

Directorate of Town & Country Planning, Haryana

Yojana Bhavan, Plot no. 3, Sector-18 A, Madhya Marg, Chandigarh
Web site tcpharyana.gov.in - e-mail: tcpharyana7@gmail.com

Regd.

(LC-IX)

[[See Rule 16(2)]]

To

✓ Esmax Infradevelopers Pvt. Ltd,
Regd. Office: 10, Sector-32,
Karnal-132001.

Memo No. LC4453/ JE (SB)/2024/ 26996 Dated: 23/08/24

Subject - Issuance of Completion Certificate of License No. 121 of 2021 dated 31.12.2021 granted for setting up of Commercial Plotted Colony over an area measuring 2.325 acres falling in the revenue estate of village Phoosgarh, Sector-32, Karnal.

Refer to your application received on 20.07.2023 for grant of completion certificate in respect of Commercial Plotted Colony measuring 2.325 acres falling in the revenue estate of village Phoosgarh, Sector-32, Karnal bearing Licence No. 121 of 2021 dated 31.12.2021.

2. Chief Engineer-II, HSVP, Panchkula vide their memo no. CE-II/SE(HQ)/EE(M)/SDE(G)/2024/92706 dated 10.04.2024 informed that the services with respect to Commercial Plotted Colony measuring 2.325 acres falling in the revenue estate of village Phoosgarh, Sector-32, Karnal bearing Licence No. 121 of 2021 dated 31.12.2021 have been got checked and reportedly laid a site and are operational/functional.

Senior Town Planner, Panchkula vide their memo no. 1070 dated 10.04.2024 confirmed about laying of the colony as per approved layout plans.

Superintending Engineer/planning, HVPNL, Panchkula vide memo no. CH-4/SE/PLG/File No. 34/UH/137 dated 12.06.2024 in reference to SE/Monitoring, UHBVNL-Panchkula letter no. CH-22/SE/Mon/Elect.Plan/170/KNL/2022-23 dated 10.06.2024 has informed that the developer has laid the electrical infrastructure in the colony as per approved electrical infrastructure plan/estimate.

3. In view of these reports it is hereby certified that the required development works in the said Commercial Plotted Colony over an area measuring 2.325 acres as indicated on the enclosed layout plan duly signed by me read in conjunction with the following terms and conditions have been completed to my satisfaction. The development works are water supply, sewerage, storm water, drainage, roads, horticulture & electrification etc. The completion certificate is granted on the following terms and conditions:-

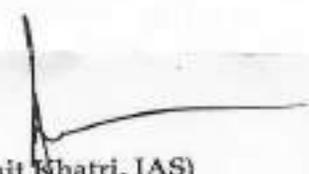
- That you shall be fully responsible for operation, upkeep and maintenance of all roads, open space, public parks and public health services like water supply, sewerage and drainage etc. for a period of five years from the date of issuance of final completion certificate or earlier relieved of said responsibility and thereafter transfer all such roads, open space, public parks and public health services like water supply, sewerage and drainage etc. free of cost to the Government or the Local Authority as directed.
- The services will be laid by the colonizer upto alignment of proposed external services of the town and connection with the HSVP system will be done with the prior

approval of the competent authority. In case pumping is required, the same will be done by the colonizer at its own cost. The services will be provided as per provision in the EDC of Karnal.

- c) That you shall be solely responsible for making arrangement of water supply and disposal of sewage and storm water of their colony as per requirement/guidelines of HSPCB/Environment Department till such time, the external services are provided by HSVP/State Government as per their scheme.
- d) Level/Extent of the services to be provided by HSVP i.e. water supply sewerage, SWD, roads etc. will be proportionate of EDC provisions.
- e) That you shall maintain the roof top rain water harvesting system properly and shall keep it operational all the time.
- f) That in case some additional structures are required to be constructed and decided by HSVP at a later stage, the same will be binding upon you. Flow control valves will be installed, preferably of automatic type on water supply connection with HSVP water supply line.
- g) That the NSL formation level of roads have been verified and are correct. You shall be responsible in case of any mistake in levels etc.
- h) That you shall neither erect nor allow the erection of any communication and transmission Tower with in colony without prior approval of competent authority.
- i) That you shall use LED fittings for street lighting in the licensed colony.
- j) That you shall comply with the conditions of Service Plan/Estimates approved by the Department vide memo no. 19059 dated 15.06.2023 and the conditions imposed by CA-HSVP, Panchkula.
- k) That you shall abide by all prevailing norms/rules and regulations as fixed by HSVP/local authority.
- l) That you shall keep all the services including water supply and sewerage treatment plant functional at site without any hindrance.
- m) That you shall get re-validate the bank guarantee on account of IDW before 30 days of its expiry.
- n) That you shall demolish toe wall & grill constructed over the area reserved for 12 mtr. wide service road as and when demanded by the Government.
- o) That you shall comply with the terms and conditions as approved from the concerned power utility.

This completion certificate shall be void-ab-initio, if any of the condition mentioned above is not complied with and this approval will not provide any immunity from any other Act/Rules/Regulations applicable to the land in question.

DA/As above.


(Amit Khatri, IAS)
Director,
Town and Country Planning,
Haryana, Chandigarh.

Endst. No. LC-4453/ JE (SB)/2024/

Dated:

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

1. The Chief Administrator, HSVP, Sector-6, Panchkula.
2. Senior Town Planner, Panchkula.
3. District Town Planner, Karnal.
4. Chief Account Officer of this Directorate.
5. Project Manager (IT) with a request to host this approval on website.



(Divya Dogra)

District Town Planner (HQ)

For: Director, Town & Country Planning
Haryana, Chandigarh

**PROPOSED COMMERCIAL PLOTTED COLONY OVER AN AREA MEASURING
2.325 ACRES IN SECTOR-32, KARNAL.**

BEING DEVELOPED BY: - M/s SAI BABA HABITAT PVT. LTD.

INCORPORATION WITH : - M/s ESMAX INFRADEVELOPERS PVT. LTD.

**SERVICE PLAN ESTIMATE FOR PROVIDING
WATER SUPPLY, SEWERAGE, STORM WATER
DRAINAGE, CONSTRUCTION OF ROADS &
PARKINGS, STREET LIGHTING AND
HORTICULTURE WORKS ETC.**

M/s SAI BABA HABITAT PVT. LTD.
10, SECTOR-32, KARNAL-132001
(HARYANA)

SERVICE PLAN ESTIMATE FOR PROVIDING WATER SUPPLY, SEWRAGE, STORM WATER DRAINAGE, CONSTRUCTION OF ROADS, STREET LIGHTING AND HORTICULTURE WORKS FOR A COMMERCIAL PLOTTED COLONY ON AN AREA MEASURING 2.325 ACRES. IN SECOR-32, KARNAL.

BEING DEVELOPED BY : - M/s SAI BABA HABITAT Pvt. Ltd.

IN-COLLABORATION WITH : - M/s ESMAX INFRADEVELOPERS Pvt. Ltd.

INTRODUCTION

Karnal is an important Town of Haryana State. It has been decided by the Haryana Govt. to establish various sectors in Karnal. Accordingly Sector-32 & 33 have been developed by the HSVP recently and the allottees have been occupied their plots after constructing their houses in these sectors. Keeping in view the demand of the residents to fulfill their daily requirement of house hold goods as well as commercial activities the license No. 121 of 2021 has been granted by the DTCP Haryana Chandigarh vide his endst No. LC-4453/JE (SB)/2021/ 225 dt. 04.01.2022 to developed a commercial plotted colony as on an area of 2.325 Acres in sector-32, Karnal which is to be developed by M/s Sai Baba Habitat Pvt. Ltd. , incollaboration with M/s Esmax Infradevelopers Pvt. Ltd.

Accordingly, this service plan estimate has been prepared for the probable cost of this colony. The brief detail of proposed development works to be executed in this colony are as under: -

1. WATER SUPPLY: -

At present the source of water supply in this area is tube well based as the underground water is potable as such provision of 1 No. tube well with submersible motor of ^{5.5}7.50 HP with a discharge of 15 KL at a head of 50 mtr. has been made. It has also been proposed to construct 1 No. underground tank of capacity ⁵⁰70 KL for domestic purposes and 40 KL capacity for firefighting arrangement. The underground tanks will be filled up from the proposed tube well and the water will be pumped to the tanks proposed on the terrace of each building in the colony.

2. **DESIGN: -**

The scheme has been designed for approximately 1317 persons considering 1 person per 10 sqmtr. of the total proposed covered area 13172 Sqmtrs. Upto the 4 stories of the proposed SCOs & Shops as In the approved layout plan. The requirement for the proposed water supply scheme has been taken as 45 liters per capita per day (lpcd) and besides the above, necessary provisions for water requirement for the proposed area of PUSs , plantations, Roads & Parkings Washing etc. have also been taken into consideration.

3. **PUMPING EQUIPMENTS :-**

It has been proposed to install a pumping set next to underground tank at pumping chamber and there would be two pumps, one working and one standby. The provision for Diesel Generating set as a stand by source of power in case of any electricity failure has also been made. Provision has also been made for Chlorination of water before distribution to the public/buildings.

4. **SEWERAGE SCHEME :-**

The sewerage network of the commercial plotted colony shall be connected to the proposed 60 KL capacity Sewage Treatment Plant . The treated water will be used for flushing and landscape irrigation for which the Flushing Water Supply has been proposed in the estimate and surplus treated water/sewage will be discharged into the fields or in the exiting main YAP sewer line, already laid on the main road in-front of this colony. The sewerage system has been designed for 3 times of average DWF. It has been assumed that ^{85%}75% of domestic water supply shall find its way into the proposed sewer. All the sewer lines of 200mm I/d have been designed to run half-full for which necessary design statement for the entire sewerage system as well as flushing system have been prepared and attached in this estimate. Sewer lines have been designed for a minimum self cleaning velocity of 2.53 ft./sec. for which S.W. pipes will be used for sewer lines. All the manholes and related appurtenances shall be constructed as per standard design.

5. **STORM WATER DRAINAGE :-**

The design rainfall intensity has been considered as $1^{1/2}$ ' per hour for the proposed development area. Pipe drains of minimum 400mm dia RCC NP-3 pipes have been proposed for the storm water drainage system. Road gully chamber will collect the storm water from the surface and discharge into the manholes through RCC NP-3 pipes. The internal storm water drains shall be connected to the proposed Rain Water Harvesting Well/Pit to disposed-off the storm water to the underground water table. The velocity of storm water in the pipe has been considered as minimum of 2.52 ft./sec. All the pipes are considered as running full and necessary design statement for the entire storm water drainage system has been prepared and attached in this estimate.

6. **ROADS AND PARKINGS :-**

The construction of roads and parkings has been proposed to be constructed with the specifications as under:-

- | | | | |
|----|---|------|----------------|
| 1. | ⁸⁰ 100mm thick interlocking tiles over | } or | 25 mm BC over |
| 2. | ²⁵⁰ 200mm thick WMM over | | 50 mm DBM over |
| 3. | ²⁰⁰ 150mm thick GSB. | | 200mm WMM over |
| 4. | Krebs and channels as per site requirement. | | 200mm GSB |

In addition to above the provisions for Horticulture works, Electrification and street Lighting have also been taken in the estimate as per the prevailing practice in HSVP.

The required arrangement for providing the fresh water supply and disposal of sewerage and storm water will be done by the licensee at his own level, till the external services will be provided/ to be laid and made functional by the HSVP.

8. **SPECIFICATIONS:-**

The work will be carried out in accordance with the standard specifications of the Public Health Department as laid down by the Haryana Govt./HSVP.

9. RATES :-

The estimate has been based on the present-day market rates of material and labour with escalation.

10. COST :-

The total cost of the scheme, including cost of all services works out of Rs. ~~672.40~~ ^{432.90} lacs including 3% contingencies and 49% departmental charges, price escalation charges.

11. DEVELOPMENT COST :-

The development cost for 2.325 Acres works out to Rs. ~~289.20~~ ^{186.19} lacs per Acre.

12. Mtc. COST :-

The Mtc. cost for the Services, Roads & Parkings for 10 years after the completion of works have also been taken in this estimate. *Esmax Infra Development Pvt. Ltd.*

Manager

Auth. Sign.

AUTHORIZED SIGNATURE

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

Licence No. 121 of 2021

This Licence has been granted under the Haryana Development and Regulation of Urban Areas Act, 1975 & the Rules 1976, made there under to Sai Baba Habitat Pvt. Ltd. in collaboration with Esmax Infra-developers Pvt. Ltd., Regd. Off. 10, Sector-32, Karnal for setting up of Commercial Plotted Colony over an area measuring 2.325 acres falling in the revenue estate of village Phoosgarh, Sector-32, Karnal.

- i. The Licence is granted subject to the following conditions:
 - i. That Commercial Plotted Colony will be laid out in accordance with the approved layout plan.
 - ii. That the conditions of the agreements already executed are duly fulfilled and the provisions of Haryana Development and Regulation of Urban Areas Act, 1975 and the Rules 1976 made thereunder are duly complied with.
 - iii. That you will pay the Infrastructure Development Charges amounting to Rs. 70,56,957/- @ Rs.500/- per sq. mtr for the commercial area (150 FAR), in two equal installments. First Instalment will be due within 60 days of grant of license and second Instalment within six months of grant of license falling which 18% PA Interest will be liable for the delayed period.
 - iv. That the licensee shall maintain and upkeep of all roads, open spaces, public park and public health services for a period of five years from the date of issue of the completion certificate unless earlier relieved of this responsibility and thereupon to transfer all such roads, open spaces, public parks and public health services free of cost to the Govt. or the local authority, as the case may be, in accordance with the provisions of Section 3(3)(a)(iii) of the Haryana Development and Regulation of Urban Areas Act, 1975.
 - v. That area coming under the sector roads and restricted belt / green belt, if any, which forms part of licensed area and in lieu of which benefit to the extent permissible as per policy towards FAR is being granted, shall be transferred free of cost to the Govt.
 - vi. That you shall construct portion of service road, internal circulation roads, forming the part of site area at your own cost and shall transfer the land falling within alignment of same free of cost to the Govt. u/s 3(3) (a) (iii) of the Haryana Development and Regulation of Urban Areas Act, 1975.
 - vii. That you shall integrate the services with Haryana Shahri Vikas Pradhikaran services as and when made available.
 - viii. That you have not submitted any other application for grant of license for development of the said land or part thereof for any purpose under the provisions of the Haryana Development and Regulation of Urban Areas Act, 1975 or any application seeking permission for change of land use under the provision

Director
Town & Country Planning
Chandigarh

of the Punjab Scheduled Roads and Controlled Area Restrictions of Unregulated Development Act, 1963.

- ix. That you shall understand that the development/construction cost of 24 m/18 m major internal roads is not included in the EDC rates and they shall pay the proportionate cost for acquisition of land, if any, alongwith the construction cost of 24 m/18 m wide major internal roads as and when finalized and demanded by the Department.
- x. That you shall obtain NOC/Clearance as per provisions of notification dated 14.09.2006. issued by Ministry of Environment & Forest, Govt. of India, if applicable before execution of development works at site.
- xi. That you shall make your own arrangements for water supply, sewerage, drainage etc. to the satisfaction of DTCP till these services are made available and the same is made functional from External Infrastructure to be laid by Haryana Shahari Vikas Pradhikaran services or any other execution agency.
- xii. That you shall obtain clearance from competent authority, if required under Punjab Land Preservation Land Act, 1900 and any other clearance required under any other law.
- xiii. That the rain water harvesting system shall be provided as per Central Ground Water Authority Norms/Haryana Govt. notification as applicable.
- xiv. That the provision of solar water heating system shall be as per guidelines of Haryana Renewable Energy Development Agency and shall be made operational where applicable before applying for an Occupation Certificate.
- xv. That you shall use only LED fitting for internal lighting as well as campus lighting.
- xvi. That you shall convey the 'Ultimate Power Load Requirement' of the project to the concerned power utility, with a copy to the Director, within two months period from the date of grant of license to enable provision of site in licensed land for Transformers/Switching Stations/Electric Sub Stations as per the norms prescribed by the power utility in the zoning plan of the project.
- xvii. That it will be made clear at the time of booking of plots/commercial space that specified rates include or do not include EDC. In case of not inclusion of EDC in the booking rates, then it may be specified that same are to be charged separately as per rate fixed by the Govt. You shall also provide detail of calculation of EDC per sqm/per sft to the allottees while raising such demand from the plot owners.
- xviii. That you shall keep pace of development at least in accordance with sale agreement executed with the buyers of the plots as and when scheme is launched.
- xix. That you shall arrange power connection from UHBVNL/DHBVNL for electrification of the colony and shall install the electricity distribution

infrastructure as per the peak load requirement of the colony for which licensee shall get the electrical (distribution) service plan/estimates approved from the agency responsible for installation of external electric services i.e. JHSVNL/DHSVNL and complete the same before obtaining completion certificate for the colony.

- xx. That you shall pay the labour cess as per policy instructions issued by Haryana Government vide memo no. Misc-2057-5/25/2008/2TCP dated 25.02.2010.
- xxi. That you shall submit compliance of Rule 24, 26, 27 & 28 of Rules 1976 & Section 5 of Haryana Development and Regulation of Urban Areas Act, 1975, and shall inform account number and full particulars of the scheduled bank wherein licensee have to deposit thirty percentage of the amount received from the plot holders for meeting the cost of Internal Development Works in the colony.
- xxii. That no further sale has taken place after submitting application for grant of license.
- xxiii. That you shall not give any advertisement for sale of plots/commercial area before the approval of layout plan.
- xxiv. That you shall construct the access to the site upto higher order road in concurrence with the concerned authority before allotment of plot.
- xxv. That you shall follow the provisions of the Real Estate (Regulations and Development) Act, 2016 and Rules framed thereunder shall be followed by the applicant in letter and spirit.
- xxvi. That no provision of the Haryana Ceiling on Land Holding Act, 1972 has been violated due to purchase of applied land.
- xxvii. That you shall integrate the bank account in which 70 percent allottee receipts are credited under Section-4(2)(i)(D) of the Real Estate Regulation and Development Act, 2016 with the online application/payment gateway of the Department, in such manner, so as to ensure that 10% of the total receipt from each payment made by an allottee is automatically deducted and gets credited to the EDC head in the State treasury.
- xxviii. That such 10% of the total receipt from each payment made by the allottee, which is received by the Department shall get automatically credited, on the date of receipt in the Government treasury against EDC dues.
- xxix. That such 10% deduction shall continue to operate till the total EDC dues get recovered from the owner/developer.
- xxx. The implementation of such mechanism shall, however, have no bearing on EDC instalment schedule conveyed to the owner/developer. The owner/developer shall continue to supplement such automatic EDC deductions with payments from its own funds to ensure that by the EDC installments that are due for payment that paid as per the prescribed schedule.

xxxl. That you shall execute the development works as per Environmental Clearance and comply with the provisions of Environment Protection Act, 1986, Air (Prevention and Control of Pollution of Act 1981) and Water (Prevention and Control of Pollution of 1974). In case of any violation of the provisions of said statutes, you shall be liable for penal action by Haryana State Pollution Controlled Board or any other Authority Administering the said Act.

2. The license is valid up to 30/12/2026.

Dated: 31/12/2021.
Place: CHANDIGARH.

(K. Makrand Pandurang, IAS)
Director,
Town & Country Planning
Haryana, Chandigarh

Endst. No. LC-4453/JE (SB)/2021/ 225

Dated: 04-01-2022

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

1. Esmax Infradevelopers Pvt. Ltd., Regd. Off. 10, Sector-32, Karnal along with a copy of agreement, LC-IV & Bilateral Agreement and Layout Plan.
2. Chairman, Pollution Control Board, Haryana, Sector-6, Panchkula.
3. Chief Administrator, HSVP, Panchkula.
4. Managing Director, HVPNL, Planning Directorate, Shakti Bhawan, Sector-6, Panchkula.
5. Joint Director, Environment Haryana-Cum-Secretary, SEAC, Paryavaran Bhawan, Sector -2, Panchkula.
6. Director, Urban Estates, Haryana, Panchkula.
7. Administrator, HSVP, Panchkula.
8. Chief Engineer, HSVP, Panchkula.
9. Superintending Engineer, HSVP, Panchkula along with a copy of agreement.
10. Land Acquisition Officer, Panchkula.
11. Senior Town Planner, Panchkula along with a copy of Layout Plan.
12. District Town Planner, Karnal along with a copy of agreement & Layout Plan.
13. Chief Accounts Officer (Monitoring) O/o DTCP, Haryana.
14. Accounts Officer, O/o DTCP along with a copy of agreement.

(Rohit Chauhan)
District Town Planner (HQ)
For Director, Town & Country Planning
Haryana Chandigarh

LC-4453

To be read with License No.....¹²¹.....dated.....^{31/12/}.....of 2021

Detail of land owned by Sai Baba Habitat Pvt. Ltd.

Village	Rect. No.	Killa No.	Area (K-M)
Phoosgarh	10	10/2	2-11
		9/2	3-2
		12/2/1	1-8
		12/1/1	5-14
		11/1	5-17
Total		18-12 OR 2.325 Acres	


Director,
Town Development Authority
Jammu & Kashmir

construction of roads Horticulture works and Street Lighting etc. in the Commercial Plotted Colony Measuring 2.326 Acres in Sector-32, Karnal.

FINAL ABSTRACT OF COST

SUB WORK No.	Description of work	Amount (Lacs.)
I	Water Supply and Flushing Water supply	78.35 65.20 72.52
II	Sewrage System	27.24 23.90 25.33
III	Storm Water Drainage	38.56 27.85 40.87
IV	Roads and Parkings	125.83 454.90 456.67
V	Street Lighting	8.95 8.91 ✓
VI	Horticulture Works	2.21 3.70 0.67
VII	Mainteneace Charges for 10 Years	100.00 151.90 ✓
Total		672.40 701.77 432.90

Area of site = 2.326 Acres
 Cost per Acre = $\frac{432.90}{2.326} = 186.19$

Say Rs. ~~289.20~~ 186.19 Lakh Acre

Esmax Infradevelopers Pvt. Ltd.
 Manoj Kumar
 Auth. Sign.

AUTHORIZED SIGNATORY


 Executive Engineer
 H.S.V.P. Division, Karnal


 FOR Superintending Engineer
 HSVP Circle, KARNAL


 SE (K)

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


 Superintending Engineer (HQ)
 for Chief Engineer-II
 HSVP, Panchkula
 19.5.2022
 SDE (U/S)
 19/5/2022


 Director General
 Town & Country Planning
 aryana, Chandigarh

Service Plan Estimate for Providing Water Supply, Sewerages, Storm Water Drainage, Construction of Roads, Horticulture works and street lighting etc. in the Commercial Plotted Colony Measuring 2.325 Acre In Sector 32, Karnal

DESIGN CALCULATIONS

Sr. No.	Details
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- 1 Total area of site = 2.325 Acre or = 9408.93 sq. mtr.
- 2 Area under parking = sq. mtr. = 6035 Sqmt. (As per detail enclosed)
- 3 Area under shops :-

Sr. No.	Type of shops	Nos.	Size (in Mtrs.)	Area (in sq. mtr.)
1	A	6	22 × 5.486	724.15
2	B	2	22 × 8.097	356.27
3	C	2	15.25 × 6.715	204.81
4	D	24	15.25 × 5.486	2007.88
Total				3293.11

Area for Four Stories = $3293.11 \times 4 = 13172.416$ Sqmtr.

- 4 Population :-
 @ 1 person per 10 sq. mtr.
 $= 13172.416 \times 1/10 = 1317$ Nos

- 5 Domestic Water Requirement :-
 Nos. of Persons = 1317 Nos
 i) water requirement- @ 45 lt / Head / day
 $= 1317 \times 45 = 59.265$ KL

ii) 2 Nos. PUS @ 5KL / day/Each = 10.00 KL
 Total = 69.265 KL
Say 70 KL

- 6 Non Domestic Water Requirement :-

i) Road & Parking area = 6035 Sq. mtr.
 or = 1.49 Acres.
 @5 KL / Acre = $1.49 \times 5 = 7.45$ KL

ii) Hort. Culture L.S. = 2.00 KL
 Total = 9.45KL
Say= 10.00 KL

Esmax Infradevelopers Pvt. Ltd.

(Signature)

h. Sign.

7	Total Water Requirement :-	
	i) Domestic Requirement	= 70.00 KL
	ii) Non. Domestic Requirement	= <u>10.00 KL</u>
	Total	= 80.00 KL

8	Required Nos. of T/wells :-	
	Daily Water Requirement	= 80.00 KL
	Assuming Working Hr. of T/ Wells	= 10 Hrs.
	Assuming discharge of T/well	= 15KL/Hr.
	Nos. of T/wells = $\frac{80}{10 \times 15}$	= 0.53 Nos.
	Add 10% on stand by	= <u>0.05</u>
	Total	= 0.58
		Say 1 No.

Hence it is proposed to install 1 No. T/wells.
with a discharge of 15 KL / Hr.

9 Pumping Machinery for T/well :-

i) Gross working load	= 35.00 m.
ii) Av. Fall in S.L.	= 3.00 m.
iii) Depression head	= 9.00 m.
iv) Friction load	= <u>3.00 m.</u>
Total	= 50.00 m.

10 BHP of Submersible Motor for T/well :-

i). Expected yield of T/w	= 15000 Lt./ hrs.
ii). Head of motor	= 50 mtr.
iii). BHP = $\frac{15000 \times 50}{60 \times 60 \times 75 \times 0.60}$	= 4.63 BHP
	Say <u>5.00</u> BHP

11 Capacity of UGT for Domestic use :-

Total domestic water required	= 70 KL
Less flushing water = $70 \times 33.33\%$	= <u>23 KL</u>
Balance	47 KL
	Say 50 KL

Capacity of UGT for 24 hr. = 50 KL

Capacity for fire fighting = $100 \times \frac{\sqrt{1320}}{1000} \times \frac{1}{3}$
= 38.33 KL
Say 40.00 KL

Total Capacity of UGT = 50 + 40 = 90 KL

Esmax Infradevelopers Pvt. Ltd.

Mary Ann

Auth. Sign.

12 Boosting Machinery for UGT :-

Daily domestic water req. = 70 KL
 Assuming working hr. = 8 Hr.

Disch. Of T/well Per Hr. = $\frac{70}{8} = 8.75 \text{ KL/Hr.}$
 or 145.83 Lpm
Say 150 Lpm

- i) Head for pump = 4.00 m.
- ii) Friction loss in main & spl. = 4.00 m
- iii) Free head required = 32.00 m
- Total = 40.00 m

BHP of motor = $\frac{150 \times 40 \times 1}{60 \times 75 \times 0.5} = 2.22 \text{ BHP}$
Say 3.00 HP

Hence it is proposed to provide 2 Nos. pumps sets (one stand by)
 of 3 HP with a discharge of 150 Lpm at a head of 40 mtrs.

13 Capacity of UGT for Flushing Water Supply :

Domestic water requirement = 70.00 KL
 Qty. of flushing water = $110 \times 33.33\% = 23.35 \text{ KL}$
 Balance requirement = 46.65 KL
 Water required for Road/Parkings & Horticultur = 10.00 KL
 Total = 33.35 + 46.65 = 80.00 KL
Say 50.00 KL
35.00

14 Boosting Machinery for Flushing UGT:-

Requirement of Flushing w/s = 35.00 KL
 Assuming working Hr. = 8 Hr.

Disch. Per Hr. = $\frac{35}{8} = 4.38 \text{ KL/Hr.}$
 or 105 Lpm
Say 100 Lpm
100 LPM

- i) Head of pump = 4.00 Mtr.
- ii) Friction loss in main & spl. = 4.00 Mtr.
- iii) Free head requirement = 32.00 Mtr.
- Total = 40.00 Mtr.

BHP of motor = $\frac{100 \times 40 \times 1}{60 \times 75 \times 0.60} = 1.48 \text{ BHP}$
Say 3.00 BHP.
1.48 HP
2.00

2 nos Pumping sets (I W + I S B) of 2 BHP
 with a discharge of 100 LPM at a head of 40 mtr

Esmax Infradevelopers Pvt. Ltd.

Manoj Kumar

Auth Sign.

15 Gen Set required :-

BHP of motors :-

I) T/well = 7.50 HP.

II) UGT = 3.00 HP.

III) Flushing = ~~3.00~~ HP.

13.50 HP.

12.50

Rating of Gen Set = ~~13.50~~ x 0.746 x 1.50 = ~~15.09~~ KVA

Add 10% Extra for lighting etc. = ~~1.51~~ KVA

13.99
15.39 16.59 KVA / ~~600~~

Say 20 KVA ✓

16 Capacity of STP :-

i). Total domestic water requirement = 70.00 KL

(Dom. + Flushing)
80 %

ii). Sewrage discharge @ 75% of water requirement

56.00
52.50 KL
Add 5% marginal factor = 2.80 KL

Say ~~58.00~~ KL or 0.206 MLD, 58.80 KL

Say 60.00 KL

Esmax Infra

Manoj Kumar

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Esmax Infra developers Pvt. Ltd.

Manoj Kumar

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Service plan estimate for providing Water Supply, Storm Water Drainage, construction of roads, Horticulture works and Street Lighting etc. in the Commercial Plotted Colony measuring 2.328 Acres in Sector-32, Karnal.

SUB WORK No. I

WATER SUPPLY

ABSTRACT OF COST

SUB HEAD No.	Description of work	Amount (Lacs.)
I	Head Works	35.49 17.65 38.32
II	Pumping Machinery	23.02 22.60 22.17
III	Distribution System for Domestic Water Supply	11.97 9.70 10.53
IV	Distribution System for Flushing Water Supply & Irrigation System.	7.87 6.85 6.50
	Total	55.20 13.52 78.35
	Say Rs.	55.20 Lacs

CC to Final Abstract of Cost

Esmax Infra Development Pvt. Ltd.
Mang' Kumar
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**SERVICE PLAN ESTIMATE FOR PROVIDING PUBLIC HEALTH SERVICES, ROADS & PARKINGS,
HORTICULTURE AND STREET LIGHTING FOR COMMERCIAL PLOTTED COLONY OF AREA
MEASURING 2.325 ACRES, IN SECTOR-32 KARNAL**

**SUB WORK NO. 1
SUB HEAD NO. 1**

**WATER SUPPLY
HEAD WORKS**

Sr. No.	Description	Qty./ Unit	Rate (in Rs.)	Amount (Rs. in lacs)
1	2	3	4	5
1	Boring and installing 150mm 1/2 tubewells with reverse rotary rig complete with pipe and strainer to depth of about 150 mtrs. complete in all respect	1 Nos. 125	10.00 15000 8.00 Lac/Each 4500/-	10.00 15000 8.00 5.63
2	Const. of underground water tanks as per drawing and design complete in all respects of capacity as under :- i) Domestic water supply = 70-KL <i>50 KL</i> ii) Firefighting = 40 KL iii) Flushing water supply = 35 KL <i>ad STP</i> Total = <i>145 KL</i> <i>125</i>	KL P/KL	2000 P/KL	2.07
3	Provision for carriage for material and other unforeseen items		L.S. 0.50	1.00
4	<i>Const. of pump chamber for UAT for drinking water</i>		3.00 Lac	3.00
5	<i>Const. of boundary wall for water works</i>		3.50 Lac	3.50
	Add 3% contingency charges			11.47 23.97 <i>23.13</i>
	Add 49% for departmental escalation unforeseen charges			0.34 0.35 <i>0.69</i>
			Total	11.82 24.72 <i>23.82</i>
			G. Total	17.81 28.32 <i>35.49</i>
			Say Rs. 17.65 lacs	<i>35.49</i>

(C.C. TO ABSTRACT OF COST OF SUB WORK NO. 1)

Say Rs 35.49 Lakh

Esmax Infradevelopers Pvt. Ltd.

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HORTICULTURE AND STREET LIGHTING FOR COMMERCIAL PLOTTED COLONY OF AREA MEASURING 2.325 ACRES. IN SECTOR-32 KARNAL

SUB WORK NO. I
SUB HEAD NO. II

WATER SUPPLY
PUMPING MACHINERY

Sr. No.	Description	Qty/ Unit	Rate (In Rs.)	Amount (Rs. In lacs)
1	2	3	4	5

1	Providing and installing electrical driven submersible motor complete in all respects :- i) ^{S.W} 2.00 HP, 250 LPM with 50 Mtr. Head	2 Nos.	1.50 Lacs/Each	3.00
	ii) 3.00 HP, 150 LPM with 40 Mtr. Head ^{(ii) 2HP, 100 LPM, 40M Head}	4 Nos.	1.00 Lacs/Each	4.00
3	Providing and installation of chlorination plant complete in all respect.	1 Nos.	0.75 Lacs/Each	1.50
4	Provision for providing and installation of Gen Set complete in all respect.	20 KVA	18500 L.S./EACH	370 4.00
5	Provision for making foundations and erection for pumping machinery		L.S.	100 0.50
6	Provision for pipes valves and specials inside the pump chamber and boosting chamber		L.S.	100 0.50
7	Provision for electric services/connection including electric fittings for tubewells chamber complete including cost of transformers		L.S.	200 2.00
8	Provision for carriage of material and other unforeseen items		L.S.	100 0.50
	Add 3% contingency charges		Total	14.45 15.40
	Add 49% for departmental escalation charges		Total	14.88 15.45
				7.29 7.57
				22.17 23.02
				23.02 23.02

Say Rs. 22.17 lacs

(G.C. TO ABSTRACT OF COST OF SUB WORK NO. I)

Esmax Infradevelopers Pvt. Ltd.

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**SERVICE PLAN ESTIMATE FOR PROVIDING PUBLIC HEALTH SERVICES, ROADS & PARKINGS,
HORTICULTURE AND STREET LIGHTING FOR COMMERCIAL PLOTTED COLONY OF AREA
MEASURING 2.326 ACRES. IN SECTOR-32 KARNAL**

**SUB WORK NO. I
SUB HEAD NO. II**

**WATER SUPPLY
DISTRIBUTION SYSTEM
FOR DOMESTIC WATER
SUPPLY**

Sr. No.	Description	Qty./ Unit	Rate (In Rs.)	Amount (Rs. In lacs)
1	2	3	4	5
1	Providing, laying, jointing and testing DI lines including cost of excavation complete as per specifications. i). 100mm Vd DI pipes	335 Mtr	1250 4430 P/Mtr	4.19 -2.78
2	Providing and fixing sluice valve including cost brick masonry chamber complete in all respect i) i)100mm Vd	3 Nos.	12000 4000 Each	0.36 0.12 -0.38
3	Providing and fixing air valves/scour valves complete in all respects. <i>include cost of brick Masonry chamber etc.</i>	1 Nos.	10000 12000 Each	0.10 0.12
4	Prov. and fixing fire hydrants complete in all respects.	8 Nos.	15000 12000 Each	1.20 0.96
5	Construction of haudies for SV and Air Valves - air valve etc.	4 Nos.	2000 Each	0.08
⑤	Provision for connection with <i>rising</i> main of HSVP	L.S.	-	1.00 0.50
⑥	<i>Provision for 0.11 specials for up line.</i>	L.S.	-	0.45
⑦	Providing for carriage of material and other unforeseen items	L.S.	-	0.50
	Add 3% contingency charges		Total	6.31- 6.36 7.80 0.19 0.21 0.23
	Add 49% for departmental escalation charges		Total	6.49 7.87 8.03 3.18 3.46 3.94
			G.Total	9.68 10.83 11.97

10.53
Say Rs. ~~9.79~~ lacs *11.97* Lakh

(C.C. TO ABSTRACT OF COST OF SUB WORK NO. I)

Esmax Infradevelopers Pvt. Ltd.
Mansu Kumar
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SERVICE PLAN ESTIMATE FOR PROVIDING PUBLIC HEALTH SERVICES, ROADS AND PARKINGS, HORTICULTURE AND STREET LIGHTING FOR COMMERCIAL PLOTTED COLONY OF AREA MEASURING 2.326 ACRES, IN SECOR-32, KARNAL

DESIGN STATEMENT FOR DOMESTIC WATER SUPPLY

Sr. No.	Name of line	Category/ Size in Mtrs./ Nos. of picks.												Population @ P/Person P/10 Sqmts.	Daily water requirement @ 45 LL/ P/PI/DAY (In KL)	Daily water requt. for PUC@ 50K/day	Total Daily water requirement (In KL)	Total Daily water requirement 3DWF (GALLONS)
		A			B			C			D							
		Self	Branch	Total	Self	Branch	Total	Self	Branch	Total	Self	Branch	Total					
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
1	UGT/A	0	6	0	2	0	2	0	24	13172	0	13172	1317	29	10	39	45776	
2	A-B	0	6	0	2	1	0	12	0	4325	4322	8747	875	39	6	39	25210	
3	B-B1	6	0	2	0	0	0	0	0	4322	0	4322	432	19	6	19	12832	
4	A-B1	0	0	0	0	1	0	12	0	4325	0	4325	443	20	10	30	12765	

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SERVICE PLAN ESTIMATE FOR PROVIDING PUBLIC HEALTH SERVICES, ROADS AND PARKINGS, HORTICULTURE AND STREET LIGHTING FOR COMMERCIAL PLOTTED COLONY OF AREA MEASURING 2.325 ACRES. IN SECOR-32, KARNAL

DESIGN STATEMENT FOR DOMESTIC WATER SUPPLY

Sr. No.	Name of line	Design Water Load (In gallons)	Head Loss Per 1000 mtrs	Size (mm)	Length of Line (mtrs.)	Head Loss in Line (mtrs.)	Average NSL at Lower End	Hydraulic level		Terminal Head at Lower End (mtrs.)
								Upper End	Lower End	
1	1	18	19	20	21	22	23	24	25	26
1	UGT-A	72000	4.72	100	4	0.02	100.03	132.03	132.01	31.96
2	A-B	72000	4.72	100	105	0.50	100.05	132.01	131.51	31.46
3	B-B1	72000	4.72	100	68	0.32	100	131.51	131.19	31.19
4	A-B1	72000	4.72	100	141	0.67	100	132.01	131.34	31.34

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SERVICE PLAN ESTIMATE FOR PROVIDING PUBLIC HEALTH SERVICES, ROADS,
HORTICULTURE AND STREET LIGHTING FOR COMMERCIAL PLOTTED
COLONY OF AREA MEASURING 2.325 ACRES. IN SECTOR-32, KARNAL

DETAIL OF LENGTH OF WATER SUPPLY LINES

Sr. No.	Name of line	Length of line (In Mtr)	SV	FH
		100 mm I/d		
1	UGT-A	4.00	-	-
2	A-B	105.00	1	2
3	B-B1	68.00	1	2
4	A-B1	141.00	1	4
5	Rising Main T- UGT	13.00	-	-
	Total	<hr/> 331.00	<hr/> 3.00	<hr/> 8.00
	Say	335 Mtrs.		


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SERVICE PLAN ESTIMATE FOR PROVIDING PUBLIC HEALTH SERVICES, ROADS & PARKINGS, HORTICULTURE AND STREET LIGHTING FOR COMMERCIAL PLOTTED COLONY OF AREA MEASURING 2.325 ACRES, IN SECTOR-32 KARNAL

SUB WORK NO. I
SUB WORK NO. IV

WATER SUPPLY
(FLUSHING & IRRIGATION)

Sr. No.	Description	Qty./ Unit	Rate (In Rs.)	Amount (Rs. In lacs)
1	2	3	4	5

1	Providing, laying, jointing and testing DI lines including cost of excavation complete as per specifications. i). 100mm I/d DI pipes	255 Mtr	1250 1430 P/Mtr	3.19 2.69
2	Providing and fixing sluice valve including cost brick masonry chamber complete in all respect i) 100mm I/d	2 Nos.	12000 Each	0.24
3	Providing and fixing air valves/scour valves complete in all respects. <i>including cost of brick Masonry chamber.</i>	1 Nos.	12000 10,000 Each	0.12 0.10
4	Construction of handles for SV and Air Valves air valve etc.	3 Nos.	2000 Each	0.06
	<i>4) Provision for D.I. specially for up line L.S</i>			0.40
5	Providing for carriage of material and other unforeseen items. <i>cutting of roads & making good the slope</i>	L.S.	-	0.50 ✓
6	Provision for irrigation hydrant 200mm dia zones @ Rs 3500 each			0.70
	Add 3% contingency charges			3.86 4.17
	Add 45% for departmental escalation charges			0.11 0.25
			Total	3.92 4.36
				1.92 2.14
			G.Total	6.83 6.50
			<i>6.50</i>	
			Sav. Rs. 6.85 lacs	7.87 Lakh
				<u>5.13</u>
				<u>0.15</u>
				<u>5.28</u>
				<u>2.59</u>
				<u>7.87</u>

(C.C. TO ABSTRACT OF COST OF SUB WORK NO. I)

Esmax Infradevelopers Pvt. Ltd.

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SERVICE PLAN ESTIMATE FOR PROVIDING PUBLIC HEALTH SERVICES, ROADS AND PARKINGS, HORTICULTURE AND STREET LIGHTING FOR COMMERCIAL PLOTTED COLONY OF AREA MEASURING 2.325 ACRES. IN SECOR-32, KARNAL

DESIGN STATEMENT FOR FLUSHING WATER SUPPLY

Sr. No.	Name of line	Flushing water peak disch. (Gallons)	Design water load (Gallons)	Head Loss per 1000 mtrs.	Size (mm)	Length of Line (mtrs.)	Head Loss In Line (mtrs.)	Average NSL at Lower End	Hydraulic Level		Terminal Head (mtrs.)
									Upper End	Lower End	
1	2	18	19	20	21	22	23	24	25	26	27
1	UGT-A	15259	24000	0.62	100	3	0.01	100.04	132.04	132.03	31.99
2	A-B	7629	24000	0.62	100	43	0.03	100.03	132.03	132.00	31.97
3	B-C	8628	24000	0.62	100	77	0.05	100.00	132.00	131.95	31.95
4	C-D	2142	24000	0.62	100	19	0.01	100.01	131.95	131.94	31.93
5	A-E	7629	24000	0.62	100	17	0.01	100.04	132.03	132.01	31.97
6	E-F	4386	24000	0.62	100	77	0.05	100.08	132.01	131.96	31.88
7	F-G	2142	24000	0.62	100	19	0.01	100.01	131.96	131.95	31.94

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**SERVICE PLAN ESTIMATE FOR PROVIDING PUBLIC HEALTH SERVICES, ROADS,
HORTICULTURE AND STREET LIGHTING FOR COMMERCIAL PLOTTED
COLONY OF AREA MEASURING 2.325 ACRES. IN SECTOR-32, KARNAL**

DETAIL OF LENGTH OF FLUSHING WATER SUPPLY LINES

Sr. No.	Name of line	Length of line (In Mtr)	Saluice Valve	Air Valve
		100 mm I/d		
1	UGT-A	3.00	-	-
2	A-B	43.00	1	-
3	B-C	77.00	-	-
4	C-D	19.00	-	1
5	A-E	17.00	1	-
6	E-F	77	-	-
7	F-G	19	-	-
	Total	<u>255.00</u>	<u>2</u>	<u>1</u>

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SERVICE PLAN ESTIMATE FOR PROVIDING PUBLIC HEALTH SERVICES, ROADS & PARKINGS,
HORTICULTURE AND STREET LIGHTING FOR COMMERCIAL PLOTTED COLONY OF AREA
MEASURING 2.325 ACRES, IN SECTOR-32 KARNAL

SUB WORK NO. II

SEWERAGE

Sr. No.	Description	Qty./ Unit	Rate (In Rs.)	Amount (Rs. In lacs)
1	2	3	4	5

1 Providing, laying, jointing, & cutting salt glazed stone ware pipe and spte. into trenches including the cost of excavation bed concrete cost of man holes etc. complete in all respect

200
Mtr 1250
~~800~~ P/Mtr 3.25
~~2.31~~

1) 200mm I/d SW pipes Av. Depth upto 1.90M

2 Provision for the construction of STP complete in all respect.

0.06
MLD 200
lacs/MLD 12.00

③ Provision for lighting watching etc., cutting of roads, cartage of material etc. L.S. 1.60
~~0.50~~

④ Provision for over-flow pipe from STP to public L.S. 0.50

5 Provision for making connection with HSVP sewer line

L.S. 0.75
1.60

Total 17.75 ~~15.56~~ 16.55

Add 3% contingencies & P.E. Charges

0.53 ~~0.47~~ 0.55
Total 18.28 ~~16.03~~ 17.10

Add 49% Departmental charges, price escalation Unforseen and admn.

8.96 ~~7.86~~ 8.33
G. Total 27.24 ~~23.89~~ 25.33

Say RS. 23.89/lacs 27.24 lach.

(C.C. TO FINAL ABSTRACT OF COST)

Esmax Infradevelopers Pvt. Ltd.

Manoj Kumar

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SERVICE PLAN ESTIMATE FOR PROVIDING PUBLIC HEALTH SERVICES, ROADS AND PARKINGS, HORTICULTURE AND STREET LIGHTING FOR COMMERCIAL PLOTTED COLONY OF AREA MEASURING 2.325 ACRES, IN SECOR-32, KARNAL

DESIGN STATEMENT FOR SEWERAGE SCHEME

Sr. No. of Site	Category Size in (Mtr.) Nos. of plots.												Population @ 1 Person per 10 Sqmt.	Daily water requirement @ 45 LL/PHY/ DAY (in KL)	Daily water reqt. for PUC@ EXCL. Day	Total water requirement (in KL)	3 times water require- ment (in gallons/ day)	Sewer discharge 75% of water reqt. (Cu. sec.)	Designed discharge (Cu. sec.)	Spans in line	Ministry
	A		B		C		D		Self	Branch	Total										
	Self	Branch	Self	Branch	Self	Branch	Self	Branch													
1	2	4	5	6	7	8	8	10	11	12	13	14	15	16	17	18	19	20	21	22	
1	A-B	3	0	6	0	0	0	0	2163	0	2163	216	10	0	10	626	0.01	0.44	1/220	2.58	
2	B-C	6	3	6	1	1	0	12	2625	2761	6003	656	21	0	21	13537	0.07	0.61	1/220	2.53	
3	C-D	6	3	6	0	1	0	12	0	6595	6003	656	30	0	35	22688	0.03	0.48	1/220	2.58	
4	E-F	3	0	6	0	0	0	0	2163	0	2163	216	10	0	10	626	0.01	0.44	1/220	2.53	
5	F-G	0	3	6	1	1	0	12	4625	2761	6003	656	30	5	35	22828	0.03	0.44	1/220	2.48	
6	G-H	0	3	6	0	0	1	0	0	6946	6003	656	30	0	30	25854	0.03	0.44	1/220	2.51	
7	H-I	0	6	6	0	0	2	0	0	3572	13172	1317	56	10	66	45776	0.30	0.14	1/220	2.53	

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SERVICE PLAN ESTIMATE FOR PROVIDING PUBLIC HEALTH SERVICES, ROADS AND PARKINGS, HORTICULTURE AND STREET LIGHTING FOR COMMERCIAL PLOTTED COLONY OF AREA MEASURING 2.325 ACRES. IN SECOR-32, KARNAL

DESIGN STATEMENT FOR SEWERAGE SCHEME

Sr. No.	Name of line	Length of Lines (Mtrs.)	Fall in Line (Mtrs.)	Average NSL		Bed Levels		Depth (Mtrs.)		
				Upper End	Lower End	Upper End	Lower End	Upper End	Lower End	Average
1	2	23	24	25	26	27	28	29	30	31
1	A-B	17	0.10	100.01	100.02	99.26	98.16	0.75	1.85	1.31
2	B-C	79	0.36	100.02	100.04	99.16	98.80	0.86	1.24	1.05
3	C-D	13	0.10	100.04	100.04	98.80	98.70	1.24	1.34	1.29
4	E-F	17	0.10	100.01	100.00	99.26	98.16	0.75	0.84	0.80
5	F-G	79	0.36	100.00	100.03	99.16	98.80	0.84	1.23	1.04
6	G-D	49	0.22	100.03	100.04	98.80	98.58	1.23	1.46	1.35
7	D-STP	4	0.02	100.04	100.04	98.58	98.56	1.46	1.48	1.47

Esmx Infradevelopers Pvt. Ltd.

Ramya Kumar
Auth. Sign.

SERVICE PLAN ESTIMATE FOR PROVIDING PUBLIC HEALTH SERVICES, ROADS,
HORTICULTURE AND STREET LIGHTING FOR COMMERCIAL PLOTTED
COLONY OF AREA MEASURING 2.325 ACRES. IN SECTOR-32, KARNAL

DETAIL OF LENGTH OF SEWER LINES

Sr. No.	Name of line	Length of line (In Mtr)
		200 mm i/d
1	A-B	17.00
2	B-C	79.00
3	C-D	13.00
4	E-F	17.00
5	F-G	79.00
6	G-D	49
7	D-STP	4
	Total	<hr/> 258.00
	Say	260 Mtrs.

Esmax Infradevelopers Pvt. Ltd.

Manoj Kumar
Auth. Sign.

**SERVICE PLAN ESTIMATE FOR PROVIDING PUBLIC HEALTH SERVICES, ROADS & PARKINGS,
HORTICULTURE AND STREET LIGHTING FOR COMMERCIAL PLOTTED COLONY OF AREA
MEASURING 2.326 ACRES, IN SECTOR-32 KARNAL**

SUB WORK NO. III

STORM WATER DRAINAGE

Sr. No.	Description	Qty./ Unit	Rate (In RS.)	Amount (Rs. In lacs)
1	2	3	4	5

1 Providing, laying, jointing & cutting RCC pipe NP-3 with cement joint const. of manhole road gullies and excavation etc. complete in all respect

1) 400mm I/d 405 2500 10.13
Mtr P/Mtr

2 Provision for construction of Recharge Pit/Rain Water Harvesting well complete in all respect

2 Nos L.S. 5.00
200 x 2.50 Laleh each

3 Provision for cutting of road and cartilage of material and unforeseen items

L.S. 1.00

4 Provision for making connection with HSVP storm water line

L.S. 1.00

5 Provision for lighting watching etc.

L.S. 1.00

6 Provision for road gullies including cost of 300mm dia RCC pipe

L.S. 2.00

7 Provision for Temporary Disposal

L.S. ~~7.50~~

Total 18.13 ~~25.63~~ 25.13

Add 3% contingencies & P.E. Charges

0.54 ~~0.75~~ 0.75

Total 48.67 ~~27.48~~ 25.88

Add 48% Departmental charges, price escalation Unforeseen and admin.

9.15 ~~12.44~~ 12.68

Total 27.82 ~~40.87~~ 38.56

Say RS. ~~27.82~~ 38.56 Laleh.

(C.C. TO FINAL ABSTRACT OF COST)

Esmax Infradevelopers Pvt. Ltd.

Manoj Kumar

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**SERVICE PLAN ESTIMATE FOR PROVIDING PUBLIC HEALTH SERVICES, ROADS AND PARKINGS, HORTICULTURE AND STREET LIGHTING
FOR COMMERCIAL PLOTTED COLONY OF AREA MEASURING 2.325 ACRES, IN SECUR-32, KARNAL**

DESIGN STATEMENT FOR STORM WATER SCHEME

Sr. No.	Name of line	Area (Acre)		Discharge with 1/4" rain Intensity (Cusec.)	Design Discharge (Cusec.)	Size of pipe (mm)	Gradient	Design Velocity ft./Sec.	Length of Line (mtrs.)	Fall in Line (mtrs)	Formation Level		Bed Level		Depth (mtrs.)		
		Self	Branch								Total	Upper End	Lower End	Upper End	Lower End	Upper End	Lower End
1	2	3	4	5	7	8	9	10	11	12	13	14	15	16	17	18	19
1	A-B	0.88	0.00	0.08	3.52	400	1/500	2.52	152	0.27	101.40	101.10	99.58	99.31	1.22	1.78	1.81
2	B1-B	0.62	0.00	0.02	3.52	400	1/500	2.52	108	0.19	101.25	101.10	99.55	99.38	1.40	1.74	1.77
3	B-C	0.175	1.50	1.675	3.52	400	1/500	2.52	30	0.05	101.10	101.03	99.31	98.23	1.78	1.80	1.79
4	C1-C	0.62	0.00	0.02	3.52	400	1/500	2.52	108	0.19	101.30	101.03	99.05	99.38	1.35	1.70	1.73
5	C-RWH	0.00	2.30	2.325	3.52	400	1/500	2.02	5	0.01	101.00	101.05	99.23	99.25	1.40	1.81	1.81

Esmax Infradevelopers Pvt. Ltd.

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**SERVICE PLAN ESTIMATE FOR PROVIDING PUBLIC HEALTH SERVICES, ROADS,
HORTICULTURE AND STREET LIGHTING FOR COMMERCIAL PLOTTED
COLONY OF AREA MEASURING 2.325 ACRES, IN SECTOR-32, KARNAL**

DETAIL OF LENGTH OF STORM WATER LINES

Sr. No.	Name of line	Length of line (In Mtr)
		400 mm i/d
1	A-B	152.00
2	B1-B	108.00
3	B-C	30.00
4	C1-C	108.00
5	C-RWH	5.00
	Total	403.00

Say 405 Mtrs.

Esmax Infradevelopers Pvt. Ltd.

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SERVICE PLAN ESTIMATE FOR PROVIDING PUBLIC HEALTH SERVICES, ROADS & PARKINGS,
HORTICULTURE AND STREET LIGHTING FOR COMMERCIAL PLOTTED COLONY OF AREA
MEASURING 2.325 ACRES. IN SECTOR-32 KARNAL.

SUB WORK NO. IV

ROADS & PARKINGS

Sr. No.	Description	Qty./ Unit	Rate	Amount (Rs. In lacs)
1	2	3	4	5

1 Providing and laying of earth for levelling and filling av. Depth 0.90M as per site condition

2.325
Acre

175000/-
50000
P/Acre

4.07

2 Construction of Roads and Parkings including prov. & fixing of cement conc. Kerbs and channels as per site requirement complete in all respect and specifications as under :-

8035
sqm -Mtr

4870
P/Mtr

1200/-
72.42

i) 80 mm thick interlocking Paver blocks

ii) Over 230 mm thick WMM

iii) Over 150 mm thick GSB

liber/ } or 25mm B.L over
50mm DBM over
250mm WMM over
20mm G.S.B over

3 Provision for Indication Boards, Guide Map & marking of parking with thermoplastic paint.

L.S.

1.00
-0.50

4 Provision for demarcation burji carriage of material and unforeseen items

L.S.

1.00
1.50

⑤ Prov. & fixing Kerbs & channels —

L.S.

3.00

⑥ Prov. For traffic light contact etc.

L.S.

0.50

Total 285.30

81.99

4.80

2.46

Total 305.30

84.45

449.00

41.38

Total 454.89

125.83

Say RS. 454.89 less 125.83 Lakh.

Add 3% contingencies & P.E. Charges

Add 49% Departmental charges, price escalation Unforeseen and admn.

(C.C. TO FINAL ABSTRACT OF COST)

Esmax Infradevelopers Pvt. Ltd.

Mandir Kumar

Auth. Sign.

SERVICE PLAN ESTIMATE FOR PROVIDING PUBLIC HEALTH SERVICES, ROADS, HORTICULTURE AND STREET LIGHTING FOR COMMERCIAL PLOTTED COLONY OF AREA MEASURING 2.325 ACRES, IN SECTOR-32, KARNAL

DETAIL OF AREA OF ROADS & PARKINGS

1 Total Area of site	=	9408.93 Sqmtr.
2 Total Ground Floor Area of SCOs & E	=	3293.10 Sqmtr.
3 Area of PUS	=	36.00 Sqmtr.
4 Area of STP site	=	18.00 Sqmtr.
5 Area of UGT	=	18.00 Sqmtr.
6 Area of T. F.	=	12.00 Sqmtr.

Total 2 to 6 3377.10 Sqmtr.

Net Area under Roads & Parkings = 9408.93 - 3377.10

= 6031.83 Sqmtrs.

Say 6035.00 Sqmtrs

Esmax Infradevelopers Pvt. Ltd.

Manoj Kumar
Auth. Sign.

SERVICE PLAN ESTIMATE FOR PROVIDING PUBLIC HEALTH SERVICES, ROADS & PARKINGS,
HORTICULTURE AND STREET LIGHTING FOR COMMERCIAL PLOTTED COLONY OF AREA
MEASURING 2.925 ACRES, IN SECTOR-32 KARNAL

SUB WORK NO. V

STREET LIGHTING

Sr. No.	Description of Item	Qty	Rate (In Rs.)	Amount (Rs. In lacs)
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- 1 Providing Street Lighting on Roads and Parkings as per the standard specifications of the UHBVN Deptt.

2.325
Acres

250000
P/Acre

5.81

Total 5.81

Add 3% contingencies & P.E. Charges

0.17

Total 5.98

Add 49% Departmental charges, price escalation Unforeseen and admn.

2.93

Total 8.91

Say RS. 8.91 lacs

(C.C. TO FINAL ABSTRACT OF COST)

Esmax Infradevelopers Pvt. Ltd.

Manoj Kumar
Auth. Sign.

SERVICE PLAN ESTIMATE FOR PROVIDING PUBLIC HEALTH SERVICES, ROADS & PARKINGS,
HORTICULTURE AND STREET LIGHTING FOR COMMERCIAL PLOTTED COLONY OF AREA
MEASURING 2.326 ACRES. IN SECTOR-32 KARNAL.

SUB WORK NO. VI

HORTICULTURE

Sr. No.	Description of Item	Qty	Rate (In Rs.)	Amount (Rs. in lacs)
①	Prep. of lawn area @ trenching to ordinary soil upto a depth of 60cm @ rough dressing of area @ grassing L.S.			1.40

- 1 Providing and planting trees along side the boundary wall @ 12M c/c interval

Total length of boundary = $(77.11 + 124 \text{ M}) \times 2 = 402.22 \text{ Mtr}$
Say 402 Mtrs.

No. of trees = $402/12 = 33.50 \text{ Trees}$ Say 34 Nos. Trees

DETAIL OF COST FOR PLANTATION :-

Excavation =	Rs. 60
Manure =	Rs. 90
Tree planting =	Rs. 150
Tree guard =	Rs. 1000

TOTAL Rs 1300 Each ✓

34 Nos.	1300.00	0.44	✓
	Each		

Add 3% contingencies & P.E. charges

Total	<u>0.44</u>	1.44
	0.04	0.04

Total	<u>0.45</u>	1.48
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Add 48% Departmental charges, price escalation Unforeseen and admn.

	0.22	0.73
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Total	<u>0.67</u>	2.21
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2.21
Say Rs. 0.20 lacs

(C.O. TO FINAL ABSTRACT OF COST)

Esmax Infradevelopers Pvt. Ltd.

Blauy Kumar
Auth. Sign.

SERVICE PLAN ESTIMATE FOR PROVIDING PUBLIC HEALTH SERVICES, ROADS & PARKINGS,
HORTICULTURE AND STREET LIGHTING FOR COMMERCIAL PLOTTED COLONY OF AREA
MEASURING 2.325 ACRES, IN SECTOR-32 KARNAL

MTC COST FOR ROAD AND SERVICES

SUB WORK NO. VII

Sr. No.	Description	Qty	Rate (In Rs.)	Amount (Rs. in lacs)
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1	Providing for mtc. Charges for water supply, sewerage, drainage, Street Light, Horticulture etc. complete including operation and establishment charges as per HSVP norms after completion for 10 years	2.325 Acre	7.50 Lacs Per Acre	17.44
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2	Provision for mtc. of roads after 1st five year <i>with 50mm thick BM & 25 mm thick premix carpet</i>	6036 Sq.m.	300 P/Sqm.	18.11
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3	Provision for mtc. of roads after 10 years <i>with 50mm thick BM & 25 mm thick premix carpet</i>	6036 Sq.m.	600 P/Sqm.	36.48
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600 *36.21*

750 *45.26*

Total ~~66.72~~ *98.91*

Add 3% contingencies & P.E. charges *2.07* *2.97*

Total ~~67.99~~ *101.88*

Add 49% Departmental charges *33.17* *49.92*

Total ~~100.96~~ *151.80*

151.80
Say Rs. ~~100.00~~ lacs

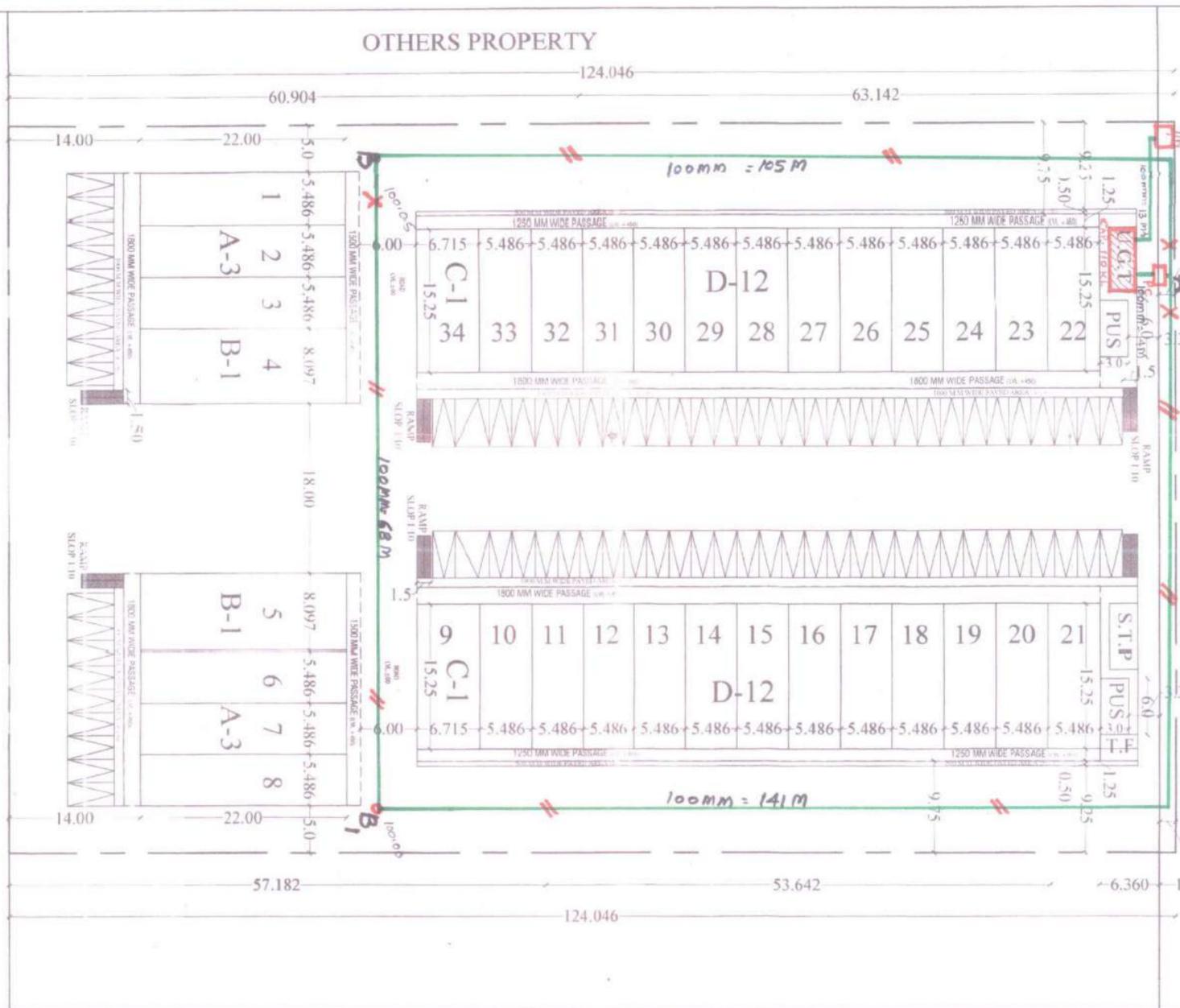
(C.O. TO FINAL ABSTRACT OF COST)

Emax Infradevelopers Pvt. Ltd.
Kangana
Auth. Sign.

60.00 METERS WIDE PERIPHERY ROAD

18.00 METERS WIDE GREEN BELT

12.00 METERS WIDE SERVICE ROAD



TO VILL. BUDA KHERRA ← 23.468 77.110 53.642 → TO VILL. PHOOSGARHI

AREA CHART

TOTAL PLOT AREA - A	2.32500	Acres	9408.93	Sq. mt.
AREA FALLING UNDER 120 M WIDE SERVICE ROAD	0.03182	Acres	128.77	Sq. mt.
NET PLANNED AREA	9408.93	Sq. mt.		
PERMISSIBLE GROUND COVERAGE	35.00%		3293.124	Sq. mt.
PROPOSED GROUND COVERAGE	35.00%		3293.104	Sq. mt.
PERMISSIBLE FAR	150.00%		14113.399	Sq. mt.
PROPOSED FAR (TENTATIVE)	140.00%		13172.414	Sq. mt.

GROUND COVERAGE

SR. NO.	TYPE	LENGTH	WIDTH	AREA (Sq. Mt.)	TOTAL NOS.	TOTAL AREA (Sq. Mt.)
1	S.C.O. (1 to 3 & 6 to 8)	5.486	22.000	120.692	0	724.152
2	S.C.O. (4 & 5)	8.097	22.000	178.134	2	356.268
3	S.C.O. (9 & 3A)	6.715	15.250	102.404	2	204.808
4	S.C.O. (10 to 33)	5.486	15.250	83.662	24	2007.676
GRAND TOTAL					34	3293.104

F.A.R. CALCULATION

S.C.O.A (1 TO 3, 6 TO 8)

1	GROUND FLOOR AREA	724.152
2	FIRST FLOOR AREA	724.152
3	SECOND FLOOR AREA	724.152
4	THIRD FLOOR AREA	724.152
TOTAL		2896.608

S.C.O.B (4 & 5)

1	GROUND FLOOR AREA	356.268
2	FIRST FLOOR AREA	356.268
3	SECOND FLOOR AREA	356.268
4	THIRD FLOOR AREA	356.268
TOTAL		1425.072

S.C.O.C (9 & 3A)

1	GROUND FLOOR AREA	204.808
2	FIRST FLOOR AREA	204.808
3	SECOND FLOOR AREA	204.808
4	THIRD FLOOR AREA	204.808
TOTAL		819.232

S.C.O.D (10 TO 33)

1	GROUND FLOOR AREA	2007.676
2	FIRST FLOOR AREA	2007.676
3	SECOND FLOOR AREA	2007.676
4	THIRD FLOOR AREA	2007.676
TOTAL		8031.504
GRAND TOTAL		13172.414

- REF.:-**
1. PROPOSED WATER SUPPLY LINES.
 2. PROPOSED TUBE WELL.
 3. PROPOSED PUMP CHAMBER.
 4. PROPOSED WGT.
 5. PROPOSED SALVAGE VALVE.
 6. PROPOSED FIRE HYDRANT.
 7. PROPOSED AIR VALVE.

Checked and approved by
 in forwarding with
 and notes
 attached with the submit

Bansal InfraDevelopers Pvt. Ltd.
 Auth. Sign.

19/5/2022

DATE: 19/5/2022

DRG. NO.: 00102

DATE: 19/5/2022

Sanjay Narang (ATP/HQ)
 Rohit Chauhan (DTP/HQ)
 Hitesh Sharma (P/SINGH) STP (HQ)
 K. Makrand Pandurang (IAS) DTP (HR)

For Bansal InfraDevelopers Pvt. Ltd.
 AR AMANDEEP BANSAAL
 CAZ2015/72167
 ESMAX DEVELOPER PVT. LTD.
 AUTHORIZED SIGNATORY



LAYOUT PLAN SHEET NO. 1

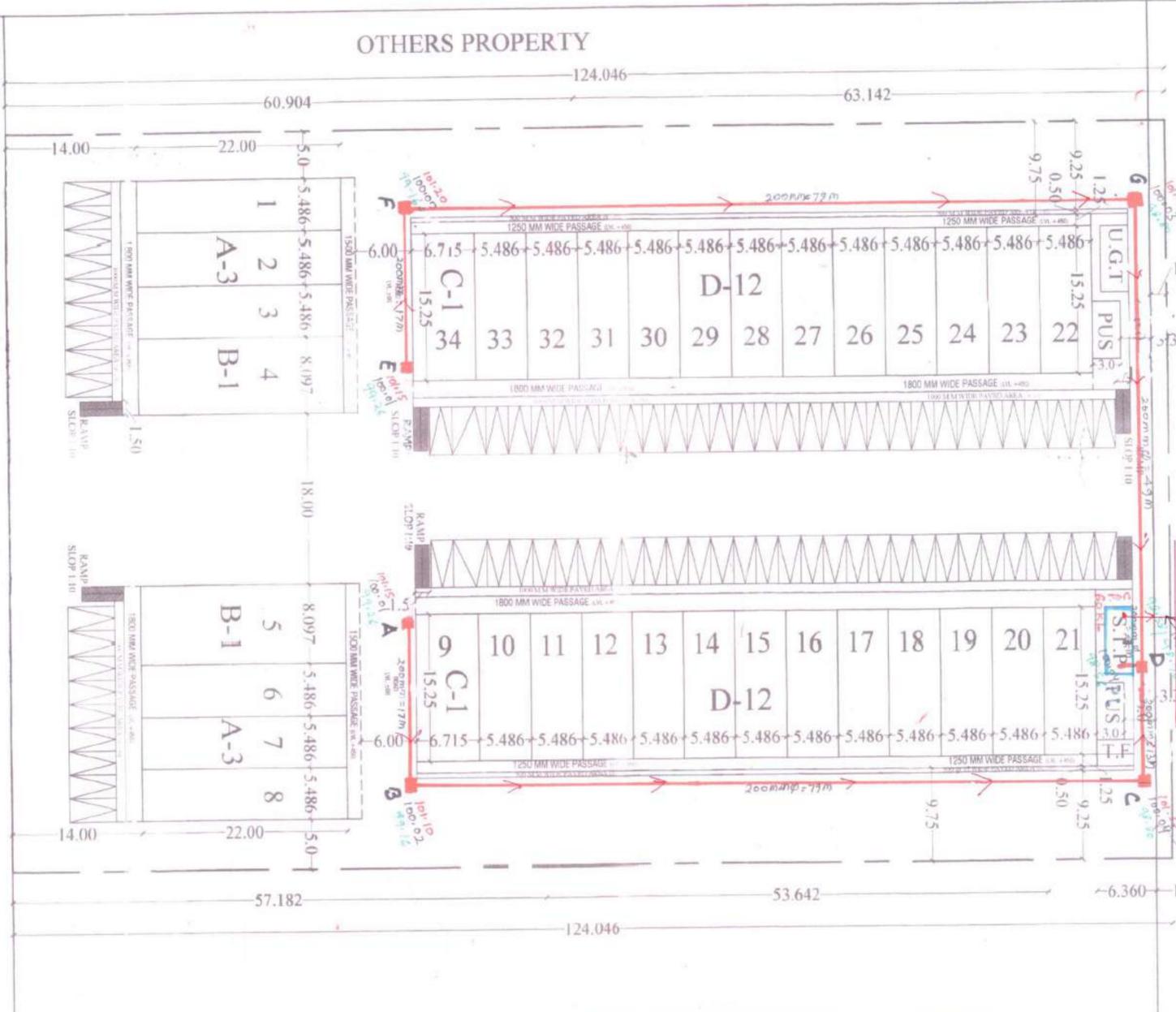
Proposed Layout Plan of Commercial Plotted Colony for an area measuring 2.325 acre falling in the revenue estate of village Phoosgarh, Sector - 32, Karnal, being developed by SA BABA HABITAT PVT. LTD. IN COLLABORATION WITH ESMAX DEVELOPER PVT. LTD.

NOTES:
 1. ALL DIMENSIONS ARE IN METERS.
 2. THE SHADING IS TO BE WITH AN AIR VALVE.
 3. ALL LINES ARE TO BE IN RED COLOR.
 4. ALL LINES ARE TO BE IN RED COLOR.
 5. ALL LINES ARE TO BE IN RED COLOR.
 6. ALL LINES ARE TO BE IN RED COLOR.
 7. ALL LINES ARE TO BE IN RED COLOR.

60.00 METERS WIDE PERIPHERY ROAD

18.00 METERS WIDE GREEN BELT

12.00 METERS WIDE SERVICE ROAD



TO VILL BUDA KHERA
24.00 METERS WIDE ROAD
77.110
53.642
TO VILL PHOOSGARH

AREA CHART

TOTAL PLOT AREA	=	2,32,500	Acres	94.08	Sq. mt.
AREA FALLING UNDER 120 M WIDE SERVICE ROAD	=	0,03,182	Acres	128.77	Sq. mt.
NET PLANNED AREA	=	94,08.93	Acres	128.77	Sq. mt.
PERMISSIBLE GROUND COVERAGE	=	35,00%	=	32,93.124	Sq. mt.
PROPOSED GROUND COVERAGE	=	35,00%	=	32,93.104	Sq. mt.
PERMISSIBLE F.A.R.	=	150.00%	=	14,113.389	Sq. mt.
PROPOSED F.A.R. (TENTATIVE)	=	140.00%	=	13,172.414	Sq. mt.

GROUND COVERAGE

SR. NO.	TYPE	LENGTH	X	WIDTH	AREA	X	TOTAL NOS.	TOTAL AREA	
				(Sq. M.)				(Sq. M.)	
1	S.C.O.-A	5.486	X	22.000	=	120.692	X	6	724.152
2	S.C.O.-B	8.097	X	22.000	=	178.134	X	2	356.268
3	S.C.O.-C	6.715	X	15.250	=	102.404	X	2	204.808
4	S.C.O.-D	5.486	X	15.250	=	83.662	X	24	2007.876
GRAND TOTAL								34	3293.104

F.A.R. CALCULATION
S.C.O.A (103.6708)

1	GROUND FLOOR AREA	=	724.152
2	FIRST FLOOR AREA	=	724.152
3	SECOND FLOOR AREA	=	724.152
4	THIRD FLOOR AREA	=	724.152
TOTAL		=	2896.608

S.C.O.B (48.51)

1	GROUND FLOOR AREA	=	356.268
2	FIRST FLOOR AREA	=	356.268
3	SECOND FLOOR AREA	=	356.268
4	THIRD FLOOR AREA	=	356.268
TOTAL		=	1425.072

S.C.O.C (98.34)

1	GROUND FLOOR AREA	=	204.808
2	FIRST FLOOR AREA	=	204.808
3	SECOND FLOOR AREA	=	204.808
4	THIRD FLOOR AREA	=	204.808
TOTAL		=	819.230

S.C.O.D (107.033)

1	GROUND FLOOR AREA	=	2007.876
2	FIRST FLOOR AREA	=	2007.876
3	SECOND FLOOR AREA	=	2007.876
4	THIRD FLOOR AREA	=	2007.876
TOTAL		=	8031.504

GRAND TOTAL = 13172.414

NOTE

- PARKING AREA CAN NOT BE SOLD IN ANY MANNER OR CIRCUMSTANCES.
- TO BE READ WITH CODE 1.2 (1) (IX) & 3.5 OF THE HARYANA BUILDING CODE - 2017.

- REF:-**
- PROPOSED SEWER LINES.
 - PROPOSED SITE OF STD.
 - AVERAGE NSL
 - PROPOSED FORMATION LEVELS
 - PROPOSED BED LEVELS.

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In forwarding letter No. 19/5/2022
and not
disturbance with the existing
conditions.

Sub-developers Pvt. Ltd.
Kavya Kumar
Auth. Sign.

OWNER SIGN
For Esmax Infra-developers Pvt. Ltd.
AR AMANDEEP BANSAAL
CA/2015/72167
ESMAX DEVELOPER PVT. LTD.
AUTHORIZED SIGNATORY

ARCHITECT SIGN
Auth. Sign.

DATE: 04.08.2023
SCALE: 1:50
SHEET NO: 1

Supervising Engineer (HO)
For Civil Engineering
19/5/2022
19/5/2022

(AJIT SINGH)
DTP(HQ)

(SANKAR NARANG)
ATP(HQ)

(ROHIT CHAUHAN)
DTP(HQ)

(HITESH SHARMA)
SIP (HQ)

(P. SINGH)
CIP (HR)

(MAHARAJ PAANDURANG, IAS)
DTP (HR)

Executive Engineer
BSPV
BSPV
BSPV

