

Ll-4436

**SERVICE ESTIMATE, DESIGN REPORT AND
CALCULATION OF
INTERNAL DEVELOPMENT WORKS**

FOR

**PROPOSED "COMMERCIAL PLOTTED COLONY OVER
AN AREA MEASURING 2.10625 ACRES" (LICENSE
NO.206 OF 2022 DATED 14.12.2022) IN THE REVENUE
ESTATE OF VILLAGE NURPUR JHARSA, IN SECTOR -
69, GURUGRAM – MANESAR URBAN COMPLEX BEING
DEVELOPED BY M/S DIVYA BUILDCON PVT. LTD.**

SERVICE ESTIMATE, DESIGN REPORT AND CALCULATIONS OF INTERNAL DEVELOPMENT WORKS FOR PROPOSED "COMMERCIAL PLOTTED COLONY OVER AN AREA MEASURING 2.10625ACRES" (LICENSE NO. 206 OF 2022 DATED 14.12.2022) IN THE REVENUE ESTATE OF VILLAGE NURPUR JHARSA, IN SECTOR - 69, GURUGRAM – MANESAR URBAN COMPLEX BEING DEVELOPED BY M/S DIVYA BUILDCON PVT. LTD.

REPORT :-

Gurugram town of Haryana State situated on N.H. -48 road at a distance of 35 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 - Manesar Urban Complex. The layout plan was approved vide DTCP Haryana Chandigarh Drg. No. DGTCP-8847 dated 15.12.2022. This report is for a part of service estimate for proposed "commercial plotted colony" area measuring 2.10625 acres" (License No.206 of 2022 Dated 14.12.2022) in the Revenue Estate of Village Nurpur Jharsa, in Sector – 69, Gurugram – Manesar urban complex being developed by M/s DIVYA BUILDCON 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 HSVP/GMDA Mains. It has been proposed to construct underground tanks of capacity as per attached details and the location for domestic purpose and for fire protection. The underground tanks will be fed from the HSVP/GMDA based supply, which will feed O.H. tanks on the roof of the SCO's and has been designed as per the Hazen Williams formula. Presently there is HSVP/GMDA W/S in this area. However the provision of tube well has been taken in this estimate due to non-availability of water but after getting the approval from the competent authority through tube well / tankers / any other approved source till HSVP/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.

DESIGN

The scheme has been designed for population of 2233 persons, considering 1 person per 3 sqm area for ground floor and 1 person per 6 sqm for first floor for plotted commercial colony and considering @ 10% for shopkeeper @ 45 LPCD and @ 90% for visitors @ 15 LPCD and office area 1 person per 10 sqm for 2nd & 3rd floor and considering @ 90% for official @ 45 LPCD and @ 10% for visitors @ 15 LPCD and other requirement etc. as per design calculations.

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/GMDA sewer 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 pipes with required number of manholes for disposal of storm water, which will be connected to the HSVP/GMDA drain. The intensity of rain fall has been taken as ^{12.50}6.00mm (1/4") per hour. A minimum size of 400mm i/d R.C.C 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 have been provided to above areas and estimate is prepared as revised specifications adopted by HSVP/GMDA.

5. STREET LIGHTING AND ELECTRIFICATION

Provision for external lighting of proposed area has been made.

6. HORTICULTURE

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

7. FIRE FIGHTING

As per N.B.C, fire tanks and required capacity pumps have been taken in the estimate and marked on the plan.

8. SPECIFICATIONS

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

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. ^{529.30}419.95 Lacs including 3% contingencies and 49% departmental charges + price as calculation and cost per acre comes out to Rs. ^{251.30}199.39 Lacs.

For DIVYA BUILDCON PVT. LTD.

(Authorized Signatory)

Director/Auth. Signatory

DESIGN CALCULATION

Total Area of Plot (Commercial)	=	2.10625 Acres Or
		8523.70 Sqm
Permissible Ground Coverage @ 35%	=	2983.29 Sqm
Permissible FAR @ 150%	=	12785.55 Sqm
Proposed Ground coverage	=	2982.65 Sqm
Area Under Public Utility	=	1 Nos.
Proposed FAR Achieved	=	12765.75 Sqm
Nos. Of S.C.O.'s	=	39 Nos.

I) WATER REQUIREMENT**A). Ground + First Floor**

1 Area on Ground Floor (Shopping Area) S.C.O.'s	=	2982.65 Sqm
Occupancy @ 3m ² / person	=	995 Persons
2 Shopping area on First floors	=	2982.65 Sqm
Occupancy @ 6 m ² /person	=	498 Persons
Total occupancy	=	1493 Person
Water Requirement @ 10% shopkeeper		
=150 nos. @ 45 LPCD	=	6750 LPD
Water Requirement @ 90% visitors		
=1343 nos. @ 15 LPCD	=	20145 LPD
Total	=	26895 LPD.....(A)

B. 2nd Floor & 4th Floor (Office Area)

i) Office Area (Remaining area 12765.75 – 5965.30)	=	6800.45 Sqm
Occupancy @ 10 m ² / Person	=	680 Persons
Water Requirement @ 90% official = 612 Persons		
@ 45 LPCD	=	27540 LPD
Water Requirement @ 10% visitors = 68 Nos		
@ 15 LPCD	=	1020 LPD
Total	=	28560 LPD.....(B)

C) For Public Utility Services L.S.

= 5000.00 LPD.....(C)

D) MTC. STAFF + GUARD ETC.

Considering water requirement for mtc. Staff + Guard etc. L.S.

Water Requirement @ 45 LPCD

= 60 Persons
= 2700 LPD(D)

Total Water Requirement (A+B+C+D)

= 63155.00 LPD
OR 64.00 KLD Say 70 KLD

II) FIRE DEMAND

- (i) For UGT i.e. Population
(p) $\frac{1}{2} \times 100/1000 = (2.233) \frac{1}{2} \times 100 \times 1/3$
(Considering 1/3 of total)
Add. 15 % extra for marginal factor

= 2233 Persons

= 49.81 KLD

= 7.47 KLD

Total = 57.28 KLD Say 100.00 KLD

III) Garden Irrigation Requirement (For Total Area)	= 20.00 KLD
IV. Total Water Requirement (Excluding Fire Demand)	= 70.00 KLD
Hence Domestic Water Requirement (67%)	= 70 x 67% = 47.00 KLD
Hence Flushing Water Requirement (33%)	= 70 x 33% = 23.00 KLD
Day Requirement @ 60%	= 29.00 K.L. for Domestic Say 30.00 K.L. = 14.00 K.L. for Flushing Say 20.00 K.L.

But it is proposed to construct an underground tank capacity 30 K.L. in two compartment for domestic use, 20 K.L. for non-potable water in two compartment (at STP) and 100 K.L. for fire fighting purposes for UGT in two compartment as shown location in the plan with UGT.

Total Capacity of UGT	= 30 + 100	= 130.00 KLD
Total storage capacity of S.T.P. (20 + 20)	= 40.00 KLD	40.0

V. Tube Well	For UGT
a) Yield	= 15 K.L. / Hr.
b) Working Hour per day	= 16 Hr. / Per Day
c) Total water demand	= 47 M3/Day
d) Number of tube well required (Water Demand / Discharge / Hr. working Per day)	= 0.196
e) Add 5% extra	= 0.009
Total	= 0.205 Nos
Say	= 1 Nos

(Water to the proposed development is to be supplied by HSVP/GMDA. However, it is proposed to install only one no. tube wells 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 competent authority..

I) Pumping Machinery for Tube wells	
a) Gross Working Head	= 80 Mtr
b) Average fall in S.L	= 2 Mtr
c) Depression Head	= 6 Mtr
d) Friction loss in main	= 10 Mtr
Total	= 98 Mtr
e) Discharge	= 15000 LPH (Or 4.17 LPS Say 4.50 LPS)
f) Horse Power	
HP = (4.50 x 98) / (75 x 0.60)	= 9.80 H.P.
Say	= 10.00 H.P.

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

II) Boosting Machinery for domestic water For UGT	
Total Water Requirement	= 47.00 KLD
Pumping per hour @ 8 hr. pumping / day	= 47 / 8 KL / hr.
	= 5.875 KL / hr.
	= 97.92 lpm = 1.63 lps
	Say 3.00 lps

Gross working head	For UGT
Suction lift	= 7.00 mts.
- Frictional loss in mains & specials	= 6.00 mts.
- Clear Head required	= 35.00 mts.
Total	= 48.00 mts.
Say	= 48.00 mts.
Pump HP	= $(3.00 \times 48) / (75 \times 0.60)$
	= 3.20 H.P.
	Say = 5.00 HP

It is proposed to provide 2 No. of pumping set of 3.00 lps discharge at 48 mts Head each (1W + 1SB) for UGT

III) Boosting Machinery for flushing water at STP

Total Water Requirement	= 23 K.L.D
Pumping per hour @ 8 hr. pumping / day	= 23 / 8 KL / hr.
	= 2.875 KL / hr.
	= 47.91 lpm = 0.80 lps,
	Say 1 No. 2.00 lps each

Gross working head	
- Suction lift	= 7.00 mts.
- Frictional loss in mains & specials	= 6.00 mts.
- Clear Head required	= 35.00 mts.
Total	= 48.00 mts.
Say	= 48.00 mts.
Pump HP	= $(2.00 \times 48) / (75 \times 0.60)$
	= 2.13 HP
	Say = 3.00 HP

It is proposed to provide 2 No. of pumping set of 2.00 lps discharge at 48 mts Head each (1W + 1S)

IV) Boosting Machinery for Irrigation water

Total Water Requirement	= 20 KLD
Pumping per hour @ 5 hr. pumping / day	= 20 / 5 KL / hr.
	= 4.00 KL / hr.
	= 66.66 lpm = 1.11 lps
	Say = 2.00 LPS

Gross working head	
- Suction lift	= 3.00 mts.
- Frictional loss in mains & specials	= 3.00 mts.
- Clear Head required	= 25.00 mts.
Total	= 31.00 mts.
Say	= 31.00 mts.
Pump HP	= $(2.00 \times 31) / (75 \times 0.60)$

= 1.38 HP

Say = 2.00 HP

It is proposed to provide 2 No. of pumping set of 2.00 lps discharge at 31 mts Head each (1W + 1S)

V) DG Set for pumping**DG Set Requirement**

Submersible Pump (1 x 10)	= 10.00 HP
Domestic Pump (1 x 5.00)	= 5.00 HP
For External Electrification	= 15.00 HP
Total pump load	= 30.00 HP
	= 30.00 x 0.746 x 1.50
	= 33.57 K.W
Total DG capacity	= 1 No. 40 KVA

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

For STP (DG set) = Flushing + Irrigation = 3+2+5 = 10 HP
 = 10 x 0.746 x 1.50 = 11.19 KVA or ^(Elect.) 15 KVA

VI) FLOW TO SEWAGE TREATMENT PLANT

Total Water Requirement = 47 KLD for domestic & 23 KLD for flushing

- i) 80% of total Domestic Water Demand = 80% of 47 KLD = 37.60 KLD
 ii) 80% of total Flushing Water Demand = 80% of 23 KLD = 18.40 KLD

Total = 56.00 KLD

Considering 5% marginal factor = 2.80 KLD

G. Total = 58.80 KLD

Say 60 KLD

Proposed STP Capacity = 60 KLD Or 0.06 MLD

For DIVYA BUILDCON PVT. LTD.


Director/Auth. Signatory

(Authorized Signatory)

FINAL ABSTRACT OF COST

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SR. NO.	SUB WORK	DESCRIPTION	AMOUNT (Rs. In Lacs)
1	SUB WORK NO. I	WATER SUPPLY SCHEME	133.09 88.63
2	SUB WORK NO. II	SEWERAGE SCHEME	35.49 35.25
3	SUB WORK NO. III	STORM WATER DRAINAGE	53.30 41.02
4	SUB WORK NO. IV	ROAD NETWORK	151.60 116.47
5	SUB WORK NO. V	STREET LIGHTING	8.09 ✓
6	SUB WORK NO. VI	HORTICULTURE (PLANTATION & ROAD SIDE TREES)	3.82 3.04
7	SUB WORK NO. VII	MTC. OF SERVICES & RESURFACING OF ROADS	143.90 127.45
		TOTAL	529.29 Lacs 419.95
			Say Rs 529.30 lacs

Cost Per Acre = Rs. 529.30 / 2.10625 = Rs. 251.36
 For DIVYA BUILDCON PVT. LTD.

AUTHORISED SIGNATORY
 Director/Auth. Signatory

R. D. Nayak
 Superintending Engineer,
 HSVP Circle, Gurugram

[Signature]
 Executive Engineer
 HSVP Division No. V,
 Gurugram

Checked subject to Comments
 In forwarding letter No. 230641
 Dt. 26/10/2023 and notes
 attached with the estimate

[Signature]
 Director
 Town & Country Planning
 Haryana, Chandigarh

Executive Engineer (M)
 for Chief Engineer-I
 HSVP, Panchkula

SUB WORK NO. 1 (Abstract of cost)

WATER SUPPLY

SR. NO.	SUB WORK	DESCRIPTION	AMOUNT (Rs. In Lacs)
1	Sub Head No. 01	Head Works	40.35 19.30
2	Sub Head No. 02	Pumping Machinery	19.25 11.60
3	Sub Head No. 03	Rising Main from Plant Room <i>Dom. & Flushing Lin</i>	21.36 21.25
4	Sub Head No. 04	External Fire Hydrants	3.60 ✓
5	Sub Head No. 05	Irrigation	2.00 2.16
		TOTAL	57.75 86.72
		Add 3% contingencies & P.H. Services	1.73 2.60
		TOTAL	59.48 89.32
		Add 49% Departmental Charges + Price escalation	29.15 43.77
		TOTAL	88.629
		Say in Lacs	88.63 133.09

SUB WORK NO. 1

Sub Head No. 01

WATER SUPPLY
HEAD Works

Sr. NO.	Description	Amount in Rs.
1	a) Construction of U.G. tanks and Fire Tank Including pipes, valve & Specials. i) UGT 130 KLD @ Rs. 4500/- per K.L.D <i>130KLD incl. 100KLD for</i>	630000.00 <i>7.15 lacs</i>
	b) Construction of storage tank at STP = 40 KLD @ Rs. 4500/- per KLD	180000.00 <i>2.20</i>
2	Provision for construction of Boosting Station 1 Nos @ Rs. 250000/- each <i>(L.S.)</i>	250000.00 <i>4.00 lacs</i>
3	Boring and installing tube well reverse rotary rig complete with pipes and strainer to a depth of about 98 Mtr complete in all respect. 1 Nos @ Rs. 700000/- each	700000.00 <i>15.0</i>
4	Provision for construction of tube well chamber size 1.50m x 1.50m complete in all respect. 1 Nos @ Rs. 100000/- each <i>T.W. Housing</i>	100000.00
5	Provision for carriage of material and unforeseen items L.S.	50000.00
6	Provision of special for tube well and rising main to U.G.T. L.S. <i>-boundary wall around T.W. & water works (L.S.)</i>	2.00 <i>50000.00</i>
7.	<i>Prov. for footpath, Hedges lawn at T.W. (L.S.)</i>	<i>1.00 lacs</i>
8.	<i>Prov. for staff chn for mtc. staff (L.S.)</i>	<i>7.50 lacs</i>
	TOTAL	1930000.00
	Say in Lacs	19.30 <i>40.35 lacs</i>

(C/O To Abstract of cost for Sub Work No.1)

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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 3.00 lps at 48 mts head - 2 No. (1W+1SB) - @ Rs. 180,000/- each Set (5.00HP)	160000.00 2.00
2	Providing and installing Hydro Pneumatic pumping set of following capacities for Flushing water supply 2.00 lps at 48 mts head - 2 No. (1W+1SB) @ Rs. 50,000/- 1 Set (3.00 HP each)	100000.00 1.20 lacs
3	Providing and installing Submersible pump for tube wells with specials 4.50 lps at 98 mts head - 1 Nos (1W) @ Rs. 1,00,000/- 1 Set (10HP each)	100000.00 2
4	Providing and installing Hydro Penumatic pumping set of following capacities for irrigation drainage 2.00 - lps at 31 mts head 2 Nos (1W + 1SB) @ Rs. 15,000/- (2.0 HP)	30000.00 0.80
5	Provision for D.G. Set for stand by arrangement for all machinery (40+15) = 1 No. 55 KVA @ Rs. 10,000/- per kVA (L.S.)	550000.00 8.25 lacs
6	Provision for making foundations & erection of pumping machinery	50000.00
7	Provision for pipes, valve & specials inside boosting chamber	50000.00
8	Provision for electric services connection including electric fittings for boosting chambers and pump chamber etc. and cost of Transformer	100000.00
9	Provision for carriage of materials and other unforeseen items L.S.	20000.00
	TOTAL	1160000.00
	Say in Lacs	11.60

(C/O To Abstract of cost for Sub Work No.1)

19.25 lacs

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SUB WORK NO. 1

Sub Head No. 03

WATER SUPPLY

Rising main upto Plant Room, Domestic & Flushing Water Supply

Sr. NO.	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. Pipe 1074 Mtr @ Rs. 1460/- Per Mtr	1568040.00
2	Providing and fixing sluice valve including cost of surface box and masonry chamber etc. complete in all respect	
i)	100mm i/d 12 No. @ Rs. 11000/- each	1.44 lacs 132000.00
3	Providing and fixing indicating plates for sluice valve 12 No. @ Rs. 2000/-	24000.00
4	Provision for carriage of materials and other unforeseen items	50000.00
5	Provision for making ^{w/s} connection with Govt. Pipe etc. (L.S)	300000.00
6	Provision for cutting the road and making good the same (L.S)	50000.00
7.	Prov. and fixing air valve and scour valve or scour Taps incl. cost of brick masonry chamber (L.S)	1.00 2124040.00
	TOTAL Say in Lacs	21.25

(C/O To Abstract of cost for Sub Work No.1)

21.36 lacs

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SUB WORK NO. 1

Sub Head No. 04

WATER SUPPLY
Fire Rising Main

Sr. NO.	Description	Amount in Rs.
1	Providing, Laying, jointing and testing Heavy Class M.S. Pipes for fire rising main including cost of fittings, valves, connection etc. complete in all respect	
a)	100mm dia - 72M @ Rs. 1460/- Per Mtr	105120.00
2	Providing and fixing fire Hydrant with accessories 12 No. @ Rs. 15000/- each	180000.00
3	Provision for carriage of materials (Lump sum)	25000.00
4	Providing and fixing indicating plate -12 No. @ Rs. 2000/- each	24000.00
5	Provision of road cutting and making its condition as original - L.S.	25000.00
	TOTAL	359120.00
	Say in Lacs	3.60 lacs

(C/O To Abstract of cost for Sub Work No.1)

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SUB WORK NO. 1

Sub Head No. 05

WATER SUPPLY

Irrigation

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	
	i) 25mm i/d 120 M @ Rs. 300/- Per Mtr	0.36 lacs
2	Providing and fixing 20mm dia, Irrigation hydrant valve complete in all respect 20 No. @ Rs. 3000/- each	60000.00
		60000.00
2	Provision for indicating plates with boxes etc.	1.00 lacs
	20 Nos. @ Rs 2000/- Each	
3	Provision for carriage of materials and other unforeseen items (Lump sum)	40000.00
		20000.00
4	Provision for road cutting and making as original condition L.S.	20000.00
		2.16 lacs
	TOTAL	200000.00
	Say in Lacs	2.00

(C/O To Abstract of cost for Sub Work No.1)

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SUB WORK NO. II

SEWERAGE SCHEME

Sr. NO.	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 Pipe 200mm i/d avg. depths 0 - 2.00M 159 M @ Rs. 1700/- per Mtr	270300.00
	b) SW Pipe 250mm i/d avg depth 2.00 M 122 M @ Rs. 2000/- per Mtr	244000.00
	c) SW Pipe 300mm i/d avg depth 3.00 M 5 M @ Rs. 2400/- per Mtr	7200.00 0.14 lacs
2	Providing, laying, jointing & testing pipe lines including cost of excavation etc. complete in all respect - 150mm dia Heavy Class DI pipes (overflow for STP)	
	a) 150MM i/d D.I. Pipe - 120 M @ Rs. 2040/- Per Mtr	244800.00
3	Provision of lighting and watching etc.	30000.00
4	Provision for cartage of material & cutting of roads etc.	150000.00
5	Provision for making connection with Govt. sewer line	250000.00
6	Prov. & fixing vent shaft at suitable places as per P.H. Res.	
7	Provision for STP 60 KLD (Tertiary Treatment Level with recycling storage). Complete in all respect. @ Rs. 20,000/- per KLD	1200000.00 9.60 lacs
	TOTAL	2296300.00 23.13 lacs
	Add 3% contingencies & P.H. Services	68889 0.69
	TOTAL	2365189 23.82
	Add 49% Departmental Charges + Price escalation	1158943 11.67
	TOTAL	3524132 35.49 lacs
	Say in Lacs	35.25

(C/O to Final Abstract of cost)

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SUB WORK NO. III

STORM WATER SCHEME

Sr. NO.	Description	Amount in Rs.
1	Providing, lowering, laying, jointing RCC pipe class Np3 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 pipe 400mm i/d = 509 M @ Rs. 2500/- Per Mtr	1272500.00
2	Provision for road gulley & with pipe ^{300mm} connection L.S.	200000.00
3	Provision for lighting and watching L.S.	50000.00
4	Provision for timbering and shoring L.S.	20000.00
5	Provision for cartage of material L.S.	150000.00
6	Provision for making connection with Govt. storm water drain L.S.	250000.00
7	Providing rain water harvesting arrangement for 03 No. pits @ Rs. 350000/- each	1050000.00
8.	Pro. for Temporary disposal arrangement till HSRP comm. on Ponds (65)	5.00 lacs
	TOTAL	2672500.00
	Add 3% contingencies & P.H. Services	80175.00
	TOTAL	2752675.00
	Add 49% Departmental Charges + Price escalation	1348810.75
	TOTAL	4101485.75
	Say in Lacs	41.02

(C/O to Final Abstract of cost)

53.30
65

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Sub Work No. 4

ROAD WORKS

S. No.	Description	Unit	Qty	Rate (In Rs.)	Amount (In Rs.)
1	Provision for leveling & earth filling as per site conditions	Per Acre	2.10625	100000 1.75 lacs	210625 3.69
2	i) Providing and laying 100mm thick PCC under pavement, cement concrete of specified grade 1:4:8 and 150mm thick RMC grade M-40 ii) Providing and laying Bituminous road (250mm GSB, 300mm WMM, 50mm DBM, 40mm BC).	Sqm	5180	1200	6216000 77.70 lacs
3	Provision for kerbs & channels of C.C. 1:2:4	Metre	1000 mh	600	600000
4	Provision for making approach and pavement to building, provision for C.C pavement	Sqm	L.S.		150000
5	Interlocking tile 80mm thick for surface of pavement etc.	Sqm	390	1800	3.40 lacs 312000
6	Provision for parking arrangement, guide map and indicating board etc.	LS			1,50000
7	Provision for carriage of material	LS		(LS)	2,50000
8	Prov. for parking arrangement	LS			2.0 lacs
	Sub Total				7588625
	Add 3% contingencies & PH Services				227659
	Sub Total				7816284
	Add 49% Departmental Charges				3829979
	Total				11646263
	Say Rs. In Lacs				116.47
					151.60 lacs

(C.O. to Final abstract of cost)

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Sub Work No. 5

STREET LIGHTING

S. No.	Description	Unit	Qty	Rate (In Rs.)	Amount (In Rs.)
1	Providing lighting at surrounding area s per standard specifications of HVPN	Acre	2.1063	250000	526562.5
	Add 3% contingencies & PH Services				15797
	Total				542359
	Add 49% Departmental Charges				265756
	Total				808115
	Say Rs. In Lacs				Rs. 8.09 Lacs

(C.O. to Final abstract of cost)

Sub Work No. 6

HORTICULTURE

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				
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 500 Sqm (Appx) Or 0.12 Acres (Considering for part area L.S.)	Acre	0.12	150000	18000
2	Providing and planting trees along boundary @12 m interval (Length appx 1000M) = $1000/12 = 84$ Nos Say No. of trees = 100 Nos Cost details : Excavation = Rs. 100-60.0 Manure = Rs. 100 Tree Plant = Rs. 100 150.0 Tree Guard = Rs. 1500-2000.0 Total = Rs. 1800-2310				
		Each	100	2310	2.31 lacs
	Sub Total			1800	180000
	Add 3% contingencies & PH Services				198000 2.49 lacs
	Sub Total				5940 0.07 lacs
	Add 49% Departmental Charges				203940 2.56 lacs
	Total				99931 1.26 lacs
	Say Rs. In Lacs				3.04 3.82 lacs
	(C.O. to Final abstract of cost)				

Sub Work No. 7

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 4.15625 acres @ Rs. 5.00 lacs per acre	Acre	2.1063	500000	1053125 16.85 lacs
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	5180	600 660/-	3108000 34.19 lacs
3	2nd phase after next five years of 2nd phase (50mm DBM & 30mm BC or as per crust design whichever is safer)	Sqm	5180	800 825/-	4144000 42.73 lacs
	Sub Total				8305125
	Add 3% contingencies & PH Services				249154
	Sub Total				8554279
	Add 49% Departmental Charges				4191597
	Total				12745875
	Say Rs. In Lacs				127.45
	(C.O. to Final abstract of cost)				

93.77

2.81

96.58

47.32

143.90

105

SUMMARY OF DESIGN REQUIREMENT

S. No.	Description	Qty	Unit
1	Total Population	2233	Persons
2	Total Water Requirement (Domestic)	47	KLD
3	Total Water Requirement (Flushing)	23	KLD
4	Total Water Requirement (Horticulture)	20	KLD
5	U. G Tank (Domestic + Fire) 40+ 100 KL = 140 KL	1	No.
6	No. of Domestic WS pumps UGT	1 + 1	Set
7	No. of Flushing pumps	1 + 1	Set
8	No. of submersible pumps	1	No.
9	Generating sets (40 KVA + 15 KVA = 55 KVA)	1	55 KVA
10	S.T.P. (60 KLD)	1	No.

TOTAL MATERIAL STATEMENT FOR WATER SUPPLY i.e. DOMESTIC, FLUSHING & RISING MAIN ETC. 22

S. No.	Description	Size of pipe upto valve in 100mm	Size of pipe upto valve in 150mm	Size of pipe upto valve in 200mm
1	Domestic	480 M	0	-
2	Flushing	419 M	0	-
3	Rising Main (T.W + H.S.P)	175 M	-	-
	Total	1074 M	0	-

MATERIAL STATEMENT OF WATER SUPPLY SCHEME (DOMESTIC)

22

S. No.	Line Designation		Size of Pipe Provided	Length of Pipe (Mtr)	Length in Mtr		
	From	To			100MM	150MM	200MM
1	UGT	A	100	7	7		-
2	A	B	100	10	10		-
3	B	C	100	122	122		-
4	C	D	100	86	86		-
5	A	E	100	55	55		-
6	E	F	100	72	72		-
7	F	D	100	48	48		-
8	E	D	100	80	80		-
	Total			480	480		-

Total for 100mm i/d D.I. Pipe Length 480 Mtr
Total 480 Mtr

24

[illegible]

419 Mtr
= 419 Mtr

25

MATERIAL STATEMENT FOR BOREWELL RISING MAINS AND Govt. MAIN

S. No.	Name of Line		Size of Pipe Provided	Length of Pipe (Mtr)	Length in Mtr	
	From	To			150mm	100mm
1	T.W.	UGT	100	15	0	15
2	Govt. Line	UGT	100	160	0	160
	Total			175	0	175

MATERIAL STATEMENT FOR SEWERAGE SCHEME

S. No.	Line No.		Length (In Mtr)	Pipe Dia	Length in Mtr		
	From	To			200mm i/d	250mm i/d	300mm i.d
1	A	B	45	200	45		
2	B	C	72	250		72	
3	C2	C1	60	200	60		
4	C3	C1	54	200	54		
5	C1	C1	50	250		50	
6	C	S.T.P.	3	300			3
7	STP	Govt line (BY Pumping) 150mm i/d D.I. PIPE=120 mtr				-	-
	Total		284		159	122	3

200mm i/d Pipe Length

159 Mtr

250mm i/d Pipe Length

122 Mtr

300mm i/d Pipe Length

3 Mtr

150mm i/d D.I. PIPE (BY PLUMBING) =

120 Mtr

say 5 mtr

MATERIAL STATEMENT OF STORM WATER DRAINAGE SCHEME

27

Sr. No.	Line Reference		400mm i/d RCC Np3 Pipe
			Length in Mtr
	From	To	
1	A	B	60
2	B	C	58
3	C	D	50
4	D1	D	45
5	D	E	21
6	E1	E	62
7	E	F	50
8	F1	F	138
9	F	Govt. S.W.D.	25
	Total Length		509

Total Length 400mm i/d RCC Np3 pipe = 509 Mtr
 TOTAL RAIN WATER HARVESTING (RWH)= 3 No.

Material Statement of Road Works

28

i) 6.00 Mtr wide Road

a) Road / Parking

a) Road No.-1=115.00 x 6.00 M =	690.00 Sqm.
b) Road No. -2 = 46.0 x 6.00 M =	276.00 Sqm.
c) Road No. -3 = 68.0 x 6.00 M =	408.00 Sqm.
d) Road No. -4 = 55.0 x 6.00 M =	330.00 Sqm.
e) Road No. -5 = 69.0 x 6.00 M =	414.00 Sqm.

b) Parking Area

a) Parking No. -i = 105.0 x 17.50 M =	1837.50 Sqm.
b) Parking No. -ii = $\frac{10.80+21.30}{2} \times 17.00$ M =	272.85 Sqm.
c) Parking No. -iii = $\frac{10.80 \times 17.00}{2}$ M =	39.96 Sqm.
d) Parking No. -iv = $\frac{14.0 \times 17.00}{2}$ M =	119.00 Sqm.
e) Parking No. -v = $\frac{7.10+4.90}{2} \times 12.80$ M =	76.80 Sqm.
f) Parking No. -vi = 11.40 x 11.00 M =	125.40 Sqm.
g) Parking No. -vii = $\frac{5.0 \times 6.20}{2}$ M =	15.50 Sqm.
h) Parking No. -viii = 27.00 x 12.00 M =	324.00 Sqm.
Total	4929.01 Sqm.
Add. 5% extra for Curves	246.45 Sqm.
Total	5175.46 Sqm.
Say	5180.00 Sqm.

ii) Kerbs & Channels

a) 6.00 m wide road = 2 X 353 m =	706.00 Sqm. mtr
b) Parking = 96 + 53 + 22 + 27+11+12+16 =	237.00 Sqm. mtr
Total	943.00 Sqm. mtr
Add. 5% extra for Curves	47.15 Sqm. mtr
Total	990.15 Sqm. mtr
Say	1000.00 Sqm. mtr.

iii) Pavement :-

i) Pavement - (a) = 96.25 x 1.0 M =	96.25	Sqm.
ii) Pavement - (b) = 96.25 x 1.0 M =	96.25	Sqm.
iii) Pavement - (c) = 14.50 x 4.0 M =	58.00	Sqm.
iv) Pavement - (d) = 16.50 x 1.0 M =	16.50	
v) Pavement - (e) = 53.00 x 1.0 M =	53.00	
vi) Pavement - (f) = 23.00 x 1.0 M =	23.00	
vii) Pavement - (g) = 12.00 x 2.0 M =	24.00	
Total	367.00	Sqm.
Add. 5% extra for Curves	18.35	Sqm.
Total	385.35	Sqm.
Say	390.00	Sqm.

MATERIAL STATEMENT FOR EXTERNAL FIRE FIGHTING

29

Total length of water supply line (Domestic) = 480 M

Fire hydrant Considering @ 30M c/c each (480/40) = 12 Nos.

For 100mm dia with Fire Hydrant = 12 Nos

For 100mm dia pipe = 12 x 6.00 = 72.00 Mtr

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

HYDRAULIC STATEMENT OF IRRIGATION WATER SUPPLY

S. No.	Line Reference	Population	Peak Flow in LPH	Velocity (m/s)	Size of the pipe required (in mm)	Size of the Pipe Recommended (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	20000	-	-	25.00	25	-	-	180	-	-	-

Note :- 20 Nos connections are to be done from flushing water supply line i.e. 20 Nos x 6 Mtr/each = 120 Mtr for 25mm i/d

31

31

SUB HEAD : FLUSHING WATER SUPPLY SCHEME - DESIGN CALCULATION

HYDRAULIC STATEMENT OF WATER SUPPLY (FLUSHING)

S. No.	Line Reference	Population	Total water requirement in LPD (as per 10.30 LPCD)	Peak flow in LPH	Velocity (m/sec)	Size of pipe required (in M)	Size of pipe recommended (in mm)	Total friction loss in (m/m)	Length in Mtr	Loss of head in line (M)	Formation level	Available head (M)	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	STP -a	2233	23000	8625	0.27	80	100	0.002	3	0.01	228.10	276.14	Finishing G.L. at STP = 228.15
2	a - b	1002	10321	3870	0.20	80	100	0.001	12	0.01	228.10	276.13	Boosting Head = 48.00
3	b - c	1002	10321	3870	0.20	80	100	0.001	112	0.11	227.90	276.02	Flushing Hydraulic head at STP = 276.15 M
4	c - d	0	0	0	0.16	80	100	0.001	81	0.08	227.90	275.94	
5	a - e	1231	12679	4754	0.20	80	100	0.001	50	0.05	228.00	276.09	
6	e - f	452	4656	1745	0.16	80	100	0.001	66	0.07	227.95	276.02	
7	f - d	0	0	0	0.16	80	100	0.001	38	0.04	227.90	275.98	
8	e - d	567	5840	2190	0.16	80	100	0.001	57	0.06	227.90	276.03	

DESIGN STATEMENT OF SEWERAGE SCHEME

150mm i/d D.I. PIPE (BY PUMPING)

35


FORM LC -V
(See Rule 12)
HARYANA GOVERNMENT
TOWN AND COUNTRY PLANNING DEPARTMENT

Licence No. 206 of 2022

This License has been granted under the Haryana Development and Regulation of Urban Areas Act, 1975 & the Rules 1976, made thereunder to Divya Buildcon Pvt. Ltd. H-334, Ground Floor, New Rajinder Nagar, New Delhi-110060 for setting up of Commercial Plotted Colony for an area measuring 2.10625 acres in Sector-69, Gurugram Manesar Urban Complex.

1. The License is granted subject to the following conditions:

- a) That Commercial Plotted Colony will be laid out in accordance with the approved layout plan.
- b) That the licensee shall deposit an amount of Rs. 1,27,85,991 /- (@Rs. 1000 per sqm for commercial component) against Infrastructural Development Charges in two equal installments. First within 60 days from issuance of license and second within six months be paid online at www.tcpharyana.gov.in. In failure of which, an interest @ 18% per annum for delay period shall be charged.
- c) That conditions of the agreements already executed are duly fulfilled and the provisions of the Haryana Development and Regulation of Urban Areas Act, 1975 and the Rules 1976 made there under are duly complied with.
- d) That you shall submit the additional bank guarantee, if any required at the time of approval of Service Plans/Estimate. With an increase in the cost of construction and increase in the number of facilities in building Plan, you would be required to furnish an additional bank guarantee within 30 days on demand. It is made clear that bank guarantee of Internal Development Works/EDC has been worked out on the interim rates.
- e) That area coming under the sector roads and restricted belt / green belt, if any, which forms part of licensed area and in lieu of which benefit to the extent permissible as per policy towards FAR is being granted, shall be transferred free of cost to the Govt.
- f) That you shall construct portion of service road, internal circulation roads, forming the part of site area at your own cost and shall transfer the land falling within alignment of same free of cost to the Govt. u/s 3(3) (a) (iii) of the Haryana Development and Regulation of Urban Areas Act, 1975.
- g) That you have understood that the development/construction cost of 24 m/30 m major internal roads is not included in the EDC rates and you shall pay the proportionate cost for acquisition of land, if any, along with the construction cost of 24 m wide major internal roads as and when finalized and demanded by the Department.

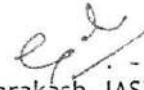

Director General
Town & Country Planning
Haryana, Chandigarh

- h) That you shall arrange electric connection from HVPNL/DHBVNL for electrification of your colony and shall install the electricity distribution infrastructure as per the peak load requirement of the colony for which you shall get the electrical (distribution) service plan/estimates approved from the agency responsible for installation of external electric services i.e. HVPNL/DHBVNL Haryana and complete the same before obtaining completion certificate for the colony.
- i) That you shall make arrangements for water supply, sewerage, drainage etc. to the satisfaction of DTCP till these services are made available from External Infrastructure to be laid by HSVP or any other Govt. Agency.
- j) That you shall submit no objection certificate/approval, as required under notification dated 14.09.2006 issued by Ministry of Environment and Forest, Govt. of India before executing development works at site, in this office.
- k) That you shall maintain and upkeep all roads, open spaces and public health services for a period of five years from the date of issue of the completion certificate unless earlier relieved of this responsibility and thereupon to transfer all such roads, open spaces and public health services free of cost to the Govt. or the local authority, as the case may be in accordable with the provisions of Section 3(3)(a)(iii) of the Haryana Development and Regulation of Urban Areas Rules, 1976.
- l) That you shall pay the labour cess charges as per Policy dated 04.05.2010.
- m) That you shall provide the rain water harvesting system as per Central Ground Water Authority Norms/Haryana Govt. notification as applicable.
- n) That you shall make the provision of solar water heating system as per HAREDA guidelines and shall be made operational where applicable before applying for an Occupation Certificate.
- o) That you shall use only LED fittings for internal lighting as well as for campus lighting.
- p) That you shall submit compliance of Rule 24, 26, 27 & 28 of Rules 1976 & Section 5 of the Haryana Development and Regulation of Urban Areas Act, 1975, and shall inform account number and full particulars of the scheduled Bank wherein you have to deposit thirty percentum of the amount from the shop buyers for meeting the cost of Internal Development Works in the colony.
- q) That you shall provide the details of calculations per Sqm/per sq ft, to the allottees while raising demand from the commercial space owners in case at the time of booking of the commercial space the IDC/EDC rates were not included and are to be charged separately as per rates fixed by Government.

- r) That you shall keep pace of the construction atleast in accordance with sale agreement executed with the buyers as and when scheme is launched.
- s) That you shall not give any advertisement for sale of commercial area before the approval of layout plan.
- t) That you have understood that provision of External Development Facilities may take long time by HSVP, the licensee shall not claim any damages against the Department for loss occurred, if any.
- u) That you shall specify the detail of calculations per Sqm/per sq ft, which is being demanded from the allottees on account of IDC/EDC, if being charged separately as per rates fixed by Govt.
- v) That no pre-launch/sale of commercial site will be undertaken before approval of the layout plans.
- w) That developer company, i.e. Divya Buildcon Pvt. Ltd. shall be responsible for compliance of all terms and conditions of license/provisions of the Act of 1975 and Rules 1976 till the grant of Final Completion Certificate to the colony or relieved of the responsibility by the Director, Town & Country Planning, Haryana whichever is earlier.
- x) That you shall permit the Director or any other officer authorized by him to inspect the execution of the layout and the development 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.
- y) That you shall obey all the directions/restrictions imposed by the Department from time to time in public interest.
- z) That you shall execute the development works as per Environmental Clearance and comply with the provisions of Environment Protection Act, 1986, Air (Prevention and Control of Pollution) Act, 1981 and Water (Prevention and Control of Pollution) Act, 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.
- aa) That you shall integrate your bank account in which 70% allottee receipts are credited under Section-4(2)(l)(D) of the Real Estate Regulation and Development Act, 2016 with the on-line application/payment gateway of the Department, in such manner, so as to ensure that 10% of the total receipts from each payment made by an allottee is automatically deducted and gets credited to the EDC head in the State treasury.
- bb) Such 10% of the total receipts from each payment made by an allottee, which is received by the Department, shall get automatically credited, on the date of receipt in Government treasury against EDC dues of the concerned license of the colonizer.

- cc) Such 10% deduction shall continue to operate till the total EDC dues get recovered from the colonizer against the said license.
- dd) The implementation of such mechanism shall, however, have no bearing on the EDC installment schedule conveyed to you. You shall continue to supplement such automatic EDC deductions with payments from its own funds to ensure that the EDC installments that are due for payment get paid as per prescribed schedule.
- ee) That you shall take prior permission from the Divisional Forest Officer, Gurugram regarding cutting of any tree in their applied site.
- ff) That you shall not create any third party rights on the mortgaged land measuring 0.2125 acres falling under Killa no. 1/7/3 min (0-17) and 14/1 min (0-17) of revenue estate Nurpur Jharsa till the same is de-mortgaged.
2. The license is valid up to 13/12/2027.


Dated: 14/12/2022.
Place:


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

Endst. No. LC-4436/JE (DS)/2022/ 37763 Dated: 15-12-2022

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

1. Divya Buildcon Pvt. Ltd. H-334, Ground Floor, New Rajinder Nagar, New Delhi-110060 Alongwith copy of LC-IV & Bilateral Agreement and Layout Plan.
2. Chairman, Pollution Control Board, Haryana, Sector-6, Panchkula.
3. Chief Administrator, HSVP, Panchkula.
4. Managing Director, HVPNL, Planning Directorate, Shakti Bhawan, Sector-6, Panchkula.
5. Joint Director, Environment Haryana-Cum-Secretary, SEAC, Paryavaran Bhawan, Sector -2, Panchkula.
6. Director, Urban Estates, Haryana, Panchkula.
7. Administrator, HSVP, Panchkula.
8. Chief Engineer, HSVP, Panchkula.
9. Superintending Engineer, HSVP, Gurugram along with a copy of agreement.
10. Land Acquisition Officer, Gurugram.
11. Senior Town Planner, Gurugram along with a copy of Layout Plan.
12. Senior Town Planner (Enforcement), Haryana, Chandigarh.
13. District Town Planner, Gurugram along with a copy of agreement & Layout Plan.
14. Chief Accounts Officer (Monitoring) O/o DGTCP, Haryana.
15. Accounts Officer, O/o DGTCP along with a copy of agreement.


(R.S. Batth)
District Town Planner (HQ)
For: Director General, Town & Country Planning
Haryana Chandigarh


To be read with License no. 206 Dated 14/12 of 2022

Detail of land owned by Divya Buildcon Pvt. Ltd.

Village	Rect. No.	Killa No.	Area (K-M)
Nurpur Jharsa	1	7/3min South	3-0
		13	5-12
		14/1	6-0
		18/2/1min	2-5
		Total	16-17

Or 2.10625 Acres

Note: - Killa no. 1/7/3min (0-17) and 14/1min (0-17) Total 1K-14M or 0.2125 acre is under mortgage.


Director General
Town & Country Planning
Haryana, Chandigarh
Jaspreet Singh