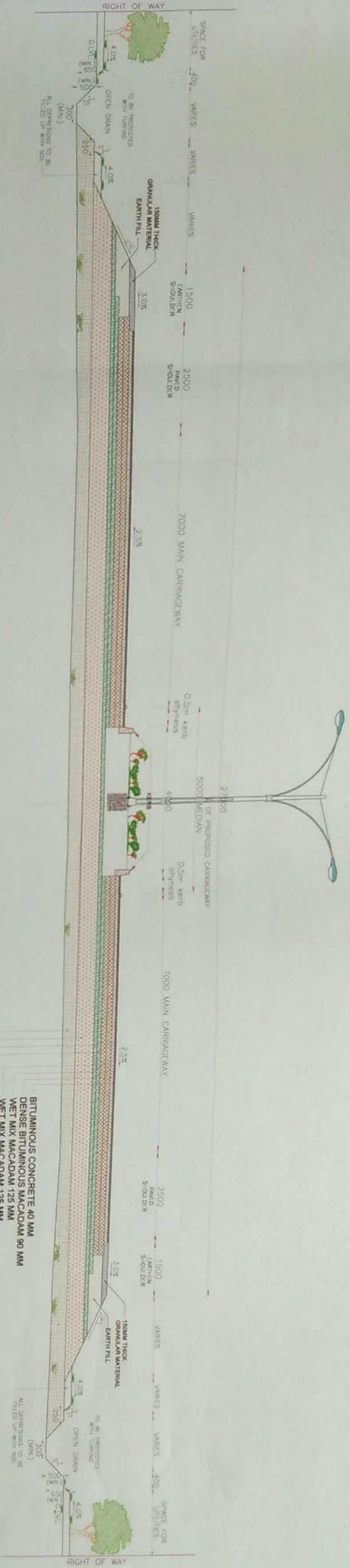




TYPICAL CROSS SECTION OF FOUR LANE ROAD
WITH RAISED MEDIAN
TYPE-I (SCALE- 1:100)

BITUMINOUS CONCRETE 40 MM
DENSE BITUMINOUS MACADAM 90 MM
WET MIX MACADAM 125 MM
WET MIX MACADAM 125 MM
GRAVEL SUBBASE 100 MM
GRAVEL SUBBASE (DRAINAGE LAYER) 100 MM
EARTH WORK

FROM	TO	LENGTH
000	5780	5780
6290	6600	310
7120	8700	1580
9140	9300	160
10050	10310	260
	TOTAL	8090M

SPSL
19/5/2022

Satyendra Prasad Singh,

Executive Engineer

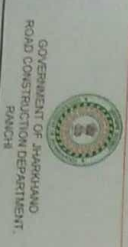
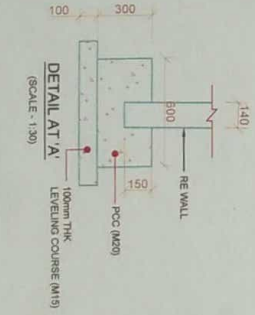
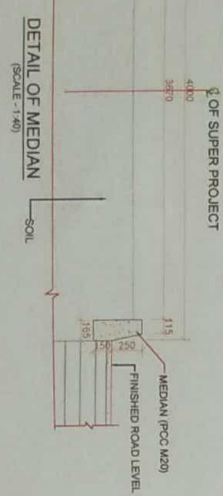
National Highway Division, Hazratnagar

PROJECT :- Consultancy services for preparation of feasibility study, alignment option & detailed project report for Chitra Bypass on NH-99, at Chitra in the State of Jharkhand. Total Length- 14.230 Km.



TYPICAL CROSS SECTION OF SERVICE ROAD WITH RE WALL TYPE-II (SCALE- 1:125)

FROM	TO	LENGTH
5780	6280	510
6600	7120	520
8700	9140	440
9300	10050	750
TOTAL		2220M



GOVERNMENT OF JHARKHAND
ROAD CONSTRUCTION DEPARTMENT,
RANCHI

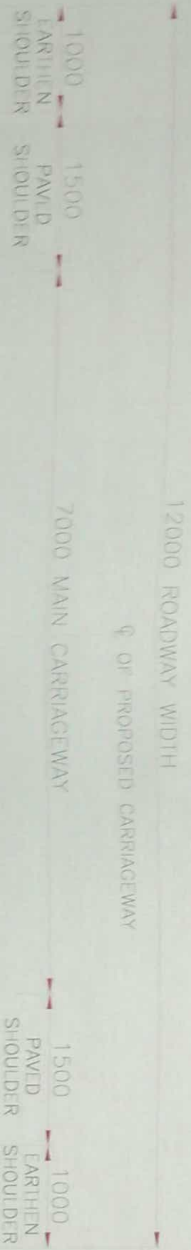
CONSULTANT:-
CUBE ENGINEER
CUBE ENGINEER CONSULTANT PVT.LTD.
JEEVAN LOK HOSPITAL COMPLEX,
MAIN ROAD HINDO,
RANCHI-2

DRAWN BY: RANAN
DESIGN BY: P. RANAN

PROJECT:-
Consultancy services for preparation of feasibility report,
Detail Survey/Investigation, Alignment Option & Detailed
Project Report for Chartra Bypass on NH-99, at Chartra in
the State of Jharkhand, Total Length- 14.230 Km.

EXECUTIVE ENGINEER,
Satendra Prasad Singh,
19/5/2022

DRAWING NO. - CHATRAVATOS_02
SCALE - AS SHOWN
PAGE SIZE - A3



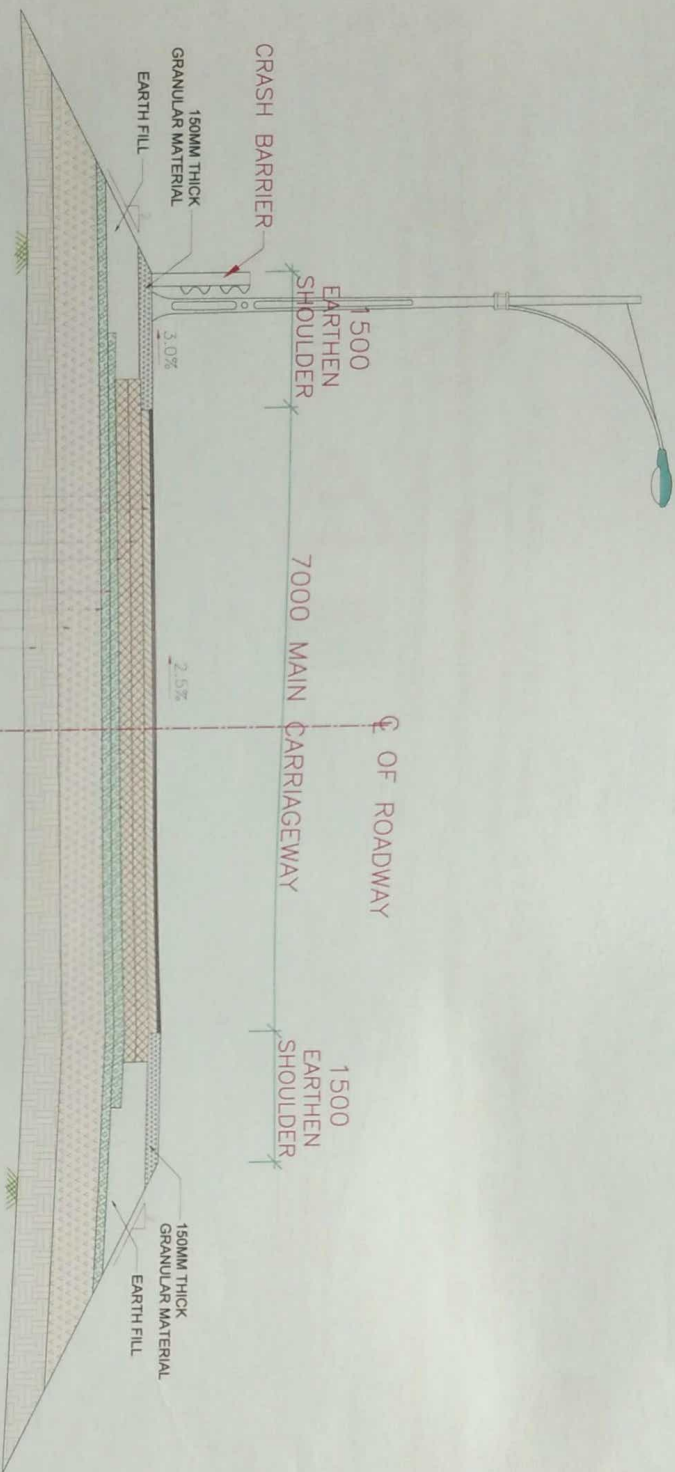
BITUMINOUS CONCRETE 40 MM
DENSE BITUMINOUS MACADAM 90 MM
WET MIX MACADAM 125 MM
WET MIX MACADAM 125 MM
GRANULAR SUB BASE 100 MM
GRANULAR SUB BASE (DL) 100 MM
SUB GRADE MATERIAL 500MM

EMBANKMENT FILL

FROM	TO	LENGTH
10310	14230	3920M
	TOTAL	3920M

TYPICAL CROSS SECTION OF TWO LANE WITH PAVED SHOULDER TYPE- III (SCALE- 1:50)

Sapce
16/11/2022
Satyendra Prasad Singh
Executive Engineer,
National Highway Division, Kharar Road



BITUMINOUS CONCRETE 40 MM
DENSE BITUMINOUS MACADAM 60 MM
WET MIX MACADAM 125 MM
WET MIX MACADAM 125 MM
GRANULAR SUBBASE 100 MM
GRANULAR SUBBASE (DRAINAGE LAYER) 100 MM
SUB GRADE MATERIAL 500MM
EARTH WORK

**TYPICAL CROSS SECTION OF SERVICE ROAD
CONNECTING EXISTING
ROAD TO PROPOSED ROAD
TYPE-IV (SCALE- 1:50)**

SL. NO.	FROM(CH) KM	TO (CH) KM	LENGTH(KM)	REMARK
1.	0.230	0.440	0.210	
2.	0.700	0.880	0.180	AT VUP CH-6+100KM
3.	1.097	1.200	0.103	
4.	3.700	3.850	0.150	
5.	3.939	4.000	0.061	AT VUP CH-9+800KM
6.	4.600	4.816	0.216	
TOTAL LENGTH			0.920	

SPD
19/11/2022

Satyendra Prasad Singh,
Executive Engineer,

National Highway Division, Hazratnagar

Typical Cross Section

CHATRATOS, 04

SCALE - AS SHOWN

PAGE SIZE - A3