OMR MALL DEVELOPERS P LTD
ALLIED MAJESTIC PROMOTERS

18.05.2016

Shri A.N.Singh,
Member Secretary,
Ministry of Environment Forest and Climate Change,
Jor Bagh Road, New Delhi- 110 003

Sub: Submission of Revised Form 1, 1A, conceptual Plan and Annexure for the project.

Ref:

1) 5th meeting of Expert Appraisal Committee (Infra-2) All Ship breaking yard including ship breaking unit, Common Hazardous waste Treatment, storage and Disposal facilities, Ports and Harbours, Aerial Ropeways, CETPs, Common Municipal Waste Management Facility, Building / Construction Projects, Township and Area Development Projects held on 29th April, 2016 - Agenda No. 5.2.8 scheduled on 29/04/2016, File No. 21-75/2015-IA-III
2) **Minutes for 5th meeting of Expert Appraisal Committee (Infra-2) held on 29th April 2016 – 5.2.8, File No. 21 -75/2015-IA-III**

Dear Sir,

This is reference to above meeting held on 29th April 2016, we are here by submitting the Revised Form1, 1A, conceptual Plan and Annexure for the above said project.

Kindly acknowledge upon receipt of the same.

Thanking You
For OMR Mall Developers Pvt. Ltd & Allied Majestic Promoters

Authorized Signatory

OMR MALL DEVELOPERS PVT. LTD. CHENNAI 600 017

Corp. Office : "Citi Tower", 5th Floor, # 117, Sir Thiyagaraya Road, T. Nagar, Chennai - 600 017.
Tel : 044 4344 4222 Fax : 044 2815 1147 www.alliedhousing.com

APPENDIX

FORM-1

(I) Basic Information

#	Item	Details
1.	Name of the Project	**Proposed "The Marina" – A Mixed Development of Mall, Hotel, Multiplex and Residential Apartments**
2.	S. No. in the schedule	8 (a)
3.	Proposed capacity/area/length/tonnage to be handled/command area/lease area/number of wells to be drilled.	Total Plot Area: 25130.90 sq .m Built Up Area : 110835.03 sq. m.
4.	New/Expansion/Modernization	Amendment to the EC obtained from MoEF since there is change in concept
5.	Existing Capacity/Area etc.	NA. Since it is a new project.
6.	Category of Project i.e., 'A' or 'B'	B 2
7.	Does it attract general condition? If yes, please specify.	No
8.	Does it attract specific condition? If Yes, please specify.	No
9.	Location	
	Plot/Survey/Khasra No.	13/1A
	Village	Egattur
	Tehsil	Thiruporur
	District	Kancheepuram
	State	Tamil Nadu
10.	Nearest Railway Station/Airport along with distance in kms.	**Railway Station:** Urapakkam Railway statation : 17.43 Km Velachery MRTS – 14.45 Km **Airport :** Meenambakkam Airport – 17.3Km
11.	Nearest Town, City, District Headquarters along with distance in kms.	Chennai
12.	Village Panchayats, Zilla Parishad, Municipal Corporation, Local body	Thiruporur Panchayat Union Thiruporur – 603 103

	(complete postal addresses with telephone nos. to be given)	
13.	Name of Applicant	Allied Majestic Promoters and OMR Mall Developers Pvt. Ltd.
14.	Registered Address	5th Floor, CITI Tower, #117, Thiyagaraya Road T.Nagar, Chennai – 600017
15.	Address for correspondence:	5th Floor, CITI Tower, #117, Thiyagaraya Road T.Nagar, Chennai – 600017
	Name	Mr. A. Abdul Wadood
	Designation (Owner/Partner/CEO)	Director
	Address	5th Floor, CITI Tower, #117, Thiyagaraya Road T.Nagar,
	Pin Code	600017
	E – mail	naren@alliedhousing.com, naren.reddy79@gmail.com
	Telephone No.	044-43444222
	Fax. No.	044- 28151147
16.	Details of Alternate Sites examined, if any. Location of these sites should be shown on a topo sheet	Not Applicable
17.	Interlinked Projects	No
18.	Whether separate application of interlinked project has been submitted?	No
19.	If yes, date of submission	Not Applicable
20.	If no, reason	Not Applicable
21.	Whether the proposal involves approval/clearance under: if yes, details of the same and their status to be given. (a) The Forest (Conservation) Act, 1980? (b) The Wildlife (Protection) Act, 1972?	Not Applicable

	(c) The C.R.Z. Notification, 1991?	
22.	Whether there is any Government Order/Policy relevant/relating to the site?	EC obtained for the same facility from MoEF vide letter no. 21-562/2007-IA.III dated 1st October, 2008. The same is enclosed in **Annexure-1**
23.	Forest Land involved (hectares)	None
24.	Whether there is any litigation pending against the product and/or land in which the project is propose to set up? (a) Name of the Court (b) Case. No. (c) Orders/Directions of the court, if any and its relevance with the proposed project.	No

(II) Activity

1. Construction, operation or decommissioning of the Project involving actions, which will cause physical changes in the locality (topography, land use, changes in water bodies, etc.)

Sr. No.	Information/Checklist Confirmation	Yes/ No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
1.1	Permanent or temporary change in land use, land cover or topography including increase in intensity of land use (with respect to local land use plan)	No	The Proposed development falls in urbanisable use Zone as per DTCP. The land use letter is enclosed as **Annexure -2.**
1.2	Clearance of existing land, vegetation and building?	Yes	Minor shrubs along the boundary
1.3	Creation of new land uses	No	The Proposed development falls in urbanisable use Zone.
1.4	Pre-construction investigations e.g. bore houses, soil testing?	Yes	The soil testing report is enclosed as **Annexure–3.**
1.5	Construction works?	Yes	Part construction of basement done as vide earlier EC and presently stopped.

<table>
<tr><th>Sr. No.</th><th>Information/Checklist Confirmation</th><th>Yes/ No</th><th>Details thereof (with approximate quantities/ rates, wherever possible) with source of information data</th></tr>
<tr><td>1.6</td><td>Demolition Works?</td><td>No</td><td>Not Required</td></tr>
<tr><td>1.7</td><td>Temporary sites used for construction works or housing of construction workers?</td><td>No</td><td>Laborers will be hired from the nearby areas. Hence there will not be any labor camp</td></tr>
<tr><td>1.8</td><td>Above ground buildings, structures or earthworks including linear structures, cut and fill or excavations</td><td>Yes</td><td>Approximately around 1,84,918 cu.m of soil was excavated for foundations. Out of which 13,368 cu.m was used for backfilling and the balance 1,71,550 cu. m were given to other plot owners for their filling requirements.</td></tr>
<tr><td>1.9</td><td>Underground works including mining or tunneling?</td><td>No</td><td>Not Applicable.</td></tr>
<tr><td>1.10</td><td>Reclamation works?</td><td>No</td><td>Not Applicable</td></tr>
<tr><td>1.11</td><td>Dredging?</td><td>No</td><td>Not Applicable</td></tr>
<tr><td>1.12</td><td>Offshore structures?</td><td>No</td><td>Not Applicable</td></tr>
<tr><td>1.13</td><td>Production and manufacturing Process?</td><td>No</td><td>Not Applicable</td></tr>
<tr><td>1.14</td><td>Facilities for storage of goods or materials?</td><td>Yes</td><td>Temporary storage will be done at the project site during the construction phase.
Separate raw material handling yard will be made as per requirement. Cement will be separately stored under covered bags. Sand will be stacked neatly under tarpaulin cover. Bricks and steel will be laid in open.
The raw material handling yard will be located within the project site and separated by enclosures.</td></tr>
<tr><td>1.15</td><td>Facilities for treatment or disposal of solid waste or liquid effluents?</td><td>Yes</td><td>Solid Waste
About 4114 Kg / day of solid wastes are likely to be generated due to the proposed project.
<table>
<tr><th>Waste</th><th>Quantity (kg/day)</th><th>Treatment method</th></tr>
<tr><td>Organic</td><td>1833</td><td>Sent to Local body</td></tr>
<tr><td>STP Sludge</td><td>40</td><td>Composted and used for Green belt</td></tr>
<tr><td>Inorganic</td><td>2241</td><td>Sold to authorized recyclers</td></tr>
</table>
Liquid Effluent
Total Quantity of water required 529 KLD. Fresh water demand is 243 KLD.</td></tr>
</table>

<table>
<tr><th>Sr. No.</th><th>Information/Checklist Confirmation</th><th>Yes/ No</th><th>Details thereof (with approximate quantities/ rates, wherever possible) with source of information data</th></tr>
<tr><td></td><td></td><td></td><td>
<table>
<tr><th>Phase</th><th>Population</th><th>Quantity of water required</th><th>Sewage/ Effluent generated</th><th>Treatment method</th></tr>
<tr><td>Construction</td><td>150</td><td>7 KLD</td><td>6 KLD</td><td>Disposed through tanker lorries</td></tr>
<tr><td>Operation</td><td>8668</td><td>529 KLD</td><td>301</td><td>STP of 300 cum /day & 78 cum/day</td></tr>
</table>
Source: Panchayat Supply
After treatment, total treated water quantity is 286KLD. Treated water will be reused for Toilet Flushing (103 KLD), Gardening (28 KLD) & Excess treated water will be used for HVAC (155 KLD). Water Balance is enclosed in Annexure- 4. Letter from Thiruporur Block Development Officer is given in Annexure-5.</td></tr>
<tr><td>1.16</td><td>Facilities for long term housing of operational workers?</td><td>No</td><td>No long-term housing facilities proposed as most of the skilled/unskilled manpower required for the construction /operation activities will be hired from the surrounding villages.</td></tr>
<tr><td>1.17</td><td>New road, rail or sea traffic during construction of operation?</td><td>No</td><td>The existing 30 m wide OMR will be used as access road.</td></tr>
<tr><td>1.18</td><td>New road, rail, air waterborne or other transport infrastructure including new or altered routes and stations, ports, airports etc.?</td><td>No</td><td>Not applicable</td></tr>
<tr><td>1.19</td><td>Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements?</td><td>No</td><td>There will not be any closure or diversion of existing transportation routes</td></tr>
<tr><td>1.20</td><td>New or diverted transmission lines or pipelines?</td><td>No</td><td>Not envisaged</td></tr>
<tr><td>1.21</td><td>Impoundment,</td><td>No</td><td>Not Applicable</td></tr>
</table>

Sr. No.	Information/Checklist Confirmation	Yes/ No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
	damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers?		
1.22	Stream crossings?	No	There is no stream crossing across the site.
1.23	Abstraction or transfers of water from ground or surface waters?	No	Fresh water demand will be met from Panchayat.
1.24	Changes in water bodies or the land surface affecting drainage or run-off	No	There will not be any change in the drainage pattern or nearby water bodies.
1.25	Transport of personnel or materials for construction, operation or decommissioning?	Yes	The existing 40 m wide road will be utilized for the transportation of material and personnel during construction and operation phase.
1.26	Long-term dismantling or decommissioning or restoration works?	No	Not Applicable
1.27	Ongoing activity during decommissioning which could have an impact on the environment?	No	Not Applicable
1.28	Influx of people to an area in either temporarily or permanently?	Yes	Influx of the people in both phases will be temporarily. **<u>Construction phase</u>** Around 150 people will be engaged for the activity temporarily. **<u>Operation phase</u>** Since the proposed project is a commercial development there will be temporary influx of 8668 people.
1.29	Introduction of alien species?	No	Not envisaged
1.30	Loss of native species or genetic diversity?	No	Not envisaged
1.31	Any other actions?	No	-

2. Use of Natural resources for construction or operation of Project (such as land, water, materials or energy, especially any resources which are non-renewable or in short supply).

<table>
<tr><th>Sr. No.</th><th>Information/Checklist Confirmation</th><th>Yes/ No</th><th>Details thereof (with approximate quantities/ rates, wherever possible) with source of information data</th></tr>
<tr><td>2.1</td><td>Land specially undeveloped or agricultural land (ha)</td><td>No</td><td>Not applicable. Proposed project is located in non agricultural land.</td></tr>
<tr><td>2.2</td><td>Water (expected source & competing users) unit KLD</td><td>Yes</td><td>The total water requirement will be 529 KLD
<table>
<tr><th>Source</th><th>Quantity</th><th>Source</th><th>Competing Users</th></tr>
<tr><td>Fresh water requirement</td><td>243 KLD</td><td>Panchayat water</td><td>Nil</td></tr>
<tr><td>Treated waste water for toilet flushing, gardening and HVAC</td><td>286 KLD</td><td>Recycling of waste water</td><td>Nil</td></tr>
</table></td></tr>
<tr><td>2.3</td><td>Minerals (MT)</td><td>No</td><td>Not applicable</td></tr>
<tr><td>2.4</td><td>Construction material – stone, aggregates, and/soil (expected source-MT)</td><td>Yes</td><td>This will be procured directly from manufacturers.</td></tr>
<tr><td>2.5</td><td>Forests and timber (source-MT)</td><td>No</td><td>Doors used will be flush doors or panel doors/laminated timbers. UPVC windows will be used.</td></tr>
<tr><td>2.6</td><td>Energy including electricity and fuels (source, competing users) Unit: fuel (MT), energy (MW)</td><td>Yes</td><td>Power requirement.
<table>
<tr><th>Details</th><th>Capacity</th><th>Source</th></tr>
<tr><td>Power Requirement</td><td>4826 kVA</td><td>TNEB</td></tr>
<tr><td>Power Back Up</td><td>2 x 380 kVA + 2 x 1500 kVA+ 1 x1000 kVA + 1 x 125 kVA</td><td>DG sets</td></tr>
</table></td></tr>
<tr><td>2.7</td><td>Any other natural resources (use appropriate standard units)</td><td>Yes</td><td>Two Gas banks of total 56 Cylinders are proposed for storing LPG for supply to Food court of which one gas bank is working and one is standby.</td></tr>
</table>

3. Use, storage, transport, handling or production of substances or materials, which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health

Sr. No.	Information/Checklist Confirmation	Yes/ No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
3.1	Use of substances or materials, which are hazardous (as per MSIHC rules) to human health or the environment (flora, fauna, and water supplies)	No	This is a Commercial building and no storage of Hazardous chemicals (as per MSIHC rules), apart from spent oil and LPG. Suitable management practice will be adopted for the same. Approximately 0.65 KL/day of HSD (low sulphur variety) will be used per day and 5 KL (1 week storage capacity) will be stored in HDPE Drums for DG sets. However, the quantity stored will be below the threshold limit specified by the MSIHC rules. *DG operation- 5hrs/day
3.2	Changes in occurrence of disease or affect disease vectors (e.g. insect or water borne diseases)	No	Suitable drainage and waste management measures will be adopted in both construction and operational phase, which will restrict stagnation of water or accumulation of waste. This will effectively restrict the reproduction and growth of disease vectors.
3.3	Affect the welfare of people e.g. by changing living conditions?	No	Not envisaged
3.4	Vulnerable groups of people who could be affected by the project e.g. hospital patients, children, the elderly etc.,	No	Not envisaged
3.5	Any other causes	No	-

4. Production of solid wastes during construction or operation or decommissioning (MT/month)

<table>
<tr><th>Sr. No.</th><th>Information/Checklist Confirmation</th><th>Yes/No</th><th>Details thereof (with approximate quantities/ rates, wherever possible) with source of information data</th></tr>
<tr><td>4.1</td><td>Spoil, overburden or mine wastes</td><td>No</td><td>Not envisaged</td></tr>
<tr><td>4.2</td><td>Municipal waste (domestic and or commercial wastes)</td><td>Yes</td><td>Solid Waste
About 4114 Kg / day of solid wastes are likely to be generated due to the proposed project.
<table>
<tr><th>Waste</th><th>Quantity (kg/day)</th><th>Treatment method</th></tr>
<tr><td>Organic</td><td>1833</td><td>Sent to Local body</td></tr>
<tr><td>STP Sludge</td><td>40</td><td>Composted and used for Green belt</td></tr>
<tr><td>Inorganic</td><td>2241</td><td>Sold to authorised recyclers</td></tr>
</table></td></tr>
<tr><td>4.3</td><td>Hazardous wastes (as per hazardous waste management rules)</td><td>Yes</td><td>Spent oil of from DG sets will be carefully stored in HDPE drums in isolated covered facility. This spent oil will be sold to vendors authorized by TNPCB/ MoEF for treatment of same. Suitable care will be taken so that spills / leaks of spent oil from storage could be avoided.
* DG Operation: 5 Hrs/Day</td></tr>
<tr><td>4.4</td><td>Other industrial process wastes</td><td>No</td><td>Not Applicable.</td></tr>
<tr><td>4.5</td><td>Surplus product</td><td>No</td><td>Not Applicable</td></tr>
<tr><td>4.6</td><td>Sewage sludge or other sludge from effluent treatment</td><td>Yes</td><td>Sewage sludge generated from STP 40 Kg will be used as manure.</td></tr>
<tr><td>4.7</td><td>Construction or demolition wastes</td><td>Yes</td><td>Construction waste generated will be limited to the construction phase and project site. These will be reused for backfilling after manual segregation. Unusable and excess construction debris will be disposed at designated places in tune with the local norms.</td></tr>
<tr><td>4.8</td><td>Redundant machinery or equipment</td><td>No</td><td>Not Applicable</td></tr>
<tr><td>4.9</td><td>Contaminated soils or other materials</td><td>No</td><td>Not Applicable</td></tr>
<tr><td>4.10</td><td>Agricultural wastes</td><td>No</td><td>Not Applicable</td></tr>
<tr><td>4.11</td><td>Other solid wastes</td><td>No</td><td>Not Applicable</td></tr>
</table>

5. Release of pollutants or any hazardous, toxic or noxious substances to air (kg/hr)

<table>
<tr><th>Sr. No.</th><th>Information/Checklist Confirmation</th><th>Yes/No</th><th>Details thereof (with approximate quantities/ rates, wherever possible) with source of information data</th></tr>
<tr><td>5.1</td><td>Emissions from combustion of fossil fuels from stationary or mobile sources</td><td>Yes</td><td>During operation phase, DG sets 2 x 380 kVA +2 x 1500 kVA + 1 x1000 kVA + 1 x 125 kVA capacity provided for power back up will generate air pollutants like SO_X, NO_x.
➢ 6 Nos. Of DG stack with an adequate height shall be provided for safe emission of the flue gases.
➢ DG will be operated only during power failure
➢ While using DG unnecessary load will be eliminated to reduce the emission of pollutants
<table><tr><td>S. No</td><td>DG Capacity (kVA)</td><td>Required Stack Ht (m)</td><td>Proposed Stack Ht (m)</td></tr><tr><td>1</td><td>2 x380</td><td>45+ 3.8= 48.8</td><td>49 m (2 nos.)</td></tr><tr><td>2</td><td>2x 1500</td><td>45 +6= 51</td><td>51 m (2 Nos)</td></tr><tr><td>3</td><td>1x 1000</td><td>45 +6 = 51</td><td>51 m</td></tr><tr><td>4</td><td>1 x 125</td><td>45 +2.2=47.2</td><td>48 m (1 nos)</td></tr></table>Construction Equipment's
<table><tr><th>Construction equipment</th><th>Quantity</th><th>Operating hours/day</th></tr><tr><td>Concrete mix plant</td><td>1</td><td>10</td></tr><tr><td>Tower Crane *</td><td>2</td><td>5</td></tr><tr><td>Dozer*</td><td>1</td><td>5</td></tr><tr><td>Truck</td><td>2</td><td>5</td></tr><tr><td>Compactors*</td><td>1</td><td>3</td></tr><tr><td>Pavers*</td><td>1</td><td>5</td></tr></table>*Intermittent use
The increase in vehicular density during construction is not expected to be significant. Thus</td></tr>
</table>

Sr. No.	Information/Checklist Confirmation	Yes/No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
			no major impacts are anticipated on this account.
5.2	Emission from production processes	No	There is no production as the proposed project is Mixed Development.
5.3	Emissions from materials handling including storage or transport	Yes	This will be restricted to the construction phase and construction site only. However, the generation of such emission will be very minimum.
5.4	Emissions from construction activities including plant and equipment	Yes	The fugitive emission will be restricted during the mixing of aggregates. This will be restricted to the construction phase and to the construction site only. It will be minimized by sprinkling water.
5.5	Dust or odours from handling of materials including construction materials, sewage and waste	Yes	Dust is likely to be generated during construction, this will be minimized by water sprinkling and tarpaulin cover will be provided over stored raw material to reduce dust emission. On site sanitation facilities will be provided for construction workers during construction.
5.6	Emissions from incineration of waste	No	No incineration of waste.
5.7	Emissions from burning of waste in open air (e.g. slash materials, construction debris)	No	Open burning of biomass / other material will be prohibited.
5.8	Emissions from any other sources	No	Not Applicable

6. Generation of Noise and vibration, and emissions of Light and heat

Sr. No	Information/Checklist Confirmation	Yes/ No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
6.1	From operation of equipment e.g. engines, ventilation plant, crushers	Yes	The machinery which will be used for construction will be of highest standard of reputed make and will adhere to international standard. Hence insignificant impacts due to construction machinery are envisaged. Source of noise in the operational phase will be DG sets and vehicular sources only. The DG sets will be in operation during power failure only. Moreover, the DG room shall be acoustically enclosed.
6.2	From industrial or similar processes	No	Not Applicable
6.3	From construction or demolition	Yes	It has been estimated that during this period the average noise level resulting from construction activities and traffic movement in the adjacent road will be around 80-85 dB (A) during peak hours. During the process workers shall be provided with protective gears.
6.4	From blasting or piling	No	No blasting or mechanized piling will be done in construction phase.
6.5	From construction or operational traffic	Yes	Negligible noise will be generated from vehicular movement in the construction and operational phase.
6.6	From lighting or cooling systems	Yes	From the cooling towers approx. 85-95 dB (A) of noise would be generated. Such noise mainly generate due to (i) cooling system fan noise and (ii) water splash noise. Adequate Care shall be taken to minimize such noise by incorporating better design fans (with Acoustic enclosure), providing soundproof platform **(with layer of geo textile)** to minimize the water splash noise. Such arrangements can minimize the noise from cooling tower to the extent of **60-70%.**
6.7	From any other sources	No	Not Applicable

7. Risks of contamination of land or water from releases of pollutants into the ground or into sewers, surface waters, groundwater, coastal wasters or the sea

Sr. No.	Information/Checklist Confirmation	Yes/No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
7.1	From handling, storage, use or spillage of hazardous materials	No	Spent oil will be handled with utmost care, spent oil will be stored in HDPE drums stationed over concrete platforms and will be directly transferred to vendors authorized to handle such hazardous material.
7.2	From discharge of sewage or other effluents to water or the land (expected mode and place of discharge)	No	The wastewater generated from the houses will be treated in STP and the treated water will be utilized for landscaping and flushing purpose.
7.3	By deposition of pollutants emitted to air into the land or into water	No	Proper air pollution control measures will be taken care by providing adequate stack height and parking facility to avoid deposition of pollutant into nearby land and water.
7.4	From any other sources	No	Not envisaged.
7.5	Is there a risk of long term build up of pollutants in the environment from these sources?	No	Not envisaged.

8. Risk of accidents during construction or operation of the project, which could affect human health or the environment

Sr. No.	Information/Checklist Confirmation	Yes/No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
8.1	From explosions, spillages, fires etc from storage, handling, use or production of hazardous substances	No	Not envisaged. 5 KL of HSD (low sulphur variety) will be stored in HDPE Drums for DG sets (1 week
8.2	From any other causes	No	-

8.3	Could the project be affected by natural disasters causing environmental damage (e.g. floods, earthquakes, landslides, could burst etc)?	No	The project falls under seismic zone-III according to the Indian Standard Seismic Zoning Map. However suitable seismic coefficients in horizontal and vertical directions will be adopted while designing the structures.

9. Factors which should be considered (such as consequential development) which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality.

Sr. No.	Information/Checklist Confirmation	Yes/ No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
9.1	Lead to development of supporting, utilities, ancillary development or development stimulated by the project which could have impact on the environment e.g.:	Yes	Supporting and ancillary development will not cause any consequences.
	Supporting infrastructure (roads, power supply, waste or waste water treatment, etc)	Yes	Internal Roads, Rainwater Harvesting, STP etc will be provided.
	Housing development	Yes	
	Extractive industries	No	
	Supply industries	No	
	Other		
9.2	Lead to after use of the site, which could have an impact on the environment	No	Not applicable
9.3	Set a precedent for later developments	Yes	This may allow commercial & residential developments near the area.
9.4	Have cumulative effects due to proximity to other existing or planned	No	No effect on any planned project in the locality.

Sr. No.	Information/Checklist Confirmation	Yes/ No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
	projects with similar effects		

(III) Environmental Sensitivity

Sr. No.	Areas	Name / Identity	Aerial distance (with 15-km) Proposed project location boundary
1	Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value	Pallikaranai Marsh Buckingham Canal Bay of Bengal	9.3 Km 400m 1.8 Km
2	Areas which are important or sensitive of ecological reasons – wetlands, water courses or other water bodies, coastal zone, biospheres,	Perumbakkam Lake Arasankazhani Lake Siruseri Lake Ottiyambakkam Lake Chittalapakkam Lake	7.7 Km 5.5 Km 2.9 Km 3.88 Km 8.8 Km

Sr. No.	Areas	Name / Identity	Aerial distance (with 15-km) Proposed project location boundary
	mountains, forests		
3	Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, over wintering, migration	Pallikaranai Marsh	9.3 Km
4	Inland, coastal, marine or underground waters	Buckingham Canal Bay of Bengal	400 m 1.8 Km
5	State, national boundaries	No	No
6	Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas	MGM Dizzie World VGP Universal Kingdom Crocodile Bank	1.2 8.8 10.2
7	Defense installations	Tambaram Airforce Station	12.5
8	Densely populated or	Navalur Kanathur Reddikuppam Siruseri Sholinganallur	0.95 1.9 Km 2.0 Km 2.45 Km

<table>
<tr><th>Sr. No.</th><th>Areas</th><th>Name / Identity</th><th>Aerial distance (with 15-km) Proposed project location boundary</th></tr>
<tr><td></td><td>built-up area</td><td>Padur
Kelambakkam</td><td>3.3 Km
5.3 Km</td></tr>
<tr><td>9</td><td>Areas occupied by sensitive man made land uses (hospitals, schools, places of worship, community facilities)</td><td>Yes</td><td>
<table>
<tr><th>S. No.</th><th>Places</th><th>Dist. from Project Site Km</th></tr>
<tr><td colspan="3">Schools & Colleges</td></tr>
<tr><td>1</td><td>Mohamad Sathak College</td><td>0.9</td></tr>
<tr><td>2</td><td>T.S.Narayanaswamy College of Arts and Science</td><td>1.5</td></tr>
<tr><td>3</td><td>Academy of Maritime Education and Training</td><td>2.6</td></tr>
<tr><td>4</td><td>SRR Engineering College</td><td>2.8</td></tr>
<tr><td>5</td><td>Sathyabama University</td><td>3.5</td></tr>
<tr><td>6</td><td>Indian Maritime University</td><td>3.6</td></tr>
<tr><td>7</td><td>Hindustan University</td><td>3.7</td></tr>
<tr><td>8</td><td>Agni college of technology</td><td>3.8</td></tr>
<tr><td>9</td><td>Central Institute of Classical Tamil</td><td>7.8</td></tr>
<tr><td>10</td><td>VIT</td><td>8.3</td></tr>
<tr><td>11</td><td>SMK Fomra Institute of Technology</td><td>8.3</td></tr>
<tr><td>12</td><td>SSN College of Engineering</td><td>9.75</td></tr>
<tr><td colspan="3">Religious Places</td></tr>
<tr><td>1</td><td>Advent church</td><td>1.32</td></tr>
<tr><td>2</td><td>Puri Jagannath Temple</td><td>2.19</td></tr>
<tr><td>3</td><td>Perumbakkam Masjid</td><td>1.38</td></tr>
<tr><td>4</td><td>Jumma Masjid</td><td>3.33</td></tr>
<tr><td>5</td><td>Pudupakkam Hill temple</td><td>5.5</td></tr>
<tr><td>6</td><td>Sri Subramaniya Temple</td><td>6.6</td></tr>
<tr><td>7</td><td>Thiruvidanthai Temple</td><td>8</td></tr>
<tr><td>8</td><td>Kandigai Masjid</td><td>9.5</td></tr>
<tr><td colspan="3">Hospitals</td></tr>
<tr><td>1</td><td>Isari Velan Mission</td><td>3.5</td></tr>
<tr><td>2</td><td>Chettinad Health City</td><td>4.3</td></tr>
<tr><td>3</td><td>Global Hospital</td><td>7.2</td></tr>
<tr><td>4</td><td>Radial Ortho Clinic</td><td>9.3</td></tr>
<tr><td colspan="3">Other Important Locations</td></tr>
<tr><td>1</td><td>Siruseri SIPCOT</td><td>0.6</td></tr>
<tr><td>2</td><td>MGM Dizzy World</td><td>1.5</td></tr>
<tr><td>3</td><td>Muttukadu Boat House</td><td>3.4</td></tr>
<tr><td>4</td><td>VGP Universal Kingdom</td><td>8.7</td></tr>
</table>
</td></tr>
<tr><td>10</td><td>Areas containing important,</td><td>Buckingham Canal
Perumbakkam Lake
Arasankazhani Lake</td><td>400m
7.7 Km
5.5 Km</td></tr>
</table>

Sr. No.	Areas	Name / Identity	Aerial distance (with 15-km) Proposed project location boundary
	high quality or scarce resources *(ground water resource, surface resources, forestry, agriculture, fisheries, tourism, minerals)*	Siruseri Lake Ottiyambakkam Lake Chittalapakkam Lake	2.9 Km 3.88 Km 8.8 Km
11	Areas already subjected to pollution or environmental damage. *(those where existing legal environmental standards are exceeded)*	No	
12	Areas susceptible to natural hazard which could cause the project to present environmental problems *(earthquakes,*	No	This area is generally plain not prone to any natural disasters. The area under study falls in Zone-III, according to the Indian Standard Seismic Zoning Map. Suitable seismic coefficients in horizontal and vertical directions respectively, have to be adopted while designing the structures.

Sr. No.	Areas	Name / Identity	Aerial distance (with 15-km) Proposed project location boundary
	subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions)		

(IV) Proposed Terms of Reference

Not Applicable

OMR MALL DEVELOPERS P LTD
ALLIED MAJESTIC PROMOTERS

Declaration

I hereby given undertaking that the data and the information given in the application and enclosures are true to the best of my knowledge and belief and I am aware that if any part of the data and information submitted is found to be false or misleading at any stage, the project will be rejected and clearance given if any to the project will be revoked at our risk and cost.

Date: 3rd April 2015

Place: Chennai

Signature of the applicant

OMR MALL DEVELOPERS PRIVATE LIMITED CHENNAI 600 017

For OMR Mall Developers P Ltd & Allied Majestic Promoters

A.Abdul Wadood

CITI Tower, 5th Floor,

117 Sir Thiyagara Road,

T.Nagar, Chennai - 600017

APPENDIX II

FORM-1A

(Only for construction projects listed under item 8 of the Schedule)

1 LAND ENVIRONMENT

1.1 Will the existing land use get significantly altered from the project that is not consistent with the surroundings? (proposed land use must conform to the approved master plan/ development plan of the area. change of land use if any and the statutory approval from the competent authority be submitted). Attach maps of (i) site location, (ii) surrounding features of the proposed site (within 500 meters) and (iii) the site (indicating levels & contours) to appropriate scales. If not available attach only conceptual plans.

The proposed site is located in 13/1A at Egattur Village, Thiruporur Taluk, Kancheepuram District. The proposed site falls under urbanisable use Zone as per DTCP. Relevant maps and other documents are attached in annexure; the details are shown in the table below.

S.No	List of Annexure	Details
1.	Annexure-2	Land use letter from DTCP
2.	Annexure -6	500 m radius topo map
3.	Annexure -7	Satellite image with Surrounding features 10 Km
4.	Annexure -8	Satellite image of site
5.	Annexure- 9	Revised Site plan submitted to DTCP
6.	Annexure-10	Site contour

1.2 List out all the major project requirements in terms of the land area, built up area, water consumption, power requirement, connectivity, community facilities, parking needs etc.

Salient Features of the Project

Item	**Details**
Project Name	**Proposed "The Marina " – A Mixed Development of Mall, Hotel, Multiplex and Residential Apartments**
Location	13/1A
Type of project	**Mixed Development**
Total Plot Area	25130.90 sq .m
Built up area	110835.03 sq. m.
OSR	2513.09 Sq.m (9.99%)
Ground coverage	9939.3 sq.m (39.54%)
Road & pavements	1911.27 Sq.m (7.6%)
Green Belt	8362.95 Sq.m (33.28%)
Number of Blocks/floors	Two Blocks with combined basement Mall + Hotel and Residential Apartment
Building Height	45 m
Road Width	Approach road 40 m OMR
Parking facilities	Cars – 1117 Two wheelers - 1511
Power requirement	4826 kVA
Source of power	TNEB
Power backup	Hotel – 2 x 380 kVA Mall and Multiplex- 2 x 1500 kVA + 1 x 1000 kVA Residential Apartment -1 x 125 kVA

Item	Details
Water requirement	Total water requirement – 529 KLD; Fresh water: 243 KLD; Recycled water – 286 KLD.
Water Source	Panchayat
Estimated population to step-in	8668 persons per day
Project cost	Rs147.9 Crores
Connectivity	Existing 40 m OMR

1.3 What are the likely impacts of the proposed activity on the existing facilities adjacent to the proposed site? (Such as open spaces, community facilities, details of the existing land use, disturbance to the local ecology)

Since the proposed project is commercial and residential development, there will be an influx of 8668 people due to the proposed activity. (Commercial – 8138 & Residential – 530)

Local community

The operation of project and other allied facilities will provide direct and indirect employment opportunities for a large section of society. The employment will have positive impact thereby increasing the quality of life.

1.4 Will there be any significant land disturbance resulting in erosion, subsidence & instability? (Details of soil type, slope analysis, vulnerability to subsidence, seismicity etc. Maybe given).

The existing terrain is retained. Cutting and filling is required. No land disturbance resulting in erosion, subsidence & instability is anticipated. Proper greening & paving of area will help in preventing soil erosion problem and subsidence. The Soil testing report is enclosed as **Annexure-3.**

The area under study falls in Zone-III, according to the Indian Standard Seismic Zoning Map. Suitable seismic coefficients in horizontal and vertical directions respectively, will be adopted while designing the structures to mitigate the seismic impacts.

1.5 Will the proposal involve alteration of natural drainage systems? (Give details on a contour map showing the natural drainage near the proposed project site)

There will be no alteration to natural drainage system and there will be a well planned storm water drain network. The contour of the project site is enclosed as **Annexure –10**

.

1.6 What are the quantities of earthwork involved in the construction activity cutting, filling, reclamation etc. (Give details of the quantities of earthwork involved, transport of fill materials from outside the site etc.)

About 1,84,918 cu.m of soil was excavated for foundations. Out of which 13,368 cu.m was used for backfilling and the balance 1,71,550 cu. m was given to other plot owners for their filling requirement.

1.7 Give details regarding water supply, waste handling etc. during the construction period.

The water requirement during construction phase is 50 KLD, which will be outsourced. The sewage generated will be sent through tankers. The construction debris will be recycled to the maximum possible and the wastes will be disposed through authorized vendors.

Waste Handling:

- Soil excavated will be reused for backfilling and the fertile topsoil will be reused for horticultural purpose.
- Excess soil will be used for road construction and will be dumped at the designated site.

- For spillage of oil from the machinery, the oil (lubricating oil or fuel) is collected in a tray kept especially for this purpose and it can be reused. If possible filtration can also be done.
- For cement residual from concrete mixer plants, it is discharged into the Mixing Drum from the soil through air tight pipeline. This minimizes the chances of pollution, and is also a space saving affair.
- For construction workers, toilets will be provided with septic tank and soak pits for sewerage treatment purpose. Wash areas and drinking water will be provided.
- Solid waste generated from the site will be collected, segregated and disposed at municipal solid waste collection sites.

1.8 Will the low-lying areas & wetlands get altered? (Provide details of how low lying and wetlands are getting modified from the proposed activity)

There will be no alteration to natural drainage system/low lying area/wetland and there will be a well-planned storm water drain network. The storm water drainage system and rainwater harvesting pits are given in **Annexure -11**

1.9 Whether construction debris & waste during construction cause health hazard? (Give quantities of various types of wastes generated during construction including the construction labors and the means of disposal)

The construction debris will be segregated viz., steel, metal, plastics, papers etc. Maximum effort will be taken to recycle the wastes and other wastes will be sold to scrap dealers. There will not be any health hazard due to this debris.

2 WATER ENVIRONMENT

2.1 Give the total quantity of water requirement for the proposed project with the breakup of requirements for various uses. How will the water requirement met? State the sources & quantities and furnish a water balance statement.

The daily requirement of water will be 529 KLD. Fresh water demand is 243 KLD & recycle water is 286 KLD. After treatment of wastewater, treated water will be reused for flushing, HVAC and green belt. The source of water is from Panchayat.

The sewage of 301 KLD generated from domestic & flushing during the operation phase will be treated up to the tertiary level in a Sewage Treatment Plant (STP) of 300 KLD & 78 KLD.

After treatment, recycled water will be used for toilet flushing (103KLD), and gardening (28 KLD) and HVAC (155 KLD) Detailed Water balance is enclosed in **Annexure-4**

2.2 What is the capacity (dependable flow or yield) of the proposed source of water?

Fresh water demand for the project has been calculated to be about 243 KLD. During operational phase, water will be primarily sourced from panchayat, which is highly dependable.

2.3 What is the quality of water required, in case, the supply is not from a municipal source? (Provide physical, chemical, biological characteristics with class of water quality)

The fresh water will be sourced from Panchayat.

2.4 How much of the water requirement can be met from the recycling of treated wastewater? (Give the details of quantities, sources and usage)

Out of the 529 KLD of total water requirement, 286 KLD water will be met from recycle water. It will be reused for toilet flushing (103 KLD), gardening (28 KLD) and HVAC (155 KLD).

2.5 Will there be diversion of water from other users? (Please assess the impacts of the project on other existing uses and quantities of consumption)

There will not be any diversion of water from the other users.

2.6 What is the incremental pollution load from wastewater generated from the proposed activity? (Give details of the quantities and composition of wastewater generated from the proposed activity)

During operation, 301KLD of wastewater will be generated which will be treated in the Sewage treatment plant of 300 KLD and 78 KLD. Treated sewage will be utilized for flushing, & gardening purposes. The expected characteristics & pollution load of wastewater are as given in the following table Characteristics of Treated Water

Parameter	Expected Sewage Wastewater Characteristics	Treated Wastewater Characteristics
pH	7.0-10.0	6-9
BOD_5 at 20°C (mg/L)	250-300	30
COD (mg/l)	400-500	100
TSS (mg/L)	150	<30
Oil and grease (mg/L)	<20	<5

2.7 Give details of the water requirements met from water harvesting? Furnish details of the facilities created.

Rain water from roof tops will be drained through rain water vertical down take pipes. These vertical down take pipes shall be located at suitable locations inside the shafts or periphery of the building. The terrace will be sloped. The down take pipes will be connected to the storm water network and then to Rainwater Harvesting Pits. Roof top harvesting is also proposed. The plan showing the Storm water drain, and rainwater harvesting pits are given in **Annexure-11**

2.8 What would be the impact of the land use changes occurring due to the proposed project on the runoff characteristics (quantitative as well as qualitative) of the area in the post construction phase on a long-term basis? Would it aggravate the problems of flooding or water logging in any way?

No adverse impacts are envisaged due to proposed project on the runoff characteristics of the area as adequate arrangements have been made to trap the rainwater and suitable storm water drainage system has been provided. During the post-construction phase, runoff from the project shall not be allowed to stand or enter into the roadside or nearby drain. Adequate measures shall be taken to collect such run off and directed to recharging pits.

2.9 What are the impacts of the proposal on the ground water? (Will there be tapping of ground water; give the details of ground water table, recharging capacity, and approvals obtained from competent authority, if any)

Water required for the proposed project will be met from Panchayat. Recharging of ground water is also proposed for this project.

2.10 What precautions/measures are taken to prevent the run-off from construction activities polluting land & aquifers? (Give details of quantities and the measures taken to avoid the adverse impacts)

No runoff will be disposed outside the project site.

2.11 How is the storm water from within the site managed? (state the provisions made to avoid flooding of the area, details of the drainage facilities provided along with a site layout indication contour levels)

The storm water from the site is collected by means of storm water drainage network. It is proposed to provide storm water manholes, desilting chambers and percolation pits for management of storm water. Excess storm water will be diverted to existing canal which passes through the site. The Rainwater harvesting calculations are enclosed in **Annexure-12**

2.12 Will the deployment of construction laborers particularly in the peak period lead to unsanitary conditions around the project site (Justify with proper explanation)

No, the deployment of construction workers will not lead to unsanitary conditions at project site. Proper sanitary facilities will be provided to construction workers and treatment of the sewage will be done using septic tank and soak pits.

2.13 What on-site facilities are provided for the collection, treatment & safe disposal of sewage? (Give details of the quantities of wastewater generation, treatment capacities with technology & facilities for recycling and disposal)

Sewage Treatment and Reuse:

The details of quantity of sewage, sewage collection, treatment, reuse and disposal are given in the Table below. The design parameters, process description and schematic flow diagram of the STP is given in **Annexure -13.**

Sewage Quantity, Treatment, Reuse & Disposal

Quantity of sewage	301 KLD
STP Capacity	STP of 300 cum /day & 78 cum/day
Collection of sewage & effluent	Waste water generated during the operation phase will be collected through sewerage system (pipe drain) for treatment in STP.
Treatment of sewage	Sewage will be treated up to the tertiary level in a Sewage Treatment Plant based on SBR technology. The secondary treated sewage will be treated in UF plant.
Reuse / recycle of treated sewage	Out of 286 KLD of treated water, 103 KLD will be recycled for toilet flushing, 28 KLD for gardening, 155 KLD for HVAC and there is no disposal of treated sewage outside the site.

The location of STP, Sewage line, fresh water line and dual plumbing line is given in site plan **Annexure-14.**

2.14 Give details of dual plumbing system if treated waste is used for flushing of toilets or any other use.

A separate tank is provided to store treated domestic sewage and shall then be connected to the toilet flushing of the building. The dual plumbing line is given in **Annexure- 14.**

3 VEGETATION

3.1 Is there any threat of the project to the biodiversity? (Give a description of the local ecosystem with its unique features, if any)

There is no biodiversity threat as the major land use is uncultivated lands with sparse bush vegetation.

3.2 Will the construction involve extensive clearing or modification of vegetation? (Provide a detailed account of the trees & vegetation affected by the project)

Very few wild shrubs are present which have to be cleared. There will be no cutting of trees involved in the proposed project.

3.3 What are the measures proposed to be taken to minimize the likely impacts on important site features (Give details of proposal for tree plantation, landscaping, creation of water bodies etc along with a layout plan to an appropriate scale)

It is proposed to have tree plantation along the periphery of the site and also to develop lawn and greenery inside the project area. The landscape plan is shown in site plan and the vegetation for the greenbelt will be selected from the native species adapted to the local environment. About 8362.95 Sq.m (33.28%) of green area will be provided.

4 FAUNA

4.1 Is there likely to be any displacement of fauna- both terrestrial and aquatic or creation of barriers for their movement? Provide the details.

Due to the temporary influx of people there will be marginal increase in traffic on the adjacent road, which will have marginal increase in noise. But adequate greenery will act as noise barrier & adequate onsite facilities are provided for management of waste generated due to the project. Hence, there will not be any type of displacement or any other effect on the local fauna due to proposed project activities.

4.2 Any direct or indirect impacts on the avifauna of the area? Provide details.

Within the proposed project site, green areas will be developed to achieve a blend between modern building and various species of plants to create a clean, healthy and aesthetic environment. Common native variety of trees and ornamental flowering species will be planted in the green space. Landscaping can have direct positive impact on the local avifauna, as this will provide shelter to local birds.

4.3 Prescribe measures such as corridors, fish ladders etc. to mitigate adverse impacts on fauna.

These measures are not applicable for the proposed project.

5 AIR ENVIRONMENT

5.1 Will the project increase atmospheric concentration of gases & result in heat islands? (Give details of background air quality levels with predicted values based on dispersion models taking into account the increased traffic generation as a result of the proposed constructions).

The marginal increase in traffic due to project is not going to cause any significant increase in atmospheric concentration of gases and will not result in heat island formation. The Baseline data is enclosed in **Annexure-15**

5.2 What are the impacts on generation of dust, smoke, odorous fumes or other hazardous gases? Give details in relation to all the meteorological parameters.

During operation smoke arising will be released through DG stacks. Both during construction & operation phase no significant impact on visibility and any other meteorological parameters.

Mitigation measures for dust:

- All fine earth materials must be covered during transportation to the site to prevent spillage and dusting. Trucks used for that purpose on the project should be fitted with tailgates that close properly and with tarpaulins to cover the materials.
- The transportation of lubricants and fuel to the site should only be done in the appropriate vehicles and containers, i.e. fuel tankers and sealed drums.
- As far as possible, transport of construction materials should be scheduled for off-peak traffic hours. This will reduce the risk of traffic congestion and of road accidents on the access roads to the site.
- All loose material either stocked or transported shall be provided with suitable covering such as tarpaulin, etc.
- Water sprinkling shall be done at the location where dust generation is anticipated.

5.3 Will the proposal create shortage of parking space for vehicles? Furnish details of the present level of transport infrastructure and measures proposed for improvement including the traffic management at the entry & exit to the project site.

Adequate car parking is provided for smooth movement of vehicles within the site.

Parking Facilities:

S. No	Parking details	Cars		Two wheelers	
		Nos.	Area (Sq.m)	Nos.	Area (Sq.m)
1	Basement1	306	3825	269	1291.2
2	Basement 2	340	4250	481	2308.8
3	Basement 3	363	4537.5	511	2452.8
4	Surface	35	437.5	208	998.4
5	Ground Floor	25	312.5	0	0
6	First Floor	48	600	42	201.6
	Total	1117	13962.5	1511	7252.8

Traffic Management Plan at the Entry & Exit to the Project Site:

The project will have access through 30m road. Internal roads are provided within the site for smooth movement of vehicles. The basement parking plan is given in **Annexure –16.** The traffic movement within the site is given in Site Plan **Annexure-9.** There is a separate entry for Residential Apartment and separate entry for Mall and Hotel.

5.4 Provide details of the movement patterns with internal roads, bicycle tracks, pedestrian pathways, footpaths etc., with areas under each category.

The internal roads, pedestrian pathways, entry/ exits and traffic circulation plan have been shown in the traffic circulation plan enclosed. In the circulation plan of the project, there will be proper entry and exit points for systematic control of the vehicular movement within the site.

5.5 Will there be significant increase in traffic noise & vibrations? Give details of the sources and the measures proposed for mitigation of the above.

There will be temporary influx of 8668 people due to the proposed project, so there will be marginal increase in traffic on the adjacent road that will have marginal increase in noise and vibrations.

5.6 What will be the impact of DG sets & other equipment on noise levels & vibration in & ambient air quality around the project site? Provide details.

Since it is a mixed development project, impact level is minimum. Proper mitigation measures will be provided.

Mitigation Measures

- DG will be acoustically enclosed to minimize noise levels.
- DG sets will be used only during power failure.
- During operation stage, monitoring of emissions from DG sets and ambient air quality will be carried out as per norms.
- Where feasible, incorporate low-noise systems, such as ventilation systems, pumps, generators, compressors, and fans.
- Locate all stationary equipment (i.e., compressors and generators) as far as practicable from nearby residences and other sensitive receptors.
- Install sound control devices (baffles, silencers) to limit noise levels of facility equipment wherever possible.
- Adequate greenery which acts as noise barrier will be provided.

6 AESTHETICS

6.1 Will the proposed constructions in any way result in the obstruction of a view, scenic amenity or landscapes? Are these considerations taken into account by the proponents?

As the proposed site does not have any scenic amenity or landscaping in its surroundings, there is no issue of obstruction of above-mentioned conditions. Moreover the proposal is submitted to DTCP for planning permission and the acknowledgement is enclosed in **Annexure-17**.

6.2 Will there be any adverse impacts from new constructions on the existing structures? What are the considerations taken into account?

Construction work will be carried out within the designated area and will not cause any obstruction to nearby existing structures. Hence no impact is envisaged.

6.3 Whether there are any local considerations of urban form & urban design influencing the design criteria? They may be explicitly spelt out.

The architectural plan of the building will confirm with the Bangalore Development Authority norms.

6.4 Are there any anthropological or archaeological sites or artifacts nearby? State if any other significant features in the vicinity of the proposed site have been considered.

No such sites are located in the vicinity.

6.5 SOCIO ECONOMIC ASPECTS

6.6 Will the proposal result in any changes to the demographic structure of local population? Provide the details.

There will be temporary influx of 8668 numbers of people upon completion of the project. Since the project is proposed mixed development, this will result in addition of people for ancillary workers viz., watchmen, electrician, plumber, vegetable/ fruits seller, commercial/ fancy, Business etc.

6.7 Give details of the existing social infrastructure around the proposed project.

The details given in item 9 of Form 1.

6.8 Will the project cause adverse effects on local communities, disturbance to sacred sites or other cultural values? What are the safeguards proposed?

Since the project related activities are confined within the premises, the proposed project will not have adverse effects on local communities.

7 BUILDING MATERIALS

7.1 May involve the use of building materials with high-embodied energy. Are the construction materials produced with energy efficient processes? (Give details of energy conservation measures in the selection of building materials and their energy efficiency)

Conventional construction material will be used. Energy efficient building materials will be used as specified in the Energy Conservation Building Code.

7.2 Transport and handling of materials during construction may result in pollution, noise & public nuisance. What measures are taken to minimize the impacts? Mitigation Measures for Air Pollution during Construction Stage

Air Quality

Air Quality around the project site will have impact during construction stage. Various construction activities especially related to handling of loose material like to cause generation of fugitive dust, that adversely impact the air quality of the surrounding area of the project site. To minimize such impact following measures shall be taken:

- All the loose material either stacked or transport shall provide with suitable covering such as tarpaulin, etc.
- Water sprinkling shall be done at the location where dust generation is anticipated.
- To minimize the occupational health hazard, proper personal protective gears i.e. mask shall be provided to the workers who are engaged in dust generation activity.

Mitigation Measures for Noise Pollution during Construction Stage

It has been estimated that the average noise level resulting from construction activities and traffic movement in the adjacent road will be around 80-85 dB (A) during peak hours, which will decrease with increase in distance as per the Inverse Square Law. Administrative as well as engineering control of noise will be implemented.

- Isolation of noise generation sources and temporal differentiation of noise generating activities will ensure minimum noise at receiver's end.

- To prevent any occupational hazard, earmuff / earplug shall be given to the workers working around or operating plant and machinery emitting high noise levels.
- Use of plant or machinery emitting high noise shall not be allowed during night hour.
- Careful planning of machinery operation and scheduling of operations shall be done to minimize such impact.

7.3 Are recycled materials used in roads and structures? State the extent of savings achieved?

Waste from construction like excavated earth, iron rods etc. will be recycled as far as possible.

7.4 Give details of the methods of collection, segregation & disposal of the garbage generated during the operation phases of the project.

Solid wastes generated from the proposed activity are given in Table below. About 4114 Kg / day of solid wastes are likely to be generated due to the proposed project.

Waste	Quantity (kg/day)	Treatment method
Organic	1833	Sent to Local Body
STP Sludge	40	Composted and used as manure
Inorganic	2241	Sold to authorised recyclers

The details of solid wastes collection recycle and disposals are given in the Table below.

Solid Wastes Collection, Recycle & Disposal

Construction debris	The approximate quantity will be 5%. Maximum care will be taken to reuse the same. Scrapes will be sold to authorized vendors
Quantity of solid waste during operational Phase	4114 kg per day (Organic waste – 1833 kg/day, Inorganic Waste – 2241 kg/day; Sludge – 40 Kg/day)
Nature of solid wastes	Organic waste: Waste vegetables, foods, leaves, STP Sludge etc. Inorganic waste: Plastics, polythene bags, glass etc.
Collection and disposal of solid wastes	The solid wastes generated will be segregated into organic and inorganic components and collected in separate bins. The organic biodegradable wastes (waste vegetables, foods etc.) will be sent to local body for processing.
Recycling of solid wastes	The inorganic wastes comprising recyclable materials, such as plastic, glass etc., will be sold by promoter to prospective buyers.

8 CONSERVATION

8.1 Give details of the power requirements, source of supply, backup source etc. What is the energy consumption assumed per square foot of built-up area? How have you tried to minimize energy consumption?

The details of power requirement, source, backup power arrangement (i.e. generators) are given in the Table below. Locations of Transformers and DG sets and the power line to different units are also provided in site plan.

Power Requirement, Source and Backup Arrangement

Power requirement	4826 kVA
Source of power	TNEB
Backup power supply arrangement	2 x 380 kVA +2 x 1500 kVA+ 1 x1000 kVA + 1 x 125 kVA will be provided by DG sets for power backup in case of power failure.

8.2 What type of, and capacity of, power back -up you plan to provide?

DG of 2 x 380 kVA +2 x 1500 kVA+ 1 x1000 kVA + 1 x 125 kVA are provided for power backup.

8.3 What are the characteristics of the glass you plan to use? Provide specifications of its characteristics related to both short wave and long wave radiation?

Clear float glass depending upon the panel size to keep the U value as per the requirement of ECBC

8.4 What passive solar architectural features are being used in the building? Illustrate the applications made in the proposed project?

Solar Power for Lighting for Mall:

Total Lighting Load in KW – 100 KW

Consumption for a period of 14 Hrs / Day (A) – 1400 KWHR

Solar Power for Lighting for Hotel:

Total Lighting Load in KW - 50 KW

Consumption for a period of 14 Hrs / Day (A) – 700 KWHR

Solar Power for Lighting for Apartment:

Total Lighting Load in KW - 50 KW

Consumption for a period of 14 Hrs / Day (A) – 700 KWHR

8.5 Does the layout of streets & buildings maximize the potential for solar energy devices? Have you considered the use of street lighting, emergency lighting and solar hot water systems for use in the building complex? Substantiate with details?

Hotel:

It is proposed to provide centralized solar hot water system of 10000 liters tank capacity with 60 panels of 125 liters per hour (Considering 2500 liters heating coil provision during non sunny days. Power consumption is 20KW per day)

Since, we have solar system for 7500 liters / hour, power saving will be 60KW per day

Apartment:

Top 3 floors are provisioned for centralized solar hot water system of 3500 liters tank capacity with 28 panels of 125 liters per hour for 36 flats

24 toilets x 3 floors x 2 = 144 KW savings per day.

8.6 Is shading effectively used to reduce cooling/heating loads? What principles have been used to maximize the shading of walls on the east and the west and the roof? How much energy saving has been effected?

Shading options wherever feasible will be used for energy saving

8.7 Do the structures use energy-efficient space conditioning, lighting and mechanical systems? Provide technical details. Provide details of the transformers and motor efficiencies, lighting intensity and air - conditioning load assumptions? Are you using CFC and HCFC free chillers? Provide specifications.

Energy-efficient space conditioning, lighting and mechanical systems will be provided.

Design Details and power savings achieved in HVAC system is given in **Annexure-18**

8.8 What are the likely effects of the building activity in altering the micro-climates? Provide a self-assessment on the likely impacts of the proposed construction on creation of heat island & inversion effects?

The building will use energy efficient and environmental friendly designs that will control formulation of heat island effect. There will be also green cover at the site to reduce formation of heat island. Passive design concepts have been used to minimize energy consumption and maximize the energy efficiency.

8.9 What are the thermal characteristics of the building envelope? (a) roof; (b) external walls; and (c) fenestration? Give details of the material used and the U-values or the R values of the individual components.

Project with brick wall, aluminum windows, normal weathering course and tiles on the terrace.

8.10 What precautions & safety measures are proposed against fire hazards?

Furnish details of emergency plans.

In case of any hazards Emergency Preparedness & Response plan will be in place

- Emergency siren to be sounded
- Systematic evacuation

General Firefighting system proposed for the site is enclosed in **Annexure-19**

and Fire NOC is given in **Annexure-20**

8.11 If you are using glass as wall material provides details and specifications including emissivity and thermal characteristics.

Glass is used as wall material, Clear float glass depending upon the panel size to keep the U value as per the requirement of ECBC.

8.12 What is the rate of air infiltration into the building? Provide details of how you are mitigating the effects of infiltration.

Adequate provisions are provided to mitigate the effects of air infiltration.

8.13 To what extent the non-conventional energy technologies are utilized in the overall energy consumption? Provide details of the renewable energy technologies used.

Solar energy will be used for minimum lighting.

9 ENVIRONMENT MANAGEMENT PLAN

9.1 The environment management plan would consist of all mitigation measures for each item wise activity to be undertaken during the construction, operation and the entire life cycle to minimize adverse environmental impacts as a result of the activities of the project. It would also delineate the environmental monitoring plan for compliance of various environmental regulations. It will state the steps to be taken in case of emergency such as accidents at the site including fire.

The Environmental Management Plan is explained briefly in **Annexure -21**.

CONCEPTUAL PLAN

1. PROPOSAL:

Change of concept plan to the Environmental Clearance already obtained for the facility **"The Marina"** at Egattur Village, Thiruporur Taluk, Kancheepuram District within an area of 25130.90 sq .m. The built up area is 110673 sq. m.

2. PROMOTERS:

The project is promoted by "OMR Mall Developers Pvt Ltd ". The registered address is - 5th Floor, CITI Tower, #117, Thiyagaraya Road, T.Nagar, Chennai – 600017

3. PROJECT:

The proposed project is modification of mixed development. The project details are given below:

Item	**Details**
Project Name	**Proposed "The Marina " – A Mixed Development of Mall, Hotel, Multiplex and Residential Apartments**
Location	13/1A
Type of project	**Mixed Development**
Total Plot Area	25130.90 sq .m
Built up area	110835.03 sq. m.
OSR	2513.09 Sq.m (9.99%)
Ground coverage	9939.3 sq.m (39.54%)
Road & pavements	1911.27 Sq.m (7.6%)
Green Belt	8362.95 Sq.m (33.28%)
Number of Blocks/floors	Two Blocks with combined basement Mall + Hotel and Residential Apartment
Building Height	45 m
Road Width	Approach road 30 m
Parking facilities	Cars – 1117 Two wheelers - 1511
Power requirement	4826 kVA

Item	Details
Source of power	TNEB
Power backup	Hotel – 2 x 380 kVA Mall and Multiplex- 2 x 1500 kVA + 1 x 1000 kVA Residential Apartment -1 x 125 kVA
Water requirement	Total water requirement – 529 KLD; Fresh water: 243 KLD; Recycled water – 286 KLD.
Water Source	Panchayat
Estimated population to step-in	8668 persons per day
Project cost	Rs147.9 Crores
Connectivity	Existing 40 m OMR

4. LAND & LOCATION:

Proposed modification will be located within an area of 25130.90 sq .m. The satellite image is enclosed as **Annexure-8**. The revised site plan submitted to DTCP is enclosed as **Annexure-9**.

5. SERVICES & UTILITIES:

Construction Materials: The major materials required in the construction are steel, cement, bricks, metal, flooring tiles/stones, wood, sanitary and hardware items, electrical fittings, water, etc. All the items to be used in the proposed project will be of good quality as much as procuring directly from the dealers or manufacturers will use possible ISI brand items. Local items sand, metal, bricks, etc will be procured through standard suppliers in the market.

5.1 Water Requirement:

During Construction Phase: During construction phase, the work force involved will be 150 Nos. The water requirement during construction phase

will be 50 KLD (including water for construction) and the sewage generated from domestic use will be 6 KLD which will be disposed through tankers.

During Operation Phase: The daily requirement of water will be 529 KLD. Fresh water demand is 243 KLD & recycle water is 286 KLD. After treatment of wastewater, treated water will be reused for flushing, HVAC and green belt. The source of water is from Panchayat. Detailed Water balance is enclosed in **Annexure-4**

5.2 Sewage Treatment Plant

During operation, 301 KLD of wastewater will be generated which will be treated in the Sewage treatment plant of 300 KLD and 78 KLD. Treated sewage will be utilized for flushing, & gardening purposes. The design parameters, process description and schematic flow diagram of the STP is given in **Annexure -13**.

The sewage collection system, STP location, Schematic representation of Dual plumbing system is enclosed in **Annexure -14**.

Sewage Quantity, Treatment, Reuse & Disposal

Quantity of sewage	301 KLD
STP Capacity	STP of 300 cum /day & 78 cum/day
Collection of sewage & effluent	Waste water generated during the operation phase will be collected through sewerage system (pipe drain) for treatment in STP.
Treatment of sewage	Sewage will be treated up to the tertiary level in a Sewage Treatment Plant based on SBR technology. The secondary treated sewage will be treated in UF plant.
Reuse / recycle of treated sewage	Out of 286 KLD of treated water, 103 KLD will be recycled for toilet flushing, 28 KLD for gardening, 155 KLD for HVAC and there is no disposal of treated sewage outside the site.

5.3 Rain water Harvesting & Storm Water Management:

Rain water from roof tops will be drained through rain water vertical down take pipes. These vertical down take pipes shall be located at suitable locations inside the shafts or periphery of the building. The terrace will be sloped. The down take pipes will be connected to the rainwater storage tank

& it will be used after suitable treatment. Rainwater harvesting calculation is given in **Annexure-12** and the plan showing the location of RWH system, storm water drainage network and rainwater harvesting pits is given in **Annexure 11.**

5.4 Power

The maximum demand has been estimated as 4826 kVA for existing and proposed expansion facility. The local electricity board will supply the required power. For back-up support, 2 x 380 kVA +2 x 1500 kVA+ 1 x1000 kVA + 1 x 125 kVA will be provided by DG sets.

5.5 Step in population

The total population 8668 has been estimated as temporary influx.

5.6 Solid Waste Management

5.6.1 Construction phase:

Solid wastes of construction phase will constitute excess excavated earth and construction debris with bits and pieces of steel, air-conditioning insulation material, packaging material and wood used for shuttering purposes etc.

- No construction material or wastes e.g. excavated soil, debris etc. will be dumped outside the project area.
- Construction waste and debris will in general be used for filling of land within the premises.
- Unusable steel bits and pieces, piping, concrete reinforcement will also be collected at site and sold to recyclers
- Recyclable wastes such as Cement bags, waste paper and cardboard packing material, glass fibre insulation etc shall be sold to recyclers. Construction sites are sources of many toxic substances such as paints, solvents, wood preservatives etc. Wastes generated from these sources during construction phase shall be stored in sealed containers, labelled and disposed of as required by the Hazardous Wastes Management and Handling act Amendment Rules (MoEF 2003).
- Excavated earth quantity was around 1,84,918 m^3. Out of which 13,368 cu.m was used for backfilling and the balance 1,71,550 cu. m were given to other plot owners for their filling requirements.

- The construction debris will be segregated viz., steel, metal, plastics, papers etc. Maximum effort will be taken to recycle the wastes and other wastes will be sold to scrap dealers. There will not be any health hazard due to this debris

5.6.2 *Operation Phase:*

Solid wastes generated from the proposed activity are given in Table below. About 4114 Kg / day of solid wastes are likely to be generated due to the proposed project.

Waste	**Quantity (kg/day)**	**Treatment method**
Organic	1833	Sent to Local Body
STP Sludge	40	Composted and used as manure
Inorganic	2241	Sold to authorised recyclers

The details of solid wastes collection recycle and disposals are given in the Table below.

Solid Wastes Collection, Recycle & Disposal

Construction debris	The approximate quantity will be 5%. Maximum care will be taken to reuse the same. Scrapes will be sold to authorized vendors
Quantity of solid waste during operational Phase	4114 kg per day (Organic waste – 1833 kg/day, Inorganic Waste – 2241 kg/day; Sludge – 40 Kg/day)
Nature of solid wastes	Organic waste: Waste vegetables, foods, leaves, STP Sludge etc. Inorganic waste: Plastics, polythene bags, glass etc.
Collection and disposal of solid wastes	The solid wastes generated will be segregated into organic and inorganic components and collected in separate bins. The organic biodegradable wastes (waste vegetables, foods etc.) will be sent to local body for processing.

Recycling of solid wastes	The inorganic wastes comprising recyclable materials, such as plastic, glass etc., will be sold by promoter to prospective buyers.

5.7 Green Belt Development:

It is proposed to have tree plantation along the periphery of the site and also to develop lawn and greenery inside the project area. The landscape plan is shown in site plan and the vegetation for the greenbelt will be selected from the native species adapted to the local environment. About 8362.95 Sqm (33.28 %) of green area will be provided. Landscaping has been taken care of in view of the environment and aesthetics of the surrounding areas. Stress has been laid on providing ample green areas in close conjugation to the hard areas in a manner, that the overall harmony and ambience is maintained. Landscaping takes into account the various aspects of the architectural design. Trees are proposed to be planted to form an integral part of the landscape plantation and their selection is based on their ability to provide shade, flowers and fragrance apart from their high-yielding growth pattern. The addition of shrubs, hedges and ground cover will add to the aesthetics and softness to the hard building surfaces.

6. ENERGY MANAGEMENT

The building will use energy efficient and environmental friendly designs that will control formulation of heat island effect. There will be also green cover at the site to reduce formation of heat island. Passive design concepts have been used to minimize energy consumption and maximize the energy efficiency.

6.1 Solar Architectural Features

- The entire layout has been designed to take advantage of the local climatic conditions, the sun path and wind direction.
- Large windows have been proposed at regular intervals to invite daylight.

6.2 Energy Efficient Systems

- Variable speed secondary pumping system is proposed for chilled water to derive energy savings during part loads.

- Cooling towers will have variable speed drives to derive energy savings during part load and low wet bulb periods.
- All Public area air handling units will be provided with variable speed drives.
- Entire HVAC system will be optimized for energy efficiency through a Building Management System.
- Electric motor drives for all fans, AHU's and pumps will be high efficiency motors to IS: 12615 – 2004 and also will comply with ECBC norms
- Design details and power savings achieved through HVAC system is given in **Annexure-18**

6.3 Energy conservation in plumbing System

- Variable speed pumping system will be adopted for water distribution.
- All W.C's will have 3 – 6 litres dual- flush cistern.
- All public wash basins & urinals will have proximity sensors.
- Heat recovered from the de super heaters from the chillers will also be used to pre- heat the cold water.

6.4 Conservation in electrical system

- Energy efficient CFL/T5 lamps for common areas. Use of low loss electronic ballasts.
- Multiple circuits for lighting to switch off unwanted lights.
- Use of low loss capacitors, APFC relays.
- Group control for elevators
- Proper selection & sizing of cables considering de rating factors so as to minimize losses.
- High efficiency motors conforming to IS: 2615 – 2004.

7. PARKING AND TRAFFIC MANAGEMENT

Adequate car parking is provided for smooth movement of vehicles within the site.

Parking Facilities:

S. No	Parking details	Cars		Two wheelers	
		Nos.	Area (Sq.m)	Nos.	Area (Sq.m)
1	Basement1	306	3825	269	1291.2
2	Basement 2	340	4250	481	2308.8
3	Basement 3	363	4537.5	511	2452.8
4	Surface	35	437.5	208	998.4
5	Ground floor	25	312.5	0	0
6	First floor	48	600	42	201.6
	Total	**1117**	**13962.5**	**1511**	**7252.8**

Traffic Management Plan at the Entry & Exit to the Project Site:

The project will have access through 30m road. Internal roads are provided within the site for smooth movement of vehicles. The basement parking plan is given in **Annexure –16.** The traffic movement within the site is given in Site Plan **Annexure- 9.** There is a separate entry for Residential Apartment and separate entry for Mall and Hotel.

8. FIRE FIGHTING SYSTEMS

Adequate fire protection facilities will be installed including fire detectors, fire alarm and fire fighting system to guard the building against fires. All fire protection facilities are designed as per the latest National Building Code. NOC from fire department is enclosed in **Annexure -20.**

9. MITIGATION MEASURES FOR AIR POLLUTION

9.1 Construction Stage

During the construction stage there are chances of fugitive dust generation due to (i) excavation, (ii) movement heavy construction vehicles along the haul roads and (iii) storage and handling of construction materials. However, the generation of such dusts is most likely limited within the project boundary and negligible quantity is expected to the surrounding environment. To minimize such impact following measures shall be under taken:

9.1.1 Haul Road:

- Every main haul road (i.e. any course inside a construction site having a vehicle passing rate of higher than 4 in any 30 minutes) shall be paved with concrete, bituminous materials, metal plates, and kept clear of dusty materials; or sprayed with water or a dust suppression chemical so as to maintain the entire road surface wet.
- Regular water spraying on haulage roads during transportation of construction materials by water sprinklers
- Transfer points for transporting construction materials shall be provided with appropriate hoods/chutes to prevent dust emissions;
- Dumping of construction materials should be from an optimum height (preferably not too high) so as to reduce the dust blow

9.1.2 Use of vehicle

- Immediately before leaving a construction site, every vehicle shall be washed to remove any dusty materials from its body and wheels.
- Where a vehicle leaving a construction site is carrying a load of dusty materials, the load shall be covered entirely by clean impervious sheeting to ensure that the dusty materials do not leak from the vehicle.

9.1.3 Stock Piles:

- All loose material either stocked or transported shall be provided with suitable covering such as tarpaulin, etc.
- Water sprinkling shall be done at the location where dust generation is anticipated;
- Over Burden (OB) waste dumps shall be sprayed with water as they are major sources of air borne particulate matter/dust; and,
- OB waste dumps shall be reclaimed / afforested to bind the loose soil and to prevent soil erosion.

9.1.4 Building construction

- Where a scaffolding is erected around the perimeter of a building under construction, effective dust screens, sheeting or netting shall be provided to enclose the scaffolding from the ground floor level of the building

- Any skip hoist for material transport should be totally enclosed by impervious sheeting

9.2 Operation Stage

Table below gives the overview of the Air Pollution Control measures adopted during the project operation stage

Air Pollution Control Measures

S. N.	Air	Source	Control Measures
1	SO_2, NOx	DG sets	Adequate stack height of 63 m for the 6 stacks as per CPCB norms.

Adequate stack is provided for the release of pollutants from DG and from process equipment. Both during construction & operation phase no significant impact on visibility and any other meteorological parameters were observed

S.No	Source of Emission	APC measures provided	Stack height (m)
1.	DG sets	Acoustic enclosure with stack	Variable height
2.	Vehicular emissions Dust, SO_2, NO_x, CO, HC	Roads will be maintained properly to reduce dust. All vehicle owners will be informed to follow the emission standards fixed by the government authorities to keep the air pollutants under control. Pollution under Control checkup camps will be arranged for vehicles.	N.A

9.2.1 *Measures for Controlling Vehicular Emission:*

To control the emissions from the movement of vehicular traffic in the proposed project, following measures shall be adopted:

- Proper maintenance of the internal paved areas inside the boundary.
- Adequate greenbelt will be developed and maintained as described in the subsequent portions.
- Informatory sign shall be provided to encourage vehicle owners to maintain their vehicle and follow the emission standards fixed by Government Authorities.

9.2.2 *Control of Sulphur Dioxide Emission:*

To minimize the effect of sulphur dioxide emissions on ambient air quality, a stack is installed for the exhaust of the flue gases at a safe

height complying with the standards laid down by MoEF. The main source of SO_2 emissions from the proposed project is the DG set operations. It would be ensured that all stacks of DG sets would be designed as per the stack height norms of MoEF. Diesel used for the DG sets will comply with the MOEF specifications.

9.2.3 *Control of Particulate Emissions:*

Particulate emissions are mainly from the movement of vehicles in the project site. Keeping this in mind the internal paved area of the complex will be well maintained. Green Belt has been proposed in the campus. The green belt development is designed basically to promote biodiversity enhancement, environmental management, land regeneration and water management, with technology transfer of the activities for wider application.

10. MITIGATION MEASURES FOR NOISE POLLUTION

10.1 Construction Stage

- During the construction stage, expected noise levels shall be in the range of 80-85 dB (A) which will decrease with increase in distance as per the Inverse Square Law.
- Administrative as well as engineering control of noise will be implemented.
- Isolation of noise generation sources and temporal differentiation of noise generating activities will ensure minimum noise at receiver's end.
- To prevent any occupational hazard, earmuff / earplug shall be given to the workers working around or operating plant and machinery emitting high noise levels.
- Careful planning of machinery operation and scheduling of operations shall be done to minimize such impact.

10.2 Operation Stage

For the noise from DG Sets, there would be acoustic enclosure, which would lower the noise level. Therefore, adequate protective measures in the form of earmuffs / earplugs shall be given to workers working in these areas.

An adequate green belt cover shall be provided and the species will be selected based upon their Air-Pollution Tolerance Index (APTI), Noise abatement capacity

and local availability and landscape requirements. Thus through the greenbelt there shall be significant attenuation of noise generation.

11. ENVIRONMENTAL MONITORING PLAN

To check the effectiveness of mitigation measures as proposed, a detail environmental monitoring plan shall be implemented both during the construction and operation stage of the project. There shall be a project implementation unit (PIU) and it will be the responsibility of PIU to implement such monitoring programme. Such monitoring activities will help the PIU to maintain the quality of environment through adequate checking and control of mitigation measures and environmental infrastructures. There shall be monitoring programme both for the construction and operation stages of the project. Environmental Management plan is enclosed in **Annexure 21.**

12. CONCLUSION:

- There is minimum negative impact on Air, Noise and Water Environment.
- Treated Waste Water will be reused for gardening, HVAC and flushing.
- Rain Water harvesting system is proposed.
- Organic waste converter for solid waste management is proposed.
- There will be positive Impact on Social conditions in and around the site.
- The Project will not result in any adverse impact to the Environment.
- The marginal impact of setting up the Development in the proposed location will be fully mitigated by the Environment Management Plans. (EMP)

No. 21-562/2007-IA.III
Government of India
Ministry of Environment & Forests

Paryavaran Bhawan,
CGO Complex, Lodhi Road,
New Delhi - 110 003.

Dated: 1st October, 2008.

To
M/s. Allied Majestic Promoters (P) Ltd.,
"City Tower", Vth Floor,
#117, Thiyagaraya Road,
T. Nagar, Chennai – 600 017.

Subject: **Construction of a Shopping Mall-cum-Hotel "Marina Grand Mall" at 13/1A, Egattur village, Old Mahabalipuram Road, Kancheepuram District, Tamil Nadu by M/s. Allied Majestic Promoters (P) Ltd. - Environmental Clearance – Reg.**

Dear Sirs,

This has reference to your application No. nil, dated 02.05.2007 and subsequent letters dated 02.05.2008, 09.06.2008 and 06.08.2008 seeking prior Environmental Clearance for the above project under the EIA Notification, 2006. The proposal has been appraised as per prescribed procedure in the light of provisions under the EIA Notification, 2006 on the basis of the mandatory documents enclosed with the application viz., the Questionnaire, EIA, EMP and the additional clarifications furnished in response to the observations of the Expert Appraisal Committee constituted by the competent authority in its meetings held on 28th – 30th January 2008, 26th – 27th May, 2008 and 4th – 5th September, 2008 and awarded "Silver" grading to the project.

2. It is, interalia, noted that the project involves the construction of Shopping Mall cum hotel on a plot area of 25,292.85 Sq.m. The total built-up area proposed is 1,30,803.23 Sq. mts. (2 basements + ground + 9 floors). It is proposed to construct retail shops, theatres (1800 seats multiplex), restaurants and a 270 rooms hotel. The total water requirement is 545 KLD (fresh water requirement will be 355 KLD). The capacity of STP proposed is 450 KLD. Treated waste water to be used for flushing of toilets - 140 KLD, horticulture - 35 KLD and AC cooling - 250 KLD. The total solid waste generation will be 4 tons/day (organic waste - 1 ton/day, carton and packaging waste - 3 tons/day and STP sludge - 100 Kg/day). Total power requirement proposed is 6843 KVA. Total Parking spaces proposed are for 1320 cars (2 basements, lower ground and 8 floors) + 852 two wheelers (2 basements, lower ground and surface). The total cost of the project is Rs. 160 Crores.

3. The Director, Department of Environment, Chennai has informed vide letter RC.No.P1/1532/2007, dated 27.04.2007 that the property situated in S.Nos. 13/1A of Egattur Village, Chengalpet Taluk, Kancheepuram District falls beyond 100 mts. of HTL of Buckingham Canal and hence the property does not attract the provisions of CRZ Notification 1991.

4. The Expert Appraisal Committee, after due consideration of the relevant documents submitted by the project proponent and additional clarifications furnished in response to its observations, have recommended for the grant of Environmental Clearance for the project mentioned above. Accordingly, the Ministry hereby accord necessary Environmental Clearance for the above project as per the provisions of Environmental Impact Assessment Notification – 2006 and its subsequent amendments, subject to strict compliance of the terms and conditions as follows:

PART A - SPECIFIC CONDITIONS

I. Construction Phase

(i) "Consent for Establishment" shall be obtained from Tamil Nadu Pollution Control Board under Air and Water Act and a copy shall be submitted to the Ministry before start of any construction work at the site.

(ii) All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.

(iii) A First Aid Room will be provided in the project both during construction and operation of the project.

(iv) Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should be made for mobile toilets. The safe disposal of wastewater and solid wastes generated during the construction phase should be ensured.

(v) Provision shall be made in the water treatment plant for attaining bacteriological quality by chlorination before supply of water for domestic use.

(vi) All the topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site.

(vii) Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.

(viii) Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.

(ix) Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water.

(x) Any hazardous waste generated during construction phase, should be disposed off as per applicable rules and norms with necessary approvals of the Tamil Nadu Pollution Control Board.

(xi) The diesel generator sets to be used during construction phase should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.

(xii) The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from Chief Controller of Explosives shall be taken.

(xiii) Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.

(xiv) Ambient noise levels should conform to residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/TNPCB.

(xv) Fly ash should be used as building material in the construction as per the provisions of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003. (The above condition is applicable only if the project site is located within the 100 Km of Thermal Power Stations).

(xvi) Ready mixed concrete must be used in building construction.

(xvii) Storm water control and its re-use as per CGWB and BIS standards for various applications.

(xviii) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.

(xix) Permission to draw ground water shall be obtained from the competent Authority prior to construction/operation of the project.

(xx) Separation of grey and black water should be done by the use of dual plumbing line for separation of grey and black water.

(xxi) Fixtures for showers, toilet flushing and drinking should be of low flow either by use of aerators or pressure reducing devices or sensor based control.

(xxii) Use of glass may be reduced by upto 40% to reduce the electricity consumption and load on airconditioning. If necessary, use high quality double glass with special reflective coating in windows.

(xxiii) Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement.

(xxiv) Opaque wall should meet prescriptive requirement as per Energy Conservation Building Code which is proposed to be mandatory for all airconditioned spaces while it is aspirational for non-airconditioned spaces by use of appropriate thermal insulation material to fulfill requirement.

(xxv) The approval of the competent authority shall be obtained for structural safety of the buildings due to earthquake, adequacy of fire fighting equipments, etc. as per National Building Code including protection measures from lightening etc.

(xxvi) Regular supervision of the above and other measures for monitoring should be in place all through the construction phase, so as to avoid disturbance to the surroundings.

(xxvii) Under the provisions of Environment (Protection) Act, 1986, legal action shall be initiated against the project proponent if it was found that construction of the project has been started without obtaining environmental clearance.

II. Operation Phase

i) The installation of the Sewage Treatment Plant (STP) should be certified by an independent expert and a report in this regard should be submitted to the Ministry before the project is commissioned for operation. Treated affluent emanating from STP shall be recycled/reused to the maximum extent possible. Treatment of 100% grey water by decentralised treatment should be done. Discharge of unused treated affluent shall conform to the norms and standards of the Tamil Nadu Pollution Control Board. Necessary measures should be made to mitigate the odour problem from STP.

ii) The solid waste generated should be properly collected and segregated. Wet garbage should be composted and dry /-inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.

iii) Diesel power generating sets proposed as source of back up power for elevators and common area illumination during operation phase should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use low sulphur diesel. The location of the DG sets may be decided with in consultation with Tamil Nadu Pollution Control Board.

iv) Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.

v) The green belt of the adequate width and density preferably with local species along the periphery of the plot shall be raised so as to provide protection against particulates and noise.

vi) Weep holes in the compound walls shall be provided to ensure natural drainage of rain water in the catchment area during the monsoon period.

vii) Rain water harvesting for roof run- off and surface run- off, as plan submitted should be implemented. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease. The borewell for rainwater recharging should be kept at least 5 mts. above the highest ground water table.

viii) The ground water level and its quality should be monitored regularly in consultation with Central Ground Water Authority.

ix) Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized.

x) A Report on the energy conservation measures confirming to energy conservation norms finalise by Bureau of Energy Efficiency should be prepared incorporating details about building materials & technology, R & U Factors etc and submit to the Ministry in three months time.

xi) Energy conservation measures like installation of CFLs/TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project

commissioning. Use CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination. Use of solar panels may be done to the extent possible.

xii) Adequate measures should be taken to prevent odour problem from solid waste processing plant and STP.

xiii) The building should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.

PART – B. GENERAL CONDITIONS

i) The environmental safeguards contained in the EIA Report should be implemented in letter and spirit.

ii) Provision should be made for supply of kerosene or cooking gas and pressure cooker to the labourers during construction phase.

iii) Six monthly monitoring reports should be submitted to the Ministry and it's Regional Office, Bangalore.

5. Officials from the Regional Office of MOEF, Bangalore who would be monitoring the implementation of environmental safeguards should be given full cooperation, facilities and documents / data by the project proponents during their inspection. A complete set of all the documents submitted to MoEF should be forwarded to the CCF, Regional office of MOEF, Bangalore.

6. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Ministry.

7. The Ministry reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.

8. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.

9. These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and control of Pollution) act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006.

10. Environmental clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No.460 of 2004 as may be applicable to this project.

11. Any appeal against this Environmental Clearance shall lie with the National Environment Appellate Authority, if preferred, within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Act, 1997.

(Bharat Bhushan)
Director (IA)
01.10.2008

Copy to:

(1) The Secretary, Department of Environment, Government of Tamil Nadu, Secretariat, Chennai.
(2) The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi – 110 032.
(3) The Member Secretary, Tamil Nadu State Pollution Control Board, 76, Mount Salai, Guindy, Chennai-600032
(4) The CCF, Regional Office, Ministry of Environment & Forests(SZ), Kendriya Sadan, IVth floor, E&F wings, 17th Main Road, Koramangala II Block, Bangalore – 560 034.
(5) IA - Division, Monitoring Cell, MOEF, New Delhi - 110003.
(6) Guard file.

(Bharat Bhushan)
Director (IA)

உறுப்பினர் செயலர் (பொ) மாமல்லபுரம் உள்ளூர் திட்டக் குழுமம், மாமல்லபுரம் அவர்களின் நடவடிக்கைகள்

முன்னிலை : திரு. சி.பாஸ்கரத் தொண்டைமான்

ந.க.எண்.678/ 2014 மாஉதிகு **நாள் : .04 .2016**

பொருள் : கட்டிடம் - மாமல்லபுரம் உள்ளூர் திட்டக் குழுமம், மாமல்லபுரம் - காஞ்சிபுரம் மாவட்டம், திருப்போரூர் வட்டம் / ஊராட்சி ஒன்றியம், முட்டுக்காடு ஊராட்சி, ஏகாட்டூர் கிராமம், சர்வே எண்.13/1A-ல் 25130.90 சதுர மீட்டர் பரப்பளவு ஏற்கனவே மனை ஒப்புதல் மற்றும் அவற்றில் உத்தேசித்த பலமாடி வணிக உபயோக கட்டுமானத்திற்கு இசைவளிக்கப்பட்டதில் திருத்திய பலமாடி வணிக உபயோக கட்டுமானத்திற்கு திட்ட அனுமதி வழங்குதல் - குறித்து.

பார்வை

1. மனுதாரர் OMR Mall Developers Pvt Ltd, Allied Majestic Promoters அவர்களின் கடிதம் நாள்.24.02.2014.
2. நகர் ஊரமைப்பு ஆணையர், சென்னை அவர்களின் செயலாணை கடிதம் ந.க.எண்.23140/2007/ பிஏ2 நாள் 26.03.2008
3. நகர் ஊரமைப்பு இயக்குநர். சென்னை அவர்களின் செயலாணை கடிதம் ந.க.எண்.22581/200714/சிபி நாள் 20.11.2015
4. நகர் ஊரமைப்பு இயக்குநர் அலுவலக கோப்பு எண் 2840/13/சிபி. பலமாடி கமிட்டி கூட்டம் நடைபெற்ற நாள் 16.04.2015
5. 143-வது மாமல்லபுரம் உள்ளூர் திட்டக் குழும கூட்டம் தீர்மானம் எண்.05, நாள்
6. அரசாணை(நிலை) எண்.86, வீட்டுவசதி மற்றும் நகர்புற வளர்ச்சித் துறை, நாள்28.03.2012
7. நகர் ஊரமைப்பு ஆணையர், சென்னை அவர்களின் சுற்றறிக்கை ந.க.எண்.7486/2009/ பிஏ2 நாள் 16.04.2009
8. நகர் ஊரமைப்பு ஆணையர், சென்னை அவர்களின் சுற்றறிக்கை ந.க.எண்.21075/2009/ பிஏ1 நாள் 04.04.2012
9. இவ்வலுவலக கடிதம் இதே எண் நாள் 11.12.2015 (அடிப்படை மற்றும் உட்கட்டமைப்பு கட்டணம், வளர்ச்சி கட்டணம். நன்னிலைவரிக் கட்டணம் செலுத்தக் கோரியது)
10. மனுதாரர் OMR Mall Developers Pvt Ltd, Allied Majestic Promoters அவர்களின் கடிதம் நாள். 16.03.2016 (அடிப்படை மற்றும் உட்கட்டமைப்பு கட்டணம்,வளர்ச்சி கட்டணம், நன்னிலைவரிக் கட்டணம் செலுத்தியது)
11. நகர் ஊரமைப்பு இயக்குநர், சென்னை அவர்களின் சுற்றறிக்கை கடிதம் ந.க.எண்.4883/2010/BA2 நாள். 14.01.2011.
12. நகர் ஊரமைப்பு இயக்குநர் சென்னை அவர்களின் கடிதம் ந.க.எண்.37/2016 சிபி நாள்.31.03.2016.

*****

உத்திரவு

மாமல்லபுரம் உள்ளூர் திட்டக் குழுமப் பகுதி, காஞ்சிபுரம் மாவட்டம், திருப்போரூர் வட்டம், திருப்போரூர் ஊராட்சி ஒன்றியம், முட்டுக்காடு ஊராட்சி, ஏகாட்டூர் கிராமம், சர்வே எண்.13/1A-ல் 25130.90 சதுர மீட்டர் பரப்பளவு மனையிடத்திற்கு பார்வை 2-ல் நகர் ஊரமைப்பு ஆணையர், சென்னை அவர்களின் செயலாணை கடிதம் ந.க.எண்.23140/2007/ பிஏ2 நாள் 26.03.2008 -ல் "ABCDE" என எல்லையிட்டு மனையிட ஒப்புதலும், அம்மனையிடத்தில் Mall Multiplex, Hotel and Food court உத்தேசத்திற்கு இசைவளிக்கப்பட்டதில் திருத்திய பலமாடி வணிக உபயோக உத்தேசங்கள் கீழ்கண்டவாறு அமைகின்றன.

Area Statement

Floor Details	Tower -1		Tower - II	
	Mall	Hotel	Residential Apartments	EWS
Combined 3rd Basement	Parking			
Combined 2nd Basement	Parking			
Combined 1st Basement	Parking			
Ground Floor	7013.00	1070.00	1st stilt parking	
1st Floor	8680.00		2nd stilt parking & 82.59	
2nd Floor	7206.70		766.11	334.04
3rd Floor	7408.30		766.11	334.04
4th Floor	4837.14	570.75	766.11	334.04
5th Floor	3920.00	1049.60	1100.15	---
6th Floor	---	776.82	1100.15	---
7th Floor	---	776.82	1100.15	---
8th Floor	---	776.82	1100.15	---
9th Floor	---	776.82	1100.15	---
10th Floor	---	776.82	942.21	---
11th Floor	---	776.82	---	---
Swimming Pool	---	---	---	---

OSR - 2513.09 already handed over

பார்வை 3-ல் கண்ட நகர் ஊரமைப்பு இயக்குநர். சென்னை அவர்களின் செயலாணை கடிதம் ந.க.எண்.22581/200714/சிபி நாள் 20.11.2015 -ல் மேற்கண்ட உத்தேச திருத்திய பலமாடி வணிக உபயோகக் கட்டுமானத்திற்கு சிறப்பு நிபந்தனைகள் மற்றும் நிபந்தனைகளுடன் நகர் ஊரமைப்புச் சட்டம் 1971 பிரிவு 49-ன் கீழ் உறுப்பினர் செயலர்,

மாமல்லபுரம் உள்ளூர் திட்டக் குழுமம் அவர்கள் திட்ட அனுமதி வழங்க இசைவு அளிக்கப்பட்டுள்ளது.

ஒப்புதல் அளிக்கப்பட்ட கட்டிட வரைபடத்திற்கு க.வ/ ந.ஊ.இ.எண்.201/2015 என எண்ணிடப்பட்டு பெறப்பட்டுள்ளது.

பார்வை 5-ல் கண்ட மாமல்லபுரம் உள்ளூர் திட்டக் குழுமத்தின் 143-வது கூட்ட தீர்மானம் எண்.05-ல், திட்ட அனுமதி வழங்க தீர்மானம் பெறப்பட்டுள்ளது.

<u>ஏற்கனவே திட்ட அனுமதி வழங்கப்பட்ட உத்தேசத்தின் விவரம்</u>

- நகர் ஊரமைப்பு ஆணையர், சென்னை அவர்களின் செயலாணை கடிதம் ந.க.எண்.23140/2007/ பிஏ2 நாள் 26.03.2008 (இசைவளிக்கப்பட்டது)
- மொத்த FSI பரப்பு 56471.54 சதுர மீட்டர் (பலமாடி குடியிருப்புகள்)
- அரசாணை எண் 84, வீட்டு வசதி மற்றும் நகர்ப்புற வளர்ச்சித்துறை, நாள் 08.04.2008
- I &A கட்டணம் சதுர மீட்டருக்கு ரு.1000/- வீதம் 56471.54 சதுர மீட்டர் x ரு.1000/- ரு.5,64,75,000/-
- மனுதாரரால் செலுத்தப்பட்ட தொகை ரூ.2,82,37,500/- நாள்.19.06.2008 (50%கூட்டணத்தொகை) மற்றும் அபிவிருத்திக் கட்டணம் ரூ.16,01,220/- நாள் 19.06.2008
- 111வது மாமல்லபுரம் உள்ளூர் திட்டக் குழும கூட்டத்தில் பொருள் எண்02 -ல் வைக்கப்பட்டு திட்ட அனுமதி வழங்க தீர்மானம் நிறைவேறப்பட்டுள்ளது.
- உறுப்பினர் செயலர், மாமல்லபுரம் உள்ளூர் திட்டக்குழுமம் அவர்களின் நடவடிக்கைகள் கடிதம் ந.க.எண் 141/2006, நாள் 26.03.2009-ல் திட்ட அனுமதி எண் 8/09, நாள் 26.03.2009-ல் திட்ட அனுமதி வழங்கப்பட்டுள்ளது.
- 26.03.2009 முதல் 25.03.2012 வரை மூன்று ஆண்டுகளுக்கு மட்டுமே திட்ட அனுமதி காலம் செல்லத்தக்கதாகும் என தெரிவித்து திட்ட அனுமதி வழங்கப்பட்டுள்ளது.

<u>2. காலநீட்டிப்புக்கான திட்ட அனுமதி</u>

- மேற்படி திட்ட அனுமதி வழங்கப்பட்ட காலத்தினை நீட்டிப்பு செய்யப்பட்டு கீழ்கண்டவாறு திட்ட அனுமதி வழங்கப்பட்டுள்ளது
- உத்தேச கட்டுமானம் தொடர்பாக மீதமுள்ள 50% கட்டணத்தொகை ரூ.2,82,37,500/- நாள்.07.05.2012 மற்றும் 6% காலதாமத வட்டி ரூ.3670900/- நாள்.11.05.2012 -ல் பெறப்பட்டுள்ளது

- உறுப்பினர் செயலர், மாமல்லபுரம் உள்ளூர் திட்டக்குழுமம் அவர்களின் நடவடிக்கைகள் கடிதம் ந.க.எண் 528/2010, நாள் 08.06.2012-ல் திட்ட அனுமதிக்கான கால நீட்டிப்பு 26.03.2012 முதல் 25.03.2015 வரை மூன்று ஆண்டுகளுக்கு மட்டுமே செல்லத்தக்கதாகும் என தெரிவித்து திட்ட அனுமதி கால நீட்டிப்பு வழங்கப்பட்டுள்ளது.

பார்வை 6-ல் கண்ட அரசாணையின்படி பார்வை 9-ல் கண்ட இவ்வலுவலக கடிதம் மூலம் மனுதாரரிடம் அடிப்படை வசதி மற்றும் உள்கட்டமைப்பு கட்டணம், அபிவிருத்தி

கட்டணம் மற்றும் நன்னிலை வரி கட்டணம் ஆகிய கட்டணங்கள் கோரப்பட்டு பார்வை 10-ல் கண்ட மனுதாரின் கடிதம் மூலம் அரசுக்கு செலுத்தப்படவேண்டிய கட்டணமான நன்னிலை வரி ரூ.60,000/-ஐ SBI, Thirukalukundram கிளை, நாள்.16.03.2016-ல் செலுத்தியதற்கான கருவூலக செலுத்து சீட்டும் மற்றும் ரூ. 50000/- க்கான சிறுசேமிப்பு பத்திரம் ஆகியவை பெறப்பட்டு அடிப்படை வசதி மற்றும் உள்கட்டமைப்பு கட்டணத் தொகை மனுதாரரால் செலுத்தப்படவில்லை.

மனுதாரர் அடிப்படை வசதி மற்றும் உட்கட்டமைப்பு கட்டணம் செலுத்துதல் தொடர்பான மேல்முறையீடு விண்ணப்பம் நகர் ஊரமைப்பு இயக்குநர், சென்னை அவர்களுக்கு இவ்வலுவலக கடிதம் ந.க.எண்.678/2014/மாஉதிகு நாள்.08.01.2016-ல் சமர்ப்பிக்கப்பட்டுள்ளது.

பார்வை 12-ல் காணும் நகர் ஊரமைப்பு இயக்குநர் சென்னை அவர்களின் கடிதம் ந.க.எண்.37/2016/சிபி, நாள்31.03.2016 -ல் மேற்காண் பொருள் தொடர்பான உத்தேசத்திற்கு அடிப்படை வசதி மற்றும் உட்கட்டமைப்பு கட்டணம் வசூலிப்பது தொடர்பாக பார்வை 11-ல் காணும் நகர் ஊரமைப்பு இயக்குநர் சென்னை அவர்களின் சுற்றறிக்கை கடிதம் ந.க.எண்.4883/2010/பிஏ2 நாள்14.01.2011-ன் அடிப்படையில் நடவடிக்கை எடுக்குமாறு தெரிவிக்கப்பட்டுள்ளது.

பார்வை 11-ல் காணும் நகர் ஊரமைப்பு இயக்குநர் சென்னை அவர்களின் சுற்றறிக்கை ந.க.எண்.4883/2010/பிஏ2 நாள்14.01.2011-ல் வரிசை எண் 4-ல் பின்வருமாறு தெரிவிக்கப்பட்டுள்ளது.

"If applicant gets approval for one type of development from this department after the payment of Infrastructure and Amenities Charges, but constructed another type of building and got approval later on from this department, the Infrastructure and Amenities charges can be adjusted. But in any case no refund of I & A charges will be allowed"

மனுதாரர் ஏற்கனவே செலுத்திய I & A கட்டணத் தொகை ரூ.5,64,75,000 தற்போதைய ஒப்புதலுக்கு பின்னர் கணக்கீட்டுத் தொகை ரூ.3,85,01,250 மனுதாரர் கூடுதல் தொகை ஏற்கனவே செலுத்தியுள்ளதால் மனுதாரரிடம் தற்சமயம் கேட்பு (Demand) செய்யப்பட்டது பார்வை 11-ல் காணும் சுற்றறிக்கையின்படி மனுதாரர் செலுத்தப்படவில்லை எனவும் தெரிவிக்கப்படுகிறது.

As per the Suggestion of the **Technical committee meeting**: (The Commissioner of Town and Country Planning, in its file No.6830/2013-T, dated: 08.04.2013 in - Subject No.4) **The**: Section 50 of the Town and Country Planning Act prescribes that every Planning permission accorded under Section 49 shall be in force for a period of 3 years and the same can be extended for another term of not exceeding 3 years on application prior to expiry of the first permission. As far as the collection of charges while considering for renewal, it is found that collection of development charges/I &A charges

second time for the same development is not justified. It has also been ascertained that local bodies do not collect development charges or other charges while considering for renewal of license except collecting license fee. Planning authority does not collect any separate planning permission fee. Therefore, The Technical Committee is suggested that no charge Viz., development charge, I & A charge need not be collected except the scrutiny fee in the circumstances stated as above. but if charges of I & A is there in case of higher rate now, difference to be collected, but if lower rate now, no refund to be given, however, specific cases requiring clarification shall be referred for detailed examination and advice of the CTCP என தெரிவிக்கப்பட்டுள்ளது அதன்படி பார்வை-12ல் காணும் கடிதத்தில் பெறப்பட்ட அறிவுரை அடிப்படையில் மனுதாரரிடம் நன்னிலை வரிக்கட்டணம் மட்டும் பெறப்பட்டுள்ளது.

திருத்திய பலமாடி வணிக உபயோகக் கட்டிட வரைபடங்களுக்கு நகர் ஊரமைப்புச் சட்டம் 1971, பிரிவு 49(i) (ii) (iii)-ன் கீழ் திட்ட அனுமதி எண்.9 (1 முதல் 18 வரை) / 2016 என எண்ணிடப்பட்டு திட்ட அனுமதியும் வழங்கப்படுகிறது.

இந்த திட்ட அனுமதி நகர் ஊரமைப்புச் சட்டம் 1971, பிரிவு 50-ன் படி திட்ட அனுமதி அளிக்கப்பட்ட தினத்திலிருந்து 20 .04.2016 முதல் 19.04.2019 வரை மூன்று ஆண்டுகளுக்கு மட்டுமே செல்லத்தக்கதாகும்.

<u>சிறப்பு நிபந்தனைகள்:</u>

1. The Project proponent/ Applicant shall not commence any activity, excepting fencing of the site and construction of temporary shed for guard, without obtaining Environment clearance under the EIA Notification, 2006 from the State Level Environment Impact Assessment Authority or the ministry of Environment and Forests, Government of India, as applicable to the project, as per the threshold limits. Any violation from the above requirement is liable for action under section 19 of the Environment (protection) Act, 1986
2. It is responsibility of the builders to ensure safe bearing capacity of the soil and adequacy of the foundations.
3. மத்திய மற்றும் மாநில அரசு துறையினரிடமிருந்து பெறப்பட்ட தடையின்மை சான்றிதழில் குறிப்பிடப்பட்டுள்ள நிபந்தனைகள் அனைத்தும் கண்டிப்பாக நிவர்த்தி செய்யப்பட வேண்டும்.
4. Planning Permission is issued in accordance with the provisions of the Town and Country Planning Act and the rules made there under and does not cover the structural stability aspects including the safety during the construction which are covered under the Building Rules under the Local bodies Act. Planning Permission is issued subject to the condition that the applicant / developer and also the architects / Licensed Surveyors and the Structural Engineer associated with the development shall ensure that developments shall be structurally sound and adequate safety measures are taken during the process of construction.
5. Applicant should obtain consent from Tamil Nadu Pollution Countrol Board Under Section 25 of the water Act 1974 for discharge of sewage.

6. "நகர் ஊரமைப்புத் துறை சட்டபூர்வமாக தொழில்நுட்ப அனுமதி / திட்ட அனுமதி அளிப்பதன் மூலம் விண்ணப்பதாரரின் பேரில் உள்ள நில உரிமையை உறுதிபடுத்தவில்லை. தொழில்நுட்ப அனுமதி / திட்ட அனுமதி அளிப்பதற்கு முன்பு விண்ணப்பத்தாரரின் விண்ணப்பத்துடன் சமர்ப்பித்த ஆவணங்கள் (கிரய பத்திரம்) குத்தகை பத்திரம், பட்டா, தானப்பத்திரம், பொது அதிகாரப் பத்திரம் மேலும் பல) விண்ணப்பதாரர் வளர்ச்சி செய்ய உரிமையுள்ளதா என்று மட்டுமே சரிபார்க்கப்படுகிறது. அதன் மூலம முதற்கட்டமாக விண்ணப்பதாரருக்கு வளர்ச்சி செய்ய உரிமை உள்ளதா என்று பார்க்கப்படுகிறது.

சொத்தினை வாங்க விரும்பும் எந்த நபரும், விண்ணப்பதாருக்கு சொத்தின் மீது உள்ள உரிமையை தனியாக உறுதிபடுத்திக் கொள்ள வேண்டும். மேலும் அதன் மேல் வேறு யாரேனும் தனிநபர் உரிமை கோரினாலோ அவர்கள் அதனை பொருத்தமான தகுதியுள்ள நீதிமன்றத்தின் முன் தீர்த்துக் கொள்ளலாம். இதனை முடிவு செய்ய நகர் ஊரமைப்பு துறை பொருத்தமான அமைப்பு அல்ல".

7. The conditions given in the fire NOC and AAI NOC should be followed.
8. Swimming Pool should be operated after obtaining clearance from theDistrict Level committee as per Go.Ms.No.97 MAWS (MA-1) Department datd 07.07.2015
9. Necessary clearance should be obtained from theDistrict Collector for Multiplex
10. NOC should be obtained for Gas Bank & Diesel bank proposed before operation from the concerned authorities
11. நகர் ஊரமைப்பு இயக்குநர் அவர்களின் சுற்றறிக்கை ந.க.எண் 05013/2015 MP, நாள் 19.03.2015-ன் படி "கட்டுமானங்கள் நடைபெறும் இடத்தில் பொது மக்கள் அனைவருக்கும் தெரியும் வகையில் பலகையில் வளர்ச்சிக் கட்டுப்பாட்டு விதிகளின்படி தளப்பரப்பு விகிதம் (FSI), திறவிடங்கள் (setback) வாகனம் நிறுத்தம் மற்றும் பல நிறுவப்பட்டிருக்க வேண்டும்".
12. "The provisions in the G.O (Ms)No.17, H & UD (UD4) (3) department, dated:05.02.2016 relating to installation and use of Solar energy system, should be followed."

<u>நிபந்தனைகள்</u>

1. உத்தேச பலமாடி திருத்திய வணிக உபயோகக் கட்டுமானத்திற்கு Solar Water Heating System அமைக்கப்பட வேண்டும்.
2. வரைபடத்தில் உத்தேசிக்கப்பட்டவாறு வாகனம் நிறுத்துமிடம் அந்த பயனுக்காகவே பயன்படுத்தப்பட வேண்டும்.
3. மனையில் காட்டப்பட்டுள்ள திறவிடங்கள் அதன்படியே நிலை நிறுத்தப்பட வேண்டும்.
4. தற்போது ஒப்புதல் பெறப்பட்ட வரைபடத்திற்கு மாறாக கட்டிடத்தில் எவ்வித மாற்றமும் செய்தல் கூடாது. மாற்றங்கள் ஏதேனும் செய்வதாக இருந்தால் இவ்வலுவலகத்தின் முன் அனுமதி பெறப்பட வேண்டும்.
5. மழைநீர் சேகரிப்பு வசதிகள் வரைபடத்தில் காட்டப்பட்டுள்ளவாறும், அரசாணை எண்.138, நகராட்சி நிர்வாகம் மற்றும் குடிநீர் வழங்கல்துறை நாள் 11.10.2002-ன் படி கட்டிடத்தில் செயல்படுத்தப்பட வேண்டும்.
6. உத்தேச கட்டிடத்தில் இருந்து வெளியேறும் கழிவுநீர் தனியார் வாகனங்கள் மூலம் வெளியேற்றவும், குடியிருப்போருக்கு பாதுகாக்கப்பட்ட குடிநீர் வசதிகள் மற்றும் இதர

தேவைக்கான நீர் வசதிகள் ஆகியவை மனுதாரர் தனது சொந்த செலவில் செய்து தர வேண்டும்.

7. மனையில் அமையும் குடிநீர் மேல்நிலைத் தொட்டி மற்றும் கிணறு ஆகியவற்றுக்கு கொசு தடுப்பு சாதனம் பொருத்தப்பட வேண்டும்.

8. உத்தேச கட்டுமானத்தில் விதிப்படி தேவையான அளவுக்கு தீ தடுப்பு மற்றும் தீயணைப்பு சாதனங்கள் அமைக்கப்பட வேண்டும்.

9. அரசாணை எண்.341, நகராட்சி நிர்வாகம் மற்றும் குடிநீர் வழங்கல் (ந.நி.1) துறை, நாள் 03.11.2004-ன் படி செப்டிக் டேங்கில் "U" Trap அமைத்தல் வேண்டும்.

10. சுற்றுச் சூழல் மற்றும் வனத்துறை அறிவிக்கையின்படி உத்தேச கட்டிடத்திற்கு Fly Ash Bricks மற்றும் Materials பயன்படுத்தப்பட வேண்டும்.

11. அங்கீகரிக்கப்பட்ட வரைபடத்தின் நகல் (உண்மை நகல்) கட்டுமானங்கள் நடைபெறும்போது அவ்விடத்தில் அனைவருக்கும் தெரியும் வகையில் பலகையில் நிறுவப்பட்டிருக்கவேண்டும்.

12. அங்கீகரிக்கப்பட்ட வரைபடத்தில் அசல் நகலுடன் ஏற்கனவே அளிக்கப்பட்ட உத்தரவு மற்றும் இவ்வாணையின் நகல் வாங்குபவர்களுக்கு வழங்க வேண்டும்.

திட்ட அனுமதி அளிக்கப்பட்ட உத்தரவு கடிதம் மற்றும் வரைபடங்கள் இரண்டு தொகுப்புகள் இத்துடன் இணைத்து அனுப்பப்படுகிறது.

மனுதாரர் மேற்கொண்டு முட்டுக்காடு ஊராட்சி மன்றத் தலைவர் அவர்களை அணுகுமாறு தெரிவிக்கப்படுகிறார்.

மேலும் திட்ட அனுமதி அளிக்கப்பட்ட உத்திரவு கடிதம் மற்றும் வரைபடங்கள் பெற்றுக் கொண்டதற்கான ஒப்புகைச் சான்றினை இவ்வலுவலகத்திற்கு அனுப்பி வைக்குமாறு முட்டுக்காடு ஊராட்சி மன்ற தலைவர் அவர்கள் கேட்டுக் கொள்ளப்படுகிறார்.

24/4/16

உறுப்பினர் செயலர் (பொ)
மாமல்லபுரம் உள்ளூர் திட்டக் குழுமம்,
மாமல்லபுரம்

இணைப்பு :
ஒப்புதலளிக்கப்பட்ட வரைபடங்கள் - 2 தொகுப்பு

பெறுநர்
ஊராட்சி மன்றத் தலைவர்,
முட்டுக்காடு ஊராட்சி,
திருப்போரூர் வட்டம்,
காஞ்சிபுரம் மாவட்டம்.

நகல்

1. M/s.Allied Majestic Promoters
   OMR Mall Developers (P) Ltd.,
   City Tower, 5th Floor,
   No.117, Sir Thiyagaraya Road,
   T.Nagar, Chennai - 17

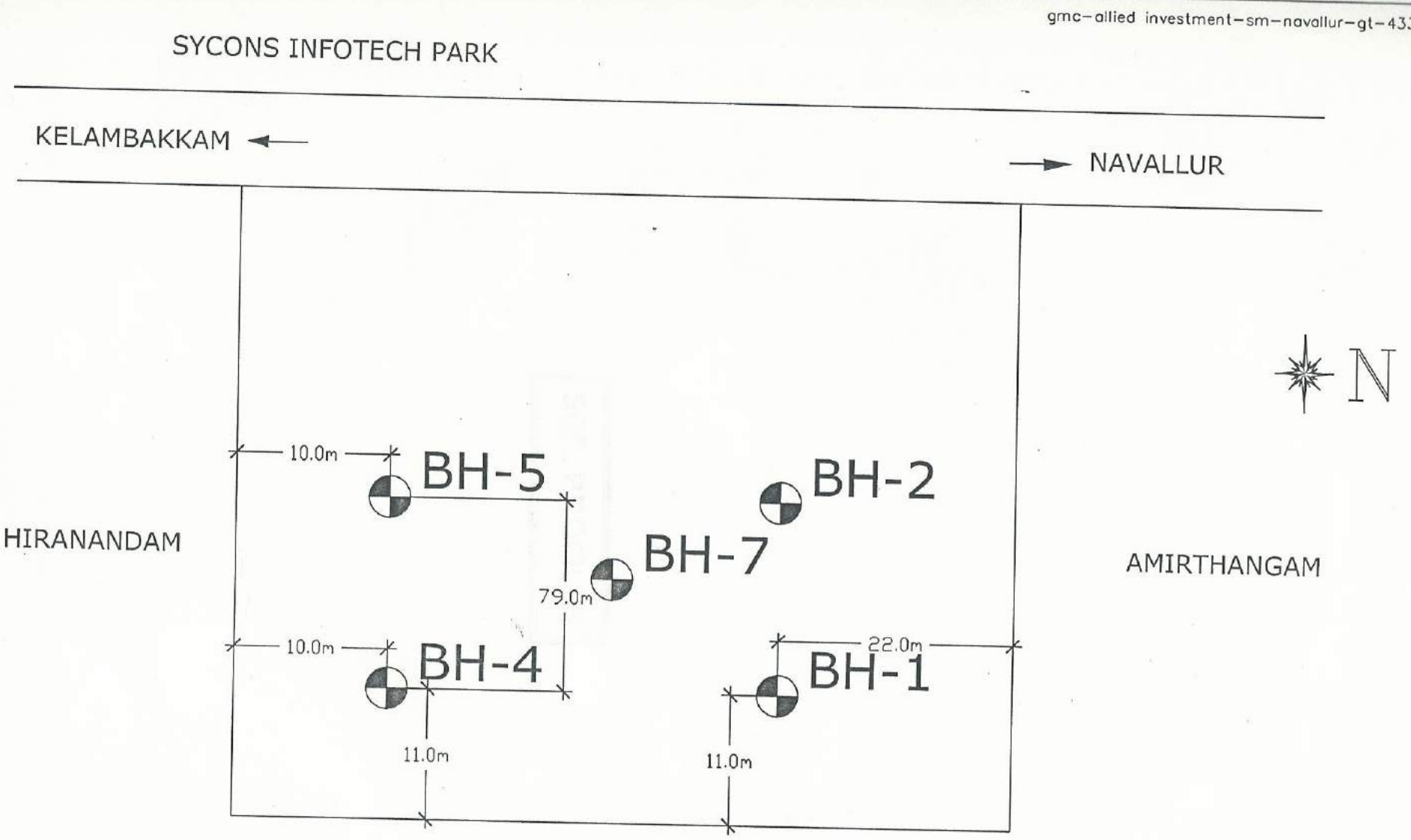
2. நகர் ஊரமைப்பு இயக்குநர்,
   சென்னை அவர்களுக்கு பணிந்து சமர்ப்பிக்கப்படுகிறது.

Annexure - 3

SITE PLAN

GEO MARINE

gmc-allied investment-sm-navallur-gt-433



1.0 SITE PLAN SHOWING THE LOCATION OF FIELD INVESTIGATION POINT AT NAVALLUR, CHENNAI

LEGEND:

DENOTES BORE HOLE

SOIL PROFILES

Project: Proposed Construction of Shopping Mall (2B+G+9Floor) at Navalur - Chennai.
Location: Navalur
RL of G.L.: *-5.50 m R.L. of G.W.T: -3.000 m
Bore Hole No.: BH- 1
Started on : 09/07/07 Ended on : 11/07/07
Dia. of Bore :150mm

Stratification Data				SPT - Data						Type of Sample	
Depth Below G.L.(m)	G.W.T. (m)	Soil Profile	Description of Soil	Depth of SPT (m)	No. of Blows for Pent. (cm) 0-15	15-30	30-45	N	0 10 20 30 40 50 60 70 80 90	Depth of Sample(m)	Type of Sample
IN THIS LEVEL DEPTH OF-5.50 m FROM THE REFERENCE ROAD LEVEL(ALREAD 5.50 m DEPTH EXCAVATED, SO DONE THE SOIL TEST BELOW 5.50 m)											
-6.000			Greyish to Whitish Clayey Medium Coarse Sand	-6.000						0.500	DS
-7.500			Greyish to Greenish M. Dense Weathered Sand with Pebbles **Angle of Shearing Resistance 32.4°**	-6.500	5	7	11	18		-6.500	SS
				-7.500	7	10	12	22		-7.500	SS
-8.500			Greenish to Greyish M. Dense Weathered Sand **Angle of Shearing Resistance 33.6°**	-8.500	12	10 Cm Penet. For 50 Blows				-8.500	SS
				-9.500	SPT Hammer Rebounded					-9.500	SS
				-10.500	SPT Hammer Rebounded					-10.500	SS (DS)
			Yellowish to Brownish Weathered Granite **Angle of Shearing Resistance 42.5°**	-12.000	SPT Hammer Rebounded					-12.000	SS
				-13.000	SPT Hammer Rebounded					-13.000	SS
-14.500				-14.000						-14.000	CS
					C.R.R. 15% R.Q.D. 0%						
			Bronwish to Greyish Highly Fractured (Jointed) Hard Granite **Angle of Shearing Resistance 45°**	-15.000						-15.000	CS
					C.R.R. 22% R.Q.D. 0%						
				-16.300						-16.300	CS
					C.R.R. 90% R.Q.D. 0%						
				-16.500						-16.500	CS

Borehole terminated at -16.5 m depth below E.G.L.

FIG.2.1Sub Soil Profile at BH-1 Location

*** Bore Hole Drilled from the excavated pit bottom of 5.5m depth from the road level. (For basement construction)**

Project: Proposed Construction of Shopping Mall (2B+G+9Floor) at Navalur - Chennai.
Location: Navalur
RL of G.L.: *-2.50 m R.L. of G.W.T: -2.500 m
Bore Hole No.: BH- 2
Started on : 09/07/07 Ended on : 11/07/07
Dia. of Bore :150mm

Stratification Data				SPT - Data						Type of Sample	
Depth Below G.L.(m)	G.W.T. (m)	Soil Profile	Description of Soil	Depth of SPT (m)	No. of Blows for Pent. (cm) 0-15	15-30	30-45	N	0 10 20 30 40 50 60 70 80 90	Depth of Sample(m)	Type of Sample
IN THIS LEVEL DEPTH OF-2.50 m FROM THE REFERENCE ROAD LEVEL(ALREAD' 2.50 m DEPTH EXCAVATED, SO DONE THE SOIL TEST BELOW 2.50 m)											
				-3.000						-3.000	DS
			Greyish to Whitish M. Dense Medium Coarse Sand **Angle of Shearing Resistance 33.9°**	-3.500	6	8	12	20		-3.500	SS
				-4.500	13	13	13	26		-4.500	SS
-5.500				-5.500	10	9	13	22		-5.500	SS
			Whitish to Greyish M. Dense Weathered Sand **Angle of Shearing Resistance 34.5°**	-6.500	11	13	14	27		-6.500	SS
-7.500				-7.500	10	11	15	26		-7.500	SS
			Greenish to Brownish M. Dense Weathred Silty Fine Sand **Angle of Shearing Resistance 35.1°**	-8.500	9	12	17	29		-8.500	SS
-9.500				-9.500	17	29	35	64		-9.500	SS
			Brownish to Yellowish Highly Weathered Granite **Angle of Shearing Resistance 42.5°**	-10.500	25	44	50	94		-10.500	SS
-11.500				-11.500	24	52	14 cm penet. For 50 blows			-11.500	SS
				-12.500	27	14 cm penet. For 50 blows				-12.500	SS
			Greenish to Brownish Highly Weathered Granite **Angle of Shearing Resistance 42.5°**	-14.000	39	8 cm penet. For 50 blows				-14.000	SS
-15.500				-15.500	8 cm penet. For 50 blows					-15.500	CS
			Greyish to Brownish Hard Granite **Angle of Shearing Resistance 45°**		C.R.R. 66% R.Q.D. 41%						
				-16.500	C.R.R. 84% R.Q.D. 71.5%					-16.500	CS
				-17.505						-17.505	CS

Borehole terminated at -17.505 m depth below E.G.L.

FIG.2.2Sub Soil Profile at BH-2 Location

*** Bore Hole Drilled from the excavated pit bottom of 2.5m depth from the road level. (For basement construction)**

Project: Proposed Construction of Shopping Mall (2B+G+9Floor) at Navalur - Chennai.
Location: Navalur
Bore Hole No.: BH- 4

RL of G.L.: *-5.50 m R.L. of G.W.T: -2.800 m
Started on : 11/07/07 Ended on : 14/07/07 Dia. of Bore :150mm

Stratification Data				SPT - Data						Type of Sample	
Depth Below G.L.(m)	G.W.T. (m)	Soil Profile	Description of Soil	Depth of SPT (m)	No. of Blows for Pent. (cm) 0-15	15-30	30-45	N	0 10 20 30 40 50 60 70 80 90	Depth of Sample(m)	Type of Sample
IN THIS LEVEL DEPTH OF-5.50 m FROM THE REFERENCE ROAD LEVEL(ALREAD 5.50 m DEPTH EXCAVATED, SO DONE THE SOIL TEST BELOW 5.50 m)											
				-6.000						0.500	DS
			Greyish to Bronwish M. Dense Weathered Sand **Angle of Shearing Resistance 33°**	-6.500	6	6	11	17		-6.500	SS
				-7.500	7	11	13	24		-7.500	SS
-8.500				-8.500	13 Cm Penet. For 55 Blows					-8.500	SS
			Brownish to yellowish Highly Weathered Granite **Angle of Shearing Resistance 42.5°**	-9.500	10 cm Penet. For 50 Blows					-9.500	SS
-9.500					C.R.R. 12 % R.Q.D. 0%						
				-10.500						-10.500	SS
					C.R.R. 12 % R.Q.D. 0%						
				-12.200						-12.200	SS
					C.R.R. 85 % R.Q.D. 0%						
				-12.700						-12.700	SS
					C.R.R. 80 % R.Q.D. 0%						
			Brownish to Yellowish Fractured (Jointed) Hard Granite **Angle of Shearing Resistance 45°**	-13.050						-13.050	SS
					C.R.R. 55 % R.Q.D. 0%						
				-13.500						-13.500	SS
					C.R.R. 50 % R.Q.D. 0%						
				-15.000						-15.000	CS
					C.R.R. 52 % R.Q.D. 0%						
				-15.500						-15.500	CS
					C.R.R. 20 % R.Q.D. 10%						
				-17.200						-17.200	CS

Borehole terminated at -17.2 m depth below E.G.L.

FIG.2.3Sub Soil Profile at BH-4 Location

* **Bore Hole Drilled from the excavated pit bottom of 5.5m depth from the road level. (For basement construction)**

Project: Proposed Construction of Shopping Mall (2B+G+9Floor) at Navalur - Chennai.
Location: Navalur
Bore Hole No.: BH- 5

RL of G.L.: *-3.00 m R.L. of G.W.T: -1.500 m
Started on : 13/07/07 Ended on : 19/07/07 Dia. of Bore : 150mm

Stratification Data				SPT - Data						Type of Sample	
Depth Below G.L.(m)	G.W.T. (m)	Soil Profile	Description of Soil	Depth of SPT (m)	No. of Blows for Pent. (cm) 0-15	15-30	30-45	N	0 10 20 30 40 50 60 70 80 90	Depth of Sample(m)	Type of Sample
IN THIS LEVEL DEPTH OF-3.00 m FROM THE REFERENCE ROAD LEVEL(ALREADY 3.00 m DEPTH EXCAVATED, SO DONE THE SOIL TEST BELOW 3.00 m)											
-3.800			Brownish to Greyish Silty Sand	-3.500						-3.500	DS
-5.000			Greyish to Whitish M. Dense Weathered Sand. **Angle of Shearing Resistance 33.6°**	-4.000	10	11	11	22		-4.000	SS
				-5.000	8	10	11	21		-5.000	SS
7.000			Greyish to Yellowish M. Dense Silty Fine to M Sand **Angle of Shearing Resistance 33°**	-6.000	5	8	11	19		-6.000	SS
				-7.000	4	5	6	11		-7.000	SS
-8.000			Greenish to Yellowish Loose Weathered Sand with Pebbles **Angle of Shearing Resistance 30.3°**	-8.000	5	12	30	42		-8.000	SS
				-9.000	24	35	48	83		-9.000	SS
				-10.000	8 cm penet. For 50 blows					-10.000	SS
				-11.000	10 cm penet. For 50 blows					-11.000	SS
			Greyish to Brownish V. Dense Weathered Rock Angle of Shearing Reesistance 42.5°	-12.000	9 cm penet. For 50 blows					-12.000	SS
				-13.000	9 cm penet. For 50 blows					-13.000	SS
				-14.500	8 cm penet. For 50 blows					-14.500	SS
16.500				16.000	7 cm penet. For 50 blows					16.000	CS
				-16.500	Small Pieces Recovered					-16.500	CS
			Brownish to Greyish V. Dense Weathered Granite **Angle of Shearing Resistance 42.5°**	-18.500	Small Pieces Recovered					-18.500	CS
				-20.200	Small Pieces Recovered					-20.200	CS
-21.500				-21.500	CRR = 28 % & RQD = 14 %					-21.500	CS
			Greyish V. Dense Fractured (Jointed) Hard Granite **Angle of Shearing Resistance 45°**	22.250						22.250	CS

Borehole terminated at m depth below E.G.L.

FIG.2.4Sub Soil Profile at BH-5 Locatior

*** Bore Hole Drilled from the excavated pit bottom of 3.00m depth from the road level.**

(For basement construction)

Project: Proposed Construction of Shopping Mall (2B+G+9Floor) at Navalur - Chennai.
Location: Navalur
Bore Hole No.: BH- 7 Started on : 20/07/07 Ended on : 23/07/07
RL of G.L.: *-5.50 m R.L. of G.W.T: -3.000 m
Dia. of Bore :150mm

Stratification Data				SPT - Data						Type of Sample	
Depth Below G.L.(m)	G.W.T. (m)	Soil Profile	Description of Soil	Depth of SPT (m)	No. of Blows for Pent. (cm) 0-15	15-30	30-45	N	0 10 20 30 40 50 60 70 80 90	Depth of Sample(m)	Type of Sample
IN THIS LEVEL DEPTH OF-5.50 m FROM THE REFERENCE ROAD LEVEL(ALREADY 5.50 m DEPTH EXCAVATED, SO DONE THE SOIL TEST BELOW 5.50 m)											
-6.300			Greyish to Greenish M. Dense Silty Fine to Medium Coarse Sand. **Angle of Shearing Resistance 31.6°**	-6.000						-6.000	DS
				-6.500	8	10	12	22		-6.500	SS
				-7.500	5	6	9	15		-7.500	SS
-8.500				-8.500	41	8 Cm Penet. For 50 Blows				-8.500	SS
			Greyish to Greenish V. Dense Weathered Rock **Angle of Shearing Resistance 42.5°**	-9.500	15 cm penet. For 60 Blows					-9.500	SS
				-10.500	14 cm penet. For 50 Blows					-10.500	SS
-11.500				-11.500	10 cm penet. For 50 Blows					-11.500	SS
					Small Pieces Recovered						
				-12.500	SPT Hammer Rebounded					-12.500	CS
			Brownish to Whitish V. Dense Highly Weathered Granite **Angle of Shearing Resistance 42.5°**		Small Pieces Recovered						
				-13.500						-13.500	CS
					C.R.R. 9% R.Q.D. 0%						
-15.500				-15.500						-15.500	CS
			Greenish to Grey Higly Compacted V. Dense Fractured (Jointed) Hard Granite **Charnockite or Hypersthene Granite Rock (Basically this is igneous Rock, Medium to Coarse Grain Structure, Melanocratic to Leucocratic and Equigranular Structre)**		C.R.R. 30% R.Q.D. 0%						
				-16.700						-16.700	CS
					C.R.R. 62.5% R.Q.D. 34%						
				-17.500						-17.500	CS

Borehole terminated at -17.5 m depth below E.G.L.

FIG.2.5Sub Soil Profile at BH-7 Location

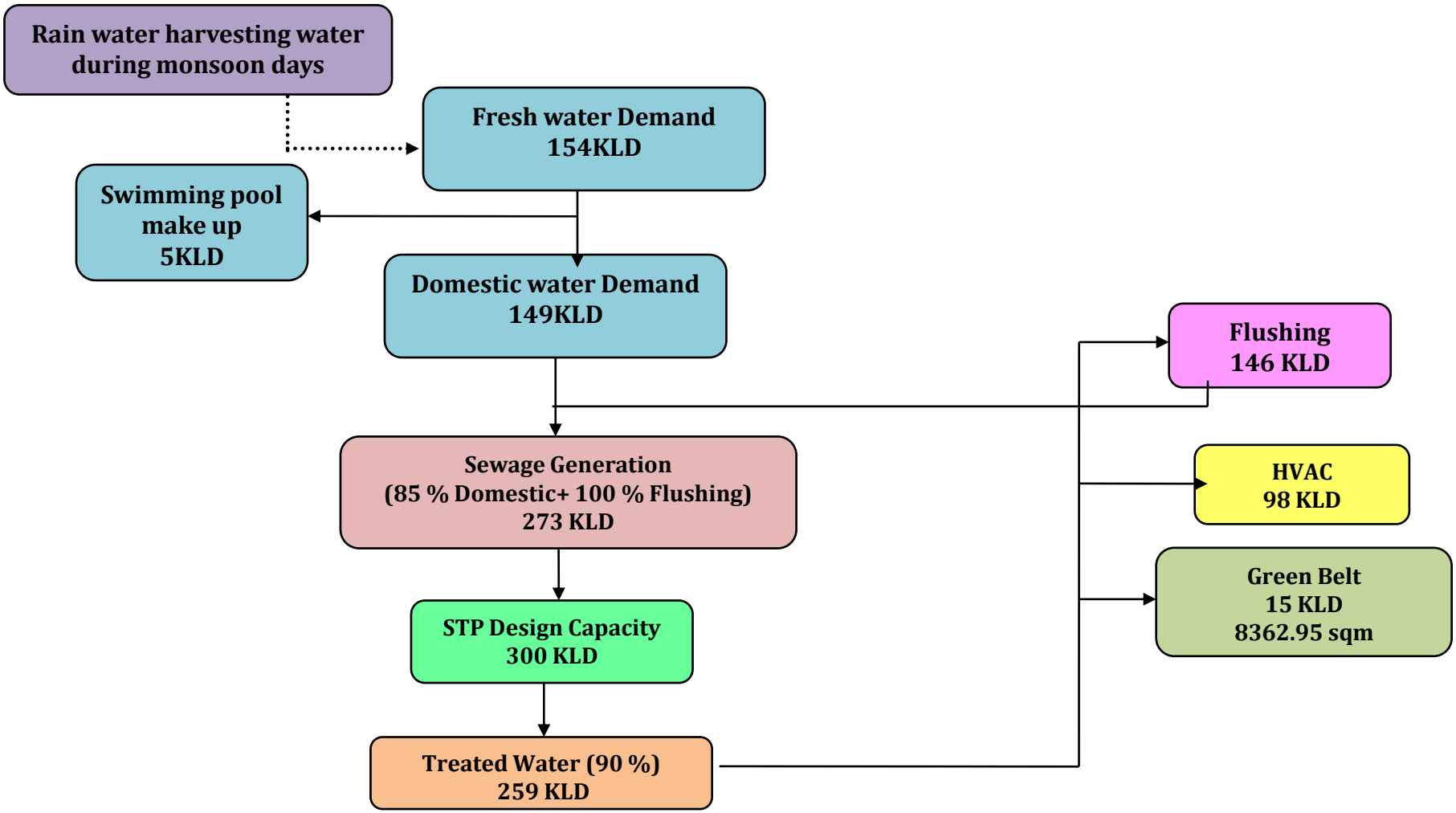
* **Bore Hole Drilled from the excavated pit bottom of 5.5m depth from the road level. (For basement construction)**

WATER DEMAND- MALL & APARTMENTS

annexure - 4

Facilities	Area (Sq.ft)	Occupant load (sq.ft/ person)	Occupancy	Water Requirement				
				Domestic Demand		recycle water Demand		Total water requirement
				Demand/ Head /day	Total	Demand/ Head /day	Total	
Retail	119000	65	1830	10	18300	5	9150	27450
Hyper market	52000	65	800	10	8000	5	4230	12230
Anchor	95000	65	1462	10	14620	5	7310	21930
Food court			1000	50	50000	20	32000	82000
Multiplex			500	10	5000	5	10000	15000
Kiosks			100	10	1000	5	500	1500
Swimming pool					5000			5000
Employees			200	30	6000	15	59250	65250
Maintenance Staff			50	30	1500	15	750	2250
Apartments (106 Nos)			500	90	45000	45	22500	67500
HVAC Make up							97500	97500
Green Belt							15000	15000
Total			6442		154420		258190	412610
Water Demand KLD					154 KLD		259	413
Sewage to STP (85 % domestic + 100 % Flushing)					273.00			
STP Capacity					300KLD			

WATER BALANCE SHEET- MALL & APARTMENTS

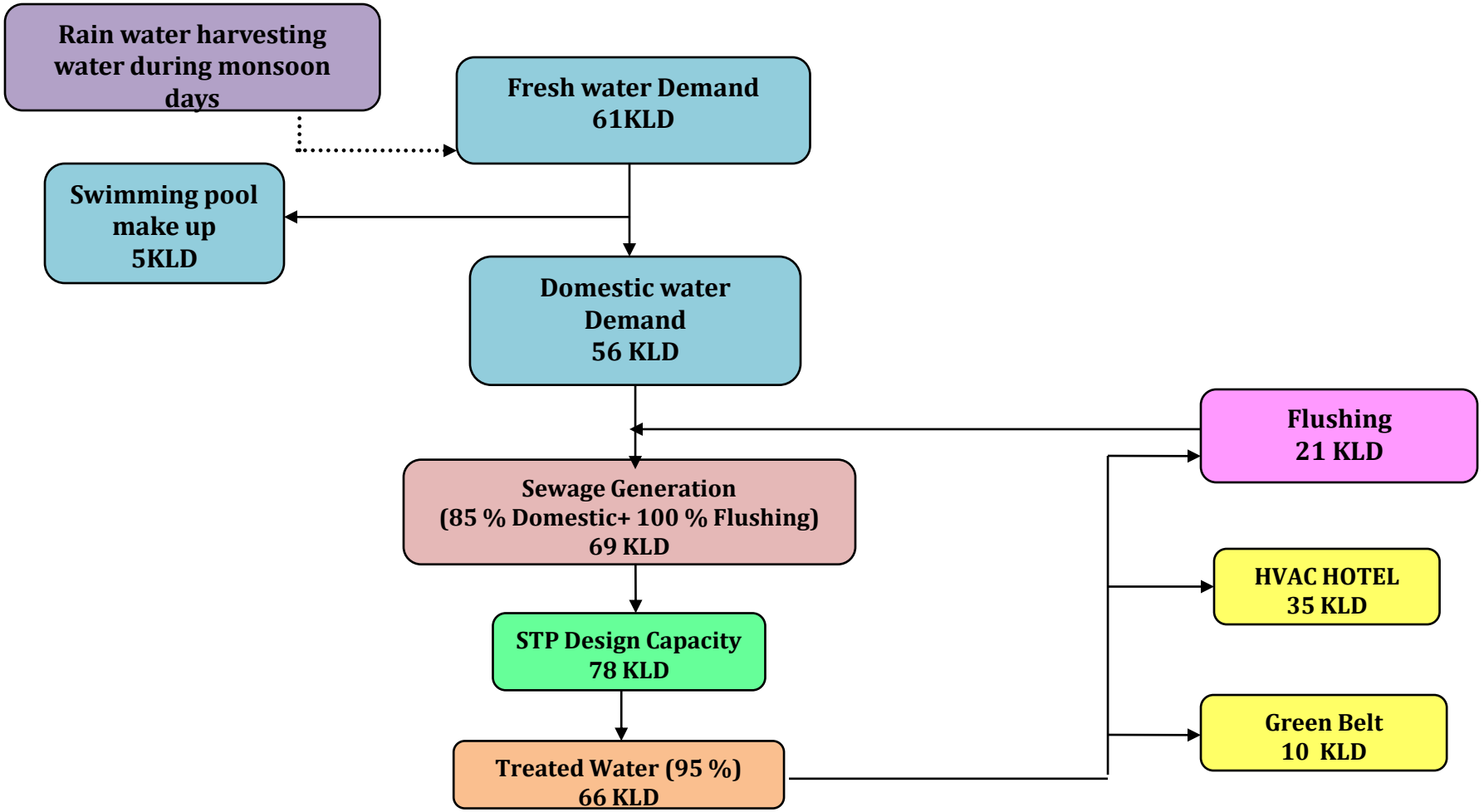


Total Water requirement – 413 KLD (Fresh water 154KLD + Recycle – 259KLD)

WATER DEMAND- HOTEL

Facilities	Occupancy	Water Requirement				
		Domestic Demand		Recycle water		Total water requirement
		Demand/ Head /day	Total	Demand/ Head /day	Total	
Maintenance Staff	25	30	750	15	375	1125
Hotel rooms (126 Nos)	300	135	40500	45	13500	54000
Hotel Staff (300 Nos)						
Residential (30%)	90	90	8100	45	4050	12150
Non Residential -70%	210	30	6300	15	3150	9450
Swimming pool			5000			5000
Green belt					10000	10000
HVAC makeup water HOTE					35000	35000
Total	625		60650		66075	126725
Water Demand Say KLD			**61**		**66**	**127**
Sewage to STP (85 % domestic + 100 % Flushing)			**69.00**			
STP Capacity			**78 KLD**			

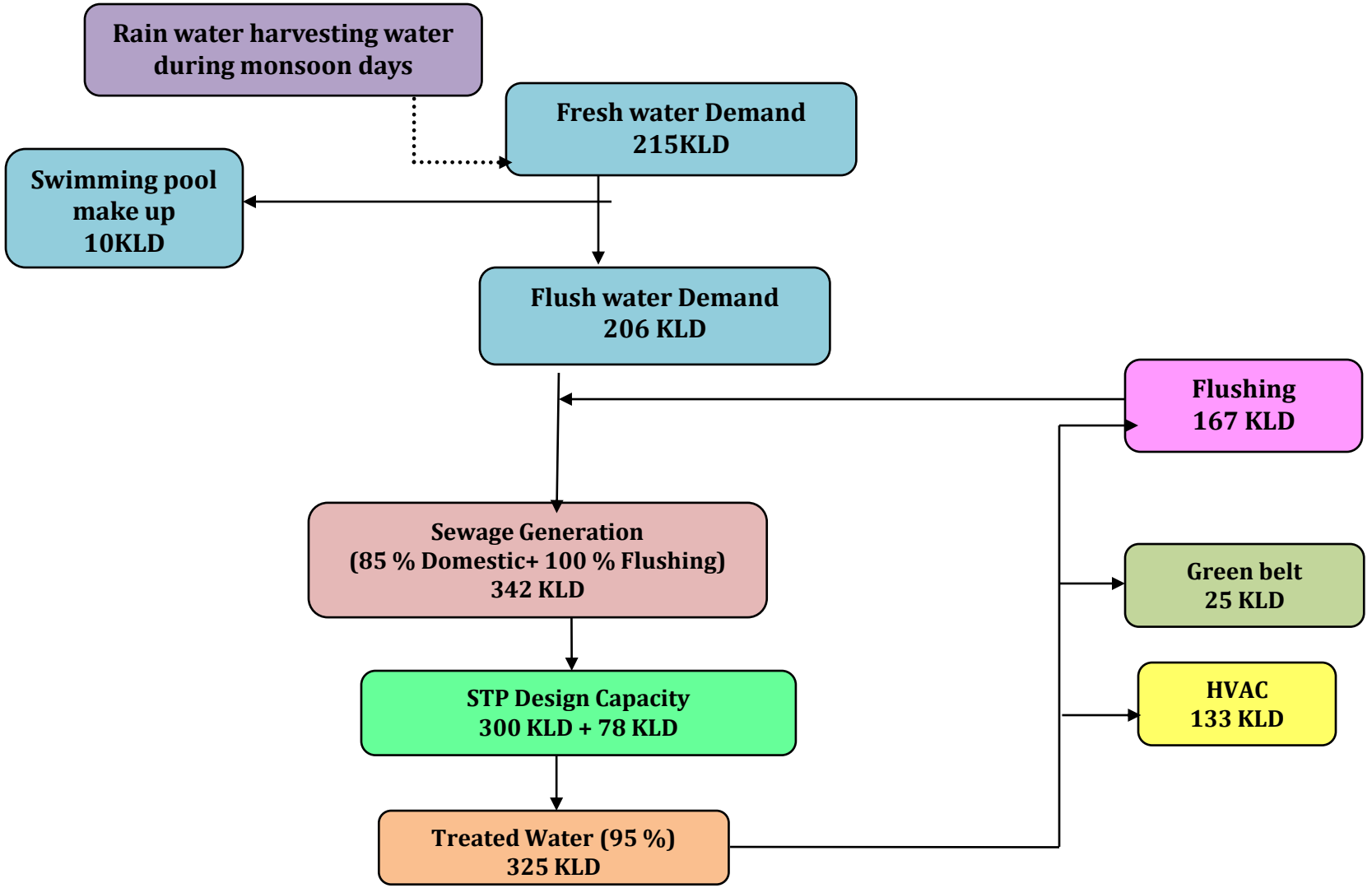
WATER BALANCE SHEET -HOTEL



Total Water requirement – 127 KLD (Fresh water 61 KLD + Recycle –66 KLD)

Note: Valet Laundry. No laundry effluent

WATER BALANCE SHEET - COMBINED



Total Water requirement – 540 KLD (Fresh water 215 KLD + Recycle – 325 KLD)

முட்டுக்காடு ஊராட்சி மன்றம்

34, ஏகாட்டூர், திருப்போரூர் ஒன்றியம்,
காஞ்சிபுரம் மாவட்டம் - 603 103.

திரு. S. பாஸ்கரன்
தலைவர்
நெ.4/145, ராஜீவ்காந்தி சாலை,
34,ஏகாட்டூர், படூர் அஞ்சல்,
காஞ்சிபுரம் மாவட்டம் - 603 103.

ஊராட்சியின் இலவச சட்ட ஆலோசகர்
திரு. M. யேசுரத்தினம் B.A., B.L.,
மாவட்ட நீதி மன்றம்,
செங்கற்பட்டு - 603 102.

திரு. R. தனசேகரன் M.A.,B.L.Phd.,
உயர்நீதிமன்றம், சென்னை,
மாவட்ட நீதி மன்றம் செங்கல்பட்டு

தேதி 13.03.2014

R.C.No.171/2013-2014

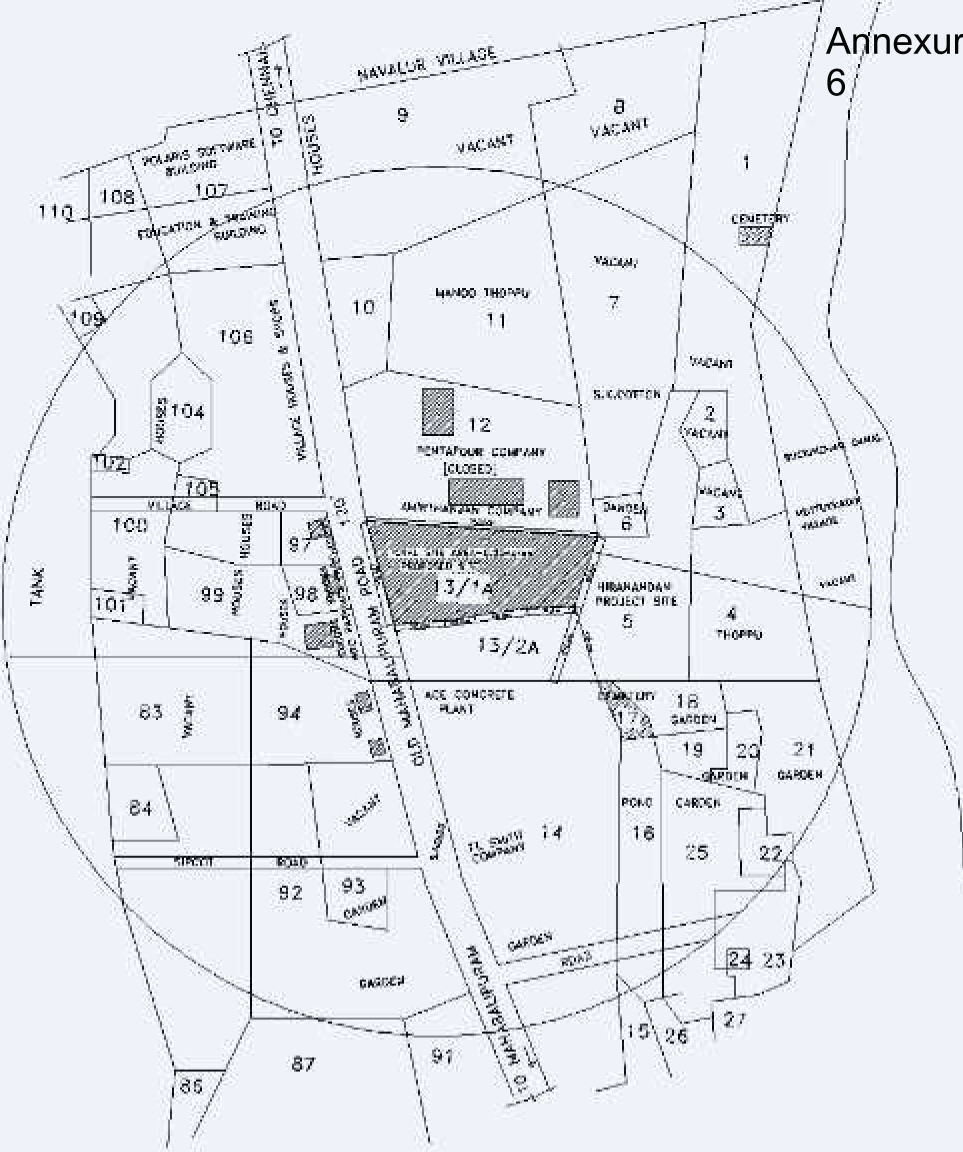
Revalidation of Water Allotment Letter

1. Allotted Name and Address	: Allied Majestic Promoters (P) Ltd "CITY TOWER" 5th Floor, 117, Theyagaraya Road, T. Nagar, Chennai 600 017.
2. Allotment Reference	: Your application Letter dated Nil
3. Allotment Basis	: D.T.C.P Infrastructure and Development Charges as Vide Ltr. No.141/07 dated 06/06/08 (Copy of Letter Attached)
4. Water Quantity Applied	: 545 KLD
5. Water Quantity Approved (Max)	: 545 KLD
6. Municipality water Source	: Tube Wells and Pallikaranai Lake
7. Municipal source Availability	: Perennial
8. Raw Water Quality	: 1. Meets DW Standards 2. Bacteriological-Non Assured Note: Refer Analysis report attached
9. Water supply deposit	: Rs.1,25,000/- Payable to Chairman Muttukadu Panchayat By DD
10. Water Supply Charges	: Rs.18.50 / Kl (Payable in monthly Advance and adjustable against advance)

We are pleased to offer the above allotment.

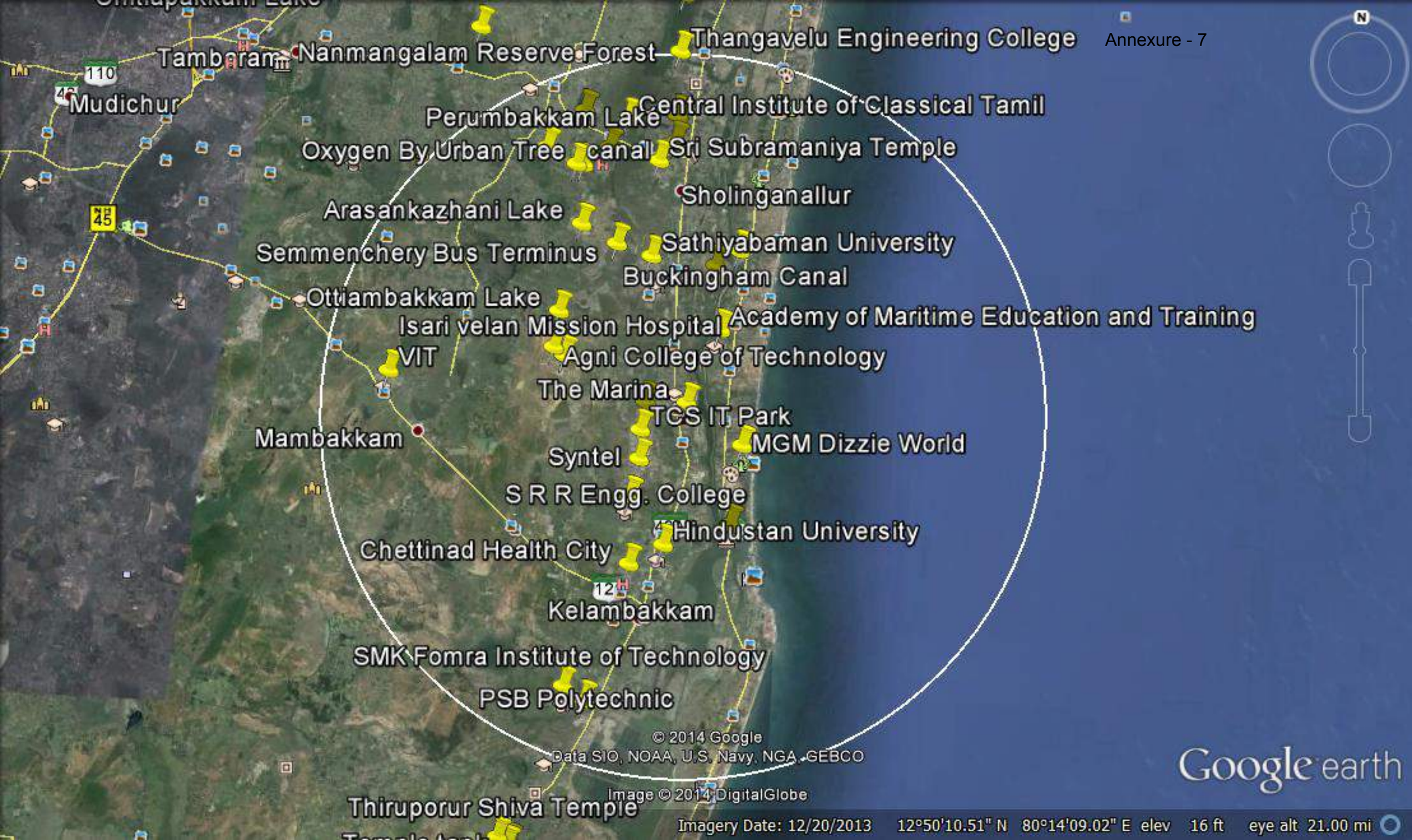
தலைவர் 13/03/14
முட்டுக்காடு ஊராட்சி
திருப்போரூர் ஊராட்சி ஒன்றியம்
காஞ்சிபுரம் மாவட்டம் - 603 103

Annexure - 6



NAVALUR VILLAGE
TO CHENNAI
HOUSES
9
VACANT
8
VACANT
1
POLARIS SOFTWARE BUILDING
108
107
110
EDUCATION & TRAINING BUILDING
CEMETERY
VACANT
10
MANGO THOPPU
11
7
109
106
VILLAGE HOUSES & SHOPS
VACANT
104
HOUSES
S.K.COTTON
2
VACANT
12
PENTAFOUR COMPANY (CLOSED)
BUCKINGHAM CANAL
112
105
VACANT
3
VILLAGE
ROAD
100
HOUSES
97
GARDEN
6
13/1A
HIRANANDANI PROJECT SITE
5
4
THOPPU
VACANT
TANK
101
99
98
OLD MAHABALIPURAM ROAD
13/2A
ACE CONCRETE PLANT
CEMETERY
18
GARDEN
83
VACANT
94
19
20
21
GARDEN
GARDEN
84
VACANT
POND
GARDEN
TI SMITH COMPANY
14
16
25
22
STREET
ROAD
92
93
GARDEN
GARDEN
ROAD
TO MAHABALIPURAM
24
23
GARDEN
27
15
26
87
91
85

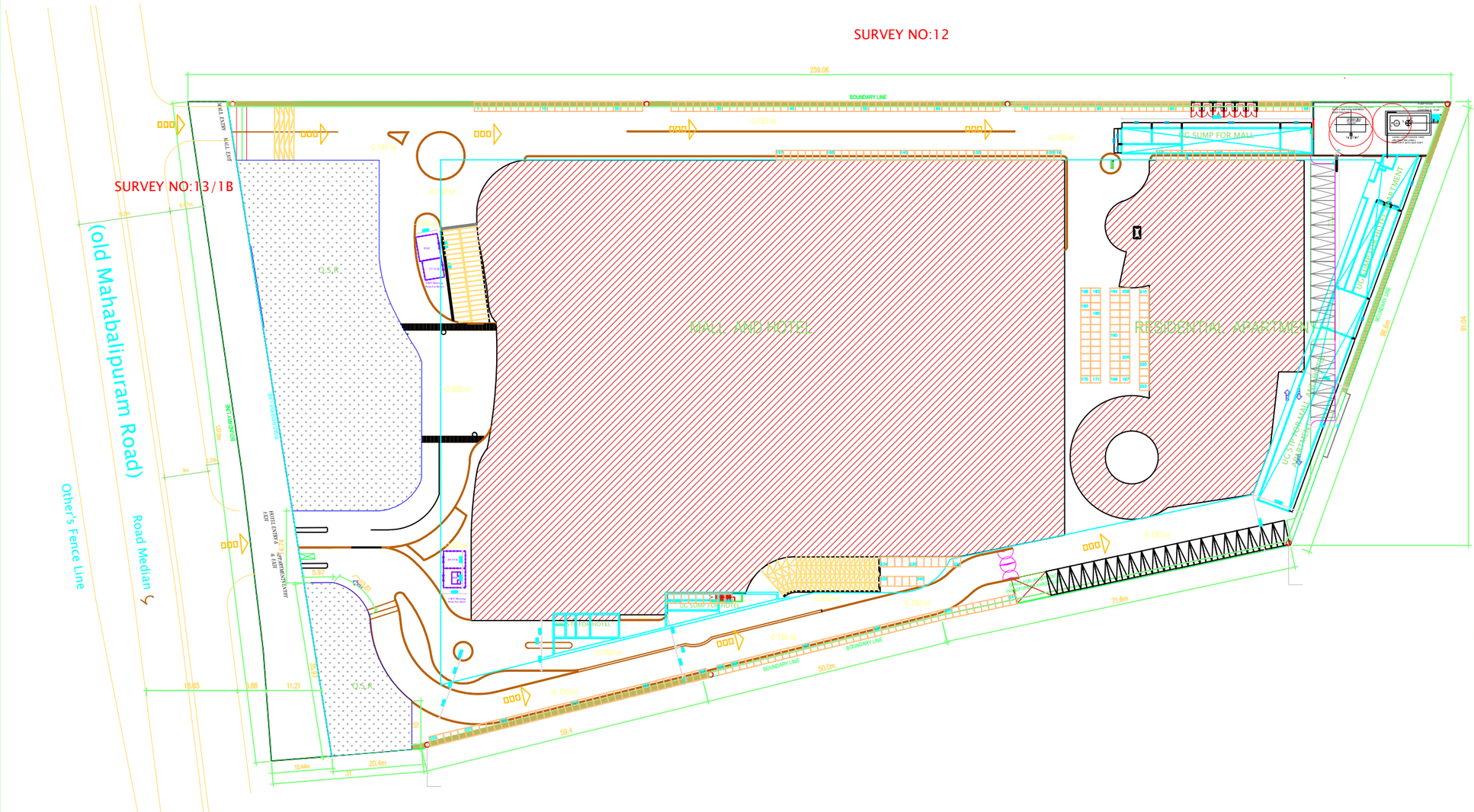
Annexure - 7

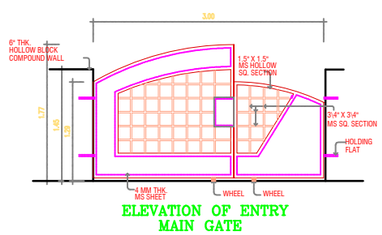

Thangavelu Engineering College
Nanmangalam Reserve Forest
Tambaram
Mudichur
Central Institute of Classical Tamil
Perumbakkam Lake
Oxygen By Urban Tree
canal
Sri Subramaniya Temple
Sholinganallur
Arasankazhani Lake
Sathiyabaman University
Semmenchery Bus Terminus
Buckingham Canal
Ottiambakkam Lake
Academy of Maritime Education and Training
Isari velan Mission Hospital
VIT
Agni College of Technology
The Marina
TCS IT Park
Mambakkam
MGM Dizzie World
Syntel
S R R Engg. College
Hindustan University
Chettinad Health City
Kelambakkam
SMK Fomra Institute of Technology
PSB Polytechnic
© 2014 Google
Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Image © 2014 DigitalGlobe
Thiruporur Shiva Temple
Google earth
Imagery Date: 12/20/2013 12°50'10.51" N 80°14'09.02" E elev 16 ft eye alt 21.00 mi

Annexure 9

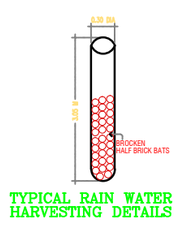
COLOUR INDEX

- PROPOSED
- ROAD
- BOUNDRY

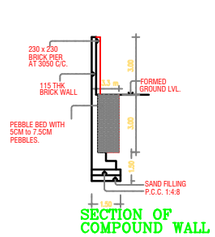




ELEVATION OF ENTRY MAIN GATE



TYPICAL RAIN WATER HARVESTING DETAILS



SECTION OF COMPOUND WALL

FLOOR LEVEL	AREA STATEMENT	TOTAL FSI AREA SQ.M	TOTAL SERVICE AREA SQ.M	PARKING AREA SQ.M	TOTAL AREA
1.	THIRD BASEMENT FLOOR PLAN	0.00	173.24	15104.30	15277.54
2.	SECOND BASEMENT FLOOR PLAN	0.00	173.24	15104.30	15277.54
3.	FIRST BASEMENT FLOOR PLAN	0.00	173.24	15104.30	15277.54
4.	LOWER GROUND FLOOR	8255.15	2023.29	1164.06	11442.49
5.	GROUND FLOOR PLAN	8795.19	218.88	2113.71	11127.78
6.	FIRST FLOOR PLAN	8336.69	914.32		9251.00
7.	SECOND FLOOR PLAN	8534.24	218.88		8753.11
8.	THIRD FLOOR PLAN	6405.75	1037.19		7442.93
9.	FOURTH FLOOR PLAN	6140.79	150.61		6291.39
10.	FOURTH MEEZ FLOOR	1876.97	62.62		1939.58
11.	FIFTH FLOOR PLAN	1876.97	62.62		1939.58
12.	SIXTH FLOOR PLAN	1876.97	62.62		1939.58
13.	SEVENTH FLOOR PLAN	1876.97	62.62		1939.58
14.	EIGHTH FLOOR PLAN	1719.03	111.39		1830.42
15.	NINTH FLOOR PLAN	776.82	166.20		943.02
	TOTAL AREA	56472.00	5647.20		110673

TOTAL AREA OF THE SITE = 6.21 ACRES
(EXCLUDING ROAD WIDENING AREA 0.25 ACRES)

ACHIEVED PLOT COVERAGE = 39.55%
9939.3 SQ.M

OSR 10% OF THE 6.21 ACRES
=2513.09SQ.M
ACHIEVED OSR =2513.09SQ.M

ALLOWED FSI = 2.25
ACHIEVED FSI = 2.247
(FSI FOR THE SITE AREA 6.21 ACRES)

ALLOWED SERVICE AREA = 10%
ACHIEVED SERVICE AREA = 10%

ACHIEVED CAR PARKING :
TOTAL NOS. OF CAR PARKING 1077 NOS
TWO WHEELER PARKING :
TOTAL NOS. OF TWO WHEELER PARKING 900 NOS

PROPOSED COMMERCIAL MALL, HOTEL / MULTIPLEX/ HOTEL APARTMENT AT S.NO. 13 /1 A , EGATTUR VILLAGE, CHENGALPATTU TALUK, KANCHEEPURAM (DIST)

SHEET NO: 1	SITE PLAN
SCALE : 1: 500	
DATE :	

STRUCTURAL ENGINEER

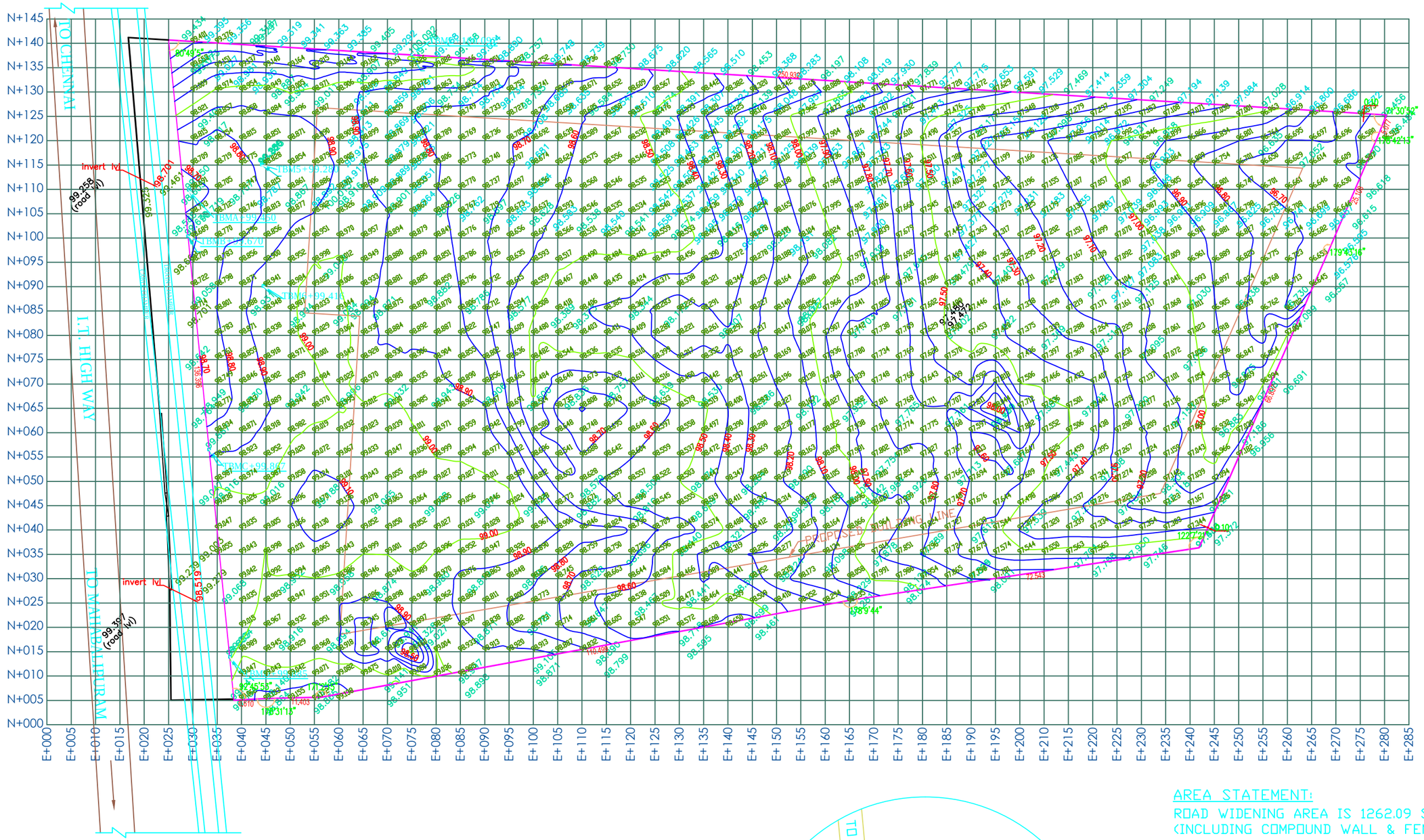
OWNERS

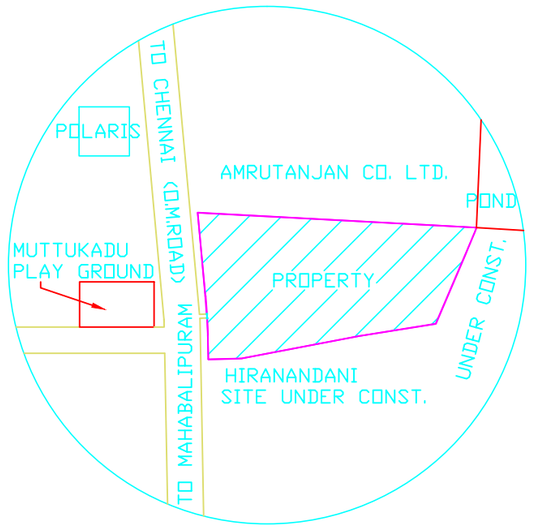
ARCHITECTS

PRODUCED BY AN AUTODESK EDUCATIONAL PRODUCT

PRODUCED BY AN AUTODESK EDUCATIONAL PRODUCT

Annexure - 10





KEY PLAN
(NOT TO SCALE)

AREA STATEMENT:

ROAD WIDENING AREA IS 1262.09 SQM. OR 31.19 CENTS.
(INCLUDING COMPOUND WALL & FENCING AREA)

PROPERTY AREA IS 25281.20 SQM. OR 6.25 ACRES.
(INCLUDING COMPOUND WALL & FENCING AREA)

TOTAL AREA IS 26543.30 SQM. OR 6.56 ACRES.
(INCLUDING COMPOUND WALL & FENCING AREA)

NOTE:

1. ALL DIMENSIONS ARE IN METRES.

SURVEYED BY:

abide Landmark
SURVEYORS & ENGINEERS
#92(old:57A),West Jones Road,
Saidapet, Chennai-600 015.
Ph:- 55690281,Mobile:9840166595
E.mail:landmarkengineers@yahoo.co.in

CLIENT

M/S. ALLIED INVESTMENTS AND HOUSING PVT. LTD.
CHENNAI-17.

SITE S.F.NO; 13/1, OLD MAHABALIPURAM ROAD, EGATTUR, NAVALUR, CHENGALPATTU-TALUK, KANCHEEPURAM-DISTRICT.

	NAME	DATE
SURVEYED	K.G.S	14.02.2007
DRAWN	K.G.S	15.02.2007
CHECKED		
APPROVED		

TITLE

PLAN SHOWING THE DETAILED BOUNDARY MAP AND EXISTING FEATURES.

SCALE 1:600

SHEET A2

CODE AISE

DRAWING No: NA/001/2007

REV. R0

Rain water harvesting system

❖ **Rain Water Harvesting Calculation**

❖ **Basic assumptions:**

- Intensity of rainfall considered: **500 mm (as on 1 December 2015*)**
- Co – efficient of runoff considered for road area : 0.70
- Co – efficient of runoff considered for landscape area : 0.20
- Co – efficient of runoff considered for roof area : 0.90

❖ **Area statement:**

- Road Area (A) : 1911.27 Sq.m x 0.70 x 0.5 m = 669
- Roof Area (B) : 9939.3 Sq.m x 0.90 x 0.5 m = 4473
- Green Area (C) : 8362.95Sq.m x 0.20 x 0.5 m =836

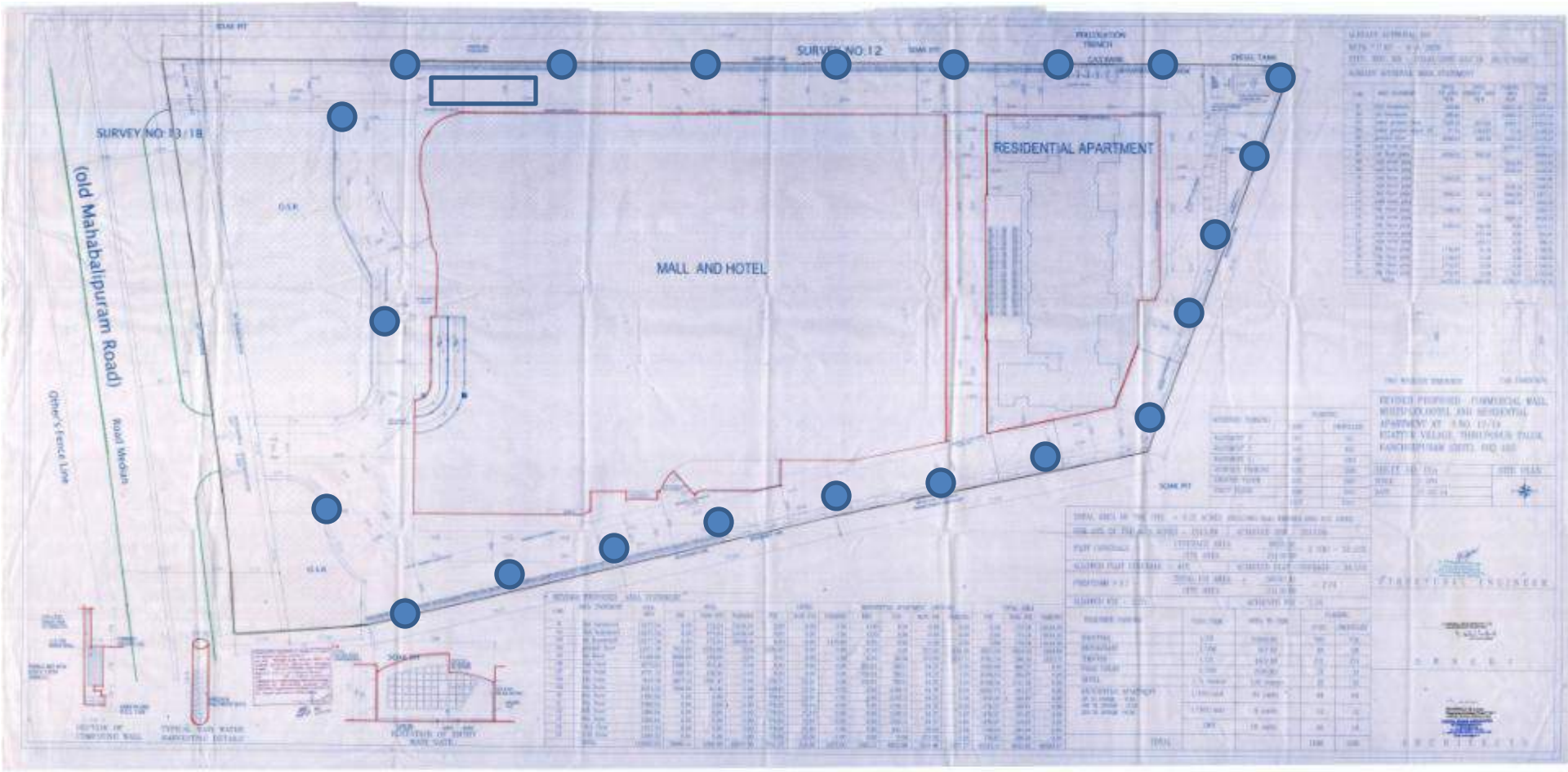
- Hence, total volume of rainwater run - off will be: (A) + (B) + (C) = 5978 Cu.m/day.

(*as per chennaiwheather.org)

Rain water harvesting system – (Cont ..)

- For roof top harvesting a sump of 160KL is proposed.
- Total rainwater available for recharging = 5818 m^3/day
- Considering 15 min of rainfall (Max GWL 4.6 m)
- Volume of rainwater available for recharging =5818 / 24 hr = 60 m^3
- Size of Rainwater Percolation Pit – 1.2 m Dia X 2.5 m, Depth
- Total volume of pit=3.14 x $(0.6)^2$x2.5 = 2.8 m^3
- Total number of Percolation pits required =21 nos.
- However No. of Pits proposed = 22 nos.
- Excess storm water will be diverted to existing storm water drain along OMR.

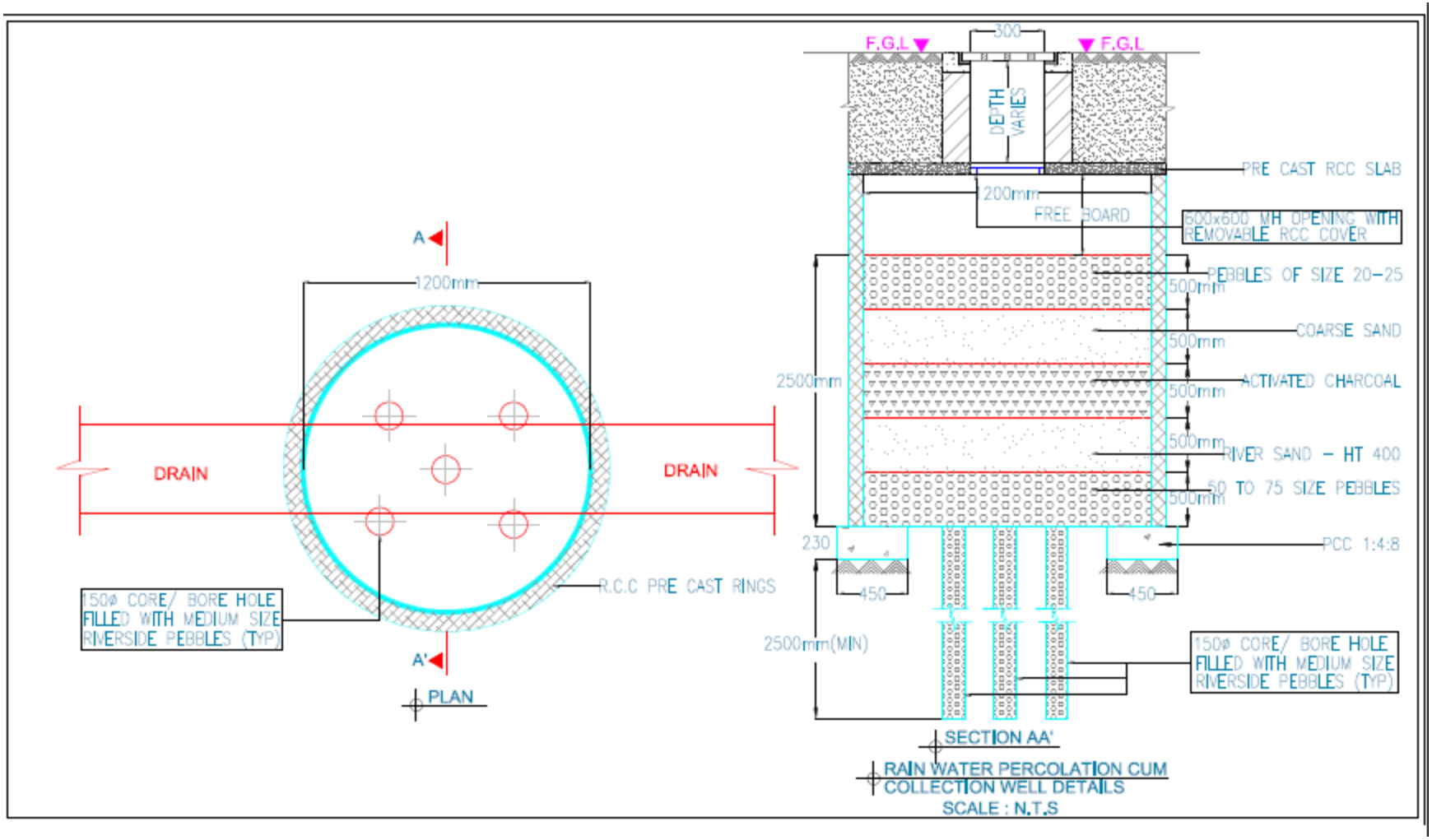
Rain water harvesting system, Strom water Drainage plan– (Cont ..)



Rain water Harvesting Pits – 22 Nos.

Rainwater harvesting sump 160 KL

Rain water harvesting system, Storm water Pit Cross Section detail – (Cont ..)



1.0. SEWAGE TREATMENT PLANT FEASIBILITY REPORT:

It is proposed to install a sewage treatment plant, to treat the domestic effluent generated from the toilets, kitchen etc, and re-use the water for flushing ,gardening and HVAC cooling tower. The treated sewage water will be designed to meet the discharge limits as per the rules stipulated by the **Tamilnadu Pollution Control Board (TNPCB)**, in order to conserve water.

The sewage treatment plant will be designed to ensure that treated effluent characteristics are well below / within the permissible limits, even under varying flow conditions, which are typical for such systems. This implies that the selected process will be able to withstand the shock load situation.

A brief description of the process involved in treating the sewage is given below:

The sewage treatment plant is designed with a capacity to handle **78 cu.m** (approx.) of soil water from the building.

QUANTITY AND QUALITY OF WASTEWATER:

The quality of raw effluent is considered as:

The sewage treatment plant is designed taking the following parameters in to account:

QUALITY OF WASTE WATER:

BOD	300 to 350 Mg / Ltr.
COD	350 to 450 Mg / Ltr.
TSS	350 to 450 Mg / Ltr.
PH	7 to 8
Oil & Grease	100 to 150 mg / Ltr.

QUALITY OF TREATED EFFLUENT:

BOD	< 10 Mg / Ltr.
COD	< 100 Mg / Ltr.
TSS	< 20 Mg / Ltr.
PH	6.5 to 7.5.
Oil & Grease	< 10 Mg / Ltr.

02. DOMESTIC EFFLUENTS CHARACTERISTICS:

QUANTITY AND QUALITY OF WASTEWATER:

The wastewater quantity from domestic sources is considered at maximum 78 Cu.m / day. The quality of raw effluent is considered as:

The sewage treatment plant is designed taking the following parameters in to account:

QUALITY OF WASTE WATER:

BOD5	300 to 350 Mg / Ltr.
COD	350 to 450 Mg / Ltr.
TSS	350 to 450 Mg / Ltr.
PH	7 to 8
Oil & Grease	100 to 150 mg / Ltr.

QUALITY OF TREATED EFFLUENT:

BOD5	< 10 Mg / Ltr.
COD	< 100 Mg / Ltr.
TSS	< 20 Mg / Ltr.
PH	6.5 to 7.5.
Oil & Grease	< 10 Mg / Ltr.

03. DESCRIPTION OF TREATMENT UNITS:

SEWAGE TREATMENT PLANT TREATMENT

METHODOLOGY USING

EXTENDED AERATION ACTIVATED SLUDGE PROCESS

PRIMARY TREATMENT

- **Bar screening**
- **Grit Chamber**
- **Sewage Transfer Pumps**

SECONDARY TREATMENT

- **Air Blowers and Aeration Tank**
- **Diffusers**
- **Secondary Clarifier**
- **Return Sludge Pump**
- **Sludge drying beds**

TERITARY TREATMENT

- **Clarified water Tank**
- **Filter Feed Pumps**
- **Sand Pressure Filter**
- **Activated Carbon Filter**
- **Hypodosing system**
- **Final Sump**

DESCRIPTION OF TREATMENT UNITS:

A. BAR SCREEN:

In the incoming channel, a chamber medium screen shall be fitted, the purpose of which is to filter out coarse trashy matter from introducing in to succeeding units of the treatment plant. Screens shall be made of M.S. construction epoxy painted.

Type : Manually cleaned with Handrake

Construction : In MS flats of size 20 x 6, c/c not more than

20mm with necessary MS flat 25 x 6 stiffeners.

The whole unit shall be given 2 coats of epoxy-based paint over a coat of epoxy based primer. 1 no. MS hand rake shall also be provided with GI pipe rod.

Channel size	0.1 mtrs W x 1.6 mtrs L x 0.75 mts D
Type of screen	M.S. Construction manually cleaned with MS flats placed at 20 mm c/c with MS hand rake with handle all epoxy painted.

B. EQUALISATION TANK / COLLECTION TANK:

In order to homogenize the quality of wastewater, as well as to feed equalization tank at a uniform rate to the rest of the treatment plant, a equalization tank is proposed. In order to mix the contents, as well as to provide a degree of preparation, diffused aeration by means of membranes and blowers are proposed.

Capacity	20 cu.m
Aeration	MECHANICAL AGITATION.
Dimensions	As per drawing
D. P.	6 Hrs.

C. RAW EFFLUENT PUMP SETS:

The equalized and neutralized waste together with return sludge shall be pumped at a uniform rate of 3.25 cu.m / Hr. into the aeration tank.

Quantity : 2 Nos. (1w + 1s)

Duty : To transfer Raw Effluent from Equalization tank to Aeration

Type : Vertical submersible pump.

Motor : TEFC Motor with IP-55 protection and suitable for 400 / 440 V , 50 HZ A/c supply of Kirloskar.

Material : CI Body and impeller in Bronze.

Accessories : Air cock with priming funnel, Flexible Coupling with guard, Base frame foundation bolts etc.,

Flow rate : 3.25 cu.m / hr

Head : 15 mtr

Solids : 35 mm maximum

Temperature : Ambient

PH : 6.0 – 8.0

D. DOUBLE STAGE AERATION TANK:

Biological stabilization of the wastewater is accomplished in the aeration tank in the presence of microorganisms, for the respiration of which, Oxygen is supplied by means of diffused aeration comprising membrane diffusers and air blowers. As micronutrients such as nitrogen and phosphorus will be already present in sufficient quantities, no external supplementation will be necessary.

The aeration tank is divided in to two parts. Each Aeration Tank is provided with diffused aeration system to supply the air for the micro-organisms growth. The nutrients required for the micro-organisms growth are organic matter, which is present in the domestic effluent.

The MLSS level is maintained in this process to enhance the aeration process. Optimum concentration of MLSS to be maintained is in the range of 3500 – 4500 mg / lit in the aeration time the sludge starts to settle in this tank. Here the settling of the solids takes place and the clear water from the top pumped to the clear water tank.

Flow Quantity	78 cu.m / day
BOD in	350 mg / L
BOD out desired	10 mg / L
Tank volume / CAP	63 Cu.m (31.50cum x 2 Nos)
Diffusers	Fine pore diffusers.
F.M.	0.12
MLSS	3600 mg / Lit

E. AIR BLOWERS:

Type	Twin lobe Compressor
Capacity	47 cu.m / hr at 0.50 KJC
Quantity	3 Nos. (2w + 1 s)

The Standard Air Requirement (SAR) is arrived at on the basis of 2 kg oxygen / Kg of BOD.

Quantity : 3 nos. (2w + 1s)

Type : Twin lobe compressor

Flow : As per system requirement

Make : Kay / CVT/ Equivalent (approved make)

F. SECONDARY SETTLING TANK:

The mixed liquor (waste water with micro – organism) exiting the aeration tank has to be clarified in a clarifier waster, as well as to thicken the biomass MLSS (mixed liquor suspended solids)

Size	As per drawing
Recirculation	75 %
Overflow	3.25cu.m / hr / sq. m

G. SLUDGE HOLDING TANK:

The biomass in the aeration tank stabilizes BOD in wastewater by consuming the organic matter in the wastewater. The metabolic activity results in growth of the biomass population in the aeration tank. Consequently, in order to contain the level of MLSS in the aeration tank to the design level of 3600 mg / L, it will be necessary to bleed off or waste the excess activated sludge. For this purpose a sludge holding tank of 4.00 cu.m with air supply & one no. filter press is proposed.

Capacity	4.00 cu.m / day
Size	As per drawing

SLUDGE DISPOSAL PUMPS:

Quantity : 2 nos. (1w + 1s)

Duty : To transfer secondary sludge from clarifier to Aeration Tanks & sludge thickener.

Type : Horizontal centrifugal non-clog Self priming, open impeller, pumps, Kirloskar, STORK Equivalent (approved by consultant)

Motor : TEFC Motor, with IP-55 protection and suitable for 400/440 V, 50 HZ A/c supply of Kirloakar / grundofos make.

Material of Construction : Body and impeller in CI

Accessories : Air cock with priming funnel, Flexible Coupling with guard, Base frame, foundation bolts etc.,

Flow : as per system requirement

H. FILTER FEED TANK:

The settled water from the settling tank is expected to meet the standards with respect to BOD and TSS for Discharge to island surface waters. However, it is proposed to improve the quality of treated water further in order to make it fit re – use. For this reason, further treatment in the form of coagulation, filtration and disinfections is proposed. The clear water from the settling tank shall be fed to the filter feed tank, from where it will be pumped to the filters.

Capacity	5.20 cu.m /hr
Size	As per drawing

FILTER FEED PUMP:

The settled water from the settling tank is expected to meet the standards with respect to BOD and TSS for Discharge to inland surface waters. However, it is proposed to improve the quality of treated water further in order to make it fit re – use. For this reason, further treatment in the form of coagulation, filtration, softening and disinfection is proposed. The clear water from the settling tank shall be fed to the filter feed pump, from where it will be pumped to the filters.

Quantity : 2 nos. (1w + 1s)

Duty : To transfer treated effluent for sand filters

Type : Horizontal centrifugal non-clog Self priming, open impeller, pumps , Kirloskar, STORK Equivalent (approved by consultant)

Motor : TEFC Motor, with IP-55 protection and suitable for 400 / 440 V, 50 HZ A/c supply of Kirloakar / grundfos make.

Material : Body and impeller in CI

Accessories : Air cock with priming funnel, Flexible Coupling with guard, Base frame, foundation bolts etc.,

Flow : as per system requirement – (min – 5.25 cu.m / hr).

Head : 30 - 40 mtr

I. PRESSURE SAND FILTER - 1 NO:

Vertical down flow type with graded gravel with polysterene strainers.

Diameter	900 dia
Depth of media	1000 mm
Test Pressure	5 Kg. / Sq.cm
Velocity of filtration	8 cu.m / Sq.m / Hr.
Flow rate	5.20 cu.m / hr

Quantity : 1 no

Make : Ion exchange or equivalent

Material : 6 mm thick MS plates and 8 mm thick end plates whole unit shall be given 2 Coats for internal and external with epoxy/enamel-based paint over a coat of epoxy based primer.

Under drain : Perforated bottom plate with plastic strainers or central headers and laterals.

Media : Graded River sand and Gravel

J. ACTIVATED CARBON FILTERS - 1 NO:

Vertical down flow type with graded gravel with polysterene strainers.

Diameter	900 dia.
Depth of media	As per system requirement
Test Pressure	5 Kg. / Sq.cm
Velocity of filtration	8 cu.m / Sq.m / Hr.
Flow rate	5.20cu.m / hr

Quantity : 1 no.

Make : Ion exchange or equivalent

Material : 6 mm thick MS plates and 8 mm thick end plates whole unit shall be given 2 Coats for internal and external with epoxy / enamel - based paint over a coat of epoxy based primer.

Under drain : Perforated bottom plate with plastic strainers or central headers and laterals.

Media : Iodised Activated carbon with Gravel support

K. CHLORINE DOSER:

Quantity : 1 no.

Make : Asia LMI / Ion exchange or approved equivalent type

Flow : As per system requirement

Material : PVC / FRP

Accessories : Foot valve with strainer, Electronic diaphragm type metering Pump

L. Ultra violet filteration :

It is proposed to provide UV filtration plant before water is feed to flushing ,landscaping and HVAC cooling tower

M. TREATED EFFLUENT COLLECTION SUMP:

One No. Final sump of 70 cu.m capacity will be provided to filtered & Ultra violet water, before pumping to Flushing and Irrigation purpose.

Capacity	70 cu.m / day
Size	As per drawing

1.0. SEWAGE TREATMENT PLANT FEASIBILITY REPORT:

It is proposed to install a sewage treatment plant, to treat the domestic effluent generated from the toilets, kitchen etc, and re-use the water for flushing, gardening and HVAC cooling tower. The treated sewage water will be designed to meet the discharge limits as per the rules stipulated by the **Tamilnadu Pollution Control Board (TNPCB)**, in order to conserve water.

The sewage treatment plant will be designed to ensure that treated effluent characteristics are well below / within the permissible limits, even under varying flow conditions, which are typical for such systems. This implies that the selected process will be able to withstand the shock load situation.

A brief description of the process involved in treating the sewage is given below:

The sewage treatment plant is designed with a capacity to handle **300 cu.m** (approx.) of soil water from the building.

QUANTITY AND QUALITY OF WASTEWATER:

The quality of raw effluent is considered as:

The sewage treatment plant is designed taking the following parameters in to account:

QUALITY OF WASTE WATER:

BOD	300 to 350 Mg / Ltr.
COD	350 to 450 Mg / Ltr.
TSS	350 to 450 Mg / Ltr.
PH	7 to 8
Oil & Grease	100 to 150 mg / Ltr.

QUALITY OF TREATED EFFLUENT:

BOD	< 10 Mg / Ltr.
COD	< 100 Mg / Ltr.
TSS	< 20 Mg / Ltr.
PH	6.5 to 7.5.
Oil & Grease	< 10 Mg / Ltr.

02. DOMESTIC EFFLUENTS CHARACTERISTICS:

QUANTITY AND QUALITY OF WASTEWATER:

The wastewater quantity from domestic sources is considered at maximum 300 Cu.m / day. The quality of raw effluent is considered as:

The sewage treatment plant is designed taking the following parameters in to account:

QUALITY OF WASTE WATER:

BOD5	300 to 350 Mg / Ltr.
COD	350 to 450 Mg / Ltr.
TSS	350 to 450 Mg / Ltr.
PH	7 to 8
Oil & Grease	100 to 150 mg / Ltr.

QUALITY OF TREATED EFFLUENT:

BOD5	< 10 Mg / Ltr.
COD	< 100 Mg / Ltr.
TSS	< 20 Mg / Ltr.
PH	6.5 to 7.5.
Oil & Grease	< 10 Mg / Ltr.

03. DESCRIPTION OF TREATMENT UNITS:

SEWAGE TREATMENT PLANT TREATMENT

METHODOLOGY USING

EXTENDED AERATION ACTIVATED SLUDGE PROCESS

PRIMARY TREATMENT

- **Bar screening**
- **Grit Chamber**
- **Sewage Transfer Pumps**

SECONDARY TREATMENT

- **Air Blowers and Aeration Tank**
- **Diffusers**
- **Secondary Clarifier**
- **Return Sludge Pump**
- **Sludge drying beds**

TERITARY TREATMENT

- **Clarified water Tank**
- **Filter Feed Pumps**
- **Sand Pressure Filter**
- **Activated Carbon Filter**
- **Hypodosing system**
- **Final Sump**

DESCRIPTION OF TREATMENT UNITS:

A. BAR SCREEN:

In the incoming channel, a chamber medium screen shall be fitted, the purpose of which is to filter out coarse trashy matter from introducing in to succeeding units of the treatment plant. Screens shall be made of M.S. construction epoxy painted.

Type : Manually cleaned with Handrake

Construction : In MS flats of size 20 x 6, c/c not more than

20mm with necessary MS flat 25 x 6 stiffeners.

The whole unit shall be given 2 coats of epoxy-based paint over a coat of epoxy based primer. 1 no. MS hand rake shall also be provided with GI pipe rod.

Channel size	0.1 mtrs W x 1.6 mtrs L x 0.75 mts D
Type of screen	M.S. Construction manually cleaned with MS flats placed at 20 mm c/c with MS hand rake with handle all epoxy painted.

B. EQUALISATION TANK / COLLECTION TANK:

In order to homogenize the quality of wastewater, as well as to feed equalization tank at a uniform rate to the rest of the treatment plant, a equalization tank is proposed. In order to mix the contents, as well as to provide a degree of preparation, diffused aeration by means of membranes and blowers are proposed.

Capacity	73 cu.m
Aeration	MECHANICAL AGITATION.
Dimensions	As per drawing
D. P.	6 Hrs.

C. RAW EFFLUENT PUMP SETS:

The equalized and neutralized waste together with return sludge shall be pumped at a uniform rate of 3.25 cu.m / Hr. into the aeration tank.

Quantity : 2 Nos. (1w + 1s)

Duty : To transfer Raw Effluent from Equalization tank to Aeration

Type : Vertical submersible pump.

Motor : TEFC Motor with IP-55 protection and suitable for 400 / 440 V , 50 HZ A/c supply of Kirloskar.

Material : CI Body and impeller in Bronze.

Accessories : Air cock with priming funnel, Flexible Coupling with guard, Base frame foundation bolts etc.,

Flow rate : 12.25 cu.m / hr

Head : 15 mtr

Solids : 35 mm maximum

Temperature : Ambient

PH : 6.0 – 8.0

D. DOUBLE STAGE AERATION TANK:

Biological stabilization of the wastewater is accomplished in the aeration tank in the presence of microorganisms, for the respiration of which, Oxygen is supplied by means of diffused aeration comprising membrane diffusers and air blowers. As micronutrients such as nitrogen and phosphorus will be already present in sufficient quantities, no external supplementation will be necessary.

The aeration tank is divided in to two parts. Each Aeration Tank is provided with diffused aeration system to supply the air for the micro-organisms growth. The nutrients required for the micro-organisms growth are organic matter, which is present in the domestic effluent.

The MLSS level is maintained in this process to enhance the aeration process. Optimum concentration of MLSS to be maintained is in the range of 3500 – 4500 mg / lit in the aeration time the sludge starts to settle in this tank. Here the settling of the solids takes place and the clear water from the top pumped to the clear water tank.

Flow Quantity	300 cu.m / day
BOD in	350 mg / L
BOD out desired	10 mg / L
Tank volume / CAP	232 Cu.m (116cum x 2 Nos)
Diffusers	Fine pore diffusers.
F.M.	0.12
MLSS	3600 mg / Lit

E. AIR BLOWERS:

Type	Twin lobe Compressor
Capacity	175 cu.m / hr at 0.50 KJC
Quantity	3 Nos. (2w + 1 s)

The Standard Air Requirement (SAR) is arrived at on the basis of 2 kg oxygen / Kg of BOD.

Quantity : 3 nos. (2w + 1s)

Type : Twin lobe compressor

Flow : As per system requirement

Make : Kay / CVT/ Equivalent (approved make)

F. SECONDARY SETTLING TANK:

The mixed liquor (waste water with micro – organism) exiting the aeration tank has to be clarified in a clarifier waster, as well as to thicken the biomass MLSS (mixed liquor suspended solids)

Size	As per drawing
Recirculation	75 %
Overflow	12.25cu.m / hr / sq. m

G. SLUDGE HOLDING TANK:

The biomass in the aeration tank stabilizes BOD in wastewater by consuming the organic matter in the wastewater. The metabolic activity results in growth of the biomass population in the aeration tank. Consequently, in order to contain the level of MLSS in the aeration tank to the design level of 3600 mg / L, it will be necessary to bleed off or waste the excess activated sludge. For this purpose a sludge holding tank of 14.00 cu.m with air supply & one no. filter press is proposed.

Capacity	14.00 cu.m / day
Size	As per drawing

SLUDGE DISPOSAL PUMPS:

Quantity : 2 nos. (1w + 1s)

Duty : To transfer secondary sludge from clarifier to Aeration Tanks & sludge thickener.

Type : Horizontal centrifugal non-clog Self priming, open impeller, pumps, Kirloskar, STORK Equivalent (approved by consultant)

Motor : TEFC Motor, with IP-55 protection and suitable for 400/440 V, 50 HZ A/c supply of Kirloakar / grundofos make.

Material of Construction : Body and impeller in CI

Accessories : Air cock with priming funnel, Flexible Coupling with guard, Base frame, foundation bolts etc.,

Flow : as per system requirement

H. FILTER FEED TANK:

The settled water from the settling tank is expected to meet the standards with respect to BOD and TSS for Discharge to island surface waters. However, it is proposed to improve the quality of treated water further in order to make it fit re – use. For this reason, further treatment in the form of coagulation, filtration and disinfections is proposed. The clear water from the settling tank shall be fed to the filter feed tank, from where it will be pumped to the filters.

Capacity	19.50 cu.m /hr
Size	As per drawing

FILTER FEED PUMP:

The settled water from the settling tank is expected to meet the standards with respect to BOD and TSS for Discharge to inland surface waters. However, it is proposed to improve the quality of treated water further in order to make it fit re – use. For this reason, further treatment in the form of coagulation, filtration, softening and disinfection is proposed. The clear water from the settling tank shall be fed to the filter feed pump, from where it will be pumped to the filters.

Quantity : 2 nos. (1w + 1s)

Duty : To transfer treated effluent for sand filters

Type : Horizontal centrifugal non-clog Self priming, open impeller, pumps , Kirloskar, STORK Equivalent (approved by consultant)

Motor : TEFC Motor, with IP-55 protection and suitable for 400 / 440 V, 50 HZ A/c supply of Kirloakar / grundfos make.

Material : Body and impeller in CI

Accessories : Air cock with priming funnel, Flexible Coupling with guard, Base frame, foundation bolts etc.,

Flow : as per system requirement – (min – 19.50 cu.m / hr).

Head : 30 - 40 mtr

I. PRESSURE SAND FILTER - 1 NO:

Vertical down flow type with graded gravel with polysterene strainers.

Diameter	1800 dia
Depth of media	1000 mm
Test Pressure	5 Kg. / Sq.cm
Velocity of filtration	8 cu.m / Sq.m / Hr.
Flow rate	19.50 cu.m / hr

Quantity : 1 no

Make : Ion exchange or equivalent

Material : 6 mm thick MS plates and 8 mm thick end plates whole unit shall be given 2 Coats for internal and external with epoxy/enamel-based paint over a coat of epoxy based primer.

Under drain : Perforated bottom plate with plastic strainers or central headers and laterals.

Media : Graded River sand and Gravel

J. ACTIVATED CARBON FILTERS - 1 NO:

Vertical down flow type with graded gravel with polysterene strainers.

Diameter	1800 dia.
Depth of media	As per system requirement
Test Pressure	5 Kg. / Sq.cm
Velocity of filtration	8 cu.m / Sq.m / Hr.
Flow rate	19.50cu.m / hr

Quantity : 1 no.

Make : Ion exchange or equivalent

Material : 6 mm thick MS plates and 8 mm thick end plates whole unit shall be given 2 Coats for internal and external with epoxy / enamel - based paint over a coat of epoxy based primer.

Under drain : Perforated bottom plate with plastic strainers or central headers and laterals.

Media : Iodised Activated carbon with Gravel support

K. CHLORINE DOSER:

Quantity : 1 no.

Make : Asia LMI / Ion exchange or approved equivalent type

Flow : As per system requirement

Material : PVC / FRP

Accessories : Foot valve with strainer, Electronic diaphragm type metering Pump

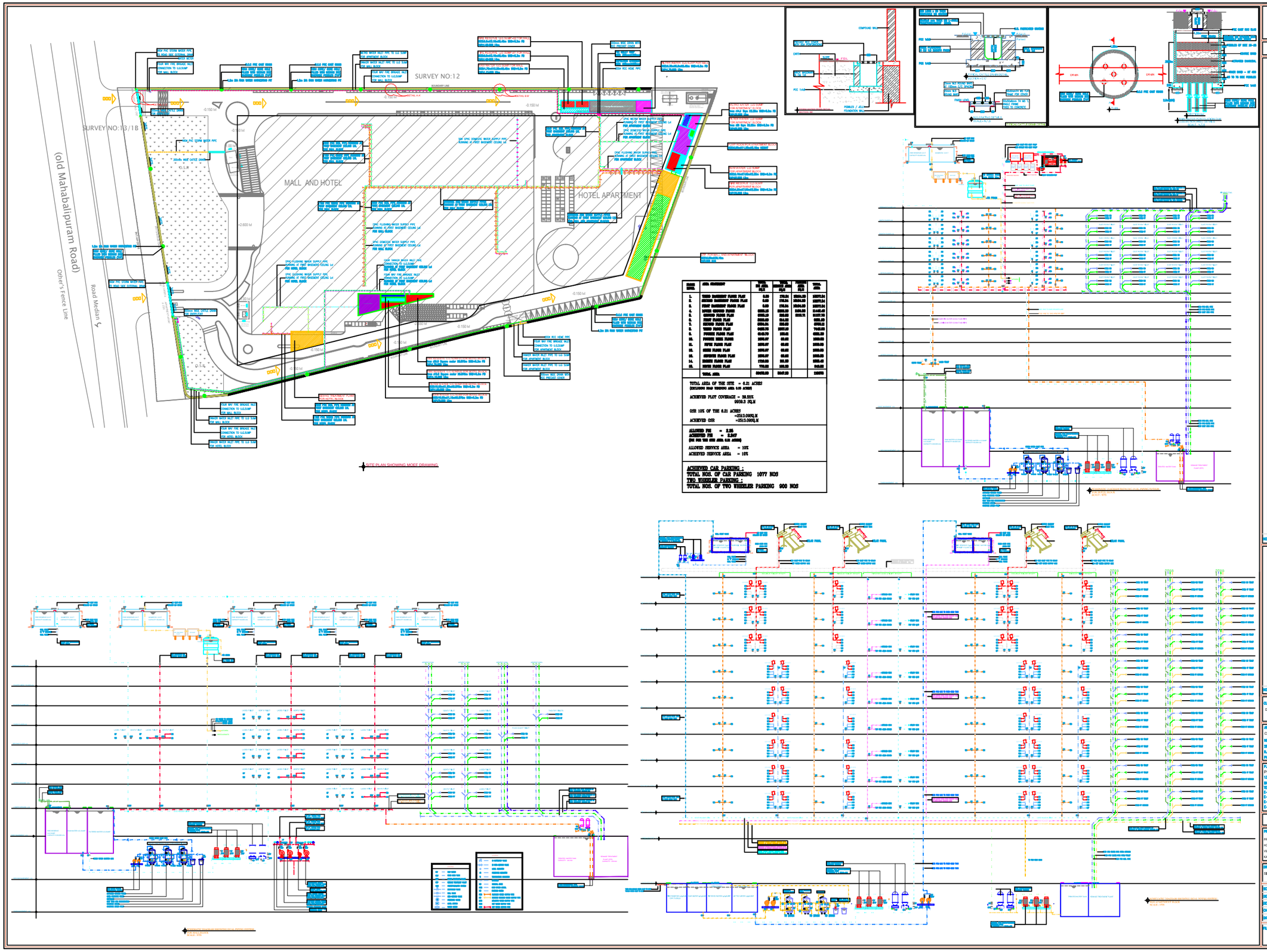
L. Ultra violet filteration :

It is proposed to provide UV filtration plant before water is feed to flushing ,landscaping and HVAC cooling tower

M. TREATED EFFLUENT COLLECTION SUMP:

One No. Final sump of 260 cu.m capacity will be provided to filtered & Ultra violet water, before pumping to Flushing and Irrigation purpose.

Capacity	260 cu.m / day
Size	As per drawing


SURVEY NO:12
SURVEY NO:13 / 1B
(old Mahabalipuram Road)
Other's Fence Line
Road Median
MALL AND HOTEL
HOTEL APARTMENT
PLANTATION
SITE PLAN SHOWING MOEF DRAWING
TOTAL AREA OF THE SITE = 6.21 ACRES
(INCLUDING ROAD WIDENING AREA 0.95 ACRES)
ACHIEVED PLOT COVERAGE = 39.55%
9939.3 SQ.M
COS 10% OF THE 6.21 ACRES
=2513.0000 SQ.M
ACHIEVED COS =2515.0000 SQ.M
ALLOWED FSI = 2.25
ACHIEVED FSI = 2.247
(NO FSI FOR MEP AREA AND ABOVE)
ALLOWED SERVICE AREA = 10%
ACHIEVED SERVICE AREA = 10%
ACHIEVED CAR PARKING :
TOTAL NOS. OF CAR PARKING 1077 NOS
TWO WHEELER PARKING :
TOTAL NOS. OF TWO WHEELER PARKING 900 NOS
NORTH
MOEF DRAWING
NO DATE REVISION BY
NO DATE PRINTS ISSUED TO BY
CLIENT :
GRAND MARINA CHENNAI.
ARCHITECTS :
CHERALATHAN ASSOCIATES
PLOT CONSULTANTS :
PRISM CONSULTANCY
PROJECT :
PROPOSED COMMERCIAL MALL, HOTEL / MULTIPLEX HOTEL APARTMENT AT S.NO. 13/1A, EGATTUR VILLAGE, CHENGALPATTU TALUK, KANCHEEPURAM (DIST).
DRG. TITLE :
SITE PLAN SHOWING MOEF DRAWING
SCALE 1:500000
JOB NO. 052/11
REV 0
DRAWN SUJU
CHECKED ELV KUMAR
DRG. NO. PC/CA/PL - 02
DATE 14.03.2014

Hubert Enviro Care Systems (P) Ltd.

18, 92nd Street, Ashok Nagar,
Chennai - 600 083.
Ph: 42985555 Fax: 42985500
E-mail : labsales@hecs.in

Laboratory Services Division
Accredited by NABL in the fields of Chemical & Biological Testing.
Recognized by MoEF.
ISO 9001, 14001 & 18001 Certified.

TEST REPORT

Name of the Client : **M/s Allied majestic Promoters.,**
Addrerss of the Client : **OMR Mall Developers(P) Ltd,13/1A,MAA Garden, Egattur Village,Tiruporur Taluk,Kancheepuram-603106**

Report No. : **HECS/A/006/180314**
Report Date : **26/03/2014**

Sample Description : **Ambient Air Quality**
Sampling Location : **Inside The Side**
Sample Drawn By : **Hubert Enviro Care Systems Pvt Ltd**
Sampling/received Date : **18/03/2014 -18/03/2014**
Analysis Commenced On : **18/03/2014**
Completed On : **25/03/2014**

S.No.	Parameters	Units	Results Obtained	Test Method	NAAQ Standards : 2009	
1	Sulphur Dioxide	µg/m³	11	IS : 5182 (P-2):2001(Reaff:2006)	80 (24 hours)	50 (Annual)
2	Nitrogen Dioxide	µg/m³	21	IS: 5182 (P-6):2006	80 (24 hours)	40 (Annual)
3	Particulate Matter Size Less than 10 µm	µg/m³	62	IS: 5182 (P-23):2006	100 (24 hours)	60 (Annual)
4	Particulate Matter Size Less than 2.5 µm	µg/m³	30	HECS/AIR/Ambient/SOP011	60 (24 hours)	40 (Annual)
5	Carbon Monoxide	mg/m³	BDL(DL 0.005)	IS : 5182 (P-10) 1999(Reaff:2003)	4 (1 hours)	2 (8 hours)
6	Lead	µg/m³	BDL(DL 0.05)	IS: 5182 (P-22): 2004(Reaff:2009)	1 (24 hours)	0.5 (Annual)
7	Ozone	µg/m³	BDL(DL 10)	HECS/AIR/Ambient/SOP013	180 (1 hours)	100 (8 hours)
8	Ammonia	µg/m³	BDL(DL 5)	HECS/AIR/Ambient/SOP012	400 (24 hours)	100 (Annual)
9	Benzene	µg/m³	BDL(DL 1)	IS: 5182 (P-11):2006(RA:2009)	5 (Annual)	5 (Annual)
10	Benzo(a)pyrene	ng/m³	BDL(DL 1)	IS: 5182 (P-12): 2004(RA:2009)	1 (Annual)	1 (Annual)
11	Arsenic	ng/m³	BDL(DL 1)	HECS/AIR/Ambient/SOP014	6 (Annual)	6 (Annual)
12	Nickel	ng/m³	BDL(DL 5)	HECS/AIR/Ambient/SOP007	20 (Annual)	

Note:-BDL - Below Detection Limit, D.L- Detection Limit, µg/m³- Micrograms per cubic meter, mg/m³- Milligrams per cubic meter, ng/m³- Nanograms per cubic meter.

End of Report

Sreep VK
Authorized Signatory

Hubert Enviro Care Systems (P) Ltd.

18, 92nd Street, Ashok Nagar,
Chennai - 600 083.
Ph: 42985555 Fax: 42985500
E-mail : labsales@hecs.in

Laboratory Services Division

Accredited by NABL in the fields of Chemical & Biological Testing.
Recognized by MoEF.
ISO 9001, 14001 & 18001 Certified.

TEST REPORT

Report No **HECS/N/001-002/180314**
Report Date: **26/03/14**

Name of the Client : **M/s.Allied Majestic Promoters OMR Mall Developers (p) Ltd,**

Address of the Client : **13/1A,MAA Garden, Egattur Village, Tiruporur Taluk, Kancheepuram -603106**

Sample Description : **Noise Monitoring**

Test Carried Out By : **Hubert Enviro Care Systems Private Limited**

Sampling/Received Date : **18/03/14 – 18/03/14**

S.No	Location	Noise Level in dB(A)
1	Inside The Site	56.13
2	Site Entrance	63.53

Exposure limits set by CPCB:

i.	Industrial Area	:	Day Time-75 dB(A);	Night Time-70 dB(A) .
ii.	Commercial Area	:	Day Time-65 dB(A);	Night Time-55 dB(A) .
iii.	Residential Area	:	Day Time-55 dB(A);	Night Time-45 dB(A) .
iv.	Silence Zone	:	Day Time-50 dB(A);	Night Time-40 dB(A) .

Sreep Vh

Authorized Signatory.

Hubert Enviro Care Systems (P) Ltd.

18, 92nd Street, Ashok Nagar,
Chennai - 600 083.
Ph: 42985555 Fax: 42985500
E-mail : labsales@hecs.in

Laboratory Services Division
Accredited by NABL in the fields of Chemical & Biological Testing.
Recognized by MoEF.
ISO 9001, 14001 & 18001 Certified.

TEST REPORT

Name of the Client : **M/s Allied majestic Promoters.,**
Addrerss of the Client : **OMR Mall Developers(P) Ltd,13/1A,MAA Garden, Egattur Village,Tiruporur Taluk,Kancheepuram-603106**

Report No. : **HECS/W/037/180314**
Report Date : **26/03/2014**

Sample Description : **WATER**
Sample Mark : **Inside The Site**
Sample Drawn By : **Hubert Enviro Care Systems Pvt Ltd**
Sampling/received Date : **18/03/2014 -18/03/2014**
Analysis Commenced On : **18/03/2014**
Completed On : **25/03/2014**

S.No.	Parameters	Units	Results	Test Method
1	pH (at 25 °C)	-	6.85	IS 3025 (Part11)-1983(Reaff:2006)
2	Electrical conductivity	µS/cm	1217.0	IS 3025 (Part14) 1983(Reaff:2006)
3	Colour	Hazen Unit	BDL(DL1)	IS 3025(Part 4):1983(Reaff:2006)
4	Turbidity	NTU	BDL(DL0.1)	IS:3025:(Pt-10):1984(Reaff:2006)
5	Total Hardness as CaCO3	mg/l	300.0	IS 3025 (Part21)-1983(Reaff 2006)
6	Calcium as Ca	mg/l	76.15	IS 3025 (Pt40)-1991(Reaff 2009)
7	Silica as SiO2	mg/l	93.64	IS 3025;4 (Part35) 1988(Reaff :2003)
8	Total Alkalinity as CaCO3	mg/l	160.0	IS 3025,1 (Pt 23)-1986(Reaff 2009)
9	Chloride as Cl	mg/l	216.49	IS 3025 (Pt 32):1988(Reaff 2009)
10	Magnesium as Mg	mg/l	26.74	IS 3025 (Pt 46)-1994(Reaff 2009)
11	Total Dissolved Solids	mg/l	725.0	IS 3025:1(Pt 16)-1984(Reaff 2006)
12	Sulphate as SO4	mg/l	44.34	IS 3025(Pt 24):1986(Reaff:2009)
13	Fluoride	mg/l	BDL(DL 0.2)	IS 3025 part(60):2008
14	Iron as Fe	mg/l	BDL(DL0.02)	IS 3025 (Pt 53)-2003(Reaff 2009)
15	Arsenic as As	mg/l	BDL(DL 0.005)	IS 3025:(Part-37):1988(Reaff 2009)
16	Total suspended solid	mg/l	BDL(DL1)	IS 3025 (Part17)-1984

Note:-BDL - Below Detection Limit, D.L- Detection Limit, NTU-Nephelometric Turbidity Unit, mg/l - Milligrams per liter.

End of Report

HUBERT ENVIRO CARE SYSTEMS (P) LTD. CHENNAI-600 083.

Authorized Signatory

Hubert Enviro Care Systems (P) Ltd.

18, 92nd Street, Ashok Nagar,
Chennai - 600 083.
Ph: 42985555 Fax: 42985500
E-mail : labsales@hecs.in

Laboratory Services Division

Accredited by NABL in the fields of Chemical & Biological Testing.
Recognized by MoEF.
ISO 9001, 14001 & 18001 Certified.

TEST REPORT

Name of the Client : **M/s Allied majestic Promoters.,**
Addrerss of the Client : **OMR Mall Developers(P) Ltd,13/1A,MAA Garden, Egattur Village,Tiruporur Taluk,Kancheepuram-603106**

Report No. : **HECS/SD/005/180314**
Report Date : **26/03/2014**

Sample Description : **SOIL**
Sample Mark : **Inside The Site**
Sample Drawn By : **Hubert Enviro Care Systems Pvt Ltd**
Sampling/received Date : **18/03/2014 -18/03/2014**
Analysis Commenced On : **18/03/2014**
Completed On : **25/03/2014**

S.No.	Parameters	Units	Results	Test Method
1	pH (at 25°C) @ 10% Solution	-	7.67	IS : 2720 (P-26,1987)
2	Electrical Conductivity	µS/cm	43.0	IS:14767,2000
3	Water holding capacity	%	23.04	HECS/SO/SOP/024
4	Chloride	mg/kg	24.74	SW 846 9253& 9077
5	Calcium as Ca	mg/kg	48.10	EPA 3050 B/EPA 7140
6	Sodium	mg/kg	10.0	EPA 3050 B/EPA 7770
7	Available Potassium	mg/kg	4.0	EPA 3050 B/EPA 7770
8	Organic Matter	%	0.14	IS:2720 (P-22, 1972)
9	Magnesium as Mg	mg/kg	12.0	EPA 3050 B/EPA 7450
10	Sulphate	mg/kg	BDL(DL1)	IS 14685:14685:1999
11	Iron	mg/kg	7381.18	USEPA Method 3050B&EPA 2008
12	Oil & Grease	mg/kg	BDL(DL1)	USEPA Method 9071B
13	Alkalinity	mg/kg	250.0	USEPA Method 310.2
14	Sodium Absorption ratio	meq/kg	0.4707	IS 1077:1984
15	Nitrate	mg/kg	BDL(DL1)	IS 14684:1999
16	Total Chromium	mg/kg	BDL(DL0.01)	USEPA Method 3050B,AAS Method.
17	Total Phosphorus	mg/kg	90.23	IS 10518-1982 Reaffirmed 2003
18	Nitrogen	mg/kg	347.20	IS 14684:1999 RA 2008

Note:-BDL - Below Detection Limit, DL- Detection Limit, mg/Kg- Milligrams per kilogram , % - Percentage.

End of Report

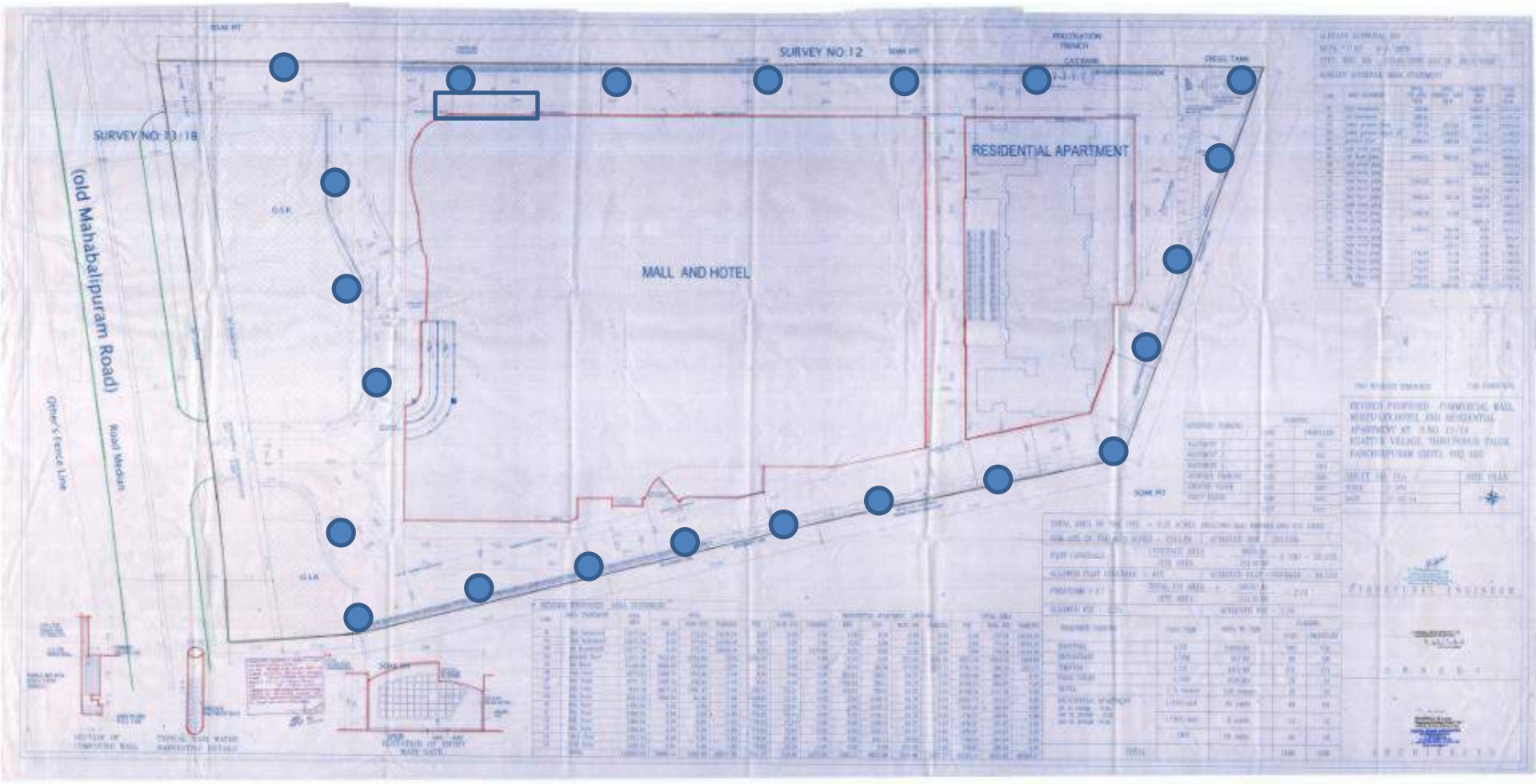
HUBERT ENVIRO CARE SYSTEMS (P) LTD CHENNAI-600 083.

Authorized Signatory

d) Details of rain water harvesting system

Strom Water Drainage Plan

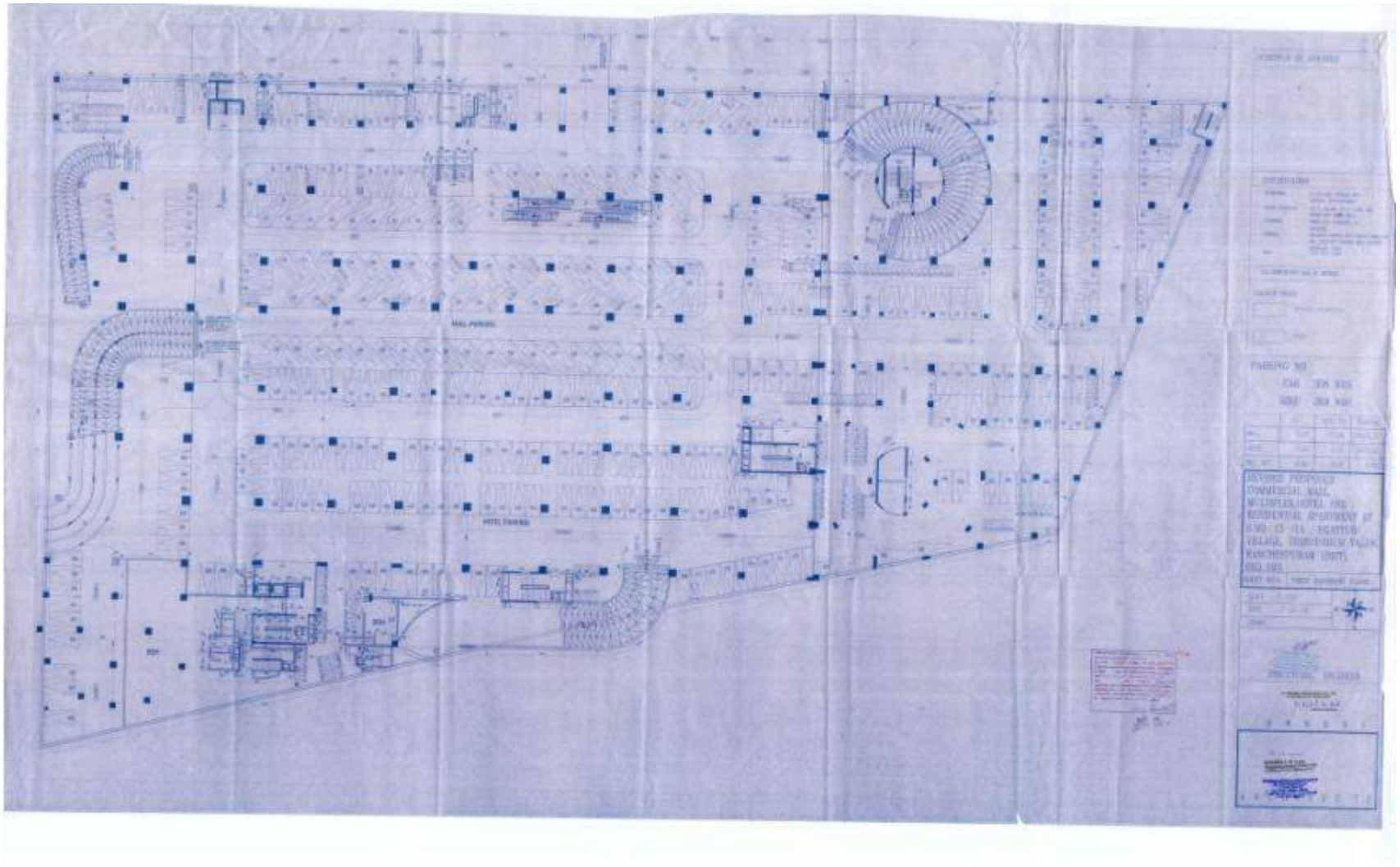
Annexure - 16



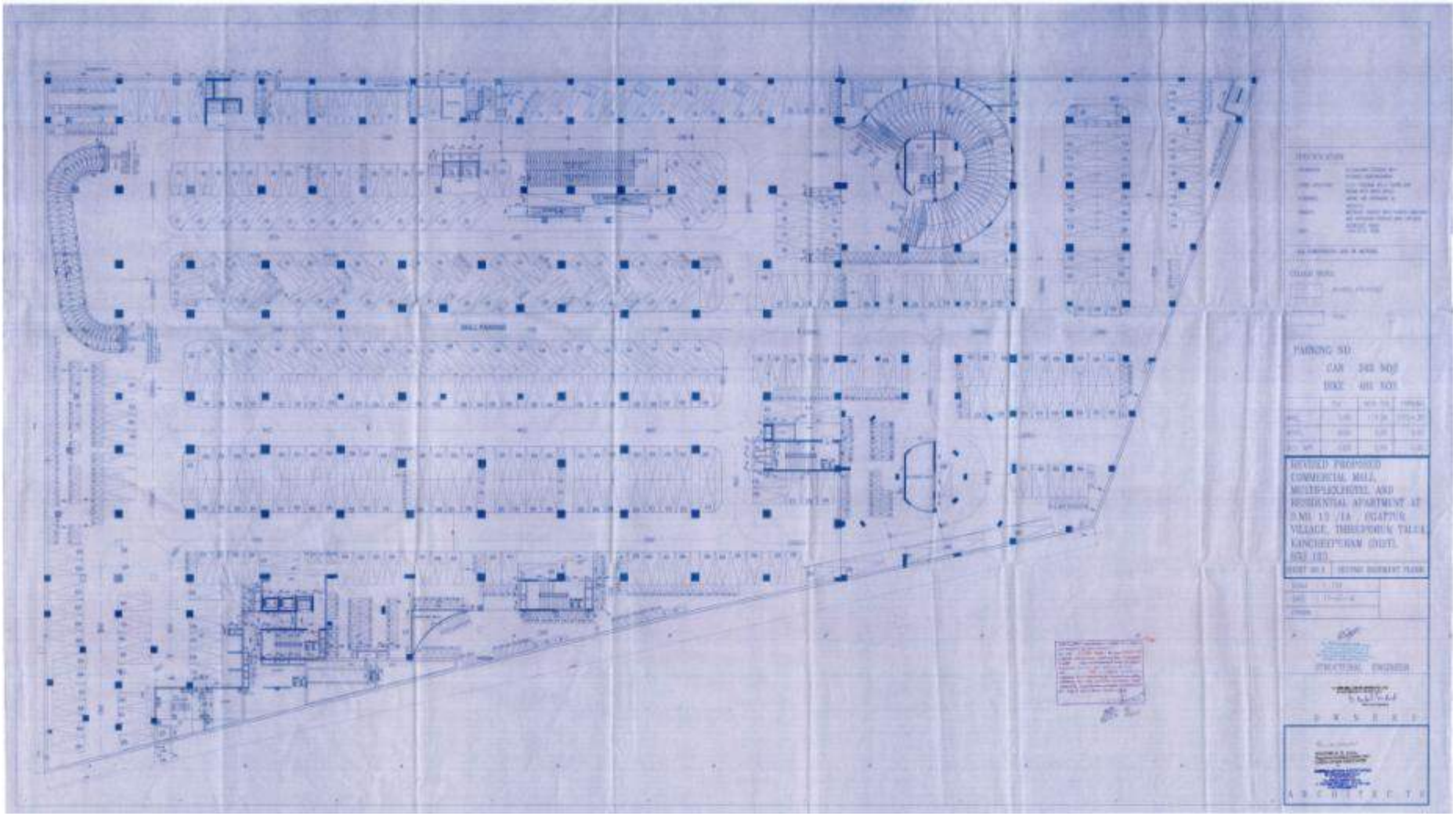
Rain water Harvesting Pits

Rainwater harvesting sump 160 KL

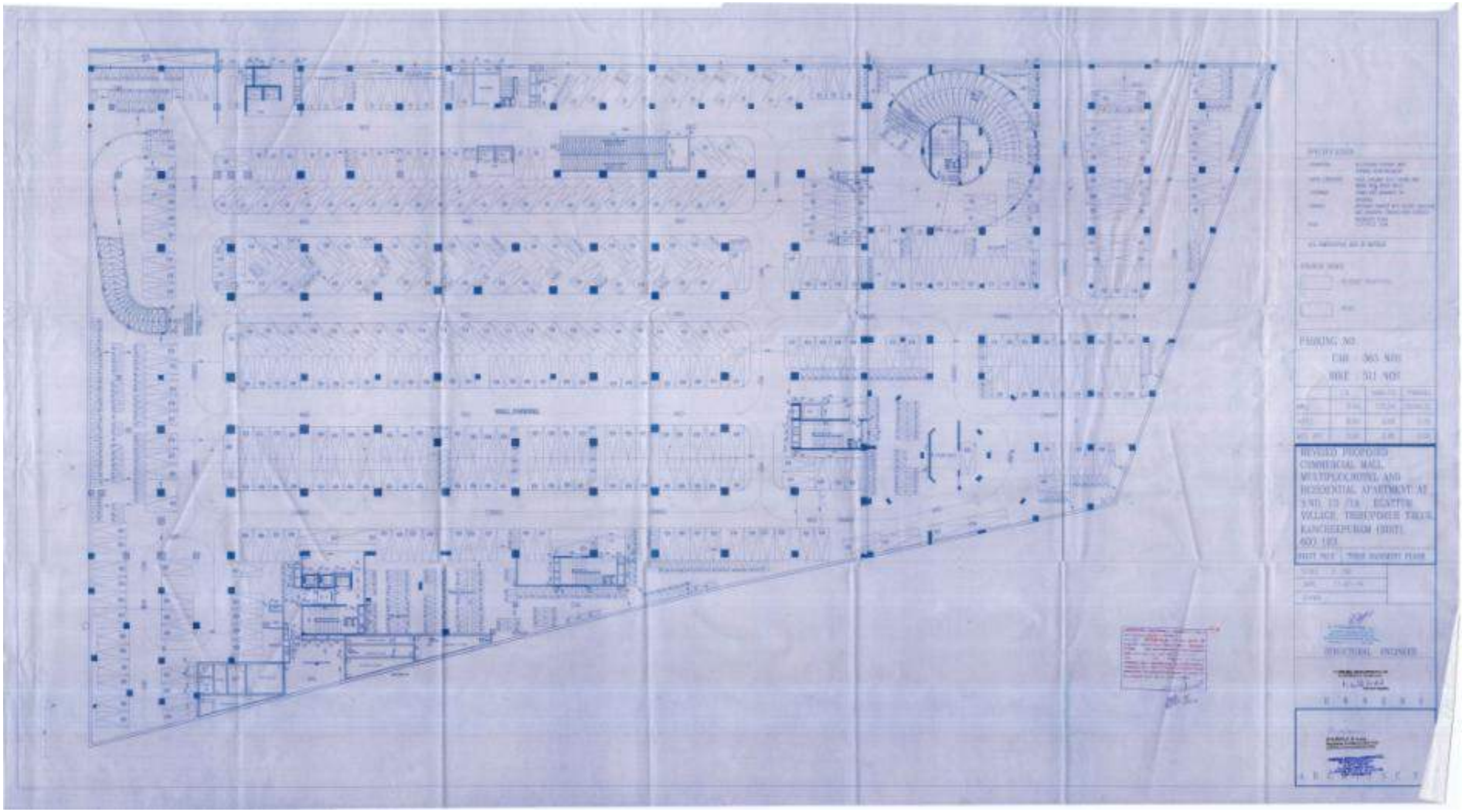
BASEMENT-I PARKING LAYOUT PLAN



BASEMENT-II PARKING LAYOUT PLAN



BASEMENT-III PARKING LAYOUT PLAN



b) Report on ECBC compliance

S.No	Norms	Details	Compliance
1	Building envelopes	1. Insulation materials and their R-values; 2. Fenestration U-factors, 3. Solar heat gain coefficients (SHGC),	Atrium : 35 % glass panels (8mm thk. clear glass + 1.52 PVB + 8mm thk. Clear glass) and 65% PUF panels (50mm thk.) 1. R value : PUF panel 4.0 2. U value I. PUF panel .026 w/sqm k II. Glass Panel 4.1w/sqm.k 3. Solar factor :Glass panel 0 .69

b) Report on ECBC compliance

S.No	Norms	Details	Compliance
1	Building envelopes	4. visible light transmittance (if the trade-off procedure is used), and air leakage;	4. Visible light transmittance : Glass panel: 84% Façade glass: A. Spider glazing : 6mm+1.52pvb+6mm clear glass B. Fixed glazing (A) :6mm + 12mm air gap+ 6mm thk clear glass C. Fixed glazing (B) 12mm thk. Clear glass 1. U Value i. Spider glazing 5.56 ii. Fixed glazing (A) 3.122 iii. Fixed glazing (B) 5.5 1. Solar factor i. Spider glazing 0.64 ii. Fixed glazing (A) 0.76 iii. Fixed glazing (B) 0.74 1. Visible light transmittance i. Spider glazing 85% ii. Fixed glazing (A) 78% iii. Fixed glazing (B) 85%

b) Report on ECBC compliance

S.No	Norms	Details	Compliance
2	Mechanical systems and equipment, including heating, ventilating, and air conditioning	1. system and equipment types, sizes,	1. Centralized chilled Water System. 100% Water cooled Chillers are used . 500TR Water Cooled Chiller - 5 Nos. 950GPM Primary Pump - 6Nos. 2000GPM Condenser Water Pump - 6Nos. 500TR Cooling Tower - 5 Nos Chiller COP – 6 Refrigerant – R – 134A .
		2. efficiencies, and controls;	2. All Equipments are selected more than or Equal to 80% Efficiency. And Automatic Controls are used to Control the Chiller operations.
		3. economizers;	3. Economizers are not used in the system.
		4. variable speed drives;	4. VFDs are Used in Chiller, Primary Pumps, Condenser Water pumps and Cooling Towers

b) Report on ECBC compliance

S.No	Norms	Details	Compliance
2	Mechanical systems and equipment, including heating, ventilating, and air conditioning	5. piping insulation; 6. duct sealing, 7. insulation and location;	5. Pipe is having insulation with sand cement plaster with 2 coats of enamel paint to avoid earlier corrosion. R Value for 50mm thick Pipe Insulation will be 1.61 . & R Value for Duct Thermal Insulation for 9mm thick will be 0.28. 6. Duct work ceiling considered 1 inch water gauge 7. Chilled water pipe insulation using EPS TF quality of thickness 50mm for pipe below 350mm dia &75 mm dia for pipes above 350mm dia with sand cement plaster with 2 coats of enamel paint. Location will be at Chiller plant room , Riser shaft and Floor level above false ceiling & Thermal Insulation (Ducting) using 9 mm Thk Armaflex insulation material, joints sealed with adhesive tape. Location at above false ceiling

b) Report on ECBC compliance

S.No	Norms	Details	Compliance
3	Service hot water heating	solar water heating system	**Hotel** It is proposed to provide centralized solar hot water system of 10000 liters tank capacity with 60 panels of 125 liters per hour (Considering 2500 liters heating coil provision during non sunny days. Power consumption is 20KW per day) Since, we have solar system for 7500 liters / hour, power saving will be 60KW per day **Apartment** Top 3 floors are provisioned for centralized solar hot water system of 3500 liters tank capacity with 28 panels of 125 liters per hour for 36 flats 24 toilets x 3 floors x 2 = 144 KW savings per day

b) Report on ECBC compliance

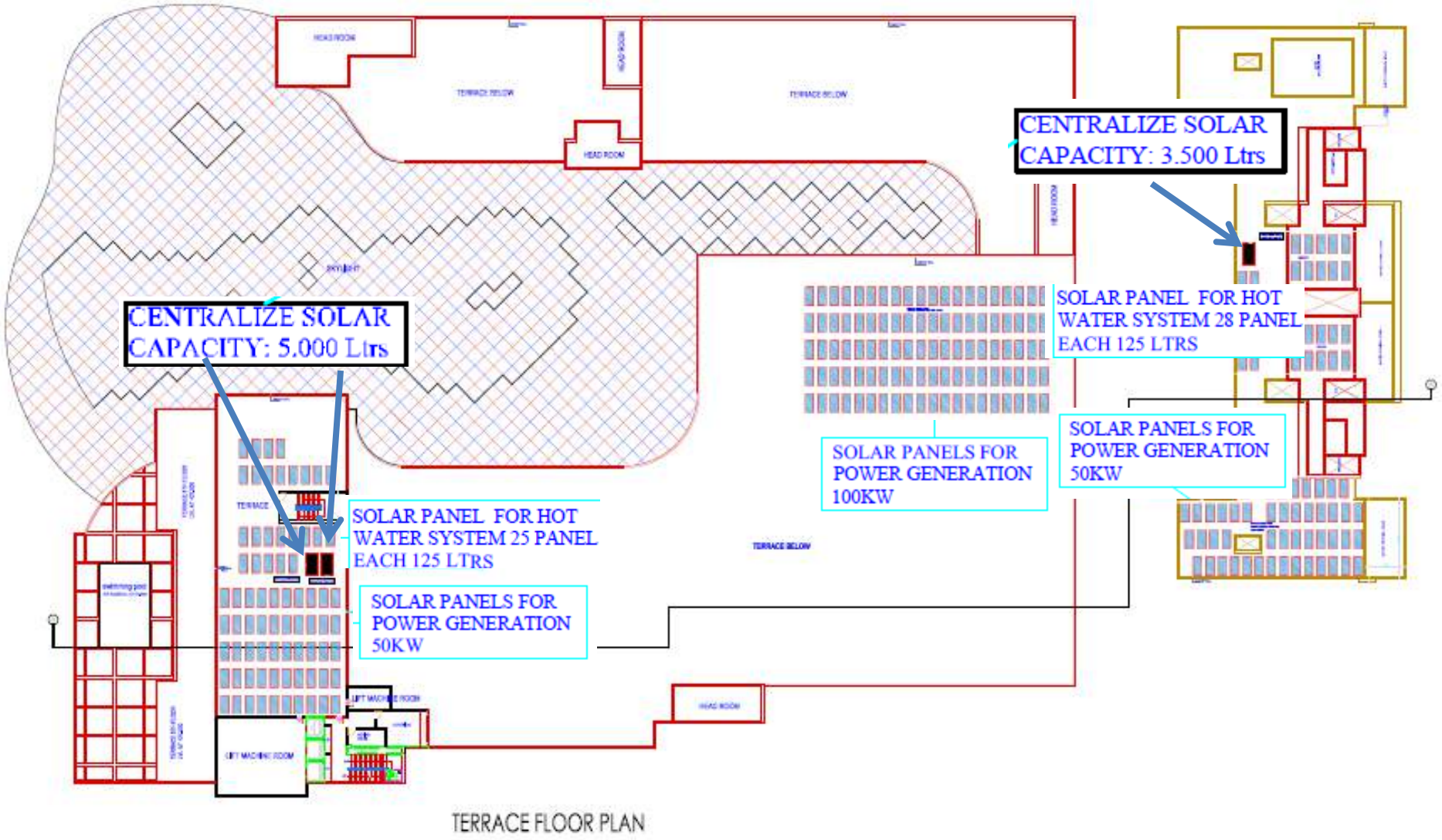
S.No	Norms	Details	Compliance
4	Interior and exterior lighting	1. automatic lighting shutoff, 2. occupancy sensors, and other lighting controls; 3. lamp efficacy for exterior lamps;	1. Automatic lighting shutoff shall be provided in corridors / toilets. 2. Occupancy sensors shall be provided in corridors / toilets. 3. 100lumens/ watts
5	Electrical power and motors	1. electric schedule showing transformer losses, 2. motor efficiencies, 3. power factor correction devices; 4. electric check metering and monitoring system	1. 2000 Kva Dry type 33Kv Transformer, losses 21.4 Kw 2. 80% 3. Automatic Power Factor Correction panel shall be provided to maintain the power factor to 0.99. 4. Provided for all the feeders

c) Solar power to be included

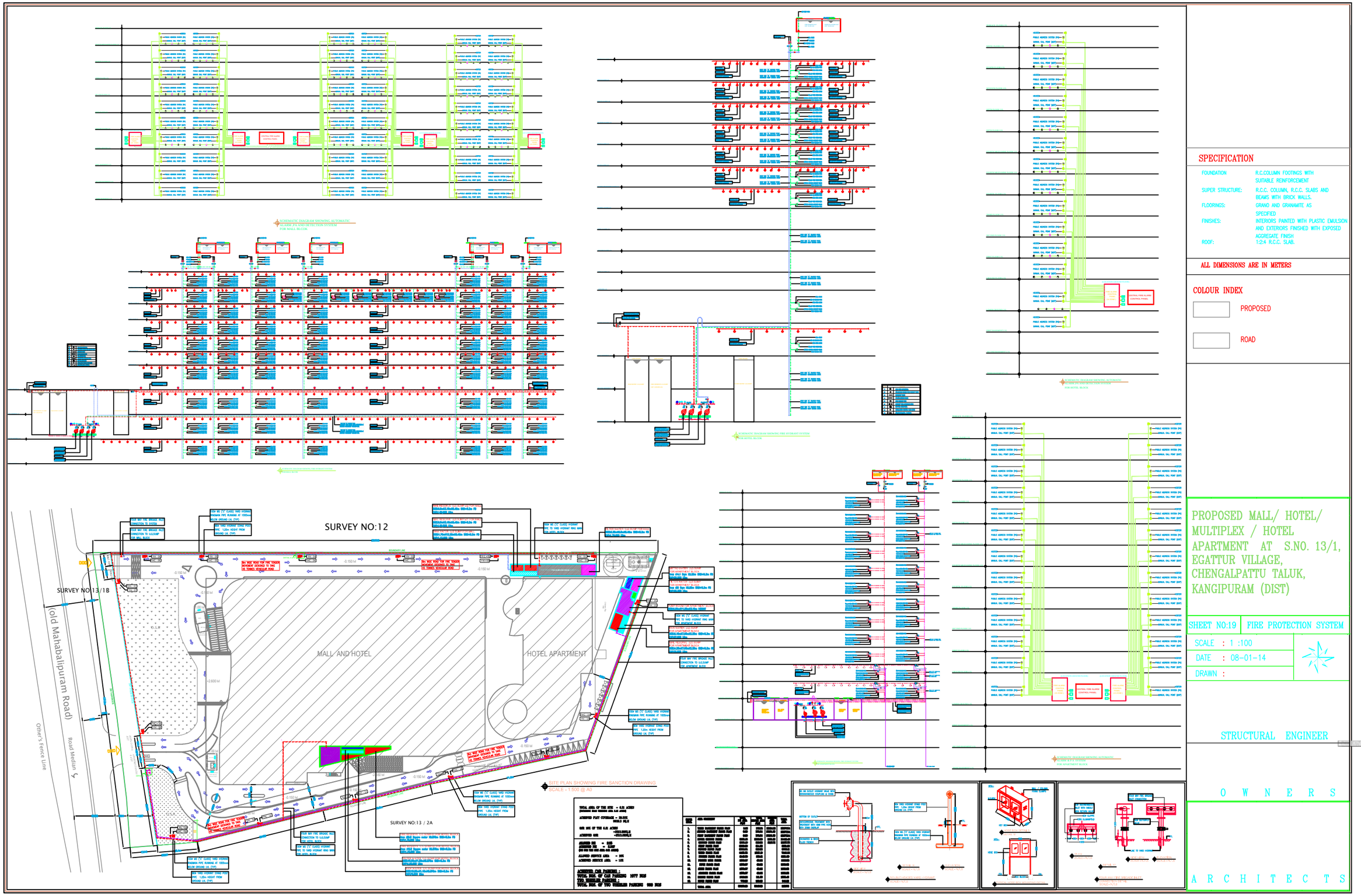
Details of solar power with Savings

I	**Solar Power for Lighting for Mall**		
	Total Lighting Load in KW	100	KW
	Consumption for a period of 14 Hrs / Day (A)	1400	KWHR
	Cost of saving / Day@ Rs 7/- per Unit	**Rs.9,800.00**	
	Cost of Saving / Year	**Rs.3,528,000.00**	
II	**Solar Power for Lighting for Hotel**		
	Total Lighting Load in KW	50	KW
	Consumption for a period of 14 Hrs / Day (A)	700	KWHR
	Cost of saving / Day@ Rs 7/- per Unit	**Rs.4,900.00**	
	Cost of Saving / Year	**Rs.1,764,000.00**	
III	**Solar Power for Lighting - Apartment**		
	Total Lighting Load in KW	50	KW
	Consumption for a period of 14 Hrs / Day (A)	700	KWHR
	Cost of saving / Day@ Rs 7/- per Unit	**Rs.4,900.00**	
	Cost of Saving / Year	**Rs.1,764,000.00**	

c) Solar power to be included



Annexure - 19



PRODUCED BY AN AUTODESK EDUCATIONAL PRODUCT

PRODUCED BY AN AUTODESK EDUCATIONAL PRODUCT

13/6/07

Annexure - 20

Tamil Nadu Fire & Rescue service Department

From

S.VIJAYA SEKAR, MSc., M.L., D.I.S.,
A. Dip. (NFSC)
Deputy Director – North West Region
Tamil Nadu Fire & Rescue Services
Chairman of Inspection Team for MSB,
Vellore.

To

THE DIRECTOR,
Tamil Nadu Fire &
Rescue Services
Egmore,
Chennai – 600008.

Rc. No. 2941 /A2/2007 Dated.06.06.2007

Sir,

Sub: Tamil Nadu Fire & Rescue Services – North West Region – Multistoried Building Inspection Team Inspected Assembly Building, M/s. Allied Majestics Promoters S.No. 13/1, Egattur Village, Chengalpattu Taluk, Kanchipuram District- Report – Regarding

Ref: 1. Directorate Endt. R. C. No.9127 /C1/2007 dated 21.05.2007
2. Inspection report of Divisional Officer & Asst. Divisional Officer (Fire Prevention wing) Kancheepuram Division Dt. 05.06.2007.

With reference to the letter cited above the team has inspected Assembly Building. M/s. Allied Majestics Promoters S.No. 13/1A Egattur Village, Chengalpattu Taluk, Kanchipuram District. On 05-06-2007 and the report is given as here under.

OBSERVATION:

The Proposal is for construction of Assembly building of Second basement + First basement + Lower Ground floor + Ground floor + 9 floors with the maximum height of 45.25mts. The total plot area of the Assembly Building is 6.25 acres. The total proposed floor area will be 64995.91 sq.mts. It hasenough setbacks, North- 12 mts. South- 12mts. East- 12.5mts, West- 25.8mts. The proposed building is classified as Group- D, AssemblyBuilding sub division VI as per national building code of India - 2005, Group I, Part-IV, Fire and Life safety SP-7 (Group – 1) 2005, Second Revision.

The team suggests following fire precautionary measures in the building:

1. There should be one Wet-riser along with landing valve per thousand Sq.m area. The raiser with landing valves should be fully charged with adequate pressure at all times & should have both automatic and manual operation provisions. To feed the Wet-riser, an underground static water tank of minimum capacity 2,00,000 liters and a terrace level tank of capacity 20000 liters should be provided with refilling facilities. To charge the wet-raiser system and the sprinkler system two electrical pump of each capacity 2850 LPM should be provided near the under ground water tank. An equal capacity of Diesel pump should also be provided as an alternative arrangement. One more electrical pump of capacity of 180 LPM should be provided as a Jacky Pump for each system. The wet-riser should also cover the basements.
2. Fire services inlets fitted with NRV at ground level should be provided both for risers and static tank.
3. Hose reel assembly should be provided covering each floor area.
4. Yard hydrants should be provided around the buildings.
5. Manual fire alarm call point should be provided all floor areas.
6. Automatic Sprinkler system should be provided at all floor area including basements area.
7. Automatic detector and fire alarm system should be provided at all floors.
8. Public address system should be provided connecting all the floors.
9. Alternate & Independent power system should be provided to pumps and emergency lighting systems, fire escapes, smoke vent system and fire lifts.
10. No of Exits locations and exit width and exits markings should conform to the requirements of National Building Code of India part 4 as stated above.
11. The first aid fire fighting equipment should be provided at all floors in accordance with the BIS 2190:1992 requirements.
12. Fire lift, Electrical Installation and wiring, AC Duct & other service ducts should meet the requirement of NBC of India as stated above.
13. The width and height of any arch or gate, if any, should have the clearance of not less than 4.5 m and 5 m respectively.
14. Automatic smoke and fume Exhaust system should be provided at basements and other needed floor areas.
15. The service ducts such as power cables, communication cables, A/C ducts, etc. should be protected with proper fire sealing or fire dampers.
16. The Cable gallery should be routed through the resistant duct or fire protected tray.
17. Necessary Electrical safety measure such as MCB, ELCB, Lightening Arrester etc. should be provided.
18. Fire Resistant and Low Smoke Emission Cable should be used.
19. One refuge area (minimum of 15 sq.mtr) on the floor immediately above 24 m and another 15 mts. respectively should be provided.
20. A fire tower should be provided as means of egress as per NBC (4.13)
21. Open space (side set-back) floor around the proposed building should be designed to with stand the minimum load of 45 tons at any point of operation for using Hydraulic plat formed special vehicles.

22. All escape stair cases should be protected with pressurization system in addition with automatic self closing fire check doors of 2 hrs rating.
23. The given side set-back should be kept free from any car parking or any other construction so as to ensure free movement of special rescue vehicles in case of an emergency operation.
24. One trained fire officer and a crew must be available to maintain as well as to operate the fire protection system in case of any emergency need.
25. Buildings total fire safety system including automatic activation system should come under single building integrated management system.
26. During construction the following safety measure should be provided:
    - Dry raiser of minimum 100mm diameter pipe with hydrant outlets on the floors constructed with a fire service inlet to booster the water in the dry riser.
    - Drums filled with water of 2000 liters capacity with two fire buckets on each floor.
    - A water storage tank of minimum 20000 liters capacity, which may be used for the construction purpose also.

There is no objection to accord planning permission to this proposal subject to the fulfillment above conditions. The applicant may be informed to comply with all the safety arrangements suggested above and on receipt of compliance report from the applicant before the actual occupancy or before issuing occupancy certificate, whichever earlier, re-inspection will be conducted for the consideration of issue of Fire License.

Deputy Director, North West Region
Fire & Rescue Services,
Chairman of Inspection Team for MSB,
Vellore.

6/6/02

ENVIRONMENTAL MANAGEMENT PLAN

1. STRUCTURE OF EMP

Environmental Management Plan (EMP) is the key to ensure a safe and clean environment. The desired results from the environmental mitigation measures proposed in the project may not be obtained without a management plan to assure its proper implementation & function. The EMP envisages the plans for the proper implementation of mitigation measures to reduce the adverse impacts arising out of the project activities. EMP has been prepared addressing the issues like:

- Pollution control/mitigation measures for abatement of the undesirable impacts caused during the construction and operation stage
- Institutional set up identified/recommended for implementation of the EMP
- Post project environmental monitoring programme to be undertaken
- Expenditures for environmental protection measures and budget for EMP

2. PROPOSED ENVIRONMENTAL IMPACT MITIGATION MEASURES

The major impacts due to different project activities and their mitigation measures have been identified and given in the following table. These measures together constitute part of Environmental Management Plan (EMP). The environmental impact mitigation measures for construction and operation phases are also given in Table 1.

Table 1 Proposed Environmental Impact Mitigation Measures

Area	Mitigation measures
	Construction Stage:
Water quality	• Toilet and drinking water facilities for construction workers will be provided by the contractor at the construction site to avoid unhygienic condition at site.
Air quality	• Dust suppression measures will be undertaken such as regular sprinkling of water around vulnerable areas of the construction site by suitable methods to control fugitive dust during earthwork

	and construction material handling / over hauling. • Properly tuned construction machinery & vehicles in good working condition with low noise & emission will be used and engines will be turned off when not in use.
Noise level	• Protective wears such as ear mufflers etc. will be provided to construction personnel exposed to high noise levels.
Solid wastes	• Waste construction materials will be recycled and excess construction debris will be disposed at designated places in tune with the local norms.
Landscape	• Appropriate landscape including plantation of evergreen and ornamental flowering trees, palms, shrubs and ground covers at open spaces within the complex will be done, which would serve the dual purpose of controlling fugitive dust and improving the aesthetics of the area.
Safety	• Adequate safety measures complying with the occupational safety manuals will be adopted to prevent accidents/hazards to the construction workers.
	Operation Stage:
Water quality	• Sewage will be treated up to the tertiary level in the proposed STP. • Treated sewage will be reused for toilet flushing, HVAC and green belt. • Regular monitoring of STP effluent quality will be carried out as per norms.
Air quality	• Back up DG sets will comply the applicable emission norms. • Adequate stack height for DG sets will be provided as per norms. • Back up DG sets will be used only during power failure. • Regular monitoring of emissions from DG sets and ambient air quality will be carried out as per norms.
Noise level	• DG room will be treated acoustically as per norms to control the noise from DG sets. • Pumps, STP, Compressors, DG sets etc. will be properly

	maintained for fuel efficiency and noise control. • Personal protective equipment will be provided to the maintenance staff working in high noise areas.
Solid wastes	• Solid wastes will be segregated into organic and inorganic components. • The recyclable inorganic wastes will be sold to prospective buyers. • Dewatered/ dried sludge from STP will be used as manure in horticulture.
Hazardous waste	• Used/spent oil from DG sets will be sold to registered recyclers.
Storm water management	• Adequate Storm water drainage facility, rainwater harvesting pits and roof top harvesting sump are proposed.
Fire protection	• Adequate fire protection facilities will be installed including fire detectors, fire alarm and fire fighting system as per National Building Code of India.
Landscape	• Proper maintenance of landscape round the year including replacement of the decayed plants.
Safety	• Adequate safety measures complying the occupational safety manuals to prevent accidents/hazards with the maintenance workers.
Others	• The building will be provided with disabled-friendly design, timber-free construction, energy efficient lighting & ventilation, and control of indoor environment. • Undertaking all necessary pollution control measures to maintain the emissions and discharges within the prescribed/stipulated limits.

3. PREVENTIVE MEASURES TO AVOID LEACHING OF TREATED SEWAGE EFFLUENT INTO NEARBY WATER COURSES/LAKES ETC.

a) The treated sewage will meet the standards post UV disinfection and will be used for gardening/ horticultural needs. We will ensure adequate sand to clay mixture in soil to ensure retention of water and facilitate evaporation.

b) We will be using controlled irrigation and sprinkling method to ensure more evaporation and ensure that about half to one litre of water / Sqft of soil will be used, so that the treated water will not penetrate more than 2 to 3 feet of percolation to the maximum.

c) The solar evaporation rate of about 1cum/ day will be utilized to enhance evaporation and also assimilation of water for horticultural species and prevent percolation to soil. Items b and c would eliminate leachate percolation to water totally.

d) Suitable sampling bore wells will be selected to ensure that there is no ground water or soil contamination, in six monthly period and the reports will be submitted to statutory bodies as required.

e) Also nearby water bodies will be monitored on six monthly basis to confirm the same for water quality.

4. ENVIRONMENTAL IMPACTS ON PROJECT LAND AND ITS SURROUNDING DEVELOPMENTS AND VICE VERSA

Since the proposed project is development of commercial building, there will not be any alteration to the surrounding locations. The proposed site is located near residential and commercial units. Also the construction will abide by the Bylaws of CMDA

During the construction phase, following measures will be taken

- Dust suppression by water sprinkling
- Protective wears such as ear mufflers etc. will be provided to construction personnel exposed to high noise levels.
- Waste construction materials will be recycled and excess construction debris will be disposed at designated places in tune with the local norms.
- Adequate safety measures complying with the occupational safety manuals will be adopted to prevent accidents/hazards to the construction workers.

During the operation phase, following measures will be taken

- Sewage will be treated up to the tertiary level in the proposed STP.
- Treated sewage will be reused for green belt and toilet flushing.
- Regular monitoring of STP effluent quality will be carried out as per norms.
- Back up DG sets will comply the applicable emission norms and stack height as specified by PCB
- Solid wastes will be segregated into organic and inorganic components. Organic waste will be treated in composter.
- Adequate rainwater harvesting will be provided by means of recharge into the groundwater.
- Adequate fire protection facilities will be installed including fire detectors, fire alarm and fire fighting system as per National Building Code of India.
- Monitoring of environmental parameters will be done periodically

Due to the proposed project, others will be encouraged to put up residential/ commercial projects. Hence no significant negative impact is envisaged.

5. GROUND WATER POTENTIAL OF THE SITE AND LIKELY IMPACT OF THE PROJECT

- Ground water table is about 4 m below ground level.
- Fresh water of about 311 KLD is to be utilized from Panchayat and 266 KLD treated sewage of 93 KLD is proposed to be used for flushing, 135 KLD for HVAC and 37.5 KLD for gardening.
- Sewage will be reused for gardening after tertiary treatment and there will be monitoring of ground water near site periodically during and after construction.
- Storm water drainage plan, Rainwater harvesting pits are proposed and roof top collection sump is also proposed.
- Thus as seen above, no impacts are envisaged on ground water.

6. ENVIRONMENTAL MANAGEMENT BUDGET ALLOCATION

A capital cost provision of about Rs. 1243 Lakhs has been kept in the project cost towards the environmental protection, control & mitigation measures and implementation of the EMP. The budgetary cost estimate for the EMP is given in **Table 2.**

Table 2 Environmental Budget

S.No.	Description	Capital Cost (Rs. In Lakhs)	Operating cost (Rs. In Lakhs)
1.	Sewage Treatment Plant	40	8
2.	Landscaping & Gardening	10	3
3.	Solid waste Management	5	1
4.	Rainwater harvesting	15	5
5.	Air pollution Control measures	40	2.5
6	Fire fighting Measures	138	5
7	Solar Lighting	10	1
8	HVAC	985	36
	Total Cost	1243	61.5

7. ENVIRONMENTAL MONITORING PLAN

It is imperative that the Project Authority set up regular monitoring stations to assess the quality of the surrounding environment after the commissioning of the project. An environmental monitoring programme is important as it provides useful information and helps to:

- Verify the predictions on environmental impacts presented in this study,
- Assist in detecting the development of any unwanted environmental situation, and thus, provides opportunities for adopting appropriate control measures, and
- Evaluate the performance and effectiveness of mitigation measures proposed in the EMP and suggest improvements in management plan, if required,
- Satisfy the legal and statutory obligations.

The monitoring plan including areas, number and location of monitoring stations, frequency of sampling and parameters to be covered is summarized in **Table 3a & 3b**. Monitoring will be get carried out by recognized laboratories.

Table 3a Environmental Monitoring Plan – Construction Phase

S.No.	Item	Parameters	Frequency	Unit cost (Rs.)	Sampling /Year	Cost/Year (Rs.)
1	Ambient Air Quality	PM_{10}, $PM_{2.5}$, SO_2 & NOx	Monthly	2800	24	67200
2	Noise Level	Equivalent Noise Level	Monthly	500	24	12000
3	Ground Water	Physical, Chemical and Bacteriological	Monthly	1800	24	43200
4	Soil	General Parameters	Monthly	5000	24	120000
Total						2,42,400

Table 3b Environmental Monitoring Plan – Post Construction

S.No.	Item	Parameters	Frequency	Unit cost (Rs.)	Samples/Year	Cost/Year (Rs.)
1	Air Quality	PM_{10}, $PM_{2.5}$, SO_2 & NO_x	Quarterly	2800	8	22,400
2	Noise Level	Equivalent Noise Level	Quarterly	500	8	4,000
3	Exhaust from DG sets	SPM, SO_2	Quarterly	2000	32	64000
4	Ground Water Analysis	Physical, Chemical and Bacteriological	Quarterly	1800	8	14,400
5	Waste Water analysis	pH, BOD, COD, TSS, TDS	Monthly	700	24	16800
6	Soil Quality	General parameters	Quarterly	5000	8	40,000
7	Compost Quality	Nutirents, moisture, Ash, pathogens, Heavy metals	Monthly	15000	12	1,80,000
Total						**341600**

Annexure - 22

सुरक्षा सहित सेवा

भारतीय विमानपत्तन प्राधिकरण
AIRPORTS AUTHORITY OF INDIA

संदर्भ सं. / Ref. No. :

दिनांक / Dated :

Noc From Airport Authority of India

BY SPEED POST

No:AAI/SR/NOC/RHQ 21-08-2007

To
M/s. Allied Majestic Promoters,
15, Venkatraman Street, T.Nagar, Chennai – 600017..

NO OBJECTION CERTIFICATEa

CASE No:648/07/07

1. Please refer to your letter No: Dated on the subject noted above.
2. This office has no objection to the construction of the proposed construction by **Allied Majestic Promoters** (hereinafter referred to as the applicant(s), at to a height of (in figure) **51.25m** (in words) **Five One dec. One Two Two meter** above ground level so that top of the proposed structure when erected shall not exceed 6.882m (Site elevation) Plus (+) 51.25m (Height of the structure) = **58.122m AMSL**.
3. This No Objection Certificate is being issued on the express understanding that site elevation reduced level (height above mean sea level) viz 6.872m relative location of the proposed building / structure and its distance and bearing the ARP / Runway ends as tendered by the applicant(s) are correct. If, however, at any stage it is established that the said data as tendered by the said applicant is actually different that the one tendered, and which could adversely affect aircraft operations, the structure or part(s) thereof in respect of which this "No Objection Certificate" is being issued will have to be demolished at his own cost as may be directed by the Airports Authority of India. The applicant(s) is / are, therefore advised in his / their own interest to verify the elevation and other data furnished for the site before embarking on the proposed construction.
4. The issue of the "No Objection Certificate" is further subject to the provisions of Section 9A of the Indian Aircraft Act, 1934, and those of any notification issued thereunder from time to time and under which also the applicant may be called upon by the Airports Authority of India to demolish in whole or in part the structure now being authorised vide this "No Objection Certificate".
5. No Radio / TV Antenna, Lightening Arresters, Staircase, Mumtee, Overhead Water Tank and attachment and Fixtures of any kind shall project above the height indicated in Para 2 above.
6. **The use of electric fire or oil fired is obligatory, within 8 Km** of the Aerodrome.
7. This certificate, is valid for a period of **3(three) years** from the date of issue if the building / structure / chimney is not constructed and completed within the above mentioned period of **3(three) years** he will be required to obtain **fresh** "No Objection Certificate" from the Chairman, Airports Authority of India and or the General Manager (Aerodromes), Airports Authority of India, Southern Region, Chennai Airport, Chennai – 600027. The date of completion of building / structure / Chimney should be intimated to the General Manager (Aero–SR), AAI, Chennai Airport, Chennai.
8. No light or a combination of lights which by reason of its intensity, configuration of colour may cause confusion with the aeronautical ground lights of the Airport shall be installed at the site at any time during or after the construction of the building.
9. This certificate is application only for the purposes of clearance from the angles of in safety and for **height clearance only**. This issue of NOC is with the approval of Competent Authority. **Day and night markings with secondary power supply shall be provided as per ICAO standard.**

(R.D. ALEX)
Senior Manager ATC (NOC)
For General Manager (Aero-SR), AAI, Chennai Airport

Copy forwarded for information to:
1. The Executive Director, Airports Authority of India, Rajiv Gandhi Bhavan, Safdarjung Airport, New Delhi-3.
2. The D.E.(Telecom- Survey), BSNL, Ethiraj Salai, Chennai.
3. The Member Secretary, CMDA, 1 Gandhi Irwin Salai, Chennai.

रॉबिन्सन डी. अलेक्स
ROBINSON D. ALEX
वरिष्ठ प्रबंधक (वि.या.नि. अनापत्ति)
Senior Manager (ATC-NOC)
भारतीय विमानपत्तन प्राधिकरण
Airports Authority of India
हवाईअड्डा, चेन्नई-600
Chennai Airport, Chennai-600 027

Annexure - 23

DEPARTMENT OF ENVIRONMENT

From
Thiru K.S. Neelakantan, I.F.S.,
Director, Dept. of Environment,
Ground Floor, Panagal Buildings,
Saidapet, Chennai - 600 015

To
M/s. Hubert Enviro Care Systems (P) Ltd
No.18, 92nd Street,
Ashok Nagar,
Chennai - 600 083

==========

R.C No.P1/1532/2007 dated 27.04.2007

Sir,

Sub: Coastal Regulation Zone - Status of property with reference to CRZ Notification - Requested - Regarding.

Ref: Letter dated 26.04.2007 from M/s. Hubert Environ Care Systems (P) Ltd., Chennai

xxxx

I am to inform that as per the HTL survey map available in this office, the property situated in S Nos. 13/1A of Egattur Village, Chengalpet Taluk, Kancheepuram District falls beyond 100 mts. of HTL of Buckingham Canal. Hence the said property does not attract the provisions of CRZ Notification 1991.

For Director of Environment

Annexure 24

ந.க.எண்.ஜ2/1154/2008
நாள். 13.03.2009

மாவட்ட காவல் அலுவலகம்,
காஞ்சிபுரம்.

தடையில்லாச் சான்று

பொருள்: காவல் –காஞ்சிபுரம் மாவட்டம் – கேளம் பாக்கம் காவல்நிலைய சரகத்திற்குட்பட்ட எண். 34, ஏகாட்டூர் கிராமத்தில் அடங்கிய சர்வே எண். 13/1ஏ –ல் 6.58 ஏக்கர் பரப்பளவு நிலத்தில் அடுக்குமாடி வணிக வளாகம், ஓட்டல் மற்றும் திரை அரங்கம் கட்டுவதற்கு தி/ள் Allied Majestic Promoters, சென்னை நிறுவனத்தினர் – போக்குவரத்து மற்றும் காவல்துறையின் கண்ணோட்டத்தில் தடையில்லாச் சான்று கோரியது – தடையில்லாச் சான்று வழங்குவது – தொடர்பாக.

பார்வை: 1) தி/ள் Allied Majestic Promoters எண்.13. வெங்கட்ராமன் தெரு, தி.நகர், சென்னை –17 அவர்களின் 29.11.2007 நாளிட்ட மனு கூடுதல் காவல் ஆணையர், போக்குவரத்து, சென்னை மாநகரம் அவர்களின் மேல்வரைவு கடித ந.க.எண்.SI/Addl.COP/Traffic/2360/44399/07 dated 1.12.2007 நாளிட்ட கடிதத்துடன் பெறப்பட்டது.

2) இவ்வலுவலக கடித ந.க.இதே எண். நாள்.24.6.08.

3) தி/ள் Allied Majestic Promoters எண்.13. வெங்கட்ராமன் தெரு, தி.நகர், சென்னை –17 அவர்களின் 06.03.2009 நாளிட்ட மனு.

மாமல்லபுரம் உட்கோட்டம், கேளம் பாக்கம் காவல்நிலைய எல்லைக்குட்பட்ட ஏகாட்டூர் கிராம சர்வே எண்.13/1ஏ –ல் அடங்கிய 6.58 ஏக்கர் நிலப்பரப்பில் இணைப்பு வரைபடத்தில் குறிப்பிட்டுள்ளபடி தி/ள் Allied Majestic Promoters சென்னை –17 என்ற நிறுவனத்தினர் அடுக்குமாடி வணிக வளாகம், ஓட்டல் மற்றும் திரை அரங்கம் கட்ட போக்குவரத்து மற்றும் காவல்துறையின் கண்ணோட்டத்தில் அனுமதி வேண்டியது தொடர்பாக புலத்தணிக்கை செய்து விசாரணை மேற்கொள்ளப்பட்டது.

2) கட்டிடங்கள் அமைய உள்ள இடமானது ஏகாட்டூர் கிராமத்தில் சென்னை –மாமல்லபுரம் செல்லும் பழைய மாமல்லபுரம் சாலையின் கிழக்குப்பக்கம் அமைந்துள்ளது. கட்டிடங்கள் அமைய உள்ள இடத்தின் வடக்கே அமிர்தாஞ்சன் நிறுவனத்தின் தொழிற்சாலையும், தெற்கு மற்றும் கிழக்குப்பகுதிகள் ஈரந்தானி அப்ஸ்கேஸ் நிறுவனத்தினருக்கு சொந்தமான பட்டா நிலமும் உள்ளது. அதில் ஈரந்தானி அப்ஸ்கேஸ் நிறுவனத்தினர் கட்டிடங்கள் கட்டும் கட்டுமான பணி நடந்து வருகிறது.

3) மேற்கண்ட நிறுவனத்தினர் கட்ட உத்தேசித்துள்ள தரைதளம் மற்றும் ஒன்பது அடுக்கு கொண்ட மாடி கட்டிடத்தில் ஐந்தாவது மாடியில் திரை அரங்கம் அமைய உள்ளது. ஒன்பது மாடியுடன் கூடிய அடுக்குமாடி கட்டிடமானது, கீழ்பகுதியில் இருந்து ஆரம் பிக்கும் கட்டிடமாக இரண்டு பேஸ்மெண்ட் அடுக்காகவும், அதற்கு மேல் லோயர் கிரவுண்டு தளமும், அதற்கு மேல் தரைதளமும், அதனைத் தொடர்ந்து தரைதளத்தில் இருந்து 9 அடுக்குகளாக மொத்தம் 5647.54 சதுர மீட்டர் பரப்பளவில் கட்டிடம் அமைக்க உள்ளது விசாரணையில் தெரிய வருகிறது.

4) ஒன்பது அடுக்குகொண்ட அடுக்குமாடி கட்டிடத்தில், முதல் தளம் உணவகம் மற்றும் அதனைச் சார்ந்து ஷாப்பிங் காம்ப்ளக்ஸ் அமைக்கப்பட உள்ளதும், மேற்படி ஷாப்பிங் காம்ப்ளக்ஸ் இடத்தில் 270 கார்கள் நிற்கும் அளவிற்க பார்கிங் வசதிக்காக இடம் ஒதுக்கீடு செய்யப்பட்டுள்ளது.

5) இரண்டாவது மற்றும் மூன்றாவது மாடியில் ஷாப்பிங் காம்ப்ளக்ஸ் மற்றும் குடியிருப்புகள் அமைய உள்ளது. மேற்கண்ட நிறுவனத்தார் 4வது மாடியில் அமைக்க உள்ள திரையரங்கம் மொத்தம் தரைதளத்தில் இருந்து 23 மீட்டர் உயரத்தில் அமைய உள்ளது. மேற்படி திரையரங்கம் 9 பிரிவுகளாக சிறு சிறு திரையரங்கமாகவும், மொத்தம் 1715 நபர்கள் அமர்ந்து பார்க்கும் வண்ணம் 9 திரைகள் அமைக்கப்பட உள்ளது விசாரணையில் தெரிய வருகிறது. மேற்படி திரையரங்கம் வந்து செல்வோர்களின் அவசர கால நிலையில் திரையரங்கம் விட்டு வெளியேற ஒவ்வொரு திரையரங்குகளிலும் 1.8m x 2.4m அளவுள்ள 5 முதல் 3 நபர்கள் வெளியேறும் நிலையில் அமைக்கப்பட்டும், 7 இடங்களில் தீ மற்றும் மின் இணைப்புகளில் ஏற்படும் விபத்துக் காலங்களில் மக்கள் வெளியேற படிக்கட்டு வசதிகள் செய்யப்பட்டு மேற்படி திரையரங்கம் செயல்பட தேசிய கட்டிட விதி (National Building Code 2005 Sec.4)–ன்படி ஒப்புதல் பெறப்பட்ட நிலையில் கட்டிடங்கள் அமைய உள்ளது விசாரணையில் தெரிய வருகிறது. மேலும், நான்காவது மாடியில் 9 திரையரங்கம் மற்றும் 322 கார்கள் நிறுத்தம் செய்யக்கூடிய அளவில் பார்கிங் இடவசதி செய்யப்பட்டும் வெளிநபர்களின் கார் பார்கிங் வேண்டி 125 கார்கள் நிற்கும் அளவில் கூடுதலாக இடவசதி அமைக்கப்பட உள்ளதும் விசாரணையில் தெரிய வருகிறது.

6) ஐந்தாவது மாடி முதல் எட்டாவது மாடிவரையில் குடியிருப்புகளுக்கான கட்டிடங்களும் ஒன்பதாவது மாடியில் குடியிருப்புகளுடன் கூடிய ஷாப்பிங் காம்ப்ளக்ஸ்–ம் அமைய உள்ளது. மேல்தளமாகிய மொட்டை மாடியில் ஒரு நீச்சல் குளம் அமைக்கப்பட்டும் அதனுடன் ஒரு டென்னிஸ் ஆடுகளமும் அமைய உள்ளது. மேலும், திரையரங்கம் அமைய உள்ள தளத்திற்கு மேல்பகுதியில் நான்கு தளங்களும், கீழ்பகுதியில் தரைதளத்துடன் கூடிய நான்கு தளங்களும் கார்பார்க்கிங் வசதிக்காக இரண்டு பேஸ்மெண்ட் தளங்களும் அமைக்க உள்ளதும் விசாரணையில் தெரிய வருகிறது.

பொதுமக்கள் அதிகம் கூடக்கூடிய இடங்களாக உணவகம் அமைய உள்ள முதல் தளமும் அதற்கு மேல் உள்ள இரண்டு மற்றும் மூன்றாவது தளங்கள் வர்த்தக ரீதியில் ஷாப்பிங் காம்பளக்ஸ் அமைய உள்ள இடமாக கட்டிடம் அமைய உள்ளது.

6) கட்டிடங்கள் அமைய உள்ள இடத்திற்கு வந்து செல்லும் வாகனங்கள் பழைய மாமல்லபுரம் சாலையில் இருந்து, கட்டிடம் அமைய உள்ள இடத்தின் வடக்குப் பக்கம் நுழைவுப் பகுதியாகவும், தெற்குப் பக்கம் வெளிவரும் பகுதியாகவும் தீர்மானிக்கப்பட்டு கட்டிடங்கள் அமைய உள்ளது. இதனால் மேற்படி இடத்தில் போக்குவரத்திற்கோ, பொதுமக்களுக்கோ இடையூறு ஏதும் ஏற்பட வாய்ப்புகள் இல்லை என விசாரணையில் தெரிய வருவதாலும், பார்வை 3-ல் கண்ட மேற்படி நிறுவனத்தாரின் மனுவில் உறுதி அளித்துள்ளவாறு அனைத்து முன்னெச்சரிக்கை நடவடிக்கைகளுடன் அடுக்குமாடி வணிக வளாகம், ஓட்டல் மற்றும் திரை அரங்கம் அமையும் பட்சத்தில், போக்குவரத்து கண்ணோட்டத்தில் மறுப்பின்மை சான்று வழங்க காவல்துறை சார்பில் ஆட்சேபணை ஏதும் இல்லை எனத் தெரிவித்துக்கொள்கிறேன்.

13/3/09

காவல் கண்காணிப்பாளருக்காக,
காஞ்சிபுரம் மாவட்டம்.

13/3

பெறுநர்

திரு/திருமதி Allied Majestic Promoters,
எண்.13, வெங்கட்ராமன் தெரு,
தி.நகர், சென்னை-17.

Original given to DTCP
chairperson
KVSaminathan

காஞ்சிபுரம் மாவட்ட ஆட்சித் தலைவர் அவர்களின் செயல்முறைகள்

முன்னிலை: திரு. சந்தோஷ் கே மிஸ்ரா, இ.ஆ.ப.,

நக 31265/2008 எம்.1 நாள் 20.11.2008.

பொருள்: தடையின்மைச் சான்று -- காஞ்சிபுரம் மாவட்டம் -- செங்கல்பட்டு வட்டம் -- ஏகாட்டூர் கிராமம் -- புல எண்.13/1ஏ1-ல் திரு.ஜே.முகம்மது அர்ஷத் என்பவர் 9 (ஒன்பது) நிரந்தர திரையரங்குகள் அமைத்திட மறுப்பின்மைச் சான்று கோரியது -- ஆணை அளித்தல்.

பார்வை: 1. திரு.ஜே.முகம்மது அர்ஷத், M/s.Allied Majestic Promoters,No117 Sir Thiyaqgaraya Road,T.Nagar, Chennai 17 கடிதம் நாள் 17.6.2006.

2. வட்டார வளர்ச்சி அலுவலர், திருப்போரூர் கடிதம் ந.க.40-08, நாள் 25.6.2008.
3. காஞ்சிபுரம் மாவட்ட அரசிதழ் எண்.19,நாள் 11.7.2008.
4. தலைவர், முட்டுக்காடு ஊராட்சி மன்றம் தீர்மானம் நாள் 28.6.2008.
5. வட்ட ஆட்சியர், செங்கல்பட்டு கடிதம் ந.க.6302/2008, அ.4. நாள் 24.9.2008.
6. சார் ஆட்சியர், செங்கல்பட்டு கடிதம் மு.மு.6655-2008, அ. நாள் 6.11.2008.
7. காவல்துறை கண்காணிப்பாளர், காஞ்சிபுரம் கடிதம் ந.க.ஜி.2/1154/2008, நாள் 24.6.2008.
8. உதவி ஆணையர், வணிகவரி,காஞ்சிபுரம் ந.க.5655/2008, நாள் 13.11.2008.

-- -- --

ஆணை:-

திரு.ஜே.முகம்மது அர்ஷத், த/பெ.எம்.ஏ.ஜின்னா, M/s.Allied Majestic Promoters, No.117 Sir Thiyagaraya Road, T.Nagar, Chennai-17 என்பவர் செங்கல்பட்டு வட்டம், ஏகாட்டூர் கிராமப் புலஎண்.131/ஏ-ல் நிரந்தர திரையரங்கம் அமைத்திட மறுப்பின்மைச்சான்று கோரியது தொடர்பாக சார்நிலை அலுவலர்களிடம் அறிக்கைகள் கோரப்பட்டன.

தடையின்மைச்சான்று விண்ணப்பிக்கும் பொருட்டு, ஒருதிரையரங்கிற்கு உரிமக் கட்டணமாக ரூ.1,000 (ரூபாய் ஒருஆயிரம் மட்டும்) வீதம் 9(ஒன்பது) திரையரங்குகளுக்கு ரூ.9,000 (ரூபாய் ஒன்பதாயிரம் மட்டும்) காஞ்சிபுரம் பாரதஸ்டேட் வங்கியில் 20.6.2008 செலுத்தப்பட்டுள்ளது. தடையின்மைச் சான்று வழங்கிட ஆட்சேபணைகள் குறித்து காஞ்சிபுரம் மாவட்ட அரசிதழிலும், காஞ்சிபுரம் மாவட்ட ஆட்சியர் அலுவலகம் மற்றும் திருப்போரூர் ஊராட்சி ஒன்றிய அலுவலக விளம்பரபலகையில் அறிவிக்கை பிரசுரம் செய்யப்பட்டது. ஆட்சேபணைகள் ஏதும் பெறப்படவில்லை.

2. முட்டுக்காடு கிராம ஊராட்சி மன்றத்தின் 28.6.2008 தேதிய கடிதத்தில் செங்கல்பட்டு வட்டம், ஏகாட்டூர் கிராமத்தில் ஒன்பது திரையரங்குகள் அமைத்திட மறுப்பின்மைச்சான்று வழங்க தீர்மானம் வழங்கப்பட்டுள்ளது.

3. பிரஸ்தாப புலத்தில் நிலஎடுப்பு நடவடிக்கைகள் தற்போ ஏதுமில்லையென நிலஎடுப்பு அலுவலர்களும், செங்கல்பட்டு, வணிக வரி உதவி ஆணையர் தடையின்மை சான்று கோரும் நிறுவனம், இம்மாவட்டத்தில் தமிழ்நாடு கேளிக்கைவரிச் சட்டத்தின் கீழ் தண்டனை ஏதும் பெறவில்லை என்றும், வரிபாக்கி நிலுவை ஏதுமில்லை என்றும் தெரிவித்துள்ளார்.

4. காவல்துறை கண்காணிப்பாளர், காஞ்சிபுரம் அறிக்கையில் செங்கல்பட்டு வட்டம், ஏகாட்டூர் கிராமப் புலஎண்.13/1ஏ1-ல் (பழைய புல எண்.13/1ஏ)-ல் 9 (ஒன்பது) திரையரங்குகள் அமையவுள்ள கட்டிடப் பகுதிக்குள் வாகனபோக்கு வரத்திற்கும் பொதுமக்களின் அமைதிக்கும் குந்தகம் விளைவிக்கக் கூடிய சாத்தியக் கூறுகள் இல்லையென்றும், சட்டம் ஒழுங்கு பிரச்சனைகள் ஏற்பட வாய்ப்புகள் இல்லையென்பதால், மறுப்பின்மைச்சான்று வழங்க காவல்துறை சார்பில் ஆட்சேபணை இல்லையென தெரிவித்துள்ளார்.

5. செங்கல்பட்டு வட்ட ஆட்சியர் பிரஸ்தாப புலத்தினை 7.7.2008 அன்று நேரடி தணிக்கை செய்து, கீழ்க்கண்டவாறு அறிக்கை சமர்ப்பித்துள்ளார். செங்கல்பட்டு வட்டம், நெ.34 ஏகாட்டூர் கிராமப்புல எண்.13/1ஏ1-ல் 2.26.5 உறக். புஞ்சை நிலம் ஆயிஷா மற்றும் முக்ரிம் பெயரில் பட்டாஎண்.7-ன் கீழ் கூட்டுப் பட்டாவாக தாக்கலாகியுள்ளது. இப்புலத்திற்கு மனுதாரர் திரு.முகம்மது அர்ஷத், த/பெ.ஜின்னா என்பவருக்கு பட்டாதாரர்களால் பொது அதிகாரம் வழங்கப்பட்டுள்ளது. இப்புலத்தில் வணிக வளாகம், உணவகத்துடன் கூடிய மொத்தம் 56471.54ச.மீ., பரப்பில் ஒன்பது அடுக்கு மாடி கட்டிடத்தில் 9 (ஒன்பது)திரையரங்குகள் அமைக்க உத்தேசிக்கப்பட்டுள்ளது.

பிரஸ்தாப புலம் பழைய மகாபலிபுரம் சாலைக்கு கிழக்குப் பக்கத்தில் அமைந்துள்ளது. உத்தேச திரையரங்கிற்கு இச்சாலை அணுகு பாதையாக உள்ளது. பிரஸ்தாப புலத்திற்கு 200 மீட்டர் சுற்றளவில் கல்வி நிலையங்களோ, பொதுமைதானம், வழிபாட்டு தலங்கள், உயர் குறைந்த அழுத்த மின் கம்பிகள், புராதானச்சின்னங்கள், விலையுயர்ந்த மரங்கள் ஏதுமில்லை. பிரஸ்தாப புலங்கள் நிலச்சீர்த்திருத்தம் நகர்ப்புற நிலவரம்பு மற்றும் நிலஎடுப்பில் கவரப்படவில்லை. விசாரணை அறிக்கையுடன் பிரஸ்தாப புலத்தில் 9 (ஒன்பது) திரையரங்குகள் அமைப்பது தொடர்பாக பொதுமக்களிடமிருந்து ஆட்சேபணைகள் ஏதும் பெறப்படவில்லை மறுப்பின்மைச் சான்று வழங்கலாம் என்று பரிந்துரை செய்துள்ளார். செங்கல்பட்டு வருவாய்க் கோட்ட அலுவலர் (பொறுப்பு) பிரஸ்தாப புலத்தினை 23.10.2008 அன்று நேரடி புலத்தணிக்கை மேற்கொண்டு மேற்படி புலத்தில் 9 (ஒன்பது) திரையரங்குகள் அமைத்திட மறுப்பின்மைச் சான்று வழங்கலாம் என்று பரிந்துரை செய்துள்ளார்.

6. எனவே, தமிழ்நாடு திரையரங்குகள் (ஒழுங்குமுறைகள்) விதிகள், 1957 விதி-36(1)-ன்படி வழங்கப்பட்டுள்ள அதிகாரத்தின்படி, காஞ்சிபுரம் மாவட்டம். செங்கல்பட்டு வட்டம், எண்.34 ஏகாட்டூர் கிராமம்

புலஎண்.13/1ஏ1-ல் பல அடுக்குகளுடன் கூடிய வணிக வளாகம், குடியிருப்புகள் மற்றும் உணவகத்துடன் கூடிய கட்டிடத்தில் ஒன்பது (9) திரையரங்குகள் அமைத்திட தடையின்மைசான்று படிவம்-2பி-ல் வழங்கப் படுகிறது. இத்துடன் தடையின்மைச்சான்றும், அங்கீகரிக்கப்பட்ட வரைபடமும் இணைக்கப்பாட்டுள்ளது.

ஓம்- சந்தோஷ் கே மிஸ்ரா,
மாவட்ட ஆட்சித் தலைவர்.
காஞ்சிபுரம்

/உத்திரவின்படி/

மேலாளர் (நிதியியல்)

பெறுநர்

திரு.ஜே.முகம்மது அர்ஷத்,
M/s.Allied Majestic Promoters,
No117 Sir Thiyagaraya Road,
T.Nagar, Chennai 17

நகல் :சார் ஆட்சியர்,செங்கல்பட்டு
நகல்: வட்டாட்சியர்,செங்கல்பட்டு

ந.க.31265/2008, எம். 1. நாள்: 19.11.2008 மாவட்ட ஆட்சியர் அலுவலகம்,
காஞ்சிபுரம்

படிவம் - 2-பி
தடையின்மைச் சான்றிதழ்
(விதி 36 பாகம் 2)

1957 ஆம் ஆண்டின் திரையரங்குகள் (ஒழுங்குபடுத்தும்) விதிகள் 2-ம் பாகம், 36(1)விதியில் அளித்துள்ள அதிகாரங்களைக் கொண்டு காஞ்சிபுரம் மாவட்ட ஆட்சித் தலைவர் அவர்களால் திரு.ஜெ.முகம்மது அர்ஷத், த/பெ.எம்.ஏ.ஜின்னா, M/s.Allied Majestic Promoters, No.117 Sir Thiyagaraya Road, T.Nagar,Chennai-17 செங்கல்பட்டு வட்டம், நெ.34. ஏகாட்டூர் கிராமம் புலஎண்.13/1ஏ1-ல் பல அடுக்குகளுடன் கூடிய வணிக வளாகம், குடியிருப்புகள் மற்றும் உணவகத்துடன் கூடிய கட்டிடத்தில் ஒன்பது (9) திரையரங்குகள் அமைக்க தடையில்லை எனக்கருதி இச்சான்றிதழ் வழங்கப்படுகிறது.

2. திரையரங்குகள் அமைக்கப்படும் இடத்தின் விவரங்கள் கீழே கொடுக்கப்பட்டுள்ளன.

அ. புல எண். 13/1ஏ1
ஆ. நெ.34. ஏகாட்டூர் கிராமம்
இ. செங்கல்பட்டு வட்டம்

நிபந்தனைகள்:

1. இச்சான்று பெற்றபின் விதிகளின்படி முறையாக திரையரங்கின் கட்டிட வரைபட ஒப்புதல் பெற்றும், ஒப்புதல் பெற்றபடி அமைக்கப் பட்டிருப்பது குறித்து பொதுப்பணித்துறை பொறியாளரின் சான்றிதழின் அடிப்படையில் மட்டுமே 'சி' படிவ உரிமம் பெற மனு செய்திடல் வேண்டும்.

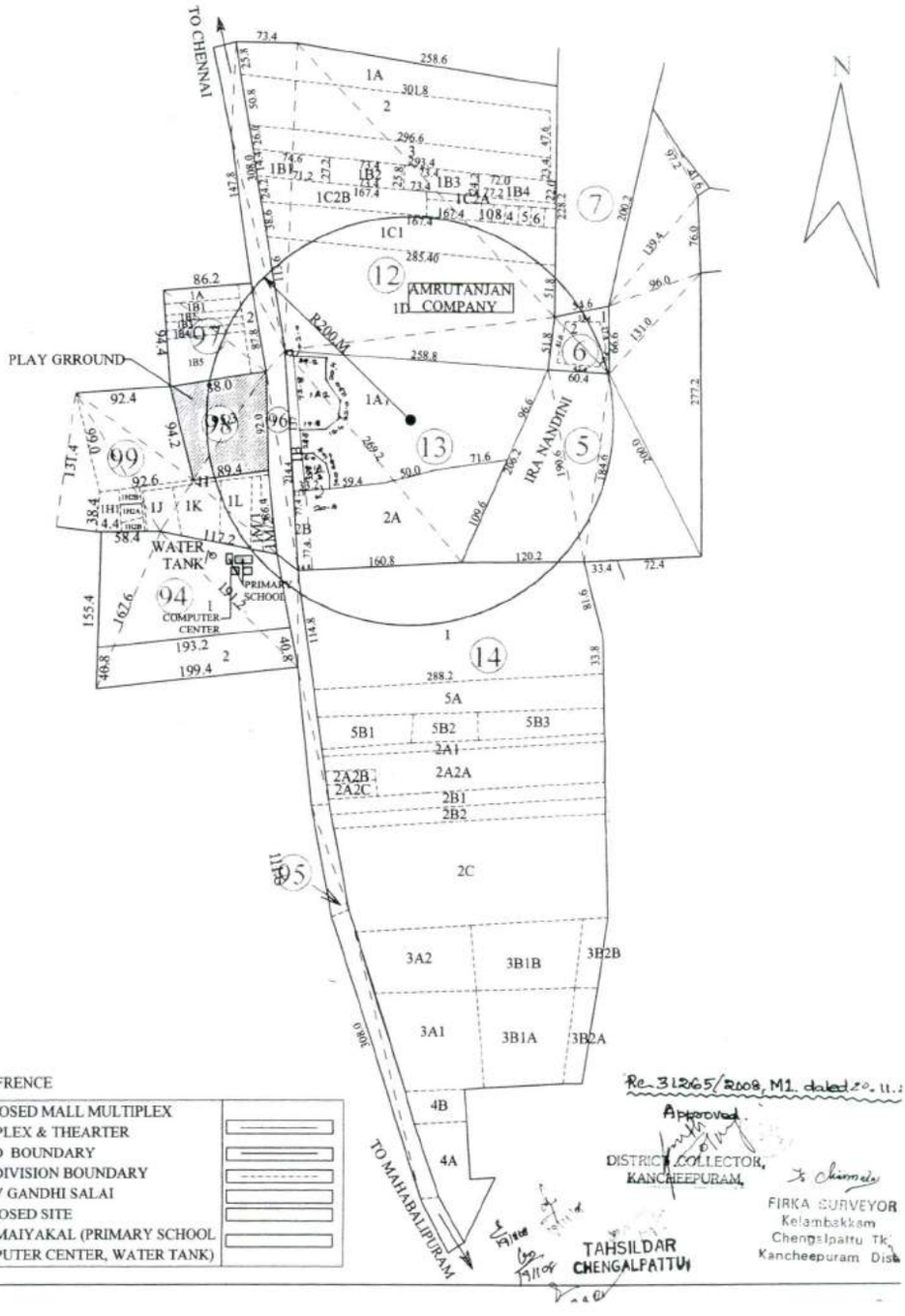
2. இந்த தடையின்மைச் சான்று கையொப்பமிட்ட தேதியிலிருந்து 5 (ஐந்து) ஆண்டுகள் வரை செல்லுபடியாகும். இந்த கால அளவுக்குள் திரையரங்குகளை கட்டிமுடிக்காவிட்டால், புதிய தடையின்மைச்சான்று பெற விண்ணப்பிக்க வேண்டும்.

2008 ஆம் ஆண்டு அக்டோபர் மாதம் 20-ம் நாள் கையொப்பமிடப்பட்டது.

மாவட்ட ஆட்சித் தலைவர்
காஞ்சிபுரம்

பெறுநர்
திரு.ஜெ.முகம்மது அர்ஷத், த/பெ.எம்.ஏ.ஜின்னா,
M/s.Allied Majestic Promoters,
No.117 Sir Thiyagaraya Road,
T.Nagar, Chennai-600 017

COMBINED SKETCH SHOWING 200 METRE RADIUS IN NO. 34 EGATTUR VILLAGE, OF S.NO. 13/1A, FOR THE PROPOSED CONSTRUCTION OF MALL MULTIPLEX COMPLEX AND THEATER.



REFRENCE

PROPOSED MALL MULTIPLEX COMPLEX & THEARTER	
FIELD BOUNDARY	
SUB DIVISION BOUNDARY	
RAJIV GANDHI SALAI	
PROPOSED SITE	
94/1 MAIYAKAL (PRIMARY SCHOOL COMPUTER CENTER, WATER TANK)	

Re-31265/2008, M1. dated 20.11.2

Approved.

DISTRICT COLLECTOR,
KANCHEEPURAM.

TAHSILDAR
CHENGALPATTU

FIRKA SURVEYOR
Kelambakkam
Chengalpattu Tk.
Kancheepuram Dist.

ந.க.எண்.ஜ2/164/2008 மாவட்ட காவல் அலுவலகம்,
நாள். 24.06.2008 காஞ்சிபுரம்.

<u>**தடையில்லாச் சான்று**</u>

பொருள்: காவல்—காஞ்சிபுரம் மாவட்டம் —கேளம்பாக்கம் காவல்நிலைய சரகத்திற்குட்பட்ட எண்.34, ஏகாட்டூர் கிராமத்தில் அடங்கிய சர்வே எண். 13/ஏ—ல் 6.68 ஏக்கர் பரப்பளவு நிலத்தில் அடுக்குமாடி வணிக வளாகம், ஓட்டல் மற்றும் திரை அரங்கம் கட்டுவதற்கு தி/ள். **Allied Majestic Promoters,** சென்னை நிறுவனத்தினர் — போக்குவரத்து மற்றும் காவல்துறையின் கண்ணோட்டத்தில் தடையில்லாச் சான்று கோரியது — தடையில்லாச் சான்று வழங்குவது தொடர்பாக.

பார்வை: தி/ள் **Allied Majestic Promoters,** எண்.13, வெங்கட்ராமன் தெரு, தி.நகர், சென்னை—17 அவர்களின் 29.11.2007 நாளிட்ட மனு கூடுதல் காவல் ஆணையர், போக்குவரத்து, சென்னை மாநகரம் அவர்களின் மேல்வரைவு கடித ந.க.எண்.SI/Addl.COP/Traffic/2360/44399/07, 31.12.2007 நாளிட்ட கடிதத்துடன் பெறப்பட்டது.

மாமல்லபுரம் உட்கோட்டம், கேளம்பாக்கம் காவல்நிலைய எல்லைக்குட்பட்ட ஏகாட்டூர் கிராம சர்வே எண்.13/ஏ—ல் அடங்கிய 6.68 ஏக்கர் நிலப்பரப்பில் இணைப்பு வரைபடத்தில் குறிப்பிட்டுள்ளபடி தி/ள்.**Allied Majestic Promoters,** சென்னை—17 நிறுவனத்தினர் அடுக்குமாடி வணிக வளாகம், ஓட்டல் மற்றும் திரைஅரங்கம் கட்ட போக்குவரத்து மற்றும் காவல்துறையின் கண்ணோட்டத்தில் அனுமதி வேண்டியது தொடர்பாக புலத்தணிக்கை செய்து விசாரணை மேற்கொள்ளப்பட்டது.

௨) கட்டிடங்கள் அமைய உள்ள இடமானது ஏகாட்டூர் கிராமத்தில் சென்னை—மாமல்லபுரம் செல்லும் பழைய மாமல்லபுரம் சாலையின் கிழக்குப் பக்கம் அமைந்துள்ளது. கட்டிடங்கள் அமைய உள்ள இடத்தின் வடக்கே அமிர்தாஞ்சன் நிறுவனத்தின் தொழிற்சாலையும், தெற்கு மற்றும்

கிழக்குப்பகுதிகள் ஈரந்தூர் "அப்ஸ்டேக்ஸ்" நிறுவனத்தினருக்கு சொந்தமான பட்டா நிலமும் உள்ளது. அதில் ஈரந்தூர் "அப்ஸ்டேக்ஸ்" நிறுவனத்தினர் கட்டிடங்கள் கட்டும் கட்டுமான பணி நடந்து வருகிறது.

3) மேற்கண்ட நிறுவனத்தினர் கட்ட உத்தேசித்துள்ள தரைதளம் மற்றும் ஒன்பது அடுக்கு கொண்ட மாடி கட்டிடத்தில் ஐந்தாவது மாடியில் திரை அரங்கம் அமைய உள்ளது. ஒன்பது மாடியுடன் கூடிய அடுக்குமாடி கட்டிடமானது, கீழ்பகுதியில் இருந்து ஆரம் பிக்கும் கட்டிடமாக இரண்டு பேஸ்மென்ட் அடுக்காகவும், அதற்கு மேல் கோயர் கிரவுண்டு தளமும், அதற்குமேல் தரைதளமும் அதனைத் தொடர்ந்து தரைதளத்தில் இருந்து 9 அடுக்குகளாக மொத்தம் 66471.64 சதுர மீட்டர் பரப்பளவில் கட்டிடம் அமைக்க உள்ளது விசாரணையில் தெரியவருகிறது.

4) ஒன்பது அடுக்குகொண்ட அடுக்குமாடி கட்டிடத்தில், முதல் தளம் உணவகம் மற்றும் அதனைச் சார்ந்து ஷாப்பிங் காம்ப்ளக்ஸ் அமைக்கப்பட்டும், மேற்படி ஷாப்பிங் காம்ப்ளக்ஸ் இடத்தில் 270 கார்கள் நிற்கும் அளவிற்கு பார்கிங் வசதிக்காக இடம் ஒதுக்கீடு செய்யப்பட்டுள்ளது.

5) இரண்டாவது மற்றும் மூன்றாவது மாடியில் ஷாப்பிங் காம்ப்ளக்ஸ் மற்றும் குடியிருப்புகள் அமைய உள்ளது. மேற்கண்ட நிறுவனத்தார் 4வது மாடியில் அமைக்க உள்ள திரையரங்கம் மொத்தம் தரைதளத்தில் இருந்து 23 மீட்டர் உயரத்தில் அமைய உள்ளது. மேற்படி திரையரங்கம் 9 பிரிவுகளாக சிறு சிறு திரையரங்குமாகவும், மொத்தம் 1,715 நபர்கள் அமர்ந்து பார்க்கும் வண்ணம் 9 திரைகள் அமைக்கப்பட உள்ளது விசாரணையில் தெரிய வருகிறது. மேற்படி திரையரங்கம் வந்து செல்வோர்களின் அவசர கால நிலையில் திரையரங்கம் விட்டு வெளியேற ஒவ்வொரு திரையரங்குகளிலும் 1.8m x 2.4m அளவுள்ள 5 முதல் 3 நபர்கள் வெளியேறும் நிலையில் அமைக்கப்பட்டும், 7 இடங்களில் தீ மற்றும் மின் இணைப்புகளில் ஏற்படும் விபத்துக் காலங்களில் மக்கள் வெளியேற படிக்கட்டு வசதிகள் செய்யப்பட்டு மேற்படி திரையரங்கம் செயல்பட தேசிய கட்டிட விதி

(National Building Code 2005 Sec.4) –ன்படி ஒப்புதல் பெறப்பட்ட நிலையில் கட்டிடங்கள் அமைய உள்ளது விசாரணையில் தெரிய வருகிறது. மேலும், நான்காவது மாடியில் 9 திரையரங்கம் மற்றும் 322 கார்கள் நிறுத்தும் செய்யக்கூடிய அளவில் பார்கிங் இடவசதி செய்யப்பட்டும் வெளிநபர்களின் கார் பார்கிங் வேண்டி 125 கார்கள் நிற்கும் அளவில் கூடுதலாக இடவசதி அமைக்கப்பட உள்ளதும் விசாரணையில் தெரிய வருகிறது.

6) ஐந்தாவது மாடி முதல் எட்டாவது மாடிவரையில் குடியிருப்புகளுக்கான கட்டிடங்களும் ஒன்பதாவது மாடியில் குடியிருப்புகளுடன் கூடிய ஷாப்பிங் காம்ப்ளக்ஸ் –ம் அமைய உள்ளது. மேல்தளமாகிய மொட்டைமாடியில் ஒரு நீச்சல் குளம் அமைக்கப்பட்டும் அதனுடன் ஒரு டென்னீஸ் ஆடுகளமும் அமைய உள்ளது. மேலும், திரையரங்கம் அமைய உள்ள தளத்திற்கு மேல்பகுதியில் நான்கு தளங்களும், கீழ்பகுதியில் தரைதளத்துடன் கூடிய நான்கு தளங்களும் கார்பார்க்கிங் வசதிக்காக இரண்டு டெல்மெண்ட் தளங்களும் அமைக்க உள்ளதும் விசாரணையில் தெரிய வருகிறது. பொதுமக்கள் அதிகம் கூடக்கூடிய இடங்களாக உணவகம் அமைய உள்ள முதல் தளமும் அதற்கு மேல் உள்ள இரண்டு மற்றும் மூன்றாவது தளங்கள் வர்த்தக ரீதியில் ஷாப்பிங் காம்ப்ளக்ஸ் அமைய உள்ள இடமாக கட்டிடம் அமைய உள்ளது.

கட்டிடங்கள் அமைய உள்ள இடத்திற்கு வந்து செல்லும் வாகனங்கள் பழைய மாமல்லபுரம் சாலையில் இருந்து, கட்டிடம் அமைய உள்ள இடத்தின் வடக்குப் பக்கம் நுழைவுப் பகுதியாகவும், தெற்குப் பக்கம் வெளிவரும் பகுதியாகவும் திர்மானிக்கப்பட்டு கட்டிடங்கள் அமைய உள்ளது. இதனால் மேற்படி இடத்தில் போக்குவரத்திற்கு இடையூறுகள் ஏதும் ஏற்பட வாய்ப்புகள் இல்லை என விசாரணையில் தெரிய வருகிறது.

4) பழைய மாமல்லபுரம் சாலையை ஆறுவழி பாதையாக தற்போது அகலப்படுத்தி வருவதாலும், மேற்படி இடம் ரோடில் இருந்து சுமார் 5 மீட்டர் தூரம் வரை கிழக்கு பக்கம் தள்ளியும் அதில் இருந்து சுற்றுச்சுவர்கள் அமைக்கப்பட்டு மேற்படி கட்டிடங்களுக்கு வந்து செல்லும்

இரண்டு சக்கர வாகனம் மற்றும் நான்கு சக்கர வாகனங்கள், கட்டிடப்பகுதிகளுக்கு உள்ளேயே நிறுத்தும் செய்யும் அளவிற்கு போதுமான பார்கிங் இட வசதியாக கீழ்தளம், தரைத்தளம் மற்றும் மேல் நோக்கி அமைப்புடன் கட்டிடங்கள் அமைய உள்ளது. எனவே, அங்கு வாகன போக்குவரத்திற்கும், பொதுமக்களின் அன்றாடம் குந்தகம் விளைவிக்கக்கூடிய சாத்தியக்கூறுகள் இல்லை. மேலும் இதுபோன்று கட்டிடங்கள் அமைய உள்ள இடங்களைச் சுற்றிலும் பலமாடி அடுக்குமாடி கட்டிடங்கள் கட்டப்பட்டு வருவதாலும், தனிப்பட்ட நபர்களின் குடியிருப்புகள், கட்டிடம் அமைய உள்ள இடத்தின அருகில் இல்லாததாலும், பொதுமக்களிடம் இருந்து எவ்விதமான புகார்களும் கட்டிடங்கள் கட்டப்பட்டு வருவது தொடர்பாக இதுநாள்வரை காவல்நிலையம் வரப்படாததால், அங்கு சட்டம் ஒழுங்கு பிரச்சனைகள் ஏற்படவும் வாய்ப்புகள் இல்லை.

மனுதாரர் திரையரங்கம், குடியிருப்புகளுடன் கூடிய ஷாப்பிங் காம்ப்ளக்ஸ் நிறுவனம் அமைக்க உள்ள கட்டிடமானது பாதுகாப்பு மிக்கதாகவும், திரையரங்கத்தில் உள்ள மக்கள் அவசர காலத்தில் திரையரங்கம் விட்டு பாதுகாப்புடன் தரைத்தளம் வந்து வெளியேற எல்லா வசதிகளுடன் கட்டிடம் அமைய உள்ளது விசாரணையில் தெரிய வந்தாலும், அவசர காலங்களில் பொதுமக்கள் விரைவாக வெளியேறுவது என்பது நடைமுறை சாத்தியமில்லை. எனவே, மனுதாரர் மேற்படி திரையரங்ககுகளை பொதுமக்கள் நலன் மற்றும் பாதுகாப்பு கருதி கீழ்தளத்திலே அமைக்கும் பட்சத்தில், மேற்கண்ட நிறுவனத்தாருக்கு மறுப்பின்மை சான்று வழங்க காவல்துறை சார்பில் ஆட்சேபணை இல்லை எனத் தெரிவித்துக்கொள்கிறேன்.

காவல் கண்காணிப்பாளருக்காக,
காஞ்சிபுரம் மாவட்டம்.

பெறுநர்
தி/ள்.Allied Majestic Promoters,
எண்.13, வெங்கட்ராமன் தெரு,
தி.நகர், சென்னை –17.

Annexure - 27

ந.க.எண்.ஸ்ரீ2/1154/2008 மாவட்ட காவல் அலுவலகம்,
நாள். 24.06.2008 காஞ்சிபுரம்.

தடையில்லாச் சான்று

பொருள்: காவல்–காஞ்சிபுரம் மாவட்டம் –கேளம்பாக்கம் காவல்நிலைய சரகத்திற்குட்பட்ட எண்.34, ஏகாட்டூர் கிராமத்தில் அடங்கிய சர்வே எண். 13/1ஏ–ல் 6.88 ஏக்கர் பரப்பளவு நிலத்தில் அடுக்குமாடி வணிக வளாகம், ஓட்டல் மற்றும் திரை அரங்கம் கட்டுவதற்கு தி/ள். **Allied Majestic Promoters,** சென்னை நிறுவனத்தினர் – போக்குவரத்து மற்றும் காவல்துறையின் கண்ணோட்டத்தில் தடையில்லாச் சான்று கோரியது – தடையில்லாச் சான்று வழங்குவது தொடர்பாக.

பார்வை: தி/ள் **Allied Majestic Promoters,** எண்.13, வெங்கட்ராமன் தெரு, தி.நகர், சென்னை–17 அவர்களின் 29.11.2007 நாளிட்ட மனு கூடுதல் காவல் ஆணையர், போக்குவரத்து, சென்னை மாநகரம் அவர்களின் மேல்வரைவு கடிதம் ந.க.எண்.S1/Addl.COP/Traffic/2360/44399/07. 31.12.2007 நாளிட்ட கடிதத்துடன் பெறப்பட்டது.

மாமல்லபுரம் உட்கோட்டம், கேளம்பாக்கம் காவல்நிலைய எல்லைக்குட்பட்ட ஏகாட்டூர் கிராம சர்வே எண்.13/1ஏ–ல் அடங்கிய 6.88 ஏக்கர் நிலப்பரப்பில் இணைப்பு வரைபடத்தில் குறிப்பிட்டுள்ளபடி தி/ள்.**Allied Majestic Promoters,** சென்னை–17 நிறுவனத்தினர் அடுக்குமாடி வணிக வளாகம், ஓட்டல் மற்றும் திரைஅரங்கம் கட்ட போக்குவரத்து மற்றும் காவல்துறையின் கண்ணோட்டத்தில் அனுமதி வேண்டியது தொடர்பாக பலத்தணிக்கை செய்து விசாரணை மேற்கொள்ளப்பட்டது.

2) கட்டிடங்கள் அமைய உள்ள இடமானது ஏகாட்டூர் கிராமத்தில் சென்னை–மாமல்லபுரம் செல்லும் பழைய மாமல்லபுரம் சாலையின் கிழக்குப் பக்கம் அமைந்துள்ளது. கட்டிடங்கள் அமைய உள்ள இடத்தின் வடக்கே அபிர்தாஞ்சன் நிறுவனத்தின் தொழிற்சாலையும், தெற்கு மற்றும்

கிழக்குப்பகுதிகள் ஈரந்தானி "அப்ஸ்கேஸ்" நிறுவனத்தினருக்கு சொந்தமான பட்டா நிலமும் உள்ளது. அதில் ஈரந்தானி "அப்ஸ்கேஸ்" நிறுவனத்தினர் கட்டிடங்கள் கட்டும் கட்டுமான பணி நடந்து வருகிறது.

3) மேற்கண்ட நிறுவனத்தினர் கட்ட உத்தேசித்துள்ள தரைதளம் மற்றும் ஒன்பது அடுக்கு கொண்ட மாடி கட்டிடத்தில் ஐந்தாவது மாடியில் திரை அரங்கம் அமைய உள்ளது. ஒன்பது மாடியுடன் கூடிய அடுக்குமாடி கட்டிடமானது, கீழ்பகுதியில் இருந்து தூம் பிக்கும் கட்டிடமாக இரண்டு பேஸ்மெண்ட் அடுக்காகவும், அதற்கு மேல் மோயர் கிரவுண்டு தளமும், அதற்குமேல் தரைதளமும் அதனைத் தொடர்ந்து தரைதளத்தில் இருந்து 9 அடுக்குகளாக மொத்தம் 56471.54 சதுர மீட்டர் பரப்பளவில் கட்டிடம் அமைக்க உள்ளது விசாரணையில் தெரியவருகிறது.

4) ஒன்பது அடுக்குகொண்ட அடுக்குமாடி கட்டிடத்தில், முதல் தளம் உணவகம் மற்றும் அதனைச் சார்ந்து ஷாப்பிங் காம் ப்ளக்ஸ் அமைக்கப்பட்டும், மேற்படி ஷாப்பிங் காம் ப்ளக்ஸ் இடத்தில் 270 கார்கள் நிற்கும் அளவிற்கு பார்கிங் வசதிக்காக இடம் ஒதுக்கீடு செய்யப்பட்டுள்ளது.

5) இரண்டாவது மற்றும் மூன்றாவது மாடியில் ஷாப்பிங் காம் ப்ளக்ஸ் மற்றும் குடியிருப்புகள் அமைய உள்ளது. மேற்கண்ட நிறுவனத்தார் 4வது மாடியில் அமைக்க உள்ள திரையரங்கம் மொத்தம் தரைதளத்தில் இருந்து 23 மீட்டர் உயரத்தில் அமைய உள்ளது. மேற்படி திரையரங்கம் 9 பிரிவுகளாக சிறு சிறு திரையரங்குமாகவும், மொத்தம் 1,715 நபர்கள் அமர்ந்து பார்க்கும் வண்ணம் 9 திரைகள் அமைக்கப்பட உள்ளது, விசாரணையில் தெரிய வருகிறது. மேற்படி திரையரங்கம் வந்து செல்வோர்களின் அவசர கால நிலையில் திரையரங்கம் விட்டு வெளியேற ஒவ்வொரு திரையரங்குகளிலும் 1.8m x 2.4m அளவுள்ள 6 முதல் 3 நபர்கள் வெளியேறும் நிலையில் அமைக்கப்பட்டும், 7 இடங்களில் தீ மற்றும் மின் இணைப்புகளில் ஏற்படும் விபத்துக் காலங்களில் மக்கள் வெளியேற படிக்கட்டு வசதிகள் செய்யப்பட்டு மேற்படி திரையரங்கம் செயல்பட தேசிய கட்டிட விதி

(National Building Code 2005 Sec.4) –ன்படி ஒப்புதல் பெறப்பட்ட நிலையில் கட்டிடங்கள் அமைய உள்ளது விசாரணையில் தெரிய வருகிறது. மேலும், நான்காவது மாடியில் 9 திரையரங்கம் மற்றும் 322 கார்கள் நிறுத்தும் செய்யக்கூடிய அளவில் பார்கிங் இடவசதி செய்யப்பட்டும் வெளிநபர்களின் கார் பார்கிங் வேண்டி 125 கார்கள் நிற்கும் அளவில் கூடுதலாக இடவசதி அமைக்கப்பட்ட உள்ளதும் விசாரணையில் தெரிய வருகிறது.

5) ஐந்தாவது மாடி முதல் எட்டாவது மாடிவரையில் குடியிருப்புகளுக்கான கட்டிடங்களும் ஒன்பதாவது மாடியில் குடியிருப்புகளுடன் கூடிய ஷாப்பிங் காம்ப்ளக்ஸ்–ம் அமைய உள்ளது. மேல்தளமாகிய மொட்டைமாடியில் ஒரு நீச்சல் குளம் அமைக்கப்பட்டும் அதனுடன் ஒரு டென்னீஸ் கோர்டுகளும் அமைய உள்ளது. மேலும், திரையரங்கம் அமைய உள்ள தளத்திற்கு மேல்பகுதியில் நான்கு தளங்களும், கீழ்பகுதியில் தரைதளத்துடன் கூடிய நான்கு தளங்களும் கார்பார்க்கிங் வசதிக்காக இரண்டு பேஸ்மெண்ட் தளங்களும் அமைக்க உள்ளதும் விசாரணையில் தெரிய வருகிறது. பொதுமக்கள் அதிகம் கூடக்கூடிய இடங்களாக உணவகம் அமைய உள்ள முதல் தளமும் அதற்கு மேல் உள்ள இரண்டு மற்றும் மூன்றாவது தளங்கள் வர்த்தக ரீதியில் ஷாப்பிங் காம்ப்ளக்ஸ் அமைய உள்ள இடமாக கட்டிடம் அமைய உள்ளது.

கட்டிடங்கள் அமைய உள்ள இடத்திற்கு வந்து செல்லும் வாகனங்கள் பழைய மாமல்லபுரம் சாலையில் இருந்து, கட்டிடம் அமைய உள்ள இடத்தின் வடக்குப் பக்கம் நுழைவுப் பகுதியாகவும், தெற்குப் பக்கம் வெளிவரும் பகுதியாகவும் தீர்மானிக்கப்பட்டு கட்டிடங்கள் அமைய உள்ளது. இதனால் மேற்படி இடத்தில் போக்குவரத்திற்கு இடையூறுகள் ஏதும் ஏற்பட வாய்ப்புகள் இல்லை என விசாரணையில் தெரிய வருகிறது.

4) பழைய மாமல்லபுரம் சாலையை ஆறுவழி பாதையாக தற்போது அகலப்படுத்தி வருவதாலும், மேற்படி இடம் ரோடில் இருந்து சுமார் 5 மீட்டர் தூரம் வரை கிழக்கு பக்கம் தள்ளியும் அதில் இருந்து சுற்றுச்சுவர்கள் அமைக்கப்பட்டு மேற்படி கட்டிடங்களுக்கு வந்து செல்லும்

Annexure - 28

DEPARTMENT OF PUBLIC HEALTH AND PREVENTIVE MEDICINE.

From
Dr. K. Vanaja, M.B.B.S., D.P.H.
Deputy Director of Health Services
Saidapettai – 600 0015.

To
The Commissioner
Panchayat Union,
Thiruporur.

K.DIS. NO. 2085/S2/2007 Dated 28.05.2007

Sub: Public Heath -- No objection certificate and blue print approval to construct the proposed Mall/Multiplex Hotel building at S. No.13/1, Egattur Village, Thirupour Block, Kancheepuram District by Allied Majestic Promoters – Regarding.

Ref: 1. Your letter R.No.A3/705/2007 dated 14.05.2007.
2. Inspection report dated 26.5.2007 of the Block Health Supervisor, Kelambakkam Primary Health centre.

****

No objection certificate and blue print approval is issued to M/s. Allied Majestic Promoters for the construction of Mall/ Multiplex Hotel building (Ground + Nine Storeyed with 9000 HP for Domestic Purpose only) at S. No.13/1 Egattur Village, Thiruporur Block, Kancheepruam District subject to the conditions that.

- The building should be constructed as per plan only.
- Enough spaces for parking places and maintain environmental should be provided as per the building rules.
- Construction (Buildings) should be enough spaces, ventilation, exhausted facilities, Aeration and lighting as per building rules.
- Before construction the permission should be obtained from CMDA / MLPA / DTCP.
- The full scale sewage treatment plant should be provided and the sewage effluent should be properly treated / recycling and disposed off in the own land for green belt or other use.
- Sufficient number of toilets/ baths should be provided according the strength of the consumers.
- There should not be emanation of objectionable odour in the vicinity.
- Solid waste should be disposed off properly.
- Should be ensured that the water used for cooling purpose be kept under closed circuit system.

- All arrangements should be made to avoid nuisance.
- DG sets installed during the construction activities must be provided with necessary acoustic measures and exhaust pipe above the height of nearest tall building.
- Bore well proposed to be dug must be done with proper permission from the concerned authorities. Periodical monitoring of drinking water should be carried out as per BIS 10500/1991 in a reputed laboratory.
- Child labour must not be appointed for construction or any other work.
- Safe equipments like boots, safety belts, Gloves must be provided for the work and safe engineering practices must be adopted.
- Necessary first aid facilities should be made available for the workers till the construction is over and after occupation.
- The premises must be maintained free from mosquito breading at all time.
- During the construction, sufficient basic amenities should be provided to the construction workers.
- Construction vehicle must not be parked in the road side and must be parked in the site area only.
- Rainwater harvesting facilities should be provided.
- The building should not be occupied without obtaining the certificate under section 26, 33 and 38 of the Tamil Nadu Public Heath Act 1939. (Tamil Nadu Act III/1939) and after obtaining the certificate the completion certificate should be issued.
- If violated any one of the above conditions the permission issued will be canceled.

28/5/07

DEPUTY DIRECTOR OF HEALTH SERVICES.
SAIDAPETTAI.

28/5/07

Enclosure
Approved Blue prints.

Copy to :

M/s Allied Majestic Promoters
Egattur village.
Thimporur Block

GOVERNMENT OF INDIA
Ministry of Environment, Forests and Climate Change
(Regional Office, Chennai)
MONITORING REPORT

PART I

DATA SHEET

1	Project Type : River valley/Mining/Industry/Thermal/ Nuclear/Other Specify		Others - Building
2	Name of the project		Construction of a shopping mall cump hotel "Marina Grand Mall" at 13/1A, Egatur village, Old Mahabalipuram road, Kanchipuram dist by M/s.Allied Majestic Promoters (P) Ltd.
3	Clearance letter(s)/OM No. and dated		EC Letter No 21 – 562/2007 – IA.III - MoEF dated 01.10.2008
4	Locations		S.F. No. 13/1A, Egattur Village, Tiruporur Taluk, Kancheepuram District - 603103
	a	District (s)	Kanchipuram
	b	State (s)	Tamil Nadu
	c	Latitudes	12°50' 9.12" N
	d	Longitudes	80° 13' 46.13" E
5	Address of correspondence		
	a	Address of concerned project Head (with Pin Code & telephone/telex/fax numbers	Shri Shajahan, 13/1A, Egattur Village, Tiruporur Taluk, Kancheepuram District – 603103, Ph - 9486752847
6	Salient features		
	a	of the project	**Item** / **Details** Project Name / Proposed "The Marina " Location / 13/1A Total Plot Area / 25131.08 sq .m Built up area / 110673 sq. m. OSR / 2513.09 Sq.m Ground coverage / 9939.3 sq.m Road & pavements / 1911.27 Sq.m Green Belt / 10763.37 Sq.m (42.8 %) Number of Blocks/floors / Two Blocks with combined basement Mall + Hotel and Serviced Apartment 3 Basement + G + 9Floors Building Height / 45 m Road Width / Approach road 40 m OMR
	b	of the environmental management plans	Air, water, noise and solid waste management has to be done
7	Breakup of the project area		
	a	Submergence area (forest & non-forests)	Nil
	b	Others	
8	Break up of project affected population with		

		enumeration of those losing houses/dwelling units only, agricultural land only, both dwelling units and agricultural land and landless labourers/artisans	Nil
	a	SC,ST/Adivasis	Nil
	b	Others	Nil
9		Financial Details	
	a	Project cost as originally planned and subsequent revised estimates and the years of price reference	1. Project cost as originally planned - Rs.160 Cr for the financial years 2008 – 2009 and 2009 - 2010 2. Revised Estimate as per revised plan – a.For the financial year 2010 – 2011 – Rs.135 Cr b.For the financial year 2011 – 2012-Rs. 142 Cr c.For the financial year 2012 – 2013-Rs.146 Cr d.For the financial year 2013 – 2014-Rs.149 Cr e.For the financial year 2014 – 2015-Rs. 151 Cr
	b	Allocations made for environmental management plans, with item wise and year wise breakup	Rs. 1243 lakh (Capital) Rs. 61.5 lakh (Operational)
	c	Benefit cost ratio/internal rate of return and the years of assessment	--
	d	Whether (c) includes the cost of environmental management as shown in (b) above	---
	e	Total expenditure on the Project so far	Rs. 95 Cr
	f	Actual expenditure incurred on the environmental management plans so far	--
10		Forest land requirement	
	a	The status of approval for a diversion of forest land for non-forestry use	Nil
	b	The status of compensatory afforestation, if any	Nil
	c	The status of clear felling	Nil
	d	Comments on the viability and sustainability of compensatory afforestation programme in the light of actual field experience so far	Nil
11		The status of clear felling in non-forest area (such as submergence area of reservoir, approach road), if any, with quantitative information	Nil
12		Status of construction	
	a	Date of commencement	15th November, 2010
	b	Date of completion (actual and/or planned)	January 2016.
13		Reasons for the delay if the project is yet to start.	---
14		Date of site visit	
	a	The dates on which the project was	---

		monitored by the Regional Office on previous occasions, if any	
	b	Date of site visit for this monitoring report	22.11.2014
15		Details of correspondence with project authorities for obtaining action plans, information and status of compliance to safeguards	---

The project construction work was started on 15th November 2010 and the basement, ground floor and first floor works have been completed, in second and third floor construction activities are at various stages. They are planning to complete the work by October 2015.

EC was accorded for construction of Shopping Mall cum Hotel (retail shops, theatres-1800 seats multiplex, restaurants and 270 rooms hotel) having an area of 1,30,803.23 Sq.m(2 basements + ground + 9 floors). Whereas the project authorities have changed the scope of construction by reducing an area to 1,10,673 Sq.m without approval. The changes are as given in the table

Sl.No	As per EC	Proposed Changes
1	2 Basement + Ground + 9 Floors	3 Basement + Ground + 11 Floors
2	Retail Shops	Retail Shops
3	Multiplex theater(1800 Seats)	Multiplex theater(1800 Seats)
4	Restaurants	Restaurants
5	Multilevel Car parking (2 Basement + Lower ground + 8 Floors)	No multilevel car parking. Instead Hotel apartment proposed.

The project authorities have submitted an application to SEIIA on 02.05.2014 to obtain EC for the changes. SEIIA directed the project authorities to obtain certified copy of the compliance report from the regional of the MoEF&CC. Accordingly the project authorities have requested a copy of the compliance report. In general the project authorities are implementing all the conditions except change in scope. This is for your kind information and necessary action please.

(DR.C.KALIYAPERUMAL)
Director (S)

PART- II

Subject : Construction of a shopping mall cump hotel "Marina Grand Mall" at 13/1A, Egatur village, Old Mahabalipuram road, Kanchipuram dist by M/s.Allied Majestic Promoters (P) Ltd.

Reference : EC No. 21 – 562/2007 – IA.III - dated 01.10. 2008

Part A- Specific Conditions

I. Construction Phase

S.No	Condition	Compliance
i.	"Consent for Establishment" to be obtained and submitted	Not Complied
ii.	All required sanitary and hygienic measures should be in place	Complied
iii.	A first aid room be provided	Complied
iv.	Drinking water and sanitary facilities be provided.	Complied
v.	Provision be made in water treatment plant	Complied
vi.	All the top soil excavated be stored	Complied
vii.	Disposal of muck should not create any adverse effect	Complied
viii.	Soil and ground water samples be tested	Complied
ix.	Bituminous and other hazardous materials should not be used	Complied
x.	Hazardous waste be disposed as per rule	Complied
xi.	DG set be low sulphur diesel type	Complied
xii.	Diesel shall be stored in under ground	Complied
xiii.	Vehicles be in good condition	Complied
xiv.	Ambient air and noise level should be controlled, monitored	Complied
xv.	Fly ash be used.	Complied
xvi.	Ready mixed concrete be used	Complied
xvii.	Storm water control arrangement	Agreed to Comply
xviii.	Water demand be reduced by adopting best practices	Complied
xix.	Permission to draw ground water be obtained	Refer Part III
xx.	Separation of grey and black water	Complied
xxi.	Fixtures of low type	Agreed to Comply
xxii.	Use of glass may be reduced upto 40%	Refer Part - iii
xxiii.	Roof should meet ECBC	Agreed to Comply
xxiv.	Opaque wall as per ECBC	Agreed to Comply
xxv.	All approvals of competent authority	Agreed to Comply
xxvi.	Regular supervision be done	Complied
xxvii.	Legal action be initiated if work started without EC	Refer Part - iii

II. Operational phase

Not applicable since the construction is not yet complete

Part-B General Conditions

S.No	Condition	Compliance
i.	Environmental safeguards be implemented.	Complied
ii.	Fuel be supplied to laborers	Complied
iii.	Six monthly monitoring reports	Complied

S.No	Condition	Compliance
iv.	A complete set of documents be submitted to RO	Complied
v.	In the case of any change, fresh appraisal is required	Refer Part - iii
vi.	Ministry reserve the right to add additional safeguard.	Agreed to Comply
vii.	All other statutory clearances be obtained	Complied
viii.	Stipulations would be enforced among other provisions	Agreed to Comply
ix.	EC is subject to final order of the WP. No. 460 of 2004	Agreed to Comply
x.	Any appeal	Agreed to Comply

(DR.C.KALIYAPERUMAL)
Director(S)

Part – III

Subject: Construction of a shopping mall cump hotel "Marina Grand Mall" at 13/1A, Egatur village, Old Mahabalipuram road, Kanchipuram dist by M/s.Allied Majestic Promoters (P) Ltd.

Reference : EC No. 21 – 562/2007 – IA.III - dated 01.10. 2008

Part A- Specific Conditions

I. Construction Phase

S.No	Conditions	Status of Compliance
1.	"Consent for Establishment" shall be obtained from the Tamil Nadu pollution Control Board under Air and Water Act and a copy shall be submitted to the Ministry before start of any Construction work at the site.	Consent for Establishment has not been obtained from TNPCB
2.	All required sanitary and hygienic measures should be in place before starting construction activities and they have to be maintained throughout the construction phase.	Sanitary facilities and hygienic measures are provided and are maintained.
3.	A first aid room shall be provided in the project site during the construction phase of the project.	A first aid room has been provided at site with trained personnel.
4.	Adequate drinking water and sanitary facilities should be provided for construction workers at the site. The safe disposal of wastewater and solid waste generated during the construction phase should be ensured	Adequate drinking water facilities such as potable RO System & sanitation facilities such as toilets, wash rooms & temporary septic tanks are provided.
5.	Provision shall be made in the water treatment plant for attaining bacteriological quality by chlorination before supply of water for domestic use.	Water is purchased from outside. The water is stored & disinfected. Drinking water is supplied through potable RO system.
6.	All the top soil excavated during construction activities should be stored for use in horticulture/ landscape development within	Top soil excavated is stacked separately within the project site and will be used for horticulture/

S.No	Conditions	Status of Compliance
	the project site.	landscape development.
7.	Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of the people, only in approved sites with the approval of competent authority.	Since it is construction project no hazardous muck was generated. Excavated earth was used for backfilling within the site.Transport trucks were covered with tarpaulin cover considering the general safety and health aspects of the people.
8.	Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy materials and other toxic contaminants.	Soil & ground water quality is monitored periodically by NABL Accredited laboratory on monthly basis. As per the reports the levels are within the limit.
9.	Construction spoils, including bituminous materials and other hazardous materials, must not be allowed to contaminate water courses and the dump site for such materials must be accrued so that they should not leach into the ground water.	No bitumen or other hazardous materials were used.
10.	Any Hazardous waste generated during construction phase should be disposed off as per applicable rules and norms with necessary approvals of the TNPCB.	Spent oil from DG and other equipments is stored in HDPE drums and proposed to be sold to vendors authorized by TNPCB.
11.	The DG sets to be used during construction phase should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.	DG set of 1 X 207.5 kVA is used during construction phase. The diesel generator set used are of low sulphur diesel type and are conforming to E (P) Rules prescribed for air and noise emission standards as informed.
12.	The diesel required for operating DG sets shall be stored in underground tanks and if required clearance from Chief Controller of Explosives shall be taken	For operating the above DG Sets approximately 75 liters of diesel /day is required. Diesel requirement is met from nearby bunks on daily basis & no need for storage of diesel within the site. Hence clearance from Chief controller of explosives is not required
13.	Vehicles hired for bringing constructional materials to the site should be in good condition and should conform to air and noise emission standards prescribed by the TNPCB/CPCB. The vehicles should be operated only during non-peak hours	Vehicles are hired for bringing constructional materials to the site which is in good condition and are conformed to the emission standards. There are only four vehicles moving in and out of the premises for bringing construction materials to the site. The vehicles are operated during non-peak hours as informed.
14.	Ambient noise level should conform to residential standards both during day and night. Incremental pollution loads on the	The ambient air quality level is controlled by water spraying and also monitored. The noise level also

S.No	Conditions	Status of Compliance
	ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air & noise level during construction phase, so as to conform to the stipulated standards by CPCB/ TNPCB.	has been monitored during day and night time. As per the reports the levels are within the limits.
15.	Fly ash should be used as building material in the construction as per the provision of fly ash notification of September, 1999 and amended as on 27th August 2003. (The above condition is applicable only if the project site is located within the 100 Km of Thermal Power Stations).	Fly ash bricks are used for construction.
16.	Ready mixed concrete must be used in building construction.	Ready mixed concrete is used for building construction.
17.	Storm water control and its re-use as per CGWB and BIS standards for various applications.	Constructions are going on and agreed to make the facilities.
18.	Water demand during construction should be reduced by use of pre – mixed concrete, curing agents and other best practices referred.	Ready mix concrete, curing agents are used in building construction to reduce the water demand.
19.	Permission to draw Ground Water shall be obtained from the competent Authority prior to construction/operation of the project.	Water obtained from outside for construction.
20.	Separation of grey and black water should be done by the use of dual plumbing line for separation of grey and black water.	Dual plumbing lines are under construction for separation of grey and black water.
21.	Fixtures for showers, toilet flushing and drinking should be of low flow type by adopting the use of aerators/ pressure reducing devices or sensor based control.	Agreed to Comply
22.	Use of glass may be reduced upto 40% to reduce the electricity consumption and load on air conditioning. If necessary, use high quality double glass with self reflective coating in window.	As informed that glass will not be used as a wall material and where as high quality double glass with self reflective coating glass will be used in windows.
23.	Roof should meet perspective requirement as per energy conservation building code by using appropriate thermal insulation material to fulfill requirement.	The proponent informed that ECBC Roof of U Value 0.39 W/m^2-k has been proposed. The specification are as follows:- Roof finish + 75 mm expanded polystyrene +150-mm concrete slab + Internal plaster (as per ECBE norms).Further informed that suitable materials will be used for rooftop thermal insulation to meet the standards prescribed in the Energy Conservation Building Code for AC buildings.
24.	Opaque wall should meet prescriptive requirement as per Energy Conservation	As informed that the materials used in construction of opaque walls

S.No	Conditions	Status of Compliance
	Building Code by using appropriate thermal insulation material to fulfill requirement.	meet the requirements of Energy Conservation Building Code. Further informed that the following measures will be adopted for thermal insulation. Insulation with low U-value will be used. Insulation with high R-value will be used. Light colored coating with high reflectance will be used.
25.	The approval of the competent authority shall be obtained for structural safety of the buildings due to earthquake, adequacy of fire fighting equipments etc as per National building code including protection measures from lightning etc.	The proponent informed that the structural safety of the buildings due to earthquake, adequacy of fire fighting equipments etc will be obtained after the construction is completed.
26.	Regular supervision of the above and other measures for monitoring should be in place all through the construction phase, so as to avoid disturbance to the surroundings.	Separate EHS cell monitors the compliance to conditions stipulated in the EC. Environmental monitoring is carried out regularly in site at the required intervals so as to ensure that the pollutants do not exceed the prescribed limits.
27.	Under the provision of Environment (Protection) Act, 1986, legal action shall be initiated against the project proponent if it was found that the construction of the project has been started without obtaining environmental clearance.	Construction of the building was started on November 2008 after obtaining Environmental clearance from the Ministry of Environment and Forests, Government of India in Lr. No: 21 – 562/2007 – IA.III - MoEF dated 1st October, 2008. Then, due to revision in plan, application for Amendment EC was submitted to SEIAA

Operational phase:

Not applicable since the construction is not yet completed.

Part B- General Conditions

S.No	Conditions	Status of Compliance
1.	The environmental safeguards contained in the EIA report should be implemented in letter and spirit.	The environmental safeguards contained in the EIA report are been implemented
2.	Provision should be made for supply of kerosene or cooking gas and pressure cookers to the labourers during construction phase.	Provisions are made for supply of kerosene and cooking gas as well as pressure cookers to the labourers.
3.	Six monthly monitoring reports should be	The Half Yearly Compliance report in

<table>
<tr><th>S.No</th><th>Conditions</th><th>Status of Compliance</th></tr>
<tr><td></td><td>submitted to the ministry and its Regional Office, Bangalore.</td><td>Hard copy has been furnished on June and December of each calendar year in respect of the conditions stipulated in the Environmental Clearance.</td></tr>
<tr><td>4.</td><td>Officials from the Regional Office of MoEF, Bangalore who would be monitoring the implementation of environmental safeguards should be given full cooperation, facilities and documents / data by the project proponents during their inspection. A complete set of all the documents submitted to MoEF should be forwarded to the CCF, Regional Office of MoEF, Bangalore.</td><td>The proponent have extended, full cooperation during the visit. A complete set of all the documents were submitted to MoEF Regional Office, Bangalore.</td></tr>
<tr><td>5.</td><td>In case, there is any change(s) in the scope of the project, the project could require a fresh appraisal by this a Ministry.</td><td>Due to changes in the scope of the project fresh application is being submitted to SEIAA for appraisal.
<table>
<tr><th>Sl.No</th><th>As per EC</th><th>Proposed Changes</th></tr>
<tr><td>1</td><td>2 Basement + Ground + 9 Floors</td><td>3 Basement +Ground + 11Floors</td></tr>
<tr><td>2</td><td>Retail Shops</td><td>Retail Shops</td></tr>
<tr><td>3</td><td>Multiplex theater(1800 Seats)</td><td>Multiplex theater(1800 Seats)</td></tr>
<tr><td>4</td><td>Restaurants</td><td>Restaurants</td></tr>
<tr><td>5</td><td>Multilevel Car parking (2 Basement + Lower ground + 8 Floors)</td><td>No multilevel car parking. Instead hotel apartment has been proposed</td></tr>
</table></td></tr>
<tr><td>6.</td><td>The Ministry reserves the right to additional safeguard measures subsequently, if find necessary, and to take action including revoking of the environment clearance under the provisions of Environment (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.</td><td>Agreed upon.</td></tr>
<tr><td>7.</td><td>All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980, Wildlife Protection Act,1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.</td><td>They have obtained the following approvals.
Airport Authority of India.
DTCP approved letter for site plan.
NOC from Police
NOC from Collector
NOC from BSNL
NOC from Prasar Bharathi
NOC from Public Health & Preventive Health
Traffic NOC</td></tr>
</table>

S.No	Conditions	Status of Compliance
		Urbanisable Zone – Land Use Certificate.
8.	These stipulations would be enforced among others under the provision of Water (Prevention & Control of Pollution), Act, 1974, the Air (Prevention & Control of Pollution), Act, 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA notification 2006.	Agreed upon.
9.	Environmental Clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No.460 of 2004 as may be applicable to this project.	Agreed upon.
10.	Any application shall lie within the National Environment Appellate Authority if preferred, within a period of 30 days as prescribed under section 11 of the National Environment Appellate Act, 1997.	Agreed upon

(DR.C.KALIYAPERUMAL)
Director (S)