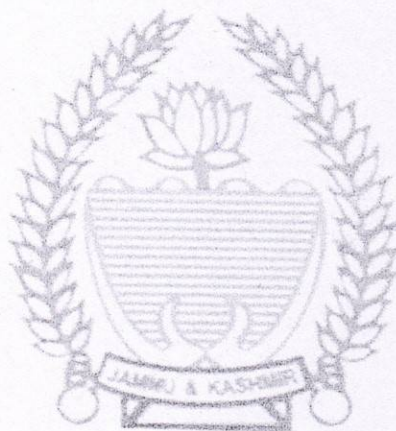


Govt. Of Jammu & Kashmir



# Public Health Engineering Department Jammu

PROJECT REPORT

For

Providing Water Supply to village Chowarian, Charangal and Parla  
Gran under WSS Chowarian-Charangal (NABARD)

P.H.E DIVISION, NOWSHERA  
DISTRICT RAJOURI



## SALIENT FEATURES

1	Name of scheme	:	Providing water supply to Chowarian, Charangal and Parla Gran mohras of village Thandapani under WSS Chowarian- Charangal (NABARD).
2	Authority	:	J&K Government PHE Department.
3	Name of State	:	Jammu and Kashmir
4	Name of District	:	Rajouri
5	Name of Tehsil	:	Sunderbani
6	Name of Constituency	:	Nowshera
7	Scope of Scheme	:	Chowarian, Charangal and Parla Gran mohras of village Thandapani
	Type of source	:	Filtration Plant & Bore well.
9	Type of Scheme	:	Lift/gravity
10	Rate of discharge	:	5000 Glns per hour (Filtration Plant) + 1 No 3000 Glns per hour(bore wells)
11	Estimated Cost	:	308.44 lacs Rs 299.50 Lacs
12	Mode of Distribution	:	Through PSPs
13	Time of Completion	:	Two Years
14	Per Capita Rate of Supply	:	55 litres/capita/day



15. Type of Treatment : Chlorination

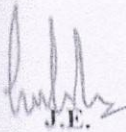
16. Maintenance charges @ 2% : Rs. 5.990 lacs


17. Peak Factor : 3.0


18. Cost per capita

a) As per present population : <sup>185367</sup>Rs. 17998.00

b) As per design population : <sup>132387</sup>Rs. 12854.00

  
J.E.  
Assistant Engineer,  
P.H.E. Sub Division,  
Sunderbani

  
Assistant Executive Engineer,  
P.H.E. Sub Division,  
Sunderbani

  
Executive Engineer,  
P.H.E. Division,  
Nowshera



# TECHNICAL REPORT

## NAME OF THE SCHEME

Providing water supply to Chowarian, Charangal and Parla Gran mohras of village Thandapani under WSS Chowarian- Charangal

## ESTIMATED COST

308.44 Lacs  
Rs 299.50 lacs.

## AUTHORITY

Government of Jammu & Kashmir through PHE department Jammu.

## LOCATION

Chowarian, Charangal and Parla Gran mohras of village Thandapani falls under the administrative jurisdiction of Sunderbani Tehsil and are located about 5 to 7 Kms towards North East of Sunderbani town.

## HISTORY & NECESSITY

Just like air, water forms the basic need to sustain life. It is also the most effective agent required for maintaining hygiene and cleanliness. Besides, save drinking water is the primary requirement for good health of human beings and thus for their prosperity and the ultimate betterment of mankind and the country we live in. as such, providing safe and sufficient drinking water to citizens is the first and foremost duty of the government and for the overall well being and development of nation.

Mohra Chowarian, Charangal and Parla gran of village Thandapani still lacks the facility of adequate and safe drinking water. The habitants of Mohra Chowarian, Charangal and Parla gran, the school students and above all the floating population of Gujjar-Bakarwals and other nomadic population in the area, have to face lot of hardships in fetching



even, imagine their hardships to get water particularly during the scorching summer heat and torrential rains during monsoons. This available water, infact, no doubt, quenches their thirst but its quality, quantity and the hardships in getting it, renders them sick and effects their health. Consequently, their overall development is marred for no fault of theirs.

It is pertinent to mention here that construction of 5000 GPH slow sand filtration plant was already taken up in hand some years back under BADP. Since the funds provided were not sufficient to complete the water supply scheme, as such, a new detailed project report, amounting to Rs. <sup>328.44</sup>~~198.60~~ lacs, has been framed. It has been proposed to complete the slow sand filtration plant and drill a 200 mm dia bore well. The water from filtration plant and bore well is collected in 10,000 GLNS Sump tank and furthur the water is pumped through well designed 65 mm dia rising main to 20,000 GLNS GSR and 10,000 GLNS GSR. From these reserviors, the drinking water shall be supplied by gravity in different directions for over all use of the masses.

#### POPULATION & WATER REQUIREMENT OF THE SCHEME

S. No	Panchayat	Village	Habitation	Total (2011) Population	Population		
					SC	ST	General
1.	Thandapani	Thandapani	Chowaraian	315	45	45	225
2.	Thandapani	Thandapani	Charangal	475	40	30	405
3.	Thandapani	Thandapani	Parla Gran	200	20	40	140
<b>TOTAL</b>				990	105	115	770

Population in year 2011 AD

= 990 souls

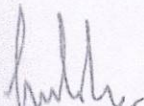
Population in year 2015 AD





a) School	=	250 souls
b) Gujjar/Bakarwal	=	300 souls
Total population in 2015 AD	=	1664 souls
Designed Population in year 2030 AD	=	2330 souls
Present water requirement in 2013 AD		
@ 55 litres per capita per day	=	$1664 \times 55$
	=	91520 Litres per day
	=	20158 Gallons per day
Designed water requirement in 2030 AD		
@ 55 litres per capita per day	=	$2330 \times 55$
	=	128150 Litres per day
	=	28227 Gallons per day
		(Say 30000 Gallons per day)
Present storage available	=	Nil
Proposed storage	=	a) 01 No 20000 Gallons GSR
		b) 01 No 10000 Gallons GSR
		<b>Total = 30000 Gallons</b>

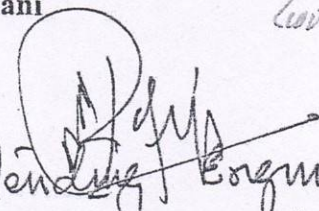
#### TIME OF COMPLETION

The scheme shall be completed within three years provided the funds and material are made available.

  
J.E. Assistant Engineer,  
P.H.E. Sub Division,  
Sunderbani

  
Assistant Executive Engineer,  
P.H.E. Sub Division,  
Sunderbani

  
Executive Engineer,  
P.H.E. Division,  
Nowshera

  
Superintending Engineer  
Hydraulic Circle  
Rampur

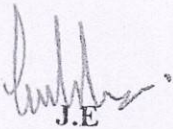


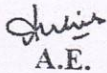
## ACCORD OF ADMINISTRATIVE APPROVAL


### SOURCE CERTIFICATE


It is Certified:-

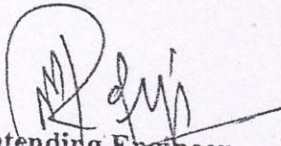
1. That the source of the scheme is free from any dispute.
2. That discharge available is adequate and will cater to the need of designed population proposed to be covered under the scheme.
3. That the source tapped will not be adverse ably affecting water supply scheme in case the source has been tapped from the existing system.
4. That the scheme has been properly investigated and proposals are viable from techno-economic consideration.
5. That the population to be covered with the drinking water supply facility has been authenticated with the 2011 census population.
6. That the proposed source is dependable and is not expected to yield a discharge below the design level.

  
J.E.

  
A.E.

  
Assistant Executive Engineer  
P.H.E Sub Division  
Sunder Bani

  
Executive Engineer  
PHE Division  
Nowshera

  
Superintending Engineer  
Hydraulic Circle  
Rajouri

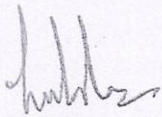


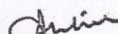
## Check List for Drinking Water Supply Schemes


S. No.	Description of the information/ Data required to be submitted with each scheme for Authority's approval	
1.	6 Copies of the DPR. (Attached/Not attached)	
2.	3 Signed copies of the maps of proposed service area (habitation) in which water supply is to be made available. (Attached/Not attached)	
3.	Scheme category (District Sector/State Sector/NRDWP)	
4.	Location of the scheme (Rural/Urban)	
5.	Type of scheme (Lift/Gravity)	
6.	Type of source (Surface/Spring/Tube well/Dug well/any other)	
7.	Whether source is perennial/seasonal.	
8.	Whether source is free from any dispute. (Yes/No)	
9.	Quantity of water available at source during the lean period of the year. (In Liters/Kiloliters per day)	
10.	Quantity of water required for the designed population of the scheme. (In Liters/Kiloliters per day)	
11.	Proposed service level of water to be provided. (In Liters/Kiloliters per day)	
12.	Whether scheme is consistent with the state water policy as per its objectives. (Yes/No)	
13.	Whether the land required for construction / raising infrastructure of the scheme is in the ownership/ possession of the department. (Yes/No)	
14.	Whether is certificate to the effect by the Chief Engineer, in case of a NRDWP or a state sector scheme /Superintending Engineer in case of a District Sector Scheme, that source of water proposed to be tapped has adequate/sustainable discharge at least upto the designed life of the project. (Attached/Not attached)	
15.	Certificate to the effect by the Chief Engineer, in case of a NRDWP or a state sector scheme/ Superintending Engineer in case of a District Sector scheme, that the proposed scheme is economical and that there is no other viable alternative. (Attached/Not attached)	
16.	Certificate to the effect by the Chief Engineer, in case of a NRDWP or a state sector scheme/ Superintending Engineer in case of a District Sector scheme, that the proposed scheme is not detrimental to any existing, ongoing or proposed water supply, irrigation, flood control, or any other scheme in the area. (Attached/Not attached)	
17.	Whether safety measures for protecting public have been envisaged and provided for in the detailed project report (Refer Regulations on safety measured issued by the Authority vide notification No. 07/JKSWRRA/2013 dated the 22 <sup>nd</sup> April. 2013. (Yes/No)	
18.	Whether the prescribed fees and service charges have been paid by the user (proof by way of a Bank Draft/ Pay Order to be	




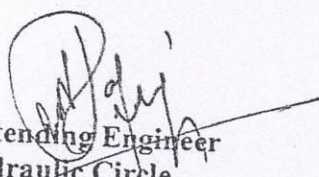
	attached. (Attached/Not attached)	
19.	Whether a note on the likely environment impact on the scheme by the chief Engineer in case of a state sector or a NRDWP Scheme/ Superintending Engineer in case of a District sector Scheme, has been attached. (Attached/Not attached)	
20.	Whether a copy of the No Objection certificate from the concerned department/ agency of the central government based in the state, in case the area proposed to be covered under the scheme includes the whole or any part of a cantonment area, aerodrome, fortress, arsenal or camp or of any building or place in the occupation of the central government for defence purposes, has been attached. (Attached/Not attached)	
21.	Whether the Project requires environment clearance under standing instruction of the state / Central Government. If so, a copy of the necessary clearance given by the competent authority to be attached. If not, a detailed note on the likely environment impact of the scheme to be prepared by the Chief Engineer/Superintending Engineer concerned and attached with the proposal.	
22.	Whether a certificate to the effect by the Chief Engineer, in case of a AIBP or a state sector scheme, Superintending Engineer in case of a District sector scheme, that the proposed scheme is not detrimental to any existing, ongoing or proposed water supply, irrigation, flood control or any other scheme in the area, has been furnished. (Attached/Not attached)	

  
J.E.

  
A.E.

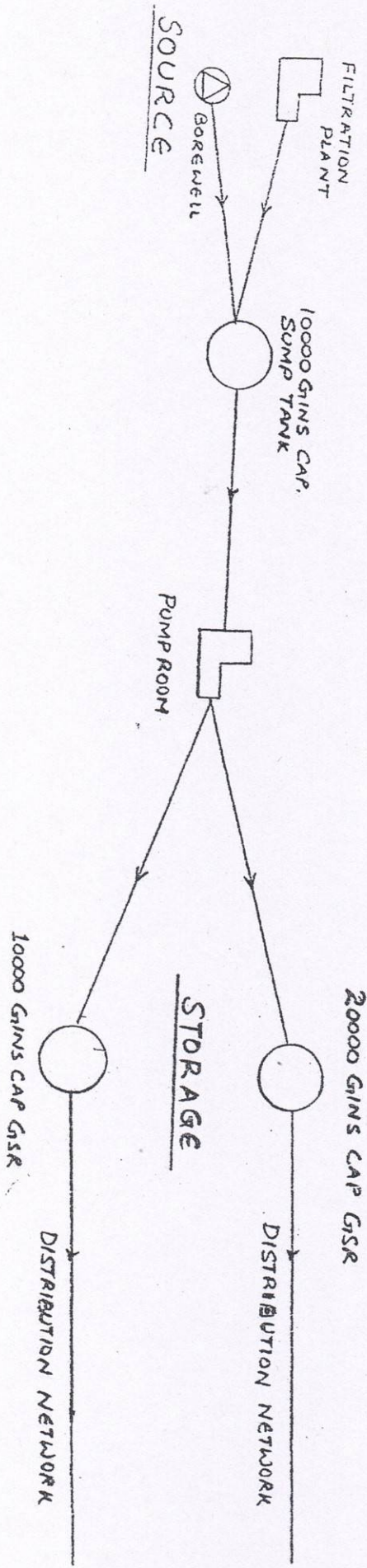
  
Assistant Executive Engineer  
P.H.E Sub Division  
Sunder Bani

  
Executive Engineer  
PHE Division  
Nowshera

  
Superintending Engineer  
Hydraulic Circle  
Rajouri



# FLOW DIAGRAM FOR WSS CHOLARAIN - CHIRANGAL



*[Signature]*  
J.E

*[Signature]*  
A.E.

*[Signature]*  
Assistant Executive Engineer  
P.H.E Sub Division  
Sunder Bani

*[Signature]*  
Executive Engineer  
PHE Division  
Nowshera

*[Signature]*  
Superintending Engineer  
Hydraulic Circle  
Rajmuri

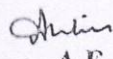



Name of Scheme :- Water Supply Scheme Chowarian – Charangal of village Thanda Pani.


Certificate

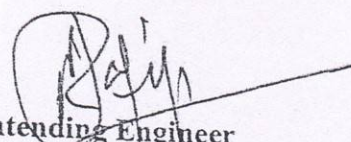
Certified that the case for land acquisition is under process and execution of WSS Chowarian – Charangal shall be taken under only after the land is made available.

  
J.E.

  
A.E.

  
Assistant Executive Engineer  
P.H.E Sub Division  
Sunder Bani

  
Executive Engineer  
PHE Division  
Nowshera

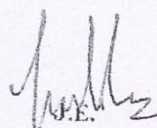
  
Superintending Engineer  
Hydraulic Circle  
Rajouri





**GENERAL ABSTRACT OF COST**  
**PROVIDING WATER SUPPLY TO VILLAGE CHOWARIAN, CHARANGAL AND**  
**PARLA GRAN UNDER WSS CHOWARIAN-CHARANGAL**

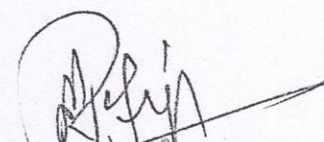
S.NO.	PARTICULARS	NO	RATE (in Lacs)	AMOUNT (in Lacs)
1	Cost for construction of Intake Structure on River Tawi including pump room, protection work and other allied works (Lum-Sum).	1	18.00	18.00
2	Cost for construction of 5000 GPH Rapid Sand Filtration Plant at Chowarian	1	50.00	50.00
3	Cost for construction of 10,000 Glns capacity Sump Tank near Filtration plant	1	5.67	5.67
4	Cost for construction of Pump Room/Chowkidar Quarter Near Filtration plant	1	7.32	7.32
5	Cost for construction of 20,000 Glns capacity GSR at Kadama Pahadi	1	11.15	11.15
6	Cost for construction of 10,000 Glns capacity GSR at Charangal	1	5.82	5.82
7	Cost for Drilling of 01 No 200mm Dia Bore Well at Charangal	1	12.00	12.00
8	Cost for Laying of G.I. Pipies for R/Mains	1	35.53	35.53
9	Cost for Laying of G.I. Pipies for Distribution System	1	47.34	47.34
10	Cost for Realignment of Existing Distribution System(Lum-Sum)	1	8.00	8.00
11	Provision for Land compensation (Lum-Sum)	1	10.00	10.00
12	Provision for Boundary wall and barbed wire Fencing Around Filtration plant complex and other Structures(Lum-Sum) (3.70 + 6.50)	1	<del>11.00</del> 10.20	<del>11.00</del> 10.20
13	Provision for providing and installation of Electrical and Mechanical Components	1	<del>52.00</del> 53.30	<del>52.00</del> 53.30
Total				273.83 275.13
Add 2.50 % for Work Charge and Contengencies				5.56.83 (Excluding item 13)
Provision for operator/fitters/turn cocks for the running of Scheme for 2 years				27.76
Grand Total				308.44

**Say Rs. 308.44 Lacs**

  
 Assistant Engineer,  
 P.H.E. Sub Division,  
 Sunderbani

  
 Assistant Executive Engineer,  
 P.H.E. Sub Division,  
 Sunderbani

  
 Executive Engineer,  
 P.H.E. Division,  
 Nowshera.

  
 S.E. D. K. Singh, Circle,  
 Rajm. n.



ESTIMATE FOR PROCUREMENT & INSTALLATION OF PUMPING MACHINERY FOR  
AUGMENTATION OF WATER SUPPLY TO VILLAGE CHANNI PRAT & OTHER LEFT  
OUT MOHRAS UNDER WATER SUPPLY SCHEME CHANNI PRAT (PHASE-II)

S. No	Particular	Amount (in lacs)
1	Cost of providing and installation of 1 No HCP set of 5000 gallons per hour capacity & 200 m head with stand by unit at Filtration plant	12.50
4	Cost of providing and installation of 1 No Raw Water VT pump set of 5000 gallons per hour capacity & 50 m head with stand by unit at Intake Structure	11.00
5	Cost of providing and installation of 01 No submersible pump set of 3000 gallons per hour capacity & 100 m head with stand by unit	5.00
6	Cost of providing and installation of 01 no's 250 KVA Voltage stabilizers, 01 no 100 KVA Voltage stabilizers and 01 no 63 KVA Voltage stabilizers and control panels resp.	11.50
7	Cost of erection of 01 no 250 KVA, 01 no 100 KVA and 01 no 63 KVA Electric Sub Station at Filtration Plant, Intake and Bore Well Resp. including HT and LT Lines and HT and LT Poles.	12.00
	<b>TOTAL</b>	<b>52.00</b>

*Add 25% for work charge and contingencies.*

Sav Rs. 52.00 Lacs

1.30  
53.30

*[Signature]*  
J.E.

*[Signature]*  
A.E.

*[Signature]*  
Assistant Executive Engineer,  
P.H.E. Sub Division Mech.,  
Nowshera

*[Signature]*  
Executive Engineer,  
P.H.E. Division Mech.,  
Rajouri

*Signed for Rs 53.30 lacs*

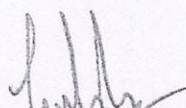
*[Signature]*  
(Er. F.A. Choudhary)  
Superintending Engineer  
P.H.E. Mech. Rural Circle  
JAMMU.




## ANNUAL FINANCIAL IMPLICATIONS


S. No	Particulars	Amount (in Rupees)
(A)	Direct Charges	
1	06 No. of pump operators @ Rs. 12000/month	1728000.00
2	02 No. T/Cock @ Rs. 9000/ month	432000.00
3	02 No. Fitter @ Rs. 12000/ month	576000.00
4	Bleaching powder and alum (LS)	40000.00
Total (A)		2776000.00

(B)	Indirect Charges	
1	Interest @ 8% on capital cost	2396000.00
2	Maintenance charges @ 2%	599000.00
3	Depreciation cost @ 2.5%	748750.00
Total (B)		3743750.00
Grand total (A) + (B)		6519750.00

  
J.E.

Assistant Engineer,  
P.H.E. Sub Division,  
Sunderbani

  
Assistant Executive Engineer,  
P.H.E. Sub Division,  
Sunderbani

  
Executive Engineer,  
P.H.E. Division,  
Nowshera.