

GOVERNMENT OF JAMMU AND KASHMIR



PRADHAN MANTRI GRAM SADAK YOJANA

DETAILED PROJECT REPORT FOR

CONSTRUCTION OF ROAD FROM

LIMBER BUDRALI (STAGE II) PHASE VIII

Package No.	District	Block	Length	Total Cost of the Project (Lacs)
JK-0340	BARAMULLA	BONIYAR	7.00 KMs	448.89

PMGSY (JKRRDA) DIVISION URI

Pradhan Mantri Gram Sadak Yojana (PMGSY)

PACKAGE SUMMARY

Proforma - B

State: Jammu & Kashmir

District: Baramulla

Package no: JK-0340

S.No	Name of Block	Name of Road		Type of Proposal	Proposed Length Km	Cost of Pavement (in Lacs)	No. of C.D works Nos	Cost of C.D works (in Lacs)	Misc. Cost (in Lacs)	Total Estimated cost (in Lacs)	Average cost per KM (in Lacs)
		From	To								
1	Block: BONIYAR	LIMBER	BUDRALI	N	7.00	421.80	21.00	2.42	3.29	427.52	61.07

Total Estimated Cost of Package AS PER SOR-2008=

Routine Maintenance for 5 Years=

Grand Total=

Rs: 427.52 Lacs

Rs: 21.38 Lacs

Rs: **448.89 Lacs**

N= New Connectivity

U= Upgradation

Prepared by:



Checked by:



Scrutinized by:



Signature:

Name:

Designation:

Signature:

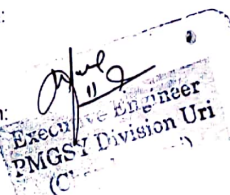
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Designation:



Technical Scrutiny done by:



Signature:

Name:

Designation:

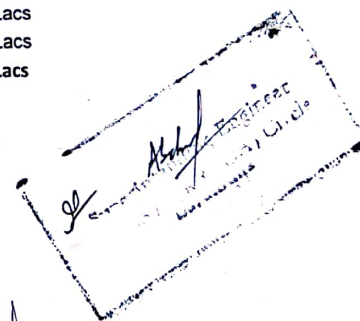
Coordinator STA:



Signature:

Name:

Designation:



FAYAZ AHMAD MIR
Asstt. Professor, NIT Srinagar
Date: 10/05/2020

Pradhan Mantri Gram Sadak Yojana (PMGSY)
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		From	To	N/U							
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[Signature]

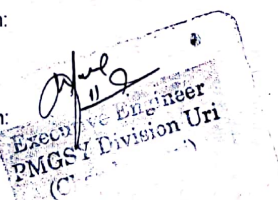
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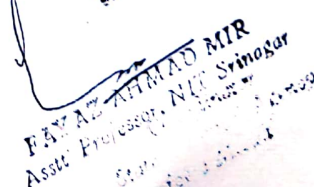
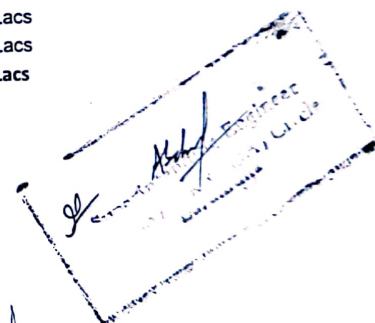
Technical Scrutiny done by:

Signature:
Name:
Designation:

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Coordinator STA:

Signature:
Name:
Designation:



PRADHAN MANTRI GRAM SADAK YOJANA (PMGSY)

CHECK LIST FOR P.I.U & S.T.A

(For Individual road works)

To be filled by PIU

1. Location:- State:- Jammu & Kashmir District: Baramulla Block: BONIYAR

2. Package No. JK-0340

3. Name of the Road:- From: LIMBER To: BUDRALI

4. Total length (Km):- 7.00 KM In Built Up Area:- 2.8 KM In Open Area: 4.2 KM

5. Estimated Cost Rs: 427.52

Average Cost: 61.07

Item	Total Cost in Lacs	Cost per Km. Lacs
Flexible Pavement	424.23	60.60
Rigid Pavement		
Others	3.29	0.47
Total	427.52	61.07

6. Type of Proposal:- New Connectivity

..If the proposed road is a New Connectivity

..Is the road a part of Core Network

If Yes Through Route/ Link Route No.

.. Name of the unconnected Target Habitation (s)
(to be crosschecked with CN-6)T-

or

L-

.. Population Sub served by the proposed road.

.. Does Proposed Road Lead up to the Habitation for which it is supposed to provide connectivity (In other words are you sure that the road is not being made partially?)

Yes

.. Does the proposed road connect the unconnected Habitation to:

..A) Another habitation having All- Weather Road.

(A)

..B) Directly to an All Weather Road.

If (B) indicate the nature of Road to which the proposed road leads.

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.. If the proposal is for upgradation

.. Is the road a part of the core network

.. Is it associated Through Route or Not

.. PCI value

.. Age of the Road

.. Is it certified that there are no other un connected Eligible Habitations in the District.

7 a) Whether the Proposed Road has the desired carriage way width, Roadway width and Road Land width (RLW)

b) Indicates the actual widths of the following for the proposed road

a) Carriageway

b) Roadway

c) Road Land Width

In the Built Up Area (m)	In the Open Area (m)
3.75	3.75
5.50	5.50
6.50	6.50

Attached -

Name of Road:

Cross Section details

a) Cross Section of The Existing Road showing different component layers.

Attached -

a) Cross Section of The Proposed Road showing different component layers.
(Should be as per Actual Provisions of DPR)

8. Base Year Traffic Volume

Month & Year of Traffic Volume															
Days	Cars, Jeep, Vans, Three Wheelers	Motorised two Wheelers	Light Commercial Vehicle	Motorised Traffic									Non Motorised traffic		
				Trucks			Agricultural Tractors Trailers			Buses			Cycles	Cycle Rickshaws	Animal Drawn Vehicle
				L	U	OL	L	U	OL	L	U	OL			
Day 1	10	5	20	15	18		13	18		5	2				
Day 2	8	4	15	11	15		15	13		5	2				
Day 3	9	6	16	16	15		14	14		8	2				
Average	9	5	17	14	16		14	15		6	2				
ADT in the year of Traffic Count= 08															

ADT in the year of Traffic Count=

98

Growth rate adopted (%)=

6%

Design life=

10 Years

Base Year Traffic AADT (T)=

118

Number of harvesting Seasons=

1

Value of (n) assumed=

1

Cumulative ESAL=

228233.84

Traffic Category=

RURAL

9. Subgrade CBR (for Different Sections) =

Chainage	KM 1ST	KM 2ND	KM 3RD	KM 4TH	KM 5TH	KM 6 & 7TH
CBR %	10.5%	8.9%	7.8%	7.5%	8.5%	8.5%

10. Cost Details

A. General Costs

Cost Rs.

Cost / Km (Rs)

Cost of Preparation of DPR

0.70

0.10

B. Pavement Components

Description of Layer	Thickness in mm	Qty.	Cost Rs.	Cost / Km (Rs)
Earth Work in Excavation/ Cutting				
Earth Work in Filling (Embankment)				
SubGrade (if Provided seperately)	300.00	10515.00	9.79	1.40
Shoulders (If not considered in the Earthwork)	325.00	4322.50	15.92	2.27
Grannular Sub Base	150.00	6127.69	78.83	11.26
Soil + Aggregate Mix				
WBM Gr - II				
WBM Gr - III	75.000	2066.34	46.35	6.62
Bituminous Layers				
Prime Coat		27551.25	18.66	2.67
Tack Coat		27551.25	8.02	1.15
Semi dence		27551.25	40.43	5.78
Seal Coat		27551.25	25.45	3.64
MPM / BBM	50.00	1377.56	103.03	14.72
Surface Dressing				
D. Cement Concrete Road				
Pavement Quailty Concrete (M30)				

E. CD Works

No. of Existing CD Works

Do they require any improvement - specify the nature of improvement proposed

If yes, their number and cost of improvement

Location - Chainage (Similar Type of CD's may be grouped together)	Type of CD & their Nos.	Total Length of Bridge / Culvert	Cost in Rs.
RD 910,1835,2404,2820,4120,4911,5249,	Buried conduits		2.42

Total Cost of Proposed CD works

2.42

0.35

F. Protection Works	Cost In Rs	Cost / KM In (Rs.)
G. Pucca Side Drains 700 Rmts and 6300 Rmts Stone Drain	75.31	10.76
H. Road Logo, other Road Furniture	2.59	0.37
I. Any other Provisions (Please Specify)		
Total Cost of the Project (Rs)	427.52	

Name of Road: LIMBER BUDRALI

J. Five Year Routine Maintenance

Year	Cost in Lacs	% Cost	Cost / Km
Total Maintenance Cost	21.38	0.050	0.000

11. Whether the road has Goemetrics as per Rural Roads Manual RRM / Latest Circulars of NRRDA.

Yes

12. Whether C.D. Works / Protection works are provided as per RRM / Latest Circulars of NRRDA/ Respective Codes.

Yes

13. Whether the Cost estimate are as per standard data analysis and S. O. R

Yes

14. soueces and the Lead distances of Materials are as under:

Material	Source	Lead Distance	Material	Source	Lead Distance
Earth			Cement	Baramulla	30
Murum			NP3 pipes	Khrew, Srinagar	80
Aggregate	Veerwan	20			
Sand	Juhama	30			

Certified that the information provided is true:

Prepared By
(Name)

Executive Engineer
PMGSY Division Uri
(Chandanwari)

Checked By

Scrutinized By

Counter Signatures of
Co-ordinator STA

FAYAZ AHMAD MIR
Asstt. Professor, NIT Srinagar
Coordinator
State P
for

Performa C

To be filled by State Technical Agency		
Name of STA:		
Name of Road:		
15	Is the Proposed road entered on the OMMS: (Data entries to be verified by STA before clicking the Proposal)	Yes / No
16	If the Proposal is for new connectivity Have you satisfied yourself that the proposed road is a part of Core Network Is the unconnected habitation(s) part of list of unconnected Habitations as per CN - 6 Does the proposal ensure full connectivity to target habitation a) If No, the Name of unconnected Habitation up to which it is connected b) If such unconnected Habitation eligible Under PMGSY	Yes / No Yes / No Yes / No Yes / No
17	Are you satisfied with the following Engineering Surveys (L section, X section must be verified) Soil/ Material Investigation (CBR, Density, LL, PI, Gradation to be verified) Traffic Surveys/ Estimation Hydraulic Studies (Catchment for structures for more than 2 vents to be verified from topo sheet. Location and	Yes / No Yes / No Yes / No Yes / No
18	In case, Traffic is projected beyond T4 category are you satisfied with the reason given by PIU	Yes / No
19	In case, sub grade CBR is less than 3; has soil stabilisation etc. been proposed (If not, specific Reasons given by PIU)	Yes / No
20	Is the design of the following elements as per Rural Roads Manual/ Circulars of NRRDA: Alignment & Geometrics Location and type of CD works and Side drains Integration for Cross and Longitudinal Protection works	Yes / No Yes / No Yes / No Yes / No
21	Is the design of flexible Pavement as per IRC SP: 72-2007 and design of Rigid Pavement as per IRC SP:	Yes / No
22	Does the estimation conform to Standard Rate Analysis and SSR generated for the current Phase	Yes / No
23	Does the proposal have provisions for PMGSY Logo Sign Boards and Information Boards KM/ Hm Stones Guard stones (where necessary) Traffic Sign Boards (as necessary)	Yes / No Yes / No Yes / No
24	Specific Remarks, if any, by STA (Specific remarks of STA about the overall project are necessary on each DPR)	Yes / No

DPR is for Stage - II of the N-Connectivity road. The pavement is as per SP-72 and provision for hill side stone pitched drain is included.

Technical Scrutiny at STA done by:

Signature
Name
Date

Parveen
MS Mui

Co-ordinator STA:
Signature
Name

FAYAZ AHMAD MIR
Asstt. Professor, NIT Srinagar
Co-ordinator
State Technical Agency
for PMGSY

Pradhan Mantri Gram Sadak Yojana (PMGSY)

Summary Sheet

Name of the Block	Total No. of Habitations	Unconnected Habitations			Package No. JK-0340
		>1000	500-999	250-500	
BONIYAR	2	0	1	1	0

Type of Work	No. of Roads	Total Length of Road (Km)	No. of new CD Structures	Estimated Cost				No. of new villages connected	
				Pavement From F-5	CD Str. From F-6	Total 5+6	Total Villages	SC/ST Villages	
1	2	3	4	5	6	7	8	6	
N	1	7.00	21	346.49	2.42	348.92	3	2	

Checked by B. H. 12.5.2014

and M. R. Total Cost of Work:
 Rs. 424.23 Lacs
 Rs. 3.29 Lacs
 Rs. 427.52 Lacs
 Rs. 21.38 Lacs
 Rs. 448.89 Lacs
 Grand Total

Rs. 424.23 Lacs
 Rs. 3.29 Lacs
 Rs. 427.52 Lacs
 Rs. 21.38 Lacs
 Rs. 448.89 Lacs

Assistant Executive Engineer

Signature

Executive Engineer
 PMGSY, Division URI
 (C)

Pradhan Mantri Gram Sadak Yojana (PMGSY)

Details of Existing Roads

District: Baramulla Block: BONIYAR

S.No.	Name of Road	Road length (Km)	Road Connecting	Facilities accessed (Use A/B/C/D)	Traffic/ day				Existing Road Details				Bituminous Layers		
					Total Motorised	Total Truck/ Tractors	Land Width (m)	Road Width (m)	Embankment formation		WBM Layers		Type	Width (m)	Thickness (mm)
1	2	3	4	5	6	7	8	9	Height (m)	Width (m)	Height (m)	Thickness (mm)	14	15	16
1	LIMBER BUDRALI	7.00	BUDRALI		31	59	6.50	5.50							

Assistant Executive Engineer

[Signature]
Baramulla

Executive Engineer
PMGSY Division Uthir

Pradhan Mantri Gram Sadak Yojana (PMGSY)

Road Proposed in PMGSY for Rural connectivity (Pavement Layers)

District: Baramulla

Block: BONIYAR

Package No: JK-0340

S.No.	Name of place/ tourist place connected by road		New Const./ Upgradation (Use N/U)	Facilities accessed (Use A/B/C/D)	Road length (Km)	Existing Surface Type	Details of Thickness & Cost for Pavement Paver													Total cost of Pavement in
							Details	50 mm thick Macada	Earth Work	Earthen Shoulder 325 mm	Sub Grade Preparat	GSB 150 mm	WBM -III 75 mm	Prime coat	Tack Coat	25mm semi dence	R/B Wall	PMC Seal Coat	Sum of (10 to 20)	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1	LIMBER	BUDRAU	N			7.00	FW		103.03		15.92	9.79	78.83	46.35	18.66	8.02	40.43		25.45	346.49

Executive Engineer
PMGSY Division Unit
(Baramulla)

Package No: JK-0340

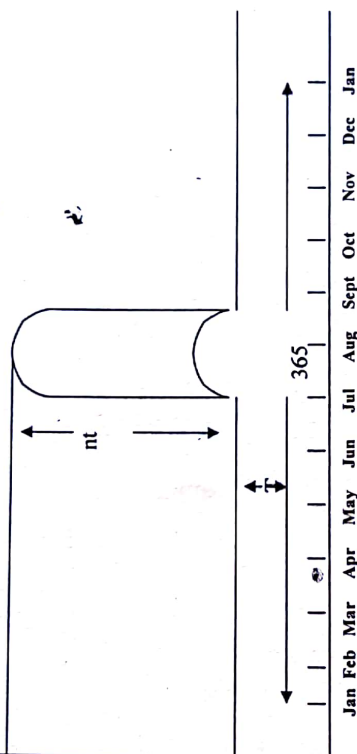
Assistant Executive Engineer

Executive Engineer in-charge
Erective Division Uti, Uti
PMG,

COMPUTATION OF DESIGN TRAFFIC

Name of the Road: LIMBER TO BUDRALI STAGE II

Harvesting Season-I



MONTH OF THE YEAR ---2011

Average daily traffic (ADT)
as per form (C)

T=98

Base Year Traffic (AADT)

$$= T + \frac{1.2nT}{365} = 98 + \frac{1.2 \times 1 \times 98 \times 62}{365} = 118$$

$$(AADT) \text{ at the time of opening the road to traffic after 2 Years} = 118 \times (1+0.06)^2 = 133$$

Proportion of HCV and MCV out of ADT at the time of opening the road to traffic

$$\begin{aligned} \text{HCV} &= \frac{50}{T} \times \text{AADT} \\ &= \frac{50}{98} \times 118 = 60 \\ \text{MCV} &= \frac{45}{T} \times \text{AADT} \\ &= \frac{45}{98} \times 118 = 54 \end{aligned}$$

Value of n=1

Growth rate r=6%

No. of harvesting season=1

DETERMINATION OF ESAL APPLICATION

H C V

Laden =62

Un-laden =52

M C V

Laden=31

Un-laden=28

V.D.F. for HCV

Laden =0.31

Un-laden =0.3

V.D.F. for MCV

Laden =0.38

Un-laden =0.03

No. of Commercial Vehicle

$$To = (62 \times 0.31 + 52 \times 0.3) + (31 \times 0.38 + 28 \times 0.03) = 47.44$$

Lane Distribution Factor, L=1

Age of road 10Years

Growth rate 6%

ESAL $To \times 4811 \times 1$
 $47.44 \times 4811 \times 1 = 228233.84$

Pavement Thickness Design :

Total Cumulative ESAL Applications=228233.84 (2,00,000-3,00,000)

CBR as per soil inspection=(7.5-10.5)

Total pavement thickness required as per IRC SP72=300mm

Total pavement thickness required = (300) mm