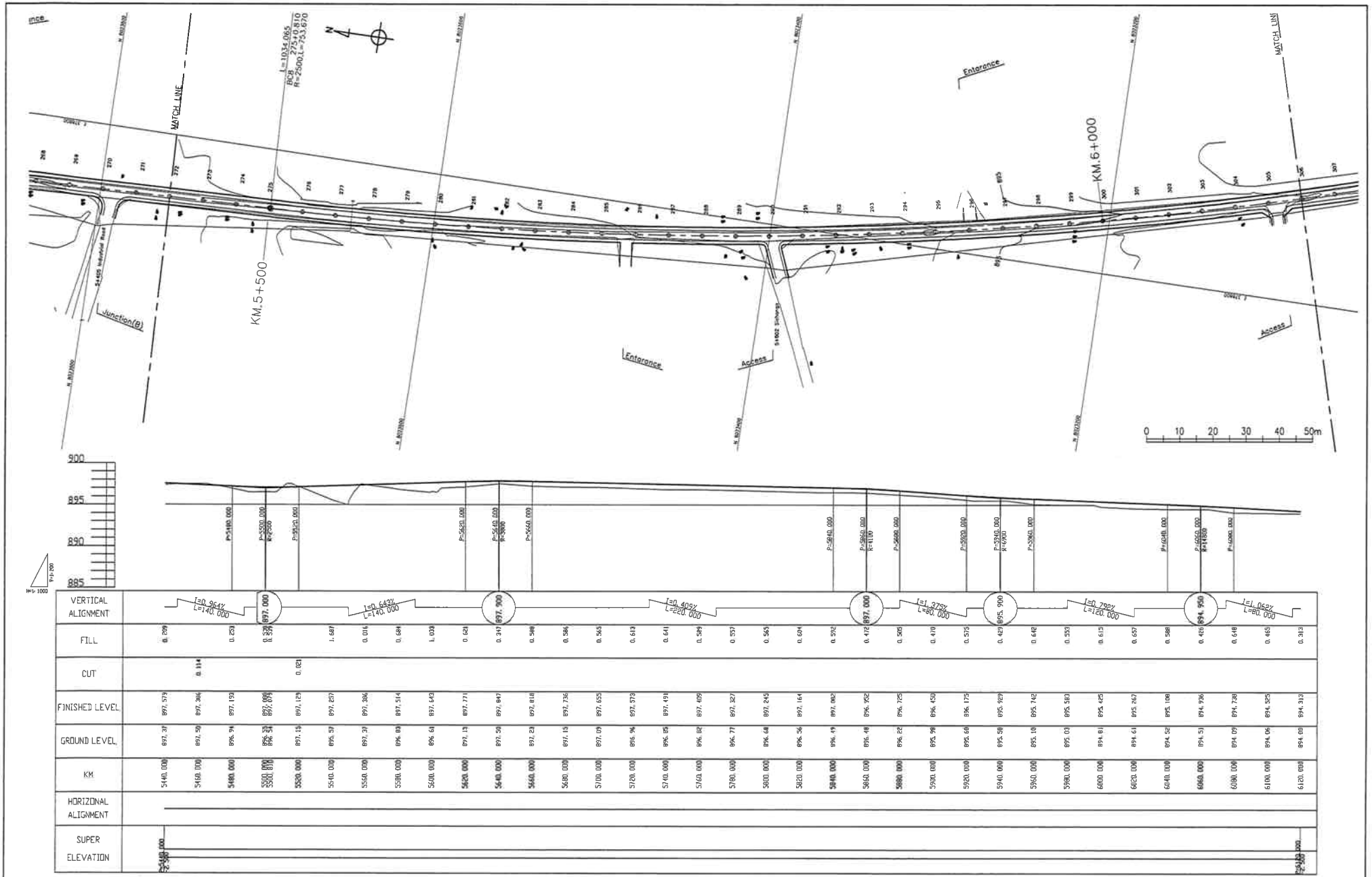


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	Construction Project Consultants, INC. (CPC)	THE PROJECT FOR IMPROVEMENT OF LIVINGSTONE CITY ROADS	PLAN AND PROFILE (8/20) KM 4+080 - KM 4+760	Prepared by:	ZL BD D-8
				Checked by:	



VERTICAL ALIGNMENT	FILL	CUT	FINISHED LEVEL	GROUND LEVEL	KM	HORIZONTAL ALIGNMENT	SUPER ELEVATION
	0.44		901.63	901.02	4760.000		
	0.33		901.34	901.01	4790.000		
	0.71		901.19	900.48	4800.000		
	0.47		901.04	900.57	4820.000		
	0.42		900.88	900.46	4840.000		
	0.53		900.73	900.20	4860.000		
	0.59		900.57	900.04	4880.000		
	0.40		900.42	900.02	4900.000		
	0.33		900.27	899.72	4920.000		
	0.77		900.11	899.34	4940.000		
	0.43		899.96	899.54	4960.000		
	0.45		899.80	899.38	4980.000		
	0.48		899.65	899.17	5000.000		
	0.50		899.50	899.00	5020.000		
	0.56		899.35	899.20	5040.000		
	0.58		899.20	899.04	5060.000		
	0.47		899.05	898.54	5080.000		
	0.47		898.90	898.43	5100.000		
	0.38		898.75	898.37	5120.000		
	0.48		898.60	898.12	5140.000		
	0.47		898.45	898.02	5160.000		
	0.78		898.30	897.48	5180.000		
	0.67		898.15	898.01	5200.000		
	0.64		898.00	897.61	5220.000		
	0.69		897.85	897.59	5240.000		
	0.62		897.70	897.89	5260.000		
	0.49		897.55	898.00	5280.000		
	0.43		897.40	898.00	5300.000		
	0.45		897.25	897.91	5320.000		
	0.38		897.10	898.00	5340.000		
	0.47		896.95	897.84	5360.000		
	0.67		896.80	897.29	5380.000		
	0.44		896.65	897.33	5400.000		
	0.28		896.50	897.37	5440.000		

<ul style="list-style-type: none"> The Ministry of Local Government and Housing of The Republic of Zambia Japan International Cooperation Agency 	CONSULTANTS:	PROJECT NAME:	DRAWING TITLE:	Date: March 2008	DRAWING No.:
	Construction Project Consultants, INC. (CPC)	THE PROJECT FOR IMPROVEMENT OF LIVINGSTONE CITY ROADS	PLAN AND PROFILE (9/20) KM 4+760 - KM 5+440	Prepared by:	ZL BD D-9
				Checked by:	



- The Ministry of Local Government and Housing of The Republic of Zambia
- Japan International Cooperation Agency

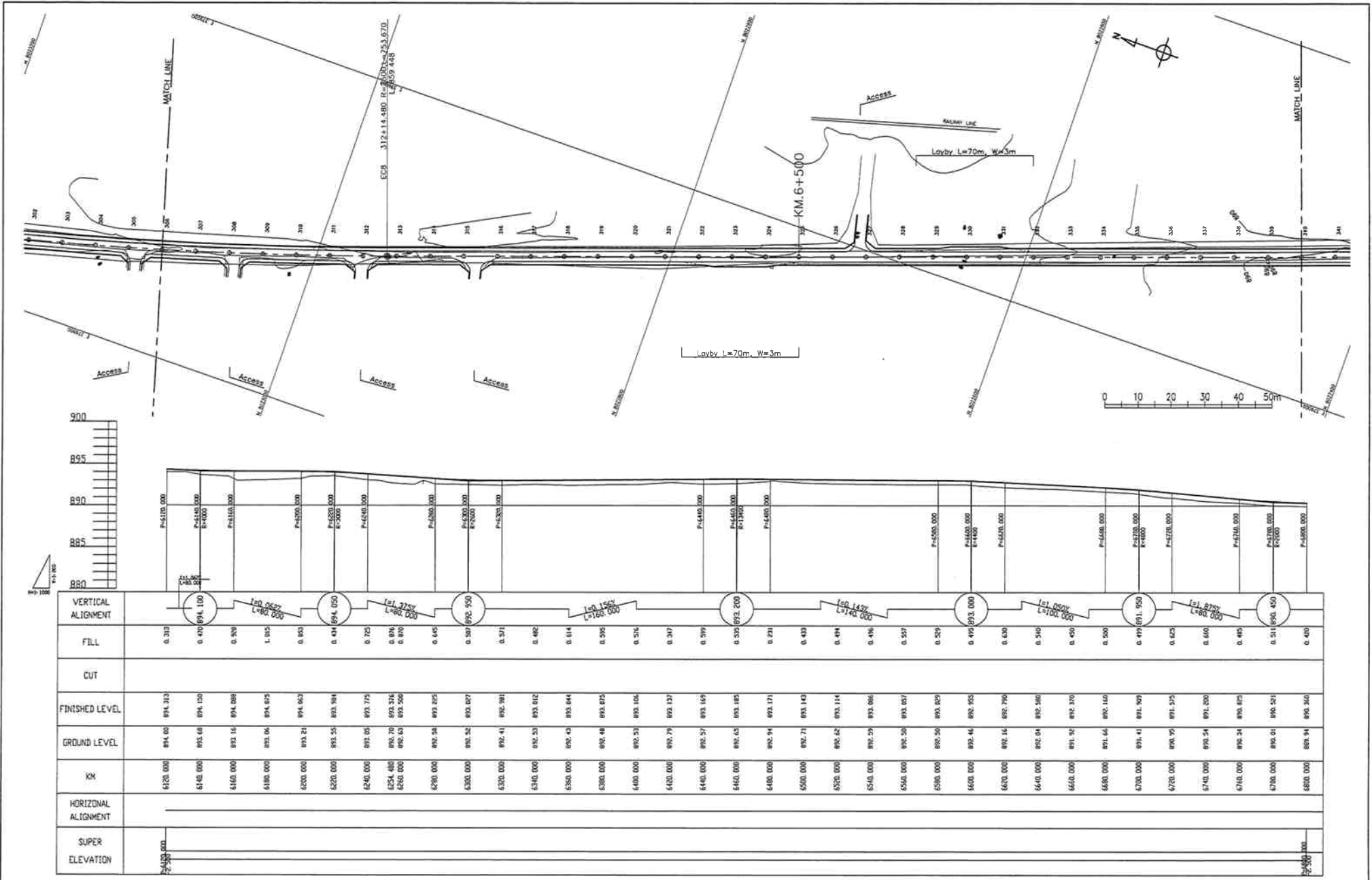
CONSULTANTS:
Construction Project Consultants, INC. (CPC)

PROJECT NAME:
THE PROJECT FOR IMPROVEMENT OF LIVINGSTONE CITY ROADS

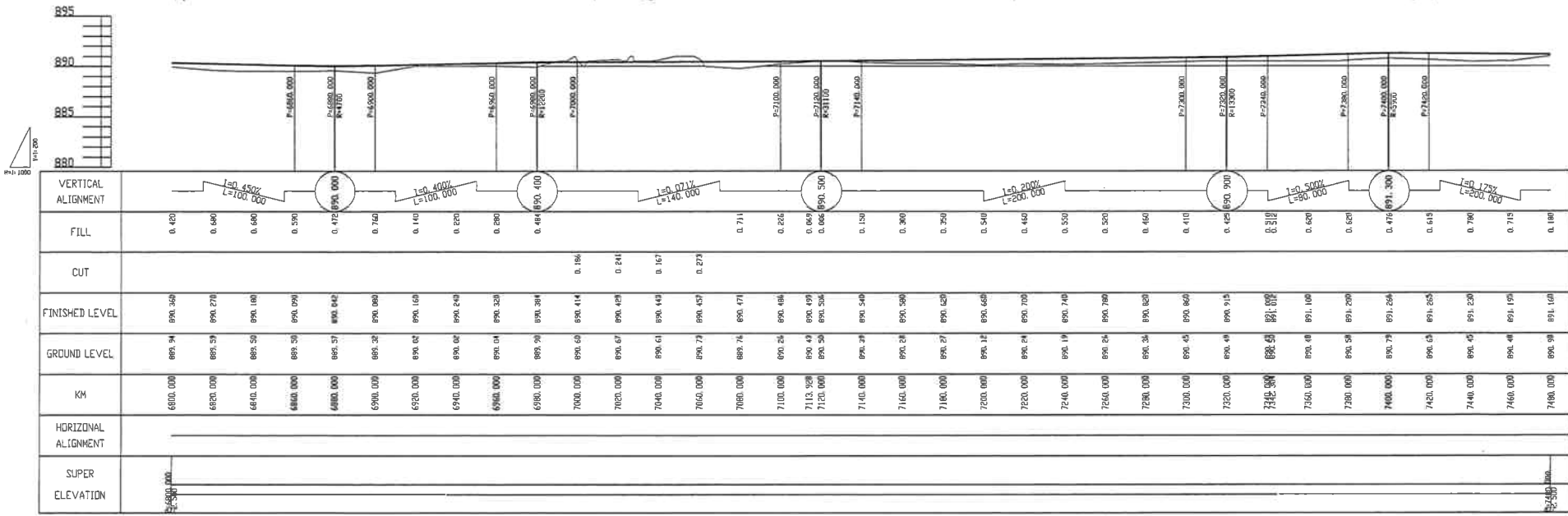
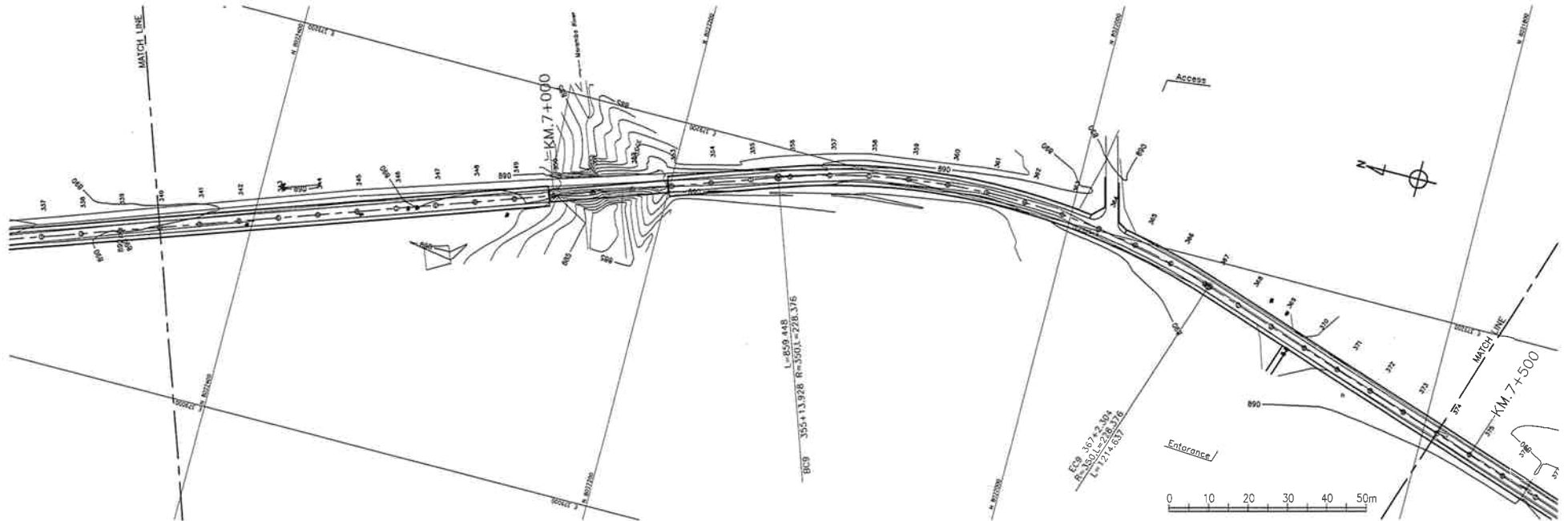
DRAWING TITLE:
PLAN AND PROFILE (10/20)
KM 5+440 - KM 6+120

Date: March 2008
Prepared by:
Checked by:

DRAWING No.:
ZL BD D-10



<ul style="list-style-type: none"> The Ministry of Local Government and Housing of The Republic of Zambia Japan International Cooperation Agency 	CONSULTANTS:	PROJECT NAME:	DRAWING TITLE:	Date: March 2008	DRAWING No.:
	Construction Project Consultants, INC. (CPC)	THE PROJECT FOR IMPROVEMENT OF LIVINGSTONE CITY ROADS	PLAN AND PROFILE (11/20) KM 6+120 - KM 6+800	Prepared by:	ZL BD D-11
				Checked by:	



<ul style="list-style-type: none"> The Ministry of Local Government and Housing of The Republic of Zambia Japan International Cooperation Agency 	CONSULTANTS:	PROJECT NAME:	DRAWING TITLE:	Date: March 2008	DRAWING No.:
	Construction Project Consultants, INC. (CPC)	THE PROJECT FOR IMPROVEMENT OF LIVINGSTONE CITY ROADS	PLAN AND PROFILE (12/20) KM 6+800 - KM 7+480	Prepared by:	ZL BD D-12
				Checked by:	