

## TECHNICAL REPORT

**Name of work:-** Providing water supply to Phalata and adjoining areas under WSS Phalata

**Authority:-** J&K govt. through PHE Department

**Location:-** The village Phalata is located at a distance of 14km from Udhampur Town i.e. District Head quarter and with concerned road network.

**History and Necessity:-** Village Phalata is located on Srinagar-Jammu national highway with area spread over vast stretches. At present, villages are dependent on traditional well located at Band Ishra and some other local sources which is quite insufficient to cater the water supply demand. With the four laning of highway, to villages residing at higher and far flung area also shifted to alongwith the national highway. Flata village is well connected with road network and also easily approachable. Village Phalata is located at a distance of 14km from District Headquarter Udhampur.

The people of the village Phlata and adjoining area approached worthy District Development Commissioner Udhampur time again to provide water supply to the village Phalata and adjoining areas. As per the direction of District Development Commissioner vide his office letter No. DDCU/ 78/2016-17/2907-09 dated 30-04-2016 and visit of Hon'ble chief Minister of J&K at Udhampur on 29-04-2016 a pre-feasibility report for providing water supply to Phalata and adjoining areas under WSS Phalata was prepared. Now a complete DPR for providing water supply is prepared. The available rate of water supply is 8 LPCD against demand of 70 LPCD, thus catering a shortfall of 106305 GPD. Since there is no reliable source to cater the present shortfall hence a lift scheme is proposed with

intake structure at right bank of Duddar nallah near old bridge with two intermediate stages with ultimate storage of 30000 GPH gallons capacity at Thakurdwara.

**Water requirement:-**

Present water requirement 2017 for the year 2017 @ 70 LPCD	-	47550 GPD
Present water availability	-	9510 GPD
Present shortfall	-	38040 GPD
Design requirement of water @ 70LPED for the year 2047	-	115815 GPD
		~ 1,20,000 GPD
Design shortfall	-	106305 GPD
Existing storage capacity	-	20,000 Gallons
Designed storage capacity required (Half day requirement)	-	60,000 Gallons
Proposed storage		30,000 gallons GSR at Thakurdwara, 10,000 gallons GSR / Sump tank at stage 2 <sup>nd</sup> and 5,000 gallons GSR at Faqir mohalla.

**Proposal:-**

It has been proposed to lift water from right bank of Duddar nallah by constructing intake well cum pump room at stage-0. It is proposed to lift the water from stage-0 to stage-1<sup>st</sup> through well designed 150mm dia (K-9) D.I. pipe rising main = 450 meter. It has been also proposed to construct, pump room / chowkidar quarter, 10000 GPH WTP with sump tank of 20000 gallons capacity at stage-1<sup>st</sup>. After chlorination water is lifted through well designed rising main of 100mm dia of length 1600 meter from stage-1<sup>st</sup> to stage-2<sup>nd</sup>. At stage-2<sup>nd</sup>, it has been proposed to construct sump tank cum GSR of 10000 gallons capacity and pump room. At

stage-2<sup>nd</sup> water is proposed to be supplied to different hamlets of Phalata i.e. Gasbu Bast, Fangalia Mohalla and other through well designed distribution network by using hazenwellon nomogram method. From stage-2<sup>nd</sup> rising main of 65mm dia 2400 meter length is proposed to lift the water upto existing GSR of 20000 gallon capacity at Dabbar. From stage-2<sup>nd</sup> is lifted through designed rising main of 80mm dia to ultimate stage, thus creating a storage of 30000 gallons capacity at Thakur Dwara from where water is supplied to different hamlets of Phalata village and adjoining areas through designed disruption network by using hazen-Willian nomogram method with a residual head of 6 to 9 meter. From 30000 gallons capacity balancing rising main at Thakur Dwara a sub gravity with compounded dias of 50mm and 40mm is proposed to supply the water to newly proposed 5000 gallons capacity GSR meter at Faguri Mohalla from water the water supplied to the Faquri Mohall through well designed proposed to be distribution system. It has also been proposed to create electric sub-station at three stages with erection of LT and HT lines. A provision for pumping motor units including automatic voltage stabilizer including allied accessories is also envisaged in the DPR. A lumpsum provision is also kept for construction of concrete Anchor blocks for rope crossings and thrust blocks for rising main wherever required.

#### Cost of the project:-

The total cost of the proposed work has been estimated to ~~382.00~~ <sup>382.00</sup> Rs. 391.00 lacs on SSR 2012

#### Time of completion:-

The work shall be completed within a period of three years subject to availability of funds and material in time.

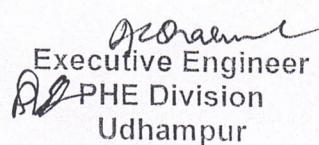


JE



A.E

Assistant Ex. Engineer  
PHE Sub-Division  
Udhampur

  
Executive Engineer  
PHE Division  
Udhampur

Name of Scheme :- Water Supply Scheme **Phalata**

### Certificate

Certified that the area proposed to be covered under the designed WSS **Phalata** does not include, the whole or any part of the cantonment area, aerodrome, fortress, arsenal or camp or any building or place in the occupation of the Central Government for defence purposes

*(Signature)*  
A.E.

*(Signature)*  
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*(Signature)*  
Assistant Executive Engineer  
P.H.E Sub Division  
Udhampur

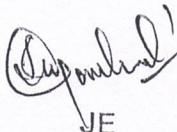
*(Signature)*  
Executive Engineer  
P.H.E Division  
Udhampur

## SALIENT FEATURES

1. Name of scheme Providing water supply to village Phalata & adjoining areas Under WSS Phalata.
2. Name of block Tikri
3. Name of District Udhampur
4. Name of constituency Udhampur
5. Scope

Sl.	Name of habitation	CC Code	Pop. 2011	Pop. 2017	Designed Pop. 2047
1	Phalata	004893	1520	1670	4067
2	Part Garnai	004942	510	600	1461
3	Part Seen Thakran	0004894	360	400	975
4	Floating			500	1218
Total:-				3170	7721

6. Type of scheme Lift
7. Source Duddar Nallah
8. Estimated Cost 391.00 lacs 382 -00
9. Present population (2017) 3170 Souls
10. Designed population (2032) 7721 Souls
11. Present water requirement (2017) 47550 GPD
12. Present Water Available (2017) 9510 GPD
13. Designed Water requirement 115815 GPD
14. Designed shortfall 106305 GPD
15. Per capita Water Supply rate 70 LPCD
16. Per Capita Water supply Rate
  - a. On present Population 12050 -00  
Rs. 12470.00
  - b. On designed Population 4947 -00  
Rs. 7719.00

  
JE

  
A.E

  
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PHE Sub-Division  
Udhampur

  
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PHALATHA  
GENERAL ABSTRACT OF COST FOR IMPROVEMENT AND AUGMENTATION OF WSS

Particulars of items	Amount (Rs. In lacs)
Cost for construction of intake structure at stage-0 on Duddar Allah.	23.0 <del>17.86</del> Rs. 17.81 lacs.
Cost for construction of approach road	8.00 <del>8.00</del> 55.00 -
Cost for construction of 10000 GPH rapid sand filtration plant at stage-1 <sup>st</sup>	6.09
Cost for construction of sump tank at stage-1 <sup>st</sup> 20000 gallons capacity	10.39 <del>10.39</del> Rs. 10.27 lacs.
Cost for construction of Pump room at stage-1 <sup>st</sup> and 2 <sup>nd</sup> -2nos. Rs. 7.54-lacs <del>7.83 lacs</del>	15.08 <del>14.85</del> Rs. 14.88 lacs.
Cost for construction of sump tank / R/vior at stage-2 <sup>nd</sup> 10000 gallons capacity	5.97 <del>5.97</del> Rs. 5.70 lacs.
Cost for construction of GSR / 5000 gallon	3.64 <del>3.66</del> 11.73 <del>11.73</del> 12.43 <del>12.43</del>
Cost for construction of 30000 gallons capacity balancing R/vior at Thakur Dwara	1.05 <del>1.05</del> 30.00 <del>30.00</del> 10.153
Cost for construction of rope crossing at places.	8.00 <del>8.00</del>
Cost for construction of chain link fencing at four stages i.e. stage-0, stage-1 <sup>st</sup> , stage-2 <sup>nd</sup> and stage-3 <sup>rd</sup>	11.43 <del>12.63</del> Rs. 12.25 lacs.
Cost for providing and laying of rising mains and distribution system	105.35 <del>105.35</del> Rs. 105.30 lacs.
<b>ELECTRO MECHANICAL COMPONENTS</b>	
Cost on account of creation of electric sub-station including HT and LT lines and installation of electro mechanical equipments etc. at stage-0, stage-1 <sup>st</sup> and stage-2 <sup>nd</sup>	76.81 <del>76.81</del>
Cost on account of Land compensation	15.00 <del>15.00</del>
Cost on account of Operational and maintenance charges	28.17 <del>28.17</del> 359.15 lacs. Total: - 381.15 lacs.
Add 2.5% for work charge contingencies	9.52 <del>9.52</del> 359.15 G. Total: - 390.67 lacs.
Say Rs. 381.75 lacs.	Say Rs. 394.00 lacs.
Say Rs. 366.50 lacs.	Rs. 6.69 lacs
Say Rs. 359.15 lacs.	Rs. 380.88 lacs.

A.E  
Assistant Ex. Engineer  
PHE Sub-Division  
Udhampur

Order No: PHE/1/DBI 9/2017

Dated:-

Native Approval is hereby accorded  
Rs. 381.75 Lacs (Rupee Three crore eighty  
one lacs) by deposit to M.H. 4215 under  
loan assistance

Executive Engineer ~~Rs. 366.5~~  
PHE Division  
Udhampur

Superintending Engineer,  
Hydraulic Circle,  
Udhampur

Chief Engineer  
PHE Department  
Jammu