

# APPENDIX L FORECAST OF FUTURE TRAFFIC

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SECTION	TRAFFIC	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
1 PANLAP - MABOLE	1 NORMAL	31.	34.	37.	40.	43.	46.	50.	54.	58.	63.	68.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	1.	1.	1.	1.	1.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	0.	1.	1.	2.	3.
	4 TOTAL	31.	34.	37.	40.	43.	46.	50.	54.	60.	65.	70.
2 MABOLE - SENDUGU	1 NORMAL	19.	28.	30.	32.	34.	37.	39.	42.	44.	47.	50.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	1.	1.	1.	1.	1.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	4 TOTAL	19.	28.	30.	32.	34.	37.	39.	42.	44.	47.	50.
3 SENDUGU - MASAKUTABA	1 NORMAL	6.	6.	6.	7.	7.	8.	9.	9.	10.	11.	12.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	4 TOTAL	6.	6.	6.	7.	7.	8.	9.	9.	10.	10.	11.
4 MASAKUTABA -BANKABI	1 NORMAL	4.	5.	5.	5.	6.	6.	7.	7.	8.	8.	9.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	4 TOTAL	4.	5.	5.	5.	6.	6.	7.	7.	8.	8.	9.
5 BANKABI - KENENDI	1 NORMAL	8.	10.	11.	12.	13.	13.	14.	15.	16.	18.	19.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	4 TOTAL	8.	10.	11.	12.	13.	13.	14.	15.	16.	17.	18.
6 KENENDI - KAMAKWIE	1 NORMAL	12.	13.	14.	15.	17.	18.	19.	21.	22.	24.	26.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.	1.
	4 TOTAL	12.	13.	14.	15.	17.	18.	19.	20.	22.	24.	26.
SECTION	TRAFFIC	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
1 PANLAP - MABOLE	1 NORMAL	73.	79.	85.	92.	99.	106.	115.	123.	133.	143.	154.
	2 DIVERTED	1.	1.	2.	2.	2.	2.	2.	2.	2.	3.	3.
	3 DEVELOPED	4.	4.	6.	7.	8.	10.	11.	13.	15.	18.	21.
	4 TOTAL	77.	83.	91.	98.	107.	116.	127.	138.	149.	162.	175.
2 MABOLE - SENDUGU	1 NORMAL	53.	57.	61.	64.	68.	73.	77.	82.	87.	93.	98.
	2 DIVERTED	1.	1.	2.	2.	2.	2.	2.	2.	2.	3.	3.
	3 DEVELOPED	3.	3.	4.	5.	6.	7.	8.	9.	10.	12.	13.
	4 TOTAL	56.	60.	64.	69.	74.	79.	86.	92.	99.	105.	113.
3 SENDUGU - MASAKUTABA	1 NORMAL	13.	13.	14.	15.	17.	18.	19.	20.	22.	23.	25.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	1.	1.	1.	1.	1.	2.	2.	2.	3.	3.	3.
	4 TOTAL	12.	13.	14.	16.	17.	18.	19.	22.	23.	25.	27.
4 MASAKUTABA -BANKABI	1 NORMAL	9.	10.	10.	11.	12.	12.	13.	14.	15.	16.	17.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	0.	1.	1.	1.	1.	1.	1.	2.	2.	2.	2.
	4 TOTAL	9.	10.	10.	11.	12.	12.	13.	14.	15.	16.	18.
5 BANKABI - KENENDI	1 NORMAL	20.	21.	23.	24.	26.	27.	29.	31.	33.	35.	37.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	1.	1.	1.	2.	2.	2.	3.	3.	4.	4.	5.
	4 TOTAL	19.	22.	23.	25.	27.	29.	30.	33.	35.	38.	40.
6 KENENDI - KAMAKWIE	1 NORMAL	28.	30.	32.	35.	37.	40.	43.	46.	49.	52.	56.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	1.	2.	2.	3.	3.	4.	4.	5.	6.	7.	8.
	4 TOTAL	28.	30.	34.	36.	40.	42.	46.	49.	53.	58.	63.
SECTION	TRAFFIC	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	
1 PANLAP - MABOLE	1 NORMAL	166.	173.	191.	200.	221.	238.	256.	275.	295.	317.	
	2 DIVERTED	3.	3.	3.	4.	4.	4.	4.	5.	5.	6.	
	3 DEVELOPED	24.	27.	31.	35.	40.	45.	51.	57.	64.	72.	
	4 TOTAL	190.	203.	224.	243.	263.	288.	309.	335.	364.	394.	
2 MABOLE - SENDUGU	1 NORMAL	105.	111.	118.	125.	133.	141.	149.	158.	168.	178.	
	2 DIVERTED	3.	3.	3.	4.	4.	4.	4.	5.	5.	6.	
	3 DEVELOPED	15.	17.	19.	21.	24.	27.	30.	33.	37.	40.	
	4 TOTAL	120.	130.	139.	149.	158.	170.	182.	194.	208.	223.	
3 SENDUGU - MASAKUTABA	1 NORMAL	27.	28.	30.	32.	35.	37.	39.	42.	45.	48.	
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
	3 DEVELOPED	4.	4.	5.	6.	6.	7.	8.	9.	10.	11.	
	4 TOTAL	29.	32.	34.	37.	40.	42.	46.	49.	53.	57.	
4 MASAKUTABA -BANKABI	1 NORMAL	18.	19.	20.	21.	22.	24.	25.	26.	28.	29.	
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
	3 DEVELOPED	3.	3.	3.	4.	4.	4.	5.	5.	6.	7.	
	4 TOTAL	19.	20.	22.	24.	26.	27.	28.	31.	33.	35.	
5 BANKABI - KENENDI	1 NORMAL	39.	41.	44.	46.	49.	52.	55.	58.	62.	65.	
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
	3 DEVELOPED	6.	6.	7.	8.	9.	10.	11.	12.	13.	15.	
	4 TOTAL	44.	47.	50.	53.	57.	61.	65.	70.	74.	79.	
6 KENENDI - KAMAKWIE	1 NORMAL	60.	64.	69.	73.	78.	84.	89.	95.	102.	109.	
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
	3 DEVELOPED	4.	10.	11.	12.	14.	16.	18.	20.	22.	25.	
	4 TOTAL	67.	73.	79.	85.	92.	98.	106.	114.	123.	132.	

SECTION	TRAFFIC	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
1 PANLAP - MABOLE	1 NORMAL	43.	46.	48.	51.	53.	56.	59.	62.	65.	68.	71.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	3.	4.	4.	4.	4.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	0.	1.	2.	2.	3.
	4 TOTAL	43.	46.	48.	50.	53.	56.	61.	67.	71.	74.	78.
2 MABOLE - SENDUGU	1 NORMAL	39.	37.	39.	40.	42.	43.	45.	46.	48.	50.	52.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	3.	4.	4.	4.	4.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	0.	1.	1.	1.	2.
	4 TOTAL	39.	37.	39.	40.	42.	43.	48.	51.	53.	55.	58.
3 SENDUGU - MASAKUTABA	1 NORMAL	24.	27.	28.	29.	31.	32.	33.	35.	36.	38.	39.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	0.	1.	1.	1.	2.
	4 TOTAL	24.	27.	28.	29.	31.	32.	33.	36.	37.	39.	41.
4 MASAKUTABA -BANKABI	1 NORMAL	20.	21.	22.	23.	23.	24.	25.	26.	27.	28.	29.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	4 TOTAL	20.	21.	22.	23.	23.	24.	25.	26.	27.	28.	29.
5 BANKABI - KENENDI	1 NORMAL	26.	28.	28.	29.	31.	32.	33.	34.	35.	36.	37.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	0.	1.	1.	1.	2.
	4 TOTAL	26.	28.	28.	29.	31.	32.	33.	35.	36.	37.	39.
6 KENENDI - KAMAKWIE	1 NORMAL	35.	38.	39.	41.	43.	44.	46.	48.	50.	52.	55.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	0.	1.	1.	2.	2.
	4 TOTAL	35.	38.	39.	41.	43.	44.	46.	49.	51.	54.	57.
SECTION	TRAFFIC	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
1 PANLAP - MABOLE	1 NORMAL	75.	78.	82.	86.	90.	95.	99.	104.	109.	114.	120.
	2 DIVERTED	4.	5.	5.	5.	5.	5.	6.	6.	6.	7.	7.
	3 DEVELOPED	4.	4.	5.	6.	7.	9.	10.	11.	13.	14.	16.
	4 TOTAL	83.	87.	92.	97.	102.	110.	115.	121.	126.	135.	143.
2 MABOLE - SENDUGU	1 NORMAL	53.	55.	57.	59.	62.	64.	66.	68.	71.	73.	76.
	2 DIVERTED	4.	5.	5.	5.	5.	5.	6.	6.	6.	7.	7.
	3 DEVELOPED	3.	3.	4.	4.	5.	6.	7.	7.	8.	9.	10.
	4 TOTAL	59.	62.	64.	67.	71.	75.	79.	81.	85.	89.	93.
3 SENDUGU - MASAKUTABA	1 NORMAL	41.	43.	45.	47.	49.	51.	53.	55.	58.	60.	63.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	2.	2.	3.	3.	4.	5.	5.	6.	7.	8.	8.
	4 TOTAL	42.	44.	46.	49.	53.	56.	58.	61.	65.	67.	70.
4 MASAKUTABA -BANKABI	1 NORMAL	30.	31.	32.	33.	34.	35.	36.	38.	39.	40.	42.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	1.	2.	2.	3.	3.	3.	4.	4.	5.	5.	6.
	4 TOTAL	30.	33.	34.	36.	37.	38.	40.	42.	44.	45.	48.
5 BANKABI - KENENDI	1 NORMAL	39.	40.	42.	43.	44.	46.	48.	49.	51.	53.	54.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	2.	2.	3.	3.	4.	4.	5.	5.	6.	7.	7.
	4 TOTAL	39.	42.	43.	45.	47.	49.	53.	54.	57.	58.	61.
6 KENENDI - KAMAKWIE	1 NORMAL	57.	59.	62.	64.	67.	70.	72.	75.	79.	82.	85.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	3.	3.	4.	5.	5.	6.	7.	8.	9.	10.	11.
	4 TOTAL	58.	62.	65.	69.	72.	76.	79.	83.	87.	91.	96.
SECTION	TRAFFIC	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	
1 PANLAP - MABOLE	1 NORMAL	125.	131.	138.	144.	151.	158.	166.	174.	182.	190.	
	2 DIVERTED	7.	8.	8.	8.	9.	9.	10.	10.	11.	11.	
	3 DEVELOPED	18.	20.	22.	25.	27.	30.	33.	36.	40.	43.	
	4 TOTAL	149.	158.	166.	176.	186.	196.	206.	219.	230.	244.	
2 MABOLE - SENDUGU	1 NORMAL	79.	81.	84.	87.	90.	93.	97.	100.	103.	107.	
	2 DIVERTED	7.	8.	8.	8.	9.	9.	10.	10.	11.	11.	
	3 DEVELOPED	11.	12.	14.	15.	16.	18.	19.	21.	22.	24.	
	4 TOTAL	96.	100.	104.	109.	114.	119.	124.	129.	135.	141.	
3 SENDUGU - MASAKUTABA	1 NORMAL	65.	68.	71.	74.	77.	80.	84.	87.	91.	95.	
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
	3 DEVELOPED	9.	10.	11.	13.	14.	15.	17.	18.	20.	22.	
	4 TOTAL	74.	78.	81.	86.	90.	95.	99.	103.	110.	116.	
4 MASAKUTABA -BANKABI	1 NORMAL	44.	45.	46.	48.	50.	51.	53.	55.	57.	59.	
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
	3 DEVELOPED	6.	7.	7.	8.	9.	10.	11.	11.	12.	13.	
	4 TOTAL	49.	50.	53.	55.	57.	60.	63.	65.	68.	71.	
5 BANKABI - KENENDI	1 NORMAL	56.	58.	60.	62.	64.	67.	69.	71.	74.	76.	
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
	3 DEVELOPED	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	
	4 TOTAL	64.	66.	69.	72.	75.	78.	81.	85.	89.	93.	
6 KENENDI - KAMAKWIE	1 NORMAL	89.	92.	96.	100.	104.	108.	112.	117.	122.	127.	
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
	3 DEVELOPED	13.	14.	15.	17.	19.	20.	22.	24.	26.	29.	
	4 TOTAL	100.	106.	110.	116.	121.	128.	134.	141.	147.	154.	

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SECTION	TRAFFIC	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
1 PANLAP - MABOLE												
	1 NORMAL	26.	27.	28.	29.	31.	32.	38.	39.	40.	41.	42.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	1.	1.	1.	1.	1.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.	2.
	4 TOTAL	26.	27.	28.	29.	30.	31.	38.	39.	40.	42.	44.
2 MABOLE - SENDUGU												
	1 NORMAL	25.	26.	27.	28.	29.	31.	37.	38.	39.	40.	41.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	1.	1.	1.	1.	1.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.	2.
	4 TOTAL	25.	26.	27.	28.	29.	30.	36.	37.	38.	40.	41.
3 SENDUGU - MASAKUTABA												
	1 NORMAL	19.	20.	21.	21.	22.	23.	27.	28.	28.	29.	30.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.	1.
	4 TOTAL	19.	19.	20.	21.	22.	23.	26.	27.	28.	29.	30.
4 MASAKUTABA -BANKABI												
	1 NORMAL	17.	18.	18.	19.	20.	20.	23.	24.	24.	25.	26.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.
	4 TOTAL	17.	17.	18.	18.	19.	20.	23.	23.	24.	24.	25.
5 BANKABI - KENENDI												
	1 NORMAL	16.	17.	17.	18.	19.	19.	22.	22.	23.	23.	24.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.
	4 TOTAL	16.	16.	17.	17.	18.	19.	21.	22.	22.	23.	24.
6 KENENDI - KAMAKWIE												
	1 NORMAL	12.	12.	13.	13.	14.	14.	15.	15.	16.	16.	16.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	4 TOTAL	12.	12.	12.	13.	13.	13.	14.	15.	15.	16.	16.

SECTION	TRAFFIC	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
1 PANLAP - MABOLE												
	1 NORMAL	43.	44.	46.	47.	48.	49.	50.	51.	52.	53.	55.
	2 DIVERTED	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
	3 DEVELOPED	3.	5.	6.	7.	7.	8.	9.	10.	11.	12.	13.
	4 TOTAL	45.	48.	50.	52.	54.	57.	59.	61.	63.	65.	67.
2 MABOLE - SENDUGU												
	1 NORMAL	41.	42.	43.	44.	46.	47.	48.	49.	50.	51.	52.
	2 DIVERTED	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
	3 DEVELOPED	3.	5.	5.	6.	7.	8.	8.	9.	10.	11.	12.
	4 TOTAL	43.	46.	48.	50.	51.	54.	56.	58.	60.	61.	63.
3 SENDUGU - MASAKUTABA												
	1 NORMAL	31.	31.	32.	33.	34.	34.	35.	36.	37.	38.	39.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	2.	3.	3.	4.	4.	5.	5.	6.	6.	7.	7.
	4 TOTAL	31.	33.	35.	35.	37.	38.	40.	40.	42.	43.	45.
4 MASAKUTABA -BANKABI												
	1 NORMAL	26.	27.	27.	28.	29.	29.	30.	31.	31.	32.	33.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	1.	2.	2.	3.	3.	4.	4.	4.	5.	5.	5.
	4 TOTAL	27.	28.	29.	30.	31.	32.	33.	34.	35.	37.	37.
5 BANKABI - KENENDI												
	1 NORMAL	25.	25.	26.	26.	27.	28.	28.	29.	30.	30.	31.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	1.	2.	2.	3.	3.	3.	3.	4.	4.	5.	5.
	4 TOTAL	25.	26.	27.	28.	29.	30.	31.	32.	33.	34.	35.
6 KENENDI - KAMAKWIE												
	1 NORMAL	17.	17.	18.	18.	18.	19.	19.	20.	20.	21.	21.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	0.	1.	1.	1.	1.	1.	1.	1.	1.	2.	2.
	4 TOTAL	16.	17.	17.	18.	18.	19.	20.	20.	21.	21.	22.

SECTION	TRAFFIC	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
1 PANLAP - MABOLE											
	1 NORMAL	56.	57.	58.	59.	60.	60.	61.	61.	62.	62.
	2 DIVERTED	1.	1.	1.	1.	2.	2.	2.	2.	2.	2.
	3 DEVELOPED	14.	14.	15.	16.	17.	18.	18.	19.	19.	20.
	4 TOTAL	69.	71.	73.	75.	77.	78.	79.	80.	81.	82.
2 MABOLE - SENDUGU											
	1 NORMAL	53.	54.	55.	56.	57.	57.	58.	58.	59.	59.
	2 DIVERTED	1.	1.	1.	1.	2.	2.	2.	2.	2.	2.
	3 DEVELOPED	13.	13.	14.	15.	16.	16.	17.	17.	18.	18.
	4 TOTAL	65.	67.	69.	71.	72.	74.	74.	76.	76.	78.
3 SENDUGU - MASAKUTABA											
	1 NORMAL	39.	40.	41.	42.	42.	43.	43.	44.	44.	45.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	8.	8.	9.	9.	10.	10.	11.	11.	11.	11.
	4 TOTAL	46.	48.	48.	50.	52.	52.	53.	53.	55.	55.
4 MASAKUTABA -BANKABI											
	1 NORMAL	33.	34.	35.	35.	36.	37.	37.	37.	38.	38.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	6.	6.	7.	7.	8.	8.	8.	8.	8.	8.
	4 TOTAL	38.	40.	40.	42.	43.	43.	43.	45.	45.	46.
5 BANKABI - KENENDI											
	1 NORMAL	32.	32.	33.	34.	34.	35.	35.	36.	36.	37.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	5.	6.	6.	7.	7.	7.	7.	7.	7.	8.
	4 TOTAL	36.	37.	37.	39.	40.	40.	42.	42.	43.	43.
6 KENENDI - KAMAKWIE											
	1 NORMAL	22.	22.	23.	23.	24.	24.	25.	25.	26.	26.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	2.	2.	2.	2.	2.	2.	2.	3.	3.	3.
	4 TOTAL	22.	23.	24.	25.	25.	26.	26.	27.	27.	28.

SECTION	TRAFFIC	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
1 PANLAP - MABOLE	1 NORMAL	30.	31.	32.	34.	35.	37.	39.	41.	43.	45.	47.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	3.	3.	4.	4.	4.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	0.	1.	1.	1.	2.
	4 TOTAL	30.	30.	32.	33.	35.	37.	42.	44.	47.	49.	51.
2 MABOLE - SENDUGU	1 NORMAL	28.	26.	27.	28.	29.	30.	31.	32.	34.	35.	36.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	3.	3.	4.	4.	4.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	0.	1.	1.	1.	1.
	4 TOTAL	28.	26.	27.	28.	29.	30.	34.	35.	36.	38.	39.
3 SENDUGU - MASAKUTABA	1 NORMAL	25.	25.	26.	27.	28.	30.	31.	32.	34.	35.	37.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	0.	1.	1.	1.	1.
	4 TOTAL	25.	24.	25.	27.	28.	29.	30.	32.	33.	36.	38.
4 MASAKUTABA -BANKABI	1 NORMAL	23.	23.	24.	25.	26.	27.	27.	28.	29.	30.	31.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	0.	1.	1.	1.	1.
	4 TOTAL	23.	23.	24.	24.	25.	26.	27.	28.	29.	30.	31.
5 BANKABI - KENENDI	1 NORMAL	28.	28.	29.	30.	31.	32.	33.	34.	36.	37.	38.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	0.	1.	1.	1.	2.
	4 TOTAL	28.	28.	29.	30.	31.	32.	33.	34.	35.	37.	39.
6 KENENDI - KAMAKWIE	1 NORMAL	33.	34.	35.	37.	38.	40.	42.	44.	46.	48.	50.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	0.	1.	1.	2.	2.
	4 TOTAL	33.	33.	35.	36.	38.	40.	41.	43.	46.	48.	52.
SECTION	TRAFFIC	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
1 PANLAP - MABOLE	1 NORMAL	50.	52.	55.	57.	60.	63.	66.	69.	73.	76.	80.
	2 DIVERTED	4.	4.	5.	5.	5.	5.	6.	6.	6.	6.	7.
	3 DEVELOPED	2.	3.	4.	4.	5.	6.	7.	7.	8.	10.	11.
	4 TOTAL	55.	58.	61.	65.	68.	73.	77.	81.	86.	91.	95.
2 MABOLE - SENDUGU	1 NORMAL	37.	38.	40.	41.	43.	44.	45.	47.	49.	50.	52.
	2 DIVERTED	4.	4.	5.	5.	5.	5.	6.	6.	6.	6.	7.
	3 DEVELOPED	2.	2.	3.	3.	3.	4.	5.	5.	6.	6.	7.
	4 TOTAL	42.	44.	45.	48.	49.	51.	54.	56.	59.	62.	63.
3 SENDUGU - MASAKUTABA	1 NORMAL	39.	41.	42.	44.	46.	48.	51.	53.	55.	58.	61.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	2.	2.	3.	3.	4.	4.	5.	5.	6.	7.	8.
	4 TOTAL	39.	42.	44.	47.	49.	52.	55.	58.	61.	65.	68.
4 MASAKUTABA -BANKABI	1 NORMAL	32.	33.	34.	35.	36.	37.	38.	40.	41.	42.	43.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	2.	2.	3.	3.	3.	3.	4.	4.	5.	5.	6.
	4 TOTAL	32.	33.	36.	37.	38.	40.	41.	43.	44.	47.	48.
5 BANKABI - KENENDI	1 NORMAL	39.	41.	42.	44.	45.	47.	48.	50.	51.	53.	55.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	2.	2.	3.	3.	4.	4.	5.	5.	6.	7.	7.
	4 TOTAL	40.	42.	44.	46.	48.	50.	52.	54.	56.	59.	61.
6 KENENDI - KAMAKWIE	1 NORMAL	52.	55.	57.	60.	63.	65.	68.	71.	75.	78.	82.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	3.	3.	4.	4.	5.	6.	7.	8.	9.	10.	11.
	4 TOTAL	54.	57.	60.	63.	67.	70.	74.	78.	82.	87.	91.
SECTION	TRAFFIC	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	
1 PANLAP - MABOLE	1 NORMAL	84.	88.	92.	96.	101.	106.	110.	116.	121.	127.	
	2 DIVERTED	7.	7.	8.	8.	9.	9.	10.	10.	11.	11.	
	3 DEVELOPED	12.	13.	15.	16.	18.	20.	22.	24.	26.	29.	
	4 TOTAL	101.	107.	112.	120.	126.	133.	140.	148.	157.	165.	
2 MABOLE - SENDUGU	1 NORMAL	54.	55.	57.	59.	61.	63.	65.	67.	69.	71.	
	2 DIVERTED	7.	7.	8.	8.	9.	9.	10.	10.	11.	11.	
	3 DEVELOPED	8.	8.	9.	10.	11.	12.	13.	14.	15.	16.	
	4 TOTAL	67.	70.	73.	76.	78.	82.	85.	88.	94.	98.	
3 SENDUGU - MASAKUTABA	1 NORMAL	63.	66.	69.	73.	76.	79.	83.	87.	91.	95.	
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
	3 DEVELOPED	9.	10.	11.	12.	14.	15.	16.	18.	20.	22.	
	4 TOTAL	72.	76.	80.	84.	88.	94.	99.	104.	109.	116.	
4 MASAKUTABA -BANKABI	1 NORMAL	45.	46.	48.	49.	51.	52.	54.	55.	57.	59.	
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
	3 DEVELOPED	6.	7.	8.	8.	9.	10.	11.	12.	12.	13.	
	4 TOTAL	50.	53.	54.	57.	59.	61.	63.	66.	69.	71.	
5 BANKABI - KENENDI	1 NORMAL	57.	59.	61.	63.	65.	67.	69.	71.	74.	76.	
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
	3 DEVELOPED	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	
	4 TOTAL	64.	66.	69.	72.	75.	78.	82.	85.	89.	93.	
6 KENENDI - KAMAKWIE	1 NORMAL	85.	89.	93.	97.	102.	106.	111.	116.	121.	127.	
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
	3 DEVELOPED	12.	14.	15.	17.	18.	20.	22.	24.	26.	29.	
	4 TOTAL	97.	102.	108.	113.	119.	126.	132.	139.	147.	154.	

= TRUCK =

SECTION	TRAFFIC	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
1 PANLAP - MABOLE	1 NORMAL	18.	18.	19.	20.	21.	22.	27.	27.	28.	29.	30.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.	2.
	4 TOTAL	17.	18.	19.	20.	20.	21.	26.	27.	28.	29.	30.
2 MABOLE - SENDUGU	1 NORMAL	17.	18.	19.	19.	20.	21.	25.	26.	27.	27.	28.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.	1.
	4 TOTAL	17.	17.	18.	19.	20.	20.	25.	26.	28.	29.	29.
3 SENDUGU - MASAKUTABA	1 NORMAL	13.	13.	14.	14.	15.	15.	18.	19.	19.	20.	20.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.
	4 TOTAL	12.	13.	13.	14.	14.	15.	18.	18.	19.	19.	20.
4 MASAKUTABA -BANKABI	1 NORMAL	11.	12.	12.	12.	13.	13.	15.	16.	16.	17.	17.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	4 TOTAL	11.	11.	11.	12.	12.	13.	15.	15.	16.	16.	17.
5 BANKABI - KENENDI	1 NORMAL	11.	11.	11.	12.	12.	12.	14.	15.	15.	16.	16.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	4 TOTAL	10.	10.	11.	11.	12.	12.	14.	14.	15.	15.	15.
6 KENENDI - KAMAKWIE	1 NORMAL	7.	8.	8.	8.	8.	9.	9.	10.	10.	10.	10.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	4 TOTAL	7.	7.	7.	8.	8.	8.	9.	9.	9.	10.	10.

SECTION	TRAFFIC	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
1 PANLAP - MABOLE	1 NORMAL	30.	31.	32.	33.	33.	34.	35.	36.	37.	37.	38.
	2 DIVERTED	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
	3 DEVELOPED	2.	4.	4.	5.	5.	6.	7.	7.	8.	9.	9.
	4 TOTAL	32.	34.	35.	36.	38.	40.	40.	42.	44.	45.	47.
2 MABOLE - SENDUGU	1 NORMAL	29.	30.	30.	31.	32.	32.	33.	34.	35.	35.	36.
	2 DIVERTED	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
	3 DEVELOPED	2.	3.	4.	5.	5.	6.	7.	7.	8.	8.	9.
	4 TOTAL	29.	32.	34.	34.	36.	37.	39.	39.	41.	43.	44.
3 SENDUGU - MASAKUTABA	1 NORMAL	21.	21.	22.	22.	23.	23.	24.	24.	25.	26.	26.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	1.	2.	2.	3.	3.	4.	4.	4.	5.	5.	5.
	4 TOTAL	21.	23.	23.	24.	25.	26.	26.	28.	29.	30.	31.
4 MASAKUTABA -BANKABI	1 NORMAL	17.	18.	18.	19.	19.	20.	20.	21.	21.	21.	22.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	1.	1.	2.	2.	2.	3.	3.	3.	3.	4.	4.
	4 TOTAL	17.	18.	19.	20.	21.	21.	22.	23.	24.	24.	25.
5 BANKABI - KENENDI	1 NORMAL	16.	17.	17.	18.	18.	18.	19.	19.	20.	20.	21.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	1.	1.	1.	2.	2.	2.	3.	3.	3.	3.	4.
	4 TOTAL	16.	17.	18.	18.	19.	20.	20.	21.	22.	23.	23.
6 KENENDI - KAMAKWIE	1 NORMAL	11.	11.	11.	11.	12.	12.	12.	12.	13.	13.	13.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	0.	0.	1.	1.	1.	1.	1.	1.	1.	1.	1.
	4 TOTAL	10.	10.	11.	11.	11.	11.	12.	12.	13.	14.	14.

SECTION	TRAFFIC	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
1 PANLAP - MABOLE	1 NORMAL	39.	40.	40.	41.	42.	42.	42.	43.	43.	43.
	2 DIVERTED	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
	3 DEVELOPED	10.	11.	11.	12.	13.	13.	14.	14.	14.	15.
	4 TOTAL	48.	50.	52.	53.	54.	55.	56.	57.	57.	58.
2 MABOLE - SENDUGU	1 NORMAL	37.	37.	38.	39.	39.	40.	40.	41.	41.	41.
	2 DIVERTED	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
	3 DEVELOPED	9.	10.	11.	11.	12.	12.	13.	13.	13.	14.
	4 TOTAL	45.	48.	49.	50.	51.	52.	52.	53.	54.	54.
3 SENDUGU - MASAKUTABA	1 NORMAL	27.	27.	28.	28.	29.	29.	29.	30.	30.	30.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	6.	6.	7.	7.	7.	8.	8.	8.	8.	9.
	4 TOTAL	31.	33.	33.	35.	35.	36.	36.	37.	37.	38.
4 MASAKUTABA -BANKABI	1 NORMAL	22.	23.	23.	24.	24.	24.	25.	25.	25.	25.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	4.	5.	5.	5.	6.	6.	6.	6.	6.	6.
	4 TOTAL	26.	26.	27.	28.	29.	29.	29.	30.	31.	31.
5 BANKABI - KENENDI	1 NORMAL	21.	21.	22.	22.	23.	23.	23.	24.	24.	24.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	4.	4.	5.	5.	5.	5.	5.	5.	5.	6.
	4 TOTAL	24.	25.	25.	26.	26.	28.	28.	28.	28.	29.
6 KENENDI - KAMAKWIE	1 NORMAL	14.	14.	14.	15.	15.	15.	15.	16.	16.	16.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	1.	1.	2.	2.	2.	2.	2.	2.	2.	2.
	4 TOTAL	14.	14.	15.	15.	15.	16.	16.	16.	17.	17.

## EXTRA HEAVY VEHICLES

SECTION	TRAFFIC	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
1 PANLAP - MABOLE	1 NORMAL	12.	13.	13.	14.	15.	16.	20.	21.	21.	22.	23.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.	2.
	4 TOTAL	12.	12.	13.	14.	14.	15.	20.	20.	21.	23.	23.
2 MABOLE - SENDUGU	1 NORMAL	12.	12.	13.	13.	14.	15.	19.	20.	20.	21.	21.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.	1.
	4 TOTAL	11.	12.	12.	13.	14.	14.	19.	19.	20.	21.	22.
3 SENDUGU - MASAKUTABA	1 NORMAL	7.	8.	8.	9.	9.	9.	12.	13.	13.	13.	14.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.
	4 TOTAL	7.	7.	8.	8.	9.	9.	12.	12.	12.	13.	13.
4 MASAKUTABA -BANKABI	1 NORMAL	6.	6.	7.	7.	7.	7.	9.	10.	10.	10.	10.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.
	4 TOTAL	5.	6.	6.	6.	7.	7.	9.	9.	10.	10.	10.
5 BANKABI - KENENDI	1 NORMAL	5.	6.	6.	6.	6.	7.	9.	9.	9.	9.	10.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	4 TOTAL	5.	5.	5.	6.	6.	6.	8.	8.	9.	9.	9.
6 KENENDI - KAMAKWIE	1 NORMAL	2.	3.	3.	3.	3.	3.	4.	4.	4.	4.	4.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	4 TOTAL	2.	2.	2.	2.	2.	3.	3.	3.	3.	3.	4.
SECTION	TRAFFIC	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
1 PANLAP - MABOLE	1 NORMAL	23.	24.	24.	25.	26.	26.	27.	28.	28.	29.	29.
	2 DIVERTED	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
	3 DEVELOPED	2.	4.	4.	5.	5.	6.	7.	7.	8.	9.	9.
	4 TOTAL	25.	26.	28.	29.	30.	32.	32.	34.	35.	36.	38.
2 MABOLE - SENDUGU	1 NORMAL	22.	22.	23.	23.	24.	25.	25.	26.	26.	27.	28.
	2 DIVERTED	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
	3 DEVELOPED	2.	3.	4.	5.	5.	6.	6.	7.	7.	8.	9.
	4 TOTAL	22.	25.	25.	27.	29.	29.	31.	31.	33.	34.	35.
3 SENDUGU - MASAKUTABA	1 NORMAL	14.	14.	15.	15.	15.	16.	16.	17.	17.	17.	18.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	1.	2.	2.	3.	3.	3.	4.	4.	5.	5.	5.
	4 TOTAL	14.	16.	16.	17.	18.	18.	19.	20.	21.	22.	22.
4 MASAKUTABA -BANKABI	1 NORMAL	11.	11.	11.	12.	12.	12.	13.	13.	13.	13.	14.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	1.	2.	2.	2.	2.	3.	3.	3.	3.	4.	4.
	4 TOTAL	10.	12.	12.	13.	13.	14.	14.	15.	16.	16.	17.
5 BANKABI - KENENDI	1 NORMAL	10.	10.	10.	11.	11.	11.	11.	12.	12.	12.	12.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	1.	1.	2.	2.	2.	2.	3.	3.	3.	3.	4.
	4 TOTAL	9.	11.	11.	11.	12.	13.	13.	13.	14.	15.	15.
6 KENENDI - KAMAKWIE	1 NORMAL	4.	4.	4.	5.	5.	5.	5.	5.	5.	5.	5.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	0.	0.	1.	1.	1.	1.	1.	1.	1.	1.	1.
	4 TOTAL	4.	4.	4.	4.	4.	4.	4.	5.	6.	6.	6.
SECTION	TRAFFIC	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	
1 PANLAP - MABOLE	1 NORMAL	30.	30.	31.	31.	32.	32.	32.	32.	32.	32.	
	2 DIVERTED	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	
	3 DEVELOPED	10.	11.	11.	12.	13.	13.	13.	14.	14.	15.	
	4 TOTAL	39.	40.	42.	44.	44.	46.	46.	46.	47.	47.	
2 MABOLE - SENDUGU	1 NORMAL	28.	28.	29.	29.	30.	30.	30.	30.	30.	30.	
	2 DIVERTED	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	
	3 DEVELOPED	9.	10.	11.	11.	12.	12.	12.	13.	13.	13.	
	4 TOTAL	36.	37.	39.	41.	41.	42.	42.	42.	44.	44.	
3 SENDUGU - MASAKUTABA	1 NORMAL	18.	18.	19.	19.	19.	20.	20.	20.	20.	20.	
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
	3 DEVELOPED	6.	6.	7.	7.	7.	8.	8.	8.	8.	8.	
	4 TOTAL	23.	24.	24.	25.	26.	26.	26.	27.	27.	27.	
4 MASAKUTABA -BANKABI	1 NORMAL	14.	14.	14.	15.	15.	15.	15.	15.	15.	15.	
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
	3 DEVELOPED	4.	5.	5.	5.	5.	6.	6.	6.	6.	6.	
	4 TOTAL	17.	18.	18.	19.	19.	19.	20.	20.	21.	21.	
5 BANKABI - KENENDI	1 NORMAL	13.	13.	13.	13.	14.	14.	14.	14.	14.	14.	
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
	3 DEVELOPED	4.	4.	4.	5.	5.	5.	5.	5.	5.	5.	
	4 TOTAL	15.	16.	17.	17.	17.	18.	18.	18.	18.	18.	
6 KENENDI - KAMAKWIE	1 NORMAL	6.	6.	6.	6.	6.	6.	6.	6.	6.	6.	
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
	3 DEVELOPED	1.	1.	1.	2.	2.	2.	2.	2.	2.	2.	
	4 TOTAL	6.	6.	6.	6.	7.	7.	7.	7.	7.	7.	

= TOTAL =

SECTION	TRAFFIC	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
1 PANLAP - MABOLE	1 NORMAL	160.	169.	178.	188.	193.	209.	233.	244.	256.	268.	281.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	9.	9.	10.	11.	11.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	1.	3.	6.	9.	13.
	4 TOTAL	160.	169.	178.	187.	197.	208.	240.	256.	270.	287.	303.
2 MABOLE - SENDUGU	1 NORMAL	136.	148.	155.	162.	169.	176.	196.	204.	212.	219.	228.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	9.	9.	10.	11.	11.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	1.	3.	5.	8.	10.
	4 TOTAL	136.	147.	154.	161.	168.	176.	204.	214.	225.	236.	248.
3 SENDUGU - MASAKUTABA	1 NORMAL	95.	99.	103.	108.	112.	117.	130.	135.	141.	146.	152.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	0.	2.	3.	5.	7.
	4 TOTAL	94.	98.	102.	107.	112.	117.	130.	136.	143.	150.	157.
4 MASAKUTABA - BANKABI	1 NORMAL	51.	84.	88.	91.	94.	98.	107.	111.	114.	118.	121.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	0.	1.	2.	4.	5.
	4 TOTAL	51.	84.	87.	90.	94.	97.	106.	111.	116.	120.	125.
5 BANKABI - KENENDI	1 NORMAL	94.	99.	103.	107.	111.	116.	125.	130.	134.	139.	144.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	1.	2.	3.	4.	6.
	4 TOTAL	94.	99.	102.	107.	111.	115.	125.	130.	136.	143.	148.
6 KENENDI - KAKAKWIE	1 NORMAL	102.	107.	112.	117.	122.	128.	135.	141.	148.	154.	161.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	0.	0.	0.	0.	0.	0.	1.	2.	3.	4.	6.
	4 TOTAL	101.	106.	111.	116.	122.	127.	135.	142.	150.	158.	166.

SECTION	TRAFFIC	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
1 PANLAP - MABOLE	1 NORMAL	294.	309.	324.	339.	356.	373.	392.	411.	432.	453.	476.
	2 DIVERTED	12.	12.	13.	14.	14.	15.	16.	17.	18.	19.	20.
	3 DEVELOPED	16.	24.	29.	34.	39.	44.	50.	57.	63.	71.	79.
	4 TOTAL	321.	344.	364.	385.	407.	432.	456.	483.	511.	541.	572.
2 MABOLE - SENDUGU	1 NORMAL	236.	245.	254.	264.	274.	284.	295.	306.	317.	329.	342.
	2 DIVERTED	12.	12.	13.	14.	14.	15.	16.	17.	18.	19.	20.
	3 DEVELOPED	13.	20.	24.	27.	31.	35.	40.	44.	49.	54.	60.
	4 TOTAL	260.	276.	290.	303.	318.	333.	348.	355.	383.	401.	419.
3 SENDUGU - MASAKUTABA	1 NORMAL	158.	164.	170.	177.	183.	191.	198.	206.	214.	222.	231.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	8.	13.	15.	17.	20.	22.	25.	29.	31.	35.	38.
	4 TOTAL	165.	175.	184.	193.	202.	212.	222.	233.	244.	256.	268.
4 MASAKUTABA - BANKABI	1 NORMAL	125.	129.	133.	138.	142.	146.	151.	156.	160.	165.	171.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	6.	9.	11.	13.	15.	18.	18.	20.	23.	25.	27.
	4 TOTAL	131.	138.	144.	149.	155.	162.	168.	175.	182.	189.	197.
5 BANKABI - KENENDI	1 NORMAL	149.	154.	160.	165.	171.	177.	183.	190.	196.	203.	210.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	7.	10.	12.	14.	16.	18.	21.	23.	26.	29.	32.
	4 TOTAL	155.	164.	171.	179.	187.	195.	203.	212.	222.	231.	241.
6 KENENDI - KAKAKWIE	1 NORMAL	169.	176.	184.	192.	201.	210.	220.	230.	240.	251.	263.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	7.	10.	12.	14.	16.	18.	21.	24.	27.	30.	34.
	4 TOTAL	175.	185.	195.	205.	216.	226.	240.	252.	267.	281.	296.

SECTION	TRAFFIC	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
1 PANLAP - MABOLE	1 NORMAL	499.	524.	550.	577.	607.	636.	667.	700.	735.	772.
	2 DIVERTED	21.	22.	23.	24.	25.	26.	27.	29.	30.	32.
	3 DEVELOPED	87.	98.	106.	117.	128.	139.	151.	164.	178.	193.
	4 TOTAL	606.	640.	677.	718.	758.	800.	844.	891.	941.	995.
2 MABOLE - SENDUGU	1 NORMAL	354.	367.	381.	395.	409.	424.	439.	453.	469.	486.
	2 DIVERTED	21.	22.	23.	24.	25.	26.	27.	29.	30.	32.
	3 DEVELOPED	65.	71.	77.	84.	91.	97.	104.	111.	118.	126.
	4 TOTAL	439.	459.	479.	500.	524.	545.	568.	591.	617.	643.
3 SENDUGU - MASAKUTABA	1 NORMAL	239.	249.	258.	268.	278.	288.	298.	309.	321.	332.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	42.	48.	50.	54.	59.	65.	67.	72.	77.	83.
	4 TOTAL	280.	293.	307.	321.	336.	350.	365.	381.	397.	414.
4 MASAKUTABA - BANKABI	1 NORMAL	176.	191.	196.	198.	198.	203.	208.	214.	220.	226.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	30.	32.	35.	38.	40.	43.	46.	48.	51.	54.
	4 TOTAL	204.	212.	220.	226.	237.	244.	253.	262.	271.	280.
5 BANKABI - KENENDI	1 NORMAL	218.	225.	233.	241.	249.	257.	266.	274.	283.	293.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	35.	38.	41.	45.	49.	52.	56.	60.	64.	68.
	4 TOTAL	251.	262.	273.	284.	297.	309.	320.	333.	346.	360.
6 KENENDI - KAKAKWIE	1 NORMAL	275.	287.	300.	314.	329.	343.	359.	375.	393.	410.
	2 DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	3 DEVELOPED	38.	42.	47.	51.	57.	62.	68.	75.	81.	89.
	4 TOTAL	311.	329.	346.	365.	384.	405.	427.	449.	473.	498.

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SECTION	TRAFFIC	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
1 PANLAP - MABOLE												
1	NORMAL	221.	232.	244.	257.	271.	285.	326.	341.	356.	371.	387.
2	DIVERTED	0.	0.	0.	0.	0.	0.	12.	13.	13.	14.	15.
3	DEVELOPED	0.	0.	0.	0.	0.	0.	1.	4.	7.	14.	19.
4	TOTAL	220.	231.	244.	257.	270.	284.	338.	357.	377.	398.	419.
2 MABOLE - SENDUGU												
1	NORMAL	193.	206.	216.	225.	236.	246.	282.	292.	305.	313.	324.
2	DIVERTED	0.	0.	0.	0.	0.	0.	12.	13.	13.	14.	15.
3	DEVELOPED	0.	0.	0.	0.	0.	0.	1.	4.	8.	12.	16.
4	TOTAL	193.	206.	215.	225.	235.	246.	293.	307.	322.	337.	353.
3 SENDUGU - MASAKUTABA												
1	NORMAL	136.	141.	147.	154.	161.	168.	191.	199.	206.	213.	221.
2	DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
3	DEVELOPED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
4	TOTAL	135.	140.	147.	154.	161.	168.	191.	200.	206.	213.	221.
4 MASAKUTABA - BANKABI												
1	NORMAL	116.	120.	125.	130.	139.	140.	157.	162.	167.	172.	177.
2	DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
3	DEVELOPED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
4	TOTAL	116.	120.	125.	130.	139.	140.	157.	162.	167.	172.	177.
5 BANKABI - KENENDI												
1	NORMAL	129.	135.	141.	146.	152.	158.	175.	181.	187.	193.	200.
2	DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
3	DEVELOPED	0.	0.	0.	0.	0.	0.	1.	2.	4.	6.	9.
4	TOTAL	129.	135.	140.	146.	152.	158.	174.	182.	190.	199.	207.
6 KENENDI - KAMAKWIE												
1	NORMAL	130.	135.	141.	148.	154.	161.	172.	179.	187.	195.	204.
2	DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
3	DEVELOPED	0.	0.	0.	0.	0.	0.	1.	2.	4.	6.	8.
4	TOTAL	129.	135.	141.	147.	154.	161.	171.	181.	190.	200.	210.
SECTION												
1 PANLAP - MABOLE												
1	NORMAL	404.	422.	440.	459.	480.	501.	523.	546.	571.	596.	623.
2	DIVERTED	16.	17.	18.	18.	19.	20.	21.	23.	24.	25.	26.
3	DEVELOPED	25.	38.	46.	53.	60.	68.	77.	86.	96.	106.	117.
4	TOTAL	443.	475.	502.	528.	558.	588.	619.	653.	688.	726.	766.
2 MABOLE - SENDUGU												
1	NORMAL	335.	346.	358.	370.	383.	396.	410.	424.	438.	453.	468.
2	DIVERTED	16.	17.	18.	18.	19.	20.	21.	23.	24.	25.	26.
3	DEVELOPED	21.	33.	39.	45.	51.	57.	64.	71.	78.	86.	94.
4	TOTAL	369.	394.	413.	432.	451.	471.	493.	515.	537.	561.	587.
3 SENDUGU - MASAKUTABA												
1	NORMAL	229.	238.	246.	255.	264.	274.	284.	294.	305.	316.	328.
2	DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
3	DEVELOPED	13.	21.	25.	29.	33.	37.	41.	46.	51.	56.	61.
4	TOTAL	242.	257.	270.	283.	296.	310.	325.	339.	355.	371.	388.
4 MASAKUTABA - BANKABI												
1	NORMAL	183.	188.	194.	200.	205.	212.	218.	224.	231.	238.	245.
2	DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
3	DEVELOPED	10.	16.	19.	21.	24.	27.	30.	34.	37.	41.	44.
4	TOTAL	192.	203.	211.	220.	229.	238.	247.	257.	267.	277.	288.
5 BANKABI - KENENDI												
1	NORMAL	206.	213.	220.	228.	235.	243.	251.	259.	268.	277.	286.
2	DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
3	DEVELOPED	11.	16.	20.	22.	26.	29.	32.	36.	40.	44.	48.
4	TOTAL	216.	229.	239.	249.	260.	270.	282.	294.	306.	319.	333.
6 KENENDI - KAMAKWIE												
1	NORMAL	213.	222.	232.	242.	252.	263.	275.	287.	300.	313.	327.
2	DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
3	DEVELOPED	10.	13.	15.	18.	21.	24.	27.	31.	35.	39.	44.
4	TOTAL	221.	233.	246.	259.	272.	287.	301.	317.	333.	351.	369.
SECTION												
1 PANLAP - MABOLE												
1	NORMAL	650.	679.	709.	740.	774.	806.	840.	876.	914.	954.	
2	DIVERTED	27.	29.	30.	32.	33.	35.	36.	38.	40.	41.	
3	DEVELOPED	128.	140.	153.	167.	182.	195.	209.	224.	241.	258.	
4	TOTAL	805.	846.	891.	938.	987.	1033.	1084.	1130.	1192.	1253.	
2 MABOLE - SENDUGU												
1	NORMAL	483.	499.	515.	532.	549.	564.	580.	597.	614.	632.	
2	DIVERTED	27.	29.	30.	32.	33.	35.	36.	38.	40.	41.	
3	DEVELOPED	102.	110.	119.	128.	138.	145.	154.	162.	171.	181.	
4	TOTAL	611.	635.	662.	689.	718.	743.	769.	795.	824.	854.	
3 SENDUGU - MASAKUTABA												
1	NORMAL	339.	351.	363.	376.	389.	401.	414.	427.	440.	455.	
2	DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
3	DEVELOPED	67.	72.	78.	85.	91.	97.	103.	109.	116.	123.	
4	TOTAL	405.	422.	440.	459.	479.	497.	516.	535.	555.	576.	
4 MASAKUTABA - BANKABI												
1	NORMAL	251.	258.	265.	272.	280.	286.	293.	300.	307.	314.	
2	DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
3	DEVELOPED	48.	52.	56.	60.	64.	68.	71.	75.	79.	83.	
4	TOTAL	298.	309.	320.	331.	343.	353.	363.	373.	384.	395.	
5 BANKABI - KENENDI												
1	NORMAL	295.	304.	314.	323.	334.	343.	353.	363.	374.	385.	
2	DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
3	DEVELOPED	52.	57.	62.	66.	72.	76.	81.	86.	91.	97.	
4	TOTAL	346.	359.	374.	389.	404.	419.	432.	448.	464.	480.	
6 KENENDI - KAMAKWIE												
1	NORMAL	341.	356.	371.	388.	405.	422.	441.	460.	480.	501.	
2	DIVERTED	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
3	DEVELOPED	49.	54.	59.	65.	72.	78.	85.	93.	101.	110.	
4	TOTAL	380.	408.	430.	452.	475.	500.	525.	552.	580.	609.	



APPENDIX M	INVENTORY SURVEY
M-1	ROAD INVENTORY
M-2	BRIDGE INVENTORY
APPENDIX N	TOPOGRAPHICAL SURVEY
APPENDIX O	METEOROLOGICAL DATA
APPENDIX P	RESULTS OF SOIL TEST AND AUGER BORING
P-1	RESULTS OF SOIL TESTS
P-2	RESULTS OF AUGER BORING AT EXISTING MABOLE BRIDGE
APPENDIX Q	HYDROLOGICAL ANALYSIS
APPENDIX R	CALCULATION OF PAVEMENT THICKNESS
APPENDIX S	DRAWINGS
S-1	PLAN AND PROFILE OF ALTERNATIVE PLAN A
S-2	PLAN AND PROFILE OF ALTERNATIVE PLAN B
S-3	PLAN AND PROFILE OF ALTERNATIVE PLAN C
S-4	TYPICAL CROSS SECTIONS
S-5	STANDARD BOX AND PIPE CULVERTS
S-6	STANDARD BRIDGES
S-7	ALTERNATIVE PLAN AND GENERAL VIEW OF MOBOLE BRIDGE
S-8	GENERAL VIEW OF MAIN BRIDGES
S-9	JUNCTIONS, BUS STOP AND PARKING LOT
APPENDIX T	ESTIMATE OF COSTS
T-1	PRELIMINARY ESTIMATE OF FINANCIAL AND ECONOMIC CONSTRUCTION COSTS
T-2	PRELIMINARY ESTIMATE OF MAINTENANCE COST
T-3	ESTIMATE OF ECONOMIC COST

## PART III      ENGINEERING STUDY SECTOR

# ROAD INVENTORY

NO. 1

IMPROVEMENT		WI.	RE - ARIGNMENT VERTICAL	WIDENING				RE -ALIGNMENT VERTICAL		
BRIDGE AND DRAINAGE STRUCTURERS  (FEET)		C - P (2.0') - 27.3'	C - P (2.0') - 20.7'	C - P (2.0') - 24.0'	C - P (2.0') - 21.0'	C - P (20') - 19.2'				
ROAD MATERIAL	KIND									
	CONDITION									
ALIGN - MENT	VERTICAL (%)									
	HORIZON - TAL (FEET)									
CROSS SECTION AND LAND USE		VILLAGE	BUSH	VILLAGE	RICE FIELD	FARM	VILLAGE	BUSH	BUSH	BUSH
		VILLAGE	BUSH	VILLAGE	RICE FIELD	FARM	VILLAGE	BUSH	BUSH	BUSH
ROAD SURFACE	TYPE	GRAVEL SAND SILTY CLAY								
	CONDITION	FAIR								
TERRAIN		FLAT TERRAIN								
NAME OF VILLAGE		PANLAP				YELISANDA				
DISTANCE	MILE	0				1				
	KILOMETER	0	200	400	600	800	1000	1200	1400	1600

NO. 2

- 58 -

# ROAD INVENTORY

NO. 3

IMPROVEMENT		WI.	RE - ALIGNMENT HORIZONTAL			RE - ALIGNMENT VERTICAL			WI.	RE - ALIGNMENT HORIZONTAL					
BRIDGE AND DRAINAGE STRUCTURERS			C - P (1.5') - 23.3'	BR - (11' 1" x 53' 4")	C - P (1.5') - 22.7'	C - P - 2 (1.5') - 31.7'	C - P (2.0') - 33.7'		C - P - 3 (2.0') - 18.3'	C - P (2.0') - 21.7'	BR - (14.9" x 332.2")				
		(FEET)													
ROAD MATERIAL	KIND	COBBLE STOME						SAND WATER							
	CONDITION	ø 7' ~ 30'						AVAI LABLE THROUGHOUT THE YEAR							
ALIGN - MENT	VERTICAL (%)														
	HORIZON- TAL (FEET)														
CROSS SECTION AND LAND USE		RICE FIELD VILLAGE			RICE FIELD VILLAGE FARM			BUSH	RICE FIELD						
ROAD SURFACE	TYPE	SAND SILTY CLAY			GRAVEL SAND SILTY CLAY										
	CONDITION	F A I R						G O O D							
TERRAIN		FLAT TERRAIN													
NAME OF VILLAGE		KUNSHU						MANEGRE MABOLE RIVER							
DISTANCE	MILE	4													
	KILOMETER	600	800	NO.6	200	400	600	800	NO.7	200	400	600	800	NO.8	200

# ROAD INVENTORY

NO. 4

IMPROVEMENT		RE - ALIGNMENT HORIZONTAL	WI.	RE - ALIGNMENT HORIZONTAL	WIDENING	RE - ALIGNMENT VERTICAL	WI.								
BRIDGE AND DRAINAGE STRUCTURERS				BRC - (12' 10" x 9' 8") C - P (2.0') - 23.3'	C - P - 2 (20') - 11.0'	BRC - (12' 10" x 14' 7") C - P (2.1') - 23.7' C - P (2.1') - 24.0' (CLOSE) C - P (2.1') - 26.3'									
(FEET)															
ROAD MATERIAL	KIND														
	CONDITION														
ALIGN - MENT	VERTICAL (%)														
	HORIZON - TAL (FEET)														
CROSS SECTION AND LAND USE		FOREST		VILLAGE	RICE FIELD	RICE FIELD	RICE FIELD								
				16'-0"		13'-0"	13'-5"								
		FOREST		VILLAGE	RICE FIELD	RICE FIELD	RICE FIELD								
ROAD SURFACE	TYPE		SAND SILTY CLAY			GRAVEL SAND SILTY CLAY									
	CONDITION	GOOD	F A I R		GOOD	F A I R									
T E R R A I N			ROLLING - TERRAIN		LOW - LAND	FLAT TERRAIN									
NAME OF VILLAGE				MAFURE	MANGO										
DISTANCE	MILE			6			7								
	KILOMETER	400	600	800	NO.9	200	400	600	800	NO.10	200	400	600	800	NO.11

# ROAD INVENTORY

NO. 5

IMPROVEMENT		WIDENING			RE-ALIGNMENT HORIZONTAL	WIDENING	RE-ALIGNMENT HORIZONTAL	W I.	RE - ALIGNMENT HORIZONTAL	
BRIDGE AND DRAINAGE STRUCTURERS		C - P (1.0') - 20.3'	C - P (2.0') - 20.7'	C - P (2.0') - 23.0'			BR - (11' 1" x 32' 2")	C - P (2.0') - 24.2'		
(FEET)										
ROAD MATERIAL	KIND									
	CONDITION									
ALIGN - MENT	VERTICAL (%)									
	HORIZON- TAL (FEET)									
CROSS SECTION AND LAND USE										
ROAD SURFACE	TYPE	BUSH BUSH BUSH BUSH BUSH BUSH VILLAGE BUSH								
	CONDITION	SAND SILTY CLAY								
TERRAIN		F A I R								
NAME OF VILLAGE		TAMBIANU								
DISTANCE	MILE	8								
	KILOMETER	200	400	600	800	NO.12	200	400	600	800

# ROAD INVENTORY

NO. 6

IMPROVEMENT		WIDENING	RE-ALIGNMENT HORIZONTAL	WIDENING	RE-ALIGNMENT HORIZONTAL	WIDENING	
BRIDGE AND DRAINAGE STRUCTURERS		C-P (20') - 18.3'		C-P (20') - 17.5'	C-P (1.0') - 14.8'	C-P (2.0') - 19.2'	BR - (11'0" x 15.1')
(FEET)							(CLOSE) C-P (20') - 22.7' C-P (20') - 22.7' (CLOSE)
ROAD MATERIAL	KIND	COBBLE STONE					
	CONDITION						
ALIGN - MENT	VERTICAL (%)						
	HORIZON- TAL (FEET)						
CROSS SECTION AND LAND USE		BUSH	BUSH	FARM	VILLEGE	BUSH	BUSH
ROAD SURFACE	TYPE	BUSH	BUSH	FARM	VILLEGE	BUSH	BUSH
	CONDITION	SAND SILTY CLAY					
TERRAIN		FAIR					
NAME OF VILLAGE		MAIYATA					
DISTANCE	MILE	9					
	KILOMETER	10					

# ROAD INVENTORY

NO. 7

IMPROVEMENT		RE - ALIGNMENT HORIZONTAL	WIDENING	RE - ALIGNMENT VERTICAL	WIDENING	RE - ALIGNMENT VERTICAL
BRIDGE AND DRAINAGE STRUCTURERS		BR - (10' 8" x 19')				C - P - 2 (2.0') - 23.7'
(FEET)						
ROAD MATERIAL	KIND					
	CONDITION					
ALIGN - MENT	VERTICAL (%)					
	HORIZON- TAL (FEET)					
CROSS SECTION AND LAND USE						
ROAD SURFACE	TYPE	SAND SILTY CLAY	GRAVEL SAND SILTY CLAY	SAND SILTY CLAY	GRAVEL SAND SILTY CLAY	SAND SILTY CLAY
	CONDITION	FAIR	GOOD	FAIR	BAD	FAIR
TERRAIN		FLAT TERRAIN				
NAME OF VILLAGE		MAFURE				
DISTANCE	MILE	12				
	KILOMETER	800	200	400	600	800



# ROAD INVENTORY

NO. 8

IMPROVEMENT		RE-ALIGNMENT VERTICAL	WIDENING									
BRIDGE AND DRAINAGE STRUCTURERS			<div>C-P (2.0')-21.2' C-P (2.0')-21.2' (CLOSE) C-P (2.0')-19.2' C-P (2.0')-23.7' (CLOSE)  C-P (2.0')-23.7'  C-P (2.0')-18.2'  BR-(11' x 32.8')</div>									
(FEET)												
ROAD MATERIAL	KIND	COBBLE STONE										
	CONDITION											
ALIGN - MENT	VERTICAL (%)											
	HORIZON- TAL (FEET)											
CROSS SECTION AND LAND USE												
ROAD SURFACE	TYPE	GRAVE SAND SILTY CLAY										
	CONDITION	BAD (WET)										
TERRAIN		LOW - LAND										
NAME OF VILLAGE		KALANGBA										
DISTANCE	MILE	13										
	KILOMETER	14										

# ROAD INVENTORY

NO. 9

IMPROVEMENT		WIDENING	RE - ALIGNMENT VERTICAL	WIDENING	RE - ALIGNMENT HORIZONTAL											
BRIDGE AND DRAINAGE STRUCTURERS			C-P-5(2.0')-18'6" C-P(2.0')-21.5'	C-P-3(2.0')-17'6" C-P(2.0')-23.7'												
(FEET)																
ROAD MATERIAL	KIND															
	CONDITION															
ALIGN - MENT	VERTICAL (%)															
	HORIZON- TAL (FEET)															
CROSS SECTION AND LAND USE																
		RICE FIELD	RICE FARM	BUSH	BUSH											
		RICE FIELD	RICE FARM	BUSH	BUSH											
ROAD SURFACE	TYPE	SAND SILTY CLAY														
	CONDITION	F A I R														
TERRAIN		FLAT TERRAIN														
NAME OF VILLAGE																
DISTANCE	MILE	14		15												
	KILOMETER	400	600	800	NO.23	200	400	600	800	NO.24	200	400	600	800	NO.25	200

# ROAD INVENTORY

NO. 10

IMPROVEMENT		RE-ALIGNMENT HORIZONTAL	WIDENING	RE - ALIGNMENT VERTICAL	RE - ALIGNMENT HORIZONTAL	WIDENING
BRIDGE AND DRAINAGE STRUCTURERS			C-P (2.0') - 21.3' (CLOSE)	C-P (2.0') - 15.7' (CLOSE BROKEN) BR - (11'0" x 50.6")	C-P (2.0') - 21.0' C-P (2.5') - 23.7' BR - (11'0" x 96.2")	BR - (11'0" x 17.7") C-P (2.0') - 24.5' (CLOSE) C-P (2.0') - 23.5' (CLOSE)
ROAD MATERIAL	KIND	PROPOSED QUARRY SITE				
	CONDITION	ø 2 ~ ø 70				
ALIGN - MENT	VERTICAL (%)	AVAILABLE THROUGHOUT THE YEAR				
	HORIZON- TAL (FEET)					
CROSS SECTION AND LAND USE						
ROAD SURFACE	TYPE	BUSH RICE FIELD VILLAGE BUSH VILLAGE FOREST				
	CONDITION	SAND SILTY CLAY GRAVEL SAND SILTY CLAY SAND SILTY CLAY				
TERRAIN		FLAT TERRAIN ROLLING - TERRAIN FLAT TERRAIN				
NAME OF VILLAGE		MATEHUN MABANGURU				
DISTANCE	MILE	16 17				
	KILOMETER	200 400 600 800 NO. 26 200 400 600 800 NO. 27 200 400 600 800 NO. 28				

# ROAD INVENTORY

NO. 11

IMPROVEMENT		WIDENING															
BRIDGE AND DRAINAGE STRUCTURES		<div style="display: flex; justify-content: space-around;"> <div>C-P (2.5') - 16.0'</div> <div>C-P (2.0') - 21.0' (CLOSE)</div> <div>BR - (11'0" x 17'8")</div> <div>C-P (2.3') - 17.8' (CLOSE)</div> </div>															
(FEET)																	
ROAD MATERIAL	KIND																
	CONDITION																
ALIGNMENT	VERTICAL (%)																
	HORIZONTAL (FEET)																
CROSS SECTION AND LAND USE		<div style="display: flex; justify-content: space-between;"> <div>RICE FIELD</div> <div>FOREST VILLAGE</div> <div>BUSH</div> <div>RICE FIELD</div> </div>															
ROAD SURFACE		<div style="display: flex; justify-content: space-between;"> <div>RICE FIELD</div> <div>FOREST VILLAGE</div> <div>BUSH</div> <div>RICE FIELD</div> </div>															
TYPE		SAND SILTY CLAY															
CONDITION		FAIR BAD FAIR															
TERRAIN		FLAT TERRAIN															
NAME OF VILLAGE		MANYE															
DISTANCE	MILE	<div style="display: flex; justify-content: space-between;"> <div>18</div> <div>19</div> </div>															
	KILOMETER	<div style="display: flex; justify-content: space-between;"> <div>200 400 600 800</div> <div>200 400 600 800</div> <div>200 400 600 800</div> </div>															

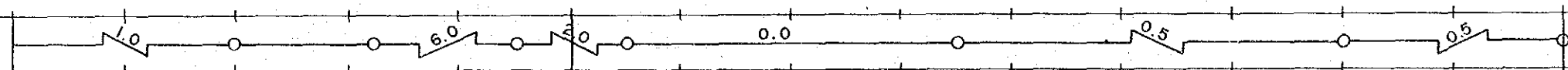
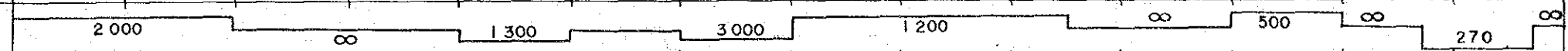
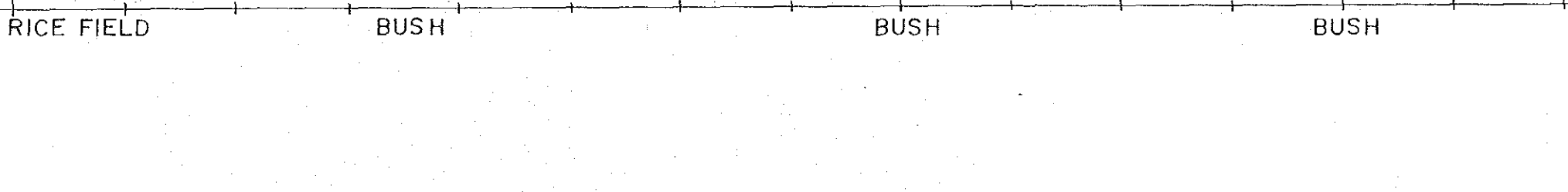
# ROAD INVENTORY

NO. 12

IMPROVEMENT		WIDENING											
BRIDGE AND DRAINAGE STRUCTURES		<div> <div>C-P (2.0') - 19.8'</div> <div>BR - (15' 9" x 10' 6")</div> <div>C-P (2.0') - 26.0'</div> <div>C-P (2.0') - 23.0'</div> <div>BRC - (17' 5" x 13' 1")</div> <div>C-P (1.8') - 23.5'</div> <div>C-P (2.0') - 20.8'</div> </div>											
ROAD MATERIAL	KIND	COBBLE STONE											
	CONDITION	PROPOSED QUARRY SITE											
ALIGNMENT	VERTICAL (%)												
	HORIZONTAL (FEET)												
CROSS SECTION AND LAND USE													
ROAD SURFACE	TYPE	SAND SILTY CLAY											
	CONDITION	<div> <div>FAIR</div> <div>GOOD</div> <div>FAIR</div> </div>											
TERRAIN		<div> <div>FLAT TERRAIN</div> <div>LOW-LAND</div> <div>FLAT TERRAIN</div> <div>LOW-LAND</div> </div>											
NAME OF VILLAGE		<div> <div>GBENDEMBU</div> <div>MASEMBI</div> </div>											
DISTANCE	MILE	<div> <div>20</div> <div>21</div> </div>											
	KILOMETER	<div> <div>800</div> <div>200</div> <div>400</div> <div>600</div> <div>800</div> <div>200</div> <div>400</div> <div>600</div> <div>800</div> <div>200</div> <div>400</div> <div>600</div> <div>800</div> </div>											

# ROAD INVENTORY

NO. 13

IMPROVEMENT		WIDENING					RE-ALIGNMENT HORIZONTAL	WIDENING			RE-ALIGNMENT HORIZONTAL						
BRIDGE AND DRAINAGE STRUCTURERS  (FEET)		BR-(11'0"x27'5")						BR-(16'1"x27'8") C-P(2.0')-18.3' C-P-2(2.0')-17.7'			C-P(1.3')-18.0' C-P(2.3')-18.2' BRC-(13'1"x12'2") C-P(1.2')-20.3'						
ROAD MATERIAL	KIND																
	CONDITION																
ALIGN - MENT	VERTICAL (%)																
	HORIZON- TAL (FEET)																
CROSS SECTION AND LAND USE																	
ROAD SURFACE	TYPE	RICE FIELD      BUSH      BUSH      VILLAGE      BUSH															
	CONDITION	SAND SILTY CLAY      GRAVEL SAND SILTY CLAY															
TERRAIN		LOW - LAND      FLAT TERRAIN															
NAME OF VILLAGE		MATIKIA      MAGBANDANI															
DISTANCE	MILE	21											22				
	KILOMETER	600	800	NO.34	200	400	600	800	NO.35	200	400	600	800	NO.36	200	400	

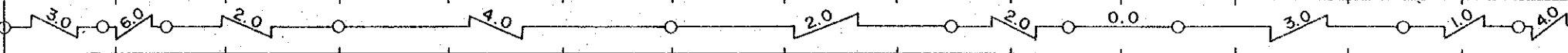
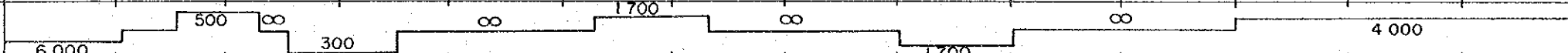
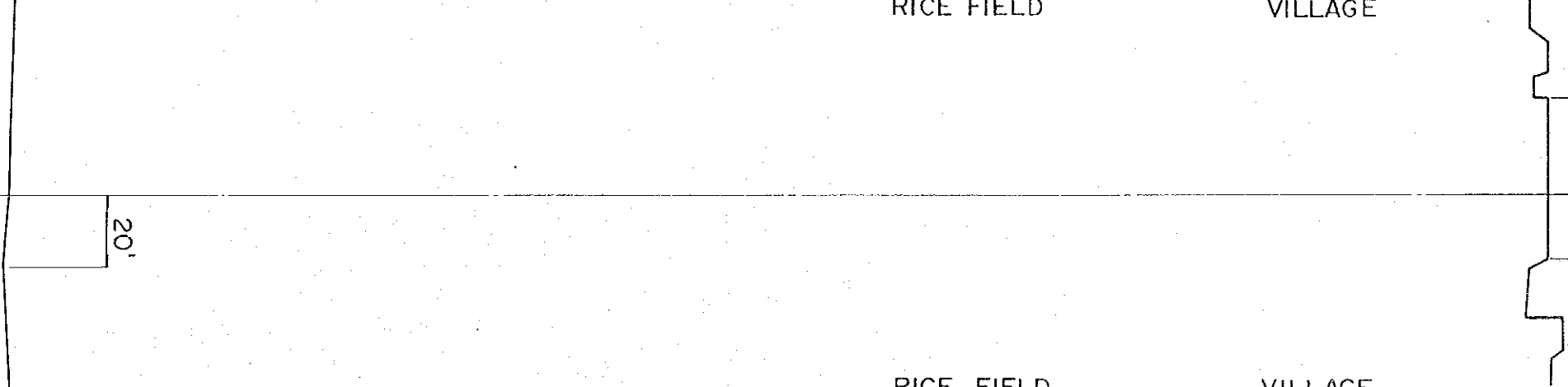
# ROAD INVENTORY

NO. 14

IMPROVEMENT		RE-ALIGNMENT HORIZONTAL		WIDENING			
BRIDGE AND DRAINAGE STRUCTURES		C-P (2.0') - 20.8'		C-P (2.6') - 17.3'		C-P (1.3') - 18.0'	
(FEET)				BRC-(13' 9" x 12' 2")		C-P (1.3') - 18.7'	
				C-P (1.2') - 20.3'		C-P (2.3') - 17.7'	
						C-P (1.3') - 17.8'	
						C-P (1.5') - 23.2'	
ROAD MATERIAL	KIND	COBBLE STONE					
	CONDITION						
ALIGN - MENT	VERTICAL (%)						
	HORIZON- TAL (FEET)						
CROSS SECTION AND LAND USE							
ROAD SURFACE	TYPE	SAND SILTY CLAY					
	CONDITION	FAIR					
TERRAIN		FLAT TERRAIN					
NAME OF VILLAGE		BOM					
DISTANCE	MILE	23					
	KILOMETER	24					

# ROAD INVENTORY

NO. 15

IMPROVEMENT		WIDENING		RE-ALIGNMENT HORIZONTAL	WIDENING	
BRIDGE AND DRAINAGE STRUCTURES		C-P-2(2.0')-25.3'		C-P(2.0')-18.3'	C-P(2.0')-23.7'	C-P(2.0')-20.7'
(FEET)						C-P(2.0')-20.7'
ROAD MATERIAL	KIND	COBBLE STONE				
	CONDITION					
ALIGN - MENT	VERTICAL (%)					
	HORIZON- TAL (FEET)					
CROSS SECTION AND LAND USE						
ROAD SURFACE	TYPE	SAND SILTY CLAY				
	CONDITION	FAIR				
TERRAIN		FLAT TERRAIN				
NAME OF VILLAGE						
DISTANCE	MILE	25				
	KILOMETER	40.42				



# ROAD INVENTORY

NO. 16

IMPROVEMENT		RE-ALIGNMENT HORIZONTAL		WIDENING		RE-ALIGNMENT HORIZONTAL		WIDENING	
BRIDGE AND DRAINAGE STRUCTURES		C-P-2(2.5')-21.3'		C-P (2.1')-20.3'		C-P (2.1')-18.3'		C-P (2.5')-17.7'	
(FEET)				C-P(2.5')-16.0'		BR-(13'11"x6'8")		C-P(2.5')-24.0'	
								BRC-(13'11"x11'4")	
								C-P(2.5')-21.2'	
ROAD MATERIAL	KIND	WATER							
	CONDITION	AVAILABLE THROUGHOUT THE YEAR							
ALIGN - MENT	VERTICAL (%)								
	HORIZON- TAL (FEET)								
CROSS SECTION AND LAND USE									
ROAD SURFACE	TYPE	GRAVEL SAND SILTY CLAY		SAND SILTY CLAY		GRAVEL SAND SILTY CLAY		SAND SILTY CLAY	
	CONDITION	FAIR				BAD		FAIR	
TERRAIN		FLAT TERRAIN				LOW-LAND		FLAT TERRAIN	
NAME OF VILLAGE		MABUTI							
DISTANCE	MILE	27							
	KILOMETER	28							

# ROAD INVENTORY

NO. 17

IMPROVEMENT		WI.	RE - ALIGNMENT HORIZONTAL			WIDENING	RE - ALIGNMENT HORIZONTAL			WI.	
BRIDGE AND DRAINAGE STRUCTURERS  (FEET)			BRC-(13'1" x 12'10")	BR-(11'0" x 28'3")	C-P (2.1') - 17.5' (CLOSE)			BRC-(14'1" x 8'0")			
ROAD MATERIAL	KIND	COBBLE STONE									
	CONDITION										
ALIGN - MENT	VERTICAL (%)										
	HORIZON- TAL (FEET)										
CROSS SECTION AND LAND USE			BUSH	VILLAGE		VILLAGE	RICE FIELD		VILLAGE	FARM	
					17.00'					17.81'	
			BUSH	VILLAGE		VILLAGE	RICE FIELD		VILLAGE	FARM	
ROAD SURFACE	TYPE		SAND SILTY CLAY								
	CONDITION		FAIR								
TERRAIN			FLAT TERRAIN				ROLLING - TERRAIN		FLAT TERRAIN		
NAME OF VILLAGE			KAIMPO		RIBIA		BOM				
DISTANCE	MILE	28									29
	KILOMETER	800	400	200	400	200	400	200	400	200	

# ROAD INVENTORY

NO. 18

IMPROVEMENT		WIDENING	RE - ALIGNMENT HORIZONTAL		WI.	RE-ALIGNMENT HORIZONTAL	WIDENING	RE-ALIGNMENT HORIZONTAL	WIDENING						
BRIDGE AND DRAINAGE STRUCTURES					BR - (10'0" x 18' 1")	C - P (2.5') - 20.7		BRC - (13'9" x 8'0")							
(FEET)															
ROAD MATERIAL	KIND														
	CONDITION														
ALIGN - MENT	VERTICAL (%)		1.0	0.5	4.0	4.0	2.0	1.0	4.0	0.0	4.0	2.0			
	HORIZON- TAL (FEET)		∞	1 300	∞	700	700	∞	600	1 200	900	∞	700	∞	
CROSS SECTION AND LAND USE			VILLAGE	ORANGE		VILLAGE								RICE FIELD	
				26'-3"			15'-0"						10'-10"		
			RICE FARM	VILLAGE	ORANGE		VILLAGE							RICE FIELD	
ROAD SURFACE	TYPE				GRAVEL	SAND	SILTY	CLAY							
	CONDITION				GOOD				FAIR						
TERRAIN							FLAT	TERRAIN							
NAME OF VILLAGE				MASHAKA			MASAK TABA								
DISTANCE	MILE			30								31			
	KILOMETER	600	800	N048	200	400	600	800	N049	200	400	600	800	N050	200

# ROAD INVENTORY

NO. 19

IMPROVEMENT		WIDENING			RE-ALIGNMENT HORIZONTAL	WIDENING	RE-ALIGNMENT HORIZONTAL	WIDENING	RE-ALIGNMENT HORIZONTAL	WI.
BRIDGE AND DRAINAGE STRUCTURERS		C-P (2.4') - 20.8'	C-P (2.0') - 20.8'	BR - (13' 1" x 3' 6")	C-P - 2 (2.0') - 17.8' (CLOSE)		C-P - 2 (2.0') - 23.8' (CLOSE)	C-P - 2 (1.2') - 18.0'	C-P (2.0') - 20.5'	C-P (2.0') - 18.3'
		(FEET)								
ROAD MATERIAL	KIND									
	CONDITION									
ALIGN - MENT	VERTICAL (%)									
	HORIZON- TAL (FEET)									
CROSS SECTION AND LAND USE										
ROAD SURFACE	TYPE	SAND SILTY CLAY GRAVEL SAND SILTY CLAY								
	CONDITION	F A I R G O O D								
TERRAIN		VILLAGE VILLAGE VILLAGE FLAT TERRAIN								
NAME OF VILLAGE		MAKAIABA MACHICHI MAKUMBU								
DISTANCE	MILE	32 33								
	KILOMETER	400 600 800 1000 1200 1400 1600 1800 2000 2200 2400 2600 2800 3000								

# ROAD INVENTORY

NO. 20

IMPROVEMENT		WIDENING	RE-ALIGNMENT HORIZONTAL	WIDENING	RE - ALIGNMENT HORIZONTAL		WIDENING	RE-ALIGNMENT HORIZONTAL								
BRIDGE AND DRAINAGE STRUCTURERS		BRC-(13' 11" x 9' 2")		C-P(2.0')-19.0' (CLOSE) C-P(2.0')-18.8'		C-P-2(20')-143' (BROKEN)		C-P-2(20')-180'								
(FEET)																
ROAD MATERIAL	KIND															
	CONDITION	Q (R)														
ALIGN - MENT	VERTICAL (%)															
	HORIZON- TAL (FEET)															
CROSS SECTION AND LAND USE																
ROAD SURFACE	TYPE	GRAVEL SAND SILTY CLAY														
	CONDITION	G O O D														
TERRAIN		FLAT TERRAIN														
NAME OF VILLAGE		MAKUTE		MASONKA			WARI									
DISTANCE	MILE	34														
	KILOMETER	200	400	600	800	N054	200	400	600	800	N055	200	400	600	800	N056

# ROAD INVENTORY

NO. 21

IMPROVEMENT		RE-ALIGNMENT HORIZONTAL	RE - ALIGNMENT VERTICAL	RE - ALIGNMENT HORIZONTAL		RE-ALIGNMENT VERTICAL	WIDENING
BRIDGE AND DRAINAGE STRUCTURES		C-P (2.0') - 18.0' C-P (2.0') - 20.7' C-P (2.0') - 20.2' (CLOSE)	C-P (2.0') - 18.8'	C-P (2.4') - 18.3'		BR - (13' 11" x 2' 6")	BR - (2' 2" x 19' 0")  C-P (2.0') - 16.1' C-P (2.0') - 18.3' (CLOSE) C-P - 3(20') - 18.0'
(FEET)							
ROAD MATERIAL	KIND						
	CONDITION						
ALIGN - MENT	VERTICAL (%)						
	HORIZON- TAL (FEET)						
CROSS SECTION AND LAND USE							
ROAD SURFACE		RICE FIELD VILLAGE GRAVEL SAND SILTY CLAY F A I R VILLAGE FARM FARM VILLAGE					
TERRAIN		FLAT TERRAIN		LOW - LAND		FLAT TERRAIN	
NAME OF VILLAGE		KAMARANKA					
DISTANCE	MILE	35				36	
	KILOMETER	NO 56	200	400	600	800	NO 57
							200
							400
							600
							800
							NO 58
							200
							400
							600
							800

# ROAD INVENTORY

NO. 22

IMPROVEMENT		WIDENING	RE-ALIGNMENT HORIZONTAL										WIDENING			
BRIDGE AND DRAINAGE STRUCTURERS																
(FEET)																
ROAD MATERIAL	KIND															
	CONDITION															
ALIGN - MENT	VERTICAL (%)															
	HORIZON- TAL (FEET)															
CROSS SECTION AND LAND USE																
ROAD SURFACE	TYPE															
	CONDITION															
TERRAIN																
NAME OF VILLAGE																
DISTANCE	MILE															
	KILOMETER															

# ROAD INVENTORY

NO. 23

IMPROVEMENT		WIDENING	RE-ALIGNMENT HORIZONTAL		WIDENING	RE-ALIGNMENT HORIZONTAL	WIDENING	RE-ALIGNMENT HORIZONTAL	WIDENING							
BRIDGE AND DRAINAGE STRUCTURERS			C-P (2.0') - 18.0'		C-P-2 (2.0') - 18.3'		C-P (1.1') - 20.8'	BR - (15' 7" x 21' 0")								
(FEET)																
ROAD MATERIAL	KIND	OUT THE YEAR														
	CONDITION															
ALIGN - MENT	VERTICAL (%)															
	HORIZON- TAL (FEET)															
CROSS SECTION AND LAND USE																
ROAD SURFACE	TYPE	GRAVEL SAND SILTY CLAY														
	CONDITION	F A I R														
TERRAIN		LOW - LAND				FLAT TERRAIN										
NAME OF VILLAGE																
DISTANCE	MILE	39														
	KILOMETER	600	800	N062	200	400	600	800	N063	200	400	600	800	N064	200	400



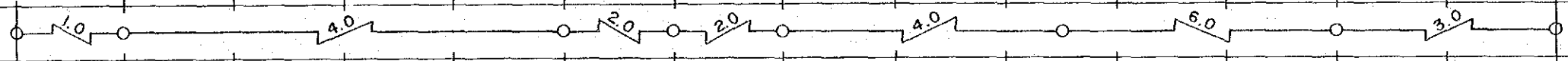
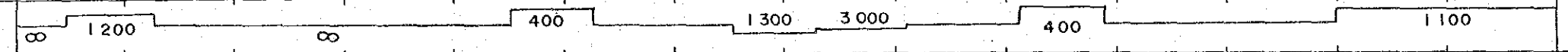
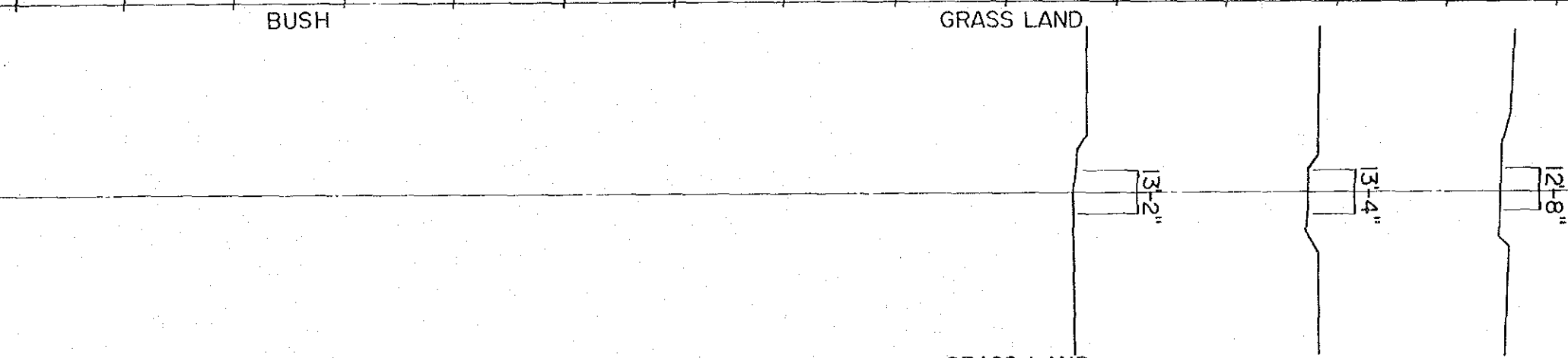
# ROAD INVENTORY

NO. 24

IMPROVEMENT		RE - ALIGNMENT HORIZONTAL		WIDENING	
BRIDGE AND DRAINAGE STRUCTURERS		BR - (13' 11" x 25' 3")		C - P (11') - 17.2'	
(FEET)				BR - (13' 11" x 52' 8")	
ROAD MATERIAL	KIND	COBBLE STONE			
	CONDITION				
ALIGN - MENT	VERTICAL (%)				
	HORIZON- TAL (FEET)				
CROSS SECTION AND LAND USE					
ROAD SURFACE	TYPE	VILLAGE RICE FIELD VILLAGE BUSH			
	CONDITION	GRAVEL SAND SILTY CLAY			
TERRAIN		FLAT TERRAIN			
NAME OF VILLAGE		POLLING TERRAIN			
DISTANCE	MILE	41			
	KILOMETER	42			

# ROAD INVENTORY

NO. 25

IMPROVEMENT		WIDENING		RE-ALIGNMENT HORIZONTAL		WIDENING		RE-ALIGNMENT HORIZONTAL		WIDENING					
BRIDGE AND DRAINAGE STRUCTURERS		BRC-(13' 11" x 14' 9")		C-P(2.0')-23.8' (CLOSE)		C-P(2.0')-19.0'		C-P(2.0')-18.8' (CLOSE)							
ROAD MATERIAL	KIND														
	CONDITION														
ALIGN - MENT	VERTICAL (%)														
	HORIZON- TAL (FEET)														
CROSS SECTION AND LAND USE															
ROAD SURFACE	TYPE	BUSH GRASS LAND													
	CONDITION	GRAVEL SAND SILTY CLAY													
TERRAIN		FAIR													
NAME OF VILLAGE		ROLLING - TERRAIN													
		FLAT TERRAIN													
NAME OF VILLAGE		MAKANGWI													
DISTANCE	MILE	42					43								
	KILOMETER	200	400	600	800	N068	200	400	600	800	N069	200	400	600	800

# ROAD INVENTORY

NO. 26

IMPROVEMENT		W I D E N I N G															
BRIDGE AND DRAINAGE STRUCTURERS		C - P (2.0') - 202' (CLOSE) C - P (20') - 183' C - P (2.0') - 22.0' C - P (20') - 27.7' (CLOSE) C - P (2.0') - 21.0' (CLOSE) C - P (2.0') - 18.3' (CLOSE) C - P (2.0') - 18.7'															
(FEET)																	
ROAD MATERIAL	KIND																
	CONDITION																
ALIGN - MENT	VERTICAL (%)																
	HORIZONTAL (FEET)																
CROSS SECTION AND LAND USE																	
ROAD SURFACE	TYPE	VILLAGE FOREST THICK BUSH VILLAGE THICK BUSH															
	CONDITION	FAIR BAD FAIR															
TERRAIN		FLAT TERRAIN															
NAME OF VILLAGE		BANKABI KAMALU															
DISTANCE	MILE	44 45															
	KILOMETER																

# ROAD INVENTORY

NO. 27

IMPROVEMENT		WIDENING														RE-ALIGN- MENT VERTICAL							
BRIDGE AND DRAINAGE STRUCTURERS		C-P (2.0') - 14.8' (CLOSE)																C-P (2.0') - 14.8' (CLOSE)		BR-(13'9" x 108' 11")		BRC-(20'2" x 9'0")	
		(FEET)																					
ROAD MATERIAL	KIND	WATER																COBBLE STONE					
	CONDITION	AVAILABLE THROUGHOUT THE YEAR																					
ALIGN - MENT	VERTICAL (%)																						
	HORIZON- TAL (FEET)																						
CROSS SECTION AND LAND USE		VILLAGE																GRASS LAND VILLAGE					
ROAD SURFACE	TYPE	VILLAGE				SAND SILTY CLAY				CLAYEY SOIL				VILLAGE GRASS LAND				SAND SILTY CLAY					
	CONDITION	FAIR				BAD				FAIR													
TERRAIN		FLAT TERRAIN																ROLLING TERRAIN					
NAME OF VILLAGE		BANKA																					
DISTANCE	MILE	46																47					
	KILOMETER	800	700	600	500	400	300	200	100	0	100	200	300	400	500	600	700	800	900	1000			

# ROAD INVENTORY

NO. 28

IMPROVEMENT		RE-ALIGNMENT VERTICAL	RE-ALIGNMENT HORIZONTAL	RE-ALIGNMENT VERTICAL	RE-ALIGNMENT HORIZONTAL	RE-ALIGNMENT VERTICAL	RE-ALIGNMENT HORIZONTAL	WIDENING						
BRIDGE AND DRAINAGE STRUCTURERS			C-P(4.0')-21.8" (CORRUGATED METAL) (PIPE)	C-P(2.0')-22.2'	C-P-3(2.0')-23.8'			C-P(2.0')-23.5' (CLOSE)						
(FEET)														
ROAD MATERIAL	KIND													
	CONDITION	W												
ALIGN - MENT	VERTICAL (%)													
	HORIZON- TAL (FEET)													
CROSS SECTION AND LAND USE														
ROAD SURFACE	TYPE	VILLAGE FARM SWAMP RICE FIELD VILLAGE												
	CONDITION	GRAVEL SAND SILTY CLAY												
TERRAIN		ROLLING - TERRAIN FLAT TERRAIN ROLLING-TERRAIN												
NAME OF VILLAGE		KENENDI												
DISTANCE	MILE	48 49												
	KILOMETER	600	800	N076	200	400	600	N077	200	400	600	800	N078	200

# ROAD INVENTORY

NO. 29

IMPROVEMENT		WIDENING		RE - ALIGNMENT HORIZONTAL		WIDENING	
BRIDGE AND DRAINAGE STRUCTURERS		C-P(2.1)-23.5' (CLOSE)					
(FEET)							
ROAD MATERIAL	KIND						
	CONDITION						
ALIGN - MENT	VERTICAL (%)						
	HORIZON - TAL (FEET)						
CROSS SECTION AND LAND USE							
ROAD SURFACE		TYPE: GRAVEL SAND SILTY CLAY CONDITION: F A I R					
TERRAIN		ROLLING - TERRAIN			FLAT TERRAIN		
NAME OF VILLAGE		MAKANKA			TUNTURU		
DISTANCE	MILE	49 400 600 800 1000 1200 1400 1600 1800 2000					
	KILOMETER	400 600 800 1000 1200 1400 1600 1800 2000					

# ROAD INVENTORY

NO. 30

IMPROVEMENT		WIDENING															
BRIDGE AND DRAINAGE STRUCTURERS		<div> <div>C-P (2.1) - 22.2</div> <div>C-P (2.1) - 21.3</div> </div>															
ROAD MATERIAL	KIND	COBBLE STONE															
	CONDITION																
ALIGNMENT	VERTICAL (%)																
	HORIZONTAL (FEET)																
CROSS SECTION AND LAND USE		<div>VILLAGE RICE FARM VILLAGE VILLAGE</div>															
ROAD SURFACE	TYPE	<div>VILLAGE RICE FARM VILLAGE VILLAGE</div>															
	CONDITION	<div>GRAVEL SAND SILTY CLAY</div> <div>F A I R</div>															
TERRAIN		FLAT TERRAIN															
NAME OF VILLAGE		<div>MATAKA</div> <div>TUMPE KAMAKUWAI</div>															
DISTANCE	MILE	<div>51</div> <div>52</div>															
	KILOMETER	<div>200 400 600 800 NO82 200 400 600 800 NO83 200 400 600 800 NO84</div>															

# ROAD INVENTORY

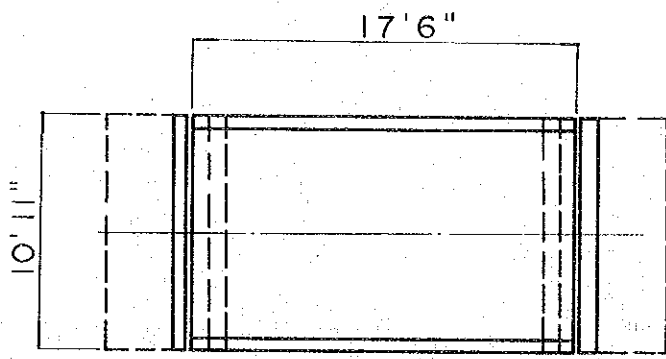
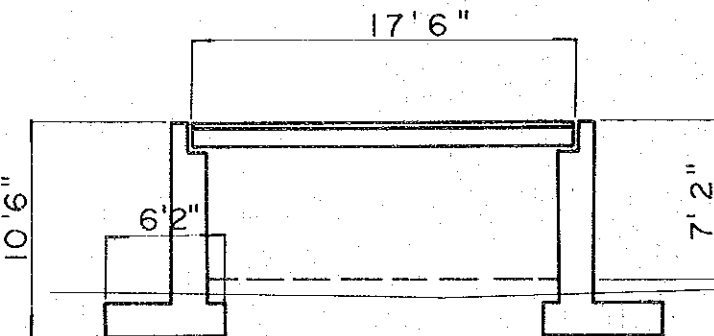
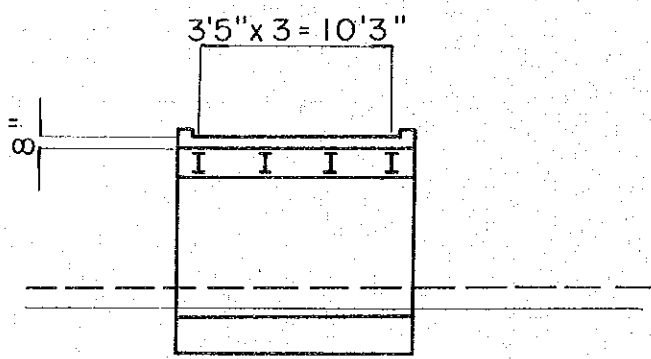
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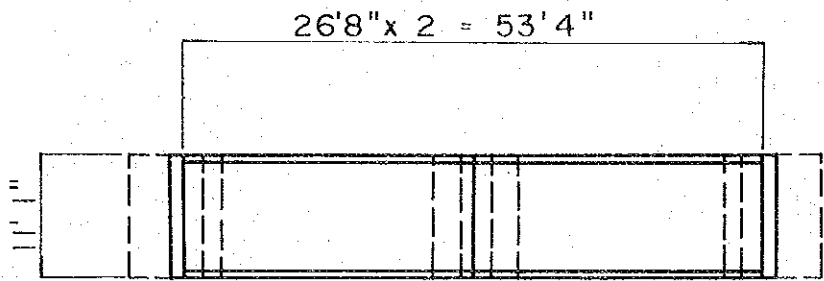
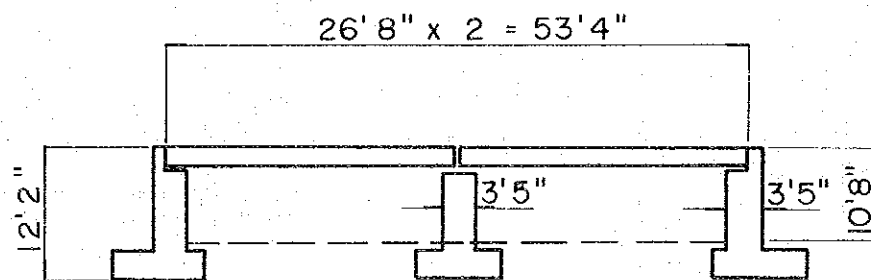
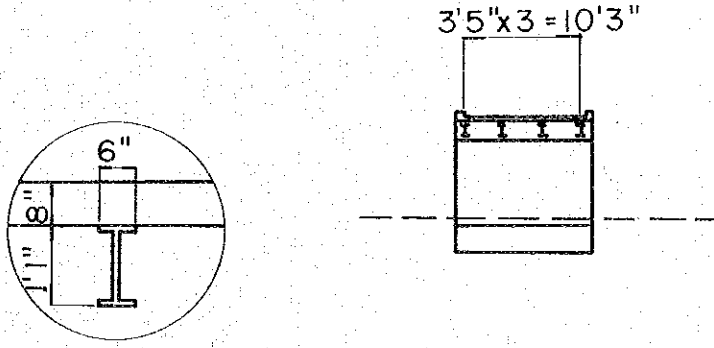
IMPROVEMENT		WIDENING		RE-ALIGNMENT HORIZONTAL		WIDENING	
BRIDGE AND DRAINAGE STRUCTURES		C - P (2.1') - 20.2'					
(FEET)							
ROAD MATERIAL	KIND						
	CONDITION						
ALIGN - MENT	VERTICAL (%)						
	HORIZONTAL (FEET)						
CROSS SECTION AND LAND USE							
ROAD SURFACE	TYPE	GRAVEL SAND SILTY CLAY					
	CONDITION	F A I R					
TERRAIN		FLAT TERRAIN					
NAME OF VILLAGE		KAMAKWIE					
DISTANCE	MILE	<div style="display: flex; justify-content: space-between;"> <span>NO84</span> <span>200</span> <span>400</span> <span>600</span> <span>800</span> <span>53</span> <span>NO85</span> <span>200</span> <span>400</span> <span>600</span> <span>800</span> <span>NO86</span> <span>200</span> <span>400</span> <span>54</span> <span>600</span> <span>800</span> </div>					
	KILOMETER						



# APPENDIX M-2 BRIDGE INVENTORY

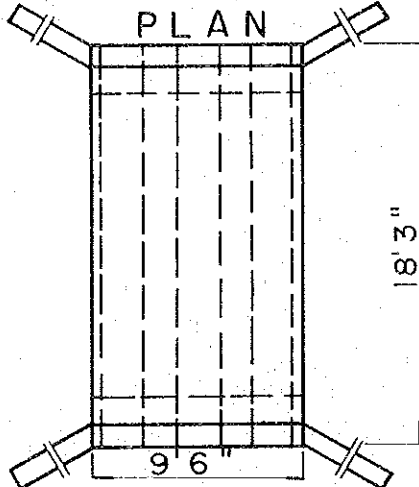
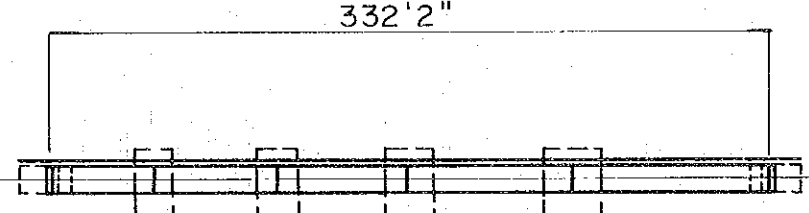
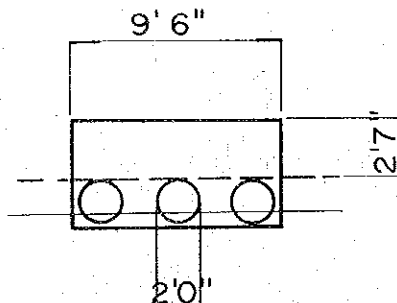
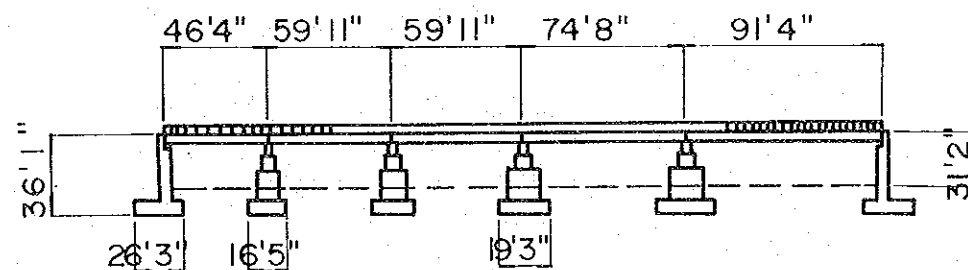
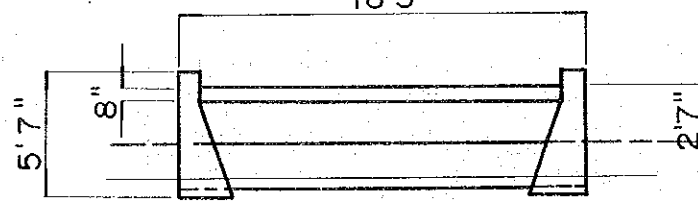
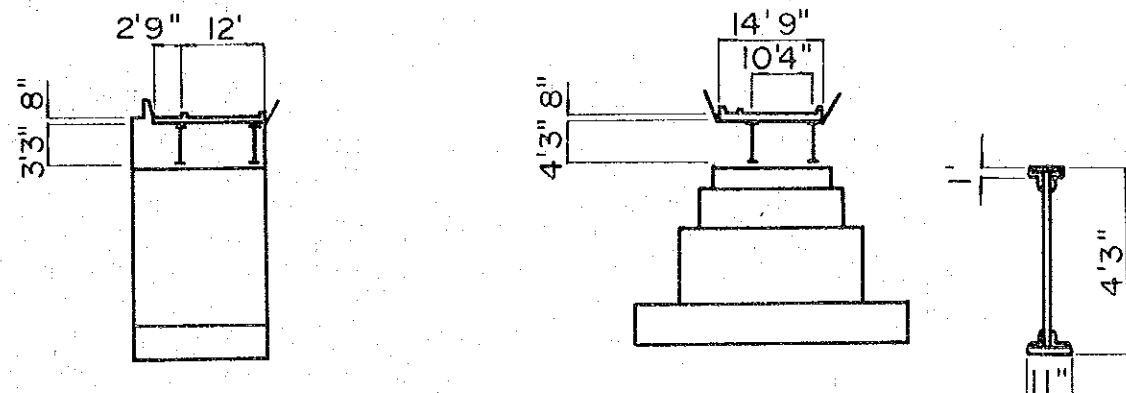
NO. 1

NAME	WARI	STATION	5.3 KM / 3.3 MILE
BRIDGE	TYPE	SIMPLE BEAM BRIDGE	
MATERIAL	SUPER STRUCTURE	BEAM : STEEL      SLAB : R.C	
	SUB STRUCTURE	ABUT : R.C	
PLAN			
			
PROFILE			
			
CROSS SECTION			
			

NAME	KUNSHU	STATION	5.9 KM / 3.7 MILE
BRIDGE	TYPE	SIMPLE BEAM BRIDGE	
MATERIAL	SUPER STRUCTURE	BEAM : STEEL      SLAB : R.C	
	SUB STRUCTURE	ABUT : R.C      PIER : R.C	
PLAN			
			
PROFILE			
			
CROSS SECTION			
			

# BRIDGE INVENTORY

NO. 2

NAME	MANEGRE	STATION	7.6 KM /4.8 MILE	NAME	MABOLE	STATION	8.0 KM /5.0 MILE
BRIDGE	TYPE	MULTIPLE PIPE CULVERT		BRIDGE	TYPE	SIMPLE BEAM BRIDGE	
MATERIAL	SUPER STRUCTURE	—		MATERIAL	SUPER STRUCTURE	BEAM : STEEL      SLAB : R.C	
	SUB STRUCTURE	—			SUB STRUCTURE	ABUT : R.C      PIER : R.C	
<div>PLAN</div> 				<div>PLAN</div> 			
<div>PROFILE</div> 				<div>PROFILE</div> 			
<div>CROSS SECTION</div> 				<div>CROSS SECTION</div> 			

# BRIDGE INVENTORY

NO. 3

NAME	MAFURE	STATION	9.4 KM/5.9 MILE	NAME	—	STATION	10.9 KM/6.8 MILE
BRIDGE	TYPE	SIMPLE BEAM BRIDGE		BRIDGE	TYPE	SIMPLE BEAM BRIDGE	
MATERIAL	SUPER STRUCTURE	BEAM : R.C      SLAB : R.C		MATERIAL	SUPER STRUCTURE	BEAM : R.C      SLAB : R.C	
	SUB STRUCTURE	ABUT : R.C			SUB STRUCTURE	ABUT : R.C	
<p>PLAN</p>				<p>PLAN</p>			
<p>PROFILE</p>				<p>PROFILE</p>			
<p>CROSS SECTION</p>				<p>CROSS SECTION</p>			

# BRIDGE INVENTORY

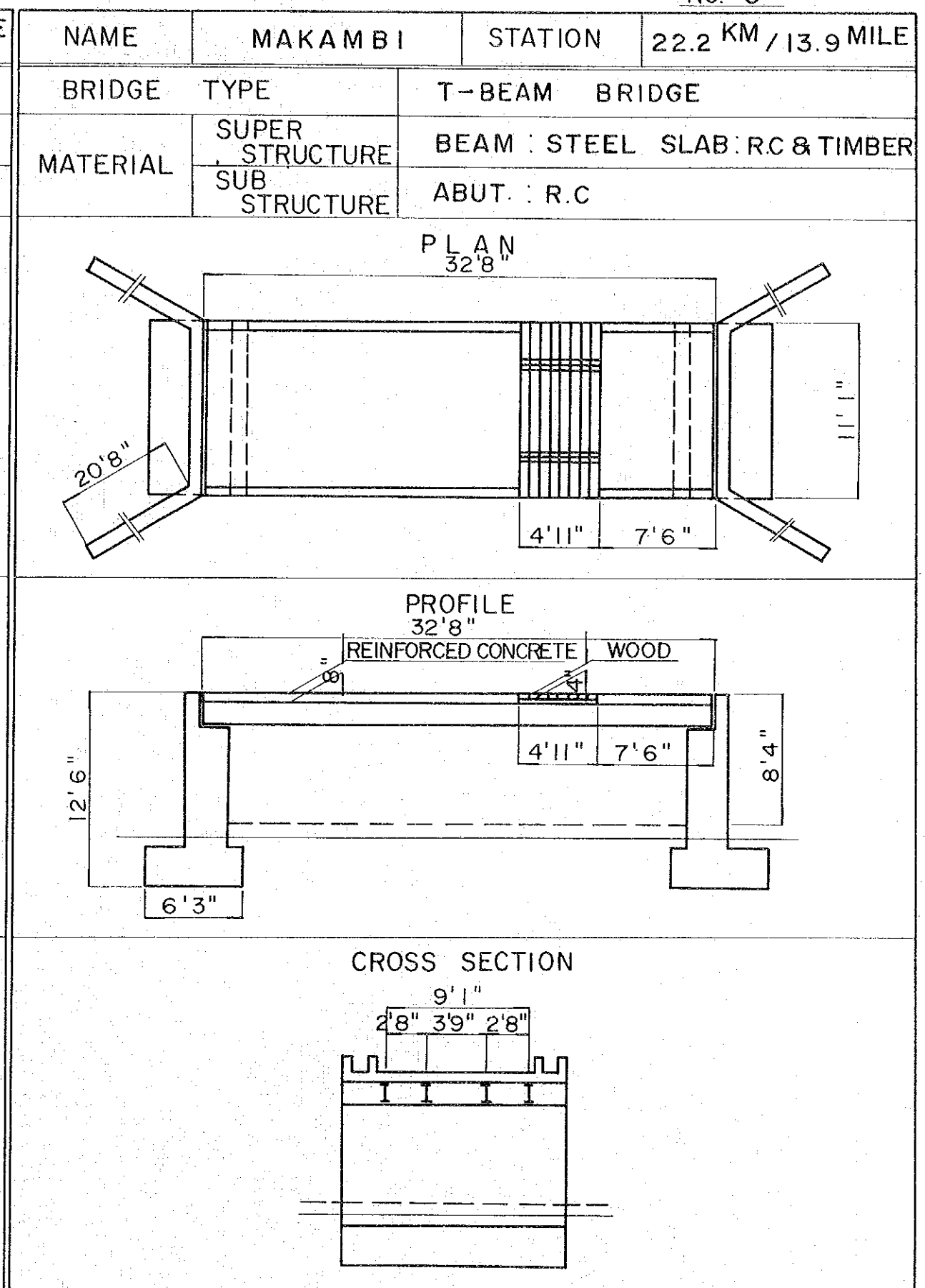
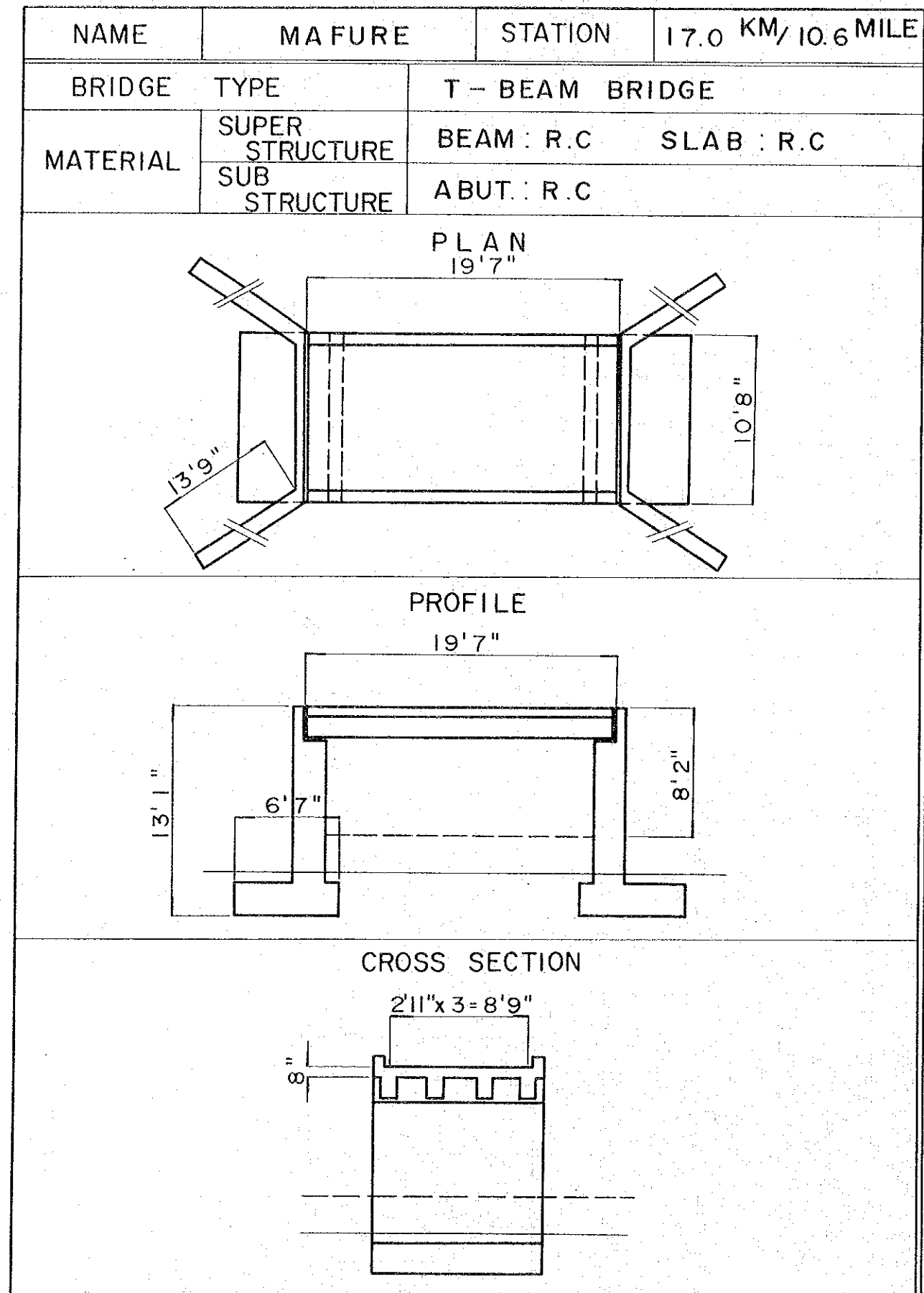
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NAME	—	STATION	13.2 KM / 8.3 MILE
BRIDGE TYPE	SIMPLE BEAM BRIDGE		
MATERIAL	SUPER STRUCTURE	BEAM : STEEL SLAB : R.C	
	SUB STRUCTURE	ABUT : R.C	
<p>PLAN 32' 2"</p>			
<p>PROFILE 32' 2"</p>			
<p>CROSS SECTION 3' x 3 = 9'</p>			

NAME	MAIYATA	STATION	16.2 KM / 10.1 MILE
BRIDGE TYPE	SIMPLE BEAM BRIDGE		
MATERIAL	SUPER STRUCTURE	BEAM : STEEL SLAB : R.C	
	SUB STRUCTURE	ABUT : R.C	
<p>PLAN 15' 1"</p>			
<p>PROFILE 15' 1"</p>			
<p>CROSS SECTION 3' x 3 = 9'</p>			

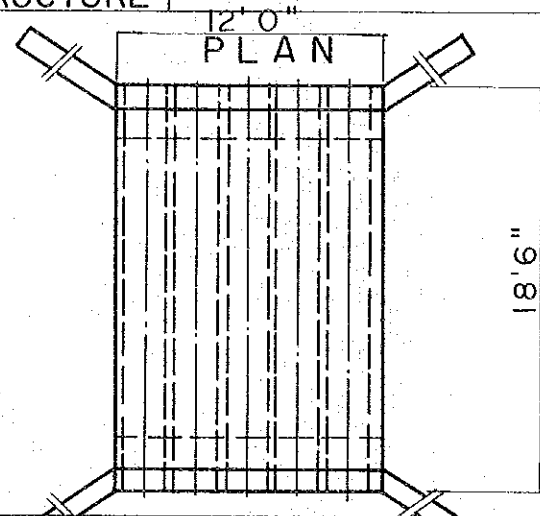
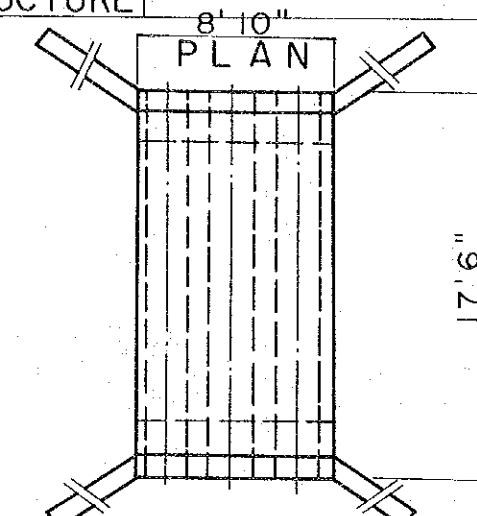
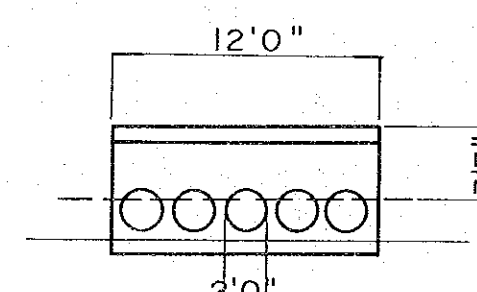
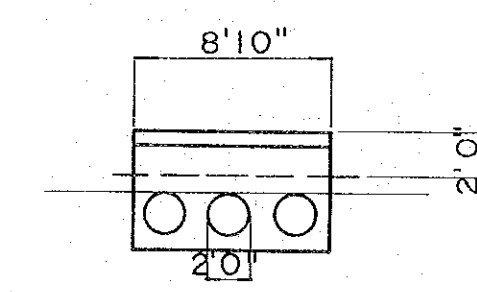
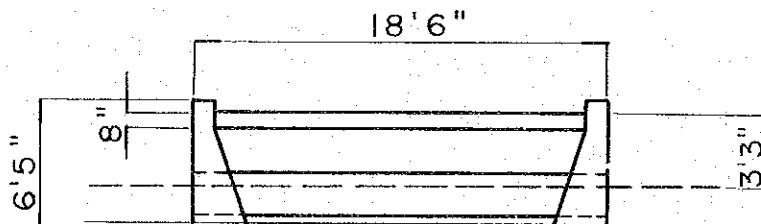
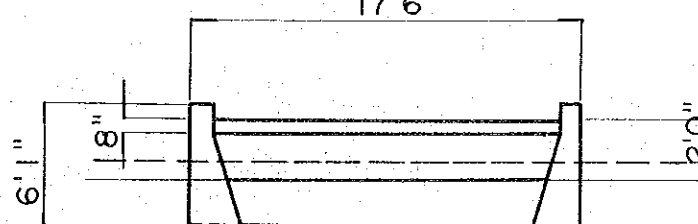
# BRIDGE INVENTORY

NO. 5



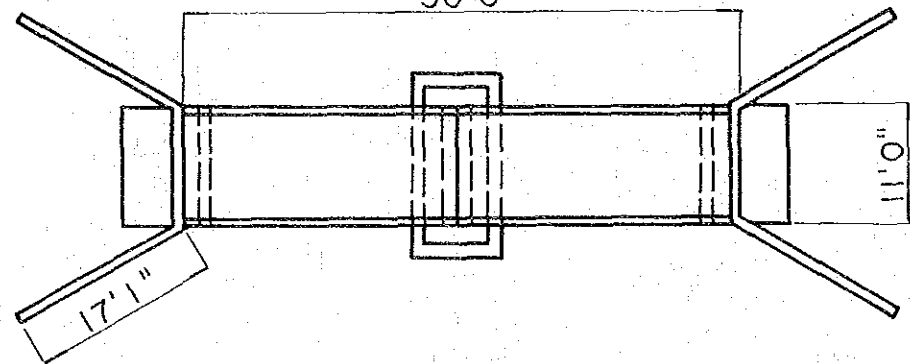
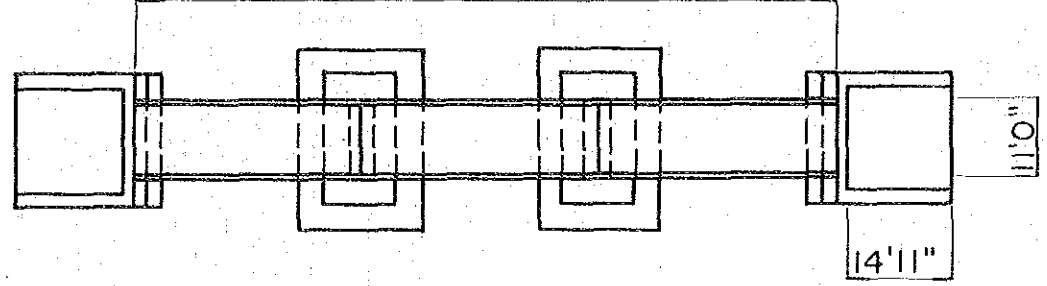
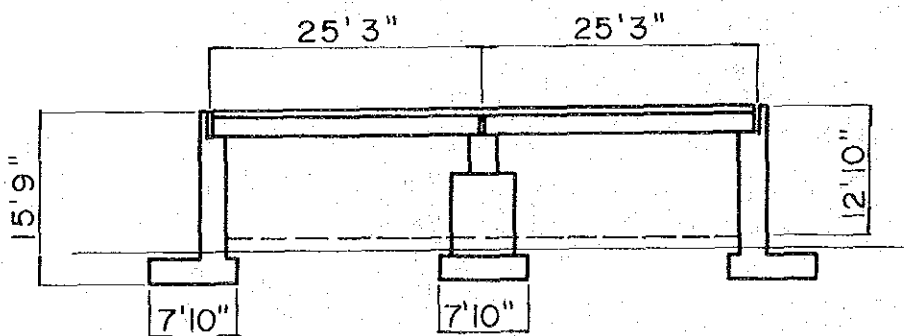
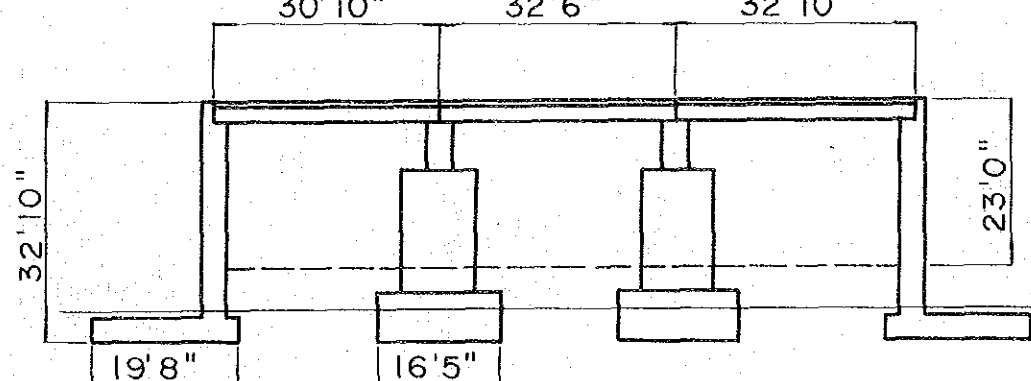
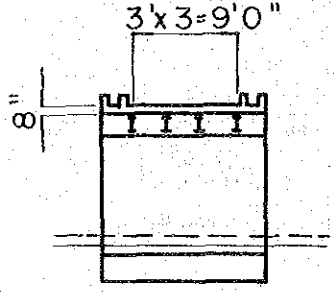
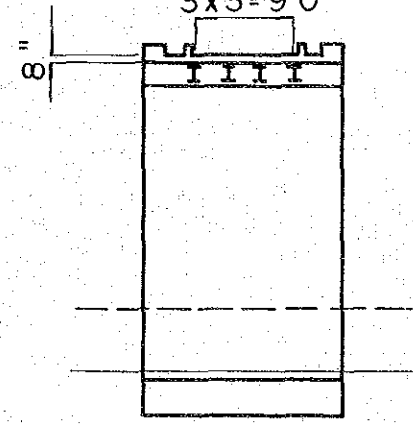
# BRIDGE INVENTORY

NO. 6

NAME	—	STATION	23.4 KM /14.6 MILE	NAME	—	STATION	23.8 KM /14.9 MILE
BRIDGE	TYPE	MULTIPLE PIPE CULVERT		BRIDGE	TYPE	MULTIPLE PIPE CULVERT	
MATERIAL	SUPER STRUCTURE	—		MATERIAL	SUPER STRUCTURE	—	
	SUB STRUCTURE	—			SUB STRUCTURE	—	
							
PROFILE				PROFILE			
							
CROSS SECTION				CROSS SECTION			
							

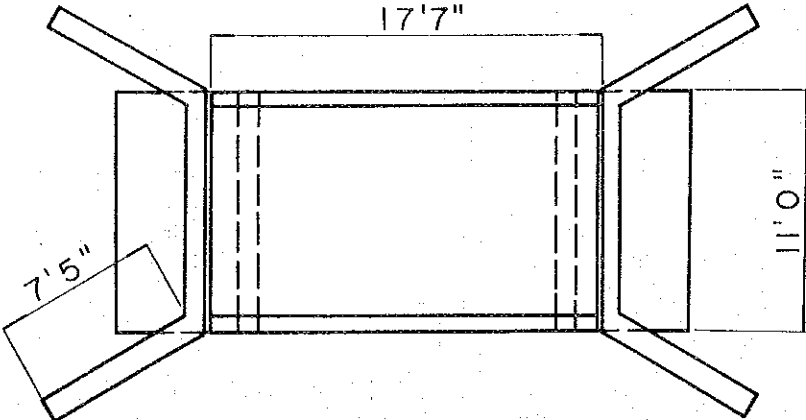
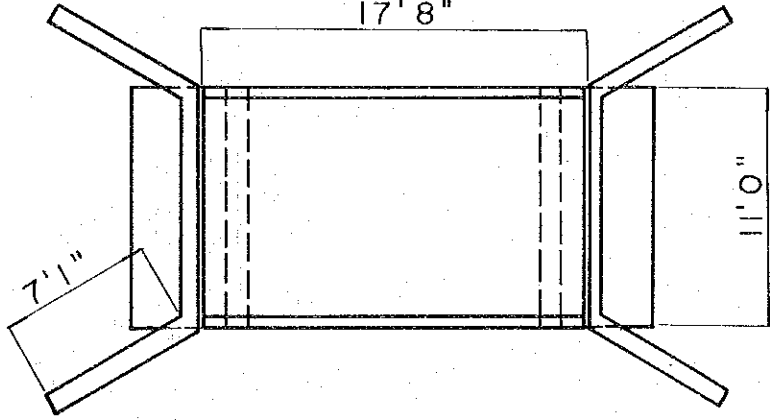
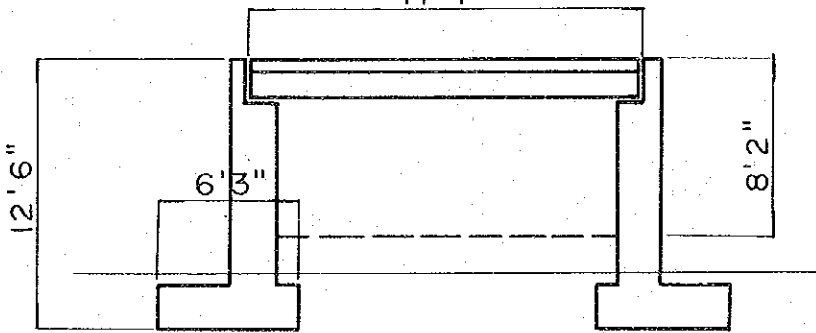
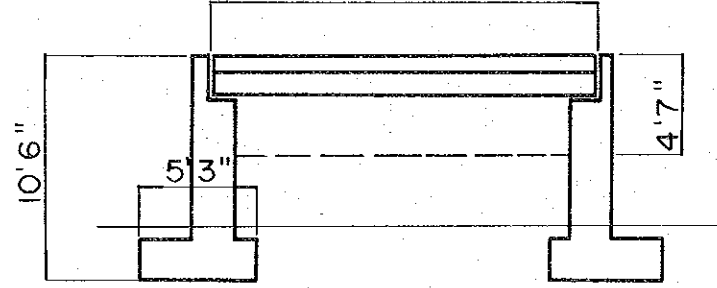
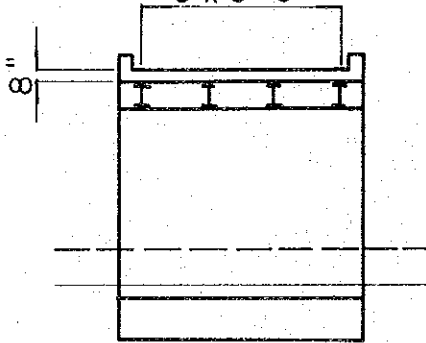
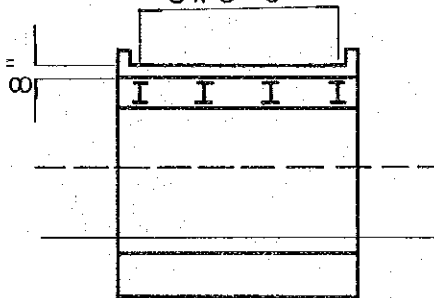
# BRIDGE INVENTORY

NO. 7

NAME	—	STATION	26.3 KM / 16.4 MILE	NAME	MATEHUN	STATION	27.2 KM / 17.0 MILE
BRIDGE TYPE	SIMPLE BEAM BRIDGE			BRIDGE TYPE	SIMPLE BEAM BRIDGE		
MATERIAL	SUPER STRUCTURE	BEAM : STEEL	SLAB : TIMBER	MATERIAL	SUPER STRUCTURE	BEAM : STEEL	SLAB : R.C
	SUB STRUCTURE	ABUT : R.C	PIER : R.C		SUB STRUCTURE	ABUT : R.C	PIER : R.C
<p>PLAN</p> <p>50'6"</p> 				<p>PLAN</p> <p>96'2"</p> 			
<p>PROFILE</p> 				<p>PROFILE</p> 			
<p>CROSS SECTION</p> <p>3x3=9'0"</p> 				<p>CROSS SECTION</p> <p>3x3=9'0"</p> 			

# BRIDGE INVENTORY

NO. 8

NAME	—	STATION	27.7 KM / 17.3 MILE	NAME	MANYE	STATION	30.2 KM / 18.9 MILE
BRIDGE	TYPE	SIMPLE BEAM BRIDGE		BRIDGE	TYPE	SIMPLE BEAM BRIDGE	
MATERIAL	SUPER STRUCTURE	BEAM: STEEL    SLAB: R.C		MATERIAL	SUPER STRUCTURE	BEAM: STEEL    SLAB: R.C	
	SUB STRUCTURE	ABUT: R.C			MATERIAL	SUB STRUCTURE	ABUT: R.C
PLAN 17'7"				PLAN 17'8"			
							
PROFILE 17'7"				PROFILE 17'8"			
							
CROSS SECTION 3'x 3 = 9'				CROSS SECTION 3'x 3 = 9'			
							



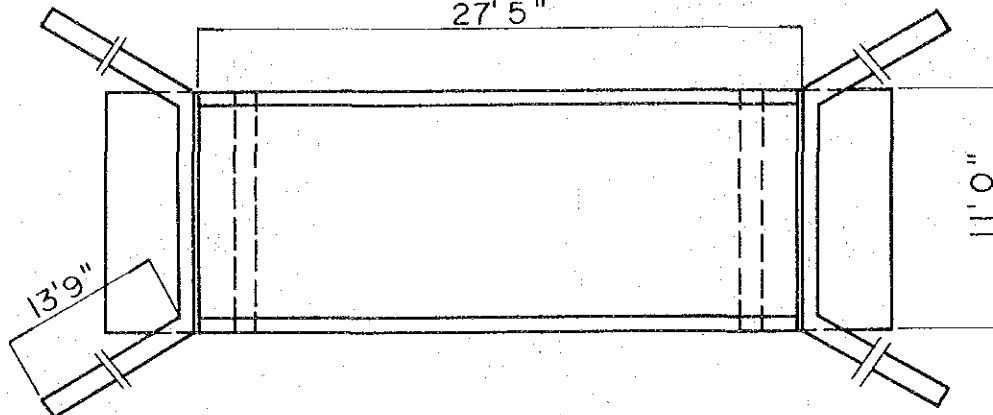
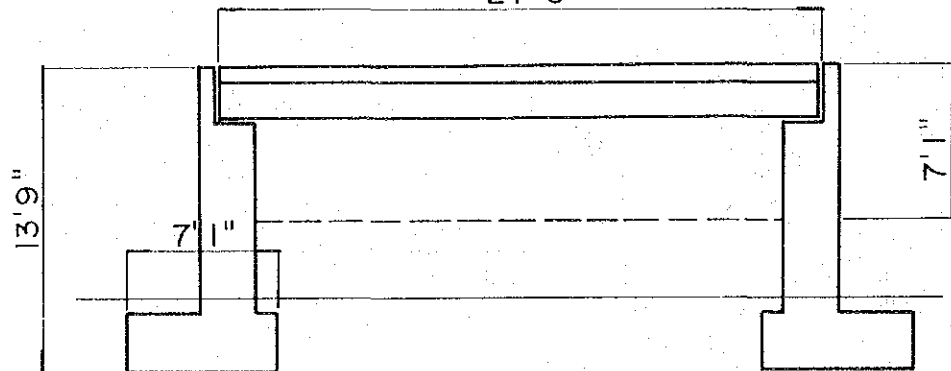
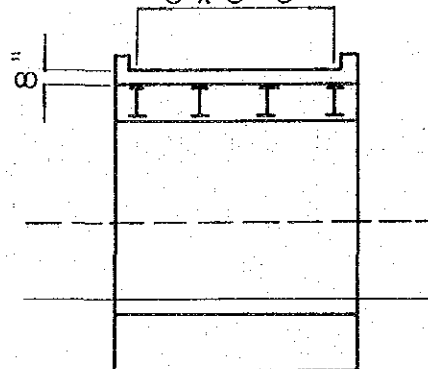
# BRIDGE INVENTORY

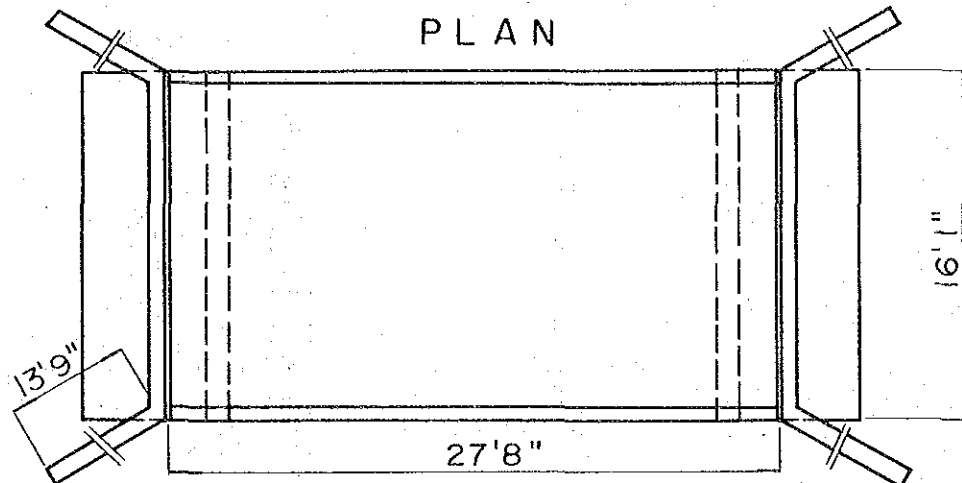
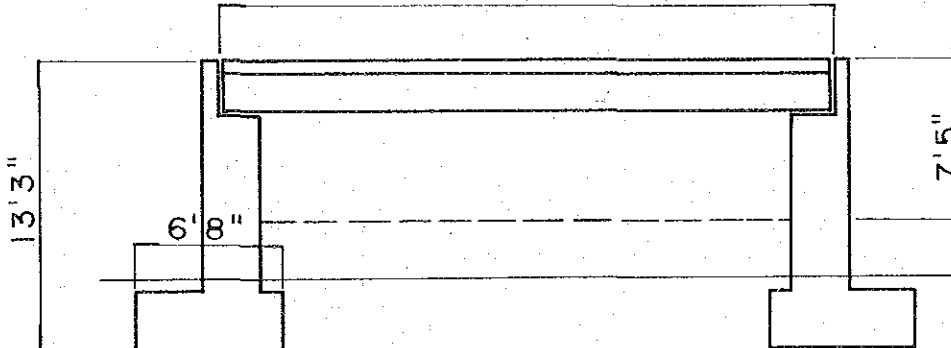
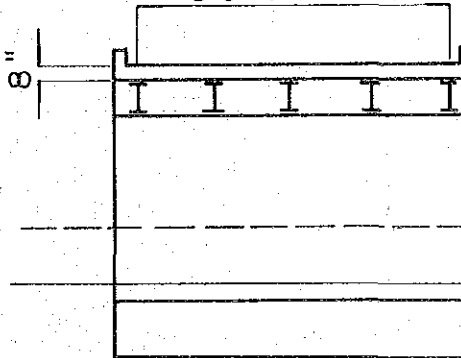
NO. 9

NAME	—	STATION	32.0 KM/20.0 MILE	NAME	GBENDEMBU	STATION	32.6 KM/20.4 MILE
BRIDGE	TYPE	SIMPLE BEAM BRIDGE		BRIDGE	TYPE	BRIDGE CULVERT	
MATERIAL	SUPER STRUCTURE	BEAM : STEEL    SLAB : R.C		MATERIAL	SUPER STRUCTURE	SLAB : R.C	
	SUB STRUCTURE	ABUT : R.C			SUB STRUCTURE	ABUT : R.C	
<div>PLAN 10'6"  15'9" 16'1"</div>				<div>PLAN  13'1" 17'5"</div>			
<div>PROFILE 10'6"  13'9" 6'11" 7'9"</div>				<div>PROFILE 13'1"  8'4" 2'9"</div>			
<div>CROSS SECTION 4'8" x 3 = 14'0"  8"</div>				<div>CROSS SECTION 17'5"  8"</div>			

# BRIDGE INVENTORY

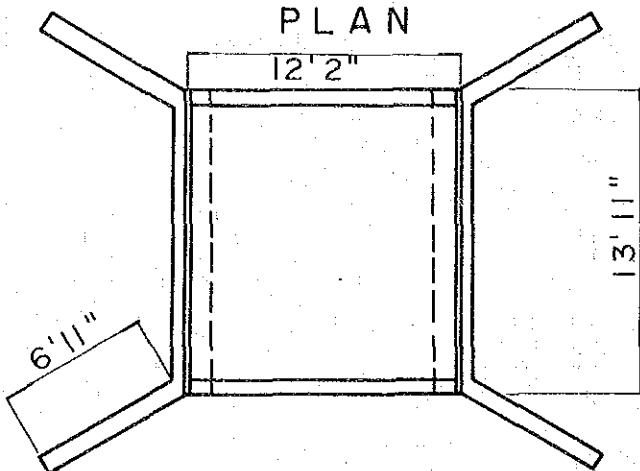
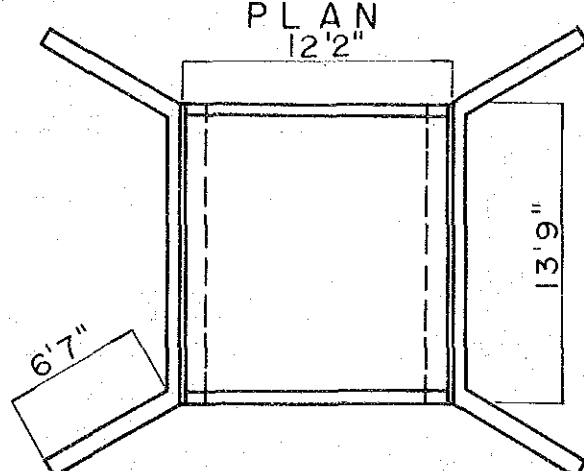
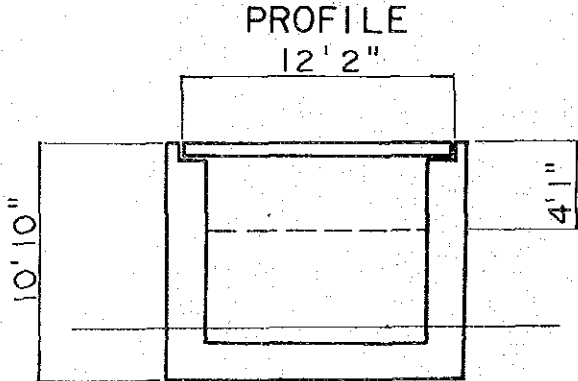
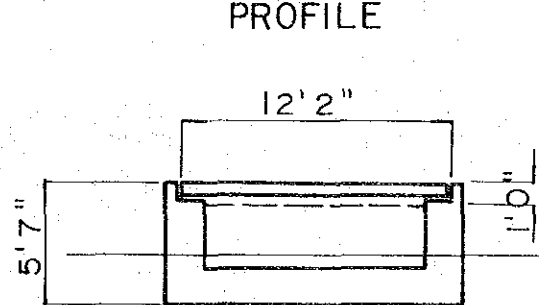
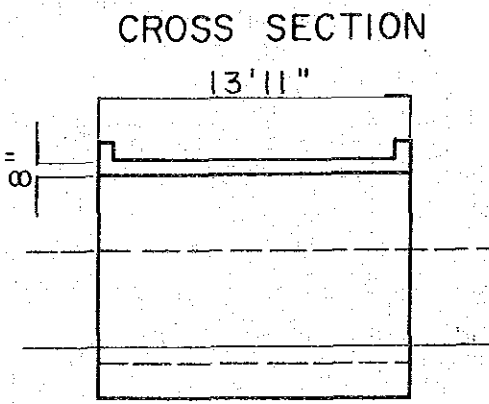
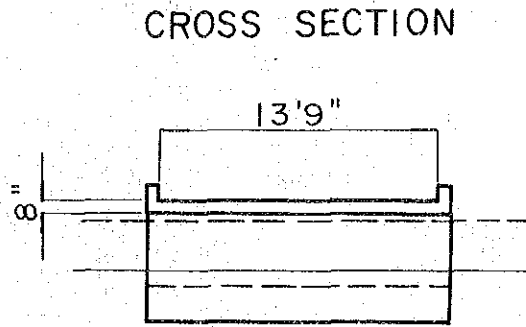
NO. 10

NAME	MASEMBI	STATION	34.0 KM / 21.3 MILE
BRIDGE	TYPE	SIMPLE BEAM BRIDGE	
MATERIAL	SUPER STRUCTURE	BEAM : STEEL    SLAB : R.C	
	SUB STRUCTURE	ABUT : R.C	
<p>PLAN 27'5"</p> 			
<p>PROFILE 27'5"</p> 			
<p>CROSS SECTION 3' x 3 = 9'</p> 			

NAME	—	STATION	35.1 KM / 21.9 MILE
BRIDGE	TYPE	SIMPLE BEAM BRIDGE	
MATERIAL	SUPER STRUCTURE	BEAM : STEEL    SLAB : R.C	
	SUB STRUCTURE	ABUT : R.C	
<p>PLAN 27'8"</p> 			
<p>PROFILE 27'8"</p> 			
<p>CROSS SECTION 3'6" x 4 = 14'0"</p> 			

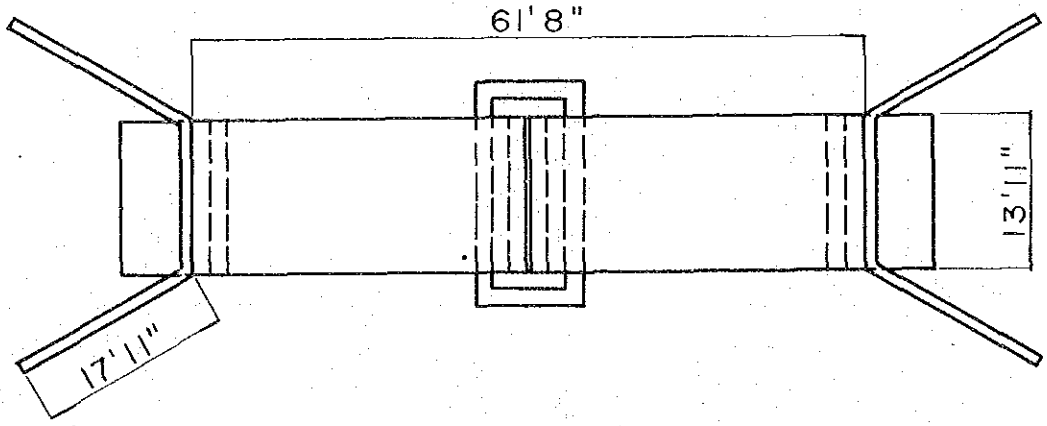
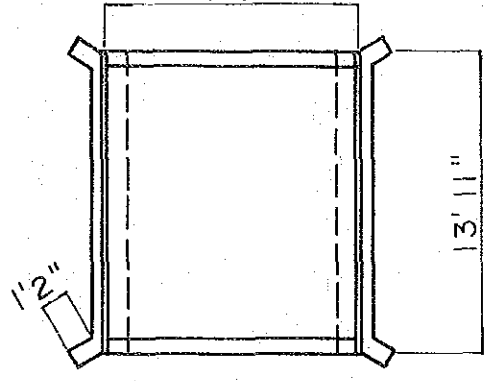
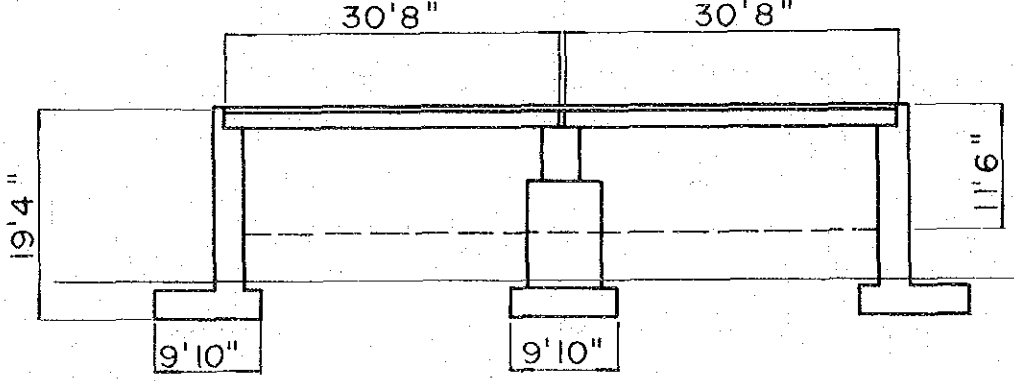
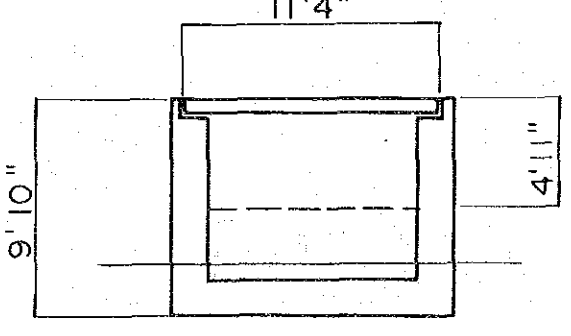
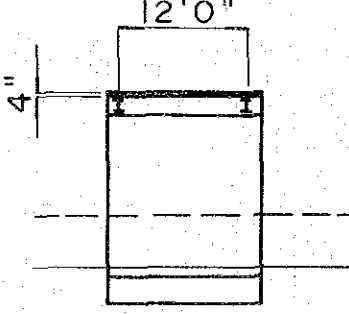
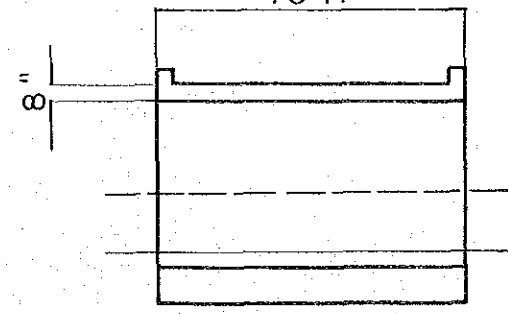
# BRIDGE INVENTORY

NO. 11

NAME	MAGBANDANI	STATION	35.9 KM / 22.4 MILE	NAME	—	STATION	37.4 KM / 23.3 MILE
BRIDGE TYPE		BRIDGE CULVERT		BRIDGE TYPE		BRIDGE CULVERT	
MATERIAL	SUPER STRUCTURE	SLAB : R.C		MATERIAL	SUPER STRUCTURE	SLAB : R.C	
	SUB STRUCTURE	ABUT : R.C			SUB STRUCTURE	ABUT : R.C	
<p>PLAN</p> 				<p>PLAN</p> 			
<p>PROFILE</p> 				<p>PROFILE</p> 			
<p>CROSS SECTION</p> 				<p>CROSS SECTION</p> 			

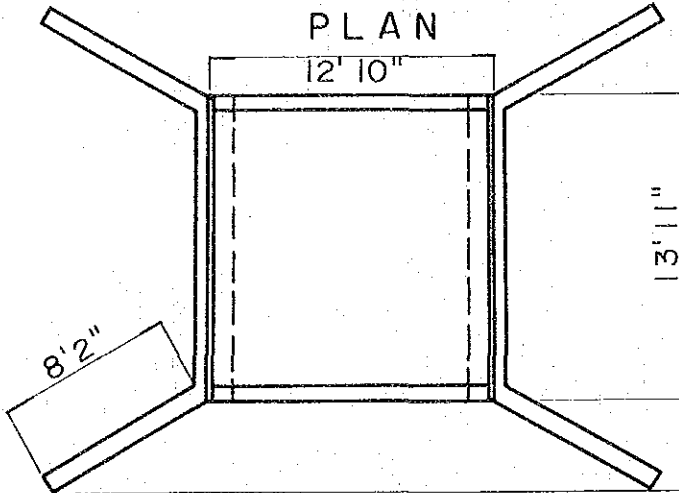
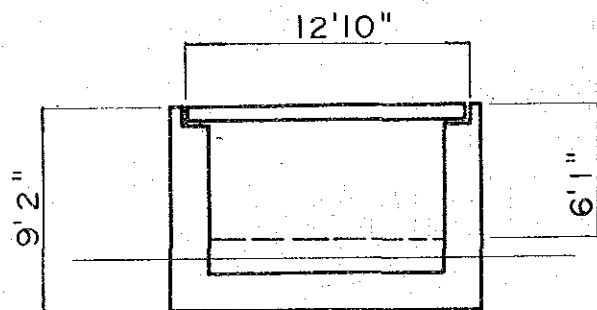
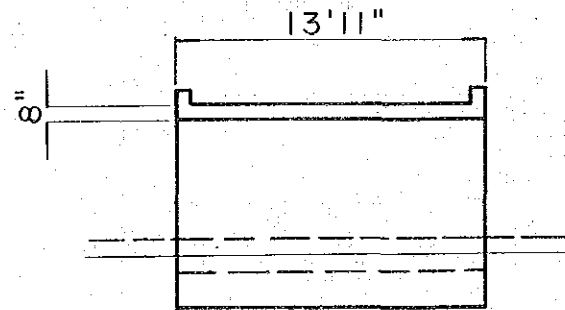
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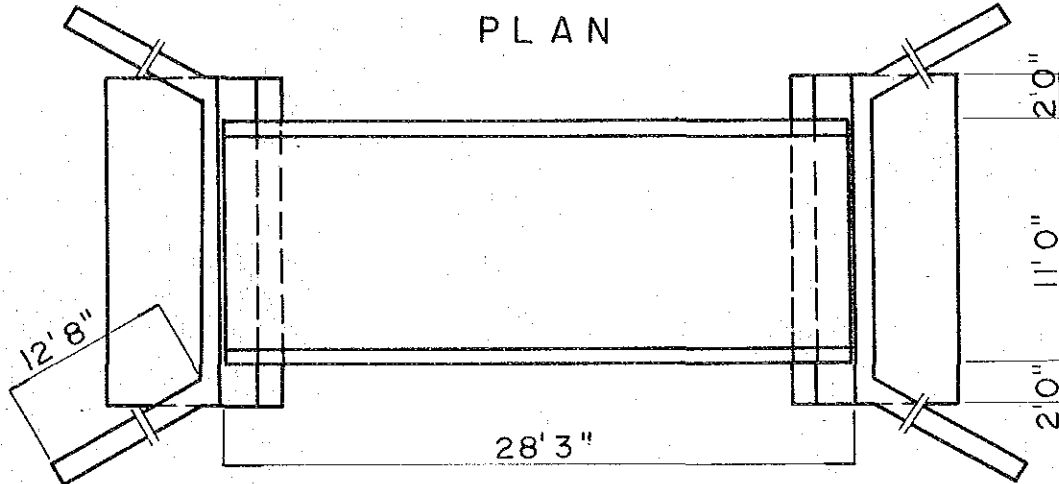
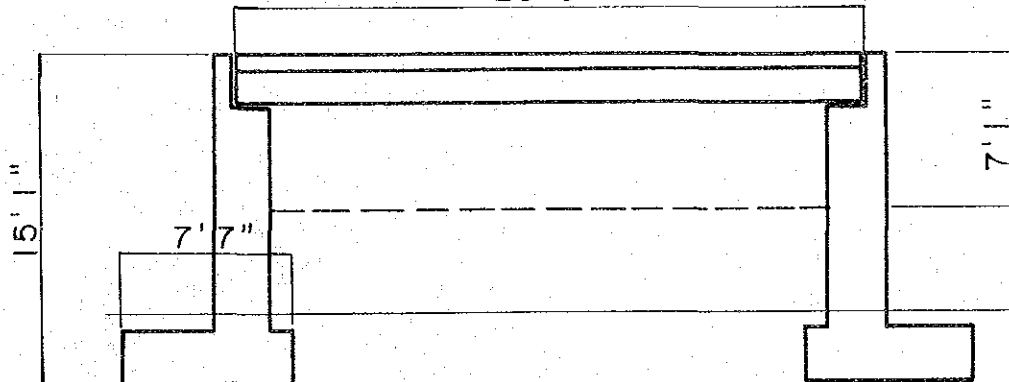
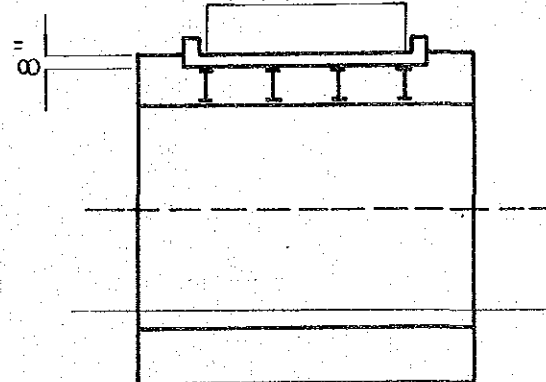
NO. 12

NAME	—	STATION	43.1 KM/26.9 MILE	NAME	—	STATION	43.9 KM/27.4 MILE
BRIDGE	TYPE	SIMPLE BEAM BRIDGE		BRIDGE	TYPE	BRIDGE CULVERT	
MATERIAL	SUPER STRUCTURE	BEAM : STEEL	SLAB : TIMBER	MATERIAL	SUPER STRUCTURE	SLAB : R.C	
	SUB STRUCTURE	ABUT : R.C	PIER : R.C		SUB STRUCTURE	ABUT : R.C	
<p>PLAN</p> <p>61'8"</p> 				<p>PLAN</p> <p>11'4"</p> 			
<p>PROFILE</p> 				<p>PROFILE</p> 			
<p>CROSS SECTION</p> 				<p>CROSS SECTION</p> 			

# BRIDGE INVENTORY

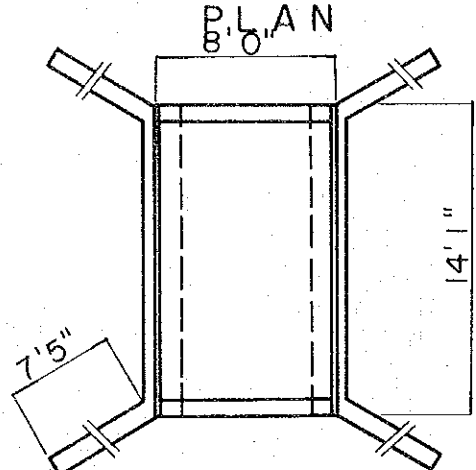
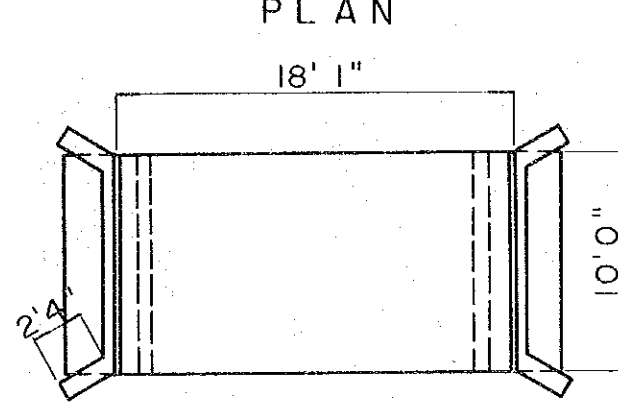
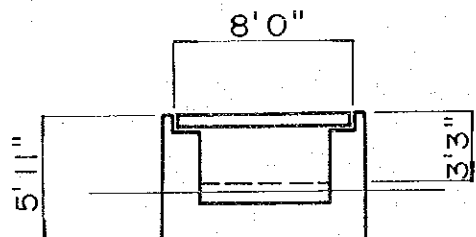
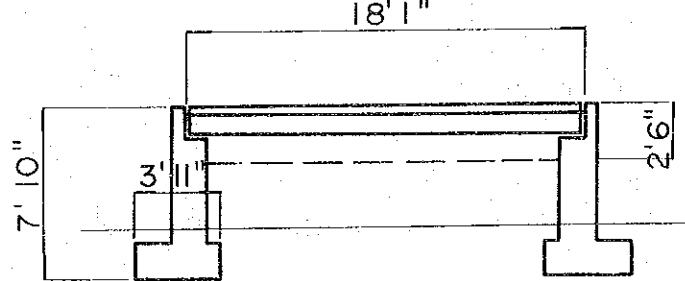
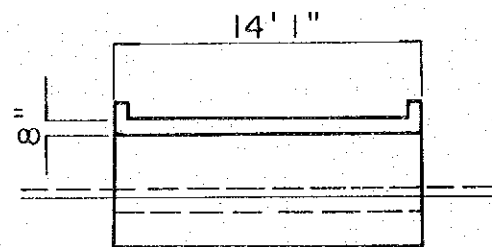
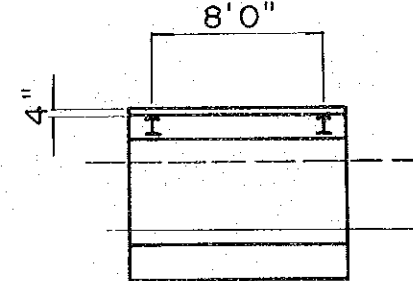
NO. 13

NAME	—	STATION	44.6 KM/27.9 MILE
BRIDGE	TYPE	BRIDGE CULVERT	
MATERIAL	SUPER STRUCTURE	SLAB : R.C	
	SUB STRUCTURE	ABUT : R.C	
			
			
			

NAME	MABUTI	STATION	45.4 KM/28.4 MILE
BRIDGE	TYPE	SIMPLE BEAM BRIDGE	
MATERIAL	SUPER STRUCTURE	BEAM : STEEL SLAB : TIMBER	
	SUB STRUCTURE	ABUT : R.C	
			
			
			

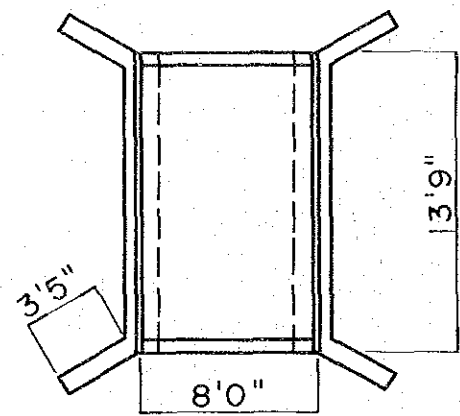
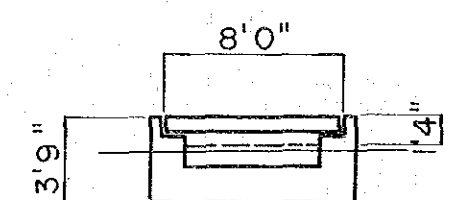
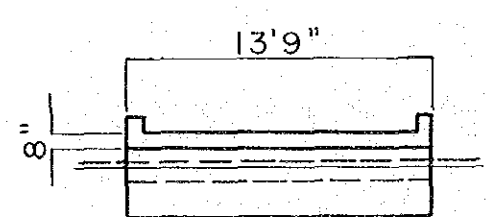
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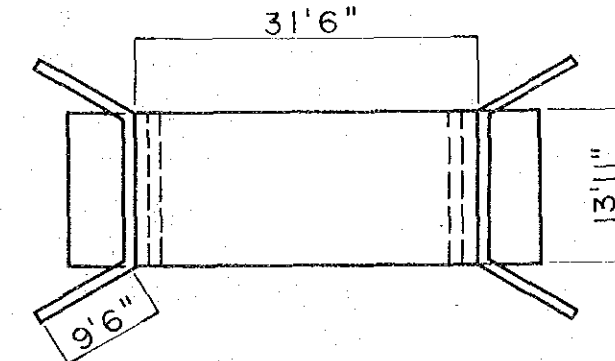
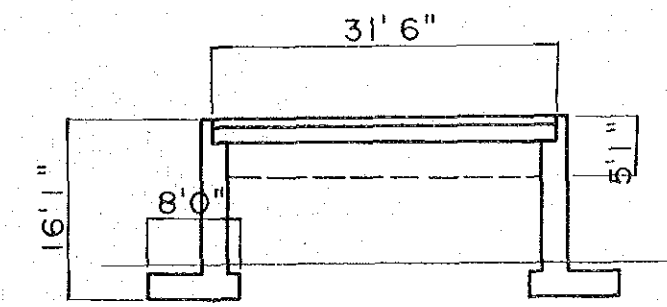
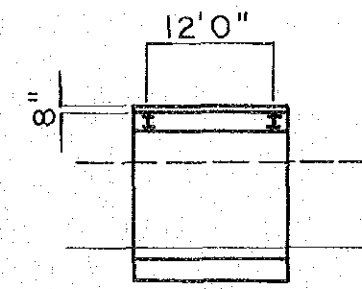
NO. 14

NAME	RIBIA	STATION	47.1 <sup>KM</sup> /29.4 MILE	NAME	MASAKTABA	STATION	49.0 <sup>KM</sup> /30.6 MILE
BRIDGE	TYPE	BRIDGE CULVERT		BRIDGE	TYPE	SIMPLE BEAM BRIDGE	
MATERIAL	SUPER STRUCTURE	SLAB : R.C		MATERIAL	SUPER STRUCTURE	BEAM : STEEL    SLAB : TIMBER	
	SUB STRUCTURE	ABUT : R.C			SUB STRUCTURE	ABUT : R.C	
<div>PLAN</div> 				<div>PLAN</div> 			
<div>PROFILE</div> 				<div>PROFILE</div> 			
<div>CROSS SECTION</div> 				<div>CROSS SECTION</div> 			

# BRIDGE INVENTORY

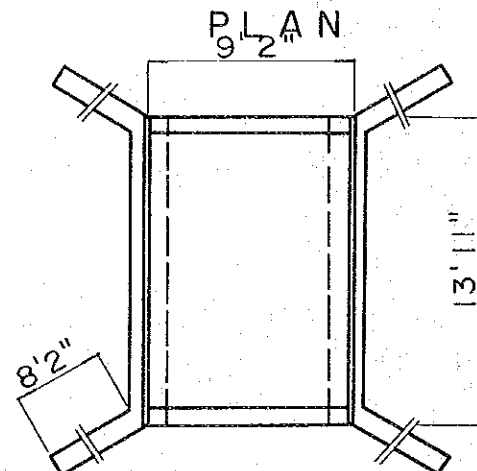
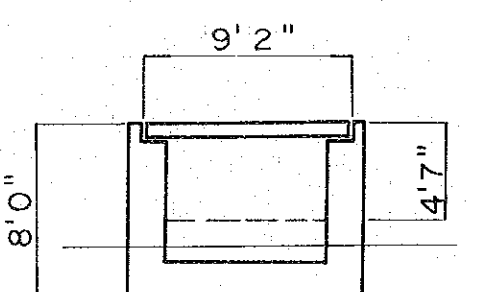
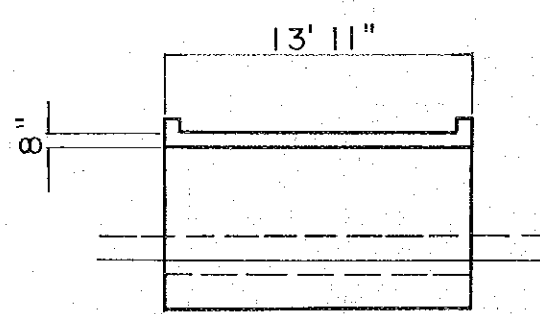
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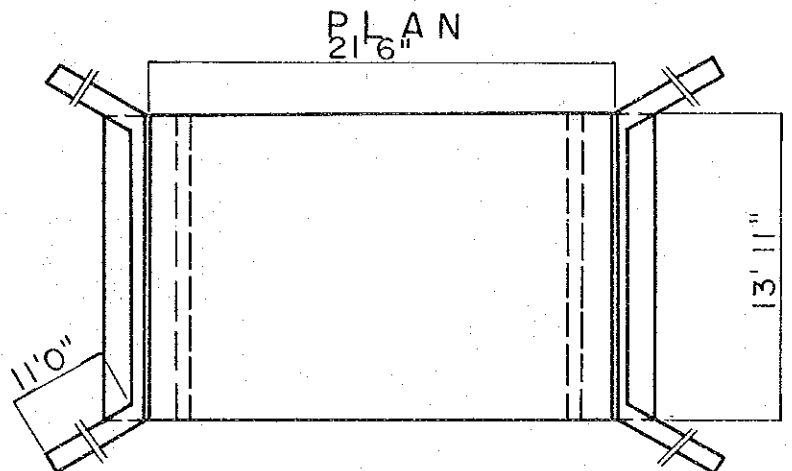
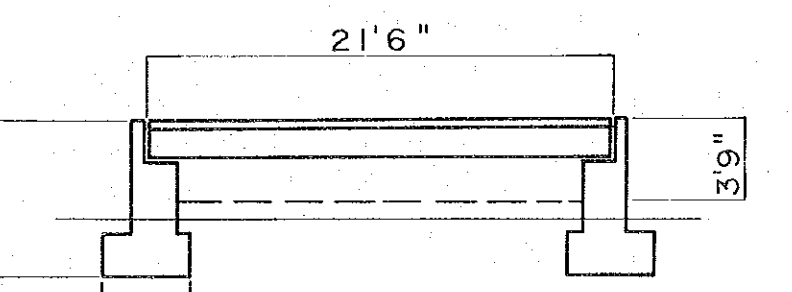
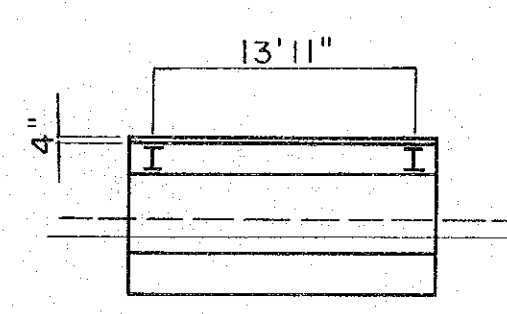
NAME	—	STATION	49.6 KM / 31.0 MILE
BRIDGE	TYPE	BRIDGE CULVERT	
MATERIAL	SUPER STRUCTURE	SLAB : R.C	
	SUB STRUCTURE	ABUT : R.C	
PLAN			
			
PROFILE			
			
CROSS SECTION			
			

NAME	—	STATION	51.2 KM / 32.0 MILE
BRIDGE	TYPE	SIMPLE BEAM BRIDGE	
MATERIAL	SUPER STRUCTURE	BEAM : STEEL    SLAB : TIMBER	
	SUB STRUCTURE	ABUT : R.C	
PLAN			
			
PROFILE			
			
CROSS SECTION			
			

# BRIDGE INVENTORY

NO. 16

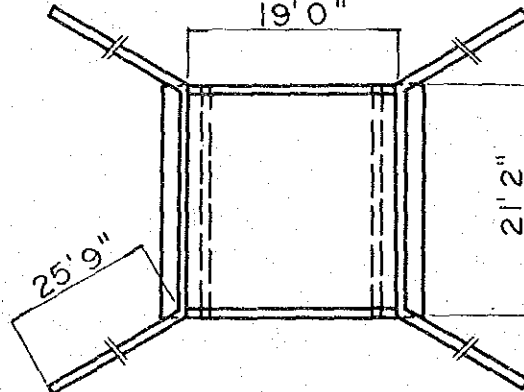
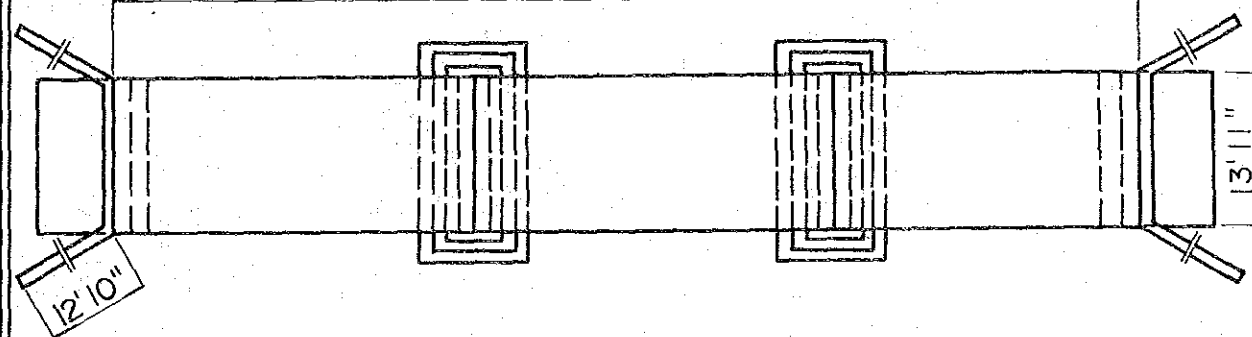
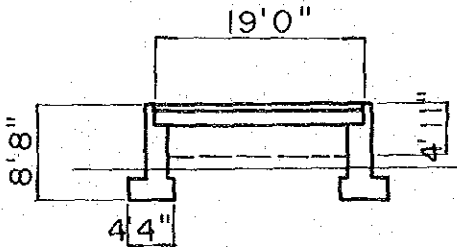
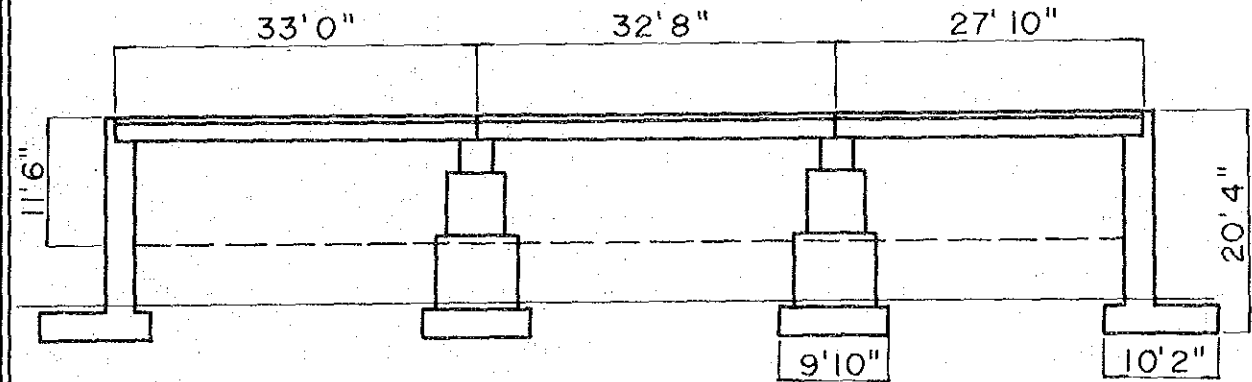
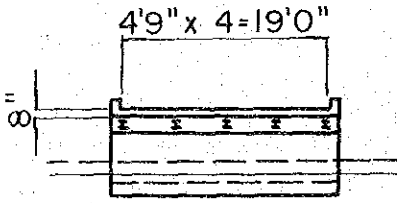
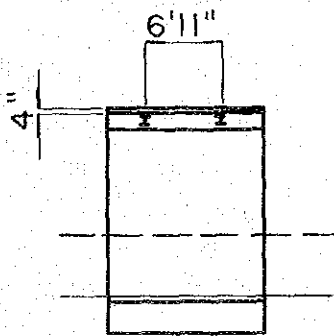
NAME	MAKUMBU	STATION	53.3 KM/33.3 MILE
BRIDGE	TYPE	BRIDGE CULVERT	
MATERIAL	SUPER STRUCTURE	SLAB : R.C	
	SUB STRUCTURE	ABUT : R.C	
			
			
			

NAME	—	STATION	57.0 KM/ 35.6 MILE
BRIDGE	TYPE	SIMPLE BEAM BRIDGE	
MATERIAL	SUPER STRUCTURE	BEAM : STEEL SLAB : TIMBER	
	SUB STRUCTURE	ABUT : R.C	
			
			
			



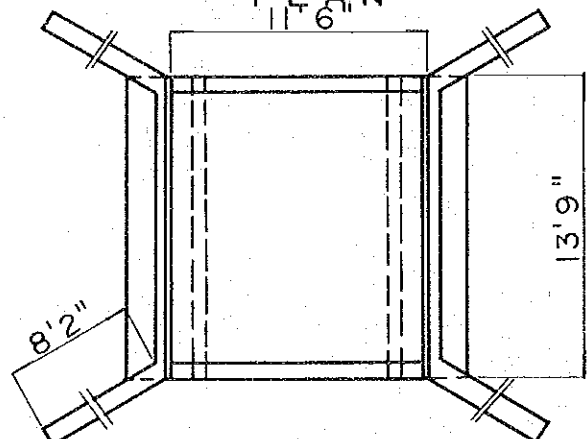
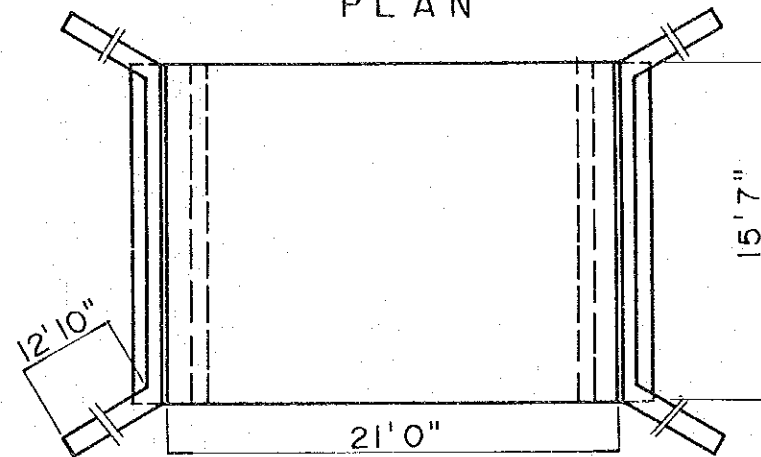
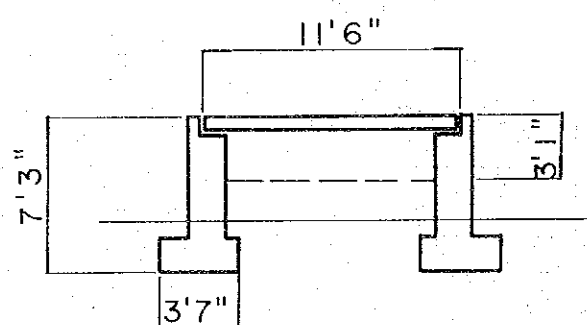
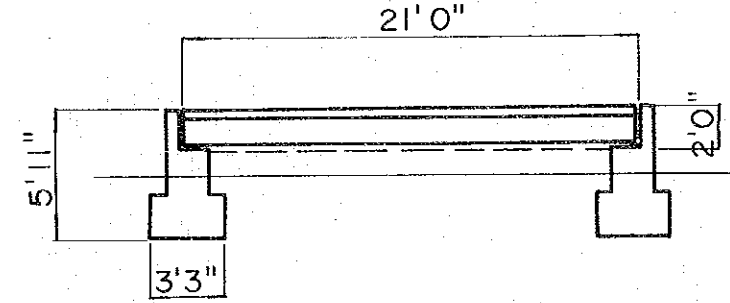
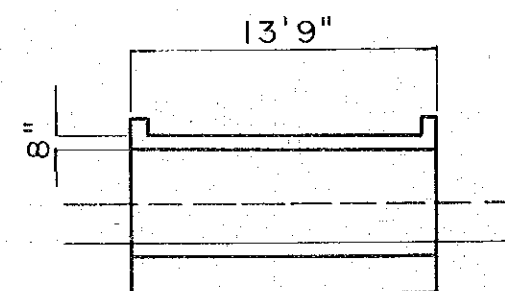
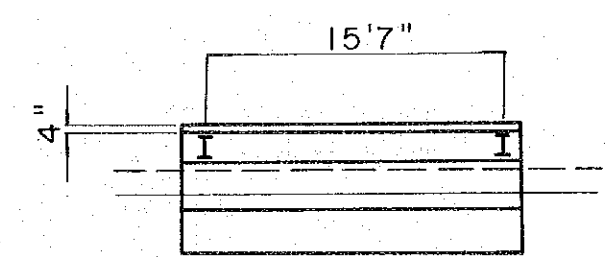
# BRIDGE INVENTORY

NO. 17

NAME	—	STATION	58.1 KM / 36.3 MILE	NAME	KAMARANKA	STATION	60.3 KM / 37.7 MILE
BRIDGE	TYPE	SIMPLE BEAM BRIDGE		BRIDGE	TYPE	SIMPLE BEAM BRIDGE	
MATERIAL	SUPER STRUCTURE	BEAM : STEEL    SLAB : R.C		MATERIAL	SUPER STRUCTURE	BEAM : STEEL    SLAB : TIMBER	
	SUB STRUCTURE	ABUT : R.C			SUB STRUCTURE	ABUT : R.C    PIER : R.C	
<p>PLAN</p> 				<p>PLAN</p> 			
<p>PROFILE</p> 				<p>PROFILE</p> 			
<p>CROSS SECTION</p> 				<p>CROSS SECTION</p> 			

# BRIDGE INVENTORY

NO. 18

NAME	—	STATION	61.5 KM/38.4 MILE	NAME	—	STATION	64.1 KM/40.1 MILE
BRIDGE	TYPE	BRIDGE CULVERT		BRIDGE	TYPE	SIMPLE BEAM BRIDGE	
MATERIAL	SUPER STRUCTURE	SLAB : R.C		MATERIAL	SUPER STRUCTURE	BEAM : STEEL SLAB : TIMBER	
	SUB STRUCTURE	ABUT : R.C			SUB STRUCTURE	ABUT : R.C	
<div>PLAN 11'6"</div> 				<div>PLAN 21'0"</div> 			
<div>PROFILE 11'6"</div> 				<div>PROFILE 21'0"</div> 			
<div>CROSS SECTION 13'9"</div> 				<div>CROSS SECTION 15'7"</div> 			

# BRIDGE INVENTORY

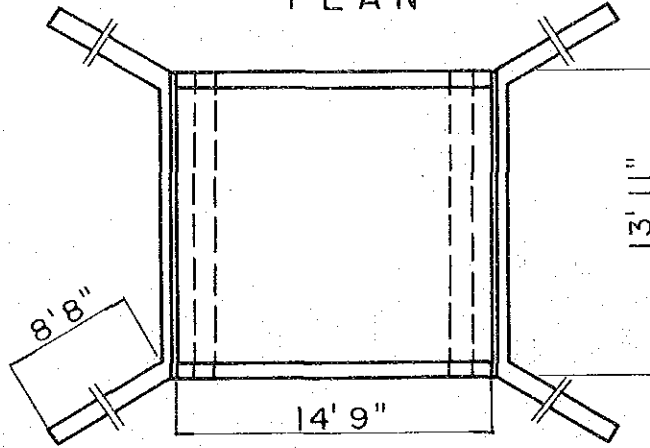
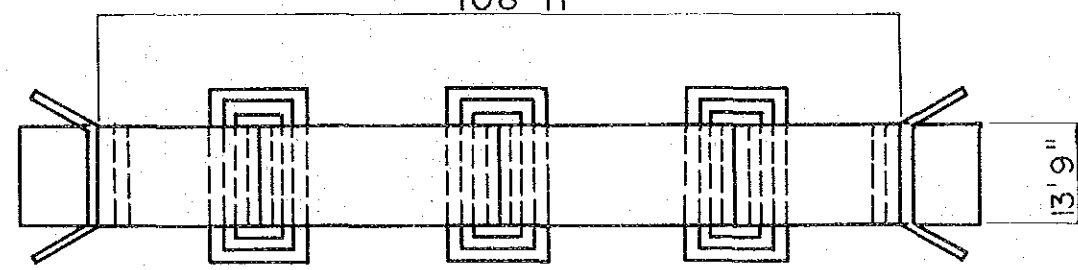
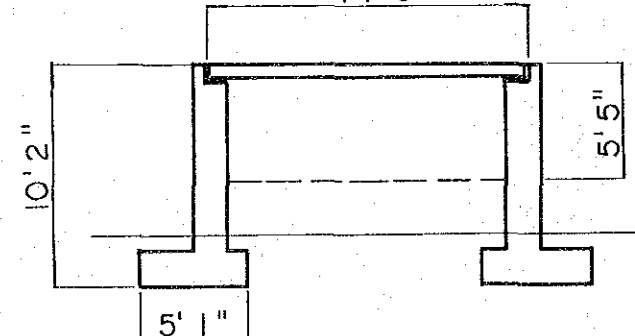
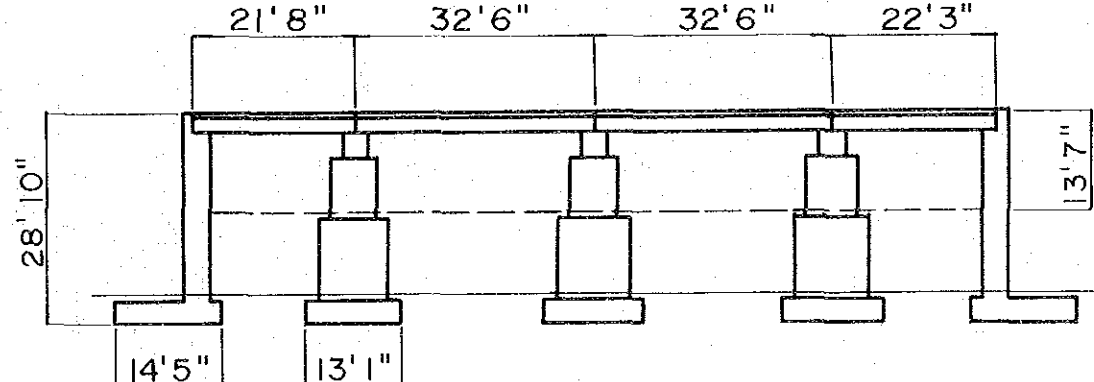
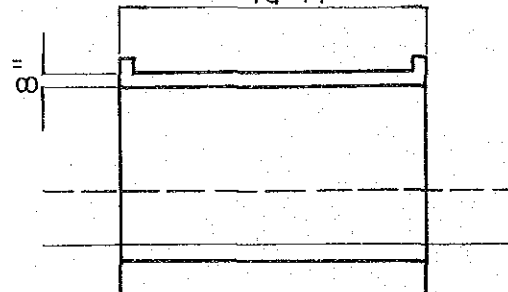
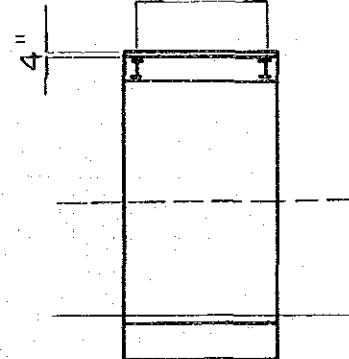
NO. 19

NAME	—	STATION	64.8 KM / 40.5 MILE
BRIDGE TYPE	SIMPLE BEAM BRIDGE		
MATERIAL	SUPER STRUCTURE	BEAM : STEEL SLAB : TIMBER	
	SUB STRUCTURE	ABUT : R.C	
<p>PLAN</p>			
<p>PROFILE</p>			
<p>CROSS SECTION</p>			

NAME	—	STATION	67.0 KM / 41.9 MILE
BRIDGE TYPE	SIMPLE BEAM BRIDGE		
MATERIAL	SUPER STRUCTURE	BEAM : STEEL SLAB : TIMBER	
	SUB STRUCTURE	ABUT : R.C PIER : P.C	
<p>PLAN</p>			
<p>PROFILE</p>			
<p>CROSS SECTION</p>			

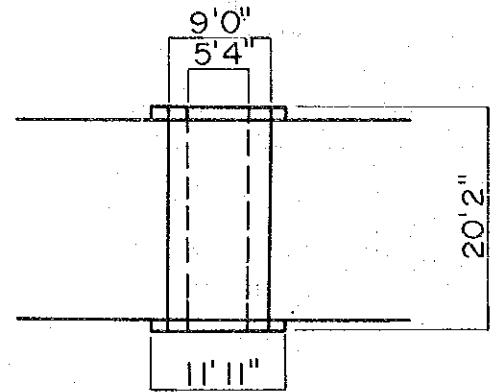
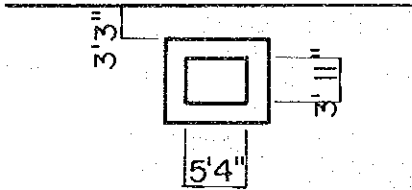
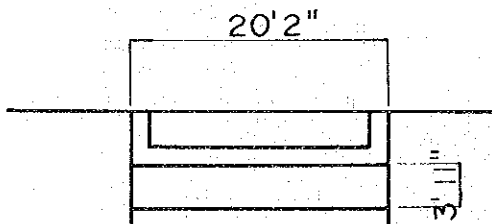
# BRIDGE INVENTORY

NO. 20

NAME	—		STATION	67.4 KM/42.1 MILE	NAME	BANKA	STATION	74.2 KM/46.4 MILE
BRIDGE	TYPE	BRIDGE CULVERT			BRIDGE	TYPE	SIMPLE BEAM BRIDGE	
MATERIAL	SUPER STRUCTURE	SLAB : R.C			MATERIAL	SUPER STRUCTURE	BEAM : STEEL    SLAB : TIMBER	
	SUB STRUCTURE	ABUT : R.C				SUB STRUCTURE	ABUT : R.C    PIER : R.C	
<p>PLAN</p> 					<p>PLAN</p> <p>108' 11"</p> 			
<p>PROFILE</p> <p>14' 9"</p> 					<p>PROFILE</p> <p>21' 8"    32' 6"    32' 6"    22' 3"</p> 			
<p>CROSS SECTION</p> <p>13' 11"</p> 					<p>CROSS SECTION</p> <p>11' 10"</p> 			

# BRIDGE INVENTORY

NO. 21

NAME	—	STATION	74.4 KM / 46.5 MILE	NAME		STATION	
BRIDGE	TYPE	BRIDGE CULVERT		BRIDGE	TYPE		
MATERIAL	SUPER STRUCTURE	SLAB : R.C		MATERIAL	SUPER STRUCTURE		
	SUB STRUCTURE	ABUT : R.C			SUB STRUCTURE		
<p>PLAN</p> 				<p>PLAN</p>			
<p>PROFILE</p> 				<p>PROFILE</p>			
<p>CROSS SECTION</p> 				<p>CROSS SECTION</p>			

# APPENDIX N TOPOGRAPHICAL SURVEY

## LOCATION OF TOPOGRAPHIC SURVEY WORKS

### 1. (ROAD SURVEY)

(No.)	(Part No.)	(Sta. B.P.)		(Sta. E.P.)		(Region)	(Dist)	
		(Km)	(Mile)	(Km)	(Mile)		(Km)	(Mile)
1.	Part - 1	0 + 00	0	0 + 40	0.2	Panlap	400	0.2
2.	" - 2	1 + 10	0.7	1 + 70	1.1	Panlap - A	600	0.4
3.	" - 3	3 + 00	1.9	3 + 80	2.4	Yoni	800	0.5
4.	" - 4	5 + 20	3.2	10 + 00	6.2	Mabole	4,800	3.0
5.	" - 5	12 + 60	7.8	14 + 00	8.7	Tambiama	1,400	0.9
6.	" - 6	15 + 60	9.7	16 + 30	10.1	Miayata	700	0.4
7.	" - 7	17 + 20	10.7	18 + 20	11.3	Mafure - 1	1,000	0.6
8.	" - 8A	19 + 00	11.8	20 + 20	12.6	Mafure	1,200	0.7
9.	" - 8B	23 + 50	14.6	24 + 00	14.9	Makambi-Makonko	500	0.3
10.	" - 9	25 + 00	15.5	27 + 00	16.8	Matehun	2,000	1.2
11.	" - 10A	44 + 80	27.8	46 + 20	28.7	Ribia	1,400	0.9
12.	" - 10B	46 + 80	29.1	47 + 60	29.6	Bom	800	0.5
13.	" - 11	48 + 00	29.8	49 + 50	30.8	Masaktaba	1,500	0.9
14.	" - 12	51 + 40	31.9	51 + 70	32.1	Makaiba	300	0.2
15.	" - 13A	52 + 10	32.4	53 + 50	33.3	Machichi	1,400	0.9
16.	" - 13B	54 + 50	33.9	55 + 50	34.5	Masonka	1,000	0.6
17.	" - 13C	55 + 80	34.7	56 + 60	35.2	Wari	800	0.5
18.	" - 13D	56 + 90	35.4	57 + 80	35.9	Kamaranka	900	0.6
19.	" - 14	58 + 30	36.2	58 + 60	36.4	Mane	300	0.2
20.	" - 15	59 + 40	36.9	60 + 30	37.5	Mamank	900	0.6
21.	" - 16	62 + 00	38.5	64 + 50	40.1	Sindugu/Songwia	2,500	1.6
22.	" - 17	68 + 50	42.6	69 + 10	42.9	Bankabi	600	0.4
23.	" - 18	75 + 30	46.8	76 + 80	47.7	Maruka/Kenedi	1,500	0.9
24.	" - 19	77 + 60	48.2	79 + 60	49.5	Makanka	2,000	1.2
25.	" - 20	84 + 40	52.5	85 + 00	52.8	Kamakwic	600	0.4
Total							(29,900)	(18.6)

### 2. (RIVER SURVEY)

1.	Part - A	0 + 00	0	21 + 00	13.1	Panlap-Mafure	21,000	13.1
2.	" - B	21 + 00	13.1	42 + 00	26.1	Mafure-Ribia	21,000	13.1
3.	" - C	42 + 00	26.1	63 + 00	39.2	Ribia-Sindugu/Songwia	21,000	13.1
4.	" - D	63 + 00	39.2	85 + 00	52.8	Sindugu/Songwia-Kamakwic	22,000	13.7
Total							(85,000)	(52.8)

Source : JICA Mission