

TECHNICAL REPORT

Name of work: Construction of road from Middle School Nadyala to Rachwa Mandir Gali.

AUTHORITY. Deputy Director (E&S) Public work R&B department Jammu vide his letter No. CEJ/Plan/2020-21/4161-66 Dated:- 21-08-2020 under RIDF – XXVI 2020-21

History & Necessity The Proposed road takes off from Middle School Nadyala road at a distance of 35 away from District Head Quarter. The road shall benefit about 4500 Soul. The road shall connected 03 Nos villages namely Nadyala, Rachwa, Mandir Gali and its adjoining hamlets will be connected by construction of this road. The main economic activity of public is agriculture, cattle raring & Para forces. The Terrain of the road is hilly and passes through a large number of bed crossings. The inhabitants of the area earn their livelihood mainly by growing crops, vegetable and dairy products. The area is rich in dairy produces and is carried to nearby area of Rajouri and its surroundings. This makes the road even more important for the farmer of the area to establish their business better and improve their living standard. The construction of this road shall provide better transport facilities to the resident of the area and shall change drastically the living standard of backward class & poor people who will get tremendous uplift. Keeping in view the above facts, it is felt necessary to construct the roads and Complete it in shortest possible time.

Proposal & specification: Construction of New road has been proposed to be constructed under state plan for a length of 2.0 Km.

- PHYSICAL DETAILS;**
- i) Earth work in cutting as per MOST specifications with the formation width of 6.00m shall be constructed
 - ii) 150mm thick GSB shall be laid.
 - iii) 15cm thick WBM Gr-II (Shingling) in two layers shall be laid by providing, laying watering and compacting with 80-100Km road roller broken, nallah stones of 63-45mm size, screening of 13.2mm size to the specified lines, grades and X- section .
 - iv) 7.5mm thick WBM Gr-III shall be laid by providing, laying 53 mm to 22.4mm size broken stone aggregate using screening of 11.2mm size, and binding material compacted with power road roller.
 - v) 25mm thick open graded premix carpet over 50mm thick B.M shall be laid with hot mix plant/pavers finisher as per clause 509 of MOST specification 1995
 - vi) 10 nos 1.00 mtr dia HP, 450 mtr pucca drain shall be constructed to drain off the water
 - vii) Retaining wall and breast walls shall be constructed for improving the geometrics of roads and protection of hill slope.

FINANCIAL DETAILS The estimated cost of the project is Rs 303.90 lacs .where as Rs 30.39 lacs are to be made available from the state Govt. and assistance of Rs 273.51 lacs is required from NABARD for completion of the project.

TECHNICAL SPECIFICATION. The road shall be constructed as per MOST specifications to achieve the hard crust thickness of 250 mm upto BT specification

COST. The average cost of the road comes to 151.95 lacs per Kms including construction of drainage works.

PHYSICAL AND FINANCIAL PHASING The road shall be completed upto BT specification in all respects in the year ending 2023 depending upon the availability of funds and key Constructional materials.

The year wise physical and financial phasing of the project is as under:

Year.	Physical	Financial
2021-22	E/W ,part walling and Part Cross drainage works.	30% of the project cost
2022-23	Completion of Earth work, walling & X-drainage work	40 % of the Project cost
2023-24	Completion of scheme in all respect	30% of the project cost

GOVT. CLEARANCE. The sanction of the project would be accorded along with Sanction of loan from NABARD.

PROJECT IMPLEMENTATION

AND MANAGEMENT This project would be completed by the State PWD under preview of the Chief Engineer PW(R&B)Deptt. Jammu. The implementation of the project would be monitored by State level monitoring committee consisting of representative from the PWD, finance department and NABARD. The state level committee would review the progress of the project on a Quarterly basis.

RISK FACTOR. There is no risk factor involved, sufficient labour is available in this area round the year for early completion of project, besides the Machinery required for construction of the road is available with state mechanical Department and can be arranged in shortest time from the mechanical department.

BENEFITS AND JUSTIFICATIONS.

The project shall provide on all Weather link to about 4500 people residing in the area

Increasing in agriculture production,

The farmers in this area grow crops like's wheat, maize, rice, vegetable fruits, etc. by getting better and regular transportation .It is expected that agriculture productivity will increase as farmers will have access to modern and improved inputs.

Saving in wastage: The up gradation of road will facilitate transportation of marketable surplus to the near by markets resulting saving in wastage of goods.

Saving in travel time, The population of these villages using this road is 4500 souls assuming that only 10% of the people are engaged in labour marketing activities with the construction of this road it is expected that the travel time shall be reduced by 4 minutes per Km with the probability of securing employment 1.15 lacs at daily wage rate of Rs.100 per day for unskilled labour and Rs 200 - for skilled.

BETTER EDUCATION FACILITY: With construction of this road the people of the area could avail better education facilities available at Rajouri easily and conveniently.

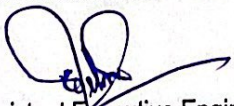
SAVING INVEHICLE OPERATING FACILITIES:- As per survey conducted by the department the volume of traffic has been converted in to standard passenger car unit with the help conversion in estimated as per the details furnish below.


S.NO	Vehicle Type	No /days	Conversion	Pcus/day
1	Cycles.	60	0.50	60
2	Motor cycle/scooter	160	0.50	80
3	Passenger car Ride	50	1.50	75
4	Agriculture tractor.	40	1.50	60
5	Bus	30	3.00	90
6	Truck/Tipper	100	3.00	300
7	Others	35	1.00	35
			Total:-	700

Assuming the vehicle operating cost Rs.7.00 lacs at 2007-08 prices. The annual saving in VOC many quantified at Rs 51.86 lacs.

GENERATION OF ADDITIONAL EMPLOYMENT: The const. of road provide direct employment to this land less and needy during the implementation period of three years *about* 1.15 lacs man days are expected to generated.

Certified that we have inspected the site and are satisfied with the proposal and specifications kept in the project report. The proposal are strictly devised and designed as per relevant codes of Indian road Congress Bureau of Indian standard and Engineering practice and most suitable under site conditions.


Assistant Executive Engineer
P.W.D (R&B) Sub-Division
South Rajouri


Executive Engineer
P.W.D (R&B) Division
Rajouri

ABSTRACT OF COST

Name of work :- **Construction of road from Nadyala to Rachwa**

Technical Data :-

1.	Length	:	2.00 Kms
2.	Specifications	:	Up to B.T specification
	(a) Road way	:	6.00 Mtr
	(b) Carriageway	:	3.75 Mtr
3.	Pavements	:	450mm upto B.T
4.	Present Status	:	New Scheme
5.	X- Drainage	:	10 Nos

S.No.	Particulars of item.	Qty.	Rate Rs	Amount (in lacs)
01.	Earth work in Bulk Excavation <u>All kinds of soil</u> <u>Soft Rock</u> <u>Hard Rock</u> 60% 20% 20%	4840.00 /m ³	436.11	21.12
02.	Pavements. a. GSB 150mm thick b. WBM Gr-IIInd 150mm thick (two layers) c. W.B.M Gr-III rd 75 mm thick (one layers) d. Bituminous Macadam 50mm thick e. 25 mm thick open graded premix carpet	1237.50 M ³ 8250.00 M ² 8250.00 M ² 412.50 M ² 8250.00 M ²	1081.05 M ³ 310 /M ² 170/M ² 5770.90/ M ³ 375/M ²	13.37 25.57 14.02 23.80 27.22
03.	X-Drainage works a. 1.00 m dia H.P Culvert b. Pacca Drain	10 Nos 450 /Rmt	2.03 lacs/ each 2745 /Rmt	20.30 12.35
04.	Walling a) Const. of semi Pacca R/Wall b) Const. of semi pacca B/Wall	350 Mtr 385 Mtr	19900/ Rmt 10700 / Rmt	69.65 41.19
05	Making of Guide Stone, caution board	2.00 Km	0.20/Km	0.40
			Total :-	268.98
	Add 3% for W.C & Contingencies charges			8.06
(A)			Total A	277.04
(B)	Maintenance for 05 years			
	1 st Year @ 0.95% of (A)			2.56
	2 nd year @ 1.70% of (A)			4.58
	3 rd year @ 1.95% of (A)			5.24
	4 th year @ 2.40% of (A)			6.45
	5 th year @ 3.0% of (A)			8.06
			Total - B	26.89
			Total A+B	303.93

Asstt. Executive Engineer
PWD(R&B) Sub-Division
South Rajouri

Say Rs 303.90 lacs

Executive Engineer
PWD(R&B) Division
Rajouri