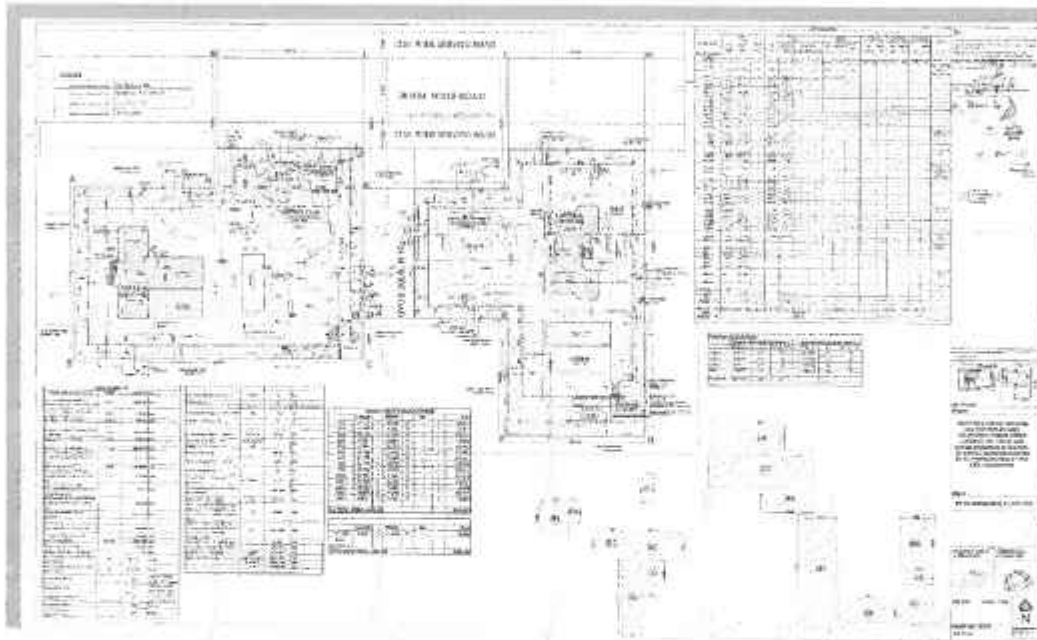


Service plan Estimate of Group housing colony for an area measuring 7.35625 acres (Licence no. 136 of 2023 dated 30/06/2023)
in sector - 32, Sohna, being developed by ST. PATRICKS REALTY PVT.LTD

SERVICE PLAN ESTIMATE



Service plan Estimate of Group housing colony for an area measuring 7.35625 acres
(Licence no. 136 of 2023 dated 30/06/2023) in sector – 32 SOHNA
Distt-GURUGRAM HARYANA

being developed
by ST. PATRICKS REALTY PVT.LTD

Authorized Signatory.


For

S.T. Patricks Realty Pvt. Ltd.

REPORT

SERVICE PLAN Estimate Service Group housing colony for an area measuring 7.35625 acres (Licence no. 136 of 2023 dated 30/06/2023) in sector - 32, SOHNA, Distt-GURUGRAM HARYANA situated on near Jaipur Highway at a distance of 50 Kms from Delhi Being the National Capital Region, the town has fast developed tendency and potential Further, it has also started sharing the growing residential load of Delhi. In order to relieve the growing pressure of population in National Capital of Delhi, it has been decided by the Haryana Govt. to establish various residential and other infrastructure sectors in village Dhunels & Berka Distt. Gurgram.

1. WATER SUPPLY

At present the source of water supply in this area is water Tankes/ Temp. Borewells/ HUDA Water Supply has been proposed to construct the underground tanks of capacity as per attached details, and at location for domestic purpose and for fire protection. The underground tanks will be fed from the tankers and HSVP supply,

2. DESIGN

The scheme has been designed for total population of 1103 Persons in residential Flats. The rate of Water supply per head per day has been taken as 45 liters as per HUDA and N.B.C. norms In addition to above necessary provision of water for miscellaneous purpose have been taken into accounts for calculating the maximum quantity of water requirement.

3. PUMP CHAMBERS AND PUMPING MACHINERY

It is proposed to equip each tube well with an electrically driven set eject type or submersible pump capable of delivering 18000 liters per hour. It is also proposed to equip the required No's pumping sets with stand by diesel engines/gen set for operation during of electricity.

4. UNDER GROUND STORAGE

Provision has been made for water which caters for the domestic as well as for firefighting requirement.

5. BOOSTING STATION

The Boosting station is being planned near underground storage tank and near S.T.P. Catering to the above requirement

6. DISTRIBUTION SYSTEM

The Distribution system for this development has been designed as per HSVP norms @ 3 times the average rate of flow on Hazen William formula. Necessary provision for laying 100MM (K7)/DI pipes conforming to event IS standards along with valves and specials has been made in the project. The minimum terminal head at any point will be more than 43.00 meters

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so that it can serve all the floors construction envisaged in the plan. Minimum pipe dia for distribution is kept as 100 MM dia.

7. RISING MAINS

Rising Mains for HSVP (100MM DIA DI-K7) water main or sector Road to water works have also been proposed and provision has been made in this estimate.

8. SEWERAGE

The sewer lines have been designed for 3 times the average DWF in relation to the water supply demand assuming that 75% of the domestic water supply shall find its way into the proposed sewer. SW pipe sewers have been proposed and designed to run half full. The Sewers have been designed on 0.77 M per second minimum velocity i.e., self-cleansing velocity. Necessary proviso for laying SW pipes manholes etc. has been made in this estimate.

9. STORM WATER DRAINAGE

The Storm water drainage is being designed as per HSVP norms to carry 6.25 mm rainfall per Hour for intramural and 3.125 mm rainfall intensity for extramural sewers. Also suitable provision are contemplated in our scheme to ensure better recharging of the underground water table in the area R.C.C PIPE NP-3 drain with minimum 250 mm dia. is proposed in the area. The Storm water collected will be discharged into the main HUDA sewer lying near the commercial colony by pumping of storm water or by gravity.

10. ROADS

The Road in the colony has been planned as per requirement of HUDA, the following specifications have been adopted which are reproduced below.

The Specification of Roads

- (i) GSB-200 mm in one layer
- (ii) WHM -250 mm in two layers
- (iii) 50 mm thick DBM
- (iv) 30 MM THICK B.C

The above constructions shall be done on well compacted sub grade as per specifications complete work will be carried out as per MORTH specifications, IRC guidelines or HSVP specifications, whichever applicable.


11. STREET LIGHTING

The provision has been made on a lump sum basis.

12. HORTICULTURE

The Usual provision of Roadside plantation and tree guards has been made for all roads. The parks shall be developed by providing lawns etc.

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For 
S.T. Patricks Realty Pvt. Ltd.

13. SPECIFICATIONS

The work will be carried out in accordance with the standard specifications of P.H. Departments as laid down by HUDA & Haryana Government.

14. RATES

An estimate for providing services in this pocket has been prepared on the recent market rates.

15. COST

The total cost of the development in this Project Phase one including various PH & B & R services works out to Rs. 825.38 lacs which include 3 % contingency and P.E charges and 49% departmental charges price escalation, unforeseen, administrative charges.

The cost per gross acre for this phase works out to Rs. 112.20 lac which covers the provision of services like water supply, sewerage, storm water drainage, roads, street lighting and plantations including plantations maintenance thereof as well as future expansion whatsoever indicated.

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TOTAL PLOT AREA DETAIL

i) Main Dwelling Units (Tower A+B)	=	193 No's
@ 5 Persons per dwelling units	=	193 x 5
	=	965 Persons
ii) EWS Units (Tower-C)	=	35 No's
@ 2 Persons per dwelling units	=	34 x 2
	=	68 Persons
iii) Service Personal	=	35 No's
@ 2 Persons per dwelling units	=	35 x 2
	=	70 Persons
Total Persons	=	1103 Persons
Domestic Water requirement		
1103 x 172.50 Lt per capita per day	=	1,90,267.5 Ltrd
iv) Swimming Pool (2Nos) LS	=	30000 Ltrs
Total	=	190.27 + 30.00
	=	220.27 KLD
SAY	=	220 KL

1. DESIGN CALCULAION

a) Land Scape / Irrigation Purpose		
@ 15.36% LS Total Area @ 25 KLD		
4270.024 Sq.mt OR 1.05 Acres	=	26.25 KL
Total = 220 + 26.25	=	246.25 KL
Say	=	250 KLD
Total Demand = 190 KLD		
65% for Domestic Use	=	123.50 KLD Say 125 KLD
35 % for Flushing Use	=	66.50 KLD Say 70 KLD

2. BORE WELLS

Approx. discharge of borewells @ 15KL/hour and working 16 hours/day

a) Total water demand	=	250 KLD
b) Number of borewells 250/15 x 16	=	1.04
Add 10% as standby	=	0.10
Total	=	1.14
Say	=	1.00 Nos

$$\begin{aligned} \text{Fire} &= 100\sqrt{P} \\ &= 100\sqrt{1.103} \\ &= 105.02 \text{ KL OR SAY } = 110 \text{ KL} \end{aligned}$$

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For
S.T. Patricks Realty Pvt. Ltd.

3. PUMPING MACHINERY FOR TUBE WELL HEAD OF PUMP: -

- 1) Gross working head = 70.00 Mts
- 2) Average Fall in S.L = 6.00 Mts
- 3) Depression head = 6.00 Mts
- 4) Friction Loss in Main = 5.00 Mts
- Total = 87.00 Mts Say 90Mts
- BHP = $\frac{15000 \times 90}{60 \times 60 \times 75 \times 0.60} = 8.33 \text{ HP (with 60\% efficiency) = 10.00 BHP}$

4. UNDER GROUND WATER TANK FOR DRINKING WATER

Daily requirement for domestic use = 125 KL
Capacity of Under Ground Tank taking Storage 100% Say = 125 KL

Fire Fighting $100\sqrt{\text{Population}} = 100\sqrt{1103} = 105.02 \text{ KL Say } = 110 \text{ KL}$
UGT of Capacity = 125 + 110 = 235 KL OR SAY 250 KL

Hence it is proposed to provide a UGT of Capacity is 250 KL which also includes 110 KL Capacity for firefighting as well. This tank will have two compartments, one for fire and the other for Domestic Use. The water first enters the fire compartment then overflows to the domestic use component, so that the water in the Fire compartment shell remains fresh.

4	PUMPS FOR DOMESTIC WATER SUPPLY FOR UGT		
1	Potable water Requirement per day	125	KL
2	Pumping Duration Per day	10	Hrs
3	Suction Lift	5	Mts
4	Clear head Required (Height of the building)	60	Mts
5	Residual Head	5	Mts
6	Friction head loss	4	Mts
7	Total head required	72	Mts
8	Discharge of pump $125/10 = 12.50 \text{ KLH OR } 208 \text{ LPM}$ SAY 220	239.56 LPM Say 220 LPM	LPM
9	Power required $(\text{LPM} \times \text{head (m)})/4500 \times 0.60$ $220 \times 225 / 60 \times 75 \times 0.60$	18.33	HP
		Say 20.00	HP

It is proposed to provide 1set of 2No's pumps (1working & 1 stand by) of 220 LPM discharge at 225M head (ONE pump is working and other as standby for domestic supply).

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For
S.T Patricks Realty Pvt. Ltd.

• **UNDER GROUND WATER TANK FOR (FLUSHING WATER SUPPLY)**

Daily requirement for Flushing Water = 70.00 KL
For Horticulture = 26.25 KL
Total = 96.25 KL SAY 100 KL
Capacity of Under Ground Tank taking 8hra Storage = 100 % i.e. 100 KL

6	Pumps for Flushing water supply for UGT		
1	Flushing water Requirement per day	100	KL
2	Pumping Duration per day	10	Hrs
3	Suction Lift	0	Mtrs
4	Clear head Required (Heights of the building)	11.25	Mts
5	Residual head	05	Mts
6	Friction Head Loss	5	Mts
7	Total Head Required	75 LPM	Mts
8	Discharge of pump = $100 / 1 \times 10 = 10 \text{ KLH/H} = 166.66$	166.66 SAY 200 LPM	LPM
9	Power Required (LPM x Head(M)/4500x.60(eff)) $200 \times 75 / 225 \times 0.60$	16.66	HP
Say		17.50	HP

7. **Diesel Gen Set**

- T.W 1No x 10 = 10.00 HP
 - Pump set (Dom) 1 x 20 = 20.00 HP
 - Pump Set (Flushing) 1 x 17.50 = 17.50 HP
 - Lighting etc = 10.00 HP
- Total = 47.50 HP
Or $47.50 \times 0.746 \times 1.50 = 53.15 \text{ KVA}$ Say 55 KVA

8. **CAPACITY OF STP**

- $0.80 \times 190 = 152 \text{ KL}$
- Total = 0.16 MLD
Add 5% for mechanical Factor = 7.60
= 159.60 KLD
SAY = 160 KLD

Authorized Signatory.


For
S.T. Patricks Realty Pvt. Ltd.

Service plan Estimate of Group housing colony for an area measuring 7.35625 acres (Licence no. 136 of 2023 dated 30/06/2023) in sector - 32, Sohna, being developed by **ST. PATRICKS REALTY PVT.LTD**

FINAL ABSTRACT OF COST			
SUB WORKS	PERTICUERS	Amount in Lacs	
SUB WORKS NO-1	WATER SUPPLY	276.51	Lacs
SUB WORKS NO-2	STORM WATER DRAINAGE	112.34	Lacs
SUB WORKS NO-3	SEWERAGE	71.89	Lacs
SUB WORKS NO-4	ROAD AND FOOTPATH	146.22	Lacs
SUB WORKS NO-5	STREET LIGHTING	28.224	Lacs
SUB WORKS NO-6	HORTICULTURE	5.08	Lacs
SUB WORKS NO-7	MAINTENANCE OF SERVICES FOR 10 YEAR INCLUDING RESURFACING OF ROAD AFTER 1st 5 YEAR AND 2nd 10 YEAR	185.12	Lacs
TOTAL COST		825.38	Lacs
AREA OF THE SITE		7.35625	ACRES
COST FOR ONE ACRES		112.20	Lacs/Acres

Executive Engineer
HSVP Division No. VI
Gurugram

Superior Engineering
HSVP, Circle-II, Gurugram

Checked subject to Comments
In forwarding letter No. 103915
Dt. 24/04/2024...and notes
Attached with the estimate

Executive Engineer (M)
for Chief Engineer-I
HSVP, Panchkula

Director
Town & Country Planning
Haryana, Chandigarh

Authorized Signatory

S.T. Patricks Realty Pvt. Ltd.



हरियाणा शहरी विकास प्राधिकरण

HARYANA SHEHARI
VIKAS PRADHIKARAN

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Toll Free No. : 1800-180-3030
Website : www.hsvp.in
Email : cencrhuda@gmail.com

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

CE-I No. 102815

Dated: 24/04/2024

Annexure-A

SUB:- Approval of service plan estimate of Group Housing Colony over an area measuring 7.35625 acres falling under licence no. 136 of 2023 dated 30.06.2023, in the revenue estate of Village Dhunela, Sector-32, Sohna, District Gurugram being developed by M/s St. Patricks Realty Pvt. Ltd.

Technical note and comments:-

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




हरियाणा शहरी विकास प्राधिकरण

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

9. A minimum 100 I/d C.I/D.I, 200mm I/d SW and 400mm id RCC NP-3 pipes will be used for water supply, sewerage and storm water drainage respectively.
10. Standard X-section for S.W. pipes sewer, RCC pipes sewer etc. will be followed as are being adopted in Haryana Public Health Engineering Deptt. or HSVP. If needed, the same may be sought by the colonizer from concerned Executive Engineer of HSVP.
11. The X-section, width of roads, will be followed as approved by the Chief Town Planner, Haryana, Chandigarh. The kerbs and channels will also be provided as per approved X-section and specifications. If needed, the same may be sought by the colonizer from concerned Executive Engineer of HSVP.
12. The specifications for various roads will be followed as per IRC/MORTH specifications.
13. The wiring system of street lighting and specifications of street lighting fixture will be as per relevant standards.
14. This shall confirm to such other conditions as are incorporated in the approved estimate and the letter of approval.


Executive Engineer (M),
for Chief Engineer-I, HSVP,
Panchkula.

Service plan Estimate of Group housing colony for an area measuring 7.35625 acres (Licence no. 136 of 2023 dated 30/06/2023)
in sector - 32, Sohna, being developed by ST. PATRICKS REALTY PVT.LTD

ABSTRACT OF COST				
Sub Work-No-1			WATER SUPPLY	
S.no	Particulars			(Amount in Lacks)
1	SUB HEAD NO-01	HEAD WORKS	=	23.32
2	SUB HEAD NO-02	PUMPING MACHINE	=	99.00
2	SUB HEAD NO-02	RISING MAIN	=	5.44
3	SUB HEAD NO-03	DISTRIBUTION SYSYTEM	=	13.53
4	SUB HEAD NO-04	FLUSHING/IRRIGATION	=	14.05
5	SUB HEAD NO-05	FIRE FIGHTING	=	24.84
TOTAL			=	180.17
ADD 3% CONTINGENCIES & P.E CHARGES			=	5.41
TOTAL			=	185.57
ADD 49% DEPTT.CHARGES, PRICE ESCALATION UNFORESEEN & ADMINISTRATION CHARGES			=	90.93
TOTAL			=	276.51

Authorized Signatory.

For 
S.T.Patrick's Realty Pvt. Ltd.

Service plan Estimate of Group housing colony for an area measuring 7.35625 acres (Licence no. 136 of 2023 dated 30/06/2023)
in sector - 32, Solina, being developed by **ST. PATRICKS REALTY PVT.LTD**

Sub work No. 1		Water Supply	
SUB HEAD No. 1		HEAD WORKS	
S.no	Description Qty./ Rate / Unit	Amount in Lacs	
1	Boring and installing 510 mm tubewell with reverse rotatry rig complete with pipe and stainer to a depth of about 120 metre in all respect 1 no. @ Rs. 15,00,000/- each	15.00	Lacs
2	Provision for rising mains, connecting tubewell with water main and bypass arrangements with DI/CI Pipe "B" Class of reputed make.	-	
	(a) 100 mm dia - 56M @ Rs. 1460/-	0.82	Lacs
3	Provision for carriage of material and other unforeseen items (L.S)	1.00	Lacs
4	Provision for construction of tube well chamber 1.50 x 1.50 x 2 No's @ Rs 1.00 Lacs each for Housing T. W	2.00	Lacs
5	Provision for construction of Boosting Chamber (L.S)	4.50	Lacs
	Total	23.32	Lacs

TUBE WELL MATERIAL STATEMENT		
	PIPELINE	100 MM DIA
1	TW1 to UGT	56.00
	TOTAL	56.00

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S.T Patricks Realty Pvt. Ltd.

Sub work No. 1		Water Supply	
SUB HEAD No. 1		Pumping Machine	
S.no	Description Qty./ Rate / Unit	Amount in Lacs	
3	Providing for diesel engine generator set each for standby arrangements for TW & booster pumps complete in all respects with following capacities.		
a)	55 KVA 1 No. (L.S)	8.25	Lacs
5	Providing and installing Hydro pneumatic pumping sets for domestic and flushing supply capable of delivering following capacities of water complete with motor and other accessories.		
a)	Domestic Supply 220 LPM @ 225Mts. Head, 20.00 HP (2No's) @ Rs 4.00 Lacs each	8.00	Lacs
b)	Flushing supply 200 LPM @ 225 Mts, Head 17.50HP (1+1=2No's) @ Rs 3.50 Lacs each	7.00	Lacs
5	Construction of U.G Tanks of capacity of 250KL Incl. 110KL for Fire & 100 KL cap for fire near STP = 250 +100 = 350KL @ 5500/KL <i>FLUSHING</i>	19.25	Lacs
6	Provision for making foundation and erection of pumping machinery (LS)	2.00	Lacs
7	Provision for pipes, valves and specials inside the pump chamber and boosting chamber (LS)	2.00	Lacs
8	Provision for electric services connection including electrical fitting for tube well and boosting chamber etc including cost of transformer (LS)	2.50	Lacs
9	Providing and fixing pumping sets of following capacity for fire protection		
(i)	180 LPM at 225M head 1 Nos Jockey pump 15. HP		
(ii)	2280 LPM at 225M head 1 Nos 190HP		
(iii)	2280 LPM at 225M head 1 Nos Diesel 190HP	50.00	Lacs
	Total	99.00	Lacs

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S.T Patricks Realty Pvt. Ltd.

Service plan Estimate of Group housing colony for an area measuring 7.35625 acres (Licence no. 136 of 2023 dated 30/06/2023) in sector - 32, Sohna, being developed by ST. PATRICKS REALTY PVT.LTD

SUB WORK No. 1		Water Supply	
SUB HEAD No. 2		HUDA RISING MAIN	
S.no	Description Qty./ Rate / Unit	Amount in Lacs	
1	Providing, Laying, Jointing & testing pipelines including cost of excavation etc complete in all respect	-	
	C.I/D.I Pipe 150 mm dia = 88Mtr @ 2040 Per SqMt	1.795	Lacs
2	Providing & fixing sluice valve including cost of surface box and masonry chamber etc complete in all respect	-	
	150 mm I/d 1 No. @ 12000	0.120	Lacs
3	Providing & fixing indicating plates for sluice valve and air valves 2 no @ Rs. 1000/- each	0.020	Lacs
5	Provision of carriage for materials and other unforeseen itmes L.S.	0.50	Lacs
6	Provision for Making water supply connection with HUDA Line on master road (L/S)	2.00	Lacs
7	Provision for cutting of roads and making good to its original condition	1.00	Lacs
	TOTAL	5.44	Lacs
(C/o to Abstract of cost for sub work No. 1)			
Material Statement			
	Line	HUDA - UG Tank	
1	FROM MAIN TO UGT	88	
	Total Length	88	

Authorized Signatory:


For
S.T Patricks Realty Pvt. Ltd.

Service plan Estimate of Group housing colony for an area measuring 7.35625 acres (Licence no. 136 of 2023 dated 30/06/2023)
in sector - 32, Sohna, being developed by ST. PATRICKS REALTY PVT.LTD

SUB WORK No. 1		Water Supply	
SUB HEAD No. 3		DISTRIBUTION SYSTEM	
		Domestic	
S.no	Description Qty./ Rate / Unit	Amount in Lacs	
1	Providing, Laying, Jointing and testing C.I./D.I pipe lines including Fittings, Valves, Cost of Excavation etc. complete in all respect (Domestic)	-	
	150 mm Dia = 487 M @ Rs 2040 /- per Mtr.	9.93	Lacs
2	Provision for carriage of materials and other unforeseen item (L.S)	2.00	Lacs
3	Providing & fixing valves incl. cost of surface box & masonry chamber etc complete in all respect	-	
	150 mm dia 4Nos @ Rs 15000/- each	0.60	Lacs
4	Provision for including Plate Air Valve, Scour Valve etc (L.S)	1.00	Lacs
TOTAL		13.53	Lacs
(C/o to Abstract of cost for sub work No. 1)			

MATERIAL STATEMENT OF WATER SUPPLY LINE DOMESTIC		
S.no	Line	Length in Mts
		100 dia
1	UGT-W1	15
2	W1-W2	118
4	W2-W3	57
5	W3-W4	92
6	W4-W5	28
7	W5-W6	37
8	W6-W7	97
9	W7-W8	43
TOTAL		487

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For
S.T. Patricks Realty Pvt. Ltd.

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SUB WORK No. 1		Water Supply	
SUB HEAD No. 04		FLUSHING / IRRIGATION	
S.no	Description Qty./ Rate / Unit	Amount in Lacs	
1	Providing, Laying, Jointing & testing pipes lines confirming to IS 4985 (Upvc/DI) including cost of excavation etc complete in all respect	-	
(a)	150 mm Dia = 463 meter @ Rs. 2040/- per Mtr	9.45	Lacs
2	Providing & fixing 25 mm dia irrigation hydrant valve complete in all respect		
(a)	25mm dia = 30 No's @ 5000 each	1.50	Lacs
3	Providing for carriage of material and other unforeseen items (Lump Sum)	1.00	Lacs
4	Providing for cutting roa & making good to its original condition.	1.00	Lacs
5	Providing and fixing Sluice valve include. Cost of Surface boxes and masonry Chambers etc. complete in all respect.		
	1500 MM dia 4 Nos @ 15000/- each	0.60	Lacs
6	Providing and fixing indicating plates (L.S)	0.50	Lacs
TOTAL		14.05	Lacs
(C/o to Abstract of cost for sub work No. 1)			

MATERIAL STATEMENT FOR FLUSHING LINE			
S.no	Line	Length	
		100 MM DIA	
1	STP to II	5	M
2	II-I2	26	M
3	I2-I3	83	M
4	I3-I4	39	M
5	II-I5	55	M
6	I5-I6	18	M
7	I5-I7	74	M
8	I7-I8	76	M
9	I8-I9	39	M
10	I9-I10	48	M
Total length		463	M

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For 
S.T. Patricks Realty Pvt. Ltd.

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SUB WORK No. 1		Water Supply	
SUB HEAD No. 05		FIRE FIGHTING (FIRE RING)	
S.no	Description Qty./ Rate / Unit	Amount in Lacs	
1	Providing, Laying, Jointing & testing M.S pipes lines including cost of excavation etc complete in all respect	-	
(a)	M.S pipe 150 mm Dia = 965 metre @ Rs. 2040/- per Mtr	19.69	Lacs
(b)	80 mm Dia CI/DI PIPE (L.S)	0.50	Lacs
2	Providing & fixing sluice valve		
(a)	150mm dia 3no @ Rs 15000/-each	0.45	Lacs
3	Providing and fixing fire Hydrant with accessories 20Nps @ Rs 15000/- each	3.00	Lacs
4	Providing for carriage of materials & other unseen items etx L.S	1.00	Lacs
5	Providing for indicating plates (L.S)	0.20	Lacs
TOTAL		24.84	Lacs
(C/o to Abstract of cost for sub work No. 1)			

MATERIAL STATEMENT FOR FIRE RING			
S.no	Line	Length	
		100 MM DIA	
1	FIRE TANK to F1	15	M
2	F1-F2	117	M
3	F2-F3	62	M
4	F3-F4	61	M
5	F1-F5	75	M
6	F5-F6	97	M
7	F6-F4	58	M
8	F4-F7	26	M
9	F7-F11	77	M
10	F7-F8	83	M
11	F8-F9	85	M
12	F9-10	77	M
13	F10-F11	132	M
Total length		965	M

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S.T. Patricks Realty Pvt. Ltd.

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in sector - 32, Sohna, being developed by **ST. PATRICKS REALTY PVT.LTD**

MATERIAL STATEMENT OF STORM WATER				
S.no	Name of storm Line			400 MM Dia Drain
1	A	to	B	31
2	B	to	C	56
3	C	to	D	29
4	D	to	E	54
5	E	to	F	42
6	F	to	G	21
7	A	to	H	42
8	H	to	I	65
9	I	to	J	56
10	J	to	G	32
11	G	to	MAIN	10
12	K	to	L	70
13	L	to	M	54
14	M	to	N	52
15	N	to	O	44
16	O	to	P	23
17	K	to	Q	53
18	Q	to	R	55
19	R	to	S	19
20	S	to	T	42
21	T	to	P	28
22	P	to	OUT	10
TOTAL				888

Authorized Signatory,


For
S.T.Patrick's Realty Pvt. Ltd.

Sub work No. II		STORM WATER DRAINAGE	
S.no	Description	Amount Rs	
1	Providing & Laying RCC pipe drain class NP-3 with cement joint manholes, excavation etc complete in all respect.		
(a)	R.C.C pipe 400 mm dia = 888 Mts @ Rs. 2500/-	22.20	Lacs
2	Provision for construction of Double Road Gullies with 300 mm i/d RCC pipe connecting with manholes complete in all respect (L.S)	3.00	Lacs
3	Provision for carriage of Material and other unforeseen items (L.S)	2.00	Lacs
4	Provision for lightning ,Watching and temporary diversions of traffic	2.00	Lacs
5	Provision for making connection with HUDA Line (L.S)	2.00	Lacs
6	Provision for cutting of roads and making good to its in original condition.(L.S)	2.00	Lacs
7	Provision for timbering and shoring (L.S)	2.00	Lacs
8	Provision for Rain Water Harvesting system at selected places as applicable 8 Nos of Rain Water harvesting @ 3.50 Lacs each	28.00	Lacs
9	Provision for Temporary Disposal arrangement till HUDA services are Provided	10.00	Lacs
Total		73.20	Lacs
Add 3% contingencies & PH Charges		2.20	Lacs
Total		75.40	Lacs
Add 49% departmental charges, price escalation unforeseen, admn. Charges		36.94	Lacs
TOTAL		112.34	Lacs
(C/o to Final Abstract of cost)			

Authorized Signatory


S.T. Patricks Realty Pvt. Ltd.

Service plan Estimate of Group housing colony for an area measuring 7.35625 acres (Licence no. 136 of 2023 dated 30/06/2023)
in sector - 32, Sohna, being developed by **ST. PATRICKS REALTY PVT.LTD**

MATERIAL STATEMENT OF SEWERAGE SCHEME				
Sr. No.	Name of Sewer Line			Length of Sewer in meters
				200 DIA
1	2			3
1	A	to	B	70
2	B	to	C	54
3	C	to	D	20
4	D	to	E	45
5	E	to	F	15
6	F	to	G	35
7	G1	to	G	11
8	G	to	H	35
9	H	to	I	60
10	I	to	J	16
11	J1	to	J2	60
12	J2	to	J	66
13	J	to	STP	10
TOTAL LENGTH				497

Authorized Signatory:


For
S.T.Patrick's Realty Pvt. Ltd.

Service plan Estimate of Group housing colony for an area measuring 7.35625 acres / Licence no. 136 of 2023 dated 30/06/2023)
in sector - 32, Sohna, being developed by **ST. PATRICKS REALTY PVT.LTD**

Sub WORK No. III		SEWERAGE SCHEME	
S.no	Description	Rs. (in lacs)	
1	Providing, Jointing, cutting & testing SW Pipes class 'A' and lowering into trenches including cost of Excavation, bed concrete, cost of manholes etc complete		
(a)	SW pipe 250 mm = 497M @ Rs. 2000 M	9.94	Lacs
2	Providing for carriage of material and other unforeseen items (L.S.)	2.00	Lacs
3	Provision for lighting and watching (LS)	2.00	Lacs
4	Provision for cutting of roads & making good to its original condition. (LS)	1.00	Lacs
5	Provision for making connection with HUDA line on master road (LS)	2.00	Lacs
6	Provision for construction Sewerage Treatment Plant Including machinery complete in all respect. (160KL) @ 16000/KL	25.60	Lacs
7	Provision for timbering & shoring (LS)	1.00	Lacs
8	Providing and laying 150 MM dia CI/DI rising main from STP to HUDA sewer line 15 Mts OF 2040 /- Per Mtr	0.31	Lacs
9	Provision for oblique junction (LS)	1.00	Lacs
10	Provision for vent pipe as per P.H required (L.S)	2.00	Lacs
	Total	46.85	Lacs
	Add 3% contingencies & PH Charges	1.41	Lacs
	Total	48.25	Lacs
	Add 49% departmental charges, price escalation unforeseen, admn. Charges	23.64	Lacs
	TOTAL	71.89	Lacs
(C/o to Final Abstract of cost)			

Authorized Signatory.


For
S.T. Patricks Realty Pvt. Ltd.

Service plan Estimate of Group housing colony for an area measuring 7.35625 acres (Licence no. 136 of 2023 dated 30/06/2023)
in sector - 32, Sohna, being developed by ST. PATRICKS REALTY PVT.LTD

MATERIAL STATEMENT FOR ROADS							
9.0 M WIDE ROAD							
A	=	22	x	2	=	44	M
B	=	17	x	4	=	68	M
C	=	36	x	4	=	144	M
D	=	26	x	1	=	26	M
E	=	45	x	1	=	45	M
F	=	27	x	1	=	27	M
G	=	43	x	1	=	43	M
H	=	33	x	2	=	66	M
I	=	21	x	2	=	42	M
J	=	7	x	1	=	7	M
K	=	13	x	1	=	13	M
TOTAL 9.0M WIDE ROAD						=	525 M
6.0 M WIDE ROAD							
a	=	15	x	1	=	15	M
b	=	26	x	1	=	26	M
c	=	48	x	1	=	48	M
d	=	25	x	1	=	25	M
e	=	35	x	1	=	35	M
TOTAL 6.0 M WIDE ROAD						=	149 M
ROAD		LENGTH	WIDTH	=	TOTAL AREA		
9.0M WIDE ROAD	=	525.00	5.50	=	2887.50	Sq.mt	
6.0 M WIDE ROAD	=	149.00	6.00	=	894.00	Sq.mt	
		674.00	M	=	3781.50	Sq.mt	
10% FOR CURVE STONE/JUNCTION	=	67.40	M	=	378.15	Sq.mt	
TOTAL	=	741.40	M	=	4159.65	Sq.mt	
SAY		750	M	=	4160.00	Sq.mt	


Authorized Signatory,


S.T. Patricks Realty Pvt. Ltd.

Service plan Estimate of Group housing colony for an area measuring 7.35625 acres (Licence no. 136 of 2023 dated 30/06/2023)
in sector - 32, Sohna, being developed by **ST. PATRICKS REALTY PVT.LTD**

Sub work No. IV			
ROAD WORK			
S.no	Description Rate	Units / Qty /	Amount in Rs.
1	Provision for levelling & earth filling as per site conditions 7.35625 Acres @ Rs. 175000/-		12.87 Lacs
2 (i)	Construction of rodas by providing Granular sub-base 200 mm as per MORT & H Specifications conforming to clause 401 grading -B 400.1.		
(ii)	Providing, Laying, Spreading & compacting hand broken/ crushed stone aggregate to wet mix macadam confirming to physical requirements laid in 250 mm stone aggregate MORT & H Specification in two layers (compacted to 250mm (125+125) by taking material 1.32 times of the (thickness of the layer) including premixing of material with water in mechanical mixer.		
(iii)	50 mm thick DBM.		
(iv)	30 mm thick BC		
	for 4160 sqm @ Rs. 1500/- per sqm		62.40 Lacs
3	Provisions for kerbs and channels of CC (1:2:4) on both sides of road. (750 x 2) = 1500 Rmt @ Rs. 600/per Mtr.		9.00 Lacs
4	Provision for carriage of material and other unforeseen items (L.S.)		4.00 Lacs
5	Provision and fixing Guide Map at selected locations. (LS)		1.00 Lacs
6	Provision for Traffic Light Arrangement. (LS)		1.00 Lacs
7	Provision for metaling of commercial L.S		2.00 Lacs
8	Const. of Footpath as per specification for approach to each block (L.S)		3.00 Lacs
	Total		95.27 Lacs
	Add 3% contingencies & PH Charges		2.86 Lacs
	Total		98.13 Lacs
	Add 49% departmental charges, price escalation unforeseen, admn. Charges		48.08 Lacs
	TOTAL		146.22 Lacs
(C/o to Final Abstract of cost)			

Authorized Signatory


For
S.T.Patricks Realty Pvt. Ltd.

Service plan Estimate of Group housing colony for an area measuring 7.35625 acres (Licence no. 136 of 2023 dated 30/06/2023)
in sector - 32, Sohna, being developed by ST, PATRICKS REALTY PVT.LTD

Sub work No. V			
		STREET LIGHTING	
S.no	Description	Amount in Rs.	
1	Providing street lightning on roads at surrounding area as per standard specifications of HVPN with CFL complete in all respect = 7.35625 Acres (Complete) @ Rs 2.50 lacs (PER Acres)	18.39	Lacs
Total		18.391	Lacs
Add 3% contingencies & PH Charges		0.552	Lacs
Total		18.942	Lacs
Add 49% departmental charges, price escalation unforeseen, admn. Charges		9.282	Lacs
TOTAL		28.224	Lacs
(C/o to Final Abstract of cost)			

Authorized Signatory:


For
S. T. Patricks Realty Pvt. Ltd.

SUB WORK NO-VI				
HORTICULTURE (Plantation & Roadside Trees)				
1	Development of Lawn Areas:		Amount in Rs.	
	a)	Trenching the ordinary Soil up to depth of 60 cm including removal and stacking Serviceable material and disposing of by spreading and leveling within a lead of 50m and making up the trenches area to proper levels by filling with earth mixed with manure before and after flooding trenches with water including cost of imported earth and manure		
	b)	Rough dressing of turfed area		
	c)	Grassing with "Doob Grass" including watering and maintenance of lawns for 30 days till the grass forms a thick lawn, free from weeds and fit moving in rows 7.5 m apart in either direction		
		4281.783 Sq.mt OR 1.05 Acres @ 1.5 Lacs / Acres	1.575	Lacs
2	Provision and planting trees along boundary @ 12M interval			
	Total Road length = 750 / 12 = 62.50 X 2 = 125 No's			
	Cost Detail			
	Excavation	Rs. 60/-		
	Manure	Rs. 90/-		
	Tree Plants	Rs. 150/-		
	Tree Guards	2000.00		
	Total	2310.00		
	75 No's tree @ Rs 2310/-		1.73	Lacs
	Total		3.31	Lacs
	Add 3% contingencies, PE & Consultancy Charges		0.10	Lacs
	Total		3.41	Lacs
	Add 49% department charges, price, and escalation unforeseen Admin charges		1.67	Lacs
	Total		5.08	Lacs
(C/o to Final Abstract of cost)				

Authorized Signatory:


For
S.T. Patricks Realty Pvt. Ltd.

Service plan Estimate of Group housing colony for an area measuring 7.35625 acres (Licence no. 136 of 2023 dated 30/06/2023) in sector - 32, Sohna, being developed by **ST. PATRICKS REALTY PVT.LTD**

SUB WORK NO-VII		SERVICES & RESURFACING OF ROADS	
		Amount in Rs.	
1	Provision of MTC charges for Water Supply, SWD sewerage, roads, street Lighting, Horticultural etc.		
	a) Complete in all aspect, including operational & establishment charges as per HUDA norms for 10 Years Completion		
	7.35625 Acres @ Rs 8.00 Lacs per Acres/-	58.85	Lacs
2	Provision for re-surfacing of roads after 5 years oBM including leveling coarse and 30mm BC as per design whichever is safer.		
	4160 @ Rs 660/- per Sq.mt	27.46	Lacs
3	Re-Surfacing of roads 2nd Phase after next 05 years of 1st Phase (50mm BM) C/O 33MM BC or as per crust design whichever is safe.		
	4160 @ Rs 825/- per Sq.mt	34.32	Lacs
	Total	120.63	Lacs
	Add 3% contingencies, PE & Consultancy Charges	3.62	Lacs
	Total	124.24	Lacs
	Add 49% department charges, price, and escalation unforeseen Admin charges	60.88	Lacs
	Total	185.12	Lacs
(C/o to Final Abstract of cost)			

Authorized Signatory,


For
S.T Patricks Realty Pvt. Ltd.

DESIGN STATEMENT OF STORM WATER FOR GROUP HOUSING COLONY FOR AN AREA MEASURING 7.35625 ACRES (LICENCE NO. 136 OF 2023 DATED 30/06/2023) IN SECTOR - 32, SOHNA, BEING DEVELOPED BY ST. PATRICKS REALTY PVT. LTD. AND OTHERS

S.no	Name of storm Line	Area in Acres			Required Discharge @ rises @ 1/4" Rain fall intensity per hour	Length of Drain in Meters	Dia of Drain in MM	Design Discharge in Cumecs	Design Velocity in Meter per second	Fall in Meters	Formation Level			Invert Level		Depth		Average Depth
		Self	Branch	Total							At Upper End	At Lower End	At Upper End	At Lower End	At Upper End	At Lower End		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
TOWER-B, RWY & COMMERCIAL BLOCK																		
1	A	0.29	0.00	0.28	0.07	31	400	4.18	0.91	350	0.09	214.28	214.20	213.25	213.16	1.00	1.08	1.02
2	B	0.54	0.28	0.82	0.20	56	400	4.18	0.91	350	0.16	214.20	214.15	213.36	213.00	1.04	1.16	1.09
3	C	0.59	0.82	1.41	0.35	29	400	4.18	0.91	350	0.08	214.15	214.18	213.00	212.92	1.15	1.26	1.21
4	D	0.27	1.41	1.68	0.42	54	400	4.18	0.91	350	0.15	214.18	214.31	212.92	212.76	1.26	1.45	1.35
5	E	0.34	1.68	2.02	0.50	42	400	4.18	0.91	350	0.13	214.21	214.24	212.76	212.64	1.45	1.60	1.52
6	F	0.22	2.02	2.24	0.56	21	400	4.18	0.91	350	0.06	214.24	214.25	212.64	212.58	1.60	1.67	1.63
7	G	0.15	0.00	0.15	0.04	42	400	4.18	0.91	350	0.12	214.25	214.29	213.25	213.13	1.00	1.16	1.08
8	H	0.27	0.15	0.42	0.11	65	400	4.18	0.91	350	0.19	214.26	214.27	213.13	212.94	1.16	1.33	1.24
9	I	0.40	0.42	0.82	0.21	56	400	4.18	0.91	350	0.16	214.27	214.26	212.94	212.78	1.33	1.48	1.40
10	J	0.23	0.02	0.25	0.06	32	400	4.18	0.91	350	0.09	214.26	214.25	212.78	212.69	1.48	1.54	1.52
11	G to MAIN	0.00	0.07	0.07	0.77	10	400	4.18	0.91	350	0.03	214.25	214.25	212.58	212.56	1.67	1.60	1.69
TOWER-A BLOCK																		
12	K	0.48	0.00	0.46	0.11	70	400	4.18	0.91	350	0.20	214.42	214.38	213.42	213.22	1.00	1.16	1.08
13	L	0.20	0.46	0.65	0.16	54	400	4.18	0.91	350	0.15	214.38	214.34	213.22	213.07	1.16	1.27	1.21
14	M	0.32	0.66	0.97	0.24	52	400	4.18	0.91	350	0.15	214.34	214.31	213.07	212.92	1.27	1.35	1.33
15	N	0.31	0.97	1.28	0.22	44	400	4.18	0.91	350	0.13	214.31	214.29	212.92	212.79	1.39	1.50	1.45
16	O	0.31	1.28	1.59	0.40	23	400	4.18	0.91	350	0.07	214.29	214.27	212.79	212.73	1.50	1.54	1.52
17	P	0.48	0.00	0.46	0.12	53	400	4.18	0.91	350	0.25	214.42	214.38	213.42	213.27	1.00	1.11	1.06
18	Q	0.32	0.48	0.80	0.20	55	400	4.18	0.91	350	0.16	214.38	214.34	213.27	213.18	1.11	1.23	1.17
19	R	0.15	0.80	0.95	0.24	19	400	4.18	0.91	350	0.05	214.34	214.31	213.11	213.06	1.23	1.35	1.24
20	S	0.35	0.96	1.30	0.33	42	400	4.18	0.91	350	0.12	214.31	214.29	213.06	212.94	1.25	1.35	1.30
21	T	0.20	1.30	1.50	0.37	28	400	4.18	0.91	350	0.08	214.29	214.27	212.94	212.86	1.35	1.41	1.38
22	P to OUT	0.00	0.09	0.09	0.77	10	400	4.18	0.91	350	0.03	214.27	214.27	212.73	212.70	1.54	1.57	1.56

DESIGN STATEMENT OF SEWERAGE SCHEME FOR GROUP HOUSING COLONY FOR AN AREA MEASURING 7.35625 ACRES (LICENCE NO. 136 OF 2023 DATED 30/06/2023) IN SECTOR - 32, SORNA, BEING DEVELOPED BY ST. PATRICKS REALTY PVT. LTD. AND OTHERS.

Sl. No. of the Sewer Line	Number of HH		Number of BWS / Sewer Pot		Total Number of Persons for the BWS / Sewer Pot (Persons / HH)	Total Number of Persons of the BWS / Sewer Pot	Water Requirement @ 150 L per Person	Water Requirement of Commercial / Industrial Premises	Water Requirement of Institutional / Public Buildings	Ground Water / Surface Water	Rainwater Harvesting	Total Water Requirement in Ltrs	Total Water Requirement in MGD	Discharge in MGD	Discharge in MGD	Length of Sewer in meters	Diameter of Sewer in mm	Slope in %	Fall in mm	Proposed Level		Existing Level		Depth	Average Slope
	Main	Branch	Total	Branch	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Proposed	Existing	Proposed	Existing	Total	Total
1	3	2	5	2	3	5	5	10	10	0	0	20	20	0.44	0.44	10	10	0.44	0.44	2.4	2.4	2.4	2.4	2.4	2.4
2	1	0	1	0	1	1	1	1	1	0	0	1	1	0.44	0.44	10	10	0.44	0.44	2.4	2.4	2.4	2.4	2.4	2.4
3	1	0	1	0	1	1	1	1	1	0	0	1	1	0.44	0.44	10	10	0.44	0.44	2.4	2.4	2.4	2.4	2.4	2.4
4	1	0	1	0	1	1	1	1	1	0	0	1	1	0.44	0.44	10	10	0.44	0.44	2.4	2.4	2.4	2.4	2.4	2.4
5	1	0	1	0	1	1	1	1	1	0	0	1	1	0.44	0.44	10	10	0.44	0.44	2.4	2.4	2.4	2.4	2.4	2.4
6	1	0	1	0	1	1	1	1	1	0	0	1	1	0.44	0.44	10	10	0.44	0.44	2.4	2.4	2.4	2.4	2.4	2.4
7	1	0	1	0	1	1	1	1	1	0	0	1	1	0.44	0.44	10	10	0.44	0.44	2.4	2.4	2.4	2.4	2.4	2.4
8	1	0	1	0	1	1	1	1	1	0	0	1	1	0.44	0.44	10	10	0.44	0.44	2.4	2.4	2.4	2.4	2.4	2.4
9	1	0	1	0	1	1	1	1	1	0	0	1	1	0.44	0.44	10	10	0.44	0.44	2.4	2.4	2.4	2.4	2.4	2.4
10	1	0	1	0	1	1	1	1	1	0	0	1	1	0.44	0.44	10	10	0.44	0.44	2.4	2.4	2.4	2.4	2.4	2.4
11	1	0	1	0	1	1	1	1	1	0	0	1	1	0.44	0.44	10	10	0.44	0.44	2.4	2.4	2.4	2.4	2.4	2.4
12	1	0	1	0	1	1	1	1	1	0	0	1	1	0.44	0.44	10	10	0.44	0.44	2.4	2.4	2.4	2.4	2.4	2.4
13	1	0	1	0	1	1	1	1	1	0	0	1	1	0.44	0.44	10	10	0.44	0.44	2.4	2.4	2.4	2.4	2.4	2.4

