

0 467

LC-3717-B

SERVICE ESTIMATE, DESIGN REPORT AND
CALCULATION OF
INTERNAL DEVELOPMENT WORKS

FOR

PROPOSED "AFFORDABLE RESIDENTIAL PLOTTED COLONY"
(DDJAY) AREA MEASURING 5.0458 ACRES (LICENSE NO. 166 OF
2022 DATED 18.10.2022) IN THE REVENUE ESTATE OF VILLAGE
WAZIRPUR, SECTOR - 95A, GURUGRAM BEING DEVELOPED BY SH.
DHARAM SINGH AND OTHERS IN COLLABORATION WITH M/S JMS
BUILDWELL REALTY PVT. LTD.

SERVICE ESTIMATE, DESIGN REPORT AND CALCULATIONS OF INTERNAL DEVELOPMENT WORKS FOR PROPOSED “AFFORDABLE RESIDENTIAL PLOTTED COLONY” (DDJAY) AREA MEASURING 5.0458 ACRES (LICENSE NO. 166 OF 2022 DATED 18.10.2022) IN THE REVENUE ESTATE OF VILLAGE -WAZIRPUR, SECTOR – 95A, GURUGRAM BEING DEVELOPED BY SH. DHARAM SINGH AND OTHERS IN COLLABORATION WITH M/S JMS BUILDWELL REALTY PVT. LTD..

Gurugram town of Haryana State situated on N.H.- 48 road at a distance of 54 Km from Delhi. Being in the national capital region, the town has fast developing tendency and potential. Further, it has also started sharing the growing residential, commercial and Industrial load of Delhi. In order to review the growing pressure of population in National Capital of Delhi, It has been decided by the Haryana Government to develop various infrastructure facilities in Gurugram Urban Complex. This layout plan for an area measuring 5.0458 Acres (Drg. No. 8618 dated 18.10.2022) has been issued in respect of Affordable Residential Plotted Colony under DDJAY by DTCP Chandigarh. This report is for a part of service estimate for proposed “Affordable Residential Plotted Colony” (DDJAY) Area Measuring 5.0458 Acres (license No. 166 of 2022 Dated 18.10.2022) in the revenue estate of Village-Wazirpur, Sector – 95A, Gurugram Being Developed By Sh. Dharam Singh And Others in Collaboration With M/S JMS Buildwell Pvt. Ltd. has been prepared with the following provisions which are as under :-

1. WATER SUPPLY

~~The source of water supply in this area is by GMDA Mains. It has been proposed to construct underground tanks of capacity as per attached details and to location for domestic purpose and for fire protection. The underground tanks will be fed from the HSP based supply, which will feed O.H. tanks on the roof of the Building and has been designed as per the Hazen Williams formula. Presently there is proposed / under execution GMDA W/S in this area. However the provision of tube wells has been taken due to non-availability of water but after getting the approval from the competent authority through tube wells / tankers / any other approved source till GMDA W/S will made available. The proposed tube well shall be 510mm bore drilled with reverse rotary rig and installed with 80mm i/d housing pipe and 50mm i/d slotted tube as strainer, hence the provision of 1 Nos. Tube Wells has been taken in this estimate.~~

DESIGN

The scheme has been designed for population of 1962 persons and considering @ 18.00 persons / units for Affordable Residential Plotted Colony and other provision etc. The combined quantum of water supply (domestic + flushing) per head / day has been taken as 172.50 Liters per head per day as per design calculation.

PUMPING EQUIPMENTS

It has been proposed to install pumping set as described with standby of equal capacity. The provision for standby generating set has also been provided in case of any time electricity failure. Generator will be provided separately or added to the capacity of main generator.

2. SEWERAGE

The scheme is designed for sewer connecting to the STP and bypass connection to HSVP Sewerage scheme. The sewer lines have designed for three times average D.W.F in relation to water supply demand. It has assumed that about 80% of the domestic and flushing water supply shall find its way into the proposed sewer. Sewer lines shall be running by gravity and discharge to STP proposed. Treated water will be used for Irrigation & Flushing purpose (through recycling) under the pipe line system.

3. STORM WATER DRAINAGE

It has been proposed to lay R.C.C Np3/DWC pipes with required number of manholes for disposal of storm water, which will be connected to the GMDA drain. The intensity of rain fall has been taken as 6.00mm per hour. A minimum size of 400mm i/d R.C.C Np3/DWC pipe for storm water drain will be provided and designed as per manning's formula. Necessary provision of rainwater harvesting arrangement has also been taken in this estimate.

4. ROADS

Road, Parking and Pavement have been provided to above areas and estimate is prepared as revised specifications adopted by HSVP.

5. STREET LIGHTING AND ELECTRIFICATION :-

Provision for external lighting, electrification and ESS of proposed area has been made.

6. HORTICULTURE :-

Estimate and details of plantation, landscaping, signage etc. have been included.

7. FIRE FIGHTING :-

Provision of Fire Fighting system has been made.

8. SPECIFICATIONS

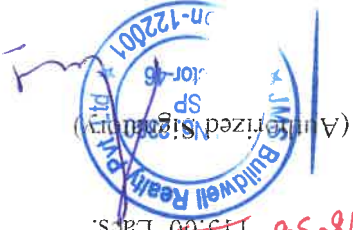
The work will be carried out in accordance with the standard specifications of PH as laid down by the Haryana Government / HSVP.

9. RATES

The estimate has been based on the present market rates.

10. COST

The total cost of the scheme including cost of all services works out to Rs. 580.25 Lacs including 3% contingencies and 49% departmental charges + Price escalation and cost per acre comes out to Rs. 118.58 115.00 Lacs.



1. DESIGN CALCULATION :-

Total Area of plot
Proposed Area Under Plots
Permissible Commercial Area
Proposed Commercial Area
Proposed Community
Proposed Plots
E.S.S. and others
Water Requirement :-

- Total Plots
- Total Population @ 18.00 Persons/Plot @172.50 LPD
- Commercial area @ 3 Sqm / person = 273 Persons @ 45 LPD
- Community Building (Area 0.50 Acre)
- ESS Guards and Mtc. Staff

Total

II. FIRE DEMAND

(i) Population

(p) $\frac{1}{2} \times 100/1000 = (1.962) \frac{1}{2} \times 100$
(Considering 1/3 of total population)
Add. @ 15% extra for margin factor

Total

=5.0458 Acres or 20419.628 Sqm.
= 2.83 Acres
= 0.20 Acres or 816.785 Sqm
= 0.20 Acres or 816.759 Sqm
= 0.50 Acres
= 109 Plots
= 1962 Persons
= 3,38,445.00 LPD
= 0.20 Acres OR (816.759 Sqm.)
= 12285.00 LPD
= 12500.00 LPD
= 10000.00 LPD
= 3,73,230.00 LPD Or 374 KLD
Say 380 KLD

Say = 60.00 KLD

III. Garden Irrigation Requirement (For Total Area)

= 25.00 KLD

IV. Total Water Requirement for UGT

(Excluding Fire Demand)
Hence Domestic Water Requirement (67%)
Hence Flushing Water Requirement (33%)
One Day Requirement considering

= 380 x 67% = 255.00 KLD
= 380 x 33% = 125.00 KLD
= 260 K.L. for Domestic
= 130 K.L. for Flushing

But it is proposed to construct an UGT i.e. 260 K.L. in two compartment for domestic use and 130 K.L. for non potable water in two compartment (at STP) and 60 K.L. for fire fighting purposes for UGT in two compartment as shown location in the plan.

Total Capacity of UGT = 260 + 60 = 320.00 KLD

Total Storage Requirement for Flushing and Irrigation at STP (130+15) = 145.00 KLD
(Flushing 120 K.L. + Irrigation 25 KLD X 60% = 15 KLD)

471

For UGT

V. Tube Well

a) Yield = 15 K.L. / Hr.

b) Working Hour per day = 16 Hr. / Per Day

c) Total water demand = 255 M3/Day

d) Number of tube well required = 1.06 Nos

(Water Demand / Discharge / Hr. working

Per day)

e) Add 5% extra

Total = 1.11 Nos

Say = 1 Nos

Water to the proposed development is to be supplied by HSVF. However consider 1 Nos. T.W. to install for proposed requirement of water for augmentation / standby purposes and provision has also been taken in the estimates due to non availability of water but after getting the approval from the competent authority.

VI) Pumping Machinery for Tube wells

a) Gross Working Head

b) Average fall in S.L

c) Depression Head

d) Friction loss in main

Total

e) Discharge

LPS)

f) Horse Power

HP = (4.50 x 98) / (75 x 0.60)

Say = 10.00 H.P.

It is proposed to provide 1 No. pumping set of 4.50 LPS discharge at 98 Mtr head (1W)

VII) Boosting Machinery for domestic water For UGT

Total Water Requirement

= 255.00 KLD

Pumping per hour @ 8 hr. pumping / day

= 255 / 8 KL / hr.

= 31.875 KL / hr.

= 531.25 lpm = 8.85 lps

Say 2 No. 5.00 lps each

For UGT

= 5.00 mts.

= 10.00 mts.

= 30.00 mts.

= 45.00 mts.

= 45.00 mts.

= (5.00x45)/(75x0.60)

= 5.00 H.P.

Say = 5.00 HP

It is proposed to provide 3 Nos. of pumping set of 5.00 lps discharge at 45mts Head each (2W + 1S) for UGT.

VIII) Boosting Machinery for flushing water at STP

Pumping per hour @ 8 hr. pumping / day

Total Water Requirement

= 125 K.L.D

= 125 / 8 KL / hr.

= 15.625 KL / hr.

= 260.42 lpm = 4.34 lps,

Say 1 No. 5.00 lps each

Gross working head

- Suction lift

= 5.00 mts.

- Frictional loss in mains & specials

= 10.00 mts.

- Clear Head required

= 30.00 mts.

Total

= 45.00 mts.

Say

= 45.00 mts.

Pump HP

= (5.00 x 45) / (75 x 0.60)

= 5.00 HP

Say

= 5.00 HP

It is proposed to provide 2 Nos of pumping set of 5.00 lps discharge at 45 mts Head each (1W + 1S)

IX) Boosting Machinery for Irrigation water

Total Water Requirement

= 25 KLD

= 25 / 5 KL / hr.

= 5.00 KL / hr.

= 83.33 lpm = 1.38 lps

Pumping per hour @ 5 hr. pumping / day

Say

= 2.00 LPS

Gross working head

- Suction lift

= 5.00 mts.

- Frictional loss in mains & specials

= 5.00 mts.

- Clear Head required

= 25.00 mts.

Total

= 35.00 mts.

Say

= 35.00 mts.

Pump HP

= (2.00 x 35) / (75 x 0.60)

= 1.55 HP

Say

= 2.00 HP

It is proposed to provide 2 No. of pumping set of 2.00 lps discharge at 35 mts Head each (1W + 1S)

0 473

7

X) DG Set for plumbing

DG Set Requirement

Submersible Pump (1 x 10)
Domestic Pump (2 x 5)
Street Light and other etc.

Total pump load

For UGT
= 10.00 HP
= 10.00 HP
= 10.00 HP
= 30.00 HP
= 30.00 x 0.746 x 1.50
= 33.57 K.W
= 1 No. 40 KVA

Hence it is proposed to provide 1 No. D.G. Set of 40 KVA capacity at U.G.T.

DG Set for S.T.P. (for flushing & Irrigation + Surplus Treated Water)

Requirement = 1 X 5.00 HP + 3.00 HP = 8.00 HP (8 X 0.746 X 1.50) = 8.95 KVA

Say

= 15.00 KVA

FLOW TO SEWAGE TREATMENT PLANT

Total Water Requirement = (255 for domestic & 125 KLD for flushing)

i) 80% of total Domestic Water Demand = 80% of 255 KLD = 204.00 KLD

ii) 80% of total Flushing Water Demand =80% of 125 KLD = 100.00 KLD

Total

= 304.00 KLD

Considering 5% marginal factor

= 15.00 KLD

G. Total

= 319.20 KLD

Say 320 KLD

Proposed STP Capacity = 320 KLD Or 0.32 MLD



(Authorized Signatory)

FINAL ABSTRACT OF COST

0 474 8

SR. NO.	SUB WORK	DESCRIPTION	AMOUNT (Rs. In Lacs)
1	SUB WORK NO. I	WATER SUPPLY SCHEME	144.11
2	SUB WORK NO. II	SEWERAGE SCHEME	152.12
3	SUB WORK NO. III	STORM WATER DRAINAGE	67.18
4	SUB WORK NO. IV	ROAD AND FOOTPATH	103.90
5	SUB WORK NO. V	STREET LIGHTING	19.36
6	SUB WORK NO. VI	HORTICULTURE (PLANTATION & ROAD SIDE TREES)	2.35
7	SUB WORK NO. VII	MTC. OF SERVICES & RESURFACING OF ROADS (After 1st 5 years of 1st Phase & Next 5 years in 2nd Phase)	91.23
			598.36
		TOTAL	580.25

Cost Per Acre = RS. 580.25 Lacs / 5.0458 = 115 Lacs Per Acre
598.36 118.58



Checked for service estimate only

AUTHORISED SIGNATORY

Checked subject to comments in forwarding letter No 1/526/2022
DL 04-12-2022 and notes attached with the estimate

Executive Engineer-I W/S Division, GMDA Gurugram
Executive Engineer-III Drainage Division, GMDA Gurugram
Executive Engineer-EDC (Infra-I) GMDA for roads/lighting/Hort.

Director Town & Country Planning Haryana, Chandigarh

Chief Engineer, (Infra-II), GMDA Gurugram

479

SUB WORK NO. 1 (Abstract of cost)

WATER SUPPLY SCHEME

Sr. NO.	SUB WORK	DESCRIPTION	AMOUNT (Rs. In Lacs)
1	Sub Head No. 01	Head Works	41.20 ✓
2	Sub Head No. 02	Pumping Machinery	19.00 ✓
3	Sub Head No. 03	Water Supply Distribution & Rising main pipe	27.13
4	Sub Head No. 04	External Fire Hydrants	4.52 ✓
6	Sub Head No. 05	Irrigation	2.05 ✓
		TOTAL	93.90 ✓
		Add 3% contingency & P.E. Services	2.82
		Total	96.72
		Add 49% Department charges + Price Escalation	47.39
		G. Total	144.11
		Say in Lacs	144.11

(C.O. to Final Abstract Of Cost)

149.94
149.94
100.68
2.93
47.39

SUB WORK NO. I
Sub Head No. 01

WATER SUPPLY
Head Works

476

Sr. NO.	Description	Amount in Rs.
1	Construction of U.G. tanks and Fire Tank including pipes, valve & Specials. 320 KLD @ Rs. 6000/- per K.L.D	1920000.00
2	Provision for construction of Boosting Station 1 Nos @ Rs. 500000/- each	500000.00
3	Boring and installing tube well reverse rotary rig complete with pipes and strainer to a depth of about 120 Mtr complete in all respect. 1 Nos @ Rs. 1500000/- each	1500000.00
4	Provision for construction of tube well chamber size 1.50m x 1.50m complete in all respect. 1 Nos @ Rs. 100000/- each	100000.00
5	Provision for carriage of material and unforeseen items L.S.	50000.00
6	Provision of specials for tube well & rising main to UGT L.S.	50000.00
	Total	4120000.00
	Say in Lacs	41.20

(C.O. to Abstract of cost of Sub Work No. I)

//

0 477

SUB WORK NO. 1 SUB HEAD NO. 02 WATER SUPPLY Pumping Machinery

Sr. NO.	Description	Amount in Rs.
1	Providing and installing Hydro pneumatic pumping set of following capacities for domestic water Supply with specials	
	5.00 lps at 45 mts head - 3 No. (2W+1SB) - @ Rs. 1,00,000/- each Set (5.00HP)	300000.00
2	Providing and installing Hydro Pneumatic pumping set of following capacities for Flushing water supply & irrigation etc.	
1	4.00 lps at 45 mts head - 2 No. (1W+1SB) @ Rs. 60,000/- 1 Set (5.00 HP each)	120000.00
!!	2.00 lps at 35 mts head - 2 No. (1W+1SB) @ Rs. 30,000/- 1 Set (2 HP each)	60000.00
3	Providing and installing Submersible pump for tube wells with specials	
	4.50 lps at 98 mts head - 1 Nos (1W) @ Rs. 1,20,000/- 1 Set (10HP each)	120000.00
4	Provision for ESS (Electric Panel Foundation) L.S.	150000.00
5	Provision for D.G. Set for stand by arrangement for all machinery (60 KVA + 20 KVA) = 1 No. 40+15=55 KVA @ Rs. 10,000/- per KVA	550000.00
6	Provision for making foundations & erection of pumping machinery	150000.00
7	Provision for pipes, valve & specials inside boosting chamber L.S.	300000.00
8	Provision for electric services connection including electric fittings for boosting chambers and pump chamber etc.	100000.00
9	Provision for carriage of materials and other unforeseen items L.S.	50000.00
	Total	1900000.00
	Say in Lacs	19.00

(C.O. to Abstract of cost of Sub Work No. I)

SUB WORK NO. 1
Sub Head No. 03
WATER SUPPLY
Water Supply Distribution & Rising Main Pipe

Sr.	Description	Amount in Rs.
1	Providing, laying, jointing & testing pipe lines including cost of excavation etc. complete in all respects	
i)	100mm dia D.I./HDPE Pipe 1105 Mtr @ Rs. 1475/- Per Mtr	1629875.00
ii)	150mm i/d D.I./HDPE Pipes - 253Mtr @ Rs. 1875/- Per Mtr	474375.00
2	Providing and fixing sluice valve including cost of surface box and masonry chamber etc. complete in all respect	
	a) 100mm i/d 10 No. @ Rs. 10000/- each	1000000.00
	b) 150mm i/d 4 No. @ Rs. 15000/- each	60000.00
3	Providing and fixing indicating plates for sluice valve 14 No. @ Rs. 2000/-	28000.00
4	Providing and fixing air valve and score valve etc. L.S.	20000.00
5	Provision for carriage of materials and other unforeseen items	50000.00
6	Provision for making connection with GMDA Pipe & T.W's etc.	300000.00
7	Provision for cutting the road and making good the same	50000.00
	Total	2712250.00
	Say in Lacs	27.13

(C.O. to Abstract of cost of Sub Work No. 1)

30.93

3092250.00

SUB WORK NO. 01

WATER SUPPLY

SUB HEAD NO. 04

EXTERNAL FIRE HYDRANTS

Sr.	Description	Amount in Rs.
1	Providing, Laying, Jointing and testing D.I./HDPE Pipes for fire rising main including cost of fittings, valves, connection etc. complete in all respect	
a)	100mm dia -120 M @ Rs. 1475/- Per Mtr	177000.00
2	Providing and fixing fire Hydrant with accessories 15 No. @ Rs. 15000/- each	225000.00
3	Providing and fixing indicating plate -15 No. @ Rs. 2000/- each	30000.00
4	Provision for carriage of material L.S.	20000.00
	Total	452000.00
	Say in Lacs	4.52

(C.O. to Abstract of cost of Sub Work No. 1)

WATER SUPPLY

430 0

IRRIGATION

SUB WORK NO. 01

SUB HEAD NO. 05

Sr. NO.	Description	Amount in Rs.
1	Providing, Laying, jointing and testing UPVC pipe lines suitable for 6 kg pressure including cost of fittings, valves, connection etc. complete in all respect	
a)	25mm dia - 120 M @ Rs. 500/- Per Mtr	60000.00
2	Providing and fixing 25mm dia, Irrigation hydrant valve complete in all respect 15 Nos @ Rs. 5000/- each	75000.00
3	Provision for carriage of materials and other unforeseen items L.S.	10000.00
4	Provision for indicating plate with safety box etc. complete in all respect 15 Nos @ Rs. 2000/- each	30000.00
5	Provision for road cutting and making it condition as original L.S.	30000.00
	Total	205000.00
	Say in Lacs	2.05

(C.O. to Abstract of cost of Sub Work No. 1)

SUB WORK NO. II

0 481

SEWERAGE SCHEME

Sr.	Description	Amount in Rs.
1	Providing, jointing, cutting and testing stoneware pipe grade A and lowering into trenches including cost of excavation, bed concrete, cost of manholes etc. complete	
	a) SW/DWC Pipe 200mm i/d avg. depths 0 - 2.00M 417 M @ Rs. 2270/- per Mtr	946590.00
	b) SW/DWC Pipe 250mm i/d avg depth 2.00 M 104 M @ Rs. 2430/- per Mtr	252720.00
2	Providing, laying, jointing & testing pipe lines including cost of excavation etc. complete in all respect - 150mm dia Heavy Class DI/HDPE pipes (overflow for STP)	
	a) 150MM i/d D.I./HDPE Pipe - 140 M @ Rs. 1875/- Per Mtr	262500.00
3	Provision of lighting and watching etc.	50000.00
4	Provision for cartage of material	100000.00
5	Provision for making connection with GMDA & connection fee	300000.00
		450,000.00
6	Provision for construction of Sewerage Treatment Plant (STP) including the cost of tertiary treatment level with recycling storage tank and machinery with all arrangement etc. complete in all respect. 320 KLD or (0.32 MLD) Capacity @ Rs. 25000/- per KLD	10061810
	Add 3% contingency & P.E. Services	297354
	Total	10209164
	Add 49% Department charges + Price Escalation	5002491
	G. Total	15211655
	Say in Lacs	152.12

(C.O. to Final Abstract of Cost)

154.42

301854
1086364
5078195
15441860

SUB WORK NO. III

STORM WATER DRAINAGE SCHEME

Sr.	Description	Amount in Rs.
1	Providing, lowering, laying, jointing RCC pipe class Np3/DWC with cement joint, manholes, specials into trenches including manholes, chambers etc. excavation, backfilling and disposal of surplus earth complete in all respect	
	a) RCC Np3/DWC pipe 400mm i/d = 572 M @ Rs. 2950/- Per Mtr	1687400.00
2	Provision for Rain Water Harvesting arrangement including the cost of screening chamber and pit with all type of pipes and other material etc. complete in all respect as per standard drawing and bore upto requirement of site etc. 5 Nos RWH @ Rs. 3,50,000/- each	1750000.00 1250,000
3	Provision for road gully & pipe with connection	500000.00
4	Provision for lighting and watching	50000.00
5	Provision for timbering and shoring	40000.00
6	Provision for cartage of material	50000.00
7	Provision for making connection with GMDA storm-water drain & sewer	300000.00 450,000
	Total	4377400.00
	Add 3% contingency & P.E. Services	131322.00
	Total	4508722.00
	Add 49% Department charges + Price Escalation	2209273.78
	G. Total	67117995.78 67,18
	Say in Lacs	67.18

(C.O. to Final Abstract of Cost)

77.16

150822
5178222
2537328
4415550

S. No.	Description	Unit	Qty	Rate (In Rs.)	Amount (In Rs.)
1	Provision for leveling & earth filling as per site conditions	Per Acre	5.0458	175000	883015
2	i) Providing and laying Bituminous road (250mm GSB, 250mm WMM, 50mm DBM, 30mm BC).	Sqm	3110	1500	4665000
3	Provision for kerbs & channels of C.C. 1:2:4	Metre	570	600	342000
4	Provision for arrangement of guide map and indicating board etc.	LS			100000
5	Provision for footpath with 100mm thick PCC under pavement cement concrete of specified grade 1:4:8 and interlocking tile 80mm thick etc. complete in all respect.	Sqm	680	1000	680000
7	Provision for carriage of material	LS			100000
	Sub Total				6770015
	Add 3% contingencies & P.E. Services				203100
	Sub Total				6973115
	Add 49% Departmental Charges + Price Escalation				3416827
	Total				10389942
	Say Rs. in Lacs				103.90

(C.O. to Final Abstract of cost)

STREET LIGHTING

Sub Work No. V

S. No.	Description	Unit	Qty	Rate (In Rs.)	Amount (In Rs.)
1	Provision for Street Lighting at surrounding area as per standard specifications of HVPN etc. complete	Acre	5.0458	250000	1261450
	Add 3% contingencies & P.E. Services				37844
	Total				1299294
	Add 49% Departmental Charges + Price Escalation				636654
	Total				1935947
	Say Rs. in Lacs.				19.36

(C.O. to Final Abstract of cost)

12/

485 -0

HORTICULTURE

Sub Work No. VI

S. No.	Description	Unit	Qty	Rate (in Rs.)	Amount (in Rs.)
1	Development of Lawn Areas				
a.	Trenching of ordinary soil upto depth of 60 cm i/c removal & stacking of serviceable material & disposing by spreading and levelling within a lead of 50 M and making up the trench area for proper levels by filling with earth or earth mixed with manure before and after flooding trench with water i/c cost of imported earth and manure with all fitting and valve etc. complete				
b.	Rough dressing of turfed area				
c	Grassing with "Cynadon dactylon" i/c watering and maintenance of lawns for 30 days till the grass forms a thick lawn, free from weeds and fit for moving in row 7.5 cm part in either direction				
d	organized green 1687.839 Sqm Or 0.417 Acres (As per detail given in green park area calculation)	Acre	0.417	150000	62550
2	Providing and planting both side trees along road boundary @ 12 m interval (Length appx 537 M) = 537/12 = 45 Nos Say No. of trees = 50 Nos Cost details : Excavation = Rs. 60 Manure = Rs. 90 Tree Plant & Guard = Rs. 1650 Total Rs. = Rs. 1800	Each	50	1800	90000
Total	Add 3% contingencies & P.E. Services				152550
	Add 49% Departmental Charges + Price Escalation				4577
Total					157127
					76992
Total					234118
	Say Rs. in Lacs				2.35

(C.O. to Final abstract of cost)

0 486

20

Sub Work No. VII

Mtc. Of services & Resurfacing of Road

S. No.	Description	Unit	Qty	Rate (In Rs.)	Amount (In Rs.)
1	Mtc. Of water supply, sewer, storm water drain, roads, street light, hort. Etc. for period of 10 years including operation charges full establishment etc. complete in all respects 11.39375 acres @ Rs. 5.0 lacs per acre	Acre	5.0458	500000	2522900
2	Provision for resurfacing of roads after 5 years of 1st phase with provision of 50mm thick DBM including leveling coarse and 30mm BC as per crust design whichever is safer	Sqm	3110	500	1555000
3	2nd phase after next five years of 1st phase (30mm DBM & 25mm BC or as per crust design whichever is safer	Sqm	3110	600	1866000
Sub Total	Add 3% contingencies & P.E. Services				5943900
Sub Total	Add 49% Departmental Charges				6122217
Total	Say Rs. In Lacs				91.23

(C.O. to Final abstract of cost)

0 487

29

SUMMARY OF DESIGN REQUIREMENT

S. No.	Description	Qty	Unit
1	Total Population	1962	Persons
2	Total Water Requirement (Domestic)	255	KLD
3	Total Water Requirement (Flushing)	125	KLD
4	Total Water Requirement (Horticulture)	25	KLD
5	U. G Tank (Domestic + fire = 260+60 = 320 KLD)	1	No.
6	No. of Domestic WS pumps UGT	2+1	Set
7	No. of Flushing pumps	2+1	No.
8	No. of submersible pumps	1 + 1	No.
9	Generating sets (40 KVA + 15 KVA = 65 KVA)	1	40 + 15 KVA
10	STP (320 KLD)	1	No.

TOTAL MATERIAL STATEMENT FOR WATER SUPPLY i.e. DOMESTIC, FLUSHING & RISING MAIN ETC.

C 488

S. No.	Description	Size of pipe upto valve in 80mm	Size of pipe upto valve in 100mm	Size of pipe upto valve in 150mm	Size of pipe upto valve in 200mm
1	Domestic	-	374 M	150 M	0
2	Flushing	-	423 M	103 M	0
3	Rising Main	-	308 M	-	0
	Total	-	1105 M	253 M	0

687 0

	Total
200mm i/d Pipe Length	
150mm i/d Pipe Length	
100mm i/d Pipe Length	

150 Mtr
374 Mtr
524 Mtr

42 067 05

150mm i/d Pipe Length	103 Mtr
100mm i/d Pipe Length	423 Mtr
Total	526 Mtr

MATERIAL STATEMENT FOR BOREWELL RISING MAINS AND HUDA MAIN

S. No.	Name of Line	Size of Pipe Provided	Length of Pipe (Mtr)	Length in Mtr
	From	To		100mm
1	T.W.	UGT	100	18
2	Govt. Line	UGT	100	290
	Total		308	308
				0

492 26

MATERIAL STATEMENT FOR SEWERAGE SCHEME

S. No.	Line No.	Length (in Mtr)	Pipe Dia	Av. Depth	Length in Mtr			
					200mm i/d	250mm i/d	300mm i/d	400mm i/d
	From	To			0 to 2.00 Mtr	0 to 2.50 Mtr	0 to 2.75 Mtr	0 to 3.00 Mtr
1	A	B	70	200	1.32	70		
2	B	B	60	200	1.09	60		
3	B	C	40	200	1.53	40		
4	C1	C	70	200	1.16	70		
5	C	D	40	200	1.66	40		
6	D1	D	82	200	1.23	82		
7	D	E	58	250	1.78		58	
8	E1	E	55	200	1.15	55		
9	E	STP	46	250	1.95		46	
10	STP - Main Sewer By Pumping 150mm i/d D.I. Pipe = 140 Mtr							
	Total		521		417	104	0	0

200mm i/d Pipe Length 417-Mtr
250mm i/d Pipe Length 104 Mtr
150mm i/d D.I. Pipe (By Pumping) = 140 Mtr

MATERIAL STATEMENT OF STORM WATER DRAINAGE SCHEME

[illegible]

Total Length 400mm i/d RCC NP3 pipe = 572 Mtr

Total Rain Water Harvesting (RWH) = 5 Nos

Material Statement of Road Works

767 0

82

Sr. No.	Road No.	Road Width	Length	Width	Area
1	1	9.00	42.00	5.50	231.00 Sqm
2	2	9.00	76.00	5.50	418.00 Sqm
3	3	9.00	109.00	5.50	599.50 Sqm
4	4	9.00	82.00	5.50	451.00 Sqm
5	5	9.00	71.00	5.50	390.50 Sqm
6	6	9.00	16.00	5.50	88.00 Sqm
7	7	9.00	141.00	5.50	775.50 Sqm
	G. Total				2953.50 Sqm
	Add 5% extra for curves				
	Total				3101.18 Sqm
				Say	3110.00 Sqm

!!) Kerbs & Channels

9.00 Mtr wide road (1 x 537) (1)

Total

Add 5% for curves

G. Total

Say

644.40 Sqm.

644.40 Sqm.

32.22 Sqm.

677 Sqm.

Say 680 5qm

G. Total

Add 5% for curves

Total

(i) 9M wide road = 537 M x 1.20M

ii) Footpath :-

570 Mtr

27 Mtr

537 Mtr

537 Mr

SUBHEAD : IRRIGATION WATER SUPPLY SCHEME - DESIGN CALCULATION (HORTICULTURE)

HYDRAULIC STATEMENT OF IRRIGATION WATER SUPPLY

S. No.	Line Reference	Requirement	Peak Flow in LPH	Velocity (m/s)	Size of the pipe required (in mm)	Size of the Pipe Recommend (mm)	Hydraulic Radius	Total Friction Loss in m/m	Length (M)	Loss of Head in Line (M)	Formation Level	Available head (M)
1	From Flushing Water Supply line	0	-	-	25.00	25	-	-	120	-	-	-

Note :- 15 Nos connections are to be done from flushing water supply line i.e. 15 Nos x 8 Mtr/each =120 Mtr for 25mm i/d

SUBHEAD : DOMESTIC WATER SUPPLY SCHEME - DESIGN CALCULATION

[illegible]

SUBHEAD : FLUSHING WATER SUPPLY SCHEME - DESIGN CALCULATION

498 0

DESIGN STATEMENT OF SEWERAGE SCHEME

SUBHEAD : SEWERAGE SCHEME - DESIGN CALCULATION																															
5. No.	Line Reference	Type of Colony	Residential Plots			Population @ 18.00 Person per plot	Water Requirement nt @ 172.50 LPCD	Other Requirement i.e. comm./ community building / other services	Total water requirement LPD	Sew. Quantity after evaporatio n losses @ 20% (in LPD)	Sewerage Discharge Peak Flow (m3/sec)	Size of pipe in (mm)	Gradient in (m)	Velocity (m/sec)	Carrying capacity of pipe (m3/sec)	Length in Mtr	Fall + Extra Fall in line due to slope (m)	Ground Level				Formation Level				Invert Level				Depth	
			Self	Branch	Total													8	9	10	11	12	13	14	15	16	17	18	19	20	21
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28				
1	A	B	Plotted Resl.	22	0	22	396.00	68310	0	68310	54648	0.0019	200	225	0.76	0.012	70	0.31	223.00	222.97	223.12	222.05	221.92	221.61	1.20	0.44	0.82				
2	B1	B	--do--	11	0	11	198.00	34155	0	34155	27324	0.0009	200	225	0.76	0.012	60	0.27	222.98	222.97	223.15	223.05	222.15	221.88	1.00	1.17	1.09				
3	B	C	--do--	2	33	35	630.00	108675	12500	121175	96940	0.0034	200	225	0.76	0.012	40	0.18	222.97	222.92	223.05	223.05	221.61	221.43	1.44	1.62	1.53				
4	C1	C	--do--	20	0	20	360.00	62100	0	62100	49680	0.0017	200	225	0.76	0.012	70	0.31	222.97	222.92	223.05	223.05	222.05	221.74	1.00	1.31	1.16				
5	C	D	--do--	6	55	61	1098.00	189405	12500	201905	161524	0.0056	200	225	0.76	0.012	40	0.18	222.92	222.86	222.85	222.95	221.43	221.25	1.42	1.70	1.56				
6	D1	D	--do--	20	0	20	360.00	62100	12285	74385	59508	0.0021	200	225	0.76	0.012	82	0.36	222.70	222.86	222.95	222.95	221.85	221.49	1.10	1.46	1.28				
7	D	E	--do--	7	81	88	1584.00	273240	24785	298025	238420	0.0083	250	305	0.76	0.019	58	0.19	222.86	222.70	222.80	222.85	221.22	221.03	1.58	1.82	1.70				
8	E1	E	--do--	15	0	15	270.00	46575	0	46575	37260	0.0013	200	225	0.76	0.012	55	0.24	222.60	222.70	222.85	222.85	221.80	221.56	1.05	1.29	1.17				
9	E	STP	--do--	6	103	109	1962.00	338445	34785	373230	298584	0.0103	250	305	0.76	0.019	46	0.15	222.70	222.86	222.95	222.95	221.03	220.88	1.92	2.07	1.99				
10	STP	Main Sewer Line	150mm i/d D.I. Pipe (by pumping from STP)															140	0.50	222.86	222.20	223.80	222.50	220.95	220.45	2.85	2.05	2.45			

SUBHEAD : SEWERAGE SCHEME - DESIGN CALCULATION

DESIGN CALCULATION OF STORM WATER DRAINAGE SCHEME

INTENSITY OF RAIN FALL = 0.005 MTR /HR

IMPERMEABILITY FACTOR = 0.5

5. No.	Name of Node	Area (Self)	Area (Self)	Branch Area	Total Area	Total Area	Rain fall mm /hr.	Discharge @ 17.36 LPS/Hector	length	Pipe dia	Slope	Velocity	Cap. Of drain	Fail + Extra	Ground Level	Formation level	Invert level	Depth of M.H's	Average Depth	Remarks					
	From	To	IN SQM	In Acre	In Acre	In Acre	In Hecter	IN LPS	In Mtr	In mm	In Mtr	IN m/sec	IN LPS	In Mtr	Start	End	Start	End	Start	End	Start	End			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1	A	B	2680	0.66	0	0.66	0.27	6.00	4.69	75	400	570	0.76	98.57	0.13	222.98	222.97	223.15	223.05	221.15	221.02	2.00	2.03	2.02	RWH-1
2	B1	B	3200	0.79	0	0.79	0.32	6.00	5.56	62	400	570	0.76	98.57	0.11	223.00	222.97	223.12	223.05	222.12	222.01	1.00	1.04	1.02	
3	B	C	520	0.13	1.45	1.58	0.64	6.00	11.11	40	400	570	0.76	98.57	0.07	222.97	222.92	223.05	223.00	221.02	220.95	2.03	2.05	2.04	RWH-12
4	C1	C	2800	0.69	0	0.69	0.28	6.00	4.86	75	400	570	0.76	98.57	0.13	222.97	222.92	223.05	223.00	222.05	221.92	1.00	1.08	1.04	
5	C	D	1260	0.31	2.27	2.58	1.04	6.00	18.05	40	400	570	0.76	98.57	0.07	222.92	222.86	223.00	222.95	220.95	220.88	2.05	2.07	2.06	RWH-3
6	D2	D1	1225	0.30	0	0.30	0.12	6.00	2.08	45	400	570	0.76	98.57	0.08	222.86	222.70	222.95	222.85	221.95	221.87	1.00	0.98	0.99	
7	D3	D1	2280	0.56	0	0.56	0.23	6.00	3.99	50	400	570	0.76	98.57	0.09	222.60	222.70	222.80	222.85	221.80	221.71	1.00	1.14	1.07	
8	D1	D	1765	0.44	0.86	1.30	0.52	6.00	9.20	65	400	570	0.76	98.57	0.11	222.70	222.86	222.85	222.95	221.71	221.60	1.14	1.35	1.24	RWH-4
9	D	Govt. SMD	4688	1.16	3.88	5.04	2.04	6.00	35.41	120	400	570	0.76	98.57	0.21	222.86	222.25	222.95	222.45	220.88	220.67	2.07	1.78	1.93	RWH-5

sector level and accordingly make provisions. The said area has been earmarked on the enclosed layout plan.

VIII. That the licensee shall transfer the part of licensed land falling under sector road/green belt free of cost to the Govt. or the local authority, as the case may be, in accordance with the provisions of Section 3(3) (a) (iii) of the Haryana Development and Regulation of Urban Areas Act, 1975.

IX. That the licensee understands that the development/construction cost of 30 m/24 m/18 m major internal roads is not included in the EDC rates and they shall pay the proportionate cost for acquisition of land, if any, alongwith the construction cost of 30 m/24 m/18 m wide major internal roads as and when finalized and demanded by the Department.

X. That the licensee shall obtain NOC/Clearance as per provisions of notification dated 14.09.2006 issued by Ministry of Environment & Forest, Govt. of India, if applicable before execution of development works at site.

XI. That the licensee shall make arrangements for water supply, sewerage, drainage etc to the satisfaction of DGTCP till these services are made available from External Infrastructure to be laid by Haryana Shehri Vikas Pardhikaran or any other execution agency.

XII. That the licensee shall pay the differential amount if there will be any change in the said rates from the original calculation required to be deposited as and when demanded by the Department as the EDC have been charged on the basis of EDC Indexation Mechanism Policy dated 11.02.2016.

XIII. That the licensee shall obtain clearance from competent authority, if required under Punjab Land Preservation Land Act, 1900 and any other clearance required under any other law.

XIV. That the rain water harvesting system shall be provided as per Central Ground Water Authority Norms/Haryana Govt notification as applicable.

XV. That the provision of solar water heating system shall be as per guidelines of Haryana Renewable Energy Development Agency and shall be made operational where applicable before applying for an Occupation Certificate.

XVI. That the licensee shall use only LED fitting for internal lighting as well as campus lighting.

XVII. That the licensee shall convey the 'Ultimate Power Load Requirement' of the project to the concerned power utility, with a copy to the Director, within two months period from the date of license to enable provision of site in licensed land for Transformers/Switching Stations/Electric Sub Stations as per the norms prescribed by the power utility in the zoning plan of the project.

XVIII. That it will be made clear at the time of booking of plots/commercial space that specified rates include or do not include EDC. In case of not inclusion of EDC in the booking rates, then it may be specified that same are to be charged separately as per rate fixed by the Govt. You shall also provide detail of calculation of EDC per Sqm/per Sft to the allottees while raising such demand from the plot owners.

XIX. That the licensee shall keep pace of development at-least in accordance with sale agreement executed with the buyers of the plots as and when scheme is launched.

- XX. That the licensee shall arrange power connection from UHBVNLD/HBVNL for electrification of the colony and shall install the electricity distribution infrastructure as per the peak load requirement of the colony for which licensee shall get the electrical (distribution) service plan/cstimates approved from the agency responsible for installation of external electric services i.e. UHBVNLD/HBVNL and complete the same before obtaining completion certificate for the colony.
- XXI. That the licensee shall complete the project within seven years (5+2 years) from date of grant of license.
- XXII. That the licensee will pay the labour cess as per policy instructions issued by Haryana Government.
- XXIII. That the licensee shall submit compliance of Rule 24, 26, 27 & 28 of Rules 1976 & Section 5 of Haryana Development and Regulation of Urban Areas Act, 1975, and shall inform account number and full particulars of the scheduled bank wherein licensee have to deposit thirty per centum of the amount received from the plot holders for meeting the cost of internal Development Works in the colony.
- XXIV. That the licensee shall permit the Director or any other officer authorized by him to inspect the execution of the layout and the development in the works in the colony and to carry out all directions issued by him for ensuring due compliance of the execution of the layout and development works in accordance with the license granted.
- XXV. That the licensee shall follow the provisions of the Real Estate (Regulations and Development) Act, 2016 and Rules framed there under shall be followed by the applicant in letter and spirit.
- XXVI. To execute the development works as per Environmental Clearance and comply with the provisions of Environment Protection Act, 1986, Air (Prevention and Control of Pollution of Act, 1981) and Water (Prevention and Control of Pollution of 1974). In case of any violation of the provisions of said statutes, you shall be liable for penal action by Haryana State Pollution Control Board or any other Authority Administering the said Acts.
- XXVII. That licensee shall obey all the directions/restrictions imposed by the Department from time to time in public interest.
- XXVIII. That no clubbing of residential plots for approval of integrated zoning plan of two adjoining plots under same ownership shall be permitted.
- XXIX. That the owner/developer shall integrate the bank account in which 70 percent allottee receipts are credited under Section-4(2)(I)(D) of the Real Estate Regulation and Development Act, 2016 with the online application/payment gateway of the Department, in such manner, so as to ensure that 10% of the total receipt from each payment made by an allottee is automatically deducted and gets credited to the EDC head in the State treasury.
- XXX. That such 10% of the total receipt from each payment made by the allottee, which is received by the Department shall get automatically credited, on the date of receipt in the Government treasury against EDC dues.
- XXXI. That such 10% deduction shall continue to operate till the total EDC dues get recovered from the owner/developer.

XXXII. The implementation of such mechanism shall, however, have no bearing on EDC instalment schedule conveyed to the owner/developer. The owner/developer shall continue to supplement such automatic EDC deductions with payments from its own funds to ensure that by the EDC instalments that are due for payment get paid as per the prescribed schedule.

XXXIII. That licensee shall abide by the provisions of the Zonal Master Plan prepared for the Eco-Sensitive Zone of the Sultanpur National Park as well as MOEF, Govt. of India notification dated 27.01.2010.

3. That licensee shall submit the addendum collaboration agreement with specific clause regarding the responsibility for compliance of term and conditions of Act No. 8 of 1975 and Rules thereof within 30 days of grant of license.

4. The licence is valid up to 17/10/2027

Dated: 18/10/2022
Place: Chandigarh

(T.L. Satyaprakash, IAS)
Director General,
Town & Country Planning
Haryana, Chandigarh

Endst. No. LC-3717-B-JE (SJ)-2022/ 31643 Dated: 18-10-2022

A copy along with a copy of schedule of land is forwarded to the following for information and necessary action: -

1. Dharam Singh, Ravinder Singh, Jitender Singh S/o Jai Narayan and Kalyan Singh S/o Suresh Kumar in collaboration with JMS Buildwell Realty Pvt. Ltd. Plot No. 2380-SN, Sector-46, Gurugram and LG-IV, Bilateral agreement.
2. Chairman, Pollution Control Board, Haryana, Sector-6, Panchkula.
3. Chief Administrator, HSVP, Panchkula.
4. Chief Administrator, Housing Board, Panchkula alongwith copy of agreement.
5. Managing Director, HVPN, Planning Directorate, Shakti Bhawan, Sector-6, Panchkula.
6. Joint Director, Environment Haryana - Cum-Secretary, SEAC, Paryavaran Bhawan, Sector -2, Panchkula.
7. Director Urban Estates, Haryana, Panchkula.
8. Administrator, HSVP, Gurugram.
9. Chief Engineer, HSVP, Gurugram.
10. Superintendenting Engineer, HSVP, Gurugram along with a copy of agreement.
11. Land Acquisition Officer, Gurugram.
12. Senior Town Planner, Gurugram.
13. Senior Town Planner (Enforcement), Haryana, Chandigarh.
14. District Town Planner, Gurugram along with a copy of agreement & Layout Plan.
15. Chief Accounts Officer (Monitoring) O/o DGTCP, Haryana.
16. PM (IT) for updation on the website.

(Narender Kumar)
District Town Planner (HQ)
For Director General, Town & Country Planning,
Haryana, Chandigarh

39
 535
 18/10/2022
 To be read with License No 166 dated 18/10/2022

Detail of land owned by Dharam Singh – Ravinder Singh-Jitender Singh
 Ss/o Jai Narayan and Kalyan Singh S/o Suresh Kumar Equal Share.

Village	Rect No	Killa No	Area	(K-M-S)
Wazirpur	49	8/2	2-16-0	
		9/2	4-0-0	
		10/2 Min	0-15-0	
		11/2 Min	5-12-3	
		12	8-0-0	
		13	8-0-0	
		18	7-17-0	
		19/1	3-7-0	
		Total	40-7-3	
OR 5.0458 Acres				

Director General
 Town & Country Planning
 Haryana, Chandigarh

FINAL DEVELOPMENT PLAN FOR CONTROLLED AREAS
DENOTED ON DRG.NO.-D.T.P.(G)1936 DATED 16.04.2010
UNDER SECTION 5 (7) OF ACT NO. 41 OF 1963

