

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

FOR

**PROPOSED "COMMERCIAL COLONY MEASURING 3.1918
ACRES (LICENSE NO.05 OF 2001 DATED 31.08.2001 AND
LICENSE NO. 115 OF 2004 DATED 27.07.2004) IN SECTOR -
53, GURUGRAM - MANESAR URBAN COMPLEX BEING
DEVELOPED BY M/S MONIKA INFRASTRUCTURE PVT. LTD.**

SERVICE ESTIMATE, DESIGN REPORT AND CALCULATIONS OF INTERNAL DEVELOPMENT WORKS FOR PROPOSED "COMMERCIAL COLONY MEASURING 3.1918 ACRES (LICENSE NO. 05 OF 2001 DATED 31.08.2001 & LICENSE NO. 115 OF 2004 DATED 27.07.2004) IN SECTOR – 53, GURUGRAM MANESAR URBAN COMPLEX BEING DEVELOPED BY M/S MONIKA INFRASTRUCTURE PVT. LTD.

REPORT :-

Gurugram town of Haryana State situated on N.H. -8 road at a distance of 35 Km from Delhi. Being in the national capital region the town has fast developing tendency and potential. Further, it has also started sharing the growing residential, commercial and Industrial load of Delhi. In order to review the growing pressure of population in National Capital of Delhi, It has been decided by the Haryana Government to develop various infrastructure facilities in Gurugram Manesar Urban Complex. This report is for a part of service estimate for proposed "commercial colony" measuring 3.1918 acres (License No. 05 of 2001 dated 31.08.2001 and License No. 115 of 2004 dated 27.07.2004) in Sector – 53, Gurugram – Manesar urban complex being developed by M/s Monika Infrastructure Pvt. Ltd. has been prepared with the following provisions which are as under:-

1. WATER SUPPLY

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

2. DESIGN

The scheme has been designed for population of 3409 persons for block –A & B for considering 1 person per 3 sqm area for ground floor and 1 person per 6 sqm for first floor for commercial and considering @ 10% for shopkeeper @ 45 LPCD and @ 90% for visitors @ 15 LPCD and office area 1 person per 10 sqm and maintenance staff and considering @ 90% for offices @ 45 LPCD and @ 10% for visitors @ 15 LPCD as per design calculations.

3. PUMPING EQUIPMENTS

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

4. SEWERAGE

The scheme is designed for sewer connecting to the STP and bypass connection to HUDA sewer scheme.

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

5. STORM WATER DRAINAGE

It has been proposed to lay R.C.C pipes with required number of manholes for disposal of storm water, which will be connected to the HUDA drain. The intensity of rain fall has been taken as 6.00mm (1/4") per hour. A minimum size of 400mm i/d R.C.C pipe for storm water drain will be provided and designed as per manning's formula. Necessary provision of rainwater harvesting arrangement has also been taken in this estimate.

6. ROADS

Road have been provided to above areas and estimate is prepared as revised specifications adopted by HUDA.

7. STREET LIGHTING

Provision for external lighting of proposed area has been made.

8. HORTICULTURE

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

9. FIRE

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

10. SPECIFICATIONS

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

11. RATES

The estimate has been based on the present market rates.

12. COST

The total cost of the scheme including cost of all services works out to Rs. 256.47 Lacs (Rupees Two Crores Fifty Six Lacs Forty Seven Thousand only) including 3% contingencies and 49% departmental charges and cost per acre comes out to Rs. 80.35 Lacs.

(Authorized Signatory)

SERVICE ESTIMATE, DESIGN REPORT AND CALCULATIONS OF INTERNAL DEVELOPMENT WORKS FOR PROPOSED "COMMERCIAL COLONY MEASURING 3.1918 ACRES (LICENSE NO. 05 OF 2001 DATED 31.08.2010 & LICENSE NO. 115 OF 2005 DATED 27.07.2004) IN SECTOR - 53, GURUGRAM MANESAR URBAN COMPLEX BEING DEVELOPED BY M/S MONIKA INFRASTRUCTURE PVT. LTD.

DESIGN CALCULATION

| | | |
|-----------------------------------|---|-----------------|
| Total Area of Plot (Commercial) | = | 3.1918 Acres Or |
| | | 12916.66 Sqm |
| Permissible Ground Coverage @ 40% | = | 5166.66 Sqm |
| Permissible FAR @ 175% | = | 22604.16 Sqm |
| Proposed Ground coverage | = | 5163.64 Sqm |
| FAR Achieved | = | 22593.562 Sqm |

WATER REQUIREMENT (BLOCK - A & B)

A. Ground + First Floor (Block -A)

| | | |
|--|---|---------------------------|
| 1 Area on Ground Floor (Shopping Area) | = | 3975.229 Sqm |
| Occupancy @ $3m^2$ / person | = | 1325 Persons |
| 2 Shopping area on First floors | = | 3329.454 Sqm |
| Occupancy @ $6m^2$ / person | = | 554 Persons |
| Total occupancy | = | 1879 Person |
| Water Requirement @ 10% shopkeeper | | |
| =186 nos. @ 45 LPCD | = | 8460 LPD |
| Water Requirement @ 90% visitors | | |
| =1672 nos. @ 15 LPCD | = | 25365 LPD |
| Total | = | 33825 LPD |
| 3. 2 nd Floor to 10 th Floor (Office Area) | | |
| i) Office Area | = | 9250.792 Sqm |
| Occupancy @ $10m^2$ / Person | = | 925 Persons |
| Water Requirement @ 90% official = 833 Nos | = | 37485 LPD |
| @ 45 LPCD | | |
| Water Requirement @ 10% visitors = 92 Nos | = | 1380 LPD |
| @ 15 LPCD | | |
| Total | = | 33865 LPD |
| Total Water Requirement (Block -A) | = | 72690 LPD (33825 + 38865) |

B) Block -B

| | | |
|--|---|--------------|
| Ground Floor to 5 th Floor | | |
| i) Office Area | = | 6043.086 Sqm |
| Occupancy @ $10m^2$ / person | = | 605 Persons |
| Water Requirement @ 90% official = 545 Nos | | |
| @ 45 LPCD | = | 24525 LPD |
| Water Requirement @ 10% visitors = 60 Nos | = | 900 LPD |
| @ 15 LPCD | | |
| Total | = | 25425 LPD |
| Water Requirement (Block A) | = | 72690 LPD |
| Add Maintenance Staff | = | 25 Persons |
| @ 45 LPCD | = | 1125 LPD |
| Total Water Requirement (Block -A) | = | 73815 LPD |

| | | |
|-------------------------------------|---|-----------|
| Total Water Requirement (Block --B) | = | 25425 LPD |
| Add Maintenance Staff | = | 8 Persons |
| @ 45 LPCD | = | 360 LPD |
| Total Water Requirement (Block --B) | = | 25785 LPD |

- Total Water Requirement (Block A & B) = 73815 + 25785 = 99600 LPD Or 100 K.L.
- II. FIRE DEMAND
- (i) For UGT i.e. Population = 3409 Persons
- (p) $\frac{1}{2} \times 100/1000 = (3.409) \frac{1}{2} \times 100$ = 185.00 KLD Say 200 KLD
- III. Garden Irrigation Requirement (For Total Area) = 30.00 KLD
- IV. Total Water Requirement = 100.00 KLD
(Excluding Fire Demand)
- Hence Domestic Water Requirement (67%) = 100 x 67% = 67.00 KLD
- Hence Flushing Water Requirement (33%) = 100 x 33% = 33.00 KLD
- Half Day Requirement = 33.50 K.L. for Domestic Say 40.00 K.L.
= 16.50 K.L. for Flushing Say 20.00 K.L.

But it is proposed to construct an underground tank capacity 40 K.L. in two compartment for domestic use, 20 K.L. for non potable water in two compartment (at STP) and 200 K.L. for fire fighting purposes for UGT in two compartment as shown location in the plan with UGT.

Total Capacity of UGT = 40 + 200 = 240.00 KLD

- V. Tube Well
- For UGT --I
- a) Yield = 15 K.L. / Hr.
- b) Working Hour per day = 16 Hr. / Per Day
- c) Total water demand = 67 M3/Day
- d) Number of tube well required = 0.279
(Water Demand / Discharge / Hr. working Per day)
- e) Add 5% extra = 0.027
- Total = 0.306 Nos
- Say = 1 Nos

(Water to the proposed development is to be supplied by HUDA. However, it is proposed to install only one no. tube wells for augmentation / standby purposes and provision has also been taken in the estimates.

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

$$HP = (4.50 \times 98) / (75 \times 0.60)$$

$$\text{Say} = 10.00 \text{ H.P.}$$

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

| | |
|---|-------------------------|
| II) Boosting Machinery for domestic water For UGT -I | |
| Total Water Requirement | = 67.00 KLD |
| Pumping per hour @ 8 hr. pumping / day | = 67 / 8 KL / hr. |
| | = 8.375 KL / hr. |
| | = 139.58 lpm = 2.32 lps |
| | Say 3.00 lps |
| Gross working head | For UGT -I |
| Suction lift | = 5.00 mts. |
| - Frictional loss in mains & specials | = 5.00 mts. |
| - Clear Head required | = 65.00 mts. |
| Total | = 75.00 mts. |
| Say | = 75.00 mts. |
| Pump HP | = (3.00x75)/(75x0.60) |
| | = 5.00 H.P. |
| | Say = 7.50 HP |

It is proposed to provide 2 No. of pumping set of 3.00 lps discharge at 75 mts Head each (1W + 1SB) for UGT

| | |
|--|-----------------------------|
| III) Boosting Machinery for flushing water at STP | |
| Total Water Requirement | = 33 K.L.D |
| Pumping per hour @ 8 hr. pumping / day | = 33 / 8 KL / hr. |
| | = 4.125 KL / hr. |
| | = 68.75 lpm = 1.15 lps, |
| | Say 1 No. 2.00 lps each |
| Gross working head | |
| - Suction lift | = 5.00 mts. |
| - Frictional loss in mains & specials | = 5.00 mts. |
| - Clear Head required | = 65.00 mts. |
| Total | = 75.00 mts. |
| Say | = 75.00 mts. |
| Pump HP | = (2.00 x 75) / (75 x 0.60) |
| | = 3.33 HP |
| | Say = 5.00 HP |

It is proposed to provide 2 No. of pumping set of 3.00 lps discharge at 75 mts Head each (1W + 1S)

| | |
|--|-------------------|
| IV) Boosting Machinery for Irrigation water | |
| Total Water Requirement | = 30 KLD |
| Pumping per hour @ 5 hr. pumping / day | = 30 / 5 KL / hr. |
| | = 6.00 KL / hr. |

$$= 100.00 \text{ lpm} = 1.67 \text{ lps}$$

$$\text{Say} = 2.00 \text{ LPS}$$

Gross working head

$$\begin{aligned} & - \text{Suction lift} & = 3.00 \text{ mts.} \end{aligned}$$

$$\begin{aligned} & - \text{Frictional loss in mains \& specials} & = 3.00 \text{ mts.} \end{aligned}$$

$$\begin{aligned} & - \text{Clear Head required} & = 25.00 \text{ mts.} \end{aligned}$$

$$\begin{aligned} \text{Total} & & = 31.00 \text{ mts.} \end{aligned}$$

$$\begin{aligned} \text{Say} & & = 31.00 \text{ mts.} \end{aligned}$$

$$\begin{aligned} \text{Pump HP} & & = (2.00 \times 31) / (75 \times 0.60) \\ & & = 1.38 \text{ HP} \end{aligned}$$

$$\text{Say} = 2.00 \text{ HP}$$

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

V) Boosting Machinery for Fire water

Total Water Requirement

Hydrant pump & spring as per CFO Directive

$$= 2280 \text{ LPM, } 105 \text{ M Head and } 90 \text{ H.P} = 2 \text{ Nos}$$

Jockey pump (Hydrant) as per NBC table No. 23

$$= 180 \text{ LPM, } 105 \text{ M Head and } 90 \text{ H.P} = 2 \text{ Nos}$$

Diesel pump as per CFO Directive

$$= 2280 \text{ LPM, } 105 \text{ M Head and } 90 \text{ H.P} = 1 \text{ Nos}$$

Gross working head

$$\begin{aligned} & - \text{Suction lift} & = 2.00 \text{ mts.} \end{aligned}$$

$$\begin{aligned} & - \text{Frictional loss in mains \& specials} & = 5.00 \text{ mts.} \end{aligned}$$

$$\begin{aligned} & - \text{Clear Head required} & = 98.00 \text{ mts.} \end{aligned}$$

$$\begin{aligned} \text{Total} & & = 105.00 \text{ mts.} \end{aligned}$$

$$\begin{aligned} \text{Jockey Pump HP (Fire)} & & = (3 \times 105) / (75 \times 0.60) \\ & & = 7.00 \text{ HP} \end{aligned}$$

$$\text{Say} = 7.50 \text{ HP (1W + 1SB)}$$

VI) DG Set for plumbing

DG Set Requirement

$$\begin{aligned} \text{Submersible Pump} \quad (1 \times 10) & & = 10.00 \text{ HP} \end{aligned}$$

$$\begin{aligned} \text{Domestic Pump} \quad (1 \times 7.50) & & = 7.50 \text{ HP} \end{aligned}$$

$$\begin{aligned} \text{Flushing Pump} \quad (1 \times 5.00) & & = 5.00 \text{ HP} \end{aligned}$$

$$\begin{aligned} \text{Rainwater drainage sump pumps (For basement)} & & = 15.00 \text{ HP (2 x 7.50 H.P.)} \end{aligned}$$

$$\begin{aligned} \text{Fire Jockey pump} & & = 7.5 \text{ HP} \end{aligned}$$

$$\begin{aligned} \text{Total pump load} & & = 45.00 \text{ HP} \end{aligned}$$

$$= 45.00 \times 0.746 \times 1.50$$

$$= 50.355 \text{ K.W}$$

$$= 1 \text{ No. } 50 \text{ KVA}$$

Total DG capacity

Hence it is proposed to provide 1 No. D.G. Set of 50 KVA capacity

VII) Submersible pumps for Power Basement drainage

Total Water Flow rate from Sprinkler System = 2000 LPM = 33.33 LPS

2 No. Sumps considered for the basement to

Curtail long routes of drainage and filling at

Basement floor

$$= 33.33 \text{ LPS} / 2 = 16.67 \text{ LPS}$$

Say

$$= 17 \text{ LPS}$$

Gross working head

- Suction lift

$$= 1.50 \text{ mts.}$$

- Frictional loss in mains & specials

$$= 1.50 \text{ mts.}$$

- Clear Head required

$$= 15.00 \text{ mts.}$$

Total

$$= 18.00 \text{ mts.}$$

Pump HP

$$= (17 \times 18) / (75 \times 0.60)$$

$$= 6.18 \text{ HP}$$

Say
$$= 7.50 \text{ HP}$$

It is proposed to provide 2 No. of pumping set of 17 lps discharge at 18 mts Head each (2W + 2SB)

VIII) FLOW TO SEWAGE TREATMENT PLANT

Total Water Requirement = 100 KLD i.e. 67 KLD for domestic & 33 KLD for flushing

i) ^{80%} 80% of total Domestic Water Demand = 80% of 67 KLD = 53.60 KLD ✓ii) ^{90%} 90% of total Flushing Water Demand = 90% of 33 KLD = 29.70 KLD ✓

Total = 83.30 KLD ✓

Considering 5% marginal factor

$$= 4.16 \text{ KLD} \quad \checkmark$$

G. Total = 87.46 KLD ✓

Say 90 KLD ✓

Proposed STP Capacity = 90 KLD Or 0.09 MLD

FINAL ABSTRACT OF COST

| SR. NO. | SUB WORK | DESCRIPTION | AMOUNT (Rs. In Lacs) |
|---|------------------|---|-------------------------|
| 1 | SUB WORK NO. I | WATER SUPPLY SCHEME | 89.64 |
| 2 | SUB WORK NO. II | SEWERAGE SCHEME | 21.90 |
| 3 | SUB WORK NO. III | STORM WATER DRAINAGE | 19.28 |
| 4 | SUB WORK NO. IV | ROAD NETWORK | 44.85 |
| 5 | SUB WORK NO. V | STREET LIGHTING | 5.88 |
| 6 | SUB WORK NO. VI | HORTICULTURE (PLANTATION & ROAD SIDE TREES) | 2.07 |
| 7 | SUB WORK NO. VII | MTC. OF SERVICES & RESURFACING OF ROADS | 72.85 |
| | | TOTAL | 256.47 |
| TOTAL : (Rupees Two Crore Fifty Six Lacs Forty Seven Thousand only) | | | |

Cost Per Acre = Rs.256.47 Lacs / 3.1918 = Rs. 80.35 Lacs Per Acre

AUTHORISED SIGNATORY

SUB WORK NO. 1 (Abstract of cost)

WATER SUPPLY

| SR. NO. | SUB WORK | DESCRIPTION | AMOUNT (Rs. In Lacs) |
|---------|-----------------|---|-------------------------|
| 1 | Sub Head No. 01 | Head Works | 16.70 |
| 2 | Sub Head No. 02 | Pumping Machinery | 22.70 |
| 3 | Sub Head No. 03 | Rising Main from Plant Room | 8.23 |
| 4 | Sub Head No. 04 | External Fire Hydrants | 8.00 |
| 5 | Sub Head No. 05 | Irrigation | 2.78 |
| | | TOTAL | 58.41 |
| | | Add 3% contingencies & P.H. Services | 1.75 |
| | | TOTAL | 60.16 |
| | | Add 49% Departmental Charges + Price escalation | 29.48 |
| | | TOTAL | 89.64 |
| | | Say in Lacs | 89.64 |

SUB WORK NO. 1

Sub Head No. 01

WATER SUPPLY
Underground Tank Works*(flood work)*

| Sr. NO. | Description | Amount in Rs. |
|---------|--|---------------|
| 1 | Construction of U.G. tanks and Fire Tank Including pipes, valve & Specials. i) UGT 240 KLD @ Rs. 3000/- per K.L.D | 720000.00 |
| 2 | Provision for construction of Boosting Station 1 Nos @ Rs. 200000/- each | 200000.00 |
| 3 | Boring and installing tube well reverse rotary rig complete with pipes and strainer to a depth of about 120 Mtr complete in all respect. 1 Nos @ Rs. 600000/- each | 600000.00 |
| 4 | Provision for construction of tube well chamber size 1.50m x 1.50m complete in all respect. 1 Nos @ Rs. 100000/- each | 100000.00 |
| 5 | Provision for carriage of material and unforeseen items L.S. | 20000.00 |
| 6 | Provision of specials for tube well & rising line to UGT L.S. | 30000.00 |
| | | |
| | | |
| | | |
| | TOTAL | 1670000.00 |
| | Say in Lacs | 16.70 |

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

SUB WORK NO. 1

Sub Head No. 02

WATER SUPPLY
Pumping Machinery

| Sr. NO. | Description | Amount in Rs. |
|---------|---|-------------------------------------|
| 1 | Providing and installing Hydro pneumatic pumping set of following capacities for domestic water Supply with specials 3.00 lps at 75 mts head - 2 No. (1W+1SB) - @ Rs. 60,000/- each Set (1.50HP) | 120000.00 |
| 2 | Providing and installing Hydro Pneumatic pumping set of following capacities for Flushing water supply 2.00 lps at 75 mts head - 2 No. (1W+1SB) @ Rs. 80,000/- 1 Set (5.00 HP each) | 160000.00 |
| 3 | Providing and installing Submersible pump for tube wells with specials 5.00 lps at 98 mts head - 1 Nos (1W) @ Rs. 2,00,000/- 1 Set (10HP each) | 200000.00 |
| 5 | Providing and installing submersible pumping set of following capacities for basement drainage - 17 lps at 18 mts head 4 Nos (2W + 2SB) @ Rs. 20,000/- (7.5 HP) | 80000.00 |
| 6 | Providing and installing pumping set of following capacities for fire prtioections - 180 lpm at 105 M head 2 No. @ Rs. 1,00,000/- (7.50 HP each) - 2280 lpm at 105 M head 2 No. @ Rs. 2,50,000/- (90 HP each) (Hydrant) - 2280 lpm at 105 M head 1 No. @ Rs. 5,00,000/- (90 HP) (Diesel Engine) | 200000.00 500000.00 500000.00 |
| 7 | Provision for D.G. Set for stand by arrangement for all machinery = 1 No. 50 KVA @ Rs. 3,00,000/- each | 300000.00 |
| 8 | Provision for water treatment plant complete 1 No. @ Rs. 1,00,000/- | 100000.00 |
| 9 | Provision for making foundations & erection of pumping machinery | 20000.00 |
| 10 | Provision for pipes, valve & specials inside boosting chamber | 20000.00 |
| 11 | Provision for electric services connection including electric fittings for boosting chambers and pump chamber etc. | 50000.00 |
| 12 | Provision for carriage of materials and other unforeseen items L.S. | 20000.00 |
| | TOTAL | 2270000.00 |
| | Say in Lacs | 22.70 |

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

SUB WORK NO. 1

Sub Head No. 03

Rising main upto Plant Room, Domestic & Flushing Water Supply

WATER SUPPLY

| Sr. NO. | Description | Amount in Rs. |
|---------|--|------------------|
| 1 | Providing, laying, jointing & testing pipe lines including cost of excavation etc. complete in all respects | |
| | 80mm dia D.I. Pipe 191 Mtr @ Rs. 800/- Per Mtr | 152800.00 |
| 2 | Providing, laying, jointing & testing pipe lines etc. complete in all respect | |
| | 100mm i/d D.I. Pipes - 468 Mtr @ Rs. 1000/- Per Mtr | 468000.00 |
| 3 | Providing and fixing sluice valve including cost of surface box and masonry chamber etc. complete in all respect | |
| | a) 80mm i/d 4 No. @ Rs. 7500/- each | 30000.00 |
| | b) 100mm i/d 8 No. @ Rs. 10000/- each | 80000.00 |
| 4 | Providing and fixing indicating plates for sluice valve 12 No. @ Rs. 1000/- | 12000.00 |
| 5 | Provision for carriage of materials and other unforeseen items | 20000.00 |
| 6 | Provision for making connection with HUDA Pipe etc. | 30000.00 |
| 7 | Provision for cutting the road and making good the same | 30000.00 |
| | TOTAL | 822800.00 |
| | Say in Lacs | 8.23 |

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

SUB WORK NO. 1

Sub Head No. 04

WATER SUPPLY
Fire Rising Main

| Sr. NO. | Description | Amount in Rs. |
|---------|---|------------------|
| 1 | Providing, Laying, jointing and testing Heavy Class M.S. Pipes for fire rising main including cost of fittings, valves, connection etc. complete in all respect | |
| a) | 80mm dia - 120M @ Rs. 600/- Per Mtr | 72000.00 |
| b) | 150mm dia -679 M @ Rs. 800/- Per Mtr | 543200.00 |
| 2 | Providing and fixing fire Hydrant with accessories 15 No. @ Rs. 10000/- each | 150000.00 |
| 3 | Provision for carriage of materials (Lump sum) | 10000.00 |
| 4 | Providing and fixing indicating plate -15 No. @ Rs. 1000/- each | 15000.00 |
| 5 | Provision of road cutting and making its condition as original - L.S. | 10000.00 |
| | TOTAL | 800200.00 |
| | Say in Lacs | 8.00 |

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

SUB WORK NO. 1

Sub Head No. 05

WATER SUPPLY

Irrigation

| Sr. NO. | Description | Amount in Rs. |
|---------|--|------------------|
| 1 | Providing, Laying, jointing and testing UPVC pipe lines suitable for 6 kg pressure including cost of fittings, valves, connection etc. complete in all respect | |
| | i) 25mm i/d 120 M @ Rs. 150/- Per Mtr | 18000.00 |
| | ii) 80mm i/d 679 M @ Rs. 250/- Per Mtr | 169750.00 |
| 2 | Providing and fixing 20mm dia, Irrigation hydrant valve complete in all respect 20 No. @ Rs. 3000/- each | 60000.00 |
| 3 | Provision for carriage of materials and other unforeseen items (Lump sum) | 5000.00 |
| 4 | Provision for pump 2 lps discharge at 21 Mts head (1W+1SB) 2 Nos @ Rs. 10000/- each (2 HP) | 20000.00 |
| 4 | Provision for road cutting and making it condition as original - L.S. | 5000.00 |
| | TOTAL | 277750.00 |
| | Say in Lacs | 2.78 |

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

SUB WORK NO. II

SEWERAGE SCHEME

| Sr. NO. | Description | Amount in Rs. |
|---------|--|-------------------|
| 1 | Providing, jointing, cutting and testing stoneware pipe grade A and lowering into trenches including cost of excavation, bed concrete, cost of manholes etc. | |
| | a) SW Pipe 200mm i/d avg. depths 0 - 2.00M 124 M @ Rs. 1000/- per Mtr | 124000.00 |
| | b) SW Pipe 250mm i/d avg depth 2.00 M 120 M @ Rs. 1200/- per Mtr | 144000.00 |
| | c) SW Pipe 300mm i/d avg depth 2.75 M 72 M @ Rs. 1300/- per Mtr | 93600.00 |
| 2 | Providing, laying, jointing & testing pipe lines including cost of excavation etc. complete in all respect - 150mm dia Heavy Class DI pipes (overflow for STP) | |
| | a) 150MM i/d D.I. Pipe - 85 M @ Rs. 1000/- Per Mtr | 85000.00 |
| 3 | Provision of lighting and watching etc. | 10000.00 |
| 4 | Provision for cartage of material & cutting of roads etc. | 20000.00 |
| 5 | Provision for making connection with HUDA | 50000.00 |
| 6 | Provision for STP 0.09 MLD (Tertiary Treatment Level with recycling storage). @ Rs. 1,00,00,000/- per MLD | 900000.00 |
| | TOTAL | 1426600.00 |
| | Add 3% contingencies & P.H. Services | 42798 |
| | TOTAL | 1469398 |
| | Add 49% Departmental Charges + Price escalation | 720005 |
| | TOTAL | 2189403 |
| | Say in Lacs | 21.90 |
| | (C/O to Final Abstract of cost) | |

SUB WORK NO. III

STORM WATER SCHEME

| Sr. NO. | Description | Amount in Rs. |
|---------|--|-------------------|
| 1 | Providing, lowering, laying, jointing RCC pipe class Np3 with cement joint, manholes, specials into trenches including manholes, chambers etc. excavation, backfilling and disposal of surplus earth complete in all respect | |
| | a) RCC Np3 pipe 400mm i/d = 425M @ Rs. 1050/- Per Mtr | 446250.00 |
| 2 | Provision for road gulley & pipe with connection 300mm i/d pipe | 100000.00 |
| 3 | Provision for lighting and watching | 20000.00 |
| 4 | Provision for timbering and shoring | 20000.00 |
| 5 | Provision for cartage of material | 20000.00 |
| 6 | Provision for making connection with HUDA storm water drain | 50000.00 |
| 7 | Providing rain water harvesting arrangement for 03 No. pits @ Rs. 200000/- each | 600000.00 |
| | TOTAL | 1256250.00 |
| | Add 3% contingencies & P.H. Services | 37687.50 |
| | TOTAL | 1293937.50 |
| | Add 49% Departmental Charges + Price escalation | 634029.38 |
| | TOTAL | 1927966.88 |
| | Say in Lacs | 19.28 |

(C/O to Final Abstract of cost)

Sub Work No. 4

ROAD WORKS

| S. No. | Description | Unit | Qty | Rate (In Rs.) | Amount (In Rs.) |
|--------|--|----------|--------|------------------|--------------------|
| 1 | Provision for leveling & earth filling as per site conditions | Per Acre | 3.1918 | 120000 | 383016 |
| 2 | i) Providing and laying 100mm thick PCC under pavement, cement concrete of specified grade 1:4:8 and 150mm thick RMC grade M-40 ii) Providing and laying Bituminous road (250mm GSB, 300mm WMM, 50mm DBM, 40mm BC). | Sqm | 2718 | 700 | 1902600 |
| 3 | Provision for kerbs & channels of C.C. 1:2:4 | Metre | 453 | 400 | 181200 |
| 4 | Provision for making approach and pavement to building, provision for C.C pavement | Sqm | L.S. | | 30000 |
| 5 | Interlocking tile 80mm thick for surface of pavement etc. | Sqm | 750 | 500 | 375000 |
| 6 | Provision for parking arrangement, guide map and indicating board | LS | | | 30000 |
| 7 | Provision for carriage of material | LS | | | 20000 |
| | Sub Total | | | | 2921816 |
| | Add 3% contingencies & PH Services | | | | 87654 |
| | Sub Total | | | | 3009470 |
| | Add 49% Departmental Charges | | | | 1474641 |
| | Total | | | | 4484111 |
| | Say Rs. In Lacs | | | | 44.85 |
| | | | | | |

(C.O. to Final abstract of cost)

Sub Work No. 5

STREET LIGHTING

| S. No. | Description | Unit | Qty | Rate (In Rs.) | Amount (In Rs.) |
|--------|--|------|--------|------------------|--------------------|
| 1 | Providing lighting at surrounding area s per standard specifications of HVPN | Acre | 3.1918 | 120000 | 383016 |
| | Add 3% contingencies & PH Services | | | | 11490 |
| | Total | | | | 394506 |
| | Add 49% Departmental Charges | | | | 193308 |
| | Total | | | | 587815 |
| | Say Rs. In Lacs | | | | 5.88 |

(C.O. to Final abstract of cost)

Sub Work No. 6

HORTICULTURE

| S. No. | Description | Unit | Qty | Rate (In Rs.) | Amount (In Rs.) |
|--------|---|------|------|------------------|--------------------|
| 1 | Development of Lawn Areas | | | | |
| a. | Trenching of ordinary soil upto depth of 60 cm i/c removal & stacking of serviceable material & disposing by spreading and levelling within a lead of 50 M and making up the trench area for proper levels by filling with earth or earth mixed with manure before and after flooding trench with water i/c cost of imported earth and manure | | | | |
| b. | Rough dressing of turfed area | | | | |
| c | Grassing with "Cynadon dactylon" i/c watering and maintenance of lawns for 30 days till the grass forms a thick lawn, free from weeds and fit for moving in row 7.5 cm part in either direction | | | | |
| d | organized green 2200 Sqm Or 0.55 Acres (As per detail given in map park area calculation) | Acre | 0.55 | 150000 | 82500 |
| 2 | Providing and planting trees along boundary @ 12 m interval (Length appx 453M) = $453/12 = 38$ Nos Say No. of trees = 40 Nos Cost details : Excavation = Rs. 60 Manure = Rs. 90 Tree Plant = Rs. 150 Tree Guard = Rs. 1000 Total = Rs. 1300 | | | | |
| | | Each | 40 | 1300 | 52000 |
| | Sub Total | | | | 134500 |
| | Add 3% contingencies & PH Services | | | | 4035 |
| | Sub Total | | | | 138535 |
| | Add 49% Departmental Charges | | | | 67882 |
| | Total | | | | 206417 |
| | Say Rs. In Lacs | | | | 2.07 |
| | | | | | |

(C.O. to Final abstract of cost)

Sub Work No. 7

Mtc. Of services & Resurfacing of Road

| S. No. | Description | Unit | Qty | Rate (In Rs.) | Amount (In Rs.) |
|--------|--|------|--------|------------------|--------------------|
| 1 | Mtc. Of water supply, sewer, storm water drain, roads, street light, hort. Etc. for period of 10 years including operation charges full establishment etc. complete in all respects 19.4255 acres @ Rs. 3.00 lacs per acre | Acre | 3.1918 | 400000 | 1276720 |
| 2 | Provision for resurfacing of roads after 5 years of 1st phase with provision of 50mm thick BM including leveling coarse and 25mm BC as per crust design whichever is safer | Sqm | 3470 | 450 | 1561500 |
| 3 | 2nd phase after next five years of 1st phase (50mm DBM & 25mm BC or as per crust design whichever is safer | Sqm | 3470 | 550 | 1908500 |
| | Sub Total | | | | 4746720 |
| | Add 3% contingencies & PH Services | | | | 142402 |
| | Sub Total | | | | 4889122 |
| | Add 49% Departmental Charges | | | | 2395670 |
| | Total | | | | 7284791 |
| | Say Rs. In Lacs | | | | 72.85 |

(C.O. to Final abstract of cost)

SUMMARY OF DESIGN REQUIREMENT

| S. No. | Description | Qty | Unit |
|--------|--|-------|---------|
| 1 | Total Population | 3409 | Persons |
| 2 | Total Water Requirement (Domestic) | 67 | KLD |
| 3 | Total Water Requirement (Flushing) | 33 | KLD |
| 4 | Total Water Requirement (Horticulture) | 30 | KLD |
| 5 | U. G Tank (Domestic 240 KLD) | 1 | No. |
| 6 | No. of Domestic WS pumps UGT | 1 + 1 | Set |
| 7 | No. of Flushing pumps | 1 + 1 | No. |
| 8 | No. of submersible pumps | 1 | No. |
| 9 | Main Fire Hydrant electrical pumps | 2 | No. |
| 10 | Diesel fire pumps | 1 | No. |
| 11 | Jockey fire pumps | 2 | No. |
| 12 | Generating sets (50 KVA) | 1 | 50 KVA |

Material Statement of Road Works

| Sr. No. | Road No. | Length | Width | Area | |
|-------------------------|----------|--------|-------|---------|-----|
| i) 6.00 Mtr wide Road | | | | | |
| 1 | 1 | 65.00 | 6.00 | 390.00 | Sqm |
| 2 | 2 | 75.00 | 6.00 | 450.00 | Sqm |
| 3 | 3 | 68.00 | 6.00 | 408.00 | Sqm |
| 4 | 4 | 40.00 | 0.00 | 238.00 | Sqm |
| 5 | 5 | 50.00 | 6.00 | 300.00 | Sqm |
| 6 | 6 | 45.00 | 6.00 | 270.00 | Sqm |
| | Total | 343.00 | 6.00 | 2058.00 | Sqm |
| ii) 10.00 Mtr wide Road | | | | | |
| 7 | I | 110.00 | 6.00 | 660.00 | Sqm |
| | G. Total | 796.00 | | 2718.00 | |

iii) Kerbs & Channels

6 Mtr wide Road

343 Mtr

10 Mtr wide Road (1 x 110Mtr)

110 Mtr

Total

453 Mtr

iv) Open Car Parking = 60 Nos

Area = 60 Nos x 2.50 x 5.00 Mtr =

750 Sqm

Total Area = 2718 + 750 = 3468.00 Sqm

Say 3470.00 Sqm

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

| S. No. | Description | Size of pipe upto valve in 80mm | Size of pipe upto valve in 100mm | Size of pipe upto valve in 150mm |
|--------|-------------|---------------------------------|----------------------------------|----------------------------------|
| 1 | Domestic | 73 M | 185M | - |
| 2 | Flushing | 118 M | 145M | - |
| 3 | Rising Main | - | 138M | - |
| | Total | 191 M | 468 M | - |

MATERIAL STATEMENT OF WATER SUPPLY SCHEME (DOMESTIC)

| S. No. | Line Designation | | Size of Pipe Provided | Length of Pipe (Mtr) | Length in Mtr | |
|--------|------------------|----|-----------------------|----------------------|---------------|------------|
| | From | To | | | 80MM | 100MM |
| 1 | UGT | A | 100 | 7 | - | 7 |
| 2 | A | B | 100 | 45 | - | 45 |
| 3 | B | C | 100 | 50 | - | 50 |
| 4 | C | D | 100 | 27 | - | 27 |
| 5 | D | E | 80 | 25 | 25 | - |
| 6 | A | F | 100 | 38 | - | 38 |
| 7 | F | G | 100 | 18 | - | 18 |
| 8 | G | H | 80 | 24 | 24 | - |
| 9 | H | I | 80 | 24 | 24 | - |
| | Total | | | 258 | 73 | 185 |

| | |
|---------------------------------|----------------|
| Total for 80mm i/d Pipe Length | 73 Mtr |
| Total for 100mm i/d Pipe Length | 185 Mtr |
| Total | 258 Mtr |

MATERIAL STATEMENT OF WATER SUPPLY SCHEME (FLUSHING)

| S. No. | Line Designation | | Size of Pipe Provided | Length of Pipe (Mtr) | Length in Mtr | |
|--------|------------------|----|-----------------------|----------------------|---------------|------------|
| | From | To | | | 80MM | 100MM |
| 1 | STP | a | 100 | 12 | - | 12 |
| 2 | a | b | 100 | 20 | - | 20 |
| 3 | b | c | 100 | 40 | - | 40 |
| 4 | c | d | 80 | 27 | 27 | - |
| 5 | d | e | 80 | 25 | 25 | - |
| 6 | a | f | 100 | 73 | - | 73 |
| 7 | f | g | 80 | 16 | 16 | - |
| 8 | g | h | 80 | 25 | 25 | - |
| 9 | h | i | 80 | 25 | 25 | - |
| | Total | | | 263 | 118 | 145 |

| | |
|---------------------------------|----------------|
| Total for 80mm i/d Pipe Length | 118 Mtr |
| Total for 100mm i/d Pipe Length | 145 Mtr |
| Total | 263 Mtr |

MATERIAL STATEMENT FOR BOREWELL RISING MAINS AND HUDA MAIN

| S. No. | Name of Line | | Size of Pipe Provided | Length of Pipe (Mtr) | Length in Mtr | |
|--------|--------------|-----|--------------------------|----------------------------|---------------|----------|
| | From | To | | | 100mm | 80mm |
| 1 | T.W. -1 | UGT | 100 | 68 | 68 | - |
| 2 | HUDA Line | UGT | 100 | 70 | 70 | - |
| | Total | | | 138 | 138 | - |

MATERIAL STATEMENT FOR EXTERNAL FIRE FIGHTING

| S. No. | Node No. | | Size of Pipe Provided | Length of Pipe (Mtr) |
|--------|--------------|----|-----------------------|----------------------|
| | From | To | | |
| | | | 150mm i/d | |
| 1 | Plant Room | D1 | 150 | 8 |
| 2 | D1 | D | 150 | 10 |
| 3 | D | C | 150 | 85 |
| 4 | C | B | 150 | 12 |
| 5 | B | A | 150 | 78 |
| 6 | A | I | 150 | 108 |
| 7 | D1 | E | 150 | 136 |
| 8 | E | F | 150 | 89 |
| 9 | F | G | 150 | 59 |
| 10 | G | H | 150 | 64 |
| 11 | H | I | 150 | 30 |
| | Total | | | 679 |

For 100mm dia with Fire Hydrant = 20 Nos

For 100mm dia pipe = $20 \times 6.00 = 120.00$ Mtr

Total for 150mm i/d Pipe Length 679 Mtr

Total for 100mm i/d Pipe Length 120 Mtr

Total 799 Mtr

MATERIAL STATEMENT FOR SEWERAGE SCHEME

| S. No. | Line No. | | Length (In Mtr) | Pipe Dia | Length in Mtr | | |
|--------|----------|-----|-----------------|----------|---------------|-----------|-----------|
| | From | To | | | 200mm i/d | 250mm i/d | 300mm i.d |
| 1 | A | B | 38 | 200 | 38 | - | - |
| 2 | B | C | 65 | 250 | - | 65 | - |
| 3 | C | D | 30 | 250 | - | 30 | - |
| 4 | D | E | 35 | 300 | - | - | - |
| 5 | G | H | 48 | 200 | 48 | - | 35 |
| 6 | H1 | H | 38 | 200 | 38 | - | - |
| 7 | H | E | 25 | 250 | - | - | - |
| 8 | E | F | 27 | 300 | - | 25 | - |
| 9 | F | STP | 10 | 300 | - | - | 27 |
| | Total | | 316 | | 124 | 120 | 72 |

200mm i/d Pipe Length
250mm i/d Pipe Length
300mm i/d Pipe Length

124 Mtr
120 Mtr
72 Mtr

MATERIAL STATEMENT OF STORM WATER DRAINAGE SCHEME

| Sr. No. | Line Reference | | 400mm i/d RCC Np3 Pipe |
|---------|----------------|------------|---------------------------|
| | | | Length in Mtr |
| | From | To | |
| 1 | A | RWH -1 | 64 |
| 2 | RWH -1 | B | 10 |
| 3 | B | C | 56 |
| 4 | C | RWH -2 | 28 |
| 5 | D | RWH -3 | 40 |
| 6 | E | RWH- 3 | 50 |
| 7 | RWH-3 | F | 10 |
| 8 | F1 | F | 45 |
| 9 | F | RWH-2 | 62 |
| 10 | RWH-2 | MASTER SWD | 60 |
| | Total Length | | 425 |

Total Length 400mm i/d RCC Np3 pipe = 425 Mtr

HYDRAULIC STATEMENT OF WATER SUPPLY (DOMESTIC)

M/S M. K. KA IN. ASTRUCURE. VT. LTD.

SUBHEAD : DOMESTIC WATER SUPPLY SCHEME - DESIGN CALCULATION

| S. No. | Line Reference | Water Requirement | Water Requirement (In KLD) | Self | Branch | Total | Discharge (Peak) per hour | Size of Pipe | Velocity | Loss of head in Mtr | Length of pipe | Los of Head on pipe | Ground Level at Lower End | Formation Level at Lower End | Hydraulic level at lower end | Terminal Head (M) | Remarks |
|--------|----------------|-------------------|----------------------------|------|--------|-------|---------------------------|--------------|----------|---------------------|----------------|---------------------|---------------------------|------------------------------|------------------------------|-------------------|---|
| | From To | | | | | | | | | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 1 | UGT | A | 67 | - | 67 | 67 | 12.5625 | 100 | 0.39 | 0.003 | 7 | 0.02 | 240.10 | 240.80 | 315.78 | 74.98 | Formation Level at UGT = 240.80 M Boosting Head = 75.00 M Hydraulic Head = 315.80 M |
| 2 | A | B | 50 | 10 | 40 | 50 | 9.3750 | 100 | 0.27 | 0.002 | 45 | 0.09 | 240.40 | 240.95 | 315.69 | 74.74 | |
| 3 | B | C | 40 | 15 | 25 | 40 | 7.5000 | 100 | 0.20 | 0.001 | 50 | 0.05 | 240.80 | 241.25 | 315.64 | 74.39 | |
| 4 | C | D | 25 | 15 | 10 | 25 | 4.6875 | 100 | 0.16 | 0.001 | 27 | 0.03 | 240.80 | 241.25 | 315.61 | 74.36 | |
| 5 | D | E | 10 | 10 | - | 10 | 1.8750 | 80 | 0.21 | 0.002 | 25 | 0.05 | 240.80 | 241.30 | 315.56 | 74.26 | |
| 6 | A | F | 17 | 2 | 15 | 17 | 3.1875 | 100 | 0.16 | 0.001 | 38 | 0.04 | 240.15 | 240.85 | 315.74 | 74.89 | |
| 7 | F | G | 15 | 3 | 12 | 15 | 2.8125 | 100 | 0.16 | 0.001 | 18 | 0.02 | 240.15 | 240.85 | 315.72 | 74.87 | |
| 8 | G | H | 12 | 7 | 5 | 12 | 2.2500 | 80 | 0.21 | 0.002 | 24 | 0.05 | 240.40 | 241.05 | 315.67 | 74.62 | |
| 9 | H | I | 5 | 5 | - | 5 | 0.9375 | 80 | 0.21 | 0.002 | 24 | 0.05 | 240.40 | 241.15 | 315.62 | 74.47 | |

SUBHEAD : FLUSHING WATER SUPPLY SCHEME - DESIGN CALCULATION

| S. No. | Line Reference | | Water Requirement | Water Requirement (In KLD) | | | Discharge (Peak) per hour | Size of Pipe | Velocity | Loss of head in Mtr | Length of pipe | Los of Head on pipe | Ground Level at Lower End | Formation Level at Lower End | Hydraulic level at lower end | Terminal Head (M) | Remarks |
|--------|----------------|----|-------------------|----------------------------|------|--------|---------------------------|--------------|----------|---------------------|----------------|---------------------|---------------------------|------------------------------|------------------------------|-------------------|---|
| | From | To | | (in KLD) | Self | Branch | | | | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | Formation Level at UGT = 240.90 M Boosting Head = 75.00 M Hydraulic Head = 315.90 M |
| 1 | STP | a | 33 | - | 33 | 33 | 6.1875 | 100 | 0.31 | 0.002 | 12 | 0.02 | 240.40 | 240.95 | 315.88 | 74.93 | |
| 2 | a | b | 24 | 4 | 20 | 24 | 4.5000 | 100 | 0.16 | 0.001 | 20 | 0.02 | 240.40 | 240.95 | 315.86 | 74.91 | |
| 3 | b | c | 20 | 8 | 12 | 20 | 3.7500 | 100 | 0.16 | 0.001 | 40 | 0.04 | 240.80 | 241.25 | 315.82 | 74.57 | |
| 4 | c | d | 12 | 7 | 5 | 12 | 2.2500 | 80 | 0.21 | 0.002 | 27 | 0.05 | 240.80 | 241.25 | 315.77 | 74.52 | |
| 5 | d | e | 5 | 5 | 1 | 5 | 0.9375 | 80 | 0.21 | 0.002 | 25 | 0.05 | 240.80 | 241.30 | 315.72 | 74.42 | |
| 6 | a | f | 9 | 1 | 8 | 9 | 1.6875 | 100 | 0.16 | 0.001 | 73 | 0.07 | 240.15 | 240.85 | 315.81 | 74.96 | |
| 7 | f | g | 8 | 2 | 6 | 8 | 1.5000 | 80 | 0.21 | 0.002 | 16 | 0.03 | 240.15 | 240.85 | 315.78 | 74.93 | |
| 8 | g | h | 6 | 3 | 3 | 6 | 1.1250 | 80 | 0.21 | 0.002 | 25 | 0.05 | 240.40 | 241.05 | 315.73 | 74.68 | |
| 9 | h | i | 3 | 3 | - | 3 | 0.5625 | 80 | 0.21 | 0.002 | 25 | 0.05 | 240.40 | 241.15 | 315.68 | 74.53 | |

DESIGN STATEMENT OF SEWERAGE SCHEME

SUBHEAD : SEWERAGE SCHEME - DESIGN CALCULATION

| SUBHEAD : SEWERAGE SCHEME - DESIGN CALCULATION | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| S. No. | Line Reference | Tower No. | Total Water Req. | Unit / Flat | | | Sewerage Discharge @ 80% of total | Sewerage Discharge Peak Flow. | Gradient in (m) | Size of pipe in (mm) | Velocity (m/sec) | Carrying capacity of pipe (m ³ /sec) | Length in Mtr | Fall + Extra Fall in line due to slope (m) | Formation Level | | Ground Level | | Invert Level | | Depth | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | From | To | Self | | | | | | | | | Branch | Total | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | 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| End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | 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| End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End | Start | End |

DESIGN CALCULATION OF STORM WATER DRAINAGE SCHEME

INTENSITY OF RAIN FALL = 0.006 MTR / HR

IMPERMEABILITY FACTOR = 0.6

| S. No. | Name of Node | | Area (Self) | Area (Self) | Branch Area | Total Area | Total Area | Rain fall | Discharge @ 17.36 LPS/Hector | Length | Pipe dia | Slope | Velocity | Cap. Of drain | Fall + Extra Fall | Ground Level | | Formation Level | | Invert Level | | Depth of M.H's | | Average Depth |
|--------|--------------|------------|-------------|-------------|-------------|------------|------------|-----------|------------------------------|--------|----------|--------|----------|---------------|-------------------|--------------|--------|-----------------|--------|--------------|--------|----------------|------|---------------|
| | From | To | Sqm | In Acre | In Acre | In Acre | In Hector | mm / hr. | In LPS | In Mtr | In mm | In Mtr | In m/sec | In LPS | In Mtr | Start | End | Start | End | Start | End | Start | End | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 1 | A | RWH-1 | 2800 | 0.69 | 0 | 0.69 | 0.28 | 6.00 | 4.85 | 64 | 400 | 570 | 0.76 | 98.57 | 0.11 | 240.85 | 240.80 | 241.35 | 241.20 | 240.15 | 240.04 | 1.20 | 1.16 | 1.18 |
| 2 | RWH-1 | B | 200 | 0.05 | 0.69 | 0.74 | 0.30 | 6.00 | 5.19 | 10 | 400 | 570 | 0.76 | 98.57 | 0.02 | 240.80 | 240.80 | 241.20 | 241.20 | 240.04 | 240.02 | 1.16 | 1.18 | 1.17 |
| 3 | B | C | 2000 | 0.49 | 0.74 | 1.23 | 0.50 | 6.00 | 8.67 | 56 | 400 | 570 | 0.76 | 98.57 | 0.10 | 240.80 | 240.40 | 241.20 | 240.95 | 240.02 | 239.92 | 1.18 | 1.03 | 1.10 |
| 4 | C | RWH-2 | 600 | 0.15 | 1.23 | 1.38 | 0.56 | 6.00 | 9.68 | 28 | 400 | 570 | 0.76 | 98.57 | 0.05 | 240.40 | 240.15 | 240.95 | 240.85 | 239.92 | 239.87 | 1.03 | 0.98 | 1.01 |
| 5 | D | RWH-3 | 1500 | 0.37 | 0 | 0.37 | 0.15 | 6.00 | 2.60 | 40 | 400 | 570 | 0.76 | 98.57 | 0.07 | 240.15 | 240.15 | 240.90 | 240.80 | 239.70 | 239.63 | 1.20 | 1.17 | 1.19 |
| 6 | E | RWH-3 | 1700 | 0.42 | 0 | 0.42 | 0.17 | 6.00 | 2.95 | 50 | 400 | 570 | 0.76 | 98.57 | 0.09 | 240.40 | 240.15 | 240.95 | 240.80 | 239.75 | 239.66 | 1.20 | 1.14 | 1.17 |
| 7 | RWH-3 | F | 100 | 0.02 | 0.79 | 0.81 | 0.33 | 6.00 | 5.72 | 10 | 400 | 570 | 0.76 | 98.57 | 0.02 | 240.15 | 240.15 | 240.80 | 240.80 | 239.63 | 239.61 | 1.17 | 1.19 | 1.18 |
| 8 | F1 | F | 2616 | 0.65 | 0 | 0.65 | 0.26 | 6.00 | 4.54 | 45 | 400 | 570 | 0.76 | 98.57 | 0.08 | 240.35 | 240.15 | 240.90 | 240.80 | 239.70 | 239.62 | 1.20 | 1.18 | 1.19 |
| 9 | F | RWH-2 | 1200 | 0.30 | 1.46 | 1.76 | 0.71 | 6.00 | 12.34 | 62 | 400 | 570 | 0.76 | 98.57 | 0.11 | 240.15 | 240.15 | 240.80 | 240.85 | 239.61 | 239.50 | 1.19 | 1.35 | 1.27 |
| 10 | RWH-2 | MASTER SWD | 200 | 0.05 | 3.14 | 3.19 | 1.29 | 6.00 | 22.41 | 60 | 400 | 570 | 0.76 | 98.57 | 0.11 | 240.15 | 240.15 | 240.85 | 240.50 | 239.50 | 239.39 | 1.35 | 1.11 | 1.23 |

DIRECTORATE OF TOWN & COUNTRY PLANNING, HARYANA

SCO 71-75, Sector 17C, Chandigarh

Phone:0172-2549349; e-mail:tcphry@gmail.com

http://tcpharyana.gov.in

Regd.

To

Monika Infrastructure Pvt. Ltd.
H-334, Ground Floor, New Rajinder Nagar,
New Delhi-60

Subject: Memo No. LC-353-PA(B)/2017/23675 Dated: 20-9-17
Renewal of licence No. 5 of 2001 dated 31.08.2001 & 115 of 2004 dated 27.07.2004.

Please refer to your application dated 23.06.2017 on the matter cited as subject above.

2. Licence No. 5 of 2001 dated 31.08.2001 & 115 of 2004 dated 27.07.2004, granted for setting up of commercial colony on the land measuring 3.1918 acres in Sector 53, Gurugram are hereby renewed upto **30.08.2019 & 26.07.2019** respectively on the same terms & conditions laid down therein.
3. This renewal will not tantamount to certification of satisfactory performance of the applicant entitling him for further renewal of license.
4. The BGs on account of IDW shall be got revalidated well before expiry of the same.

(T.L. Satyaprakash, IAS)

Director,

Town & Country Planning
Haryana, Chandigarh

Endst. No. LC-353-PA(B)/2017/

Dated:

A copy is forwarded to the following for information and necessary action:-

- i. Chief Administrator, HUDA, Panchkula.
- ii. Senior Town Planner, Gurugram.
- iii. Website Administrator with a request to update the status of renewal of license on the website of the Department.
- iv. District Town Planner, Gurugram.
- v. Chief Account Officer of this Directorate.

(S.K. Sehrawat)

Distt. Town Planner (HQ)


For Director, Town & Country Planning
Haryana, Chandigarh

ORDERS

Whereas, License No. 5 of 2001 dated 31.08.2001 & 115 of 2004 dated 27.07.2004 stands granted to Monika Infrastructure Pvt. Ltd., H-334, Ground Floor, New Rajinder Nagar, New Delhi-60 for setting up of commercial colony over an additional area measuring 3.1918 acres in Sector 53, Gurugram Manesar Urban Complex under the provisions of Haryana Development and Regulation of Urban Areas Act, 1975. As per terms and conditions of the licenses and of the agreement executed on LC-IV, the colonizer is required to comply with the provisions of the Haryana Development and Regulation of Urban Areas Act, 1975 and its Rules, 1976.

And, whereas, for delay in compliance of the provisions of Rule 28 of the Haryana Development and Regulation of Urban Areas Rules, 1976 upto 31.03.2017, the licensee has submitted a request for composition of said offence vide application dated 04.09.2017. As per the rates finalized by the Govt. the composition fee has worked out as Rs. 14,000/-. The company has deposited composition charges amounting Rs. 14,000/- vide DD No. 674626 dated 06.09.2017.

Accordingly, in exercise of power conferred under Section-13(1) of the Haryana Development and Regulation of Urban Areas Act, 1975, I hereby order to compound the offence committed due to delay in compliance of above said Rules upto 31.03.2017.



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

Endst. No. LC-353-PA(B)/2017/ 23682

Dated: 20-9-17

A copy is forwarded to the following for information and necessary action:-

1. Chief Accounts Officer, O/o Director, Town and Country Planning Haryana Chandigarh.
✓ Monika Infrastructure Pvt. Ltd., H-334, Ground Floor, New Rajinder Nagar, New Delhi-60.


(S.K. Sehrawat)
Distt. Town Planner (HQ)
For Director, Town and Country Planning,
Haryana, Chandigarh

BR-III

(See Rule 44)

DIRECTORATE OF TOWN & COUNTRY PLANNING, HARYANA

SCO-71-75, SECTOR-17-C, CHANDIGARH

Tele Fax: 0172-2548475; Tel.: 0172-2549851, E-mail: tcpharyana3@gmail.com

Website www.tcpharyana.gov.in

Memo No. ZP-101/AD(RA)/2016/ 17135 Dated: 16/8/2016

To

Monika Infrastructure Pvt. Ltd
Sector-53, Golf Course Road,
Gurgaon.

Subject: Approval of revised building plans of Commercial Colony measuring 3.1918 acres (Licence No. 05 of 2001 dated 31.08.2001 and Licence No. 115 of 2004 dated 27.07.2004) in Sector-53 Gurgaon Manesar Urban Complex being developed by Monika Infrastructure Pvt. Ltd.

Reference your application dated 29.06.2015 and subsequent letter dated 10.03.2016 for permission to re-erect the buildings in Commercial Colony measuring 3.1918 acres in Sector-53, Gurgaon Manesar Urban Complex, in accordance with the plans submitted with it.

The building plans were approved provisionally vide this office memo no. 6100 dated 28.03.2016 for the purpose of inviting objections/suggestions. STP, Gurgaon vide memo no. 770 dated 16.06.2015 has informed that no objection has been received from any allottee in respect of the amendments made in the building plans. Further vide undertaking submitted in the office of STP, Gurgaon, dated 23.05.2016; you have also confirmed that no objection from any allottee has been received in your office. Hence, permission for construction for subject cited plans approved provisionally vide above memo is hereby granted subject to the provisions of the Punjab Scheduled Roads & Controlled Areas Restriction of Unregulated Development Act, 1963, its rules and the zoning plan framed thereunder alongwith special reference to the following conditions: -

1. The plans are valid for a period of 2 years of the buildings less than 15.00 meters in height and 5 years for the multistoried buildings from the date of issuance of sanction, subject to validity of licenses granted for this scheme.
2. The structural responsibility of the construction shall be entirely of the owner/ supervising architect/ Engineer of the scheme.

Further that: -

- a) The building shall be constructed as per the structure design submitted by you and as certified by your structure engineer that the same has been designed as per the provisions of NBC and relevant IS code for all seismic load, all dead and live loads wind pressure and structural safety from earthquake of the intensity expected under Zone-IV

- b) All material to be used for erection of building shall conform to I.S.I. and N.B.C standards.
- c) No walls/ceiling shall be constructed of easily inflammable material and staircases shall be built of the fire resisting material as per standard specification
- d) The roof slab of the basement external to the buildings if any shall be designed/constructed to take the load of fire tender up to 45 tones.

3. FIRE SAFETY:

- (i) The colonizer firm and the Supervising Architect of the project shall be entirely responsible for making provisions of fire safety and fire fighting measures and shall abide by all fire safety bye laws.
 - (ii) That you shall get approved the fire fighting scheme in accordance with the section 15 of The Haryana Fire Safety Act 2009 and directions issued by the Director, Haryana Fire Service, Haryana, before starting the construction work at site.
- 4. The provision of letter boxes for each dwelling unit shall be made at the ground floor of each building.
 - 5. No addition and alteration in the building plans/ layout plan shall be made without the prior approval of DG,TCP. Further only figured dimensions shall be followed and in case of any variation in the plans, prior approval of DG,TCP shall be pre-requisite.
 - 6. That you shall furnish the service plan/ estimate of this scheme in accordance with approved building plans.
 - 7. Based on the actual estimated cost of internal development of the group housing colony you shall furnish additional bank guarantee, if required.
 - 8. The revenue Rasta if any passing through the site shall be kept unobstructed.
 - 9. If any infringement of byelaws remains unnoticed, the department reserves the right to amend the plan as and when any such infringement comes to its notice after giving an opportunity of being heard and the department shall stand indemnified against any claim on this account.
 - 10. The layout showing the electric installation shall have to be got approved from the competent authority before execution of work at site.
 - 11. No person shall occupy or allow any other person to occupy any new building or part of the same for any purpose what so ever until such building or part thereof has been certified by the Director General or any person authorized by him in this behalf as having been completed in accordance with the permission granted and an occupation certificate in prescribed form has been duly issued in your favour.
 - 12. Before grant of occupation certificate, you shall apply for occupation certificate as per the provisions of Rule 47 (1) of the Punjab Schedule Roads and Controlled Areas Restriction of Unregulated Development Rules, 1965 which shall be accompanied by certificates regarding completion of works described in the plans and it shall be accompanied by:

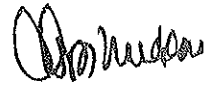
- (i) DPC certificate issued by DTP.
 - (ii) Structural stability certificate duly signed by the recognized Architect & Structural Engineer.
 - (iii) A clearance from Fire Safety point of view from the competent authority
13. The basements shall be used for parking and services as prescribed in the approved zoning plan and building plans. The parking lots proposed in the scheme shall be exclusively for the use of flat owners/residents of the group housing scheme. The parking lot shall not be leased out /transferred to any person who is not a flat owners /residents of the group housing complex.
14. You shall comply with the conditions laid down in the Memo No. 28 dated 19.01.2016 of Superintending Engineer (HQ), HUDA, Panchkula (copy enclosed).
15. GENERAL: -
- (i) That the colonizer shall obtain the clearance/NOC as per the provisions of the Notification No. S.O. 1533 (E) Dated 14.09.2006 issued by Ministry of Environment and Forest, Government of India before starting the construction/execution of development works at site.
 - (ii) That the rain water harvesting system shall be provided as per Central Ground Water Authority norms/Haryana Govt. notification as applicable
 - (iii) That the coloniser/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.
 - (iv) That coloniser/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.
 - (v) That the coloniser/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.
 - (vi) That the colonizer/owner shall use only Light-Emitting Diode (LED) Lamps fitting for internal lighting as well as Campus lighting.
 - (vii) That you shall submit the scanned copy of the approved building plans of this scheme to this office from the issuance of this letter.
 - (viii) That you shall deposit the labour cess in future, time to time as per construction of work done at site.
 - (ix) That if any, site for Electric Sub Station is required same will be provided by you in the group housing colony.
 - (x) That provision of parking shall be made within the area earmarked /designated for parking in the colony and no vehicle shall be allowed to park outside the premises.

(x) That you shall follow provisions of section 46 of The Persons with Disabilities (Equal Opportunities, protection of Rights and full Participation) Act, 1995 which includes constructions of Ramps in public buildings, adaption of toilets for wheel chair users, Braille symbols and auditory signals in elevators or lifts and other relevant measures for Hospitals, Primary Health Centre and other medical care and rehabilitation units.

16. That you shall strictly comply with the directions of MOEF Guidelines, 2010 while raising construction and comply with the instructions of Director General, Town and Country Planning, Haryana, Chandigarh issued vide orders dated 14.5.2015 and is also available on the departmental website www.tcpharyana.gov.in.

This sanction will be void abinitio, if any of the conditions mentioned above are not complied with.

~~PA/As above~~



(Rajesh Kaushik)

District Town Planner (HQ),

Member Secretary,

For: Chief Town Planner, Haryana-cum- Chairman,

Building Plan Approval Committee.

Memo No. ZP-101/AD(RA)/2016/_____

Dated:-_____

A copy is forwarded to the following for information:-

1. Haryana State Pollution Control Board, Panchkula with the request that the compliance of the instructions issued by NGT shall be monitored and strict compliance to be ensured.
2. Administrator, HUDA, Gurgaon.
3. Senior Town Planner, Gurgaon.
4. Superintending Engineer (HQ) HUDA, Panchkula.
5. District Town Planner, Gurgaon.
6. District Town Planner (Enf.), Gurgaon.
7. Nodal Officer, website updation.

(Rajesh Kaushik)

District Town Planner (HQ),

Member Secretary,

For: Chief Town Planner, Haryana-cum- Chairman,

Building Plan Approval Committee.