

**EXTERNAL DEVELOPMENT WORKS  
DESIGN AND COST ESTIMATES**

**FOR**

**APPROVAL OF SERVICE ESTIMATE OF  
PROPOSED BUILDING PLAN OF  
COMMERCIAL COLONY AREA MEASURING  
3.78125 ACRES (LICENCE NO. 93 DATED  
12/11/2021) IN SECTOR-89, GURUGRAM  
BEING DEVELOPED BY COPIOUS  
REALTORS PVT. LTD.**

**DEVELOPED BY:**

**COPIOUS REALTORS PVT. LTD.**

**APPROVAL OF SERVICE ESTIMATE OF PROPOSED BUILDING  
PLAN OF COMMERCIAL COLONY AREA MEASURING 3.78125  
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**REPORT**

ESTIMATE FOR PROVIDING WATER SUPPLY, SEWERAGE, STORM WATER DRAINAGE, ROADS, STREET LIGHTING AND HORTICULTURE IN RESPECT REVISED BUILDING PLAN FOR PROPOSED BUILDING PLAN OF COMMERCIAL COLONY AREA MEASURING 3.78125 ACRES (LICENCE NO. 93 DATED 12/11/2021) IN SECTOR-89, GURUGRAM BEING DEVELOPED BY COPIOUS REALTORS PVT. LTD.

Gurgaon Manesar Urban Complex of Haryana State situated on N.H.- 8 Highway at a distance of 50 Kms from Delhi. Being the National Capital Region, the town has fast developing tendency and potential. Further, it has also started sharing the growing residential load of Delhi. In order to relieve the growing pressure of population in National Capital of Delhi, it has been decided by the Haryana Govt. to establish various residential, and other infrastructure sectors in Gurgaon Manesar Urban Complex Being Developed by COPIOUS REALTORS PVT. LTD. IN PROPOSED BUILDING PLAN OF COMMERCIAL COLONY AREA MEASURING 3.78125 ACRES (LICENCE NO. 93 DATED 12/11/2021) IN SECTOR-89, GURUGRAM

**WATER SUPPLY**

At present the source of water supply in this area is water Tankes/ Boosting station/ HSVP Water Supply. It has been proposed to construct the under ground tanks of capacity as per attached details, and at location for domestic purpose and for fire protection. The underground tanks will be fed from the tankers and HSVP supply, which will feed overhead tanks on the roof of the buildings. The water supply system has been designed as per Hazen Williams formula.

**DESIGN**

The scheme has been designed for population of approx 9150 persons for Commercial Building. The rate of water supply per head / day has been taken as (Staff = 45 liters , Visitor = 15 liters , Restaurant = 70Litre) as per HSVP norms in addition to above necessary provision of water for club and parks etc. have been taken into account for calculating the maximum quantity of water requirement.

**PUMPING REQUIREMENTS**

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 electricity failure.





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**UNDERGROUND STORAGE TANK**

Underground storage tank provision has been made in two compartments, which cater for the domestic as well as for fire fighting requirement. The water for fire water compartment shall overflow to the domestic compartment so that the water in the fire compartment also remain full & fresh and will not contaminate.

**BOOSTING STATION**

The boosting station is being planned near underground storage tank catering to above

**DISTRIBUTION SYSTEM**

The distribution system for this development has been designed to supply @ (Staff = 45 liters, Visitor=15Litre, Restaurant = 70Litre , Food court = 35liters) per head per day @ 3 times the average rate of flow on Hazen William formula. Necessary provision for laying CI/DI pipes conforming to relevant IS standard along with valves and special has been made in the project. The minimum terminal head at any point will be more than 50 so that it can be serve the B+G + 3 floors construction envisaged in the plan. Minimum pipe dia. for distribution is kept as 100

**RISING MAIN**

Raising main from HSVP water main or sector road to water work have also been proposed as provision has been made in this estimate.

**SEWERAGE SCHEME**

This scheme has been designed for sewer connecting to STP & over flow of STP connected to HSVP sewer main. The sewerage system has been marked on respective plans.

The sewer lines have been designed for three times average D.W.F. in relation to water supply demand. It has been assumed that about 80% of the domestic water supply shall find its way into the proposed sewer. Sewer lines shall be laid to a gradient maintaining minimum 2.46 ft/sec self cleaning velocity.

Necessary design statement for entire sewerage system has been prepared and attached with estimate. Manning's formula has been used for the design of sewerage system.



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**STORM WATER DRAINAGE**

Since the Master Scheme has been proposed with pipe drain with rain water harvesting pit, we proposed to lay pipe drains with required number of catch basins for disposal of storm water to harvesting pit. The intensity of rain fall has been taken as 40 mm per hour. A minimum size of 400 mm dia pipe storm water pipe will be provided and designed as per Manning's formula.

**FIRE**

As per N.B.C. (National Buiding Code), fire tanks & required capacity pumps have been provided the plan as shown on the plan. Similarly irrigation pumps of required capacity provided as shown on the plan.

**SPECIFICATIONS**

The work will be carried out in accordance with the standard specifications of P.H. as laid down by the Haryana Government / HSV. *G.M. D.T.*

**ROADS**

Cost of Road has been taken in the estimate.

**STREETLIGHTING**

Provision of lighting on surrounding area has been made.

**HORTICULTURE**

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

**RATES**

The estimate has been prepared based on the present market rates.



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**COST**

The total cost of the scheme, including cost of all services works out to be Rs ~~436.13~~<sup>828.45</sup> Lacs  
Including 3% contingencies and 49% departmental charges, price escalation & other  
unforeseen charges. Cost of per Acres Rs ~~115.34~~<sup>219.09</sup> Lacs.

**COPIOUS REALTORS PVT. LTD.**

For Copious Realtors Pvt. Ltd

  
Authorised Signatory

**(AUTHORIZED SIGNATORY)**





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<b>(I) DAILY WATER REQUIREMENT</b>			
<b>A) Commercial</b>			
6606.714	a) Shops at Lower Ground Floor 6400 sqm @ 3 sqmt/ person	=	2202 2133 Persons
7345.29	b) Shops at Ground Floor 7310 sqm @ 3 sqmt/ person	=	2448 2437 Persons
660.51	c) Shops at Mezzanine Floor 680 sqm @ 8 sqmt/ person	=	110 227 Persons
6437.07	d) Shops at First Floor 6465 sqm @ 6 sqmt/ person	=	1073 1078 Persons
	e) <b>Total</b>	=	5834 5874 Persons
	f) Shopkeepers @ 10% of Population	=	583 587 Persons
	@ 45 LPCD	=	26235 26415 Liters/ Day
	g) Visitors @ 90% of Population	=	5250 5287 Persons
	@ 15 LPCD	=	78750 79305 Liters/ Day
	h) 2nd and 3rd floor (Food Court)		
	total area = 3695+765 sqm @ 1.8 sqm per person	=	2341 2478 person
	Visitors @ 90% of Population @ 70 LPCD	=	156100.00 Liters/ Day
	Restaurant staff @ 10 % of Population @ 45 LPCD	=	11150.00 Liters/ Day
	i) Auditorium (3rd & 4th floor)		
	Auditorium no. of seats - 782 nos. 826	=	826 782 person
	Visitors @ 15 LPCD	=	12390 11730.00 Liters/ Day
	Staff (30 nos) @ 45 LPCD	=	1350.00 Liters/ Day
	j) Water required for Kitchen & Laundry - L.S.	=	10000 Liters/day
	k) Maintenance staff	=	35 Persons
	@ 45 LPCD	=	1575 Liters/ Day
	l) Back Wash Filters - L.S.	=	3000 Liters/day
	<b>Total water demand</b>	=	291331 300625 Liters/day
	<b>SAY</b>	=	291 301 KLD
<b>B) Horticulture &amp; Road Work</b>			
	a) Area under Green area 2295.32 sqmt	=	2295.32 SQMM
	@ 5 Ltrs./Sqmt	=	13772 Liters
	b) Area under road + Paved area = 5641.63 sqm	=	1.39437 Acres



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@ 25 K.L./Acre	=	34859.31	Liters
Total Water Demand	=	48631	Liters
Say	=	50000	Liters
The demand of horiculture & road work will met from recirculates water after treatment at S.T.P.			
Total water demand	=	<del>291331</del> 300625	Liters/day
	=	<del>291.331</del> 300.625	KLD
Say	=	<del>295</del> 310	KLD
<b>Domestic water demand</b>			
60% of AV/WD of (A)	=	<del>174799</del> 180375	Liters/day
Domestic water demand (KLD)	=	<del>174.80</del> 180.38	KLD
Or Say	=	<del>175</del> 180.00	KLD
<b>Flushing water demand</b>			
40% of AV/WD	=	<del>116532</del> 120250	Liters/day
Flushing water demand (KLD)	=	<del>116.53</del> 120.25	KLD
Or Say	=	120.00	KLD
<b>Sewage Treatment Plant Capacity</b>			
Average Sewerage Contribution Considering 80% of AV domestic water demand & <del>80%</del> 90% of AV/Flushing demand	=	<del>240000</del> 248000	Liter / Day
Sewage Treatment Plant Capacity (KLD)	=	<del>248</del> 240.00	KLD
Or Say	=	<del>250</del> 240.00	KLD
<b>Sewage scheme</b>			
Peak discharge @3 times of sewage discharge plus sub soil infiltration @ 10% of total water demand	=	<del>779500</del> 751000	Liters
	=	<del>173222</del> 166889	GPD
	=	<del>0.309</del> 0.321	Cusces





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<b>(I) BOOSTING STATION</b>		
Approx. discharge of borewells @ 18 KL/hour and working 16 hours/day		
(a) Total domestic water demand = KLD	=	180.00 <span style="color: red;">175</span>
(b) Number of borewells 35/(18 x 16)	=	0.63 <span style="color: red;">0.61</span>
Add 10% extra	=	0.06
Total	=	0.69 <span style="color: red;">0.67</span>
Say	=	1.00
So, it is proposed to provide <b>Two No. (1W+1S)</b> (One working & One standby). Moreover, the water demand for horticulture purposes is to met from recirculated water after treatment at STP and ultimate water supply is to provided by HUDA. <span style="color: red;">GMDA</span>		





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<b>(I) Pumping Machinery for Boosting Station</b>			
Gross working Head	=	18.0	Meters
Average Fall in S.L.	=	5.0	Meters
Depression Head	=	5.0	Meters
Friction loss in main + Positive head	=	10.0	Meters
Total	=	38.0	Meters
<b>Or Say</b>	=	<b>40.0</b>	<b>Meters</b>
Pump HP = $\frac{18000 \times 40 \times 100}{60 \times 60 \times 75 \times 70}$		=	3.81 H.P.
<b>Or Say</b>	=	<b>5.00</b>	<b>H.P.</b>
It is proposed to provide 2 Nos. of 5HP motors 40 Mtr head (1 Working & 1 standby)			
<b>(II) Plumbing Machinery for Domestic &amp; Flushing Tank</b>			
a) Total Domestic Water Demand	=	174.79	180.375 Liters
Day Storage (Equal to one day)	=	174.8	180.38 KLD
<b>Or Say</b>	=	<b>175</b>	<b>180.0</b> KLD
Fire Tank provided as per N.B.C. Norms	=		435.00 KLD
Hence it is proposed to construct an underground tank of 180 KLD having 90 KLD for treated water, 90 KLD as raw water, and 350 KLD for fire fighting purpose as per location shown on plan i.e. Total 615 K.L.D.			
<b>(III) Boosting Machinery</b>			
a) For Under Ground Tank			
Total water demand (Domestic)	=	175	180.00 KLD
L.P.M. for 6 hour pumping	=	486.11	500.00 LPM
<b>Or Say</b>	=		<b>500.00</b> LPM
Gross Working Head			
- Suction lift	=	3.00	Meters
- Delivery head	=	5.00	Meters
- Frictional loss in Mains & Specials+ Positive head	=	9.50	Meters
- Clear head required	=	32.0	Meters
Total	=	49.5	Meters
<b>Or Say</b>	=	<b>50.0</b>	<b>Meters</b>
Pump HP = $\frac{500 \times 50 \times 100}{60 \times 75 \times 70}$		=	7.94 H.P.
<b>Or Say</b>	=	<b>10.00</b>	<b>H.P.</b>
It is proposed to provide 2 nos. of motors of 10 HP sets of 500 LPM discharge at 50 M head (One pumps working and One as standby for domestic supply & generator set of same capacity in case of electric failure) for domestice purpose.			

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b)	Flushing water supply requirement			
(i)	AV water demand	=	241331	liters/day
(ii)	Flushing water supply demand @40%	=	300625	liters/day
	Flushing water demand (KLD)	=	116.53	120.25 KLD
	<b>Or Say</b>	=	120.00	KLD
	L.P.M. for @ 6 hour pumping	=	333.33	LPM
	Say	=	350.00	LPM
	Pump HP = $\frac{350 \times 50 \times 100}{60 \times 75 \times 70}$	=	5.56	H.P.
	<b>Or Say</b>	=	7.50	H.P.
	It is proposed to provide 2 nos. of motors 7.5 HP sets of 350 LPM discharge at 50 m head (One pump working & one pump stand by & generator set of same capacity in case of electric failure.)			
(V)	<b>Irrigation Pumping</b>			
a)	Plot Area	=	3.7812	Acres
		=	15302.15	Sqmt
	Water Demand of Horticulture + Road Area	=	50000	LPD
	8 Hours Pumping	=	104.17	LPM
	Say	=	110	LPM
	Head	=	35	Mtr.
	Pump HP = $\frac{110 \times 35 \times 100}{60 \times 75 \times 70}$	=	1.22	H.P.
	<b>Or Say</b>	=	1.50	H.P.
	It is proposed to provide 2 Nos. of motors of 1.5 HP sets of 110 LPM discharge at 35 M head (One pump are working and one as standby & generator set of same capacity in case of electric failure.)			



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<b>(VI) PUMPS FOR FIRE PROTECTION</b>						
S. No.	Parameters	Location	Pump sets			
			Water curtain	Jockey	Main	Diesel
1	Discharge in lpm	Pump Room	2850 lpm	180 lpm	2850 lpm	2850 lpm
2	Head in metre		50	85	85	85
3	HP		40	5	70	70
4	Quantity in nos.		1	2	2	1
<b>(VII) GENERATING SETS</b>						
S. No	Equipment	QTY		HP	Total HP	
1	Boosting Station	1		5	5.0	
2	For Jockey Pump	2		10	20.0	
3	Booster Pump (for domestic) + Flushing+ irrigation pump	1 + 1 + 1		10+7.5+1.5	19.0	
	<b>Total</b>				<b>44.0</b>	
					<b>32.82</b>	<b>KW</b>
	Disversity 0.8 & Power factor 0.8				<b>51.29</b>	<b>KVA</b>
	<b>Or Say</b>				<b>62.50</b>	<b>KVA</b>
It is proposed to add 62.50 KVA capacity for above said machinery to the main DG set.						





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**FINAL ABSTRACT OF COST**

Sub Work	Description	Amount (Rs.) in Lacs
I	Water Supply Scheme	313.26 <del>244.77</del> <del>317.10</del>
II	Sewerage Scheme	132.37 <del>50.94</del> <del>128.37</del>
III	Storm Water Drainage	26.29 <del>68.40</del>
IV	Road	59.59 <del>151.38</del>
V	Street Lighting	5.80 <del>14.50</del>
VI	Horticulture	5.86 <del>16.16</del>
VII	Maintenance Charges for 10 Years including Resurfacing of Roads after Ist 5 year & IInd 5 years of mtc	45.88 <del>132.38</del>
	<b>Total (in Lacs)</b>	<b>436.13</b> <del>828.27</del>
	<b>Cost of Per Acre (in Lacs)</b>	<b>115.34</b> <del>828.27/3.7812 = 219.09</del>

*Lacs per Acre*

COPIOUS REALTORS PVT. LTD.

(AUTHORIZED SIGNATORY)

**Checked for service estimate only**

**Executive Engineer-I  
W/S Division, GMDA  
Gurugram**

**Executive Engineer-V  
Sew. Division No. I  
GMDA, Gurugram**

**Executive Engineer-1 (EDC)  
Gurugram Metropolitan Development Authority  
Gurugram**

**Executive Engineer-III  
Drainage Division, GMDA,  
Gurugram**

**Chief Engineer,  
(Infra-II), GMDA  
Gurugram**

**Checked subject to comments  
in forwarding letter No. 1/5079/2022  
Dt. 30.09/2022 and notes  
attached with the estimate**

**Director General  
Town & Country Planning  
Haryana, Chandigarh**



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Sub Work No.I							Water Supply	
Sub Head	Description						Amount (Rs.). In lacs	
1	Head Works						<del>45.58</del>	81.65
2	Pumping Machinery						<del>14.20</del>	17.65
3	Rising Main						<del>8.21</del>	12.18
4	Distribution System						<del>23.06</del>	43.63
5	Fire Fighting						<del>141.48</del>	148.58
6	Irrigation						<del>9.25</del>	9.57
	Say (In Lacs)						<del>241.77</del>	313.26



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Sub Work No-1						Water Supply	
Sub Head No-01						Head Works	
SI No	DESCRIPTION		Qty		Rate		AMOUNT (In Lacs.)
1	Providing Boosting arrangement with chamber by pumps (5.00 HP) at 40 M head, 2 Nos. @ <del>Rs. 50,000/- each</del>		<del>2</del>		<del>80000</del> 7,40,000	Rs.	<del>1.60</del> 7.40
2	Providing Boosting arrangement by pumps 10 HP, capacity 500 LPM at 50 M head, 2 Nos. each & @ Rs. 150,000/- each (For Domestic) complete with panel, foundation etc.		<del>2</del>	x	<del>150000</del> 8,40,000/-	Rs.	<del>3.00</del> 8.40
3	Provision for carriage of materials and other unforeseen items (LS)					Rs.	0.50
4	Construction of U.G. tanks of total cap. 615 KL @ Rs. <del>4000KL</del> 6000 Rs KL		<del>615</del>	x	<del>4000</del>	Rs.	<del>24.60</del> 36.90
TOTAL						Rs.	29.70
Add 3% contingencies						Rs.	0.89
TOTAL						Rs.	30.59
Add 49% Department charges, Price Escalation & other unforeseen Charges.						Rs.	14.99
TOTAL COST						Rs.	45.58





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Sub Work No-1

Water Supply

Sub Work No-02

Pumping Machinery

SI No	DESCRIPTION	Qty	Rate	AMOUNT (In Lacs.)
1	Provision for diesel engine genset each for standby arrangements for T.W. of booster pump complete with gear head arrangement. - 1 No. 62.5 KVA @ 650000 /-.	1	x 650000	Rs. 6.50
2	Providing for disinfection plant complete. 1 No. @ 50,000/-	1	x 50000	Rs. <del>0.50</del> 1.00
3	Provision for making foundations and erection of Pumping machinery @ Rs. 50000/	1	x 50000	Rs. <del>0.50</del> 1.00
4	Provision for pipes, valves and specials inside boosting chamber ~1 Set (L.S.) for Rs. 50000/	1	x 50000	Rs. <del>0.50</del> 1.00
5	Provision for electric services connection including electric fitting for tube wells & boosting chamber etc. 1 set (L.S.) Rs. 100000/	1	x <del>75000</del>	Rs. <del>0.75</del> 1.00
6	Provision for carriage of material and unforeseen item. L.S. for Building Rs. 50000/	1	x 50000	Rs. <del>0.50</del> 1.00
TOTAL				Rs. <del>9.25</del> 11.50
Add 3% contingencies				Rs. <del>0.28</del> 0.35
TOTAL				Rs. <del>9.53</del> 11.85
Add 49% Department charges, Price Escalation & other unforeseen Charges.				Rs. <del>4.67</del> 5.80
TOTAL COST				Rs. <del>14.20</del> 17.65



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Sub Work No-1

Water Supply

Sub Work No-03

Rising Main from HSVP

SI No	DESCRIPTION	Qty	Rate	AMOUNT (In Lacs)
1	Providing, laying, jointing & testing 80 mm dia. G.I. pipe lines including cost of excavation complete in all respects.	175	@ 1475	Rs. 2.58
2	Providing and fixing 80 mm dia. sluice valves including cost of surface boxes and masonry chambers etc., complete in all respects.	1	@ 25000	Rs. 0.25
3	Providing and Fixing indicating plates for sluice valves, Air valves & fire hydrant.	1	@ 10000	Rs. 0.10
4	Provision for carriage of material & other foreseen items etc., L.S.	1	@ 50000	Rs. 0.50
5	Provision for making connection with HUDA main (L.S.) 1 job complete in all respect	1	@ 175000	Rs. 3.00
6	Provision for cutting road and making good the same (L.S.) 1 job	1	@ 50000	Rs. 0.50
TOTAL				Rs. 5.35
Add 3% contingencies				Rs. 0.16
TOTAL				Rs. 5.51
Add 49% Department charges, Price Escalation & other unforeseen Charges.				Rs. 2.70
TOTAL COST				Rs. 8.21

Material Statement and design statement of HUDA Rising Mains

S. No.	Name of line	Dia. in mm	Length in m from municipal to U.G.T.
1	Municipal Main To UGT	80	175



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Sub Work No-1						Water Supply	
Sub Head No-04						Distribution system	
SI No	DESCRIPTION		Qty		Rate		AMOUNT (In Lacs)
1	Providing, laying, jointing & testing GI pipes including cost of excavation complete as per ISI marked.						
1.1	40 mm I/D		200	@	450	Rs.	0.90
1.1	50 mm I/D		300	@	575	Rs.	1.73
1.1	65 mm I/D		300	@	765	Rs.	2.30
1.1	80 mm I/D		100	@	825	Rs.	0.83
1.1	100 mm I/D	900 + 815	15	@	975	Rs.	7.95
1.2	150 mm I/D		15	@	4225	Rs.	0.18
2	Providing and Fixing sluice valves including cost of brick masonry chamber complete in all respect.						
2.1	100 mm I/D		5	@	8000	Rs.	0.40
2.2	150 mm I/D		1	@	10000	Rs.	0.10
3	Providing and Fixing air valves and scour valves including cost of brick masonry chamber complete.		1	@	10000	Rs.	0.10
4	Providing and Fixing indicating plates for sluice valves		5	@	1000	Rs.	0.05
5	Provision for carriage of material & other foreseen items etc., (L.S). 1 Job including cutting of road and making the same.		1	@	50000	Rs.	0.50
TOTAL						Rs.	15.03
Add 3% contingencies						Rs.	0.45
TOTAL						Rs.	15.48
Add 49% Department charges, Price Escalation & other unforeseen Charges.						Rs.	7.58
TOTAL COST						Rs.	23.06





**APPROVAL OF SERVICE ESTIMATE OF PROPOSED BUILDING PLAN OF COMMERCIAL COLONY AREA  
MEASURING 3.78125 ACRES (LICENCE NO. 93 DATED 12/11/2021) IN SECTOR-89, GURUGRAM  
BEING DEVELOPED BY COPIOUS REALTORS PVT. LTD.**

S. No.	Description	300 mm	200 mm	150 mm	100 mm	<del>80 mm</del> 100	<del>40mm</del> 100	<del>65 mm</del> 100	<del>50 mm</del> 100
(A)	<b>Domestic</b>								
1	UGT-Domestic water supply line	-	-	15	0	-	-	-	-
2	Domestic water supply piping in basement ceiling	-	-	-	400	50	100	150	150
	<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>15</b>	<b>400</b>	<b>50</b>	<b>100</b>	<b>150</b>	<b>150</b>
(A)	<b>Flushing</b>								
1	STP-Flushing water supply line	-	-	0	15	-	-	-	-
2	Flushing water supply piping in basement ceiling	-	-	-	400	50	100	150	150
	<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>415</b>	<b>50</b>	<b>100</b>	<b>150</b>	<b>150</b>
	<b>GRAND TOTAL</b>	<b>0</b>	<b>0</b>	<b>15</b>	<b>815</b>	<b>100</b>	<b>200</b>	<b>300</b>	<b>300</b>

+ 900  
1715



DOMESTIC WATER SUPPLY - HYDRAULIC DESIGN

S. No	Ref of line	Length in mts	Self			Additional			AV/WD	Domestic Water demand @ commercial 60% KLD	Peak Demand @ 3 time of AV/WD	Dia of Pipe (mm)	Velocity mt/sec	Loss of Head in 1000 M (mts)	Loss of head in the line (mts)	Level in start			Remarks
			Shopkeepers + Food Court Staff @ 45LPCD	Food & Beverage Staff @ 35 LPCD & Restaurant @ 70 LPCD	Shop & Audi Visitor @ 15 LPCD	Shopkeepers, Food Court, Restaurant, and audi Staff @ 45LPCD	Food & Beverage Staff @ 35 LPCD & Restaurant @ 70 LPCD	Shop & Audi Visitor & Backwash @ 15 LPCD								HL (Mts)	GL (Mts)	TH (Mts)	
1	AT - UGT	-	-	-	-	Staff =950 person =42750 litre	2230 persons = 156100 litre	5991 persons = 101035 litres	307.625	184.58	553.73	-	-	-	-	340.00	300.00	40.00	Ground Level= +300 U.G.T. Bed Level=293 Add Building Head B+G+3=33 mtrs Add Suction Head=3.0 mtrs Delivery Head=5.0 Positive Head=3.0 mtrs Friction Lose=4.0 mtrs Head Level=350
2	UGT-WS1	15	-	-	-	Staff =950 person =42750 litre	2230 persons = 156100 litre	5991 persons = 101035 litres	307.625	184.58	553.73	150	0.75	0.1915	0.0287	339.97	300.00	39.97	
3	Ring (WS1 - WS13)	725	Staff =950 person =42750 litre	2230 persons = 156100 litre	5991 persons = 101035 litres	-	-	-	307.625	184.58	553.73	100	0.75	1.3466	9.7631	330.21	300.00	30.21	

NOTE: 1. Water supply Line shall be laid as per NBC / HUDA Norms.



FLUSHING WATER SUPPLY - HYDRAULIC DESIGN

S. No	Ref of line	Length in mts	Self			Additional			AV/WD	Flushing Water demand @ 40% commercial K.L.D.	Peak Demand @ 3 time of AV/WD	Dia of Pipe (mm)	Velocity mt/sec	Lose of Head in 1000 M (mts)	Level in start			Remarks	
			Shopkeepers + Food Court Staff @ 45LPCD	Food & Beverage Staff @ 35 LPCD & Restaurant @ 70 LPCD	Shop & Audi Visitor @ 15 LPCD	Shopkeepers ,Food Court, Restaurant, and audi Staff @ 45LPCD	Food & Beverage Staff @ 35 LPCD & Restaurant @ 70 LPCD	Shop & Audi Visitor & Backwash @ 15 LPCD							HL (Mts)	GL (Mts)	TH (Mts)		
1	AT S.T.P.		-	-	-	Staff =950 person =42750 litre	2230 persons = 156100 litre	5991 persons = 101035 litres	307.625	123.050	369.15	-	0.75	-	340.00	300.00	40.00	Ground Level= +300 U.G.T. Bed Level=293 Add Building Head B+G+3=33 mtrs Add Suction Head=3.0 mtrs Delivery Head=5.0 Positive Head=3.0 mtrs Friction Lose=4.0 mtrs Head Level=350	
2	STP-FWS1	15	-	-	-	Staff =950 person =42750 litre	2230 persons = 156100 litre	5991 persons = 101035 litres	307.625	123.050	369.15	100	0.75	0.6464	0.0970	339.90	300.00	39.90	
3	Ring (FWS1-FWS13)	725	Staff =950 person =42750 litre	2230 persons = 156100 litre	5991 persons = 101035 litres	-	-	-	307.625	123.050	369.15	100	0.75	0.6464	4.8867	335.22	300.00	35.22	

NOTE: 1. Water supply Line shall be laid as per NBC / HUDA Norms.





**APPROVAL OF SERVICE ESTIMATE OF PROPOSED BUILDING PLAN OF COMMERCIAL COLONY AREA  
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BEING DEVELOPED BY COPIOUS REALTORS PVT. LTD.**

Sub Work No-1					Water Supply	
Sub Work No-05					Fire fighting	
SI No	DESCRIPTION	Qty		Rate		AMOUNT (In Lacs.)
1	Providing, laying jointing & testing M.S. pipe lines for rising main including cost of fitting, valves, connection etc., complete in all respects.					
	150 mm I/D for Ring Main	755	@	1150.00	Rs.	8.68
	100 mm I/D for Tanker Inlet	20	@	950.00	Rs.	0.19
	80 mm I/D for Yard Hydrant pipe	35	@	900.00	Rs.	0.32
2	Providing & fixing valve including cost of surface boxes and masonry chambers etc. complete in all respects					
	- 150 mm dia.	3	@	14000.00		0.42
	- 100 mm dia.	1	@	10000.00		0.10
	- 80 mm dia.	16	@	8000.00		1.28
3	Providing and fixing fire Hydrant with accessories	16	@	10000.00	Rs.	1.60
4	Providing Fire Diesel pumps of 70 HP, capacity 2850 LPM at 70 M head, 1 Nos. each & @ Rs. 22,50,000/- each complete with panel, foundation etc.	1	@	2250000.00		22.50
5	Providing Fire Main pumps of 70 HP, capacity 2850 LPM at 70 M head, 1 Nos. each & @ Rs. 17,00,000/- each complete with panel, foundation etc.	2	@	1700000.00		34.00
6	Providing Fire Jockey pumps of 5 HP, capacity 180 LPM at 70 M head, 1 Nos. each & @ Rs. 5,00,000/- each complete with panel, foundation etc.	2	@	500000.00		10.00
7	Providing Water curtain pumps of 40 HP, capacity 2850 LPM at 50 M head, 1 Nos. each & @ Rs. 12,50,000/- each complete with panel, foundation etc.	1	@	1250000.00		12.50
8	Providing for carriage of material (L.S.) 1 jobs	1	@	50000.00	Rs.	0.50
9	Providing and fixing Indicating plate	10	@	1000.00	Rs.	0.10
	<b>TOTAL</b>			96.82	Rs.	92.19
	<b>Add 3% contingencies</b>			2.90	Rs.	2.77
	<b>TOTAL</b>			99.72	Rs.	94.96
	<b>Add 49% Department charges, Price Escalation &amp; other unforeseen Charges.</b>			48.86	Rs.	46.53
	<b>TOTAL COST</b>			148.58	Rs.	141.48

**Material Statement of Fire ring – MS – 150mm dia**

S. No.	Location	200 mm dia pipe	150 mm dia pipe	100 mm dia pipe	80 mm dia pipe	Fire Hydrant
1	UGT to Fire Ring	-	15	-	-	-
2	Fire Ring Pipe	-	700	-	-	-
3	Tanker inlet connection	-	-	20	-	-
4	Fire Brigade 4 way	-	20	-	-	-
5	Fire Brigade 2 way	-	20	-	-	-

**APPROVAL OF SERVICE ESTIMATE OF PROPOSED BUILDING PLAN OF COMMERCIAL COLONY AREA  
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6	Yard Hydrants = 16 Nos. x 2 Meters	-	-	-	35	16
	<b>Total</b>	<b>0</b>	<b>755</b>	<b>20</b>	<b>35</b>	<b>16</b>
<b>Fire Hydrant System</b>						
1	Valves 150mm dia				3 Nos.	
2	Valves 100mm dia				1 No.	
3	Valves 80mm dia				16 Nos.	
4	Fire Hydrants				16 Nos.	
5	Fire Brigade Connections 4 Way				1 No.	
6	Fire Brigade Connections 2 Way				1 No.	



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Sub Work No-1					Water Supply	
Sub Work No-06					Irrigation	
SI No	DESCRIPTION	Qty		Rate		AMOUNT (In Lacs)
1	Providing, laying, jointing and testing uPVC pipe line conforming to I.S 4985 including cost of excavation etc., complete in all respects.					
	20 mm O/D for Garden Hydrants	60	@	200	Rs.	0.12
	75 mm O/D UPVC Pipe for Ring Main	725	@	550	Rs.	3.99
	90 mm O/D from STP to Ring Main	25	@	<del>650</del> 800	Rs.	<del>0.16</del> 0.20
2	Providing and fixing Irrigation hydrant valve complete in all respect.	30	@	2000	Rs.	0.60
3	Provision for carriage of material & other foreseen items etc., (L.S.) 1 jobs				Rs.	0.50
4	Providing & fixing ball valve 20 mm	30	@	250	Rs.	0.08
5	Providing & fixing sluice valve complete with chamber.					
	- 100 mm dia.	1	@	<del>8000</del> 25000	Rs.	<del>0.08</del> 0.25
6	Providing and fixing Irrigation pump 2 nos., 1.0 HP, 50 LPM @ 35 Mtr. Head complete with foundation & control panel etc.	2	@	25000	Rs.	0.50
TOTAL					Rs.	6.03 6.24
Add 3% contingencies					Rs.	0.18
TOTAL					Rs.	6.21 6.42
Add 49% Department charges, Price Escalation & other unforeseen Charges.					Rs.	3.04 3.14
TOTAL COST					Rs.	9.25 9.57
Material statement of Irrigation System						
S. No.	Line Name	90 mm	75 mm OD	50 mm OD	20 mm OD	Irrigation Hydrants
1	Pump Room to G1	25				
2	Irrigation Ring	0	725			
3	GARDEN HYDRANT (30 Nos x 2 M)				60	30
	Total	25	725	0	60	30





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Sub Work No-II					Sewerage Scheme	
SI No	DESCRIPTION	Qty		Rate		AMOUNT (In Lacs)
1	Providing, jointing, cutting and testing S.W.R. PVC pipe including all bends fitting, clamps etc. Complete in all respect running in basement ceiling.					
	200mm dia	10	@	2270		13.52
	150mm dia	386	@	900.00	Rs.	0.09
	100mm dia	200	@	700.00	Rs.	2.70
			@	500.00	Rs.	1.00
2	Provision for lighting and watching L.S	1	@	50000.00	Rs.	0.50
3	Provision for timbering and shuttering L.S.	1	@	50000.00	Rs.	0.50
4	Provision of 150 mm dia line form STP to HSVP main by pumping	50	@	1000.00	Rs.	0.50
5	Providing Boosting arrangement by pumps 7.5 HP, capacity 350 LPM at 50 M head, 2 Nos. each & @ Rs. 100,000/- each (For Flushing) complete with panel, foundation etc.	2	@	100000.00	Rs.	2.00
6	Provision for making STP (KLD)	240	@	10000.00	Rs.	24.00
7	Provision for carriage of material (L.S.)	1	@	40000.00	Rs.	0.40
8	Provision of cutting road & making it good as same in original condition - 1 job	1	@	50000.00	Rs.	0.50
9	Providing Sewage with HSVP	1	@	100000.00	Rs.	1.00
<b>TOTAL</b>				<b>86.16</b>	<b>Rs.</b>	<b>33.49</b>
<b>Add 3% contingencies</b>				<b>2.58</b>	<b>Rs.</b>	<b>1.00</b>
<b>TOTAL</b>				<b>88.74</b>	<b>Rs.</b>	<b>34.49</b>
<b>Add 49% Department charges, price escalation, other for unforeseen charges.</b>				<b>43.48</b>	<b>Rs.</b>	<b>16.75</b>
<b>TOTAL COST</b>				<b>132.22</b>	<b>Rs.</b>	<b>50.94</b>



Material statement of Sewerage System – As per drawing sheet								
S. No.	Name of Pipe Line		Length of Pipe in M					
			500 mm	450 mm	400 mm	350 mm	<del>100 mm</del> <del>150 mm</del>	200 mm
1	Sewer line running in basement ceiling		-	-	-	-	<del>200</del> <del>386</del>	586
2	Upto-STP		-	-	-	-	-	10
	Total						<del>200</del> <del>386</del>	<del>10</del>

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APPROVAL OF SERVICE ESTIMATE OF PROPOSED BUILDING PLAN OF COMMERCIAL COLONY AREA MEASURING 3.78125 ACRES (LICENCE NO. 93 DATED 12/11/2021) IN SECTOR-89, GURUGRAM BEING DEVELOPED BY COPIOUS REALTORS PVT. LTD.						
Sub Work No-III			Storm water drain			
S. No.	DESCRIPTION	Qty	Rate		AMOUNT (In Lacs)	
1	Providing, lowering, laying and jointing R.C.C NP-3 pipes and specials into trenches including manholes, chambers etc., excavation, back filling and disposal of surplus earth complete in 400 mm I/D Avg. depth upto 2.0 M.	652	@ 2950		Rs. 19.23	
	450 mm I/D Avg. depth upto 2.0 M.	10	@ 1650		Rs. 0.16	
2	Provision for Road Gullies L.S.	LS	3400		Rs. 0.50	
3	Provision for lighting and watching	LS			Rs. 0.50	
4	Provision for timbering and shoring L.S.	LS			Rs. 0.50	
5	Provision for carriage of material & other foreseen items etc., L.S.	LS			Rs. 0.50	
6	Provision for Rain water harvesting arrangements for 3.7812 Acres @ 1.50 Lac / Acres.	3.7812	@ 450000		Rs. 18.00	
7	Provision for temporary connection with HUDA				Rs. 0.50	
TOTAL					Rs. 44.57	
Add 3% contingencies					Rs. 1.33	
TOTAL					Rs. 45.90	
Add 49% Department charges, price escalation, other for unforeseen charges.					Rs. 22.49	
TOTAL					Rs. 68.40	





**APPROVAL OF SERVICE ESTIMATE OF PROPOSED BUILDING PLAN OF COMMERCIAL  
COLONY AREA MEASURING 3.78125 ACRES (LICENCE NO. 93 DATED 12/11/2021) IN  
SECTOR-89, GURUGRAM  
BEING DEVELOPED BY COPIOUS REALTORS PVT. LTD.**

**STORM WATER DRAIN**

S. No	Name of Drain	400mm dia RCC pipe	450mm dia pipe	500mm dia RCC pipe
<b>Rain Water Harvesting - 1</b>				
1	D1-D2	16		
2	D2-D3	30		
3	D3-D4	30		
4	D4-D5	22		
5	D5-D6	5		
6	D6- RWH1	5		
7	RWH1-D7	5		
<b>Rain Water Harvesting - 2</b>				
1	D7-D8	16		
2	D8-D9	22		
3	D9-D10	30		
4	D10-D11	30		
5	D11-D12	9		
6	D12-RWH2	5		
7	RWH2-D13	5		
<b>Rain Water Harvesting - 3</b>				
1	D13-D14	30		
2	D14-D15	30		
3	D15-D16	22		
4	D16-D17	30		
5	D17-D18	10		
6	D18-RWH3	5		
7	RWH3-D19	5		
<b>Rain Water Harvesting - 4</b>				
1	D19-D20	5		
2	D20-D21	18		
3	D21-D22	18		
4	D22-D23	30		
5	D23-D24	17		
6	D24-D25	20		
7	D25-D26	22		
8	D27-D28	20		
9	D28-D29	30		
10	D29-D30	16		
11	D30-D31	27		
12	D31-D26	8		
13	D26-D32	5		
14	D32-RWH4	0	5	
15	RWH4-OFLOW	0	5	
<b>Rain Water Harvesting - 5</b>				
1	D33-D34	10		
2	D34-D35	26		
3	D35-D36	8		
4	D36-RWH5	5		
5	RWH5-OFLOW	5		
<b>TOTAL</b>		<b>652</b>	<b>10</b>	<b>0</b>



**APPROVAL OF SERVICE ESTIMATE OF PROPOSED BUILDING PLAN OF COMMERCIAL COLONY AREA MEASURING 3.78125 ACRES (LICENCE NO. 93 DATED 12/11/2021) IN SECTOR-89, GURUGRAM**

**Hydraulic Design Chart**

**Storm Water Drain**

Calculations are based on Manning Formula  $V = (1.486/n) \times m^{2/3} \times s^{1/2}$  in F.P.S System

Sl. No.	Name of Line	Length in Meter	Catchment Area in sqmt		Total Area (Sqmt)	Discharge in Cusec (1 Acre = 1 Cusec)	Proposed dia of pipe (mm)	Velocity (mt/sec)	Design Capacity of Drain (Cusecs)	Gradient	Drop (Mtr.)	Level at Start			Level at End		
			Self	Additional								G.L (Mtr.)	I.L (Mtr.)	Depth (Mtr.)	G.L (Mtr.)	I.L (Mtr.)	Depth (Mtr.)
RAIN WATER HARVESTING-1																	
1	D1-D2	16	370	0	370	0.091	400	0.75	1.680	1:350	0.05	0.30	-0.60	0.90	0.30	-0.65	0.95
2	D2-D3	30	693	370	1063	0.263	400	0.75	1.680	1:350	0.09	0.30	-0.65	0.95	0.30	-0.73	1.03
3	D3-D4	30	693	1063	1756	0.434	400	0.75	1.680	1:350	0.09	0.30	-0.73	1.03	0.30	-0.82	1.12
4	D4-D5	22	508	1756	2265	0.560	400	0.75	1.680	1:350	0.06	0.30	-0.82	1.12	0.30	-0.88	1.18
5	D5-D6	5	116	2265	2380	0.588	400	0.75	1.680	1:350	0.01	0.30	-0.88	1.18	0.30	-0.89	1.19
6	D6-RWH-1	5	116	2380	2496	0.617	400	0.75	1.680	1:350	0.01	0.30	-0.89	1.19	0.30	-0.91	1.21
7	RWH-1-D7	5	116	2496	2611	0.645	400	0.75	1.680	1:350	0.01	0.30	-0.90	0.90	0.30	-0.91	0.91
RAIN WATER HARVESTING-2																	
1	D7-D8	16	370	2611	2981	0.737	400	0.75	1.680	1:350	0.05	0.30	-0.61	0.91	0.30	-0.66	0.96
2	D8-D9	22	508	2981	3490	0.862	400	0.75	1.680	1:350	0.06	0.30	-0.66	0.96	0.30	-0.72	1.02
3	D9-D10	30	693	3490	4183	1.034	400	0.75	1.680	1:350	0.09	0.30	-0.72	1.02	0.30	-0.81	1.11
4	D10-D11	30	693	4183	4876	1.205	400	0.75	1.680	1:350	0.09	0.30	-0.81	1.11	0.30	-0.89	1.19
5	D11-D12	9	208	4876	5084	1.256	400	0.75	1.680	1:350	0.03	0.30	-0.89	1.19	0.30	-0.92	1.22
6	D12-RWH-2	5	116	5084	5200	1.285	400	0.75	1.680	1:350	0.01	0.30	-0.92	1.22	0.00	-0.93	0.93
7	RWH-2-D13	5	116	5200	5315	1.313	400	0.75	1.680	1:350	0.01	0.30	-0.93	0.90	0.00	-0.91	0.91
RAIN WATER HARVESTING-3																	
1	D13-D14	30	693	5315	6009	1.485	400	0.75	1.680	1:350	0.09	0.30	-0.61	0.91	0.30	-0.70	1.00
2	D14-D15	30	693	6009	6702	1.656	450	0.75	3.050	1:500	0.06	0.30	-0.70	1.00	0.30	-0.76	1.06
3	D15-D16	22	508	6702	7210	1.782	450	0.75	3.050	1:500	0.04	0.30	-0.76	1.06	0.30	-0.80	1.10
4	D16-D17	30	693	7210	7904	1.953	450	0.75	3.050	1:500	0.06	0.30	-0.80	1.10	0.30	-0.86	1.16
5	D17-D18	10	231	7904	8135	2.010	450	0.75	3.050	1:500	0.02	0.30	-0.86	1.16	0.30	-0.88	1.18
6	D18-RWH-3	5	116	8135	8250	2.039	450	0.75	3.050	1:500	0.01	0.30	-0.88	1.18	0.00	-0.89	0.89
7	RWH-3-D19	5	116	8250	8366	2.067	450	0.75	3.050	1:500	0.01	0.30	-0.90	0.90	0.00	-0.91	0.91
RAIN WATER HARVESTING-4																	
1	D19-D20	5	116	8366	8481	2.096	450	0.75	3.050	1:500	0.01	0.30	-0.61	0.91	0.30	-0.62	0.92
2	D20-D21	18	416	8481	8897	2.199	450	0.75	3.050	1:500	0.04	0.30	-0.62	0.92	0.30	-0.66	0.96
3	D21-D22	18	416	8897	9313	2.301	450	0.75	3.050	1:500	0.04	0.30	-0.66	0.96	0.30	-0.69	0.99
4	D22-D23	30	693	9313	10007	2.473	450	0.75	3.050	1:500	0.06	0.30	-0.69	0.99	0.30	-0.75	1.05
5	D23-D24	17	393	10007	10400	2.570	450	0.75	3.050	1:500	0.03	0.30	-0.75	1.05	0.30	-0.79	1.09
6	D24-D25	20	462	10400	10862	2.684	450	0.75	3.050	1:500	0.04	0.30	-0.79	1.09	0.30	-0.83	1.13
7	D25-D26	22	508	10862	11370	2.810	450	0.75	3.050	1:500	0.04	0.30	-0.83	1.13	0.30	-0.87	1.17
8	D27-D28	20	462		462	0.114	400	0.75	1.680	1:350	0.06	0.30	-0.60	0.90	0.30	-0.66	0.96
9	D28-D29	30	693	462	1156	0.286	400	0.75	1.680	1:350	0.09	0.30	-0.66	0.96	0.30	-0.74	1.04
10	D29-D30	16	370	1156	1525	0.377	400	0.75	1.680	1:350	0.05	0.30	-0.74	1.04	0.30	-0.79	1.09
11	D30-D31	27	624	1525	2149	0.531	400	0.75	1.680	1:350	0.08	0.30	-0.79	1.09	0.30	-0.87	1.17
12	D31-D26	8	185	2149	2334	0.577	400	0.75	1.680	1:350	0.02	0.30	-0.87	1.17	0.30	-0.89	1.19
13	D26-D32	5	116	13704	13820	3.415	500	0.75	3.760	1:550	0.01	0.30	-0.89	1.19	0.30	-0.90	1.20
14	D32-RWH-4	5	116	13820	13935	3.443	500	0.75	3.760	1:550	0.01	0.30	-0.90	1.20	0.00	-0.91	0.91
15	RWH-4-OFLOW	5	116	13935	14051	3.472	500	0.75	3.760	1:550	0.01	0.30	-0.90	0.90	0.00	-0.91	0.91
RAIN WATER HARVESTING-5																	
1	D33-D34	10	231	0	231	0.057	400	0.75	1.680	1:350	0.03	0.30	-0.60	0.90	0.30	-0.63	0.93
2	D34-D35	25	601	231	832	0.206	400	0.75	1.680	1:350	0.07	0.30	-0.63	0.93	0.30	-0.70	1.00
3	D35-D36	8	185	832	1017	0.251	400	0.75	1.680	1:350	0.02	0.30	-0.70	1.00	0.30	-0.73	1.03
4	D36-RWH-5	5	116	1017	1132	0.280	400	0.75	1.680	1:350	0.01	0.30	-0.73	1.03	0.00	-0.74	0.74
5	RWH-5-OFLOW	5	116	1132	1248	0.308	400	0.75	1.680	1:350	0.01	0.30	-0.74	1.04	0.00	-0.75	0.75
NOTE:- 1. STORM WATER LINE SHALL BE LAID AS PER NBC/HUDA NORMS.																	

NOTE:- 1. STORM WATER LINE SHALL BE LAID AS PER NBC/HUDA NORMS.  
2. LEVEL HAVE BEEN TAKEN WITH REFERENCE TO ROAD LEVEL=300MM





APPROVAL OF SERVICE ESTIMATE OF PROPOSED BUILDING PLAN OF COMMERCIAL COLONY AREA MEASURING 3.78125 ACRES (LICENCE NO. 93 DATED 12/11/2021) IN SECTOR-89, GURUGRAM BEING DEVELOPED BY COPIOUS REALTORS PVT. LTD.						
SU' WORK NO. - IV					Road Work	
SI No	DESCRIPTION	Qty		Rate		AMOUNT (In Lacs)
1	Provision for leveling - earth filling / cutting as per site conditions. (In Acres)					
	Area = 3.7812 Acre	3.781	@	100000	Rs.	3.78
2	Provision for Granular sub base 100mm, 150 mm thick stone aggregate, 50 mm thick D.B.M., 20 mm thick pre mix carpet with seal coat	4290	@	500	Rs.	21.45
3	Provision of Paved path of C.C. 1:2:4	1430	@	300	Rs.	4.29
4	Provision for Kerbs & channels of CC 1:2:4	1430	@	350	Rs.	5.01
5	Provision for making approach to each block for C.C. pavements L.S.		@	50000	Rs.	0.50
6	Provision of guide maps at selected place (L.S.)		@	50000	Rs.	0.50
7	Provision for Traffic Lights arrangement - L.S.		@	30000	Rs.	0.30
8	Provision for Demarcating Durgies - L.S.		@	50000	Rs.	0.50
9	Provision for Plot indicator - L.S.		@	50000	Rs.	0.50
10	Provision for Parking Arrangement, L.S.		@	150000	Rs.	1.50
11	Provision of carriage of material and unforeseen items - L.S.		@	50000	Rs.	0.50
TOTAL					Rs.	38.83
Add 3% contingencies					Rs.	1.16
TOTAL					Rs.	39.99
Add 49% Department charges, price escalation, other for unforeseen charges.					Rs.	19.60
TOTAL					Rs.	59.59





**APPROVAL OF SERVICE ESTIMATE OF PROPOSED BUILDING PLAN OF COMMERCIAL COLONY AREA  
MEASURING 3.78125 ACRES (LICENCE NO. 93 DATED 12/11/2021) IN SECTOR-89, GURUGRAM  
BEING DEVELOPED BY COPIOUS REALTORS PVT. LTD.**

<b>Road Work</b>					
S. No.	Name of Road	Length of Road (in Mtrs.)	Road Width	Metalled Width (Mtrs.)	Area in Sqm.
	A	B	C	D	B x D
1	Road No.A	570		6	3420.00
2	Road No.B	80		6	480.00
	<b>Total</b>	<b>650</b>			3900.00
	Add 10 % for curves				390.00
	<b>Total</b>				4,290.00
	Add for surface plaza/ parking				-
	<b>Total</b>				4,290.00
	<b>Say</b>				4,290.00
	Total Length of road	650			
	Add 10% curves	65			
	Total Length	715			
	<b>Say</b>	<b>715</b>	<b>Mtrs.</b>		
	No. of CAR Parking = 0 Nos.	0	Nos.		
	Surface Plaza Area =2X5X3	0	Sqmts.		
	CC foot paths on both side road				
	CC foot paths on both side =2m x length of road	1430	Mtrs.		



APPROVAL OF SERVICE ESTIMATE OF PROPOSED BUILDING PLAN OF COMMERCIAL COLONY AREA MEASURING 3.78125 ACRES (LICENCE NO. 93 DATED 12/11/2021) IN SECTOR-89, GURUGRAM BEING DEVELOPED BY COPIOUS REALTORS PVT. LTD.						
Su Work No-V					Street Lighting	
SI No	DESCRIPTION	Qty		Rate		AMOUNT (In Lacs)
1	Providing street lighting on roads as per standard specifications on HVPN					
	Area = 3.7812 Acre	3.781	@	250000/100000	Rs.	9.45
	TOTAL				Rs.	3.78
	Add 3% contingencies				Rs.	0.11
	TOTAL				Rs.	3.89
	Add 49% Department charges, price esclation, other for unforeseen				Rs.	1.91
	TOTAL				Rs.	5.80
						84 14.50



**APPROVAL OF SERVICE ESTIMATE OF PROPOSED BUILDING PLAN OF COMMERCIAL COLONY AREA  
MEASURING 3.78125 ACRES (LICENCE NO. 93 DATED 12/11/2021) IN SECTOR-89, GURUGRAM  
BEING DEVELOPED BY COPIOUS REALTORS PVT. LTD.**

Sub Work No-V1					Plantation & Road side trees	
SI No	DESCRIPTION	Qty		Rate		AMOUNT (In Lacs)
1	Development of Lawn Area :-					
	a) Trenching the ordinary soil upto depth of 60 cm. including removal and packing of serviceable material and disposing at a lead of 50 M. and making up the trenched area to proper level by filling with earth mixed with manure before and after flooding trench with water including cost of imported earth and manure.					
	b) Rough dressing of trenched area.					
	c) Grassing with "grass" including watering and maintenance of lawns free from weeds and fit for moving in rows 7.50 cm. in either direction including for hedges and grill and barred wire fencing around park and green belts (As per HSVP norms)					
	Area = 3.7812 Acre	3.7812	@	2,50,000 <del>1,00,000</del>	Rs.	9.45 <del>3.78</del>
2	Providing & Planting of trees with tree guards on roads at 12 m intervals					
	Total Road Length (M.)	715				
	Trees @ 12 M. c/c	60				
	Say (1x 60) = 35 Or Say	60				
	Cost of One Tree :-					
	Excavation (Rs.) 30/-					
	Manure (Rs.) 40/-					
	Tree Plants (Rs.) 80/-					
	Tree Guards (Rs.) 600/-					
	Total Cost (each)			1800		1.08
	Cost of Total trees	60	@	<del>64</del>	Rs.	<del>0.04</del>
	<b>TOTAL</b>				Rs.	<del>3.82</del> 10.53
	<b>Add 3% contingencies</b>				Rs.	<del>0.11</del> 0.31
	<b>TOTAL</b>				Rs.	<del>3.93</del> 10.84
	<b>Add 49% Department charges, price escalation, other for unforeseen charges.</b>				Rs.	<del>1.93</del> 5.31
	<b>TOTAL</b>				Rs.	<del>5.86</del> 16.16

Rs 16.16





**APPROVAL OF SERVICE ESTIMATE OF PROPOSED BUILDING PLAN OF COMMERCIAL COLONY AREA  
MEASURING 3.78125 ACRES (LICENCE NO. 93 DATED 12/11/2021) IN SECTOR-89, GURUGRAM  
BEING DEVELOPED BY COPIOUS REALTORS PVT. LTD.**

SURV. WORK NO. VII:				MTC. CHARGES AND RESURFACING OF ROADS.		
SI No	DESCRIPTION	Qty		Rate		AMOUNT (In Lacs)
1	Provision for maintenance charges for water supply, sewerage, storm water, drainage, roads, street light, Hort., etc. complete including operation & establishment charges as per HSVP norms after completion.					
	Area = 3.7812 Acre	3.7812	@	<del>280000</del> 750,000	Rs.	<del>10.59</del> 28.35
2	Provision for resurfacing of roads after first five years of maintenance i.e. 20mm thick premix carpet with seal coat with mechanical paver. (Sqm) <i>20mm premix carpet with seal coat with mechanical paver. (Sqm)</i>	4290	@	<del>250</del> 600	Rs.	<del>10.73</del> 25.74
3	Provision for resurfacing of roads after 10 years of Mtc. i.e. 20mm thick premix carpet with seal coat with mechanical paver. (Sqm) <i>20mm premix carpet with seal coat with mechanical paver. (Sqm)</i>	4290	@	<del>200</del> 750	Rs.	<del>8.58</del> 32.17
<b>TOTAL</b>					Rs.	<del>29.89</del> 86.26
<b>Add 3% contingencies</b>					Rs.	<del>0.90</del> 2.58
<b>TOTAL</b>					Rs.	<del>30.79</del> 88.84
<b>Add 49% Department charges, price escalation, other for unforeseen</b>					Rs.	<del>15.09</del> 43.53
<b>TOTAL</b>					Rs.	<del>45.88</del> 132.38

