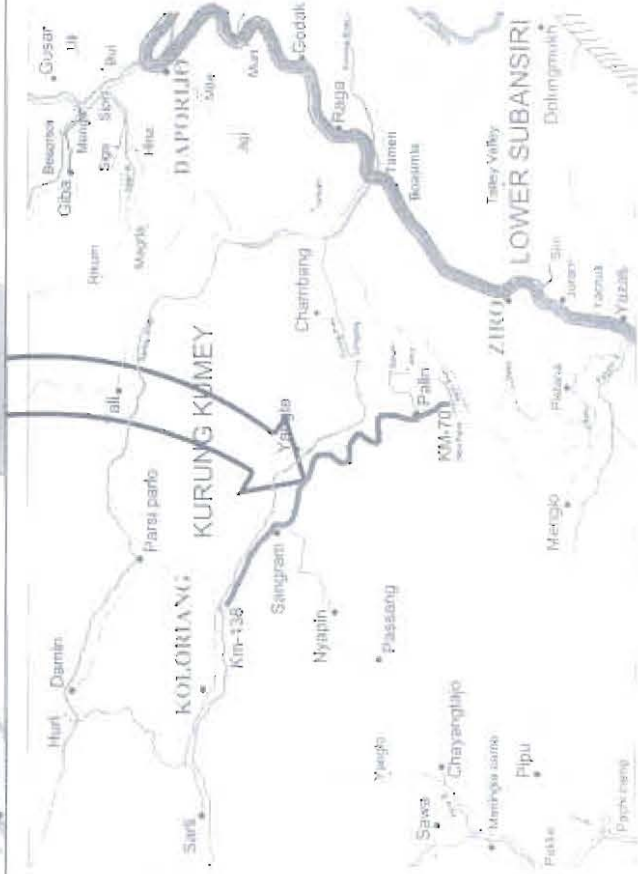
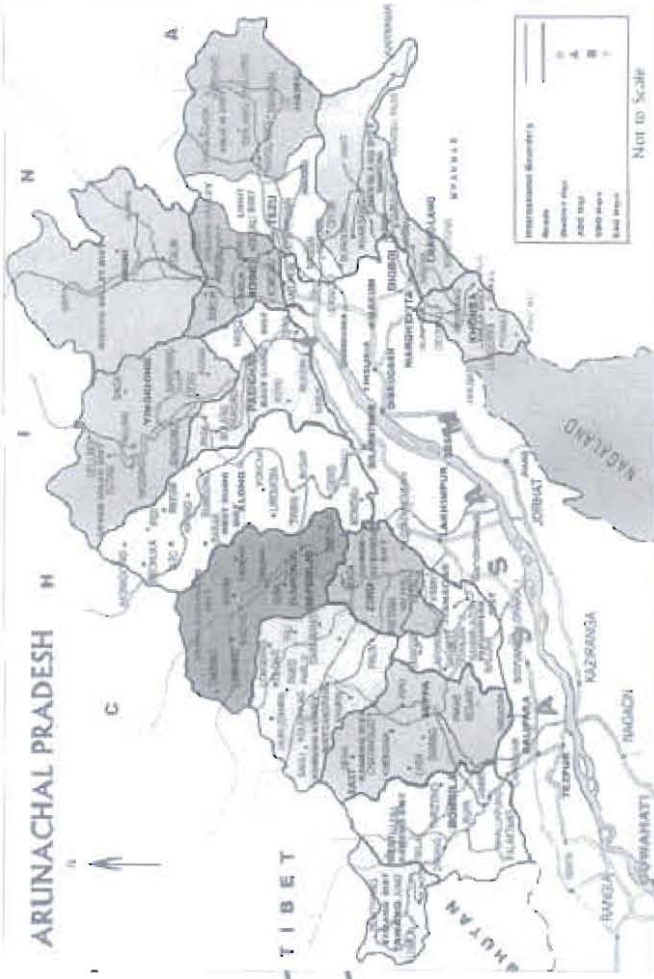
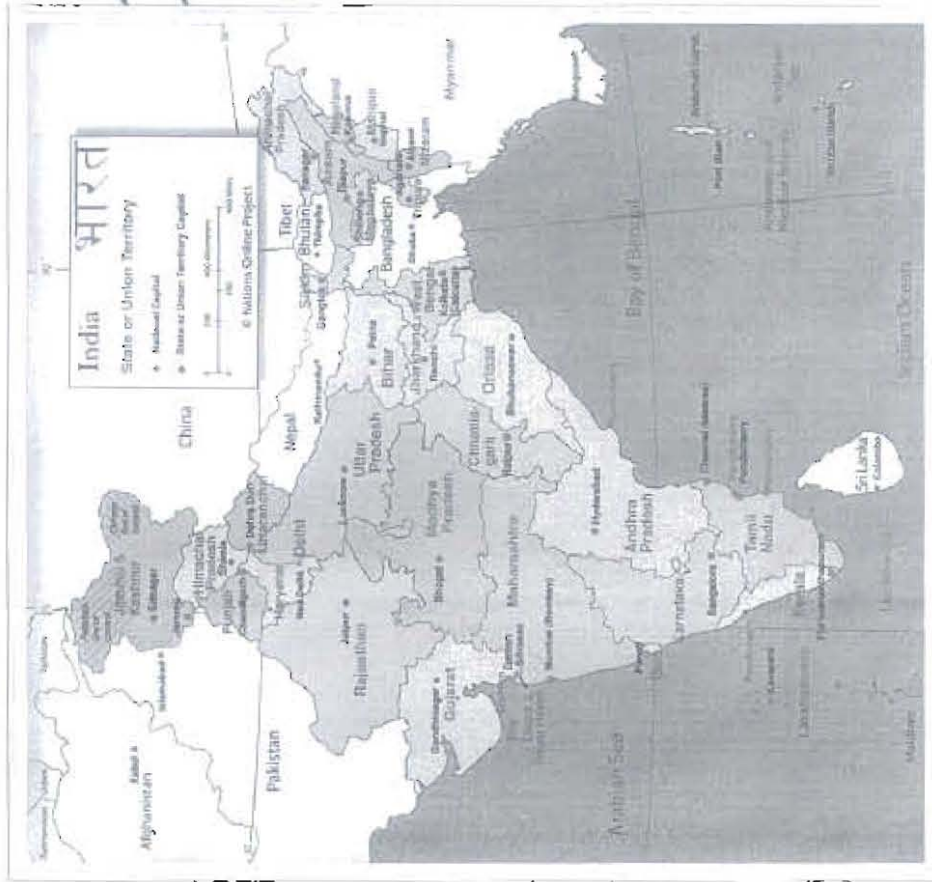


ARUNACHAL PRADESH



PROJECT ROAD



Consultancy Services for preparation of Detailed Project report for 24 lining of Jorhat-Kurung Kumey Road from Km 70.00 to Km 138.00 (Length = 68 Km) in the state of Arunachal Pradesh under SARDF-NE on EPC Mode

Project Name



E & J Projects Pvt. Ltd.



Client



Org No. MA/AR/01/Road/consulting

Scale

Location Map

Consultancy Services for preparation of Detailed Project report for 24 lining of Jorhat-Kurung Kumey Road from Km 70.00 to Km 138.00 (Length = 68 Km) in the state of Arunachal Pradesh under SARDF-NE on EPC Mode

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Project Name



E & J Projects Pvt. Ltd.



Client



**Annexure- IV:
Classified Traffic Volume Count**

CLASSIFIED VEHICLE COUNT : SURVEY STATION 1, (KM 70.00 : New Palni)

Date : 18.8.2015

TIME	Two wheeler	Three wheeler / auto	Car/jeep/ van/Taxi	BUS		LCV	TRUCK			PCU
				Mini	FULL		2-Axle	Multi Axle	Artic/sem / Artic	
8.00-9.00	60	0	59	0	1	7	7	0	0	123.5
9.00-10.00	28	0	33	0	0	12	5	0	0	80
10.00-11.00	17	0	20	0	0	0	2	0	0	34.5
11.00-12.00	7	0	25	0	0	1	2	0	0	36
12.00-1.00	20	0	20	0	0	5	5	0	0	52.5
1.00-2.00	7	0	17	0	0	1	3	0	0	31
2.00-3.00	17	0	28	0	0	1	1	0	0	41
3.00-4.00	32	0	23	0	0	0	3	0	0	48
4.00-5.00	11	0	32	0	0	2	0	0	0	40.5
5.00-6.00	15	0	32	0	0	3	1	0	0	47
6.00-7.00	2	0	8	0	0	1	0	0	0	10.5
7.00-8.00	1	0	4	0	0	0	0	0	0	4.5
8.00-9.00	0	0	0	0	0	0	1	0	0	3
9.00-10.00	0	0	0	0	0	0	0	0	0	0
10.00-11.00	0	0	0	0	0	0	0	0	0	0
11.00-12.00	0	0	0	0	0	0	0	0	0	0
12.00-1.00	0	0	0	0	0	0	0	0	0	0
1.00-2.00	0	0	0	0	0	0	0	0	0	0
2.00-3.00	0	0	0	0	0	0	0	0	0	0
3.00-4.00	0	0	0	0	0	0	0	0	0	0
4.00-5.00	0	0	0	0	0	0	0	0	0	0
5.00-6.00	0	0	0	0	0	0	0	0	0	0
6.00-7.00	1	0	0	0	0	0	0	0	0	0.5
7.00-8.00	3	0	0	0	0	0	0	0	0	1.5
TOTAL	221		301		1	33	30			554

Date : 19.8.2015

TIME	Two wheeler	Three wheeler / auto	Car/jeep/ van/Taxi	BUS		LCV	TRUCK			PCU
				Mini	FULL		2-Axle	Multi Axle	Artic/sem / Artic	
8.00-9.00	58	0	62	0	1	9	9	0	0	134.5
9.00-10.00	25	0	34	0	0	10	8	0	0	85.5
10.00-11.00	19	0	18	0	0	0	1	0	0	30.5
11.00-12.00	8	0	26	0	0	2	4	0	0	45
12.00-1.00	18	0	19	0	0	5	7	0	0	56.5
1.00-2.00	7	0	19	0	0	2	2	0	0	31.5
2.00-3.00	18	0	26	0	0	3	0	0	0	39.5
3.00-4.00	25	0	25	0	0	2	4	0	0	52.5
4.00-5.00	8	0	28	0	0	1	5	0	0	48.5
5.00-6.00	18	0	29	0	0	0	1	0	0	41
6.00-7.00	3	0	7	0	0	1	0	0	0	10
7.00-8.00	1	0	5	0	0	0	0	0	0	5.5
8.00-9.00	1	0	0	0	0	0	1	0	0	3.5
9.00-10.00	0	0	0	0	0	0	0	0	0	0
10.00-11.00	0	0	0	0	0	0	0	0	0	0
11.00-12.00	0	0	0	0	0	0	0	0	0	0
12.00-1.00	0	0	0	0	0	0	0	0	0	0
1.00-2.00	0	0	0	0	0	0	0	0	0	0
2.00-3.00	0	0	0	0	0	0	0	0	0	0
3.00-4.00	0	0	0	0	0	0	0	0	0	0
4.00-5.00	0	0	0	0	0	0	0	0	0	0
5.00-6.00	0	0	0	0	0	0	0	0	0	0
6.00-7.00	1	0	0	0	0	0	0	0	0	0.5
7.00-8.00	3	0	0	0	0	0	0	0	0	1.5
TOTAL	213		298		1	35	42			586



Annexure- IV:
Classified Traffic Volume Count

CLASSIFIED VEHICLE COUNT : SURVEY STATION 1. (KM 70.00 : New Palni)

Date : 20.8.2015

TIME	Two wheeler	Three wheeler / auto	Car/jeep/ van/Taxi	BUS		LCV	TRUCK			PCU
				Mini	FULL		2-Axle	Multi Axle	Artic/sem / Artic	
8.00-9.00	61	0	59	0	1	11	7	0	0	130
9.00-10.00	27	0	31	0	0	13	8	0	0	88
10.00-11.00	15	0	22	0	0	3	1	0	0	37
11.00-12.00	11	0	23	0	0	3	2	0	0	30
12.00-1.00	21	0	17	0	0	7	7	0	0	59
1.00-2.00	9	0	21	0	0	2	1	0	0	31.5
2.00-3.00	17	0	25	0	0	4	3	0	0	48.5
3.00-4.00	28	0	27	0	0	1	3	0	0	51.5
4.00-5.00	9	0	33	0	0	4	4	0	0	49.5
5.00-6.00	17	0	34	0	0	2	2	0	0	51.5
6.00-7.00	2	0	9	0	0	1	0	0	0	11.5
7.00-8.00	1	0	1	0	0	0	0	0	0	1.5
8.00-9.00	0	0	0	0	0	0	1	0	0	3
9.00-10.00	0	0	0	0	0	0	0	0	0	0
10.00-11.00	0	0	0	0	0	0	0	0	0	0
11.00-12.00	0	0	0	0	0	0	0	0	0	0
12.00-1.00	0	0	0	0	0	0	0	0	0	0
1.00-2.00	0	0	0	0	0	0	0	0	0	0
2.00-3.00	0	0	0	0	0	0	0	0	0	0
3.00-4.00	0	0	0	0	0	0	0	0	0	0
4.00-5.00	0	0	0	0	0	0	0	0	0	0
5.00-6.00	0	0	0	0	0	0	0	0	0	0
6.00-7.00	1	0	0	0	0	0	0	0	0	0.5
7.00-8.00	3	0	0	0	0	0	0	0	0	1.5
TOTAL	222		302		1	47	35			603.5

Date : 21.8.2015

TIME	Two wheeler	Three wheeler / auto	Car/jeep/ van/Taxi	BUS		LCV	TRUCK			PCU
				Mini	FULL		2-Axle	Multi Axle	Artic/sem / Artic	
8.00-9.00	60	0	60	0	1	13	10	0	0	142.5
9.00-10.00	28	0	33	0	0	13	10	0	0	96.5
10.00-11.00	14	0	23	0	0	5	2	0	0	43.5
11.00-12.00	12	0	22	0	0	6	3	0	0	46
12.00-1.00	19	0	19	0	0	12	9	0	0	73.5
1.00-2.00	10	0	22	0	0	2	2	0	0	36
2.00-3.00	17	0	26	0	0	8	4	0	0	58.5
3.00-4.00	30	0	27	0	0	2	8	0	0	69
4.00-5.00	7	0	31	0	0	5	4	0	0	54
5.00-6.00	14	0	36	0	0	2	5	0	0	61
6.00-7.00	2	0	7	0	0	1	0	0	0	9.5
7.00-8.00	1	0	2	0	0	0	0	0	0	2.5
8.00-9.00	0	0	0	0	0	0	1	0	0	3
9.00-10.00	0	0	0	0	0	0	0	0	0	0
10.00-11.00	0	0	0	0	0	0	0	0	0	0
11.00-12.00	0	0	0	0	0	0	0	0	0	0
12.00-1.00	0	0	0	0	0	0	0	0	0	0
1.00-2.00	0	0	0	0	0	0	0	0	0	0
2.00-3.00	0	0	0	0	0	0	0	0	0	0
3.00-4.00	0	0	0	0	0	0	0	0	0	0
4.00-5.00	0	0	0	0	0	0	0	0	0	0
5.00-6.00	0	0	0	0	0	0	0	0	0	0
6.00-7.00	1	0	0	0	0	0	0	0	0	0.5
7.00-8.00	3	0	0	0	0	0	0	0	0	1.5
TOTAL	218		308		1	69	58			697.5



**Annexure- IV:
Classified Traffic Volume Count**

CLASSIFIED VEHICLE COUNT : SURVEY STATION 1. (KM 70.00 : New Palin)

Date : 22.8.2015

TIME	Two wheeler	Three wheeler / auto	Car/jeep/ van/Taxi	BUS		LCV	TRUCK			PCU
				Mini	FULL		2-Axle	Multi Axle	Artic/semi Artic	
8.00-9.00	41	0	48	0	1	15	8	0	0	118
9.00-10.00	17	0	27	0	0	13	10	0	0	85
10.00-11.00	8	0	20	0	0	9	1	0	0	40.5
11.00-12.00	5	0	20	0	0	10	2	0	0	44
12.00-1.00	13	0	18	0	0	15	8	0	0	71
1.00-2.00	7	0	18	0	0	4	1	0	0	30.5
2.00-3.00	12	0	23	0	0	11	4	0	0	57.5
3.00-4.00	22	0	22	0	0	4	4	0	0	51
4.00-5.00	4	0	24	0	0	6	5	0	0	50
5.00-6.00	7	0	28	0	0	5	2	0	0	45
6.00-7.00	2	0	5	0	0	1	0	0	0	7.5
7.00-8.00	1	0	1	0	0	0	0	0	0	1.5
8.00-9.00	0	0	0	0	0	0	1	0	0	1
9.00-10.00	0	0	0	0	0	0	0	0	0	0
10.00-11.00	0	0	0	0	0	0	0	0	0	0
11.00-12.00	0	0	0	0	0	0	0	0	0	0
12.00-1.00	0	0	0	0	0	0	0	0	0	0
1.00-2.00	0	0	0	0	0	0	0	0	0	0
2.00-3.00	0	0	0	0	0	0	0	0	0	0
3.00-4.00	0	0	0	0	0	0	0	0	0	0
4.00-5.00	0	0	0	0	0	0	0	0	0	0
5.00-6.00	0	0	0	0	0	0	0	0	0	0
6.00-7.00	1	0	0	0	0	0	0	0	0	0.5
7.00-8.00	3	0	0	0	0	0	0	0	0	1.5
TOTAL	144		254		1	93	46			606.5

Date : 23.8.2015

TIME	Two wheeler	Three wheeler / auto	Car/jeep/ van/Taxi	BUS		LCV	TRUCK			PCU
				Mini	FULL		2-Axle	Multi Axle	Artic/semi Artic	
8.00-9.00	32	0	33	0	1	17	6	0	0	95.5
9.00-10.00	17	0	20	0	0	17	6	0	0	72
10.00-11.00	11	0	14	0	0	9	1	0	0	36
11.00-12.00	10	0	14	0	0	11	2	0	0	41.5
12.00-1.00	11	0	12	0	0	14	6	0	0	56.5
1.00-2.00	8	0	14	0	0	2	1	0	0	24
2.00-3.00	11	0	16	0	0	13	2	0	0	47
3.00-4.00	19	0	16	0	0	7	2	0	0	42
4.00-5.00	8	0	18	0	0	8	3	0	0	43
5.00-6.00	10	0	22	0	0	5	2	0	0	40.5
6.00-7.00	2	0	3	0	0	1	0	0	0	5.5
7.00-8.00	1	0	4	0	0	0	0	0	0	4.5
8.00-9.00	0	0	0	0	0	0	1	0	0	3
9.00-10.00	0	0	0	0	0	0	0	0	0	0
10.00-11.00	0	0	0	0	0	0	0	0	0	0
11.00-12.00	0	0	0	0	0	0	0	0	0	0
12.00-1.00	0	0	0	0	0	0	0	0	0	0
1.00-2.00	0	0	0	0	0	0	0	0	0	0
2.00-3.00	0	0	0	0	0	0	0	0	0	0
3.00-4.00	0	0	0	0	0	0	0	0	0	0
4.00-5.00	0	0	0	0	0	0	0	0	0	0
5.00-6.00	0	0	0	0	0	0	0	0	0	0
6.00-7.00	1	0	0	0	0	0	0	0	0	0.5
7.00-8.00	3	0	0	0	0	0	0	0	0	1.5
TOTAL	144		186		1	104	32			513



Annexure- IV:
Classified Traffic Volume Count

CLASSIFIED VEHICLE COUNT : SURVEY STATION 1, (KM 70.00 : New Pallo)

Date: 24.8.2019

TIME	Two wheeler	Three wheeler / auto	Car/jeep/ van/Taxi	BUS		LCV	TRUCK			PCU
				Mini	FULL		2-Axle	Multi Axle	Artic/semi Artic	
8.00-9.00	68	0	64	0	1	14	10	0	0	152
9.00-10.00	34	0	38	0	0	14	11	0	0	109
10.00-11.00	19	0	27	0	0	7	2	0	0	53
11.00-12.00	16	0	28	0	0	8	8	0	0	72
12.00-1.00	26	0	23	0	0	15	12	0	0	94.5
1.00-2.00	34	0	26	0	0	3	5	0	0	52.5
2.00-3.00	22	0	31	0	0	13	8	0	0	85.5
3.00-4.00	37	0	33	0	0	7	11	0	0	95
4.00-5.00	13	0	36	0	0	9	8	0	0	80
5.00-6.00	22	0	41	0	0	5	5	0	0	74.5
6.00-7.00	2	0	9	0	0	1	0	0	0	11.5
7.00-8.00	1	0	2	0	0	0	0	0	0	2.5
8.00-9.00	0	0	0	0	0	0	1	0	0	1
9.00-10.00	0	0	0	0	0	0	0	0	0	0
10.00-11.00	0	0	0	0	0	0	0	0	0	0
11.00-12.00	0	0	0	0	0	0	0	0	0	0
12.00-1.00	0	0	0	0	0	0	0	0	0	0
1.00-2.00	0	0	0	0	0	0	0	0	0	0
2.00-3.00	0	0	0	0	0	0	0	0	0	0
3.00-4.00	0	0	0	0	0	0	0	0	0	0
4.00-5.00	0	0	0	0	0	0	0	0	0	0
5.00-6.00	0	0	0	0	0	0	0	0	0	0
6.00-7.00	1	0	0	0	0	0	0	0	0	0.5
7.00-8.00	3	0	0	0	0	0	0	0	0	1.5
TOTAL	278		358		1	96	81			887

DAILY TRAFFIC FOR 7 DAYS

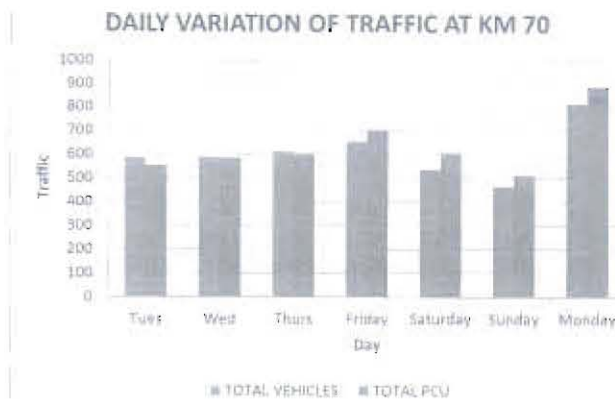
Date	Two wheeler	Three wheeler / auto	Car/jeep/ van/Taxi	BUS		LCV	TRUCK			PCU
				Mini	FULL		2-Axle	Multi Axle	Artic/semi Artic	
18.08.2015	221	0	301	0	1	33	30	0	0	554
19.08.2015	213	0	298	0	1	35	42	0	0	586
20.08.2016	222	0	302	0	1	47	39	0	0	604
21.08.2016	218	0	308	0	1	69	58	0	0	698
22.08.2017	144	0	254	0	1	93	46	0	0	607
23.08.2018	144	0	186	0	1	104	32	0	0	513
24.08.2019	278	0	358	0	1	96	81	0	0	887
Average Daily Traffic	206	0	287	0	1	69	47	0	0	635

DAILY VARIATION OF TRAFFIC

DATE	DAY	TOTAL VEHICLES	TOTAL PCU
18.08.2015	Tues	586	554
19.08.2015	Wed	589	586
20.08.2016	Thurs	611	604
21.08.2016	Friday	654	698
22.08.2017	Saturday	538	607
23.08.2018	Sunday	467	513
24.08.2019	Monday	814	887



Annexure- IV:
Classified Traffic Volume Count



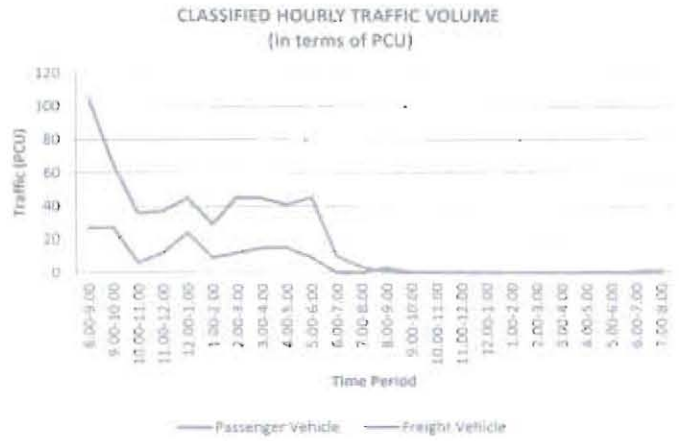
HOURLY VARIATION OF TRAFFIC										
TIME	Two wheeler	Three wheeler / auto	Car/jeep/ van/Taxi	BUS		LCV	TRUCK			PCU
				Mini	FULL		2-Axle	Multi Axle	Artic/semi Artic	
8.00-9.00	55	0	55	0	1	13	9	0	0	132
9.00-10.00	26	0	31	0	0	14	9	0	0	92
10.00-11.00	15	0	21	0	0	5	2	0	0	42
11.00-12.00	10	0	23	0	0	6	4	0	0	49
12.00-1.00	19	0	19	0	0	11	8	0	0	69
1.00-2.00	9	0	20	0	0	3	3	0	0	38
2.00-3.00	17	0	25	0	0	8	4	0	0	57.5
3.00-4.00	28	0	25	0	0	4	5	0	0	60
4.00-5.00	9	0	29	0	0	5	5	0	0	56
5.00-6.00	15	0	32	0	0	4	3	0	0	54.5
6.00-7.00	3	0	7	0	0	1	0	0	0	10
7.00-8.00	1	0	3	0	0	0	0	0	0	3.5
8.00-9.00	1	0	0	0	0	0	1	0	0	3.5
9.00-10.00	0	0	0	0	0	0	0	0	0	0
10.00-11.00	0	0	0	0	0	0	0	0	0	0
11.00-12.00	0	0	0	0	0	0	0	0	0	0
12.00-1.00	0	0	0	0	0	0	0	0	0	0
1.00-2.00	0	0	0	0	0	0	0	0	0	0
2.00-3.00	0	0	0	0	0	0	0	0	0	0
3.00-4.00	0	0	0	0	0	0	0	0	0	0
4.00-5.00	0	0	0	0	0	0	0	0	0	0
5.00-6.00	0	0	0	0	0	0	0	0	0	0
6.00-7.00	1	0	0	0	0	0	0	0	0	0.5
7.00-8.00	3	0	0	0	0	0	0	0	0	1.5



Annexure- IV:
Classified Traffic Volume Count

CLASSIFIED HOURLY TRAFFIC VOLUME (in terms of PCU)

Time	Passenger Vehicle	Freight Vehicle
8.00-9.00	105	27
9.00-10.00	65	27
10.00-11.00	36	6
11.00-12.00	37	12
12.00-1.00	45	24
1.00-2.00	29	9
2.00-3.00	45.5	12
3.00-4.00	45	15
4.00-5.00	41	15
5.00-6.00	45.5	9
6.00-7.00	10	0
7.00-8.00	3.5	0
8.00-9.00	0.5	3
9.00-10.00	0	0
10.00-11.00	0	0
11.00-12.00	0	0
12.00-1.00	0	0
1.00-2.00	0	0
2.00-3.00	0	0
3.00-4.00	0	0
4.00-5.00	0	0
5.00-6.00	0	0
6.00-7.00	0.5	0
7.00-8.00	1.5	0



TIME = 8.00-9.00
DATE = 24.08.2015
DAY = MONDAY
V-15 = 58
Peak hour factor = 65.52%



CLASSIFIED VEHICLE COUNT : SURVEY STATION 2. (KM 95.00 : Meer)

Date : 18.8.2015

TIME	Two wheeler	Three wheeler / auto	Car/jeep/ van/Taxi	BUS		LCV	TRUCK			PCU
				Mini	FULL		2-Axle	Multi Axle	Artic/sem i Artic	
8.00-9.00	43	0	51	0	1	9	3	0	0	98
9.00-10.00	29	0	35	0	0	4	4	0	0	67.5
10.00-11.00	23	0	17	0	0	1	2	0	0	36
11.00-12.00	7	0	23	0	0	5	0	0	0	34
12.00-1.00	17	0	9	0	0	1	5	0	0	34
1.00-2.00	6	0	13	0	0	2	5	0	0	34
2.00-3.00	29	0	27	0	0	9	2	0	0	61
3.00-4.00	15	0	21	0	0	3	6	0	0	31
4.00-5.00	7	0	33	0	0	0	2	0	0	42.5
5.00-6.00	19	0	27	0	0	3	4	0	0	53
6.00-7.00	2	0	7	0	0	1	0	0	0	9.5
7.00-8.00	1	0	3	0	0	0	0	0	0	3.5
8.00-9.00	0	0	0	0	0	0	1	0	0	3
9.00-10.00	0	0	0	0	0	0	0	0	0	0
10.00-11.00	0	0	0	0	0	0	0	0	0	0
11.00-12.00	0	0	0	0	0	0	0	0	0	0
12.00-1.00	0	0	0	0	0	0	0	0	0	0
1.00-2.00	0	0	0	0	0	0	0	0	0	0
2.00-3.00	0	0	0	0	0	0	0	0	0	0
3.00-4.00	0	0	0	0	0	0	0	0	0	0
4.00-5.00	0	0	0	0	0	0	0	0	0	0
5.00-6.00	0	0	0	0	0	0	0	0	0	0
6.00-7.00	1	0	0	0	0	0	0	0	0	0.5
7.00-8.00	3	0	0	0	0	0	0	0	0	1.5
TOTAL	202		266		1	38		34		529

Date : 19.8.2015

TIME	Two wheeler	Three wheeler / auto	Car/jeep/ van/Taxi	BUS		LCV	TRUCK			PCU
				Mini	FULL		2-Axle	Multi Axle	Artic/sem i Artic	
8.00-9.00	55	0	63	0	1	9	8	0	0	131
9.00-10.00	25	0	33	0	0	11	6	0	0	80
10.00-11.00	17	0	18	0	0	2	5	0	0	44.5
11.00-12.00	8	0	21	0	0	1	1	0	0	29.5
12.00-1.00	17	0	13	0	0	5	4	0	0	41
1.00-2.00	11	0	14	0	0	4	6	0	0	43.5
2.00-3.00	19	0	24	0	0	7	5	0	0	59
3.00-4.00	23	0	19	0	0	0	4	0	0	42.5
4.00-5.00	7	0	27	0	0	1	3	0	0	41
5.00-6.00	21	0	23	0	0	3	2	0	0	44
6.00-7.00	3	0	6	0	0	1	0	0	0	9
7.00-8.00	1	0	5	0	0	0	0	0	0	5.5
8.00-9.00	1	0	0	0	0	0	1	0	0	3.5
9.00-10.00	0	0	0	0	0	0	0	0	0	0
10.00-11.00	0	0	0	0	0	0	0	0	0	0
11.00-12.00	0	0	0	0	0	0	0	0	0	0
12.00-1.00	0	0	0	0	0	0	0	0	0	0
1.00-2.00	0	0	0	0	0	0	0	0	0	0
2.00-3.00	0	0	0	0	0	0	0	0	0	0
3.00-4.00	0	0	0	0	0	0	0	0	0	0
4.00-5.00	0	0	0	0	0	0	0	0	0	0
5.00-6.00	0	0	0	0	0	0	0	0	0	0
6.00-7.00	1	0	0	0	0	0	0	0	0	0.5
7.00-8.00	3	0	0	0	0	0	0	0	0	1.5
TOTAL	212		266		1	44		45		576



Annexure - IV
Classified Traffic Volume Count

CLASSIFIED VEHICLE COUNT : SURVEY STATION 2. (KM 95.00 : Meer)

Date : 20.8.2015

TIME	Two wheeler	Three wheeler / auto	Car/jeep/ van/Taxi	BUS		LCV	TRUCK			PCU
				Mini	FULL		2-Axle	Multi Axle	Artic/sem / Artic	
8.00-9.00	48	0	59	0	1	5	11	0	0	126.5
9.00-10.00	27	0	31	0	0	7	4	0	0	67
10.00-11.00	19	0	19	0	0	0	7	0	0	49.5
11.00-12.00	11	0	17	0	0	3	1	0	0	30
12.00-1.00	23	0	11	0	0	2	3	0	0	34.5
1.00-2.00	14	0	9	0	0	3	7	0	0	41.5
2.00-3.00	24	0	22	0	0	6	3	0	0	52
3.00-4.00	17	0	23	0	0	1	3	0	0	42
4.00-5.00	8	0	29	0	0	3	2	0	0	43.5
5.00-6.00	22	0	18	0	0	2	3	0	0	41
6.00-7.00	4	0	9	0	0	0	0	0	0	11
7.00-8.00	1	0	3	0	0	0	0	0	0	1.5
8.00-9.00	0	0	0	0	0	0	1	0	0	3
9.00-10.00	0	0	0	0	0	0	0	0	0	0
10.00-11.00	0	0	0	0	0	0	0	0	0	0
11.00-12.00	0	0	0	0	0	0	0	0	0	0
12.00-1.00	0	0	0	0	0	0	0	0	0	0
1.00-2.00	0	0	0	0	0	0	0	0	0	0
2.00-3.00	0	0	0	0	0	0	0	0	0	0
3.00-4.00	0	0	0	0	0	0	0	0	0	0
4.00-5.00	0	0	0	0	0	0	0	0	0	0
5.00-6.00	0	0	0	0	0	0	0	0	0	0
6.00-7.00	1	0	0	0	0	0	0	0	0	0.5
7.00-8.00	3	0	0	0	0	0	0	0	0	1.5
TOTAL	222		248		1	32	45			545

Date : 21.8.2015

TIME	Two wheeler	Three wheeler / auto	Car/jeep/ van/Taxi	BUS		LCV	TRUCK			PCU
				Mini	FULL		2-Axle	Multi Axle	Artic/sem / Artic	
8.00-9.00	47	0	60	0	1	6	9	0	0	122.5
9.00-10.00	26	0	32	0	0	7	4	0	0	67.5
10.00-11.00	18	0	20	0	0	1	8	0	0	54.5
11.00-12.00	10	0	18	0	0	3	1	0	0	30.5
12.00-1.00	22	0	12	0	0	2	3	0	0	35
1.00-2.00	13	0	10	0	0	3	6	0	0	39
2.00-3.00	23	0	23	0	0	8	4	0	0	58.5
3.00-4.00	16	0	24	0	0	1	3	0	0	42.5
4.00-5.00	7	0	30	0	0	2	1	0	0	39.5
5.00-6.00	21	0	19	0	0	2	3	0	0	41.5
6.00-7.00	2	0	5	0	0	1	0	0	0	7.5
7.00-8.00	1	0	2	0	0	0	0	0	0	2.5
8.00-9.00	0	0	0	0	0	0	1	0	0	3
9.00-10.00	0	0	0	0	0	0	0	0	0	0
10.00-11.00	0	0	0	0	0	0	0	0	0	0
11.00-12.00	0	0	0	0	0	0	0	0	0	0
12.00-1.00	0	0	0	0	0	0	0	0	0	0
1.00-2.00	0	0	0	0	0	0	0	0	0	0
2.00-3.00	0	0	0	0	0	0	0	0	0	0
3.00-4.00	0	0	0	0	0	0	0	0	0	0
4.00-5.00	0	0	0	0	0	0	0	0	0	0
5.00-6.00	0	0	0	0	0	0	0	0	0	0
6.00-7.00	1	0	0	0	0	0	0	0	0	0.5
7.00-8.00	3	0	0	0	0	0	0	0	0	1.5
TOTAL	210		255		1	36	43			546



Annexure - IV
Classified Traffic Volume Count

CLASSIFIED VEHICLE COUNT : SURVEY STATION 2. (KM 95.00 : Meer)

Date : 22.8.2015

TIME	Two wheeler	Three wheeler / auto	Car/jeep/ van/Taxi	BUS		LCV	TRUCK			PCU
				Mini	FULL		2-Axle	Multi Axle	Artic/sem / Artic	
8.00-9.00	41	0	49	0	1	8	3	0	0	93.5
9.00-10.00	27	0	33	0	0	3	3	0	0	60
10.00-11.00	21	0	15	0	0	0	2	0	0	31.5
11.00-12.00	5	0	21	0	0	4	1	0	0	32.5
12.00-1.00	15	0	7	0	0	0	5	0	0	29.5
1.00-2.00	4	0	11	0	0	1	5	0	0	29.5
2.00-3.00	27	0	25	0	0	8	2	0	0	56.5
3.00-4.00	13	0	19	0	0	2	6	0	0	46.5
4.00-5.00	5	0	31	0	0	0	2	0	0	39.5
5.00-6.00	17	0	25	0	0	2	4	0	0	48.5
6.00-7.00	2	0	5	0	0	1	0	0	0	7.5
7.00-8.00	1	0	1	0	0	0	0	0	0	1.5
8.00-9.00	0	0	0	0	0	0	1	0	0	1
9.00-10.00	0	0	0	0	0	0	0	0	0	0
10.00-11.00	0	0	0	0	0	0	0	0	0	0
11.00-12.00	0	0	0	0	0	0	0	0	0	0
12.00-1.00	0	0	0	0	0	0	0	0	0	0
1.00-2.00	0	0	0	0	0	0	0	0	0	0
2.00-3.00	0	0	0	0	0	0	0	0	0	0
3.00-4.00	0	0	0	0	0	0	0	0	0	0
4.00-5.00	0	0	0	0	0	0	0	0	0	0
5.00-6.00	0	0	0	0	0	0	0	0	0	0
6.00-7.00	1	0	0	0	0	0	0	0	0	0.5
7.00-8.00	3	0	0	0	0	0	0	0	0	1.5
TOTAL	182		242		1	29	34			481.5

Date : 23.8.2015

TIME	Two wheeler	Three wheeler / auto	Car/jeep/ van/Taxi	BUS		LCV	TRUCK			PCU
				Mini	FULL		2-Axle	Multi Axle	Artic/sem / Artic	
8.00-9.00	32	0	33	0	1	8	5	0	0	79
9.00-10.00	17	0	20	0	0	3	4	0	0	45
10.00-11.00	11	0	14	0	0	1	2	0	0	27
11.00-12.00	10	0	14	0	0	3	2	0	0	29.5
12.00-1.00	11	0	12	0	0	6	6	0	0	44.5
1.00-2.00	8	0	14	0	0	0	4	0	0	30
2.00-3.00	11	0	16	0	0	5	2	0	0	35
3.00-4.00	19	0	16	0	0	0	2	0	0	31.5
4.00-5.00	8	0	18	0	0	0	3	0	0	31
5.00-6.00	10	0	22	0	0	0	2	0	0	33
6.00-7.00	2	0	3	0	0	1	0	0	0	5.5
7.00-8.00	1	0	1	0	0	0	0	0	0	1.5
8.00-9.00	0	0	0	0	0	0	1	0	0	3
9.00-10.00	0	0	0	0	0	0	0	0	0	0
10.00-11.00	0	0	0	0	0	0	0	0	0	0
11.00-12.00	0	0	0	0	0	0	0	0	0	0
12.00-1.00	0	0	0	0	0	0	0	0	0	0
1.00-2.00	0	0	0	0	0	0	0	0	0	0
2.00-3.00	0	0	0	0	0	0	0	0	0	0
3.00-4.00	0	0	0	0	0	0	0	0	0	0
4.00-5.00	0	0	0	0	0	0	0	0	0	0
5.00-6.00	0	0	0	0	0	0	0	0	0	0
6.00-7.00	1	0	0	0	0	0	0	0	0	0.5
7.00-8.00	3	0	0	0	0	0	0	0	0	1.5
TOTAL	144		183		1	27	33			397.5



Annexure - IV
Classified Traffic Volume Count

CLASSIFIED VEHICLE COUNT : SURVEY STATION 2. (KM 95.00 : Meer)

Date : 24.8.2015

TIME	Two wheeler	Three wheeler / auto	Car/jeep / van/Taxi	BUS		LCV	TRUCK			PCU
				Mini	FULL		2-Axle	Multi Axle	Artic/semi Artic	
8.00-9.00	55	0	62	0	1	9	8	0	0	130
9.00-10.00	25	0	32	0	0	11	6	0	0	79
10.00-11.00	17	0	17	0	0	2	5	0	0	49.5
11.00-12.00	8	0	20	0	0	1	1	0	0	28.5
12.00-1.00	17	0	17	0	0	5	4	0	0	40
1.00-2.00	11	0	13	0	0	4	6	0	0	42.5
2.00-3.00	19	0	23	0	0	7	5	0	0	58
3.00-4.00	23	0	18	0	0	0	4	0	0	41.5
4.00-5.00	7	0	26	0	0	1	3	0	0	40
5.00-6.00	21	0	22	0	0	3	2	0	0	43
6.00-7.00	3	0	9	0	0	1	0	0	0	17
7.00-8.00	2	0	2	0	0	0	0	0	0	3
8.00-9.00	0	0	0	0	0	0	1	0	0	1
9.00-10.00	0	0	0	0	0	0	0	0	0	0
10.00-11.00	0	0	0	0	0	0	0	0	0	0
11.00-12.00	0	0	0	0	0	0	0	0	0	0
12.00-1.00	0	0	0	0	0	0	0	0	0	0
1.00-2.00	0	0	0	0	0	0	0	0	0	0
2.00-3.00	0	0	0	0	0	0	0	0	0	0
3.00-4.00	0	0	0	0	0	0	0	0	0	0
4.00-5.00	0	0	0	0	0	0	0	0	0	0
5.00-6.00	0	0	0	0	0	0	0	0	0	0
6.00-7.00	1	0	0	0	0	0	0	0	0	0.5
7.00-8.00	3	0	0	0	0	0	0	0	0	1.5
TOTAL	212		256		1	44	45			566

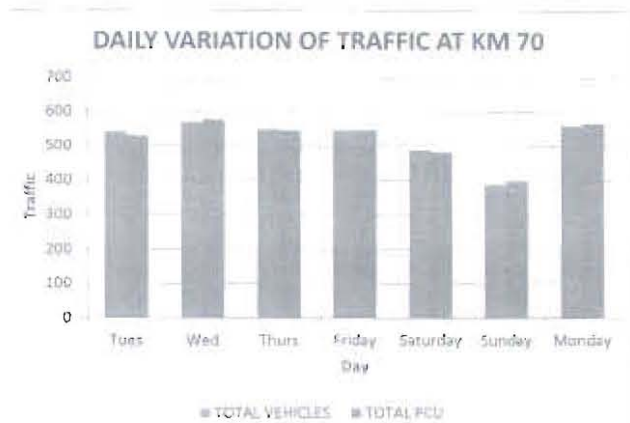
DAILY TRAFFIC FOR 7 DAYS

Date	Two wheeler	Three wheeler / auto	Car/jeep / van/Taxi	BUS		LCV	TRUCK			PCU
				Mini	FULL		2-Axle	Multi Axle	Artic/semi Artic	
18.08.2015	202	0	266	0	1	38	34	0	0	529
19.08.2015	212	0	266	0	1	44	45	0	0	576
20.08.2016	222	0	248	0	1	32	45	0	0	545
21.08.2016	210	0	255	0	1	36	43	0	0	546
22.08.2017	182	0	242	0	1	29	34	0	0	482
23.08.2018	144	0	183	0	1	27	33	0	0	398
24.08.2019	212	0	256	0	1	44	45	0	0	566
Average Daily Traffic	198	0	246	0	1	36	40	0	0	520

DAILY VARIATION OF TRAFFIC

DATE	DAY	TOTAL VEHICLES	TOTAL PCU
18.08.2015	Tues	541	529
19.08.2015	Wed	568	576
20.08.2016	Thurs	548	545
21.08.2016	Friday	545	546
22.08.2017	Saturday	488	482
23.08.2018	Sunday	388	398
24.08.2019	Monday	558	566





HOURLY VARIATION OF TRAFFIC

TIME	Two wheeler	Three wheeler / auto	Car/jeep/ van/Taxi	BUS		LCV	TRUCK			PCU
				Mini	FULL		2-Axle	Multi Axle	Artic/semi Artic	
8.00-9.00	46	0	54	0	1	8	7	0	0	113
9.00-10.00	25	0	31	0	0	7	5	0	0	69.5
10.00-11.00	18	0	18	0	0	1	5	0	0	43.5
11.00-12.00	9	0	20	0	0	3	1	0	0	32
12.00-1.00	18	0	11	0	0	3	5	0	0	39.5
1.00-2.00	10	0	12	0	0	3	6	0	0	39.5
2.00-3.00	22	0	23	0	0	8	4	0	0	58
3.00-4.00	18	0	20	0	0	1	4	0	0	42.5
4.00-5.00	7	0	28	0	0	1	3	0	0	42
5.00-6.00	19	0	23	0	0	3	3	0	0	46
6.00-7.00	3	0	7	0	0	1	0	0	0	10
7.00-8.00	2	0	3	0	0	0	0	0	0	4
8.00-9.00	1	0	0	0	0	0	1	0	0	3.5
9.00-10.00	0	0	0	0	0	0	0	0	0	0
10.00-11.00	0	0	0	0	0	0	0	0	0	0
11.00-12.00	0	0	0	0	0	0	0	0	0	0
12.00-1.00	0	0	0	0	0	0	0	0	0	0
1.00-2.00	0	0	0	0	0	0	0	0	0	0
2.00-3.00	0	0	0	0	0	0	0	0	0	0
3.00-4.00	0	0	0	0	0	0	0	0	0	0
4.00-5.00	0	0	0	0	0	0	0	0	0	0
5.00-6.00	0	0	0	0	0	0	0	0	0	0
6.00-7.00	1	0	0	0	0	0	0	0	0	0.5
7.00-8.00	3	0	0	0	0	0	0	0	0	1.5



CLASSIFIED HOURLY TRAFFIC VOLUME (in terms of PCU)

Time	Passenger Vehicle	Freight Vehicle
8.00-9.00	92	21
9.00-10.00	54.5	15
10.00-11.00	28.5	15
11.00-12.00	29	9
12.00-1.00	24.5	15
1.00-2.00	21.5	18
2.00-3.00	46	12
3.00-4.00	30.5	12
4.00-5.00	33	9
5.00-6.00	37	9
6.00-7.00	10	0
7.00-8.00	4	0
8.00-9.00	0.5	3
9.00-10.00	0	0
10.00-11.00	0	0
11.00-12.00	0	0
12.00-1.00	0	0
1.00-2.00	0	0
2.00-3.00	0	0
3.00-4.00	0	0
4.00-5.00	0	0
5.00-6.00	0	0
6.00-7.00	0.5	0
7.00-8.00	1.5	0



PEAK HOUR FACTOR

PEAK HOURLY TRAFFIC OF 7 DAYS = 131
 TIME = 8.00-9.00
 DATE = 19.08.2015
 DAY = WEDNESDAY
 V-15 = 45
 Peak hour factor = 72.78%



Annexure- IV
Classified Traffic Volume Count

CLASSIFIED VEHICLE COUNT : SURVEY STATION 3, (KM 118.00 : Sangram)

Date : 18.8.2015

TIME	Two wheeler	Three wheeler / auto	Car/jeep/ van/Taxi	BUS		LCV	TRUCK			PCU
				Mini	FULL		2-Axle	Multi Axle	Artic/sem I Artic	
8.00-9.00	39	0	34	0	1	5	2	0	0	70
9.00-10.00	18	0	26	0	0	4	3	0	0	50
10.00-11.00	18	0	26	0	0	1	2	0	0	42.5
11.00-12.00	3	0	16	0	0	0	3	0	0	26.5
12.00-1.00	13	0	14	0	0	1	2	0	0	28
1.00-2.00	5	0	9	0	0	1	5	0	0	28
2.00-3.00	10	0	20	0	0	3	3	0	0	38.5
3.00-4.00	18	0	15	0	0	5	5	0	0	46.5
4.00-5.00	10	0	21	0	0	0	2	0	0	32
5.00-6.00	10	0	18	0	0	7	7	0	0	54.5
6.00-7.00	1	0	5	0	0	1	0	0	0	7
7.00-8.00	1	0	3	0	0	0	0	0	0	3.5
8.00-9.00	0	0	0	0	0	0	1	0	0	3
9.00-10.00	0	0	0	0	0	0	0	0	0	0
10.00-11.00	0	0	0	0	0	0	0	0	0	0
11.00-12.00	0	0	0	0	0	0	0	0	0	0
12.00-1.00	0	0	0	0	0	0	0	0	0	0
1.00-2.00	0	0	0	0	0	0	0	0	0	0
2.00-3.00	0	0	0	0	0	0	0	0	0	0
3.00-4.00	0	0	0	0	0	0	0	0	0	0
4.00-5.00	0	0	0	0	0	0	0	0	0	0
5.00-6.00	0	0	0	0	0	0	0	0	0	0
6.00-7.00	1	0	0	0	0	0	0	0	0	0.5
7.00-8.00	3	0	0	0	0	0	0	0	0	1.5
TOTAL	150		207		1	28	35			432

Date : 19.8.2015

TIME	Two wheeler	Three wheeler / auto	Car/jeep/ van/Taxi	BUS		LCV	TRUCK			PCU
				Mini	FULL		2-Axle	Multi Axle	Artic/sem I Artic	
8.00-9.00	20	0	40	0	1	1	3	0	0	63.5
9.00-10.00	17	0	19	0	0	2	1	0	0	33.5
10.00-11.00	12	0	8	0	0	1	2	0	0	21.5
11.00-12.00	10	0	9	0	0	3	0	0	0	18.5
12.00-1.00	9	0	19	0	0	2	5	0	0	41.5
1.00-2.00	3	0	8	0	0	1	5	0	0	26
2.00-3.00	12	0	28	0	0	5	2	0	0	47.5
3.00-4.00	14	0	15	0	0	0	6	0	0	40
4.00-5.00	12	0	16	0	0	2	2	0	0	31
5.00-6.00	11	0	21	0	0	3	4	0	0	43
6.00-7.00	3	0	7	0	0	1	0	0	0	10
7.00-8.00	1	0	2	0	0	0	0	0	0	2.5
8.00-9.00	1	0	0	0	0	0	1	0	0	3.5
9.00-10.00	0	0	0	0	0	0	0	0	0	0
10.00-11.00	0	0	0	0	0	0	0	0	0	0
11.00-12.00	0	0	0	0	0	0	0	0	0	0
12.00-1.00	0	0	0	0	0	0	0	0	0	0
1.00-2.00	0	0	0	0	0	0	0	0	0	0
2.00-3.00	0	0	0	0	0	0	0	0	0	0
3.00-4.00	0	0	0	0	0	0	0	0	0	0
4.00-5.00	0	0	0	0	0	0	0	0	0	0
5.00-6.00	0	0	0	0	0	0	0	0	0	0
6.00-7.00	1	0	0	0	0	0	0	0	0	0.5
7.00-8.00	3	0	0	0	0	0	0	0	0	1.5
TOTAL	129		192		1	21	31			384



Annexure- IV
Classified Traffic Volume Count

CLASSIFIED VEHICLE COUNT : SURVEY STATION 3. (KM 118.00 : Sangram)

Date : 20.8.2015

TIME	Two wheeler	Three wheeler / auto	Car/jeep/ van/Taxi	BUS		LCV	TRUCK			PCU
				Mini	FULL		2-Axle	Multi Axle	Artic/semi Artic	
8.00-9.00	23	0	36	0	1	3	2	0	0	61
9.00-10.00	21	0	23	0	0	5	4	0	0	53
10.00-11.00	24	0	16	0	0	2	3	0	0	40
11.00-12.00	6	0	17	0	0	1	2	0	0	27.5
12.00-1.00	8	0	17	0	0	3	2	0	0	31.5
1.00-2.00	4	0	22	0	0	2	5	0	0	42
2.00-3.00	11	0	19	0	0	6	4	0	0	45.3
3.00-4.00	16	0	17	0	0	2	6	0	0	46
4.00-5.00	14	0	12	0	0	0	4	0	0	31
5.00-6.00	11	0	23	0	0	2	3	0	0	40.5
6.00-7.00	2	0	6	0	0	1	0	0	0	8.5
7.00-8.00	1	0	0	0	0	0	0	0	0	0.5
8.00-9.00	0	0	0	0	0	0	1	0	0	3
9.00-10.00	0	0	0	0	0	0	0	0	0	0
10.00-11.00	0	0	0	0	0	0	0	0	0	0
11.00-12.00	0	0	0	0	0	0	0	0	0	0
12.00-1.00	0	0	0	0	0	0	0	0	0	0
1.00-2.00	0	0	0	0	0	0	0	0	0	0
2.00-3.00	0	0	0	0	0	0	0	0	0	0
3.00-4.00	0	0	0	0	0	0	0	0	0	0
4.00-5.00	0	0	0	0	0	0	0	0	0	0
5.00-6.00	0	0	0	0	0	0	0	0	0	0
6.00-7.00	1	0	0	0	0	0	0	0	0	0.5
7.00-8.00	3	0	0	0	0	0	0	0	0	1.5
TOTAL	145		208		1	27	36			432

Date : 21.8.2015

TIME	Two wheeler	Three wheeler / auto	Car/jeep/ van/Taxi	BUS		LCV	TRUCK			PCU
				Mini	FULL		2-Axle	Multi Axle	Artic/semi Artic	
8.00-9.00	23	0	35	0	1	3	2	0	0	60
9.00-10.00	19	0	23	0	0	5	4	0	0	52
10.00-11.00	24	0	16	0	0	2	3	0	0	40
11.00-12.00	5	0	17	0	0	1	2	0	0	27
12.00-1.00	8	0	17	0	0	3	2	0	0	31.5
1.00-2.00	4	0	22	0	0	2	3	0	0	36
2.00-3.00	9	0	18	0	0	5	4	0	0	42
3.00-4.00	16	0	17	0	0	2	6	0	0	46
4.00-5.00	14	0	12	0	0	0	4	0	0	31
5.00-6.00	11	0	23	0	0	2	3	0	0	40.5
6.00-7.00	2	0	5	0	0	1	0	0	0	7.5
7.00-8.00	1	0	2	0	0	0	0	0	0	2.5
8.00-9.00	0	0	0	0	0	0	1	0	0	3
9.00-10.00	0	0	0	0	0	0	0	0	0	0
10.00-11.00	0	0	0	0	0	0	0	0	0	0
11.00-12.00	0	0	0	0	0	0	0	0	0	0
12.00-1.00	0	0	0	0	0	0	0	0	0	0
1.00-2.00	0	0	0	0	0	0	0	0	0	0
2.00-3.00	0	0	0	0	0	0	0	0	0	0
3.00-4.00	0	0	0	0	0	0	0	0	0	0
4.00-5.00	0	0	0	0	0	0	0	0	0	0
5.00-6.00	0	0	0	0	0	0	0	0	0	0
6.00-7.00	1	0	0	0	0	0	0	0	0	0.5
7.00-8.00	3	0	0	0	0	0	0	0	0	1.5
TOTAL	140		207		1	26	34			421



Annexure- IV
Classified Traffic Volume Count

CLASSIFIED VEHICLE COUNT : SURVEY STATION 3. (KM 118.00 : Sangram)

Date : 22.8.2015

TIME	Two wheeler	Three wheeler / auto	Car/jeep/ van/Taxi	BUS		LCV	TRUCK			PCU
				Mini	FULL		2-Axle	Multi Axle	Artic/semi Artic	
8.00-9.00	19	0	39	0	1	1	3	0	0	62
9.00-10.00	16	0	18	0	0	1	1	0	0	30.5
10.00-11.00	11	0	7	0	0	1	2	0	0	20
11.00-12.00	9	0	8	0	0	3	0	0	0	17
12.00-1.00	8	0	18	0	0	2	5	0	0	40
1.00-2.00	2	0	7	0	0	1	5	0	0	24.5
2.00-3.00	11	0	27	0	0	4	2	0	0	44.5
3.00-4.00	13	0	14	0	0	0	6	0	0	38.5
4.00-5.00	11	0	15	0	0	2	2	0	0	29.5
5.00-6.00	10	0	20	0	0	3	4	0	0	41.5
6.00-7.00	2	0	5	0	0	1	0	0	0	7.5
7.00-8.00	1	0	1	0	0	0	0	0	0	1.5
8.00-9.00	0	0	0	0	0	0	1	0	0	3
9.00-10.00	0	0	0	0	0	0	0	0	0	0
10.00-11.00	0	0	0	0	0	0	0	0	0	0
11.00-12.00	0	0	0	0	0	0	0	0	0	0
12.00-1.00	0	0	0	0	0	0	0	0	0	0
1.00-2.00	0	0	0	0	0	0	0	0	0	0
2.00-3.00	0	0	0	0	0	0	0	0	0	0
3.00-4.00	0	0	0	0	0	0	0	0	0	0
4.00-5.00	0	0	0	0	0	0	0	0	0	0
5.00-6.00	0	0	0	0	0	0	0	0	0	0
6.00-7.00	1	0	0	0	0	0	0	0	0	0.5
7.00-8.00	3	0	0	0	0	0	0	0	0	1.5
TOTAL	117		179		1	19	31			362

Date : 23.8.2015

TIME	Two wheeler	Three wheeler / auto	Car/jeep/ van/Taxi	BUS		LCV	TRUCK			PCU
				Mini	FULL		2-Axle	Multi Axle	Artic/semi Artic	
8.00-9.00	19	0	34	0	1	1	3	0	0	57
9.00-10.00	16	0	17	0	0	1	1	0	0	29.5
10.00-11.00	11	0	6	0	0	1	2	0	0	19
11.00-12.00	9	0	7	0	0	2	0	0	0	18.5
12.00-1.00	8	0	17	0	0	2	3	0	0	31
1.00-2.00	2	0	6	0	0	1	2	0	0	14.5
2.00-3.00	11	0	26	0	0	2	2	0	0	40.5
3.00-4.00	12	0	13	0	0	0	5	0	0	34
4.00-5.00	11	0	14	0	0	1	2	0	0	27
5.00-6.00	10	0	19	0	0	0	4	0	0	36
6.00-7.00	2	0	3	0	0	1	0	0	0	5.5
7.00-8.00	1	0	4	0	0	0	0	0	0	4.5
8.00-9.00	0	0	0	0	0	0	1	0	0	3
9.00-10.00	0	0	0	0	0	0	0	0	0	0
10.00-11.00	0	0	0	0	0	0	0	0	0	0
11.00-12.00	0	0	0	0	0	0	0	0	0	0
12.00-1.00	0	0	0	0	0	0	0	0	0	0
1.00-2.00	0	0	0	0	0	0	0	0	0	0
2.00-3.00	0	0	0	0	0	0	0	0	0	0
3.00-4.00	0	0	0	0	0	0	0	0	0	0
4.00-5.00	0	0	0	0	0	0	0	0	0	0
5.00-6.00	0	0	0	0	0	0	0	0	0	0
6.00-7.00	1	0	0	0	0	0	0	0	0	0.5
7.00-8.00	3	0	0	0	0	0	0	0	0	1.5
TOTAL	116		166		1	12	25			320



Annexure- IV
Classified Traffic Volume Count

CLASSIFIED VEHICLE COUNT : SURVEY STATION 3, (KM 118.00 | Sangram)

Date : 24.8.2015

TIME	Two wheeler	Three wheeler / auto	Car/Jeep/ van/Taxi	BUS		LCV	TRUCK			PCU
				Mini	FULL		2-Axle	Multi Axle	Artic/sem / Artic	
8.00-9.00	24	0	35	0	1	4	2	0	0	62
9.00-10.00	20	0	23	0	0	6	4	0	0	54
10.00-11.00	25	0	16	0	0	3	3	0	0	42
11.00-12.00	6	0	17	0	0	2	2	0	0	29
12.00-1.00	9	0	17	0	0	4	2	0	0	33.5
1.00-2.00	5	0	22	0	0	3	5	0	0	44
2.00-3.00	12	0	18	0	0	7	4	0	0	46.5
3.00-4.00	17	0	17	0	0	3	6	0	0	48
4.00-5.00	15	0	12	0	0	1	4	0	0	33
5.00-6.00	12	0	23	0	0	3	3	0	0	42.5
6.00-7.00	2	0	8	0	0	1	0	0	0	10.5
7.00-8.00	1	0	2	0	0	0	0	0	0	2.5
8.00-9.00	0	0	0	0	0	0	1	0	0	3
9.00-10.00	0	0	0	0	0	0	0	0	0	0
10.00-11.00	0	0	0	0	0	0	0	0	0	0
11.00-12.00	0	0	0	0	0	0	0	0	0	0
12.00-1.00	0	0	0	0	0	0	0	0	0	0
1.00-2.00	0	0	0	0	0	0	0	0	0	0
2.00-3.00	0	0	0	0	0	0	0	0	0	0
3.00-4.00	0	0	0	0	0	0	0	0	0	0
4.00-5.00	0	0	0	0	0	0	0	0	0	0
5.00-6.00	0	0	0	0	0	0	0	0	0	0
6.00-7.00	1	0	0	0	0	0	0	0	0	0.5
7.00-8.00	3	0	0	0	0	0	0	0	0	1.5
TOTAL	152		210		1	37	36			452.5

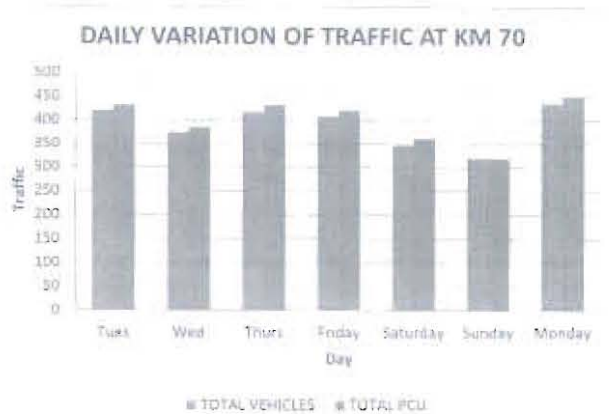
DAILY TRAFFIC FOR 7 DAYS

Date	Two wheeler	Three wheeler / auto	Car/Jeep/ van/Taxi	BUS		LCV	TRUCK			PCU
				Mini	FULL		2-Axle	Multi Axle	Artic/sem / Artic	
18.08.2015	150	0	207	0	1	28	35	0	0	432
19.08.2015	129	0	192	0	1	31	31	0	0	384
20.08.2016	145	0	208	0	1	27	36	0	0	432
21.08.2016	140	0	207	0	1	26	34	0	0	421
22.08.2017	117	0	179	0	1	19	31	0	0	362
23.08.2018	116	0	166	0	1	12	25	0	0	320
24.08.2019	152	0	210	0	1	37	36	0	0	453
Average Daily Traffic	136	0	196	0	1	25	33	0	0	401

DAILY VARIATION OF TRAFFIC

DATE	DAY	TOTAL VEHICLES	TOTAL PCU
18.08.2015	Tues	421	432
19.08.2015	Wed	374	384
20.08.2016	Thurs	417	432
21.08.2016	Friday	408	421
22.08.2017	Saturday	347	362
23.08.2018	Sunday	320	320
24.08.2019	Monday	436	453





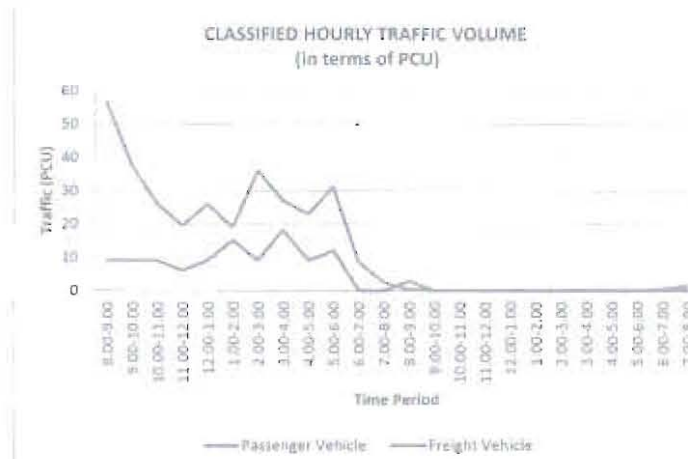
HOURLY VARIATION OF TRAFFIC

TIME	Two wheeler	Three wheeler / auto	Car/jeep/ van/Taxi	BUS		LCV	TRUCK			PCU
				Mini	FULL		2-Axe	Multi-Axe	Artic/semi Artic	
8.00-9.00	24	0	37	0	1	3	3	0	0	65.5
9.00-10.00	19	0	22	0	0	4	3	0	0	46.5
10.00-11.00	18	0	14	0	0	2	3	0	0	35
11.00-12.00	7	0	13	0	0	2	2	0	0	25.5
12.00-1.00	9	0	17	0	0	3	3	0	0	35
1.00-2.00	4	0	14	0	0	2	5	0	0	34
2.00-3.00	11	0	23	0	0	5	3	0	0	45
3.00-4.00	16	0	16	0	0	2	6	0	0	45
4.00-5.00	13	0	15	0	0	1	3	0	0	32
5.00-6.00	11	0	21	0	0	3	4	0	0	43
6.00-7.00	2	0	6	0	0	1	0	0	0	8.5
7.00-8.00	1	0	2	0	0	0	0	0	0	2.5
8.00-9.00	1	0	0	0	0	0	1	0	0	3.5
9.00-10.00	0	0	0	0	0	0	0	0	0	0
10.00-11.00	0	0	0	0	0	0	0	0	0	0
11.00-12.00	0	0	0	0	0	0	0	0	0	0
12.00-1.00	0	0	0	0	0	0	0	0	0	0
1.00-2.00	0	0	0	0	0	0	0	0	0	0
2.00-3.00	0	0	0	0	0	0	0	0	0	0
3.00-4.00	0	0	0	0	0	0	0	0	0	0
4.00-5.00	0	0	0	0	0	0	0	0	0	0
5.00-6.00	0	0	0	0	0	0	0	0	0	0
6.00-7.00	1	0	0	0	0	0	0	0	0	0.5
7.00-8.00	3	0	0	0	0	0	0	0	0	1.5



CLASSIFIED HOURLY TRAFFIC VOLUME (In terms of PCU)

Time	Passenger Vehicle	Freight Vehicle
8.00-9.00	56.5	9
9.00-10.00	37.5	9
10.00-11.00	26	9
11.00-12.00	19.5	6
12.00-1.00	26	9
1.00-2.00	19	15
2.00-3.00	36	9
3.00-4.00	27	18
4.00-5.00	23	9
5.00-6.00	31	12
6.00-7.00	8.5	0
7.00-8.00	2.5	0
8.00-9.00	0.5	3
9.00-10.00	0	0
10.00-11.00	0	0
11.00-12.00	0	0
12.00-1.00	0	0
1.00-2.00	0	0
2.00-3.00	0	0
3.00-4.00	0	0
4.00-5.00	0	0
5.00-6.00	0	0
6.00-7.00	0.5	0
7.00-8.00	1.5	0



PEAK HOUR FACTOR

PEAK HOURLY TRAFFIC OF 7 DAYS = 70
 TIME = 8.00-9.00
 DATE = 18.08.2015
 DAY = TUESDAY
 V-15 = 23
 Peak hour factor = 76.09%



Annual Average Daily Traffic (AADT)

SCF = Average/ That Particular Month
Daily Fuel Sales and Seasonal Correction Factor (SCF) for calculating AADT

Month	Daily Diesel Consumption (Litres)	Daily Petrol Consumption (Litres)	SCF (Diesel)	SCF (Petrol)
August	290	155	1.21	1.09
September	342	163	1.02	1.04
October	355	170	0.99	0.99
November	402	188	0.87	0.9
December	452	208	0.77	0.81
January	405	197	0.86	0.86
February	395	191	0.89	0.88
March	370	175	0.95	0.97
April	325	157	1.08	1.08
May	310	146	1.13	1.16
June	282	141	1.24	1.2
July	273	137	1.28	1.23
Average	350	169	1.02	1.02

ADT Before SCF						
Survey Location	70 Km		95 km		118 Km	
Vehicle Category	ADT Vehicles	ADT (PCU)	ADT Vehicles	ADT (PCU)	ADT Vehicles	ADT (PCU)
Two Wheeler	206	103	198	99	136	68
Car/jeep/van/Taxi	287	287	245	245	196	196
FULL BUS	1	3	1	3	1	3
LCV	68	102	36	54	24	36
2 axle Truck	47	141	40	120	33	99
Total	609	636	520	521	390	402

AADT after SCF						
Survey Location	70 Km		95 km		118 Km	
Vehicle Category	ADT Vehicles	ADT (PCU)	ADT Vehicles	ADT (PCU)	ADT Vehicles	ADT (PCU)
Two Wheeler	210	105	202	101	139	69
Car/jeep/van/Taxi	293	293	250	250	200	200
FULL BUS	1	3	1	3	1	3
LCV	69	104	37	55	24	37
2 axle Truck	48	144	41	122	34	101
Total	621	649	530	531	398	410



Projected Traffic

Year	At Km 70 (New Palin)		At Km 95 (Meer)		At Km 118 (Sangram)	
	Nos.	PCU	Nos.	PCU	Nos.	PCU
2015	621	649	530	531	398	410
2016	652	681	557	558	418	431
2017	685	716	584	585	439	452
2018	719	751	614	615	461	475
2019	755	789	644	645	484	498
2020	793	828	676	678	508	523
2021	832	870	710	712	533	549
2022	874	913	746	747	560	577
2023	917	959	783	785	588	606
2024	963	1007	822	824	617	636
2025	1012	1057	863	865	648	668
2026	1062	1110	906	908	681	701
2027	1115	1166	952	954	715	736
2028	1171	1224	999	1001	750	773
2029	1230	1285	1049	1051	788	812
2030	1291	1349	1102	1104	827	852
2031	1356	1417	1157	1159	869	895
2032	1423	1488	1215	1217	912	940
2033	1495	1562	1276	1278	958	987
2034	1569	1640	1339	1342	1006	1036
2035	1648	1722	1406	1409	1056	1088



DESIGN OF FLEXIBLE PAVEMENTS

Name of Work : Consultancy Services for preparation of Detailed Project report for 2-Laning of Joram-Koloriang Road from Km 70.00 to Km 138.00 (Length = 68 Km) in the state of Arunachal Pradesh under SARDP-NE on EPC Mode

DESIGN CALCULATIONS : (referred to IRC-37-2012 of Clause 4.6.1)

$$N = \frac{365 \times \{(1+r)^n - 1\} \times A \times D \times F}{r}$$

Where,

N= The cumulative number of standard axles to be catered for the design in terms of msa
 A= Initial traffic in the year of completion of construction in terms of the numbers of commercial vehicles per day
 D= Lane Distribution Factor
 F= Vehicle Damage Factor
 n= Design life in years
 r = Annual growth rate of commercial vehicles in decimal (e.g.for 5% annual growth rate, r =0.05)The traffic in the year of completion is estimated in the following formula:-
 $A = P(1+r)^x$

where,

P = Number of commercial vehicles as per last construction.
 x = Number of years between the last count and the year completion of construction

DATA

r = 0.050 (clause No.4.2.2) of IRC-37
 x = 3 (Years of completion of construction of project)
 P = 650 CVPD (from traffic data of the year)
 $A = 650 \times (1 + 0.050)^3 = 752$
 D = 0.5 (For Two Lane single carriageway vide para 4.5.1 (ii))
 F = 1.5 [For traffic volume 150- 1500 CVPD on rolling/ plain area, vide clause 4.4.6 (Table-4.2) of IRC:37]
 n = 15 years (as per Clause 4.3.2 of IRC:37)

$$N = \frac{365 \times \{(1 + 0.050)^{15} - 1\} \times 752 \times 1.5 \times 0.5}{0.050}$$

 = 4.44 msa

A minimum value of 20 MSA is to be considered as per IRC 73: 2015 for pavement design.

CBR : The CBR of Sub-grade soil is considered to be 8%

Thickness and Composition of Pavement as per Plate-6 (CBR=8%) of IRC:37-2012

For BC, with 20 msa Traffic, thickness = 40mm

For DBM, with 20 msa Traffic, thickness = 85 mm

Hence, the following pavement thickness is proposed for the project road stretch,

BC	= 40 mm
DBM	= 85 mm
WMM	= 250 mm
GSB	= 200 mm
Total = 575 mm	



AADT obtained after applying Seasonal Correction Factors						
SURVEY LOCATION	70 Km		95 Km		118Km	
Vehicle category	AADT vehicle	AADT PCU	AADT vehicle	AADT PCU	AADT vehicle	AADT PCU
Two Wheeler	210	105	202	101	139	69
Car/jeep/van/Taxi	293	293	250	250	200	200
Full Bus	1	3	1	3	1	3
LCV	69	104	37	55	24	37
2 axle Truck	48	144	41	122	34	101
Total	621	649	530	531	398	410

The Maximum value of AADT (PCU) at Ch. 70 KM is considered as input CVPD for Calculation of Design Traffic(MSA)



Determination of Resilient modulus (As per Equation 5.2 of IRC:37-2012)

Equation 5.2 for two cases

Case-I	$M_R \text{ (MPa)} = 10 \times \text{CBR}$	for CBR ≤ 5	} Equation 5.2
Case-II	$M_R \text{ (MPa)} = 17.6 \times (\text{CBR})^{0.64}$	for CBR > 5	

Here Design CBR is found 8.2 therefore Case-II is considered.

Now, putting the value of CBR

$$M_R \text{ (MPa)} = 17.6 \times (8.2)^{0.64}$$

$$M_R \text{ (MPa)} = 67.66 \text{ Mpa}$$

Now, Calculation of $M_{R_{\text{granular}}}$ (As per equation 7.3 of IRC:37-2012)

$$M_{R_{\text{granular}}} = 0.2 \times h^{0.45} \times M_{R_{\text{subgrade}}}$$

Where h = thickness of granular sub-base and base in mm

$$M_{R_{\text{granular}}} = 211.50, \text{ from eqn. 7.3}$$

Also, Calculation of $M_{R_{\text{bituminous layer}}}$ (as per Table 7.1 of IRC:37-2012)

$M_{R_{\text{bituminous layer}}} =$	2500	Mpa	From Table 7.1 considering max temp. of 30°C
-------------------------------------	------	-----	--

N.B.- For Traffic upto 30 msa with VG 30 bitumen can be used as per Clause 6.2.2 of IRC:37-2012.

FATIGUE MODEL

As per IRC:37-2012 Clause 6.2.2 for Traffic upto 30 msa Equation 6.1 against 80 % reliability is to be used for Calculation of tensile strain bottom of the bituminous layer.

Calculation for 80% reliability by Eqn.6.1

$$N_f = 2.21 \times 10^{-04} \times [1/\epsilon_t]^{3.89} [1/M_R]^{0.854} \quad (80 \text{ percent reliability}) \text{-----} 6.1$$

Where, $N_f = 20 \text{ msa}$

$M_R = 2500 \text{ mpa}$

Now putting the above values in Eqn.6.1 as follows below,

$$N_f = 2.21 \times 10^{-04} \times [1/\epsilon_t]^{3.89} [1/M_R]^{0.854}$$

$$20 = 2.21 \times 10^{-04} \times [1/\epsilon_t]^{3.89} [1/2500]^{0.854}$$

$$\text{Hence, } \epsilon_t = 0.0095$$

Therefore, Maximum allowable Tensile strain at the bottom of the bituminous layer,

$$\epsilon_t = 0.0095$$

Now, as per Clause 6.1 of IRC:37-2012, IITPav Software is to be used to check the strain at the bottom of the Bituminous layer :-

From IIT Pave

$$\epsilon_t = -0.00019$$

Maximum Tensile Strain found from IITPave is less than Allowable.

Therefore, Design is Safe.



RUTTING MODEL

As per IRC:37-2012 Clause 6.3.2 for Traffic upto 30 msa The Equation 6.4 against 80% reliability is to be used for Calculation of Vertical Strain in the Subgrade.

The Equation 6.4 are given below:

$$N = 4.1656 \times 10^{-08} [1/\epsilon_v]^{4.5337} \quad (80 \text{ percent reliability}) \text{-----6.4}$$

Where,

N is the number of cumulative standard axles, and
 ϵ_v is the Vertical Strain in the subgrade

Now, we have Data

$$N = 20 \text{msa}$$

Now putting the N value in Eqn.6.4 as follows below,

$$20 = 4.1656 \times 10^{-08} [1/\epsilon_v]^{4.5337}$$

$$\epsilon_v = 0.012$$

Therefore, Maximum allowable Vertical Elastic Strains in the subgrade = 0.012

Now, as per Clause 6.1 of IRC:37-2012, IITPav Software is to be used to check the strain in the subgrade :-

$$\text{FROM IITPave} \quad \epsilon_v = 0.000056$$

Vertical Strain found from IITPave is less than Allowable.

Therefore, Design is Safe.

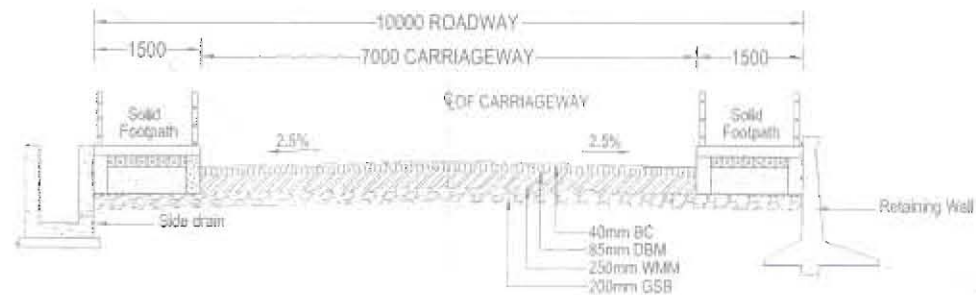


RESULT OF IIT PAVE SOFTWARE CHECK AS PER CLAUSE 6.1 OF IRC:37-2012.

No. of layers	5						
E values (MPa)	2500.00	2500.00	211.50	211.50	67.66		
Mu values	0.350	0.350	0.350	0.350	0.35		
thicknesses (mm)	40.00	85.00	250.00	200.00			
single wheel load (N)	20500.00						
tyre pressure (MPa)	0.56						
Single Wheel							
Z	R	SigmaZ	SigmaT	SigmaR	TaoRZ	DispZ	epZ
epT	epR						
0.00	0.00	-0.5525E+00	-0.1018E+01	-0.1018E+01	0.0000E+00	0.2829E+00	
0.6398E-04	-0.1873E-03	-0.1873E-03					
40.00	200.00	-0.7418E-02	-0.1183E+00	-0.9210E-01	-0.8053E-01	0.2125E+00	
0.2648E-04	-0.3338E-04	-0.1924E-04					
40.00L	200.00	-0.7418E-02	-0.1183E+00	-0.9210E-01	-0.8053E-01	0.2125E+00	
0.2648E-04	-0.3338E-04	-0.1924E-04					
0.00	0.00	-0.5525E+00	-0.1018E+01	-0.1018E+01	0.0000E+00	0.2829E+00	
0.6398E-04	-0.1873E-03	-0.1873E-03					
125.00	200.00	-0.4257E-01	0.2035E+00	-0.5774E-02	-0.2835E-01		
0.2116E+00	-0.4471E-04	0.8818E-04	-0.2484E-04				
125.00L	200.00	-0.4258E-01	0.3768E-02	-0.2147E-01	-0.2835E-01		
0.2116E+00	-0.1595E-03	0.8818E-04	-0.2484E-04				
0.00	0.00	-0.5525E+00	-0.1018E+01	-0.1018E+01	0.0000E+00	0.2829E+00	
0.6398E-04	-0.1873E-03	-0.1873E-03					
375.00	200.00	-0.2182E-01	0.5973E-02	0.2630E-02	-0.1133E-01		
0.1747E+00	-0.1174E-03	0.5999E-04	0.3866E-04				
375.00L	200.00	-0.2182E-01	0.5973E-02	0.2629E-02	-0.1133E-01		
0.1747E+00	-0.1174E-03	0.6000E-04	0.3865E-04				
0.00	0.00	-0.5525E+00	-0.1018E+01	-0.1018E+01	0.0000E+00	0.2829E+00	
0.6398E-04	-0.1873E-03	-0.1873E-03					
575.00	200.00	-0.1091E-01	0.1582E-01	0.1360E-01	-0.2870E-02		
0.1542E+00	-0.1003E-03	0.7037E-04	0.5618E-04				
575.00L	200.00	-0.1094E-01	0.1055E-02	0.3541E-03	-0.2875E-02		
0.1542E+00	-0.1690E-03	0.7035E-04	0.5637E-04				



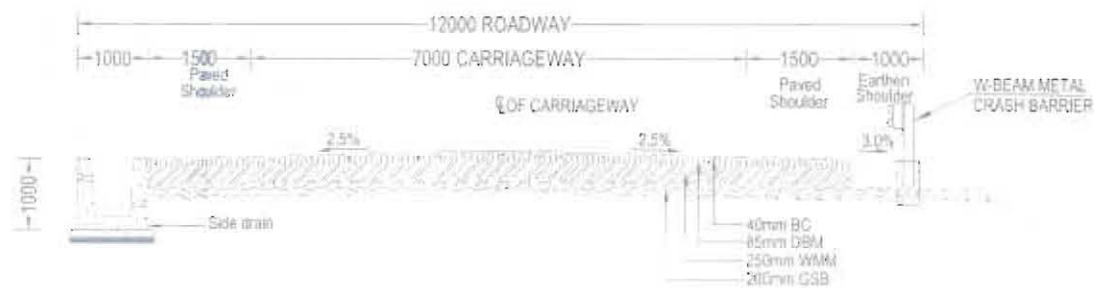
Earthen Catch water drain



Typical Cross Section of Pavement in Builtup Area Normal Camber

TCS TYPE-I

Earthen Catch water drain



Typical Cross Section of Pavement in Open country Area Normal Camber

TCS TYPE-II

Scale 2:1



Consultant



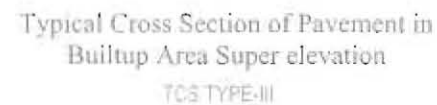
Project Name

Consultancy Services for preparation of Detailed Project report for 2-Laning of Joram-Kulorling Road from Km 70.00 to Km 138.00 (Length = 68 Km) in the state of Arunachal Pradesh under SARDP/NE on EPC Mode.

Typical Cross Section of Pavement

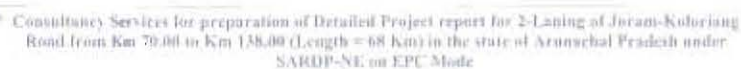
Fig No. K&T/ALLIANCE Road/PCS/01

Not to Scale



The diagram illustrates the cross-section of a 12000 Roadway. The total width is 12000 units, divided into a 7000 CARRIAGEWAY and two 1500 Paved Shoulders, with 1000 units of Earthen Shoulder on each side. The roadway is shown with a side drain on the left and a W-BEAM METAL CRASH BARRIER on the right. The road surface is composed of several layers: 40mm BC, 85mm DBM, 250mm WMM, and 200mm GSB. The diagram also indicates a slope of 2:1 on the right side and a 1000 unit vertical dimension for the side drain area.

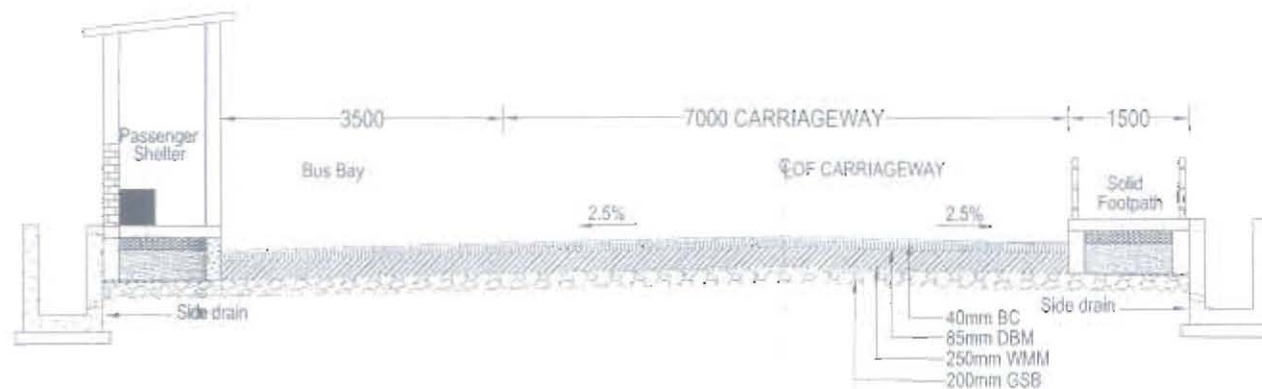
Typical Cross Section of Pavement in Open country Area Super elevation



Typical Cross Section of Pavement



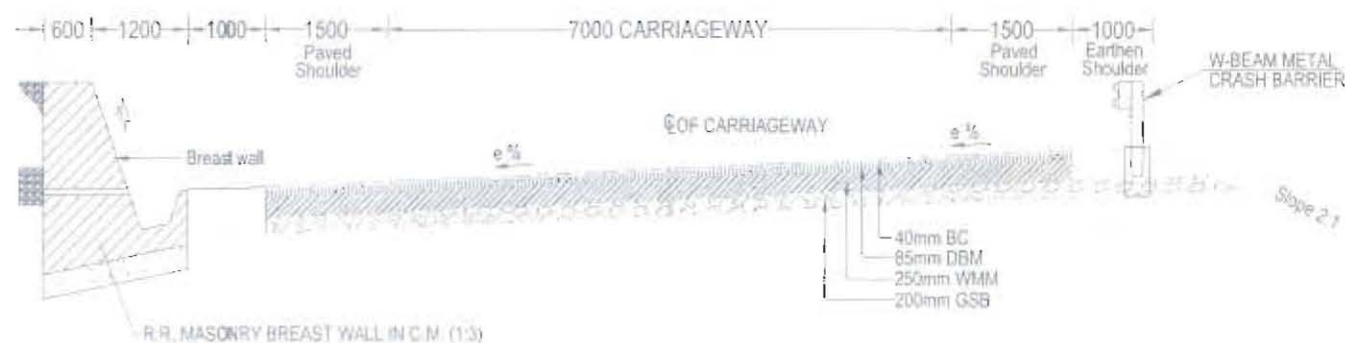
None to Scale



Typical Cross Section of Pavement in Open country Area
with Pick Up Bus Stop & Passenger Shelter

TCS TYPE-V

Earthen Catch water drain



Typical Cross Section of Pavement in Open country Area
with Breast wall Super elevation

TCS TYPE-VI



Name of work:- Consultancy Services for preparation of Detailed Project report for 2-Laning of Joram-Koloriang Road from Km 70.00 to Km 138.00 (Length = 68 Km) in the state of Arunachal Pradesh under SARDP-NE on EPC Mode

Annexure - VIII

LIST OF BM PILLERS

Sl.No	BM PILLER NO.	NORTHING	EASTING	ELEVATION
1	71/1	3064276.444	562556.949	863.010
2	71/2	3064287.724	562573.979	862.830
3	71/3	3064483.081	562606.555	869.599
4	71/4	3064498.189	562416.360	880.961
5	71/5	3064630.047	562371.895	890.184
6	71/6	3064744.026	562339.428	884.892
7	72/1	3064804.910	562300.650	900.478
8	72/2	3064950.186	562339.428	914.537
9	72/3	3065142.044	562555.615	927.984
10	72/4	3065318.462	562545.082	938.454
11	73/1	3065559.437	562525.116	953.135
12	73/2	3065560.126	562662.475	964.209
13	73/3	3065640.596	562847.556	980.306
14	73/4	3065845.125	562912.830	992.504
15	73/5	3066050.497	562977.139	1003.762
16	74/1	3066283.564	562967.204	1015.989
17	74/2	3066494.039	562969.075	1029.868
18	74/3	3066602.597	563158.470	1046.422
19	74/4	3066811.054	563205.911	1063.777
20	75/1	3066975.951	563080.347	1081.890
21	75/2	3067110.534	562884.596	1104.635
22	75/3	3067115.362	562751.471	1119.106
23	75/4	3067109.056	562732.298	1120.726
24	75/5	3067360.011	562883.178	1152.873
25	76/1	3067481.342	562832.408	1177.938
26	76/2	3067533.892	562983.372	1195.116
27	76/3	3067702.648	563099.253	1211.944
28	77/1	3067794.108	563310.740	1211.944
29	77/2	3067894.533	563487.041	1234.762
30	77/3	3067939.133	563635.347	1244.194
31	77/4	3067955.145	563462.803	1253.422



Sl.No	BM PILLER NO.	NORTHING	EASTING	ELEVATION
32	78/1	3067896.950	563240.417	1264.657
33	78/2	3067905.582	563065.761	1279.130
34	78/3	3067902.267	562880.580	1285.826
35	78/4	3068006.747	562677.589	1287.353
36	78/5	3068086.546	562512.156	1276.767
37	79/1	3068150.022	562315.456	1263.847
38	79/2	3068096.549	562125.961	1254.374
39	79/3	3068258.300	562026.368	1240.422
40	79/4	3068354.355	561826.078	1221.696
41	80/1	3068212.876	561647.374	1207.907
42	80/2	3068183.449	561397.348	1188.513
43	80/3	3068055.146	561275.488	1178.140
44	80/4	3068193.870	561138.404	1158.687
45	81/1	3068361.595	561028.781	1139.357
46	81/2	3068490.005	560849.513	1120.453
47	81/3	3068702.835	560751.048	1097.092
48	81/4	3068899.200	560760.497	1080.946
49	81/5	3068828.131	560539.782	1066.162
50	82/1	3068851.206	560294.790	1055.273
51	82/2	3068799.880	560106.613	1036.856
52	82/3	3068561.693	560088.522	1015.109
53	82/4	3068393.305	560098.125	1010.045
54	83/1	3068538.124	559908.873	1007.413
55	83/2	3068649.110	559736.505	998.936
56	83/3	3068637.209	559524.082	996.056
57	83/4	3068663.477	559316.377	986.274
58	84/1	3068663.477	559316.377	986.274
59	84/2	3068851.704	559296.785	946.917
60	84/3	3068964.936	559290.893	924.930
61	84/4	3069143.396	559149.759	902.590
62	85/1	3069197.843	559264.587	906.833
63	85/2	3069195.157	559286.600	908.461
64	85/3	3069054.709	559405.235	921.044
65	85/4	3069038.351	559590.347	945.740
66	86/1	3069266.039	559530.365	951.938



Sl.No	BM PILLER NO.	NORTHING	EASTING	ELEVATION
67	86/2	3069434.757	559697.152	961.601
68	86/3	3069583.804	559890.329	967.611
69	86/4	3069660.990	560113.291	973.901
70	87/1	3069678.708	560340.548	973.905
71	87/2	3069754.062	560577.353	969.172
72	87/3	3069954.774	560682.102	986.170
73	87/4	3070052.434	560462.637	980.865
74	87/5	3070266.640	560396.992	985.354
75	88/1	3070493.128	560338.654	994.929
76	88/2	3070594.487	560114.412	987.682
77	88/3	3070758.483	560053.882	979.094
78	88/4	3070990.611	560117.119	977.686
79	89/1	3071131.734	559954.905	983.431
80	89/2	3071309.404	559818.665	977.050
81	89/3	3071305.766	559614.120	967.384
82	89/4	3071466.849	559570.100	954.322
83	90/1	3071637.241	559690.546	941.109
84	90/2	3071664.888	559636.383	938.484
85	90/3	3071679.237	559622.695	938.289
86	90/4	3071767.493	559501.819	933.883
87	90/5	3071755.103	559266.004	922.116
88	90/6	3071899.399	559068.080	902.308
89	91/1	3071733.828	558898.259	881.341
90	91/2	3071685.066	558685.595	866.103
91	91/3	3071886.447	558657.691	837.815
92	91/4	3072026.228	558506.175	824.016
93	92/1	3072194.546	558338.793	805.067
94	92/2	3072039.300	558198.240	798.499
95	92/3	3072086.314	558078.590	798.196
96	92/4	3072272.271	558192.814	789.795
97	93/1	3072348.726	558427.510	811.093
98	93/2	3072504.516	558604.823	832.298
99	93/3	3072608.493	558731.458	857.065
100	93/4	3072593.621	558933.863	868.948
101	94/1	3072642.906	559160.958	884.617
102	94/2	3072702.329	559389.894	906.496



Sl.No	BM PILLER NO.	NORTHING	EASTING	ELEVATION
103	94/3	3072884.315	559420.916	929.379
104	94/4	3073063.095	559261.885	951.685
105	95/1	3073296.840	559199.347	957.557
106	95/2	3073541.848	559221.349	981.757
107	95/3	3073717.622	559074.418	1003.699
108	95/4	3073913.395	559065.904	1015.217
109	96/1	3074109.667	558915.182	1018.129
110	96/2	3074262.345	558940.232	1020.832
111	96/3	3074468.763	558968.054	1031.157
112	96/4	3074650.937	558803.814	1043.301
113	97/1	3074794.001	558608.024	1062.514
114	97/2	3074982.021	558502.284	1078.932
115	97/3	3075130.870	558382.539	1091.354
116	97/4	3075315.399	558213.590	1102.940
117	98/1	3075287.231	557970.619	1110.276
118	98/2	3075243.187	557734.627	1120.094
119	98/3	3075125.353	557537.039	1128.042
120	98/4	3075148.428	557439.189	1131.285
121	98/5	3075084.319	557355.418	1131.311
122	98/6	3075005.559	557130.227	1134.526
123	99/1	3074907.577	556912.507	1140.605
124	99/2	3074763.466	556759.640	1137.828
125	99/3	3074655.244	556660.362	1134.762
126	100/1	3074572.288	556440.412	1144.172
127	100/2	3074559.592	556191.917	1135.137
128	100/3	3074418.332	556042.400	1149.680
129	100/4	3074341.081	555812.383	1143.744
130	101/1	3074334.261	555589.917	1128.517
131	101/2	3074246.914	555443.730	1125.327
132	101/3	3074023.213	555474.783	1111.616
133	101/4	3073869.770	555289.641	1103.381
134	101/5	3073691.338	555351.373	1091.367
135	102/1	3073694.130	555140.546	1088.825
136	102/2	3073896.342	555073.693	1076.061
137	102/3	3073980.632	554881.221	1070.821



Sl.No	BM PILLER NO.	NORTHING	EASTING	ELEVATION
138	102/4	3073847.563	554674.798	1065.432
139	103/1	3073879.856	554447.726	1060.255
140	103/2	3073895.079	554207.338	1053.128
141	103/3	3073794.938	554050.763	1036.765
142	103/4	3073555.168	554028.887	1028.926
143	104/1	3073371.407	554094.269	1025.543
144	104/2	3073269.137	553916.076	1008.959
145	104/3	3073096.755	553775.786	1000.621
146	104/4	3073317.712	553721.403	987.309
147	105/1	3073532.283	553674.155	969.715
148	105/2	3073569.820	553561.880	965.422
149	105/3	3073418.017	553498.550	957.515
150	105/4	3073635.913	553422.511	948.360
151	106/1	3073832.740	553315.517	934.567
152	106/2	3073893.691	553100.163	928.432
153	106/3	3074004.505	552898.563	920.896
154	106/4	3074036.426	552681.361	907.214
155	107/1	3073870.584	552520.230	892.406
156	107/2	3073909.599	552293.459	874.152
157	107/3	3073769.663	552144.284	865.914
158	107/4	3073634.471	551950.636	835.492
159	108/1	3073594.070	551857.005	832.611
160	108/2	3073737.951	552058.249	823.943
161	108/3	3073967.586	552081.637	806.086
162	108/4	3074024.685	552253.315	795.439
163	109/1	3074203.068	552389.759	776.908
164	109/2	3074266.613	552392.650	754.966
165	109/3	3074154.704	552184.537	750.478
166	109/4	3074075.406	551954.481	735.844
167	109/5	3073843.716	551864.966	717.616
168	110/1	3073666.469	551741.695	704.507
169	110/2	3073776.080	551777.524	711.576
170	110/3	3074026.920	551792.700	731.792
171	111/1	3074223.390	551815.550	747.059
172	111/2	3074307.128	551751.253	743.818



Sl.No	BM PILLER NO.	NORTHING	EASTING	ELEVATION
173	111/3	3074487.899	551903.073	751.302
174	111/4	3074625.783	552019.209	761.493
175	111/5	3074641.977	552159.286	770.482
176	112/1	3074743.321	552325.777	788.341
177	112/2	3074854.064	552496.555	805.052
178	112/3	3074865.299	552689.625	818.841
179	112/4	3074852.369	552853.052	831.215
180	113/1	3074672.463	552963.925	849.378
181	113/2	3074814.364	553140.562	868.509
182	113/3	3074933.160	553266.927	891.410
183	113/4	3075059.664	553388.983	887.009
184	113/5	3075234.582	553402.255	908.504
185	114/1	3075419.777	553414.355	920.222
186	114/2	3075570.481	553556.879	929.535
187	114/3	3075719.775	553420.473	937.863
188	114/4	3075947.042	553458.887	959.586
189	115/1	3075848.249	553244.539	974.003
190	115/2	3075829.622	553055.293	983.140
191	115/3	3075825.741	552832.666	985.094
192	115/4	3076022.879	552827.950	997.047
193	116/1	3076238.686	552896.139	1003.093
194	116/2	3076420.740	552813.751	1003.420
195	116/3	3076417.970	552645.689	995.311
196	116/4	3076514.864	552475.964	991.031
197	116/5	3076531.334	552335.511	976.249
198	117/1	3076519.655	552128.465	960.400
199	117/2	3076539.641	551986.926	945.002
200	117/3	3076462.657	551853.545	956.405
201	117/4	3076741.204	551808.065	939.409
202	118/1	3076937.792	551697.668	933.801
203	118/2	3076782.770	551523.165	940.008
204	118/3	3076710.727	551299.448	943.288
205	118/4	3076840.730	551358.741	942.846
206	119/1	3077062.677	551341.405	941.956
207	119/2	3077267.498	551270.317	941.964



Sl.No	BM PILLER NO.	NORTHING	EASTING	ELEVATION
208	119/3	3077460.162	551217.902	940.795
209	119/4	3077496.522	550991.009	929.987
210	120/1	3077465.013	550882.043	917.571
211	120/2	3077693.317	550955.753	917.532
212	120/3	3077745.175	550752.705	901.923
213	120/4	3077796.710	550669.697	891.927
214	121/1	3078039.321	550718.416	880.376
215	121/2	3078330.633	550727.733	871.035
216	121/3	3078404.974	550651.460	865.930
217	121/4	3078626.402	550625.885	863.146
218	121/5	3078706.115	550418.038	854.902
219	122/1	3078762.399	550189.536	844.830
220	122/2	3078815.130	550011.875	828.719
221	122/3	3079041.296	550036.649	814.793
222	122/4	3078898.633	549898.165	801.453
223	123/1	3078800.394	549701.740	788.589
224	123/2	3078783.978	549473.340	774.435
225	123/3	3078657.412	549325.179	757.309
226	124/1	3078599.827	549250.937	744.301
227	124/2	3078783.070	549319.197	753.262
228	124/3	3078914.215	549439.533	760.778
229	124/4	3079011.386	549609.600	769.162
230	124/5	3079150.093	549721.891	773.790
231	125/1	3079388.833	549674.956	779.601
232	125/2	3079588.541	549531.687	785.045
233	125/3	3079826.555	549494.583	791.261
234	125/4	3079777.605	549332.051	797.283
235	126/1	3079579.978	549163.652	799.208
236	126/2	3079495.582	548925.677	805.540
237	126/3	3079560.133	548719.376	813.109
238	126/4	3079777.286	548623.694	812.927
239	127/1	3079875.564	548505.290	814.870
240	127/2	3079819.788	548724.740	825.233
241	127/3	3079721.807	548900.036	829.106
242	127/4	3079844.769	549075.433	835.287



Sl.No	BM PILLER NO.	NORTHING	EASTING	ELEVATION
243	128/1	3080070.133	549082.439	840.610
244	128/2	3080092.385	548837.455	840.471
245	128/3	3080211.074	548653.132	839.969
246	128/4	3080389.177	548491.132	836.456
247	129/1	3080587.344	548371.572	832.657
248	129/2	3080760.305	548214.050	840.662
249	129/3	3080989.077	548199.902	839.341
250	129/4	3081110.682	548001.190	839.471
251	130/1	3081142.630	547788.118	839.944
252	130/2	3081213.948	547741.096	844.037
253	130/3	3081268.338	547923.058	843.726
254	130/4	3081295.687	548028.341	843.589
255	130/5	3081424.208	548003.227	844.169
256	131/1	3081606.020	547851.107	844.382
257	131/2	3081698.379	547626.609	843.226
258	131/3	3081849.480	547450.801	841.826
259	131/4	3081719.523	547245.998	832.755
260	132/1	3081763.040	547214.524	828.938
261	132/2	3081981.343	547317.128	836.933
262	132/3	3082161.493	547200.795	842.140
263	132/4	3082200.798	546959.642	842.962
264	133/1	3082174.485	546760.861	841.114
265	133/2	3082155.539	546538.135	841.911
266	133/3	3082207.486	546384.829	841.862
267	133/4	3082232.831	546156.805	844.073
268	133/5	3082215.796	546059.994	843.521

