Agenda for 75th meeting of SEAC-3 (Day-1)

SEAC Meeting number: 75 **Meeting Date** November 1, 2018

Subject: Environment Clearance for Environment Clearance for Proposed Integrated Township at Gat No. 124, 125,127 to 132, 137 to 142, 144 to 153, 155 to 160, 162 to 164, 166 ,167 ,169,170, 194 at Manjri Khurd, Haveli Taluka, Pune by Ashdan Developers Private Ltd.

Is a Violation Case: No

1.Name of Project	Proposed Integrated Township at Gat No. 124, 125,127 to 132, 137 to 142, 144 to 153, 155 to 160, 162 to 164, 166 ,167 ,169,170, 194 at Manjri Khurd, Haveli Taluka, Pune by Ashdan Developers Private Ltd.
2.Type of institution	Private
3.Name of Project Proponent	Mr. Vilas Tambe
4.Name of Consultant	VK:e Environmental LLP , Pune
5.Type of project	Integrated Township Project
6.New project/expansion in existing project/modernization/diversification in existing project	Amendment in Earlier EC, EC Number: SEAC-2010/CR 287/TC-2
7.If expansion/diversification, whether environmental clearance has been obtained for existing project	The project has been granted environmental clearance vide letter SEAC-2010/CR 287/TC-2 , Dated - September 7, 2010, EC Extended till year 2022
8.Location of the project	Gat No. 124, 125,127 to 132, 137 to 142, 144 to 153, 155 to 160, 162 to 164, 166 ,167 ,169,170, 194
9.Taluka	Haveli
10.Village	Manjri Khurd
Correspondence Name:	Mr. Vilas Tambe
Room Number:	S.No. 36/1/1
Floor:	NA
Building Name:	Solitaire World Level 8
Road/Street Name:	Mumbai Banglore Highway Baner
Locality:	Opposite Regency Classic
City:	Pune
11.Area of the project	PMRDA
12.IOD/IOA/Concession/Plan Approval Number	In process
	IOD/IOA/Concession/Plan Approval Number: In process
	Approved Built-up Area: 00
13.Note on the initiated work (If applicable)	Work in progress as per old EC. Buildings of Sector R1 and R2 are under construction.
14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)	NA
15.Total Plot Area (sq. m.)	4,04,497.00 m2
16.Deductions	NA as proposed project is Integrated Township
17.Net Plot area	4,04,497.00 m2
18 (a).Proposed Built-up Area (FSI & Non-FSI)	**a) FSI area (sq. m.):** 687645
	b) Non FSI area (sq. m.): 639882.9
	c) Total BUA area (sq. m.): 1327527.9
18 (b).Approved Built up area as per DCR	**Approved FSI area (sq. m.):** 00
	Approved Non FSI area (sq. m.): 00
	Date of Approval: 26-06-2018
19.Total ground coverage (m2)	1,00,139.44
20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)	24.7
21.Estimated cost of the project	27940000000

22.Number of buildings & its configuration

Serial number	Building Name & number	Number of floors	Height of the building (Mtrs)
1	Sector R1- Tower T7,T8,T9	Stilt+22 floors	69
2	Sector R1- Tower T10,T11,T12	Stilt+Podium+22 floors	72
3	Sector R2- Tower T1, T2,T3,T4,T5,T6	Stilt+22 floors	69
4	Sector R3- Tower A1,A2,A3,A4	2 Podium + 21 floors	69
5	Sector R3- Tower C1,C2,C3,C4	2 Podium + 14 floors	48
6	Sector R4- Wing A1,A2,B1,B2	Stilt+ Podium + 21 floors	69
7	Sector R4- Wing C1,C2,C3,C4	Stilt+ Podium + 14 floors	48
8	Sector R5A – Tower A,B,C,D,E	Stilt+2Podium+21 floors	72
9	Sector R5B – Wing A,B	Stilt+2Podium+21floors	72
10	Sector R6-Bldg A,B,C	Stilt+2 Podium + 13 floors	48
11	Sector R6-Bldg D,E	Stilt+2 Podium +23 floors	78
12	Sector R7-Tower 1,2,3,4	Stilt+2 Podium +21floors	72
13	Sector R8-Bldg 1,2,3,4,5,6,7,8	2 B+Stilt+23 floors	72
14	Sector R9-Wing A,B,C	Podium + 30 floors	99
15	Sector R10- Tower T1,T2,T3,T4,T5,T6,T7	Stilt + 12 floors	39
16	Sector E1- Commercial Tower	G+15 floors	64
17	Sector E2-Tower 1,2	Podium +G+15 floors	68
18	Market C01- 4 nos.	Ground + 1 floor	6
19	Healthcare H01	Ground + 6 floors	24
20	Town hall P01	Ground + 5 floors	24
21	School	Ground + 5 floors	24
22	U2 Residential- Bldg A,B	Podium + 3 floors	12
23	U2 Fire Station	GR+ 1 floors	7.8
24	Sports complex	G+2 floors	14

23.Number of tenants and shops	8663 Tenements , 1213 offices/shops Residential tenants : 43,315 Persons; Commercial users including visitors: 18,761 Persons Total population: 62,076
24.Number of expected residents / users	Residential tenants : 43,315 Persons; Commercial users including visitors: 18,761 Persons Total population: 62,076
25.Tenant density per hectare	216 Tenement/hectare; 1082 Tenants/hectare
26.Height of the building(s)	
27.Right of way (Width of the road from the nearest fire station to the proposed building(s)	30 m wide road from the nearest fire station to the project. Nearest fire station: Amanora fire station. Nearest Fire Station Distance : 5 Km Also fire station is proposed in the project itself

28.Turning radius for easy access of fire tender movement from all around the building excluding the width for the plantation	For easy access of fire tender 9m turning radius will be provided.
29.Existing structure (s) if any	Buildings of Sector R1 and R2 are under construction
30.Details of the demolition with disposal (If applicable)	NA

31.Production Details

Serial Number	Product	Existing (MT/M)	Proposed (MT/M)	Total (MT/M)
1	Not applicable	Not applicable	Not applicable	Not applicable

32.Total Water Requirement

Dry season:	**Source of water**	Irrigation Department, Govt of Mahatrashtra
	Fresh water (CMD):	4360 for res.+ 119 for car washing
	Recycled water - Flushing (CMD):	2320
	Recycled water - Gardening (CMD):	715
	Swimming pool make up (Cum):	13
	Total Water Requirement (CMD) :	7527
	Fire fighting - Underground water tank(CMD):	3125
	Fire fighting - Overhead water tank(CMD):	20 KLD for each building
	Excess treated water	2977

Wet season:	**Source of water**	Irrigation Department, Govt of Mahatrashtra
	Fresh water (CMD):	4360 for res.+ 119 for car washing
	Recycled water - Flushing (CMD):	2320
	Recycled water - Gardening (CMD):	00
	Swimming pool make up (Cum):	13
	Total Water Requirement (CMD) :	6812
	Fire fighting - Underground water tank(CMD):	3125
	Fire fighting - Overhead water tank(CMD):	20 KLD for each building
	Excess treated water	3692
Details of Swimming pool (If any)	Water requirement for make up : 13 kld a) PH-7.0 to 7.6 b)Chlorine Content -0.8 to 1.0 ppm Residual Chlorine in pool c) Disinfection Treatment - With Ozone	

33.Details of Total water consumed

Particulars	Consumption (CMD)			Loss (CMD)			Effluent (CMD)		
Water Requirement	**Existing**	**Proposed**	**Total**	**Existing**	**Proposed**	**Total**	**Existing**	**Proposed**	**Total**
Domestic	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

34.Rain Water Harvesting (RWH)	**Level of the Ground water table:**	Pre Monsoon : 10 to 12 mt below ground level Post Monsoon: 4 to 6 mt below ground level
	Size and no of RWH tank(s) and Quantity:	NA
	Location of the RWH tank(s):	NA
	Quantity of recharge pits:	50 Nos. of recharge pits proposed
	Size of recharge pits :	2 m. X 1 m. X 2 m.
	Budgetary allocation (Capital cost) :	50,00,000/-
	Budgetary allocation (O & M cost) :	5,00,000/-
	Details of UGT tanks if any :	For Sector R1: 1789 kld For Sector R2: 1400 kld For Sector R3: 1327 kld For Sector R4: 1327 kld For Sector R5A: 617 kld For Sector R5B: 500 kld For Sector R6: 707 kld For Sector R7: 887 kld For Sector R8: 936 kld For Sector R9: 557 kld For Sector R10: 868 kld For fire station residential:29 kld For Sector E1: 396 kld For Sector E2: 828 kld For Health care: 125 kld For Town hall: 35 kld For School: 340 kld For fire station: 12 kld For fire tank: 500 kld
35.Storm water drainage	**Natural water drainage pattern:**	Natural water drainage pattern: The storm water drainage will be designed according to contours. The storm water collected through the storm water drains of adequate capacity will be led to recharge pits.
	Quantity of storm water:	2,83,148 cum
	Size of SWD:	1.5m dia pipe
Sewage and Waste water	**Sewage generation in KLD:**	6012
	STP technology:	Engineered Wetland
	Capacity of STP (CMD):	6013
	Location & area of the STP:	Sector wise STPs are provided, also ETP of 1 kld is provided for healthcare
	Budgetary allocation (Capital cost):	Rs. 21,77,00,000 /-
	Budgetary allocation (O & M cost):	Rs. 1,16,00,000/-

36.Solid waste Management

Waste generation in the Pre Construction and Construction phase:	**Waste generation:**	Total waste generated: 100 kg/day - Dry waste (Kg/day): 40 kg/day -Wet waste (Kg/day): 60 kg/day
	Disposal of the construction waste debris:	The Construction waste generated during construction shall be segregated, reused on site and surplus shall be led to scrap dealers for recycling.
Waste generation in the operation Phase:	**Dry waste:**	11487 kg/day
	Wet waste:	14857 kg/day
	Hazardous waste:	NA
	Biomedical waste (If applicable):	12 kg/day
	STP Sludge (Dry sludge):	900 kg /day
	Others if any:	E-waste : 72 kg/day
Mode of Disposal of waste:	**Dry waste:**	Dry waste will be segregated into recyclable and non-recyclable waste. Non degradable waste will be handed over to "SwaCH" (Co-operative enterprise for waste collection. Dried sludge from STP will be used as manure
	Wet waste:	Biodegradable waste will be treated in Organic Waste Converter. Separate OWCs are proposed for different sectors and amenities.
	Hazardous waste:	NA
	Biomedical waste (If applicable):	Will be handed over to authorized biomedical waste vendor
	STP Sludge (Dry sludge):	Dried sludge from STP will be used as manure.
	Others if any:	E-waste will be sent to Hi Tech Recycling Pvt. Ltd.
Area requirement:	**Location(s):**	Sector wise OWCs will be provided
	Area for the storage of waste & other material:	269 sqm
	Area for machinery:	1068 sqm
Budgetary allocation (Capital cost and O&M cost):	**Capital cost:**	Rs 4,21,00,000/-
	O & M cost:	Rs 91,10,274/-

37.Effluent Charecterestics

Serial Number	Parameters	Unit	Inlet Effluent Charecterestics	Outlet Effluent Charecterestics	Effluent discharge standards (MPCB)
1	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

Amount of effluent generation (CMD):	0.8 kld
Capacity of the ETP:	1 KLD
Amount of treated effluent recycled :	0.7 kld
Amount of water send to the CETP:	Not applicable
Membership of CETP (if require):	Not applicable
Note on ETP technology to be used	Not applicable
Disposal of the ETP sludge	Not applicable

38.Hazardous Waste Details

Serial Number	Description	Cat	UOM	Existing	Proposed	Total	Method of Disposal

1	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

39.Stacks emission Details

Serial Number	Section & units	Fuel Used with Quantity	Stack No.	Height from ground level (m)	Internal diameter (m)	Temp. of Exhaust Gases
1	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

40.Details of Fuel to be used

Serial Number	Type of Fuel	Existing	Proposed	Total
1	Not applicable	Not applicable	Not applicable	Not applicable
41.Source of Fuel		Not applicable		
42.Mode of Transportation of fuel to site		Not applicable		

43.Green Belt Development	**Total RG area :**	RG area + City Green: 81818.3 Sq m
	No of trees to be cut :	Few of the existing trees will be transplanted, other trees will be protected
	Number of trees to be planted :	6070
	List of proposed native trees :	Refer Below list
	Timeline for completion of plantation :	Till operation phase

44.Number and list of trees species to be planted in the ground

Serial Number	Name of the plant	Common Name	Quantity	Characteristics & ecological importance
1	Syzygium cumini	Jambhul tree	215	A large size tree with dense foliage provides shade along roads, wood is water resistant and attracts a variety of birds.
2	Millingtonia hortensis	Indian cork tree	417	A columnar, evergreen tree, grows well both dry and moist regions.
3	Lagerstromia flos-regineae	Tamhan	406	State flower tree of Maharashtra Medium sized tree, beautiful purple flowers, grows well in both dry and humid climate.
4	Pongamia pinnata	Karanj	286	Large tree good for stopping soil erosion along canal banks
5	Azadirachta indica	Neem	563	A medium to large size hardy tree which stand in drought conditions. Air Purifying quality. Attain a much larger size in dry regions.
6	Cassia fistula	Bahava	400	Small deciduous tree. Excellent bright flowering tree for arid regions.
7	Ficus benjamina	Weeping fig	262	Medium sized evergreen tree with elegant appearance and moderate water requirement.
8	Plumeria alba	Champa	311	Ornamental flowering tree.

9	Michelia champaca	Sonchapha	380	Medium sized evergreen tree, fragrant yellow flowers, Butterfly host plant.
10	Polyathia longifolia	Ashoka	365	Large evergreen tree. Effective in decreasing noise pollution.
11	Mangifera indica	Mango	215	Large evergreen and fruit bearing tree
12	Albizia lebeck	Shirish	282	Shady, large tree, ball shaped flowers
13	Butea monosperma	Palas	312	Small Deciduous. Good for roadside plantation.
14	Psidium guajava	Guava, peru	215	Small hardy and birds attracting tree.
15	Jacaranda mimosifolia	Jacaranda	360	Medium size gracious deciduous, flowering tree which prefers moderate climate.
16	Khaya senghalis	Khaya	407	Large roadside tree with white sweet scented flowers
17	Spathodia campanulata	Pichkari	284	A handsome large deciduous flowering tree. Good for roadside plantation.
18	Bauhinia purpurea	Rakta Kanchan	390	Small hardy tree with beautiful pink flowers.
45.Total quantity of plants on ground				

46.Number and list of shrubs and bushes species to be planted in the podium RG:

Serial Number	Name	C/C Distance	Area m2
1	Raphis palm	0.60 m	200
2	Allamanda yellow	0.45m	155
3	Asparagus sprengeri	0.30m	140
4	Ixora red	0.30 m	100
5	Rhoeo	0.23 m	100
6	Russelia red	0.30m	115
7	Areca palm	0.60m	110
8	Euphorbia carcassana	0.45m	70

47.Energy

Power requirement:	**Source of power supply :**	Maharashtra State Electricity Distribution Company Limited (M.S.E.D.C.L.)
	During Construction Phase: (Demand Load)	100KW
	DG set as Power back-up during construction phase	125 kvA
	During Operation phase (Connected load):	55563.71KW
	During Operation phase (Demand load):	26741.70 kvA
	Transformer:	630 kvA - 49 Nos.
	DG set as Power back-up during operation phase:	365KVA- 3Nos. 200KVA- 1 Nos. 180KVA- 2Nos. 160KVA- 1Nos. 140KVA- 1Nos. 250KVA- 5Nos.
	Fuel used:	Diesel
	Details of high tension line passing through the plot if any:	NA

48.Energy saving by non-conventional method:

Timers and contactors will be used to switch on / off common are & external landscape and facade lighting.
Light Emitting Diode (LED) will be used for corridors, Lobbies and common areas.
All fluorescent light fixtures are specified to incorporate electronic chokes which have less watt-loss compared to electro-magnetic chokes and result in superior operating power factor. This indirectly saves energy. Electronic chokes also improves life of the fluorescent lamps.
Energy efficient cfl/t5/led lamps which give approx. 30% more light output for the same watts consumed and therefore require less nos. Of fixtures and corresponding lower point wiring costs. LPD of 7.5 W/sq.mtr. in Residential areas & 10.8 W/sq.mtr. in Office areas is proposed.
All cables will be derated to avoid heating during use. This also indirectly reduces losses and improves reliability. To achieve the same we have considered current carrying capacity of all the cables laid through ground/air whichever is minimum.
125 Ltrs Solar water is provided for each flat.
Solar PV panel system is proposed for Street lighting & Building common lighting.

49.Detail calculations & % of saving:

Serial Number	Energy Conservation Measures	Saving %
1	Total Energy Saving : i.e. (27 % Savings) Energy saving due to solar :i.e. (82 % Savings)	Total Energy Saving : i.e. (27 % Savings) Energy saving due to solar :i.e. (82 % Savings)

50.Details of pollution control Systems

Source	Existing pollution control system	Proposed to be installed
Not applicable	Not applicable	Not applicable

Budgetary allocation (Capital cost and O&M cost):	**Capital cost:**	13300000
	O & M cost:	668000

51.Environmental Management plan Budgetary Allocation

a) Construction phase (with Break-up):

Serial Number	Attributes	Parameter	Total Cost per annum (Rs. In Lacs)

1	Air Environment	Erosion control – dust suppression measures, barricading and top soil preservation	38044695
2	Land	Labour Camp toilets & sanitation	4400000
3	Health and Safety	Health checkup & Disinfection	306000
4	Environment Management	Environment management cell	300000
5	Environmental Monitoring	Environmental Monitoring	275000

b) Operation Phase (with Break-up):

Serial Number	Component	Description	Capital cost Rs. In Lacs	Operational and Maintenance cost (Rs. in Lacs/yr)
1	Sewage Treatment Plant	STP	21,77,00,000/-	1,16,00,000/-
2	Solid Waste Management	OWC	4,21,00,000/-	91,10,274/-
3	Landscaping	Development and Maintenance	2,95,15,825/-	23,61,266/-
4	Rain Water Harvesting	Rain Water Harvesting	50,00,000/-	5,00,000/-
5	Energy Saving	Solar PV panels	133,00,000/-	6,68,000/-
6	Environmental Monitoring	Environmental Monitoring	-	11,50,000/-

51.Storage of chemicals (inflamable/explosive/hazardous/toxic substances)

Description	Status	Location	Storage Capacity in MT	Maximum Quantity of Storage at any point of time in MT	Consumption / Month in MT	Source of Supply	Means of transportation
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

52.Any Other Information

No Information Available

53.Traffic Management

	Nos. of the junction to the main road & design of confluence:	Proposed site is located at Manjri. Site is accessible from 30 m road from west side. For internal traffic movement 6m, 9m wide driveway will be proposed.

Parking details:	**Number and area of basement:**	101107.64 sqm
	Number and area of podia:	116434.69 sqm
	Total Parking area:	283803.52 sqm
	Area per car:	12.5 sqm
	Area per car:	12.5 sqm
	Number of 2-Wheelers as approved by competent authority:	10860
	Number of 4-Wheelers as approved by competent authority:	11938
	Public Transport:	Buses are propsoed
	Width of all Internal roads (m):	9m-24m
	CRZ/ RRZ clearance obtain, if any:	NA
	Distance from Protected Areas / Critically Polluted areas / Eco-sensitive areas/ inter-State boundaries	NA
	Category as per schedule of EIA Notification sheet	8(b) Township and Area Development Projects
	Court cases pending if any	NA
	Other Relevant Informations	Proposed project is Integrated Township at Manjri
	Have you previously submitted Application online on MOEF Website.	No
	Date of online submission	-

SEAC DISCUSSION ON ENVIRONMENTAL ASPECTS

Summorised in brief information of Project as below.

Brief information of the project by SEAC

PP submitted their application for amendment in earlier Environmental clearance for total plot area of 4,04,497.00 m2, Total BUA of 1327527.9 m2 and FSI area of 687645 m2.

The case was discussed on the basis of the documents submitted and presentation made by the proponent. All issues relating to environment, including air, water, land, soil, ecology, biodiversity and social aspects were examined. The proposal is appraised as category 8(a) B1.

DECISION OF SEAC

PP requested for time to submit above information; after deliberations committee asked PP to **comply with the above observations** and submit information to the committee for further discussion and consideration of SEAC.

Specific Conditions by SEAC:

1) PP to obtain specific NOC from adjoining plot owners to lay storm water drainage line up to the final disposal point, i.e. River.
2) PP to submit plan of SWD & sewer line connectivity up to final disposal point with chamber, invert level details.
3) PP to submit hydrogeological report along with RWH details.
4) PP to calculate V/C ratio for all the internal and external road and present in tabular form.
5) PP to submit parking level plan for each floor of typical building showing the width of ramp and slope should not be less than 1:10.
6) PP to submit revised parking plan including basements.
7) PP to submit basement plan approved by PMRDA.
8) PP to submit cross section of 14 floor, 22 floor and typical other building including basement.
9) PP to submit details of ventilation for small buildings.
10) PP to submit detailed parking statement – sector wise as well as for total township. The minimum area per car should be as per MoEF&CC guidelines.
11) PP to submit revised EMP including cost required to lay sewer line up to final disposal point.

FINAL RECOMMENDATION

SEAC-III decided to defer the proposal.Kindly find SEAC decision above.

Agenda for 75th meeting of SEAC-3 (Day-1)

SEAC Meeting number: 75 **Meeting Date** November 1, 2018

Subject: Environment Clearance for Application for Environmental Clearance for proposed Residential & Commercial project at Charholi Budruk, Pune

Is a Violation Case: No

1.Name of Project	Residential & Commercial project by M/s. Xrbia Mirth Properties LLP
2.Type of institution	Private
3.Name of Project Proponent	Mr.Veer Bharati Kouls- Xrbia Mirth Properties LLP
4.Name of Consultant	Mahabal Enviro Engineers Pvt. Ltd., Thane, Maharashtra
5.Type of project	Housing Project
6.New project/expansion in existing project/modernization/diversification in existing project	New project
7.If expansion/diversification, whether environmental clearance has been obtained for existing project	Not applicable
8.Location of the project	S. No. 309/1 & 309/2
9.Taluka	Haveli
10.Village	Charholi Budruk
Correspondence Name:	Xrbia Mirth Properties LLP
Room Number:	929
Floor:	1st floor
Building Name:	Mantri House
Road/Street Name:	FC road
Locality:	Pune
City:	Pune
11.Area of the project	Pimpri Chinchwad Municipal Corporation
12.IOD/IOA/Concession/Plan Approval Number	IOD
	IOD/IOA/Concession/Plan Approval Number: Kra. BP/Paryavaran/Charholi/01/2017
	Approved Built-up Area: 119241
13.Note on the initiated work (If applicable)	Not Applicable as project is new construction.
14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)	Included in IOD
15.Total Plot Area (sq. m.)	48,460 m2
16.Deductions	12,085 m2
17.Net Plot area	36,375 m2
18 (a).Proposed Built-up Area (FSI & Non-FSI)	**a) FSI area (sq. m.):** 82,285 m2
	b) Non FSI area (sq. m.): 42,318 m2
	c) Total BUA area (sq. m.): 124603
18 (b).Approved Built up area as per DCR	**Approved FSI area (sq. m.):**
	Approved Non FSI area (sq. m.):
	Date of Approval:
19.Total ground coverage (m2)	9,236 m2
20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)	25 % of total net plot area
21.Estimated cost of the project	1892000000

22.Number of buildings & its configuration

Serial number	Building Name & number	Number of floors	Height of the building (Mtrs)
1	Building A1	P + 12	38.67
2	Building A2	P + 12	38.67
3	Building B1	P + 12	38.67
4	Building B2	P + 12	38.67
5	Building B3	P + 12	38.67
6	Building B4	P + 12	38.67
7	Building C1	P + 12	38.67
8	Building C2	P + 12	38.67
9	Building C3	P + 12	38.67
10	Building C4	P + 12	38.67
11	Building C5	P + 12	38.67
12	Building D1 (MHADA)	P + 12	38.67
13	Commercial Building (Amenity Area)	B+G+2	12.60

23.Number of tenants and shops	Tenements-2,800 nos. and Shops – 87 nos.
24.Number of expected residents / users	Residential- 14,000 nos. & Shops- 261 nos.
25.Tenant density per hectare	577 /Ha
26.Height of the building(s)	
27.Right of way (Width of the road from the nearest fire station to the proposed building(s)	6 m
28.Turning radius for easy access of fire tender movement from all around the building excluding the width for the plantation	9 m
29.Existing structure (s) if any	NA
30.Details of the demolition with disposal (If applicable)	NA

31.Production Details

Serial Number	Product	Existing (MT/M)	Proposed (MT/M)	Total (MT/M)
1	Not applicable	Not applicable	Not applicable	Not applicable

32.Total Water Requirement

Dry season:	**Source of water**	Pimpri Chinchwad Municipal corporation
	Fresh water (CMD):	1265 m3/day
	Recycled water - Flushing (CMD):	637 m3/day
	Recycled water - Gardening (CMD):	23 m3/day
	Swimming pool make up (Cum):	NA
	Total Water Requirement (CMD) :	1902 m3/day
	Fire fighting - Underground water tank(CMD):	600 m3
	Fire fighting - Overhead water tank(CMD):	240 m3
	Excess treated water	794 m3/day
Wet season:	**Source of water**	Pimpri Chinchwad Municipal corporation
	Fresh water (CMD):	1265 m3/day
	Recycled water - Flushing (CMD):	637 m3/day
	Recycled water - Gardening (CMD):	12 m3/day
	Swimming pool make up (Cum):	NA
	Total Water Requirement (CMD) :	1902 m3/day
	Fire fighting - Underground water tank(CMD):	600 m3
	Fire fighting - Overhead water tank(CMD):	240 m3
	Excess treated water	805 m3/day
Details of Swimming pool (If any)	NA	

33.Details of Total water consumed

Particulars	Consumption (CMD)			Loss (CMD)			Effluent (CMD)		
Water Requirement	**Existing**	**Proposed**	**Total**	**Existing**	**Proposed**	**Total**	**Existing**	**Proposed**	**Total**
Domestic	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

34.Rain Water Harvesting (RWH)	**Level of the Ground water table:**	Summer Season – 21.50 m. to 26.25 m. BGL. (23.88 M. Average) ; Rainy Season – 9.25 m. to 15.50 BGL. (12.38 M. Average) ; Winter Season – 15.38 m. to 20.88 m. BGL. (18.13 M. Average)
	Size and no of RWH tank(s) and Quantity:	NA
	Location of the RWH tank(s):	NA
	Quantity of recharge pits:	21 nos.
	Size of recharge pits :	2.0 m. X 2.0 m. X 2.0 m Depth
	Budgetary allocation (Capital cost) :	Rs. 19.00 Lakh
	Budgetary allocation (O & M cost) :	Rs. 1.25 Lakh/year
	Details of UGT tanks if any :	Domestic: 1,832 m3 Flushing: 920 m3 Fire: 600 m3
35.Storm water drainage	**Natural water drainage pattern:**	Along with road side nalla
	Quantity of storm water:	47.18 m3/ min.
	Size of SWD:	300 mm
Sewage and Waste water	**Sewage generation in KLD:**	1,616 m3/day
	STP technology:	MBBR
	Capacity of STP (CMD):	1 no. x 1,517 m3/day ; 1 no. x 180 m3/day
	Location & area of the STP:	STP 1: 1,517 m3/day is west side of the project with area 1,023 m2 and STP 2: 180 m3/day is near to commercial building with area 190 m2
	Budgetary allocation (Capital cost):	Rs. 72.00 Lakh
	Budgetary allocation (O & M cost):	Rs. 4.00 Lakh/year
36.Solid waste Management		
Waste generation in the Pre Construction and Construction phase:	**Waste generation:**	13,854.30 m3
	Disposal of the construction waste debris:	Will be used for levelling & backfilling work at site
Waste generation in the operation Phase:	**Dry waste:**	1935 kg/day
	Wet waste:	4430 kg/day
	Hazardous waste:	NA
	Biomedical waste (If applicable):	NA
	STP Sludge (Dry sludge):	15 kg/day
	Others if any:	NA

Mode of Disposal of waste:	**Dry waste:**	Handed over to authorized recycler for further handling and process
	Wet waste:	Through Organic Waste Convertor. Generated manure will be used for gardening and landscaping
	Hazardous waste:	NA
	Biomedical waste (If applicable):	NA
	STP Sludge (Dry sludge):	Will be used as manure for gardening purpose
	Others if any:	NA
Area requirement:	**Location(s):**	South west side of the project
	Area for the storage of waste & other material:	150 m2
	Area for machinery:	9 m2
Budgetary allocation (Capital cost and O&M cost):	**Capital cost:**	Rs. 28 Lakhs
	O & M cost:	Rs. 4 lakhs/year

37.Effluent Charecterestics

Serial Number	Parameters	Unit	Inlet Effluent Charecterestics	Outlet Effluent Charecterestics	Effluent discharge standards (MPCB)
1	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Amount of effluent generation (CMD):		Not applicable			
Capacity of the ETP:		Not applicable			
Amount of treated effluent recycled :		Not applicable			
Amount of water send to the CETP:		Not applicable			
Membership of CETP (if require):		Not applicable			
Note on ETP technology to be used		Not applicable			
Disposal of the ETP sludge		Not applicable			

38.Hazardous Waste Details

Serial Number	Description	Cat	UOM	Existing	Proposed	Total	Method of Disposal
1	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

39.Stacks emission Details

Serial Number	Section & units	Fuel Used with Quantity	Stack No.	Height from ground level (m)	Internal diameter (m)	Temp. of Exhaust Gases
1	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

40.Details of Fuel to be used

Serial Number	Type of Fuel	Existing	Proposed	Total
1	Not applicable	Not applicable	Not applicable	Not applicable
41.Source of Fuel		Not applicable		
42.Mode of Transportation of fuel to site		Not applicable		

43.Green Belt Development	**Total RG area :**	4,827 m2
	No of trees to be cut :	Not applicable
	Number of trees to be planted :	613 Nos.
	List of proposed native trees :	Provided
	Timeline for completion of plantation :	6 to 9 months after completion of Civil Works

44.Number and list of trees species to be planted in the ground

Serial Number	Name of the plant	Common Name	Quantity	Characteristics & ecological importance
1	Albizzia Lebbek	Shirish	34	Shade-giving tree
2	Artocarpus Heterophyllus	Fanas	49	Shade-giving tree
3	Azadirachta Indica	Neem/ Kadunimb	77	Hardy, drought resistant Medicinal Tree
4	Bauhinia Purpurea	Apta/Kanchan	28	Butterfly Host Tree
5	Cassia Fistula	Bahava	16	Drought-resistant, butterfly-host tree
6	Cassia Siamea	Kassod	26	Drought-resistant, butterfly-host tree
7	Emblica Officinalis	Amala/ Awala	95	Medicinal properties
8	Lagerstroemia Flos-reginae	Tamhan	15	Ornamental plant
9	Michelia champaka	Piwala chapha	87	Butterfly-host plant
10	Milingtonia hortensis	Booch	16	Ornamental plant
11	Pterospermum acerifolium	Muchkund	33	Quick growing Tree
12	Pongamia pinnata	Karanj	43	Shade-giving tree
13	Saraca Indica	Sita Ashok	15	Shade-giving tree
14	Mutingia calabura	Cherry	99	Fruit attracts birds and butterflies
45.Total quantity of plants on ground				

46.Number and list of shrubs and bushes species to be planted in the podium RG:

Serial Number	Name	C/C Distance	Area m2
1	NA	NA	NA

47.Energy

Power requirement:	**Source of power supply :**	MSEDCL
	During Construction Phase: (Demand Load)	200 kW
	DG set as Power back-up during construction phase	1 no. x 500 kVA
	During Operation phase (Connected load):	5504 kVA
	During Operation phase (Demand load):	5450 kVA
	Transformer:	10 nos. x 630 kVA
	DG set as Power back-up during operation phase:	2 no. x 200 kVA
	Fuel used:	Diesel
	Details of high tension line passing through the plot if any:	NA

48.Energy saving by non-conventional method:

Solar PV panel

49.Detail calculations & % of saving:

Serial Number	Energy Conservation Measures	Saving %
1	By using LED	2.52 %
2	By using Solar	1%

50.Details of pollution control Systems

Source	Existing pollution control system	Proposed to be installed
Not applicable	Not applicable	Not applicable

Budgetary allocation (Capital cost and O&M cost):	**Capital cost:**	Rs. 48 Lakh
	O & M cost:	Rs. 4.0 Lakh/year

51.Environmental Management plan Budgetary Allocation

a) Construction phase (with Break-up):

Serial Number	Attributes	Parameter	Total Cost per annum (Rs. In Lacs)
1	Air Environment	Water for dust suppresion	Rs 2.0
2	Site Sanitation& Safety	Sanitation Disinfection & Health check up	Rs. 7.00
3	Environmental Monitoring	Environmental Monitoring	Rs. 2.50
4	Disinfection	Sanitation	Rs. 1.00
5	Health Check up	Safety parameters	Rs. 2.50

b) Operation Phase (with Break-up):

Serial Number	Component	Description	Capital cost Rs. In Lacs	Operational and Maintenance cost (Rs. in Lacs/yr)
1	Sewage Treatment plant	2 no. of STP having total Capacity 1,617 m3/day	Rs. 72	Rs. 4.0
2	Solid Waste Management	Cost for Treatment of biodegradable garbage in OWC (-1- nos.)	Rs. 28	Rs. 4.0
3	Landscape	Tree Plantation & Landscaping	Rs. 47.5	Rs. 5.1
4	Environmental Monitoring	Monitoring and analysis of Air and Noise, water, soil etc.	MoEF approved laboratory	Rs. 5
5	Energy Conservation	Solar street lighting	Rs. 48	Rs. 4.0
6	Rain Water Harvesting	21 no. of recharge pits	Rs. 19	Rs. 1.25
7	Laying of storm & Sewer line up to final disposal point	Laying of storm & Sewer line up to final disposal point	Rs. 66	Rs. 2
8	Water Treatment Plant	1 nos. of WTP having capacity 106 m3/hr	Rs. 40	Rs. 2

51.Storage of chemicals (inflamable/explosive/hazardous/toxic substances)

Description	Status	Location	Storage Capacity in MT	Maximum Quantity of Storage at any point of time in MT	Consumption / Month in MT	Source of Supply	Means of transportation
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

52.Any Other Information

No Information Available

53.Traffic Management

	Nos. of the junction to the main road & design of confluence:	1 No.

Parking details:	**Number and area of basement:**	1 basement for commercial building and area is 979.40 m2
	Number and area of podia:	NA
	Total Parking area:	37,580 m2
	Area per car:	30 m2
	Area per car:	30 m2
	Number of 2-Wheelers as approved by competent authority:	5750 Nos.
	Number of 4-Wheelers as approved by competent authority:	414 nos.
	Public Transport:	NA
	Width of all Internal roads (m):	6 m
	CRZ/ RRZ clearance obtain, if any:	NA
	Distance from Protected Areas / Critically Polluted areas / Eco-sensitive areas/ inter-State boundaries	NA
	Category as per schedule of EIA Notification sheet	8(a), B2
	Court cases pending if any	NA
	Other Relevant Informations	1.We have provided WTP for project having capacity 106 m3/hr. Quantity of water requirement for WTP is 1,265 m3/day & treated water from WTP is 1,265 m3/day. Area provided for WTP is 60 m2. 2. We have submitted application on MoEF state portal having proposal no. SIA/MH/NCP/72465/2018 dt.24.01.2018. We are applying for New Residential and Commercial project under schedule 8(a) B2 category.
	Have you previously submitted Application online on MOEF Website.	Yes
	Date of online submission	24-01-2018

SEAC DISCUSSION ON ENVIRONMENTAL ASPECTS

Summorised in brief information of Project as below.

Brief information of the project by SEAC

PP submitted their application for prior Environmental clearance for total plot area of 48,460 m2, Total BUA of 124603 m2 and FSI area of 82,285 m2.

The case was discussed on the basis of the documents submitted and presentation made by the proponent. All issues relating to environment, including air, water, land, soil, ecology, biodiversity and social aspects were examined. The proposal is appraised as category 8(a) B2.

DECISION OF SEAC

SEAC decided to **recommend** the proposal for prior environmental Clearance, subject to PP complying with the above conditions.

Specific Conditions by SEAC:

1) PP to submit details of CER activities in consultation with the affected people in the project area as per MoEF&CC circular dated 01.05.2018 with details of fund utilization & agreement with executor.

FINAL RECOMMENDATION

SEAC-III have decided to recommend the proposal to SEIAA for Prior Environmental clearance subject to above conditions

Agenda for 75th meeting of SEAC-3 (Day-1)

SEAC Meeting number: 75 **Meeting Date** November 1, 2018

Subject: Environment Clearance for Building construction Project

Is a Violation Case: No

1.Name of Project	Proposed Residential Project
2.Type of institution	Private
3.Name of Project Proponent	Mr. Mohan Devji Naik
4.Name of Consultant	Mr. Rajesh Shrivastav PECS- Pollution & Ecology Control Services.
5.Type of project	Housing Project
6.New project/expansion in existing project/modernization/diversification in existing project	Not applicable
7.If expansion/diversification, whether environmental clearance has been obtained for existing project	Not applicable
8.Location of the project	SR. NO. 72/1B/1+72/1B/2, Varale -Ambi Road
9.Taluka	Maval
10.Village	Varale
Correspondence Name:	Mr. Mohan Devji Naik
Room Number:	G-8
Floor:	2nd Floor
Building Name:	K K Market
Road/Street Name:	-
Locality:	Dhankawadi
City:	Pune
11.Area of the project	Other area
12.IOD/IOA/Concession/Plan Approval Number	IOD not received
	IOD/IOA/Concession/Plan Approval Number: Not Received
	Approved Built-up Area:
13.Note on the initiated work (If applicable)	NA
14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)	NA
15.Total Plot Area (sq. m.)	15248 Sqm
16.Deductions	2698 Sqm
17.Net Plot area	12550
18 (a).Proposed Built-up Area (FSI & Non-FSI)	**a) FSI area (sq. m.):** 17783
	b) Non FSI area (sq. m.): 9982.05
	c) Total BUA area (sq. m.): 27765.05
18 (b).Approved Built up area as per DCR	**Approved FSI area (sq. m.):** Applied for
	Approved Non FSI area (sq. m.): Applied for
	Date of Approval: 01-01-1900
19.Total ground coverage (m2)	3333.12
20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)	26.56 %
21.Estimated cost of the project	477723200

22.Number of buildings & its configuration

Serial number	Building Name & number	Number of floors	Height of the building (Mtrs)

1	Building A	B + P +10	31.5
2	Building B	B + P + 10	31.5
3	Building C	B + P + 11	34.35
4	Building D	B + P + 12	37.2

23.Number of tenants and shops	424 Tenements
24.Number of expected residents / users	Residential Users- 2120 Nos
25.Tenant density per hectare	338 Tenements per hector
26.Height of the building(s)	
27.Right of way (Width of the road from the nearest fire station to the proposed building(s)	12 M wide approach road
28.Turning radius for easy access of fire tender movement from all around the building excluding the width for the plantation	6 M
29.Existing structure (s) if any	NIL
30.Details of the demolition with disposal (If applicable)	NA

31.Production Details

Serial Number	Product	Existing (MT/M)	Proposed (MT/M)	Total (MT/M)
1	Not applicable	Not applicable	Not applicable	Not applicable

32.Total Water Requirement

Dry season:	**Source of water**	Grampanchayat, Varale
	Fresh water (CMD):	190.8
	Recycled water - Flushing (CMD):	95.4
	Recycled water - Gardening (CMD):	7.53
	Swimming pool make up (Cum):	2.14
	Total Water Requirement (CMD) :	295.87
	Fire fighting - Underground water tank(CMD):	100
	Fire fighting - Overhead water tank(CMD):	40
	Excess treated water	183.27
Wet season:	**Source of water**	Grampanchayat, Varale
	Fresh water (CMD):	190.8
	Recycled water - Flushing (CMD):	95.4
	Recycled water - Gardening (CMD):	0
	Swimming pool make up (Cum):	0
	Total Water Requirement (CMD) :	286.2
	Fire fighting - Underground water tank(CMD):	100
	Fire fighting - Overhead water tank(CMD):	40
	Excess treated water	190.8
Details of Swimming pool (If any)	Size of swimming pool- 7.05 m x 5.05 m x 1.2 m	

33.Details of Total water consumed

Particulars	Consumption (CMD)			Loss (CMD)			Effluent (CMD)		
Water Requirement	**Existing**	**Proposed**	**Total**	**Existing**	**Proposed**	**Total**	**Existing**	**Proposed**	**Total**
Domestic	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

34.Rain Water Harvesting (RWH)	**Level of the Ground water table:**	12 m BGL
	Size and no of RWH tank(s) and Quantity:	Harvesting proposed in recycled water tank with filtration
	Location of the RWH tank(s):	Collected in raw water tank
	Quantity of recharge pits:	4 Nos.
	Size of recharge pits :	2m x 2m x 3m
	Budgetary allocation (Capital cost) :	Rs. 2.60 Lacs
	Budgetary allocation (O & M cost) :	Rs. 0.11 Lacs/Annum
	Details of UGT tanks if any :	UGT capacity- 440 Cum
35.Storm water drainage	**Natural water drainage pattern:**	Sowth East to North West
	Quantity of storm water:	4230.19
	Size of SWD:	450 mm to 600 mm
Sewage and Waste water	**Sewage generation in KLD:**	286.2 Cum
	STP technology:	Phytorid
	Capacity of STP (CMD):	300 Cum- 1 No
	Location & area of the STP:	Shown on Plan
	Budgetary allocation (Capital cost):	Rs. 40 Lacs
	Budgetary allocation (O & M cost):	Rs. 4.4 Lacs/Annum
36.Solid waste Management		
Waste generation in the Pre Construction and Construction phase:	**Waste generation:**	2.5 Kg/day
	Disposal of the construction waste debris:	Handed over to Authorized Agency
Waste generation in the operation Phase:	**Dry waste:**	424.0 Kg/day
	Wet waste:	636.0 Kg/day
	Hazardous waste:	Negligible
	Biomedical waste (If applicable):	Nil
	STP Sludge (Dry sludge):	Negligible. If generated shall be composted in situ
	Others if any:	Nil

Mode of Disposal of waste:	**Dry waste:**	Handed over to authorized agency
	Wet waste:	in-situ composting
	Hazardous waste:	If any, handed over to authorized agency
	Biomedical waste (If applicable):	NA
	STP Sludge (Dry sludge):	In- Situ Composting
	Others if any:	NA
Area requirement:	**Location(s):**	As Shown in the plan
	Area for the storage of waste & other material:	71 Sqm
	Area for machinery:	Considered in above area
Budgetary allocation (Capital cost and O&M cost):	**Capital cost:**	Rs. 14.0 Lacs
	O & M cost:	Rs. 2.0 Lacs/ Annum

37.Effluent Charecterestics

Serial Number	Parameters	Unit	Inlet Effluent Charecterestics	Outlet Effluent Charecterestics	Effluent discharge standards (MPCB)
1	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Amount of effluent generation (CMD):		Not applicable			
Capacity of the ETP:		Not applicable			
Amount of treated effluent recycled :		Not applicable			
Amount of water send to the CETP:		Not applicable			
Membership of CETP (if require):		Not applicable			
Note on ETP technology to be used		Not applicable			
Disposal of the ETP sludge		Not applicable			

38.Hazardous Waste Details

Serial Number	Description	Cat	UOM	Existing	Proposed	Total	Method of Disposal
1	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

39.Stacks emission Details

Serial Number	Section & units	Fuel Used with Quantity	Stack No.	Height from ground level (m)	Internal diameter (m)	Temp. of Exhaust Gases
1	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

40.Details of Fuel to be used

Serial Number	Type of Fuel	Existing	Proposed	Total
1	Not applicable	Not applicable	Not applicable	Not applicable
41.Source of Fuel		Not applicable		
42.Mode of Transportation of fuel to site		Not applicable		

43.Green Belt Development	**Total RG area :**	1255 Sqm
	No of trees to be cut :	Nil
	Number of trees to be planted :	157 Nos
	List of proposed native trees :	List given below
	Timeline for completion of plantation :	Before completion of the project

44.Number and list of trees species to be planted in the ground

Serial Number	Name of the plant	Common Name	Quantity	Characteristics & ecological importance
1	Nyctanthes arbor-tristis	Parijatak	12	This Small tree has highly fragrant flowers those attract Bees and Butterflies, Fruits attract Birds.
2	This Small tree has highly fragrant flowers those attract Bees and Butterflies, Fruits attract Birds.	Kanak Champa	12	Native, this shrub has yellow fragrant flowers, Host plant for Butterflies.
3	Murraya paniculatum	Kamini/Kunti	12	Native to Western Ghats, this shrub has fragrant white flowers and dense foliage. It is a host plant for Butterflies.
4	Manilkara zapota	Chickoo	12	This small tree attracts Birds and Bees. Edible Fruit.
5	Citrus limon	Lemon	12	This Shrub is used in everyday Cooking and acts as a host plant for Butterflies.
6	Bauhinia racemosa	Apta	12	Native to Pune, this Shrub has a Religious importance
7	Mimusops elengi	Bakul	12	Native, Evergreen Foliage and Flowering tree has dense branching, hence good for Wind screening. Flowers are deeply fragrant and attracts birds and Bees.
8	Pongamia pinnata	Karanj	12	Native to Pune, this Deciduous White Flowering tree . Attracts Birds and Arboreal Mammals.
9	Lagerstroemia reginae	Tamhan	12	This Purple Flowering plant is the State flower of Maharashtra.
10	Cassia fistula	Bahava	12	This Flowering and Deciduous tree has beautiful Yellow chandeliers in Summers. Good perching site for Birds.
11	Erythrina variegata	Pangara	5	Native to Western Maharashtra, this Reddish-Orange Flowering and Deciduous tree attracts lot of Birds for the Nectar.
12	Saraca asoca	Ashoka	12	Flowering tree attracting Avifauna
13	Azadirachta indica	Neem	12	Multipurpose tree with medicinal uses

14	Albizia lebbeck	Shirish	8	Flowering tree attracting Avifauna
45.Total quantity of plants on ground				

46.Number and list of shrubs and bushes species to be planted in the podium RG:

Serial Number	Name	C/C Distance	Area m2
1	NA	NA	NA

47.Energy

Power requirement:	**Source of power supply :**	MSEDCL
	During Construction Phase: (Demand Load)	30 KW
	DG set as Power back-up during construction phase	62.5 KVA
	During Operation phase (Connected load):	1409 KW
	During Operation phase (Demand load):	1040 KVA
	Transformer:	630 KVA- 2 Nos
	DG set as Power back-up during operation phase:	125 KVA- 1 Nos
	Fuel used:	HSD
	Details of high tension line passing through the plot if any:	NA

48.Energy saving by non-conventional method:

- Common area lighting such as parking, stairways, passages etc shall be provided with LED bulbs
- LED for entire Drive way and internal roads and pathways
- Solar Water heating system shall be provided for entire scheme as per norms
- Energy efficient pumps.
- Timer for Staircase lighting, Lift Lobby, Parking area and street lights.
- Energy saving devices for passenger lifts.

49.Detail calculations & % of saving:

Serial Number	Energy Conservation Measures	Saving %
1	Solar water Heater, Solar PV, Solar Street Lights	Total 4-6 % of energy saving

50.Details of pollution control Systems

Source	Existing pollution control system	Proposed to be installed
Not applicable	Not applicable	Not applicable

Budgetary allocation (Capital cost and O&M cost):	**Capital cost:**	Rs. 37.22 Lacs
	O & M cost:	Rs. 0.75 Lacs/ Annum

51.Environmental Management plan Budgetary Allocation

a) Construction phase (with Break-up):			
Serial Number	**Attributes**	**Parameter**	**Total Cost per annum (Rs. In Lacs)**
1	Water for construction & labour	Water Requirement	0.92
2	Site sanitation & safety	Health & Safety	1.60
3	Environmental Monitoring	Pollution monitoring & control	1.80
4	Disinfection	Health & Safety	0.50
5	Health & Safety	Health & Safety	0.50

b) Operation Phase (with Break-up):				
Serial Number	**Component**	**Description**	**Capital cost Rs. In Lacs**	**Operational and Maintenance cost (Rs. in Lacs/yr)**
1	Rain water harvesting	RWH Pits	2.60	0.11
2	Sewage treatment plant	waste water treatment	40.0	4.4
3	Organic waste composting	solid waste management	14.0	2.0
4	Tree Plantation	landscape development	9.41	4.15
5	Energy saving	Energy conservation measures	37.22	0.75
6	Environmental Monitoring	pollution monitoring & control	0.00	1.80

51.Storage of chemicals (inflamable/explosive/hazardous/toxic substances)

Description	Status	Location	Storage Capacity in MT	Maximum Quantity of Storage at any point of time in MT	Consumption / Month in MT	Source of Supply	Means of transportation
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

52.Any Other Information

No Information Available

53.Traffic Management

	Nos. of the junction to the main road & design of confluence:	2 Nos

Parking details:	**Number and area of basement:**	4 Basement of 3333.12 Sqm
	Number and area of podia:	Nil
	Total Parking area:	5916.4 Sqm
	Area per car:	20 Sqm
	Area per car:	20 Sqm
	Number of 2-Wheelers as approved by competent authority:	781 Nos
	Number of 4-Wheelers as approved by competent authority:	124 Nos
	Public Transport:	Nil
	Width of all Internal roads (m):	Minimum 6 M wide
	CRZ/ RRZ clearance obtain, if any:	NA
	Distance from Protected Areas / Critically Polluted areas / Eco-sensitive areas/ inter-State boundaries	NA
	Category as per schedule of EIA Notification sheet	8(a)
	Court cases pending if any	NA
	Other Relevant Informations	NA
	Have you previously submitted Application online on MOEF Website.	No
	Date of online submission	-

SEAC DISCUSSION ON ENVIRONMENTAL ASPECTS

Summorised in brief information of Project as below.

Brief information of the project by SEAC

PP submitted their application for amendment in earlier Environmental clearance for total plot area of 15248 m2, Total BUA of 27765.05 m2 and FSI area of 17783 m2.

The case was discussed on the basis of the documents submitted and presentation made by the proponent. All issues relating to environment, including air, water, land, soil, ecology, biodiversity and social aspects were examined. The proposal is appraised as category 8(a) B2.

Committee noted that the PP has complied with the points raised in 72nd SEAC-3 meeting.

DECISION OF SEAC

SEAC decided to **recommend** the proposal for prior environmental Clearance.

Specific Conditions by SEAC:

FINAL RECOMMENDATION

SEAC-III have decided to recommend the proposal to SEIAA for Prior Environmental clearance subject to above conditions

Agenda for 75th meeting of SEAC-3 (Day-1)

SEAC Meeting number: 75 **Meeting Date** November 1, 2018

Subject: Environment Clearance for Environment Clearance for Integrated Township at S no 40-47 at Mhalunge taluka-Mulshi Dist Pune by Mahalunge Land Developers LLP

Is a Violation Case: No

1.Name of Project	Environment Clearance for Integrated Township at S no 40-47 at Mhalunge taluka- Mulshi Dist Pune by Mahalunge Land Developers LLP
2.Type of institution	TOR
3.Name of Project Proponent	Mr. Vilas Tambe
4.Name of Consultant	Vke environmental LLP
5.Type of project	Integrated Township
6.New project/expansion in existing project/modernization/diversification in existing project	Amendment in EC
7.If expansion/diversification, whether environmental clearance has been obtained for existing project	Yes. Environmental clearance has been granted by SEIAA vide no SEAC-2009/CR.71/TC-2 however extension for EC has been obtained for 3 years on 14 dec 2016
8.Location of the project	Survey No 40 to 47of Village Mahalunge Taluka Mulshi Dist Pune
9.Taluka	Mulshi
10.Village	Mahalunge
Correspondence Name:	Mr. Vilas Tambe
Room Number:	-
Floor:	8th Level
Building Name:	Solitaire World
Road/Street Name:	-
Locality:	Opp Regency Classic, Mumbai Banglore Highway, Baner Pune
City:	Pune
11.Area of the project	PMRDA
12.IOD/IOA/Concession/Plan Approval Number	In Process
	IOD/IOA/Concession/Plan Approval Number: In Process
	Approved Built-up Area: 00
13.Note on the initiated work (If applicable)	As per earlier EC Phase 1 of Sector R1 completed and Phase II of sector R1 , School building , E1 Retail shopping Building is under construction.
14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)	In Process
15.Total Plot Area (sq. m.)	418297.00 sq m
16.Deductions	NA as Integrated Township Project
17.Net Plot area	418297.00
18 (a).Proposed Built-up Area (FSI & Non-FSI)	**a) FSI area (sq. m.):** 7,11,100
	b) Non FSI area (sq. m.): 5,57,783
	c) Total BUA area (sq. m.): 1268883
18 (b).Approved Built up area as per DCR	**Approved FSI area (sq. m.):** In Process
	Approved Non FSI area (sq. m.): In Process
	Date of Approval: 26-06-2018
19.Total ground coverage (m2)	99375
20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)	23.75 %
21.Estimated cost of the project	29880000000

22.Number of buildings & its configuration

Serial number	Building Name & number	Number of floors	Height of the building (Mtrs)
1	Sector R1-Tower 1, Building A	LB+UB+S+22	69.75
2	Sector R1- Tower 2 Building C and D	P+7	23.95
3	Sector R1-Tower 3 Building C and D	P+7	23.95
4	Sector R1- Tower 4 Building C and D	P+7	23.95
5	Sector R1- Tower 4 Building C and D	P+7	23.95
6	Sector R1 -Tower 5 Building A,B,C and F	S+P+7	26.95
7	Sector R1 -Tower 6 Building D and E	P+7	23.95
8	Sector R1 -Tower 7 Building A,B And C	P+7	23.95
9	Sector R1 -Tower 8 Building D,E	P+7	23.95
10	Sector R1 -Tower 10	LB+UB+S+P+22	69.60
11	Sector R1 -Tower 11	LB+UB+S+P+22	69.60
12	Sector R1 -Tower 12	LB+UB+S+P+22	69.60
13	Sector R1 -Tower 13	LB+UB+S+P+22	69.60
14	Sector R1 -Tower 14	LB+UB+S+P+22	69.60
15	Sector R1 -Tower 15	UB+S+22	69.60
16	Sector R1 -Tower 16	UB+S+22	69.60
17	Sector R1 -Tower 17	UB+S+22	69.60
18	Sector R2- Building A1	S+7	22.95
19	Sector R2- Building B1,C2, E1,E2, E3 and E4	S+P+14	45.90
20	Sector R2- Building C1, D1 and D2	S+P+21	65.85
21	Sector R2 Commercial Building	G+ 1	09.00
22	Sector R3 Tower T1 to Tower T4	S+2P+21	72.00
23	Sector R3 Tower T5 and Tower T6	S+2P+14	51.70
24	Bunglows	G+ 3	14.00
25	Sector R4- Building A	P+9	29.00
26	Sector R4- Building B	P+12	37.70
27	Sector R4- Building C	P+11	34.80
28	Sector R5- Building A and Building B	B+S+P+30	100.00
29	Sector R6 Tower T1 and Tower T2	G+2P+21	74.70
30	Sector R6 Tower T3	B+G+2P+21	74.70
31	Sector R7 Tower T1 to Tower T5	S+2P+21	74.70
32	Sector R8-Building- A, B, C, E, F and G	P+12	37.05
33	Sector R8- Building- D	P+10	31.35
34	Sector E1-Commercial Building	B+LG+UP+3	21.00
35	Sector E2- Retail/ Offices	B+S+G+12	53.20
36	Sector E3- Tower 1 and Tower 2	2B+G+16	68.40

37	Sector E4- Tower 1 and Tower 2	2B+G+16	68.40
38	Sector E5- Retail/ Offices	B+G+5	23.10
39	Hospital	B+G+3	15.00
40	Town hall	B+G+2	15.00
41	Market – Building 1 to Building 4	G + 1	07.35
42	School	G + 5	21.00
43	Fire Station (office)	G+1	09.00
44	Fire Station (residential)	P+4	15.00
45	Sport Complex building A	G+2	14.00
46	Sport Complex building B	B + G	03.50

23.Number of tenants and shops	8737 tenaments , 18 bunglows and 1106 offices/ retail Shops
24.Number of expected residents / users	Residential 43,775 users Commercial 28,959 users
25.Tenant density per hectare	Tenant Density 1046/hec Tenement Density 209/ hec
26.Height of the building(s)	
27.Right of way (Width of the road from the nearest fire station to the proposed building(s)	Access from 30m Mahalunge Road, Nearest fire station Blue ridge fire station approx. 1 km.
28.Turning radius for easy access of fire tender movement from all around the building excluding the width for the plantation	9 m
29.Existing structure (s) if any	As per earlier EC Phase 1 of Sector R1 completed and Phase II of sector R1 , School building , E1 Retail shopping Building is under construction.
30.Details of the demolition with disposal (If applicable)	NA

31.Production Details

Serial Number	Product	Existing (MT/M)	Proposed (MT/M)	Total (MT/M)
1	Not applicable	Not applicable	Not applicable	Not applicable

32.Total Water Requirement

Dry season:	**Source of water**	Mula River Irrigation Department, Govt of Mahatrashtra
	Fresh water (CMD):	4723 m3/day
	Recycled water - Flushing (CMD):	2530 m3/day
	Recycled water - Gardening (CMD):	732 m3/day
	Swimming pool make up (Cum):	5 m3/day
	Total Water Requirement (CMD) :	7990 m3/day
	Fire fighting - Underground water tank(CMD):	2750 m3/day
	Fire fighting - Overhead water tank(CMD):	20000 lit/building
	Excess treated water	3179 m3/day
Wet season:	**Source of water**	Mula River Irrigation Department, Govt of Mahatrashtra
	Fresh water (CMD):	4723 m3/day
	Recycled water - Flushing (CMD):	2530 m3/day
	Recycled water - Gardening (CMD):	00
	Swimming pool make up (Cum):	5 m3/day
	Total Water Requirement (CMD) :	7258 m3/day
	Fire fighting - Underground water tank(CMD):	2750 m3/day
	Fire fighting - Overhead water tank(CMD):	20000 lit/building
	Excess treated water	3911 m3/day
Details of Swimming pool (If any)	Water requirement for make up : 5kld a) PH-7.0 to 7.6 b)Chlorine Content -0.8 to 1.0 ppm Residual Chlorine in pool c) Disinfection Treatment - With Ozone	

33.Details of Total water consumed

Particulars	Consumption (CMD)			Loss (CMD)			Effluent (CMD)		
Water Requirement	**Existing**	**Proposed**	**Total**	**Existing**	**Proposed**	**Total**	**Existing**	**Proposed**	**Total**
Domestic	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

34.Rain Water Harvesting (RWH)	**Level of the Ground water table:**	Pre Monsoon 12-15 mt bgl Post Monsoon 4 to 5 mt bgl
	Size and no of RWH tank(s) and Quantity:	NA
	Location of the RWH tank(s):	NA
	Quantity of recharge pits:	46
	Size of recharge pits :	2m X 1 m X 2m
	Budgetary allocation (Capital cost) :	Rs 46,00,000 /-
	Budgetary allocation (O & M cost) :	Rs 5,00,000 /-
	Details of UGT tanks if any :	Total UGT Capacity of the Project 13640 KLD
35.Storm water drainage	**Natural water drainage pattern:**	Natural water drainage pattern: The storm water drainage will be designed according to contours. The storm water collected through the storm water drains of adequate capacity will be led to recharge pits
	Quantity of storm water:	264 m3/Min
	Size of SWD:	1.5 m dia
Sewage and Waste water	**Sewage generation in KLD:**	6441 KLD
	STP technology:	Engineered Wetland
	Capacity of STP (CMD):	6500 KLD
	Location & area of the STP:	On ground, Sector wise STPs are Provided also ETP of 1 KLD will be provide for health care.
	Budgetary allocation (Capital cost):	Rs 21,80,00,000 /-
	Budgetary allocation (O & M cost):	Rs 1,15,22,000/-
36.Solid waste Management		
Waste generation in the Pre Construction and Construction phase:	**Waste generation:**	Dry waste (Kg/day): 60 kg/day -Wet waste (Kg/day): 60 kg/day –Total waste generated: 120 Kg/day
	Disposal of the construction waste debris:	The Construction waste generated during construction shall be segregated, reused on site and surplus shall be led to scrap dealers for recycling
Waste generation in the operation Phase:	**Dry waste:**	13152 kg/day
	Wet waste:	16038 kg/day
	Hazardous waste:	NA
	Biomedical waste (If applicable):	8
	STP Sludge (Dry sludge):	773 kg/day
	Others if any:	e waste : 140 kg/day

Mode of Disposal of waste:	**Dry waste:**	Will be segregated and handed over to authorized Vendor
	Wet waste:	Wet waste will be treated in Organic Waste Converter, sector wise OWC has been proposed
	Hazardous waste:	NA
	Biomedical waste (If applicable):	Will be segregated and handed to Authorized Biomedical Waste vendor
	STP Sludge (Dry sludge):	Dried sludge from STP will be used as manure
	Others if any:	e waste will be handover to authorized e waste Vendor
Area requirement:	**Location(s):**	On ground, Sector wise OWCs are Proposed
	Area for the storage of waste & other material:	263 sq m
	Area for machinery:	1074 sq m
Budgetary allocation (Capital cost and O&M cost):	**Capital cost:**	Rs 4,20,25,000
	O & M cost:	Rs 86,88,211

37.Effluent Charecterestics

Serial Number	Parameters	Unit	Inlet Effluent Charecterestics	Outlet Effluent Charecterestics	Effluent discharge standards (MPCB)
1	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

Amount of effluent generation (CMD):	0.8
Capacity of the ETP:	1 KLD
Amount of treated effluent recycled :	0.7
Amount of water send to the CETP:	Not applicable
Membership of CETP (if require):	Not applicable
Note on ETP technology to be used	advance Oxidation Process
Disposal of the ETP sludge	Will be Disposed through authorized vendor

38.Hazardous Waste Details

Serial Number	Description	Cat	UOM	Existing	Proposed	Total	Method of Disposal
1	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

39.Stacks emission Details

Serial Number	Section & units	Fuel Used with Quantity	Stack No.	Height from ground level (m)	Internal diameter (m)	Temp. of Exhaust Gases
1	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

40.Details of Fuel to be used

Serial Number	Type of Fuel	Existing	Proposed	Total
1	Not applicable	Not applicable	Not applicable	Not applicable

41.Source of Fuel	Not applicable
42.Mode of Transportation of fuel to site	Not applicable

43.Green Belt Development	**Total RG area :**	RG + CG = 122090 sq m
	No of trees to be cut :	Few Trees exist on site of of which some will be transplanted and rest of the trees will be protected
	Number of trees to be planted :	6275
	List of proposed native trees :	As listed Below
	Timeline for completion of plantation :	Till Operation Phase

44.Number and list of trees species to be planted in the ground

Serial Number	Name of the plant	Common Name	Quantity	Characteristics & ecological importance
1	Syzygium cumini	Jambhul Tree	250	A large size tree with dense foliage provides shade along roads; wood is water resistant and attracts a variety of birds
2	Millingtonia hortensis	Indian cork tree	545	A columnar, evergreen tree, grows well in both dry and moist regions.
3	Lagerstromia flos-regineae	Tamhan	470	State flower tree of Maharashtra. Medium sized tree, beautiful purple flowers, grows well in both dry and humid climate.
4	Pongamia pinnata	Karanj	540	Large tree good for stopping soil erosion along canal banks
5	Azadirachta indica	Neem	550	A medium to large size hardy tree which stand in drought conditions. Air Purifying quality Attain a much larger size in dry regions.
6	Cassia fistula	Bahava	350	SSmall deciduous tree. Excellent bright flowering tree for arid regions.
7	Ficus benjamina	Weeping Fig	240	Medium sized evergreen tree with elegant appearance and moderate water requirement
8	Plumeria alba	Champa	200	Ornamental flowering tree
9	Michelia champaca	Sonchapha	550	Medium sized evergreen tree, fragrant yellow flowers, Butterfly host plant.
10	Polyathia longifolia	Ashoka	300	Large evergreen tree Effective in decreasing noise pollution
11	Mangifera indica	Mango	250	Large evergreen and fruit bearing tree
12	Albizia lebeck	Shirish	450	Shady, large tree, ball shaped flowers
13	Butea monosperma	Palas	250	Small deciduous. Good for roadside plantation.
14	Psidium guajava	Guava, Peru	150	Small hardy and birds attracting tree.
15	Jacaranda mimosifolia	Jacaranda	350	Medium size gracious deciduous, flowering tree which prefers moderate climate.

16	Khaya senghalis	Khaya	230	Large roadside tree with white sweet scented flowers.
17	Spathodia campanulata	Pichkari	250	A handsome large deciduous tree. Good for roadside plantation
18	Bauhinia purpurea	Rakta Kanchan	350	Small hardy tree with beautiful pink flowers.
45.Total quantity of plants on ground				

46.Number and list of shrubs and bushes species to be planted in the podium RG:

Serial Number	Name	C/C Distance	Area m2
1	Raphis Palm	0.60	125
2	Allamanda yellow	0.45	75
3	Asparagus Sprengeri	0.30	60
4	Ixora red	0.30	75
5	Rhoeo	0.23	50
6	Russelia Red	0.30	50
7	Areca palm	0.60	50
8	Euphorbia carcassana	0.45	75

47.Energy

Power requirement:	**Source of power supply :**	MSEDCL
	During Construction Phase: (Demand Load)	100 KW
	DG set as Power back-up during construction phase	125 KVA
	During Operation phase (Connected load):	52940 kW
	During Operation phase (Demand load):	39411 kVA
	Transformer:	63 x 630 kva
	DG set as Power back-up during operation phase:	25 x 500 kva, 8 x 400 kva, 4 x 300 kva, 6 x 250 kva, 4 x 140 kva
	Fuel used:	HSD
	Details of high tension line passing through the plot if any:	YES

48.Energy saving by non-conventional method:

Total Energy Saving : i.e. (28 % Savings)

49.Detail calculations & % of saving:

Serial Number	Energy Conservation Measures	Saving %

1	Timers and contactors will be used to switch on / off common are & external landscape and facade lighting.	956180 kWH
2	Light Emitting Diode (LED) will be used for corridors ,Lobbies and common areas.	YES
3	All fluorescent light fixtures are specified to incorporate electronic chokes which have less watt-loss compared to electro-magnetic chokes and result in superior operating power factor. This indirectly saves energy. Electronic chokes also improves life of the fluorescent lamps.	YES
4	Energy efficient cfl/t5/led lamps which give approx. 30% more light output for the same watts consumed and therefore require less nos. Of fixtures and corresponding lower point wiring costs. LPD of 7.5 W/sq.mtr. in Residential areas & 10.8 W/sq.mtr. in Office areas is proposed.	956180 kWH
5	All cables will be derated to avoid heating during use. This also indirectly reduces losses and improves reliability. To achieve the same we have considered current carrying capacity of all the cables laid through ground/air whichever is minimum.	YES
6	125 Ltrs Solar water is provided for each flat.	13139199 kWH
7	Solar PV panel system is proposed for Street lighting & Building common lighting.	480000 kWH

50.Details of pollution control Systems

Source	Existing pollution control system	Proposed to be installed
Not applicable	Not applicable	Not applicable

Budgetary allocation (Capital cost and O&M cost):	**Capital cost:**	Rs 2,00,00,000/-
	O & M cost:	Rs 10,00,000/-

51.Environmental Management plan Budgetary Allocation

a) Construction phase (with Break-up):

Serial Number	Attributes	Parameter	Total Cost per annum (Rs. In Lacs)
1	Air Environment	Erosion control, dust suppression measures, top soil preservation	434.60
2	Land	Labour camp toilets & sanitation	28.80
3	Health and safety	Health checkup & Disinfection	2.76
4	Environment Management	Environment management cell	3.00
5	Environmental Monitoring (Per Year)	Air, Water, Noise, Soil, DG set,	2.75
6	Labor Safety Equipment and training	Labor Safety Equipment and training	24.00

b) Operation Phase (with Break-up):

Serial Number	Component	Description	Capital cost Rs. In Lacs	Operational and Maintenance cost (Rs. in Lacs/yr)

1	Sewage treatment plant	STP	2180	115.22
2	Organic waste management	OWC	420.25	86.88
3	Landscaping	Development and Maintenance	305.22	30.52
4	Rain water harvesting	Recharge pits	46.00	5.00
5	Energy	Solor Hot Water & PV panels	200	10.00
6	Environment Monitoring	Air, Noise, Soil, Water, STP /ETP/ WTP treated water, OWC Manure, DG Stack	00	11.50

51.Storage of chemicals (inflamable/explosive/hazardous/toxic substances)

Description	Status	Location	Storage Capacity in MT	Maximum Quantity of Storage at any point of time in MT	Consumption / Month in MT	Source of Supply	Means of transportation
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

52.Any Other Information

No Information Available

53.Traffic Management

	Nos. of the junction to the main road & design of confluence:	The site is located in Mhalunge Area. The development will be accessible from 36m wide Mhalunge road while the internal driveways are 6 m to 30 m
Parking details:	**Number and area of basement:**	51184.08 sq m
	Number and area of podia:	104613.40 sq m
	Total Parking area:	231432 sq m
	Area per car:	12.5 sq m
	Area per car:	12.5 sq m
	Number of 2-Wheelers as approved by competent authority:	18688 Nos
	Number of 4-Wheelers as approved by competent authority:	9303 Nos
	Public Transport:	The Project proposespublic transport li
	Width of all Internal roads (m):	6 m to 36 m

	CRZ/ RRZ clearance obtain, if any:	NA
	Distance from Protected Areas / Critically Polluted areas / Eco-sensitive areas/ inter-State boundaries	NA
	Category as per schedule of EIA Notification sheet	8 (b)
	Court cases pending if any	NA
	Other Relevant Informations	NA
	Have you previously submitted Application online on MOEF Website.	No
	Date of online submission	-

SEAC DISCUSSION ON ENVIRONMENTAL ASPECTS

Summorised in brief information of Project as below.

Brief information of the project by SEAC

PP submitted their application for amendment in earlier Environmental clearance for total plot area of 418297.00 m2, Total BUA of 1268883 m2 and FSI area of 711100 m2.

The case was discussed on the basis of the documents submitted and presentation made by the proponent. All issues relating to environment, including air, water, land, soil, ecology, biodiversity and social aspects were examined. The proposal is appraised as category 8(a) B1.

DECISION OF SEAC

PP requested for time to submit above information; after deliberations committee asked PP to **comply with the above observations** and submit information to the committee for further discussion and consideration of SEAC.

Specific Conditions by SEAC:

1) PP to submit condition wise compliance report of earlier EC conditions.
2) PP to submit comparative statement of components approved and components constructed as per earlier EC and proposed development.
3) PP to submit 6 monthly compliance report of earlier EC validated by Regional Office, MOEF&CC, Nagpur, as per MoEF & CC Circular dated 07.09.2017.
4) PP to obtain and submit following NOC's: a) CFO NOC, b) Water supply NOC with quantity, c) Drainage NOC, d) Non-biodegradable waste disposal.
5) PP to submit design details of water treatment plant; PP to submit details of reject of WTP.
6) PP to relocate STPs proposed within RED Line and submit details of the same.
7) PP to remove puzzle parking proposed in commercial area OR submit the approved plan.

FINAL RECOMMENDATION

SEAC-III decided to defer the proposal.Kindly find SEAC decision above.

Agenda for 75th meeting of SEAC-3 (Day-1)

SEAC Meeting number: 75 **Meeting Date** November 1, 2018

Subject: Environment Clearance for Proposed hill station type area development "The Green Butterfly" project at villages Telbaila, Majgaon and Saltar by Satind Infrastructures Pvt. Ltd.

Is a Violation Case: No

1.Name of Project	The Green Butterfly
2.Type of institution	Private
3.Name of Project Proponent	Smt. Taranjit Anand Director Satind Infrastructures Pvt. Ltd.
4.Name of Consultant	Aditya Environmental Services Pvt. Ltd.
5.Type of project	Hill station type area development.
6.New project/expansion in existing project/modernization/diversification in existing project	New project
7.If expansion/diversification, whether environmental clearance has been obtained for existing project	Not applicable
8.Location of the project	List of survey number is attached as Annexure 1
9.Taluka	Mulshi
10.Village	Villages Telbaila, Majgaon and Saltar
11.Area of the project	Other area
12.IOD/IOA/Concession/Plan Approval Number	Approval from Urban Development, Department Govt. Of Maharashtra, vide notification no TPS1813/3302/CR-573 and TPS -1895/2247/CR-26/95/UD-13 declaring the specified area, three villages as a hill station development.
	IOD/IOA/Concession/Plan Approval Number: Approval from Urban Development, Department Govt. Of Maharashtra, vide notification no TPS1813/3302/CR-573 and TPS -1895/2247/CR-26/95/UD-13 declaring the specified area, three villages as a hill station development.
	Approved Built-up Area: 2096820
13.Note on the initiated work (If applicable)	No work has been initiated
14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)	TPS1813/3302/CR-573 and TPS -1895/2247/CR-26/95/UD-13
15.Total Plot Area (sq. m.)	97,94,100 m2
16.Deductions	4,55,100 m2
17.Net Plot area	93,39,000 m2
18 (a).Proposed Built-up Area (FSI & Non-FSI)	**a) FSI area (sq. m.):** 18,96,829 m2
	b) Non FSI area (sq. m.): 1,99,992 m2
	c) Total BUA area (sq. m.): 20,96,820 m2
18 (b).Approved Built up area as per DCR	**Approved FSI area (sq. m.):**
	Approved Non FSI area (sq. m.):
	Date of Approval:
19.Total ground coverage (m2)	1170372
20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)	12 %
21.Estimated cost of the project	94650000000

22.Number of buildings & its configuration

Serial number	Building Name & number	Number of floors	Height of the building (Mtrs)
1	Small Villa Plots (525 sq m) 2000 unit	G + 1	9

2	Medium Villa Plots (800 sq m) 1300 units	G + 1	9
3	Luxury villa Plots (1000 sq m) 800 units	G + 1	9
4	Service Quarters 1948 units	G + 7	24
5	Commercial AVGC Park 1 unit	G + 6	21
6	City Office 1 unit	G + 2	12
7	Office Complex 2 units	G + 2	12
8	Hill Street Shopee 1 unit	G + 2	12
9	Service Industries 2 unit	G + 2	12
10	University 2 unit	G+ 2	12
11	Craft center 1 unit	G + 2	12
12	Cultural Center & Cineplex	G+ 2	12
13	Convention Center	G+ 2	12
14	Residential School	G+ 2	12
15	Primary + Secondary School	G+2	12
16	Multi specialty	G+ 2	12
17	Auditorium	G+ 2	12
18	City Club	G+ 2	12
19	Hotels < 3 star 5 nos Business Hotels	G + 3	12
20	Hotels > 3 star 3 nos Luxury Hotels & Convention centre	G + 4	16
21	Hotels > 3 star 1 nos Valley View Resorts	G + 4	16

23.Number of tenants and shops	Residential Residential Villas: 4,100 units Service quarters: 1948 units Total : 6048 units. Public Semi-public/Hotels Hotels (9): 2297 rooms Universities: 3 Residential School+School: 3 Hospital: 1 Commercial: AVGC Park: 1 Office complex: 2, Hill street shops City office: 1 Bank, Fire station, Petrol Pump, Police station: 1 each Service industries: 2. Office: 2
24.Number of expected residents / users	Residential: 20,500 Hotels: 4830 Public-Semi-public: 10,377 Service quarters:9,739 Commercial:18954 Service Industries: 6273 Total population: 70,672 nos.
25.Tenant density per hectare	Residential: 6.17 Tenement/hectare 30.87 Tenants/hectare
26.Height of the building(s)	

27.Right of way (Width of the road from the nearest fire station to the proposed building(s)	36 m
28.Turning radius for easy access of fire tender movement from all around the building excluding the width for the plantation	Minimum road width (tertiary roads) in the project premises is of 12 m has been proposed thus turning radius is more than 9 m for entire project.
29.Existing structure (s) if any	Gaothan of three villages (Saltar, Teilbaila and Majgaon) are coming in Project area which will be retained as it is and around 200 buffer zone with ROW is left as per approval.
30.Details of the demolition with disposal (If applicable)	NA

31.Production Details

Serial Number	Product	Existing (MT/M)	Proposed (MT/M)	Total (MT/M)
1	Not applicable	Not applicable	Not applicable	Not applicable

32.Total Water Requirement

Dry season:	**Source of water**	Proposed Water reservoirs(Rain water) (12 nos)
	Fresh water (CMD):	4728 m3/day
	Recycled water - Flushing (CMD):	2625 m3/day
	Recycled water - Gardening (CMD):	3295 m3/day
	Swimming pool make up (Cum):	NA
	Total Water Requirement (CMD) :	11015m3/day including HVAC water
	Fire fighting - Underground water tank(CMD):	Details of individual UGW tank will be calculated during detail designing of individual unit
	Fire fighting - Overhead water tank(CMD):	Details of individual OHW tank will be calculated during detail designing of individual unit
	Excess treated water	00 m3/day

Wet season:	**Source of water**	Proposed Water reservoirs(Rain water) (12 nos)
	Fresh water (CMD):	4728 m3 / d a y
	Recycled water - Flushing (CMD):	2625 m3/day
	Recycled water - Gardening (CMD):	00m3/day
	Swimming pool make up (Cum):	NA
	Total Water Requirement (CMD) :	7720m3/day including HVAC
	Fire fighting - Underground water tank(CMD):	details of individual UGW tank will be calculated during detail designing of the unit
	Fire fighting - Overhead water tank(CMD):	Details of individual OHW tank will be calculated during detail designing of individual unit
	Excess treated water	3295 m 3 /day
Details of Swimming pool (If any)	Details of the dimension of the swimming pool plant and machinery used for the treatment of swimming pool water will be dependent on the design of the individual unit and their need for such requirement . it will be calculated during detail designing of each unit	

33.Details of Total water consumed

Particulars	Consumption (CMD)			Loss (CMD)			Effluent (CMD)		
Water Requirement	**Existing**	**Proposed**	**Total**	**Existing**	**Proposed**	**Total**	**Existing**	**Proposed**	**Total**
Domestic	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

34.Rain Water Harvesting (RWH)	**Level of the Ground water table:**	pre-monsoon approx. 4m bgl post monsoon approx.0.5 mbgl
	Size and no of RWH tank(s) and Quantity:	RWH tanks are not proposed , 5 check dams and 12 water bodies have been proposed
	Location of the RWH tank(s):	NA, location of check dams and reservoirs are given in master plan
	Quantity of recharge pits:	75 recharge pits with borewell of 30 m
	Size of recharge pits :	3mx3mx2m
	Budgetary allocation (Capital cost) :	Check dams - Rs. 2,50,000,000 , Rain water harvesting reservoirs
	Budgetary allocation (O & M cost) :	7,50,000
	Details of UGT tanks if any :	Two water treatment plants of 3 MLD in Northern part and 2 MLD in southern part of project has been proposed. ESR of different capacities are proposed from where the water will be supplied to entire premises. Details of individual UGT tank will be calculated during detailed designing of each component.

35.Storm water drainage	**Natural water drainage pattern:**	The storm water collected through the existing streams/ravines and additional storm water drains of adequate capacity will be led to recharge pits/ check dams and water reservoirs.
	Quantity of storm water:	2,61,49,200 cum
	Size of SWD:	Details are given in the EIA report
Sewage and Waste water	**Sewage generation in KLD:**	6617 m3/day
	STP technology:	Phytorid Technology
	Capacity of STP (CMD):	32 no.s of STPs of Phytorid Technology+ 1 ETP/ STP proposed for hospital having total capacity 6618 m3/day
	Location & area of the STP:	Area and location has been shown in master layout
	Budgetary allocation (Capital cost):	Rs. 25,50,00,060 /-
	Budgetary allocation (O & M cost):	Rs.65,98,000/-
36.Solid waste Management		
Waste generation in the Pre Construction and Construction phase:	**Waste generation:**	1000 kg/day (Dry +wet)
	Disposal of the construction waste debris:	The Construction waste generated during construction shall be segregated, reused on site and surplus shall be led to scrap dealers for recycling.
Waste generation in the operation Phase:	**Dry waste:**	8.08 tonnes/day
	Wet waste:	9.76 tonnes/day
	Hazardous waste:	NA
	Biomedical waste (If applicable):	0.077 tonnes /day
	STP Sludge (Dry sludge):	115 kg/day
	Others if any:	E-waste- 0.089 tonnes/day

Mode of Disposal of waste:	**Dry waste:**	Dry waste will be further segregated into recyclable and non-recyclable. Recyclable waste like plastic and PET will be compressed through a baler machine and will be stored on site for further handover to authorized recyclers. Other non recyclable material with high calorific value will be treated by the method of pulverization and the pellets will be used for firing in boilers of hotels. The non-recyclable like sanitary wastes will be incinerated on site through an incinerator. A baler machine
	Wet waste:	Biodegradable waste will be treated in Biogas plant and Organic Waste Converter. One biogas plant has been proposed to treat the biodegradable waste generating from Hotels, Universities, Residential schools, Restaurants etc. around 57% of biodegradable waste will be get treated with Bio-methanation method. Around 43% of organic waste will be treated in organic waste convertor. Total 9 OWCs are proposed to treat the biodegradable waste generating from residential area, day school and city club.
	Hazardous waste:	NA
	Biomedical waste (If applicable):	Authorized vendor
	STP Sludge (Dry sludge):	STP sludge from Phytorid Technology STP will be fed to Biogas
	Others if any:	E-waste: Agreement for management and disposal has been done with Hi-tech Recyclers.
Area requirement:	**Location(s):**	Locations of OWC and Biogas are provided in master layout
	Area for the storage of waste & other material:	Area and locations are given in the master layout
	Area for machinery:	Details are given in the master layout
Budgetary allocation (Capital cost and O&M cost):	**Capital cost:**	1) OWC: Approx. Capital Cost: Rs.1,42,25,000/- 2) Sanitary Napkin Incinerator: Approx. Capital Cost: Rs. 8,70,000 /- 3) Smart Baler Machine : Approx. Capital Cost: Rs. 9,90,000/- 4) Biogas: Approx. Capital Cost: Rs. 1,93,00,000 /-
	O & M cost:	1) OWC: Approx. O & M Cost: 27,84,848/- 2) Sanitary Napkin Incinerator: Approx.O & M Cost:5,17,978/- 3) Smart Baler Machine : Approx.O & M Cost: 8,53,910 /- 4) Biogas: Approx.O & M Cost:18,96,000 /-

37.Effluent Charecterestics

Serial Number	Parameters	Unit	Inlet Effluent Charecterestics	Outlet Effluent Charecterestics	Effluent discharge standards (MPCB)
1	pH	NA	6.5 to 7	6 to 6.5	5.5-9
2	TSS	mg/l	300 to 400	<10	100
3	BOD	mg/l	200 to 270	<10	30
4	COD	mg/l	500 to 560	<30	250
5	O & G	mg/l	15 to 20	<05	<10

Amount of effluent generation (CMD):	83
Capacity of the ETP:	83
Amount of treated effluent recycled :	50
Amount of water send to the CETP:	Not applicable
Membership of CETP (if require):	Not applicable
Note on ETP technology to be used	Details are given in EIA report
Disposal of the ETP sludge	ETP sludge will be disposed to CHWTF

38.Hazardous Waste Details

Serial Number	Description	Cat	UOM	Existing	Proposed	Total	Method of Disposal
1	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

39.Stacks emission Details

Serial Number	Section & units	Fuel Used with Quantity	Stack No.	Height from ground level (m)	Internal diameter (m)	Temp. of Exhaust Gases
1	96 no.s of DG sets of 1000 KVA	Approx. 153.30 Kg/hr per DG set	96	6.3m	10 inches	500-400 Deg Celsius
2	4 no.s of DG sets of 750 KVA	Approx.130.4 Kg/hr per DG set	4	5.4 m	8 inches	500-400 Deg Celsius
3	8 no.s of DG sets of 500 KVA	Approx.160 Kg/hr per DG set	8	4.4 m	6 inches	500-400 Deg Celsius
4	3 no.s of DG sets of 400 KVA	Approx.160 Kg/hr per DG set	3	4.0 m	6 inches	500-400 Deg Celsius
5	4 no.s of DG sets of 320 KVA	Approx.160 Kg/hr per DG set	4	3.5 m	6 inches	500-400 Deg Celsius
6	6 no.s of DG sets of 250 KVA	Approx.31.8 Kg/hr per DG set	6	3.16 m	5 inches	500-400 Deg Celsius
7	23 no.s of DG sets of 600 KVA	Approx.160 Kg/hr per DG set	23	4.8 m	6 inches	500-400 Deg Celsius

40.Details of Fuel to be used

Serial Number	Type of Fuel	Existing	Proposed	Total
1	Not applicable	Not applicable	Not applicable	Not applicable
41.Source of Fuel		Petrol pump in the premise		
42.Mode of Transportation of fuel to site		By road		

43.Green Belt Development	**Total RG area :**	908.48 Acres (39.36%)
	No of trees to be cut :	No tree will be cut. Only shrubs coming under building foot print or road will be cut.
	Number of trees to be planted :	2.75 Lakhs
	List of proposed native trees :	Detailed list is attached as Annexure No.2
	Timeline for completion of plantation :	12-15 years

44.Number and list of trees species to be planted in the ground

Serial Number	Name of the plant	Common Name	Quantity	Characteristics & ecological importance
1	Detailed list is attached as Annexure no. 2	Detailed list is attached as Annexure no. 2	Detailed list is attached as Annexure no. 2	Detailed list is attached as Annexure no. 2
45.Total quantity of plants on ground				

46.Number and list of shrubs and bushes species to be planted in the podium RG:

Serial Number	Name	C/C Distance	Area m2
1	NA	NA	NA

47.Energy

Power requirement:	**Source of power supply :**	MSEDCL/Tata Power
	During Construction Phase: (Demand Load)	Details are given in EIA report
	DG set as Power back-up during construction phase	Total 37 DG sets have been proposed during construction Phase of following capacities 1000 kVA-11 nos. , 750 kVA-3 nos., 600 kVA-13 nos. , 500 kVA3 nos. , 400 kVA-3 nos., 320 kVA-2 nos. , 250 kVA-2 nos.
	During Operation phase (Connected load):	223 MW
	During Operation phase (Demand load):	166 MVA
	Transformer:	Receiving station has been proposed
	DG set as Power back-up during operation phase:	Total 144 DG set has been proposed : Details are as follows - 1) 1000 KVA - 96 DG sets 2) 750 KVA - 4 DG sets 3) 600 KVA - 23 DG sets 4) 500 KVA - 8 DG sets 5) 400 KVA-3 DG sets 6) 320 KVA-4 DG sets 7) 250 KVA- 6 DG sets
	Fuel used:	HSD
	Details of high tension line passing through the plot if any:	NA

48.Energy saving by non-conventional method:

-Around 35 to 40 % power requirement will be met through Green Energy, with combination of solar PV and wind mills.
-Each residential villa, will have 1.5 kWp to 10 kWp Solar PV and combination of wind and Solar PV power generating unit.
-Commercial complexes such as hotels, hospitals, office complex, office complex,University campus will have minimum 100 to 200 kW -solar PV plant to feed their own requirement.
-Non-buildable area will be explore for installation of solar PV plant.
-Power gener

49.Detail calculations & % of saving:

Serial Number	Energy Conservation Measures	Saving %
1	Use of renewable energy like solar and wind energy	35-40 % energy saving by using renewable energy

50.Details of pollution control Systems

Source	Existing pollution control system	Proposed to be installed
Not applicable	Not applicable	Not applicable

Budgetary allocation (Capital cost and O&M cost):	**Capital cost:**	Rs. 250,00,00,000/-
	O & M cost:	Rs. 5,00,00,000/-

51.Environmental Management plan Budgetary Allocation

a) Construction phase (with Break-up):

Serial Number	Attributes	Parameter	Total Cost per annum (Rs. In Lacs)
1	land environment	Labour camp toilets	20,00,000/-
2	health and safety	labour safety equipment and training	2,00,00,000/-
3	land , water, noise and air environment	Environmental monitoring	7,60,000/-
4	Health and safety	Disinfection and Health Check -ups (per year)	24,90,000/-
5	water environment	Sewage treatment plant (2 no.s)	Capital cost 60,00,000/- O & M cost 9,00,000/-
6	land environment	Organic waste treatment (OWC)	Capital cost 20,25,000/- O & M cost 4,77,855/-
7	water environment	Packaged water treatment plant	30,00,000/-
8	air environment	continuous air monitoring station	Capital cost 1,03,00,000 O & M 7,00,000 /-
9	water environment	Check dams	2,50,00,000/-
10	water environmnet	Reservoirs	15,00,00,000/-

b) Operation Phase (with Break-up):

Serial Number	Component	Description	Capital cost Rs. In Lacs	Operational and Maintenance cost (Rs. in Lacs/yr)
1	Sewage treatment plant	32 no.s of STP with Phytorid Technology	25,50,00,060 /-	65,98,000/-
2	OWC	9 OWC machines	1,42,25,000/-	27,84,848/-
3	Sanitary Napkin Incinerator	9 Incinerators	8,70,000 /-	5,17,978/-
4	Smart Baler Machine	9 baler machines	9,90,000/-	8,53,910 /-
5	Biogas	1 biogas plant	1,93,00,000 /-	18,96,000 /-
6	Landscaping	Development and maintenance of Landscape area	41,19,70,000/-	32,95,600/-
7	Rain Water Harvesting	Recharge pits	26,25,000 /-	7,50,000/-
8	Water Treatment Plant	2. no.s of WTPs	8,04,00,000/-	1,22,16,000/-
9	ETP / STP for Hospital	1 ETP-STP proposed for hospital	1,31,00,000/-	30,00,000 /-
10	Solar and Wind Energy	Devices for renewable energy	250,00,00,000/-	5,00,00,000/-
11	Environmental Monitoring	Land, air, noise and waterenvironment	Cost of online monitoring has been considered in construction phase EMP costing.	30,65,000/-

51.Storage of chemicals (inflamable/explosive/hazardous/toxic substances)

Description	Status	Location	Storage Capacity in MT	Maximum Quantity of Storage at any point of time in MT	Consumption / Month in MT	Source of Supply	Means of transportation
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

52.Any Other Information

No Information Available

53.Traffic Management

	Nos. of the junction to the main road & design of confluence:	The Major District Road that connects Khalapur and Khopoli to Pali somewhat North to South, parallel and west to the road that presently connects the site from Lonavala and onwards onto Tamhini Ghat. This MDR is a potential future connector, and the PWD's present road map for Raigad District and the Govt. of Maharashtra's own MoU with this development, opens possible opportunities for connecting the lower main road to the Lonavala-Tamhini connector, bringing Mumbai to within 1.0-1.5 hours to th
Parking details:	**Number and area of basement:**	NA
	Number and area of podia:	NA
	Total Parking area:	For visitors around 95000 sq m area has been identified for around 3000 vehicles. In total provision of parking for 12044 number of 4 wheeler and 36132 of 2 wheeler and bicycle is proposed for the project. For private parking facility is set aside in three different areas and will be distributed within each individual sector and applicable villas.
	Area per car:	12.5
	Area per car:	12.5
	Number of 2-Wheelers as approved by competent authority:	36132 of 2 wheelers
	Number of 4-Wheelers as approved by competent authority:	12044 number of 4 wheelers
	Public Transport:	Public transport will be arranged by SIPL. Details are given in EIA report.
	Width of all Internal roads (m):	Internal Road proposed • Arterial Roads – 36m ROW (3-Lane + 3-Lane) • Sub Arterial Roads – 24m & 18m ROW (2-Lane + 2-Lane) • Tertiary Roads – 12m ROW (2-Lane)
	CRZ/ RRZ clearance obtain, if any:	NA
	Distance from Protected Areas / Critically Polluted areas / Eco-sensitive areas/ inter-State boundaries	1)Reserve Forest near Saltar Site adjacent 2)Reserve Forest near Kewani Pathar 5 km - S 3)Reserve Forest near Navghar 5 km - W 4)Reserved Forest near Kadva Dongar 9.30 km - NE 5)Reserved Forest near Morgiri 13 km - NE 6)Reserve Forest near Ponda 14 km- SE

	Category as per schedule of EIA Notification sheet	8 b "Townships and Area development"
	Court cases pending if any	1 court case is Pending in Civil Court of Pune
	Other Relevant Informations	This Application is for compliance. As "The Green Butterfly" project was submitted to Dept of Environment, Govt. of Maharashtra dated 20.04.2009 and discussed in 20th SEAC meeting dated 30.11.2009. -On submission of compliance, the proposal was discussed in 43rd SEAC meeting, Project was recommended for prior Environment Clearance dated 18.04.2011. -Project was considered in 40th SEIAA meeting dated 12.10.2011. Authority asked for the final approval of hill station development u/s 20 (4) of the MRTP Act, 1966. -After submission of approval from the Govt. of Maharashtra vide its notification dated 26.11.2015, the case was considered in 96th SEIAA meeting. - Proposal discussed in 47th SEAC-III meeting under EIA Notification as a compliance case. Terms of Reference (ToR) has been issued by Dept. of Environment, Govt. of Maharashtra to supplement earlier EIA studies dated 23.05.2016. -SEAC III hearing has been done in 55th Meeting dated 8.10.2016. - Minutes of meetings has been received dated 19.10.2016.
	Have you previously submitted Application online on MOEF Website.	No
	Date of online submission	-

SEAC DISCUSSION ON ENVIRONMENTAL ASPECTS

Summorised in brief information of Project as below.

Brief information of the project by SEAC

PP submitted their application for amendment in earlier Environmental clearance for total plot area of 9794100 m2, Total BUA of 2096820 m2 and FSI area of 1896829 m2.

The case was discussed on the basis of the documents submitted and presentation made by the proponent. All issues relating to environment, including air, water, land, soil, ecology, biodiversity and social aspects were examined. The proposal is appraised as category 8(a) B1.

DECISION OF SEAC

After detail discussion of the case, committee shared the observations with the PP in respect to water and waste water, Traffic, Ecology & Biodiversity and asked to submit information to the committee for further discussion and consideration of SEAC and asked the PP for detail presentation on **Air, Noise, Solid Waste Management, Energy, Power and Socioeconomic issues chapters in the next meeting** and also PP shall make compliance of this meeting. The committee shall perform the site visit as and when necessary.

Specific Conditions by SEAC:

1) PP to obtain remarks from water commission of GoM regarding catchment area consumption.
2) PP to obtain specific NOC from the respective dept. of GoM for sustainable water supply to project.
3) PP to submit details of check dams, contour map, NOC to change natural course of water and cross sections along with detailed drawings.
4) PP to follow dual plumbing system.
5) PP to undertake waste management program designed to avoid run-off of nutrients (from use of fertilizers) / pesticides to water drains or water bodies.
6) PP to submit details as to how much of the water requirement can be met from the recycling of treated wastewater.
7) PP to submit NGP NOC.
8) PP to submit cross sections through the streams and the proposed buildings / bungalows adjoining the same.
9) PP to submit plans of existing drainage pattern.
10) PP to submit following details regarding traffic management: (a) Details of roads to be developed by Government. (b) Intersection diagrams to scale of all external road networks, traffic volume counts. (c) Present volumes on approach roads – inputs from Amby Valley / Maharashtra Valley & nearby developments. (d) V/C ratio on external roads. (e) Internal traffic generation – commercial / residential /others. (f) V/C ratio on all internal roads. (g) Sector wise fire tender movement. (h) Cross section of all driveways / buildings. (i) Parking details of each sectors. (j) Separate parking to be provided for commercial and residential purpose.
11) PP to submit following details regarding ecology and biodiversity: (a) NOC from Forest Department. (b) Undertaking that aquatic flora and fauna will not be affected. (c) What will be the impacts of lighting during construction phase as well as when the human habitation occurs on animals, particularly birds as regards the impacts on nesting activity, roosting places, and feeding behavior since the alteration will change the food available which may disturb the balance of these communities as urban avoiders would leave the area being sensitive to human presence. It may encourage and consequently the variety of raptors in the area. (d) What will be the likely impacts of heat generated when the area is finally occupied? (e) What will be the impact on fossorial fauna as a result of digging and excavation for construction activity? (f) Will it attract wild life from the surrounding area when the refuse from dwelling units are deposited in the garbage dumps? (g) What are the possibilities of road-hits when the roads are laid for human population and the wildlife present tries to cross the roads? (h) What will be the impacts of wildlife due to fragmentation of a habitat? (i) What impacts will the pets in local households will have on the native fauna? (j) How many lux of light is expected to be present due to street lighting and domestic lighting and how will it impact insect breeding as well as flowering of plants since there will be a change in duration of photoperiod? (k) Ultimately all the water from gardens and golf-course will drain to nearest water body and there will be a heavy use of pesticides, particularly herbicides, in the developed area. How will it impact the aquatic food chains, particularly due to bio-magnifications through the food chain, on the apex level organisms? (l) How will this aquatic pollution impact the flora and fauna in the sediment of these water bodies? (m) What will be the impact of air pollution caused due to large number of vehicles, both private and public, ecologically sensitive species since all species are not equally resistant to air pollution? (n) What will be the visual impact on wildlife, particularly birds, due to large scale construction? (o) What will be impact of this development on the movement of regularly migrating species? (p) Will there be a change in the circadian cycles of animals and plants? (q) What will be the impacts of power-lines laid for electrical supply on the fauna due to collisions / electrocutions? (r) Will the introduction of avenue-lining trees reduce the nesting sites for birds? (s) What will be the level of noise generated during construction phase and during the time the area is inhibited on the breeding behaviours of animals? (t) What plans are designed to mitigate the man-animal conflicts like snake-bite or occasional venturing of wild animals in the inhibited area? (u) PP to submit phase-wise plantation plan. (v) PP to submit patch-wise plantation plan. (w) PP to submit list of local native adaptive species. (x) PP to submit special chapter on macrophytes.

FINAL RECOMMENDATION

SEAC-III decided to defer the proposal.Kindly find SEAC decision above.