

REVISED

Service Plan estimate of

**PLAN OF GROUP HOUSING
SCHEME AREA MEASURING
13.32 ACRE**

**AT
SECTOR-99, GURGAON MANESAR URBAN
COMPLEX, HARYANA**

**SERVICE PLAN ESTIMATE
FOR
PUBLIC HEALTH ENGINEERING SERVICES**

Client

M/s SHIVNANDAN BUILDTECH PVT. LTD

Architect

ICHINEN ARCHITECTS PVT. LTD.
107, US Complex, Opposite Apollo Hospital,
Mathura Road, New Delhi 110076

Plumbing & Fire Suppression Consultant

PARADISE CONSULTANTS
Plot No. 96, Pocket-1, Jasola Vihar, New Delhi -110025

PROJECT REPORT / ESTIMATES FOR PROVIDING INTERNAL SERVICES e.g. WATER SUPPLY, FIRE, SEWERAGE & STORM WATER DRAINAGE ETC. IN RESPECT OF Revised & Proposed Building Plan Of Group Housing Colony Area Measuring 13.32 Acre at sector - 99 Gurgaon Manesar Urban Complex, Haryana

Gurgaon is located at 28°28'N 77°02'E/28.47°N 77.03°E/28.47; 77.03. It has an average elevation of 220 metres (721 ft). Gurgaon district, comprising four blocks Pataudi, Sohna, Gurgaon and Farukhnagar, was created on 15 August, 1979. On its north, it is bounded by the district of Rohtak and the Union Territory of Delhi. Faridabad district lies to its east. On its south, the district shares boundaries with the district of Mewat. To its west lies the district of Rewari and the State of Rajasthan. Gurgaon is situated between the Himalayas and Aravalis mountain ranges. It is surrounded on three sides by Haryana and to the east, across the river Yamuna by Uttar Pradesh. Its greatest length is around 13 miles and the greatest breadth is 17 miles. Delhi's altitude ranges between 180 to 305 meters above sea level.

Service plan estimate
Revised & Proposed Building Plan Of Group Housing Colony Area Measuring 13.32 Acre is a residential proposed between at sector - 99 Gurgaon Manesar Urban Complex, Haryana for development by M/s SHIVNANDAN BUILDTech PVT. LTD.

Water Supply

1 Source

The source of water supply shall be HUDA water supply connection. It has been proposed to construct underground tanks of capacity as per attached detailed for domestic and other purpose. The underground tanks will be filled up from the riser and then pumped to the overhead water tanks of each tower.

2 Pumping Equipments

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

3 Sewerage

This scheme is designed for sewer connecting to the proposed sewage treatment. The sewerage system has been marked on the respective plans.

The sewer lines have been designed for 3 times average DWR in relation to the water supply demand assuming that 80% of the domestic water supply shall find its way into the proposed sewer SW pipe sewers have been proposed designed to run half full. The sewers have been designed on 0.75 mtr. per second velocity i.e. Self cleansing velocity. Necessary provisions for laying SW pipes manholes etc. has been made in this estimate.

Necessary design statement for entire sewerage system has been prepared and attached with estimate.

For Shivnandan Buildtech Pvt. Ltd.

18/Jan
**ARCHITECT
RAJESH JAIN
CA/91/13678**

[Signature]
Director

4 Storm Water Drainage

The storm water drain is being designed to carry 6.25 mm rain fall per hour. Also suitable provisions are contemplated in our scheme to ensure better recharging of under ground water table in the area. RCC NP₃ pipe drain with minimum 400 mm dia is proposed in this area.

5 Roads

Cost of road has been taken in the estimate

6 Street Lighting

Provision for street lighting on surrounding area has been made.

7 Horticulture

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

8 Specifications :

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

9 Rates

Estimates for providing services in this site has been prepared on the recent HUDA rates.

10 Cost

The total cost of development in this Project including various PH & B & R services works out to Rs. ~~201.83~~ ^{141.65} lacs which includes 3% contingency and PE charges and 49% departmental charges also.

The cost per gross acre for this phase works out to Rs. ~~15.21~~ ^{105.58} Lacs/acre which covers the provision of services like water supply, sewerage, storm water drainage, roads, street lighting and plantations including plantations maintenance thereof as well as future expansion whatsoever indicated.

M/s SHIVNANDAN BUILDTech PVT. LTD

Authorised Signatory



18/11/20
**ARCHITECT
RAJESH JAIN
CA/91/13678**

For Shivanandan Buildtech Pvt. Ltd.

Director

**REVISED & PROPOSED BUILDING PLAN OF GROUP HOUSING SCHEME AREA MEASURING
13.32 ACRE AT SECTOR-99, GURGAON MANESAR URBAN COMPLEX, HARYANA**

DESIGN CALCULATION

1 Daily Domestic Water Requirement

Nos. of Blocks

Apartment 680

EWS 124

Service Personnel 68

Population @ 5 person per unit - Apartment 5

Population @ 5 person per unit - EWS 5

Population @ 2 person per unit - Service Personnel 2

Therefore population (Apartment) 3400 persons

Therefore population (EWS) 620 persons

Therefore population (Maintenance Personnel) 136 persons

Total Population 4156 persons

SAY 4156 persons

Water requirement for apartment @ 172.5 liter / head / day

716910.00 lpd

or 716.91 KLD (1)

2 Other Requirement

a.) Nursery School 1 @ 10000 lit/day
Therefore daily water requirement 10000 lit/day
10.00 KLD

b.) No. of Community Center 1 @ 25000 lit/day
Daily water requirement lumpsum 25000 lit/day
Therefore daily water requirement 25.00 KLD

c.) No. of Commercial 1 Lumpsum 5000 lit/day
Daily water requirement lumpsum 5000 lit/day
Therefore daily water requirement 5.00 KLD

Total 40.00 KLD (3)

3	Total Daily Water Requirement (1+2)		756.91 KLD
i)	Domestic Water Requirement @	65%	491.99 KLD
		Say	500.00 KLD
ii)	Flushing Water Requirement @	35%	264.92 KLD
		Say	270.00 KLD
4	Water usage from STP		
a)	Area under Parks	4.81 acre	
	Daily water requirement	@	25000 lit/acre/day
			120215.55 lit/day
			120.22 KLD
b)	Area under Roads		
	Daily water requirement	Lumpsum	25000 lit/acre/day
			25000 lit/day
			25.00 KLD
c)	Under Road+ Parks (a+b)	Total	145.22 KLD
		Say	150.00 KLD
d)	Total treated water requirement [3 (ii) + c]		420.00 KLD
	Total Daily Requirement [3 (i) + 4d]		920.00 KLD
		SAY	920.00 KLD

For Shivnandan Buldtech Pvt. Ltd.

18/Jan
ARCHITECT
RAJESH JAIN
CA/92/13678


Director

5 Underground Tank

Daily fresh water requirement for domestic use	=	500.00 KL
Capacity of under ground tank		
24 hours storage	$500.00 \times 24 / 24$	= 500.00 KL
Fire Tank Capacity As/NBC Code 100 kld. But Proposed	=	375.00 KL
Total		875 KL

It is proposed to provide under ground tank of capacity 875 KL which also includes 375 KL capacity for fire fighting.

This tank will have Six compartments, two for fire, two for raw and the other two for domestic use. The water first enters the fire compartment, then over flows to the raw use compartment so that the water in the fire compartment shall remain fresh.

FIRE WATER TANK	375.00 KL
TOTAL UG STORAGE (DOMESTIC + FLUSHING + HORTICULTURE)	920.00 KL
RAW WATER TANK	200.00 KL
DOMESTIC WATER TANK	300.00 KL
FLUSHING, HORTICULTURE & ROAD WASHING (PART OF STP)	420.00 KL

For Shivnandan Buildtech Pvt. Ltd.

(P) Jain
ARCHITECT
RAJESH JAIN
 CA/92/13678

(Signature)
 Director

DOMESTIC WATER PUMPS - LOCATED IN PUMP ROOM

Domestic Water Transfer Pumps

i) For Towers, EWS, Community Building, Shopping & N. School

Daily requirement for domestic use = 491.99 KL

Assuming 6 hours running 4 pumps (with one standby)

Discharge/hour = 491.99 / 6 / 4 = 20.50 KL/HR

Head of pump = 34.65 (pm say 35.06 pm)

i) Suction lifts = 0.0 m

ii) Friction loss in M<main & specials = 5.0 m

iii) Residual head = 5.0 m

iv) Clear head = 59.0 m

$\frac{350 \times 70}{60 \times 75 \times 0.60} = 9.07 \text{ m}$
= 69.0 m

BHP of motor = 20.50 x 1000 x 69 / 4500 x 60 x 0.60 = 8.7 HP

SAY = 10.0 HP



7 PUMPS FOR FIRE PROTECTION

Pump Description	Location	Nos.	Discharge	Head	HP
i) Diesel Driven Pump	Pump Room	2	2850	105.00	-
ii) Hydrant Pump	Pump Room	2	2850	105.00	120
iii) Sprinkler Pump	Pump Room	2	2850	105.00	120
iv) Jockey Pump	Pump Room	4	180	105.00	15
v) Water Curtain Pump	Pump Room	1	2850	45.00	40

Capacity of Gen Set Nos. HP

Domestic Water Transfer Pumps for Towers 4 + 4 10.0 = 80 HP

Fire Pump (Jockey) 4 15.0 = 60 HP

Lighting = 25 HP

165 125 HP

or 165
125 x 0.746 x 1.50

Say

184.63
180.00 KVA

140.00 KVA

Requirement of 140 KVA capacity will be added in to the main D.G. set to provide standby supply.

18/1/24

**ARCHITECT
RAJESH JAIN
CA/91/13678**

For Shivanandan Buildtech Pvt. Ltd.

(Signature)
Director

Estimate for Providing in internal Development works for Housing for
M/s SHIVNANDAN BUILDTech PVT. LTD

Description	Amount (Lacs.)
	381.34
Sub Work - I Water Supply	381.34
	155.78
Sub Work - II Sewerage	155.78
	109.21
Sub Work - III Storm Water Drainage	109.21
	289.73
Sub Work - IV Roads & Footpath	289.73
	51.11
Sub Work - V Street Lighting	51.11
	15.04
Sub Work - VI - Horticulture	15.04
	409.52
Sub Work - VII - Maintenance of Services for 10 years including resurfacing of roads after 1st 5 years & II phase i.e. 10 years of maintenance (as per HUDA norms)	409.52

Total 1411.64

~~ROADS EIGHT MORE FIFTY ONE ACRE NINETEEN THOUSAND ONLY~~

M/s SHIVNANDAN BUILDTech PVT. LTD

Cost per Acre - 985.01

Rs-73.95 Per Acre
13.32 Acre 105.98 lacs

Checked subject to comments
in forwarding letter No.
Dt..... and notes
attached with the estimate

Authorized Signatory

Superintending Engineer (HQ)
for Chief Engineer HSVP
Bachkula

For Shivnandan Buildtech Pvt. Ltd.

ARCHITECT
RAJESH JAIN
CA/92/13678



Director

Director
Town and Country Planning,
Haryana, Chandigarh

Superintending Engineer
HUDA Circle No. I,
Gurgaon

Executive Engineer
HSVP Division No.V
Gurugram

Addl. Chief Engineer
HSVP, Gurugram

FINAL ABSTRACT OF REVISED COST of Sub Head (Water Supply)	
Description	Amount (Lacs.)
Sub Head - (I) Head Works	45.13
Sub Head - (II) Pumping Machinery	97.50
Sub Head - (III) Distribution System, Flushing water, Rising main	43.75
Sub Head - (IV) Irrigation Scheme	18.62
Sub Head - (V) Fire Scheme	43.48
	248.48
Total	248.48
Add 3% Contingencies & P.E. charges	7.45
	255.93
Total	255.93
Add 49% Departmental Charges, price escalation unforseen, return	125.41
Grand Total	381.34
(CO to final abstract of cost)	Say 381.34

ARCHITECT
RAJESH JAIN
CA/91/13678

For Shivnandan Buildtech Pvt. Ltd.

Director

Sub Work I					Water Supply
Sub Head No. I					Head Works
S. No.	Description	Unit	Qty	Rate	Amount
					Rs. (lacs)
1	Construction of boosting chambers of suitable size along with under ground tank and pumping machinery room and generating set etc. complete in all respects.				
	Details of boosting station				
i)	construction of boosting chamber	LS	-	3500	7.50
ii)	UG tank capacity inclusive fire fighting, complete in all respects (500 KL + 375 KL)	KL	875	3500	30.63
4	Provision for carriage of material and other unforeseen items.	LS	-	-	2.00
5	Provision for facilities staff for Maintenance	LS	-	-	5.00
	(C.O. to abstract of cost of Sub-work No.I)				40.75 Lacs
				Say	45.13 Lacs

For Shivanandan Buildtech Pvt. Ltd.

Director

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CA/91/13678

Sub Work I			Water Supply		
Sub Head No. II			Pumping Machinery		
S. No.	Description	Unit	Qty	Rate	Amount (In Lakhs)
1	Providing & installing electricity driven pumping set capable of delivering 350 LPM of water against a total head of 9.25m complete with motor and other accessories (For Domestic - 10.0 HP)		4+1	1.00 lacs	5.00 lacs
1A	do - 300 LPM, 7.0 m head	Nos.	5	126000.00	6.25
	loss for pumping water	No.	4+1	@ 1.00 lacs	5.00 lacs
2	Provision for diesel engine generator set each for standby Arrangements for booster pump complete with gear head arrangements of following capacities.			(L.S)	15.00 lacs
	1 No. - 900 KVA	Nos.	1	1400000.00	14.00
3	Providing & installing pumping set of following capacities for fire protection:				
i)	2850 LPM @ 105 M Head (DG Pump)	Nos.	2	950000.00	19.00
ii)	2850 LPM @ 105 M Head (120 HP) Hydrant	Nos.	2	7.50 lacs 600000.00	15.00
iii)	2850 LPM @ 105 M Head (120 HP) Sprinkler	Nos.	2	7.50 lacs 600000.00	15.00
iv)	180 LPM @ 105 M Head (15 HP)	Nos.	4	125000.00	5.00
v)	2850 LPM @ 40 M Head (40 HP) Water Curtain	Nos.	1	350000.00	3.50
4	Provision for making foundations & erection of pumping machinery.	LS	-	-	5.00 4.00
5	Provision for pipes, valves & specials inside the pump chamber.	LS	-	-	5.00 1.60
6	Provision for carriage for materials and other unforeseen items.	LS	-	-	2.50 lacs 0.75
7	Provision for electric service connection (C.O. to abstract of cost of Sub-work No.I)				2.50 lacs 75.00
	for boosting chamber incl. cost of transformer			Say	75.00
					97.50 lacs

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For Shivrindan Bulidtech Pvt. Ltd.

Director

Sub Work I				Water Supply	
Sub Head No. III				Distribution System/Rising Main	
S. No.	Description	Unit	Qty	Rate	Amount (Rs.)
1	Providing, laying, jointing & testing C.I./D.I. pipes including cost of excavation complete as per ISI marked.			1250/-	11.76 la
i)	100 mm dia	M	941	1550.00	1458550.00
ii)	150 mm dia	M	188	1060.00	201280.00
2	Providing, fixing & Testing butter fly valves including cost of complete in all respects.			1575/-	2.96 la
i)	100 mm i/d	Nos.	1	12000.00	12000.00
ii)	150 mm i/d	Nos.	2	15000.00	30000.00
3	Providing, fixing & Testing Non Return valves (NRV) including cost of complete in all respects.				
i)	150 mm i/d	Nos.	1	18000.00	18000.00
4	Providing and fixing air valves and scour valves including cost of complete in all respects.	Nos.	3	10000.00	30000.00
5	Providing and fixing indicating plates for sluice valve, air valve etc.	Nos.	7	1000.00	7000.00
6	Provision for carriage of material	LS	-	-	150000.00
7	Provision for cutting the roads and making to its original conditions.	LS	-	-	150000.00
8	Making water supply connection with HUDA main - lin	LS	-	-	1.00 la 250000.00
9	Provision for D.I. rising main from HUDA water supply line & tubewells to UG tank.		258	1575/-	4.06 la
i)	150 mm i/d	M	202	1950.00	402400.00
10	Per for 150/100 mm & Flushing line (C.O. to abstract of cost of Sub-work No.I)				20.00 la 292400.00
				Say	29.25 la 843.75 la

18/Jan
ARCHITECT
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CA/91/13678

For Shivnandani Buildtech Pvt. Ltd.

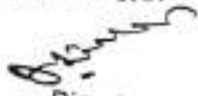
Dom. Water Supply Line

Line No	100 mm	150 mm
UGT. D ₁	—	90 m
D ₁ - D ₂	—	16 m
D ₂ - D ₃	—	9 m
D ₃ - D ₄	—	29 m
D ₄ - D ₅	—	44 m
D ₅ - D ₆	37 m	—
D ₆ - D ₇	47 m	—
D ₇ - D ₈	46 m	—
D ₈ - D ₉	48 m	—
D ₉ - D ₁₀	73 m	—
D ₁₀ - D ₁₁	15 m	—
D ₁₁ - D ₁₂	16 m	—
D ₁₂ - D ₁₃	41 m	—
D ₁₃ - D ₁₄	39 m	—
D ₁₄ - D ₁₅	38 m	—
D ₁₂ - W.S.	125 m	—
D ₆ - W.S.	60 m	—
D ₃ - Comm center	50 m	—
D ₁₃ - Shopping	35 m	—
	669 m	188 m
misc	272 m	
	941 m	

Sub Work I				Water Supply	
Sub Head No. IV				Irrigation	
S. No.	Description	Unit	Qty	Rate	Amount (Rs.)
1	Providing, laying, jointing & testing uPVC pipe line confirming to IS 4985 including cost of Excavation etc. complete in all respect.				15.66 lacs
i)	80 mm dia	M	1566	1000.00	1566000.00
2	Providing and fixing 20mm dia Irrigation hydrant valve complete in all respect.	Nos.	54	3500/ 4200.00	1.89 lacs 84800.00
3	Providing & fixing valve 25mm dia	Nos.	54	400.00	21600.00
4	Providing, fixing & Testing butter fly valves including cost of complete in all respects.				
i)	80 mm l/d	Nos.	5	4750.00	23750.00
5	Providing and fixing air valves and scour valves including cost of complete in all respects.	Nos.	2	4500.00	9000.00
6	Providing and fixing indicating plates for sluice valve, air valve etc.	Nos.	7	1000.00	0.07 lacs 6000.00
7	Provision for carriage of materials etc. and other unforeseen charges	LS	-	-	15000.00
8	Provision for cutting of roads & making good to its in original condition	LS	-	-	30000.00
				Total	18.62 lacs 1422600.00
				Say	18.23 Lacs


 ARCHITECT
 RAJESH JAIN
 GA/91/13678

For Shrivandan Builders Pvt. Ltd.


 Director

Sub Work I					
Sub Head No. V					Fire Scheme
S. No.	Description	Unit	Qty	Rate	Amount (Rs.)
1	Providing, laying, jointing & testing M.S. pipes for fire ring main including cost of Fittings, Valves & excavation complete (as per ISI marked) in all respect.			1575/-	24.70 lakhs
a)	150 mm dia	M	1568	2000.00	3136000.00
b)	80 mm dia	M	525	1000.00	525000.00
2	Providing and fixing External Fire Hydrants complete with masonry chambers.	Nos.	35	15000.00	525000.00
3	Providing, fixing & Testing butter fly valves including cost of complete in all respects.				
a)	150 mm dia	Nos.	6	15000.00	90000.00
b)	80 mm dia	Nos.	35	10000.00	350000.00
4	Providing, fixing & Testing Non Return valves (NRV) including cost of complete in all respects.			7500/-	2.63 lakhs
i)	80 mm i/d	Nos.	35	6000.00	175000.00
5	Provision for cutting of roads and carriage of materials etc. and other unforeseen charges	LS	-	-	40000.00
6	Provision for indication plates	Nos.	35	1000.00	35000.00
7	Provision for carriage of material	LS	-	-	50000.00
			Total		43.48 lakhs
					4348000.00
			Say		43.48 Lakhs

For Shivnandan Bulldtech Pvt. Ltd.

18/12/24
ARCHITECT
RAJESH JAIN
CA/91/13678

Director

Sub Work II		Sewerage Scheme			
S. No.	Description	Unit	Qty	Rate	Amount (Rs.)
1	Providing, lowering, jointing, cutting salt glazed stone ware pipes and specials into trenches including cost of excavation, bed concrete lot of manholes complete.				
i)	250 mm i/d		183		2.29
a)	Average depth 1.5 m to 4.5 m	M	180	1250.00	172500.00
ii)	250 mm i/d				5.18 lac
a)	Average depth 1.5 m to 4.5 m	M	288	1800.00	475200.00
iii)	300 mm i/d				3.48
a)	Average depth 1.5 m to 4.5 m	M	158	2050.00	323900.00
iv)	400 mm dia i/d				4.56 lac
a)	Average depth 1.5 m to 4.5 m	M	189	2450.00	449550.00
2	Provision for lighting, watching and temporary diversion of traffic	LS	-	-	2.50 lac 100000.00
3	Provision for cutting of roads and carriage of materials etc. and other unforeseen charges	LS	-	-	100000.00
4	Provision for connection with HUDA on master	LS	-	-	100000.00
5	Cost of 610 Kid Sewerage Treatment Plant. up to	LS	-	-	76.50 lac 6500000.00
6	Provision for CI / DI pipe 150 mm dia pipe from STP. To Huda Main Line.	LS	-	-	500000.00
				Total	101.51 lac 8685650.00
Add 3% contingencies & PE charges					3.04 lac 200569.50
				Total	104.55 lac 8946219.50
Add 49% Deptt. Charges					51.23 lac 4333547.80
				Total	155.78 lac 13320857.30
(C.O. to abstract of cost of Sub-work No. 1)				Say	133.30 Lac

ARCHITECT
RAJESH JAIN
CA/91/13678

For Shivnandan Buildtech Pvt. Ltd.

Director

S.W. PIPELINE No250 mm300 mm400 mm

S1-S2

108 m

—

—

S2-S3

—

158 m

—

S3-S4

—

—

164 m

S5-S6

138 m

—

—

S6-S7

180 m

—

—

S7-STP

—

—

5 m

N.S. to S1

45 m

—

—

471 m158 m169 m

Sub Work - III		Storm Water Drain			
S. No.	Description	Unit	Qty	Rate	Amount (Rs.)
1	Providing, lowering, jointing, cutting RCC NP ₃ pipes and specials into trenches including cost of excavation cost of manholes, ventilating chambers etc. complete in all respects.				
i)	400 mm i/d			2500	24.90 lacs
a)	Average depth 1.5 m to 4.5 m	M	996	2450.00	2440200.00
ii)	500 mm i/d				
a)	Average depth 1.5 m to 4.5 m	M	25	2850.00	71250.00
2	Provision for Road Gully & Drain pipe 300 mm dLS	-	-	-	500000.00
3	Provision for cutting of roads and carriage of materials etc. and other unforeseen items	LS	-	-	150000.00
4	Provision for disposal arrangements / Recharge Pit.	Nos	13	250000.00	32.50 lacs 1050000.00
5	Provision for lighting, watching and temporary diversion of traffic	LS	-	-	500000.00
6	Provision for connection with HUDA on main road	LS	-	-	150000.00
				Total	6761450.00 71.11 lacs
Add 3% contingencies & P.E. charges					202843.50 2.13 lacs
					5024030.10
Add 49% Deptt. Charges, proc. escalation, unforeseen, action charges				Total	3907903.945 73.24 lacs
				Total	8842097.02 85.88 lacs
				SAY	88.42 Lacs
(C.O. to abstract of cost of Sub-work No. 1					109.12 lacs

For Shrivandan Buildtech Pvt. Ltd.


Director


ARCHITECT
RAJESH JAIN
CA/91/13678

material statement of SWD

<u>Line no</u>	<u>400 mm</u>	<u>500 mm</u>
A1-A2	60 m	—
A2-A3	77 m	—
A3-A4	56 m	—
A4-A5	72 m	—
A5a-A5	67 m	—
A5-A6	10 m	—
A6-A7	57 m	—
A7-A8	45 m	—
A8-A9	68 m	—
A10-A11	78 m	—
A12-A11	15 m	—
A11-A13	10 m	—
A13-A14	41 m	—
A14-A15	39 m	—
A15-A16	37 m	—
A16-A17	44 m	—
A17-A18	59 m	—
A18-A9	46 m	—
A8-RWH 13	11 m	—
RWH 13 to outfall	—	25 m
	<u>104 m</u>	<u>25 m</u>

No Work IV				Road Work	
S. No.	Description	Unit	Qty	Rate	Amount (Rs.)
1	Provision for leveling & earth filling as per site condition 13.32 acre @ 425000/acre	Acres	13.320	1.50 lacs 425000.00	19.98 lacs 4665000.00
2	Construction of road by:- soling coat 100 mm thick (63-45) mm gauge compacted to 75 mm thick WBM conforming to MOT specification (table 400-6, grading no 2) 7043.999 sqm.X0.10 m - 704.399 cum say 704.50 cum @ 950/ cum	Cu. mtr.	704.50	-950.00	-668900.00
	ii) Wearing coat (top coat) 100 mm thick (53-22.4)mm gauge compacted to 75 mm thick conforming to MOT specifications (table 400-6, grading no 3) 7043.999 sqm.X0.10 m - 704.399 cum say 704 cum @ 950/ cum	Cu. mtr.	704	-950.00	-668900.00
	iii) 25mm thick pre-mix carpet with seal coat 7043.999 sqm say 7044 sqm @ 265/ sqm	Sq. mtr.	12366 7044	1200 265.00	148.39 lacs 1866660.00
3	Provision for making approach and pavement to building block by providing concrete pavement or tile. Etc. 3204.035 sqm say 3285 sqm @ 500 /sqm	Sq. mtr.	1070 3285	600 500.00	6.42 lacs 1642500.00
4	Provision for parking arrangement 2037.5 sqm @ 500/sqm to bldg block	Sq. mtr.	2037.5	(2037.5) 500.00	10.19 lacs 1019750.00
5	Provision for Carriage of material	LS.		200000.00	200000.00
6	Provision for traffic lighting and guide map/ indicators	LS.		200000.00	200000.00
		Total			7325313.00 188.79 lacs
	Add 3% contingencies				219759.39 5.66 lacs
					7545072.39 194.45 lacs
		Total			8433135.00 95.28 la
	Add 49 % department charges				4132236.25 95.28 la
	under 10% escalation				10.93 Lacs
	under 10% escalation	SAY			424.21 Lacs 289.73

For Shivanandan Buildtech Pvt. Ltd.

ARCHITECT
RAJESH JAIN
CA/91/13678

C.O. to final abstract of cost

Director

Sub Work V				Street Lighting	
S. No.	Description	Unit	Qty	Rate	Amount (Rs.)
1	Supply, installation, testing and commissioning of Street Lighting GI Poles, Light Fixtures, Feeder Pillars, Cables & Wires including cable end terminations and Earthing Station etc. for Street Lighting on roads as per standard Specification of H.P.S.V with C.F.I.	per acre	13.320	250000 100000.00	3330000 1332000.00
	Add 3% contingencies & P.E. charges				99900 26688.00
	Total				3429900 4671960.00
	Add 49% Defft. Charges, price escalation, insurance				1680651 672200.4
	Admin charges				5110.551
	Total				2044330.00
	SAY				20.44 Lacs
					51.18 La

C.O. to final abstract of cost

For Shivanandan Buildtech Pvt. Ltd.

18/Jan
ARCHITECT
RAJESH JAIN
CA/91/13678


Director

Sub Work VI				Horticulture	
S. No.	Description	Unit	Qty	Rate	Amount (Rs.)
1	Development of lawn area				
	a) Trenching the ordinary soil upto depth of 60 cm. including removal & packing of serviceable material & disposing at a lead of 50 M and making up the trenched area to proper level by filling with earth mixed with manure before & after flooding trench with water including cost of imported earth & manure.				
	b) Rough dressing of trenched area.				
	c) Grassing including watering & maintenance of lawns free from weeds & fit for mowing in rows including hedges, shrubs & green belts (as per HUDA Norms)				
	19459.82 Sqm or 4.80 Acre		4.80	1.50/ha	7.20 lac
	13.32 acres @ Rs. 0.90/lacs.	per acre	13.32	96000.00	1,198,800
	550 trees @ Rs. 750/- each		550.00	750.00	412,500
			200	1300/-	1641300.30
	Add 3% contingency charges				18339.09
				Total	1659639.39
	Add 49% Deptt. Charges, price escalation				813223.44
	unforseen, Delhi			Total	2472862.83
		say			24.73 lacs
					15.05 lacs

c.o. to final abstract of cost.

For Shivanandan Buildtech Pvt. Ltd.

12/11/18
ARCHITECT
RAJESH JAIN
CA/91/13678

Director

Cost details

- (i) excavation ₹ 60/-
 - (ii) manure ₹ 90/-
 - (iii) tree plant ₹ 150/-
 - (iv) tree guard ₹ 100/-
- ₹ 1300/-

Sip Work VII				Maintenance Charges & Resurfacing of Roads	
S. No.	Description	Unit	Qty	Rate	Amount (Rs.)
1	Provision for maintenance charges for water supply, sewerage, storm water drainages, roads, street light, horticulture etc. complete including operation & establishments charges as per HUDA norms after completion & resurfacing of roads after 10 years or 1st phase.			7.50/lac	99.90/lac
	13.32 acres @ 5 lacs per acre	per acre	13.320	500000.00	6600000
2	Provision for resurfacing & strengthening of road after five years of 1st phase 12366 sqm @ 250/- per sqm	Sq. mtr.	12366	600/- 250.00	74.20/lac 3091500.00
3	Provision for resurfacing & strengthening of road after ten years of 2 nd phase 12366 sqm @ 125/- per sqm	Sq. mtr.	12366	750/- 120.00	444.50 1545750.00
					99.75
				Total	1146967.50 266.85/lac
					8100/lac
	Add 3% contingency & PE charges				200847.5 274.85/lac
				Total	1500013.5 134.67/lac
	Add 49% Departmental charges, price escalation				5201320.275 247420
	Major work, Admin.			Total	17227820.59 409.51/lac
		say			17227820.59 225.55

For Shivnandan Buildtech Pvt. Ltd.

Director

18/11/19
ARCHITECT
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CA/91/13678

PROJECT : REVISED & PROPOSED BUILDING PLAN OF GROUP HOUSING SCHEME AREA MEASURING 13.32 ACRE AT SECTOR-99, GURGAON MANESAR URBAN COMPLEX, HARYANA				
TITLE : ROAD QUANTITY SHEET				
AREA OF METALLED ROAD (A)				
S.NO.	ROAD NO.	LENGTH (In Sq. Mt.)	WIDTH	TOTAL AREA (In Sq. Mt.)
1	1	17.025	6.000	102.150
2	2	17.025	6.000	102.150
3	3	129.148	7.000	904.036
4	4	3.715	6.000	22.290
5	5	68.972	6.000	413.832
6	6	14.800	6.000	88.800
7	7	144.431	7.000	1011.017
8	8	7.694	7.000	53.858
9	9	81.952	7.000	573.664
10	10	14.311	6.000	85.866
11	11	69.974	6.000	419.844
12	12	0.995	6.000	5.970
13	13	13.354	6.000	80.124
14	14	2.984	6.000	17.904
15	15	13.354	6.000	80.124
16	16	7.076	6.000	42.456
17	17	28.848	6.000	173.088
18	18	10.892	6.000	65.352
19	19	39.613	6.000	237.678
20	20	11.839	6.000	71.034
21	21	84.865	7.000	594.055
22	22	6.930	7.000	48.510
23	23	21.154	7.000	148.078
24	24	9.159	7.000	64.113
25	25	70.447	6.000	422.682
26	26	6.192	5.000	30.960
27	27	61.285	5.000	306.425
28	28	16.289	5.000	81.445
29	29	2.069	5.000	10.345
30	30	7.912	5.000	39.560
31	31	1.570	5.000	7.850
32	32	17.182	5.000	85.910
33	33	2.493	5.000	12.465
TOTAL 971.50 mh				6403.635
ADD 10% FOR CURVES 97.15 mh				640.364
TOTAL METALLED ROAD AREA (A)				7043.999 SQM

1068.65 m

Say 1070 m



हरियाणा शहरी विकास प्राधिकरण

HARYANA SHEHRI
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Address: C-3, HSVP, HQ Sector-6
Panchkula

C.E.I-No.

Dated:

Annexure-A

SUB:- Approval of Service plan estimate for Group Housing Colony measuring 13.32 acres (License No. 70 of 2011 dated 22.7.2011 & No. 82 of 2012 dated 27.8.2012) in Sec-99 Gurugram Manesar Urban Complex being developed by M/S. Shivnandan Buildtech Pvt. Ltd.

Technical note and comments:-

1. All detailed working drawings would have to be prepared by the colonizer for Integrating the internal services proposals with the master proposals of town.
2. The correctness of the levels will be the sole, responsibility of the colonizer for the integration of internal proposals, with the master proposals, of town and will be got confirmed before execution.
3. The material to be used shall the same specifications as are being adopted by HSVP and further shall also confirm to such directions, as issued by Chief Engineer, HSVP from time to time.
4. The work shall be carried out according to Haryana PWD specification or such specifications as are being followed by HSVP. Further it shall also confirm to such other directions, as are issued by Chief Engineer, HSVP from time to time.
5. The colonizer will be fully responsible to meet the demand of water supply and allied services till such time these are made available by State Government/ HSVP. All link connections with the State Government/ HSVP system and services will be done by the colonizer. If necessary extra tube-wells shall also be installed to meet extra demand of water beyond the provision according to EDC deposited.
6. Structural design & drawings of all the structures, such as pump chamber, boosting chamber, RCC OHSR underground tanks quarters, manholes chamber, sections of RCC pipes sewer and SW pipes, sewer, ventilating shafts for sewerage and Masonry Ventilation Chamber for Chamber for storm water drainage, temporary disposal/ arrangement etc. will be as per relevant I.S codes and PWD specifications; colonizer himself will be responsible for structural stability of all structures.

S-1

R

S-1 (40)
5/3/17



हरियाणा शहरी विकास प्राधिकरण

HARYANA SHEHRI
VIKAS PRADHIKARAN

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Address: C-3, HSVP, HQ Sector-6
Panchkula

C.E. No:

Dated:

7. Potability of water will be checked and confirmed and the tube-wells will be put into operation after getting chemical analysis of water tested.
8. Only C.I/D.I pipes will be used in water supply and flushing system, UPVC/HDPE pipe for irrigation purposes.
9. A minimum 100 i/d C.I/D.I, 200mm i/d SW and 400mm id RCC NP-3 pipes will be used for water supply, sewerage and storm water drainage respectively.
10. Standard X-section for S.W. pipes sewer, RCC pipes sewer etc. will be followed as are being adopted in Haryana Public Health Engineering Deptt.or HSVP.
11. The X-section, width of roads, will be followed as approved by the Chief Town Planner, Haryana, Chandigarh. The kerbs and channels will also be provided as per approved X-section and specifications.
12. The specifications for various roads will be followed as per IRC/MORTH specifications.
13. The wiring system of street lighting and specifications of street lighting fixture will be as per relevant standards.
14. This shall confirm to such other conditions as are incorporated in the approved estimate and the letter of approval.

For Superintending Engineer (HQ),
Chief Engineer-I, HSVP,
Panchkula.

AREA OF HARD PAVED		(For Fire Tender Movement) (B)		
NO.	ROAD NO.	LENGTH (In Meter)	WIDTH (In Meter)	TOTAL AREA (In Sq. M.)
1	A	142.214	6.000	853.284
2	B	4.488	6.000	26.928
3	C	15.124	6.000	90.744
4	D	117.870	6.000	707.220
5	E	2.539	6.000	15.234
6	F	9.823	6.000	58.938
7	G	19.552	6.000	117.312
8	H	11.789	6.000	70.734
9	J	25.428	6.000	152.568
10	K	16.222	6.000	97.332
11	L	34.314	6.000	205.884
12	M	16.222	6.000	97.332
13	N	29.886	6.000	179.316
14	P	52.210	6.000	313.260
TOTAL				2986.086
ADD 10% FOR CURVES				298.609
TOTAL HARD PAVED AREA (B)				3284.695 SQM
AREA UNDER CAR PARKING (C)				
NO. OF CARS ON SURFACE = 163 No.				
AREA UNDER CAR PARKING = $5 \times 2.5 \times 163 = 2037.50$ SQM				
TOTAL AREA UNDER CAR PARKING (C)				2037.50 SQM
TOTAL AREA OF ROADS = A + B + C = $7043.999 + 3284.695 + 2037.50 = 12366.194$ SQM Say 12366 SQM				

18/12/21
ARCHITECT
RAJESH JAIN
CA/91/13678

For Shivnandan Buildtech Pvt. Ltd.

Director