

Date: 18/01/2024

To,

**Ministry of Environment, Forests & Climate Change,  
Integrated Regional Offices,  
Ground Floor, East Wing, New Secretariat Building,  
Civil Lines, Nagpur – 440 001. Maharashtra.**

**Sub** : Submission of six monthly compliance reports as per terms & conditions Stipulated in Environmental clearance letter for Proposed Residential and Commercial Project at CTS No, 657, Survey No. 17, Safed Pool, Andheri Kurla Road, Village Mohili, Lward, Mumbai - 400072 Maharashtra.

**Ref. No.** : Environment clearance no. SIA/MH/MIS/143467/2020, dated: 27/10/2020.

Respected Sir/Madam,

In reference to the above referred letter of your highly revered office we would like to submit the Current status of our construction work and point-wise compliance status to various stipulations in its Clearance letter no. **SIA/MHIMIS/143467/2020, dated: 27/10/2020** along with the necessary annexure.

This compliance report is submitted for the period from **October2022 to March 2023**

This is for your kind consideration and records. Kindly acknowledge the same.

Thanking you,

With warm regards,

For, **Landcare Realty LLP**

**Authorized Signatory**

Encl : Part A: Current status of construction work.  
Part B: Point-wise compliance status.  
Datasheet & Annexures.

**Copy to Regional Office, MPCB, Sion, Mumbai.**

Regional Office, CPCB, Pune

Department of Environment, Mantralaya, Mumbai.

**LANDCARE REALTY LLP**

**Builders & Developers**

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## INDEX

<b>Sl. No.</b>	<b>PARTICULARS</b>
1.	Part A : Current status of work
2.	Part B : Point wise compliance status
3.	Datasheet
4.	Annexures
Annexure – 01	DP Remark
Annexure – 02	HE NOC
Annexure – 03	Sewerage Remark
Annexure – 04	Storm Water Drain Remark
Annexure – 05	HPBD Analysis Report
Annexure – 06	Plan showing Nalla
Annexure – 07	Energy saving statement
Annexure – 08	Fire (CFO) NOC
Annexure – 09A	Index map showing distance from Thane Creek Flamingo Sanctuary
Annexure – 09B	Application to TCFS
Annexure – 10	CER plan to The Municipal Commissioner of MCGM
Annexure – 11	Height Clearance (AAI) NOC
Annexure – 12	Intimation of Disapproval & Drawing
Annexure – 13	Commencement certificate
Annexure – 14	Industrial to Residential NOC
Annexure – 15	MPCB consent to establish
Annexure – 16	Solid Waste Management NOC

Annexure – 17	Excavation Permission
Annexure – 18	Copy of Environmental monitoring reports
Annexure – 19	STP details
Annexure – 20	Copy of Environmental clearance
Annexure – 21	Advertisement copy

PART A:

Current Status of Work

Status of construction work		<b>Construction work status for period March 2023 is as follows:-</b> <ul style="list-style-type: none"><li>• Basements Completed</li><li>• ABC wing -1st floor completed</li><li>• DE wing Basements Completed</li><li>• Area - 11086 m<sup>2</sup></li></ul>
a.	Date of commencement ( Actual and/or planned )	: 04/06/2021 Site preparation work started on 04/06/2021 based on commencement certificate received.
b.	Date of completion ( Actual and/or planned )	: 31/12/2025 (Planned)

## PART B

**Compliance status of conditions stipulated in Environmental clearance for proposed ‘Residential and Commercial project at CTS nos. 657, Survey no. 17, Safed Pool, Andheri-Kurla Road, Village Mohili, ‘L’ Ward, Mumbai – 400072. Maharashtra granted by SEIAA, Govt. of Maharashtra vide EC No. SIA/MH/MIS/143467/2020, dated: 27/10/2020 are as follows;**

Sl. No.	Stipulated Clearance Conditions	Compliance Status
<b>Specific Conditions:</b>		
<b>A. SEAC Conditions:</b>		
i.	PP to submit the sewerage network, water supply, storm water drains NOC from local planning authority.	<ul style="list-style-type: none"> <li>❖ Development Plan remarks with additional information of external water pipeline, Sewer line and Drainage line.</li> <li>❖ <b>Please refer Annexure – 1 for Development Plan remark.</b></li> <li>❖ Municipal Corporation of Greater Mumbai has issued water NOC vide letter no. HE/000797/2021/L/ES, Date: 26/04/2021.</li> <li>❖ <b>Please refer Annexure – 2 for HE NOC.</b></li> <li>❖ Sewerage remark issued by MCGM vide letter no. 4536/REM/2018/SP/515, Date: 09/11/2020.</li> <li>❖ <b>Please refer Annexure – 3 for Sewerage NOC.</b></li> <li>❖ MCGM has issued storm water drain remark vide letter no. 000186/2020/L/ES, Date: 09/11/2020.</li> <li>❖ <b>Please refer Annexure – 4 for Storm Water Drain Remark.</b></li> </ul>
ii.	PP to submit & upload wind analysis, shadow analysis, traffic analysis, light and ventilation analysis and measures to reduce heat island effect 10%.	<ul style="list-style-type: none"> <li>❖ <b>Please refer Annexure – 5 for detailed wind analysis, shadow analysis, traffic analysis, light and ventilation analysis and heat island effect study report.</b></li> </ul>
iii.	Nalla adjoining the project shall neither be diverted nor be covered by slab.	<ul style="list-style-type: none"> <li>❖ We ensure that Nalla adjoining the project shall not be diverted or covered.</li> </ul>
iv.	6 meter separate motorable road without any obstruction shall be provided for maintenance & up keeping of Nalla.	<ul style="list-style-type: none"> <li>❖ We have already proposed 6.0 mt. wide clear access for maintenance &amp; up keeping of Nalla.</li> <li>❖ <b>Please refer Annexure – 6 for Nalla Plan.</b></li> </ul>

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v.	Treated Sewage discharge to be restricted to 35% only.	<ul style="list-style-type: none"> <li>❖ Total treated sewage available for reuse will be 113 KLD.</li> <li>❖ Recycling of treated sewage shall be done for gardening (9 KLD) and flushing (53 KLD) within site which will help to reduce the quantity of treated sewage to the tune of 55 % (62 KLD).</li> <li>❖ In addition to reuse of treated sewage on site the treated sewage i.e., 11 KLD shall also be used in the adjoining garden which will further help to reduce the quantity of treated sewage to the tune of 35% (40 KLD).</li> <li>❖ Details are given as below;</li> </ul> <table border="1" data-bbox="866 734 1434 1343"> <tr> <td colspan="3" data-bbox="866 734 1434 825"><b>Total treated sewage available for reuse is 195 KLD</b></td></tr> <tr> <th data-bbox="866 825 1078 973">Treated sewage</th><th data-bbox="1078 825 1258 973">Reuse</th><th data-bbox="1258 825 1434 973">Excess treated sewage</th></tr> <tr> <td data-bbox="866 973 1078 1094">Reuse on site: For gardening &amp; flushing</td><td data-bbox="1078 973 1258 1094">62 KLD (55 %)</td><td data-bbox="1258 973 1434 1094">51 KLD (45 %)</td></tr> <tr> <td data-bbox="866 1094 1078 1343">Reuse on site + Reuse outside: Gardening area, median plantation etc.</td><td data-bbox="1078 1094 1258 1343">73 KLD (65 %)</td><td data-bbox="1258 1094 1434 1343">40 KLD (35%)</td></tr> </table>	<b>Total treated sewage available for reuse is 195 KLD</b>			Treated sewage	Reuse	Excess treated sewage	Reuse on site: For gardening & flushing	62 KLD (55 %)	51 KLD (45 %)	Reuse on site + Reuse outside: Gardening area, median plantation etc.	73 KLD (65 %)	40 KLD (35%)
<b>Total treated sewage available for reuse is 195 KLD</b>														
Treated sewage	Reuse	Excess treated sewage												
Reuse on site: For gardening & flushing	62 KLD (55 %)	51 KLD (45 %)												
Reuse on site + Reuse outside: Gardening area, median plantation etc.	73 KLD (65 %)	40 KLD (35%)												
vi.	The energy savings from renewable energy shall be 5.16%	<ul style="list-style-type: none"> <li>❖ We have already proposed solar energy saving upto 5.61%.</li> <li>❖ <b>Please refer Annexure – 7 for Detailed Energy saving statement.</b></li> </ul>												
vii.	PP to abide all conditions prescribed in CFO NOC.	<ul style="list-style-type: none"> <li>❖ Mumbai Fire Brigade, MCGM has issued Fire NOC vide letter no. CHE/ES/4273/337 (New), Date 24/01/2020.</li> <li>❖ <b>Please refer Annexure – 8 for Fire NOC.</b></li> <li>❖ We shall abide all conditions prescribed in CFO NOC.</li> </ul>												
viii.	The PP to get NOC from competent authority with reference to Thane creek flamingo sanctuary if the project site falls within 10 Km radius from the said sanctuary boundary. The	<ul style="list-style-type: none"> <li>❖ Aerial distance of Thane Creek Flamingo Sanctuary as per Index Map of Mumbai Mangrove Conservation Unit: 7.00 Km.</li> <li>❖ <b>Please refer Annexure – 9A for Index</b></li> </ul>												

Sl. No.	Stipulated Clearance Conditions	Compliance Status
	planning authorities to ensure fulfillment of this condition before granting CC.	<p><b>map showing distance from Thane Creek Flamingo Sanctuary.</b></p> <p>❖ We have already applied for NOC with reference to Thane Creek Flamingo Sanctuary to the Forest Officer, Divisional Forest Office, Kamgarnagar, Kurla (East), Mumbai.</p> <p>❖ <b>Please refer Annexure - 9B for Acknowledgement copy.</b></p>

**B. SEIAA Conditions:-**

i.	PP to ensure that CER plan gets approved from Municipal Commissioner.	<p>❖ CER plan is submitted to The Municipal Commissioner of MCGM.</p> <p>❖ <b>Please refer Annexure - 10 for Acknowledgement copy of CER.</b></p>
ii.	PP Shall comply with Standard EC conditions mentioned in the Office Memorandum issued by MoEF& CC vide F.No.22-34/2018-IA.lll dt04.01.2019.	❖ Noted.
iii.	SEIAA decided to grant EC for- FSI:7428.35 m2, Non-FSI: 13772.83 m2 and Total BUA: 21201.18 m2 (Plan Approval) CHE/ES/4273/33 7(New) 33711 Amend, dated 10.09.2020)	❖ Noted.

**General conditions:**

i	E-waste shall be disposed through Authorized vendor as per E-waste (Management and Handling) Rules, 2016.	<p>❖ Proposed project is a Residential &amp; Commercial building. Hence, generation of E-waste will be negligible and shall be through to authorize vendor as per E-waste (Management and Handling) Rules, 2016.</p> <p>❖ E-Waste will be stored separately and disposed through authorized recyclers.</p>
ii	The Occupancy Certificate shall be issued by the Local Planning Authority to the project only after ensuring sustained availability of drinking water, connectivity of sewer line to the project site and proper disposal of treated water as per environmental norms.	❖ Agreed to comply with.
iii	This environmental clearance is issued subject to obtaining NOC from Forestry & Wild life angle including clearance from the standing committee of the National Board for Wild life as if applicable & this environment clearance does not necessarily implies that Forestry & Wild life clearance granted to the project which will be considered separately on merit.	<p>❖ NOC from Wild Life Board is Not Applicable as per Final Notification reg. ESZ of SGNP published by MoEF &amp; CC u/no. S.O.3645 (E), dated: 05/12/2016 as our project site is not affected by the ESZ belt.</p> <p>❖ Aerial distance of Thane Creek Flamingo Sanctuary as per Index Map of Mumbai</p>

Sl. No.	Stipulated Clearance Conditions	Compliance Status
		<p>Mangrove Conservation Unit: 7.00 Km. Index map showing distance from Thane Creek Flamingo Sanctuary.</p> <p>❖ We have already applied for NOC with reference to Thane Creek Flamingo Sanctuary to the Forest Officer, Divisional Forest Office, Kamgarnagar, Kurla (East), Mumbai.</p>
iv	PP has to abide by the conditions stipulated by SEAC & SEIAA.	<p>❖ Agreed to comply with.</p>
v	<p>The height, Construction built up area of proposed construction shall be in accordance with the existing FSI/FAR norms of the urban local body &amp; it should ensure the same along with survey number before approving layout plan &amp; before according commencement certificate to proposed work. Plan approving authority should also ensure the zoning permissibility for the proposed project as per the approved development plan of the area.</p>	<p>❖ Height of the building will be as per the Approved building plan.</p> <p>❖ Airport Authority of India issued Height Clearance for the project vide letter no. SNCR/WEST/B/111916/182862, dated: 26/12/2016.</p> <p>❖ <b>Please refer Annexure – 11 for Height Clearance NOC.</b></p> <p>❖ MCGM issued Intimation of Disapproval for the project vide letter no. CHE/ES/4273/L/337(NEW), dated: 10/09/2020.</p> <p>❖ <b>Please refer Annexure – 12 for Intimation of Disapproval &amp; Drawing.</b></p> <p>❖ MCGM issued commencement certificate for the project vide letter no. CHE/ES/4273/L/337(NEW)CC/1/New, dated: 25/03/2021.</p> <p>❖ <b>Please refer Annexure – 13 for Commencement certificate.</b></p> <p>❖ MCGM issued Development Plan 2034 Remarks for the project vide letter no. Ch.E./DP34201904111218253, dated: 24/04/2019.</p> <p>❖ As per DP Remarks project site falls under Industrial Zone (I). MCGM allow the user permissible in Residential Zone (R) situated in Special Industrial Zone (I-3) vide letter no. DyChE/3147/BPES/L, dated: 16/11/2017.</p> <p>❖ <b>Please refer Annexure – 14 for Industrial to Residential NOC.</b></p>
vi	If applicable Consent for Establishment" shall be obtained from Maharashtra Pollution Control	<p>❖ MPCB granted consent to establish for the projects vide order no.</p>

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	Board under Air and Water Act and a copy shall be submitted to the Environment department before start of any construction work at the site.	<p>Format1.0/JD(WPC)UAN no.0000117570/CE-2109001199, dated: 23/09/2021.</p> <p>❖ <b>Please refer Annexure – 15 for Consent to Establish.</b></p>
vii	All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.	<p>❖ All necessary facilities will be provided on site for Residential and Non-Residential workers.</p> <p>❖ 10 nos of Hutsments are provided to 30 nos of residential workers. Also, there are no non-residential workers working on site.</p> <p>❖ Adequate MCGM water line for drinking and tanker water domestic purpose, 02 nos of bathroom and 08 nos of toilets have been provided.</p> <p>❖ Proper housekeeping &amp; regular pest control will be carried out.</p>
viii	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.	<p>❖ All necessary facilities will be provided on site for Residential and Non-Residential workers.</p> <p>❖ 10 nos of Hutsments are provided to 30 nos of residential workers.</p> <p>❖ Adequate MCGM water line for drinking and tanker water domestic purpose, 02 nos of bathroom and 08 nos of toilets have been provided.</p>
ix	The solid waste generated should be properly collected and segregated. Dry/inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.	<p>❖ Excavation material will partly reused on site for backfilling and remaining will be disposed to Authorized landfill site.</p> <p>❖ Separate storage for debris, excavation and construction waste.</p> <p>❖ Construction waste material (Brick, blocks, ceramic tiles, marbles etc.) will be partly recycled and will be used for waterproofing work, paving &amp; landscaping areas.</p> <p>❖ Solid Waste Management Department, MCGM issued SWM NOC vide letter no. 007564/2021/L/ES, dated: 10/05/2021.</p> <p>❖ <b>Please refer Annexure - 16 for SWM NOC.</b></p> <p>❖ Office of the Additional Collector Mumbai Suburban District issued Excavation permission vide letter no. AC/DESK/IV/MNL/SR-78/2021-22, dated:</p>

Sl. No.	Stipulated Clearance Conditions	Compliance Status
		<p>04/05/2021.</p> <p>❖ Please refer Annexure - 17 for Excavation Permission.</p>
x	<p>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 people, only in approved sites with the approval of competent authority.</p>	<p>❖ Site preparation stage: Excavation work in progress, actual construction work yet to start.</p> <p>❖ Excavation material will partly be reused on site for backfilling and remaining will be disposed to Authorized landfill site.</p> <p>❖ Separate storage for debris, excavation and construction waste.</p> <p>❖ Construction waste material (Brick, blocks, ceramic tiles, marbles etc.) will be partly recycled and will be used for waterproofing work, paving &amp; landscaping areas.</p> <p>❖ Solid Waste Management Department, MCGM issued SWM NOC vide letter no. 007564/2021/L/ES, dated: 10/05/2021.</p> <p>❖ Office of the Additional Collector Mumbai Suburban District issued Excavation permission vide letter no. AC/DESK/IV/MNL/SR-78/2021-22, dated: 04/05/2021.</p>
xi	<p>Arrangement shall be made that waste water and storm water do not get mixed.</p>	<p>❖ Proper management of channelization of storm water from site by using proper internal SWD system and discharge points of adequate capacity.</p> <p>❖ Use of screens and silt traps to SWD.</p> <p>❖ Proper maintenance of storm water drainage to avoid choking of drains and flooding on site.</p> <p>❖ STP of capacity 145 KLD will be provided based on MBBR technology for the treatment of waste water.</p>
xii	<p>All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.</p>	<p>❖ There was an existing structure on site which has been demolished, and site will developed into Residential and Commercial development. The site was in Special Industrial Zone as per the DP Remarks; hence, topsoil excavated will be negligible.</p>
xiii	<p>Additional soil for leveling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.</p>	<p>❖ Site preparation stage: Excavation work in progress, actual construction work yet to start.</p> <p>❖ Excavation material will partly be reused on site for backfilling and remaining will be</p>

Sl. No.	Stipulated Clearance Conditions	Compliance Status
		<p>disposed to Authorized landfill site.</p> <ul style="list-style-type: none"> <li>❖ Separate storage for debris, excavation and construction waste.</li> <li>❖ Construction waste material (Brick, blocks, ceramic tiles, marbles etc.) will be partly recycled and will be used for waterproofing work, paving &amp; landscaping areas.</li> </ul>
xiv	Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO / Agriculture Department.	<ul style="list-style-type: none"> <li>❖ Recreational Green area will be developed over an area of 1235.47 Sq. meters with the plantation of different trees.</li> </ul>
xv	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.	<ul style="list-style-type: none"> <li>❖ Groundwater accumulation was monitored in boreholes during and after completion of drilling activities, level of the groundwater table was observed at depth between 4.50 M to 6.00 M below ground level in the boreholes. Seasonal and annual fluctuations in ground water levels can be expected to occur. No extraction of Ground water for construction purpose.</li> <li>❖ Soil quality is being monitored.</li> <li>❖ <b>Please refer Annexure – 18 for Environmental monitoring reports.</b></li> </ul>
xvi	Construction spoils, including bituminous material and other hazardous materials must not be allowed to contaminate watercourses and the dumpsites for such material must be secured so that they should not leach into the ground water.	<ul style="list-style-type: none"> <li>❖ No generation of hazardous waste during construction.</li> </ul>
xvii	Any hazardous waste generated during construction phase should be disposed off as per applicable rules and norms with necessary approvals of the MPC Board.	<ul style="list-style-type: none"> <li>❖ No generation of hazardous waste during construction.</li> </ul>
xviii	The diesel generator sets to be used during construction phase should be low Sulphur diesel type and should conform to Environments (Protection) Rules prescribed for air and noise emission standards.	<ul style="list-style-type: none"> <li>❖ No use of DG sets during construction.</li> </ul>
xix	The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from concern authority shall be taken.	<ul style="list-style-type: none"> <li>❖ No use of DG sets during construction.</li> </ul>
xx	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	<ul style="list-style-type: none"> <li>❖ Site preparation stage: Excavation work in progress, actual construction work yet to start.</li> <li>❖ Vehicles with valid PUC are being allowed</li> </ul>

<b>Sl. No.</b>	<b>Stipulated Clearance Conditions</b>	<b>Compliance Status</b>
	emission standards and should be operated only during non-peak hours.	to enter the site for bringing construction material.
xxi	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/MPCB.	<ul style="list-style-type: none"> <li>❖ Ambient air and Noise levels monitoring will be carried out.</li> <li>❖ Please refer Annexure – 18 for Environmental monitoring reports.</li> </ul>
xxii	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 27 <sup>th</sup> August, 2003. (The above condition is applicable only if the project site is located within the 100 Km of Thermal Power Stations).	<ul style="list-style-type: none"> <li>❖ We are outsourcing fly ash i.e., 700 MT from different site.</li> </ul>
xxiii	Ready mixed concrete must be used in building construction.	<ul style="list-style-type: none"> <li>❖ Ready Mixed Concrete will used in building construction.</li> </ul>
xxiv	Storm water control and its re-use as per CGWB and BIS standards for various applications.	<ul style="list-style-type: none"> <li>❖ Proper management of channelization of storm water from site by using proper internal SWD system and discharge points of adequate capacity.</li> <li>❖ Use of screens and silt traps to SWD.</li> <li>❖ Provision of Rain Water Harvesting system, RWH tank of capacity 60 KL will be provided.</li> </ul>
xxv	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.	<ul style="list-style-type: none"> <li>❖ Ready Mixed Concrete will used in building construction.</li> </ul>
xxvi	The ground water level and its quality should be monitored regularly in consultation with Ground Water Authority.	<ul style="list-style-type: none"> <li>❖ Groundwater accumulation was monitored in boreholes during and after completion of drilling activities, level of the groundwater table was observed at depth between 4.50 M to 6.00 M below ground level in the boreholes. Seasonal and annual fluctuations in ground water levels can be expected to occur. No extraction of Ground water for construction purpose.</li> <li>❖ Soil quality is being monitored.</li> <li>❖ Please refer Annexure – 18 for Environmental monitoring reports.</li> </ul>
xxvii	The installation of the Sewage Treatment Plant (STP) should be certified by an independent	<ul style="list-style-type: none"> <li>❖ STP of capacity 145 KLD will be provided based on MBBR technology for the</li> </ul>

Sl. No.	Stipulated Clearance Conditions	Compliance Status
	<p>expert and a report in this regard should be submitted to the MPCB and Environment department before the project is commissioned for operation. Discharge of this unused treated affluent, if any should be discharge in the sewer line. Treated effluent emanating from STP shall be recycled/refused to the maximum extent possible. Discharge of this unused treated affluent, if any should be discharge in the sewer line. Treatment of 100% gray water by decentralized treatment should be done. Necessary measures should be made to mitigate the odour problem from STP.</p>	<p>treatment of waste water.</p> <p>❖ Treated sewage will be re-used for flushing and gardening to reduce fresh water demand.</p> <p>❖ <b>Please refer Annexure - 19 for STP details.</b></p>
xxvii i	<p>Permission to draw ground water and construction of basement if any shall be obtained from the competent Authority prior to construction/operation of the project</p>	<p>❖ No extraction of ground water for construction purposes also we are not planning to withdraw ground water for any purpose in future. Hence, permission from CGWA is not applicable.</p>
xxix	<p>Separation of gray and black water should be done by the use of dual plumbing line for separation of gray and black water.</p>	<p>❖ Dual plumbing line will be provided for buildings for using the treated wastewater for flushing and gardening.</p>
xxx	<p>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.</p>	<p>❖ Water saving practices like dual flush cisterns, low loss plumbing fixtures and flow control devices will be installed.</p>
xxxi	<p>Use of glass may be reduced up to 40% to reduce the electricity consumption and load on air conditioning. If necessary, use high quality double glass with special reflective coating in windows.</p>	<p>❖ It is proposed to insulate the roofs of these buildings to minimize the heat gain and in turn saving the electricity. If necessary, will Use High Quality Double Glass with Special Reflective coating in windows.</p>
xxxi ii	<p>Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement.</p>	<p>❖ It is proposed to insulate the roofs of these buildings to minimize the heat gain and in turn saving the electricity. If necessary, will Use High Quality Double Glass with Special Reflective coating in windows.</p>
xxxi i	<p>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</p>	<p>❖ Energy conservation measures to be provided are as follows;</p> <ul style="list-style-type: none"> <li>• Better Envelope Design</li> <li>• Lower Lighting Loads</li> <li>• Efficient Air Conditioning System</li> <li>• Efficient Pumps &amp; Motors</li> <li>• Solar PV System</li> </ul> <p>22.59% energy saved as per Conventional Base Case.</p>

Sl. No.	Stipulated Clearance Conditions	Compliance Status
	panels may be done to the extent possible like installing solar street lights, common solar water heaters system. Project proponent should install, after checking feasibility, solar plus hybrid non-conventional energy source as source of energy.	3.27% energy saved as per ECBC 2007 Base Case. Please refer Annexure - 4 for Energy Saving Statement.
xxxiv v	Diesel power generating sets proposed as source of backup 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 MPCB.	❖ 2 DG sets of capacity 400 kVA each is proposed for emergency backup during power failure in operation phase.
xxxv	Noise should be controlled to ensure that it does not exceed the prescribed standards. During nighttime the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.	❖ Recreational Green area will be developed over an area of 1235.47 Sq. meters with different species trees. ❖ Also, the proposed DG sets will be acoustic enclose type. ❖ Ambient Air & Noise monitoring is being carried out. ❖ Please refer Annexure – 19 for Environmental monitoring reports.
xxxv i	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.	❖ Public road and public areas are not being used for project activity purpose and are free for smooth traffic movement. ❖ Provision is made for adequate parking facilities within the project site for construction vehicles. ❖ Provision of Internal road with adequate width. ❖ The traffic congestion will be avoided by proper parking arrangement and maintaining smooth traffic flow.
xxxv ii	Opaque wall should meet prescriptive requirement as per Energy Conservation Building Code, which is proposed to be mandatory for all air-conditioned spaces while it is aspiration for non-air-conditioned spaces by use of appropriate thermal insulation material to fulfill requirement.	❖ Agreed to comply with.
xxxv	The building should have adequate distance	❖ 1 Building with 4 wings.

Sl. No.	Stipulated Clearance Conditions	Compliance Status
iii	between them to allow movement of fresh air and passage of natural light, air and ventilation.	
xxxix x	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.	❖ Regular supervision of the above measures will be monitored regularly to avoid disturbance to surrounding under competent person.
xli	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.	❖ Obtained Environmental clearance from SEIAA, Govt. of Maharashtra vide letter no. SIA/MH/MIS/143467/2020, dated: 27/10/2020. ❖ <b>Please refer Annexure - 20 for Environmental clearance.</b>
Xlii	Six monthly monitoring reports should be submitted to the Regional office MoEF, Bhopal with copy to this department and MPCB.	Submitting six monthly compliance reports to; ❖ RO, MPCB, Sion, Mumbai. ❖ RO, CPCB, Vadodara. ❖ RO, MoEF & CC, Nagpur. ❖ Environment Department, Mantralaya.
Xliii	Project proponent shall ensure completion of STP, MSW disposal facility, green belt development prior to occupation of the buildings. As agreed during the SEIAA meeting, PP to explore possibility of utilizing excess treated water in the adjacent area for gardening before discharging it into sewer line. No physical occupation or allotment will be given unless all above said environmental infrastructure is installed and made functional including water requirement in Para 2. Prior certification from appropriate authority shall be obtained.	❖ STP of capacity 145 KLD will be provided based on MBBR technology for the treatment of waste water. ❖ Treated sewage will be re-used for flushing and gardening to reduce fresh water demand. ❖ Segregation will be done of Non-biodegradable and biodegradable garbage on site. ❖ Bio degradable garbage will be treated in OWC (Organic Waste Convertor). ❖ Non- biodegradable garbage will be send to recyclers. ❖ STP Sludge will use as manure within the premises for plants. ❖ Recreational Green area will be developed over an area of 1235.47 Sq. meters with of different species trees.
xliv	Wet garbage should be treated by Organic Waste Converter and treated waste (manure) should be utilized in the existing premises for gardening. And, no wet garbage will be disposed outside the premises. Local authority should ensure this.	❖ Informing and educating occupants for solid waste management. ❖ Proper segregation on site to biodegradable and non-biodegradable. ❖ Non-Biodegradable (260 kg/day): To be handed over to authorized recyclers. ❖ Biodegradable waste (173 kg/day) shall be treated in OWC. ❖ End product from OWC and sludge

Sl. No.	Stipulated Clearance Conditions	Compliance Status
		generated from STP shall be used as manure on site.
Xliv	Local body should ensure that no occupation certification is issued prior to operation of STP/MSW site etc. with due permission of MPCB.	<ul style="list-style-type: none"> <li>❖ STP of capacity 145 KLD will be provided based on MBBR technology for the treatment of waste water.</li> <li>❖ Treated sewage will be re-used for flushing and gardening to reduce fresh water demand.</li> <li>❖ Proper segregation on site to biodegradable and non-biodegradable.</li> <li>❖ Non-Biodegradable (260 kg/day): To be handed over to authorized recyclers.</li> <li>❖ Biodegradable waste (173 kg/day) shall be treated in OWC.</li> <li>❖ End product from OWC and sludge generated from STP shall be used as manure on site.</li> <li>❖ Recreational Green area will be developed over an area of 1235.47 Sq. meters with different species of trees.</li> </ul>
Xlv	A complete set of all the documents submitted to Department should be forwarded to the Local authority and MPCB.	<ul style="list-style-type: none"> <li>❖ A complete set of all the documents has been submitted to MPCB along with consent to establish application.</li> </ul>
Xlvi	In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Department.	<ul style="list-style-type: none"> <li>❖ Noted.</li> </ul>
Xlvii	A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.	<ul style="list-style-type: none"> <li>❖ Regular supervision of the above measures is being monitored regularly to avoid disturbance to surrounding under competent person.</li> </ul>
Xvii i	Separate funds shall be allocated for implementation of environmental protection measures/EMP along with item-wise breaks-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should be reported to the MPCB & this department.	<p>Separate funds have been allocated for implementation of Environmental protection measures;</p> <p><b>During construction phase;</b></p> <ul style="list-style-type: none"> <li>❖ Capital Cost: Rs. 45.90 Lakhs have been allocated for the entire construction period.</li> </ul> <p><b>During operation phase;</b></p> <ul style="list-style-type: none"> <li>❖ Set up Cost: Rs. 103.50 Lakhs &amp;</li> <li>❖ O &amp; M Cost: Rs. 16.40 Lakhs / Annum.</li> </ul>
Xlix	The project management shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Marathi language of the local concerned within seven days of issue of this letter,	<ul style="list-style-type: none"> <li>❖ After getting Environmental clearance from SEIAA, Govt. of Maharashtra vide letter no. SIA/MH/MIS/143467/2020, dated: 27/10/2020, we published public notice in Navshakti (Marathi) &amp; The Free Press</li> </ul>

Sl. No.	Stipulated Clearance Conditions	Compliance Status
	informing that the project has been accorded environmental clearance and copies of clearance letter are available with the Maharashtra Pollution Control Board and may also be seen at Website at <a href="http://ec.maharashtra.gov.in">http://ec.maharashtra.gov.in</a> .	<p>Journal (English) local newspapers.</p> <p>❖ Please refer Annexure - 21 for Advertisement copy.</p>
1	Project management should submit half yearly compliance reports in respect of the stipulated prior environment clearance terms and conditions in hard & soft copies to the MPCB & this department, on 1st June & 1st December of each calendar year.	<p><b>Submitting six monthly compliance reports to:</b></p> <p>❖ RO, MPCB, Sion, Mumbai.</p> <p>❖ RO, CPCB, Vadodara.</p> <p>❖ RO, MoEF &amp; CC, Nagpur.</p> <p>❖ Environment Department, Mantralaya.</p>
li	A copy of the clearance letter shall be sent by proponent to the concerned Municipal Corporation and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.	<p>❖ Environmental clearance copy submitted to MCGM.</p>
lii	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO <sub>2</sub> , NO <sub>x</sub> (ambient levels as well as stack emissions) or critical sector parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	<p>❖ We will upload the copies of EC and six monthly compliance reports on our website.</p>
liii	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.	<p><b>Submitting six monthly compliance reports to:</b></p> <p>❖ RO, MPCB, Sion, Mumbai.</p> <p>❖ RO, CPCB, Vadodara.</p> <p>❖ RO, MoEF &amp; CC, Nagpur.</p> <p>❖ Environment Department, Mantralaya.</p>
lix	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as	<p>❖ Environmental statement has been submitted on MPCB web portal for the financial year 2022-2023.</p>

<b>Sl. No.</b>	<b>Stipulated Clearance Conditions</b>	<b>Compliance Status</b>
	amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective RO of MoEF by e-mail.	
4	The environmental clearance is being issued without prejudice to the action initiated under EP Act or any court case pending in the court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision under EP Act or of the Hon'ble court will be binding on the project proponent. Hence this clearance does not give immunity to the project proponent in the case filed against him, if any or action initiated under EP Act.	❖ Noted.
5	In case of submission of false document and non-compliance of stipulated conditions, Authority/ Environment Department will revoke or suspend the Environment clearance without any intimation and initiate appropriate legal action under EPA, 1986.	❖ Noted.
6	The Environment department reserves the right to add any stringent condition or to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the department or for that matter, for any other administrative reason.	❖ Noted.
7	Validity of Environment Clearance: The environmental clearance accorded shall be valid as per EIA Notification, 2006, and amended time to time.	❖ Noted.
8	In case of any deviation or alteration in the project proposed from those submitted to this department for clearance, a fresh reference should be made to the department to assess the adequacy of the condition(s) imposed and to incorporate additional environmental protection measures required, if any.	❖ Noted.
9	The above stipulations would be enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and rules there under, Hazardous Wastes	❖ Noted.

Sl. No.	Stipulated Clearance Conditions	Compliance Status
	(Management and Handling) Rules, 1989 and its amendments, the public Liability Insurance Act, 1991 and its amendments.	
10	Any appeal against this Environment clearance shall lie with the National Green Tribunal (Western Zone Bench, Pune), New Administrative Building, 1 <sup>st</sup> Floor, D-, Wing, Opposite Council Hall, Pune, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	❖ Noted.

**Compliance as per**  
**Monitoring the Implementation of Environmental Safeguards**  
**Ministry of Environment, Forests & Climate Change**  
**Regional Office (WCZ), Nagpur**  
**Monitoring Report**

**DATA SHEET**

1	Project type: River - valley/ Mining / Industry / Thermal / Nuclear / Other (specify)	:	Construction Project.
2	Name of the project	:	Proposed 'Residential and Commercial project at CTS nos. 657, Survey no. 17, Safed Pool, Andheri-Kurla Road, Village Mohili, 'L' Ward, Mumbai – 400072. Maharashtra.
3	Clearance letter ( s ) / OM No. and Date	:	Obtained Environmental clearance from SEIAA, Govt. of Maharashtra vide letter no. SIA/ MH/MIS/143467/2020, dated: 27/10/2020.
4	Location		
a.	District ( S )	:	Mumbai.
b.	State ( S )	:	Maharashtra.
c.	Latitude/ Longitude	:	Lat : 19° 5'49.75" N Long : 72°53'5.02" E
5	Address for correspondence		
a.	Address of Concerned Project Chief Engineer ( with pin code & Telephone / telex / fax number)	:	Mr. Sudarshan Barapate, 601, Orbit Plaza, New Prabhadevi, Prabhadevi Road, Mumbai – 400 025.
b.	Address of Executive Project:	:	Mr. Shubham Dubey,

	Engineer/Manager ( with pin code/ Fax numbers)	601, Orbit Plaza, New Prabhadevi, Prabhadevi Road, Mumbai – 400 025.							
6	Salient features	<p><b>a. of the project</b> :</p> <p><b>1 Building with 4 wings (A to D) with separate podium for RG &amp; swimming pool:</b></p> <table border="1"> <thead> <tr> <th>Wings</th> <th>Nos of floors</th> </tr> </thead> <tbody> <tr> <td>Wing A, B &amp; C: (Residential)</td> <td>2 Basements + Ground Floor + 1<sup>st</sup> to 12<sup>th</sup> floor.</td> </tr> <tr> <td>Wing D: (Commercial)</td> <td>3 Basements + Ground floor + 1<sup>st</sup> to 11<sup>th</sup> floor.</td> </tr> </tbody> </table> <p><b>b. of the environmental management plans</b> :</p> <p>Separate funds have been allocated for implementation of Environmental protection measures;</p> <p><b>During construction phase;</b></p> <ul style="list-style-type: none"> <li>❖ Capital Cost: Rs. 45.90 Lakhs have been allocated for the entire construction period.</li> </ul> <p><b>During operation phase;</b></p> <ul style="list-style-type: none"> <li>❖ Set up Cost: Rs. 103.50 Lakhs &amp;</li> <li>❖ O &amp; M Cost: Rs. 16.40 Lakhs / Annum.</li> </ul>		Wings	Nos of floors	Wing A, B & C: (Residential)	2 Basements + Ground Floor + 1 <sup>st</sup> to 12 <sup>th</sup> floor.	Wing D: (Commercial)	3 Basements + Ground floor + 1 <sup>st</sup> to 11 <sup>th</sup> floor.
Wings	Nos of floors								
Wing A, B & C: (Residential)	2 Basements + Ground Floor + 1 <sup>st</sup> to 12 <sup>th</sup> floor.								
Wing D: (Commercial)	3 Basements + Ground floor + 1 <sup>st</sup> to 11 <sup>th</sup> floor.								
7	Breakup of the project area	<p><b>a. submergence area forest &amp; non-forest</b> :</p> <p>Not Applicable.</p> <p><b>b. Others</b> :</p> <ul style="list-style-type: none"> <li>❖ FSI area: 19,447.66 Sq. mt.</li> <li>❖ Non-FSI area: 15,444.50 Sq. mt.</li> <li>❖ Total Built-up area: 34,892.16 Sq. mt.</li> </ul>							
8	Breakup of the project affected Population with enumeration of that losing houses/dwelling unit's Only agricultural land only, both Dwelling units & agricultural Land & landless laborers/artisan.	<p>Not Applicable.</p>							
	<b>a. SC, ST/Adivasis</b>	<p>Not Applicable.</p>							
	<b>b. Others</b> (Please indicate whether these Figures are based on any scientific And systematic survey carried out Or only provisional figures, if a Survey is carried out give details And years of survey)	<p>Not Applicable.</p>							
9	Financial details	<p><b>a. Project cost as originally planned and subsequent revised estimates and the year of price reference.</b> :</p> <p>Project Cost: Rs. 142.34 Cr.</p>							

	b.	Allocation made for environmental management plans with item wise and year wise Break-up.	:	Separate funds have been allocated for implementation of Environmental protection measures;  <b>During construction phase;</b> ❖ Capital Cost: Rs. 45.90 Lakhs have been allocated for the entire construction period. <b>During operation phase;</b> ❖ Set up Cost: Rs. 103.50 Lakhs & ❖ O & M Cost: Rs. 16.40 Lakhs / Annum.
	c.	Benefit cost ratio/Internal rate of Return and the year of assessment	:	--
	d.	Whether (c) includes the Cost of environmental management as shown in the above.	:	--
	e.	Actual expenditure incurred on the project so far	:	<b>Rs. 58.89 Cr.</b>
	f.	Actual expenditure incurred on the Environmental Management plans so	:	<b>Rs. 12.21 Lac.</b>
10	Forest land requirement			
	a.	The status of approval for diversion of forest land for non-forestry use	:	Not Applicable.
	b.	The status of clearing felling	:	Not Applicable.
	c.	The status of compensatory afforestation, if any	:	Not Applicable.
	d.	Comments on the viability & sustainability of compensatory afforestation program in the light of actual field experience so far	:	Not Applicable.
11	The status of clear felling in Non-forest areas (such as submergence area of reservoir, approach roads), if any with quantitative information			
12	Status of construction: Excavation work		:	<b>Construction work status for period March 2023 is as follows:-</b> <ul style="list-style-type: none"> <li>• Basements Completed</li> <li>• ABC wing -1st floor completed</li> <li>• DE wing Basements Completed</li> <li>• Area - 11086 m<sup>2</sup></li> </ul>
	a.	Date of commencement (Actual and/or planned)	:	04/06/2021 Site preparation work started on 04/06/2021 based on commencement certificate received.
	b.	Date of completion (Actual and/or planned)	:	31/12/2025 (Planned)

13	Reasons for the delay if the Project is yet to start	:	--
14	Dates of site visits		
	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	:	--
15	Details of correspondence with Project authorities for obtaining Action plans/information on Status of compliance to safeguards Other than the routine letters for Logistic support for site visits ) (The first monitoring report may contain the details of all the Letters issued so far, but the Later reports may cover only the Letters issued subsequently.)	:	--



MUNICIPAL CORPORATION OF GREATER MUMBAI

NO. Ch.E./DP34201904111218253 D.P. Rev. dt. Refer Inward Number: L/2019/111218259 Payment Dated 24/04/2019

Office of the Chief Engineer (Development Plan)  
Municipal Head Office, 5th Floor,  
Annex Building, Fort,  
Mumbai - 400 001

# DP 2034 Remarks

To,

Mr./Mrs. shashikant laxman jadhav  
B-106,natraj bldg mulund goregaon link road,mulund west

Sub: Development Plan 2034 remarks in respect to Land Bearing C.T.S. No(s) 657 of MOHILI Village situated in L Ward, Mumbai.

Ref : Application u/no. L/2019/111218259 Payment Challan No. DP34201904111218253 Dated 24/04/2019 certifying payment of charges made under Receipt no. 18200017810 Dated 24/04/2019

Gentleman/Madam,

With reference to above, Development Plan 2034 remarks sanctioned by GoM in respect of subject land boundaries, shown in blue color boundary on the accompanied plan, are as follows.

Description	Nomenclature	Remarks
CTS No.	657	
Village	MOHILI	
Development Plan 2034 referred to Ward	L	
Zone [as shown on plan]	Industrial(I)	
Roads affecting the Land [as shown on plan]	Existing Road	Present
	Proposed Road	NIL
	Proposed Road Widening	Proposed Road 18.3 m
Reservation affecting the Land [as shown on plan]	NO	
Reservation abutting the Land [as shown on plan]	NO	
Existing amenities affecting the Land [as shown on plan]	NO	
Existing amenities abutting the Land [as shown on plan]	NO	
Whether a listed Heritage building/ site:	Yes / No	
Whether situated in a Heritage Precinct:	Yes / No	
Whether situated in the buffer zone/Vista of a listed Grade- I heritage site:	Yes / No	
Whether a listed archaeological site (ASI):	Yes / No	
Whether situated in the buffer zone/Vista of a listed archaeological site (ASI):	Yes / No	

Note:

The remarks are offered based on the records of CS/CTS boundaries/CS/CTS Nos available with this office. However the boundaries shown in the records of City Survey Office shall supersede those shown on the DP Remarks Plan.

Demarcation: The Alignment of the proposed road/R.L. and boundaries of reservations and their area are subject to the actual demarcation on site by E.E.T&C./A.E.(Survey) as case may be.

Remarks are offered only from the zoning point of view without reference to ownership and without carrying out actual site inspection and without verification of the status of the structures if any on the land under reference. Status of the existing road, if any, shall be confirmed from the concerned Ward Office.

The DP Remarks and Plan shall be read with notification no. TPB.4317/629/CR-118/2017/UD-11 dt. 8.11.2017, TPB.4317/778/CR-267/2017/UD-11 dt. 7.2.2018, TPB.4317/629/CR-118/2017/DP/UD-11 dt 8.5.2018 & TPB.4317/629/CR-118/2017/EP/UD-11 dt.8.5.2018 before granting any development permission on the land/s. (For the Sanctioned Modification & Excluded Portion the link for notification is as under:-

Notifications:

MCGM Home Page ([portal.mcgm.gov.in](http://portal.mcgm.gov.in))> Ward & Departments> Chief Engineer - Development Plan>Docs> Sanctioned DP2034

Plans:

EP Sheets:- MCGM Home Page ([portal.mcgm.gov.in](http://portal.mcgm.gov.in))> Ward & Departments> Chief Engineer - Development Plan>Docs> Sanctioned DP2034> Development Plan 2034 (Excluded Part) EP Sheets, 8th May 2018 - For Suggestions / objections by Government

SM Sheets:- MCGM Home Page ([portal.mcgm.gov.in](http://portal.mcgm.gov.in))> Ward & Departments> Chief Engineer - Development Plan>Docs> Sanctioned DP2034> Development Plan 2034(sanctioned part) SM sheets, 8th May 2018

## Additional Information

Water pipeline Remark:

Water pipeline near the plot (3.69 meters far) has 150 mm pipe diameter.

Sewerline Remark:

Sewer Manhole near the plot (Node No. 20234303, 5.60 meters far) has invert level 26.50 meters with reference to Town Hall Datum (THD).

Drainage Remark:

Drain Manhole near the plot (Node ID 2177123904, 4.47 meters far) has invert level 29.24 meters with reference to Town Hall Datum (THD).

Ground level:

The plot has minimum 31.00 meters and maximum 34.00 meters ground level with reference to Town Hall Datum (THD)

RL Remark:

REGULAR LINE REMARKS (Traffic):

As far as Traffic department is concerned, there is no any proposed or sanctioned Regular Line/Road Line at present along the plot C.T.S. No.(s) 657 of Village/Division MOHILI in L ward of M.C.G.M. as shown bounded blue on accompanying plan.

You are also requested to obtain remarks from Asst. Engineer (Survey) L Ward. The earlier R.L. Remarks issued by this office if any shall be treated as cancelled.

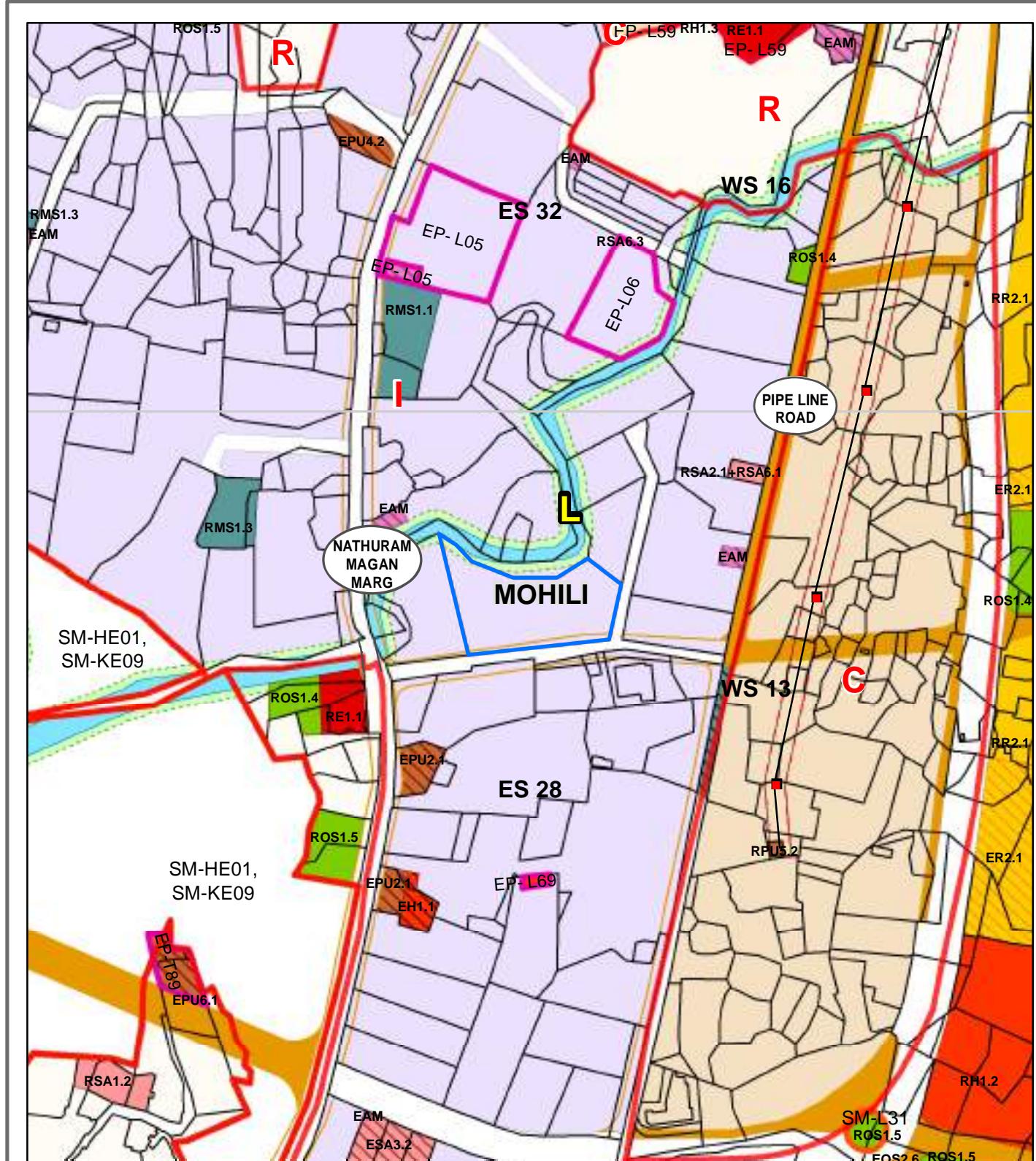
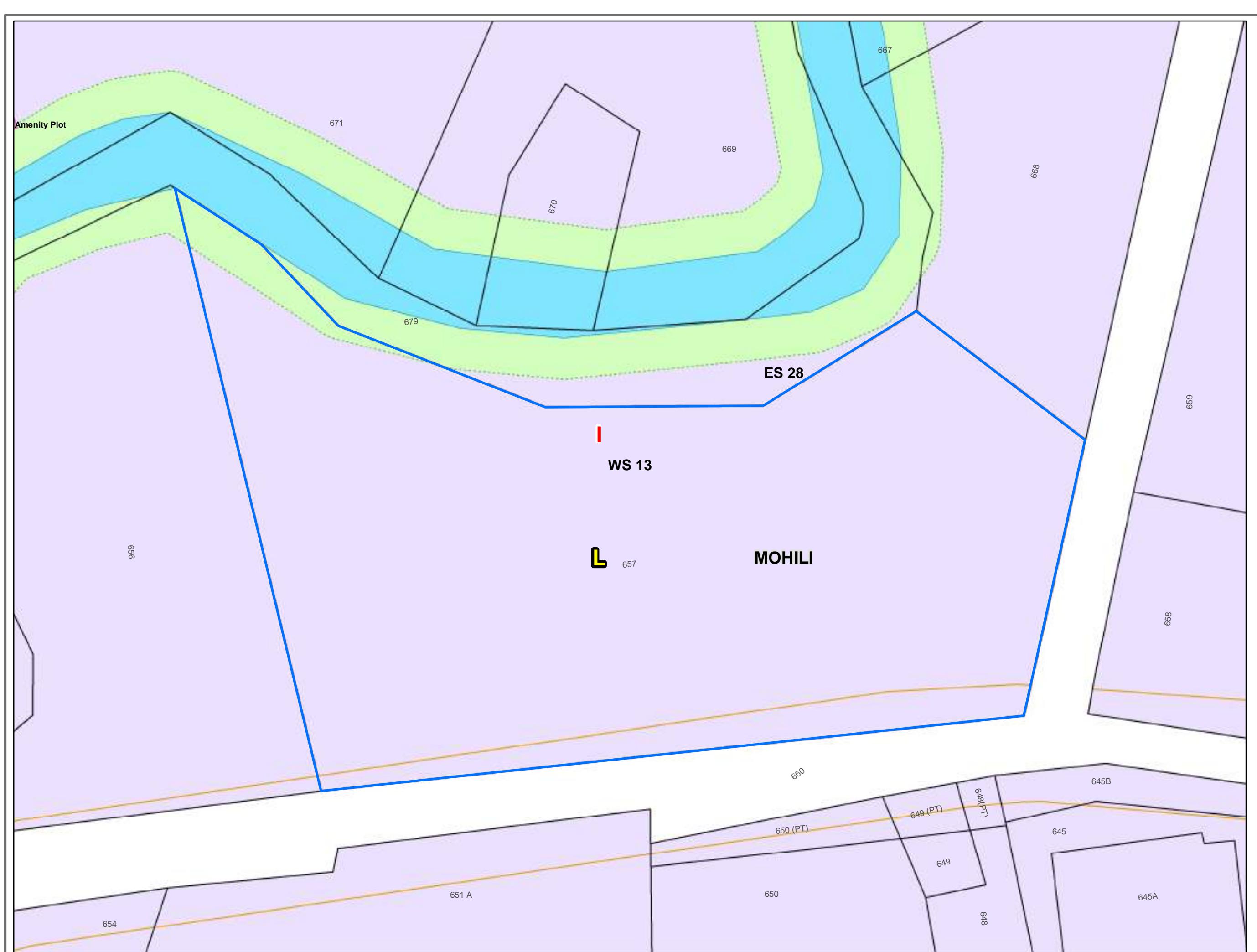
The above remarks are issued without prejudice to the ownership, status of the structure, plot boundaries and will supersede to the earlier remarks and shall be valid for one year from the date of its issue.

Natural Water Course:

The land under reference is under influence zone of waterbody hence specific remark from the concerned Authority should be obtained separately before taking up any development on the land

Acc: As Plan

Note: The above information is as per the data received from concerned MCGM Departments.



## LOCATION PLAN

Scale 1:4000

Next

DP Remarks have been offered only from Zoning point of view without any reference to the existing and status of the structures on the land under reference etc. This plan is to be read with letter under

CHE/DR34201904111318253/DR/ES/L

This is an electronically generated document. Hence NO signature required. Assistant Engineer (DP), L Ward, Dated: 24/04/2019



# **MUNICIPAL CORPORATION OF GREATER MUMBAI**

## **(Development Plan Department)**

## Development Plan 2034

Office of the Chief Engineer (Development Plan),  
5th Floor, Annexe Building,  
Municipal Head Office,  
Mahapalika Marg, Fort, MUMBAI - 400 001.



## MUNICIPAL CORPORATION OF GREATER MUMBAI

HYDRAULIC ENGINEER'S DEPARTMENT Remark Issued u/n HE/000797/2021/L/ES Dated : 26 Mar 2021

Office of the :

Office of Ex. Eng.(P & R) 'B' Ward Office,  
3rd Floor, Near J J Hospital, Babula Tank  
Cross Road, Mumbai-400009.

To,

Shri. SHASHIKANT LAXMAN JADHAV  
B-106, NATRAJ BLDG., MULUND (W)

CC,

LANDCARE REALTY LLP  
601, Orbit Plaza, New Prabhadevi Road,  
Prabhadevi, Mumbai

**Subject :** Hydraulic Engineer's Department Remark for proposed building on Plot bearing CTS / CS Number 657 of Village / Division MOHILI at Eastern Suburb, L Ward, Mumbai.

**Reference :** 1) Your online application - Application Number CHE/ES/4273/L/337(NEW)-HE/1/New dated 26 Mar 2021  
2) Scrutiny fee receipt Number CHE/BP/51982/21

As per the data furnished by Architect / Consultant / LS / LP the proposed building under reference is a Residential. Total water requirement of the building works out to 95000 lpd for residential purpose, 4000 lpd for commercial purpose and 0 lpd for other purpose.

It is to inform that, Hydraulic Engineer's Remark for the proposed Individual building under reference are as follows :-

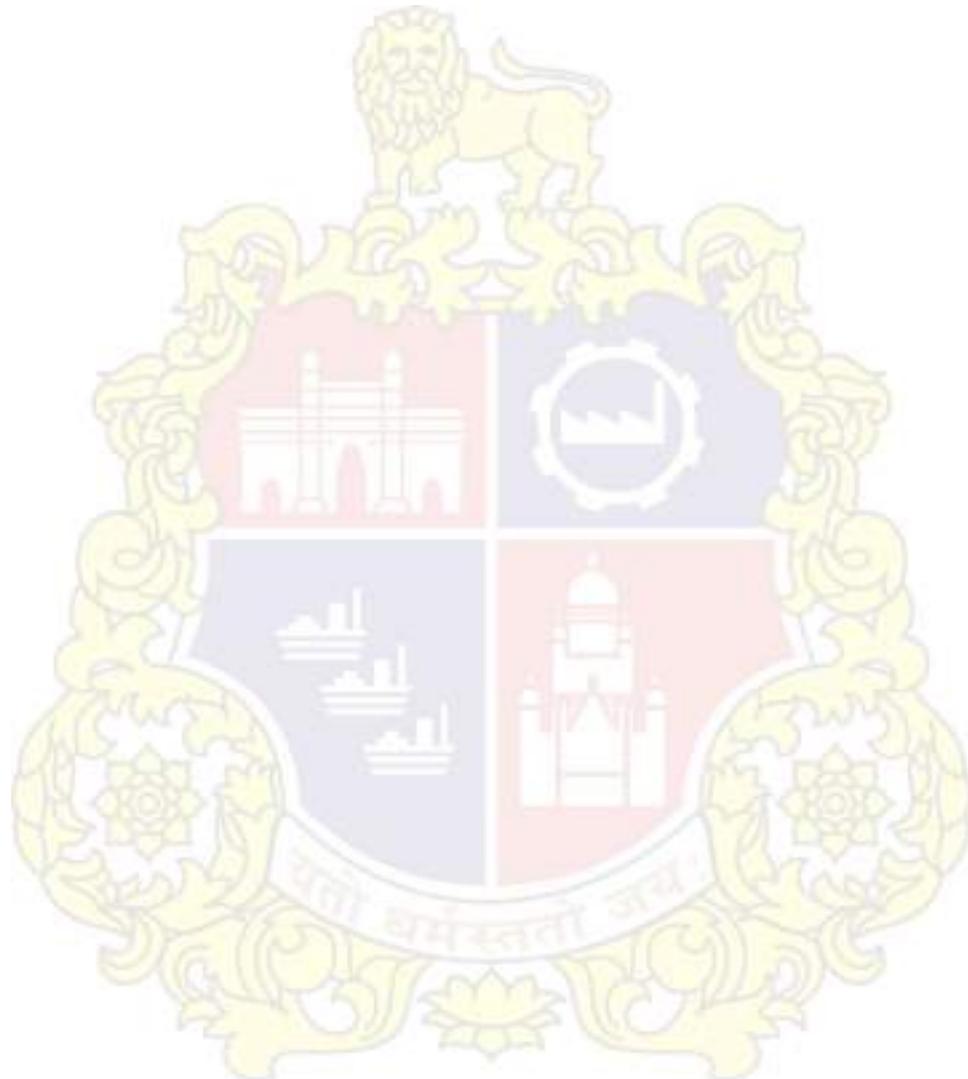
1. Water supply for the Resi+Comm building will be made available as per prevailing norms, on submission of occupation certificate.
2. If borewell is to be dug on site an Register Under Taking from Architect / Consultant / LS / LP to be submitted for proposed location of borewell with latitude and longitude of borewell.
3. Physically separate underground and overhead water storage tanks of adequate capacities for domestic and flushing purpose shall be provided. Capacity of underground water storage tank shall be obtained from consultant. Underground suction tank shall be located as close as possible to the existing water main in Municipal Road and the same shall not be in 1.5 M vicinity of drainage / Sewer line / Manhole / Inspection Chamber and shall be at minimum distance of 6.00 mt from proposed STP. Top of manhole shall be maintained at about 60 cm above adjacent ground / floor level and minimum head clearance of 1.20 M shall be maintained for inspection and cleaning of tanks.
4. The internal water distribution system within building shall be provided by Terrace loop & downtake system. The design for same shall be obtained from consultant and shall be self certified.
5. Adequate precaution shall be taken while designing and execution of the structural members continuously in contact, with chlorinated Municipal water in the suction tank, located in the basement / stilt of the building. As suction tank is located within the building line, adequate care shall be taken to avoid contamination and adequate arrangements shall be made to drain out the overflow water.
6. Automatic level control censors system & Ball Cock arrangement shall be provided in overhead & underground water storage tanks to avoid overflow from tanks.
7. Water conservation devices such as dual flushing cisterns (ISI marked) / dual flush valves for W.C.'s and sensor operated taps for wash basins & urinals, shall be installed in the building.

Above Remark are issued as per data furnished by Architect / Consultant / LS / LP while amendment in building plans, if water

demand of the building exceeds above 10% to the above water demand, then this Remark shall be treated as cancelled and fresh Remark shall have to be obtained by providing revised data.

Notes:

1. The above remarks are system generated based on the input data submitted by Architect / Consultant / L.S. / L.P. and if in future it is found that the data is incorrect / fraudulent then the remarks deemed to be treated as cancelled and necessary action will be initiated.
2. The above remarks are system generated and does not require any signatures.





## **MUNICIPAL CORPORATION OF GREATER MUMBAI**

Office of the Dy.Chief Engineer(Sewerage Project), P&D, Engg. Hub, Stores Bldg., 2nd Floor, Dr. E. Moses Road, Worli, Mumbai - 400 018

System generated Sewer remark Number 4536/REM/2018/SP/515 Dated 09 Nov 2020.

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To,

Shri. SHASHIKANT LAXMAN JADHAV (L.P Number Sadanand\$Balkrishna\$Ayare)  
B-106, NATRAJ BLDG., MULUND (W)

CC,  
Sadanand\$Balkrishna\$Ayare  
Udyam Sahakari Sandan Sanstha Ltd, Shop No. 3, 978,  
Gokhale Road (South), Dadar (W), Mumbai - 400028.

CC,  
LANDCARE REALTY LLP  
Udyam Sahakari Sandan Sanstha Ltd, Shop No. 3, 978,  
Gokhale Road (South), Dadar (W), Mumbai - 400028.

**Subject:-** Sewerage remarks for proposed on plot bearing CTS Number 657 of village Zone 5 at ward Ward L

**Reference:-** Application Number Sadanand\$Balkrishna\$Ayare and date 01 Jan 1900

It is to inform you that , there is no objection to connect proposed Resi+comm to 0 mm dia municipal sewer by laying 150 mm dia pipe sewer street connection from sewer trap chamber of proposed development / building to municipal sewer manhole, subject to the following conditions:

1. That work shall be carried out as per the Municipal Specifications and drainage bye-laws after obtaining necessary permission from concerned ward.
2. Sewer street connection from sewer trap chamber of proposed development / building to municipal sewer manhole line shall be laid as per Municipal Specifications using R.C.C. pipes NP3 class (I.S.I. Mark only) duly encased with 15 cm. thick M-15 cement concrete all around along with provision, in 1:80 slope for 150 mm dia and 1:135 slope for 230 mm dia from connection.
3. That the vent shaft of adequate size (minimum 150 mm dia) shall be provided at sewer trap chamber and at every 150 m. intervals, along the sewer line.
4. That the work shall be carried out through licensed plumber / plumbing consultants only.
5. The work shall be commenced from the downstream of the network.
6. That all necessary permissions from concerned officials / departments like Traffic Police, Ward Office, etc. shall be obtained before starting the work.
7. That house drains for all the buildings at the above mentioned premises should be got approved form the concerned A.E (B.P) / Self Certification.
8. You shall be solely responsible for safety of other underground services pipe lines etc. and safety of third party including injury / death of any person. Any harm done as a consequence of work being carried out by you shall be compensated solely by you.
9. The necessary road reinstatement charges shall be borne by developer.
10. That fresh remarks should be obtained in case of amendment in plans.
11. That after the work is completed the Drainage Completion Certificate along with L-section of completed work must be uploaded for acceptance to concerned E.E(SP)P&D before obtaining part OCC / Full OCC of the building.
12. In the event of proposed development the remarks are generated showing the connection to the existing municipal sewer network and it is not feasible practically to connect then Arch / L.P / plumbing consultants has to make a sump or pump arrangement at his / her own risk and cost.
13. Any additional / separate street connection required to be laid for the proposed building same has to be approved by EE SP (P&D).
14. If the proposed development exceeds built-up area of 20000 sq. m. then the street connection to be treated as overflow connection of only excess treated sewage from STP provided in the building development.
15. If any short recovery in payment of prorata charges, scrutiny fee etc. to be paid to MCGM is observed then the same shall be paid to MCGM as and when demanded.

**Note:**

1. The remarks are generated without prejudice to the ownership of land and status of the land and structures there on.
2. The said remarks are generated as per plan submitted by the Architect / Consultant / L.S / L.P.
3. If there is any amendment / change in Plan / layout revised remark will have to be obtained before completion.
4. The sole responsibility of Auto generated remarks lies with Architect / Consultant / L.S / L.P Only.
5. Without prejudice the remarks are generated on input/ data entered by applicant for calculation of prorata charges and if any discrepancy / shortfalls is observed then the prorata charges as intimated by concerned E.E(SP)P&D shall be paid within stipulated period.
6. The above remarks are system generated based on the input data submitted by the Architect / Consultant / L.S / L.P and if in future it is found that the data is incorrect/ fraudulent, then the remarks deemed to be treated as cancelled and necessary action will be initiated.
7. The above remarks are system generated and does not require any signatures.





## MUNICIPAL CORPORATION OF GREATER MUMBAI

Storm Water Drain Remarks Issued u/n /000186/2020/L/ES Dated : 09 Nov 2020

Office of the :

Office of Dy. Cheif Engineer(SWD)ES  
5th floor,Transport Garage  
building,pant nagar,Ghatkoper  
(East),Mumbai-400075

To,

Shri. SHASHIKANT LAXMAN JADHAV  
B-106, NATRAJ BLDG., \$MULUND (W)

CC,

Sadanand\$Balkrishna\$Ayare , L.P.  
No. - Sadanand\$Balkrishna\$Ayare,  
Udyam Sahakari Sandan Sanstha Ltd,  
Shop No. 3, 978, Gokhale Road  
(South), Dadar (W), Mumbai - 400028.

CC,

LANDCARE REALTY LLP  
601, Orbit Plaza, New Prabhadevi Road,  
Prabhadevi, Mumbai

**Subject :** Storm Water Drains Remarks for proposed building on Plot bearing C.T.S./C.S. No. 657 of Village/Div. MOHILI at Eastern Suburb,L Ward, Mumbai.

**Reference:** 1) Application No. CHE/ES/4273/L/337(NEW)-SWD/1/New dated 30 Oct 2020

2) I.O.D No.CHE/ES/4273/L/337(NEW)-IOD dated 6/4/2019 12:31:46 PM

Dear Applicant,

The remarks regarding storm water drain and Natural Water Course passing through the property mentioned above are as under & the remarks are offered without prejudice to the boundaries of plot, ownership of land, status of the land and structures thereon

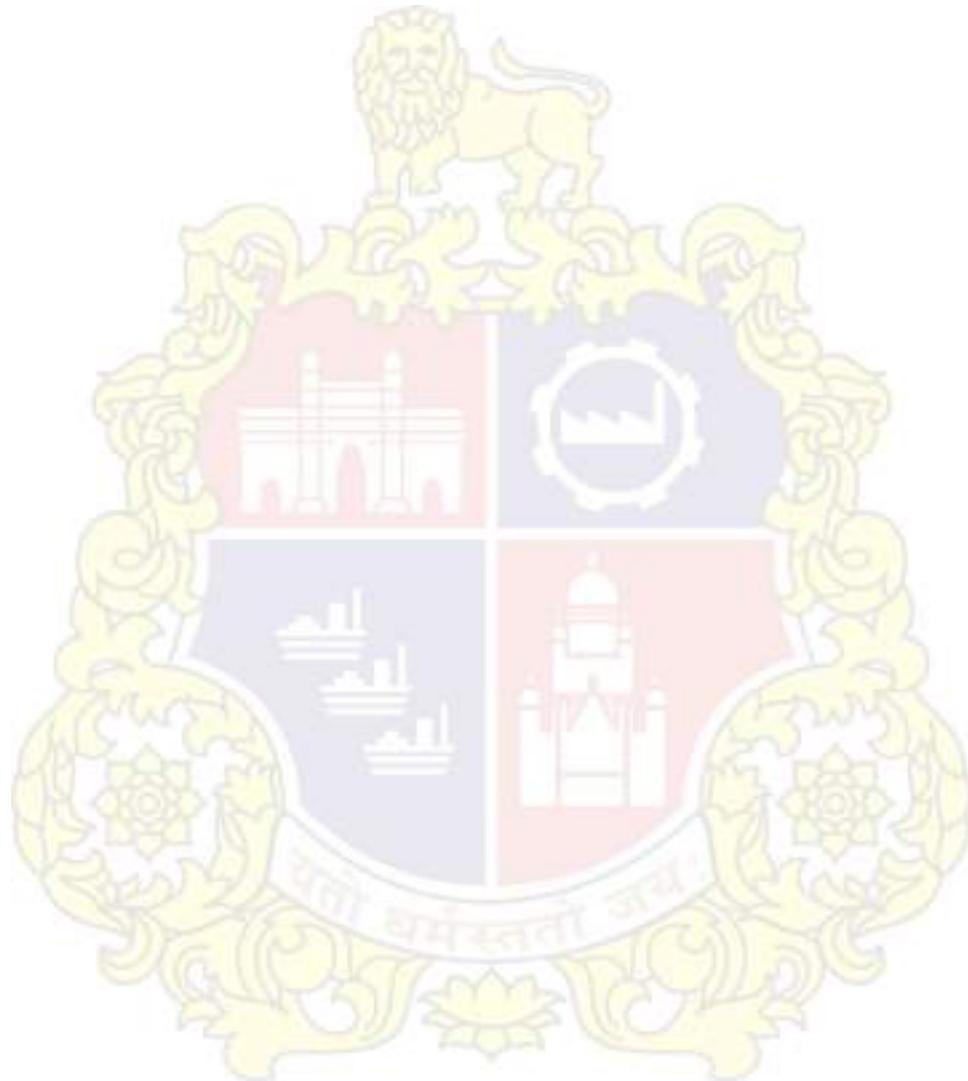
1	Whether any natural water course is passing through the property.	No
2	Whether access for desilting is to be left out from either side of the nalla within the plot.	NA
3	Nature of land (whether the R.L. is above 28.04M THD or not).	Yes
4	Adequate storm water drains shall be provided in the property including provision for admitting storm water coming from the surrounding locality if required in future.	
5	While constructing the S.W. Drain invert level of the drain shall be kept such as to admit the storm water coming from the adjoining areas.	
6	If the plot under reference is affected by a Major / Minor Nalla or a natural water course then the party shall construct the same as per Municipal Specifications. The party will have to bear full cost of training and construction of water course in the property in case the Corporation takes up the work in hand.	
7	The access / internal roads of the layout should be provided with pucca open S. W. Drains on each/one side The road side drains, if any, should be constructed on final R.L.obtained from Competent Authority.	
8	Side open spaces shall be levelled consolidated and paved with proper slope to drain in such a way to dispose off the storm water into the S. W.Drains as proposed and or into the existing drains along Municipal Roads./As per Environmental requirement.	
9	Architect shall upload the plan showing proposed storm water drain arrangement.	

10	That during the execution work of the proposed building, if any Storm Water Drain, is found existing within the plot shall be brought to the notice of this office immediately & The drain shall be diverted in coordination with SWD dept.	
11	The S. W. Drain remarks for the holding under reference are as under -	
	a)	The storm water drains for existing Municipal Roads / D. P. Roads / Intrenal Roads / Access Roads as per these remarks shall be constructed as per M.C.G.M. specifications and the walls should be of c.c. M-25 of minimum thickness 0.20 m. over a bed concrete of M-15(1:2:4) c.c. 15 cm. thick and M-25 c.c. haunches of 8.0 cm. thick with cement plaster in cement mortar. (1:2) 12 mm thick for haunches.
	b)	The gradient of the drains shall be given such way to create velocity of 1.22 m. /sec. In case of steep localities where velocity is likely to exceed 2.40 m. / Sec. intermediate drop in invert shall be provided.
	c)	All cross drains ( Culvert) shall be 1.5 times the size of the drains proposed.
	d)	Before commencing the work of S.W.D. as per remarks, party should intimate this office along with details of Proposed Work.
	e)	To reconstruct if existing S.W.D. / natural water course passing through plot u/r within premises between at starting points and further to be provided with bottom slope of 1:500 towards discharging points and same shall be covered with heavy duty R.C.C./C.I./M.S. gratings after obtaining Specific remarks as mentioned above.
	f)	To construct 0.2 Sq.M. internal S.W.D. network within premises along periphery of the holding & wherever required, at starting points and further to be provided with bottom slope of 1:500 towards discharging points and same shall be covered with heavy duty R.C.C./C.I./M.S. gratings and connect the same to Existing Drain. The width of internal S.W.D. shall be minimum 0.45 m.
	g)	To comply all the conditions incorporated in the nalla remarks issued by Planning Cell and submit completion certificate of nalla before asking completion of S.W.D. to this office.
	h)	To Provide proper slope and drainage arrangement in basement floor/ Car Lift Pit parking with sump pit of adequate size and pumping arrangement as designed by the licensed electrical engineer with standby unit to pump out the water accumulated into drains at ground level and connected to internal S.W.D. Construct catch drain of size 0.3m x 0.3 m at entry of ramp and connect same to disposal end.
	i)	An Indemnity Bond duly notarized on stamp paper of Rs. 200 / -shall be submitted to this office indemnifying M.C.G.M.against any losses, damages, etc., if occurred, due to flooding in the basement/ Car lift pit under reference and stating that the same will be binding on Owner / Developer and their legal heirs / successors or whosoever deriving title through them.
	j)	Provide proper slope and drainage arrangement on podium floor with adequate numbers of weep holes and down take pipe shall be provided to carry storm water to S.W.D. at ground floor. Also catch drains shall be constructed at entry of every ramp and connect same to the side drain.
	k)	To provide Carriage entrance of AA Class loading slab at every gate with opening of size 0.60mx0.90m at center along with heavy duty frame and cover and locking arrangement.
	l)	Proper arrangement to dispose of storm water from paved/unpaved open spaces R.G. ramp, approaches, amenity open space & internal road shall be made into the internal proposed/existing drains inside property/ external municipal drain to avoid flooding during monsoon season.
	m)	The Compound wall shall not be constructed on Storm Water Drain Wall/Nalla wall. Adequate numbers of weep holes (150 mm dia) shall be provided in the compound wall, wherever necessary.
	n)	To submit undertaking to indemnify MCGM & its staff against any legal dispute for S.W.D. remarks and for not obstructing any storm water flow of adjoining properties if passing through property u/r.
	o)	All above S.W.D/Carriage entrance Work shall be constructed as per design of Lic. Structural engineer and stability & completion certificate from lic. Structural Engineer also Completion certificate from Architect/Consultant/LS/LP in Appendix II format alongwith as – built drawing shall be submitted before asking completion certificate to this office .
	p)	To submit copy of IOD & approved plan issued by Executive Engineer (BP) prior to asking for S.W.D. completion to this office.
	q)	All temporary measures are to be taken to avoid flooding and stagnation of water in the area due to proposed construction activity.
	r)	The above remarks are generated as per your request and without prejudice. The said remarks are likely to be revised subject to contention raised at any instance in future.

Notes:

1. The above remarks are system generated based on the input data submitted by Architect / Consultant / L.S. / L.P. and if in future it is found that the data is incorrect / fraudulent then the remarks deemed to be treated as cancelled and necessary action will be initiated.

2. The above remarks are system generated and does not require any signatures.
3. All the carriage entrances / culverts shall be designed and constructed considering - "AA" class loading.



# HPBD Analysis Report

## Proposed Project at Plot CTS No. 657, Village Mohili, Mumbai

KAIZEN DESIGN SOLUTIONS

L - 022 26473109 E - [projects@kdsglobe.com](mailto:projects@kdsglobe.com) W - [www.kdsglobe.com](http://www.kdsglobe.com)

# Shadow Analysis

## SITE SURROUNDING



Key plan



## BRE DOCUMENT –

## SITE LAYOUT PLANNING FOR DAYLIGHT AND SUNLIGHT

*No more than 40% of any garden or amenity area should be prevented by buildings from receiving any sun at all on 21st March".*

- Proposed buildings
- Site
- Neighborhood Buildings

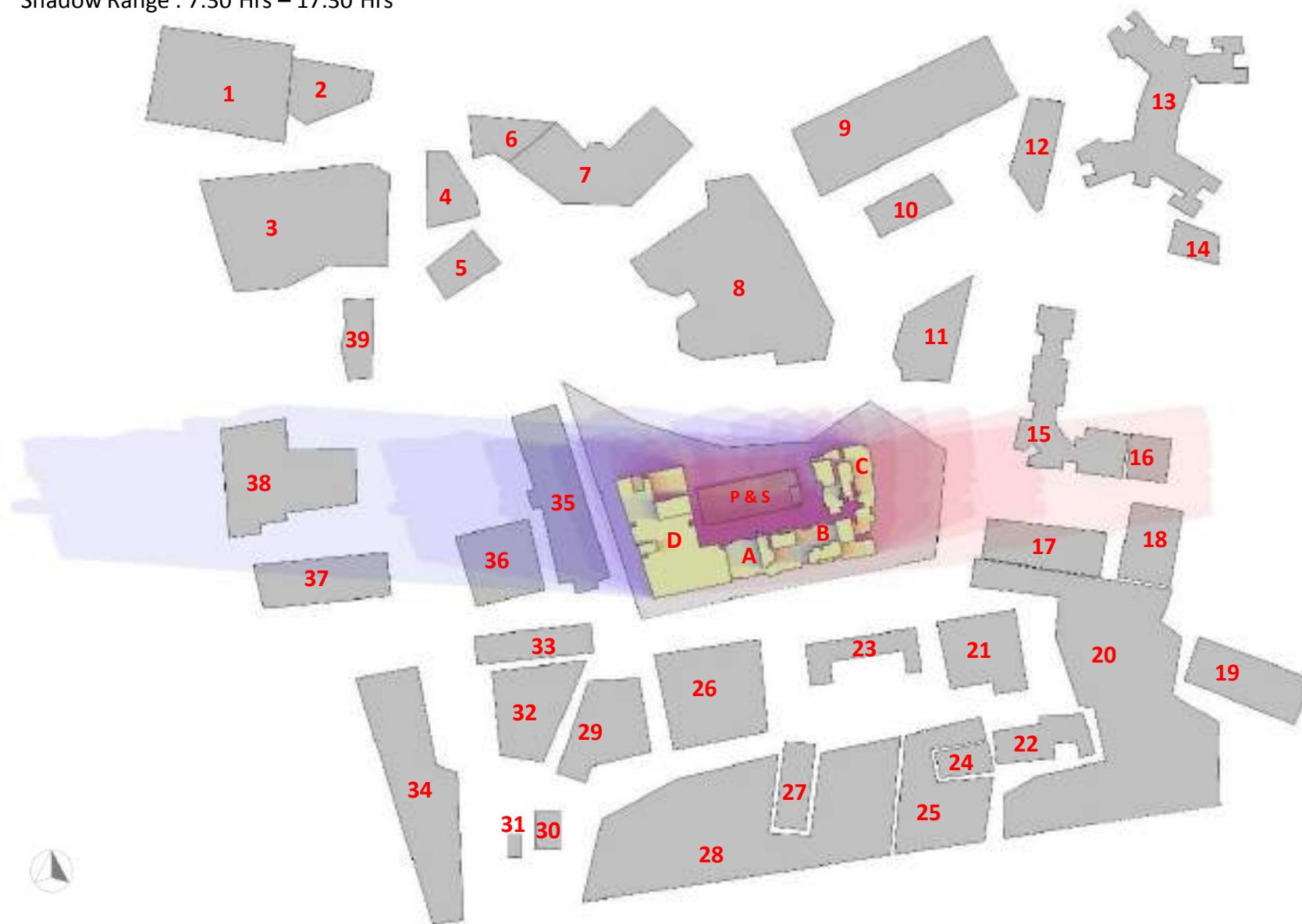
## Site Plan



## HOURLY SHADOW PATTERN

Day: 21<sup>st</sup> March

Shadow Range : 7:30 Hrs – 17:30 Hrs



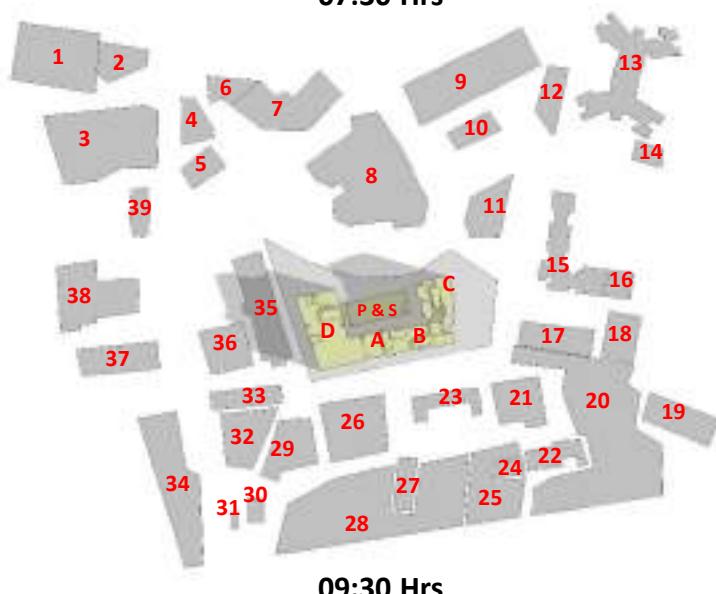
## HOURLY SHADOW PATTERN

Day: 21<sup>st</sup> March

07:30 Hrs



08:30 Hrs



09:30 Hrs



10:30 Hrs



## HOURLY SHADOW PATTERN

Day: 21<sup>st</sup> March

11:30 Hrs



12:30 Hrs



13:30 Hrs



14:30 Hrs



## HOURLY SHADOW PATTERN

Day: 21<sup>st</sup> March

15:30 Hrs



16:30 Hrs



17:30 Hrs



## RESULTS

Day: 21<sup>st</sup> March

ID Mark	Building Name	Building Configuration	Height (metre)	Shadow Impact			
				Start Time	End Time	Impact Hours	%
1	1	G+1	6	0:00	0:00	0:00	0%
2	2	G+1	6	0:00	0:00	0:00	0%
3	3	G+1	6	0:00	0:00	0:00	0%
4	4	G	3	0:00	0:00	0:00	0%
5	5	G+1	6	0:00	0:00	0:00	0%
6	6	G	3	0:00	0:00	0:00	0%
7	7	G	3	0:00	0:00	0:00	0%
8	8	G+8	36	0:00	0:00	0:00	0%
9	9	G+1	7	0:00	0:00	0:00	0%
10	10	G+1	7	0:00	0:00	0:00	0%
11	11	G+2	9	0:00	0:00	0:00	0%
12	12	G+1	6	0:00	0:00	0:00	0%
13	13	G+8	27	0:00	0:00	0:00	0%
14	14	G+1	6	0:00	0:00	0:00	0%
15	15	G+8	27	0:00	0:00	0:00	0%
16	16	G	3	17:00	17:30	0:30	5%
17	17	G+2	9	17:00	17:30	0:30	5%
18	18	G	3	0:00	0:00	0:00	0%
19	19	G+1	6	0:00	0:00	0:00	0%
20	20	G	3	0:00	0:00	0:00	0%
21	21	G+2	9	0:00	0:00	0:00	0%
22	22	G+1	6	0:00	0:00	0:00	0%
23	23	G+2	9	0:00	0:00	0:00	0%
24	24	G+1	6	0:00	0:00	0:00	0%
25	25	G	3	0:00	0:00	0:00	0%

## RESULTS

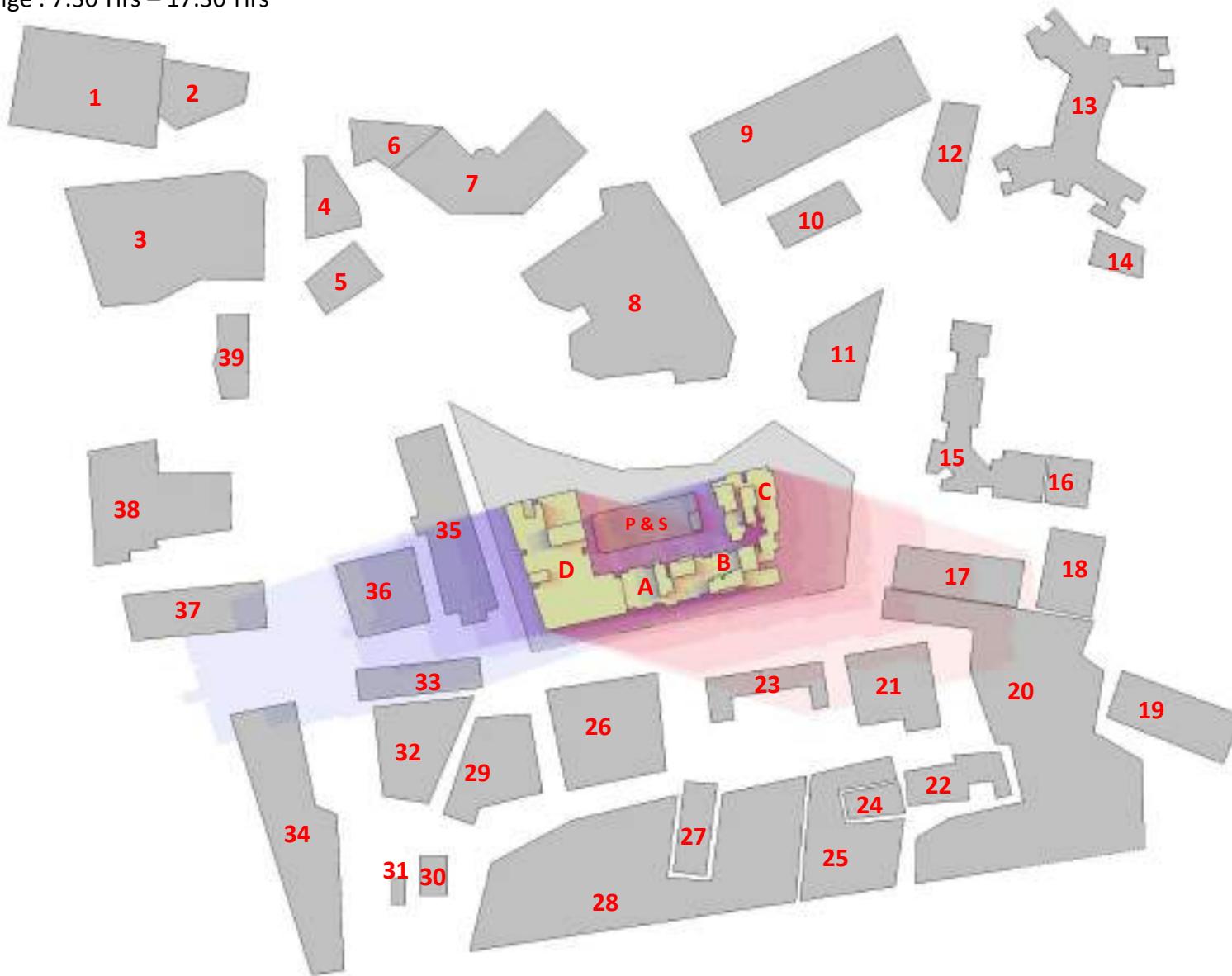
Day: 21<sup>st</sup> March

ID Mark	Building Name	Building Configuration	Height (metre)	Shadow Impact			
				Start Time	End Time	Impact Hours	%
26	26	G+1	6	0:00	0:00	0:00	0%
27	27	G+1	6	0:00	0:00	0:00	0%
28	28	G	3	0:00	0:00	0:00	0%
29	29	G+2	9	0:00	0:00	0:00	0%
30	30	G	3	0:00	0:00	0:00	0%
31	31	G	3	0:00	0:00	0:00	0%
32	32	G+1	6	0:00	0:00	0:00	0%
33	33	G+1	6	0:00	0:00	0:00	0%
34	34	G+1	6	0:00	0:00	0:00	0%
35	35	G+1	6	7:30	10:30	3:00	30%
36	36	G+1	6	7:30	8:30	1:00	10%
37	37	G+1	6	0:00	0:00	0:00	0%
38	38	G+8	27	0:00	0:00	0:00	0%
39	39	G+11	33	0:00	0:00	0:00	0%
A	Wing A	2B+G+12	38.3	0:00	0:00	0:00	0%
B	Wing B	2B+G+12	38.3	0:00	0:00	0:00	0%
C	Wing C	2B+G+12	38.3	17:00	17:30	0:30	5%
D	Wing D	3B+G+11	38.75	7:30	9:00	1:30	15%

## HOURLY SHADOW PATTERN

Day: 21<sup>st</sup> June

Shadow Range : 7:30 Hrs – 17:30 Hrs



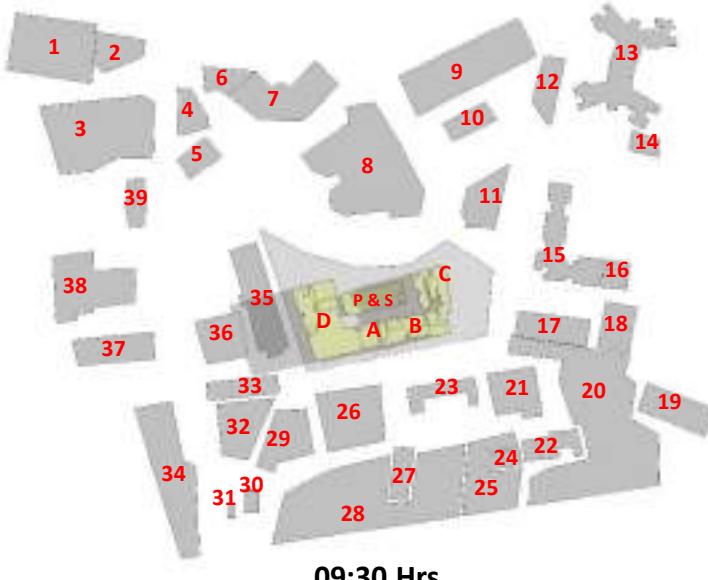
## HOURLY SHADOW PATTERN

Day: 21<sup>st</sup> June

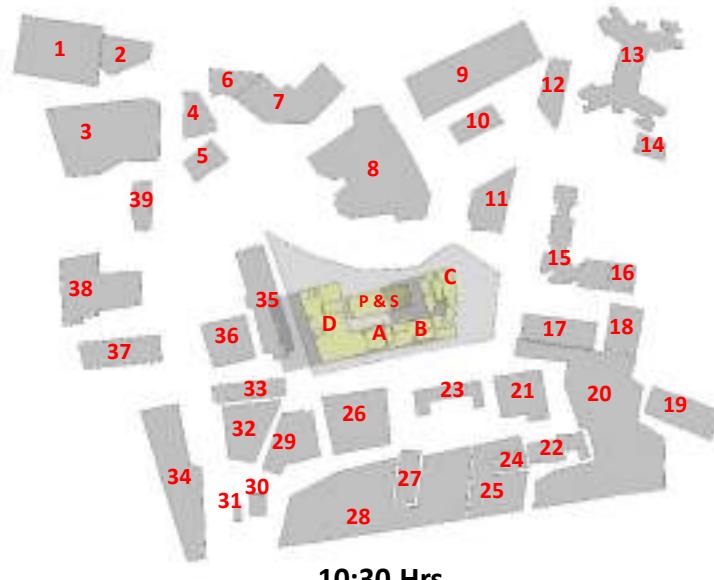
07:30 Hrs



08:30 Hrs



09:30 Hrs



10:30 Hrs



## HOURLY SHADOW PATTERN

Day: 21<sup>st</sup> June

11:30 Hrs



12:30 Hrs



13:30 Hrs



14:30 Hrs



## HOURLY SHADOW PATTERN

Day: 21<sup>st</sup> June

15:30 Hrs



16:30 Hrs



17:30 Hrs



## RESULTS

Day: 21<sup>st</sup> June

ID Mark	Building Name	Building Configuration	Height (metre)	Shadow Impact			
				Start Time	End Time	Impact Hours	%
1	1	G+1	6	0:00	0:00	0:00	0%
2	2	G+1	6	0:00	0:00	0:00	0%
3	3	G+1	6	0:00	0:00	0:00	0%
4	4	G	3	0:00	0:00	0:00	0%
5	5	G+1	6	0:00	0:00	0:00	0%
6	6	G	3	0:00	0:00	0:00	0%
7	7	G	3	0:00	0:00	0:00	0%
8	8	G+8	36	0:00	0:00	0:00	0%
9	9	G+1	7	0:00	0:00	0:00	0%
10	10	G+1	7	0:00	0:00	0:00	0%
11	11	G+2	9	0:00	0:00	0:00	0%
12	12	G+1	6	0:00	0:00	0:00	0%
13	13	G+8	27	0:00	0:00	0:00	0%
14	14	G+1	6	0:00	0:00	0:00	0%
15	15	G+8	27	0:00	0:00	0:00	0%
16	16	G	3	0:00	0:00	0:00	0%
17	17	G+2	9	17:00	17:30	0:30	5%
18	18	G	3	0:00	0:00	0:00	0%
19	19	G+1	6	0:00	0:00	0:00	0%
20	20	G	3	0:00	0:00	0:00	0%
21	21	G+2	9	0:00	0:00	0:00	0%
22	22	G+1	6	0:00	0:00	0:00	0%
23	23	G+2	9	17:00	17:30	0:30	5%
24	24	G+1	6	0:00	0:00	0:00	0%
25	25	G	3	0:00	0:00	0:00	0%

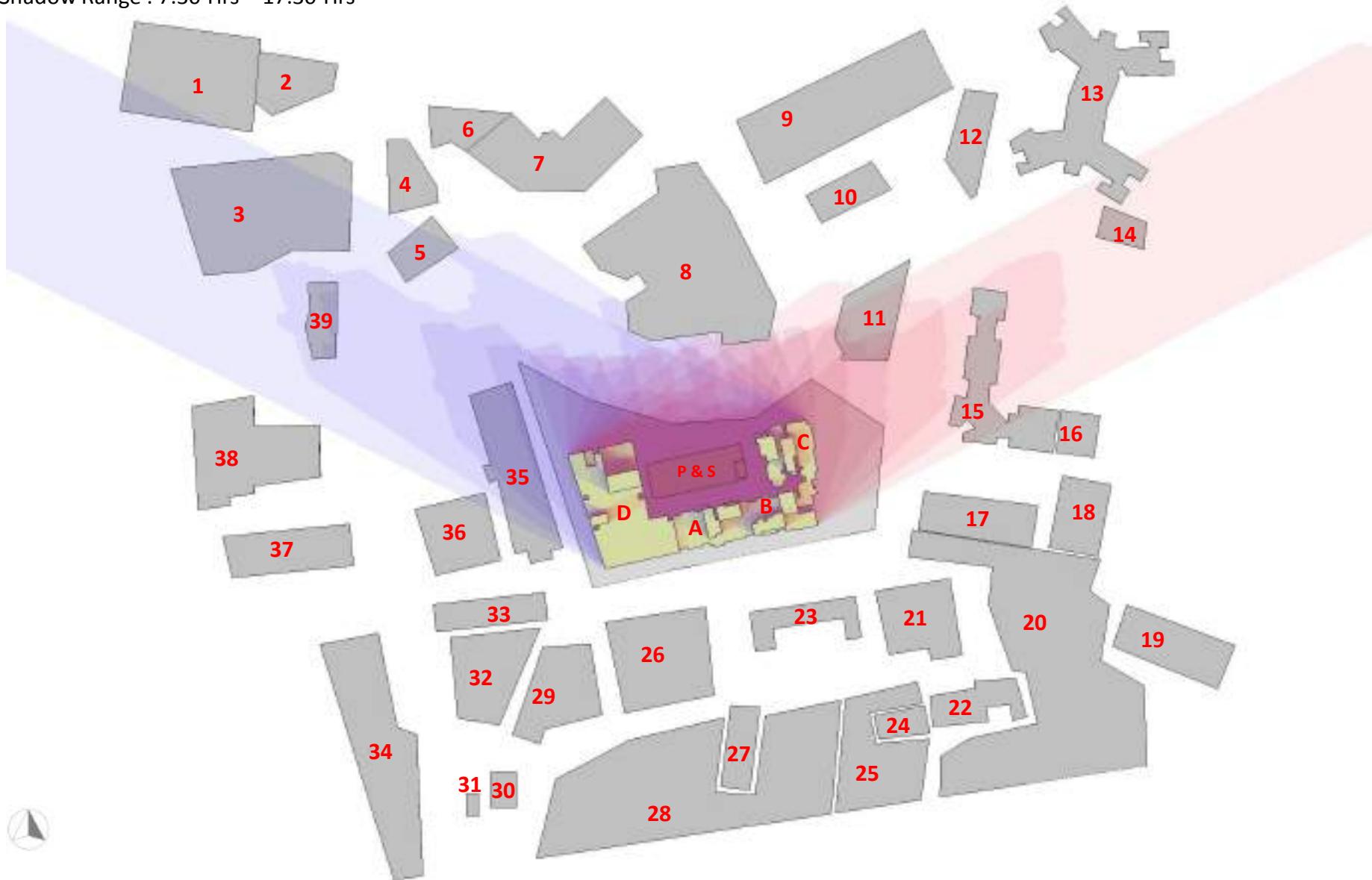
## RESULTS

Day: 21<sup>st</sup> June

ID Mark	Building Name	Building Configuration	Height (metre)	Shadow Impact			
				Start Time	End Time	Impact Hours	%
26	26	G+1	6	0:00	0:00	0:00	0%
27	27	G+1	6	0:00	0:00	0:00	0%
28	28	G	3	0:00	0:00	0:00	0%
29	29	G+2	9	0:00	0:00	0:00	0%
30	30	G	3	0:00	0:00	0:00	0%
31	31	G	3	0:00	0:00	0:00	0%
32	32	G+1	6	0:00	0:00	0:00	0%
33	33	G+1	6	7:30	8:00	0:30	5%
34	34	G+1	6	0:00	0:00	0:00	0%
35	35	G+1	6	7:30	9:30	2:00	20%
36	36	G+1	6	7:30	8:30	1:00	10%
37	37	G+1	6	0:00	0:00	0:00	0%
38	38	G+8	27	0:00	0:00	0:00	0%
39	39	G+11	33	0:00	0:00	0:00	0%
A	Wing A	2B+G+12	38.3	7:30	8:30	1:00	35%
				15:00	17:30	2:30	
B	Wing B	2B+G+12	38.3	7:30	10:00	2:30	30%
				17:00	17:30	0:30	
C	Wing C	2B+G+12	38.3	0:00	0:00	0:00	0%
D	Wing D	3B+G+11	38.75	0:00	0:00	0:00	0%

**HOURLY SHADOW PATTERN**Day: 21<sup>st</sup> December

Shadow Range : 7:30 Hrs – 17:30 Hrs



## HOURLY SHADOW PATTERN

Day: 21<sup>st</sup> December

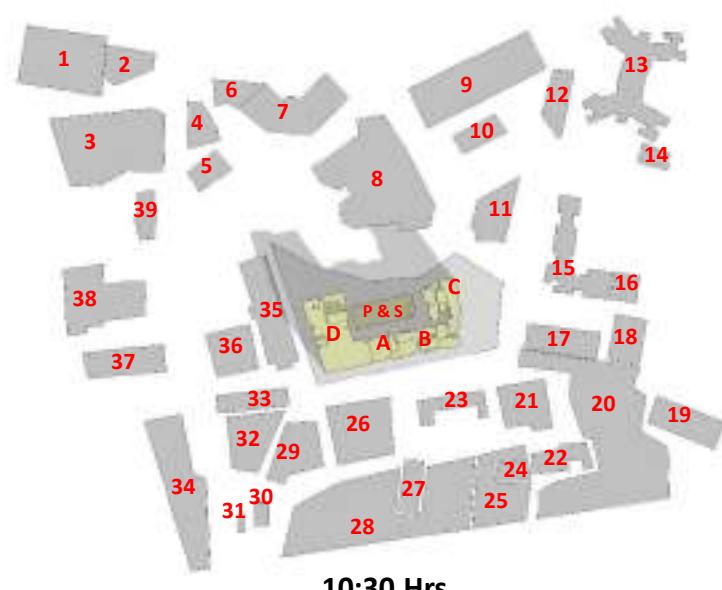
07:30 Hrs



08:30 Hrs



09:30 Hrs



10:30 Hrs



## HOURLY SHADOW PATTERN

Day: 21<sup>st</sup> December

11:30 Hrs



12:30 Hrs



13:30 Hrs



14:30 Hrs



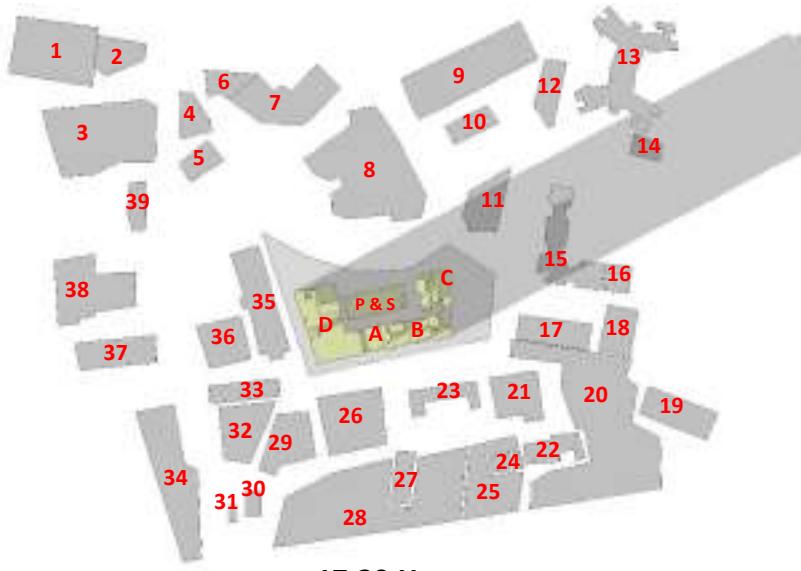
## HOURLY SHADOW PATTERN

Day: 21<sup>st</sup> December

15:30 Hrs



16:30 Hrs



17:30 Hrs



## RESULTS

Day: 21<sup>st</sup> December

ID Mark	Building Name	Building Configuration	Height (metre)	Shadow Impact			
				Start Time	End Time	Impact Hours	%
1	1	G+1	6	0:00	0:00	0:00	0%
2	2	G+1	6	0:00	0:00	0:00	0%
3	3	G+1	6	7:30	8:00	0:30	5%
4	4	G	3	0:00	0:00	0:00	0%
5	5	G+1	6	7:30	8:00	0:30	5%
6	6	G	3	0:00	0:00	0:00	0%
7	7	G	3	0:00	0:00	0:00	0%
8	8	G+8	36	0:00	0:00	0:00	0%
9	9	G+1	7	0:00	0:00	0:00	0%
10	10	G+1	7	0:00	0:00	0:00	0%
11	11	G+2	9	17:00	17:30	0:30	5%
12	12	G+1	6	0:00	0:00	0:00	0%
13	13	G+8	27	0:00	0:00	0:00	0%
14	14	G+1	6	17:00	17:30	0:30	5%
15	15	G+8	27	17:00	17:30	0:30	5%
16	16	G	3	0:00	0:00	0:00	0%
17	17	G+2	9	0:00	0:00	0:00	0%
18	18	G	3	0:00	0:00	0:00	0%
19	19	G+1	6	0:00	0:00	0:00	0%
20	20	G	3	0:00	0:00	0:00	0%
21	21	G+2	9	0:00	0:00	0:00	0%
22	22	G+1	6	0:00	0:00	0:00	0%
23	23	G+2	9	0:00	0:00	0:00	0%
24	24	G+1	6	0:00	0:00	0:00	0%
25	25	G	3	0:00	0:00	0:00	0%

## RESULTS

Day: 21<sup>st</sup> December

ID Mark	Building Name	Building Configuration	Height (metre)	Shadow Impact			
				Start Time	End Time	Impact Hours	%
26	26	G+1	6	0:00	0:00	0:00	0%
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28	28	G	3	0:00	0:00	0:00	0%
29	29	G+2	9	0:00	0:00	0:00	0%
30	30	G	3	0:00	0:00	0:00	0%
31	31	G	3	0:00	0:00	0:00	0%
32	32	G+1	6	0:00	0:00	0:00	0%
33	33	G+1	6	0:00	0:00	0:00	0%
34	34	G+1	6	0:00	0:00	0:00	0%
35	35	G+1	6	7:30	9:30	2:00	20%
36	36	G+1	6	0:00	0:00	0:00	0%
37	37	G+1	6	0:00	0:00	0:00	0%
38	38	G+8	27	0:00	0:00	0:00	0%
39	39	G+11	33	7:30	8:30	1:00	10%
A	Wing A	2B+G+12	38.3	0:00	0:00	0:00	0%
B	Wing B	2B+G+12	38.3	0:00	0:00	0:00	0%
C	Wing C	2B+G+12	38.3	13:00	17:30	4:30	45%
D	Wing D	3B+G+11	38.75	7:30	11:00	3:30	35%

## ANNUAL RESULTS

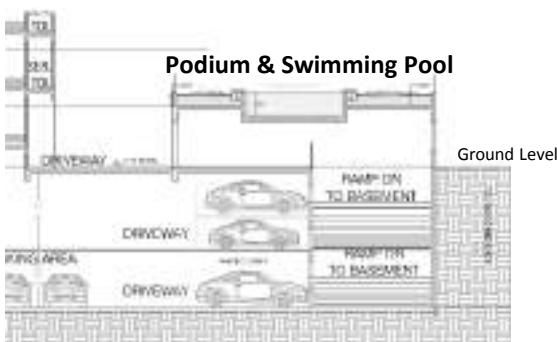
ID Mark	Building Name	Building Configuration	Height (metre)	Shadow Impact			
				March	June	December	Average
1	1	G+1	6	0%	0%	0%	0%
2	2	G+1	6	0%	0%	0%	0%
3	3	G+1	6	0%	0%	5%	2%
4	4	G	3	0%	0%	0%	0%
5	5	G+1	6	0%	0%	5%	2%
6	6	G	3	0%	0%	0%	0%
7	7	G	3	0%	0%	0%	0%
8	8	G+8	36	0%	0%	0%	0%
9	9	G+1	7	0%	0%	0%	0%
10	10	G+1	7	0%	0%	0%	0%
11	11	G+2	9	0%	0%	5%	2%
12	12	G+1	6	0%	0%	0%	0%
13	13	G+8	27	0%	0%	0%	0%
14	14	G+1	6	0%	0%	5%	2%
15	15	G+8	27	0%	0%	5%	2%
16	16	G	3	5%	0%	0%	2%
17	17	G+2	9	5%	5%	0%	3%
18	18	G	3	0%	0%	0%	0%
19	19	G+1	6	0%	0%	0%	0%
20	20	G	3	0%	0%	0%	0%
21	21	G+2	9	0%	0%	0%	0%
22	22	G+1	6	0%	0%	0%	0%
23	23	G+2	9	0%	5%	0%	2%
24	24	G+1	6	0%	0%	0%	0%
25	25	G	3	0%	0%	0%	0%

## ANNUAL RESULTS

ID Mark	Building Name	Building Configuration	Height (metre)	Shadow Impact			
				March	June	December	Average
26	26	G+1	6	0%	0%	0%	0%
27	27	G+1	6	0%	0%	0%	0%
28	28	G	3	0%	0%	0%	0%
29	29	G+2	9	0%	0%	0%	0%
30	30	G	3	0%	0%	0%	0%
31	31	G	3	0%	0%	0%	0%
32	32	G+1	6	0%	0%	0%	0%
33	33	G+1	6	0%	5%	0%	2%
34	34	G+1	6	0%	0%	0%	0%
35	35	G+1	6	30%	20%	20%	23%
36	36	G+1	6	10%	10%	0%	7%
37	37	G+1	6	0%	0%	0%	0%
38	38	G+8	27	0%	0%	0%	0%
39	39	G+11	33	0%	0%	10%	3%
A	Wing A	2B+G+12	38.3	0%	35%	0%	12%
B	Wing B	2B+G+12	38.3	0%	30%	0%	10%
C	Wing C	2B+G+12	38.3	5%	0%	45%	17%
D	Wing D	3B+G+11	38.75	15%	0%	35%	17%

## CONCLUSION

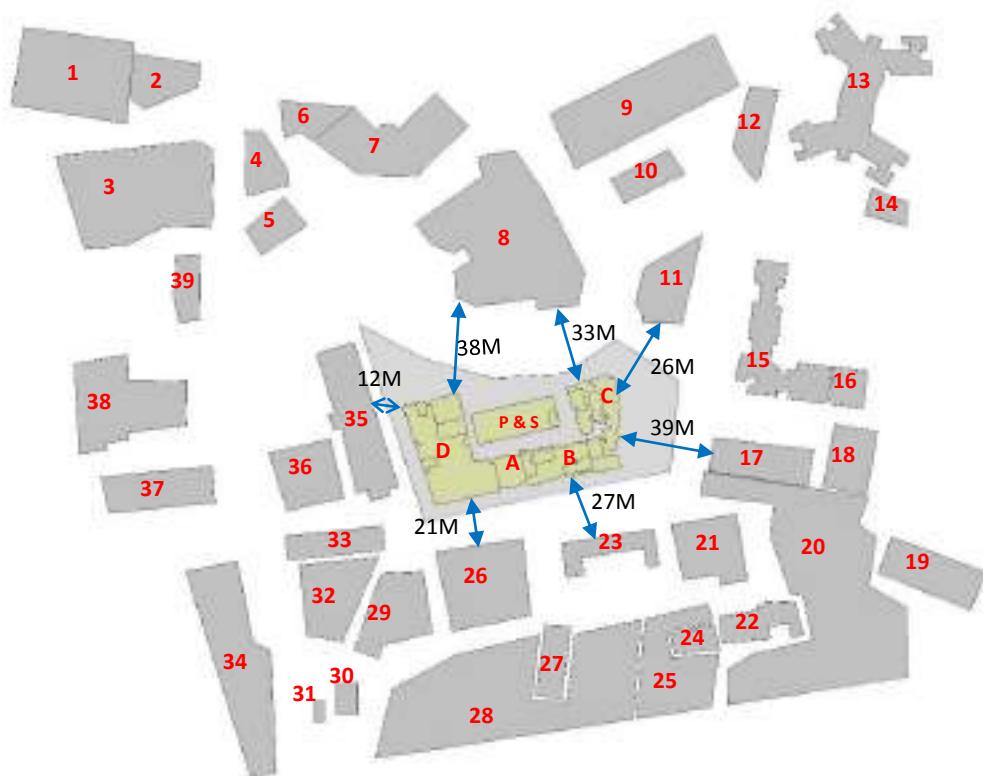
Shadow analysis result shows that the most affected building is Building No. 35 with an average impact time of 02:18 hrs. 23% is the percentage impact which is lesser than 40 % as per BRE standards.



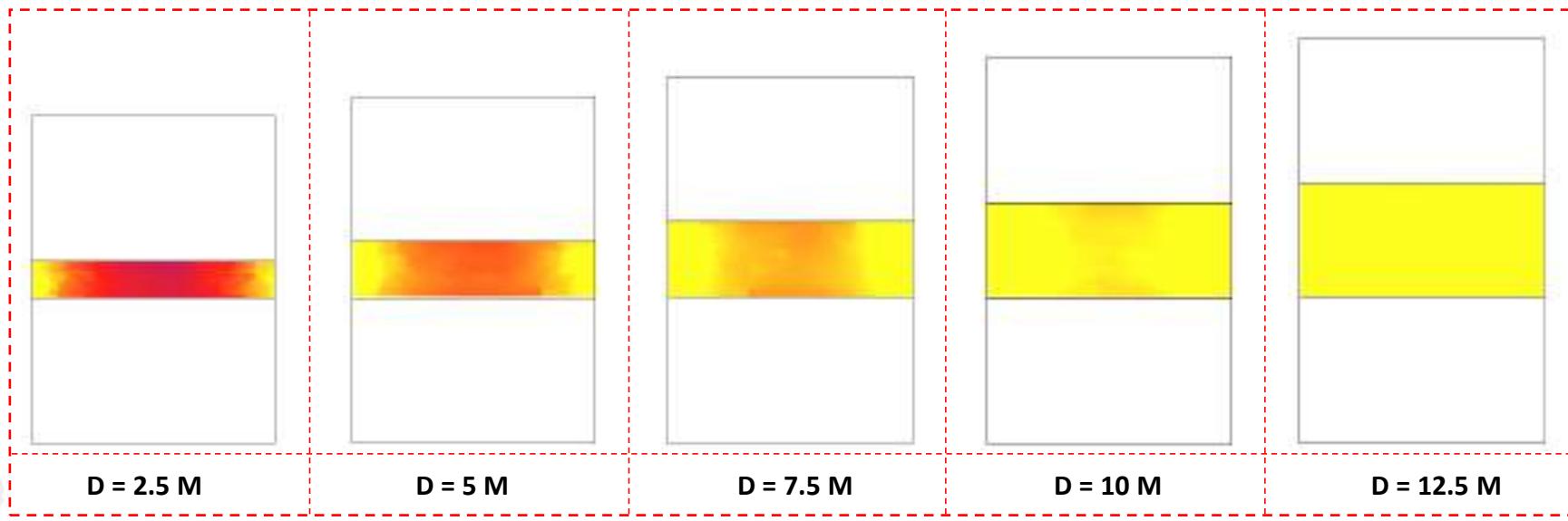
Section through P &amp; S

- Proposed buildings
- Site
- Neighborhood Buildings

## Minimum distance between the buildings



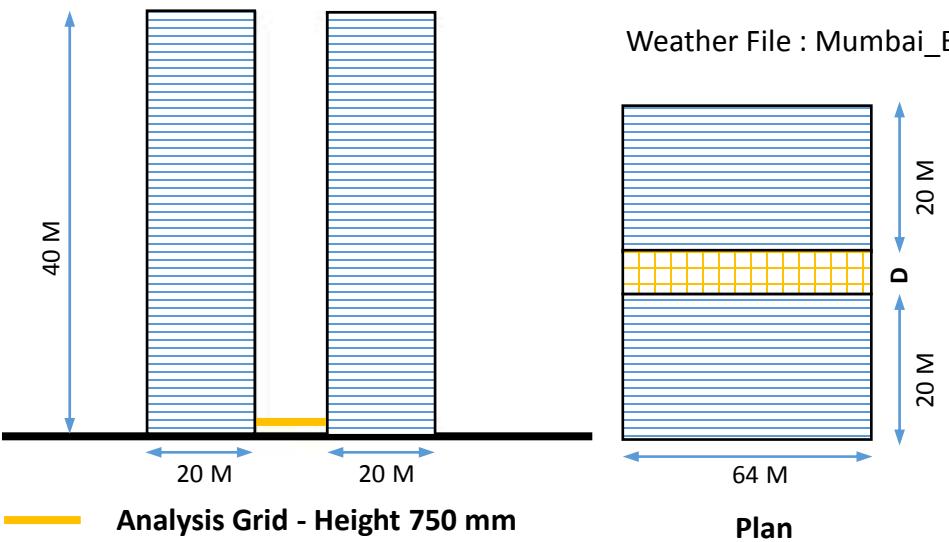
## Illumination Analysis for Different distances between two Buildings

**D = 2.5 M****D = 5 M****D = 7.5 M****D = 10 M****D = 12.5 M**

Analysis Hour : 12:00 PM

Sky Condition : Overcast Sky

Weather File : Mumbai\_EPW File



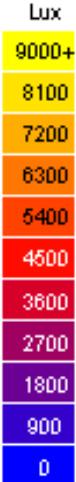
Analysis Grid - Height 750 mm

Plan

According to NBC, the average illumination levels in the exterior should be 9000 lux for Warm and Humid Climate. The analysis has been done for Worst case scenario considering Over cast Sky Condition Where there is almost 95% Cloud cover

**CONCLUSION :**

The illumination analysis shows that the space shaded between Two Buildings receives Average 9000 lux when minimum distance between them is 10 M. The illumination level increases and reaches a saturation point at 11 M gap and almost remains the same when the distance between the building increases thereafter.



brightness produce the effect of glare. When glare is present, the efficiency of vision is reduced and small details or subtle changes in scene cannot be perceived. It may be,

- direct glare due to light sources within the field of vision;
- reflected glare due to reflections from light sources or surfaces of excessive brightness; and
- veiling glare where the peripheral field is comparatively very bright.

**4.1.3.3** An example of glare sources in daylighting is the view of the brightness through a window or skylight, especially when the surrounding wall or ceiling is comparatively dark or weakly illuminated. Glare can be minimised in this case either by shielding the open sky from direct light by leaves, external hoods or deep eaves, curtains or other shading devices or by cross lighting the surroundings to a comparable level. A gradual transition of brightness from one portion to the other within the field of vision always avoids or minimises the discomfort from glare.

For electric lamps the minimum shielding angles for lamp luminaire shall not be less than the values given in the table below:

Task Luminaire	Minimum Shielding Angle in degrees
1 to 20	10
20 to 50	15
50 to 500	20
≥ 500	30

The above mentioned shielding angle should not be applied to luminaires that do not appear in the field of view of a worker during visual work and do not give the worker any noticeable disability glare.

Table 4 also gives recommended value of quality class of direct glare limitation for different tasks. These are numbers assigned in qualitative terms of direct glare: high, medium and low quality as 1, 2 and 3, respectively. For more details reference may be made to good practice [8-12].

#### 4.1.4 Recommended Factor of Illuminance

Table 4 gives recommended values of illuminance corresponding with the general standards of lighting described in this Section and related to many occupations and buildings. These are valid under most of the conditions whether the illumination is by daylighting, artificial lighting or a combination of the two. The great variety of visual tasks makes it impossible to list them all and those given should be regarded as representing types of task.

**4.1.4.1** The different locations and tasks are grouped within the following four sections:

- Industrial buildings and process;
- Offices, schools and public buildings;
- Hospitals and medical facilities;
- Residential, restaurants, shops and houses.

**4.1.4.2** The illumination levels recommended in Table 4 are those to be maintained at all times on the task. As circumstances may be significantly different for different interiors used for the same application or for different conditions for the same kind of activity, a range of illuminance is recommended for each type of interior or activity instead of a single value of illuminance. Each range consists of three successive steps of the recommended scale of illumination. They represent good practice and should be regarded as giving order of illumination commonly required other than as having some absolute significance. For working interiors the middle value of each range represents the recommended service illuminance that would be used unless one or more of the factors mentioned below apply.

**4.1.4.2.1** The higher value of the range should be used when,

- unusually low reflectances or contrasts are present in the task;
- errors are costly to rectify;
- visual work is critical;
- occupancy or higher productivity is of great importance; and
- visual capacity of the worker makes it necessary.

**4.1.4.2.2** The lower value of the range may be used when,

- reflectances or contrast are unusually high;
- speed and accuracy is not important; and
- the task is executed only occasionally.

**4.1.4.3** Where a visual task is required to be carried out throughout an interior, general illumination level to the recommended value on the working plane is necessary; whereas the precise height and location of the task are not known, or cannot be easily specified, the minimum del value is that on horizontal plane 850 mm above floor level.

**4.1.4.4** For an industrial task, working plane for the purpose of general illumination levels is that on a work place which is generally 700 mm above the floor level. For certain purposes, such as viewing the objects of art, the illumination levels recommended are for the visual plane or working plane as placed.

**4.1.4.4** Where the task is located, the recommended values that for the task only, if need not, and conditions should not, be the general level of illumination used

on the horizontal plane, reference may be made to good practice [8-12].

#### 4.2 Daylighting

The primary source of lighting for daylighting is the sun. The light received by the earth from the sun consists of two parts, namely, direct solar illumination and sky illumination. For the purposes of daylighting design, direct solar illumination shall not be considered and only sky illumination shall be taken as contributing to illumination of the working interior during the day.

**4.2.1** The relative amount of sky illumination depends on the position of the sun defined by local time, which in turn, varies with the latitude of the locality, the day of the year and the time of the day, as indicated in Table 5.

**4.2.2** The external available horizontal sky illuminance (dilute) (lumilux) values which are extended for about 90 percent of the daytime working hours may be taken as basic design illuminance values for assessing adequacy of daylighting design. The outdoor design sky illuminance rates for different climatic regions of the country, The recommended design sky illuminance values are 6,800 lux for cold climate, 8,100 lux for composite climate, 9,000 lux for warm humid climate, 9,000 lux for temperate climate and 10,500 lux for hot dry climate. For integration with the artificial lighting during daytime working hours an increase of 500 lux in the recommended sky design illuminance for daylighting is suggested.

**4.2.3** The daylight factor is dependent on the sky luminance distribution, which varies with atmospheric conditions. A clear design sky with its non-uniform distribution of luminance is adopted for the purposes of design in this Section.

#### 4.2.4 Components of Daylight Factor

Daylight factor is the ratio of all the day light reaching on an indoor reference point to the following outside:

- Direct sky visible from the point;
- External surfaces reflecting light directly to the point (see Note 1); and
- Internal surfaces reflecting and inter-reflecting light to the point.

##### NOTES

1 External surface reflectors may be considered approximately only for points at the corners of the room, and for detailed analysis of problems concerned in them may be ignored for general calculations.

2 Each of the three components, when expressed as a ratio or general of the instantaneous annual illuminance on the

horizontal plane, reference may be made to good practice [8-12]. The internal reflectors provide for the component (1), the external reflected component (12) and the internal reflected component (10) of the daylight factor.

**4.2.4.1** The daylight factor on the horizontal plane only are usually taken as the working plane in a room is generally horizontal; however, the factors in vertical planes should also be considered when specifying daylighting values for special cases, such as daylighting on classrooms, blackboards, pictures and paintings hung on walls.

#### 4.2.5 Sky Component (SC)

Sky component for a window of any size is computed by the use of the appropriate table of Annex B.

**4.2.5.1** The recommended sky component (SC) should be stated generally on the working plane at the following positions:

- At a distance of 3 m to 3.75 m from the window along the central line perpendicular to the window;
- At the centre of the room if more appropriate, and
- At fixed locations, such as school desks, blackboards and drafting tables;
- The daylight area of the presented sky component should not normally be less than half the total area of the room.

**4.2.5.2** The values obtainable from the tables are for rectangular, open unglazed windows, without external obstructions. The values shall be corrected for the presence of window bars, glazing and external obstructions, if any. This assures the maintenance of angular cleaning schedules.

#### 4.2.5.3 Correction for window bars

The correction for window bars shall be made by multiplying the values read from tables in Annex B by a factor equal to the ratio of the clear opening to the overall opening.

#### 4.2.5.4 Correction for glazing

Where windows are glazed, the sky components obtained from Annex A shall be reduced by 10 to 20 percent, provided the pane is of plain and clear glass. When glass is of the tinted (green) type, the sky component from Annex A may be reduced by 15 to 30 percent. In case of tinted or reflective glass the reduction is about 20 percent. Higher indicated correction corresponds to larger windows and more reference points. In the case of openings and glazings which are not vertical, suitable correction shall be taken into account.

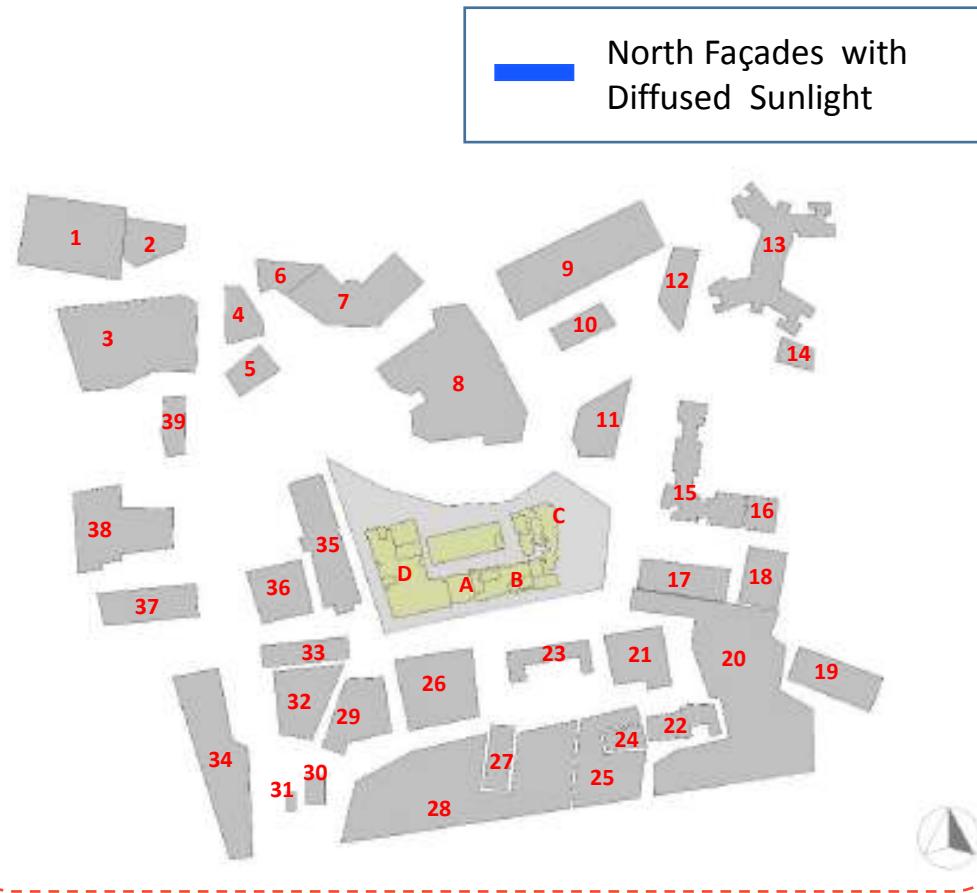
## North Façade with Diffused Light ( December 21<sup>st</sup> )

### Solar access requirements in SEPP

65 -

State Environmental Planning Policy No 65 - Design Quality of Residential Apartment Development (SEPP 65) and the Apartment Design Guide.

- Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9am and 3pm at mid winter in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas.
- In all other areas, living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 3 hours direct sunlight between 9am and 3pm at mid winter.



### Result:

The total percentage of flats which receive diffused sunlight is 0%.

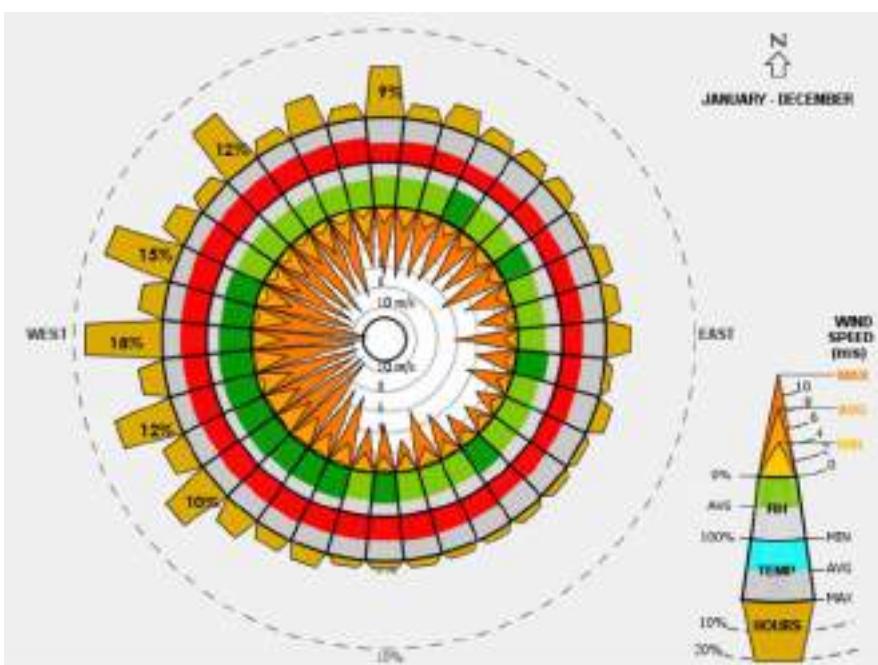
ID Mark	Building Name	No. of Flats	No. of Flats		% of Flats with Diffused Sunlight
			Direct Sunlight	Diffused Sunlight	
A, B & C	Wing A, B & C	141	141	0	0%
<b>Total</b>		<b>141</b>	<b>141</b>	<b>0</b>	<b>0%</b>

# Wind & Ventilation Analysis

## WIND ANALYSIS STUDY

The construction of a building inevitably changes the microclimate in its vicinity. Wind speed, wind direction, air flow are all examples of physical aspects that constitute the outdoor climate and that are changed by the presence of the building. The change of these quantities depends on the shape, size and orientation of the building and on the interaction of the building with the surrounding buildings and other obstacles such as trees etc. These changes can be either favourable or unfavourable. Unfavourable changes include increased wind speeds around the building leading to uncomfortable or even dangerous conditions for pedestrians. This is particularly the case at the base of high-rise buildings.

The software needs wind direction and wind speed as input for processing the wind analysis. Indian Society for Heating Refrigeration and Air Conditioning Engineers (ISHRAE) provides hourly weather data for all major cities in India. This data is available in the .epw or 'weather data file' format on the ISHRAE's website. From the website Mumbai data was downloaded. See the image below for the Annual Wind rose prepared from the weather data. The predominant wind direction can be observed as South West to North West.



### CFD input condition:

- Critical Wind Speed: 4.16 m/s
- Wind Direction: South West (SW) – North West (NW)

Beaufort number	Description	Wind speed at 1.75 m height (m/s)	Effect
0	Calm	0.0 - 0.1	
1	Light air	0.2 - 1.0	No noticeable wind
2	Light breeze	1.1 - 2.3	Wind felt on face
3	Gentle breeze	2.4 - 3.8	Hair disturbed, clothing flaps, newspaper difficult to read
4	Moderate breeze	3.9 - 5.5	Raises dust and loose paper, hair disarranged
5	Fresh breeze	5.6 - 7.5	Force of wind felt on body, danger of stumbling when entering a windy zone
6	Strong breeze	7.6 - 9.7	Umbrellas used with difficulty, hair blown straight, difficult to walk steadily, sideways wind force about equal to forwards walking force, wind noise on ears unpleasant
7	Near gale	9.8 - 12.0	Inconvenience felt when walking
8	Gale	12.1 - 14.5	Generally impedes progress, great difficulty with balance in gusts
9	Strong gale	14.6 - 17.1	People blown over

## WIND ANALYSIS STUDY

## Monthly Wind Speed Data

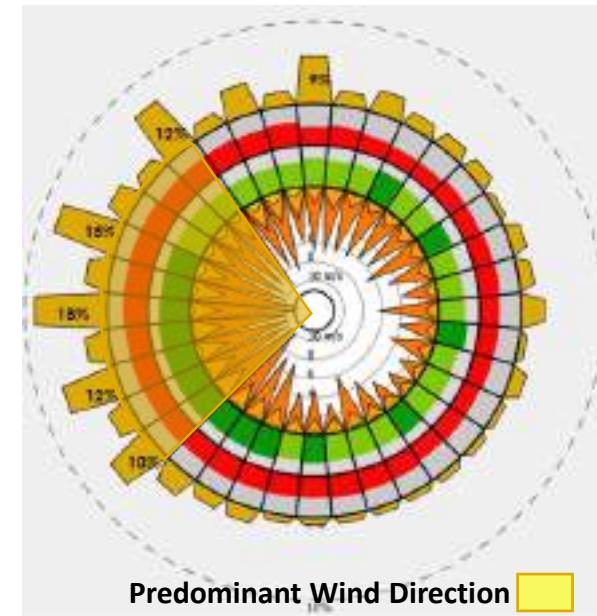
Month	Wind Speed (m/s)		
	Avg Daily	Avg Daily Low	Avg Daily High
Jan	1.35	0.03	3.66
Feb	1.53	0.04	3.46
Mar	1.89	0.08	4.36
Apr	1.73	0.00	4.09
May	2.65	0.84	4.57
Jun	2.79	1.36	4.57
Jul	3.70	2.08	5.48
Aug	3.73	1.95	5.52
Sep	1.49	0.00	4.16
Oct	0.85	0.00	2.26
Nov	1.50	0.04	3.93
Dec	1.45	0.06	3.90
<b>Average</b>	<b>2.05</b>	<b>0.54</b>	<b>4.16</b>

The IWEC2 weather files were produced from ISD data for 23 years (from 1986 to 2009).

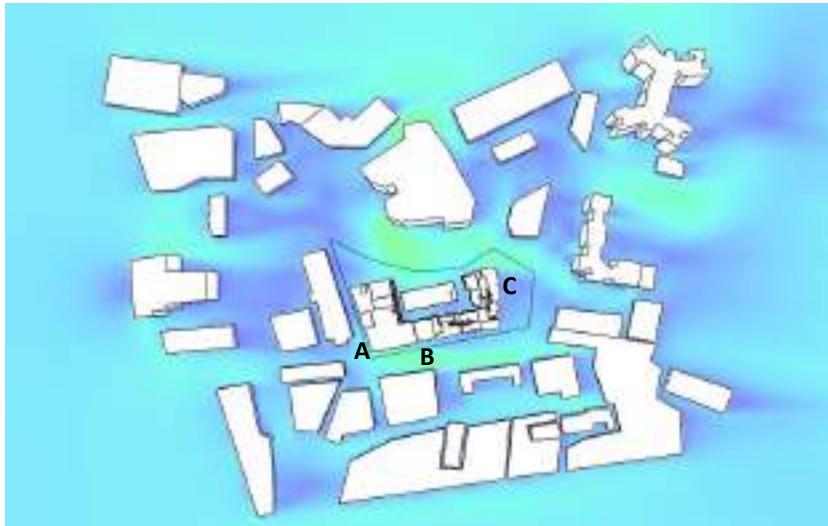
IWEC2 weather files have been considered for all types of analysis.

Weather Data Source: IND\_Mumbai.430030\_IWEC.epw

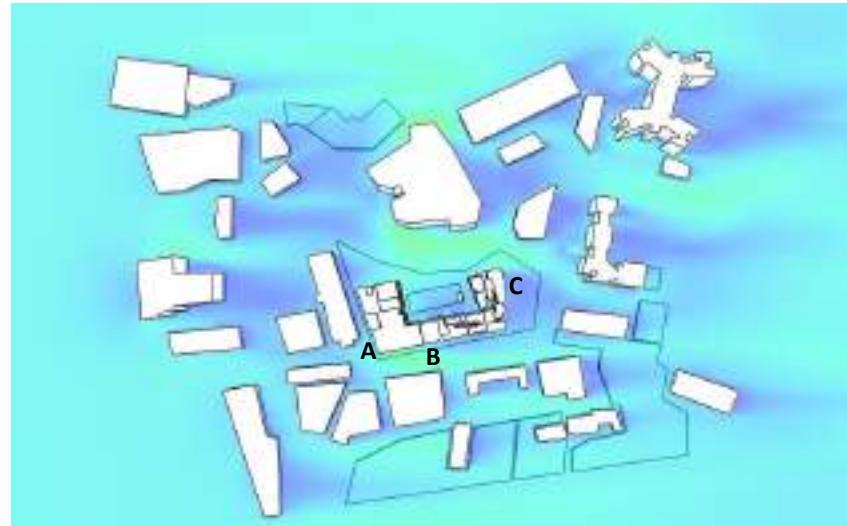
The Maximum Hours of Wind is observed in the direction of South West to North West Quadrant.



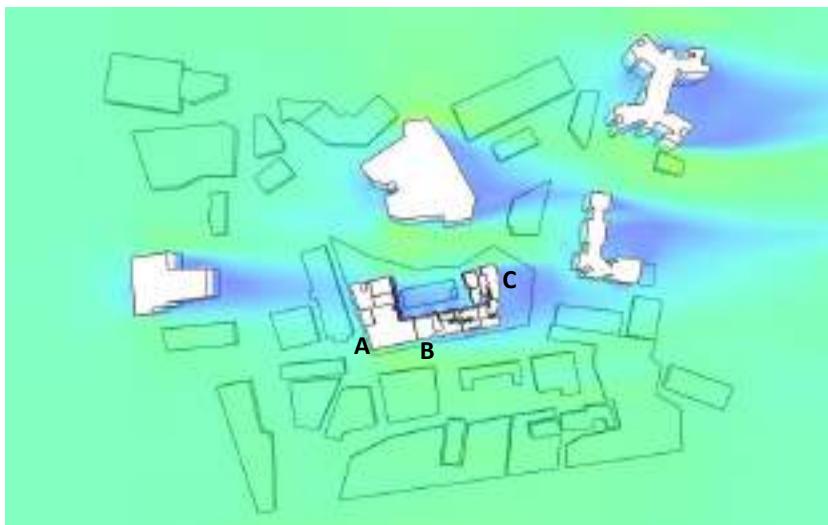
CFD INPUT CONDITION (Max. Avg. Wind Speed: 4.16m/s; Wind Direction: South West – North West (SW-NW))



@ 02 meter



@ 06 meter



@ 12 meter



@ 18 meter



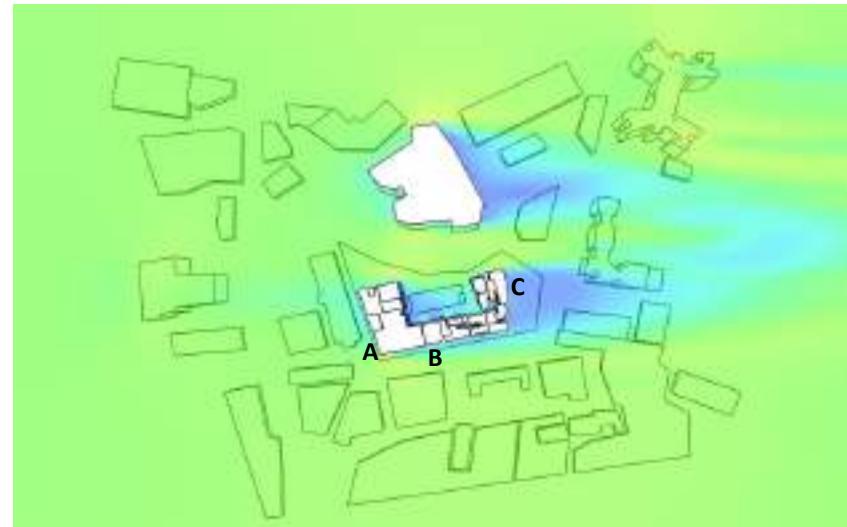
Velocity



CFD INPUT CONDITION (Max. Avg. Wind Speed: 4.16m/s; Wind Direction: South West – North West (SW-NW))



@ 24 meter



@ 30 meter



@ 36 meter



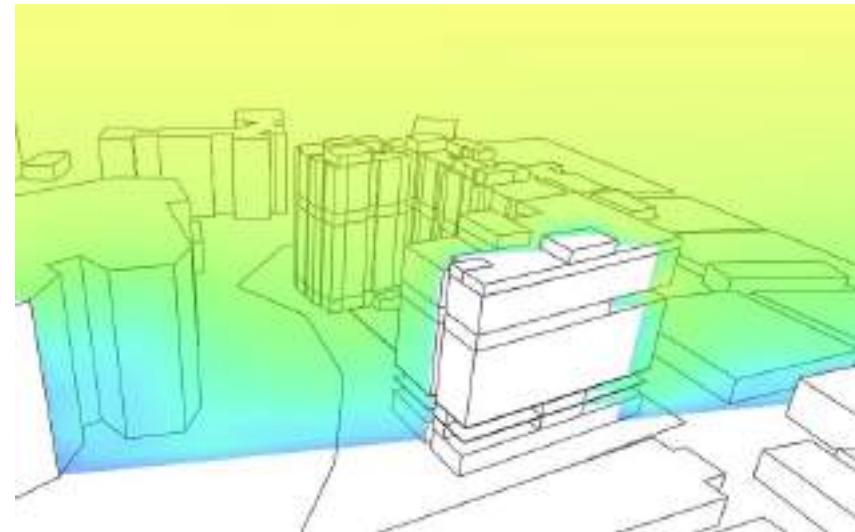
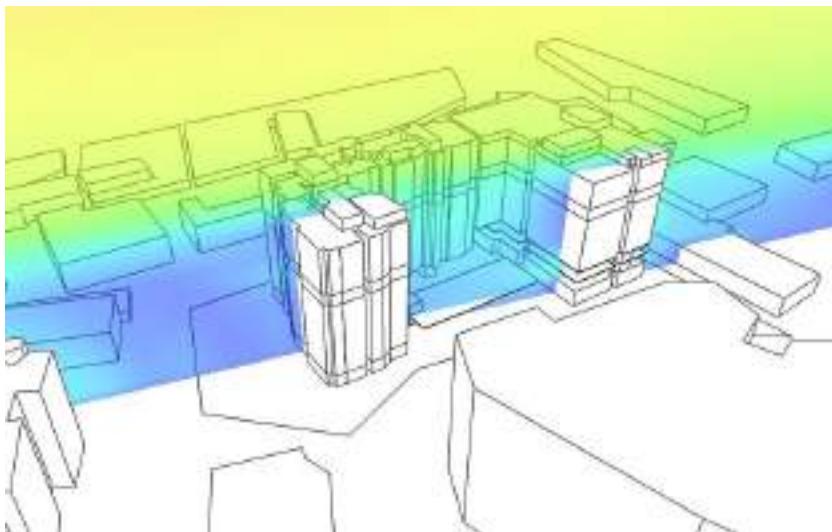
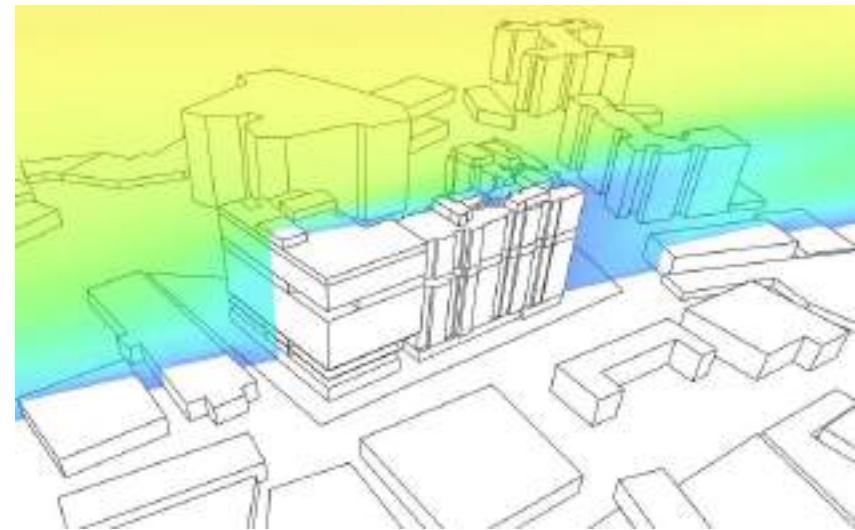
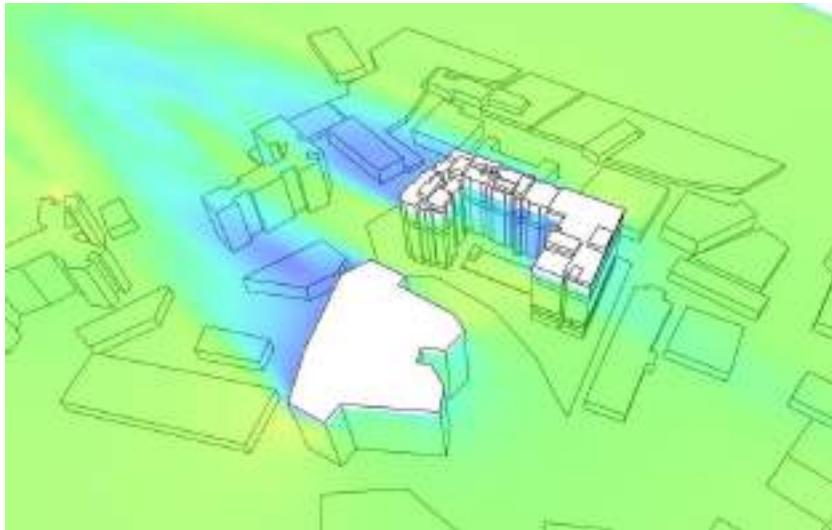
@ 40 meter



Velocity

0.00 0.60 1.20 1.80 2.40 3.00 3.60 4.20 4.80 5.40 6.00 m/s

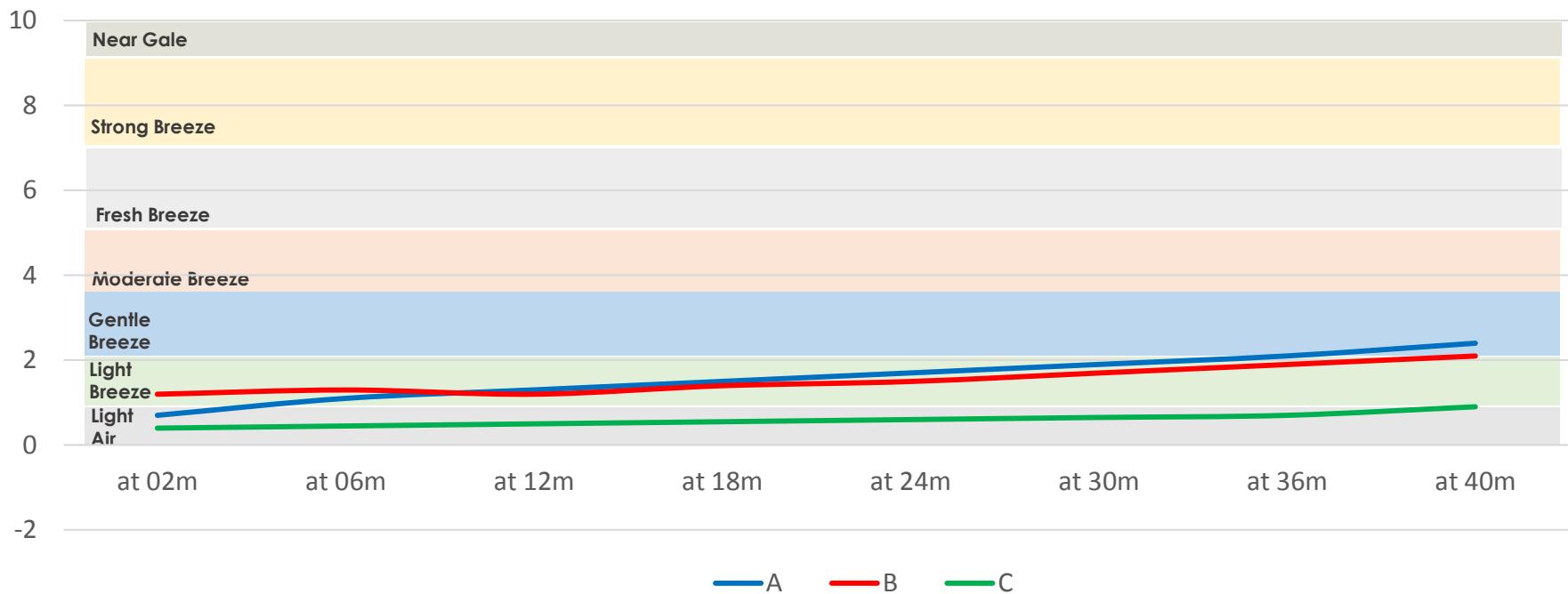
**CFD INPUT CONDITION** (Max. Avg. Wind Speed: 4.16m/s; Wind Direction: South West – North West (SW-NW))



Velocity



**Velocity Graph & Conclusion:** Max. Avg. Wind Speed: 4.16m/s; Wind Direction: South West – North West (SW-NW)



### Conclusion :

- The observation point A, which is at West side of the Proposed Wing D, has wind speed ranging from 0.70 to 2.40 m/s at the height of 40 m and this ranges from Light Air to Gentle Breeze.
- The observation point B, which is at South side of the Proposed Wing A, has wind speed ranging from 1.20 to 2.10 m/s at the height of 40 m and this ranges in Light Breeze.
- The observation point C, which is at East side of the Proposed Wing C, has wind speed ranging from 0.40 to 0.9 m/s at the height of 40 m, and this ranges in Light Air.
- **Overall, wind speed observed at various heights is between 0.40 m/s to 2.40 m/s.**

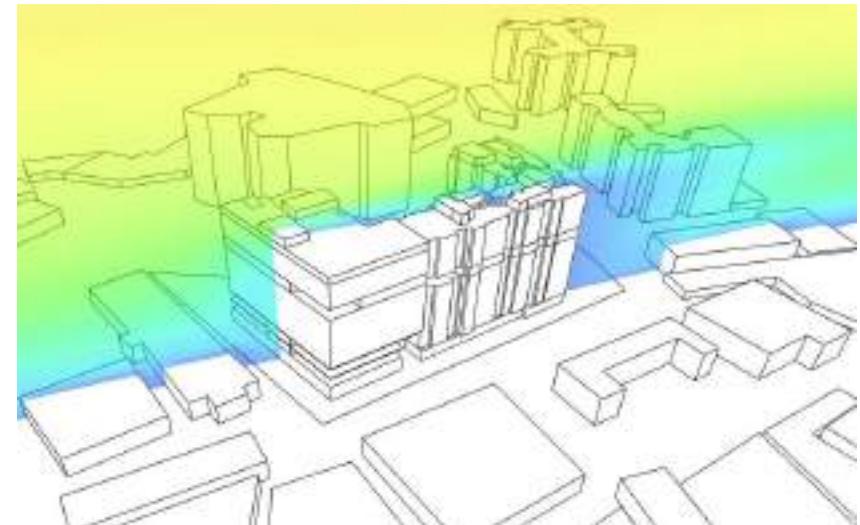
## VENTILATION CALCULATION

The natural wind around buildings is majorly responsible for natural ventilation. The NBC 2016 specifies about minimum Air Changes per Hour (ACH) requirement for natural ventilation by building type. The relevant categories for the project is as below.

- Bedroom                    2-4 ACH
- Living Room                3-6 ACH

### Methodology:

1. To identify required ACH as per NBC 2016
2. To determine required ACH space wise
3. To calculate minimum wind speed at window to achieve the required ACH
4. To perform wind analysis to evaluate available wind speed in the worst case scenario i.e. on leeward side



## VENTILATION CALCULATION

Unit	Space	Area	Windows Area	Window Operable Area	Avg Req ACH	Required CMM	Equv CFM	Req Wind Speed at Window	Wind Speed Available	Achieved ACH at 4.16 m/s	Achieved ACH at 2.05 m/s	Achieved ACH at 0.54 m/s
		sq.m.	sq.m.	sq.m.		CuM/Min	CFM	m/s	m/s			
Wing - B 1 BHK	Living Room	18.7	3.4	2.22	4.5	4.1	143.8	0.10	0.8	>35	>20	>9
	Kitchen	5.3	1.8	1.16	4.5	1.2	41.0	0.10	0.7	>30	>15	>9
	Bedroom 1	10.3	2.9	1.94	3	1.5	52.7	0.10	0.85	>25	>15	>6
Wing - C 3 BHK	Living Room	23.7	2.9	1.94	4.5	5.2	182.0	0.10	1.2	>50	>25	>9
	Kitchen	4.5	2.0	1.29	4.5	1.0	34.7	0.10	1.2	>50	>25	>9
	Bedroom 1	10.9	2.9	1.94	3	1.6	56.1	0.10	1.2	>35	>20	>6
	Bedroom 2	10.2	2.2	1.46	3	1.5	52.0	0.10	1.2	>35	>20	>6
	Bedroom 3	10.3	2.9	1.94	3	1.5	52.7	0.10	1.3	>35	>20	>6
Wing - A 3 BHK	Living Room	25.2	2.9	1.94	4.5	5.5	193.6	0.10	0.8	>35	>20	>9
	Kitchen	5.1	1.8	1.16	4.5	1.1	39.5	0.10	0.8	>35	>20	>9
	Bedroom 1	11.4	3.4	2.22	3	1.6	58.2	0.10	0.85	>25	>15	>6
	Bedroom 2	10.3	2.9	1.94	3	1.5	52.7	0.10	0.85	>25	>15	>6
	Bedroom 3	9.2	2.7	1.80	3	1.3	47.1	0.10	0.85	>25	>15	>6

# Daylighting Analysis

## ASSUMPTIONS

1

## Working Plane



The analysis has been performed at working plan height i.e. 750 mm from the floor level.

2

## Design Sky

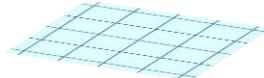


21<sup>st</sup> March - Clear Sky

The simulation will analyse daylighting level on 21<sup>st</sup> March i.e. equinox in clear sky condition, as per daylight simulation methodology.

3

## Analysis Grid



200 x 200 mm

All the floor spaces (daylight spaces) will be divided in an analysis grid of 200 x 200mm, then daylight will be analyzed on the same.

4

## Glass VLT



Glass VLT: 45%

The value defines daylight's transmission property of glass. Higher the percentage, higher the daylight is allowed to transmit.

5

## Surface Reflectances



Flooring - 30%, Wall – 50%, Ceiling – 70%

The analysis has been performed considering the above reflectances.

## DAYLIGHT REQUIREMENT

BIS SP 41:

Handbook On Functional Requirements Of Buildings-  
part 4

TABLE 2 RECOMMENDED DAYLIGHT FACTORS FOR INTERIORS

(Clause 3.4)  
(1 percent DF = 80 lux)

SL. NO.	LOCATION	DAYLIGHT FACTOR, PERCENT
<b>i) Dwellings</b>		
	Kitchen	2.5
	Living room	0.625
	Study room	1.9
	Circulation	0.313
<b>ii) Schools</b>		
	Class room: desk top, black board	1.9-3.8
	Laboratory	2.5-3.8
<b>iii) Offices</b>		
	General	1.9
	Drawing, typing	3.75
	Enquiry	0.625-1.9
<b>iv) Hospitals</b>		
	General wards	1.25
	Pathological laboratory	2.5-3.75
<b>v) Libraries</b>		
	Stack room	0.9-1.9
	Reading room	1.9-3.75
	Counter area	2.5-3.75
	Catalogue room	1.9-2.5

## DAYLIGHT ANALYSIS

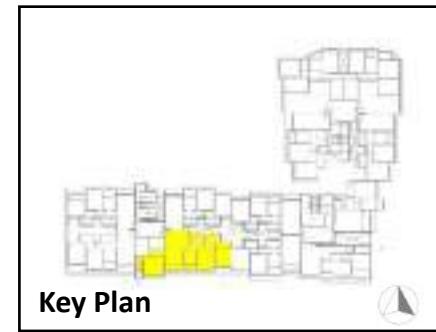
## Wing B - 1 BHK

Space	SP 41	Achieved
Living	50	245
Bed 1	152	295
Kitchen	200	225
Toilet 1	-	125
Toilet 2	-	185



## Wing A - 3 BHK

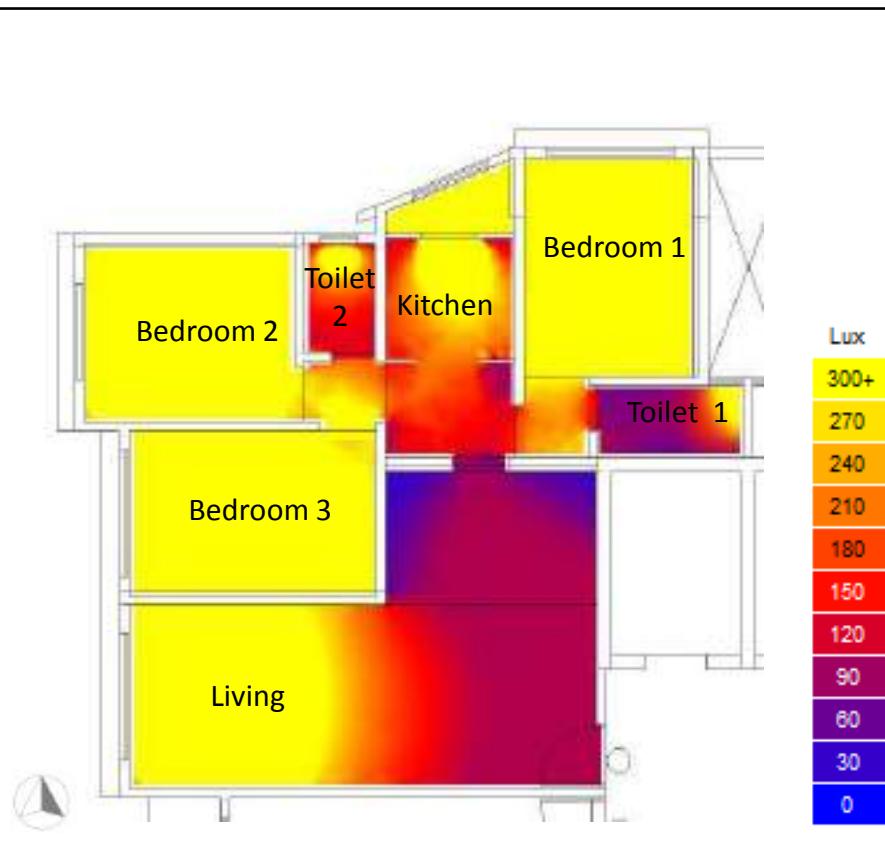
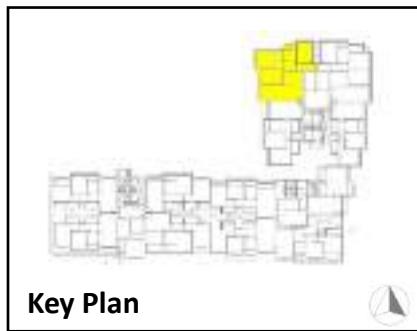
Space	SP 41	Achieved
Living	50	235
Bed 1	152	290
Bed 2	152	275
Bed 3	152	310
Kitchen	200	215
Toilet 1	-	170
Toilet 2	-	175



## DAYLIGHT ANALYSIS

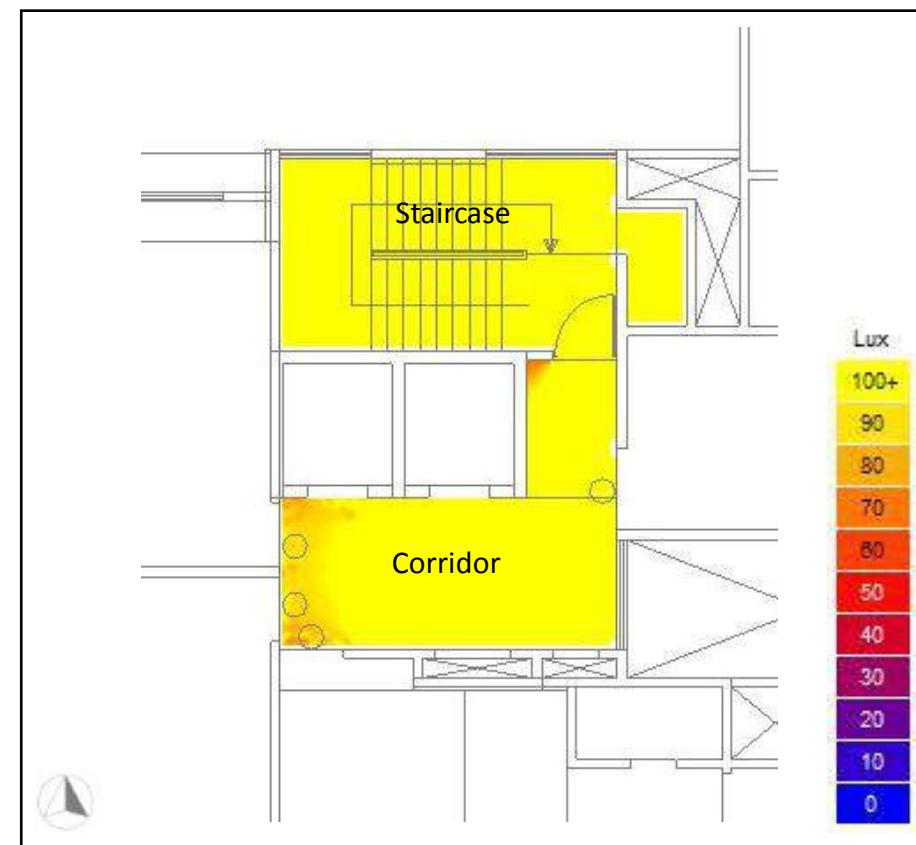
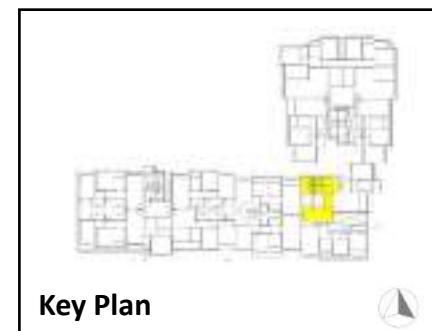
## Wing C – 3BHK

Space	SP 41	Achieved
Living	50	225
Bed 1	152	285
Bed 2	152	295
Bed 3	152	300
Kitchen	200	275
Toilet 1	-	110
Toilet 2	-	165



## Corridor

Space	SP 41	Achieved
Stair 1	25	110
Corridor	25	105

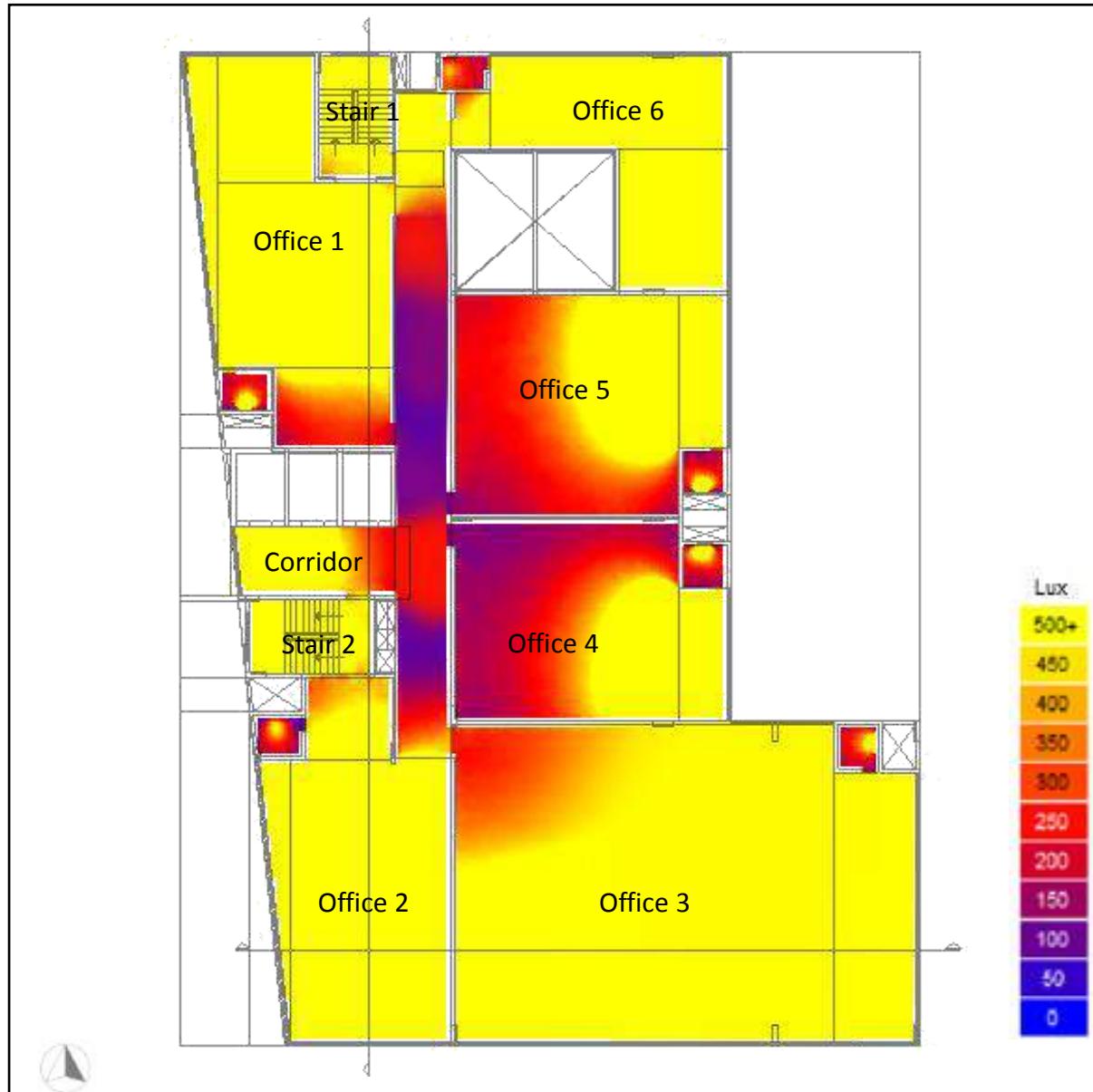


## DAYLIGHT ANALYSIS

## Wing D



Space	SP 41	Achieved
Office 1	300	475
Office 2	300	485
Office 3	300	480
Office 4	300	395
Office 5	300	425
Office 6	300	505
Stair 1	25	510
Stair 2	25	515
Corridor	25	190



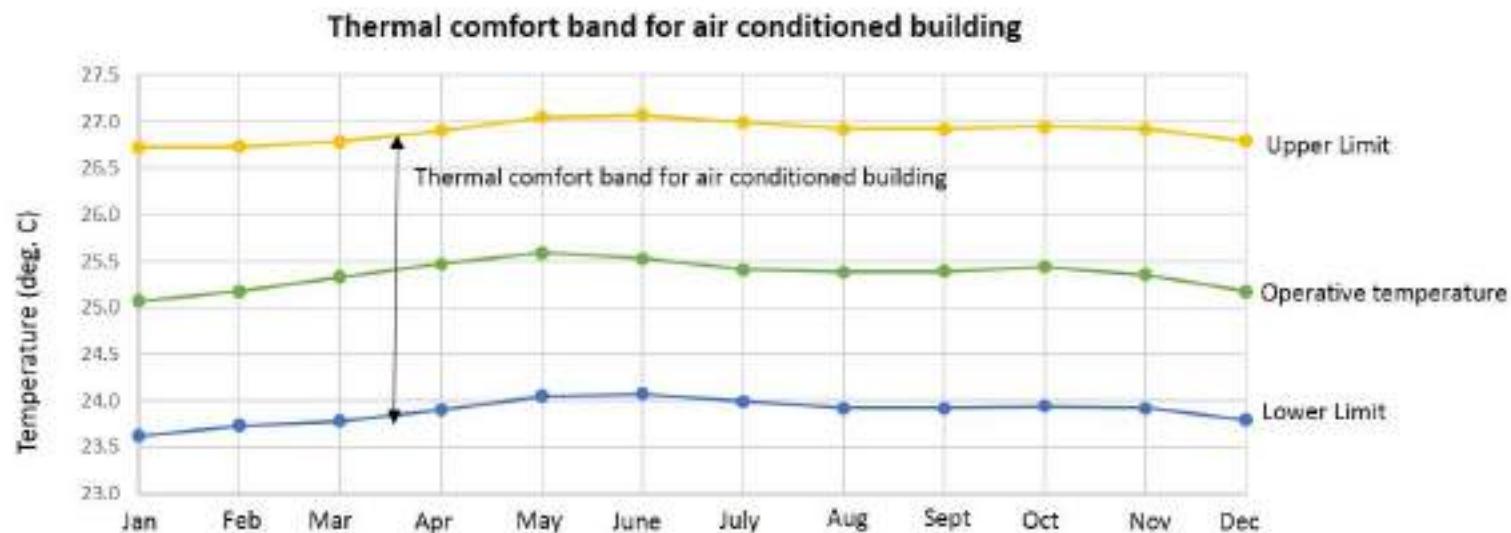
# Thermal comfort Analysis

## INDIAN MODEL FOR ADAPTIVE THERMAL COMFORT

Hourly indoor Operative temperatures are calculated through hourly outside dry bulb temperature for Mumbai using the equations mentioned in ECBC 2017 and IMAC 2015.

The operative temperature (Thermostat) can be maintained at 26 deg. C instead of 22 Deg C which can result in reducing the cooling load, hence increasing the energy savings.

Months	30 day daily mean operative temperature	Thermal Band		Acceptability range	Set Point Temperature
		Lower limit	Upper limit		
Jan	25.1	23.62	26.72	90%	26
Feb	25.2	23.73	26.73	90%	26
Mar	25.3	23.78	26.78	90%	26
Apr	25.5	23.9	26.9	90%	26
May	25.6	24.05	27.05	90%	26
Jun	25.5	24.07	27.07	90%	26
July	25.4	23.99	26.99	90%	26
Aug	25.4	23.92	26.92	90%	26
Sept	25.4	23.92	26.92	90%	26
Oct	25.4	23.94	26.94	90%	26
Nov	25.4	23.92	26.92	90%	26
Dec	25.2	23.79	26.79	90%	26



## ASHRAE 55 – THERMAL COMFORT MODEL

## CBE Thermal Comfort Tool

[ASHRAE-55](#)
[EN-15251](#)
[Compare](#)
[Ranges](#)
[Upload](#)

Select method: **PMV method**

Operative temperature: **26 °C**

Air speed: **0.5 m/s**

Humidity: **55 %**

Metabolic rate: **1.1 met**

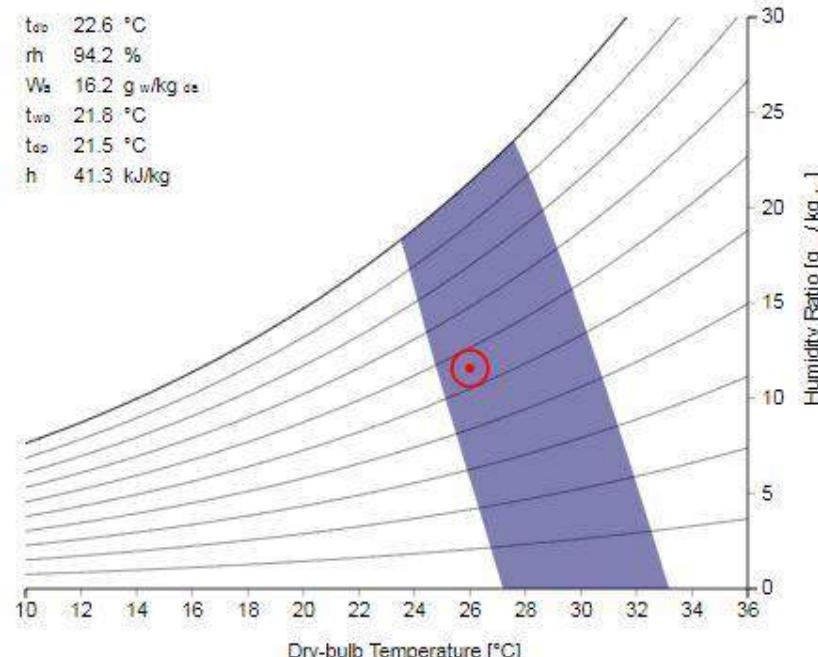
Clothing level: **0.61 clo**

✓ Complies with ASHRAE Standard 55-2017

PMV with elevated air speed: **-0.29**  
 PPD with elevated air speed: **7%**  
 Sensation: **Neutral**  
 SET: **24.1°C**  
 Drybulb temperature at still air: **23.7°C**  
 Cooling effect: **2.3°C**

Psychrometric chart (air temperature)

$t_{db}$ : 22.6 °C  
 $rh$ : 94.2 %  
 $W_s$ : 16.2 g\_w/kg\_da  
 $t_{wa}$ : 21.8 °C  
 $t_{dp}$ : 21.5 °C  
 $h$ : 41.3 kJ/kg



**Conclusion** - The Thermal Comfort Analysis shows that to maintain comfortable range inside the building, the temperature should be maintained as per the thermal band. The thermal comfort can be achieved in all the spaces keeping the thermostat at 26 deg. C.

# Heat Island Effect Analysis

KAIZEN DESIGN SOLUTIONS

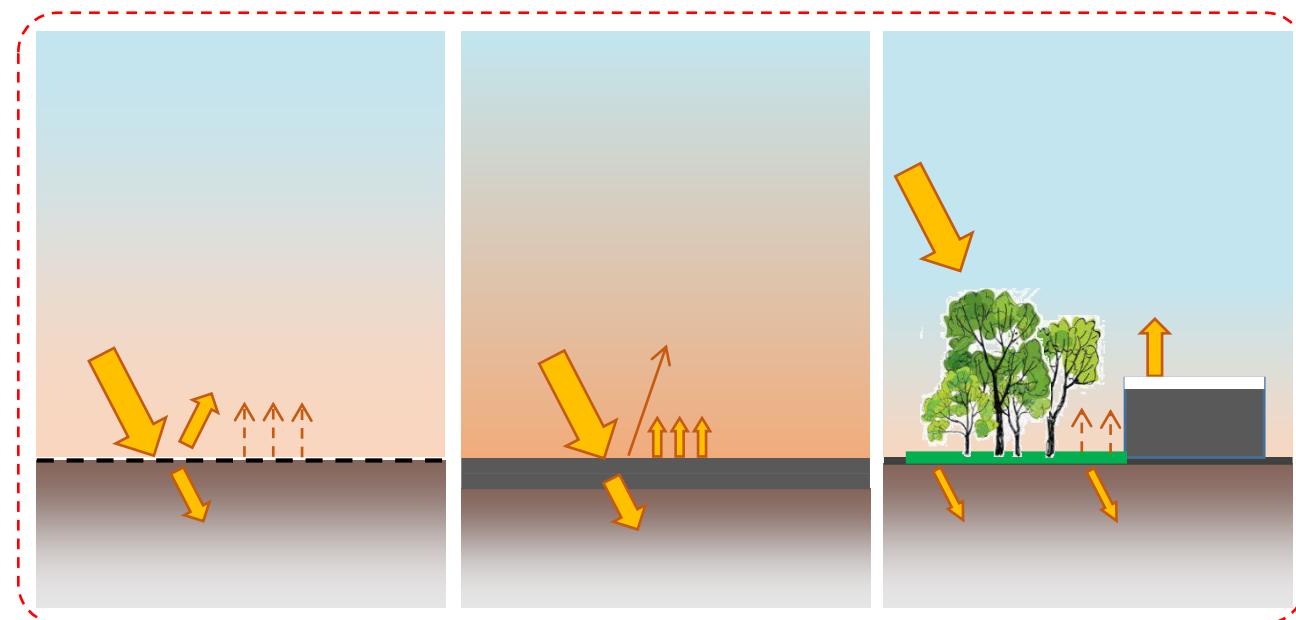
L - 022 26473109 E - [projects@kdsglobe.com](mailto:projects@kdsglobe.com) W - [www.kdsglobe.com](http://www.kdsglobe.com)

## URBAN HEAT ISLAND EFFECT

Urban development has serious effects on the global environmental quality, including the quality of air, increase in temperature and traffic congestion. Construction of building itself is related to global changes in terms of increase of urban temperatures, the rate of energy consumption, the increased use of raw materials, pollution and the production of waste, conversion of agricultural land to developed land, loss of biodiversity and water scarcity. An urban heat island is a climatic phenomenon in which urban areas have higher air temperature than their rural surroundings as a result of anthropogenic modifications of land surfaces, significant energy use and its consequent generation of waste heat. Thus, this might prove to be an unsustainable factor that leads to excessive energy use for cooling and putting the urban population at great risk for morbidity and mortality. According to the above perspective and considering that rapid and huge population growth is expected in the near future, it becomes increasingly important to apply heat island mitigation strategies in order to reduce energy consumption and improve the quality of life.

## MICRO CLIMATE

Microclimates exist, for example, near bodies of water which may cool the local atmosphere, or in heavily urban areas where brick, concrete, and asphalt absorb the sun's energy, heat up, and reradiate that heat to the ambient air: the resulting urban heat island is a kind of microclimate. Microclimates can be found in most places.



Another place this can occur is when the ground is made of tar or concrete; because these are man-made objects, they do not take in much heat, but mainly reradiate it. But if the same surface are shaded or treated or landscaped, the intensity can be reduced & it is possible to feel less heat island effect in an developed surrounding than a barren land.

WEATHER DATA SUMMARY												LOCATION: MUMBAI, -, IND
												Latitude/Longitude: 19.12° North, 72.85° East, Time Zone from Greenwich 5
												Data Source: IWECC Data 430030 VMO Station Number: 430030 Elevation: 14 m
MONTHLY MEANS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Global Horiz Radiation (Avg Hourly)	411	468	520	550	508	368	299	304	346	440	427	392
Direct Normal Radiation (Avg Hourly)	382	423	436	466	360	149	49	52	97	364	422	382
Diffuse Radiation (Avg Hourly)	367	173	381	177	236	248	249	261	272	189	153	157
Global Horiz Radiation (Max Hourly)	803	897	996	1022	1015	973	896	737	791	915	833	763
Direct Normal Radiation (Max Hourly)	738	828	844	883	848	795	647	262	694	913	878	789
Diffuse Radiation (Max Hourly)	406	436	553	547	498	580	590	578	573	534	445	392
Global Horiz Radiation (Avg Daily Total)	4516	5313	6196	6859	6559	4838	3770	3837	4197	5306	4735	4266
Direct Normal Radiation (Avg Daily Total)	4202	4900	5196	5905	4649	3955	639	656	1168	4178	4676	4156
Diffuse Radiation (Avg Daily Total)	1839	1973	2159	2205	2798	3266	3250	3305	3303	2290	1706	1736
Global Horiz Illumination (Avg Hourly)	44753	51219	57321	61438	57224	41962	33384	34792	39301	46395	46902	42723
Direct Normal Illumination (Avg Hourly)	36125	40661	41730	44222	32047	12420	3946	4304	7914	33698	40190	35858
Dry Bulb Temperature (Avg Monthly)	23	24	26	28	29	29	27	27	27	28	26	24
Dew Point Temperature (Avg Monthly)	13	15	18	22	24	25	24	24	24	22	18	14
Relative Humidity (Avg Monthly)	58	59	63	69	71	79	83	86	82	74	62	57

Month	Day	Hour	Global Horiz Rad (Wh/sq.m)
3	21	7	2
3	21	8	62
3	21	9	269
3	21	10	522
3	21	11	740
3	21	12	890
3	21	13	957
3	21	14	936
3	21	15	829
3	21	16	645
3	21	17	405
3	21	18	160
3	21	19	16
TOTAL			6433

### Radiation in HIE Calculator

#### Daily (daytime) Average Solar Radiation (W/m<sup>2</sup>)

- The daily average solar radiation for the location should be for the day of 21st March.

The IWECC weather files were produced from ISD data for 23 years (from 1986 to 2009).

IWECC weather files have been considered for all types of analysis.

The weather files on this website have been developed primarily from historical weather data archived in [NCDC's ISD data base](#). The IWEC2 weather files were produced from ISD data from as far back as 1986 to as recently as 2009. The historical weather files have been processed from 2001 thru 2016, with earlier years available upon request.

This is not synthetic or derived data, but the actual recorded data from official weather stations around the world. Where they exist, these data are the basis by which other weather data are evaluated. Even when they don't exist, a 2011 study ([Survey and Analysis of Weather Data for Building Energy Simulations](#)) showed that weather data from the nearest ISD station produced the best match to onsite measurements.

White Box Technologies uses software to convert the raw ISD data to local time and conditions, fill or reduce them to hourly time steps, and most importantly, calculate the solar radiation. The software has been used and tested for many years and proven to be robust. The resultant weather files are provided in BINM format for DOE-2-based programs, EPW format for EnergyPlus-based programs, as well as a humanly-readable text format. TMY2 and TMY3 CSV formats can also be supplied.

The IWEC2 weather files were produced from ISD data for 23 years (from 1986 to 2009).

**Preface**

The purpose of this book is to present brief summary of weather conditions as well as unique conditions for all the different analysis project. The book is likely to contain sufficient information for the designer who is not an hourly simulation tool. The CD provided with this book contains hourly weather files in different formats to enable the user to analyze the files with regard to the building energy simulation tools used. To facilitate further data analysis and development of this is any other future data of Typical Meteorological Year (TMY) files is also provided in two downloadable sources. The SIS files file, besides containing TMY data also contains hourly graphs for temperature, relative humidity and solar radiation to enhance the visualization of hourly variation in their values.

Creation of a TMY file is an empirical approach that selects individual months for different years from the period of record. For example, if the raw data set contains 19 years of data, all 12 January months are evaluated. By using empirical methods, the data judged most typical for that particular month is selected and is retained as the TMY. The other months of the year are analyzed in a similar manner to select the 12 typical months and then form a complete TMY. TMY files in this way are created by combining the field measurements of temperature, humidity, precipitation and solar radiation provided by the Bureau of Energy Efficiency (BEE) and Indian Meteorological Department, Government of India, to the present time. The raw data comprised seasonal values of TMY data reported at various weather stations over a period of 1990-2006. Some of the essential tasks related to pre-processing of raw data were identifying data gaps and screening of erroneous data. This was followed by filling up data gaps through scientific extrapolation and modelling. Whenever the data gaps were large, for example in the case of solar radiation data, theoretical models were used to generate data with the help of other climatic parameters over a period of several years. Rather than using a mix of measured and modelled data for development of TMY weather files for solar radiation data, only measured data was used as a small large data gaps. Hence the gaps in the datasets of temperature and relative humidity were resolved, they were interpolated using algorithms.

Two analysis tools, Climate Consultant V1.4, developed by University of California, Los Angeles, and DIVSIS V 1.25, developed by National Renewable Energy Laboratory & Matrix Engineering Inc, have been used to develop various graphs of the book.

It would be worth mentioning here that since the procedure of creating weather files is based upon data of the past several years, they do not reflect recent changes in weather, because of global heat island effect, increasing air pollution and change in precipitation pattern to the latest data.

Vishal Garg, IIT Hyderabad  
Prateeksha Murhe, MNIT Jaipur  
Vikram Murthy, ISHRAE

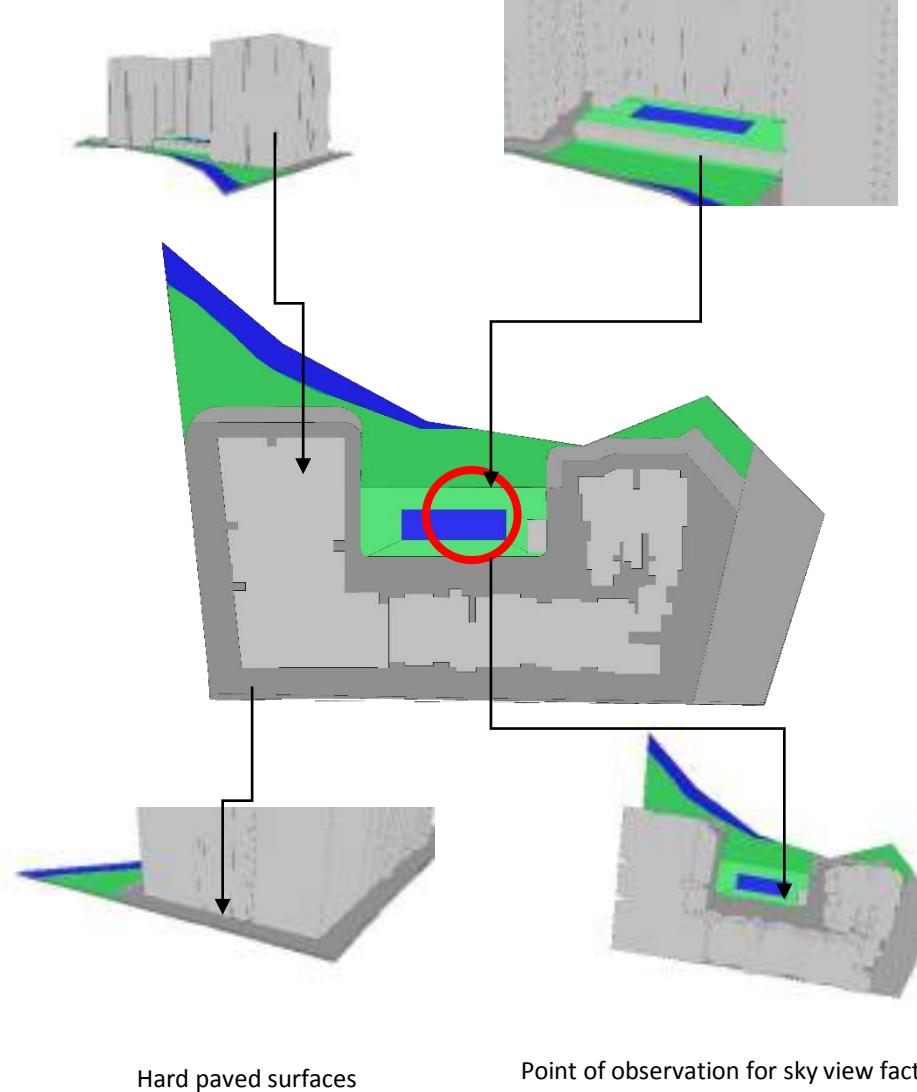
The ISHRAE weather files were produced from ISD data for 16 years (from 1990 to 2006).

IWEC2 weather files have been considered for all types of analysis.

## CALCULATION METHODOLOGY

Average height to area ratio

Green areas Included in the zone

**Step 1. Identifying the representative areas for the evaluation:**

A zone has been selected as per people occupancy and day to day activities and gatherings (marked in red).

**Step 2. Calculation of hard paved surface for the selected zone**

Total hard paved surface is calculated for the entire site and distributed among the zone in terms of percentage.

**Step 3. Calculation of average height to a building area ratio**

The buildings coming under each zone are considered for calculation of average height to area ratio.

**Step 4. Calculation of total wall surface area**

The building coming under each zone are considered to calculate the wall surface area of each building. Green plot area is calculated considering number of trees and tree leaf area for each zone.

**Step 5. Calculation of sky view factor**

Sky view factor is calculated as per the point of observation shown. The calculations are done for two perpendicularly inclined directions and average sky view factor is considered.

**Step 6. Design case and base incremental temperature**

The incremental temperatures are calculated for all the zones and average of all the incremental/ detrimental value is added to the outside average temperature to calculate the design case temperature.

## 8 STEP ANALYSIS



## Heat Island Effect of Existing Site

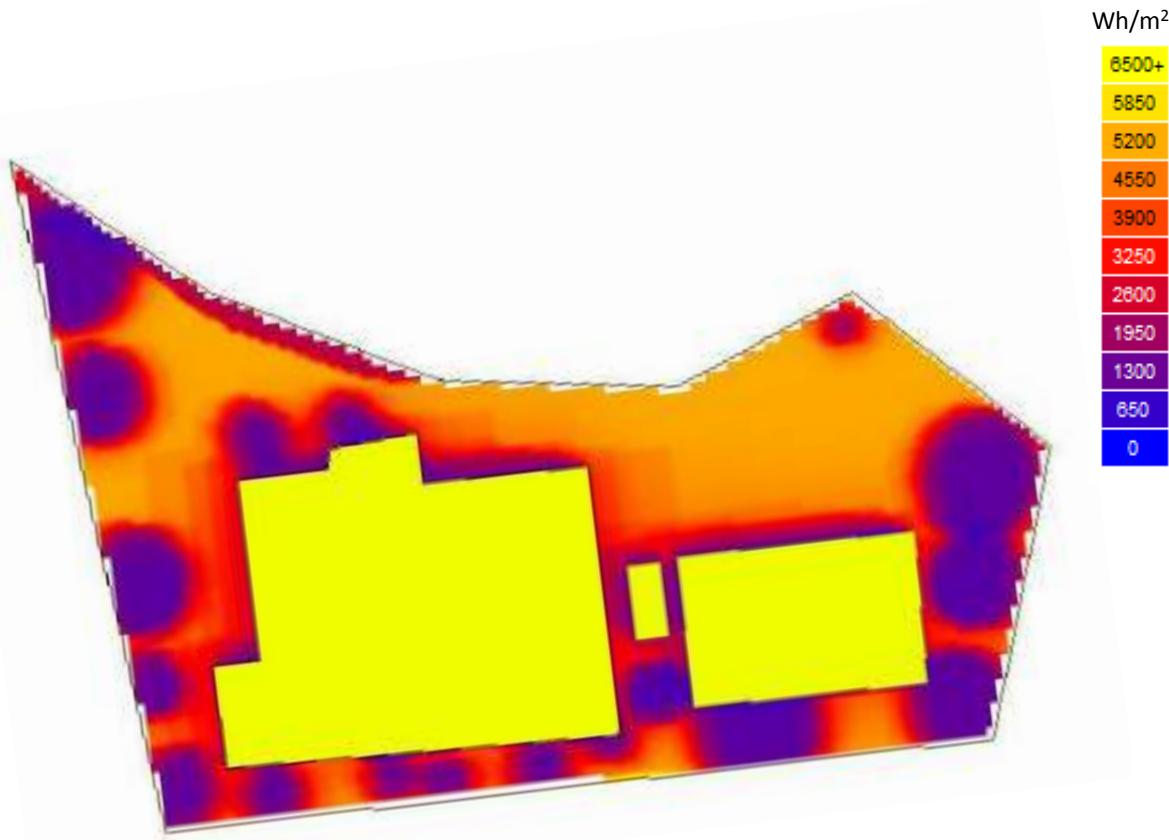


### Description

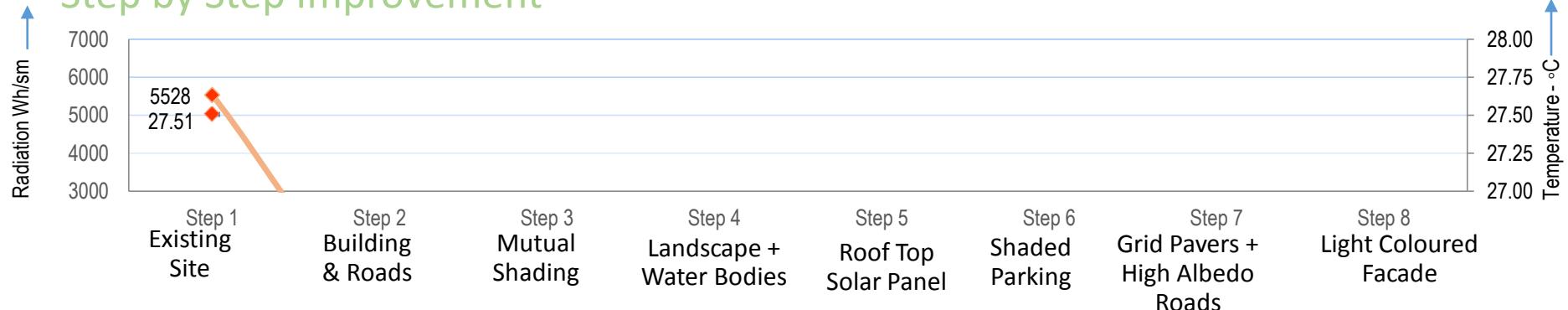
Existing site has been modeled and insolation level is calculated. In succeeding slides, all the proposed buildings and roads have been modeled and analyzed to calculate the increase in insolation level by the development.

### Avg. Radiation

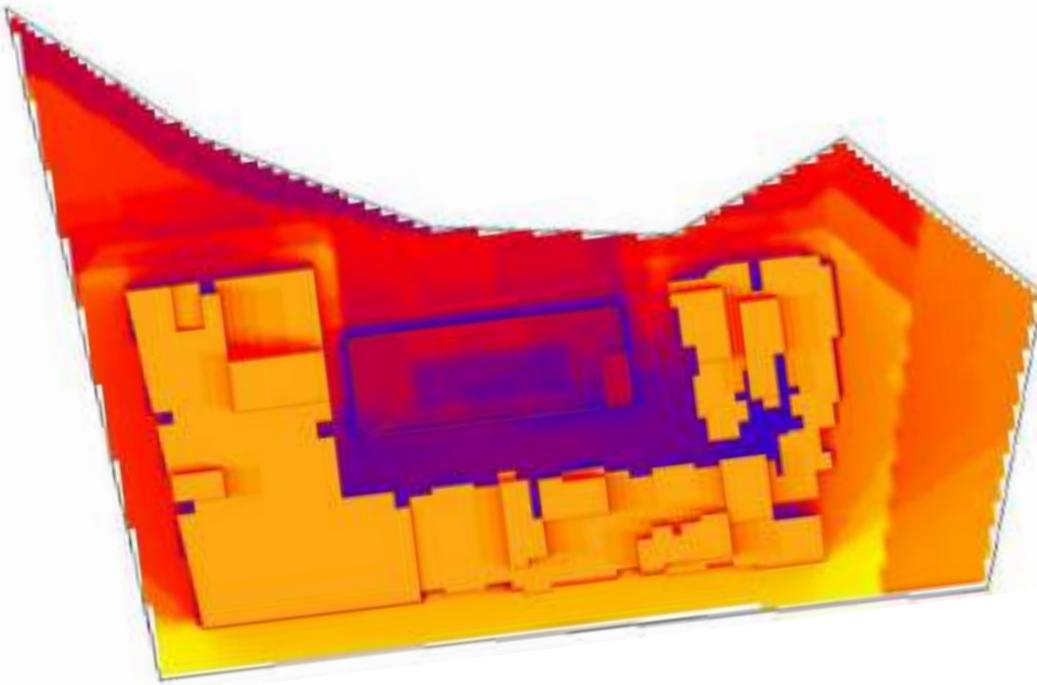
5,528 Wh/sq.m.



### Step by Step Improvement



## Heat Island effect of proposed case



## Description

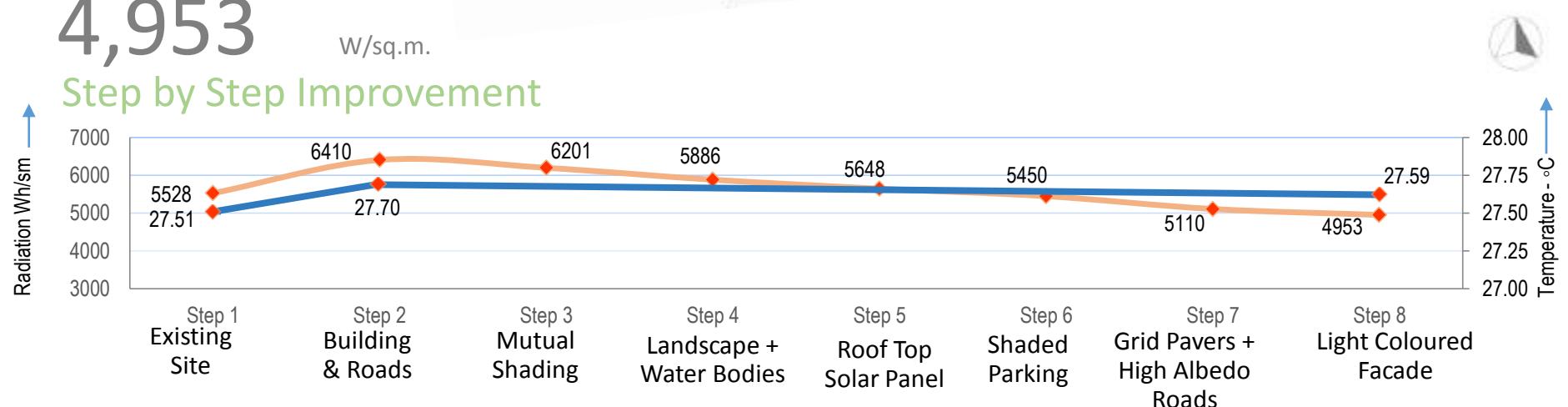
In the final step there is a significant reduction in solar insolation levels due to proposed landscape, trees and paved surfaces. Building phenomena like mutual shading further reduces the heat island effect. Proposed measures like light Coloured facade and shaded parking can reduce the solar insolation levels, resulting in decrease of average ambient temperature.

## Avg. Radiation

**4,953**

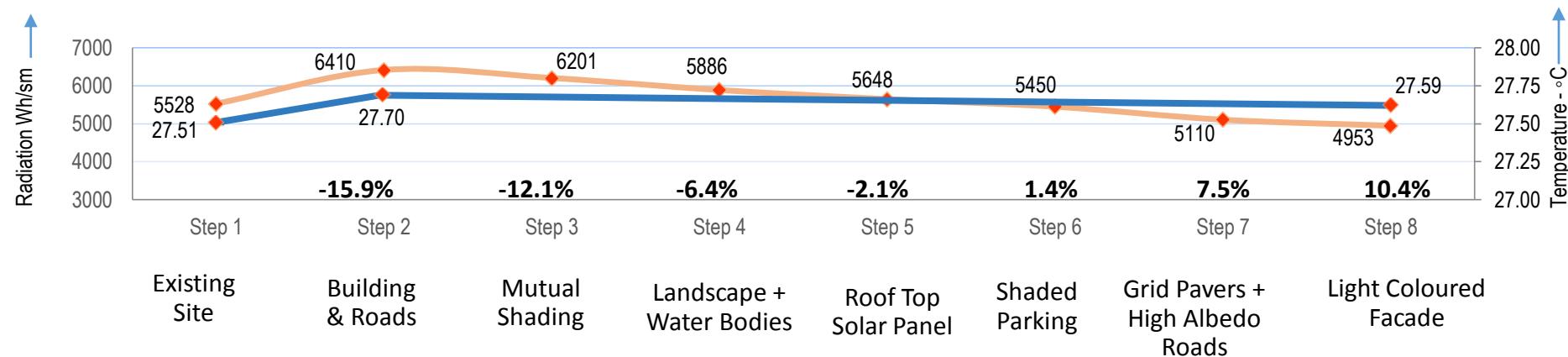
W/sq.m.

## Step by Step Improvement



## SUMMARY

Radiation	Base case	Design case	Reduction
5,528 Wh/sq.m.	4,953 Wh/sq.m.	10.4%	
Temperature	27.51 °C	27.59 °C	-0.08 °C



Overall, the project reduces solar insolation by 10.4% due to step by step measures taken and temperature increases by 0.08°C.

# Environmental Management Plan

# ENVIRONMENTAL MANAGEMENT PLAN

No	Environmental Aspects/ Findings of studies	Standards	Impacts	Design Mitigation Measures to improve Daylight	Considerations/
<b>DESIGN SPECIFIC</b>					
1.	<p><b>Shadow Analysis:</b> The aim of the study is to assess the potential impact of the development on the neighboring properties which falls under key sunlight sensitive areas.</p>	Not more than 50% of surface area of any building should be shaded for more than 40% time as per BRE standards.	Shadow analysis result shows that the most affected building is Building No. 35 with an average impact time of 02:18 hrs. 23% is the percentage impact which is lesser than 40 % as per BRE standards.	<ul style="list-style-type: none"> <li>• No mitigation measures required.</li> </ul>	

# ENVIRONMENTAL MANAGEMENT PLAN

Sr. No.	Environmental Aspects/ Findings of studies	Standards	Design Considerations/Mitigation Measures																												
<b>DESIGN SPECIFIC</b>																															
2.	<p><b>Daylight Analysis:</b> For the daylight simulation, worst case scenario has considered i.e. the units on 2'nd floor of each of the typical proposed towers are considered as the worst case. It is to be noted that the DL level achieved in these flat would be the lowest among all the units.</p>	<p>Daylight levels available should meet the minimum lighting levels mentioned in SP 41 which are as follows:</p> <table border="1"> <thead> <tr> <th>Space</th><th>Required lux levels (SP 41)</th></tr> </thead> <tbody> <tr> <td>Living room</td><td>50</td></tr> <tr> <td>Bedroom</td><td>152</td></tr> <tr> <td>Kitchen</td><td>200</td></tr> <tr> <td>Toilet</td><td>25</td></tr> <tr> <td>Circulation</td><td>25</td></tr> <tr> <td>Office</td><td>300</td></tr> </tbody> </table>	Space	Required lux levels (SP 41)	Living room	50	Bedroom	152	Kitchen	200	Toilet	25	Circulation	25	Office	300	<ul style="list-style-type: none"> <li>It is recommended to paint all the exterior surfaces with light colored paints for maximum light reflectance.</li> <li>Similarly, it is recommended to use light color wall, ceilings and floor finishes to achieve higher daylight reflections.</li> <li>It is recommended to provide light coloured grid pavers / tiles / roads for hardscaping around the buildings to increase ground reflectance resulting increment in diffused light levels.</li> <li>It is recommended to choose Window Glass with visual light transmission of 45%.</li> </ul> <p>The project is achieving an average of more than 200 lux in all habitable spaces which is higher than the requirement.</p> <table border="1"> <thead> <tr> <th>Space</th><th>Achieved lux levels (SP 41)</th></tr> </thead> <tbody> <tr> <td>Living room</td><td>225</td></tr> <tr> <td>Bedroom</td><td>275</td></tr> <tr> <td>Kitchen</td><td>215</td></tr> <tr> <td>Toilet</td><td>110</td></tr> <tr> <td>Circulation</td><td>105</td></tr> <tr> <td>Office</td><td>395</td></tr> </tbody> </table>	Space	Achieved lux levels (SP 41)	Living room	225	Bedroom	275	Kitchen	215	Toilet	110	Circulation	105	Office	395
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# ENVIRONMENTAL MANAGEMENT PLAN

No.	Environmental Aspects/ Findings of studies	Standards	Design Considerations/Mitigation measures																
<b>DESIGN SPECIFIC</b>																			
3.	<p><b>Wind &amp; Ventilation Analysis:</b></p> <p>Wind Analysis is done for external environment around the buildings to ensure that all the habitable areas are meeting the required ventilation rates.</p>	<p>Ventilation Requirement as per NBC 2016 has specified minimum ACPH required for various habitable spaces which are as follows:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Space</th> <th>Required ACH (NBC 2016)</th> </tr> </thead> <tbody> <tr> <td>Living room</td> <td>3-6</td> </tr> <tr> <td>Bedroom</td> <td>2-4</td> </tr> <tr> <td>Kitchen</td> <td>4.5</td> </tr> </tbody> </table>	Space	Required ACH (NBC 2016)	Living room	3-6	Bedroom	2-4	Kitchen	4.5	<p>Wind speed observed at various heights is between 0.4 m/s to 2.4 m/s.</p> <p>Ventilation rates achieved for various spaces are as follows:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Space</th> <th>Achieved ACH</th> </tr> </thead> <tbody> <tr> <td>Living room</td> <td>&gt;9</td> </tr> <tr> <td>Bedroom</td> <td>&gt;6</td> </tr> <tr> <td>Kitchen</td> <td>&gt;9</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>• No mitigation measures required.</li> </ul>	Space	Achieved ACH	Living room	>9	Bedroom	>6	Kitchen	>9
Space	Required ACH (NBC 2016)																		
Living room	3-6																		
Bedroom	2-4																		
Kitchen	4.5																		
Space	Achieved ACH																		
Living room	>9																		
Bedroom	>6																		
Kitchen	>9																		

# ENVIRONMENTAL MANAGEMENT PLAN

No.	Environmental Aspects/ Findings of studies	Standards	Design Considerations/Mitigation measures
<b>DESIGN SPECIFIC</b>			
4.	<p><b>Thermal Comfort:</b></p> <p>Hourly indoor Operative temperatures are calculated through hourly outside dry bulb temperature for Mumbai using the equations mentioned in ECBC 2017 and IMAC 2015.</p>	<p>As per ASHRAE 55, the temperature of the room should be between 22 deg. C to 27 deg. C. The relative humidity should range between 50 – 60%.</p>	<p>The thermal comfort can be achieved in all the spaces keeping the thermostat at 26 deg. C.</p> <ul style="list-style-type: none"> <li>• No mitigation measures required.</li> </ul>

# ENVIRONMENTAL MANAGEMENT PLAN

No .	Environmental Aspects/Findings of studies	Standards	Impacts	Design Considerations/ Mitigation Measures	
<b>DESIGN SPECIFIC</b>					
5.	<p><b>Heat Island Effect Analysis:</b></p> <p>An urban heat island is a climatic phenomenon in which urban areas have higher air temperature than their rural surroundings as a result of anthropogenic modifications of land surfaces, significant energy use and its consequent generation of waste heat.</p>	<p>There are no standards as such to measure the Heat Island Effect impact. But the comparison between Base Case &amp; Proposed Case can be analysed in terms of incident Solar Radiation reduction &amp; change in ambient air temperature.</p>	<p>Ambient air temperature may increase from 27.51 °C to 27.59°C i.e., an increase of 0.08°C in temperature due to Proposed Project.</p>	<p>Though ambient temp will increase the solar insolation will decrease, there is reduction in solar insolation on site due to the following proposed measures</p> <ul style="list-style-type: none"> <li>▪ Mutual shading</li> <li>▪ Landscape</li> <li>▪ Water Bodies</li> <li>▪ Roof Top Solar panels</li> <li>▪ China Mosaic Tiles</li> <li>▪ Shaded Parking</li> <li>▪ Light coloured Grid pavers</li> <li>▪ High albedo roads</li> <li>▪ Light coloured façade</li> </ul>	<p>There is reduction in solar insolation from 5,528 to 4,953 Wh/sq.m. i.e., a reduction of 10.4% due to Proposed Project.</p>



THANK YOU



# ENCLOSURE 3 LAYOUT PLAN





# ENERGY SAVING STATEMENT

Overall Energy Saving: 22 %  
Saving Due to Solar: 5 %

## ENERGY CALCULATION – AGAINST CONVENTIONAL CASE

	Building Parameters	Maximum Demand Load in kW		Energy Conservation Measures	% Savings
		Standard Base Case	Efficient Proposed Case		
<b>A) Commercial</b>					
1	Internal Lighting	343	164	# LED Tubes & Lamps for all habitable areas	52.00
2	Air Conditioning	462	411	# Energy Efficient VRV System, with high COP	11.00
3	Equipments	247	247	# 5 A Load - TV, Telephone, Fans, Plug Points etc. # 15 A Load - Fridge, Microwave, Washing Machines etc.	0.00
<b>B) Residential</b>					
1	Internal Lighting	130	71	# LED Tubes & Lamps for all habitable areas	45.00
2	Air Conditioning	178	178	# Energy Efficient 5 - Star Rated Split AC, High COP	0.00
3	Equipments	119	119	# 5 A Load - TV, Telephone, Fans, Plug Points etc. # 15 A Load - Fridge, Microwave, Washing Machines etc.	0.00
4	Water Heating	149	89	# 40% of Total Hot Water requirement on Solar	40.00
<b>C) Infrastructure</b>					
1	Common Area Lighting	50	24	# LED Tubes for Stairs, Stores, MEP Rooms, Toilets, Lobbies	52.00
2	External / Landscape Area Lighting	24	12	# LED Lamps with Timer Based Controls	50.00
3	Parking Area Lighting	24	12	# LED Tubes for Parking Spaces	51.00
4	Plumbing, Fire, Equipment & Ventilation	73	59	# Pumps & Motors with Premium Efficiency of 80%	18.00
5	Lifts & Escalators	33	30	# Energy Efficient Lifts with VVVF Lift Drive	11.00
#	<b>Grand Total</b>	<b>1830</b>	<b>1417</b>	<b>Total Savings in Energy Demand - 1417 kW</b>	<b>22.59</b>

Sr. No	Energy Conservation Measures	Savings %
1	Better Envelope Design	22.59% energy saved as per Conventional Base Case.
2	Lower Lighting Loads	3.27% energy saved as per ECBC 2007 Base Case.
3	Efficient Air Conditioning System	7.28% energy saved as per ECBC 2017 Base Case.
4	Efficient Pumps & Motors	

Hot water consumption	59 kW
Solar	20 kW
PV	79 kW
Total	1417 kW
Demand Load	
<b>Savings through Renewable energy</b>	<b>5.61%</b>



## ECBC COMPLIANCE- RESIDENTIAL

Sr. No.	Model Input Parameter	Baseline Case (As per ECBC 2007)		Proposed Case	
1	Exterior Wall Construction	U-factor: 0.44 W/sm.K	U-Value: 0.85 W/sm.K 6" External AAC Wall		
2	Roof Construction	U Value: 0.26 W/sm.K	U-Value: 0.47 W/sm.K 6" RCC Slab with 2" XPS insulation		
3	Glazing	UValue: 3.30 W/sm.K SHGC: 0.25	UValue: 4.60 W/sm.K SHGC: 0.42 VLT: 45%		
4	WWR	25%	25%		
5	Shading	No shades	Shading effect of solar panel on roof and shading devices on all facade is considered.		
6	EPD (W/sqm.)	15	15		
7	Pumps & Motors	IE 1	IE 2		
8	LPD (W/sq.m.)	7.5	5.0		
9	External Lighting Load (kW)	As per Annexure IV	30% lesser than Annexure IV		
10	Domestic Hot Water	20% on Solar (20 ltr/person/day)	40% on Solar (20 ltr/person/day)		
11	HVAC System Type	Packaged Single Zone (Split Unit) with COP 3.0.	Packaged Single Zone (Split Unit) with COP 5.0		
12	Process Loads	As per Design	As per Design		
13	DG Set	CPCB Approved	CPCB Approved		
14	PF Correction	0.95	0.95		
15	Power Distribution Losses	<1%	<1%		

## ECBC COMPLIANCE- COMMERCIAL

Sr. No.	Model Input Parameter	Baseline Case as per ECBC 2017 Parameters		Proposed Case	
		U factor:	W/sm.K	U-Value:	W/sm.K
1	Exterior Wall Construction	0.40	W/sm.K	0.85	W/sm.K 6" External AAC Wall
2	Roof Construction	0.33	W/sm.K	0.47	W/sm.K 6" RCC Slab with 3" XPS insulation
3	Glazing	3.00	W/sm.K SHGC: 0.25 0.50 North	1.80	W/sm.K SHGC: 0.2 VLT: 45%
4	WWR	40%		40%	
5	Shading Devices	Not Applicable		As per Design	
6	Eqv Power Density	15 W/sm		15 W/sm	
7	Lighting Power Density	As per Building Area Method LPD: 9.5 W/sm		As per Building Area Method LPD: 7.5 W/sm	
8	Pumps & Motors	IE 2		IE 3	
9	Occupancy Sensors	Applicable		Considered	
10	Daylight Sensors	Applicable		Not Considered	
11	Ext. Lighting Load	As per Annexure III		30% lesser than Annexure III	
12	Domestic Hot Water	No Hot Water requirement		Not Considered	
13	Process Load	As per design		As per Design	
14	Renewable Energy	1% of Peak Demand (14.1 kW - For Entire Project)		Complied with (20 kW - For Entire Project)	
15	Data Server Loads	Not Applicable		Not Considered	
16	Ventilation Requirement	10 CFM / person ASHRAE 62.1 2010		13 CFM / person ASHRAE 62.1 2010 + 30%	
17	Chiller Parameter	Not Applicable		Not Considered	
18	VSD's on Chiller	Not Applicable		Not Considered	
19	VFD's on Cooling Tower	Not Applicable		Not Considered	
20	Primary, Fire, Condenser Pump	Standard – 60%		Premium – 70%	
21	Primary, Fire, Condenser Motor	Standard – 70%		Premium – 85%	
22	HVAC System	Packaged Single Zone (Split Unit) with COP 3.0.		Varial Refrigerant Volume - COP 4.5 Packaged Single Zone (Split Unit) with COP 5.0	
23	VFD in AHU's & Secondary Pumps	Not Applicable		Not Considered	
24	Demand Control Ventilation	Not Applicable		Not Considered	
25	Heat Recovery Wheel	Not Applicable		Not Considered	
26	Airside Economizer	Not Applicable		Not Considered	
27	CO Sensors	Applicable		Considered	
28	DG Set	BEE 3 Star Rated		BEE 3 Star Rated	
29	PF Correction	0.97		0.97	
30	Power Dist. Loss	< 3%		< 3%	

**MUNICIPAL CORPORATION OF GREATER MUMBAI**  
**MUMBAI FIRE BRIGADE**

**Sub:** N.O.C. stipulating Fire-Protection & Fire-Fighting requirements for the Proposed Construction of High Rise Residential-cum-Commercial Building, in General Industrial (I-2) Zone, On Plot bearing C.T.S. Nos. 657 of Village Mohili 'L' Ward, Mumbai.

**Ref:** Online File Submission No. CHE/ES/4273/337 (New).

**E.E.B.P. (E.S.)**

This is proposal for the Construction of High Rise Residential-cum-Commercial Building, comprising of 04 Wings, designated as Wing -A, Wing -B, Wing -C, & Wing -D. Wings -A, B, & C are High Rise Residential Wings & Wing -D is High Rise Commercial Wing.

Wings A, B, & C are having Common 02 level basements (also common with High Rise Commercial Wing -D) + Ground floor part on stilt + & thereafter the building is divided into 03 different Wings i.e. A, B & C, each wing having 1<sup>st</sup> to 12<sup>th</sup> upper residential floors with a total height of 38.30 mtrs. measured from general ground level up to terrace level.

High Rise Commercial Wing -D having 03 level basements (1<sup>st</sup> & 2<sup>nd</sup> basements common with High Rise Residential Wings A, B, C & 3<sup>rd</sup> basement is Part basement only for Commercial Wing -D) + Ground floor for partly on stilts + 1<sup>st</sup> & 2<sup>nd</sup> floors as Parking floors (within building line) + 3<sup>rd</sup> to 11<sup>th</sup> upper Commercial floors (11<sup>th</sup> Pt.) with a total height of 38.75 mtrs. measured from general ground level up to terrace level.

The Licensed Surveyor has also proposed a Low Rise Independent Structure, on North side of the building, having Ground floor on stilts for car parking & 1<sup>st</sup> floor for swimming pool & R.G. with independent staircase having flight width of 01.50 mtrs. leading from ground to 1<sup>st</sup> floor, as shown in the plan.

Licensed Surveyor has proposed space for Sub-station & Transformer on North-East corner & Space for D.G. Set on North-West Corner of the plot, as shown on the enclosed plans

➤ **The Floor-Wise user of the High Rise Residential Wings -A, B & C, are as under;**

<b>Floors;</b>	<b>Occupancy per floor;</b>		
	<b>Wing A</b>	<b>Wing B</b>	<b>Wing C</b>
2 <sup>nd</sup> Basement (-06.75mtrs.)	Horizontal car parking accessible by 06.00 mtrs. wide 02 way ramp & two car lifts		
1 <sup>st</sup> Basement (-03.75 mtrs.)	For STP tanks & Space for U.G. tanks, Pump rooms, Electric meter rooms & for Horizontal as well as 02 Tier Stack car parking accessible by 06.00 mtrs. wide 02 way ramp & 02 Car lifts.		
Common Ground floor part on stilt.	For Entrance lobbies, 07 Shops, 02 Fitness centers, Fire Panels & Stilt for Horizontal car parking.		
1 <sup>st</sup> to 7 <sup>th</sup> & 9 <sup>th</sup> to 12 <sup>th</sup> floors.	04 nos. of Residential flats on each floor.	04 nos. of Residential flats on each floor.	04 nos. of Residential flats on each floor.
8 <sup>th</sup> floor.	03 nos. of Residential flats & for Refuge area.	03 nos. of Residential flats & for Refuge area.	03 nos. of Residential flats & for Refuge area.
Terrace.	Open to sky of each Wing (to be treated as Refuge area)		

➤ **Floor-Wise user of the High Rise Commercial Wing -D, are as under;**

<b>Floors;</b>	<b>Occupancy per floor;</b>
3 <sup>rd</sup> Part Basement (-09.75 mtrs.)	For Horizontal car parking way of 02 nos. of Car lifts.
2 <sup>nd</sup> Basement (-06.75 mtrs.)	For Horizontal car parking accessible by 06.00 mtrs. wide 02 way ramp & 02 nos. of Car lifts.
1 <sup>st</sup> Basement (-03.75 mtrs.)	For STP tanks, Space for U.G. tanks, Pump rooms, Electric meter rooms & for Horizontal car parking accessible by 06.00 mtrs. wide 02 way ramp & 02 nos. of Car lifts.
Ground floor partly on stilt	For Entrance lobbies, 02 Nos. of Showrooms & Stilt for Horizontal car parking
1 <sup>st</sup> & 2 <sup>nd</sup> Parking floors	For Horizontal car parking way of 02 nos. of Car lifts.
3 <sup>rd</sup> floor.	For 06 nos. Offices & Car lift machine room.
4 <sup>th</sup> to 7 <sup>th</sup> , 9 <sup>th</sup> & 10 <sup>th</sup> floors.	For 06 nos. Offices
8 <sup>th</sup> floor	For 05 nos. Offices & for Refuge area
11 <sup>th</sup> floor (Pt.)	For 05 nos. Offices & for Part terrace.
Terrace.	Open to sky.

➤ The proposed site / plot abut on 18.30 mtrs. wide D.P. Road Off Kurla-Andheri Road on South side.

<b>Side</b>	<b>Open spaces for High Rise Residential Wings -A, B, &amp; C, are as follows;</b>		
	<b>Wing -A</b>	<b>Wing -B</b>	<b>Wing -C</b>
North	07.43 mtrs. upto Independent Structure.	Attached to Wing -C.	06.08 mtrs. to 11.57 mtrs.
South	05.45 mtrs. to 05.85 mtrs. (No Compound Wall) + 18.30 mtrs. wide D.P. Road.	04.43 mtrs. to 04.71 mtrs. (No Compound Wall) + 18.30 mtrs. wide D.P. Road.	Partly Attached to Wing -B.
East	Attached to Wing -B.	08.70 mtrs. + Amenity area.	07.94 mtrs. to 10.10 mtrs. + Amenity area.
West	06.00 mtrs. Joint open space with Wing -D.	Attached to Wing -A.	06.00 mtrs. to 07.67 mtrs. upto Independent Structure.

<b>Side</b>	<b>Open spaces for Commercial Wing-D, are as follows;</b>
North	07.68 mtrs. to 12.42 mtrs. including Paved RG
South	04.54 mtrs. to 05.21 mtrs. (No Compound Wall) + 18.30 mtrs. wide D.P. Road.
East	03.00 mtrs. upto Independent Structure & 06.00 mtrs. Joint open space with Wing -A.
West	06.09 mtrs. to 09.36 mtrs.

<b>Side</b>	<b>Open spaces for Independent Structure, are as follows;</b>
North	15.01 mtrs. including Paved RG
South	06.15 mtrs. to 07.43 mtrs. upto Wing -A.
East	06.00 mtrs. to 07.67 mtrs. upto Wing -C.
West	03.00 mtrs. upto Wing -D.

➤ **Details of Refuge Area, (For High Rise Residential Wings -A, B, C & Commercial Wing);**

Floor	Wings	Refuge area in sq. mtrs.		At the height from ground level in mtrs.
		Required	Provided	
8 <sup>th</sup> floor.	Wing 'A'	55.85 sq. mtrs.	59.47 sq. mtrs.	23.80 mtrs.
	Wing 'B'	48.77 sq. mtrs.	52.92 sq. mtrs.	
	Wing 'C'	59.83 sq. mtrs.	63.57 sq. mtrs.	
8 <sup>th</sup> floor	Wing 'D'	134.30 sq. mtrs.	137.91 sq. mtrs.	26.35 mtrs.
In addition to above, Terrace floors of all the above Wings shall be treated as refuge area. Excess refuge area if any shall be counted in FSI.				

➤ **The Details of Staircases of High-Rise Residential Wings -A, B, & C;**

Staircase Description	Width of staircase	No. of staircase	Type
Leading from 2 <sup>nd</sup> Basement level up to terrace level, (Diverted at ground level).	01.50 mtrs.	02 Nos.	Enclosed
Leading from ground level up to terrace level	01.50 mtrs.	01 No.	Enclosed
Additional staircase for independent structure having ground and first floor	01.50 mtrs.	01 No.	open
The staircases are externally located & adequately ventilated. The basements are provided with smoke check lobby, as shown in the enclosed plans.			

➤ **The Details of Staircases of High Rise Commercial Wing -D;**

Staircase Description	Width of staircase	No. of staircase	Type
Leading from 3 <sup>rd</sup> Basement level up to terrace level, (Diverted at ground level).	01.50 mtrs.	01 No.	Enclosed
Leading from Ground level up to terrace level	01.50 mtrs.	01 No.	Enclosed
The staircases are externally located & adequately ventilated. The basements are provided with smoke check lobby, as shown in the enclosed plans.			

➤ **The Details of Lifts of High-Rise Residential Wings -A, B, & C;**

Lifts Type;	Profile;	Nos. of Lifts;		
		Wing -A	Wing -B	Wing -C
Passenger Lifts	Leading from 2 <sup>nd</sup> Basement level up to Top floor / terrace level.	02 Nos.	02 Nos.	02 Nos.
01 Lift from each Wing will be converted into Fire Lift. The Lift lobby / Common passage on each floor in Each Wing are ventilated to outside air, as shown in the enclosed plans.				

➤ **The Details of Lifts of High Rise Commercial Wing -D;**

Lifts Type;	Profile;	Nos. of Lifts for Wing -D;
Passenger Lifts	Leading from 3 <sup>rd</sup> basement level up to Terrace level.	03 Nos.
01 of the Lift will be converted into Fire Lift. The Lift lobby / Common passage on each floor are ventilated to outside air, as shown in the enclosed plans.		

➤ **Basements;**

1<sup>st</sup> & 2<sup>nd</sup> basements are common for all the four wings i.e. Residential Wings -A, B, C & Commercial Wing -D while 3<sup>rd</sup> basement which is Part basement is only for Commercial Wing -D. The basement levels are proposed below the building as well as extend beyond the building line. The basements will be ventilated through ventilation cutouts, as shown in the plans. In addition, mechanical ventilation will be provided as per the rules.

➤ **Access Ramp;**

No. of Access Ramp	Width	Details
01	06.00 mtrs.	Leading from ground level up to 2 <sup>nd</sup> basement level.

➤ **The proposal has been considered favorably in view of the facts that;**

1. The proposed site / plot abut on 18.30 mtrs. wide D.P. Road Off Kurla-Andheri Road on North side. As such, the proposed building is accessible to fire appliances.
2. The building will be protected with advance in built Fire-fighting system such as Wet riser, Hydrant system, Fire alarm system & Sprinkler system, Public address system, Smoke detection system etc.
3. The fire resistance rating for staircase F.R.D., Lift lobby / protected lobby & the lift doors as per N.B.C. provisions.
4. During construction stage & prior to Final Occupation Party to comply with additional requirements stipulated by Mumbai Fire Brigade Officer if any in future.

In view of the above, as far as this Department is concerned, there would be no objection for the proposed Construction of High Rise Residential-cum-Commercial Building, comprising of 04 Wings, designated as Wing -A, Wing -B, Wing -C, & Wing -D. Wing A, B & C are High Rise Residential wings, & Wing -D is High Rise Commercial Wing. Wing -A,B, & C are having Common 02 level basements (also common with High Rise Commercial Wing -D) + Ground floor part on stilt & thereafter the building is divided into 03 different Wings i.e. A, B, & C, each wing having 1<sup>st</sup> to 12<sup>th</sup> upper residential floors with a total height of 38.30 mtrs. measured from general ground level up to terrace level. High Rise Commercial Wing -D will have 03 level basement (1<sup>st</sup> & 2<sup>nd</sup> basements common with High Rise Residential Wing -A, B & C & 3<sup>rd</sup> basement is part basement only for Commercial Wing -D) + Ground floor for partly on stilts + 1<sup>st</sup> & 2<sup>nd</sup> floor as parking floors (within building line) + 3<sup>rd</sup> to 11<sup>th</sup> upper Commercial floors (Part 11<sup>th</sup> floor) with a total height of 38.75 mtrs. measured from general ground level up to terrace level, alongwith Independent Structure having ground floor on stilts for car parking & 1<sup>st</sup> floor for Swimming pool & R.G. on the North side of the plot with independent staircase having flight width of 01.00 mtrs. leading from ground to first floor, as per shown on the submitted enclosed plans, signed in token of approval, subject to satisfactory compliance of the following requirements;

**1. ACCESS;**

- i. There shall be no compound wall on Internal road side of the building. The courtyards shall be flushed with the road levels.
- ii. All access & fire tender access should be free of encumbrances.
- iii. Courtyards shall be flushed with the road level.

**2. PROTECTION TO STRUCTURAL STEEL;**

- i. All the structural steel members i.e. columns, beams etc., shall be protected with the 02 hours fire resisting materials & methods as stipulated under IS 1942-1960 as application for residential building.
- ii. A certificate for as stated above shall be furnished from the Structural Engineer as the time of application for occupying the building.

### **3. COURTYARDS;**

- i. The available courtyards / open space, on all the sides of the building shall be paved, suitably to bear the load of fire engines weighing up to 48 m. tones each with point load of 10 Kgs. /sq. cms.
- ii. All the courtyards shall be in one plan.
- iii. The courtyards shall be kept free from obstruction at all times.

### **4. STAIRCASES, (For Wing A, B, C & D);**

- i. The flight width of staircases shall be maintained as shown in the enclosed plans.
- ii. The layout of staircases shall be enclosed type as shown in the plan throughout its height & shall be approached (gained) at each floor level at least 02 hours fire resistant self-closing door (45 mm. thickness) placed in the enclosed wall of the staircase.
- iii. Externally located staircases adequately ventilated to outside air with smoke check lobby for the basement.
- iv. Permanent vent at the top equal to 5% of the cross sectional area of the staircase shall be provided.
- v. Openable sashes or R.C.C. grills with clear opening of not less than 0.5 sq.mtrs. per landing on the external wall of the staircase shall be provided.
- vi. No combustible material shall be kept or stored in staircase / passage.
- vii. Internal staircases shall be no combustible material.

### **5. BASEMENTS, (All Wings);**

- i. Each basement shall be separately ventilated. Vents with cross, sectional area (Aggregate) not less than 2.5 percent of the floor area spread evenly around the perimeter of the basement shall be provided in the form of grills or breakable stall boards lights or pavement lights or by way of shafts. Alternatively, a system of air inlets shall be provided at basement floor level & smoke outlets at basement ceiling level. Inlets & outlets may be terminated at ground level with stall boards or pavement lights as before but ducts to convey fresh air to the basement floor level shall have to be laid. Stall boards & pavement lights should be in position easily accessible to the Fire Brigade Personal & Rescue Teams & clearly marked '**SMOKE OUTLET**' or '**AIR INLET**' with an indication of area served at or near the opening.
- ii. The basements shall be used for designated purpose only as shown in the plan.
- iii. The basements shall be provided with natural ventilations through the ventilators, open cut outs as shown in the plan.
- iv. The staircases of the basements shall be of enclosed type & entry to basement areas shall be through 02 hours fire resistance self-closing door provided in the enclosed wall of the staircase & through smoke check / cut off lobby. The smoke check / cut off lobby shall be mechanically pressurized.
- v. Mechanical ventilation shall be provided to the basement with 06 air changes per hour with an arrangement to accelerate the rate of air changes to 12 per hour in the event of a fire emergency.
- vi. The ducts of the mechanical ventilations system shall be of substantial metal gauge as per the relevant I.S. standard.
- vii. Basement area shall be divided in compartments as per rule.
- viii. The operating switches of the mechanical ventilation shall be located in the fire control room with appropriate zonal indications.
- ix. Exhaust duct shall be provided to draw out exhaust at ground level of the basement.
- x. Suitable signage's shall be provided in the basement showing exit direction, way to exits etc.
- xi. Automatic sprinkler system shall be provided in basement area. These systems shall be installed as per the standard laid down by T.A.C. & relevant I.S. specifications

- xii. Smoke off lobby, Staircases, common passages & escape routes of the entire building shall be painted with fire retardant paint.
- xiii. Staircase & lift lobby shall have illuminated by inverter operated exits signs with IP 54 enclosure. Luminance of the signage's shall be such that they are visible from a distance of 12.00 to 16.00 mtrs.
- xiv. The staircases of the basements & the associated lift lobbies shall be pressurized in the event of fire. The pressure in this enclosed staircase & enclosed lift lobbies shall be maintained not less than 5 m.m. W.G. & 2.5 mm W.G. for lift lobbies.
- xv. CO Detector with audible alarm system shall be provided to all the basement areas & the circuit of the same shall be given / connected to mechanical ventilation system to start automatically on actuation of CO Detector & the other detectors provided in the basements.
- xvi. Ventilation system shall start automatically on actuation of detector provided in the basement area.
- xvii. Exhaust duct, mechanical ventilation duct should not pass through exit or entry.
- xviii. The basement beyond building line shall be paved, suitably to bear the load of fire engines weighing up to 48 m. tones each with point load of 10 Kgs. / sq. cms.
- xix. 02 Nos. of Dry Chemical Powder (ABC) type fire extinguishers of 09 Kgs. capacity each with I.S.I. certification mark shall be kept for every 100 sq. mtrs. area in each basement.

## **6. ELECTRIC CABLE SHAFTS, SERVICES & METER ROOM, (For Wing A, B, C & D);**

- i. Electric cable shafts shall be exclusively used for electric cables & should not open in staircase enclosure.
- ii. Inspection doors for shafts shall have 02 hours fire resistance.
- iii. Electric shafts shall be sealed at each floor level with non-combustible materials such as vermiculite concrete. No storage of any kind shall be done in electric shaft.
- iv. Electric wiring / cable shall be non-toxic, non-flammable, low smoke hazard having copper core / fire resistance for the entire building with provision of E.L.C.B. / M.C.B.
- v. Electric meter rooms shall be provided at first basement floor level & shall be adequately ventilated & easily accessible.
- vi. Electric wiring shall be having copper core having the fire resistance & low smoke hazard cables for the entire building, with the provision of E.L.C.B. / M.C.B. Low & Medium voltage wiring running in shaft & in false ceiling should run in separate conduits.
- vii. Water mains, telephone lines, intercom lines, gas pipes or any other service line should not be laid in the duct for electrical cables, use of bus bar / solid rising mains instead of cables is preferred.
- viii. Separate circuits for fire-fighting pumps, lifts, staircases & corridor lighting & blowers for pressurizing system shall be provided directly from the main switch gear panel & these circuits shall be laid in separate conduit pipes, so that fuse in one circuit will not affect the others. Such circuits shall be protected at origin by an automatic circuit breaker with its no-volt coil removed.
- ix. Master switches controlling essential service circuits shall be clearly labeled.

## **7. ELECTRIC SUB STATION, (Dry Type);**

- i. Only dry type transformer shall be installed.
- ii. The proposed Electric Sub-station shall be covered from all three sides either by 04 hours fire resistance brick masonry walls / R.C.C. of 9<sup>th</sup> thickness with provision of 02 hours fire resistant door.
- iii. Entire Installation of sub-station including Switchgear Room, Capacitors, & Transformer etc. shall be conforming to the Indian Electrical Act. & Ruled framed their under.
- iv. The proposed sub-station shall be constructed as per plan.
- v. Cables in the cable trenches shall be coated with fire retardant material.

- vi. Electric wiring shall be having copper core having the fire resistance & low smoke hazard cables for the entire building with provision of E.L.C.B. / M.C.B.
- vii. Automatic built-in-circuit breakers shall be provided in the Electric Sub-Station.
- viii. Transformer shall be suitably insulated & shall be designed for continuous operation at rated KVA at the secondary terminal under the prevailing service condition at a higher rated voltage.
- ix. The design, treatment & construction of Transformer & breaking of the windings shall be such as to withstand the heavy, mechanical & thermal stresses, which may be experienced under the condition of daily cycle of heating & pulling due to fluctuation in load of dead short circuit on either side of the transformer.
- x. The capacity of the Electrical sub-stations shall be as per Electric supply company's requirements.
- xi. Adequate air & ventilation for Switchgear Room is essential to prevent condensation of moistures
- xii. All parts of Switchgear & Transformer shall be got examined frequently & carefully for signs of overheating, tracking etc.
- xiii. Entrance, Exit & clear passage shall be kept free from obstruction.
- xiv. Good housekeeping shall be maintained at the premises & flooring shall be kept free from oil spillage.
- xv. Smoking, Heating, Cooking use of naked light on the premises shall be strictly prohibited.
- xvi. Switches gears shall be housed in separate room, separated from the transformer base by a fire resistant wall of not less than 04 hours.
- xvii. All security & staff shall be well trained to use the fire-fighting equipment & summoned the fire brigade in case of emergency.
- xviii. The Electric Sub-Stations area shall be kept prohibited and no unauthorized person shall be allowed to enter in the area.
- xix. Authenticity / Approval of the premises shall be inspected, verified & approved by concerned department & municipal authorities of concerned Ward till then further process shall not be permitted.
- xx. Location, place & capacity of the sub-station shall be inspected, verified & approved by concerned authorities.
- xxi. 04 Nos. of Dry Chemical Powder (ABC) type fire extinguishers of 09 Kgs. capacity each with I.S.I. certification mark coupled with 08 buckets filled with dry, clean sand shall be kept at the entrance of the Electrical Sub-station.

## **8. D. G. SET ROOM;**

- i. D.G. Set with appropriate change over switch shall be provided for fire pumps, sprinkler pump, booster pump, staircase and corridor lighting circuits, manual fire alarm system & Fire lift.
- ii. For proposed D. G. Set acoustic enclosure will be provided for safe operation.
- iii. Entire installation of D. G. Set shall be confirming to the Indian Electrical Act. / Rules & Practice.
- iv. A deep tray shall be kept under the fuel tank of the D. G. Set to collect the spillage & same shall be disposed off daily without fail.
- v. Cable in the cable trenches shall be coated with fire retardant material.
- vi. Electrical wiring shall be having copper core having the fire resistant and low smoke hazards cables for the entire building with the provision of E.L.C.B. / M.C.B.
- vii. In electrical installation of the building shall be provided for vertical electrical shaft with feeder pillar box of a gap of every 24.00 mtrs. height of the building.
- viii. Adequate air & ventilation for switchgear room is essential to prevent condensation of moistures.
- ix. The capacity of the D.G. Set shall be 500 KVA as per BEST's requirements.
- x. D.G. Set shall be properly grounded.

- xi. Exhaust of D. G. Set shall not be directed in to the exit / entrance of any adjoining structure.
- xii. Sand bed of 6 inches thickness shall be provided below D. G. Set.
- xiii. Electrical cable of D. G. Set shall be FRLS type.
- xiv. Adequate quantity of diesel shall be stored in its original container near D.G. Set, away from electrical switches of source of ignition.
- xv. Automatic built in circuit breaker shall be provided to the D.G. Set.
- xvi. Rubber pad shall be provided to the D.G. Set for absorbed vibrations if any.
- xvii. The D.G. Set area shall be kept prohibited & no unauthorized shall be allowed entering the area.
- xviii. Structural stability of the building regarding absorption of the vibration of D.G. Set shall be checked by Structural Engg. Before installation of the D. G. Set.
- xix. Two foam type fire extinguisher of 09 ltrs. Capacity each with BIS certification mark coupled with 4 buckets filled with dry, clean sand shall be kept in the D. G. Set cabin.

## **9. LIFTS, (For Wing A, B, C & D);**

### **a) PASSENGER LIFTS;**

- i. Walls enclosing lift shaft shall have a fire resistance of not less than 02 hours.
- ii. Shafts shall have permanent vent of not less than 0.2 sq. mtrs in clear area immediately under the machine room.
- iii. Landing doors & lift car doors of the lifts shall be of steel shuttered with fire resistance of 01 hour.
- iv. No collapsible shutter shall be permitted.
- v. 01 of the lift in each wing shall be converted into Fire lift for each Wing & shall be as per specifications laid down under the regulations, a toggle switch shall be provided to this lift for the use of Firemen.
- vi. Threshold of non-combustible material shall be provided at the entrance of each landing door.

### **b) FIRE LIFTS;**

- i. Walls enclosing lift shafts shall have 02 hours fire resistance.
- ii. The shafts shall have permanent vent equal 0.2 sq. mtr. clear area under the Lift Machine room.
- iii. Landing doors & lift car doors shall be of steel shuttered type with 01 hour fire resistance. No collapsible shutters shall be provided.
- iv. To enable fire services personnel to reach the upper floor with the minimum delay, one fire lift shall be provided & shall be available for the exclusive use of the firemen in an emergency & the directly accessible to every dwelling of each floor.
- v. The lift shall have a floor area of not less than 1.4 sq. mtrs. with a minimum dimension of 01.12 mtrs. It shall have loading capacity of not less than 545 Kg. (08 Persons lift) with automatic closing doors.
- vi. There shall be an alternate electric supply of an adequate capacity apart from the normal electric supply the building & the cables run in a route safe from fire, i.e. within the lift shaft. In case of failure normal electric supply, it shall automatically trip over to alternate supply.
- vii. The operation of fire lift should be by a simple toggle or two button switch situated in glass-fronted box adjacent to the lift at the entrance level. When the switch is on, landing call points will become inoperative and the lift will be on car control only or on priority control device. When the switch is off, the lift will return to normal working. This lift can be used by the occupants in normal times.
- viii. The words '**FIRE LIFT**' shall be conspicuously displayed in florescent paint on the lift landing door at each floor level & Threshold of non-combustible material shall be provided at the entrance of each landing door.
- ix. Except Service Lifts, other lifts shall be converted into Fire Lifts conforming to relevant regulations.

- x. The lift lobbies in the basement shall be enclosed & shall be pressurized with positive air pressure of 05 m.m. W.G.

## **10. CAR PARKING;**

- i. Car parking shall be permitted in the designated area.
- ii. Drainage of the car parking area of all the levels shall be laid independent from that of the buildings & it shall be provided with catch pit & fire trapped before connecting the building drainage or Municipal drainage.
- iii. Drainage of the car parking areas at all the levels shall be so laid as to prevent any overflow in the staircase, lift shaft etc.
- iv. The parking area shall not be used for dwelling purpose & repairing / maintenance purpose, at any time. Dwelling use of naked light / flame, repairing / maintenance of vehicles shall be strictly prohibited in the parking area.
- v. Repairing / Servicing of cars, use of naked light shall not be permitted in the car parking areas.
- vi. The drive way shall be properly marked & maintained unobstructed.
- vii. The Automatic Sprinkler System provided to the entire car parking area.

## **11. STACKED CAR PARKING:**

- i. Structural Design: The SA-FAMCP shall be constructed of structural steel construction.
- ii. Vertical deck separation For SA-FAMCP having multi-car parking level, vertical separation between the upper & lower decks by using the non-perforated and non-combustible materials. (Structural steel plate) shall be provided. This is to minimize direct impingement of flame to the car in the upper deck and also to prevent dripping of any possible leaking fuel to the lower deck.
- iii. Elements of the stacked car parking structure shall have 01 hour fire resistance.
- iv. Each car parking deck shall have 01 hour fire resistance.
- v. Parking area shall be accessible by trained staff when carrying out the maintenance work.
- vi. The parking system is to be ceased during the maintenance operation.
- vii. Automatic sprinkler system to the entire parking floor & drencher system on the top of each car parking level shall be provided.

## **12. CORRIDOR / LIFT LOBBY, (For Wing A, B, C & D);**

- i. Corridor & lift lobby at each floor level shall be naturally ventilated.
- ii. The common corridor & lift lobby at each floor level shall be kept free from obstructions at all times.
- iii. Proper signage's for way to staircase, escape routes, staircase, floor nos. etc. shall be provided at each floor of building.
- iv. Portable lights / insta-lights shall be provided at strategic locations in the staircase & lift lobby of Commercial Wing -D only.

## **13. STAIRCASE AND CORRIDOR LIGHTINGS, (For Wing A, B, C & D);**

- i. The staircase & corridor lighting shall be on separate circuits & shall be independently connected so that they could be operated by one switch installation on the ground floor easily accessible to fire-fighting staff at any time irrespective of the position of the individual control of the light points, if any.
- ii. Staircase & corridor lighting shall also be connected to alternate supply.
- iii. Double throw switches should be installed to ensure that lighting in the staircase & the corridor do not get connected to two sources of supply simultaneously. A double throw switch shall be installed in the service room to terminate the stand-by-supply.
- iv. Emergency lights shall be provided in the staircases / corridors.

**14. COMMERCIAL UNIT AREA;**

- i. Necessary Trade Permission / License shall be obtained from competent authority.
- ii. The Automatic Smoke Detection System shall be provided in the commercial premises of the building.
- iii. 02 nos. of Dry Chemical Powder fire extinguishers A.B.C. type of 09 kgs. capacity each shall be kept at Commercial Unit premises for every 100.00 sq. mtrs.

**15. ENTRANCE DOORS & EXIT / ENTRANCE STAIRCASE, (For Wing A, B, C & D);**

- i. All Entrance doors, Kitchen doors (if any) shall be of solid core having fire resistance of not less than 01 hour (solid wood of 45 mm thickness.)
- ii. The fire resistance rating for staircase F.R.D., Lift lobby / protected lobby & the lift doors as per N.B.C. provisions.

**16. FALSE CEILING (If Provided), (For Wing A, B, C & D);**

False ceiling if provided in the building shall be of non-combustible material, similarly, the suspenders of the false ceiling shall be of no combustible materials.

**17. MATERIALS FOR INTERIOR DECORATION / FURNISHING, (For Wing A, B, C & D);**

The use of materials which are combustible in nature & may spread toxic fume / gases should not be used for interior decoration / furnishing, etc.

**18. GLASS GLAZING, (For Wing -D);**

- i. An opening to the glass glazing of min. width 1.5 m & height 1.5 m shall be provided at proposed floor at level of 1.2 m from the flooring facing compulsory open space as well as on road side.
- ii. The open able glass panel shall be either left or right hinged to facilitate approach of the rescue cage / ladder. Similarly, this portion shall have manual opening mechanism from inside as well as outside. Such openable panels shall be marked conspicuously so as to easily identify the openable panel from outside.
- iii. Distance between external wall & glass glazing shall not be more than 300 mm.
- iv. The smoke seals / barriers between building & glazing shall be provided in form of non-combustible material / vermiculate cement.
- v. Glass glazing blocking the area if staircase, lift lobby, corridor shall be kept openable. Pressurized system of the staircase / lobby shall be synchronized with opening mechanism.
- vi. The glass use for the glazing shall be toughened (tempered) safety glass as per I.S. 2553, Part I or laminated safety glass as per I.S. 2553-Part I, satisfying stability criteria.
- vii. Automatic dry type water curtain shall be provided at floor level from inside of glass glazing.
- viii. Openable vent of 600 mm height to be installed below ceiling level or false ceiling level. The openable vent of min. 2.5% of the floor area shall be provided. It shall be of min. 600 mm depth below ceiling / false ceiling or full length on the periphery of the glass glazing whichever is less. Openable mechanical devices for the said vent shall be located at 1.2 m height from the flooring level. The openable vent can be pop out type or bottom hinged provided with fusing link opening mechanism and shall also be integrated with automatic smoke detection system.

Or

- ix. Alternate vertical glass panels of the glazing shall be openable type with the mechanism mentioned above in order to ventilate the smoke.

## **19. AIR CONDITIONING SYSTEM, (If Provided);**

- i. The A.C. System shall be child water type in case of common A.C. plant. There shall be no objection to provide A.C. by means of package units or split units, if necessary.
- ii. Escape route such as staircase, corridors, passage lift lobbies etc. shall be used as return air passages.
- iii. A . C. ducting shall be constructed of substantial metal gauge as specified under IS: 665: 1963 for Metal Air Ducts (Revised).
- iv. Whenever the A.C. ducting passes through the walls, the opening from the duct shall be sealed with fire resting / non-combustible material such as vermiculite concrete.
- v. A.H.U. shall be independent for each floor / occupancy / zone. In any case, one A.H.U. shall not be required to serve more than one floor / occupancy / zone.
- vi. The insulating material, if provided to A.C. ducting either from inside or outside, shall be of non-combustible material such as glass wool covered with aluminum foil, spun glass with neoprene facing or any other similar material.
- vii. The material used for false ceiling & its runners & suspenders shall be of non- combustible type.

## **20. SWIMMING POOL;**

- i. Swimming pool shall be fenced properly from all sides & entry shall be restricted, so as to avoid any accident as shown on the plans.
- ii. Swimming pool shall be constructed of inert & enduring materials, designed to withstand all loads for both pool empty & pool full conditions conforming to the requirements as laid down in I.S.I code for this purpose.
- iii. There shall be no obstruction extending from the wall or the floor extending into the clear area of the diving portion of the pool. There shall be completely unobstructed clear distance of 4 mtrs. above the diving board.
- iv. Wall & floor area shall be of inert & impervious material & shall be reasonably enduring. Finish shall be moderately smooth & of a white or light color.
- v. If diving is permitted, it shall have adequate area & depth of water for safe diving & the minimum depth & area characteristics as per relevant standards.
- vi. Depth of water shall be plainly marked at or above the water surface on the vertical pool wall & on the edge of the deck or walk-way next to the pool, at maximum points & at the points of break between the deep & shallow portions & at intermediate increments of depth, spaced at not more than 2.5" (7.62 cm) intervals. Depth markers, contrasting with background shall be on both sides of the pool.
- vii. Swimming pool shall have adequate arrangement for providing safety measures like float, lifeline, & ladder, trained rescue personal, rescue equipment against drowning.
- viii. A slide handrail extending up above & returning to the horizontal surface of the pool deck curb or coping shall be provided at each side of each ladder.
- ix. Swimming pool shall have adequate arrangement for first aid which includes mechanical resuscitator for initiating artificial respiration trained staff for providing emergency aid & such equipment's & medicines.
- x. At least one trained life guard shall be available at the swimming pool during working hours & life guard chair shall be provided at the swimming pool from where he can view / watch the entire pool area.
- xi. The finish texture of flooring surface adjacent to the pool shall be not slippery
- xii. A continuous overflow gutter shall be installed all around the swimming pool.
- xiii. Disposal of water from the overflow gutters may be either to waste water drain or may enter into circulation system to filter & return to the pool.
- xiv. Swimming pool shall have re-circulation & filtration equipment provided for water purification.

xv. Necessary permission for Swimming Pool shall be obtained from concerned Department & M.C.G.M's Department.

## **21. FIRE FIGHTING REQUIREMENTS:**

### **a) UNDER GROUND WATER STORAGE TANKS, (COMMON FOR Wing -A, B, & C & SEPARATE FOR WING -D);**

An underground water storage tank of 2,50,000 liters capacity common for Wing -A, B, & C, & separate 1,00,000 liters capacity for Wing -D shall be provided for Wet riser & sprinkler system at the location marked in the plan, as per the design specified in the rules with baffle wall and fire brigade collecting breeching. The tank shall be provided in such a manner that its manholes are accessible to fire appliances & depth of the tank from manhole level shall not be more than 07.00 mtrs. The tank shall be flushed with the courtyards & the roof slab of the tank shall be reinforced suitably to bear the load of fire engines weighing up to 48 m. tones each with a point load of 10 kgs. /sq. cms.

### **b) OVERHEAD TERRACE WATER STORAGE TANKS;**

A tanks of 30,000 liters capacity shall be provided over each staircase shaft at the terrace level of Wing -A, B & C, as well as tanks of 25,000 liters capacity each shall be provided over each staircase shaft at the terrace level of Wing -D, the layout of which shall be got approved from H. E.'s Departments prior to erection. The tank shall be connected to wet risers through a booster pump through a non-return valve gate valve.

### **c) WET RISER, (Separate for each wing);**

Wet riser of internal dia of 15 cms. of G.I. 'C' Class pipe shall be provided with single hydrant outlet & hose reel at each floor as shown on the plan. Pressure reducing discs or orifices shall be provided at lower level, so as not to exceed the pressure of 5.5 kgs. per sq. cms. The wet risers shall be extended from ground to terrace level.

### **d) FIRE SERVICE INLET;**

- i. A fire service inlet on the external face of the building near the tank directly fronting the courtyards shall be provide to connect the mobile pump of the fire service independently to a) the wet riser, b) sprinkler system.
- ii. Breeching connection inlet shall be provided to refill U.G. tank,
- iii. Operating switches of fire pumps shall be also provided in glass fronted boxes at ground floor & Fire control rooms.

### **e) AUTOMATIC SPRINKLER SYSTEM, (Separate for each wing);**

The Automatic sprinkler system shall be provided in each shop, each office, each show room, fitness centre, lift lobby & common corridor at each floor level of each Wing, car parking areas on ground & all the basements (so as to cover each parking) as per the standards laid down by T.A.C. or relevant I.S. specifications.

### **f) AUTOMATIC SMOKE DETECTION SYSTEM, (For each Wing);**

The Lift machine rooms, Electric meter rooms, each shop, each show room, Fitness centers, each office on each floor of Wing -D as well as lift lobby & common corridor at each floor

level of each wing shall be protected with Automatic smoke detection system with main console panel at ground floor level.

**g) FIRE PUMP, SPRINKLER PUMP JOCKEY PUMP, (COMMON FOR Wing -A, B, & C, SEPARATE FOR WING -D) & BOOSTER PUMP (Separate for Wing -A, B, C & D);**

- i. Wet riser shall be connected to a fire pump at basement level of 2,400 liters / min capacity giving a pressure of not less than 3.2 kgs / sq.cms. at the topmost hydrant along with jockey pump of a suitable size.
- ii. Operating switches for pumps shall be also provided in glass fronted boxes in lift lobbies at ground floor.
- iii. Booster pump capacity of 900 litres / min. having a pressure of not less than 3.2 kgs. / sq. cms. at the topmost hydrant outlet of the wet riser-cum-down comer shall be provided at the terrace level of each wing.
- iv. A jockey pump of suitable capacity shall be provided for automatic sprinkler system.
- v. Electric supply (normal) to these pumps shall be on independent circuit.
- vi. Four hose boxes, each with two hoses of length 50 feet standard size & branch shall be equally distributed near wet riser landing valve in ground floor area.
- vii. ON / OFF switch panel of all pumps shall be installed on ground floor level.
- viii. All above pump should be surface mounted or vertical turbine type pump (Submersible type pump not permitted) with adequate size of pump room for pump panel.
- ix. Wet riser should be extended up to main gate / entrance with Fire Brigade inlet.

**h) EXTERNAL / COURTYARD HYDRANTS;**

External / Courtyard hydrants shall be provided at distance of 30.00 mtrs each at each Basement levels as well as Ground floor within the confines of the site of the wet riser-cum-down comer at the location marked on the plan.

**i) ALTERNATE SOURCE OF POWER SUPPLY, (Common for Wing -A, B, C, & D);**

An alternate source of L.V. / H.C. supply from a separate sub-station as well as D.G. Set with appropriate change over switch shall be provided for fire pumps, sprinkler pump, booster pump, staircase & corridor lighting circuits, fire lifts, manual fire alarm system & P.A. system. It shall be housed in a separate cabin.

**j) PORTABLE FIRE EXTINGUISHERS, (For each wing);**

- i. Two Dry Chemical Power (A.B.C.) type fire extinguishers of 06 Kgs. capacity having B. I.S. certification mark & two buckets filled with dry, clean sand shall be kept in each Electric Meter panel as well as in each Lift Machine Room.
- ii. One dry chemical powder (class ABC) type fire extinguishers each of 06 Kgs. capacity & with BIS mark clean sand shall be kept in each office of Wing -D & Each floor of all wings.
- iii. One dry chemical powder (class ABC) type fire extinguishers each of 06 Kgs. capacity & with BIS mark & two buckets of dry, clean sand shall be kept on each Refuge floor level of each wing.

**k) FIRE ALARAM SYSTEM, (For each wing);**

The building shall be provided with manual fire alarm system with main control panel at ground floor level & pill-boxes & hooters at each upper floor level. The layout of fire alarm system shall be in accordance with I.S. specification.

**l) PUBLIC ADDRESS SYSTEM, (For each wing);**

The entire building shall be provided with the public address system in common areas as per the with main control operator at console panel at ground floor reception area.

**m) SIGNAGES, (For each wing);**

Self-glowing / fluorescent exit signs in green color shall be provided showing the means of escape for entire building.

**n) FIRE DRILLS / EVACUATION DRILLS;**

Fire Drills & Evacuation drills shall be conducted regularly in consultation with Mumbai Fire Brigade & log of the same shall be maintained.

**o) TRAINED SECURITY STAFF;**

- i. The trained security / fire supervisor along with trained staff having basic knowledge of fire-fighting & fix fire-fighting installation shall be provided / posted in the building.
- ii. Maintenance of all the first aid fire-fighting equipment's, fixed installations & other firefighting equipment / appliance in good working condition at all times.
- iii. Imparting training to the occupants of the building in the use of firefighting equipment provided on the premises & kept them informed about the fire & other emergency evacuation procedures.
- iv. To liaise with the City Fire Brigade on regular & continual basis.

**p) Panel Board Of Firefighting System;**

Fire alarm system, public address system, alternate supply, etc. panels shall be installed on ground floor at the location shown in the plans & which shall be manned 24 hrs.

**22. REFUGE AREA, (For Wing A, B, C & Commercial Wing -D);**

Refuge area provided on 8<sup>th</sup> floors levels shall be conforming to the following requirements;

**a) Manner of refuge area;**

- i. The refuge area shall be so located that it shall preferably face the access road of the building.
- ii. The refuge area shall be provided with railing / parapet of 01.20 mtrs.
- iii. The refuge area shall have a door which 'shall be painted or fixed with a sign in luminous paint mentioning "**REFUGE AREA**"
- iv. The lift shall not be permitted to open into the refuge areas.
- v. The refuge area provided within building line shall be accessible from common passage / staircase.

**b) Use of refuge area;**

- i. The refuge area shall be earmarked exclusively for the use of occupants as temporary shelter & for the use of Fire Brigade Department or any other organization dealing with fire or other emergencies when occur in the building & also for exercises / drills if conducted by the Fire Brigade Department.
- ii. The refuge areas shall not be allowed to be used for any other purpose & it shall be the responsibility of the owner / occupier to maintain the same clean & free of encumbrances & encroachments at all times.

**c) Facilities to be provided at refuge area;**

Adequate emergency lighting facility shall be provided.

**d) Terrace floor as a refuge floor, (For Wing -A, B, C & Commercial Wing -D);**

- i. The necessary facilities such as emergency lighting, drinking water etc. shall be provided.
- ii. The access door/s from the enclosed staircase/s to the terrace floor shall have louvers at top half portion of the door. The entrance doors to the terrace shall be painted or fixed with sign painted in luminous paint mentioning "REFUGE AREA".

**e) Excess refuge area beyond 4.25 % shall be counted in FSI.**

The Party has paid Online Scrutiny fees of Rs. 19,49,430/- vide CFC Receipt No. 2820791, for the File No. CHE/ES/4273/337 (New) on the gross built-up area 36,781.65 sq. mtrs. as certified by the Licensed Surveyor.

However, E.E.B.P. (E.S.) is requested to verify the gross built-up area & inform this office if it is found to be more, for the purpose of levying additional scrutiny fee if any.

**Note;**

1. The Fire-fighting shall be carried out by approved Licensed Agency.
2. There shall not be any trees obstructing fire appliances reach in compulsory open spaces, required as per D.C.R.
3. E.E.B.P. (E.S.) requested to scrutinized the plans as per Amended D.C.P.R. 2034 & verify Civil work & all other requirements pertaining to Civil Engineering side including open spaces, corridors, staircase, amendments, height, & floor occupancy of the building.
4. The area calculation shown in the enclosed plan shall be checked by the E.E.B.P. (E.S.).
5. E.E.B.P. (E.S.) shall verify the proposal in context with Hon. M.C.'s Circulars issued u/r. no. Ch.E/32545/DP-Gen dated 24/02/2015 & u/r. no. Ch.E/34194/DP/Gen dated 10/03/2015 & verify the compliance as per the above said circulars. If the same is not complied with, this proposal shall be referred back to this department for issuing fresh recommendation letter.
6. Necessary permission for any licensable activity shall be obtained from concerned Department & M.C.G.M.'s / C.F.O.'s Department till then shall not be allowed to use.
7. Necessary permission for the Commercial activity Office / Shops / Showroom shall be obtained from concerned Department & M.C.G.M's Department.
8. The area size to consult with MEP Consultant for the sprinkler system, Detection system, Fire alarm system, Wet riser system, Public address system, Electrical duct, etc. to be verified & examine.
9. If any matter in this case, violates from Fire Safety point of view of D.C.P.R.-2034 then this proposal shall be referred back to this Department for issuing fresh recommendation letter.
10. No any addition / alteration shall be done in the structure of the flats / building without the previous consent of all the concerned / occupier as per the provision of Section 7 of MOFA.
11. The plans approved along with this recommendation letter are approved from Fire Risk / Fire Safety point of view only. Approval of these plans does not mean in any way of allowing construction of the building. It is Architect / Licensed Surveyor / Developer's responsibility to take necessary prior approval from all concerned competent authorities for the proposed construction of the building.
12. This is issued only from Fire Protection & Fire-Fighting requirements point of view & issued on the request letter from Architect / Licensed Surveyor. Any authorized or legal matter shall be cleared by Owner / Occupier / Developer / Architect / Licensed Surveyor etc.
13. The width of abuts road, open spaces mentioned in plans as submitted by the Architect attached herewith. These parameters shall be verified by E.E.B.P. (E.S.) before granting any

permission (I.O.D. / C.C. / further C.C.) If found any contradiction, the proposal shall be referred back to this Department.

14. The Area Calculation submitted by the Architect / Licensed Surveyor in the plans shall be verified by E.E.B.P. (E.S.) & if any change then the proposal shall be referred back to this Department.
15. This N.O.C. is issued from fire risk point of view only without prejudice to legal matters pending in court of law if any.
16. Necessary permission for Swimming pool, Electric Sub-Station, D. G. Set & Fitness center shall be obtained from concern Department of M.C.C.M. / C.F.O.'s Department.
17. The Electric meter rooms provided in 1<sup>st</sup> basement which is approved by this department subject to provision of natural ventilation.

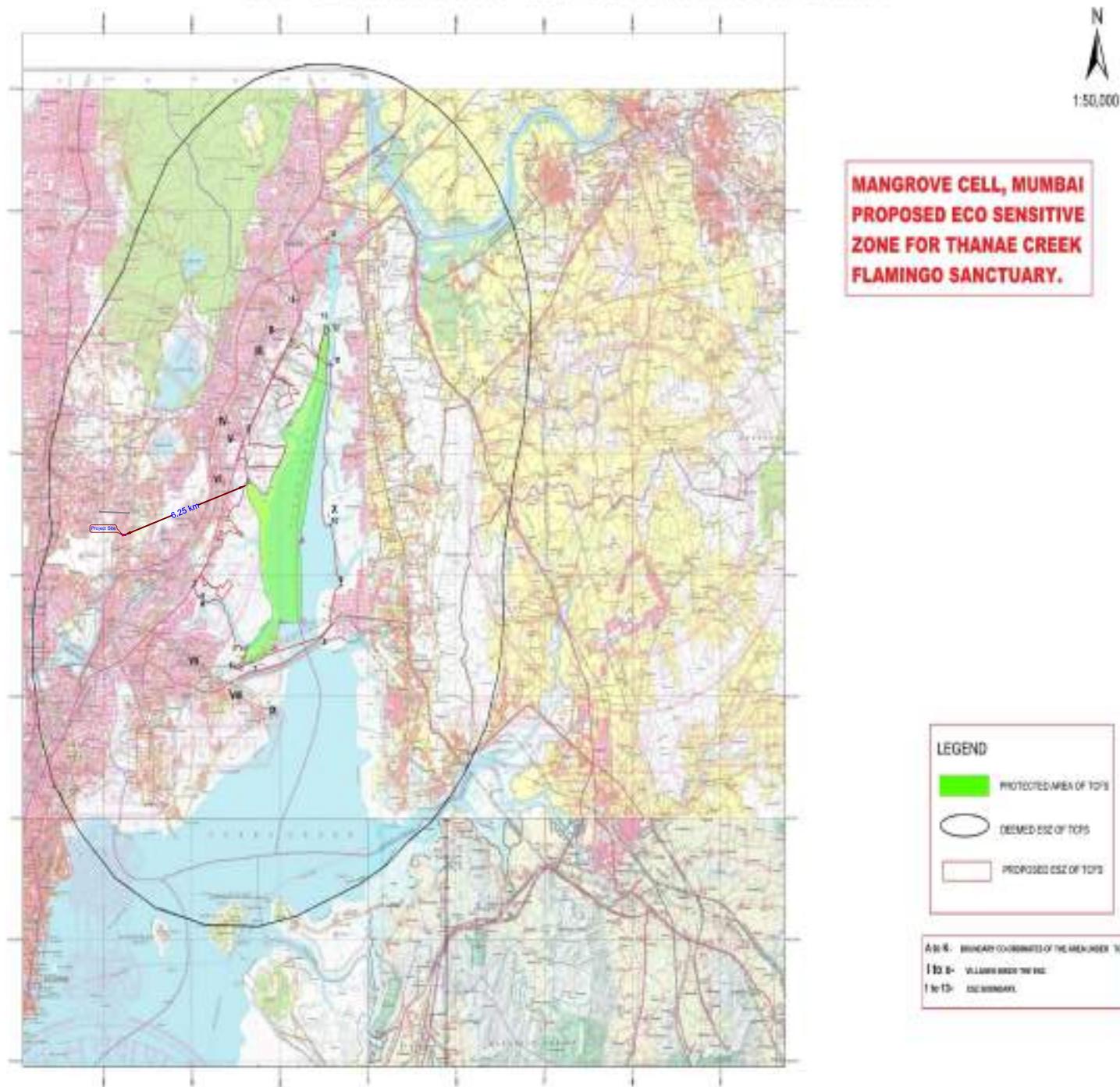
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Prepared by D.F.O.

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Approved by Dy. C.F.O.

भारतीय सर्वेक्षण (एस आ० आई) टोपोशीट पर मुख्य अवस्थानों के अक्षांश - देशांतर और 10 किलोमीटर बफर के साथ ठाणे क्रिक फ्लेमिंगो अभयारण्य के पारिस्थितिकी संवेदी जोन का मानचित्र





Date: 14<sup>th</sup> March 2020

To,  
The Forest Officer,  
Divisional Forest Office,  
B-68, 2nd floor,  
Kamgarnagar,  
Kurla (E), Mumbai.

**Subject : Application for Wildlife NOC with reference to Thane creek flamingo sanctuary**

**Reference: : Application for Environmental Clearance (EC) for Proposed Residential & Commercial development at Safed Pool, AndheriKurla Road, Village Mohili, TalukaKurla, Mumbai Suburban District, L ward, Mumbai.**

Dear Sir,

This is with reference to above mentioned subject we are proposing Residential & Commercial development at Safed Pool, Andheri Kurla Road, Village Mohili, Taluka Kurla, Mumbai Suburban District, L ward, Mumbai. We have submitted Application for obtaining Environmental Clearance from SEIAA, Maharashtra.

We would like to bring to your notice that, our project falls within 6.50 Km radius from the Thane Creek Flamingo Sanctuary.

Though as per draft notification it is not coming under ESZ, but still we are applying for NOC with reference to Thane creek flamingo sanctuary to the Forest Officer, Divisional Forest Office, Kamgarnagar, Kurla (E), Mumbai.

Please do the needful and oblige

Thanking you,

Yours faithfully  
For LANDCARE REALTY LLP



**AUTHORIZED SIGNATORY**

Encl: Google image of the project site

*Bhaddar*  
31/3/2020  
लिपीक  
विभागीय वन अधिकारी  
मुं. का. सं. घ., मुंबई

**LANDCARE REALTY LLP**

Builders & Developers

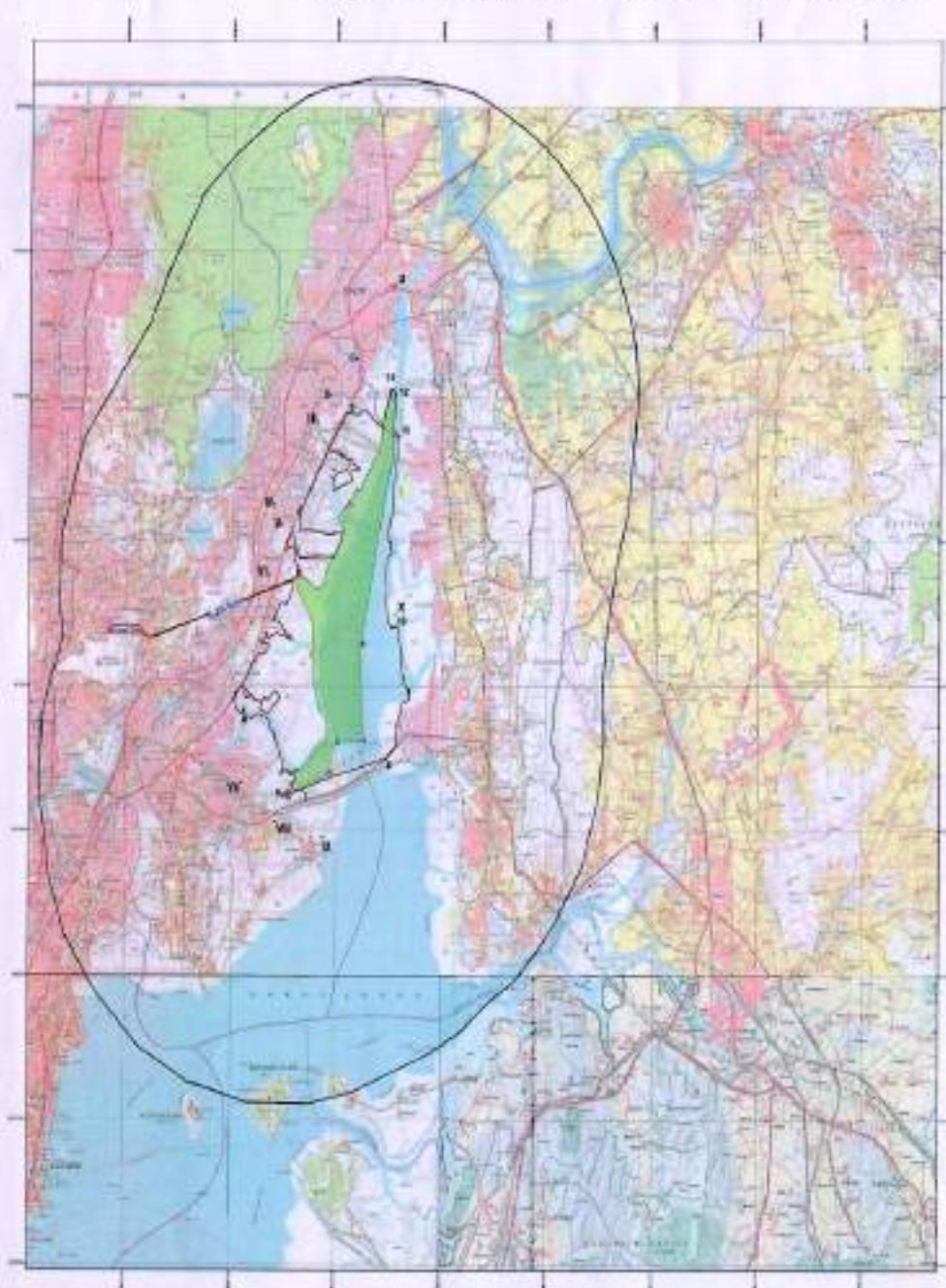
Orbit Plaza | 6th floor | New Prabhadevi Marg | Prabhadevi | Mumbai 400 025  
www.pridegroup.net | Info@pridefestyles.com | Tel. 4334 3501 | Fax. 2421 8130

Mumbai | Pune | Bangalore



AC

भारतीय सर्वेक्षण (एस आई) टोपोशीट पर मुख्य बवस्थानों के अक्षांश - देशांतर और 10 किलोमीटर बफर के साथ ठाणे क्रिक फ्लेमिंगो अभयारण्य के पारिस्थितिकी संवेदी जोन का मानचित्र



MANGROVE CELL, MUMBAI  
PROPOSED ECO SENSITIVE  
ZONE FOR THANE CREEK  
FLAMINGO SANCTUARY.

LEGEND

- PROTECTED AREA OF TOPS
- DESIRED BZ OF TOPS
- PROPOSED BZ OF TOPS

ANNEX - BOUNDARY COORDINATES OF THE PROPOSED BZ  
TOPS - FLAMINGO SANCTUARY  
TOPS - DESIRABLE

AK



## Corporate Environmental Responsibility

In accordance with the circular issued by Ministry of Environment, Forest and Climate Change (MoEF&CC) dated May 01, 2018 and subsequent circular of June 19, 2018 on Corporate Environment Responsibility we hereby submit our plan as below;

### A. Basic Information of the Project

No.	Description	Details
1	Name of the Project	Residential & Commercial development at, Village Mohili, Taluka Kurla, District Mumbai Suburban, L ward, Mumbai - 400072
2	Location of the project	CTS No. 657, Survey No. 17
3	Project type (green/brown field)	Green field
4	Cost of the project as mentioned in CS (Rupees in Crores)	Rs. 142.34 Crores
5	Any previous EC and Completion certificate of the part of the project before May 01, 2018, if yes give the details with date and reference number	--
6	Cost of the part completed project (as per details given at Sr.No.5)	--
7	Effective cost of the project for CER consideration (4-6) (Rupees in Crores)	Rs. 2.13 Crores
8	Applicable norms in terms of % of the project cost for CER and amount	1.5 % (i.e. Rs. 2.13 Crores)
9	Expected duration for completion of the project (Years)	5 Years
10	Implementing Agency Identified (NGO/Trust/ULB) give name and details.	Not yet identified
11	Please attach agreement with implementing agency	--

### B. CER Activities Proposed: (please propose as per the suggested list given in table below)

No.	Description	Details									
1	Any issues raised during the public hearing, social need assessment, R&R plan, EMP, etc.	Not Applicable									
2	If Yes Please give details	Not Applicable									
3	CER activities proposed to be from suggested activities as infrastructure creation for drinking water supply, sanitation, health, education, skill development, roads, cross drains, electrification including solar power, solid waste management facilities, scientific support and awareness to local farmers to increase yield of crop and fodder, rain water harvesting, soil moisture conservation works, avenue plantation, plantation in community areas, community level sewage treatment plant, solid waste (composter or Biogas plants), air quality monitoring, research activities on environmental aspects, training programmes on waste management including skill development, studies related to environmental aspects for town/city/village, pilot projects on clean energy/ environment, etc.	<p>Activities Identified :</p> <table border="1"> <thead> <tr> <th>No.</th> <th>Activity</th> <th>Estimated Amount</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Electrification including solar power at local Municipal Garden</td> <td>25 lakhs</td> </tr> <tr> <td>2.</td> <td>Education- at Local BMC / Private School / Scholarship</td> <td>50 lakhs</td> </tr> </tbody> </table>	No.	Activity	Estimated Amount	1.	Electrification including solar power at local Municipal Garden	25 lakhs	2.	Education- at Local BMC / Private School / Scholarship	50 lakhs
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1.	Electrification including solar power at local Municipal Garden	25 lakhs									
2.	Education- at Local BMC / Private School / Scholarship	50 lakhs									

**LANDCARE REALTY LLP**

Builders & Developers

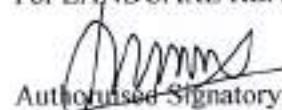
Orbit Plaza | 6th floor | New Prabhadevi Marg | Prabhadevi | Mumbai 400 025  
[www.pridegroup.net](http://www.pridegroup.net) | [info@pridefashion.com](mailto:info@pridefashion.com) | Tel. 4334 3501 | Fax. 24218130

Mumbai | Pune | Bangalore

		3. Rainwater harvesting: As per MCGM requirement.	25 lakhs
		4. Medical Aids: Local BMC Hospital, TATA Cancer Hospitals	75 lakhs
		5. Social Upliftment	38 lakhs
Amount proposed to be allocated : Rs. 2.13 Crores			-
4	Consent of implementing agency (NGO etc.) and local authority to accept the CER in case of environmental infrastructure project		
5	Year wise activity indicating the detail of plan and cost (as applicable for duration of the project) attach separate sheet with Gantt Chart which will be useful for monitoring.		
First Year (indicate year)		Rs. 0.42 Crores	
Second Year		Rs. 0.42 Crores	
Third Year		Rs. 0.42 Crores	
Fourth Year		Rs. 0.42 Crores	
Fifth Year		Rs. 0.42 Crores	

We undertake to complete the work with our CER commitment as per this plan.

For LANDCARE REALTY LLP

  
Authorised Signatory

Place : Mumbai  
Date : 05-09-2020



**LANDCARE REALTY LLP**

Builders & Developers

Orbit Plaza | 6th floor | New Prabhadevi Marg | Prabhadevi | Mumbai 400 025  
www.pridegroup.net | info@pridelifestyles.com | Tel. 4334 3501 | Fax. 24218130

Mumbai | Pune | Bangalore



approvals &lt;approvals@pridelifestyles.com&gt;

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## Contribution towards CER - Landdcare Realty LLP

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approvals <approvals@pridelifestyles.com>  
To: mc@mcgm.gov.in

Sat, Sep 5, 2020 at 5:16 PM

Respected Sir,

As per our previous manually submitted letter to mcgm dated 09 March 2020 Please find enclosed herewith revised letter of contribution towards CER for Residential & commercial Development at Village Mohili Taluka Kurla , District Mumbai Suburban, L ward Mumbai by Landcare Realty LLP .

Thanks & Regards

Landcare Realty LLP

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**Revised CER letter.pdf**  
2918K



भारतीय विमानपत्तन प्राधिकरण  
AIRPORTS AUTHORITY OF INDIA

M/s. Landcare Realty LLP  
601, Orbit Plaza, New Pabhadevi  
Road, Prabhadevi, Mumbai - 400025.

Date: 26-12-2016  
Valid Upto: 25-12-2021

**No Objection Certificate for Height Clearance**

1. This NOC is issued by Airports Authority of India (AAI) in pursuance of responsibility conferred by and as per the provisions of Govt. of India (Ministry of Civil Aviation) order GSR751 (E) dated 30th Sep. 2015 for Safe and Regular Aircraft Operations.

2. This office has no objection to the construction of the proposed structure as per the following details:

NOC ID :	SNCR/WEST/B/111916/182862
Applicant Name*	Dhanaji Gurkhe
Site Address*	C.T.S. No. 657, Of Village - Mohili, At Kurla Andheri Road, Kurla, Mumbai, Kurla, Mumbai, Maharashtra
Site Coordinates*	72 53 02.72-19 05 51.13, 72 53 03.21-19 05 48.53, 72 53 04.64-19 05 50.48, 72 53 06.35-19 05 51.12, 72 53 06.95-19 05 49.10, 72 53 07.34-19 05 50.86,
Site Elevation in mtrs AMSL as submitted by Applicant*	8.39 M
Permissible Top Elevation in mtrs Above Mean Sea Level(AMSL)	49.59 M (Restricted)

\*As provided by applicant

3. This NOC is subject to the terms and conditions as given below:

a. Permissible Top elevation has been issued on the basis of Site coordinates and Site Elevation submitted by Applicant. AAI neither owns the responsibility nor authenticates the correctness of the site coordinates & site elevation provided by the applicant. If at any stage it is established that the actual data is different, this NOC will stand null and void and action will be taken as per law. The office in-charge of the concerned aerodrome may initiate action under the Aircraft (Demolition of Obstruction caused by Buildings and Trees etc.) Rules, 1994"

b. The Structure height (including any superstructure) shall be calculated by subtracting the Site elevation in AMSL from the Permissible Top Elevation in AMSL i.e. Maximum Structure Height = Permissible Top Elevation minus (-) Site Elevation.

c. The issue of the 'NOC' is further subject to the provisions of Section 9-A of the Indian Aircraft Act, 1934 and any notifications issued there under from time to time including the Aircraft (Demolition of Obstruction caused by Buildings and Trees etc.) Rules, 1994.

d. No radio/TV Antenna, lighting arresters, staircase, Mumtee, Overhead water tank and attachments of fixtures of any kind shall project above the Permissible Top Elevation of 49.59 M (Restricted) , as indicated in para 2.

Page 1/2

राजीव गांधी भवन

Rajiv Gandhi Bhawan

सफदरजंग हवाई अड्डा नई दिल्ली-110003

Safdarjung Airport, New Delhi-110003

दूरभाष : 24632950

Phone: 24632950



भारतीय विमानपत्तन प्राधिकरण  
AIRPORTS AUTHORITY OF INDIA

e. Only use of oil fired or electric fired furnace is permissible, within 8 KM of the Aerodrome Reference Point.

f. The certificate is valid for a period of 5 years from the date of its issue. If the construction of structure/Chimney is not commenced within the period, a fresh 'NOC' from the Designated Officer of Airports Authority of India shall be obtained. However, if construction work has commenced, ontime revalidation request, for a period not exceeding 8 years from the date of issue of NOC in respect of building/structure and for a period not exceeding 12 years from the date of issue of NOC in respect of chimney, may be considered by AAI. The date of completion of the Structure should be intimated to this office.

g. No light or a combination of lights which by reason of its intensity, configuration or 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. No activity shall be allowed which may affect the safe operations of flights

h. The applicant will not complain/claim compensation against aircraft noise, vibrations, damages etc. caused by aircraft operations at or in the vicinity of the airport.

i. Day markings & night lighting with secondary power supply shall be provided as per the guidelines specified in chapter 6 and appendix 6 of Civil Aviation Requirement Series 'B' Part 1 Section 4, available on DGCA India website: [www.dgca.nic.in](http://www.dgca.nic.in)

j. The applicant is responsible to obtain all other statutory clearances from the concerned authorities including the approval of building plans. This NOC for height clearances is to ensure the safe and regular aircraft operations and shall not be used as document for any other purpose/claim whatsoever, including ownership of land etc.

k. This NOC has been issued w.r.t. the Civil Airports. Applicant needs to seek separate NOC from Defence, if the site lies within their jurisdiction.

l. In case of any discrepancy/interpretation of NOC letter, English version shall be valid.

m. In case of any dispute w.r.t site elevation and/or AGL height, top elevation in AMSL shall prevail.

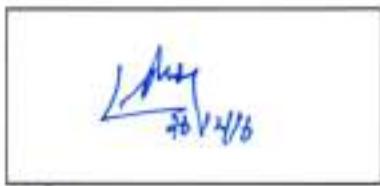
Chairman NOC Committee

Region Name: WEST

Address: General Manager Airports  
Authority of India, Regional  
Headquarter, Western Region,  
Opp. Parsiwada, Sahar Road,  
Vale Parle (E)

Email ID: [nocwrtmumbai@gmail.com](mailto:nocwrtmumbai@gmail.com)

Contact No: 022-26819573



मुख्य सचिव / M.S.P. CHINTAN  
प्रशासनिक (विमानपत्तन विभाग) /  
General Manager (Aero), WR

राजीव गांधी भवन

Rajiv Gandhi Bhawan

सफदरजंग हवाई अड्डा नई दिल्ली-110003

Safdarjung Airport, New Delhi-110003

दूरभाष : 24632950

Phone: 24632950



**Intimation of Disapproval under Section 346 of the Mumbai Municipal Corporation Act, as amended up to date.**

No. CHE/ES/4273/L/337(NEW) Dt 10.09.2020

MEMORANDUM

Municipal Office,  
Mumbai

To,  
**Shri. Dhannalal P. Jain,**  
**Partner of Landcare Realty LLP, CA to Owner**  
 Orbit Plaza, 601, 6<sup>th</sup> Floor,  
 New Prabhadevi Marg,  
 Prabhadevi, Mumbai-400025.

With reference to your Notice 337 (New), letter No. 1687 dated. 08.10.2018 and the plans, Sections Specifications and description and further particulars and details of your buildings for Proposed Residential cum Commercial building situated on land bearing C.T.S. No. 657 of Village Mohili furnished to me under your letter, dated 19.03.2020, I have to inform you that, I cannot approve of the building or work proposed to be erected or executed, and I therefore hereby formally intimate to you, under Section 346 of the Mumbai Municipal Corporation Act as amended up to date, my disapproval by reasons thereof :-

**A: CONDITIONS TO BE COMPILED WITH BEFORE STARTING THE WORK.**

1. That the commencement certificate under Section 44/69(1)(a) of the M.R.T.P. Act shall not be obtained before starting the proposed work.
2. That 20% premium for I to R/C conversion shall not be paid.
3. That all the conditions of I to R/C permission issued u/no. Dy.Ch.E/B.P./1622/E.S. dated 03.09.2020 shall not be complied with.
4. That the compound wall is not constructed on all sides of the plot clear of road widening line with foundation below the bottom of road side drain without obstructing the flow of rain water from the adjoining holding to prove possession for holding before starting the work.
5. That the low lying plot shall not be filled up to reduced level of at least 92 T.H.D. or 6" above adjoining road level whichever is higher with murum, earth, boulders, etc. and will be levelled, rolled, consolidated and sloped towards road side before starting the work.
6. That the specification for layout / D.P. /or access roads/development of setback land shall not be obtained from Executive Engineer (Road Construction) before starting the construction work and the access and setback land will not be developed accordingly including providing street lights and SWD. The completion certificate shall not be obtained from

Executive Engineer (R.C.) /Executive Engineer (SWD) E.S. before submitting building completion certificate.

7. That the licensed Structural Engineer shall not be appointed and his supervision memo as per Regulation shall not be submitted by him.
8. That the structural design and calculations for the proposed building considering seismic and wind forces as per relevant I.S. Code Nos. 1893 and 4326 etc. shall not be got carried out and accordingly, the structural work shall not be carried out under supervision of Structural Engineer.
9. That the regular/sanctioned/proposed lines, DP roads and reservations shall not be got demarcated at site through A.E. (Survey)/ E.E. (T&C) / E.E. (D.P.)/ D.I.L.R. before applying for C.C.
10. That the registered undertaking and additional copy of plan shall not be submitted for agreeing to handover the setback land free of compensation and that the setback handing over certificate shall not be obtained from Ward Officer and the ownership of the setback land shall not be transferred in the name of M.C.G.M.
11. That the Indemnity Bond, indemnifying the Corporation for damages, risks, accidents, to the occupiers and an Undertaking regarding no nuisance shall not be submitted before C.C./starting the work.
12. That the N.O.C. of Chief Fire Officer will not be obtained & the requisition, if any, shall not be complied with before occupation certificate/B.C.C.
13. That the specific NOC from Electric supply co. for substation shall not be obtained and the requisitions, if any, shall not be complied with before occupation certificate/BCC.
14. That the adequate care in planning, designing and carrying out construction shall not be taken in the proposed building to provide for the consequence of settlement of floors and plinth filling etc.
15. That adequate care shall not be taken to safeguard the trees existing on the plot while carrying out construction work and remarks from S.G. shall not be submitted.
16. That the qualified registered Site supervisor through Architect / Structural Engineer shall not be appointed before applying for C.C. & his name and license no. duly revalidated shall not be submitted.
17. That the notice under Sec. 347(1)(a) of the Mumbai Municipal Corporation Act shall not be sent for intimating the date of commencement of the work.
18. That the clearance Certificate from Assessment Department ('L' Ward) regarding up to date payment of Municipal taxes etc. shall not be submitted.
19. That the copy of Intimation of Disapproval conditions imposed by the Corporation in connection with the development at site shall not be given to the would be purchaser and also displayed at site.
20. That Janata Insurance policy shall not be submitted before asking C.C. and renewed during the construction of work and owner developer should not submit revalidated Janata Insurance Policy from time to time.
21. That the development charges as per M.R.T.P (Amendment) Act 1992 shall not be paid.
22. That the carriage entrance shall not be provided before starting the work.
23. That the undertaking in prescribed proforma agreeing to demolish the excess area if constructed beyond permissible FSI shall not be submitted.

24. That the adequate and decent temporary sanitary accommodation shall not be provided for construction workers before starting the work. The mobile toilet shall not be provided on site to keep proper sanitation as per CircularU/No.CHE/DP/27391/Gen dated 07/01/2019.
25. That the documentary evidence regarding ownership, area & boundaries of holding is not produced by way of extracts from District Inspector of Land Records, extracts from City Survey Record and Conveyance Deed etc. Separate PRC of land under reference in the name of Owner shall not be submitted.
26. That the NOC from S.W.M. Department shall not be obtained in view of order of Hon'ble Supreme Court of India dated 15/03/2018(SLP Civil NoD-23708 of 2017), for disposal of C & D waste.
27. That the Undertaking for paying additional premium due to increase in land rate as and when demanded and registered undertaking for handing over of excess parking in case full FSI is not consumed shall not be submitted.
28. That the N.O.C. from Insecticide officer shall not be obtained.
29. That the board mentioning the name of Architect / Owner shall not be displayed on site.
30. That the C.C. shall be asked unless payment of advance for providing treatment at construction site to prevent epidemics like dengue, malaria etc. is made to the insecticide officer of the concerned ward office and provision shall not be made as and when required by insecticide officer for inspection of water tanks by providing safe and stable ladder etc, and requirement as communicated by the insecticide officer shall not be complied with.
31. That the bore well shall not be constructed in consultation with H.E.
32. That the work shall not be carried out only between 6.00 am to 10.00 pm as per circular u/no ChE/DP/7749/Gen dt 07.06.2016.
33. That the requisitions of clause 49 and 50 of DCPR- 2034 shall not be complied with and records of quality of work, verification report, etc. shall not be maintained on site till completion of the entire work.
34. That the soil investigation of site shall not be got carried out from the empanelled soil investigation consultant and accordingly the structural design of foundation and superstructure shall not be carried out.
35. That the remarks from Suptd. Of Garden shall not be obtained before commencement of work.
36. That the necessary remarks for training of nalla/ construction of S.W.D. shall not be obtained from Dy.Ch. E. (S.W.D.) City & Central cell, before plinth C.C. and compliance of said remarks shall not be submitted before granting full C.C. for the building.
37. That users in the shop shall not be as permissible in the DCPR-2034.
38. That construction area shall exceed 20000 sq.mt without obtaining NOC from MOEF.
39. That registered undertaking for agreeing to hand over excess parking in case full potential is not consumed shall not be submitted.
40. That the developer / owner shall not demolish the structure/ building proposed to be demolished by following the guidelines proposed in the IS Code 4130:1991 amended up to date in respect of demolition of building-code of safety and not under the supervision of approved structural engineer duly registered with MCGM.

41. That the status of road from A.E. (Maint) of L ward shall not be submitted.
42. That the No Objection Certificate from Hydraulic Engineer for the proposed development shall not be obtained and his requirements shall not be complied with.
43. That the remarks from Asst. Engineer, Water Works regarding location, size, capacity of the suction tank and overhead storage tank for proposed existing work shall not be submitted before starting the work and his requirements shall not be complied with.
44. That remarks from various consultants for internal services shall not be submitted.
45. That the requirement of bye law 4(c) shall not be complied with before starting the drainage work and in case Municipal sewer is laid, the drainage work shall not be carried on as per the requirement of Executive Engineer (Sewerage Project), Planning & Completion certificate from him shall not be submitted.
46. That the Owner shall not give advance possession of the land to be surrendered to MCGM. The said land free of encumbrances shall not be handed over to MCGM within 24 months from the date of approval of the building plans. The CC for BUA equivalent to 25% of Zonal FSI will not be restricted till handing over of the said land.

**C: CONDITIONS TO BE COMPILED BEFORE FURTHER C.C**

1. That this office shall not be intimated in prescribed proforma for checking the open spaces & building dimensions as soon as the work up to plinth is completed and plinth/stilt height shall not be got checked from this office staff.
2. All the payments as intimated by various departments of MCGM shall not be paid.
3. That set back land free of compensation and free of any encumbrance shall not be handed over to MCGM and possession receipt shall not be submitted from Assistant commissioner of the ward.
4. That in the event setback is handed over then at FCC, area equivalent to the area of Setback shall not be restricted till such area is handed over or as per circular issued from time to time.
5. That the Material testing report shall not be submitted.
6. That the yearly progress report of the work shall not be submitted by the Architect.
7. That Civil Aviation NOC shall not be submitted.
8. That the extra water & sewerage charges shall not be paid to A.E. Water works "L" ward.
9. That the remarks from competent authority regarding the Flamingo notification applicability to be obtained before proceeding work beyond 20,000Sq.Mt. shall not be submitted.

**D: GENERAL CONDITIONS TO BE COMPILED BEFORE O.C**

1. That some of the drains shall not be laid internally with C.I. pipes.
2. That the dust bin shall not be provided.
3. That final N.O.C. from concerned authorities / empanelled consultants for a)S.W.D. b) Parking. c)Roads. d)Sewerage. e)Water Works. f)CFO / Fire Fighting Provisions. g) Mechanical Ventilation. h)Tree authority. i) Hydraulic Engineer j) Assessment dept. shall not be submitted before occupation.

4. That 3.00 mt. wide paved pathway upto staircase shall not be provided.
5. That the surrounding open spaces, parking spaces and terrace shall not be kept open and unbuilt upon and will be levelled and developed before requesting to grant permission to occupy the building or submitting the B.C.C. whichever is earlier.
6. That the name plate/board showing Plot No., Name of the Bldg. etc. shall not be displayed at a prominent place.
7. That the parking spaces shall not be provided as per Regulation No.44. of DCPR 2034.
8. That B.C.C. will not be obtained and I.O.D. and debris deposit etc. shall not be claimed for refund within a period of 6 years from the date of its payment.
9. That the certificate to the effect that the licensed surveyor has effectively supervised the work and has carried out tests for checking leakages through sanitary blocks, termites, fixtures, joints in drainage pipes etc. and that the workmanship is found very satisfactory shall not be submitted.
10. That the certificate from Lift Inspector regarding satisfactory installation and operation of lift shall not be submitted.
11. That the adequate provision for post-mail boxes shall not be made suitable location on ground floor / stilt.
12. That the every part of the building construction and more particularly, overhead tank shall not be provided with a proper access for the staff of Insecticide Officer with a provision of temporary but safe and stable ladder etc.
13. 14. That Structural Engineer's final Stability Certificate along with upto date License copy and R.C.C. design plan shall not be submitted.
15. That the infrastructural works such as; construction of hand holes /manholes, ducts for underground cables, concealed wiring inside the flats/rooms, rooms/space for telecom installations etc. required for providing telecom services shall not be provided.
16. That the provision for rain water harvesting as per design prepared by approved Consultant in the field shall not be made to the satisfaction of Municipal Commissioner and completion certificate to that effect shall not be submitted.
17. That the Vermiculture bins for disposal of wet waste as per the design and specification of Organizations / individuals specialized in this field, as per the list furnished by Solid Waste Management Department of MCGM, shall not be provided to the satisfaction of Municipal Commissioner.
18. That terraces, sanitary blocks, nahanis in kitchen shall not be made Water proof and same shall not be provided by method of pounding and all sanitary connections shall not be leak proof and smoke test shall not be done in presence of licensed plumber.
19. That Site Supervisor certificate for quality of work and completion of the work shall not be submitted in prescribed format.
20. That carriage entrance shall not be provided as per design of registered structural engineer and carriage entrance fee shall not be paid.
21. That terraces shall not be made Water proof and same shall not be provided by method of pounding and all sanitary connections shall not be leak proof and smoke test shall not be done in presence of licensed plumber.

22. That water available from rain water harvesting shall not be used for toilet flushing.  
That the top most elevation of the building is not certified by AAI of India /GVK
23. mentioning that the same is within the permissible limits of Civil Aviation N.O.C.
24. That the capacity of overhead tank shall not be provided as per 'P' form issued by department of Hydraulic Engineer and structural design to that effect submitted.
25. That the dry and wet garbage shall not be separated and the wet garbage generated in the building shall not be treated separately on the same plot by the residents/ occupants of the building in the jurisdiction of M.C.G.M. The necessary condition in Sale Agreement to that effect shall not be incorporated by the Developer/ Owner.
26. That compliance of NOC from Labour Commissioner shall not be submitted.
27. That the PRC of setback land / amenity in MCGM's name shall not be submitted

( ) That proper gutters and down pipes are not intended to be put to prevent water dropping from the leaves of the roof on the public street.

( ) That the drainage work generally is not intended to be executed in accordance with the Municipal requirements.

Subject to your so modifying your intention as to obviate the before mentioned objections and meet by requirements, but not otherwise you will be at liberty to proceed with the said building or work at anytime before the day of but not so as to contravene any of the provision of the said Act, as amended as aforesaid or any rule, regulations or bye-law made under that Act at the time In force.

Your attention is drawn to the Special Instructions and Note accompanying this Intimation of Disapproval.

**Executive Engineer, Building Proposals,  
Zone, Wards.**

**SPECIAL INSTRUCTIONS**

**1. THIS INTIMATION GIVES NO RIGHT TO BUILD UPON GROUND WHICH IS NOT YOUR PROPERTY.**

2. Under Section 68 of the Bombay Municipal Corporation Act, as amended, the Municipal Commissioner for Greater Mumbai has empowered the City Engineer to exercise, perform and discharge the powers, duties and functions conferred and imposed upon and vested in the Commissioner by Section 346 of the said Act.
3. Under Byelaw, No. 8 of the Commissioner has fixed the following levels :-

"Every person who shall erect as new domestic building shall cause the same to be built so that every part of the plinth shall be

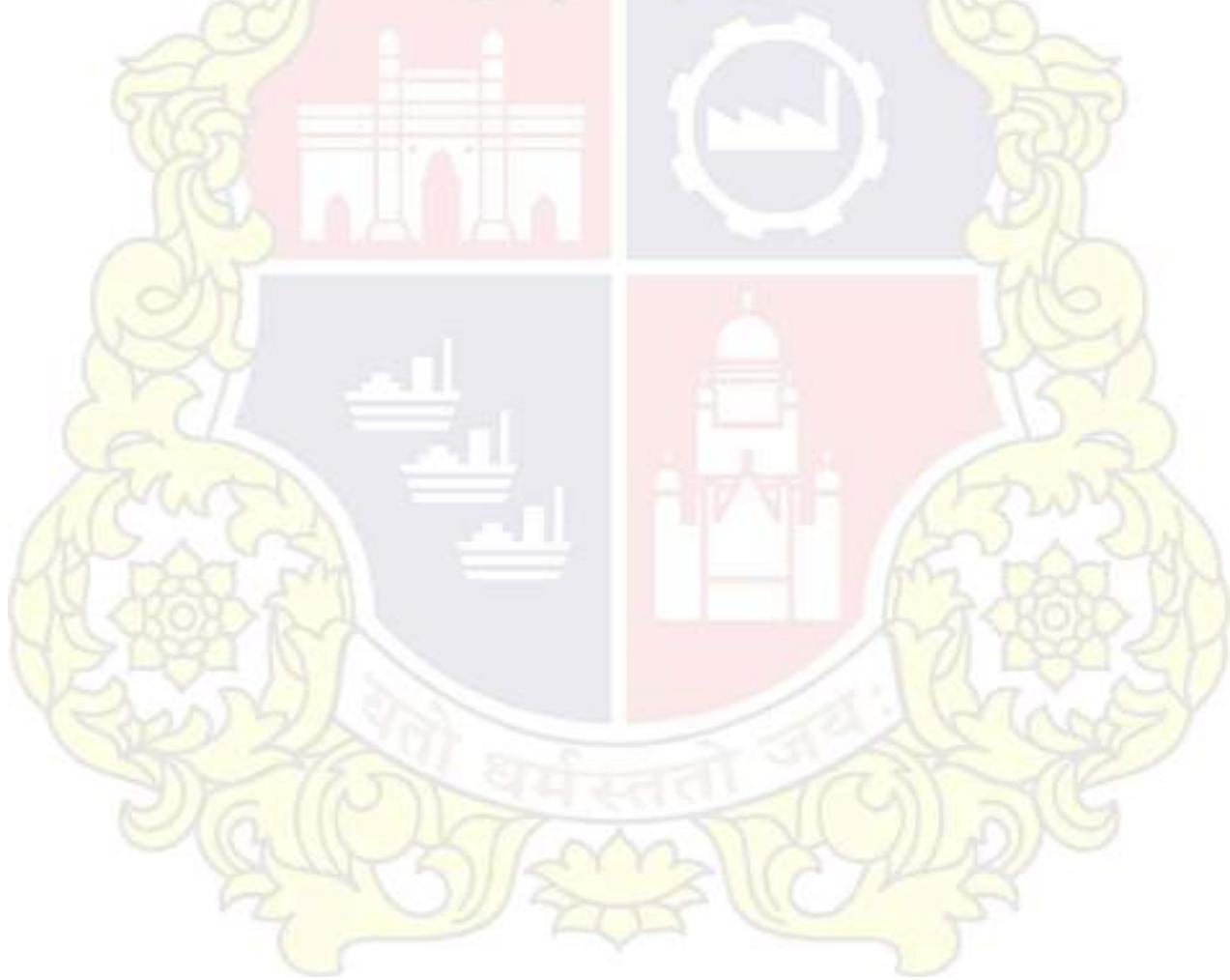
- a) Not less than, 2 feet (60 cms.) above the center of the adjoining street at the nearest point at which the drain from such building can be connected with the sewer than existing or thereafter to be- laid in such street
- b) Not less than 2 feet (60 cms.) Above every portion of the ground within 5 feet (160 cms.)-of such building.
- c) Not less than 92 ft. (19.80 mts.) above Town Hall Datum.

4. Your attention is invited to the provision of Section 152 of the Act whereby the person liable to pay property taxes is required to give notice of erection of a new building or occupation of building which has been vacant, to the Commissioner, within fifteen days of the completion or of the occupation whichever first occurs. Thus compliance with

this provision is punishable under Section 471 of the Act irrespective of the fact that the valuation of the premises will be liable to be revised under Section 167 of the Act, from the earliest possible date in the current year in which the completion on occupation is detected by the Assessor and Collector's Department.

5. Your attention is further drawn to the provision of Section 353-A about the necessary of submitting occupation certificate with a view to enable the Municipal Commissioner for Greater Mumbai to inspect your premises and to grant a permission before occupation and to levy penalty for non-compliance under Section 471 if necessary.
6. Proposed date of commencement of work should be communicated as per requirements of Section 347 (1) (aa) of the Bombay Municipal Corporation Act.
7. One more copy of the block plan should be submitted for the Collector, Mumbai Suburbs District.
8. Necessary permission for Non-agricultural use of the land shall be obtained from the Collector Mumbai Suburban District before the work is started. The Non-agricultural assessment shall be paid at the site that may be fixed by the Collector, under the Land Revenue Code and Rules there under.

Attention is drawn to the notes Accompanying this Intimation of Disapproval.



**NOTES**

- 1) The work should not be started unless objections are complied with
- 2) A certified set of latest approved plans shall be displayed on site at the time of commencement the work and during the progress of the construction work.
- 3) Temporary permission on payment of deposit should be obtained any shed to house and store for construction purpose, Residence of workmen shall not be allowed on site. The temporary structures for storing constructional material shall be demolished before submission of building completion certificate and certificate signed by Architect submitted along with the building completion certificate.
- 4) Temporary sanitary accommodation on full flushing system with necessary drainage arrangement should be provided on site workers, before starting the work.
- 5) Water connection for constructional purpose will not be given until the hoarding is constructed and application made to the Ward Officer with the required deposit for the construction of carriage entrance, over the road side drain.
- 6) The owners shall intimate the Hydraulic Engineer or his representative in Wards at least 15 days prior to the date of which the proposed construction work is taken in hand that the water existing in the compound will be utilised for their construction works and they will not use any Municipal Water for construction purposes. Failing this, it will be presume that Municipal tap water has been consumed on the construction works and bills preferred against them accordingly.
- 7) The hoarding or screen wall for supporting the depots of building materials shall be constructed before starting any work even though no materials may be expected to be stabled in front of the property. The scaffoldings, bricks metal, sand preps debris, etc. should not be deposited over footpaths or public street by the owner/ architect /their contractors, etc without obtaining prior permission from the Ward Officer of the area.
- 8) The work should not be started unless the manner in obviating all the objection is approved by this department.
- 9) No work should be started unless the structural design is approved.
- 10) The work above plinth should not be started before the same is shown to this office Sub-Engineer concerned and acknowledgement obtained from him regarding correctness of the open spaces & dimension.
- 11) The application for sewer street connections, if necessary, should be made simultaneously with commencement of the work as the Municipal Corporation will require time to consider alternative site to avoid the excavation of the road an footpath.
- 12) All the terms and condition of the approved layout /sub-division under No. of should be adhered to and complied with.
- 13) No Building /Drainage Completion Certificate will be accepted non water connection granted (except for the construction purpose) unless road is constructed to the satisfaction of the Municipal Commissioner as per the provision of Section 345 of the Bombay Municipal Corporation Act and as per the terms and conditions for sanction to the layout.
- 14) Recreation ground or amenity open space should be developed before submission of Building Completion Certificate.
- 15) The access road to the full width shall be constructed in water bound macadam before commencing work and should be complete to the satisfaction of Municipal Commissioner including asphalt lighting and drainage before submission of the Building Completion Certificate.
- 16) Flow of water through adjoining holding or culvert, if any should be maintained unobstructed.

17) The surrounding open spaces around the building should be consolidated in Concrete having broke glass pieces at the rate of 12.5 cubic meters per 10 sq. meters below payment.

18) The compound wall or fencing should be constructed clear of the road widening line with foundation below level of bottom of road side drain without obstructing flow of rain water from adjoining holding before starting the work to prove the owner's holding.

19) No work should be started unless the existing structures proposed to be demolished are demolished.

20) The Intimation of Disapproval is given exclusively for the purpose of enabling you to proceed further with the arrangements of obtaining No Objection Certificate from the Housing Commissioner under Section 13 (h) (H) of the Rent Act and in the event of your proceeding with the work either without an intimation about commencing the work under Section 347(1) (aa) or your starting the work without removing the structures proposed to be removed the act shall be taken as a severe breach of the conditions under which this Intimation of Disapproval is issued and the sanctioned will be revoked and the commencement certificate granted under Section 45 of the Maharashtra Regional and Town Planning Act 1966, (12 of the Town Planning Act), will be withdrawn.

21) If it is proposed to demolish the existing structures be negotiations with the tenant, under the circumstances, the work as per approved plans should not be taken up in hand unless the City Engineer is satisfied with the following:-

- i. Specific plans in respect of evicting or rehousing the existing tenants on hour stating their number and the areas in occupation of each.
- ii. Specifically signed agreement between you and the existing tenants that they are willing to avail or the alternative accommodation in the proposed structure at standard rent.
- iii. Plans showing the phased programme of constructions has to be duly approved by this office before starting the work so as not to contravene at any stage of construction, the Development control Rules regarding open spaces, light and ventilation of existing structure.

22) In case of extension to existing building, blocking of existing windows of rooms deriving light and its from other sides should be done first starting the work.

23) In case of additional floor no work should be start or during monsoon which will same arise water leakage and consequent nuisance to the tenants staying on the floor below.

24) The bottom of the over head storage work above the finished level of the terrace shall not be less than 1.20 Mt. and not more than 1.80 mt.

25) The work should not be started above first floor level unless the No Objection Certificate from the Civil Aviation Authorities, where necessary is obtained.

26) It is to be understood that the foundations must be excavated down to hard soil.

27) The positions of the nahanis and other appurtenances in the building should be so arranged as not to necessitate the laying of drains inside the building.

28) The water arrangement nut be carried out in strict accordance with the Municipal requirements.

29) No new well, tank, pond, cistern or fountain shall be dug or constructed without the previous permission in writing of the Municipal Commissioner for Greater Mumbai, as required in Section 381-A of the Municipal Corporation Act.

30) All gully traps and open channel drains shall be provided with right fitting mosquito proof made of wrought iron plates or hinges. The manholes of all cisterns shall be covered with a properly fitting mosquito proof hinged cast iron cap over in one piece, with locking arrangement provided with a bolt and huge screwed on highly serving

the purpose of lock and the warning pipes of the rabbet pretested with screw or dome shape pieces (like a garden mari rose) with copper pipes with perfections each not exceeding 1.5 mm in diameter. The cistern shall be made easily, safely and permanently accessible by providing a firmly fixed iron ladder, the upper ends of the ladder should be earmarked and extended 40 cms above the top where they are to be fixed as its lower ends in cement concrete blocks.

- 31) No broken bottles should be fixed over boundary walls. This prohibition refers only to broken bottles to not to the use of plane glass for coping over compound wall.
- 32) a Louvres should be provided as required by Byeolaw No. 5 (b)  
b Lintels or Arches should be provided over Door and Windows opening  
c The drains should be laid as required under Section 234-1(a)  
d The inspection chamber should be plastered inside and outside.
- 33) If the proposed additional is intended to be carried out on old foundations and structures, you will do so as your own risk.

**SHINDE  
SACHIN  
BALAKRISH  
NA**

Digitally signed by SHINDE SACHIN  
BALAKRISHNA  
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BALAKRISHNA  
Date: 2020.09.10 18:05:42 +05'30'

**YATISH  
SHIRISH  
RANDERIA**

AE (BP) L&N

Digitally signed by YATISH SHIRISH  
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st=Maharashtra  
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Date: 2020.09.10 18:44:59 +05'30'

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Parasharam  
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cn=Patil Deelip Parasharam  
Date: 2020.09.10 19:29:27 +05'30'

### **Executive Engineer, Building Proposal ( Eastern Zone)-I.**

SE (BP) L-W Copy To :-

1. Shri. Shashikant Jadhav of M/s. Speageage Consultants  
106, Natraj Building, Mulund Goregaon Link Road,  
Mulund (W), Mumbai-400080.
2. Asst. Commissioner L Ward.
3. A.E.W.W. L Ward,
4. Dy.A& C. Eastern Suburb
5. Designated Officer/Ex. Engg. 'L' Ward ,
- 6.The Collector of MSD.

RESALE SALE PARKING AREA STATEMENT (WING = A TO C)			
FLOOR	PARK REQUIRED	NO. OF FLATS	PERM PARK
BELLOW 45.00 SQ.MT	1 FOR 4 FLATS	0	0.00
45.00 TO 60.00 SQ.MT	1 FOR 2 FLATS	38	19.00
60.00 TO 90.00 SQ.MT	1 FOR 1 FLATS	32	32.00
ABOVE 90.00 SQ.MT	2 FOR 1 FLATS	0	0.00
<b>TOTAL</b>		<b>70</b>	<b>51.00</b>
25% FOR VISITORS PARKING			12.75
REQUIRED PARKING FOR RESL. (A)			= 64
REQUIRED PARKING FOR COMM. (B)			= 51
<b>TOTAL PARKING REQUIRED (C) (A+B)</b>			= 115
TOTAL PARKING PROPOSED			= 304
TWO WHEELER PARKING PROPOSED			= 26

TOTAL PARKING					
FLOOR	BIG CARS	SMALL CARS	TOTAL PARKING	TRANSPORT VEHICLE	TWO WHEELER PARKING
2ND FLOOR	13	10	23		0
1ST FLOOR	11	8	19		0
GROUND	16	6	22		0
1ST BASEMENT	80	45	125		15
2nd BASEMENT	53	20	73		11
3rd BASEMENT	24	18	42		0
<b>TOTAL</b>	<b>197</b>	<b>107</b>	<b>304</b>	<b>5</b>	<b>26</b>

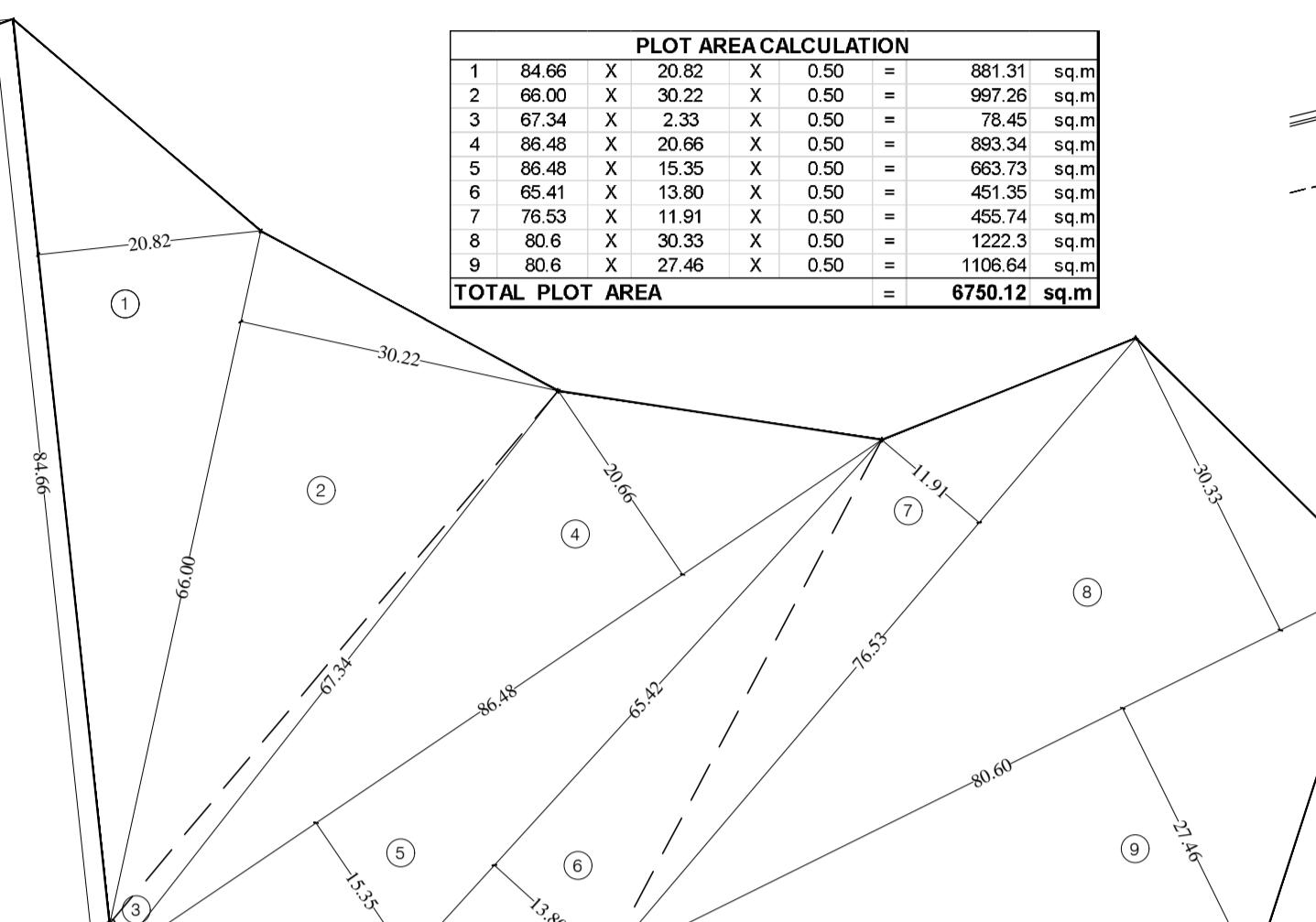
## RG. AREA CALCULATION(GROUND FLR.)

RG. AREA CALCULATION(GROUND FLR.)				
1 22.63 X 1.66 X 0.50 = 18.76 sq.m				
* 16.79 X 1.46 X 0.50 = 13.72 sq.m				
* 16.79 X 1.40 X 0.50 = 12.06 sq.m				
* 15.93 X 1.54 X 0.50 = 12.27 sq.m				
* 14.92 X 1.74 X 0.50 = 12.27 sq.m				
* 13.38 X 2.71 X 0.50 = 18.13 sq.m				
* 12.07 X 2.13 X 0.50 = 12.85 sq.m				
* 11.56 X 2.45 X 0.50 = 14.16 sq.m				
* 6.55 X 1.20 X 0.50 = 3.93 sq.m				
* 6.10 X 1.55 X 0.50 = 4.73 sq.m				
* 6.35 X 1.61 X 0.50 = 5.11 sq.m				
* 6.35 X 1.17 X 0.50 = 3.44 sq.m				
* 11.25 X 2.75 X 0.50 = 15.47 sq.m				
* 10.30 X 3.60 X 0.50 = 18.54 sq.m				
* 10.30 X 4.49 X 0.50 = 23.12 sq.m				
* 7.51 X 5.07 X 0.50 = 19.04 sq.m				
* 7.51 X 3.75 X 0.50 = 14.08 sq.m				
* 5.62 X 1.87 X 0.50 = 5.25 sq.m				
* 6.78 X 1.81 X 0.50 = 6.16 sq.m				
* 9.80 X 2.22 X 0.50 = 10.88 sq.m				
* 10.95 X 5.17 X 0.50 = 28.31 sq.m				
* 14.89 X 5.12 X 0.50 = 38.12 sq.m				
* 10.72 X 1.35 X 0.50 = 7.24 sq.m				
* 8.33 X 2.11 X 0.50 = 8.79 sq.m				
* 5.97 X 2.65 X 0.50 = 7.91 sq.m				
* 14.19 X 3.91 X 0.50 = 18.74 sq.m				
* 14.92 X 1.33 X 0.50 = 9.47 sq.m				
* 14.85 X 4.00 X 0.50 = 20.7 sq.m				
* 6.02 X 2.73 X 0.50 = 8.22 sq.m				
* 6.02 X 2.73 X 0.50 = 8.22 sq.m				
* 5.98 X 1.69 X 0.50 = 1.67 sq.m				
* 6.46 X 1.89 X 0.50 = 6.10 sq.m				
* 6.46 X 2.06 X 0.50 = 6.05 sq.m				
* 2.17 X 1.57 X 0.50 = 1.70 sq.m				
* 7.12 X 2.80 X 0.50 = 9.97 sq.m				
* 10.57 X 2.94 X 0.50 = 15.54 sq.m				
* 10.57 X 2.17 X 0.50 = 11.47 sq.m				
* 7.43 X 6.02 X 0.50 = 22.36 sq.m				
* 6.70 X 4.01 X 0.50 = 13.43 sq.m				
* 6.82 X 1.64 X 0.50 = 5.59 sq.m				
* 8.67 X 1.64 X 0.50 = 7.27 sq.m				
* 8.61 X 1.64 X 0.50 = 7.08 sq.m				
* 7.27 X 1.11 X 0.50 = 4.03 sq.m				
* 6.82 X 1.45 X 0.50 = 4.8 sq.m				
* 6.12 X 1.67 X 0.50 = 5.11 sq.m				
* 7.01 X 3.37 X 0.50 = 11.81 sq.m				
* 7.01 X 2.18 X 0.50 = 7.64 sq.m				
* 7.03 X 2.45 X 0.50 = 8.81 sq.m				
* 7.03 X 6.67 X 0.50 = 23.45 sq.m				
* 8.90 X 2.18 X 0.50 = 9.7 sq.m				
* 11.64 X 2.90 X 0.50 = 16.88 sq.m				
* 16.45 X 3.00 X 0.50 = 24.66 sq.m				
* 6.00 X 0.81 X 2/3 = 2.34 sq.m				
* 8.13 X 6.12 X 0.50 = 40.09 sq.m				
* 7.32 X 3.45 X 0.50 = 12.62 sq.m				
* 5.28 X 4.01 X 0.50 = 10.59 sq.m				
* 8.17 X 3.67 X 0.50 = 14.99 sq.m				
* 5.69 X 0.51 X 0.50 = 1.45 sq.m				
* 10.28 X 5.79 X 0.50 = 29.76 sq.m				
* 7.30 X 4.53 X 0.50 = 16.53 sq.m				
* 6.07 X 1.95 X 0.50 = 5.92 sq.m				
* 6.92 X 0.97 X 0.50 = 6.05 sq.m				
* 9.37 X 5.95 X 0.50 = 27.68 sq.m				
* 10.95 X 5.87 X 0.50 = 32.16 sq.m				
* 10.05 X 1.69 X 0.50 = 8.49 sq.m				
* 13.00 X 1.59 X 0.50 = 10.34 sq.m				
* 13.00 X 3.64 X 0.50 = 23.66 sq.m				
* 10.82 X 4.37 X 0.50 = 23.64 sq.m				
* 10.82 X 0.80 X 0.50 = 4.33 sq.m				
* 9.32 X 2.74 X 0.50 = 13.27 sq.m				
* 5.10 X 1.72 X 0.50 = 4.39 sq.m				
* 6.39 X 0.55 X 0.50 = 1.76 sq.m				
* 12.72 X 3.59 X 0.50 = 22.83 sq.m				
* 11.40 X 6.10 X 0.50 = 40.87 sq.m				
* 9.93 X 5.22 X 0.50 = 25.92 sq.m				
* 12.72 X 4.46 X 0.50 = 28.37 sq.m				
* 6.04 X 2.02 X 0.50 = 6.16 sq.m				
* 3.27 X 1.29 X 0.50 = 2.11 sq.m				
* 6.57 X 1.32 X 0.50 = 4.34 sq.m				
* 6.82 X 2.52 X 0.50 = 8.59 sq.m				
* 6.82 X 2.69 X 0.50 = 9.17 sq.m				
* 13.65 X 2.70 X 0.50 = 9.25 sq.m				
* 7.74 X 3.00 X 0.50 = 11.61 sq.m				
* 6.44 X 3.00 X 0.50 = 9.66 sq.m				
* 5.70 X 1.41 X 0.50 = 4.02 sq.m				
<b>TOTAL</b>		<b>= 1159.42 sq.m</b>		

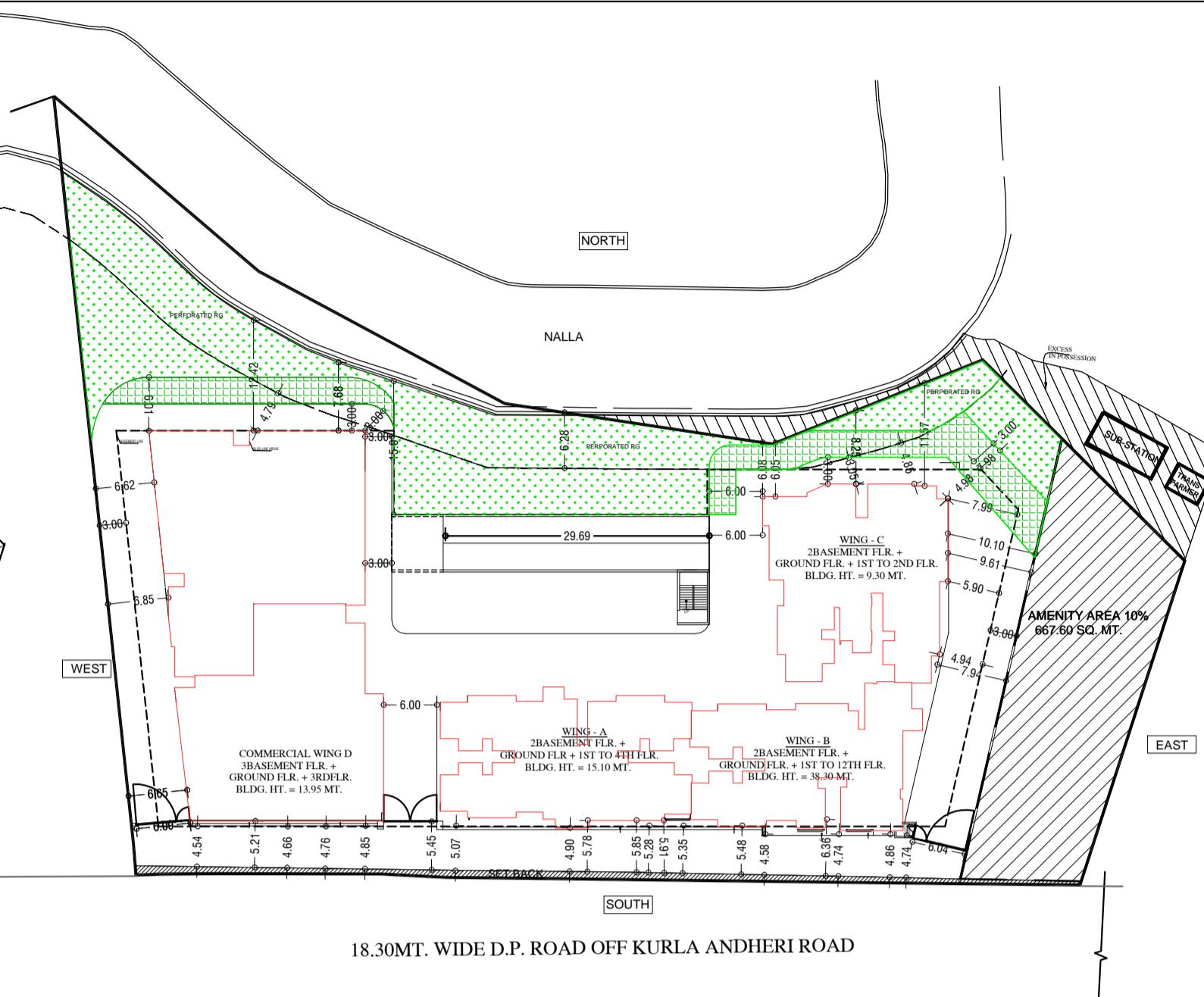
LINE DIAGRAM OF  
GROUND FLOOR PLAN  
(AMENITY AREA)  
SCALE :- 1:500

LINE DIAGRAM OF GROUND FLOOR PLAN (ROAD SETBACK AREA)  
SCALE :- 1:200

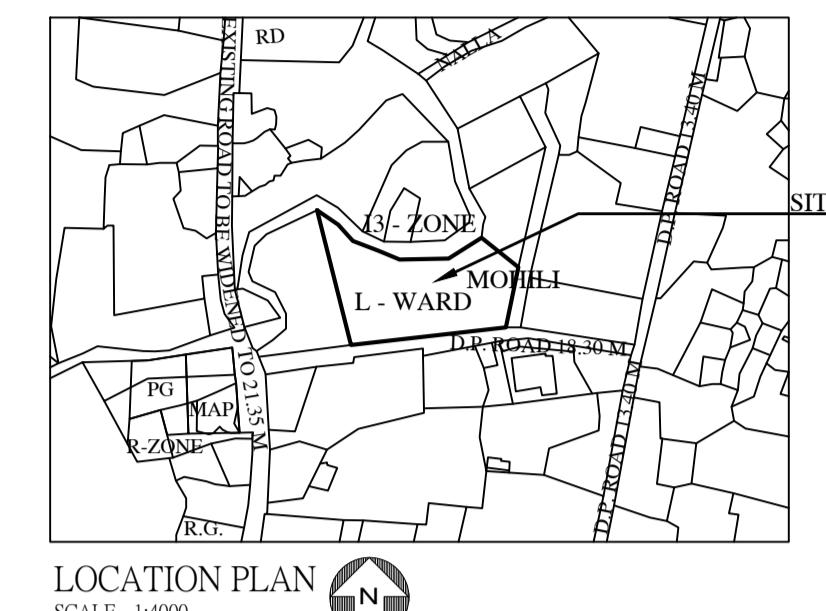
PLOT AREA CALCULATION					
1 84.66 X 20.82 X 0.50 = 881.31 sq.m					
2 66.00 X 30.22 X 0.50 = 997.26 sq.m					
3 67.34 X 2.33 X 0.50 = 78.45 sq.m					
4 66.00 X 20.82 X 0.50 = 881.31 sq.m					
5 66.49 X 15.26 X 0.50 = 663.73 sq.m					
6 65.41 X 13.80 X 0.50 = 451.35 sq.m					
7 76.53 X 11.91 X 0.50 = 455.74 sq.m					
8 80.6 X 30.33 X 0.50 = 1222.3 sq.m					
9 80.6 X 27.46 X 0.50 = 1106.64 sq.m					
<b>TOTAL PLOT AREA</b>		<b>= 6750.12 sq.m</b>			



PLOT AREA CALCULATION  
SCALE 1:500



18.30MT. WIDE D.P. ROAD OFF KURLA ANDHERI ROAD



LOCATION PLAN  
SCALE : 1:4000

Total Commercial BUA	
Zonal Basic FSI	6,008.38
REQ. Commercial BUA	20% 1201.68
Total proposed	1,784.34
REQUIRED 20% BUA OF Flat Having Carpet &lt	



# MUNICIPAL CORPORATION OF GREATER MUMBAI

## FORM 'A'

### MAHARASHTRA REGIONAL AND TOWN PLANNING ACT, 1966

No CHE/ES/4273/L/337(NEW)/CC/1/New

#### COMMENCEMENT CERTIFICATE

To.

LANDCARE REALTY LLP

601, Orbit Plaza, 6th floor, New Prabhadevi Road,  
Prabhadevi, Mumbai. 400 025.

Sir,

With reference to your application No. **CHE/ES/4273/L/337(NEW)/CC/1/New** Dated. **11 Oct 2018** for Development Permission and grant of Commencement Certificate under Section 44 & 69 of the Maharashtra Regional and Town Planning Act, 1966, to carry out development and building permission under Section 346 no 337 (New) dated **11 Oct 2018** of the Mumbai Municipal Corporation Act 1888 to erect a building in Building development work of on plot No. - C.T.S. No. **657** Division / Village / Town Planning Scheme No. **MOHILI** situated at **Saki Viha road** Road / Street in **L Ward** Ward .

The Commencement Certificate / Building Permit is granted on the following conditions:--

1. The land vacated on consequence of the endorsement of the setback line/ road widening line shall form part of the public street.
2. That no new building or part thereof shall be occupied or allowed to be occupied or used or permitted to be used by any person until occupancy permission has been granted.
3. The Commencement Certificate/Development permission shall remain valid for one year commencing from the date of its issue.
4. This permission does not entitle you to develop land which does not vest in you.
5. This Commencement Certificate is renewable every year but such extended period shall be in no case exceed three years provided further that such lapse shall not bar any subsequent application for fresh permission under section 44 of the Maharashtra Regional and Town Planning Act, 1966.
6. This Certificate is liable to be revoked by the Municipal Commissioner for Greater Mumbai if :-
  - a. The Development work in respect of which permission is granted under this certificate is not carried out or the use thereof is not in accordance with the sanctioned plans.
  - b. Any of the conditions subject to which the same is granted or any of the restrictions imposed by the Municipal Commissioner for Greater Mumbai is contravened or not complied with.
  - c. The Municipal Commissioner of Greater Mumbai is satisfied that the same is obtained by the applicant through fraud or misrepresentation and the applicant and every person deriving title through or under him in such an event shall be deemed to have carried out the development work in contravention of Section 43 or 45 of the Maharashtra Regional and Town Planning Act, 1966.
7. The conditions of this certificate shall be binding not only on the applicant but on his heirs, executors, assignees, administrators and successors and every person deriving title through or under him.

The Municipal Commissioner has appointed Shri. **Executive Engineer BP ES-I** Executive Engineer to exercise his powers and functions of the Planning Authority under Section 45 of the said Act.

Issue On : 25 Mar 2021

Valid Upto : 24 Mar 2022

Application Number : CHE/ES/4273/L/337(NEW)/CC/1/New

Remark :

C.C. up to top of Basement i.e. 0.45mt AGL as per the approved IOD plans dated 10.09.2020 .



For and on behalf of Local Authority  
Municipal Corporation of Greater Mumbai

Executive Engineer . Building Proposal

Eastern Suburb L Ward Ward

**MUNICIPAL CORPORATION OF GREATER MUMBAI**

No. DyCHE / 3147 / BPES / L Ward 16 NOV 2017

OFFICE OF THE:  
Dy.Chief Engineer,  
Building Proposal,(E.S.)  
M.C.G.M, Near Raj Legacy,  
L.B.S. Road, Vikhroli (West),  
Mumbai - 400 083.

To,  
M/s. Spaceage Consultants  
Shop No.15, b-106, C-108,  
C-109, Natraj Building,  
Mulund-Goregaon Link Road,  
Mulund (W), Mumbai – 400 080.

**Sub :** Request to allow the user permissible in Residential Zone (R) on Land bearing C.T.S. No. 657 of village Mohili of Taluka Kurla (W), in 'L' ward, Mumbai situated in Special Industrial Zone (I-3).

**Ref :** (i) License Surveyor's Letter dt. 27.06.2017.  
(ii) Hon'ble M.C.'s approval u/No. MCP/807 dtd. 04.10.2017.

Sir,

With reference to your above cited the letter, I have by direction to inform you that your request to allow the residential user on land bearing C.T.S. No. 657 of village Mohili situated in special industrial zone (I-3) considered as per provisions of regulation No. 57(4)(C) of Development Control Regulation for Greater Mumbai 1991, subject to the compliance of the following terms & conditions:-

**TERMS & CONDITIONS :**

1. That the residential development on the plot under reference shall be strictly in accordance with D.C.Reg. for Greater Mumbai 1991 as amended up to date.
2. That the segregating distance shall be provided as per provisions of D.C. Reg. 29 table No. 10(c) of D.C. Reg 1991 for Greater Mumbai & as shown in the accompanying plan.
3. That the deficiency in segregating distance is condoned in principle subject to necessary payment of premium in E.E.(B.P.)E.S. office.
4. That the open space within segregating distance shall be planted within trees at the rate of 5 per 100 sq mt. as per D.C. Reg. 1991.
5. That the aspects of ownership, authenticity of access road, segregating distance etc. for plot under reference shall be scrutinized in detailed by E.E.(B.P.) E.S. before approval of plans.
6. That the layout/Sub-division & amalgamation on plot under reference shall be got approved from E.E.(B.P.)E.S.
7. That the permission is valid for the period of 2 (Two) years from the date of issue of Development Permission. However, for the valid reason Ch. Eng. (D.P.) may extend the time limit by recovering revalidation charges as per policy. Further, during the course of time (i.e. C.C. beyond plinth is not issued), if there is change in D.C. Regulation/Policy beneficial to M.C.G.M. shall be applicable.
8. That the existing structures proposed to be demolished on plot under reference shall not be demolished before issue of IOD for the proposed development under consideration.

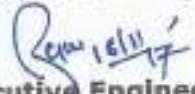
9. That the NOC from the Tree Authority for cutting of trees if any on plot under reference shall be submitted to E.E.(B.P.)E.S.
10. That the land affected by area under D.P road set back, shall be handed over and transferred on PRC in the name of M.C.G.M by removing encumbrances thereon if any , the separate P.R card in words & in the name of M.C.G.M shall be submitted.
11. That the factory permit under Section 390 of MMC Act and storage license under Section 394 of MMC Act, if any shall be surrendered to the concerned ward office. Motive Power/ Industrial Electric Supply connection shall be discontinued from the concerned Electrical Company; proof thereof shall be submitted to Building Proposal Deptt. All pending municipal dues including factory permit / license charges etc. shall be paid to respective section of Ward Office. The same shall be complied with before requesting for further commencement certificate /O.C.
12. That the building shall be constructed as per the latest I.S. codes including earthquake resistant designs.
13. That the fresh PRC shall be submitted showing area correction as per J.M. plan.
14. That the 10% proposed vacant Amenity Space admeasuring not less than 667.60 Sq.Mt. (considering net plot area as 6675.98 Sq.Mt.) shall be handed over to MCGM free of cost and encumbrances& the same shall be transferred in the Name of MCGM on separate PRC at the cost of owner / Developer.
15. That owner/developer shall pay premium equal to 20% of the rate of developed land as given in the Annual Statement of Rates, before starting work on site & the rate of prevailing year of start of construction work is applicable as per Government of Maharashtra Notification u/no.published by U.D. Dept. u/no. TPB-4313/630/CR-107/2013/UD-11 dtd. 21-07-2016.
16. That the no industrial activity shall be allowed on land and the same shall be used exclusively for the users permissible in Residential zone as proposed.
17. That the remarks for proposed building on plot under reference from C.F.O., S.W.D. , Roads & S.P. Dep. shall be submitted to E.E.(B.P.)E.S.
18. That this development permission shall be deemed to be cancelled in case any of the documents submitted by the L.S. or owner are found to be fraudulent / misappropriated.
19. That this permission shall not be used as in Instrument to evict the existing occupants / tenants, if any, on the land under reference.
20. That the Stamp Duty, if any, will be paid by the developer on Power of Attorney / Agreement between owner and developer.
21. That the owner / developer should submit detailed ownership documents in the office of E.E.(B.P.)E.S. before requesting for I.O.D.
22. That the owner / Developer/Lesse shall Indemnify the Corporation against any loss, damages, claims or suit arising out of grant of this release letter.
23. That the Municipal Corporation of Greater Mumbai reserves right to include / alter any condition / conditions if found necessary subsequently.
24. That the development of the land shall be carried out as per the proposed modification Notification issued by the U.D. Deptt. Under No. TPB-4313/630/CR-107/2013/UD-11 dt. 21.07.2016.
25. That the owner / developer shall submit Registered Undertaking to E.E (B.P) E.S office before requesting for further Commencement Certificate /O.C stating agreeing to all the conditions of said 'I-3' to 'R' in consultation with Law officer of M.C.G.M.
26. That the conditions of NOC from the Addl. Collector & C.A. (ULC) for Greater Mumbai granted if any, shall be complied with. If ULC NOC is not applicable, the Indemnity bond for affidavit in respect of S.V.L under U.L.C Act shall be

submitted on stamp papers of Rs.300/- in the prescribed format.

27. That the above conditions shall be applicable to the developer of the land and their legal heirs or any persons mentioned in the titles.
28. That the plans shall be approved in accordance to Hon'ble Supreme Court order dated 17.12.2013 in Civil appeal no.11150 of 2013.
29. That out of Total BUA proposed to be utilized for residential development, 20% of the same shall be built for residential tenements having built up area up to 50 Sq. Mt.
30. That a copy of sale agreement with prospective buyers of residential/other units in the proposed residential building incorporating a clause therein indicating that proposed building is developed with deficient segregating distance. No litigation/complaints in this regard will be entertained by M.C.G.M. and Indemnity bond indemnifying MCGM and its officers shall be submitted.
31. That owner/ developer shall submit Regd. Undertaking to this office stating that if any legal disputes or any complaint regarding compensation pending to pay is received in future same shall be dealt by the owner / developer only, M.C.G.M staff shall not be responsible for the same.
32. That the owner/ developer shall submit the Regd. undertaking that "they will not serve purchase notice for reservations, D.P road / set back area of D.P reservation and amenity space in future on plot under reference and will claim benefit only in terms of TDR/FSI only".
33. That the conditions of N.O.C from Labour Commissioner, Maharashtra State Mumbai under no. u/no .काआ/ नाहप्र/ प्रक्र.47 / 2016 / कार्यसन -७ / 19601, दि.23.08.2016, shall be complied with.
34. That the Owner / Developer shall take cognizance of circulars issued u/no. CHE/34194/DP/Gen. Dt. 10.03.2015 & CHE/002456/DP/Gen. Dt. 06.04.2015 and CHE/7204/DP/Gen. Dt. 30.05.2016 and shall submit Registered Undertaking accordingly agreeing to comply the stringent conditions mentioned therein.

This development permission is issued as per the approval of Hon'ble M.C. u/No. MCP/807 dtd. 04.10.2017.

Yours Faithfully,

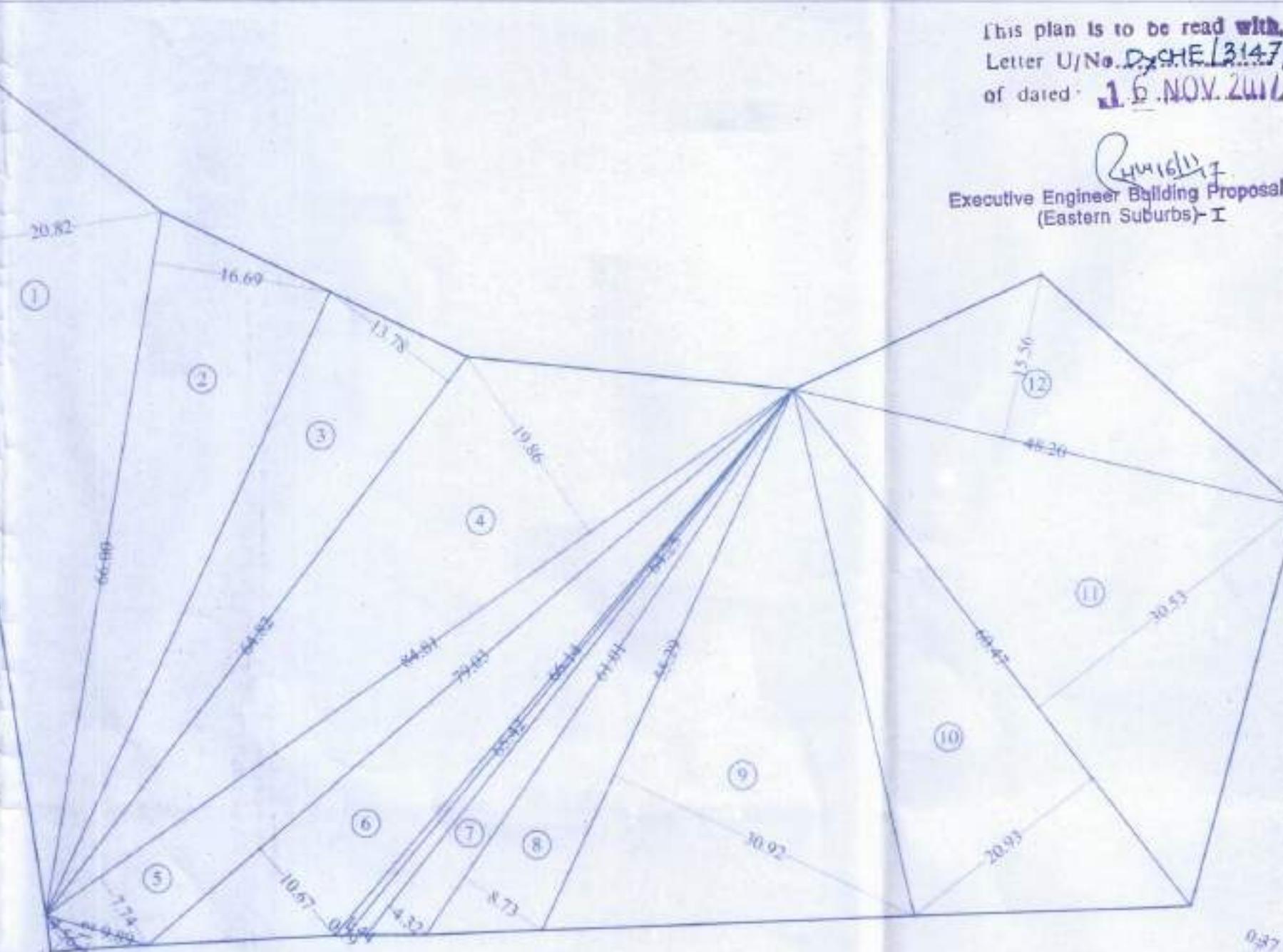
  
Executive Engineer  
(Building Proposal)E.S. - I



AMENITY AREA DIAGRAM

SCALE = 1:500

AMENITY AREA CALCULATION			
<b>ADDITION</b>			
1	40.21	X	15.22
2	42.27	X	0.83
3	42.27	X	16.28
		=	305.98 sq.m
		=	17.54 sq.m
		=	344.08 sq.m
<b>TOTAL</b>		=	<b>667.60 sq.m</b>



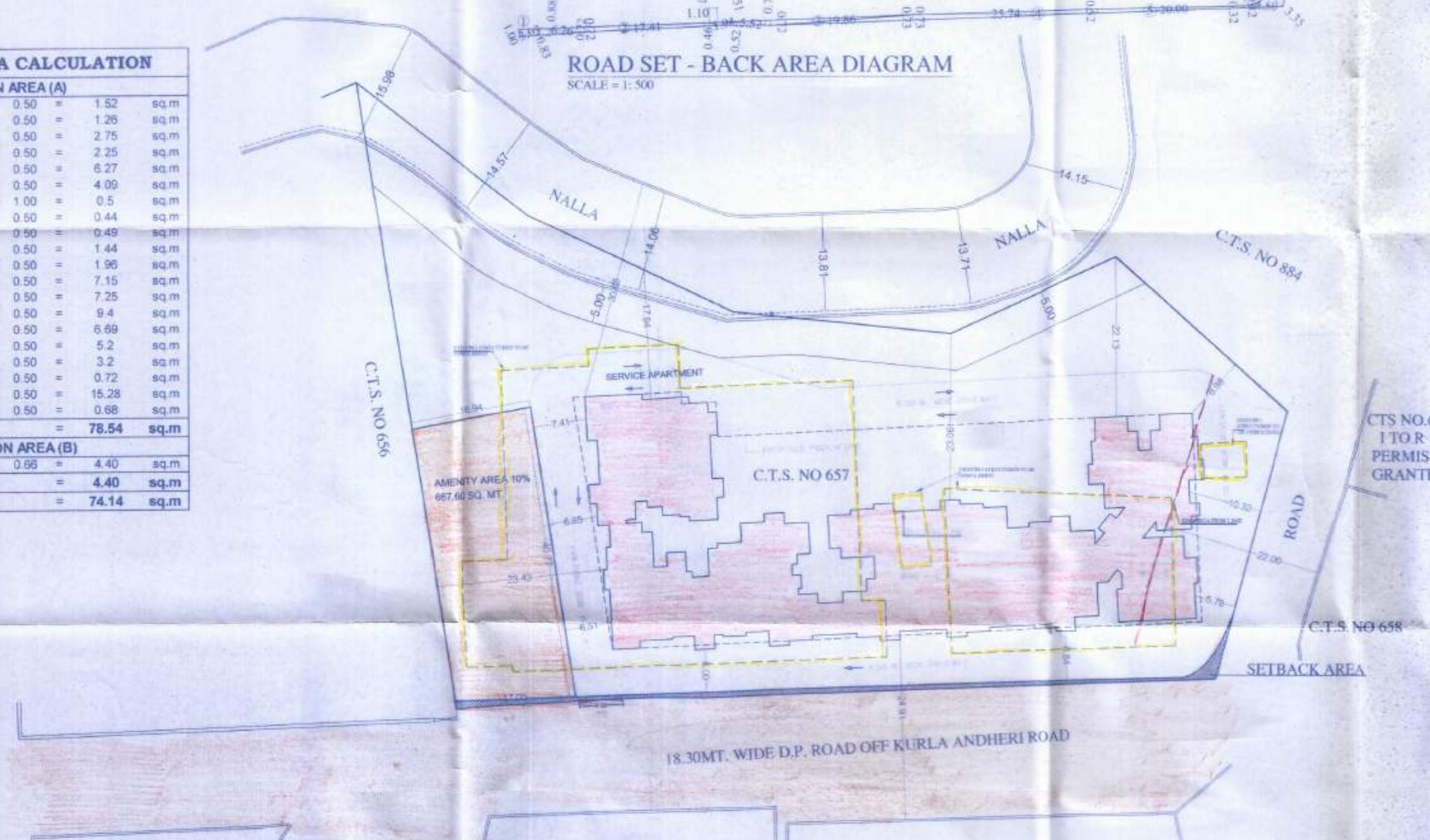
PLOT AREA DIAGRAM

SCALE = 1:500

ROAD SET - BACK AREA DIAGRAM

SCALE = 1:500

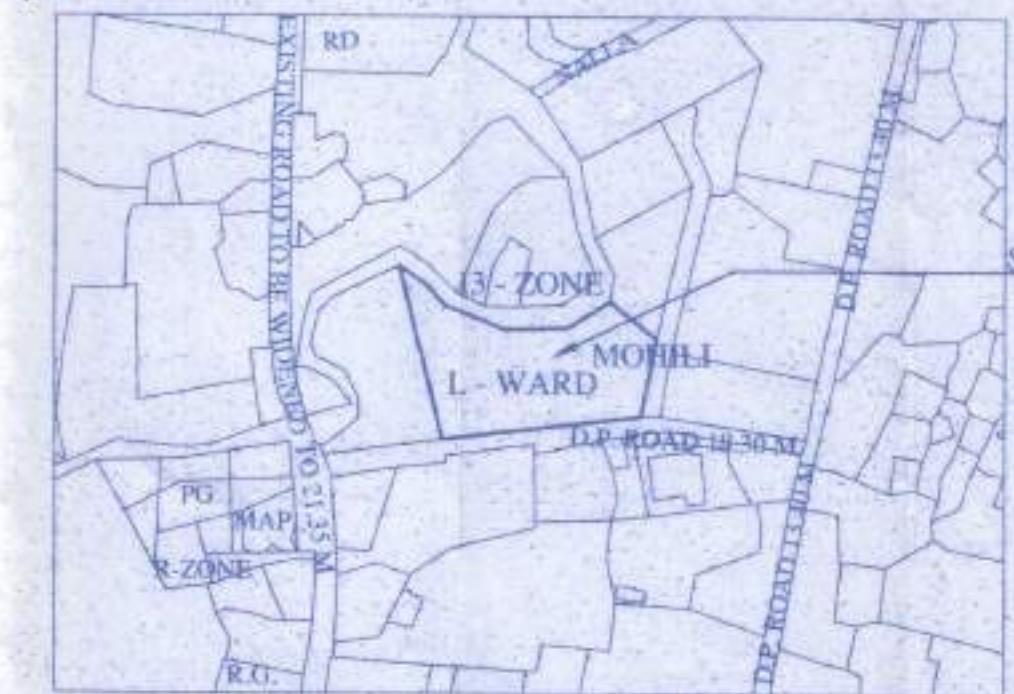
SET BACK AREA CALCULATION			
ADDITION AREA (A)			
1	3.03	X	1.00
2	3.03	X	0.83
3	6.26	X	0.88
4	6.26	X	0.72
5	17.41	X	0.72
6	17.41	X	0.47
7	1.08	X	0.46
8	1.94	X	0.45
9	1.94	X	0.51
10	5.52	X	0.52
11	5.52	X	0.71
12	19.86	X	0.72
13	19.86	X	0.73
14	25.74	X	0.73
15	25.74	X	0.52
16	20.00	X	0.52
17	20.00	X	0.32
18	4.50	X	0.32
19	9.12	X	3.35
20	3.65	X	0.37
<b>TOTAL</b>		=	<b>78.54 sq.m</b>
DEDUCTION AREA (B)			
a	8.03	X	0.83
<b>TOTAL</b>		=	<b>4.40 sq.m</b>
<b>TOTAL AREA (A - B)</b>		=	<b>74.14 sq.m</b>



BLOCK PLAN  
SCALE = 1:500

This plan is to be read with  
Letter U/No. D.CHE/3147/B/PES/L Ward  
of dated: 16.NOV.2017

Executive Engineer Building Proposal  
(Eastern Suburbs)-I



LOCATION PLAN  
SCALE = 1:4000

PLOT AREA CALCULATION

1	84.67	X	20.82	X	0.50	=	881.41	sq.m
2	66.00	X	16.69	X	0.50	=	550.76	sq.m
3	64.82	X	13.78	X	0.50	=	446.61	sq.m
4	84.81	X	19.86	X	0.50	=	842.16	sq.m
5	84.81	X	7.74	X	0.50	=	328.29	sq.m
"	9.89	X	2.12	X	0.50	=	10.48	sq.m
"	4.56	X	2.16	X	0.50	=	4.92	sq.m
6	79.03	X	10.67	X	0.50	=	421.62	sq.m
"	66.14	X	0.79	X	0.50	=	26.13	sq.m
"	65.42	X	1.44	X	0.50	=	47.10	sq.m
7	64.25	X	4.32	X	0.50	=	138.78	sq.m
8	61.01	X	8.73	X	0.50	=	266.31	sq.m
9	58.29	X	30.92	X	0.50	=	854.77	sq.m
10	60.47	X	20.93	X	0.50	=	632.81	sq.m
11	60.47	X	30.53	X	0.50	=	923.07	sq.m
12	48.20	X	15.66	X	0.50	=	374.99	sq.m
<b>TOTAL</b>						=	<b>6750.12</b>	sq.m

PROFORMA -A

A AREA STATEMENT		SQ.MT
1	AREA OF PLOT	6750.12
2	DEDUCTION FOR	-
3	ROAD SET-BACK AREA	74.14
<b>TOTAL</b>		<b>74.14</b>
3 NET PLOT AREA (X)		6675.99
4 REQUIRED AMENITY 1 TO R AS PER CIRCULAR U/NO. CHE/DP/44/GEN 2016-17 & CHE/DP/16804/DID.24.8.2016 READ WITH U.D.S. PROPOSED MODIFICATION U/NO. TPB/4313/630/C.NO. 107/2013/UD-11 21.07.2016. [6675.99 x 10%]		667.60
5 PROPOSED AMENITY		667.60

DESCRIPTION OF PROPOSAL & PROPERTY

PROPOSED TO ALLOW RESIDENTIAL USER (R) IN SPECIAL INDUSTRIAL (I-3) ZONE PLAN SHOWING PLOT BEARING C.T.S.NO. 657 OF VILLAGE MOHILI IN 'L' WARD.

CTS NO.659  
1 TO R  
PERMISSION  
GRANTED

NORTH	JOB. NO.	DRG. NO.	DRAWN BY
		1/1	

SCALE	DATE	CHECKED BY
1:500	09/11/2017	

REVISIONS DESCRIPTION :

R-0

NAME OF THE OWNER	SIGNATURE

NAME ADDRESS AND SIGNATURE OF LICENSED SURVEYER	SIGNATURE

8-106, Natraj Building,  
Mulund Goregaon Link Road  
Mulund (w), Mumbai - 4000 80



# Maharashtra Pollution Control Board

## 614c13945bd043691f9be466

### MAHARASHTRA POLLUTION CONTROL BOARD

Tel: 24010706/24010437  
 Fax: 24044532/4024068/4023516  
 Website: <http://mpcb.gov.in>  
 Email: [jdwater@mpcb.gov.in](mailto:jdwater@mpcb.gov.in)



Kalpataru Point, 2nd and  
 4th floor, Opp. Cine Planet  
 Cinema, Near Sion Circle,  
 Sion (E), Mumbai-400022

Infrastructure/RED/M.S.I  
 No:- Format1.0/JD (WPC)/UAN No.0000117570/CE - 2109001199

Date: 23.09.2021

To,  
 M/s. LANCARE REALTY LLP "Pride  
 Panorama" (Resi.-cum- comm. Project)  
 CTS No, 657 Survey No. 17, Safed Pool,  
 Andheri Kurla Road, Mohili, L ward,  
 Mumbai - 400072



Your Service is Our Duty

#### Sub: Consent to Establish for residential and commercial construction project in Red Category

Ref: 1. Application submitted by SRO Mumbai-II

Your application NO. MPCB-CONSENT-0000117570

For: grant of Consent to Establish under Section 25 of the Water (Prevention & Control of Pollution) Act, 1974 & under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorization / Renewal of Authorization under Rule 6 of the Hazardous & Other Wastes (Management & Transboundary Movement) Rules 2016 is considered and the consent is hereby granted subject to the following terms and conditions and as detailed in the schedule I,II,III & IV annexed to this order:

1. Consent to establish is granted for period upto commissioning of the project or five years whichever is earlier
2. The capital investment of the project is Rs.81.82 Cr. (As per C.A Certificate submitted by industry).
3. The Consent to Establish is valid for residential and commercial construction project named as M/s. LANCARE REALTY LLP "Pride Panorama" (Resi.-cum-comm. Project) CTS No, 657 Survey No. 17, Safed Pool, Andheri Kurla Road, Mohili, L ward, Mumbai on Total Plot Area of 6750.12 Sq Mtrs for construction BUA of 21201.18 Sq Mtrs as per specific condition of EC dtd 27.10.2020 including utilities and services
4. Conditions under Water (P&CP), 1974 Act for discharge of effluent:

Sr No	Description	Permitted (in CMD)	Standards to	Disposal
1.	Trade effluent	Nil	NA	NA
2.	Domestic effluent	125	As per Schedule - I	The treated effluent shall be 60% recycled for secondary purposes such as toilet flushing, air conditioning, cooling tower make up, firefighting etc. and remaining shall be connected to the sewerage system provided by local body

M/s. LANCARE REALTY LLP "Pride Panorama" (Resi.-cum-comm. Project) CTS No, 657 Survey No. 17, Safed Pool, Andheri Kurla Road, Mohili, L ward, Mumbai - 400072 022-28500049/CE/UAN No. MPCB-CONSENT-0000117570 (22-09-2021 11:41:59 am)  
 /QMS.PO6\_F01/00

Page 1 of 5



# Maharashtra Pollution Control Board

## 614c13945bd043691f9be466

5. **Conditions under Air (P& CP) Act, 1981 for air emissions:**

Stack No.	Description of stack / source	Number of Stack	Standards to be achieved
S-1	DG SET-400 KVA	01	As per Schedule -II
S-2	DG SET-400 KVA	01	As per Schedule -II

6. **Conditions under Solid Waste Rules, 2016:**

Sr No	Type Of Waste	Quantity & UoM	Treatment	Disposal
1	DRY GARBAGE	260 Kg/Day	Segregation	MCGM/SALE
2	WET GARBAGE	173 Kg/Day	OWC and Composting	As Manure
3	STP SLUDGE	20 Kg/Day	Dewatering	As Manure

7. **Conditions under Hazardous & Other Wastes (M & T M) Rules 2016 for treatment and disposal of hazardous waste:**

Sr No	Category No.	Quantity UoM	Treatment	Disposal
1	5.1 Used or spent oil	50	Ltr/A Reprocessing	To Authorized Reprocessor

8. This Board reserves the right to review, amend, suspend, revoke etc. this consent and the same shall be binding on the industry.
9. This consent should not be construed as exemption from obtaining necessary NOC/permission from any other Government agencies.
10. Project Proponent shall install online monitoring system for the parameter pH, SS, BOD and flow at the outlet of STP.
11. Project Proponent shall provide Organic waste digester with composting facility or biodigester with composting facility.
12. Project Proponent shall comply the Construction and Demolition Waste Management Rules, 2016 which is notified by Ministry of Environment, Forest and Climate Change dtd.29/03/2016.
13. The project proponent shall make provision of charging of electric vehicles in atleast 30 % of total available parking area.
14. The project proponent shall take adequate measures to control dust emission and noise level during construction phase.
15. PP shall submit an affidavit in Board's prescribed format within 15 days regarding compliance of C to E & Environmental Clearance/CRZ Clearance.
16. The Project Proponent shall comply with the Environmental Clearance obtained vide SIA/MH/MIS/143467/2020 dtd 27.10.2020 for proposed residential and commercial construction project having total plot area 6750.12 SqM. and total Construction BUA 21201.18 sq. mtr as per specific condition.

For and on behalf of the  
Maharashtra Pollution Control Board.



Dr. Y.B. Sontakke  
Joint Director (WPC)

Received Consent fee of -

Sr.No	Amount(Rs.)	Transaction/DR.No.	Date	Transaction Type
1	125000.00	TXN2107001065	11/07/2021	Online Payment



# Maharashtra Pollution Control Board

## 614c13945bd043691f9be466

### Copy to:

1. Regional Officer, MPCB, Mumbai and Sub-Regional Officer, MPCB, Mumbai II
  - They are directed to ensure the compliance of the consent conditions.
2. Chief Accounts Officer, MPCB, Sion, Mumbai





# Maharashtra Pollution Control Board

## 614c13945bd043691f9be466

### SCHEDULE-I

#### Terms & conditions for compliance of Water Pollution Control:

- 1) A] As per your application, you have proposed to provide Sewage Treatment Plant of 145 CMD capacity based in MBBR Technology for treatment of domestic effluent  
B] The Applicant shall operate the sewage treatment plant (STP) to treat the sewage so as to achieve the following standards prescribed by the Board or under EP Act, 1986 and Rules made there under from time to time, whichever is stringent.

<b>Sr.No</b>	<b>Parameters</b>	<b>Limiting concentration not to exceed in mg/l, except for pH</b>
1	pH	5.5-9.0
2	BOD	10
3	COD	50
4	TSS	20
5	NH4 N	5
6	N-total	10
7	Fecal Coliform	less than 100

- 2) C] The treated domestic effluent shall be 60% recycled for secondary purposes such as toilet flushing, air conditioning, cooling tower make up, firefighting etc. and remaining shall be utilized on land for gardening and connected to the sewerage system provided by local body.
- 3) The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification thereof & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions. The Applicant shall obtain prior consent of the Board to take steps to establish the unit or establish any treatment and disposal system or and extension or addition thereto.
- 4) The industry shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.
- 4) **The Applicant shall comply with the provisions of the Water (Prevention & Control of Pollution) Act,1974 and as amended, and other provisions as contained in the said act.**

<b>Sr. No.</b>	<b>Purpose for water consumed</b>	<b>Water consumption quantity (CMD)</b>
1.	Industrial Cooling, spraying in mine pits or boiler feed	0.00
2.	Domestic purpose	177.00
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	0.00
4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	0.00

- 5) The Applicant shall provide Specific Water Pollution control system as per the conditions of EP Act, 1986 and rule made there under from time to time.



# Maharashtra Pollution Control Board

## 614c13945bd043691f9be466

### SCHEDULE-II

#### **Terms & conditions for compliance of Air Pollution Control:**

- 1) As per your application, you have proposed to provide the Air pollution control (APC)system and also proposed to erect following stack (s) and to observe the following fuel pattern-

Stack No.	Stack Attached To	APC System	Height in Mtrs.	Type of Fuel	Quantity & UoM
S-1	DG SET-400 KVA	Acoustic Enclosure	3.5	Diesel/HSD	113 Ltr/Hr
S-2	DG SET-400 KVA	Acoustic Enclosure	3.5	Diesel/HSD	113 Ltr/Hr

- 2) The applicant shall operate and maintain above mentioned air pollution control system, so as to achieve the level of pollutants to the following standards.

Total Particular matter	Not to exceed	150 mg/Nm <sup>3</sup>
-------------------------	---------------	------------------------

- 3) The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacement/alteration well before its life come to an end or erection of new pollution control equipment.

- 4) The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary).

- 5) **Conditions for utilities like Kitchen, Eating Places, Canteens:-**

- a) The kitchen shall be provided with exhaust system chimney with oil catcher connected to chimney through ducting.
- b) The toilet shall be provided with exhaust system connected to chimney through ducting.
- c) The air conditioner shall be vibration proof and the noise shall not exceed 68 dB(A).
- d) The exhaust hot air from A.C. shall be attached to Chimney at least 5 mtrs. higher than the nearest tallest building through ducting and shall discharge into open air in such a way that no nuisance is caused to neighbors.



# Maharashtra Pollution Control Board

## 614c13945bd043691f9be466

### SCHEDULE-III Details of Bank Guarantees:

Sr. No.	Consent(C2E/C2O/C2R)	Amt of BG Imposed	Submission Period	Purpose of BG	Compliance Period	Validity Date
1	C2E	Rs 10 Lakhs	15 Days	Compliance of Consent Conditions	Continious	5 Yrs

\*\* The above Bank Guarantee(s) shall be submitted by the applicant in favour of Regional Officer at the respective Regional Office within 15 days of the date of issue of Consent.

# Existing BG obtained for above purpose if any may be extended for period of validity as above.

#### BG Forfeiture History

Srno.	Consent (C2E/C2O/C2R)	Amount of BG imposed	Submission Period	Purpose of BG	Amount of BG Forfeiture	Reason of BG Forfeiture
		NA				

#### BG Return details

Srno.	Consent (C2E/C2O/C2R)	BG imposed	Purpose of BG	Amount of BG Returned
		NA		



**SCHEDULE-IV**

**Conditions during construction phase**

<b>A</b>	During construction phase, applicant shall provide temporary sewage and MSW treatment and disposal facility for the staff and worker quarters.
<b>B</b>	During construction phase, the ambient air and noise quality shall be maintained and should be closely monitored through MoEF approved laboratory.
<b>C</b>	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.

**General Conditions:**

- 1 The applicant shall provide facility for collection of samples of sewage effluents, air emissions and hazardous waste to the Board staff at the terminal or designated points and shall pay to the Board for the services rendered in this behalf.
- 2 The firm shall strictly comply with the Water (P&CP) Act, 1974, Air (P&CP) Act, 1981 and Environmental Protection Act 1986 and Solid Waste Management Rule 2016, Noise (Pollution and Control) Rules, 2000 and E-Waste (Management & Handling Rule 2011.
- 3 Drainage system shall be provided for collection of sewage effluents. Terminal manholes shall be provided at the end of the collection system with arrangement for measuring the flow. No sewage shall be admitted in the pipes/sewers downstream of the terminal manholes. No sewage shall find its way other than in designed and provided collection system.
- 4 Vehicles hired for bringing construction material to the site should be in good condition and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.
- 5 Conditions for D.G. Set
  - a) Noise from the D.G. Set should be controlled by providing an acoustic enclosure or by treating the room acoustically.
  - b) Industry should provide acoustic enclosure for control of noise. The acoustic enclosure/ acoustic treatment of the room should be designed for minimum 25 dB (A) insertion loss or for meeting the ambient noise standards, whichever is on higher side. A suitable exhaust muffler with insertion loss of 25 dB (A) shall also be provided. The measurement of insertion loss will be done at different points at 0.5 meters from acoustic enclosure/room and then average.
  - c) Industry should make efforts to bring down noise level due to DG set, outside industrial premises, within ambient noise requirements by proper siting and control measures.
  - d) Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.
  - e) A proper routine and preventive maintenance procedure for DG set should be set and followed in consultation with the DG manufacturer which would help to prevent noise levels of DG set from deteriorating with use.
  - f) D.G. Set shall be operated only in case of power failure.
  - g) The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.
  - h) The applicant shall comply with the notification of MoEFCC, India on Environment (Protection) second Amendment Rules vide GSR 371(E) dated 17.05.2002 and its amendments regarding noise limit for generator sets run with diesel.

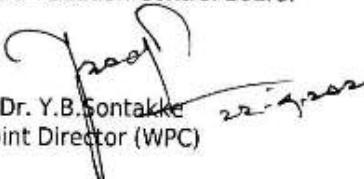


# Maharashtra Pollution Control Board

## 614c13945bd043691f9be466

- 6 Solid Waste - The applicant shall provide onsite municipal solid waste processing system & shall comply with Solid Waste Management Rule 2016 & E-Waste (M & H) Rule 2011.
- 7 Affidavit undertaking in respect of no change in the status of consent conditions and compliance of the consent conditions the draft can be downloaded from the official web site of the MPCB.
- 8 Applicant shall submit official e-mail address and any change will be duly informed to the MPCB.
- 9 The treated sewage shall be disinfected using suitable disinfection method.
- 10 The firm shall submit to this office, the 30th day of September every year, the environment statement report for the financial year ending 31st march in the prescribed Form-V as per the provision of rule 14 of the Environmental (Protection) Second Amended rule 1992.
- 11 The applicant shall obtain Consent to Operate from Maharashtra Pollution Control Board before commissioning of the project.

For and on behalf of the  
Maharashtra Pollution Control Board.



Dr. Y.B. Sontakke  
Joint Director (WPC)



**MUNICIPAL CORPORATION OF GREATER MUMBAI**  
**(Solid Waste Management Department)**

Office of Executive Engineer,  
SWM SWM Zonal Office 5,

Application Number - CHE/ES/4273/L/337(NEW)/SWM/3/Amend, dated - 08 May 2021  
Issued remarks Number **/007564/2021/L/ES** Dated **10 May 2021**.

To (Architect / L.S),  
SHASHIKANT LAXMAN JADHAV  
B-106, NATRAJ BLDG., MULUND (W)

CC (Owner),  
LANDCARE REALTY LLP  
601, Orbit Plaza, New Prabhadevi Road,  
Prabhadevi, Mumbai

**Subject :-** Approval to Construction & Demolition Waste Management Plan for the site at CTS/CS Number 657 of village MOHILI at ward Ward L.

**Reference :-** Your application / online submission for C&D Waste Management Plan levelling & filling at designated site dtd. 08 May 2021.

With reference to your application/ online submission, the Debris Management Plan submitted by you has been approved as per "Construction and Demolition Waste Rules 2016" and you are allowed to transport Construction & Demolition/ Excavation Material from construction site to the unloading site subject to following terms & conditions.

1. This approval is subject to the orders given by Hon. Supreme Court u/no. in SLP (Civil) No. D23708/2017 dated 15.3.2018. You shall follow this order of Hon. Supreme Court and instructions therein.
2. You shall handle & transport **Construction & Demolition Waste / Excavation Material to the extent of 1000 Brass only to the designated unloading site Approval of new site for unloading of C and D waste material, on the site at Bhiwandi,Gut No. 86/2/C , Pise Village, Tal- Bhiwandi, Dist-Thane(Applicant:M/s. K.G.N.Enterprises)(Mr.Sohail 9082441168). & validity 25 Apr 2022.**
3. You shall transport the C&D waste with proper precautions and employ adequate measures safe guards to dispersal of particles through the air.
4. You have mentioned designated site for transportation of C&D waste for filling and levelling purpose. The C&D waste shall be transported and deposited at the designated site only The Landfill site (unloading site) shall be governed by the Construction and Demolition Waste Management Rules, 2016 and Solid Waste Management Rules, 2016.
5. In the event for any reason whatsoever, the consent given by the Designated Site / Agency is revoked or the time limit for the designated site has expired or the capacity of unloading site is exhausted. In such case the builder / developer shall forthwith stop the transportation activities. The builder / developer shall submit revised Construction and Demolition waste management plan along with required valid documents for revalidation of existing C&D waste Management Plant.
6. The construction & Demolition Waste shall be transported through your Transport Contractor. The details of the same shall be uploaded in the system by the applicant at the time of actual transportation.
7. The deployed vehicles shall abide by all the R.T.O. rules and regulations. You shall ensure that the vehicles should be properly covered with tarpaulin or any other suitable material firmly to avoid any escape / fall of waste on road from moving vehicle. The body and wheels shall be cleaned and washed thoroughly to avoid spreading of waste on road.
8. The copy of approved Construction and Demolition Management Plan Shall be accompanied with each and every vehicle under this approval. The developer shall issue the proper Challan for each and every trip of vehicles and that shall be acknowledged by the agency

of unloading site. The developer shall maintain record of C&D material transported and shall make it available to MCGM and / or Monitoring Committee whenever required for inspection.

9. The approval is granted presuming that the papers submitted by the applicants / Owners are genuine. For any dispute arising out of documents submitted by applicant, POA / Occupant / Owner shall be held responsible as prescribed under the law prevailing in force.
10. The approval granted hereto does not absolve the other approval required from the other department of M.C.G.M. OR Govt. authorities.
11. In case of disputes, court matters etc. related to the subject site / land / property, this approval cannot be treated as a valid proof.
12. In case of any breach of condition is brought to the notice of MCGM or Monitoring Committee, Show Cause Notice will be issued and decision will be taken within one month as expeditiously as possible, which shall be binding on you / land owner.
13. This approval is not a permission for excavation or permission for dumping but this is the only approval under Construction & Demolition Waste Management Plan for the transportation of Construction & Demolition Waste for unloading at designated unloading site.
14. You / Land owner shall submit valid Bank Guarantee from the bankers approved by the MCGM and the amount applicable as per attached table. The bank guarantee remains valid till grant of Occupation Certificate (OCC).
15. The license architect / license engineer shall upload compliance report in respect of Construction & Demolition Waste Management Plan, any breach will entitle the cancellation of building permission and work will be liable to stop immediately.
16. (A) Project Total Estimated Qty (Brass) :21252  
(B) Obtained NOC(s) Total Qty (Brass): 2050

**Note:**

1. The above remarks are system generated based on the input data submitted by Architect / Consultant / L.S and if in future it is found that the data is incorrect / fraudulent then the remarks deemed to be treated as cancelled and necessary action will be initiated.
2. The above remarks are system generated and does not require any signatures.
3. This C & D approval is issued subject to obtaining valid IOD / CC. Actual transportation shall begin after obtaining valid IOD / CC only.



## OFFICE OF THE ADDITIONAL COLLECTOR MUMBAI SUBURBAN DISTRICT

Administrative Bldg, 9th Floor, Near Chetana College, Govt. Colony, Dadar(E), Mumbai 400 051,

NO. AC/DESK-IV/MNL-SR-78/2021-22

DATE: 04/05/2021

**READ:**

- 1) Revenue and Forest Department, Govt. of Maharashtra Mantralaya Mumbai G.R. No. M 21 K- 1097 P.K. 41 dated 17-3-2001
- 2) Maharashtra minor minerals extraction (Development & Regulation) rule 2013
- 3) Revenue and Forest Department, Gauhati Khargi-10-GR/279 R.612 R.H. dt 13.12.13
- 4) Revenue and Forest Department, Gauhati Khargi-10-10127 P. R.603 R.H. dt 1.05.15.
- 5) Revenue and Forest Department, Notification dated 12.01.2019
- 6) Section 107 No.CHE/ES/4273/L/332(New)A/ Dated 10/09/2010 Department of Executive Engineers Building Purpose Zone 11,2 Wards by M.G.M.
- 7) Application dated 27/04/2021 from M/s. Landcare Realty LLP
- 8) Excavation Permission as per the Approved Plan marked for proposed Excavation

### EXCAVATION PERMISSION AS AGAINST THE APPROVAL OF MCGMSRA/MMRDA/MDTC/AIRPORT AUTHORITY

WHEREAS Application Dated 27/04/2021 of From Ali Hussain Boxwala And Others C/o.M/s.Landcare Realty LLP Office at Orbit Plaza,6th Floor,New Prabhadevi Marg,Prabhadevi,Mumbai-400025 applied for grant of permit for Excavation and removal of Minor Minerals Earth/Soil/Mud/Murem to the extent of (46.5m X3.45m X 1.93m =2822.48C.u.m.-997.34x1000 Brass) 1000 Brass only from the land bearing CSES No. 657 of village Mohili Taluka Kurla , Situated at- District Mumbai Suburban.

The applicant has paid the Royalty of Rs. 4,00,000/- (Rs.Four Lakh Only) at the rate of Rs.400/- per brass and application fees of Rs. 2,000/- (Rs.Two Thousand Only) and Surface Rent of Rs. 14396/- N.A.Rate Rs.9.84 Area adm 1463 Sq. Mtrs. which is not exceeding the Land revenue and ceases on the land fixed by the Collector/Govt. from time to time.

An amount of Rs. 4,16,396/- (Rs.Four Lakh Sixteen Thousand Three Hundred Ninety-six Only) is credited in the State Bank Of India GRN NO. MH00 MFI00941932202122E Dated 03/05/2021 and 10% of the total Royalty payable to the District Mineral Foundation Contribution Fund paid by D.D.No.421618 Dt.04/05/2021 Amount Rs. 40,000/- has been deposited in this office.

In exercise of the powers conferred under rule 59 and 60 of the Maharashtra Minor Mineral Extraction (Development & Regulation) Rule 2013, & rule 46 (a) (i) of the Maharashtra Minor Mineral Extraction (Development and Regulation) (Amendment) Rules, 2017, The Collector , Mumbai Suburban District , having office at the above address hereby granted approved to issue Permit to, from, Ali Hussain Boxwala And Others C/o.M/s.Landcare Realty LLP Office at Orbit Plaza,6th Floor,New Prabhadevi Marg,Prabhadevi,Mumbai-400025 for extraction and removal of minor mineral Earth/Soil/Mud/Murem to the extent of 1000 Brass (One Thousand Only) for the period of 75 Days from the date of issue of this permit order i.e. with effect from the date 04/05/2021 to 18/07/2021 subject to the following conditions

1. The Permit holder shall carry out excavation operations within the prescribed limit demarcated on map as ABCD shown in Red colored ink
2. The Permit holder shall have to complete excavation and removal operation of the permitted quantity of Earth/Soil/Mud/Murem within the prescribed period only. Under no circumstances the said period will be extended
3. The failure of the Permit holder to complete excavation and removal of permitted quantity of Murem shall be liable to the forfeiture of the royalty already paid for the quantity not excavated and removal within the prescribed period and he shall not be entitled to claim any refund of the royalty already paid.
4. The Permit holder shall be responsible to pay the compensation to the Govt. for damage, if any made to the land and the decision of the Competent Officer shall be final in respect of determination of the damage
5. The Govt. shall be immune against any claims of third parties of such claim of any shall be settled by the Permit holder himself.
6. The Permit holder shall report all accidents immediately to the Collector, Sub Divisional Officer, Tahsildar of the area, Police Department of the area and thereafter to all the licensing authorities concerned.
7. The Permit holder shall have no rights over the extracted material and other property lying in permit area after the date of expiry of the Permit.

8. If any excess quantity over that permitted is found to be removed the material shall be confiscated and the Permit holder shall be liable for penal action under the provisions of section 48 (7) of Maharashtra Land Revenue Code, 1966.
9. The Permit holder shall allow inspection of the excavation of operation and transit passes book to the Collector, Sub Divisional Officer, or any officer authorized by him and give him reasonable opportunity for carrying out such inspection.
10. The Permit holder shall not cut any trees during the extraction of minor mineral.
11. The Permit holder shall issue transit pass giving all the details therein and duly sealed by the Collector, Sub Divisional Officer or District Mining Officer with every dispatch of mineral, failing which the transport shall be treated as unauthorized and shall be liable for penalty as per the provisions of section 48(7) and 48 of Maharashtra Land Revenue Code, 1966.
12. Permit holder should keep the day to day records of excavations, transportation/ dispatch of minor minerals in the production, sale cum dispatch registers duly certified by this office, also submit the monthly progress report to this office on 5<sup>th</sup> day of every month.
13. In the event of the breach of any of the above condition the Permit shall be cancelled and the royalty paid by the Permit holder shall be forfeited to the State Government and the Permit holder shall be liable to such other penal action according to the provisions of the Maharashtra Land Revenue Code and Rules there under and the minor mineral Extracted shall become the absolute property of Govt.
14. That in case of increase in royalty rate hereafter the Permit holder will have to pay the difference amount of the royalty rates failing which the same will be recovered as arrears of land revenue by adopting the coercive measures.
15. Government reserves the right to cancel the excavation Permit any time without notice and without assigning any reason.
16. The letter is granted presuming that the papers submitted by the applicants POA/Occupant/Owners are genuine & for any dispute arising out of documents submitted by applicant, POA/Occupant/Owner will be held responsible.
17. Care should be taken due to excavation works slum dwellers are not affected.
18. Under no circumstances the excavated material like ordinary clay, ordinary earth, stones and all sizes etc. should be dumped, spreaded over the areas of mangroves and 50 meters' on all sides of mangroves regardless of ownership of the land. In case of committing breach of the conditions the permit is revoked without any notice, and the permit holder will be liable to for penal action in accordance with the concerned provision of rules, acts and the Order of the Hon. High Court Dt.06-10-2005.
19. The validity of this permit is up to 18/07/2021 and this Excavation permission is use only for digging Foundation for construction and Development of an Sancion as per Planning Authority.
20. If the Excavation is not done as per the sanctioned plan and IOD from development Authority and also any authority complaint raise by completing or challenging in the court about sanction permission then the permission of excavation automatically null & void from the date issue of this excavation permission.
21. The rate of royalty are liable to be revised by time to time, and the permit holder should pay the difference of amount of royalty on account of such revision of rates by time to time.
22. This Permit is issued only for Excavation of minor material of purpose and all other necessary permissions from other Authority/department should taken by applicant.
23. The permit Holder has to follow the Guidelines Issued by Govt. of India, Govt. of Maharashtra State, Regarding 'Covid-19' Pandemic.
24. As per Ministry of Home Affairs (MHA) Order no. 40.3/2020-DM-1(A) Dated 1<sup>st</sup> May,2020, Activities in Red Zones (Hotspot) (Outsides Containment Zone), "Demolition activities in Urban areas is Permitted only in Site Construction (where workers are available on site and no workers are required to be brought in from outside), permit holder should Also strictly follow all the guidelines mentioned for "Covid-19" Management (Annexure-I)"

(O/C signed by In-charge Collector)



For Additional Collector  
Mumbai Suburban District

To,

Ali Hussain Roxwala And Others  
C/o. M/s. Landcare Realty LLP  
Orbit Plaza 4th Floor, New Prabhadevi  
Marg, Prabhadevi, Mumbai-400025

## TEST REPORT

**ISSUED TO: M/S. LANDCARE REALITY LLP**

 AT CTS NO.657, Survey No.17, Safed Pool, Andheri Kurla Road  
 Village Mohili, L Ward, Mumbai, Maharashtra

**REPORT NO. : UT/ELS/REPORT/C-101/12-2022**
**ISSUE DATE : 13/12/2022**
**YOUR REF. : Work Order Letter**
**REF. DATE : 14/10/2022**
**SAMPLE PARTICULARS :**

SAMPLE PARTICULARS :		AMBIENT AIR QUALITY MONITORING	
Sampling Plan Ref. No.:	C-11/11-2022	Location Code	01
Sampling Procedure	UT/LQMS/SOP/AA01A	Sample Location	At Project Site
Sample Registration Date	05/11/2022	Co-ordinates: N19°5'50.67"; E72°53'3.07"	
Date of Sampling	04/11/2022 to 05/11/2022	Collected By	ULTRA-TECH
Time of Sampling	09:30 Hrs. to 09:30 Hrs.	Height of Sampler	1.0 Meter
Analysis Starting Date	05/11/2022	Sampling Duration	24 Hours
Analysis Completion Date	08/11/2022	Relative Humidity	50.0 % to 62.0 %
Sample Lab Code	UT/ELS/C-088/11-2022		
Ambient Air Temperature	24.1°C to 30.1°C		

Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Sulphur Dioxide (SO <sub>2</sub> )	IS 5182 (Part 02) : 2001	13	µg/m <sup>3</sup>
2.	Oxides of Nitrogen (NO <sub>x</sub> )	IS 5182 (Part 06) : 2006	23	µg/m <sup>3</sup>
3.	Particulate Matter (PM <sub>10</sub> )	EPA/625/R-96/010a Method 10-2.1	77	µg/m <sup>3</sup>
4.	Particulate Matter (PM <sub>2.5</sub> )	IS 5182 (Part 24) : 2019	27	µg/m <sup>3</sup>
5.	Carbon Monoxide (CO) †	IS 5182 (Part 10) : 1999	1.3	mg/m <sup>3</sup>

†: Sampling Period 1 Hr.

Remark/ Statement of The parameters tested above are found to be within 24 hourly TWA of National Ambient Air Quality Monitoring Standard (NAAQMS). Part III- Section IV. NAAQMS is provided as Annexure-I for your reference. (Turnover to find Annexure)

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Respirable Dust Sampler	Make - Politech; Model - PEM-RDS BNL; Sr. No. 3313	Valid up to - 03/10/2023
	Fine Dust Sampler	Make - Politech; Model - PEM ADS 2.5/10µ; Sr. No. 18213	Valid up to - 05/01/2023

Note:

1. Samples were collected by following laboratory's SOP (UT/LQMS/SOP/AA01A) based on CPCB Guidelines - National Ambient Air Quality Monitoring Series: NAAQMS/2003-04 and respective test methods.
2. This test report refers only to the sample tested.
3. Monitoring area coming under Residential areas and observed values are relevant to sample collected only.
4. This test report may not be reproduced in part, without the permission of this laboratory.
5. Any correction invalidates this test report.
6. Weather was Sunny & Clear during sampling period.

**- END OF REPORT -**


For ULTRA-TECH,

Meghan Patil

(Authorized Signatory)

## **ANNEXURE-I**

### **NATIONAL AMBIENT AIR QUALITY STANDARDS, PART III-SECTION IV**

**The Gazette of India with Effect from Wednesday, November 18, 2009/KARTIKA 27, 1931**

Sr. No.	Pollutants	Time Weighted Average	<i>National Ambient Air Quality Standards</i>	
			Industrial, Residential, Rural and Other Area	Ecological Sensitive Area (Notified by Central Government)
01.	Sulphur Dioxide (SO <sub>2</sub> ), $\mu\text{g}/\text{m}^3$	Annual*	50	20
		24 Hours**	80	80
02.	Oxides of Nitrogen (NO <sub>x</sub> ), $\mu\text{g}/\text{m}^3$	Annual*	40	30
		24 Hours**	80	80
03.	Particulate Matter (PM <sub>10</sub> ), $\mu\text{g}/\text{m}^3$	Annual*	60	60
		24 Hours**	100	100
04.	Particulate Matter (PM <sub>2.5</sub> ), $\mu\text{g}/\text{m}^3$	Annual*	40	40
		24 Hours**	60	60
05.	Carbon Monoxide (CO), $\text{mg}/\text{m}^3$	08 Hours*	02	02
		01 Hours**	04	04

\* Annual arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.

\*\* 24 hourly or 8 hourly or 1 hourly monitored values, as applicable, shall be complied with 98% of the time in a year. 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.

**NOTE:** Whenever and wherever monitoring results on two consecutive days of monitoring exceed the limits specified above for the respective category, it shall be considered adequate reason to institute regular or continuous monitoring and further

## TEST REPORT

**ISSUED TO: M/S. LANDCARE REALITY LLP**

 AT CTS NO.657, Survey No.17, Safed Pool, Andheri Kurla Road  
 Village Mohili, L Ward, Mumbai, Maharashtra

**REPORT NO. : UT/ELS/REPORT/C-102/12-2022**
**ISSUE DATE : 13/12/2022**
**YOUR REF. : Work Order Letter**
**REF. DATE : 14/10/2022**
**SAMPLE PARTICULARS :**
**NOISE LEVEL QUALITY MONITORING**
**Sampling Plan Ref. No. : C-11/11-2022**
**Sample Lab Code : UT/ELS/C-089/11-2022**
**Date of Monitoring : 04/11/2022**
**Survey Done By : ULTRA-TECH**

Sr. No.	Location	Noise Level Reading in dB(A)			
		Time (Hrs)	Day dB(A)	Time (Hrs)	Night dB(A)
01.	At Project Site	10:00 to 10:05	54.4	22:00 to 22:05	44.3

**Opinions / Interpretations:** The Noise Pollution (Regulation And Control) Rules, 2000: Is Provided as Annexure II for Your Reference.  
 (Turnover to find Annexure).

**Note:** 1. Monitoring area coming under Residential Area.  
 2. Noise level monitored is an average for period as stated above, the permissible sound pressure level is to be determined with respect to the total time a workman is being exposed (continuously or a number of short term exposures per day) in Hrs.

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Sound Level Meter	Make - Casella; Model - CEL-633C; Sr. no. 2382959	Valid up to - 10/12/2022

**Note:** 1. This test report refers only to the monitoring conducted.  
 2. This test report may not be reproduced in part, without the permission of this laboratory.  
 3. Any correction invalidates this test report.

## - END OF REPORT -



For ULTRA-TECH,

  
 Meghan Patil  
 (Authorized Signatory)

**ANNEXURE-II**  
**THE NOISE POLLUTION (REGULATION AND CONTROL) RULES, 2000**

(The Principal Rules were published in the Gazette of India, vide S.O. 123(E), dated 14.2.2000 and subsequently amended vide S.O. 1046(E), dated 22.11.2000, S.O. 1088(E), dated 11.10.2002, S.O. 1569 (E), dated 19.09.2006 and S.O. 50 (E) dated 11.01.2010 under the Environment (Protection) Act, 1986.)

**\* SCHEDULE**

[See rule 3(1) and 4(1)]

Ambient Air Quality Standards in respect of Noise

Area Code	Category of Area / Zone	Limits in dB(A) Leq	
		Day Time	Night Time
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40

Note:

1. Day time shall mean from 6.00 a.m. to 10.00 p.m.
2. Night time shall mean from 10.00 p.m. to 6.00 a.m.
3. Silence zone is an area comprising not less than 100 meters around hospitals, educational institutions, courts, religious places or any other area which is declared as such by the competent authority.
4. Mixed categories of areas may be declared as one of the four above mentioned categories by the competent authority.

\* dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.

A "decibel" is a unit in which noise is measured.

"A", in dB(A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.

Leq: It is energy mean of the noise level over a specified period.

**\* CONSTRUCTION ACTIVITIES**

The maximum noise levels near the construction site should be limited to 75 dB(A) Leq(5 min.) in industrial areas and to 65 dB(A) Leq(5 min.) in other areas.

**\* THE PERMISSIBLE LEVELS FOR NOISE EXPOSURE FOR WORK ZONE**

[The Model Rules Of The Factories Act, 1948]

Peak sound pressure level in dB	Permitted number of impulses or impact/day
140	100
135	315
130	1000
125	3160
120	10000

Notes:

1. No exposure in excess of 140 dB peak sound pressure level is permitted.
2. For any peak sound pressure level falling in between any figure and the next higher or lower figure as indicated in column 1, the permitted number of impulses or impacts per day is to be determined by extrapolation on a proportionate basis.

Total time exposure (continuous or a number of short term exposures per day) in Hrs	Sound Pressure Level in dB(A)
8	90
4	93
2	96
1	99
1/2	102
1/8	108
1/16	111
1/32 (2 minutes) or less	114

Notes:

1. No exposure in excess of 115 dB(A) is to be permitted.
2. For any period of exposure falling in between any figure and the next higher or lower figure as indicated in column 1, the permissible sound pressure level is to be determined by extrapolation on a proportionate basis.

## TEST REPORT

<b>ISSUED TO: M/S. LANDCARE REALITY LLP</b>	<b>REPORT NO.</b>	<b>UT/ELS/REPORT/C-103/12-2022</b>
AT CTS NO.657, Survey No.17, Safed Pool, Andheri Kurla Road Village Mohili, L. Ward, Mumbai, Maharashtra	<b>ISSUE DATE</b>	<b>13/12/2022</b>
	<b>YOUR REF.</b>	<b>Work Order Letter</b>
	<b>REF. DATE</b>	<b>14/10/2022</b>

<b>SAMPLE PARTICULARS</b>		<b>SOIL QUALITY MONITORING</b>	
Sampling Plan Ref. No.	: C-11/11-2022	Sample Type	: Surface Soil (at 15cm depth)
Sampling Procedure	: UT/LQMS/SOP/S01A	Sample Location	: At Project Site
Sample Registration Date	: 05/11/2022		
Date & Time of Sampling	: 04/11/2022 at 17:00Hrs.		
Analysis Starting Date	: 05/11/2022		
Analysis Completion Date	: 11/11/2022	Sample Quantity & Packing Details	: 1kg In Plastic Bag Contained in Zip Lock Bag
Sample Collected By	: ULTRA TECH		
Sample Lab Code	: UT/ELS/C-090/11-2022		

Sr. No.	Test Parameter	Test Methods	Test Result	Unit
1.	Moisture Content	IS:2720 (Part 2) : 1973	4.4	%
2.	Bulk Density	UT/LQMS/SOP/S03	1164	kg/m <sup>3</sup>
3.	Organic Matter	IS:2720 (Part 22) : 1972	0.9	%
4.	Total Organic Carbon	IS:2720 (Part 22) : 1972	0.5	%
5.	pH [1:2.5 Soil:Water Extract]	IS:2720 (Part 26) : 1987	7.9	-
6.	Conductivity(1:2soil:Water Extract)	IS:14767- 2000	0.511	mS/cm
7.	Sodium as Na (Water Extractable)	UT/LQMS/SOP/S19	74	mg/kg
8.	Magnesium as Mg (Water Extractable)	UT/LQMS/SOP/S22	79	mg/kg
9.	Chlorides as Cl <sup>-</sup> (Water Extractable)	UT/LQMS/SOP/S23	107	mg/kg
10.	Sulphate as SO <sub>4</sub> <sup>2-</sup> (Water Extractable)	UT/LQMS/SOP/S24	102	mg/kg
11.	Sodium Adsorption Ratio	UT/LQMS/SOP/S26	1.1	(meq/kg) <sup>1/2</sup>
12.	Cation Exchange Capacity	UT/LQMS/SOP/S18	24.3	meq/100g
13.	Water Holding Capacity	UT/LQMS/SOP/S12	54.2	%
14.	Available Boron as B (Available)	UT/LQMS/SOP/S27	0.7	mg/kg
15.	Phosphorous as P <sub>2</sub> O <sub>5</sub> (Available)	UT/LQMS/SOP/S28	54	kg/ha
16.	Potassium as K <sub>2</sub> O (Available)	UT/LQMS/SOP/S29	232	kg/ha
17.	Nitrogen as N (Available)	UT/LQMS/SOP/S30	185	Kg/ha
18.	Iron as Fe	UT/LQMS/SOP/S35&S37	69541	mg/kg
19.	Zinc as Zn	UT/LQMS/SOP/S35&S37	88	mg/kg

**Remark/ Statement of Conformity:** **Nil**

**Note:**

1. Samples were collected by following laboratory's SOP (UT/LQMS/SOP/S01A) based on Methods Manual: Soil Testing in India by DA&FW, MoA, GOI.
2. This test report refers only to the sample tested.
3. This test report may not be reproduced in part, without the permission of this laboratory.
4. Any correction invalidates this test report.

**- END OF REPORT -**


For ULTRA TECH

 Meghan Patil  
 (Authorized Signatory)





05.03.2020

**Project** :- Mohili, Pride Group

**Subject** :- Sewage treatment Plant Details

The proposed project consists of Residential Buildings. The sanitary waste will be typically generated through the Toilets and Kitchen. The entire waste generated in form of black & grey water will be treated in the STP. The treated recycled water will be used for gardening and flushing purpose.

## 1.1 **Calculation for STP Capacity:**

Total Domestic water requirement	-	88,330 litres/day
Total Flushing water requirement	-	60,980 litres/day
Total water Demand	-	1,49,310 litres/day
Expected Sewage Generation - Residential 90% -		1,34,379 litres/day

Therefore the plant is designed for an average capacity of **160 cu.m/day.**

Approximately area required shall be **116 sq.m.**

## 1.2 **Raw Sewage characteristics**

### 1.2.1 Expected Characteristics of Raw Domestic Sewage

- pH	: 7 to 8
- Suspended Solids	: 300 mg/l. - 350 mg/l.
- BOD 3 days AT 27 <sup>0</sup> C	: 250 mg/l. - 300 mg/l.
- COD	: 500 mg/l. - 600 mg/l.
- Oil & Grease	: 20-25 mg/l.

## 1.3 **Characteristics of treated sewage.**

### 1.3.1 Treated Domestic Sewage shall conform to the following characteristics.

- pH	: Around 7 to 8.5
- Suspended Solids	: Less than 20 mg/l.
- BOD 3 days AT 27 <sup>0</sup> C	: Less than 10 mg/l.
- Oil & Grease	: Less than 10 mg/l.

## 1.4 **Expected Treatment**

The sewage treatment plant will be Aerobic Process Type with tertiary treatment facilities. The treated

sewage shall be reclaimed and used for Flushing, & Landscaping requirement within Project area.

**1.5 The Treatment Plant shall broadly consist of the following.**

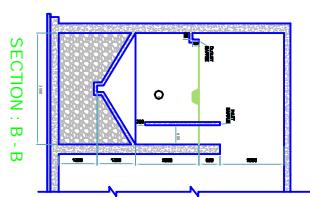
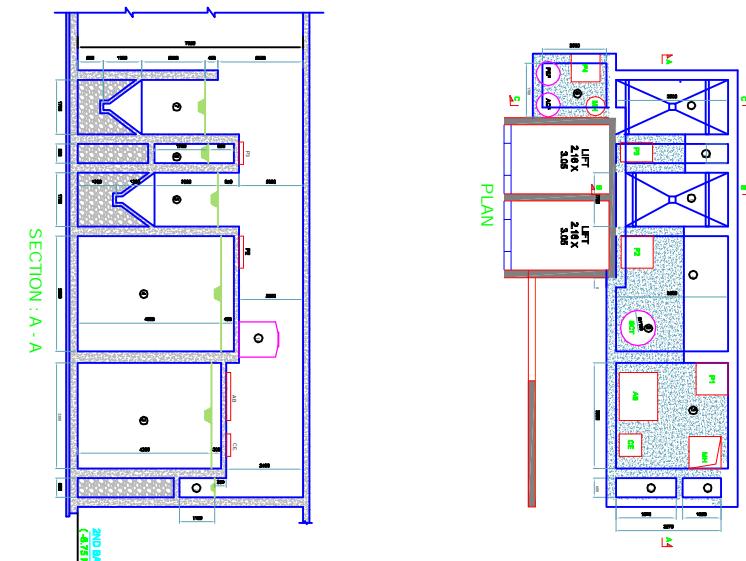
1. Raw Sewage Pumps for Treatment
2. Receiving sump with air-grid in R.C.C.
3. Oil / Grease Removal in R.C.C.
4. Screen Chamber in R.C.C, with M.S screens
5. Air blowers.
6. Aeration tanks (with or without media)
7. Plate Settlers.
8. Return Sludge Pumps.
9. Sludge Filter Press.
10. Sludge Pumps.
11. Multigrade sand filter
12. Activated Carbon filter
13. U.V. filter
14. Post Chlorination
15. Interconnecting pipe work complete with valve, fittings etc, interconnection between pumps, tanks and filters.
16. Instruments such as Pressure Gauges, Rotameters, Auto Level Controllers, Flow Indicators, etc.
17. Motor control panel complete with starters, push buttons, indicating lamps, isolating switches, fuse unit, single phase preventer, overload protection, all cabling and wiring.
18. Walkways and ladders in Hot Dip galvanised sections.
19. All initial media charge and consumables as required, until final acceptance.

**With Regards**

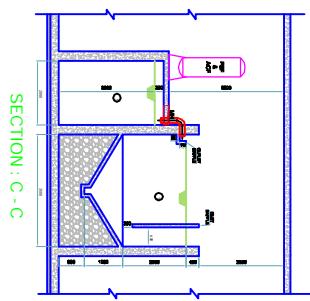
**E.C.P.H.C.P.L**

Authorized Sign

## STP SECTION



## SECTION : B - B



## SECTION : C - C

## STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

No. SIA/MH/MIS/143467/2020

Environment Department

Room No. 217, 2<sup>nd</sup> Floor,

Mantralaya,

Mumbai- 400062.

Date: 27/10/2020.

To

M/s. Landcare Realty LLP

CTS No. 657, Survey No. 17,

Safed Pool, Andheri Kurla Road,

Village Mohili, L Ward, Mumbai.

**Subject :** Environmental Clearance for Proposal Residential and Commercial Project at CTS No. 657, Survey No. 17, Safed Pool, Andheri Kurla Road, Village Mohili, L Ward, Mumbai - 400072 by M/s. Landcare Realty LLP

**Reference** Application no: SIA/MH/MIS/143467/2020

This has reference to your communication on the above mentioned subject. The proposal was considered by the SHAC 2 in its 131<sup>st</sup> meeting under screening category 8 (a) B2 as per EIA Notification, 2006 and recommended to SEIAA. Proposal then considered in 205<sup>th</sup> meeting of State Level Environment Impact Assessment Authority (SEIAA).

2. Brief Information of the project submitted by you is as below:-

1. Plot Area	6,750.17 Sq. mtr.
2. FSI Area	19,447.66 Sq. mtr.
3. Non FSI Area	15,444.50 Sq. mtr.
4. Total Built up Area (FSI & Non FSI)	34,892.16 Sq. mtr.
5. Building Configuration	1 Building with 4 Wings (A to D) with separate podium for RCI and Swimming pool ( Total Flats : 141 nos, Shops & Offices) Wing A, B & C (Residential) 2 Basements + Ground floor + 1 <sup>st</sup> to 12 <sup>th</sup> floor Wing D (Commercial) : 3 Basements + Ground floor + 1 <sup>st</sup> to 11 <sup>th</sup> floor
6. Total Population	1768 nos.
7. Water Requirement	194 KLD
8. Sewage generation	125 KLD
9. STP capacity and Technology	1 STP of capacity 145 KL
10. STP location	Basement

11.	RG area required and RG area requirement	RG area requirement: 1201.68 Sq.mtr.
	Provided	RG area provision: 1735.47 Sq.mtr
12.	Energy requirement	Connected load : 2361 KW Maximum demand : 1417 KW
13.	Total Energy Saving	22%
	Energy saving by	Solar
14.	No. of DGI sets and capacity	2 DGI sets of capacity 400 KVA each.
15.	Solid waste generation	Non-biodegradable waste: 260 Kg/day Biodegradable waste: 173 Kg/day
16.	OWG Capacity	Area for solid waste management: 30 Sq.mtr. Space provision for E-waste storage: 27 Sq.mtr.
17.	Parking	2 Wheeler: 321 Nos. 3 Wheeler: 26 Nos
18.	EMP Cost	Construction Phase : Rs. 45.90 Lacs Operation Phase : Capital cost : Rs. 10.150 Lacs Operations and Maintenance cost : Rs. 16.40 Lacs/annum
19.	Rain water Harvesting	Provision of RWTH tank of capacity 60 KI
20.	Number of rectangular pits and sizes of the pits	
21.	Details of LCT tanks - Number and capacity	Domestic : 65 KI Flushing : 45 KI Frigating : 400 KI
22.	CER	CER plan as per the MoEF & CC circular dated 01/05/2018 Project Cost: Rs. 142.34 Crores Cost for CER: Rs. 2.13 Crores (1.5 % of project cost)

3. The proposal has been considered by SEIAA in its 205<sup>th</sup> meeting and decided to accord Environment Clearance to the said project under the provisions of Environment Impact Assessment Notification, 2006 subject to implementation of following terms and conditions:-

#### Specific Conditions:

##### A. SEAC Conditions:

- I. PP to submit the sewerage network, water supply, storm water drain NOC from local planning authority.
- II. PP to submit & upload wind analysis, shadow analysis, traffic analysis, light and ventilation analysis and measures to reduce heat island effect 10%.

- III. Nalla adjoining the project shall neither be diverted nor be covered by slab.
- IV. 6 meter separate motorable road without any obstruction shall be provided for maintenance & up keeping of Nalla.
- V. Treated Sewage discharge to be restricted to 35% only.
- VI. The energy savings from renewable energy shall be 5.16%.
- VII. PP to abide all conditions prescribed in CFO NOC.
- VIII. The PP to get NOC from competent authority with reference to Thane creek flamingo sanctuary if the project site falls within 10 Km radius from the said sanctuary boundary. The planning authority to ensure fulfillment of this condition before granting CC.

**B. SEIAA Conditions:-**

- I. PP to ensure that CER plan gets approved from Municipal Commissioner.
- II. PP Shall comply with Standard EC conditions mentioned in the Office Memorandum issued by MoH&CC vide F No.22-34/2018-1A/H on 04.01.2019.
- III. SEIAA decided to grant EC for FSI 7128.55 m<sup>2</sup>, Non-FSI: 137/2.82 m<sup>2</sup> and Total BUA: 21301.38 m<sup>2</sup> (Plan Approval date CER/1/S/2273/337(New)/337/1/Amend. dated 10.09.2020)

**General Conditions:-**

- I. E-waste shall be disposed through Authorized vendor as per E-waste (Management and Handling) Rules, 2016.
- II. The Occupancy Certificate shall be issued by the Local Planning Authority to the project only after ensuring sustained availability of drinking water, connectivity of sewer line to the project site and proper disposal of treated water as per environmental norms.
- III. This environmental clearance is issued subject to obtaining NOC from Forestry & Wildlife angle including clearance from the standing committee of the National Board for Wildlife as if applicable & this environmental clearance does not necessarily implies that Forestry & Wildlife clearance granted to the project which will be considered separately on merit.
- IV. PP has to abide by the conditions stipulated by SEAC & SEIAA.
- V. The height, Construction built up area of proposed construction shall be in accordance with the existing FSI/FAR norms of the urban local body & it should ensure the same along with survey number before approving layout plan & before according commencement certificate to proposed work. Plan approving authority should also ensure the cutting permissibility for the proposed project as per the approved development plan of the area.
- VI. If applicable Consent for Establishment shall be obtained from Maharashtra Pollution Control Board under Air and Water Act and a copy shall be submitted to the Environment department before start of any construction work at the site.
- VII. All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.
- VIII. 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.
- IX. The solid waste generated should be properly collected and segregated. Dry/moist solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.
- X. Disposal of truck 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.

- XI. Arrangement shall be made that waste water and storm water do not get mixed.
- XII. All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.
- XIII. Additional soil for levelling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.
- XIV. Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO/ Agriculture Dept.
- XV. 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.
- XVI. Construction sites, including bituminous material and other hazardous materials must not be allowed to contaminate watercourses and the dumpsites for such material must be secured so that they should not leach into the ground water.
- XVII. Any hazardous waste generated during construction phase should be disposed of as per applicable rules and norms with necessary approvals of the Maharashtra Pollution Control Board.
- XVIII. 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.
- XIX. The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from concerned authority shall be taken.
- XX. 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.
- XXI. 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/MPCB.
- XXII. 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 100Km of Thermal Power Stations).
- XXIII. Ready mixed concrete must be used in building construction.
- XXIV. Storm water control and its use as per CCWBS and BIS standards for various applications.
- XXV. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- XXVI. The ground water level and its quality should be monitored regularly in consultation with Ground Water Authority.
- XXVII. 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 MPCB and Environment department before the project is commissioned for operation. Discharge of this unused treated effluent, if any should be discharge in the sewer line. Treated effluent emanating from STP shall be recycled/ reused to the maximum extent possible. Discharge of this unused treated effluent, if any should be discharge in the sewer line. Treatment of 100% grey water by decentralized treatment should be done. Necessary measures should be made to mitigate

the odour problem from STP

- XXVII. Permission to draw ground water and construction of basement if any shall be obtained from the competent Authority prior to construction/operation of the project
- XXIX. Separation of grey and black water should be done by the use of dual plumbing line for separation of grey and black water.
- XXX. 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
- XXXI. Use of glass may be reduced up to 40% to reduce the electricity consumption and load on air conditioning. If necessary, use high quality double glass with special reflective coating in windows
- XXXII. Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfil requirement
- XXXIII. Energy conservation measures like installation of CFLs / LED's 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 LED's 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 like installing solar street lights, common solar water heaters system. Project proponent should install after checking feasibility, solar plus hybrid non-conventional energy source as source of energy
- XXXIV. Diesel power generating sets proposed as source of backup 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 Maharashtra Pollution Control Board
- XXXV. 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.
- XXXVI. 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.
- XXXVII. Opaque wall should meet prescriptive requirement as per Energy Conservation Building Code, which is proposed to be mandatory for all air-conditioned spaces while it is aspirational for non-air-conditioned spaces by use of appropriate thermal insulation material to fulfil requirement
- XXXVIII. The building should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.
- XXXIX. 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.
- XI. 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.
- XII. Six monthly monitoring reports should be submitted to the Regional office MoEF, Bhopal with copy to this department and MPCA
- XIII. Project proponent shall ensure completion of STP, MSW disposal facility, green belt envelopment prior to occupation of the buildings. As agreed during the SEIAA meeting, PP

to explore possibility of utilizing excess treated water in the adjacent area for gardening before discharging it into sewer. No physical occupation or allotment will be given unless all above said environmental infrastructure is installed and made functional including water requirement in Para 2. Prior certification from appropriate authority shall be obtained.

XLIII. Wet garbage should be treated by Organic Waste Converter and treated waste (manure) should be utilized in the existing premises for gardening. And no wet garbage will be disposed outside the premises. Local authority should ensure this.

XLIV. Local body should ensure that no occupation certificate is issued prior to operation of STP/MSW site etc. with due permission of MPCB.

XLV. A complete set of all the documents submitted to Department should be forwarded to the Local authority and MPCB.

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

XLVII. A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.

XLVIII. Separate funds shall be allocated for implementation of environmental protection measures/EMP along with item-wise break-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year wise expenditure should reported to the MPCB & this department.

XLIX. The project management shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the Maharashtra Pollution Control Board and may also be seen at Website at <http://pariveshanic.in>

L. Project management should submit half yearly compliance reports in respect of the stipulated prior environmental clearance terms and conditions in hard & soft copies to the MPCB & this department, on 1st June & 1st December of each calendar year.

L.I. A copy of the clearance letter shall be sent by proponent to the concerned Municipal Corporation and the local NCO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.

L.II. The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO<sub>2</sub>, NO<sub>x</sub> (ambient levels as well as stack emissions) or critical sector parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

L.III. The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions, including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.

L.IV. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended.

subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.

4. The environmental clearance is being issued without prejudice to the action initiated under EP Act or any court case pending in the court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision under EP Act or of the Hon'ble court will be binding on the project proponent. Hence this clearance does not give immunity to the project proponent in the case filed against him, if any or act or initiated under EP Act.

5. In case of submission of false document and non-compliance of stipulated conditions, Authority Environment Department will revoke or suspend the Environment clearance without any intimation and institute appropriate legal action under Environmental Protection Act, 1986.

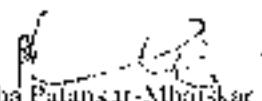
6. The Environment department reserves the right to add any stringent condition or to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the department or for that matter, for any other administrative reason.

7. Validity of Environment Clearance: The environmental clearance accorded shall be valid as per EIA Notification, 2006, amended time to time.

8. In case of any deviation or alteration in the project proposed from those submitted to this department for clearance, a fresh reference should be made to the department to assess the adequacy of the condition(s) imposed and to incorporate additional environmental protection measures required, if any.

9. The above stipulations would be enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and rules there under, Hazardous Wastes (Management and Handling) Rules, 1989 and its amendments, the public Liability Insurance Act, 1991 and its amendments.

10. Any appeal against this Environment clearance shall lie with the National Green Tribunal (Western Zone Bench, Pune), New Administrative Building, 1<sup>st</sup> Floor, D Wing, Opposite Court Hall, Pune, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.



Manisha Patankar-Mhatkar  
(Member Secretary, SEIAA)

Copy to:

1. Shri Johny Joseph, Chairman, SEIAA.
2. Secretary, MoEF & CC.
3. IA- Division MoEF & CC.
4. Member Secretary, Maharashtra Pollution Control Board, Mumbai.
5. Regional Office MoEF & CC, Nagpur.
6. District Collector, Mumbai Suburban.
7. Commissioner, Municipal Corporation of Greater Mumbai.
8. Regional Officer, Maharashtra Pollution Control Board, Mumbai.



**PUBLIC NOTICE**

our client is negotiating with **MR. BEVIS LUIS** bnr. 43, Turner Road, Bandra (West), Mumbai 400 050 residing at "Luis Villa", Ground Floor, 43, Turner 400 050 and **MR. RAYNER LUIS** residing at Turner Road, Bandra (West), Mumbai 400 050 a piece and parcel of land admeasuring 624.6 square yards) bearing old Survey No. 64 Hissa No. 5/6 lot No. 2 of T.P.S. II, Bandra corresponding to CTS Andheri, Taluka Andheri, Registration District Mumbai, Turner Road, Bandra (West), Mumbai - 400 050 a residential building/structure constructed sometime in 1924 as "LUIS VILLA" consisting of ground and suring about 224.06 square meters carpet area b. 8 and now bearing Street No. 43, Ward No. H-HW0206050090000 ("Building"). The Land and collectively referred to as "Property" and more hchedule hereunder written.

RSONS having any claim, right, title, benefit, respect of the said Property or any part thereof by, assignment, mortgage (equitable or otherwise), inheritance, claim, possession, lease, sub-lease, basis, occupation, settlement, succession, lien, maintenance, easement, partition, pledge, cumberance by operation of law, decree or order of al Authority, contract/agreements, development and/or arrangement or otherwise, howsoever, e the same known by addressing an e-mail to the ven below along with the details of the documents days from the date of publication hereof, failing the said Property shall be completed without any title, benefit, demand, estate or interest and/or shall be deemed to have been waived and/or poses and no such claim will be deemed to exist.

**REFFERED TO ABOVE:**

admeasuring 624.6 square meters (equivalent to Survey No. 64 Hissa No. 5/6 (part) and now II, Bandra corresponding to CTS No. F/1103 of Andheri, Registration District Mumbai Suburban (West), Mumbai - 400 050 together with the instructed sometime in the year 1924 thereon consisting of ground and one upper floor totally are meters carpet area bearing old Municipal Street No. 43, Ward No. H-6084 and Property 0.

st, 2021.

Sd/-

**K. Merchant**

ome Merchant & Partners,  
Advocate & Solicitors,  
8th floor, Nariman Point, Mumbai - 400021.  
s - (1) [kalpana.merchant@jmp.law](mailto:kalpana.merchant@jmp.law)  
(2) [simran.kaur@jmp.law](mailto:simran.kaur@jmp.law)

**PUBLIC NOTICE**

This is to inform to the general public that, the proposed construction of Residential & Commercial Project at CTS No. 657, Safed Pool, Village Mohili Taluka Kurla, Mumbai 400 072, Maharashtra, by developers 'Landcare Realty LLP', has been accorded Environmental Clearance from Environment Department, Govt. of Maharashtra vide letter no. SIA/MH/MIS/143467/2020, dated: 27/10/2020, copies of the said Environmental Clearance letters are available with the Maharashtra Pollution Control Board & Environment Department, Govt. of Maharashtra and same may also be seen on the website at <http://parivesh.nic.in>

Sd/-  
**Landcare Realty LLP**  
601, Orbit Plaza, New Parbhadevi Marg, Mumbai - 25, Maharashtra.

**PUBLIC NOTICE**

I am concerned for my clients Bhupinder Singh Kirpal Singh who purchased the Flat No. 165 on 3rd Floor in Bldg. No. 4, Punjabi Colony, G.T.B. Nagar, J. K. Bhasin Marg, Sion Koliwada, Mumbai-400 037, along with his Father Kripal Singh who died on 26.08.2002 leaving behind his two sons Harbhajan Singh & Inderpal Singh who inherited the 50% Share in the said Flat. Now Harbhajan Singh & Inderpal Singh are releasing & relinquishing their right, title, interest in favour of Shri Bhupinder Singh.

Any person having claim, right, title & interest in the said Undivided Share may put their Objection with supporting proof to the undersigned within 7 days from the date of Publication hereof.

Date : 12/08/2021

**RAMESH W. PATHAI**  
Advocate High Court  
Reg. No. MAH/1836/88  
Bldg. No. 6B, Flat No. 141,  
14th Floor, Seva Samiti CHS Ltd,  
Sion Koliwada, Mumbai-400 037

**ARNOLD HOLDINGS LTD.**

CIN: L65993MH1981PLC282783

8-208, Ramji House, 30, Jambulwadi, J.S.S. Road, Mumbai-400 002 TEL: 022 22016640, E-Mail Id: [arnoldholding9@gmail.com](mailto:arnoldholding9@gmail.com) Website: [www.arnoldholdings.in](http://www.arnoldholdings.in)

**Extract of Unaudited Financial Result for the Quarter ended 30th June, 2021**

Amount in Lakh Except EPS

	QUARTER ENDED		YEAR ENDED	
	30/06/2021	31/03/2021	30/06/2020	31/03/2021
	(Unaudited)	(Audited)	(Unaudited)	(Audited)
Period (before Tax, ordinary items)	1948.090	1859.034	496.686	3733.106
Period before tax	47.110	-14.525	8.998	93.678
Extraordinary items)	47.110	-14.525	8.998	93.678
Period after tax	47.110	-39.110	8.998	69.094
Extraordinary items)	47.110	-39.110	8.998	69.094
ome for the period	47.110	-39.110	8.998	69.094
for the period (after tax)	47.110	-39.110	8.998	69.094
Income (after tax)]	47.110	-39.110	8.998	69.094
valuation Reserve) as shown in the Balance Sheet of the	3007.500	3007.500	3007.500	3007.500
Value of Rs. 10/- each)			2401.607	

**WEST LEISURE RESORTS LIMITED**

CIN: L55101MH2008PLC177941; Website: [www.westleisureresort.co.in](http://www.westleisureresort.co.in)  
Regd. Office : Office No. 802, Floor-8, Plot -213,  
Raheja Chambers, Free Press Journal Marg, Nariman Point, Mumbai - 400 021  
Tel. No.: 022-22837614 ; E-mail ID: [ho@hawcoindia.com](mailto:ho@hawcoindia.com)

**Statement of Unaudited Financial Results for the Quarter ended 30-06-2021**

Particulars	(₹ in Lacs)		
	Quarter ended	Year ended	
30/6/2021	30/6/2020	31/3/2021	
Total income from operations	8.15	9.50	39.76
Net Profit/ (Loss) for the period (before tax, Exceptional and/or Extraordinary items)	1.13	3.77	16.11
Net Profit/ (Loss) for the period before tax (after Exceptional and/or Extraordinary items)	1.13	3.77	16.11
Net Profit/ (Loss) for the period after tax (after Exceptional and/or Extraordinary items)	0.23	2.93	10.42
Total Comprehensive Income for the period [Comprising Profit/ (Loss) for the period (after tax) and other Comprehensive Income (after tax)]	25.15	21.44	(22.65)
Equity Share Capital	305.33	305.33	305.33
Reserves (excluding Revaluation Reserve) as shown in the Audited Balance Sheet of the previous year			1,635.49
Earnings Per Share (of ₹ 10 each) (for continuing and discontinued operations)	0.01	0.10	0.34
Basic & Diluted (in ₹)			

**Note:**

The above is an extract of the detailed format of Quarterly/Annual Financial Results filed with the Stock Exchange under Regulation 33 of SEBI (Listing and Other Disclosure Requirements) Regulations, 2015. Full format of the Financial Results are available on the Website [www.sebiindia.com](http://www.sebiindia.com)

**KALYAN DOMBIVLI MUNICIPAL CORPORATION, KALYAN**

**Tender Notice No. 10/1, 10/2, 11/1, 11/2, 12, 13, 14-2021-2022**

Kalyan Dombivli Municipal Corporation, Health Department, Kalyan, Hereby Invited online tender from the Manufactures, Reputed Std. Firms, Authorised Distributors for SITC of Medical Liquid Oxygen Tank - 41 to 50 & 51 to 60 KI & 5 to 10 KI, 11 to 15 KI, 16 to 20 KI Tanker, Install Dialysis Machnes, R.O. Plants, Supply Paediatric Ventilators, Medicines & Surgical Items for KDMC Hospital. (Tender notice No. 10/1 to 14/2020-21)

- All Tender forms are available on Website <http://mahatenders.gov.in/nicgep.app>
- Online Tender Sale from Dt. 12/08/2021 to 18/08/2021
- Last date of tender acceptance Dt. 18/08/2021 upto 2.00 p.m.
- If possible Tender forms will be opened on 20/08/2021 After 3.00 P.M.
- No Tender forms will be accepted by post/courier services.
- Hon. Commissioner, Kalyan Dombivli Municipal Corporation reserved the right to accept or reject tender without assigning any reasons thereof.
- Tender must be Upload on website <http://mahatenders.gov.in/nicgep.app>.
- Before submitting Tender register your firm & digital signature contact Helpline No. 18002337315.

KDMC/PRO/HQ/394

Dt. 11/08/21

**Sd/-**  
**I/c. Medical Officer of Health**  
**Kalyan Dombivli Municipal Corporation**  
**Kalyan**

**Bank of India**

*Relationship beyond banking...*

**Churchgate Branch**

Eros Theatre Building Jamsnedji Tata Road, Post Box No. 1276,  
Churchgate, Mumbai-400 020,  
Tel. No. 022-22884867, 22022561

**APPENDIX IV**

**SEE RULE [8 (I)]**

**POSSESSION NOTICE**

Whereas beforehand arrived to ascertain the above-mentioned

**Lab :**Survey No. 93/A, Conformity Hissa No.2 G.V.Brothers Bldg., Bata Compound, Khopat, Near Flower Valley, Thane (West) - 400 601, Maharashtra, India.  
**Tele :** +91 22 2547 49 07 / +91 22 2547 62 17 **Email :** lab@ultratech.in **Visit us at :** www.ultratech.in

## TEST REPORT

**ISSUED TO: M/S. LANDCARE REALITY LLP**

AT CTS NO.657, Survey No.17, Safed Pool, Andheri Kurla Road  
Village Mohili, L Ward, Mumbai, Maharashtra

**REPORT NO. :** UT/ELS/REPORT/C-101/12-2022

**ISSUE DATE :** 13/12/2022

**YOUR REF. :** Work Order Letter

**REF. DATE :** 14/10/2022

**SAMPLE PARTICULARS :**
**AMBIENT AIR QUALITY MONITORING**

<b>Sampling Plan Ref. No.:</b>	: C-11/11-2022	<b>Location Code :</b>	01
<b>Sampling Procedure</b>	: UT/LQMS/SOP/AA01A	<b>Sample Location :</b>	At Project Site
<b>Sample Registration Date</b>	: 05/11/2022		Co-ordinates: N19°5'50.67"; E72°53'3.07"
<b>Date of Sampling</b>	: 04/11/2022 to 05/11/2022		
<b>Time of Sampling</b>	: 09:30 Hrs. to 09:30 Hrs.		
<b>Analysis Starting Date</b>	: 05/11/2022	<b>Collected By</b>	ULTRA-TECH
<b>Analysis Completion Date</b>	: 08/11/2022	<b>Height of Sampler</b>	1.0 Meter
<b>Sample Lab Code</b>	: UT/ELS/C-088/11-2022	<b>Sampling Duration</b>	24 Hours
<b>Ambient Air Temperature</b>	: 24.1°C to 30.1°C	<b>Relative Humidity</b>	50.0 % to 62.0 %

Sr. No.	Test Parameter	Test Method	Test Result	Unit
1.	Sulphur Dioxide (SO <sub>2</sub> )	IS 5182 (Part 02) : 2001	13	µg/m <sup>3</sup>
2.	Oxides of Nitrogen (NO <sub>x</sub> )	IS 5182 (Part 06) : 2006	23	µg/m <sup>3</sup>
3.	Particulate Matter (PM <sub>10</sub> )	EPA/625/R-96/010a Method IO-2.1	77	µg/m <sup>3</sup>
4.	Particulate Matter (PM <sub>2.5</sub> )	IS 5182 (Part 24) : 2019	27	µg/m <sup>3</sup>
5.	Carbon Monoxide (CO) †	IS 5182 (Part 10) : 1999	1.3	mg/m <sup>3</sup>

†: Sampling Period 1 Hr.

**Remark/ Statement of Conformity:** The parameters tested above are found to be within 24 hourly TWA of National Ambient Air Quality Monitoring Standard (NAAQMS), Part III- Section IV. NAAQMS is provided as Annexure-I for your reference. (Turnover to find Annexure)

Sampling Equipment Details	Instrument Used	Make & Model	Calibration Status
	Respirable Dust Sampler	Make – Polltech; Model - PEM-RDS 8NL; Sr. No .3313	Valid up to – 03/10/2023
	Fine Dust Sampler	Make - Polltech; Model - PEM ADS 2.5/10µ; Sr. No. 18213	Valid up to – 05/01/2023

**Note:**

1. Samples were collected by following laboratory's SOP (UT/LQMS/SOP/AA01A) based on CPCB Guidelines - National Ambient Air Quality Monitoring Series: NAAQMS/2003-04 and respective test methods.
2. This test report refers only to the sample tested.
3. Monitoring area coming under Residential areas and observed values are relevant to sample collected only.
4. This test report may not be reproduced in part, without the permission of this laboratory.
5. Any correction invalidates this test report.
6. Weather was Sunny & Clear during sampling period.

**- END OF REPORT -**



For ULTRA-TECH,

Meghan Patil  
(Authorized Signatory)

## **ANNEXURE-I**

### **NATIONAL AMBIENT AIR QUALITY STANDARDS, PART III-SECTION IV**

**The Gazette of India with Effect from Wednesday, November 18, 2009/KARTIKA 27, 1931**

Sr. No.	Pollutants	Time Weighted Average	<i>National Ambient Air Quality Standards</i>	
			Industrial, Residential, Rural and Other Area	Ecological Sensitive Area (Notified by Central Government)
01.	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Annual* 24 Hours**	50 80	20 80
02.	Oxides of Nitrogen (NO <sub>x</sub> ), µg/m <sup>3</sup>	Annual* 24 Hours**	40 80	30 80
03	Particulate Matter (PM <sub>10</sub> ), µg/m <sup>3</sup>	Annual* 24 Hours**	60 100	60 100
04.	Particulate Matter (PM <sub>2.5</sub> ), µg/m <sup>3</sup>	Annual* 24 Hours**	40 60	40 60
05.	Carbon Monoxide (CO), mg/m <sup>3</sup>	08 Hours* 01 Hours**	02 04	02 04

\* Annual arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.

\*\* 24 hourly or 8 hourly or 1 hourly monitored values, as applicable, shall be complied with 98% of the time in a year. 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.

**NOTE:** Whenever and wherever monitoring results on two consecutive days of monitoring exceed the limits specified above for the respective category, it shall be considered adequate reason to institute regular or continuous monitoring and further

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## TEST REPORT

<b>ISSUED TO:</b> M/S. LANDCARE REALITY LLP	<b>REPORT NO.</b> : UT/ELS/REPORT/C-102/12-2022
AT CTS NO.657, Survey No.17, Safed Pool, Andheri Kurla Road	<b>ISSUE DATE</b> : 13/12/2022
Village Mohili, L Ward, Mumbai, Maharashtra	<b>YOUR REF.</b> : Work Order Letter
	<b>REF. DATE</b> : 14/10/2022

<b>SAMPLE PARTICULARS</b> :		<b>NOISE LEVEL QUALITY MONITORING</b>			
<b>Sampling Plan Ref. No.</b> :		<b>Sample Lab Code</b> : UT/ELS/C-089/11-2022			
<b>Date of Monitoring</b> :		<b>Survey Done By</b> : ULTRA-TECH			

<b>Sr. No.</b>	<b>Location</b>	<b>Noise Level Reading in dB(A)</b>			
		<b>Time (Hrs)</b>	<b>Day dB(A)</b>	<b>Time (Hrs)</b>	<b>Night dB(A)</b>
01.	At Project Site	10:00 to 10:05	54.4	22:00 to 22:05	44.3

**Opinions / Interpretations:** *The Noise Pollution (Regulation And Control) Rules, 2000: Is Provided as Annexure II for Your Reference. (Turnover to find Annexure).*

**Note:** 1. Monitoring area coming under Residential Area.  
2. Noise level monitored is an average for period as stated above, the permissible sound pressure level is to be determined with respect to the total time a workman is being exposed (continuously or a number of short term exposures per day) in Hrs.

<b>Sampling Equipment Details</b>	<b>Instrument Used</b>	<b>Make &amp; Model</b>	<b>Calibration Status</b>
	Sound Level Meter	Make - Casella; Model - CEL-633C; Sr. no. 2382959	Valid up to - 10/12/2022

**Note:** 1. This test report refers only to the monitoring conducted.  
2. This test report may not be reproduced in part, without the permission of this laboratory.  
3. Any correction invalidates this test report.

**- END OF REPORT -**



For ULTRA-TECH,

  
**Meghan Patil**  
**(Authorized Signatory)**

**ANNEXURE-II**  
**THE NOISE POLLUTION (REGULATION AND CONTROL) RULES, 2000**

(The Principal Rules were published in the Gazette of India, vide S.O. 123(E), dated 14.2.2000 and subsequently amended vide S.O. 1046(E), dated 22.11.2000, S.O. 1088(E), dated 11.10.2002, S.O. 1569 (E), dated 19.09.2006 and S.O. 50 (E) dated 11.01.2010 under the Environment (Protection) Act, 1986.)

• **SCHEDULE**

(See rule 3(1) and 4(1))

Ambient Air Quality Standards in respect of Noise

Area Code	Category of Area / Zone	Limits in dB(A) Leq	
		Day Time	Night Time
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40

Note:

1. Day time shall mean from 6.00 a.m. to 10.00 p.m.
2. Night time shall mean from 10.00 p.m. to 6.00 a.m.
3. Silence zone is an area comprising not less than 100 meters around hospitals, educational institutions, courts, religious places or any other area which is declared as such by the competent authority.
4. Mixed categories of areas may be declared as one of the four above mentioned categories by the competent authority.

\* dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.

A "decibel" is a unit in which noise is measured.

"A", in dB(A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.

Leq: It is energy mean of the noise level over a specified period.

• **CONSTRUCTION ACTIVITIES**

The maximum noise levels near the construction site should be limited to 75 dB(A) Leq(5 min.) in industrial areas and to 65 dB(A) Leq(5 min.) in other areas.

• **THE PERMISSIBLE LEVELS FOR NOISE EXPOSURE FOR WORK ZONE**

(The Model Rules Of The Factories Act, 1948)

Peak sound pressure level in dB	Permitted number of impulses or impact/day
140	100
135	315
130	1000
125	3160
120	10000

Notes:

1. No exposure in excess of 140 dB peak sound pressure level is permitted.
2. For any peak sound pressure level falling in between any figure and the next higher or lower figure as indicated in column 1, the permitted number of impulses or impacts per day is to be determined by extrapolation on a proportionate basis.

Total time exposure (continuous or a number of short term exposures per day) in Hrs	Sound Pressure Level in dB(A)
8	90
4	93
2	96
1	99
1/2	102
1/8	108
1/16	111
1/32 (2 minutes) or less	114

Notes:

1. No exposure in excess of 115 dB(A) is to be permitted.
2. For any period of exposure falling in between any figure and the next higher or lower figure as indicated in column 1, the permissible sound pressure level is to be determined by extrapolation on a proportionate basis.

## TEST REPORT

**ISSUED TO: M/S. LANDCARE REALITY LLP**

AT CTS NO.657, Survey No.17, Safed Pool, Andheri Kurla Road  
Village Mohili, L Ward, Mumbai, Maharashtra

**REPORT NO.** : UT/ELS/REPORT/C-103/12-2022

**ISSUE DATE** : 13/12/2022

**YOUR REF.** : Work Order Letter

**REF. DATE** : 14/10/2022

**SAMPLE PARTICULARS**

:

**SOIL QUALITY MONITORING**

**Sampling Plan Ref. No.** : C-11/11-2022  
**Sampling Procedure** : UT/LQMS/SOP/S01A  
**Sample Registration Date** : 05/11/2022  
**Date & Time of Sampling** : 04/11/2022 at 17:00Hrs.  
**Analysis Starting Date** : 05/11/2022  
**Analysis Completion Date** : 11/11/2022  
**Sample Collected By** : ULTRA TECH  
**Sample Lab Code** : UT/ELS/C-090/11-2022

**Sample Type** : Surface Soil (at 15cm depth)  
**Sample Location** : At Project Site

**Sample Quantity & Packing Details** : 1kg In Plastic Bag Contained in Zip Lock Bag

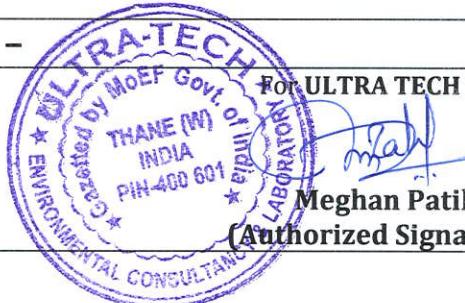
Sr. No.	Test Parameter	Test Methods	Test Result	Unit
1.	Moisture Content	IS:2720 (Part 2) : 1973	4.4	%
2.	Bulk Density	UT/LQMS/SOP/S03	1164	kg/m <sup>3</sup>
3.	Organic Matter	IS:2720 (Part 22) : 1972	0.9	%
4.	Total Organic Carbon	IS:2720 (Part 22) : 1972	0.5	%
5.	pH [1:2.5 Soil:Water Extract]	IS:2720 (Part 26) : 1987	7.9	-
6.	Conductivity(1:2soil:Water Extract)	IS:14767- 2000	0.511	mS/cm
7.	Sodium as Na (Water Extractable)	UT/LQMS/SOP/S19	74	mg/kg
8.	Magnesium as Mg (Water Extractable)	UT/LQMS/SOP/S22	79	mg/kg
9.	Chlorides as Cl <sup>-</sup> (Water Extractable)	UT/LQMS/SOP/S23	107	mg/kg
10.	Sulphate as SO <sub>4</sub> <sup>2-</sup> (Water Extractable)	UT/LQMS/SOP/S24	102	mg/kg
11.	Sodium Adsorption Ratio	UT/LQMS/SOP/S26	1.1	(meq/kg) <sup>1/2</sup>
12.	Cation Exchange Capacity	UT/LQMS/SOP/S18	24.3	meq/100g
13.	Water Holding Capacity	UT/LQMS/SOP/S12	54.2	%
14.	Available Boron as B (Available)	UT/LQMS/SOP/S27	0.7	mg/kg
15.	Phosphorous as P <sub>2</sub> O <sub>5</sub> (Available)	UT/LQMS/SOP/S28	54	kg/ha
16.	Potassium as K <sub>2</sub> O (Available)	UT/LQMS/SOP/S29	232	kg/ha
17.	Nitrogen as N (Available)	UT/LQMS/SOP/S30	185	Kg/ha
18.	Iron as Fe	UT/LQMS/SOP/S35&S37	69541	mg/kg
19.	Zinc as Zn	UT/LQMS/SOP/S35&S37	88	mg/kg

**Remark/ Statement of Conformity:** **NIL**

**Note:**

1. Samples were collected by following laboratory's SOP (UT/LQMS/SOP/S01A) based on Methods Manual: Soil Testing in India by DA&FW, MoA, GOI.
2. This test report refers only to the sample tested.
3. This test report may not be reproduced in part, without the permission of this laboratory.
4. Any correction invalidates this test report.

**- END OF REPORT -**



**Meghan Patil**  
**(Authorized Signatory)**

