

Rough Cost Estimate for Development of Internal Services like:- Roads, Sewerage, Water Supply, Storm Water Drainage, Rain Water Harvesting, Horticulture Works, Solid Waste Management and Electrical works including Street Lighting in Affordable Residential Plotted Colony under Deen Daal Jan Awas Yojna Policy No. 2016, Area measuring 8.25125 Acres, Baluda Road, Sohna, Haryana.



TOTAL AREA	8.25125 Acres
ESTIMATED COST	Rs. 271.84 Lacs
COST PER ACRE	Rs. 32.95 Lacs

History of the Town:

Sohna is one of the strategic towns identified as a Tourist and Transport centre in the Regional Plan, 2021 of National Capital Regional (NCR). It is a Tehsil headquarters of Gurgaon District. It is located on the junction of National Highway (NH 71 B) Palwal – Rewari and Delhi – Gurgaon – Alwar road (State Highway), at a distance of 24 km south of Gurgaon. Also, Sohna is an important centre on Palwal – Sohna – Rewari Road (NH-71B). Haryana State Industrial Development Corporation (HSIDC) and Haryana Urban Development Authority (HUDA) have developed an industrial estate, Roz ka Meo at Sohna considering its strategic location. Sohna is an important tourist destination supported by Sohna Lake / Hot water springs in the town and Arawali Ranges on the backdrop of town. It is situated at 28° 14'N and 77° 05'E. Characteristics of Indian Towns, Sohna too grew in an organic fashion and its physical expansion is now influenced by its location on the junction of two major state highways of Haryana.

Sohna is derived from Sona, which means gold. The town is said to have derived its name from the gold dust, which was found after heavy rains in the beds of the neighboring torrents. The town is of great antiquity and has been occupied in succession by three different races, viz. the Kambhos, the Khanzadas and the Rajputs, traces of which still exist in the extensive ruins by which town is surrounded. Being a Tehsil headquarter, the town offers trading and other facilities to the surrounding villages.

In order to provide an exclusive township to the people of Sohna town, Zoning plan of Affordable Residential Plotted Housing Colony (under Deen Dayal Jan Awas Yojna Policy 2016) area measuring 8.25125 Acres at Baluda Road Sohna has been developed by **M/s M.V. BUILDCON PVT. LTD. & OTHERS**. The scheme is approved vide Haryana Govt. – Urban Local Bodies Department Dwg. No. DULB/CTP/2020/06 Dated 16/03/2020.

The estimate has been prepared for internal services prescribed below:-

Sub Head No. I: Internal Roads

The internal roads have been taken in plan in 12 m and 9.00 m total formation width and metalled width of road has been taken as 5.50 m & 4.50 m. The level of roads shall keep according to the top level of proposed surroundings area. 2 layers of stone metal have been taken up to WBM. The surface of road shall be finished with 25 mm thick premix carpet. Interlocking CC blocks of M-25 grade of 80 mm thickness shall be provided in parking area and foot path as per site requirement. The provision of plot indication Boards, guide board and Entry Gate has been taken on Lump sum Basis.

Sub Head No. II: Internal Sewer and STP

The Internal sewer has been proposed by laying 200 mm i/d & 250 mm i/d SW pipe sewer. The sewage will be collected in the proposed Sewage Treatment Plant of 0.30 MLD of SBR Technology as shown on the plan. The treated effluent will be utilized in the green park and irrigation purposes. The proposed sewerage lines has been designed as per Public Health standard design.

Sub Head No. III: Tubewell, Pumping Station & Internal Water Supply

To meet the requirement of complex Independent Tubewell has been proposed to be drilled with reverse rotary rig upto a depth of 160 mtr BGL, the water available from the tubewell will be collected in the proposed Pumping Station consisting of UGSR equal to one day requirement and pumping machinery as shown on the plan.

The water will be collected through 150 mm DI pipe in the proposed pumping station comprising of 1 No. RCC Under Ground Service Reservoir of size 11.50 m x 11.50 m x 3.0 m water depth of capacity 3,96,750 ltrs. The water will be further pumped through horizontal centrifugal pumping set of 15.00 HP capable of delivering of 850 LPM against head of 50.00 mtr as per design calculations attached in the project.

Necessary provision for drilling of 1 No. Tubewell, 1 No. Submersible Pumping set capable of delivering 600 LPM against head of 90.00 mtr of 17.50 HP, Construction of RCC Clear Water

Tank of size 11.50 m x 11.50 m x 3.0 m and capacity 396750 litres . Provision for 1 No. Horizontal Centrifugal Pumping Set having 850 LPM against Head of 50.00 m of 15.00 HP and also 1 No. Gen set of 25.00 KVA to act as standby arrangement in case of failure of power has been made in the project. DI pipe K-7 has been proposed from 100 mm to 150 mm pipe line for distribution of water supply in the proposed scheme. The water requirement has been kept @135LPCD + 15% UAF as per Manual of CPHEEO as detailed given in the design statement enclosed.

Sub Head No. IV: Internal Storm Water Drainage / Rain Water Harvesting

The RCC hume pipe of 300 & 350 mm internal diameter has been proposed for drainage of storm water and same shall be connected rain water harvesting wells proposed in the parks. The overflow of the rain water harvesting well shall be disposed off in the Nallah located nearby by Gravity.

Sub Head No. V: Rain Water Harvesting

Two Rain Water Harvesting systems in the parks shall be provided in the parks for conservation of water as per Govt. Policy.

Sub Head No. VI: Horticulture

Lump sum provision of Rs. 0.50 lacs per acre has been proposed to develop park, grill, fencing and road side plantation etc. complete in all respect.

Sub Head No. VII: Solid Waste Management

The provision for Solid Waste Management for the proposed scheme has also been taken in the estimate. The colony has been proposed a Dustbin free colony. 1 tricycle with twin bins shall be provided for door to door collection of solid waste, which shall be collected at primary collection centre proposed in Park.

Sub Head No. VIII: Electrical works and Street Lighting

The internal electrical works has been proposed for providing one 260 KVA transformer and LT lines as per norms of electrical department. In addition, provision of 2 x 36 W CFL based Street Light with automatic sensors has been proposed. 150 w SVL has been proposed at main entry gate and junction points.

All the rates have been taken on the basis of Haryana Schedule of rates + Ceiling Premium as latest notification of Haryana Govt. issued vide No. SE/PWD, B&R/ Ambala / CZC/13 Dated 10th November, 2011.

Design Calculation**Requirement of water**

S. No.	Size of Plots	No. of Plots	Persons per Plot	Total Population
A	12.023 X 6.492 M	2	13.50	27.00
B	12.023 X 6.484 M	18	13.50	243.00
C	16.350 X 6.250 M	15	13.50	202.50
D	20.100 X 6.700 M	9	13.50	121.50
E	21.100 X 6.756 M	1	13.50	13.50
F	19.056 X 6.600 M	10	13.50	135.00
G	13.350 M X 6.950M	9	13.50	121.50
H	14.500 X 6.500 M	12	13.50	162.00
I	14.000 X 6.500 M	11	13.50	148.50
J/1	17.619 X 7.123 M	1	13.50	13.50
J/2	17.416 X 7.123 M	1	13.50	13.50
J/3	17.212 X 7.123 M	1	13.50	13.50
J/4	17.009 X 7.123 M	1	13.50	13.50

J/5	16.805X 7.123 M	1	13.50	13.50
J/6	16.805 X 7.123 M	1	13.50	13.50
J/7	16.398 X 7.123 M	1	13.50	13.50
J/8	16.193 X 7.191 M	1	13.50	13.50
K	13.130 X 6.812 M	1	13.50	13.50
L	13.130 X 6.700 M	19	13.50	256.50
M	13.110 X 6.700 M	16	13.50	216.00
N	13.110 X 6.750 M	2	13.50	27.00
O	13.110 X 7.162 M	1	13.50	13.50
P	13.110 X 7.200 M	16	13.50	216.00
Q	18.117 X 6.75 M	4	13.50	54.00
R	18.117 X 6.700 M	24	13.50	324.00
	TOTAL	178		2403
			Say	2403.00

Water allowances /Capita/day
as per CPHEEO Manual

135 litre + 15% UAF
155 litre

Daily requirement-

2403 x 155
372465 litre

For Green Area- 1494.28 sqm + 1011.71 sqm = 2506.06 sqm

or 0.626 Acre @ 24500 litre/Acre
15337 litre

For Commercial- 0.33006 acre @ 10000 ltrs/ acre

3300 litre

For Community Facility- 0.82517 acre @ 10000 litre/ acre

8252 litre

Total requirement

399354 litre

Pump Chamber

It is proposed to construct Brick Masonry tubewell chamber of size 3.05 x 3.65 m inside dimensions to accommodate the Panel Board etc. and necessary provision has been made.

Pumping Station

i) Under Ground Storage Reservoir

Daily requirement including requirement of Green Area,
Commercial and Community facilities **399354 litre**

Capacity of tank is proposed equal to one day requirement

Proposed depth of tank **3.0 m BGL**

Area requirement for tank $\frac{399354 \times 1}{3 \times 1000}$ **133.12 Sqm**

Proposed size of Clear Water Underground Reservoir **11.50x 11.50 m**

Actual capacity of Tank
 $1 \times 11.50 \times 11.50 \times 3 \times 1000$ **396750 litre**

It is proposed to construct RCC Clear Water Under Ground Reservoir of size 11.50 x 11.50 with 3.0 m water depth having capacity of 396750 litre against the requirement of 399354 litre in the premises of park as shown on the plan.

ii) Pumping Machinery

Daily requirement	399354 litre
Pumping hour	8
Pumping per hour	
$399354/8$	49919 litre
Or	832 LPM
Say	850 LPM

Head of Machinery

- | | | |
|------|--------------------------------------------------------------------|-------|
| i) | Suction lift | : 5 m |
| ii) | Friction losses in pipes/specials & machinery etc. | : 2 m |
| iii) | Minimum residual head required keeping in view the height of flats | : 40m |

Total	: 47m
Say	50m

HP of Machinery

$$\frac{850 \times 50}{75 \times 60 \times 0.65} = 14.53 \text{ HP}$$

Say 15.00 HP

Gen. Set

$$15 \times 1.15 \times 1.33 = 22.94 \text{ KVA}$$

Say 25.00 KVA

It is proposed to install One No. Horizontal Centrifugal Pumping sets of 15 HP capable of delivering 850 LPM against head of 50 M and also to install One No. Gen. set of 25 KVA to act as standby arrangement in case of failure of electric power.

Sewage Treatment Plant		
Daily requirement for excluding Irrigation purposes.	Ltrs	384017
Sewage flow will be taken @ 80% of the water supply as per Manual of CPHEEO.		
384017 x 80 / 100	Ltrs	307214
	MLD	0.31
	Say	0.30 MLD
It is proposed to construct Package type Sewage Treatment Plant for 0.30 MLD capacity based on SBR Technology, which will be capable to meet the requirement.		

To meet the daily requirement of above complex, it is proposed to develop independent water source i.e. drilling a tubewell with Direct/ Reverse Rotary Rig up to a depth of 160 m BGL.

Tubewell

Daily Requirement	399354 litre
Pumping hours	16
Expected yield of proposed tubewell	8000 gls/ 36360 ltr
	600 LPM

$$\text{No. of tubewells} = \frac{399354}{36360 \times 16} = 0.69$$

$$\text{Add 10\% as standby} = 0.07$$

0.76 Say- 1 No. Tubewell

Hence it is proposed to drill one no. tubewell with Direct /Reverse Rotary Rig upto depth of 160 m BGL to meet the requirement of drinking water.

Pumping Machinery

i) Spring Level	=	65.00 m
ii) Fall in Water Table	=	6.00 m
iii) Draw Down	=	5.00 m
iv) Losses in Pipes & Specials	=	2.00 m
v) Losses in Machinery	=	2.00 m
vi) Minimum Residual Head Required	=	10.00 m
TOTAL	=	90.00 m

HP of Machinery

$$\frac{600 \times 90}{60 \times 75 \times 0.70} = 17.14 \text{ HP}$$

SAY- 17.50 HP

It is proposed to install Submersible Pumping Set of 600 LPM – Head – 90.00m (17.50 HP) in the proposed tubewell to meet the requirement of water.

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Rough cost estimate for Development of Internal Services like:- Roads, Sewerage, Water Supply, Storm Water Drainage, Rain Water Harvesting, Horticulture Works, Solid Waste Management and Electrical works including Street Lighting in Affordable Residential Plotted Colony under Deen Dayal Jan Awas Yojna Policy No. 2016, Area measuring 8.25125 Acres at Baluda Road, Sohna, Haryana

FINAL ABSTRACT OF COST

S.No.	Head	Description	Amount in Rs.
1	SUB HEAD NO. I	INTERNAL ROADS	4224050.00
2	SUB HEAD NO. II	INTERNAL SEWERAGE NETWORK AND STP	9256460.00
3	SUB HEAD NO. III	TUBEWELL, PUMPING STATION & INTERNAL WATER SUPPLY	8091390.00
4	SUB HEAD NO. IV	INTERNAL STORM WATER DRAINAGE	2381880.00
5	SUB HEAD NO. V	RAIN WATER HARVESTING	206000.00
6	SUB HEAD NO. VI	HORTICULTURE WORKS	412562.50
7	SUB HEAD NO. VII	SOLID WASTE MANAGEMENT	721000.00
8	SUB HEAD NO. VIII	ELECTRICAL WORKS AND STREETS LIGHTING	1890575.00
		Total	27183917.50
		SAY	271.84 Lacs

checked.

[Signature]
VIVEK BERNWAL
SDE-III DULB

Rough cost estimate for Development of Internal Services like:- Roads, Sewerage, Water Supply, Storm Water Drainage, Rain Water Harvesting, Horticulture Works, Solid Waste Management and Electrical works including Street Lighting in Affordable Residential Plotted Colony under Deen Dayal Jan Awas Yojna Policy No. 2016, Area measuring 8.25125 Acres at Baluda Road, Sohna, Haryana

Sub Head No. I : INTERNAL ROADS

ABSTRACT OF COST

S.No.	HSR Items	Descriptions	Quantity	Unit	Rate	Ceiling Premium	Amount
1	N.S Item	Supply and laying of Earth including Watering and Rolling to specification in 25 cm thick layers for compaction complete in all respect. Details attached.	3924	Per Cum	154	-	604296.00
2	24.1	Preparation of Sub grade including trenches, rough dressing spoil and final dressing of earth As per details of area of roads and parking.	4132	Per 100 Sqm	92.45	370	17954.16
3	NS Item	Providing and laying of first class brick on end edging including cost of bricks Details attached	1520	m	51.75	-	78660.00
4	NS Item	Collection and carriage of stone metal 63 mm to 45 mm from any approved quarry including carriage loading, unloading and stacking complete in all respect.	485	cum	910	-	441350.00
5	NS Item	Collection and carriage of stone metal 53 mm to 22.4 mm from any approved quarry including carriage loading, unloading and stacking complete in all respect Quanrity as per Item No. 4	485	cum	910	-	441350.00

6	NS Item	Collection and carriage of screening / nallah sand from any approved quarry including carriage loading, unloading and stacking complete in all respect 22% Qty of Item No. 4 & 5 $737 + 737 = 1474 @ 22\%$	214	cum	730	-	156220.00
7	24.7	Laying and Consolidation of stone metal soiling coat to WBM specification coat to WBM specification complete in all respect Quantity as per item No. 4	485	cum	23.40	370	53340.30
8	24.9	Laying and Consolidation of stone metal wearing coat to WBM specification coat to WBM specification complete in all respect Quantity as per item No. 5 & 6	699	cum	28.75	370	94452.38
9	NS Item	Providing single coat surface dressing / painting road surface with bitumen Ist coat.	4432	cum	83.6	-	370515.20
10	NS Item	Providing and laying of 25 mm thick premix carpet and seal coat type - A on existing black to surface including heating material in hot mix plant, carrying the mixed material from plant site of work, laying the same with mechanical paver and rolling it with road roller in all respect.	4132	sqm	176	-	727232.00
11	NS Item	Providing and laying factory manufacture precast Kerb of size 300 x 300 x 150 mm of cc grade M-30 including carriage, loading unloading and laying the same in correct alignment complete in all respect.	300	sqm	495	-	148500.00
12	NS Item	Providing and laying cement concrete M-30 channel of size 300 x 300 x 75 mm complete in all respect.	300	m	393	-	117900.00

13	NS Item	Providing and laying of MS Plot indicator plate of size 1.5' x 1.25' fixed on double MS angle of size 50 x 50 x 8 and 45 x 45 x 6 frame including welding, painting, writing and embedded in CC 1:2:4 block of size 300 x 300 x 450 mm complete in all respect.	15	No	2500	-	37500.00
14	NS Item	Providing and fixing of interlocking tiles of dumble shape on shape of 100 mm thick cement concrete 1:4:8	300	Sqm	720	-	216000.00
15	NS Item	Construction of brick masonry toe wall of 0.23 m in width and 0.23 m in height to support the pavement.	150	m	105	-	15750.00
16	NS Item	Provision of construction of Entry Gate	9	No	50000	-	450000.00
17	NS Item	Providing and fixing of Colony indication board.	10		3500	-	35000.00
18	NS Item	Providing and fixing of colony site boards.	10		3500	-	35000.00
19	NS Item	Providing and fixing of colony guide board.	12		5000	-	60000.00
		Total					4101020.03
		Contingency @ 3%					123030.60
							4224050.64
		G. Total					
						Say Rs.	4224050.00

Rough cost estimate for Development of Internal Services like:- Roads, Sewerage, Water Supply, Storm Water Drainage, Rain Water Harvesting, Horticulture Works, Solid Waste Management and Electrical works including Street Lighting in Affordable Residential Plotted Colony under Deen Dayal Jan Awas Yojna Policy No. 2016, Area measuring 8.25125 Acres at Baluda Road, Sohna, Haryana

Sub Head No. I : INTERNAL ROADS

DETAILS OF QUANTITY

S.No.	HSR Items	Descriptions	Quantity
1	Appd. Item	Supply and laying of Earth including Watering and Rolling to specification in 25 cm thick layers for compaction complete in all respect. Details attached.	3924.00 Cum
2	24.1	Preparation of Sub grade including trenches, rough dressing spoil and final dressing of earth As per details of area of roads and parking.	4132.00 Sqm
3	Appd. Item	Providing and laying of first class brick on end edging including cost of bricks Details attached	1520.00 M
4	Appd. Item	Collection and carriage of stone metal 63 mm to 45 mm from any approved quarry including carriage loading, unloading and stacking complete in all respect.	485.00 Cum
5	Appd. Item	Collection and carriage of stone metal 53 mm to 22.4 mm from any approved quarry including carriage loading, unloading and stacking complete in all respect.	485.00 Cum
6	Appd. Item	Collection and carriage of screening / nallah sand from any approved quarry including carriage loading, unloading and stacking complete in all respect 22% Qty of Item No. 4 & 5 $485 + 485 = 970 \text{ cum} \times 0.22 = 213.40 \text{ cum}$ Say 214.00 Cum	214.00 cum
7	24.7	Laying and Consolidation of stone metal soiling coat to WBM specification coat to WBM specification complete in all respect Quantity as per item No. 4	485.00 Cum
8	24.9	Laying and Consolidation of stone metal wearing coat to WBM specification coat to WBM specification complete in all respect Quantity as per item No. 5 & 6	699.00 cum
9	Appd. Item	Providing single coat surface dressing / painting road surface with bitumen 1st coat.	4432.00 Sqm
10	Appd. Item	Providing and laying of 25 mm thick premix carpet and seal coat type - A on existing black to surface including heating material in hot mix plant, carrying the mixed material from plant site of work, laying the same with mechanical paver and rolling it with road roller in all respect.	4132.00 Sqm
11	Appd. Item	Providing and laying factory manufacture precast Kerb of size 300 x 300 x 150 mm of cc grade M-30 including carriage, loading unloading and laying the same in correct alignment complete in all respect.	300.00 m
12	Appd. Item	Providing and laying cement concrete M-30 channel of size 300 x 300 x 75 mm complete in all respect.	300.00 m

13	Appd. Item	Providing and laying of MS Plot indicator plate of size 1.5' x 1.25' fixed on double MS angle of size 50 x 50 x 8 and 45 x45x 6 frame including welding, painting, writing and embedded in CC 1:2:4 block of size 300 x 300 x 450 mm complete in all respect.	15.00 Nos.
14	HSR	Providing and fixing of interlocking tiles of dumb shape on shape of 100 mm thick cement concrete 1:4:8	300.00 Sqm
15	Appd. Item	Construction of brick masonry toe wall of 0.23 m in width and 0.23 m in height to support the pavement.	150.00
16	Appd. Item	Provision of construction of Entry Gate	9 No.
17	Appd. Item	Providing and fixing of Colony indication board.	10
18		Providing and fixing of colony site boards.	10
19		Providing and fixing of colony guide board.	12

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Sub Head No. I : INTERNAL ROADS

DETAILS OF ROADS

1) 12.00 M formation width and 5.50 M wide metalled width

i) Road Opposite to Type P/8 Houses = 84.00 M

Surface area of road (Length of Road x Width of Road)	84 m x 5.50 m	462.00 Sqm
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2) 9.00 M formation width and 4.50 M wide metalled width

Internal Roads

i)	60.00 m	
ii)	60.00 m	
iii)	133.00 m	
iv)	24.00 m	
v)	99.00 m	
vi)	64.00 m	
vii)	58.00 m	
viii)	67.00 m	
ix)	65.00 m	
x)	67.00 m	
xi)	63.00 m	
Sub Total	760.00 m	

Surface area of road (Length of Road x Width of Road)	760 m x 4.50 m	3420.00 Sqm
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**3) Surface area of parking
for Commercial area.**

100 Sqm	100	100.00 Sqm
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**4) Surface area of parking
for Community Facility**

150 Sqm	150	150.00 Sqm
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Total 4132.00 Sqm

Length of Kerb and Channels

Length of Parking area		300.00 m
Length of Brick on end edging		
Length of road (taking both sides)	2.00 x 760.00 m	1520.00 M

DETAILS OF EARTH FILLING				
Roads No.	Length in Mtr	Width in Mtr	Depth in Mtr	Quantity in cum
12.00 M formation width and 5.50 M wide metalled width				
Detail attached	84	12	0.5	504
9.00 M formation width and 4.50 M wide metalled width				
Detail attached	760	9	0.5	3420
		Total		3924
Total Earth filling	3924.00 Cum			
Earth filling has been proposed for estimate purpose. However, proper level shall be maintained in contiguous with levels of main roads of area.				

ANALYSIS OF RATES			
Analysis of Rates for Earth Filling with Average lead of 5 KM, Rater per cum			
S.No.	Descriptions		Rates
1	Carriage of earth average lead 5 km (HSR 5.2 B)	Rs.	21
	Add 450% Premium	Rs.	94.5
2	Rates for loading & unloading (HSR 4.1 (a)	Rs.	4.75
	Add 450% Premium	Rs.	21.38
3	Extra for laying of earth as per specification in 25 cm layers (HSR 6.2 (g)(i)	Rs.	0.68
	Add 425% Premium	Rs.	2.89
4	Extra for watering (HSR 6.2 (g) (ii)	Rs.	0.75
	Add 425% Premium	Rs.	3.19
5	Extra for watering (HSR 6.2 (g) (v)	Rs.	2.25
	Add 135% Premium	Rs.	3.04
	Total	Rs.	154.43
	Say Rs. 154.00 per cum		
Certified that lead taken in the analysis is from shortest route and correct.			

ANALYSIS OF RATES				
Analysis of Rates for Providing and laying of First Class Brick on End Edging				
S.No.	HSR Item	Descriptions		Rates
1	N.S	Collection and carriage of Ist class Bricks including carriage upto to site of work loading, unloading complete in all respect. 100@9 bricks per m = 900 Nos. 900 bricks @ Rs. 4800 per 1000 bricks	Rs.	4320
		Add 10% contractor profit		432
2	24.6	Laying Brick on end edging length wise 22.86 cm deep and 6.83 cm wide 100 m @ 0.90 per m	Rs.	90
		Add 370% Premium	Rs.	333
		Total	Rs.	5175
		Say Rs. 51.75 per cum		
Certified that the rate provided in the analysis of rate are the lowest and reasonable as per market rate.				

ANALYSIS OF RATES										
Analysis of Rates for Material to be used in Road Work										
Name of Item: Collection & Carriage of Road Material from approved quarry to the site of chapra / karnal / or Alwar (Rajasthan) proposed T.P. Scheme.										
S.No.	Description	Stone Material		Coarse Aggregate			Crushed Bajri			Dry Sand / Binding Material
		63 mm - 45 mm size	53 mm - 22.4 mm size	26.5 mm - 11.2 mm size	11.2 mm - 2.8 mm size	2.8 mm - size 90 micron	13.2 mm size	11.2 mm size	22.4 - 2.8 mm size	
1	Quarry Rates	450.00	450.00	420.00	420.00	420.00	340.00	400.00	400.00	270.00
2	Add for Carriage wth Mechanical mean to an avg. lead of 107 km	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00
3	Add CP 440% Above	352.00	352.00	352.00	352.00	352.00	352.00	352.00	352.00	352.00
4	Add loading / unloading	4.75	4.75	4.75	4.75	4.75	4.75	4.75	4.75	4.75
5	Add CP 450 % above	21.38	21.38	21.38	21.38	21.38	21.38	21.38	21.38	21.38
6	Total	908.13	908.13	878.13	878.13	878.13	798.13	858.13	858.13	728.13
	Say	910.00	910.00	880.00	880.00	880.00	800.00	860.00	860.00	730.00
Certified that lead taken in the analysis is from shortest route and correct										

ANALYSIS OF RATES			
Analysis of Rates for Providing and laying of Taring Coat			
Unit Per 10 Sqm			
S.No.	Items		Rates
1	Bajri 0.15 cum @ Rs. 860.00 per cum	Rs.	129
2	Bitumen 18 km or 0.018 MT. @ Rs. 35000 Mt		630
3	Laying tack coat (HSR 24.18)	Rs.	16.37
4	Add 370% Ceiling Premium	Rs.	60.57
	Total	Rs.	835.94
	Rate per sqm = 835.94 / 10 = 83.59		
	Say Rs. 83.60 per Sqm		
Analysis of Rates for Tack Coat			
Unit Per 100 Sqm			
S.No.	Items		Rates
1	Rate of bitumen 0.075 MT @ Rs. 35000 Mt.	Rs.	2625
2	Laying tack coat (HSR 24.18)	Rs.	63.5
3	Add 370% Ceiling Premium	Rs.	234.95
	Total	Rs.	2923.45
	Rate per sqm = 2923.45 / 100 = 29.23		
	Say Rs. 29.00 per Sqm		

ANALYSIS OF RATES				
Analysis of Rates for Providing and laying of 25 mm thick Premix carpet with seal Coat by Paver				
Unit : 100 Sqm				
S.No.	HSR Item	Descriptions		Rates
	A	MATERIAL		
1	N.S	Aggregate Bajri 13.2 mm 2.30 cum @ Rs. 800/- per cum Bajri 11.2 mm 1.10 cum @ Rs. 860/- per cum Stone Dust 0.60 cum @ Rs. 730/- per cum	Rs. Rs. Rs.	1840.00 946.00 438.00
2	N.S	For Tack Coat 50 kg For Bajri 13.2 mm 120 kg Bajri 11.2 mm 62 kg Seal Coat 68 kg 300 kg or 0.30 MT @ 35000 /- per MT	Rs.	10500.00
		Total : A	Rs.	13724.00
	B	LABOUR		
1	24.27	Laying of Tack Coat	Rs.	32
2		Laying of 25 mm thick premix carpet 100 x 0.25 x 2.20 = 5.50 MT @ 101.40 per MT additional Lead upto 2 to 10 KM = 8 Km @ 1.20 Per cum	Rs. Rs.	557.70 52.80
3	24.31	Laying premix carpet type seal coat	Rs.	116.40
		Total	Rs.	759.40
		Add 370% Ceiling Premium	Rs.	2809.78
		Total B	Rs.	3872.54
		Total A + B		17596.54
		Rate for 1 Sqm = 17596.54 / 100 = 175.97		
		Say Rs. 176.00 per Sqm		

ANALYSIS OF RATES				
Analysis of Rates for Providing and fixing of factory manufactured precast Cement Concrete M-30 Grade Kerb of size 300 x 300 x 150 mm				
S.No.	HSR Item	Descriptions	Unit	10 M Kerb Rates
	A	MATERIAL		
1	N.S	Factory manufactured Cement Concrete M-30 Grade Kerb of size 300 x 300 x 150 mm for each kerb 34 Kerb for 10 m @ Rs. 125/- each kerb including Vat. excise duty and FOR at site	Rs.	4250
		Add 10% contractor profit		425
2	6.6	Earthwork excavation including dressing $10 \times 0.15 \times 0.075 = 0.1125$ cum @1108.10 per 100 cum	Rs.	1.25
		Add 425% premium	Rs.	5.31
		Hoisting and placing of Kerb $10 \times 0.30 \times 0.15 = 0.45$ cum @ Rs. 95.40 per cum	Rs.	42.93
		Add 300% premium	Rs.	128.79
		Cement pointing in kerbs $1090.23 + 0.15 = 3.80$ sqm @ Rs. 4.30 per sqm	Rs.	16.34
		Add 500% premium	Rs.	81.70
		Total : A	Rs.	4951.32
		Rate for 1 M Kerb = $4951.32 / 10 = 495.13$		
		Say Rs. 495.00 per m		

ANALYSIS OF RATES				
Analysis of Rates for Providing and fixing of factory manufactured precast Cement Concrete M-30 Grade Channel of size 300 x 300 x 150 mm				
Unit : 10 M Channel				
S.No.	HSR Item	Descriptions		Rates
1	N.S	Factory manufactured Cement Concrete M-30 Grade Channel of size 300 x 300 x 0.0750 mm for each kerb 34 Channel for 10 m @ Rs. 90/- each kerb including Vat, excise duty and FOR at site	Rs.	3060.00
		Add 10% contractor profit		306.00
2	6.6	Earthwork excavation including dressing 10 x 0.30 x 0.075 = 0.225 cum @1108.10 per 100 cum	Rs.	2.50
		Add 425% premium	Rs.	8.75
3	13.1	Providing and laying CC 1:6:12 with stone aggregate 20 mm nominal size in foundation and plinth 10 x (0.30+0.15) x 0.075 = 0.338 cum @Rs. 348.25 per cum	Rs.	117.53
		Add 300% premium	Rs.	352.59
4	15.73	Cement pointing in Channels 10 (0.3) = 3.0 Sqm @ Rs. 4.30 per sqm	Rs.	12.90
		Add 500% premium	Rs.	64.50
		Total :	Rs.	3924.77
		Rate for 1 M Channel = 3924.77 / 10 = 392.48		
		Say Rs. 393.00 per m		

Rough cost estimate for Development of Internal Services like:- Roads, Sewerage, Water Supply, Storm Water Drainage, Rain Water Harvesting, Horticulture Works, Solid Waste Management and Electrical works including Street Lighting in Affordable Residential Plotted Colony under Deen Dayal Jan Awas Yojna Policy No. 2016, Area measuring 8.25125 Acres at Baluda Road, Sohna, Haryana

Sub Head No. II : INTERNAL SEWERAGE NETWORK AND SEWAGE TREATMENT PLANT

Abstract of Cost

S.No	HSN Item No.	Description	Amount in Rs
1	6.10	Excavation of trenches in streets, lanes or in open areas for storm sewer, sewers running by gravity and manholes to full depths as shown in drawings including shoring, timbering of poling boards, frame system type and removal of surplus soil from site of work, upto a lead of 1 Km in ordinary soil.	
		Avg. Depth 1.05 m BGL (200 mm SW pipe sewer Type - II)	
		953 x 0.414 x 0.173 = 68.26 cum	
		953 x 0.714 x 1.01 = 687.25 cum	
		Avg. Depth 2.00 m BGL (250 mm SW pipe sewer Type - II)	
		362 x 0.470 x 0.197 = 33.52 cum	
		362 x 0.770 x 1.948 = 542.98 cum	
		Sub Total of Exavation of SW pipe = 1332.01 cum	
		Add 10% extra for Manholes = 133.20	
		1332.01 cum + 133.20 = 1465.21	
		or 1465.21 cum @ 1919 per % cum	28117.38
		Add 370% Ceiling Premium	104034.31

S.No	HSR item No.	Description	Amount in Rs
2	29.95	Providing salt glazed stone ware pipes Grade- A in standard length of 600 mm each pipe marked with IS 651 and their lowering, cutting, jointing and testing as described HSR item no. 29.38, 29.39, 29.40 including cost of jointing materials as well as carriage, loading, unloading stacking, handling, rehandling etc complete in all respects to the satisfaction of the Engineer- in- charge.	
		200 mm = 953 M @Rs. 253.00	241109
		Ceiling Premium	0.00
		250 mm = 362 M @Rs. 386.00	139732.00
		Ceiling Premium	0.00
3	10.40	Cement Concrete 1:3:6 with stone aggregate 20mm nominal size in foundation and plinth.	
		Under 8" or 200mm i/d 953 x 0.0741 = 70.62	
		Under 10" or 250mm i/d 362 x 0.093 = 33.67	
		Total = 104.29	
		or 104.29 cum @ Rs. 516.90 per cum	53907.501
		Add Ceiling Premium @450%	242583.75
4	NS Item	Construction of Brick Masonry M.H. Chamber of various sizes complete in all respect as per analysis attached.	
		On 200 mm SW pipe sewer AV. Depth 1.05 M BGL = 64Nos @ Rs. 11840/- each	757760.00
		On 250 mm SW pipe sewer AV. Depth 2.00 M BGL = 24Nos @ Rs. 18685/- each	448440.00

S.No	HSIC Item No.	Description	Amount in Rs
5	29.28	Providing & fixing STEEL BARS EMBEDDED PLASTIC STEPS OF SIZE 263 MM X 165 MM of orange colour conforming to specifications in pump chamber, manholes etc. having minimum 3 mm thick polypropylene polymer conforming to IS:10910 encapsulated on 12 mm dia ribbed steel bars as per IS:1786.	
		The rate include cost of setting the same to correct lines & levels duly embedded in 1:2:4 cement concrete including carriage, loading, unloading, stacking, handling, re-handling etc. complete in all respects to the satisfaction of Engineer-In-charge	
		281 Nos.@Rs. 90.00 each	25290.00
6	29.94	Providing and fixing SFRC MANHOLE COVERS AND FRAMES MARKED WITH IS:12592 including setting the same to correct lines and levels in 1:2 cement sand mortar over manhole including carriage loading unloading stacking handling re-handling etc. complete in all respects to the satisfaction of Engineer-In-Charge	
		Type: Extra Heavy Duty Set (EHD-35)-560 MM clear opening	
		88 Nos.@Rs. 1200.00 each	105600.00
		Add Ceiling Premium @5%	5280.00
7	NS Item	Providing and Fixing of RCC Vent Shaft of standard design complete in all respect	
		3 Nos @ Rs. 25000/- each	75000.00
8	N.S Item	Designing and Construction of Sewage Treatment Plant of 0.30 MLD of SBR Technology complete in all respects including construction of MPS, Installation of Machinery and laying of PVC pipes for disposed of treated effluent in the green parks etc. complete.	

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S.No	NS Item	Description	Amount in Rs
		0.30 MLD@Rs.2,25,00,000/-	6750000.00
9	NS Item	Extra Provision for Road cuts and making good in original condition.	10000.00
		Sub Total	8986853.94
		Add Contingency Charges @3%	269605.62
		Grand Total	9256459.56
		Say	9256460.00

Rough cost estimate for Development of Internal Services like:- Roads, Sewerage, Water Supply, Storm Water Drainage, Rain Water Harvesting, Horticulture Works, Solid Waste Management and Electrical works including Street Lighting in Affordable Residential Plotted Colony under Deen Dayal Jan Awas Yojna Policy No. 2016, Area amounting 8.25125 Acres at Ballia Road, Sahib, Haryana

S.No.		Node no. of Sewer line	No. of Plots		No. of persons @ 13.50 person per plot	3 times sewerage Flow @ 80% of Water supplied @135 LPCD (in MLD)	3 times Sewerage flow of Community facility and commercial @ 80% of water supply (in MLD)	Design statement of Sewerage Network										Velocity (in m /sec)	Fall	Ground level		Invert level	Depth in meter	Avg. Depth in meter
								Total Peak Flow		Length in mtr	Proposed size of Sewer (in mm)	Slope		Design Discharge running full		Design Discharge running full (m³/s)								
								MLD	LPS			MLD	LPS	MLD	LPS		MLD			LPS				
1	1	2	18	0	18	243.00	0.079	0.000	100.00	200.00	2.16	25.00	1.08	12.5	0.77	0.45	100.10	99.30	98.85	0.80	1.23	1.02		
2	2	2	18	0	18	243.00	0.079	0.000	50.00	200.00	2.16	25.00	1.08	12.5	0.77	0.23	100.10	99.30	98.80	0.80	1.01	0.99		
3	3	4	0	36	36	486.00	0.157	0.000	10.00	200.00	2.16	25.00	1.08	12.5	0.77	0.05	100.08	98.85	98.80	0.80	1.23	1.24		
4	4	5	19	0	19	245.50	0.083	0.000	58.00	200.00	2.16	25.00	1.08	12.5	0.77	0.26	100.10	99.30	99.04	0.80	1.04	0.92		
5	5	6	19	0	19	245.50	0.083	0.000	60.00	200.00	2.16	25.00	1.08	12.5	0.77	0.27	100.10	99.30	99.03	0.80	1.05	0.93		
6	6	7	19	0	19	245.50	0.083	0.000	35.00	200.00	2.16	25.00	1.08	12.5	0.77	0.16	100.08	99.03	98.87	1.05	1.18	1.12		
7	7	8	19	0	19	245.50	0.083	0.000	170.00	200.00	2.16	25.00	1.08	12.5	0.77	0.57	100.05	98.80	98.73	1.25	1.77	1.51		
8	8	9	22	12	34	451.00	0.451	0.000	32.00	250.00	3.86	38.93	1.68	19.44444	0.77	0.15	100.10	99.30	99.15	0.80	1.00	0.85		
9	9	10	22	3	25	451.00	0.451	0.000	18.00	200.00	2.16	25.00	1.08	12.5	0.77	0.08	100.10	99.30	99.22	0.80	0.83	0.82		
10	10	11	5	15	20	451.00	0.451	0.000	28.00	200.00	2.16	25.00	1.08	12.5	0.77	0.13	100.05	99.15	99.03	0.90	0.97	0.93		
11	11	12	15	14	0	29	0.560	0.000	32.00	250.00	3.86	38.93	1.68	19.44444	0.77	0.11	100.00	98.23	98.13	1.77	1.87	1.87		
12	12	13	14	20	0	290	0.087	0.000	62.00	200.00	2.16	25.00	1.08	12.5	0.77	0.11	100.10	99.30	99.19	0.80	0.89	0.85		
13	13	14	12	0	20	270.00	0.087	0.000	143.00	200.00	2.16	25.00	1.08	12.5	0.77	0.28	100.10	99.30	99.02	1.06	1.06	0.93		
14	14	15	20	4	0	54.00	0.017	0.000	17.00	200.00	2.16	25.00	1.08	12.5	0.77	0.65	100.08	99.02	98.37	1.06	1.37	1.37		
15	15	16	20	4	0	54.00	0.017	0.000	34.00	200.00	2.16	25.00	1.08	12.5	0.77	0.06	100.10	99.30	99.22	0.80	0.86	0.83		
16	16	19	20	10	0	135.00	0.044	0.000	37.00	200.00	2.16	25.00	1.08	12.5	0.77	0.15	100.10	99.30	99.15	0.90	0.93	0.87		
17	17	20	17	6	14	270.00	0.087	0.000	37.00	200.00	2.16	25.00	1.08	12.5	0.77	0.17	100.08	99.15	98.98	0.93	1.07	1.00		
18	18	17	5	0	5	67.50	0.022	0.000	39.00	200.00	2.16	25.00	1.08	12.5	0.77	0.18	100.08	99.28	99.10	0.80	0.95	0.87		
19	19	16	0	25	25	337.50	0.109	0.000	60.00	200.00	2.16	25.00	1.08	12.5	0.77	0.41	100.05	98.98	98.57	1.07	1.49	1.28		
20	20	16	12	0	25	337.50	0.109	0.000	115.00	200.00	2.16	25.00	1.08	12.5	0.77	0.52	100.05	98.57	98.05	1.49	2.00	1.75		
21	21	12	11	0	45	607.50	0.197	0.028	120.00	240.00	3.86	38.89	1.68	19.44444	0.77	0.40	100.05	97.65	97.65	2.00	2.35	2.13		
22	22	11	5	173	178	245.500	0.779	0.028	40.00	250.00	4.36	38.89	1.68	19.44444	0.77	0.13	100.05	97.65	97.51	2.35	2.49	2.42		

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Rough cost estimate for Development of Internal Services like:- Roads, Sewerage, Water Supply, Storm Water Drainage, Rain Water Harvesting, Horticulture Works, Solid Waste Management and Electrical works including Street Lighting in Affordable Residential Plotted Colony under Deen Dayal Jan Awas Yojna Policy No. 2016, Area measuring 8.25125 Acres at Baluda Road, Sohna, Haryana

Design statement of Sewerage Network							
S.No.	Node no. of Sewer line		Length in mtr	Proposed size of Sewer (in mm)	Avg. Depth in meter	No. of Manholes	No. of Steps
	From	To					
1	1	2	100.00	200.00	1.02	7	14
2	3	2	50.00	200.00	0.90	3	6
3	2	4	10.00	200.00	1.24	1	3
4	6	5	58.00	200.00	0.92	4	8
5	7	5	60.00	200.00	0.93	4	8
6	5	4	35.00	200.00	1.12	2	4
7	9	22	32.00	200.00	0.85	2	4
8	10	22	18.00	200.00	0.82	1	2
9	22	8	28.00	200.00	0.93	2	4
10	15	14	25.00	200.00	0.85	2	4
11	13	14	62.00	200.00	0.93	4	8
12	14	12	143.00	200.00	1.37	10	30
13	21	20	17.00	200.00	0.83	1	2
14	19	20	34.00	200.00	0.87	2	4
15	20	17	37.00	200.00	1.00	2	4
16	18	17	39.00	200.00	0.87	3	6
17	17	16	90.00	200.00	1.28	6	18
18	16	12	115.00	200.00	1.75	8	32
		TOTAL	953.00		1.03	64	161
				Say	1.05 m		

Rough cost estimate for Development of Internal Services like:- Roads, Sewerage, Water Supply, Storm Water Drainage, Rain Water Harvesting, Horticulture Works, Solid Waste Management and Electrical works including Street Lighting in Affordable Residential Plotted Colony under Deen Dayal Jan Awas Yojna Policy No. 2016, Area measuring 8.25125 Acres at Baluda Road, Sohna, Haryana

Design statement of Sewerage Network

S.No.	Node no. of Sewer line		Length in mtr	Proposed size of Sewer (in mm)	Avg. Depth in meter	No. of Manholes	No. of Steps
	From	To					
1	4	8	170.00	250.00	1.51	11	44
2	8	11	32.00	250.00	1.82	2	10
3	12	11	120.00	250.00	2.18	8	48
4	11	STP	40.00	250.00	2.42	3	18
		TOTAL	362.00		1.98	24	120
				Say	2.00 m		

Rough cost estimate for Development of Internal Services like:- Roads, Sewerage, Water Supply, Storm Water Drainage, Rain Water Harvesting, Horticulture Works, Solid Waste Management and Electrical works including Street Lighting in Affordable Residential Plotted Colony under Deen Dayal Jan Awas Yojna Policy No. 2016, Area measuring 8.25125 Acres at Baluda Road, Sohna, Haryana

Size = (1.50M X 0.90 M)

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Rough cost estimate for Development of Internal Services like:- Roads, Sewerage, Water Supply, Storm Water Drainage, Rain Water Harvesting, Horticulture Works, Solid Waste Management and Electrical works including Street Lighting in Affordable Residential Plotted Colony under Deen Dayal Jan Awas Yojna Policy No. 2016, Area measuring 8.25125 Acres at Baluda Road, Sohna, Haryana

Sub Head No. III : Tubewells, Pumping Station and Internal Water Supply

Abstract of Cost

S.No	HSR Item No.	Description	Amount in Rs
1	N.S	Drilling of Tubewell with Reverse Rotary Rig upto depth of 160 M B.G.L capable of delivering 600 LPM complete in all respects. (Detail Analysis enclosed)	
		1 No. @Rs. 10,64,500.00	1064500.00
2	N.S	Supplying and Installation of Clear Water Submersible Pumping Set capable of delivering 600 LPM against Head of 90 M including Submersible cable and lowering pipes complete in all respects as per analysis enclosed.	
		1 No. @Rs. 1,50,000.00	150000.00
3	N.S	Construction of RCC Clear water under ground storage Reservoir of size 11.50 x 11.50 x 3.00 m water depth having capacity 396750 ltr complete including inlet outlet overflow, vent pipe etc. complete in all respects.	
		396750 ltr @ Rs.8.00 per ltr	3174000.00
4	N.S	Supplying and installation of horizontal centrifugal pumping set of 17.50 HP capable of delivering 850 LPM against head of 50 mtr complete in all respects.	
		Discharge = 850 LPM	
		Head = 50 Mtr	

S.No	HSR Item No.	Description	Amount in Rs
		HP = 17.50	
		Quantity = 1 No. @ Rs. 175000/- each	175000.00
5	NS	Supplying and installation of Gen Set of 25 KVA complete in all respect as per specifications.	
		25 KVA = 1 No. @ Rs. 500000/- each	500000.00
6	N.S	Supplying and installation of Panel Board of suitable capacity for running of tubewell and Boosting Station complete in all respects.	
		1 No. @ Rs. 100000/- each	100000
7	N.S	Construction of Brick Masonry Pump Chamber of size 3.05 x 3.65 m to accommodate the Pumping Machinery, Genset & Panel Board etc complete in all respects.	
		1 No. @ Rs. 250000/- each	250000
8	6.8	Earthwork in excavation in trenches for laying pipe lines 100 mm to 150 mm i/d pipelines = 1550 m Qty = 1550 x 0.70 x 1.20 = 1302.00 cum	
		1302.00 cum @Rs. 1030.00	13410.60
		Add Ceiling Premium @425%	56995.05
9	NS Item	Supplying, Laying, Jointing and Testing of Ductile Iron K-7 pipe including cost of specials complete in all respects as per analysis enclosed.	
		4" or 100mm i/d pipe line 1494m @ Rs.1248 per m	1864512.00
		6" or 150mm i/d pipe line 56m @ Rs.1815 per m	101640.00
10	28.10	Providing and Installation of Sluice Valves complete as per Specification of HSR Item No. 28.10.	

S.No	HSR Item No.	Description	Amount in Rs
		4" or 100mm i/d pipe line 15 Nos @ Rs.3698+10%CP = Rs. 4068.00 each	61020.00
		6" or 150mm i/d pipe line 3 No. @ Rs. 6709.00+10% CP = Rs. 6280.00 each	18840.00
11	NS Item	Providing and Fixing of Air Valve 4 Nos. @ Rs. 10080/-	40320.00
12	NS Item	Providing and Fixing of Fire Hydrants 4 Nos. @ Rs. 9950/-	39800.00
13	NS Item	Providing and Fixing of indication plate 26 Nos. @ Rs.500/- each	13000.00
14	NS Item	Construction of Brick Masonry Chamber for Sluice Valves, Air Valves and Fire Hydrants complete in all respects. 26 Nos. @ Rs.8180/- each	212680.00
15	NS Item	Providing and Installation of DI pipe connections from Tubewell to Collecting Tank and Collecting Tank to Pump Chamber including specials and Non Return Valve in tubewell site complete in all respects.	
		L.S	20000.00
		Sub Total	7855717.65
		Add Contingency Charges @3%	235671.5295
		Grand Total	8091389.18
		Say	8091390.00

Rough cost estimate for Development of Internal Services like:- Roads, Sewerage, Water Supply, Storm Water Drainage, Horticulture Works, Solid Waste Management and Electrical works including Street Lighting in Affordable Residential Plotted Colony under Deen Dayal Jan Awas Yojna Policy No. 2016, Area measuring 8.25125 Acres at Baluda Road, Sohna, Haryana

Hydraulic Statement for distribution network

S. No.	Reach No.	No. of plots		Plots @ 13.5 Pers. For each plot		Discharge @ 155 lpcd @ 3 times of daily requirement (in MLD)	3 times flow of Community facility, commercial and Irrigation purposes in MLD	Total Discharge in MLD	Designe d Discharge (in MLD)	Size of Pipe line (in mm)	Length of Pipe line in Metre	Friction Losses in Pipe per 1000 Metre	Total Friction Losses (in metre)	Hydraulic Level at		G. L. at L.E (in metre)	Hydraulic Level available at L.E (in metre)	Remarks
		From	To	Self	Branch	Total								G.E (in metre)	L.E (in metre)			
1	08	1	3	40.5	236.3	240.3	0.08	1.20	1.23	150	16.00	8.64	0.14	140.00	139.86	100.10	39.76	Average ground level at proposed Boosting station 100.00
2	1	2	12	162	0	162	0.00	0.08	0.11	100	40.00	0.680	0.03	139.86	139.83	100.10	39.73	
3	1	3	6	81	2120	2201	0.08	1.10	1.11	150	40.00	6.88	0.28	139.86	139.59	100.00	39.59	
4	3	4	29	391.5	999	1391	0.00	0.65	0.66	100	179.00	18.800	3.37	139.59	136.22	100.05	36.17	Head of Pump excluding Suction lift & losses 40.00
5	4	5	0	0	243	243	0.00	0.11	0.12	100	63.00	0.800	0.05	136.22	136.17	100.08	36.09	
6	5	6	18	243	0	243	0.00	0.11	0.120	100	63.00	0.800	0.05	136.17	136.12	100.10	35.92	
7	4	7	0	0	336	336	0.00	0.35	0.36	100	30.00	6.120	0.06	136.12	136.06	100.05	36.01	Hydraulic level at 5m 140.00
8	7	8	18	243	0	243	0.00	0.11	0.12	100	164.00	0.800	0.13	136.06	136.03	100.08	35.95	
9	7	9	0	0	318	318	0.00	0.24	0.25	100	36.00	3.120	0.11	136.03	136.05	100.08	35.97	
10	9	10	18	243	0	243	0.00	0.11	0.12	100	60.00	0.800	0.05	136.05	136.00	100.10	35.90	
11	9	11	20	270	0	270	0.00	0.13	0.15	100	69.00	1.210	0.08	136.05	135.96	100.10	35.86	
12	3	12	4	54	675	729	0.08	0.42	0.43	100	34.00	8.500	0.29	135.99	139.30	100.00	39.30	
13	12	13	5	68	0	68	0.027	0.06	0.11	100	35.00	0.680	0.02	139.30	139.27	100.00	39.27	
14	12	14	0	0	608	608	0.053	0.34	0.35	100	115.00	5.800	0.67	139.30	138.63	100.05	38.58	
15	14	15	0	0	270	270	0.053	0.18	0.20	100	163.00	2.060	0.34	138.63	138.29	100.08	38.21	
16	15	17	20	270	0	270	0.025	0.15	0.16	100	80.00	1.360	0.11	138.29	138.19	100.10	38.09	
17	15	16	0	0	0	0	0.01	0.01	0.11	100	35.00	0.680	0.02	138.29	138.27	100.10	38.17	
18	14	18	0	0	338	338	0.00	0.16	0.17	100	115.00	1.530	0.18	138.63	138.45	100.05	38.40	
19	18	19	0	0	338	338	0.00	0.16	0.17	100	109.00	1.530	0.17	138.45	138.29	100.06	38.23	

20	19	20	5	67.5	0	68	0.03	0.00	0.03	0.11	100	20.00	0.680	0.01	138.29	138.27	100.05	38.22		
21	19	21	7	94.5	176	270	0.13	0.00	0.13	0.15	100	58.00	1.210	0.07	138.29	138.22	100.05	38.17		
22	21	23	10	135	0	135	0.06	0.00	0.06	0.11	100	29.00	0.680	0.02	138.22	138.20	100.04	38.16		
23	23	22	3	40.5	0	41	0.02	0.00	0.02	0.11	100	17.00	0.680	0.01	138.22	138.21	100.05	38.16		
			178	240.3																

Rough cost estimate for Development of Internal Services like:- Roads, Sewerage, Water Supply, Storm Water Drainage, Rain Water Harvesting, Horticulture Works, Solid Waste Management and Electrical works including Street Lighting in Affordable Residential Plotted Colony under Deen Dayal Jan Awas Yojna Policy No. 2016, Area measuring 8.25125 Acres at Baluda Road, Sohna, Haryana

Material Statement for distribution network						
S.No.	Reach No.		Size of Pipe line (in mm)	Length of Pipe line in Metre	No. Of Sluice	
	From	To			150mm	100mm
1	BS	1	150	16.00	2	0
2	1	3	150	40.00	1	0
			Sub Total	56.00	3	0
1	1	2	100	40.00	0	1
2	3	4	100	179.00	0	1
3	4	5	100	63.00	0	1
4	5	6	100	63.00	0	
5	4	7	100	10.00	0	1
6	7	8	100	164.00	0	
7	7	9	100	36.00	0	1
8	9	10	100	60.00	0	
9	9	11	100	69.00	0	1
10	3	12	100	34.00	0	1
11	12	13	100	35.00	0	1
12	12	14	100	115.00	0	1
13	14	15	100	163.00	0	1
14	15	17	100	80.00	0	1
15	15	16	100	35.00	0	
16	14	18	100	115.00	0	1
17	18	19	100	109.00	0	1
18	19	20	100	20.00	0	
19	19	21	100	58.00	0	1
20	21	23	100	29.00	0	1
21	21	22	100	17.00	0	

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				1494.00	0.00	15.00
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Rough cost estimate for Development of Internal Services like:- Roads, Sewerage, Water Supply, Storm Water Drainage, Rain Water Harvesting, Horticulture Works, Solid Waste Management and Electrical works including Street Lighting in Affordable Residential Plotted Colony under Deen Dayal Jan Awas Yojna Policy No. 2016, Area measuring 8.25125 Acres at Baluda Road, Sohna, Haryana

Analysis of Rates for Providing and fixing of Air Valve			
			Unit : Each
S.No	HSR Item No.	Description of Items	Rate in Rs
A	Material		
1	N.S.	Providing Air Valve including all taxes freight and storage charges	9000.00
		Add 10% Contractor Profit	900.00
2	28.12	Fixing of Air Valve	43.00
		Add 300% CP	129.00
		Total	10072.00
		Say Rs.	10080.00

Rough cost estimate for Development of Internal Services like:- Roads, Sewerage, Water Supply, Storm Water Drainage, Rain Water Harvesting, Horticulture Works, Solid Waste Management and Electrical works including Street Lighting in Affordable Residential Plotted Colony under Deen Dayal Jan Awas Yojna Policy No. 2016, Area measuring 8.25125 Acres at Baluda Road, Sohna, Haryana													
Analysis of Rates of Sluice Valves Chamber of size 1.0 x 1.0 x 1.0 m													
S. No.	HSR ITEM NO	DESCRIPTION	L	B	H	Qty	Unit	Rate (Rs)	Amount	PREMIUM IN (%)	Total Amount (Rs)	REMARK	
1		Constructing brick masonry 1 No. S.V.Chamber inside size 1.00 m x 1.0 m x1.00 m in 1:5 cement sand mortar &12 mm thick cement plaster 1:3 with floating coat complete with standard C.I.surface Box fixed in R.C.C. top slab including excavation, foundation concrete complete in all respects.											
a	6.7	Earth work in excavation in foundation & trenches of underground structures in ordinary soil including dressing – disposal of surplus soil as directed with in a lead of 30 mtrs. For depth upto 2 m B.G.L.	1	1.7	1.7	1.15	3.32	100 cum	932.00	30.98	370%	145.58	
b	10.39	Cement concrete 1:4:8 with stone aggregate 40 mm nominal size in foundation & plinth.	1	1.7	1.7	0.10	0.29	cum	403.10	116.50	450%	640.73	
c	10.82	Cement concrete 1:2:4 with stone aggregate 20 mm nominal size for reinforced concrete work in slabs with inclination not exceeding 25 degree with horizontal, excluding steel reinforcement, but including centering and shuttering, laid in position, complete in all respects.	1	1.46	1.46	0.15	0.32	cum	997.90	319.07	450%	1754.88	
d	11.3	First class brick work laid in cement sand mortar 1:5 in foundation and plinth.	2	1.49	0.23	1.05	0.72						
			2	1.03	0.23	1.05	0.50						
							1.22	cum	407.60	496.11	600%	3472.80	

Rough cost estimate for Development of Internal Services like:- Roads, Sewerage, Water Supply, Storm Water Drainage, Rain Water Harvesting, Horticulture Works, Solid Waste Management and Electrical works including Street Lighting in Affordable Residential Plotted Colony under Deen Dayal Jan Awas Yojna Policy No. 2016, Area measuring 8.25125 Acres at Baluda Road, Sohna, Haryana

Analysis of Rates for Providing and fixing of Fire Hydrants			
Unit : Each			
S.No	HSR Item No.	Description of Items	Rate in Rs
A	Material		
1	N.S.	Providing Fire Hydrant including all taxes freight and storage charges	9000.00
		Add 10% Contractor Profit	900.00
2	28.12	Fixing of Fire Hydrants	9.70
		Add 300% CP	29.10
		Total	9938.80
		Say Rs.	9950.00

Rough cost estimate for Development of Internal Services like:- Roads, Sewerage, Water Supply, Storm Water Drainage, Rain Water Harvesting, Horticulture Works, Solid Waste Management and Electrical works including Street Lighting in Affordable Residential Plotted Colony under Deen Dayal Jan Awas Yojna Developed by M/s Bala Ji Builders(Measuring 9.131 Acres) in Sector-8 Village Charkhi Dadri District Dadri, Haryana

ANALYSIS OF SUBMERSIBLE PUMPING SET FOR CLEAR WATER

S. No.	Description	Quantity	Rate
1	Supplying and installation of ISI marked submersible pumping sets should be directly coupled with submersible motor as per BIS specification No. IS: 8034: 1989 as amended up to date for pumps and IS: 9283:1995 (As amended up to date) for motors. The pump motors sets should be capable of Pumping clear, fresh cold water having characteristics as specified in Clause 4 fo IS: 8034 : 1989 and clause 4.1 of IS 9283 : 1995. Each pump motor set shall be supplied with 3 Meter joint free, double length P.V.C insulated and P.V.C Sheeted, flexible 3 core flat type submersible cable duly ISI Marked with copper conductor confirming to BIS Specification No. IS: 694 : 1990 (as amended up to date). The size of the copper conductor should be adequate for continuous use under water and in air. The material of construction should be as per Clause 6.2 (Table – 1) of IS 8034: 1989 (as amended up to date). The nominal speed should correspond to 2 Pole motors(2800 to 3000) rev. / min (synchronous). The Impellers, Motor Body, Pump shaft, shaft Sleeves shall be of stainless steel complete as per satisfaction of the Engineer-in-Charge.		
	Discharge = 600 LPM Head = 90 M	1	60000
2	Supplying and installation of joint free double length P.V.C Insulated and P.V.C Sheeted, flexible 3 core flat type submersible cable of 6 mm ² as confirming to ISI Specifications complete in all respects.		
	80mtr @ Rs. 250.00 per m	80m	20000
3	Supplying and Installation of 100 mm Delivery pipe with flanges, Nut& Bolts and Rubber Sheet complete in all respects.	L.S	70000
	Total		150000

Rough cost estimate for Development of Internal Services like:- Roads, Sewerage, Water Supply, Storm Water Drainage, Rain Water Harvesting, Horticulture Works, Solid Waste Management and Electrical works including Street Lighting in Affordable Residential Plotted Colony under Deen Dayal Jan Awas Yojna Policy No. 2016, Area measuring 8.25125 Acres at Baluda Road, Sohna, Haryana

DETAIL OF DRILLING OF TUBE WELL WITH REVERSE ROTARY RIG UPTO DEPTH OF 160M B.G.L

S. No.	Description	Quantity		Unit	Rate	Amount
1	Drilling of 558.80 mm dia bore by hydraulic rotary drilling (reverse circulation method) according to ISI specification No. 2800-1991 (Part-I) as amended up to date and modified to extent of the specification attached with this schedule of items of work in all kinds of soils and boulders up to 125 mm dia except rocky strata including the cost of all consumable stores, fuel, oil, soil stabilizing material and transportation of rig and other accessories to the site of proposed bore and back (including cost of lowering of all sizes of casing pipe while boring and extracting the same against earth frictions etc.) complete to the satisfaction of the Engineer-in-charge.	160	Meter	P. Meter	750	120000
2	Supplying and lowering 273.10 mm outer dia ERW steel pipes as per IS 4270/1992 as amended up to date, duly ISI marked for housing pipe in 4 to 7 meters random length with 88.90mm of threaded ends (8 threads to an inch or 25.40mm) manufactured out of 8.00mm thick M.S. plates with required number of M.S. socket 177.80mm with inside thread to match the pipe threads and made out of M.S. plate in to borehole in vertical position including cost of all scaffolding, derricks, Jim, poles, tools and plants, ropes, gags M.S. clamp embedded in foundation etc. complete in all respects to the satisfaction of the Engineer-in-charge of the work including cost of all cutting, threading of pipe where required and all sockets.	100	Meter	P. Meter	4500	450000
3	Supplying and lowering 219.10mm outer dia ERW steel pipes as per IS 4270/1992 as amended up to date, duly ISI marked for housing pipe in 4 to 7 meters random length with 88.90mm of threaded ends (8 threads to an inch or 25.40mm) manufactured out of 6.40mm thick M.S. plates with required number of M.S. socket 152.40mm with inside thread to match the pipe threads and made out of M.S. plate in to borehole in vertical position including cost of all scaffolding, derricks, Jim, poles, tools and plants, ropes, M.S. clamp embedded in foundation etc. complete in all respects to the satisfaction of the Engineer-in-charge of the work including cost of all cutting, threading of pipe where required and all sockets.	40	Meter	P. Meter	2700	108000

4	Lowering 200mm i/d all welded low carbon galvanized steel (L.C.G) cage type V-wire wound screen conforming to ISI 8110-2000, IS 4270-1992 and composition of material as per ISI-1012 of outer dia 219mm equivalent thickness 7.0mm, tensile load 14000 Kg. minimum and ring thickness 7mm, slot opening 0.75 mm. open area 25%	20	Meter	P. Meter	12000	240000
5	Supplying, fixing and lowering reducing socket as per IS: 226/1975 as amended up to date 273.10mm outer dia, into 219.10 mm outer dia with 8 threads per inch or 25.40 mm, to be made out of M.S. plate with interior threads to be suitable for jointing outer dia pipe and 219.10mm outer dia ERW pipe as per item No. 3 and 4 above or by cement grouting.	1	No.	Each	2000	2000
6	Providing and fixing in position suitable bail plug hook of 219.10mm as per IS 226/1975 as amended up to date, including the cost of M.S. Screwed sockets etc. complete in all respects, to the entire satisfaction of the Engineer-in-charge of the work.	1	No.	Each	1000	1000
7	Supplying and packing graded gravel of size as per ISI 4097/1988, as amended up to date and specification attached with this schedule of item of work. The gravel should be free from dust, dirt or vegetable matters. Packing to be done from the housing pipe to the bottom of liner all around in the bore and will be placed after liner and housing pipes have been lowered and suitably clamped. Thickness and size of the gravel packing will be as directed by the Engineer-in-charge strictly as per relevant ISI.	35	cum	P. Cum	2400	84000
8	Supplying and fixing well threaded M.S. cap for 273.10mm outer dia M.S. pipe as per ISI 226/1975 as amended up to date to the satisfaction of the Engineer-in-charge	1	No.	Each	1000	1000
9	Supplying as per IS: 226/1975 as amended upto date deodar wooden box made of 20mm thick wood size 60cmx30cmx75cm with lid and locking arrangement etc. for preserving the strata samples received from the bore as and when desired by the Engineer-in-charge.	1	No.	Each	1000	1000
10	Supplying & fixing 273.10 mm M.S. clamp as per IS: 226/1975 as amended up to date for supporting the housing pipe supported on two girders not less than 100mmx150mm and two meters long each embedded in suitable foundation as approved by the Engineer-in-charge.	1	No.	Each	2500	2500
11	Electric logging of tube well					
	1 x 1 = 1 Job	1	Job	P. Job	20000	20000

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12	Development of tube well according to clause 9.3 of IS: 2800-1991 (Part-I) as amended up to date and specifications attached and as directed by the Engineer-in-charge of the work including the cost of all consumable stores, fuel, oil, compressors, pumps and machinery etc. as required for this work.					
(a)	When developed by compressor of 450 CFM/250 PSI or suitable rating of 1x10= 10 hours	10	Hours	Per hour	3500	35000
Cost of 1 No. Tube Well					G. Total	1064500.00

Rough cost estimate for Development of Internal Services like:- Roads, Sewerage, Water Supply, Storm Water Drainage, Rain Water Harvesting, Horticulture Works, Solid Waste Management and Electrical works including Street Lighting in Affordable Residential Plotted Colony under Deen Dayal Jan Awas Yojna Policy No. 2016, Area measuring 8.25125 Acres at Baluda Road, Sohna, Haryana

ANALYSIS OF RATES (with rate contract 2019)

Supplying of ISI Marked Centrifugally Cast (Spun) Ductile Iron Pressure Pipes, Classes K-7 conforming to IS specification no. 8329-2000 (as amended up to date) with Rubber Gasket (Push On).

Unit Per Metre

SR, No.	Size in	Basic supplying Rates / M (As per Rate Contract 2019)	3% Storage Charges	Cost of specials @ 10% of basic rates of pipe	Total cost of pipe & specials.	Add 10% contractor Profit & overhead charges.	Total Cost
1	2	3	4	5	6	7	8
1	100	953.00	28.59	95.30	1076.89	107.69	1184.58
2	150	1406.00	42.18	140.60	1588.78	158.88	1747.66

Analysis of Rates for Supplying, laying, jointing & cutting of Ductile Iron Pipes K/7 of 100 mm dia in the trenches including excavation & refilling the same and cost of specials complete in all respects									
S. No.	HSR Item No.	Description	Quantity	Unit	Rate	Unit - 100 Metre			Total Amount
						Amount	Ceiling Premium		
1	NS	Supplying of 100 mm dia Ductile Iron Pipes class K/9 as per analysis enclosed	100	Metre	1184.58	118457.90	0%		118457.90
						Sub Total			118457.90
	B.	Labour charges							
2	6.9	(Excavation for pipelines running under pressure in trenches and pits, in streets & lanes including trimming and dressing sides, levelling of beds of trenches to correct grade, cutting joint holes, cutting trees and bushes, etc., refilling consolidation and watering of refill, in 15 cm layers and restoration of unmetalled or unpaved surface to its original condition, including the cost of dewatering of rain water, diversion of traffic, night signals, fixing caution boards, crossing over trenches for access to the houses, watching, fencing etc. and disposal of surplus soil outside and inside the town, involving lead upto one km in ordinary soil							
		(a) Without timbering and shoring upto 1.5 metres depth							
		100 x 0.75 x 1.20	90	100 cum	1183.00	1064.7	370%		5004.09
3	28.61	Stringing out DI K-9 pipes and specials casting along trenches and laying the same in trenches to correct alignment and gradients including cartage from divisional stores or nearest railway station to site of work and return of pieces of pipes to stores.							
		ii) 100 mm i/d	100	Metre	5.62	562.00	0%		562.00
4	28.63	Cutting DI pipe and specials and chipping or filling the surface to a uniform finish							
		ii) 100 mm i/d	2	per Cut	21.30	42.60	0%		42.60
5	28.64	Joining DI socketed pipes, valves and specials with rubber tyton joints fitted complete including cost of labour and tools etc. and tested complete.							
		ii) 100 mm i/d	25	per Joint	29.15	728.75	0%		728.75
						Sub Total			6337.44
			Total rate for 100 mtr (Material -A + Labour-B)						124795.34
			Rate per metre						1247.95
			Say Rs.						1248.00

Analysis of Rates for Supplying, laying, jointing & cutting of Ductile Iron Pipes K/7 of 150 mm dia in the trenches including excavation & refilling the same and cost of specials complete in all respects									
S. No.	HSR Item No.	Description	Quantity	Unit	Rate	Amount	Ceiling Premium	Total Amount	Unit - 100 Metre
	A.	Material							
1	NS	Supplying of 150 mm dia Ductile Iron Pipes class K/9 as per analysis enclosed	100	Metre	1747.66	174766.00	0%	174766.00	
						Sub Total		174766.00	
	B.	Labour charges							
2	6.9	(Excavation for pipelines running under pressure in trenches and pits, in streets & lanes including trimming and dressing sides, levelling of beds of trenches to correct grade, cutting joint holes, cutting trees and bushes, etc., refilling consolidation and watering of refill, in 15 cm layers and restoration of unmetalled or unpaved surface to its original condition, including the cost of dewatering of rain water, diversion of traffic, night signals, fixing caution boards, crossing over trenches for access to the houses, watching, fencing etc. and disposal of surplus soil outside and inside the town, involving lead upto one km in ordinary soil							
		(a) Without timbering and shoring upto 1.5 metres depth							
		100 x 0.75 x 1.20	90	100 cum	1183.00	1064.7	370%	5004.09	
3	28.61	Stringing out DI K-9 pipes and specials casting along trenches and laying the same in trenches to correct alignment and gradients including cartage from divisional stores or nearest railway station to site of work and return of pieces of pipes to stores.							
		ii) 150 mm i/d	100	Metre	8.47	847.00	0%	847.00	
4	28.63	Cutting DI pipe and specials and chipping or filling the surface to a uniform finish							
		ii) 150 mm i/d	2	per Cut	24.20	48.40	0%	48.40	
5	28.64	Jointing DI socketed pipes, valves and specials with rubber tyton joints fitted complete including cost of labour and tools etc. and tested complete.							
		ii) 150 mm i/d	25	per Joint	32.40	810.00	0%	810.00	
						Sub Total		6709.49	
						Total rate for 100 mtr (Material-A + Labour-B)		181475.49	
						Rate per metre		1814.75	
						Say Rs.		1815.00	

Rough cost estimate for Development of Internal Services like:- Roads, Sewerage, Water Supply, Storm Water Drainage, Rain Water Harvesting, Horticulture Works, Solid Waste Management and Electrical works including Street Lighting in Affordable Residential Plotted Colony under Deen Dayal Jan Awas Yojna Policy No. 2016, Area measuring 8.25125 Acres at Baluda Road, Sohna, Haryana

Sub Head No. IV : INTERNAL STORM WATER DRAINAGE

Abstract of Cost

S.No	HSR Item No.	Description	No.	L (m)	B (m)	H (m)	Qty.	Unit	Rate in Rs	Ceiling Premium	Amount in Rs
1	6.10	Excavation of trenches in Streets. Lanes or open areas for storm water sewer etc.									
		300 MM RCC pipe	1	900	0.90	2.0	1620	100 cum	1919.00	370%	146112.66
		350 MM RCC pipe	1	340	0.95	2.0	646	100 cum	1919.00	370%	58264.68
2	10.39	Cement Concrete 1:4:8 with brick ballast 40mm nominal size in foundation and plinth									
		Under 300 mm RCC pipe	1	900	0.90	0.15	121.5				
		Under 350 mm RCC pipe	1	340	0.95	0.2	48.45				
		Total					169.95	cum	403.10	450%	376787.65

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S.No	HSR Item No.	Description	No.	L (m)	B (m)	H (m)	Qty.	Unit	Rate in Rs	Ceiling Premium	Amount in Rs
3	28.60	Providing, lowering, laying, cutting (cut surface to be uniformly finished), jointing with rubber rings marked with IS 5382 and testing of Spigot and socketted RCC NP-2 Marked with IS: 458-1988 and specials in to trenches for all stacking, handling, rehandling etc., complete in all respect to the satisfaction to the Engineer -in- charge									
			1	900			900	Metre	414.00	0	372600.00
			1	340			340	Metre	511.00	0	173740.00
4	NS Item	Constructing Brick Masonry Road Gully Chamber as per standard Drawings	1	20			20	each	15000.00		300000.00

S.No	HSR Item No.	Description	No.	L (m)	B (m)	H (m)	Qty.	Unit	Rate in Rs	Ceiling Premium	Amount in Rs
5	NS Item	Construction of desilting chamber complete in all respects as per Public Health Standard Design.	1	1			1	each	25000.00		25000.00
6	NS Item	Construction of Brick Masonry Manholes complete in all respects upto suitable depth including Manhole cover and frames, M. I Steps complete in all respects.									
		On 300 mm & 350 mm RCC pipe	1	43			43	Each	20000		860000.00
		Sub Total									2312504.99
		Add Contingency Charges @3%									69375.14957
		Grand Total									2381880.14
										Say	2381880.00

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Rough cost estimate for Development of Internal Services like:- Roads, Sewerage, Water Supply, Storm Water Drainage, Rain Water Harvesting, Horticulture Works, Solid Waste Management and Electrical works including Street Lighting in Affordable Residential Plotted Colony under Deen Dayal Jan Awas Yojna Policy No. 2016, Area measuring 8.25125 Acres at Baluda Road, Sohna, Haryana					
S. No.	Node		Size of RCC Pipe NP-3	Length in M	No. of M.H at a distance of 30 M
	From	To			
1	12	14	300	55	2
2	11	14	300	55	2
3	14	8	300	32	1
4	9	8	300	55	2
5	10	8	300	90	3
6	8	6	300	175	6
7	7	6	300	55	2
8	6	4	300	33	1
9	5	4	300	20	1
10	4	3	300	115	4
11	1	2	300	125	4
12	2	3	300	90	3
			Total	900	31
1	3	13	350	115	4
2	13	Silt Chamber	350	225	8
			Total	340	12
No. of Single Road Gullies			20 Nos.		

Rough cost estimate for Development of Internal Services like:- Roads, Sewerage, Water Supply, Storm Water Drainage, Rain Water Harvesting, Horticulture Works, Solid Waste Management and Electrical works including Street Lighting in Affordable Residential Plotted Colony under Deen Dayal Jan Awas Yojna Policy No. 2016, Area measuring 8.25125 Acres at Baluda Road, Sohna, Haryana

Sub Head No. V : RAIN WATER HARVESTING

Abstract of Cost					
S.No	HSR Item No.	Description	Qty	Rate	Amount in Rs
1	6.1	Providing & Construction of rain water harvesting system consisting of Boring of Tubewell and Rain Water Harvesting Chamber in parks as per Public Health Standard Design.	2	100000	200000.00
		Total			200000.00
		Add contingency 3%			6000.00
		Total			206000.00
Important Note:					
	1	Incorporation of storm water harvesting is essential for all the plot holders (residential, commercial, public utility e.g School, Clinic, Community Centre etc.) irrespective of size of plot subject to exclusion of only those plots owners who are permitted 100% ground coverage and hence not left with open space to incorporate rain water harvesting system.			
	2	Only over flow out of rain water harvesting well / tank installed by the plot owner caused by excessive rains or refusal of earth strata to absorb rain water in the subsoil, shall be allowed to flow on the road immediately in front of the gate.			
	3	300 mm dia pipe laid to drain surface water coming out of individual plots / buildings and disposed off in to main stream / channel / collecting chamber.			

Rough cost estimate for Development of Internal Services like:- Roads, Sewerage, Water Supply, Storm Water Drainage, Rain Water Harvesting, Horticulture Works, Solid Waste Management and Electrical works including Street Lighting in Affordable Residential Plotted Colony under Deen Dayal Jan Awas Yojna Policy No. 2016, Area measuring 8.25125 Acres at Baluda Road, Sohna, Haryana

Sub Head No. VI :

HORTICULTURE WORKS

Abstract of Cost

S.No	Description	Amount in Rs
1	Providing and fixing of grill wall fencing around park, earth filling in the parks, plantation and grassing in the parks and plantation along side of roads and all other horticulture works.	
	Total area of the scheme = 8.25125 Acres Taking cost of development of Parks and Green Belts in colony @ Rs. 0.50 lacs per acres.	412562.50
	Say	412562.50

Rough cost estimate for Development of Internal Services like:- Roads, Sewerage, Water Supply, Storm Water Drainage, Rain Water Harvesting, Horticulture Works, Solid Waste Management and Electrical works including Street Lighting in Affordable Residential Plotted Colony under Deen Dayal Jan Awas Yojna Policy No. 2016, Area measuring 8.25125 Acres at Baluda Road, Sohna, Haryana

Sub Head No. VII : SOLID WASTE MANAGEMENT

Abstract of Cost				
S.No	Description	Qty	Rate	Amount in Rs
1	Providing 5 Nos. tricycle Rickshaws for door to door collection of Municipal Solid Waste.	5	22000	110000.00
2	Construction of Primary Collection Centre	3	150000	450000.00
3	Bins for collection SW at primary collection centre 1.0 cum capacity compitable with three wheeler Auto-Cargo.	6	15000	90000.00
4	Providing and erection of litter bins in market area and parks.	10	5000	50000.00
	Total			700000.00
	Add contingency 3%			21000.00
	Total			721000.00

Rough cost estimate for Development of Internal Services like:- Roads, Sewerage, Water Supply, Storm Water Drainage, Rain Water Harvesting, Horticulture Works, Solid Waste Management and Electrical works including Street Lighting in Affordable Residential Plotted Colony under Deen Dayal Jan Awas Yojna Policy No. 2016, Area measuring 8.25125 Acres at Baluda Road, Sohna, Haryana

Sub Head No. VIII

ELECTRICAL WORKS

ABSTRACT OF COST

S.No	Description	Amount in Rs
1	Cost of Pole mounting sub station	704500.00
2	Cost of L.T. Line	390610.00
3	Cost of Installation of Street Lighting	740400.00
		1835510.00
	3% Contingency Charges	55065.30
	Total	1890575.30
	Say	1890575.00

Rough cost estimate for Development of Internal Services like:- Roads, Sewerage, Water Supply, Storm Water Drainage, Rain Water Harvesting, Horticulture Works, Solid Waste Management and Electrical works including Street Lighting in Affordable Residential Plotted Colony under Deen Dayal Jan Awas Yojna Policy No. 2016, Area measuring 8.25125 Acres at Baluda Road, Sohna, Haryana

Sub Head No. VIII : ELECTRIC WORKS

COST OF POLE MOUNTING SUB STATION

S.No	HSR Item No.	Description	Unit	Qty	Rate in Rs.	Amount in Rs
1	NS Item	Supply and erection of 260KVA transformer complete in all respects.	Each	1	550000	550000.00
2	NS Item	Supply and erection of 9mtr long PCC Poles	Each	5	3000	15000.00
3	NS Item	Supply and erection of GO Switch	Each	1	7000	7000.00
4	NS Item	Supply and erection of LA Set	Each	1	3000	3000.00
5	NS Item	Supply and erection of Nut & Bolts	Kg	20	100	2000.00
6	NS Item	Supply and erection of MS Channel 100 x 75 x 40 & 75 x 40 x 40 complete in all respects	Kg	300	100	30000.00
7	NS Item	Supply and erection of MS Angle Iron 50 X 50 X 6mm	Kg	50	100	5000.00

8	NS Item	Supply and erection of MS Angle Flat 50 X 6mm		50	400	20000.00
9	NS Item	Supply and erection of PVC Cable single core	m	150	400	60000.00
10	NS Item	Earthing with GI Earth including Charcol		2	5000	10000.00
11	NS Item	Supply and erection of stay set complete in all respects		1	1500	1500.00
12	NS Item	Supply and erection of LT Fuse unit board		1	1000	1000.00
Total						704500.00

Rough cost estimate for Development of Internal Services like:- Roads, Sewerage, Water Supply, Storm Water Drainage, Rain Water Harvesting, Horticulture Works, Solid Waste Management and Electrical works including Street Lighting in Affordable Residential Plotted Colony under Deen Dayal Jan Awas Yojna Policy No. 2016, Area measuring 8.25125 Acres at Baluda Road, Sohna, Haryana

Sub Head No. VIII : ELECTRIC WORKS

COST OF LT LINE

S.No	HSR Item No.	Desxcription	Unit	Qty	Rate in Rs.	Amount in Rs
1	NS Item	Supply and erection of 9mtr long PCC Poles		48	3500	168000.00
2	NS Item	Supply and erection of MS Strip		192	60	11520.00
3	NS Item	Supply and erection of shackle insulator		192	45	8640.00
4	NS Item	Supply and erection of Nut & Bolts	kg	144	100	14400.00
5	NS Item	Supply and erection & fabrication of MS Flat 50 X 6mm complete in all respects	Kg	144	100	14400.00
6	NS Item	Supply and erection of MS Angle Iron 50 X 50 X 6mm	Kg	65	100	6500.00
7	NS Item	Supply and erection of MS Flat 50 X 6mm	Kg	3	1200	3600.00
8	NS Item	Supply and erection of MS Road earthing for LT Line		7	450	3150.00
9	NS Item	Supply and erection of cradle guard with real complete		130	45	5850.00
10	NS Item	Supply and erection of ACSR conductor 50mm complete		3	45000	135000.00

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11	NS Item	Supply and erection of ACSR conductor 20mm complete		0.6	18000	10800.00
12	NS Item	Supply and erection of 8swg GI Wire complete in all respect		0.6	1250	750.00
13	NS Item	Supply and erection of PVC Phase Separator		80	100	8000.00
					Total	390610.00

Rough cost estimate for Development of Internal Services like:- Roads, Sewerage, Water Supply, Storm Water Drainage, Rain Water Harvesting, Horticulture Works, Solid Waste Management and Electrical works including Street Lighting in Affordable Residential Plotted Colony under Deen Dayal Jan Awas Yojna Policy No. 2016, Area measuring 8.25125 Acres at Baluda Road, Sohna, Haryana

Sub Head No. VIII : ELECTRICAL WORKS

Abstract of Cost					
S.No	HSR Item No.	Description			Amount in Rs
1	31.62	Supply and erection of CFL street light luminaries of aluminium / sheet steel housing with epoxy powder coated finish and acrylic cover including cost of CFL lamps including making connection and erection of the same on existing pole / bracket irrespective of height of pole / mounting height with cost of all labour and material required to complete the job in all respects as per approved make and model . Street Light luminaries 2 x 36 W CFL Bajaj / Philips / Crompton / GE	96	1900	182400.00
2	N.S	Supply and erection of 150 W sodium vapour lamps for entry gates and x-junctions of good quality complete in all respects and GI poles.	30	16000	480000.00
3	NS	Supply and Erection of PVC copper wire	2000	15	30000.00
4	NS	Supply and erection of GI pipes bracket for fixing street lighting fitting.	120	400	48000.00
		Sub Total			740400.00