II

LC-35-54

PROPOSED RESIDENTIAL PLOTTED COLONY MEASURING 8.225 ACRES (LC-3564) AT SECTOR-36, BAHADURGARH (HARYANA)

SERVICE PLAN ESTIMATE FOR PUBLIC HEALTH ENGINEERING SERVICES WORK

Client

GNEX INFRABUILD (P) LIMITED.
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Architect

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हरियाणा शहरी विकास प्राधिकरण
HARYANA SHEHRI
VIKAS PRADHIKARAN

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

C.E.I-No.
Dated:

Annexure-A

SUB:- **Approval of service plan estimates of Affordable Residential Plotted Colony (Under Deen Dyal Jan Awas Yojna-2016) measuring 8.225 acres falling in the revenue estate of Village Nuna Majra Sec-36, Bahadurgarh Distt. Jhajjar being developed by Gnex Realtech Pvt. Ltd. (License No. 95 of 2017 dated 7.10.2017).**

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.

PROJECT : PROPOSED PLOTTED COLONY FALLING SECTOR-36, BAHADURGARH (HARYANA)

EC-3564 (8.225 Acre)

S.No	Line No.		Average Demand		Peak Demand @ 1.5 Times	Flow Rate	Length of Pipe	Head Loss	Total Head Loss	Velocity	Dia of Pipe
-	From	To	kld.	kl/hr.	lph.	lpm.	mtr.	mtr./ mtr.	mtr.	m/sec	mm
1	HUDA	UGT-2	320.16	14.6	21.8	363.8	50.0	0.012	0.61	0.772	100

Note : HUDA supply line calculation has been done as / 22 hours.

PROJECT REPORT / ESTIMATES FOR PROVIDING INTERNAL SERVICES e.g. WATER SUPPLY, FIRE, SEWERAGE & STORM WATER DRAINAGE ETC. IN RESPECT OF RESIDENTIAL PLOTTED COLONY ON LAND MEASURING 8.225 ACRES AT SECTOR - 36, BAHADURGARH, HARYANA.

Bahadurgarh is located at 28.68°N 76.92°E.[2] It has an average elevation of 206 metres (675 feet). Bahadurgarh was founded by Mughal Emperor Alamgir II (The Sultan of Delhi 1754-1759) gave the town in jagir to Bahadur Khan and Tej Khan, Baloch rulers of Farrukhnagar in 1754, who changed its name from Sharafabad to Bahadurgarh.A fort named Bahadurgarh Fort was constructed there by them. Bahadurgarh came into the hands of Sindhia in 1793. After his defeat in 1803 at the hands of the British, Lord Lake handed the town to the brother of the Nawab of Jhajjar. It was confiscated after the First War of Independence (1857) and became a division of the Rohtak district in 1860.In 1997, the town got attached with Jhajjar after Jhajjar become new district bifurcated from Rohtak. But Bahadurgarh is still larger to Jhajjar in every term; be it education, economy, population or administration.Bahadurgarh is the upcoming NCR of New Delhi, capital of India.Bahadurgarh is upcoming like Gurgaon and Faridabad It is well connected through rail and road network to the capital of nation.

PROPOSED RESIDENTIAL PLOTTED COLONY MEASURING 8.225 ACRES is a residential proposed between **SECTOR - 36 AT BAHADURGARH, HARYANA** for development by **GNEX REALTECH (P) LIMITED.**

1 Water Supply

The source of water supply shall be HUDA water supply connection. It has been proposed to construct undergorund tanks of capacity as per attached detaileds 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 plot.

i.) Source

The source of water supply in this area is tubewells as the underground water is sweet and fit for human consumption, moreover, the water is available at reasonable depth.The average yield of tubewell with 60'–80' strainer will be about 36000 Iph per hour. The recharging of under ground water table in this belt is stated to be good. However still we shall resort to rain water harvesting system to keep up the recharging system. The number of tubewells required for the above area has been worked out to 02 Nos and the tubewells will be bored in tune with growth of demand to avoid absolence of the tubewells.

ii.) Design

The scheme has been designed for population of 2754 persons in 8.225 Acre. The rate of water supply per head per day has been taken assumed as 155.25 litres per head per day as per HUDA norms. In addition to above necessary provision of water for Community building, Commercial building, parks etc. have been taken into account for calculating the maximum number of tubewell water required.

iii.) 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.

iv.) Under Ground Storage

Underground storage tank provision has been made, which caters for the present and a lot of future requirement as well as fire fighting requirement. The water for domestic water compartment shall over flow from the fire compartment so that the water in the fire compartment also remains fresh.

v.) Boosting Station

The boosting station is being planned near UGSR catering to the above requirement.

vi.) **Distribution System**

The distribution systems for this development are has been designed to supply @ 155.25 Litres per head per day @ 3 times the average rate of flow on 'Hazen Willima' formula with C-100. Necessary provision for laying D.I. pipes only conforming to relevant IS standards along with valves and specials has been made in this estimate. The minimum terminal head at any point in this system will be about 17.00 metres so that it can serve the 2.5 stories construction envisaged in the plan. Minimum pipe diameters for distribution are kept as 100 dia.

vii.) **Rising Mains**

Rising mains from HUDA water main on sector road to water works have also been designed and provision for D.I. pipe line (dia as/design) has been made in this estimate.

2 **Sewerage**

This scheme is designed for sewer connecting to the proposed sewage treatment plant. 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% fo 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 ie. 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.

3 **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 NP_2 pipe drain with minimum 400 mm dia is proposed in this area.

4 **Roads**
Cost of road has been taken in the estimate.

5 **Street Lighting**

Provision for street lighting on surrounding area has been made.

5 **Horticulture**

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

7 **Specifications :**

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

8 **Rates**

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

9 Cost

The total cost of development in this Project including various PH & B & R services works out to **Rs. ~~658.30~~ 895.75 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. ~~80.04~~ 108.90 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.

GNEX INFRABUILD (P) LIMITED.

Authorised Signatory

RESIDENTIAL PLOTTED COLONY ON LAND MEASURING 8.225 ACRES AT SECTOR - 36 BAHADURGARH, HARYANA.

DESIGN CALCULATION

	Total No. of Plots (General)			158 ~~204~~ Nos.	
	Total No. of Plots (EWS)			0 Nos.	
	Population per plot (general)			13.5 persons	
	Population per plot (EWS)			9 persons	
1	Therefore population (general)			2133 ~~2754~~ persons	
	Therefore population (EWS)			0 persons	
	Total Population			2133 ~~2754~~ persons	
			SAY	2133 ~~2754~~ **persons**	
	Water requirement for plots (General)		@	155.25 Lpd.	
				Domestic @ 65 %	**Flushing @ 35 %**
	Water requirement for plots (General)		@	100.91	54.34 Lpd.
				215246 ~~277913~~	115902 ~~149645~~ Lpd.
			or	~~277.91~~ 215.25	~~149.65~~ 115.90 **Kld.**
2	**No. of Community Center**		1.00	~~50000~~ 25000	7131
	Daily water requirement	0.815 acre	@	~~32500~~ 13244	~~17500.00~~ Lpd.
	Therefore daily water requirement	@ 25000 /Ltr/Acre		~~32500~~	~~17500~~ Lpd.
				~~32.50~~ 13.24	~~17.50~~ 7.13 **Kld.**
3	**No. of Commercial**		1.00	~~15000~~ 18531	6486
	Daily water requirement	0.5791 Acre @ 32000/Ltr per acre	@	~~9750~~ 18045	~~5250.00~~ Lpd.
	Therefore daily water requirement			~~9750~~	~~5250~~ Lpd.
				~~9.75~~ 12.04	~~5.25~~ 6.49 **Kld.**
	Total Domestic Water Requirement (1+2+3)		**Total**	~~320.16~~ 240.53	~~172.40~~ 129.52 **Kld.**
4	**Area under Parks**		0.623		
	Daily water requirement		@	-	25000 Ltr./Acre
				-	15575 Lpd.
				0.00	**15.58 Kld.**
5	**Area under Roads**				
	Daily water requirement		Lumpsum	-	0 Lpd.
				0.00	**0.00 Kld.**
6	**Area under undetermined use**		0.00		
	Daily water requirement		@	-	0 Lpd.
				0.00	0 Lpd.
			Total	**0.00**	**0.00 Kld.**
		(4+5+6)	**Total**	**0.00**	**15.58 Kld.**

I	**Total daily requirement**			
	a) For Domestic+Flushing use (1+2+3)		240.53 ~~320.16~~	129.52 ~~172.40~~ Kld.
	b) Under Road+ Parks (4+5+6)		0.00	15.58 Kld.
	Total Daily Requirement		240.53 ~~320.16~~	145.10 ~~187.97~~ Kld.
		SAY	245 KL ~~330.00~~	150 KL ~~190.00~~ **Kld.**
II	**Tubewell**			
	Assuming working hours of tubewells			8 Hours
	Assuming discharge/hour of each tubewell			36 Kl./Hours
	Total domestic demand			~~320.16~~ **Kld.**
	No. of tubewells required	245 ~~320.16~~ /36/8		245 ~~1.11~~ 0.85
		Say		~~2~~ 1.00 **Nos.**
III	**Pumping machinery for tubewell**			
	Gross working load		=	45.00 Mtr.
	Average fall in SL		=	3.05 Mtr.
	Depression head		=	6.10 Mtr.
	Friction loss in main		=	2.50 Mtr.
			=	56.65 Mtr.
		Say	=	60.00 Mtr.
	BHP = 26000x60x1/60/60/75/0.6		=	13.33 ~~9.63~~ HP
	With 60% efficiency	Say		~~10.00~~ **HP** 15.00
IV	**Underground Tank**			~~2450~~
	Daily requirement for domestic use		=	~~320.16~~ Kld.
	Capacity of under ground tank 12 hours storage	245 ~~320.16~~ x 12 / 24		245.0 122.50 ~~160.08~~ Kld.
		Say	=	~~180.00~~ **Kld.** 150.0
	Fire Tank Capacity As/NBC Code 100 sqrt (P)= 100 sqrt (4.784)		=	165.95 KLD
		Say	=	**170.00 KLD**
		TOTAL		350.00 **KLD**

It is proposed to provide under ground tank of capacity 350 **KL** which also includes **170 KL** capacity for fire fighting.

Both tanks 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.

It is proposed to provide the under ground tank of following capacity :

Capacity of Fire Water Tank-01	**85.00 Kld.**
Capacity of Fire Water Tank-02	**85.00 Kld.**
Capacity of Raw Water Tank-01	37.50 ~~45.00~~ **Kld.**
Capacity of Raw Water Tank-02	37.50 ~~45.00~~ **Kld.**
Capacity of Domestic Water Tank-01	37.50 ~~45.00~~ **Kld.**
Capacity of Domestic Water Tank-02	37.50 ~~45.00~~ **Kld.**
	UGT

V BOOSTING MACHINERY

UG. Tank

Daily requirement for domestic use		=	245.0 ~~320.16~~ Kld.
Assuming 8 hours pumping	3 pumps (with one standby)		
Discharge/hour	~~320.16~~ / 8 / 3 =		10.20 ~~17.79~~ KL./Hours
Head of pump	245		40 x 170 LPM
i) Suction lifts		=	4.0 ~~0.0~~ Mtr.
ii) Friction loss in M<main & specials		=	6.0 10.0 Mtr.
iii) Clear head		=	30.0 ~~15.0~~ Mtr.
iv) Residual head		=	~~5.0~~ Mtr.
		=	40.0 ~~30.0~~ Mtr.
BHP of motor	$\frac{170 \times 40}{60 \times 75 \times 0.60}$		2.52 ~~3.3~~ HP
		=	~~4.0~~ HP 3.00

Gen Set		Nos.	HP		
Pumps for UG. Tank	(Dom + flushing) (3+2)	~~3~~	~~4.0~~	15	15 HP
Tubewell		~~2~~	10.0		~~20~~ HP
Lighting				=	25 HP
					55 ~~61~~ HP
	or		55.0 ~~61~~ x0.746x1.5		61.54 ~~68.26~~ KVA
				Say	**70.00 KVA**

VI Sewage Treatment Plant Capacity (STP.)

Gross Domestic+Flushing water requirment / day	370.05 ~~492.56~~ Kld.
Sewage flow 75 ~~80~~% of total load	277.54 ~~394.05~~ Kld.
Proposed STP. Capacity	300 ~~400.00~~ **Kld.** **STP**

Boosting machinery for flushing water Pump

Daily water req = 129.52 KL
Add for Horf = 15.58 KL
145.10 KL

Assuming 8 hrs. Pumping 2 Pumps with one standby 145/8/2 = 9.068 KLH or 151.14 LPM
Say 160 LPM

Head = 40 m

BHP = $\frac{160 \times 40}{60 \times 75 \times 0.6}$ = 2.37 HP
Say 3.0 HP

Estimate for Providing in Internal Development works for

GNEX REALTECH (P) LIMITED.

FINAL ABSTRACT OF COST

Description	Amount (Lacs.)
Sub Work - I Water Supply	214.96 ~~221.40~~
Sub Work - II Sewerage	99.65 ~~106.62~~
Sub Work - III Storm Water Drainage	84.81 ~~97.71~~
Sub Work - IV Roads & Footpath	199.22 ~~79.52~~
Sub Work - V Street Lighting	31.55 ~~25.25~~
Sub Work - VI - Horticulture	4.42 ~~15.62~~
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)	261.12 ~~112.29~~
Total	895.73 ~~668.30~~

895.75

Cost per Acre ~~668.30~~/8.225 = ~~80.00~~ lacs ~~per~~ Acre

108.90 lacs

Say ₹ 895.75 lacs

~~(RUPEES SIX CRORE FIFTY EIGHT LACS THIRTY THOUSAND ONLY)~~

GNEX INFRABUILD (P) LIMITED.

GNEX INFRABUILD PRIVATE LIMITED

Authorized Signatory

Executive Engineer,
HSVP Division,
Bahadurgarh,

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

Superintending Engineer (HQ)
for Chief Engineer HSVP
Panchkula

12/12

Superintending Engineer
HSVP Circle, Rohtak

Director
Town & Country Planning
Haryana, Chandigarh

FINAL ABSTRACT OF REVISED COST

Description		Amount (Lacs.)
Sub Head - (I) Head Works	₹	42.20 ~~49.00~~
Sub Head - (II) Pumping Machinery	₹	23.50 ~~39.60~~
Sub Head - (III) Distribution System (Dom. & Flushing)	₹	68.03 ~~48.31~~
Sub Head - (IV) Irrigation Scheme	₹	6.34 ~~7.46~~
	Total ₹	140.07 ~~144.27~~
Add 3% Contingencies & PE charges	₹	4.20 ~~4.33~~
	Total	144.27 ~~148.59~~
Add 49% Departmental Charges, price escalation, water cess, Admin.		70.69 ~~72.81~~
	Grand Total	214.96 ~~221.40~~
(CO to final abstract of cost)	~~Say~~	~~221.40~~

	Sub Work I				**Water Supply**	
	Sub Head No. I				**Head Works**	
S. No.	**Description**	**Unit**	**Qty**	**Rate**	**Amount**	
					Rs. (lacs)	
1	Boring and installing 510 mm i/d tubewells with reverse/direct rotary rig complete with pipe strainer to a depth of about 80 m. complete.	Nos.	~~2~~ 1	~~600000.00~~ 1,00,000	10.00	
2	Constructing pump chambers as per standard design of PWD PH/HUDA of size ~~2.50x2.50~~ 2.50 x 4.90 m.	Nos.	~~2~~ 1	~~100000.00~~	~~2.00~~	
1	Construction of boosting chambers of suitable size along with under ground tank & pumping machinery and generating set etc. complete in all respects.					
	Details of boosting station					
i)	construction of boosting chambers	Nos.	1	750000.00	7.50	
ii)	construction of UG tank 320 KL including 170 KL for fire reserve Complete in all respect	KL	~~350~~ 320	~~7000.00~~ 3500	~~24.50~~ 11.20	
4	Provision for carriage of material and other unforeseen items.	LS	-	-	~~3.00~~ 1.00	
5	Provision for facilites staff for Maintenance	LS	-	-	~~2.00~~	
6.	P&M for boundary wall around T.W. water works, fountain, lawn etc		(L.S)		5+	
	(C.O. to abstract of cost of Sub-work No.I)				~~49.00~~	Lacs
				Say	~~49.00~~ 42.20	**Lacs**

	Sub Work I				Water Supply
	Sub Head No. II				Pumping Machinery
S. No.	Description	Unit	Qty	Rate	Amount (in Lakhs)
1 (i)	Providing and installing electricity driven electro or submersible pumping set capable of delivering about 36 KL water per hour against a total head of 60 M complete with motor and other accessories.	Nos.	~~1~~	~~160000.00~~ 2.00	~~3.20~~ 2.00 Lac
1 (ii)	Providing & installing electricity driven pumping set capable of delivering ~~300~~ 170 LPM of water against a total head of ~~40~~ 40 m complete with motor and other accessories (For Domestic - ~~3~~ 3.0 HP). (iii) — do — 160 LPM 40 m head with 3.0 HP (For Flushing)	Nos.	~~4~~ (3+1) 4 Nos	~~110000.00~~ 0.50	~~5.60~~ 2.00
2	Provision for diesel engine generator set each for standby Arrangements for booster pump complete with gear haed arrangements of following capacities.	NOs	2+1 3 Nos	0.50	1.50 Lac
i)	70 KVA	Nos.	~~1~~	~~1050000.00~~ (L.S)	~~10.50~~ 7.00
4	Provision for diesel engine genset stand bye arrangements for Tubewells.	Nos.	~~2~~	~~550000.00~~ (L.S)	~~11.00~~ 2.00
5	Provision for cheap pressure type chlorination plant complete.	Nos.	~~2~~ 1	~~15000.00~~ 1.00	~~0.30~~ 1.00
6	Provision for making foundations & erection of pumping machinery.	LS	-	-	~~3~~ 2.00
7	Provision for pipes, valves & specials inside the pump chamber.	LS	-	-	~~2.00~~ 1.50
8	Provision for electric services connection including electric fittings for tubewells chambers complete. incl. cost of Transformer	LS	-	-	~~2.00~~ 3.50 Lac
9	Provision for carriage for materials and other unforeseen items.	LS	-	-	~~2~~.00
	(C.O. to abstract of cost of Sub-work No.I)			Total	~~39.50~~ 23.50 Lac
				Say	~~39.50~~

	Sub Work I				Water Supply	
	Sub Head No. III				Distribution System/Rising Main	
					(Dom. & F. Flushing)	
S. No.	Description	Unit	Qty	Rate	Amount (Rs.)	
1	Providing, laying, jointing & testing D.I. K-7 pipes including cost of excavation complete as per ISI marked. (For Domestic & Tube Well water supply line) & Flushing Lines		4404		55.05 lacs	
i)	100 mm dia	M	~~3429~~	1250.00	~~3754800.00~~	
ii)	150 mm dia	M	~~36~~ 239	1575.00	~~56700.00~~ 3.76 lacs	
2	Providing, fixing & Testing Sluice valves including cost of complete in all respects.				2.40 lacs	
i)	100 mm i/d	Nos.	20	12000.00	~~200000.00~~	
3	Providing, fixing & Testing Non Return valves (NRV) including cost of complete in all respects.					
i)	100 mm i/d	Nos.	3	14000.00	42000.00	
5	Providing and fixing air valves and scour valves including cost of complete in all respects.	Nos.	4	10000.00	40000.00	
7	Providing and fixing indicating plates for sluice valve, air valve etc.	Nos.	27	1000.00	27000.00	
8	Provision for carriage of material & other unforeseen items	LS	-	-	250000.00	
9	Provision for cutting the roads and making to its original conditions.	LS	-	-	100000.00	
10	Making water supply connection. on master Road	LS	-	-	100000.00	
11	Provision for rising main from HUDA water supply line to UG Tank.				0.63	
i)	100 mm i/d	M	50	1250.00	~~60000.00~~	
12	Pour & Fixing Fire Hydrant Complete with masonry Chamber		(Lot)		0.60 lac	
	(C.O. to abstract of cost of Sub-work No.I)			Total	~~4830500.00~~	
				Say	~~48.31~~ Lacs	
					68.03 lacs	

	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.					
i)	90 OD	M	703	800.00	562400.00	
2	Providing and fixing 20mm dia Irrigation hydrant valve complete in all respect.	Nos.	8	3500 ~~2400.00~~	0.28 ~~19200.00~~	
3	Providing & fixing valve 25mm dia.	Nos.	8	400.00	3200.00	
4	Providing, fixing & Testing Butter fly valves including cost of complete in all respects.					
i)	80 mm i/d	Nos.	1	4750.00	4750.00	
5	Providing and fixing air valves and scour valves including cost of complete in all respects.	Nos.	1	4500.00	4500.00	
6	Providing and fixing indicating plates for sluice valve, air valve etc.	Nos.	2	1000.00	2000.00	
7	Provision for carriage of materials etc. and other unforsean charges.	LS	-	-	0.10 ~~50000.00~~	
8	Provision for cutting of roads & making good to its in original condition.	LS	-	-	0.20 ~~100000.00~~	
					6.34 lacs	
				Total	~~746050.00~~	
				Say	~~7.46 Lacs~~	

	Sub Work II			Sewerage Scheme	
S. No.	Description	Unit	Qty	Rate	Amount (Rs.)
1	Providing, lowering, jointing, cutting SW /RCC NP_3 pipes and specials into trenches including cost of excavation, bed concrete lot of manholes complete.				
i)	**200 mm i/d**				
a)	Average depth 0.0 m to 1.5 m	M	112	1250.00	140000.00
b)	Average depth 1.5 m to 4.5 m	M	260	~~1350.00~~ 1500	~~351000.00~~ 3.90
ii)	**250 mm i/d**				1.46
a)	Average depth 0.0 m to 1.5 m	M	86	1400.00	~~120400.00~~
b)	Average depth 1.5 m to 4.5 m	M	463	~~1500.00~~ 1800	~~694500.00~~ 8.33
iii)	**300 mm i/d**				
a)	Average depth 1.5 m to 4.5 m	M	46	2250.00	103500.00
iv)	**400 mm i/d**				
a)	Average depth 1.5 m to 4.5 m	M	163	2400.00	391200.00
2	Provision for lighting, watching and temporary diversion of traffic	LS	-	-	200000.00
3	Provision for cutting of roads and carriage of materials etc. and other unforsean charges.	LS	-	-	200000.00
4	Provision for connection with HUDA.	LS	-	-	200000.00
5	Cost of 400 Kld Sewerage Treatment Plant. complete in all respect	LS	-	-	37.50 ~~4500000.00~~
6	Provision for CI / DI pipe from STP. To Huda Main Line.				
i)	150 mm dia pipe.	M	25	~~1600.00~~ 1575	~~40000.00~~ 0.39
	Provision for Vent Pipe as P.H Norms		(4)		4.00 la
					~~6840600.00~~ 64.93
	Add 3% contingencies on P.E. charges				~~208218~~ 1.95
					~~7148818.00~~ 66.88
	Add 49% Deptt. Charges, price escalation, unforseen Admin.				~~3502920.82~~ 32.77
				Total	~~10651738.82~~ 99.65 Lacs
	(C.O. to abstract of cost of ~~Sub-work No. 1~~ final)			Say	~~106.52~~ Lacs

	Sub Work - III			Storm Water Drain		
S. No.	Description	Unit	Qty	Rate	Amount (Rs.)	
1	Providing, lowering, jointing, cutting RCC NP3 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	11.48	Lacs
a)	Average depth upto 1.5 m	M	459	~~1900.00~~	~~872100.00~~	
b)	Average depth 1.5 m to 4.5 m	M	888	~~2250.00~~	~~1998000.00~~	
				2600	23.09	Lacs
ii)	**500 mm i/d**					
a)	Average depth upto 1.5 m	M	0	2150.00	0.00	
b)	Average depth 1.5 m to 4.5 m	M	241	~~2300.00~~	~~554300.00~~	
				3400	8.19	Lacs
2	Provision for Road Gully & Drain pipe 300 mm	LS	-	-	~~1000000.00~~ 4.60	
3	Provision for cutting of roads and carriage of materials etc. and other unforseen items	LS	-	-	250000.00	
4	Provision for disposal arrangements Recharge Pit. at Selected places as applicable	Nos	~~3~~	(LS) ~~250000.00~~	50000.00	
5	Provision for lighting, watching and temporary diversion of traffic	LS	-	-	500000.00	
6	~~Provision for connection with HUDA.~~ Connect to Next MH.					
i)	~~400 mm i/d~~ i.e. 11.60 acre scheme	~~M~~	~~150~~	~~2950.00~~	~~442500.00~~	
						55.26
					~~6366900.00~~	
	Add 3% contingencies on PE charges				~~191007.00~~	1.66
						56.92
					~~6557907.00~~	27.89
	Add 49% Deptt. Charges for escalation, Unforseen				~~3213374.43~~	
	Return					84.81
				Total	~~9771281.43~~	
				SAY	~~97.71~~	**Lacs**
	(C.O. to abstract of cost ~~of Sub-work No. 1~~ final)					

	Sub Work IV				Road Work	
S. No.	Description	Unit	Qty	Rate	Amount (Rs.)	
1	Provision for leveling & earth filling as per site condition ~~8.225 acre @ 100000/acre~~	Acres	8.225	~~100000~~	12.34 las ~~822500.00~~	
2	Construction of road by:-					
	i) Providing GSB 300 mm thick.					
	ii) 250 mm thick W.M.M. stone aggregate.					
	iii) 50 mm thick B.M.					
	iv) ~~2~~ 0 mm thick M.S.S. complete in all respect.	Sq. mtr.	~~2913.0~~ 8035	~~850~~ 1200	~~2476050.00~~ 96.42	
3	Provision for making approach and pavement to building block by providing concrete pavement or tiles. Etc. 500.49 sqm @ 500 / sqm.	Sq. mtr.	500.49	500	250245.00	
4	Provision for ~~parking arrangement @ 500 / sqm~~ Pavement in Commercial area i.e. 58% of the area = 0.25625 Acre x 4046.7 / 2 = 518.52 sqm 600	Sq. mtr.		~~500~~	3.11 las ~~0.00~~	
5	Provision for kerb stone with complete specification.	mtr.	~~1260.8~~ 1990	~~600~~	11.94 las ~~882532.00~~	
6	Provision for Carriage of material & other unforseen 1 Jobs	LS.		~~500000.00~~	2.50 las ~~500000.00~~	
7	Provision for traffic lighting and guide map/ indicators	LS.		~~250000.00~~	1.00 las ~~250000.00~~	
				Total	~~5181327.00~~	
	Add 3% contingencies & PE. charges				129.81 3.89 ~~155439.81~~	
					133.70	
					~~5336766.81~~	
				Total	65.52 ~~53.37~~ Lacs	
	Add 49 % department charges, price escalation, unforseen & dum.				199.22 ~~26.15~~ Lacs	
				SAY	~~79.52~~ Lacs	

	Sub Work V				**Street Lighting**	
S. No.	**Description**	**Unit**	**Qty**	**Rate**	**Amount (Rs.)**	
1	Providing street lighting on internal roads as per standard specifications of HVPNL with CFL	per acre	8.225	200000.00	20.56 ~~1645000.00~~	lacs
	Add 3% contingencies ~~on~~ PE charges				0.62 ~~49350.00~~	lacs
				Total	21.18 ~~1694350.00~~	lacs
	Add 49% Deptt. Charges, price escalation, unforseen items.				10.37 ~~830231.50~~	lacs
				Total	31.55 ~~2524582.00~~	lacs
				SAY	~~25.25~~ **Lacs**	

	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 prope level by filling with earth mixed with manure befor & after flodding 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)					
			0.623		0.93 lacs	
	~~8.225 acres @ Rs. 1.0 lacs.~~ 0.623 Acre	per acre	~~8.225~~	100000.00	~~8,22,500~~	
	~~260~~ trees @ Rs. ~~750~~/- each 610 +10% = 693/12 = 58 Nos				~~1,95,000~~	1.95
	150 1300/ Sq Ft 58×22=1276 Nos Say 150 Nos				~~1017500.00~~	2.88
	Add 3% contingency charges				~~30525.00~~	0.09
				Total	~~1048025.00~~	
	Add 49% Deptt. Charges, price escalation, Unforseen				~~513632.25~~	2.97 lacs
	Solum.			Total	~~1561557.25~~	1.45 lacs
				Say	~~15.62~~ Lacs	4.42 lacs

	Sub 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 drainage, 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 lacs	61.68 lacs	
	~~8.225 acres @ 5 lacs per acre~~	per acre	8.225	~~500000.00~~	~~4112500~~	
2	Provision for resurfacing & strengthening of road after five years of Ist phase @ ~~400~~/- per sqm	Sq. mtr.	8035 ~~2913.0~~	600/-	48.21 ~~1165200.00~~	
3	Provision for resurfacing & strengthening of road after ten years of 2nd phase @ ~~600~~/- per sqm	Sq. mtr.	8035 ~~2913.0~~	750/- ~~700~~	60.26 ~~2039100.00~~	
					170.15	
				Total	~~7316800.00~~	
	Add 3% contingency & PE charges				5.10	
					~~219504.00~~	
					175.25	
				Total	~~7536304.00~~	85.87
	Add 49% Departmetal charges, price escalation				~~3692788.96~~	261.12
	Work Charged, Admin Charges			Total	~~11229092.96~~	
				say	~~112.29~~	Lacs

WATER SUPPLY QUANTITY SHEET FOR LC-3564 (8.225 ACRE)

DOMESTIC WATER SUPPLY QUANTITY SHEET

S.No.	Line No		Length of Pipe	Dia of Pipe
	From	To	mtr.	mtr.
1	*UGT-2*	D16	25.0	150
2.	D16	D16a	22.0	100
3.	D16a	D16b	8.0	100
4.	D16b	D16c	~~8.0~~ 51	100
5.	D16a	D16c	~~8.0~~ 55	100
6.	D16	D16d	~~8.0~~ 21	100
7.	D16d	D16e	~~8.0~~ 20	100
8.	D16d	D19a	~~8.0~~ 124	100
9.	D16	D17	~~8.0~~ 24	150
10.	D17	D17a	~~8.0~~ 29	100
11.	D17	D18	8.0 ~	150
12.	D18	D17a	~~8.0~~ 33	100
13.	D18	D19	~~8.0~~ 94	150
14.	D19	D19a	~~8.0~~ 20	100
15.	D19a	D19b	~~8.0~~ 100	100
16.	D19	D20	8.0	~~100~~ 150
17.	D20	D19b	~~8.0~~ 128	100
18.	D20	D21	~~8.0~~ 44	~~100~~ 150
19.	D21	D25a	~~8.0~~ 175	100
20.	D21	D22	~~8.0~~ 45	100
21.	D22	D22a	~~8.0~~ 127	100
22.	D22	D23	8 ~~8.0~~ ~~135~~	100
23.	D23	D22a	~~8.0~~ 135	100
24.	D23	D24	36 ~~8.0~~ ~~127~~	100
25.	D24	D24a	127 ~~8.0~~ ~	100
26.	D24	D25	8.0 ~	100

S.No.	Line No		Length of Pipe	Dia of Pipe
	From	To	mtr.	mtr.
27.	D25	D24a	~~80~~ 135	100

S.No.	Line No		Length of Pipe	Dia of Pipe
	From	To	mtr.	mtr.
28.	D25	D25a	~~8.0~~ 93	100
29.	D21	D26	~~8.0~~ 34	100
30.	D26	D27	8.0	100
31.	D27	D27a	227.0	100
32.	D26	D27a	219.0	100
			100 mm = 1992 m 150 mm = 203 m	
FLUSHING WATER SUPPLY QUANTITY SHEET				
1	***STP-2***	F14	25.0	100
2.	F14	F15	12.0	100
3.	F15	F15a	51.0	100
4.	F15	F16	8.0	100
5.	F16	F15a	55.0	100
6.	F16	F17	22.0	100
7.	F17	F17a	21.0	100
8.	F17a	F17b	20.0	100
9.	F17a	F20a	124.0	100
10.	F17	F18	24.0	100
11.	F18	F18a	29.0	100
12.	F18	F19	8.0	100
13.	F19	F18a	33.0	100
14.	F19	F20	94.0	100
15.	F20	F20a	20.0	100
16.	F20a	F20b	100.0	100
17.	F20	F21	8.0	100
18.	F21	F20b	128.0	100
19.	F21	F22	44.0	100
20.	F21	F26a	175.0	100
21.	F22	F27	34.0	100

S.No.	Line No		Length of Pipe	Dia of Pipe
	From	To	mtr.	mtr.
22.	F27	F28a	219.0	100
23.	F27	F28	8.0	100
24.	F28	F28a	227.0	100
25.	F22	F23	45.0	100
26.	F23	F23a	127.0	100
27.	F23	F24	8.0	100
28.	F24	F23a	135.0	100
29.	F24	F25	36.0	100
30.	F25	F25a	127.0	100
31.	F25	F26	8.0	100
32.	F26	F26a	97.0	100
			2072	
TUBE WELL WATER SUPPLY QUANTITY SHEET				
1	TW3	TT1	330.0	100
2.	TW4	TT1	10.0	100
3.	TT1	***UGT-02***	36.0	150
HUDA WATER SUPPLY QUANTITY SHEET				
1	HUDA Water Supply	***UGT-02***	50.0	100

Description	**Length in (MTR)**	**Pipe Dia (MM)**
Domestic & Tube Well Water Supply line	~~3129.0~~ 4404	100
Domestic & Tube Well Water Supply line	~~36.0~~ 203	150

Description	**Length in (MTR)**	**Pipe Dia (MM)**
HUDA Water Supply line	50.0	100
100 Dia Valve	20	Nos.
100 Dia Non Return Valve	3	Nos.
Air Valve	4	Nos.

IRRIGATION WATER SUPPLY QUANTITY SHEET FOR LC-3564 (8.225 ACRE)				
S.No.	Line No		Length of Pipe	Dia of Pipe
	From	To	mtr.	OD
1	*STP-2*	G7	5.0	90
2.	G7	G8	125.0	90
3.	G8	G9	269.0	90
4.	G9	G10a	55.0	90
5.	G10a	G10	62.0	90
6.	G9	G10	35.0	90
7.	G10	G11	10.0	90
8.	G11	G12	48.0	90
9.	G12	G13	35.0	90
10.	G13	G11	59.0	90
Irrigation Water Supply line			**703.0**	**90**
Garden Hydrant			8	**Nos.**
80 Dia Valve			1	**Nos.**
Air Valve			1	**Nos.**

TITLE - SEWERAGE QUANTITY SHEET FOR LC-3564 (8.225 ACRE)

S.No.	Line No.		Length	Pipe Dia		Depth			EXCAVATION			
						Start	End	Avg.	0.0 - 1.5	1.5 - 3.0	3.0 - 4.5	4.5 - 6.0
	From	To	(mtr.)	(mm)	(mtr.)	(mtr.)	(mtr.)	(mtr.)	(mtr.)	(mtr.)	(mtr.)	(mtr.)
1	S8	S9	251.0	250	0.250	1.25	2.67	1.96	0.0	251.0	0.0	0.0
2.	S14	S15	86.0	250	0.250	1.25	1.70	1.48	86.0	0.0	0.0	0.0
3.	S15a	S15	137.0	250	0.250	1.25	1.97	1.61	0.0	137.0	0.0	0.0
4.	S15	S16	37.0	250	0.250	1.97	2.17	2.07	0.0	37.0	0.0	0.0
5.	S16a	S16	137.0	200	0.200	1.20	2.18	1.69	0.0	137.0	0.0	0.0
6.	S16	S9	38.0	250	0.250	2.23	2.53	2.38	0.0	38.0	0.0	0.0
7.	S9	S10	46.0	300	0.300	2.72	2.71	2.71	0.0	46.0	0.0	0.0
8.	S10a	S10	123.0	200	0.200	1.20	2.08	1.64	0.0	123.0	0.0	0.0
9.	S10	S11	100.0	400	0.400	2.81	3.08	2.94	0.0	100.0	0.0	0.0
10.	S11a	S11	27.0	200	0.200	1.20	1.39	1.30	27.0	0.0	0.0	0.0
11.	S11	S12	51.0	400	0.400	3.08	3.21	3.14	0.0	0.0	51.0	0.0
12.	S12a	S12	50.0	200	0.200	1.20	1.56	1.38	50.0	0.0	0.0	0.0
13.	S12b	S12	35.0	200	0.200	1.20	1.45	1.32	35.0	0.0	0.0	0.0
14.	S12	S13	9.0	400	0.400	3.21	3.24	3.23	0.0	0.0	9.0	0.0
15.	S13	***STP-2***	3.0	400	0.400	3.24	3.25	3.24	0.0	0.0	3.0	0.0
Total			**1130.0**						**198.0**	**869.0**	**63.0**	**0.0**

Excavation Depth				
	(0.0 - 1.5)	(1.5 - 3.0)	(3.0 - 4.5)	(4.5 - 6.0)
200 mm Dia pipe	112.0	260.0	0.0	0.0
250 mm Dia pipe	86.0	463.0	0.0	0.0
300 mm Dia pipe	0.0	46.0	0.0	0.0
400 mm Dia pipe	0.0	100.0	63.0	0.0

TITLE : STORM WATER QUANTITY SHEET FOR LC-3564 (8.225 ACRE)

S.No.	Line No.		Length	Size of Pipe		Depth			EXCAVATION		
						Start	End	Avg.	0.0 -1.5	1.5 - 3.0	3.0 - 4.5
	From	To	(mtr.)	(mm)	(mtr.)	(mtr.)	(mtr.)	(mtr.)	(mtr.)	(mtr.)	(mtr.)
1	B1	B2	27.0	400	0.400	1.40	1.45	1.42	27.0	0.0	0.0
2.	B2a	B2	47.0	400	0.400	1.40	1.48	1.44	47.0	0.0	0.0
3.	B2	B3	51.0	400	0.400	1.48	1.57	1.53	0.0	51.0	0.0
4.	B3a	B3	25.0	400	0.400	1.40	1.44	1.42	25.0	0.0	0.0
5.	B3	B4	26.0	400	0.400	1.57	1.62	1.59	0.0	26.0	0.0
6.	B13	B14	34.0	400	0.400	1.40	1.46	1.43	34.0	0.0	0.0
7.	B14a	B14	13.0	400	0.400	1.40	1.42	1.41	13.0	0.0	0.0
8.	B14	B4	88.0	400	0.400	1.46	1.61	1.54	0.0	88.0	0.0
9.	B4	D.C.05	4.0	400	0.400	1.62	1.62	1.62	0.0	4.0	0.0
10.	D.C.05	R.P.05	2.0	400	0.400	1.62	1.63	1.63	0.0	2.0	0.0
11.	R.P.05	B5	4.0	400	0.400	1.40	1.41	1.40	4.0	0.0	0.0
12.	B5	B6	89.0	400	0.400	1.41	1.76	1.59	0.0	89.0	0.0
13.	B6	B7	20.0	500	0.500	1.86	1.89	1.88	0.0	20.0	0.0
14.	A24	B7	61.0	400	0.400	1.40	1.51	1.45	61.0	0.0	0.0
15.	B7	B8	36.0	500	0.500	1.89	1.94	1.91	0.0	36.0	0.0
16.	A25	B8	129.0	400	0.400	1.40	1.63	1.51	0.0	129.0	0.0
17.	B8	B9	41.0	500	0.500	1.94	1.89	1.91	0.0	41.0	0.0
18.	A26	B9	128.0	400	0.400	1.40	1.62	1.51	0.0	128.0	0.0
19.	B9	B10	105.0	500	0.500	1.89	2.03	1.96	0.0	105.0	0.0
20.	C9	B10	130.0	400	0.400	1.40	1.63	1.51	0.0	130.0	0.0
21.	B10	B11	15.0	500	0.500	2.03	2.04	2.04	0.0	15.0	0.0
22.	B11	D.C.06	7.0	500	0.500	2.04	2.05	2.05	0.0	7.0	0.0
23.	D.C.06	R.P.06	3.0	500	0.500	2.05	2.06	2.06	0.0	3.0	0.0
24.	R.P.06	B12	4.0	500	0.500	1.50	1.51	1.50	0.0	4.0	0.0
25.	B12	C5	10.0	500	0.500	1.51	1.52	1.51	0.0	10.0	0.0
26.	B15	B16	37.0	400	0.400	1.40	1.46	1.43	37.0	0.0	0.0
27.	B16a	B16	97.0	400	0.400	1.40	1.57	1.49	97.0	0.0	0.0
28.	B16	B17	19.0	400	0.400	1.57	1.80	1.69	0.0	19.0	0.0

S.No.	Line No.		Length	Size of Pipe		Depth			EXCAVATION		
	From	To	(mtr.)	(mm)	(mtr.)	Start (mtr.)	End (mtr.)	Avg. (mtr.)	0.0 -1.5 (mtr.)	1.5 - 3.0 (mtr.)	3.0 - 4.5 (mtr.)
29.	B17a	B17	37.0	400	0.400	1.40	1.46	1.43	37.0	0.0	0.0
30.	B17	B18	20.0	400	0.400	1.80	1.84	1.82	0.0	20.0	0.0
31.	B18a	B18	20.0	400	0.400	1.40	1.44	1.42	20.0	0.0	0.0
32.	B18	B19	15.0	400	0.400	1.84	1.86	1.85	0.0	15.0	0.0
33.	B19a	B19	21.0	400	0.400	1.40	1.44	1.42	21.0	0.0	0.0
34.	B19	B20	176.0	400	0.400	1.86	2.07	1.97	0.0	176.0	0.0
35.	B20	D.C.07	8.0	400	0.400	2.07	2.09	2.08	0.0	8.0	0.0
36.	D.C.07	R.P.07	3.0	400	0.400	2.09	2.09	2.09	0.0	3.0	0.0
37.	R.P.07	B21	6.0	400	0.400	1.40	1.41	1.41	6.0	0.0	0.0
38.	B21	B22	13.0	400	0.400	1.41	1.43	1.42	13.0	0.0	0.0
39.	B22	**C6a**	17.0	400	0.400	1.43	1.46	1.45	17.0	0.0	0.0
Total			**1588.0**						**459.0**	**1129.0**	**0.0**

Excavation Depth			
Description	(0.0 - 1.5)	(1.5 - 3.0)	(3.0 - 4.5)
400 mm Dia pipe	459.0	888.0	0.0
500 mm Dia pipe	0.0	241.0	0.0

TITLE : ROAD QUANTITY SHEET FOR LC-3564 (8.225 ACRE)					
AREA OF METALLED ROAD (A)			metalled		
S.NO.	ROAD NO.	LENGTH	WIDTH	-	TOTAL AREA
-	-	(In Sq. Mt.)	-	-	(In Sq. Mt.)
1	R1-R9 Road No 1	220.75	5.50 m ~~4.20~~		1214.12 ~~927.17~~
2.	~~R11-R16~~ 2	220.75	5.50 m ~~4.20~~		1214.12 ~~927.17~~
3.	~~R29-R30~~ 3	98.38	5.50 m ~~4.20~~		541.09 ~~413.20~~
4.	~~R31-R32~~ 4	15.23	5.50 m ~~4.20~~		83.76 ~~63.95~~
5.	~~R33-R34~~ 5	49.10	5.50 m ~~4.20~~		270.05 ~~206.20~~
6.	~~R35-R36~~ Road No- 6	26.17	5.50 m ~~4.20~~		143.93 ~~409.91~~
	TOTAL	630.38	TOTAL		3467.67 ~~2647.60~~
		63.03 693.41	ADD 10% FOR CURVES		346.70 ~~264.760~~
			TOTAL METALLED ROAD AREA (A)		3813.77 ~~2912.36~~
			TOTAL AREA OF ROAD	SAY	2913.00
7	24m wide Road Road No 7	76 m	14m (2x7)		1064
8	Road No. 8	198 m	14m (2x7)		2772
		APPROCH PAVEMENT 274 m			3836 Sqm
		27.40	Add 10% for Curves		383.60
	PARK PATHWAY AREA CALCULATION	301.40 m			4219.60 Sqm
	PHASE-02				
	1	PARK -01	231.97		
	2	PARK -02	268.52		
			500.49		

Total length of Road = 693.41m + 301.40 m = 994.81m

Say 995 m

Total area = 4219.60 + 3813.77 = 8033.37 Sqm

Say 8035 Sqm

PROJECT : PROPOSED PLOTTED COLONY FALLING SECTOR-36, BAHADURGARH (HARYANA)

TITLE : HYDRAULIC SEWAGE DESIGN CHART FOR LC-3564 (8.225 ACRE)

S.No.	Line No.		Gross Water Requirement (Load on Line)	Sewage Flow (Self Load on Line) LPD	Sewage Flow (Self Load on Line) KLD	Previous Load	Progressive Discharge	Progressive Discharge (Average)	Progressive Discharge (Peak)	Infilteration @ 25% Av. Discharge	Total Discharge	Length	Pipe Size	Slope (1 in)	Fall	Velocity	Capacity of Pipe	Levels at start (mtr)			Levels at End (mtr)			Manhole Start Depth	Manhole Start End	Average Depth
-	From	To	lpd.	80%	1000	kld.	kld.	lps.	lps.	lps.	lps	(mtr.)	(mm)	(mm)	(mtr.)	(m/s) (v)	lps	FRL	FSL	IL	FRL	FSL	IL	(mtr)	(mtr)	(mtr)
1.	S8	S9	106890	85512	85.51	0.00	85.51	0.99	2.97	0.25	3.22	251.0	250	190	1.32	0.76	18.70	212.072	211.07	210.82	212.172	209.75	209.50	1.25	2.67	1.96
2.	S14	S15	29342	23474	23.47	0.00	23.47	0.27	0.82	0.07	0.88	86.0	250	190	0.45	0.76	18.70	212.072	211.07	210.82	212.072	210.62	210.37	1.25	1.70	1.48
3.	S15a	S15	83835	67068	67.07	0.00	67.07	0.78	2.33	0.19	2.52	137.0	250	190	0.72	0.76	18.70	212.072	211.07	210.82	212.072	210.35	210.10	1.25	1.97	1.61
4.	S15	S16	12575	10060	10.06	90.54	100.60	1.16	3.49	0.29	3.78	37.0	250	190	0.19	0.76	18.70	212.072	210.35	210.10	212.072	210.16	209.91	1.97	2.17	2.07
5.	S16a	S16	62876	50301	50.30	0.00	50.30	0.58	1.75	0.15	1.89	137.0	200	140	0.98	0.76	12.02	212.072	211.07	210.87	212.072	210.09	209.89	1.20	2.18	1.69
6.	S16	S9	12575	10060	10.06	150.90	160.96	1.86	5.59	0.47	6.05	38.0	250	190	0.20	0.76	18.70	212.072	210.09	209.84	212.172	209.89	209.64	2.23	2.53	2.38
7.	S9	S10	17096	13677	13.68	246.47	260.15	3.01	9.03	0.75	9.79	46.0	300	250	0.18	0.75	26.51	212.172	209.75	209.45	211.972	209.57	209.27	2.72	2.71	2.71
8.	S10a	S10	67068	53654	53.65	0.00	53.65	0.62	1.86	0.16	2.02	123.0	200	140	0.88	0.76	12.02	211.972	210.97	210.77	211.972	210.09	209.89	1.20	2.08	1.64
9.	S10	S11	52096	41677	41.68	313.81	355.48	4.11	12.34	1.03	13.37	100.0	400	370	0.27	0.75	46.93	211.972	209.57	209.17	211.972	209.30	208.90	2.81	3.08	2.94
10.	S11a	S11	12575	10060	10.06	0.00	10.06	0.12	0.35	0.03	0.38	27.0	200	140	0.19	0.76	12.02	211.972	210.97	210.77	211.972	210.78	210.58	1.20	1.39	1.30
11.	S11	S12	0	0	0.00	365.54	365.54	4.23	12.69	1.06	13.75	51.0	400	370	0.14	0.75	46.93	211.972	209.30	208.90	211.972	209.16	208.76	3.08	3.21	3.14
12.	S12a	S12	29342	23474	23.47	0.00	23.47	0.27	0.82	0.07	0.88	50.0	200	140	0.36	0.76	12.02	211.972	210.97	210.77	211.972	210.61	210.41	1.20	1.56	1.38
13.	S12b	S12	6288	5030	5.03	0.00	5.03	0.06	0.17	0.01	0.19	35.0	200	140	0.25	0.76	12.02	211.972	210.97	210.77	211.972	210.72	210.52	1.20	1.45	1.32
14.	S12	S13	0	0	0.00	394.05	394.05	4.56	13.68	1.14	14.82	9.0	400	370	0.02	0.75	46.93	211.972	209.16	208.76	211.972	209.13	208.73	3.21	3.24	3.23
15.	S13	*STP-2*	0	0	0.00	394.05	394.05	4.56	13.68	1.14	14.82	3.0	400	370	0.01	0.75	46.93	211.972	209.13	208.73	211.972	209.13	208.73	3.24	3.25	3.24

PROJECT : PROPOSED PLOTTED COLONY FALLING SECTOR-36, BAHADURGARH (HARYANA)

LOAD ON SEWAGE LINES FOR LC-3564 (8.225 ACRE)

S.No.	Name of Sewer Line		Residential Sewage Load						Non Residential Load		Residential + Non Residential Load		
			Plots	Population for apartment @ 13.5 persons / Unit	Water Reuirement @ 155.25 Ltr/ day /Person	EWS	Population @ 9 persons / Unit	Water Reuirement @ 155.25 Ltr/ day /Person	Amenity	Water Reuirement @ Lumsum/day	Gross Water Requirement (Load on Line)	Sewage Flow (Self Load on Line)	Sewage Flow (Self Load on Line)
-	From	To	Unit	13.5	155.25	Unit	9	155.25	-	Lumpsum	lpd.	lpd. 80%	kld. 1000
1.	S8	S9	51	688.5	106889.625	0	0	0	-	0.00	106890	85512	85.51
2.	S14	S15	14	189	29342.25	0	0	0	-	0.00	29342	23474	23.47
3.	S15a	S15	40	540	83835	0	0	0	-	0.00	83835	67068	67.07
4.	S15	S16	6	81	12575.25	0	0	0	-	0.00	12575	10060	10.06
5.	S16a	S16	30	405	62876.25	0	0	0	-	0.00	62876	50301	50.30
6.	S16	S9	6	81	12575.25	0	0	0	-	0.00	12575	10060	10.06
7.	S9	S10	1	13.5	2095.875	0	0	0	Commecrial (0.25625 Acre)	15000.00	17096	13677	13.68
8.	S10a	S10	32	432	67068	0	0	0	-	0.00	67068	53654	53.65
9.	S10	S11	1	13.5	2095.875	0	0	0	Community (0.815 Acre)	50000.00	52096	41677	41.68
10.	S11a	S11	6	81	12575.25	0	0	0	-	0.00	12575	10060	10.06
11.	S11	S12	0	0	0	0	0	0	-	0.00	0	0	0.00
12.	S12a	S12	14	189	29342.25	0	0	0	-	0.00	29342	23474	23.47
13.	S12b	S12	3	40.5	6287.625	0	0	0	-	0.00	6288	5030	5.03
14.	S12	S13	0	0	0	0	0	0	-	0.00	0	0	0.00
15.	S13	*STP-2*	0	0	0	0	0	0	-	0.00	0	0	0.00
			204	**2754**	**427559**	**0**	**0**	**0**	-	**65000.00**	**492558.50**	**394046.80**	**394.05**

PROJECT : PROPOSED PLOTTED COLONY FALLING SECTOR-36, BAHADURGARH (HARYANA)

TITLE : HYDRAULIC STORM WATER DESIGN CHART FOR LC-3564 (8.225 ACRE)

S.No.	Line No.		Length	Catchment Area (Sqm.)			Discharge @ 6.25 mm/hr rainfall	Pipe dia	Slope 1 in	Velocity m/sec.	Capacity of pipe	Fall in line	Levels at start (mtr.)			Levels at End (mtr.)			Manhole Depth		
																			Depth (mtr.)		Avg.
	From	To	(mtr.)	Self	Progg.	Total	60% runoff (lps)	(mm)	(mm)	m/sec.	lps.	mtr.	FRL	FSL	IL	FRL	FSL	IL	Start	End	Depth
1.	B1	B2	27.0	450.0	0.0	450.0	0.47	400	570	0.60	75.63	0.05	211.972	210.97	210.57	211.972	210.92	210.52	1.40	1.45	1.42
2.	B2a	B2	47.0	2100.0	0.0	2100.0	2.19	400	570	0.60	75.63	0.08	211.972	210.97	210.57	211.972	210.89	210.49	1.40	1.48	1.44
3.	B2	B3	51.0	920.0	2550.0	3470.0	3.61	400	570	0.60	75.63	0.09	211.972	210.89	210.49	211.972	210.80	210.40	1.48	1.57	1.53
4.	B3a	B3	25.0	1200.0	0.0	1200.0	1.25	400	570	0.60	75.63	0.04	211.972	210.97	210.57	211.972	210.93	210.53	1.40	1.44	1.42
5.	B3	B4	26.0	430.0	4670.0	5100.0	5.31	400	570	0.60	75.63	0.05	211.972	210.80	210.40	211.972	210.75	210.35	1.57	1.62	1.59
6.	B13	B14	34.0	750.0	0.0	750.0	0.78	400	570	0.60	75.63	0.06	211.972	210.97	210.57	211.972	210.91	210.51	1.40	1.46	1.43
7.	B14a	B14	13.0	670.0	0.0	670.0	0.70	400	570	0.60	75.63	0.02	211.972	210.97	210.57	211.972	210.95	210.55	1.40	1.42	1.41
8.	B14	B4	88.0	2450.0	1420.0	3870.0	4.03	400	570	0.60	75.63	0.15	211.972	210.91	210.51	211.972	210.76	210.36	1.46	1.61	1.54
9.	B4	***D.C.05***	4.0	0.0	8970.0	8970.0	9.34	400	570	0.60	75.63	0.01	211.972	210.75	210.35	211.972	210.75	210.35	1.62	1.62	1.62
10.	***D.C.05***	***R.P.05***	2.0	0.0	8970.0	8970.0	9.34	400	570	0.60	75.63	0.00	211.972	210.75	210.35	211.972	210.74	210.34	1.62	1.63	1.63
11.	***R.P.05***	B5	4.0	0.0	8970.0	8970.0	9.34	400	570	0.60	75.63	0.01	211.972	210.97	210.57	211.972	210.96	210.56	1.40	1.41	1.40
12.	B5	B6	89.0	1880.0	8970.0	10850.0	11.30	400	570	0.60	75.63	0.16	211.972	210.96	210.56	212.172	210.81	210.41	1.41	1.76	1.59
13.	B6	B7	20.0	50140.0	10850.0	60990.0	63.53	500	770	0.60	117.98	0.03	212.172	210.81	210.31	212.172	210.78	210.28	1.86	1.89	1.88
14.	A24	B7	61.0	1700.0	0.0	1700.0	1.77	400	570	0.60	75.63	0.11	212.172	211.17	210.77	212.172	211.06	210.66	1.40	1.51	1.45
15.	B7	B8	36.0	900.0	62690.0	63590.0	66.24	500	770	0.60	117.98	0.05	212.172	210.78	210.28	212.172	210.74	210.24	1.89	1.94	1.91
16.	A25	B8	129.0	5000.0	0.0	5000.0	5.21	400	570	0.60	75.63	0.23	212.172	211.17	210.77	212.172	210.95	210.55	1.40	1.63	1.51
17.	B8	B9	41.0	1140.0	68590.0	69730.0	72.64	500	770	0.60	117.98	0.05	212.172	210.74	210.24	212.072	210.68	210.18	1.94	1.89	1.91
18.	A26	B9	128.0	5000.0	0.0	5000.0	5.21	400	570	0.60	75.63	0.22	212.072	211.07	210.67	212.072	210.85	210.45	1.40	1.62	1.51
19.	B9	B10	105.0	2920.0	74730.0	77650.0	80.89	500	770	0.60	117.98	0.14	212.072	210.68	210.18	212.072	210.55	210.05	1.89	2.03	1.96
20.	C9	B10	130.0	4800.0	0.0	4800.0	5.00	400	570	0.60	75.63	0.23	212.072	211.07	210.67	212.072	210.84	210.44	1.40	1.63	1.51
21.	B10	B11	15.0	400.0	82450.0	82850.0	86.30	500	770	0.60	117.98	0.02	212.072	210.55	210.05	212.072	210.53	210.03	2.03	2.04	2.04
22.	B11	***D.C.06***	7.0	0.0	82850.0	82850.0	86.30	500	770	0.60	117.98	0.01	212.072	210.53	210.03	212.072	210.52	210.02	2.04	2.05	2.05
23.	***D.C.06***	***R.P.06***	3.0	0.0	82850.0	82850.0	86.30	500	770	0.60	117.98	0.00	212.072	210.52	210.02	212.072	210.51	210.01	2.05	2.06	2.06
24.	***R.P.06***	B12	4.0	0.0	82850.0	82850.0	86.30	500	770	0.60	117.98	0.01	212.072	211.07	210.57	212.072	211.07	210.57	1.50	1.51	1.50
25.	B12	**C5**	10.0	350.0	82850.0	83200.0	86.67	500	770	0.60	117.98	0.01	212.072	211.07	210.57	212.072	211.05	210.55	1.51	1.52	1.51

S.No.	Line No.		Length	Catchment Area (Sqm.)			Discharge @ 6.25 mm/hr rainfall	Pipe dia	Slope 1 in	Velocity m/sec.	Capacity of pipe	Fall in line	Levels at start (mtr.)			Levels at End (mtr.)			Manhole Depth		
																			Depth (mtr.)		Avg.
	From	To	(mtr.)	Self	Progg.	Total	60% runoff (lps)	(mm)	(mm)	m/sec.	lps.	mtr.	FRL	FSL	IL	FRL	FSL	IL	Start	End	Depth
26.	B15	B16	37.0	630.0	0.0	630.0	0.66	400	570	0.60	75.63	0.06	211.972	210.97	210.57	211.972	210.91	210.51	1.40	1.46	1.43
27.	B16a	B16	97.0	3900.0	0.0	3900.0	4.06	400	570	0.60	75.63	0.17	211.972	210.97	210.57	211.972	210.80	210.40	1.40	1.57	1.49
28.	B16	B17	19.0	200.0	4530.0	4730.0	4.93	400	570	0.60	75.63	0.03	211.972	210.80	210.40	212.172	210.77	210.37	1.57	1.80	1.69
29.	B17a	B17	37.0	480.0	0.0	480.0	0.50	400	570	0.60	75.63	0.06	212.172	211.17	210.77	212.172	211.11	210.71	1.40	1.46	1.43
30.	B17	B18	20.0	150.0	5210.0	5360.0	5.58	400	570	0.60	75.63	0.04	212.172	210.77	210.37	212.172	210.73	210.33	1.80	1.84	1.82
31.	B18a	B18	20.0	200.0	0.0	200.0	0.21	400	570	0.60	75.63	0.04	212.172	211.17	210.77	212.172	211.14	210.74	1.40	1.44	1.42
32.	B18	B19	15.0	200.0	5560.0	5760.0	6.00	400	570	0.60	75.63	0.03	212.172	210.73	210.33	212.172	210.71	210.31	1.84	1.86	1.85
33.	B19a	B19	21.0	350.0	0.0	350.0	0.36	400	570	0.60	75.63	0.04	212.172	211.17	210.77	212.172	211.14	210.74	1.40	1.44	1.42
34.	B19	B20	176.0	7500.0	6110.0	13610.0	14.18	400	570	0.60	75.63	0.31	212.172	210.71	210.31	212.072	210.40	210.00	1.86	2.07	1.97
35.	B20	***D.C.07***	8.0	0.0	13610.0	13610.0	14.18	400	570	0.60	75.63	0.01	212.072	210.40	210.00	212.072	210.38	209.98	2.07	2.09	2.08
36.	***D.C.07***	***R.P.07***	3.0	0.0	13610.0	13610.0	14.18	400	570	0.60	75.63	0.01	212.072	210.38	209.98	212.072	210.38	209.98	2.09	2.09	2.09
37.	***R.P.07***	B21	6.0	0.0	13610.0	13610.0	14.18	400	570	0.60	75.63	0.01	212.072	211.07	210.67	212.072	211.06	210.66	1.40	1.41	1.41
38.	B21	B22	13.0	500.0	13610.0	14110.0	14.70	400	570	0.60	75.63	0.02	212.072	211.06	210.66	212.072	211.04	210.64	1.41	1.43	1.42
39.	B22	C6a	17.0	480.0	14110.0	14590.0	15.20	400	570	0.60	75.63	0.03	212.072	211.04	210.64	212.072	211.01	210.61	1.43	1.46	1.45

Formula Used:

Velocity(m/s)=(1/n)x(A/P)^(2/3)*(1/slope)^.5

n=.015 for RCC pipe (Manning's Coefficient)

A=Area of x-section of pipe in sqm.

P =Wetted Perimeter in m

Capacity of pipe(lps) =Area of x-section of pipe in sqm x velocity in m/s x1000x1/2(Storm water are designed to run full flow)

Abbreviation Used:

IL=Invert level of pipe

FSL=Full supply level

FRL=Formation Road Level

CL=Connection Level

PROJECT : PROPOSED PLOTTED COLONY FALLING SECTOR-36, BAHADURGARH (HARYANA)

TITLE : WATER SUPPLY HYDRAULIC CHART FOR 8.225 ACRE

S.No.	Line No					Plots (EWS)			Water Req. for Non Resi. Plots.		Total water Requirement	Domestic Water Req. @ 65 %														
	From	To	Nos.	Population @ 13.5 persons / Plot.	Water Requirement /day/person @	Nos.	Pop. @ 9 persons / Plot	Water Req./day/ person @	Type of Building	Basis of Water Requirement	Residential & Non Residential Building	Residential & Non Residential Building	Average Demand	Peak Demand @ 3 Times	Flow Rate	Length of Pipe	Head Loss	Total Head Loss	Velocity	Dia of Pipe	Ground Level at start	Hydraulic Level at start	Head at start	Ground level at End	Hydraulic level at End	Head at End
-	-	-	-	13.5	155.25	-	9	155.25	-	Lumpsum	lpd.	lpd.	kld.	kld.	lpm.	mtr.	mtr./mtr	mtr.	mtr./sec	mtr.	mtr.	mtr.	mtr.	mtr.	mtr.	mtr.
1.	*UGT-2*	D16	204	2754	427559	0	0	0	-	65000	492559	320163	320.16	960	667	25.0	0.027	0.67	1.415	150	211.972	232.97	21.00	211.972	232.30	20.33
2.	D16	D16a	14	189	29342	0	0	0	-	0	29342	19072	19.07	57	40	22.0	0.000	0.00	0.084	100	211.972	232.30	20.33	211.972	232.30	20.32
3.	D16a	D16b	8	108	16767	0	0	0	-	0	16767	10899	10.90	33	23	8.0	0.000	0.00	0.048	100	211.972	232.30	20.32	211.972	232.30	20.32
4.	D16b	D16c	8	108	16767	0	0	0	-	0	16767	10899	10.90	33	23	50	0.000	0.00	0.048	100	211.972	232.30	20.32	211.972	232.30	20.32
5.	D16a	D16c	6	81	12575	0	0	0	-	0	12575	8174	8.17	25	17	55	0.000	0.00	0.036	100	211.972	232.30	20.32	211.972	232.30	20.32
6.	D16	D16d	3	40.5	6288	0	0	0	-	50000	56288	36587	36.59	110	76	20	0.000	0.00	0.162	100	211.972	232.30	20.33	211.972	232.30	20.32
7.	D16d	D16e	3	40.5	6288	0	0	0	-	0	6288	4087	4.09	12	9	20	0.000	0.00	0.018	100	211.972	232.30	20.32	211.972	232.30	20.32
8.	D16d	D19a	0	0	0	0	0	0	Community (0.815 Acre)	50000	50000	32500	32.50	98	68	134	0.000	0.00	0.144	100	211.972	232.30	20.32	211.972	232.29	20.32
9.	D16	D17	187	2524.5	391929	0	0	0	-	15000	406929	264504	264.50	794	551	24	0.019	0.15	1.169	150	211.972	232.30	20.33	211.972	232.15	20.18
10.	D17	D17a	4	54	8384	0	0	0	-	0	8384	5449	5.45	16	11	29	0.000	0.00	0.024	100	211.972	232.15	20.18	211.972	232.15	20.18
11.	D17	D18	183	2470.5	383545	0	0	0	-	15000	398545	259054	259.05	777	540	8.0	0.018	0.15	1.145	150	211.972	232.15	20.18	211.972	232.00	20.03
12.	D18	D17a	2	27	4192	0	0	0	-	0	4192	2725	2.72	8	6	33	0.000	0.00	0.012	100	211.972	232.00	20.03	211.972	232.00	20.03
13.	D18	D19	181	2443.5	379353	0	0	0	-	15000	394353	256330	256.33	769	534	96	0.018	0.14	1.133	150	211.972	232.00	20.03	211.972	231.86	19.89
14.	D19	D19a	16	216	33534	0	0	0	-	0	33534	21797	21.80	65	45	20	0.000	0.00	0.096	100	211.972	231.86	19.89	211.972	231.86	19.89
15.	D19a	D19b	16	216	33534	0	0	0	-	0	33534	21797	21.80	65	45	100	0.000	0.00	0.096	100	211.972	231.86	19.89	211.972	231.86	19.89
16.	D19	D20	164	2214	343724	0	0	0	-	15000	358724	233170	233.17	700	486	8.0	0.015	0.12	1.030	150	211.972	231.86	19.89	211.972	231.74	19.77
17.	D20	D19b	16	216	33534	0	0	0	-	0	33534	21797	21.80	65	45	128	0.000	0.00	0.096	100	211.972	231.74	19.77	211.972	231.74	19.77
18.	D20	D21	148	1998	310190	0	0	0	-	15000	325190	211373	211.37	634	440	44	0.012	0.10	0.934	150	211.972	231.74	19.77	212.172	231.64	19.47
19.	D21	D25a	27	364.5	56589	0	0	0	-	0	56589	36783	36.78	110	77	175	0.000	0.00	0.163	100	212.172	231.64	19.47	212.072	231.64	19.57
20.	D21	D22	70	945	146711	0	0	0	-	0	146711	95362	95.36	286	199	45	0.003	0.02	0.421	100	212.172	231.64	19.47	212.072	231.62	19.55
21.	D22	D22a	10	135	20959	0	0	0	-	0	20959	13623	13.62	41	28	127	0.000	0.00	0.060	100	212.072	231.62	19.55	212.072	231.62	19.55
22.	D22	D23	60	810	125753	0	0	0	-	0	125753	81739	81.74	245	170	8.0	0.002	0.02	0.361	100	212.072	231.62	19.55	212.072	231.60	19.53
23.	D23	D22a	20	270	41918	0	0	0	-	0	41918	27246	27.25	82	57	135	0.000	0.00	0.120	100	212.072	231.60	19.53	212.072	231.60	19.53
24.	D23	D24	40	540	83835	0	0	0	-	0	83835	54493	54.49	163	114	36	0.001	0.01	0.241	100	212.072	231.60	19.53	212.072	231.59	19.52
25.	D24	D24a	20	270	41918	0	0	0	-	0	41918	27246	27.25	82	57	129	0.000	0.00	0.120	100	212.072	231.59	19.52	212.072	231.59	19.52
26.	D24	D25	20	270	41918	0	0	0	-	0	41918	27246	27.25	82	57	8.0	0.000	0.00	0.120	100	212.072	231.59	19.52	212.072	231.59	19.52
27.	D25	D24a	20	270	41918	0	0	0	-	0	41918	27246	27.25	82	57	130	0.000	0.00	0.120	100	212.072	231.59	19.52	212.072	231.59	19.52
28.	D25	D25a	20	270	41918	0	0	0	-	0	41918	27246	27.25	82	57	97	0.000	0.00	0.120	100	212.072	231.59	19.52	212.072	231.59	19.52
29.	D21	D26	51	688.5	106890	0	0	0	-	15000	121890	79228	79.23	238	165	34	0.002	0.02	0.350	100	212.172	231.64	19.47	212.172	231.63	19.45

S.No.	Line No					Plots (EWS)			Water Req. for Non Resi. Plots.		Total water Requirement	Domestic Water Req. @ 65 %														
	From	To	Nos.	Population @ 13.5 persons / Plot.	Water Requirement /day/person @	Nos.	Pop. @ 9 persons / Plot	Water Req./day/ person @	Type of Building	Basis of Water Requirement	Residential & Non Residential Building	Residential & Non Residential Building	Average Demand	Peak Demand @ 3 Times	Flow Rate	Length of Pipe	Head Loss	Total Head Loss	Velocity	Dia of Pipe	Ground Level at start	Hydraulic Level at start	Head at start	Ground level at End	Hydraulic level at End	Head at End
30.	D26	D27	51	688.5	106890	0	0	0	-	15000	121890	79228	79.23	238	165	8.0	0.002	0.02	0.350	100	212.172	231.63	19.45	212.172	231.61	19.44
31.	D27	D27a	22	297	46109	0	0	0	Commecrial (0.25625 Acre)	15000	61109	39721	39.72	119	83	227.0	0.001	0.13	0.176	100	212.172	231.61	19.44	212.072	231.48	19.41
32.	D26	D27a	29	391.5	60780	0	0	0	-	0	60780	39507	39.51	119	82	219.0	0.001	0.12	0.175	100	212.172	231.63	19.45	212.072	231.50	19.43

PROJECT : PROPOSED PLOTTED COLONY FALLING SECTOR-36, BAHADURGARH (HARYANA)

EC-3564 (8.225 Acre)

S.No	Line No.		Average Demand	Peak Demand @ 1.5 Times	Flow Rate	Length of Pipe	Head Loss	Total Head Loss	Velocity	Dia of Pipe
	From	To	kl/hr.	lph.	lpm.	mtr.	mtr./ mtr.	mtr.	m/sec	mm
1	TW1	TT1	36.0	54.0	900.0	330.0	0.066	21.65	1.909	100
2.	TW2	TT1	36.0	54.0	900.0	10.0	0.066	0.66	1.909	100
3.	TT1	***UGT-02***	72.0	108.0	1800.0	36.0	0.033	1.18	1.697	150

LC-3564

AREA STATEMENT

TOTAL AREA OF THE SCHEME	=	8.225	Acres	..... A
AREA UNDER U.D	=	0.077	Acre	..... B
NET PLANNED AREA (A - B)	=	8.148	Acres	
AREA UNDER COMMERCIAL	=	0.25625	Acres	3.146
AREA UNDER PLOTS	=	3.77625	Acres	46.333
TOTAL SALEBLE AREA	=	4.03150	Acres	49.479

AREA UNDER PLOTS

TYPE	SIZE			AREA	TOTAL PLOTS		TOTAL AREA	
A	6.135	x	15.000	92.025	120	=	11043.000	Sq.Mt
B	7.300	x	15.000	109.500	14	=	1533.000	Sq.Mt
C	6.135	x	18.350	112.577	24	=	2701.854	Sq.Mt
TOTAL					158	=	15277.854	Sq.Mt
					OR	=	3.77625	Acres

DENSITY CALCULATION

TOTAL DENSITY	=	158	x	13.50	@ Person's per Plot
	=	2133	÷	8.14800	Acres
	=	261.782	PPA	Against 240 - 400 PPA permissible	

AREA UNDER GREEN

REQUIRED GREEN	=	0.611100	Acres	7.50% of Total area of the Scheme	
GREEN AREA PROPVIDED					
ORGANISED GREEN	=	GREEN-1	=	0.309	Acres
	=	GREEN-2	=	0.273	Acres
	=	GREEN-3	=	0.050	Acres
TOTAL GREEN PROVIDED	=			0.633 Acres	7.85 %

AREA FOR PROVISION OF COMMUNITY FACILITIES

REQUIRED AREA	=	0.8148000 Acres	10.00%
PROVIDED AREA	=	0.8150000 Acres	10.00%

LC-3565

AREA STATEMENT

TOTAL AREA OF THE SCHEME	=	14.58250	Acres	..... A
AREA FALLING UNDER GREEN BELT	=	0.16930	Acres	..... B
BALANCE (A - B)	=	14.393200	Acres	..... E
50% AREA OF GREEN BELT	=	0.084650	Acres	..... F
NET PLANNED AREA (E + F)	=	14.477850	Acres	
AREA UNDER COMMERCIAL	=	0.67910	Acres	4.690
AREA UNDER PLOTS	=	7.91698	Acres	54.683
TOTAL SALEBLE AREA	=	8.49608	Acres	58.663

AREA UNDER PLOTS

TYPE	SIZE			AREA	TOTAL		TOTAL AREA	
A	6.135	x	15.000	92.025	150	=	13803.750	Sq.Mt
B	6.450	x	15.792	101.865	60	=	6111.891	Sq.Mt
C	6.200	x	15.661	97.088	20	=	1941.904	Sq.Mt
D	6.135	x	17.118	105.019	15	=	1575.284	Sq.Mt
D1	6.840	x	17.118	113.654	7	=	795.645	Sq.Mt
E	7.335	x	15.000	110.025	3	=	330.075	Sq.Mt
F	6.135	x	17.059	105.522	16	=	1736.352	Sq.Mt
G	7.312	x	17.658	129.336	2	=	259.669	Sq.Mt
H	6.139	x	17.350	106.526	10	=	1065.253	Sq.Mt
I	6.701	x	16.321	109.416	8	=	859.495	Sq.Mt
J	6.550	x	22.852	149.681	8	=	1197.445	Sq.Mt
K	6.892	x	16.764	115.578	4	=	461.475	Sq.Mt
L	7.927	x	15.000	118.905	2	=	237.810	Sq.Mt
M	7.300	x	15.000	109.500	2	=	219.000	Sq.Mt
N	8.325	x	15.000	124.875	4	=	499.500	Sq.Mt
O	7.648	x	15.000	114.720	10	=	1147.200	Sq.Mt
TOTAL					319	=	32036.823	Sq.Mt
					OR	=	7.91698	Acres

DENSITY CALCULATION

TOTAL DENSITY	=	319	x	13.50	@ Person's per Plot
	=	4306.5	÷	14.47785	Acres
	=	297.464	PPA	Against 240 - 400 PPA permissible	

AREA UNDER GREEN

REQUIRED GREEN	=	1.09584	Acres	7.50% of Total area of the Scheme	
GREEN AREA PROPVIDED					
ORGANISED GREEN	=	GREEN-1	=	0.192	Acres
	=	GREEN-2	=	0.297	Acres
	=	GREEN-3	=	0.03	Acres
	=	GREEN-4	=	0.079	Acres
	=	GREEN-5	=	0.322	Acres
	=	GREEN-6	=	0.170	Acres
TOTAL GREEN PROVIDED	=			1.090 Acres	7.53 %

AREA FOR PROVISION OF COMMUNITY FACILITIES

REQUIRED AREA	=	1.4477850 Acres	10.00%
PROVIDED AREA	=	1.4549750 Acres	10.05%

LC-3563

AREA STATEMENT

TOTAL AREA OF THE SCHEME	=	11.60000	Acres	..... A
AREA FALLING UNDER GREEN BELT	=	0.33298	Acres	..... B
BALANCE (A - B)	=	11.26702	Acres	..... E
50% AREA OF ROAD WIDENING AND GREEN BELT	=	0.16649	Acres	..... F
NET PLANNED AREA (E + F)	=	11.43351	Acres	
AREA UNDER COMMERCIAL	=	0.39040	Acres	3.414
AREA UNDER PLOTS	=	4.91687	Acres	43.004
TOTAL SALEBLE AREA	=	5.30727	Acres	46.418

AREA UNDER PLOTS

TYPE	SIZE			AREA	TOTAL PLOTS		TOTAL AREA	
A	6.135	x	15.000	92.025	177	=	16288.425	Sq.Mt
B	7.300	x	15.000	109.500	2	=	219.000	Sq.Mt
C	7.600	x	16.700	119.320	2	=	238.640	Sq.Mt
D	7.500	x	20.000	150.000	3	=	450.000	Sq.Mt
E	7.335	x	16.500	121.028	8	=	968.220	Sq.Mt
F	5.000	x	10.000	50.000	6	=	300.000	Sq.Mt
G	6.135	x	13.141	80.620	9	=	725.580	Sq.Mt
H	7.732	x	15.000	115.980	4	=	463.920	Sq.Mt
I	8.130	x	15.000	122.025	2	=	244.050	Sq.Mt
TOTAL					213	=	19897.835	Sq.Mt
					OR	=	4.91687	Acres

DENSITY CALCULATION

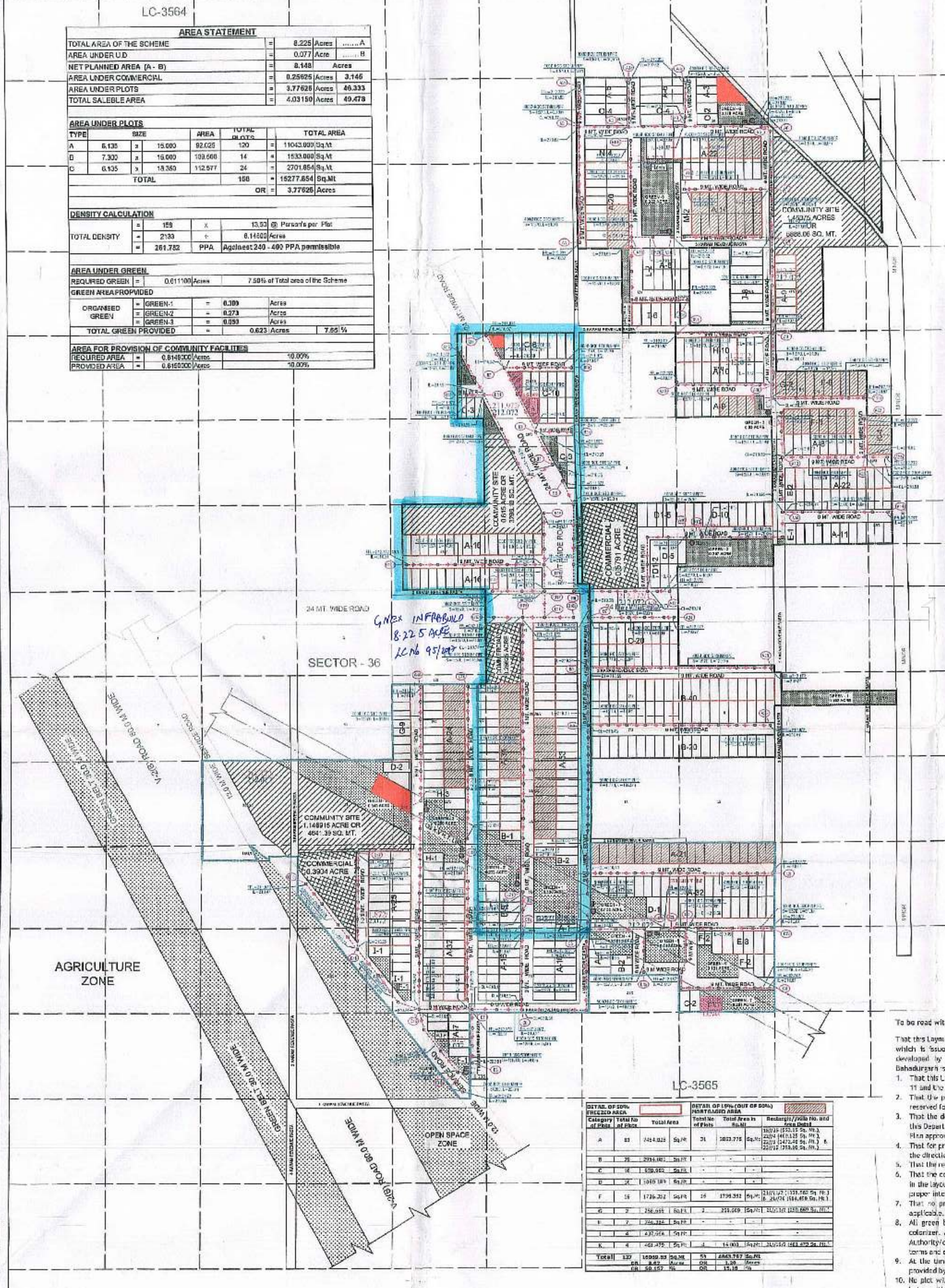
TOTAL DENSITY	=	213	x	13.50	@ Person's per Plot
	=	2875.5	÷	11.43351	Acres
	=	251.498	PPA	Against 240 - 400 PPA permissible	

AREA UNDER GREEN

REQUIRED GREEN	=	0.85751	Acres	7.50% of Total area of the Scheme	
GREEN AREA PROPVIDED					
ORGANISED GREEN	=	GREEN-1	=	0.648	Acres
	=	GREEN-2	=	0.285	Acres
	=	GREEN-3	=	0.168	Acres
	=	GREEN-4	=	0.091	Acres
		GREEN-5	=	0.146	Acres
		GREEN-6	=	0.131	Acres
	=	GREEN-7	=	0.201	Acres
TOTAL GREEN PROVIDED	=			1.547 Acres	13.53 %

AREA FOR PROVISION OF COMMUNITY FACILITIES

REQUIRED AREA	=	1.143351 Acres	10.00%
PROVIDED AREA	=	1.149315 Acres	10.05%



DETAIL OF 50% FREEZED AREA				DETAIL OF 15% (OUT OF 50%) MORTGAGED AREA			
Category of Plots	Total No of Plots	Total Area		Total No of Plots	Total Area in Sq.Mt		Rectangle//Kills No. and Area Detail
A	83	7464.825	Sq.Mt	31	2803.775	Sq.Mt	39/16 (552.15 Sq. Mt.), 39/4 (463.125 Sq. Mt.), 39/13 (1472.48 Sq. Mt.) & 39/12 (253.00 Sq. Mt.)
B	25	2934.181	Sq.Mt	-	-	-	-
C	10	920.862	Sq.Mt	-	-	-	-
D	10	1040.189	Sq.Mt	-	-	-	-
F	16	1736.352	Sq.Mt	16	1736.352	Sq.Mt	39/12/2 (1151.662 Sq. Mt.) & 39/13 (584.689 Sq. Mt.)
G	2	259.669	Sq.Mt	2	259.669	Sq.Mt	39/13/2 (259.669 Sq. Mt.)
I	2	244.050	Sq.Mt	-	-	-	-
I	8	859.495	Sq.Mt	-	-	-	-
K	4	461.475	Sq.Mt	1	14.003	Sq.Mt	39/13/2 (461.475 Sq. Mt.)
Total	177	16288.428	Sq.Mt	51	4869.797	Sq.Mt	
	OR	4.49	Acres	OR	1.20	Acres	
	OR	50.157	%	OR	15.10	%	

DETAIL OF 50% FREEZED AREA				DETAIL OF 15% (OUT OF 50%) MORTGAGED AREA			
Category of Plots	Total No of Plots	Total Area		Total No of Plots	Total Area in Sq.Mt		Rectangle//Kills No. and Area Detail
A	94	8650.350	Sq.Mt	33	3036.825	Sq.Mt	39/16 (1002.123 Sq. Mt.), 39/17 (930.402 Sq. Mt.), 39/8/2 (604.672 Sq. Mt.) 39/12/1 (299.628 Sq. Mt.)
E	5	607.136	Sq.Mt	-	-	-	-
G	9	725.580	Sq.Mt	-	-	-	-
Total	108	9981.07	Sq.Mt	33	3036.825	Sq.Mt	
	OR	2.47	Acres	OR	0.75	Acres	
	OR	50.162	%	OR	15.26	%	

LC-3563

LC-3564

APPLIED LAND 11.60 ACRES UNDER MIGRATION (DDJAY) SHOWN THUS

To be read with LOI No. 17019 Dated 17-07-2017

That this Layout plan for an area measuring 11.60 acres (Drawing no. DTCP-5997 dated 17.07.2017) comprised of LOI which is issued in respect of Affordable Residential Plotted Colony (Under Deen Dayal Jan Awas Yojna) being developed by Renu Realtech Pvt. Ltd. and others collaboration with Gnex Realtech Pvt. Ltd. in Sector-36, Bahadurgarh is hereby approved subject to the following conditions:

1. That this Layout Plan shall be read in conjunction with the clauses appearing on the agreement executed under Rule 11 and the bilateral agreement.
2. That the plotted area of the colony shall not exceed 65% of the net planned area of the colony. The entire area reserved for commercial purposes shall be taken as plotted for calculation of the area under plots.
3. That the demarcation plans as per site of all the Residential Plots and Commercial site shall be got approved from this Department and construction on these sites shall be governed by the Haryana Building Code, 2017 and the Zoning Plan approved by the Director, Town & Country Planning, Haryana.
4. That for proper planning and integration of services in the area adjacent to the colony, the colonizer shall abide by the directions of the DTCP for the modification of layout plans of the colony.
5. That the revenue rasta falling in the colony shall be kept free for circulation/movement as shown in the layout plan.
6. That the colonizer shall abide by the directions of the DTCP, Haryana and accordingly shall make necessary changes in the layout plan for making any adjustment in the alignment of the peripheral roads, internal road circulation or for proper integration of the planning proposals of the adjoining areas.
7. That no property/plot shall derive access directly from the carriage way of 30 metres or wider sector road if applicable.
8. All green belts provided in the layout plan within the licenced areas of the colony shall be developed by the colonizer. All other green belts outside the licenced area shall be developed by the Haryana Urban Development Authority/colonizer or the directions of the Director, Town and Country planning, Haryana or in accordance with terms and conditions of the agreements of the licence.
9. At the time of demarcation plan, if required percentage of organized open space is reduced, the same will be provided by the colonizer in the licenced area.
10. No plot will derive an access from less than 9 metres wide road would mean a minimum clear width of 9 metres between the plots.
11. Any excess area over and above the permissible 4% under commercial use shall be deemed to be open space.
12. The maximum number of dwelling units in a plot shall be as per the provisions of the Haryana Building Code, 2017. This condition shall also be incorporated in the zoning plan and in the allotment letters being issued by the colonizer to the plot holders. The stipulation shall also be incorporated in the agreement to be executed by the colonizer with the plot buyers.
13. The portion of the sector/development plan roads /green belts as provided in the Development Plan if applicable, which form part of the licenced area shall be transferred free of cost to the government on the lines of Section 3(3)(a)(iii) of the Act No.8 of 1975.
14. That the odd size plots are being approved subject to the conditions that these plots should not have a frontage of less than 75% of the standard frontage when consecrated.
15. That you will have no objection to the regularization of the boundaries of the licence through give and take with the land that HUDA is finally able to acquire in the interest of planned development and integration of services. The decision of the competent authority shall be binding in this regard.
16. That the rain water harvesting system shall be provided as per Central Ground Water Authority norms/Haryana Govt. notification as applicable.
17. That the colonizer/owner shall use only Light-Emitting Diode lamps (LED) fitting for internal lighting as well as Campus lighting.
18. That the colonizer/owner shall ensure the installation of Solar Power Plant as per provisions of Haryana Solar Power Policy, 2016 issued by Haryana Government Renewable Energy Department vide Notification No. 19/42/2016-5 Power dated 14.03.2016.
19. That the colonizer/owner shall ensure the installation of Solar Photovoltaic Power Plant as per the provisions of order No.22/52/2005-5Power dated 21.03.2016 issued by Haryana Government Renewable Energy Department.
20. That the colonizer/owner shall strictly comply with the directions issued vide Notification No. 19/6/2016 5P dated 31.03.2016 issued by Haryana Government Renewable Energy Department for enforcement of the Energy Conservation Building Codes.

PROJECT	ARCHITECT:	ARCHITECT SIGNATURE	COMPANY:	OWNER SIGNATURE
PROPOSED LAYOUT PLAN OF AFFORDABLE PLOTTED COLONY ON AN AREA MEASURING 14.5625 ACRES FALLING SECTOR-36, BAHADURGARH, HARYANA.	DESIGN FORUM INTERNATIONAL ARCHITECTURE / URBAN DESIGN / TOWN PLANNING K-47, KAILASH COLONY, NEW DELHI -110048 PH. NO:- 011-46556600, FAX:- 011-46556601	Ar. Amandeep Bansal CA/2015/72167	GNEX REALTECH PVT. LTD. PERMANENT ADD. :- B-10, LAWRENCE ROAD, INDUSTRIAL AREA, DELHI - 110035 CORRESPONDENCE ADD. :- BUNGALOW NO. -11, BARAKHAMBA ROAD, NEW DELHI - 110001	

DATE	20.09.2017	NORTH	DRAWING TITLE:- LAYOUT PLAN
SCALE	1:1000		

(BALWANT SINGH) SD (HQ) | (SANJAY KUMAR) DTP (HQ) | (DEVENDRA NIMBOKAR) STP (M) HQ | (KAMAL KUMAR) CTP (HR) | (T.L. SATYANARAYAN, IAS) DTCP (HR)

(RAM AVTAR BASSI) AD (HQ)

Checked subject to comments in forwarding letter No. 12613 Dt. 17.10.17 and notes attached with the estimate

Executive Engineer, HSVP, Division, Bahadurgarh,

Superintending Engineer (HQ) for Chief Engineer HSVP Panchkula

Superintending Engineer HSVP Circle, Rohtak

Director Town & Country Planning Haryana, Chandigarh

LC-3564

AREA STATEMENT

TOTAL AREA OF THE SCHEME	=	8.225	Acres	..... A
AREA UNDER U/D	=	0.077	Acre	..... B
NET PLANNED AREA (A - B)	=	8.148	Acres	
AREA UNDER COMMERCIAL	=	0.25625	Acres	3.145
AREA UNDER PLOTS	=	3.77525	Acres	46.333
TOTAL SALEBLE AREA	=	4.03150	Acres	49.478

AREA UNDER PLOTS

TYPE	SIZE			AREA	TOTAL PLOTS		TOTAL AREA
A	6.135	x	15.000	92.025	120	=	11043.000 Sq.Mt
B	7.300	x	15.000	109.500	14	=	1533.000 Sq.Mt
C	6.135	x	15.350	112.577	24	=	2701.854 Sq.Mt
TOTAL					158	=	15277.854 Sq.Mt
					OR	=	3.77525 Acres

DENSITY CALCULATION

TOTAL DENSITY	=	158	x	13.50	@ Person's per Plot
	=	2133	÷	8.14800	Acres
	=	261.782	PPA	Against 240 - 400 PPA permissible	

AREA UNDER GREEN

REQUIRED GREEN	=	0.611103	Acres	7.50% of Total area of the Scheme	
GREEN AREA PROPMIDED					
ORGANISED GREEN	=	GREEN-1	=	0.300	Acres
	=	GREEN-2	=	0.273	Acres
	=	GREEN-3	=	0.050	Acres
TOTAL GREEN PROVIDED			=	0.623	Acres 7.65 %

AREA FOR PROVISION OF COMMUNITY FACILITIES

REQUIRED AREA	=	0.8148000 Acres	10.00%
PROVIDED AREA	=	0.8160000 Acres	10.00%

LC-3565

AREA STATEMENT

TOTAL AREA OF THE SCHEME	=	14.58250	Acres	..... A
AREA FALLING UNDER GREEN BELT	=	0.16930	Acres	..... B
BALANCE (A - B)	=	14.393200	Acres	..... E
50% AREA OF GREEN BELT	=	0.084650	Acres	..... F
NET PLANNED AREA (E + F)	=	14.477850		Acres
AREA UNDER COMMERCIAL	=	0.67910	Acres	4.690
AREA UNDER PLOTS	=	7.91698	Acres	54.683
TOTAL SALEBLE AREA	=	8.49608	Acres	59.883

AREA UNDER PLOTS

TYPE	SIZE			AREA	TOTAL		TOTAL AREA
A	6.135	x	15.000	92.025	150	=	13803.750 Sq.Mt
B	6.450	x	15.755	101.665	60	=	6111.891 Sq.Mt
C	6.200	x	15.651	97.093	20	=	1941.904 Sq.Mt
D	6.135	x	17.118	105.019	15	=	1575.284 Sq.Mt
D1	6.640	x	17.118	113.664	7	=	795.648 Sq.Mt
E	7.335	x	15.000	110.025	3	=	330.075 Sq.Mt
F	6.135	x	17.669	108.322	16	=	1733.152 Sq.Mt
G	7.312	x	17.688	129.335	2	=	258.669 Sq.Mt
H	6.135	x	17.380	106.576	10	=	1065.253 Sq.Mt
I	6.704	x	16.321	109.416	6	=	656.496 Sq.Mt
J	6.690	x	22.662	149.691	8	=	1197.445 Sq.Mt
K	6.682	x	16.764	115.370	4	=	461.479 Sq.Mt
L	7.907	x	15.000	118.905	2	=	237.810 Sq.Mt
M	7.300	x	15.000	109.500	2	=	219.000 Sq.Mt
N	8.325	x	15.000	124.875	4	=	499.500 Sq.Mt
O	7.645	x	15.000	114.720	10	=	1147.200 Sq.Mt
TOTAL					319	=	32030.823 Sq.Mt
					OR	=	7.91698 Acres

DENSITY CALCULATION

TOTAL DENSITY	=	319	x	13.50	@ Person's per Plot
	=	4306.5	÷	14.47785	Acres
	=	297.464	PPA	Against 240 - 400 PPA permissible	

AREA UNDER GREEN

REQUIRED GREEN	=	1.08584	Acres	7.50% of Total area of the Scheme	
GREEN AREA PROPMIDED					
ORGANISED GREEN	=	GREEN-1	=	0.192	Acres
	=	GREEN-2	=	0.297	Acres
	=	GREEN-3	=	0.03	Acres
	=	GREEN-4	=	0.079	Acres
	=	GREEN-5	=	0.322	Acres
	=	GREEN-6	=	0.170	Acres
TOTAL GREEN PROVIDED			=	1.090	Acres 7.53 %

AREA FOR PROVISION OF COMMUNITY FACILITIES

REQUIRED AREA	=	1.4477850 Acres	10.00%
PROVIDED AREA	=	1.4549750 Acres	10.05%

LC-3563

AREA STATEMENT

TOTAL AREA OF THE SCHEME	=	11.60000	Acres	..... A
AREA FALLING UNDER GREEN BELT	=	0.33298	Acres	..... B
BALANCE (A - B)	=	11.26702	Acres	..... E
50% AREA OF ROAD WIDENING AND GREEN BELT	=	0.10649	Acres	..... F
NET PLANNED AREA (E + F)	=	11.43351	Acres	
AREA UNDER COMMERCIAL	=	0.39040	Acres	3.414
AREA UNDER PLOTS	=	4.91687	Acres	43.004
TOTAL SALEBLE AREA	=	5.30727	Acres	46.418

AREA UNDER PLOTS

TYPE	SIZE			AREA	TOTAL PLOTS		TOTAL AREA
A	6.135	x	15.000	92.025	177	=	16288.425 Sq.Mt
B	7.300	x	15.000	109.500	2	=	219.000 Sq.Mt
C	7.800	x	15.700	119.520	2	=	239.040 Sq.Mt
D	7.500	x	20.000	150.000	3	=	450.000 Sq.Mt
E	7.335	x	16.500	121.028	8	=	968.220 Sq.Mt
F	5.000	x	10.000	50.000	6	=	300.000 Sq.Mt
G	6.135	x	13.141	80.620	9	=	725.580 Sq.Mt
H	7.732	x	15.000	115.980	4	=	463.920 Sq.Mt
I	8.125	x	15.000	122.025	2	=	244.050 Sq.Mt
TOTAL					213	=	19697.835 Sq.Mt
					OR	=	4.91687 Acres

DENSITY CALCULATION

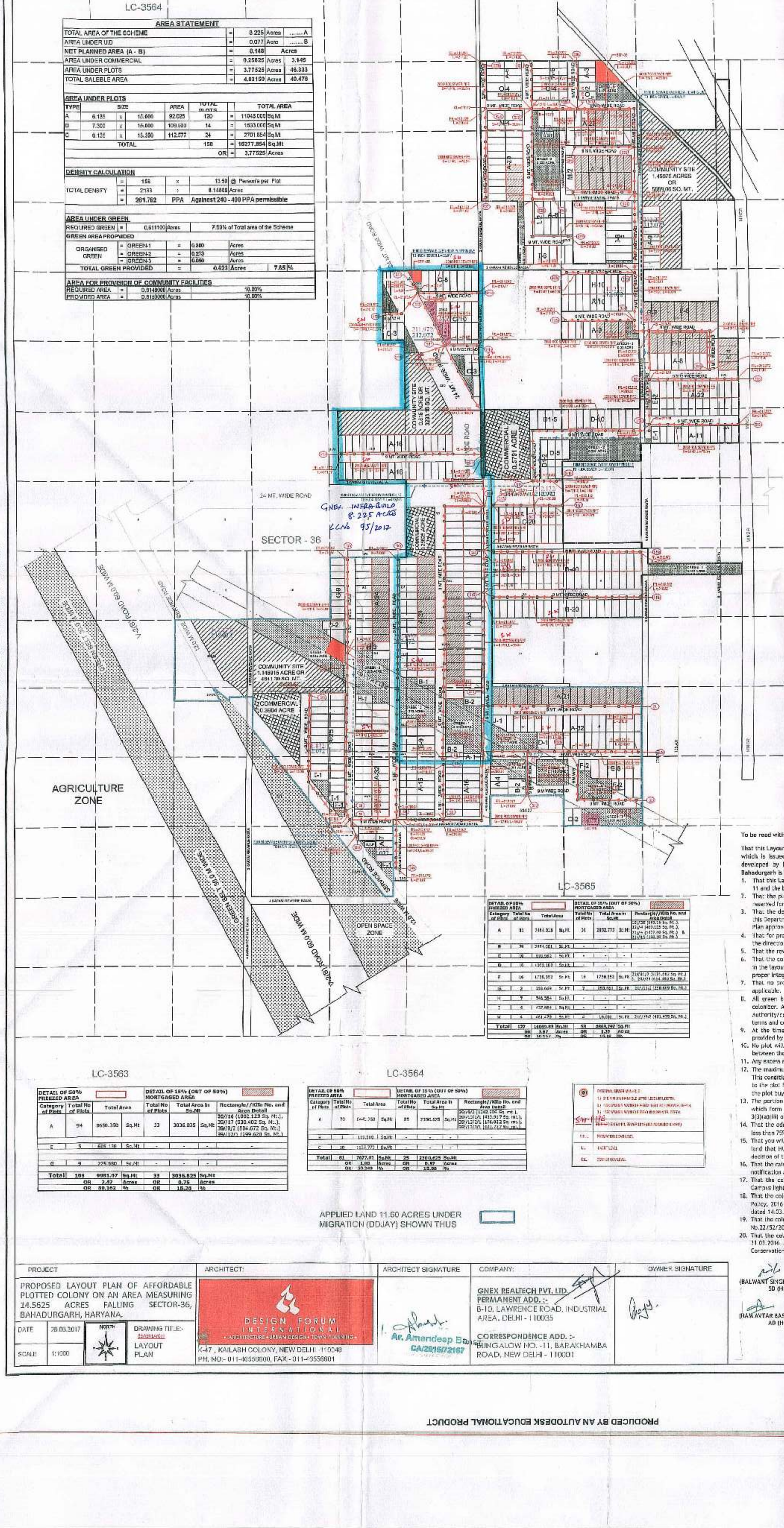
TOTAL DENSITY	=	213	x	13.50	@ Person's per Plot
	=	2875.5	÷	11.43351	Acres
	=	251.488	PPA	Against 240 - 400 PPA permissible	

AREA UNDER GREEN

REQUIRED GREEN	=	0.85751	Acres	7.50% of Total area of the Scheme	
GREEN AREA PROPMIDED					
ORGANISED GREEN	=	GREEN-1	=	0.645	Acres
	=	GREEN-2	=	0.289	Acres
	=	GREEN-3	=	0.150	Acres
	=	GREEN-4	=	0.081	Acres
		GREEN-5	=	0.146	Acres
	=	GREEN-6	=	0.131	Acres
	=	GREEN-7	=	0.201	Acres
TOTAL GREEN PROVIDED			=	1.647	Acres 13.83 %

AREA FOR PROVISION OF COMMUNITY FACILITIES

REQUIRED AREA	=	1.143351 Acres	10.00%
PROVIDED AREA	=	1.148915 Acres	10.00%



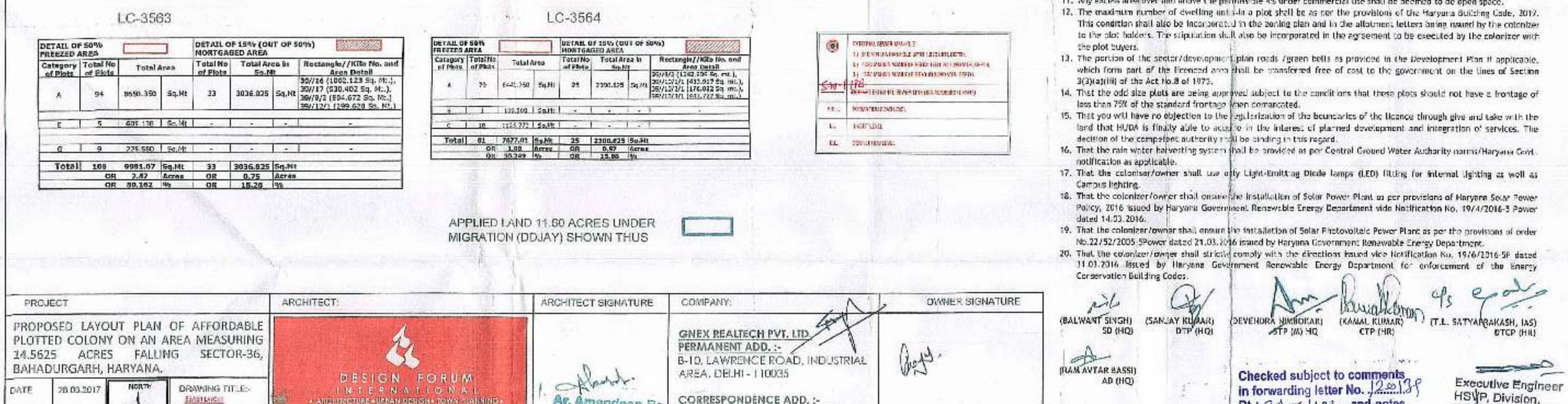
LC-3563

DETAIL OF 50% FREEZED AREA				DETAIL OF 15% (OUT OF 50%) MORTGAGED AREA			
Category of Plots	Total No of Plots	Total Area		Total No of Plots	Total Area in Sq.Mt		Rectangle/ /Kite No. and Area Detail
A	94	9650.350	Sq.Mt	33	3036.825	Sq.Mt	30//16 (1002.123 Sq. Mt.), 30//17 (930.402 Sq. M..), 39//9/2 (604.672 Sq. Mt.) 39//12/1 (299.628 Sq. Mt.)
E	5	605.136	Sq.Mt	-	-	-	-
G	9	225.580	Sq.Mt	-	-	-	-
Total	108	9981.07	Sq.Mt	33	3036.825	Sq.Mt	
	OR	2.47	Acres	OR	0.75	Acres	
	OR	50.162	%	OR	15.20	%	

LC-3564

DETAIL OF 50% FREEZED AREA				DETAIL OF 15% (OUT OF 50%) MORTGAGED AREA			
Category of Plots	Total No of Plots	Total Area		Total No of Plots	Total Area in Sq.Mt		Rectangle/ /Kite No. and Area Detail
A	75	6441.350	Sq.Mt	25	2300.625	Sq.Mt	39//9/2 (1240.795 Sq. mt.), 39//12/2/1 (433.917 Sq. mt.), 39//12/2/1 (176.012 Sq. m.), 39//12/2/1 (451.727 Sq. m.)
B	1	120.500	Sq.Mt	-	-	-	-
C	10	1125.270	Sq.Mt	-	-	-	-
Total	81	7677.01	Sq.Mt	25	2300.625	Sq.Mt	
	OR	1.89	Acres	OR	0.57	Acres	
	OR	50.369	%	OR	15.05	%	

APPLIED LAND 11.60 ACRES UNDER MIGRATION (DDJAY) SHOWN THUS



To be read with LOI No. 17019 Dated 17-07-2017

That this Layout plan for an area measuring 11.60 acres (Drawing no. DTCP-5997 dated 17.07.2017) comprised of LOI which is issued in respect of Affordable Residential Plotted Colony (Under Deen Dayal Jan Awas Yojna) being developed by Renu Realtech Pvt. Ltd. and others collaboration with Gnex Realtech Pvt. Ltd. in Sector-36, Bahadurgarh is hereby approved subject to the following conditions

1. That this Layout Plan shall be read in conjunction with the clauses appearing on the agreement executed under Rule 11 and the bilateral agreement.
2. That the plotted area of the colony shall not exceed 65% of the net planned area of the colony. The entire area reserved for commercial purposes shall be taken as plotted for calculation of the area under plots.
3. That the demarcation plans as per site of all the Residential Plots and Commercial site shall be got approved from this Department and construction on these sites shall be governed by the Haryana Building Code, 2017 and the Zoning Plan approved by the Director, Town & Country Planning, Haryana.
4. That for proper planning and integration of services in the area adjacent to the colony, the colonizer shall abide by the directions of the DTCP for the modification of layout plans of the colony.
5. That the revenue rasta falling in the colony shall be kept free for circulation/movement as shown in the layout plan.
6. That the colonizer shall abide by the directions of the DTCP, Haryana and accordingly shall make necessary changes in the layout plan for making any adjustment in the alignment of the peripheral roads, internal road circulation or for proper integration of the planning proposals of the adjoining areas.
7. That no property/plot shall derive access directly from the carriage way of 30 metres or wider sector road if applicable.
8. All green belts provided in the layout plan within the licenced areas of the colony shall be developed by the colonizer. All other green belts outside the licenced area shall be developed by the Haryana Urban Development Authority/colonizer as the directions of the Director, Town and Country planning, Haryana or in accordance with terms and conditions of the agreements of the licence.
9. At the time of demarcation plan, if required percentage of organized open space is reduced, the same will be provided by the colonizer in the licenced area.
10. No plot will derive an access from less than 9 metres wide road would mean a minimum clear width of 9 metres between the plots.
11. Any excess area over and above the permissible 4% under commercial use shall be deemed to be open space.
12. The maximum number of dwelling unit in a plot shall be as per the provisions of the Haryana Building Code, 2017. This condition shall also be incorporated in the zoning plan and in the allotment letters being issued by the colonizer to the plot holders. The stipulation shall also be incorporated in the agreement to be executed by the colonizer with the plot buyers.
13. The portion of the sector/development plan roads /green belts as provided in the Development Plan if applicable, which form part of the licenced area shall be transferred free of cost to the government on the lines of Section 3(3)(a)(iii) of the Act No.8 of 1975.
14. That the odd size plots are being approved subject to the conditions that these plots should not have a frontage of less than 75% of the standard frontage when demarcated.
15. That you will have no objection to the regularization of the boundaries of the licence through give and take with the land that HUDA is finally able to acquire in the interest of planned development and integration of services. The decision of the competent authority shall be binding in this regard.
16. That the rain water harvesting system shall be provided as per Central Ground Water Authority norms/Haryana Govt. notification as applicable.
17. That the colonizer/owner shall use only Light-Emitting Diode lamps (LED) fitting for internal lighting as well as Campus lighting.
18. That the colonizer/owner shall ensure the installation of Solar Power Plant as per provisions of Haryana Solar Power Policy, 2016 issued by Haryana Government Renewable Energy Department vide Notification No. 19/4/2016-3 Power dated 14.03.2016.
19. That the colonizer/owner shall ensure the installation of Solar Photovoltaic Power Plant as per the provisions of order No.22/52/2005-5Power dated 21.03.2016 issued by Haryana Government Renewable Energy Department.
20. That the colonizer/owner shall strictly comply with the directions issued vide Notification No. 19/6/2016-5P dated 11.03.2016 issued by Haryana Government Renewable Energy Department for enforcement of the Energy Conservation Building Codes.

PROJECT	ARCHITECT:	ARCHITECT SIGNATURE	COMPANY:	OWNER SIGNATURE
PROPOSED LAYOUT PLAN OF AFFORDABLE PLOTTED COLONY ON AN AREA MEASURING 14.5625 ACRES FALLING SECTOR-36, BAHADURGARH, HARYANA.	DESIGN FORUM INTERNATIONAL • ARCHITECTURE • URBAN DESIGN • TOWN PLANNING • K-47, KAILASH COLONY, NEW DELHI -110048 PH. NO:- 011-46559600, FAX:- 011-46556601	Ar. Amandeep Bansal CA/2015/72167	GNEX REALTECH PVT. LTD. PERMANENT ADD. :- B-10, LAWRENCE ROAD, INDUSTRIAL AREA, DELHI - 110035 CORRESPONDENCE ADD. :- BUNGALOW NO. -11, BARAKHAMBA ROAD, NEW DELHI - 110001	

DATE	26.09.2017	NORTH	DRAWING TITLE:- LAYOUT PLAN
SCALE	1:1000		

(BALWANT SINGH) SD (HQ) | (SANJAY KUMAR) DTP (HQ) | (DEVENDRA NIMBOKAR) STP (M) HQ | (KAMAL KUMAR) CTP (HR) | (T.L. SATYAPRAKASH, IAS) DTCP (HR) | (RAM AVTAR BASSI) AD (HQ)

Checked subject to comments in forwarding letter No. 12519 Dt. 3.10.17 and notes attached with the estimate

Executive Engineer HSVP, Division, Bahadurgarh.

Superintending Engineer (HQ) for Chief Engineer HSVP Panchkula

Superintending Engineer HSVP Circle, Rohtak

Director Town & Country Planning Haryana, Chandigarh

LC-3564

AREA STATEMENT

TOTAL AREA OF THE SCHEME	=	8.225	Acres	..... A
AREA UNDER U/D	=	0.077	Acre	..... B
NET PLANNED AREA (A - B)	=	8.148	Acres	
AREA UNDER COMMERCIAL	=	0.25625	Acres	3.145
AREA UNDER PLOTS	=	3.77526	Acres	46.333
TOTAL SALEBLE AREA	=	4.03150	Acres	49.478

AREA UNDER PLOTS

TYPE	SIZE			AREA	TOTAL PLOTS		TOTAL AREA
A	6.135	x	15.000	92.025	120	=	11043.000 Sq.Mt
B	7.300	x	15.000	109.500	14	=	1533.000 Sq.Mt
C	6.135	x	18.350	112.577	24	=	2701.854 Sq.Mt
TOTAL					158	=	16277.854 Sq.Mt
					OR	=	3.77526 Acres

DENSITY CALCULATION

TOTAL DENSITY	=	158	x	13.50	@ Person's per Plot
	=	2133	÷	8.14800	Acres
	=	261.782	PPA	Against 240 - 400 PPA permissible	

AREA UNDER GREEN

REQUIRED GREEN	=	0.611100	Acres	7.50% of Total area of the Scheme	
GREEN AREA PROPVIDED					
ORGANISED GREEN	=	GREEN-1	=	0.300	Acres
	=	GREEN-2	=	0.273	Acres
	=	GREEN-3	=	0.050	Acres
TOTAL GREEN PROVIDED			=	0.623	Acres 7.65 %

AREA FOR PROVISION OF COMMUNITY FACILITIES

REQUIRED AREA	=	0.8148000 Acres	10.00%
PROVIDED AREA	=	0.8150000 Acres	10.00%

LC-3565

AREA STATEMENT

TOTAL AREA OF THE SCHEME	=	14.53250	Acres	..... A
AREA FALLING UNDER GREEN BELT	=	0.16050	Acres	..... B
BALANCE (A - B)	=	14.393200	Acres	..... E
50% AREA OF GREEN BELT	=	0.084650	Acres	..... F
NET PLANNED AREA (E + F)	=	14.477850	Acres	
AREA UNDER COMMERCIAL	=	0.57910	Acres	4.000
AREA UNDER PLOTS	=	7.91698	Acres	54.683
TOTAL SALEBLE AREA	=	8.49608	Acres	58.683

AREA UNDER PLOTS

TYPE	SIZE			AREA	TOTAL		TOTAL AREA
A	6.135	x	15.000	92.025	150	=	13803.750 Sq.Mt
B	6.450	x	15.793	101.855	60	=	6111.551 Sq.Mt
C	6.200	x	15.651	97.093	20	=	1941.864 Sq.Mt
D	6.135	x	17.116	105.019	15	=	1575.284 Sq.Mt
D1	6.640	x	17.116	113.664	7	=	795.645 Sq.Mt
E	7.335	x	15.000	110.025	3	=	330.075 Sq.Mt
F	6.135	x	17.669	108.422	16	=	1736.352 Sq.Mt
G	7.312	x	17.695	129.395	2	=	258.869 Sq.Mt
H	6.135	x	17.380	105.626	10	=	1056.260 Sq.Mt
I	6.704	x	16.321	109.419	6	=	656.495 Sq.Mt
J	6.550	x	22.852	149.681	8	=	1197.445 Sq.Mt
K	6.992	x	16.784	115.370	4	=	461.479 Sq.Mt
L	7.927	x	15.000	118.905	2	=	237.810 Sq.Mt
M	7.300	x	15.000	109.500	2	=	219.000 Sq.Mt
N	6.325	x	15.000	124.875	4	=	499.500 Sq.Mt
O	7.648	x	15.000	114.720	10	=	1147.200 Sq.Mt
TOTAL					319	=	32036.823 Sq.Mt
					OR	=	7.91698 Acres

DENSITY CALCULATION

TOTAL DENSITY	=	319	x	13.50	@ Person's per Plot
	=	4306.5	÷	14.47765	Acres
	=	297.454	PPA	Against 240 - 400 PPA permissible	

AREA UNDER GREEN

REQUIRED GREEN	=	1.09564	Acres	7.50% of Total area of the Scheme	
GREEN AREA PROPVIDED					
ORGANISED GREEN	=	GREEN-1	=	0.192	Acres
	=	GREEN-2	=	0.297	Acres
	=	GREEN-3	=	0.03	Acres
	=	GREEN-4	=	0.079	Acres
	=	GREEN-5	=	0.322	Acres
	=	GREEN-6	=	0.170	Acres
TOTAL GREEN PROVIDED			=	1.090	Acres 7.53 %

AREA FOR PROVISION OF COMMUNITY FACILITIES

REQUIRED AREA	=	1.4477853 Acres	10.00%
PROVIDED AREA	=	1.4549793 Acres	10.05%

LC-3563

AREA STATEMENT

TOTAL AREA OF THE SCHEME	=	11.60000	Acres	..... A
AREA FALLING UNDER GREEN BELT	=	0.33298	Acres	..... B
BALANCE (A - B)	=	11.26702	Acres	..... E
50% AREA OF ROAD WIDENING AND GREEN BELT	=	0.10649	Acres	..... F
NET PLANNED AREA (E + F)	=	11.43351	Acres	
AREA UNDER COMMERCIAL	=	0.39040	Acres	3.414
AREA UNDER PLOTS	=	4.91687	Acres	43.004
TOTAL SALEBLE AREA	=	5.30727	Acres	46.418

AREA UNDER PLOTS

TYPE	SIZE			AREA	TOTAL PLOTS		TOTAL AREA
A	6.135	x	15.000	92.025	177	=	16289.425 Sq.Mt
B	7.300	x	15.000	109.500	2	=	219.000 Sq.Mt
C	7.600	x	15.700	119.320	2	=	238.640 Sq.Mt
D	7.500	x	20.000	150.000	3	=	450.000 Sq.Mt
E	7.335	x	16.500	121.028	8	=	968.220 Sq.Mt
F	9.000	x	10.000	90.000	6	=	900.000 Sq.Mt
G	6.135	x	13.141	80.620	9	=	725.580 Sq.Mt
H	7.732	x	15.000	115.980	4	=	463.920 Sq.Mt
I	8.136	x	15.000	122.025	2	=	244.050 Sq.Mt
TOTAL					213	=	19897.835 Sq.Mt
					OR	=	4.91687 Acres

DENSITY CALCULATION

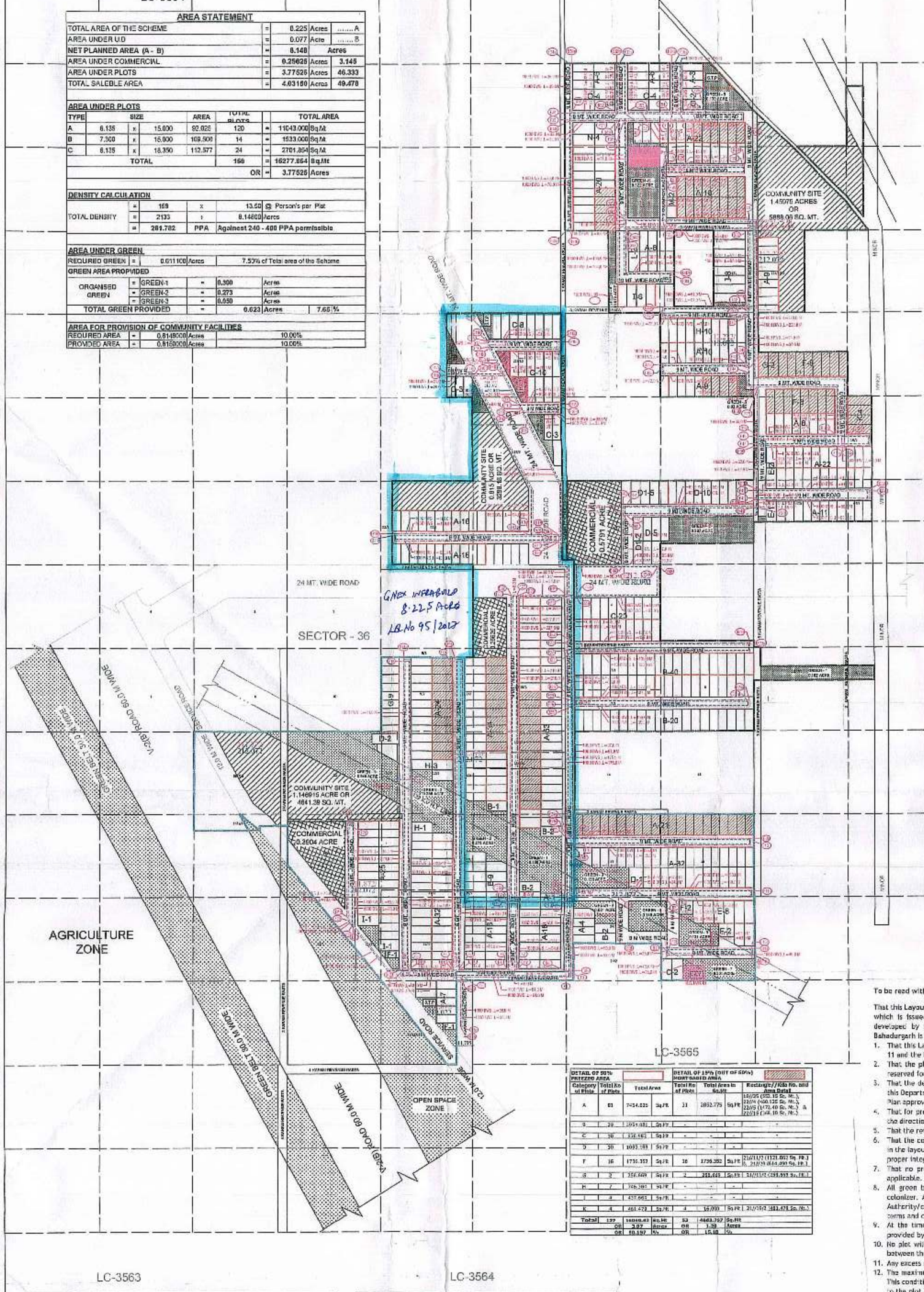
TOTAL DENSITY	=	213	x	13.50	@ Person's per Plot
	=	2875.5	÷	11.43351	Acres
	=	251.498	PPA	Against 240 - 400 PPA permissible	

AREA UNDER GREEN

REQUIRED GREEN	=	0.85751	Acres	7.50% of Total area of the Scheme	
GREEN AREA PROPVIDED					
ORGANISED GREEN	=	GREEN-1	=	0.545	Acres
	=	GREEN-2	=	0.255	Acres
	=	GREEN-3	=	0.158	Acres
	=	GREEN-4	=	0.091	Acres
	=	GREEN-5	=	0.146	Acres
	=	GREEN-6	=	0.131	Acres
	=	GREEN-7	=	0.291	Acres
TOTAL GREEN PROVIDED			=	1.547	Acres 13.53 %

AREA FOR PROVISION OF COMMUNITY FACILITIES

REQUIRED AREA	=	1.143351 Acres	10.00%
PROVIDED AREA	=	1.148915 Acres	10.03%



LC-3563

DETAIL OF 50% FREEZED AREA				DETAIL OF 15% (OUT OF 50%) MORTGAGED AREA			
Category of Plots	Total No of Plots	Total Area		Total No of Plots	Total Area in Sq.Mt		Rectangle//Kite No. and Area Detail
A	84	6650.388	Sq.Mt	33	3036.825	Sq.Mt	35//16 (1002.123 Sq. Mt.), 35//17 (930.402 Sq. Mt.), 35//9/2 (804.672 Sq. Mt.) 35//13/1 (299.628 Sq. Mt.)
B	5	605.138	Sq.Mt	-	-	-	-
G	9	725.580	Sq.Mt	-	-	-	-
Total	109	9981.07	Sq.Mt	33	3036.825	Sq.Mt	
	OR	2.47	Acres	OR	0.75	Acres	
	OR	50.162	%	OR	15.26	%	

LC-3564

DETAIL OF 50% FREEZED AREA				DETAIL OF 15% (OUT OF 50%) MORTGAGED AREA			
Category of Plots	Total No of Plots	Total Area		Total No of Plots	Total Area in Sq.Mt		Rectangle//Kite No. and Area Detail
A	70	6941.795	Sq.Mt	25	2301.625	Sq.Mt	39//8/2 (1242.003 Sq. mt.), 39//13/1/1 (433.017 Sq. mt.), 39//13/2/1 (176.022 Sq. mt.), 39//13/2/2 (447.277 Sq. mt.)
B	1	100.516	Sq.Mt	-	-	-	-
C	10	1125.773	Sq.Mt	-	-	-	-
Total	81	7677.02	Sq.Mt	25	2301.625	Sq.Mt	
	OR	1.90	Acres	OR	0.57	Acres	
	OR	50.269	%	OR	15.08	%	

PLANNED LEGEND:-

———	DOMESTIC WATER SUPPLY LINE
------	SEWERAGE WATER SUPPLY LINE

APPLIED LAND 11.60 ACRES UNDER MIGRATION (DDJAY) SHOWN THUS

To be read with LOI No. 17019 Dated 17-07-2017

That this Layout plan for an area measuring 11.60 acres (Drawing no. DTCP-5997 dated 17.07.2017) comprised of LOI which is issued in respect of Affordable Residential Plotted Colony (Under Deen Dayal Jan Awas Yojna) being developed by Renu Realtech Pvt. Ltd. and others collaboration with Gnex Realtech Pvt. Ltd. in Sector-36, Bahadurgarh is hereby approved subject to the following conditions

1. That this Layout Plan shall be read in conjunction with the clauses appearing on the agreement executed under Rule 11 and the bilateral agreement.
2. That the plotted area of the colony shall not exceed 65% of the net planned area of the colony. The entire area reserved for commercial purposes shall be taken as plotted for calculation of the area under plots.
3. That the demarcation plans as per site of all the Residential Plots and Commercial site shall be got approved from this Department and construction on these sites shall be governed by the Haryana Building Code, 2017 and the Zoning Plan approved by the Director, Town & Country Planning, Haryana.
4. That for proper planning and integration of services in the area adjacent to the colony, the colonizer shall abide by the directions of the DTCP for the modification of layout plans of the colony.
5. That the revenue rasta falling in the colony shall be kept free for circulation/movement as shown in the layout plan.
6. That the colonizer shall abide by the directions of the DTCP, Haryana and accordingly shall make necessary changes in the layout plan for making any adjustment in the alignment of the peripheral roads, internal road circulation or for proper integration of the planning proposals of the adjoining areas.
7. That no property/plot shall derive access directly from the carriage way of 30 metres or wider sector road if applicable.
8. All green belts provided in the layout plan within the licenced areas of the colony shall be developed by the colonizer. All other green belts outside the licenced area shall be developed by the Haryana Urban Development Authority/colonizer on the directions of the Director, Town and Country Planning, Haryana or in accordance with terms and conditions of the agreements of the licence.
9. At the time of demarcation plan, if required percentage of organized open space is reduced, the same will be provided by the colonizer in the licenced area.
10. No plot will derive an access from less than 9 metres wide road would mean a minimum clear width of 9 metres between the plots.
11. Any excess area over and above the permissible 4% under commercial use shall be deemed to be open space.
12. The maximum number of dwelling units in a plot shall be as per the provisions of the Haryana Building Code, 2017. This condition shall also be incorporated in the zoning plan and in the allotment letters being issued by the colonizer to the plot holders. The stipulation shall also be incorporated in the agreement to be executed by the colonizer with the plot buyers.
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14. That the odd size plots are being approved subject to the conditions that these plots should not have a frontage of less than 75% of the standard frontage when demarcated.
15. That you will have no objection to the regularization of the boundaries of the licence through give and take with the land that HUDA is finally able to acquire in the interest of planned development and integration of services. The decision of the competent authority will be binding in this regard.
16. That the rain water harvesting system shall be provided as per Central Ground Water Authority norms/Haryana Govt. notification as applicable.
17. That the colonizer/owner shall use only Light-Emitting Diode lamps (LED) fitting for internal lighting as well as Campus lighting.
18. That the colonizer/owner shall ensure the installation of Solar Power Plant as per provisions of Haryana Solar Power Policy, 2016 issued by Haryana Government Renewable Energy Department vide Notification No. 19/4/2016-5 Power dated 14.03.2016.
19. That the colonizer/owner shall ensure the installation of Solar Photovoltaic Power Plant as per the provisions of order No.22/52/2005-5Power dated 21.03.2016 issued by Haryana Government Renewable Energy Department.
20. That the colonizer/owner shall strictly comply with the directions issued vide Notification No. 19/6/2016-5P dated 31.03.2016 issued by Haryana Government Renewable Energy Department for enforcement of the Energy Conservation Building Codes.

(BALWANT SINGH) SO (HQ) — (SANJAY KUMAR) DTP (HQ) — (DEVENDRA HIMBURKAR) STP (M) HQ — (KAMAL KUMAR) CTP (HR) — (T.L. SATYAPRAKASH, IAS) DTCP (HR)

(RAM AVTAR BASSI) AD (HQ)

PROJECT	ARCHITECT:	ARCHITECT SIGNATURE	COMPANY:	OWNER SIGNATURE
PROPOSED LAYOUT PLAN OF AFFORDABLE PLOTTED COLONY ON AN AREA MEASURING 14.5625 ACRES FALLING SECTOR-36, BAHADURGARH, HARYANA.	DESIGN FORUM INTERNATIONAL — ARCHITECTURE • INTERIOR DESIGN • TOWN PLANNING — K-47, KAILASH COLONY, NEW DELHI -110048 PH. NO:- 011-46556500, FAX:- 011-46556501	Ar. Amandeep Bansal CA/2016/72167	GNEX REALTECH PVT. LTD. PERMANENT ADD. :- 8-10, LAWRENCE ROAD, INDUSTRIAL AREA, DELHI - 110035 CORRESPONDENCE ADD. :- BUNGALOW NO. -11, BARAKHAMBA ROAD, NEW DELHI - 110001	

DATE 29.08.2017 — SCALE 1:1000 — NORTH — DRAWING TITLE:- LAYOUT PLAN

Checked subject to comments in forwarding letter No. 12137 Dt. 1.9.17 and notes attached with the estimate

Executive Engineer, HSVP, Division, Bahadurgarh,

Superintending Engineer (HQ) for Chief Engineer HSVP Panchkula

Superintending Engineer HSVP Circle, Rohtak

Director Town & Country Planning Haryana, Chandigarh

LC-3564

AREA STATEMENT

TOTAL AREA OF THE SCHEME	= 8.225 Acres	..... A	
AREA UNDER U/D	= 0.077 Acre	..... B	
NET PLANNED AREA (A - B)	= 8.148	Acres	
AREA UNDER COMMERCIAL	= 0.25625 Acres	3.145	
AREA UNDER PLOTS	= 3.77525 Acres	46.333	
TOTAL SALEBLE AREA	= 4.03150 Acres	49.478	

AREA UNDER PLOTS

TYPE	SIZE			AREA	TOTAL PLOTS		TOTAL AREA
A	6.135	x	15.000	92.025	120	=	11043.000 Sq.Mt
B	7.300	x	15.000	109.500	14	=	1533.000 Sq.Mt
C	6.135	x	16.350	112.577	24	=	2701.854 Sq.Mt
TOTAL					158	=	15277.854 Sq.Mt
					OR	=	3.77525 Acres

DENSITY CALCULATION

TOTAL DENSITY	= 158	x	13.50	@ Person's per Plot	
	= 2133	÷	6.14200	Acres	
	= 261.782	PPA	Against 240 - 400 PPA permissible		

AREA UNDER GREEN

REQUIRED GREEN	= 0.611100 Acres	7.50% of Total area of the Scheme			
GREEN AREA PROPVIDED					
ORGANISED GREEN	= GREEN-1	= 0.300	Acres		
	= GREEN-2	= 0.273	Acres		
	= GREEN-3	= 0.050	Acres		
TOTAL GREEN PROVIDED	=	0.623 Acres		7.65 %	

AREA FOR PROVISION OF COMMUNITY FACILITIES

REQUIRED AREA	= 0.8148000 Acres	10.00%	
PROVIDED AREA	= 0.9150000 Acres	10.00%	

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AREA STATEMENT

TOTAL AREA OF THE SCHEME	= 14.56250 Acres	..... A		
AREA FALLING UNDER GREEN BELT	= 0.16830 Acres	..... B		
BALANCE (A - B)	= 14.393200 Acres	..... E		
50% AREA OF GREEN BELT	= 0.084650 Acres	..... F		
NET PLANNED AREA (E + F)	= 14.477850	Acres		
AREA UNDER COMMERCIAL	= 0.57910 Acres	4.000		
AREA UNDER PLOTS	= 7.91698 Acres	54.683		
TOTAL SALEBLE AREA	= 8.49608 Acres	58.683		

AREA UNDER PLOTS

TYPE	SIZE			AREA	TOTAL		TOTAL AREA
A	6.135	x	15.000	92.025	150	=	13803.750 Sq.Mt
B	6.450	x	16.793	101.865	60	=	6111.991 Sq.Mt
C	6.200	x	16.661	97.059	20	=	1941.904 Sq.Mt
D	6.135	x	17.118	105.019	15	=	1575.284 Sq.Mt
D1	6.640	x	17.118	113.654	7	=	795.645 Sq.Mt
E	7.335	x	15.000	110.025	3	=	330.075 Sq.Mt
F	6.135	x	17.669	108.922	16	=	1736.352 Sq.Mt
G	7.312	x	17.668	129.335	2	=	258.669 Sq.Mt
H	6.135	x	17.360	106.535	10	=	1065.253 Sq.Mt
I	6.704	x	16.321	109.415	5	=	656.496 Sq.Mt
J	6.650	x	22.652	149.687	8	=	1197.445 Sq.Mt
K	6.882	x	16.764	115.370	4	=	461.479 Sq.Mt
L	7.027	x	15.000	118.905	2	=	237.810 Sq.Mt
M	7.300	x	15.000	109.500	2	=	219.000 Sq.Mt
N	8.325	x	15.000	124.875	4	=	499.500 Sq.Mt
O	7.648	x	15.000	114.720	10	=	1147.200 Sq.Mt
TOTAL					319	=	32036.823 Sq.Mt
					OR	=	7.91698 Acres

DENSITY CALCULATION

TOTAL DENSITY	= 319	x	13.50	@ Person's per Plot	
	= 4306.5	÷	14.47785	Acres	
	= 297.454	PPA	Against 240 - 400 PPA permissible		

AREA UNDER GREEN

REQUIRED GREEN	= 1.08884 Acres	7.50% of Total area of the Scheme			
GREEN AREA PROPVIDED					
ORGANISED GREEN	= GREEN-1	= 0.192	Acres		
	= GREEN-2	= 0.297	Acres		
	= GREEN-3	= 0.03	Acres		
	= GREEN-4	= 0.079	Acres		
	= GREEN-5	= 0.322	Acres		
	= GREEN-6	= 0.170	Acres		
TOTAL GREEN PROVIDED	=	1.090 Acres		7.53 %	

AREA FOR PROVISION OF COMMUNITY FACILITIES

REQUIRED AREA	= 1.4477850 Acres	10.00%	
PROVIDED AREA	= 1.4549750 Acres	10.05%	

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AREA STATEMENT

TOTAL AREA OF THE SCHEME	= 11.60000 Acres	..... A	
AREA FALLING UNDER GREEN BELT	= 0.33298 Acres	..... B	
BALANCE (A - B)	= 11.26702 Acres	..... E	
50% AREA OF ROAD WIDENING AND GREEN BELT	= 0.16649 Acres	..... F	
NET PLANNED AREA (E + F)	= 11.43351 Acres		
AREA UNDER COMMERCIAL	= 0.39040 Acres	3.414	
AREA UNDER PLOTS	= 4.91687 Acres	43.004	
TOTAL SALEBLE AREA	= 5.30727 Acres	46.418	

AREA UNDER PLOTS

TYPE	SIZE			AREA	TOTAL PLOTS		TOTAL AREA
A	6.135	x	15.000	92.025	177	=	16289.425 Sq.Mt
B	7.300	x	15.000	109.500	2	=	219.000 Sq.Mt
C	7.600	x	15.700	119.320	2	=	238.640 Sq.Mt
D	7.500	x	20.000	150.000	3	=	450.000 Sq.Mt
E	7.335	x	16.500	121.028	8	=	968.220 Sq.Mt
F	5.000	x	10.000	50.000	6	=	300.000 Sq.Mt
G	6.135	x	13.141	80.620	9	=	725.580 Sq.Mt
H	7.732	x	15.000	115.980	4	=	463.920 Sq.Mt
I	8.135	x	15.000	122.025	2	=	244.050 Sq.Mt
TOTAL					213	=	19697.835 Sq.Mt
					OR	=	4.91687 Acres

DENSITY CALCULATION

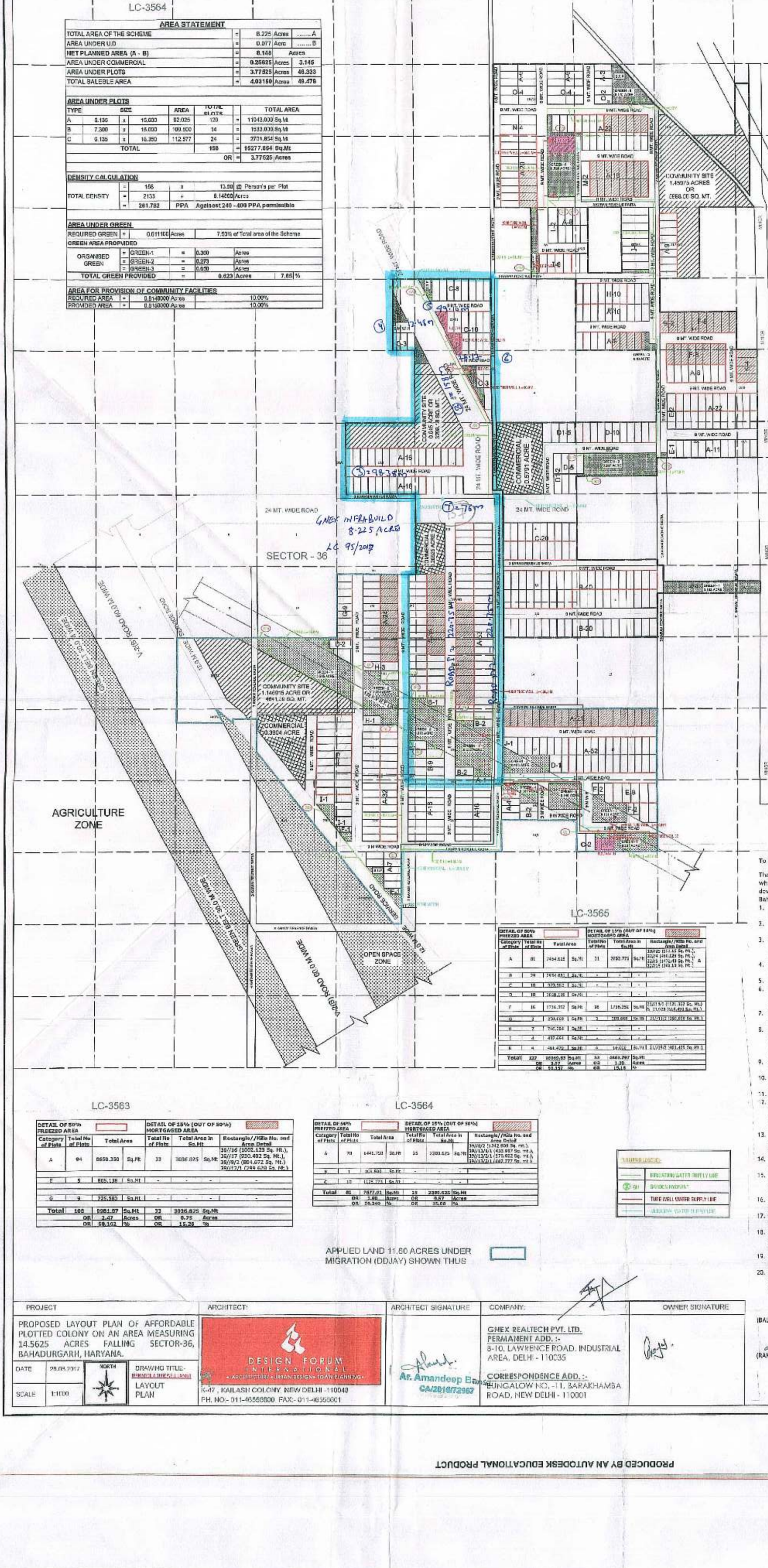
TOTAL DENSITY	= 213	x	13.50	@ Person's per Plot	
	= 2875.5	÷	11.43351	Acres	
	= 251.498	PPA	Against 240 - 400 PPA permissible		

AREA UNDER GREEN

REQUIRED GREEN	= 0.86751 Acres	7.60% of Total area of the Scheme			
GREEN AREA PROPVIDED					
ORGANISED GREEN	= GREEN-1	= 0.645	Acres		
	= GREEN-2	= 0.285	Acres		
	= GREEN-3	= 0.150	Acres		
	= GREEN-4	= 0.061	Acres		
	GREEN-5	= 0.146	Acres		
	GREEN-6	= 0.131	Acres		
	= GREEN-7	= 0.201	Acres		
TOTAL GREEN PROVIDED	=	1.547 Acres		13.53 %	

AREA FOR PROVISION OF COMMUNITY FACILITIES

REQUIRED AREA	= 1.143351 Acres	10.00%	
PROVIDED AREA	= 1.140915 Acres	10.03%	



LC-3565

DETAIL OF 50% FREEZED AREA				DETAIL OF 15% (OUT OF 50%) MORTGAGED AREA			
Category of Plots	Total No of Plots	Total Area		Total No of Plots	Total Area in Sq.Mt		Rectangle/ Kite No. and Area Detail
A	81	7494.825	Sq.Mt	31	2892.775	Sq.Mt	39/15 (1111.15 Sq. Mt.), 39/14 (1441.625 Sq. Mt.), 39/13 (1472.49 Sq. Mt.), 39/15 (1249.13 Sq. Mt.)
B	39	3451.613	Sq.Mt	-	-	-	-
C	10	925.662	Sq.Mt	-	-	-	-
D	10	1068.138	Sq.Mt	-	-	-	-
F	16	1736.352	Sq.Mt	16	1736.352	Sq.Mt	39/17/1/1 (1131.327 Sq. Mt.), 39/17/2/1 (605.025 Sq. Mt.)
G	2	258.669	Sq.Mt	2	258.669	Sq.Mt	39/17/2 (258.669 Sq. Mt.)
H	7	742.254	Sq.Mt	-	-	-	-
I	4	437.664	Sq.Mt	-	-	-	-
K	4	461.479	Sq.Mt	4	461.479	Sq.Mt	39/17/2 (461.479 Sq. Mt.)
Total	177	16289.425	Sq.Mt	53	5469.295	Sq.Mt	
	OR	4.03	Acres	OR	1.35	Acres	
	OR	50.157	%	OR	15.18	%	

DETAIL OF 50% FREEZED AREA				DETAIL OF 15% (OUT OF 50%) MORTGAGED AREA			
Category of Plots	Total No of Plots	Total Area		Total No of Plots	Total Area in Sq.Mt		Rectangle/ Kite No. and Area Detail
A	94	8650.350	Sq.Mt	33	3036.825	Sq.Mt	39/16 (1002.123 Sq. Mt.), 39/17 (930.402 Sq. Mt.), 39/9/2 (804.672 Sq. Mt.) 39/17/1 (299.628 Sq. Mt.)
E	5	605.138	Sq.Mt	-	-	-	-
G	9	725.580	Sq.Mt	-	-	-	-
Total	108	9981.07	Sq.Mt	33	3036.825	Sq.Mt	
	OR	2.47	Acres	OR	0.75	Acres	
	OR	58.102	%	OR	15.29	%	

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DETAIL OF 50% FREEZED AREA				DETAIL OF 15% (OUT OF 50%) MORTGAGED AREA			
Category of Plots	Total No of Plots	Total Area		Total No of Plots	Total Area in Sq.Mt		Rectangle/ Kite No. and Area Detail
A	78	6441.750	Sq.Ft	25	2303.625	Sq.Ft	39/9/2 (342.506 Sq. mt.), 39/13/1/1 (433.917 Sq. mt.), 39/13/2/1 (575.022 Sq. mt.), 39/13/2/1 (447.777 Sq. mt.)
B	1	103.593	Sq.Ft	-	-	-	-
C	10	1125.773	Sq.Ft	-	-	-	-
Total	81	7677.01	Sq.Mt	25	2303.625	Sq.Mt	
	OR	1.90	Acres	OR	0.57	Acres	
	OR	58.240	%	OR	15.08	%	

APPLIED LAND 11.60 ACRES UNDER MIGRATION (DDJAY) SHOWN THUS

BOUNDARY LEGEND:	
	IRRIGATION WATER SUPPLY LINE
SW	SWEEPER PROPOSED
	TUBE WELL WATER SUPPLY LINE
	DRINKING WATER SUPPLY LINE

To be read with LO No. 17019 Dated 17-07-2017

That this Layout plan for an area measuring 11.60 acres (Drawing no. DTCP-5997 dated 17.07.2017) comprised of LOI which is issued in respect of Affordable Residential Plotted Colony (Under Deen Dayal Jan Awas Yojna) being developed by Renu Realtech Pvt. Ltd. and others collaboration with Gnex Realtech Pvt. Ltd. in Sector-36, Bahadurgarh is hereby approved subject to the following conditions

1. That this Layout Plan shall be read in conjunction with the clauses appearing on the agreement executed under Rule 11 and the bilateral agreement.
2. That the plotted area of the colony shall not exceed 65% of the net planned area of the colony. The entire area reserved for commercial purposes shall be taken as plotted for calculation of the area under plots.
3. That the demarcation plans as per site of all the Residential Plots and Commercial site shall be got approved from this Department and construction on these sites shall be governed by the Haryana Building Code, 2017 and the Zoning Plan approved by the Director, Town & Country Planning, Haryana.
4. That for proper planning and integration of services in the area adjacent to the colony, the colonizer shall abide by the directions of the DTCP for the modification of layout plans of the colony.
5. That the revenue rasta falling in the colony shall be kept free for circulation/movement as shown in the layout plan.
6. That the colonizer shall abide by the directions of the DTCP, Haryana and accordingly shall make necessary changes in the layout plan for making any adjustment in the alignment of the peripheral roads, internal road circulation or for proper integration of the planning proposals of the adjoining areas.
7. That no property/plot shall derive access directly from the carriage way of 30 metres or wider sector road if applicable.
8. All green belts provided in the layout plan within the licenced areas of the colony shall be developed by the colonizer. All other green belts outside the licensed area shall be developed by the Haryana Urban Development Authority/colonizer on the directions of the Director, Town and Country Planning, Haryana or in accordance with terms and conditions of the agreements of the licence.
9. At the time of demarcation plan, if required percentage of organized open space is reduced, the same will be provided by the colonizer in the licenced area.
10. No plot will derive an access from less than 9 metres wide road would mean a minimum clear width of 9 metres between the plots.
11. Any excess area over and above the permissible 4% under commercial use shall be deemed to be open space.
12. The maximum number of dwelling units in a plot shall be as per the provisions of the Haryana Building Code, 2017. This condition shall also be incorporated in the zoning plan and in the allotment letters being issued by the colonizer to the plot holders. The stipulation shall also be incorporated in the agreement to be executed by the colonizer with the plot buyers.
13. The portion of the sector/development plan roads /green belts as provided in the Development Plan if applicable, which form part of the licenced area shall be transferred free of cost to the government on the lines of Section 3(3)(e)(ii) of the Act No.8 of 1975.
14. That the odd size plots are being approved subject to the conditions that these plots should not have a frontage of less than 75% of the standard frontage when demarcated.
15. That you will have no objection to the regularization of the boundaries of the licence through give and take with the land that HUDA is finally able to acquire in the interest of planned development and integration of services. The decision of the competent authority shall be binding in this regard.
16. That the rain water harvesting system shall be provided as per Central Ground Water Authority norms/Haryana Govt. notification as applicable.
17. That the colonizer/owner shall use only Light-Emitting Diode lamps (LED) fitting for internal lighting as well as Campus lighting.
18. That the colonizer/owner shall ensure the installation of Solar Power Plant as per provisions of Haryana Solar Power Policy, 2016 issued by Haryana Government, Renewable Energy Department vide Notification No. 19/4/2016-5 Power dated 14.03.2016.
19. That the colonizer/owner shall ensure the installation of Solar Photovoltaic Power Plant as per the provisions of order No.22/52/2005-5Power dated 21.03.2016 issued by Haryana Government Renewable Energy Department.
20. That the colonizer/owner shall strictly comply with the directions issued vide Notification No. 19/6/2016-5P dated 31.03.2016 issued by Haryana Government Renewable Energy Department for enforcement of the Energy Conservation Building Codes.

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(RAM AVTAR BASSI) AD (HQ)

Checked subject to comments in forwarding letter No. 12687 Dt. 17.07.17 and notes attached with the estimate

Executive Engineer, HSVP, Division, Bahadurgarh.

Superintending Engineer (HQ) for Chief Engineer HSVP Panchkula

Superintending Engineer HSVP Circle, Rohtak

Director Town & Country Planning

PROJECT	ARCHITECT:	ARCHITECT SIGNATURE	COMPANY:	OWNER SIGNATURE
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DATE 28.06.2017 | SCALE 1:1000 | NORTH | DRAWING TITLE:- LAYOUT PLAN