GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY EIA-Goa State Secretariat.

1st Floor, Dempo Towers, Patto, Panaji, Goa – 403 001 Phone nos.: 2416561 Fax. no.: 2438528

e-mail: goaseac@gmail.com

No: 3 - 181 - 2010/STE-DIR/ 169

Date: 28/11/2019

To,

Joe Mathias,
Managing Director,
Mathias construction Pvt. Ltd,
Mathias House, Campal,
Panaji-Goa.403001

Sub: Prior environmental clearance for modification of the project "Ocean Park"-Residential Apartment and Commercial Shops project located at survey No.249/1-A,
Taleigao Plateau, Dona -Paula, Tiswadi Goa.

I am directed to refer to your application (i.e. Form-1, Form-1A) dated 26/12/2018 seeking prior Environmental Clearance (EC) as mandated in the EIA Notification, 2006 (as amended till date) for modification of the project "Ocean Park"-Residential Apartment and Commercial Shops project located at survey No.249/1-A, Taleigao Plateau, Dona -Paula, Tiswadi Goa. Accordingly, the above proposal has been appraised under '8(a) - B2 category': Building and construction project. Subsequently, the Goa State Expert Appraisal Committee (Goa-SEAC - hereinafter referred as 'Committee') conducted the site-inspection on 09/01/2019 and was followed by project-specific presentation by the NABET/QCIaccredited environmental consultant (Enviro Resources, Mumbai on behalf of project proponent) made the project-specific presentation during 102^{rid} Goa-SEAC meeting held on 25/02/2019. During said meeting the committee sought various compliances which were submitted by the project proponent on 01/04/2019. The Committee perused the said compliances during its 105th Goa-SEAC meeting held on 25/04/2019 and after detailed discussion and deliberation decided to recommend the said proposal to State Environment Impact Assessment Authority (Goa-SEIAA hereinafter referred as 'Authority') for grant of EC.

Project details and salient features of the proposed developmental activity, as submitted by the proponent, is as under –

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Sl. No.	Description	Details	
1.	Name & location of the project	MATHIAS OCEAN PARK M/S.MATHIAS CONSTRUCTIONS PVT LTD At Sy. No 249/1-A, Taleigao Plateau, Dona-Paula, Tiswadi Taluka, Goa	
2.	Plot Area	82,220 (20.3 Acres).	
3.	Net plot Area	82,220 (20.3 Acres).	
4.	FSI Area Non-FSI Area	C-1: 1.99 (permissible = 2.00) C-2: 1.49 (permissible = 1.50)	
	Total construction Area	Proposed - 31,858.73 Sq.m Total BUA - 64,348.38Sq.m	
	Building configuration & Height of the building	Zone C-1: Sector 4: B + Stilt /G + 8F Height 24m Sector HIC: G + 2 Floors Zone C-2: Sector -1: Stilt + 7 Floors Height 20.5m	
5.	No. of shops	7 Shops	
6.	Total water requirement(Construction/operation phase)	Construction - 22 KLD Operation- 319 (Fresh water + Recycling water)	
7.	Sewage generation	276 KLD	
8.	STP Capacity	1X105 KLD 1X175 KLD)	
9.	Total Solid Waste Quantities	661 Kg/day	
	RG Area	21,503.35 (26%)	
	No. of trees	Proposed - 190 Nos.	
	Energy Efficiency Parking 4 W	26.4% REQUIRED: 664 nos. PROVIDED: 677 nos.	
14.	Power requirement	2631 kVA	
	D.G set Capacity	2 X 320 KVA and 2X150 KVA	
	RWH tank capacity	90 cum	
	EMP cost (including DMP cost)	Capital cost - 115.00 Lakhs Operating cost - 22.00 Lakhs/A	
18.	No. of trees to be cut	10 Nos.	
19.	No. of tress to be planted on site	190 Nos. along with existing trees.	

The Authority during 48th meeting held on 14/06/2019 took note of the recommendation from the Goa-SEAC and all the compliances submitted by the project proponent. Accordingly, the authority decided to conduct a site visit of the proposed site to ascertain the status of proposed project on points like waste management including STP capacity, biodegradable waste proposed, proposed solar panels. Accordingly the Authority conducted site inspection on 13/09/2019 and sought above compliances, which were submitted by the project proponent on 24/09/2019. The said proposal was deliberated during 49th Goa-SEIAA meeting held on 21/11/2019 wherein the Authority after detailed discussion and deliberation decided to recommend the said proposal for grant of Environmental clearance EC under the provision of EIA Notification 2006 (as amended) with the condition that Project proponent must submit a concrete proposal for proposed CSR for Taleigao village.

- 1. Further Project proponent has to comply with following "General Conditions":-
 - PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal and treatment / air and water pollution / wastewater management.
 - ii. Water harvesting ought to be done by the project proponent to the extent of 90 KLD.
 - iii. The PP shall install bio methanation plant to tackle bio degradable waste generated at the site and the non biodegradable waste shall be placed in a transfer station to be constructed by the PP within the complex having separate containers for e waste glass waste plastic waste, robber waste.
 - iv. PP needs to ensure that no treated water or any waste sewage shall be discharged into any water body. E-waste shall be disposed through Authorised vendor as per E-waste (Management and Handling) Rules, 2011.
 - v. Project Proponent (PP) should necessarily make appropriate provision while constructing the roof-tops at the time of construction stage only to enable installation of solar panels towards south facing walls as and when made applicable in future.
 - vi. The Project Proponent shall utilize fly ash bricks in masonry works.
- vii. The PP shall use construction debris for land filling wherever applicable.
- viii. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.

- ix. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC. Outdoor and common area lighting shall be LED. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.
- x. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
- xi. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning, etc. shall be done.
- xii. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
- xiii. Solar based electric power shall be provided to each unit for at least two bulbs/light and one fan. As proposed, central lighting and street lighting shall also be based on solar power.
- xiv. The project proponent will provide landscape bed of 600mm wide X 600mm deep along the periphery of the plot to carry out plantation of trees. The treated water from the sewage treatment plant will be pumped through high flow drips on these beds to prevent outflow of treated sewage water outside the premises.
- xv. The project proponent will provide landscape bed of 600mm wide X 600mm deep along the periphery of the plot to carry out plantation of trees. The treated water from the sewage treatment plant will be pumped through high flow drips on these beds to prevent outflow of treated sewage water outside the premises.
- xvi. Areas which are marked as No Development Zone (NDZ) should be year marked on site and no construction shall be carried out in the said NDZ. Land Profile of NDZ shall not be altered.
- xvii. No construction shall be carried out in the property which is identified as private forest, if any.

- xviii. PP should obtain all the requisite permissions/NOCs/Licenses etc from all the competent authorities before commencement of any activity at site.
- 2. Further, the Authority has decided that PP needs to comply to the following "additional specific Conditions":
 - i. Sewage Treatment Plant (STP) contract should be for minimum period of 5 years with operation and maintenance contract after commissioning /completion of project.
 - ii. PP needs to ensure that no treated water or any waste sewage shall be discharged into any water body.
 - iii.E-waste shall be disposed through Authorised vendor as per E-waste (Management and Handling) Rules, 2011.
 - iv. Project Proponent (PP) should necessarily make appropriate provision while constructing the roof-tops at the time of construction stage only to enable installation of solar panels towards south facing walls as and when made applicable in future.
 - v. The Project Proponent shall utilise fly ash bricks in masonry works.
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- xiii. The project proponent will provide landscape bed of 600mm wide X 600mm deep along the periphery of the plot to carry out plantation of trees. The treated water from the sewage treatment plant will be pumped through high flow drips on these beds to prevent outflow of treated sewage water outside the premises.
 - xiv. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal and treatment / air and water pollution / waste-water management.
 - xv. PP needs to ensure that no treated water or any waste sewage shall be discharged into any water body.
 - xvi. E-waste shall be disposed through Authorised vendor as per E-waste (Management and Handling) Rules, 2011.
 - xvii. Project Proponent (PP) should necessarily make appropriate provision while constructing the roof-tops at the time of construction stage only to enable installation of solar panels towards south facing walls as and when made applicable in future.
 - xviii. The Project Proponent shall utilise fly ash bricks in masonry works.
 - xix. The PP shall use construction debris for land filling wherever applicable.
 - xx. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
 - Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC. Outdoor and common area lighting shall be LED. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.

- xxii. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
- **xxiii.** Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning, etc. shall be done.
- xxiv. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
- xxv. Solar based electric power shall be provided to each unit for at least two bulbs/light and one fan. As proposed, central lighting and street lighting shall also be based on solar power.
- xxvi. The project proponent will provide landscape bed of 600mm wide X 600mm deep along the periphery of the plot to carry out plantation of trees. The treated water from the sewage treatment plant will be pumped through high flow drips on these beds to prevent outflow of treated sewage water outside the premises.
- **xxvii.** PP shall make provision for charging points for electronic vehicles in the parking Area.

3. Project Proponent should implement Dust mitigation measures for construction activities such as:

- a. Roads leading to or at construction sites must be paved and blacktopped (i.e. metallic roads).
- b. No excavation of soil shall be carried out without adequate dust mitigation measures in place.
- c. No loose soil or sand or Construction & Demolition Waste or any other construction material that causes dust shall be left uncovered.
- d. Wind-breaker of appropriate height i.e. 1/3rd of the building height and maximum up to 10 meters shall be provided.
- e. Water sprinkling system shall be put in place.
- f. Dust mitigation measures shall be displayed prominently at the construction site for easy public viewing.
- g. New serial number '107' has been inserted which relates to Mandatory Implementation of Dust Mitigation Measures for all Construction and Demolition Activities:

- h. Grinding and cutting of building materials in open area shall be prohibited.
- Construction material and waste should be stored only within earmarked area and road side storage of construction material and waste shall be prohibited.
- No uncovered vehicles carrying construction material and waste shall be permitted.
- k. Construction and Demolition Waste processing and disposal site shall be identified and required dust mitigation measures be notified at the site

Further, progress will be reviewed after six months (minimum 3 times in a year) depending upon progress of the work. Further, the compliance to these conditions as and when submitted by PP will be verified /ascertained by the authority to propose additional conditions if any.

- 4. Further, the Authority has decided that PP needs to comply to the following "General Conditions":
 - a. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
 - b. Solar power generation Every major consumer of conventional power will have to generate and opt for certain percentage of power generation from the non-conventional sources. In this context, Project Proponent (PP) should necessarily make appropriate provision while constructing the roof-tops at the time of construction stage only to enable installation of solar panels as and when made applicable in future. In addition, south-facing walls to be utilized to install solar panels to harness optimum solar energy. Use of solar panels may be done to the extent possible like installing solar street lights, common solar water heater system. PP should install, after checking feasibility, solar-plus-hybrid non-conventional source as source of energy.
 - c. PP should adopt roof-top rainwater harvesting / conservation measures to optimally utilize the water availability by constructing sumps for collection of rainwater as per the site-specific location details provided.
 - d. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal and treatment / air and water pollution / wastewater management.

- e. PP should not disturb the natural drainage and as far as possible and maintain the original topography while designing for landscape development by planting local plant species and which are not alien to the prevailing environment.
- f. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization / zoning.
- g. PP should submit half-yearly compliance report(s) in hard as well as soft copy format to the Authority for the period upto project completion.
- h. This environmental clearance is issued subject to land use verification. Local authority / planning authority should ensure this with respect to Rules, Regulations, Notifications, Government Resolutions, Circulars, etc. issued if any, from time to time. Judgements / Orders issued by Hon'ble High Court, NGT, Supreme Court regarding DCR provisions, environmental issues applicable in this matter should be verified by the competent authorities.
- i. PP should ensure and ascertain that 'civil plans' which were submitted to the Committee/ Authority during the process of project appraisal be submitted to other line Departments / agencies concerned while seeking NOC / Consents/ Permissions, as applicable. If any discrepancy is found in the plans submitted or details provided may be reported to this Authority. This environmental clearance is issued with respect to the environmental considerations and it does not mean that Goa-SEIAA approved the proposed land.
- j. PP needs to ensure that no treated water or any waste sewage shall be discharged into any water body. STP of suitable capacity shall be installed considering the quantity / quality of waste water generation.
- k. E-waste if any shall be disposed through Authorised vendor as per E-waste (Management & Transboundary Movement) Rules, 2016.
- 1. This environmental clearance is issued subject to obtaining NOC from the Forestry & Wildlife angle including clearance from the Standing Committee of the National Board for wildlife, if applicable. The grant of environmental clearance does not necessarily imply that Forestry & Wildlife clearance has been granted to the project, which has to be dealt separately by the competent authorities in accordance with law.

- m. The height, construction gross built up area of proposed construction is 64,348.38 Sq.mts shall be in accordance with the existing FSI/ FAR norms of the local body and planning authorities and it should ensure the same along with survey number before approving layout plan and 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.
- n. All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.

5. Further, the PP is required to comply with the following "General Conditions" during construction phase.-

- a. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the Authority within 30 days of starting construction work at site.
- b. Permission to draw groundwater, as applicable, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) government of Goa.
- c. Project proponent shall not make any change in the Surface Layout Plan / Civil Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project proponent need to inform this Authority.
- d. Project proponent shall make suitable provisions for sewage / wastewater disposal and storm water release independently.
- e. The diesel generator sets (D.G. set) to be used during construction / after commissioning should be low-sulphur diesel type and should conform to Environment (*Protection*) Rules prescribed for air and noise emission standards as laid down by the Goa State Pollution Control Board (GSPCB).
- f. The installation of the Sewage Treatment Plant (STP) if any should be certified by the GSPCB and a report in this regard should be submitted to the Authority before the STP is commissioned.
- g. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche and first aid room etc.

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- h. 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 waste water and solid waste generated during the construction phase should be ensured.
- i. The solid waste generated should be properly segregated. Dry /inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.
- j. Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved site with the approval of competent authority.
- k. Arrangements shall be made that waste water and storm water do not get mixed.
- 1. All the top soil excavated during construction activities should be stored if or use in horticulture/landscape development within the project site.
- m. 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.
- n. Green-belt development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the State Forest / Agriculture Department.
- o. 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.
- p. Construction spoils, including bituminous material and other hazardous materials must not be allowed to contaminate water courses and the dump sites for such materials must be secured so that they should not leach into ground water.
- q. Any hazardous waste generated during construction phase should be disposed off as per applicable rules and norms with necessary authorisation of the GSPCB.
- r. The diesel requires for operating DG sets shall be stored in underground tanks and if required, Clearance from concerned authority shall be taken.
- s. 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

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applicable air and noise emission standard and should be operated during non-peak hrs.

- t. Ambient noise levels should conform to residential standards both during day and night. Incremental pollution load 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 construction phase, so as to conform to the stipulated standard by CPCB/ GSPCB.
- u. The approval of competent authority shall be obtained for structural safety of the buildings due to any possible earthquakes, adequacy of fire fighting equipments etc. as per National Building Code (NBC) including measures from lighting.
- v. Storm water controlled and its re-use as per Central Ground Water Board (CGWB) and Bureau of Indian Standards (BIS) for various applications.
- w. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- x. The groundwater level and its quality should be monitored regularly in consultation with ground water authority of the Water Resources Department (WRD), Government of Goa.
- y. 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 GSPCB before the project is commissioned for operation. Treated effluent released from STP shall be recycled / refused to the maximum extent possible. Discharge of this unused treated effluent, if any should be discharged in the sewer line. Treatment of 100% grey water through the centralised treatment should be done. Necessary measures should be adopted to mitigate the odour problem from STP.
- z. Use of glass may be reduced upto 40% to reduce electricity consumption and load on air-conditioning. If necessary, use high quality double glass with special reflective coating in windows.
- aa. Roof should meet prescriptive requirement as per energy conservation building code by using appropriate thermal insulation material.
- bb. Energy conservation measures like installation of LEDs' 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 of CFLs / TFLs, if any, should be properly collected and disposed off / sent for recycling as per the prevailing guidelines / rules of the regulatory authority to avoid mercury contamination.

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- cc. 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 combine capacity of all proposed DG sets.
- dd. 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.
- ee. Traffic congestions near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalised and no public place should be utilised.
- ff. opaque wall should meet prescriptive requirement as per energy conservation board which is proposed to mandatory for all air conditioned spaces while it is aspiration for non- air conditioned spaces by use of appropriate thermal insulation material to fulfil requirement.
- gg. The buildings should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.
- hh. Regular supervision of the above and other measures for monitoring should be in placed all through the construction phase, so as to avoid disturbance to the surroundings.
- Under the provisions of Environment Protection Act 1986, legal action shall be initiated against the PP if it was found that construction of the project has been started without obtaining EC.
- jj. Six monthly compliance reports should be submitted to the MOEF with copy to the Goa-SEIAA and GSPCB.
- 6. Further, the Authority decided to direct the PP to comply with the following "General Conditions" during post-construction phase:
 - a. PP shall ensure completion of STP, MSW disposal facility, green belt development prior to occupation of the buildings. The PP to explore possibility of utilising excess treated water in the adjacent area for gardening before discharging into sewer line. No physical occupation of allotment will be given unless all above said environmental infra structure is installed and made functional including water requirement prior certification from appropriate authority shall be obtained.

- b. Wet garbage should be treated by organic waste convertor and treated waste (manure) should be utilise in the existing premises foe gardening. And no wet garbage will be disposed outside the premises. Local authority should ensure compliance to this.
- c. A complete set of all the documents submitted to Goa-SEIAA should be forwarded local authority, GSPCB and Planning authority.
- d. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by the Goa-SEIAA.
- e. Separate funds shall be allocated for implementation of environmental protection measures /EMP along with item wise breaks-up. The funds earmarked for the environment protection measures shall not be diverted for other purposes.
- f. A copy of the environmental clearance letter shall be sent by PP to the concerned Village Panchayat and planning authority as applicable, from which suggestions / representation, if any, were received while processing the proposal. The EC letter shall also be put on the company's website by PP within one week time period from date of issue of environmental clearance.
- g. The PP shall upload the status of the compliance of the stipulated EC conditions, including results of monitoring data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MoEF & CC, the respective Zonal office, CPCB and the GSPCB. The pollutant levels in respect of SPM, RSPM, SO₂ and NO_X (ambient levels as well as D.G. stack emissions) shall be monitored.
- h. The environmental statement for each financial year ending 31st March in Form V is to be submitted to the GSPCB as prescribed under the Environment (*Protection*) Rules 1986 (as amended) and subsequently shall also be put on the company's website along with the status of the compliance of the EC conditions and shall also be sent to the respective Regional Office of the MoEF & CC.
- i. Consent to Operate shall be obtained from GSPCB before operation, failing which the Environmental Clearance herein shall be deemed to be withdrawn.
- j. Sewage Treatment Plant (STP) shall be installed at site. The STP should be certified by an independent expert and adequacy report in this regard should

be submitted to GSPCB before the project is commissioned for operation. Necessary measures should be made to mitigate the odour problem from STP.

- k. The solid waste (dry as well as wet garbage) generated should be properly collected and segregated. Organic Waste Converter shall be installed by RWA for the treatment of biodegradable (wet) garbage generated within the housing complex. Non-Biodegradable waste should be outsourced properly after recovery of recyclable material. Adequate measures should be taken to prevent odour problem.
- Utilization of Diesel power generating sets is subject to power failure condition only. The DG sets proposed as a source of power back up during operation phase should be of enclosed type, low sulphur diesel run and conform to rules made under the Environment (Protection) Act, 1986. The DG sets should be subjected to periodic noise and stack monitoring in consultation with GSPCB. Waste/used diesel should be stored and managed as per the Hazardous and other Wastes (Management & Transboundary Movement) Rules, 2016 as amended.
- m. Noise should be controlled to ensure that it does not exceed the prescribed standards both during day & night time.
- n. The ground water drawl from existing/proposed bore wells if any should be done only with the prior permission of Ground Water Board. The ground water level and its quality should also be monitored regularly both during construction and operation phase in consultation with Ground Water Board.
- o. Traffic congestion near the entry and exit points from the roads adjoining the project site must be avoided. Parking should be fully internalized and no public space should be utilized.
- p. Energy Conservation measures such as solar lighting for common area, solar water heating system, CFLs/TFLs for lighting of areas, LED lights for signage, solar inverters on the etc should be adopted.
- q. Used CFLs/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.
- r. A Report on energy conservation measures conforming to energy conservation norms finalized by Bureau of energy Efficiency should be prepared incorporating details about building materials and technology, R & U factors

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etc and submit to the State Expert Appraisal Committee and a copy to GSPCB in three months time.

- 7. Further this EC is issued without prejudice to the action initiated in the Environment (Protection) Act or any court case pending in the court of law. As such, it does not mean that the PP has not violated any environmental laws in the past and whatever decision under the said Act by the Hon'ble Court will be binding on the PP. Hence, this environmental clearance does not give immunity to the PP in the case complaint is filed against, if any, or action initiated under the said Act.
- 8. In case of submission of false document and non-compliance to any of the stipulated conditions, this Authority will revoke or suspend the EC without any intimation and initiate appropriate legal action under the Environment (*Protection*) Act, 1986 (as amended till date).
- 9. E-waste generated in the complex should be managed as per CPCB guidelines on E-waste management.
- 10. The Goa-SEIAA reserves their right to add any stringent condition or to revoke the environmental clearance, if conditions stipulated above are not implemented to the satisfaction of the Authority or for that matter, for any other administrative reasons.
- 11. In addition, the following conditions shall be specifically complied with:
 - Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani or Marathi language within <u>seven days</u> of receipt of this communication, informing that the proposed project has been accorded prior Environmental Clearance (EC) and the copies of the clearance letter will be available on the PP website.
 - 2. Validity of the Environmental Clearance (EC) accorded shall be for a period of 07 (seven) years from the date of its issue.
 - 3. These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006.
 - 4. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by State Environment Impact Assessment Authority.

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- Status of compliance to the various stipulated environmental conditions and environmental safeguards will be uploaded by the project proponent in its website.
- Any appeal against this prior environmental clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (Central Act 19 of 2010).

Yours faithfully,

(Johnson Fernandes)

Director Environment & Member Secretary, Goa-SEIAA

Copy for favour of information to:

- 1. Shri. Vivekanand L. Sawkar, (Chairman, Goa-SEIAA), F-2 Soarcs Enclave, Near Basilo's Health Club, St. Inez, Panaji, Goa.
- 2. Prof. Suhas Godse, (Chairman, Goa-SEAC), H. No. 5258, Faket, Nr. Pandurang Temple, Opp. Workshop Taleigao, Goa
- 3. P. A. to Principal Secretary (Environment), Secretariat, Porvorim, Goa.
- 4. P. S. to Additional Secretary, Ministry of Environment & Forests (MoEF), Paryavaran Bhavan, C.G.O. Complex, Lodhi Road, New Delhi 110 510.
- Addl. Director General (C), Ministry of Environment & Forests (MoEF), Regional office (Southern Zone), Kendriya Sadan, IV floor, E & F Wings, 17th main road, 11nd Block, Koramangala, Bengaluru-560034.
- 6. Member Secretary, Goa State Pollution Control Board (GSPCB), Opp Saligao Seminary, Saligao, Bardez, Goa.
- 7. The Collector & District Magistrate, (North), Office of the Collector (North), Panaji-Goa.

GREATER PANAJI PLANNING AND DEVELOPMENT AUTHORITY

Archidiocese Bldg., 1st Floor, Mala Link Road, Panaji Goa - 403001.

Ref: GPPDA/134/TAL/ 82\ /2018

Date:

19 7 OCT 2018

ORDER

(Development Permission under Section 44 of the Town & Country Planning Act, 1974)

Whereas application has been made by **Joe Mathias, Mathias Construction Pvt. Ltd,** for development permission in accordance with the provision of Section 44 of the Goa Town & Country Planning Act, 1974, for **Proposed Construction of Group Housing Scheme** with respect to his land zoned as **Commercial C-1 Zone** in O.D.P and situated at **Dona Paula, Taleigao** village bearing Survey No. **249/1** approved sub-division reference number - - - - dated - - - - -

And whereas Development charges affixed at ₹ 748805/- and Infrastructure Tax at

₹ 34661448/- vide Challan No. 125 dated 22/06/2010 & Rs. 1,90,82,478/- vide Challan No. P-55 dated 04/09/2013 have been paid earlier.

The Planning and Development Authority has granted permission to carry out the development in respect of the property above mentioned subject to the terms and conditions hereinafter stipulated upon receipt of the development charges levied for the said development. The terms and conditions upon which the permission has been granted by the Authority are the following:

- 1) Construction shall be strictly as per the approved plans. No changes shall be effected in the approved plans/approved built spaces without the prior permission of this Authority.
- 2) The permission granted shall be revoked, if any information, plans, calculations, documents and any other accompaniments of the application are found incorrect or wrong at any stage after the grant of the permission and the applicant will not be entitled for any compensation.
- 3) The permission shall be revoked if found expedient to such an action under the provision of Section 50 of the Goa Town & Country Planning Act, 1974.
- 4) The Development Permission will not entitle the applicant for making/laying any claim on water and any other connection from the Government of Goa.
- 5) The Developer/applicant should display a signboard of minimum size 1.00 mts. x 0.50 mts. with writing in black colour on white background at the site, as required under the regulations.
- 6) The applicant shall obtain Conversion Sanad under the Goa Land Revenue Code, 1968 before the commencement of development/construction as per the permission granted by this order.
- 7) The soak pit shall not be located within a distance of 15.00 mts. from any other well in the plot area/plan.
- 8) The commencement and the completion of the work shall be notified to the Authority in writing in the appropriate forms.
- 9) Completion Certificate has to be obtained from this Authority before applying for Occupancy Certificate from the Licencing Authority.
- 10) Storm water drain should be constructed along the boundary of the affected plot abutting to the road.
- 11) Adequate Utility space for the dustbin, transformer, etc. should be reserved within the plot area. In case of any cutting of sloppy land of filling of low-lying land, beyond permissible limits, prior permission of the Chief Town Planner shall be obtained before the commencement of the works as per the provision of Section 17(A) of the Goa Town & Country Planning Act, 1974.
- 12) In Case of compound wall, the gates shall open inwards only and traditional access, if any passing through the property shall not be blocked.
- 13) The ownership of the property shall be verified by the licensing body before the issuing of the licence.

- 14) Parking area should be developed as per the specification of P.W.D.
- 15) This Development Permission shall not in any way construed to be a document conforming any or all the following:
 - a) Title or interest of the holder of the permission to the relevant land or building or both.
 - b) Boundaries of the relevant site for which permission has been obtained; or
 - c) Any easement thereon or therefrom.
- 16) The construction shall be strictly as per the provision of Goa Land Development and Building Construction Regulations 2010.

This permission is issued with reference to the application dated **08.08.2018** under Section 44 of Goa Town & Country Planning Act, 1974, from **Joe Mathias, Mathias Construction Pvt. Ltd.**

This Permission is valid for three years from the date of issue of construction licence, provided the construction licence is issued within the period of three years.

WANNA!

(R. K. PANDITA) MEMBER SECRETARY

To,
Joe Mathias,
Mathias Construction Pvt.Ltd,
"MATHIAS HOUSE"
H.No. 156/13,
Opposite to Luis Gomes Garden,
Campal, Panaji-Goa

Copy to:

/v

1) The Secretary, Village Panchayat, Taleigao- Goa 403002 *

* Not to issue Occupancy Certificate without submitting Completion Certificate from Greater Panaji Planning and Development Authority.



Government of Goa **Directorate of Fire & Emergency Services**

St. Inez, Panaji,

Goa - 403 001 - India

File No.: DFES/FP/HB/19-20/ 5-/

Date: 12.04.2019.

SECTOR

Sub:- Uses of places and trades for purpose involving risk from fires. Regarding issue of Initial No Objection Certificate for the proposed Residential cum Commercial Building "Mathias Ocean Park" for M/s. Mathias Constructions Pvt. Ltd., situated on Survey No. 249/1-A of Village Taleigao, Dona - Paula, Goa.

Ref:- 1) Your letter No. Nil, dated; 26.11.2018.

- 2) This office letter No.DFES/FP/C-1/3/18-19/575/4098, dt; 07.01.2019.
- 3) This office letter No.DFES/FP/HB/18-19/724, dated; 20.02.2019.
- 4) Your undertaking dated; 08.04.2019.

With reference to the above, this office has no objection to the said proposal for the construction of the proposed Residential cum Commercial Building subject to compliance of the conditions as agreed by you vide undertaking dated; 08.04.2019.

The No Objection given is specific to the plan submitted to this department. Any changes other than as per the plans submitted and the recommendation given by this office, will need prior approval of this Directorate.

The Final No Objection Certificate be obtained from this office on satisfactory compliance of fire safety requirements as stipulated in the Annexure on completion of the building before it is occupied.

FIRE & EMERGENCY SERVICES

Encl:- Annexure "A", "B" & "C"

To,

Shri Joe Mathias. Managing Director, M/s. Mathias Construction Pvt. Ltd., Mathias House, Campal, Panaji, Goa.

Phone Nos.: +91 (832) 2225500 / 2425101 Directorate of Fire & Emergency Services

Fax No.: +91 (832) 2226100 www.dfes.goa.gov.in Email:dir-fire.goa@nic.in

ANNEXURE "A"

- I. <u>APPROACH FOR FIRE APPLIANCE:</u> Adequate passage way clearance required for the fire fighting vehicles to enter the premises shall be provided at the main entrance, the width of such entrance shall not be less than 4.5 mtrs. If an arch or covered gate is constructed it shall have a clear head room of not less than 5 mtrs.
- II. SET BACKS: The Front, Side and Rear Setbacks shall be as per requirements of Clause 4.4 of The Goa Land Development and Building Construction Regulations, 2010. The compulsory open space around the building shall not be used for parking. The setbacks shall be free from obstructions for manoeuvreing the Fire Fighting Vehicles.

III. EXIT STAIRCASES:-

- a) The Buildings Tower 1, 2 & 3 shall be provided with Exit Staircase of Dog leg type with adequate landing on every floor in addition to the normal staircase as shown in the approved Architectural Plan No.GPPDA/134/TAL/821/2018 dated; 17.10.2018.
- b) The Exit Staircases in the Fire Tower as indicated in the Architectural Plan submitted to this office shall be as per requirements of Clause 4.4.2.4.3, Sub Clause 4.4.2.4.3.2 of National Building Code of India, Part 4, Fire & Life Safety, 2016.
 - i) The Exit Staircase shall be constructed of non-combustible material and the doorway leading to it shall have Fire Resistant Door (FRD) with Panic Bar of 2 hours fire resistance to prevent spread of fire and smoke. The Exit Staircase shall terminate on the Ground Floor.
 - ii) The Exit Staircases shall be placed remote from each other and shall be arranged to provide direct access in separate directions from any floor
 - iii) The Exit Staircase shall have flight not less than 125 cms. wide with 25 cms. Treads and Risers not more than 19 cms. and should be limited to 12 per flight.
 - iv) The floor indication board of size not less than 300 mm x 200 mm, indicating the location/ designated number of staircase, respective floor number and direction to exit discharge shall be placed inside the staircase, on the wall nearest to the fire door. Individual floors shall be prominently indicated on the wall outside the staircase and facing it.



IV. LIFTS:-

- a) The lifts in the buildings **Tower 1, 2 & 3** shall be provided with a minimum capacity for **Eight (8) Passengers** fully automated with emergency Switch on ground level and shall be equipped with inter communication equipments.
- b) Wall enclosing lift shall have fire resistance of not less than 2 hours.
- c) Shaft shall have permanent vents of not less than 0.2 sq. mtrs. in clear area immediately under machine room.
- d) Landing doors and lift car doors of the <u>lift shall be of steel shutters of fire</u>

 resistance of one hour. No collapsible shutters / gates shall be permitted.
- e) Grounding switch(es), at ground floor level, shall be provided on all the lifts to enable the fire service to ground the lifts. In case of emergencies the lift should cease at the ground floor.
- f) A sign shall be posted and maintained on every floor at or near the lift indicating that 'In case of fire, occupants shall use the stairs'.
- g) All the requirements of the Lifts shall comply with Part 8 'Building Services, Section 5 Installation of Lifts, Escalator and Moving Walks, Subsection 5A Lifts of National Building Code of India, 2016, Fire & Life Safety (Part-4).
- h) The Exit Staircases and Lift Lobby's in the Fire Tower of Tower 1, 2 & 3 shall be pressurized on all floors to prevent ingress of Smoke or Toxic gases. The same shall conform to the requirements of 4.4.2.5 of National Building Code of India 2016, Fire & Life Safety (Part-4). The drawings of the pressurization of the Fire Towers shall be submitted to this office for approval before issue of Initial No Objection Certificate.

V. <u>ELECTRICAL CABLE SHAFT AND ELECTRICAL METER ROOM:</u>

- a) The Electrical cable shafts shall be exclusively used for electrical cables and should not open in the staircase enclosures.
- b) The Inspection doors for the shaft if provided shall have two hours fire resistance.
- c) The Electrical shaft shall be sealed at each floor level with non-combustible material having fire resistance rating of not less than 1 hour.
- d) The Opening in walls or floors which are provided for the passage of all building services like cables, electrical wiring etc. shall be protected by enclosures in the form of Duct/Shaft with fire resistance of not less than 2 hours. The door of the Shaft shall be of 2 hours fire rating.



- e) The Electrical meter rooms shall be provided at ground floor level and they shall be adequately ventilated.
- f) The electrical installation should conform BIS:1646:1997 Code of Practice for Fire Safety of Buildings (General) Electrical Installation.
- VI. <u>FLAT ENTRANCE</u>:- The flat entrance and other Doors shall be of solid core with fire resistance of not less than half hour (solid wood of 35 mm Shutter) finished thickness and the same shall be of self closing type.
- VII. MECHANICAL EXTRACTORS FOR SMOKE VENTING:-Mechanical Extractors for Smoke Venting System shall be installed in the entire Basement connecting Tower 1, 2 & 3 coupled to the Fire Alarm System/ Sprinkler System and the same shall conform to the requirements of Clause 4.6.1 of National Building Code of India, 2016, Fire & Life Safety (Part 4).
- VIII. <u>SERVICE DUCTS AND SHAFTS</u>: All Openings in Separating Walls and Floors in **Tower 1, 2 & 3** shall conform to the requirements of Clause 3.4.5.4 & 3.4.5.6 of National Building Code of India, 2016, Fire & Life Safety (Part-4).
- IX. <u>ESCAPE ROUTE LIGHTING</u>:- Escape route lighting and Illumination of Means of Exit (Staircase and Corridor light) in the buildings Tower 1, 2 & 3 shall be as per Clause 3.4.7 to 3.4.7.2 of National Building Code of India 2016, Fire & Life Safety (Part-4). The exit arrangements shall comply with IS:1644/1989 code of practice for safety of Building (General).
- X. <u>LIGHTNING PROTECTION OF BUILDING</u>: The buildings Tower 1, 2 & 3 shall be protected from lightning as per Clause 11 of Part 8 'Building Services', Section 2 'Electrical and Allied Installations' of National Building Code of India 2016, Fire & Life Safety (Part-4) and same shall conform to IS: 2309/1989.
- XI. FIRE FIGHTING REQUIREMENTS:- The Fire Protection Measures shall be provided in the buildings Tower 1, 2 & 3 as incorporated in the Fire Fighting drawings No. PDP-FF-SCH-0501, PDP-FP-PLN-0502, PDP-FP-PLN-0503, PDP-FP-PLN-0504, PDP-FP-PLN-0505, PDP-FP-PLN-0506, PDP-FP-PLN-0507, PDP-FP-PLN-0508, PDP-FP-PLN-0509, PDP-FP-PLN-0510 and PDP-FP-PLN-0511 and submitted to this office vide your letter dated; 26.11.2018.



- a) <u>UNDERGROUND STATIC WATER STORAGE TANK:-</u> A RCC Underground Static Water Storage tank of 2,00,000 liters capacity shall be provided at ground level at the location marked on the plan as per design specified in the rules with baffled wall as per fire fighting drawing No.PDP-FP-SCH-0501 and PDP-FP-PLN-0502.
- b) OVERHEAD (TERRACE WATER STORAGE TANK):- A RCC tank of 10,000 liters capacity shall be provided on top of the terrace level of each Building wing exclusively for fire fighting. The tank shall be connected to the Wet Riser cum Down Comer all through by a non-return valve and a gate valve as per fire fighting drawing No.PDP-FP-SCH-0501.
- c) WET RISER CUM DOWN COMER: 04 Nos. Wet Riser cum Down Comer of internal diameter of 10 cms. of GI 'C' class pipe shall be provided in the duct in the Buildings Tower 1, 2 & 3 with landing valve on each floor alongwith Hose Boxes and 2 Nos. of Elastomeric coated Delivery Hoses of 70 mm diameter having a length of 15 mtrs. each with Hand Controlled Branch Pipe and Hose Reel Hose of 30 mts length conforming to type 'A' 884-1985 on each floor in such a way as not to reduce the width of the corridor and no part of the floor is more than 6 mtrs. away from the nozzle when fully extended as per fire fighting drawing No. PDP-FF-SCH-0501, PDP-FP-PLN-0502, PDP-FP-PLN-0503, PDP-FP-PLN-0504, PDP-FP-PLN-0505, PDP-FP-PLN-0506, PDP-FP-PLN-0507, PDP-FP-PLN-0508, PDP-FP-PLN-0509, PDP-FP-PLN-0511.
- d) <u>COURTYARD HYDRANT</u>:- Courtyard Hydrants shall be located in the courtyard of the premises with a minimum size of the main being not less than 100 mm. which shall be pillar post type with 63 mm single outlet conforming to BIS:908 as per fire fighting drawing No.PDP-FP-SCH-0501 and PDP-FP-PLN-0502.
- e) <u>FIRE SERVICE INLET CONNECTION</u>:- 02 Nos. Four way Fire Service Inlet Connection of 63 mm diameter standard coupling shall be provided at the ground floor in the premises to connect the mobile pump of the fire service to the Wet Riser cum Down Comer as per fire fighting drawing No. PDP-FP-SCH-0501 and PDP-FP-PLN-0502.



f) <u>SPRINKLER SYSTEM</u>: Automatic Sprinkler System confirming to Bureau of Indian Standard should be installed in the Car Parking Area in entire Basement & Stilt floor, Shops on the Ground floor, Restaurant on the Fourth and Fifth floor and Club House on the Seventh floor of the building as per fire fighting drawing No.PDP-FP-SCH-0501, PDP-FP-PLN-0502, PDP-FP-PLN-0503, PDP-FP-PLN-0504, PDP-FP-PLN-0505, PDP-FP-PLN-0508, PDP-FP-PLN-0509 and PDP-FP-PLN-0511.

g) **FIRE PUMP**:-

- i) The Wet Riser cum Down Comer shall be connected to a electric fire pump capable of delivery 2280 LPM of water at ground level at a pressure of not less than 3.5 Kg/cm. at the topmost hydrant.
- ii) Another Electric Pump of capacity 180 LPM shall be provided as Jockey Pump iii) Another Electric pump of capacity 2280 LPM shall be provided as Sprinkler pump iv) The Electric supply to these pumps shall be on independent circuit.
- v) A stand-by diesel operated pump of equal capacity as that of (i) above shall be provided and the same shall be connected to the Wet Riser cum Down Comer.
- vi) The Fire Fighting Pump House shall confirm to the requirement of Clause 5.1.2.2 of National Building Code of India 2016, Fire & Life Safety (Part-4).

h) FIRE DETECTION AND ALARM SYSTEM:-

- i) MANUALLY OPERATED ELECTRIC FIRE ALARM SYSTEM: The buildings Tower 1, 2 & 3 shall be provided with the above system conforming to BIS:2189/1999 with the main control panel at ground floor and pill boxes, hooters at each side of the upper floors. The Layout shall be in accordance with Indian Standard Specification as per fire fighting drawing No.PDP-FF-SCH-0501, PDP-FP-PLN-0502, PDP-FP-PLN-0503, PDP-FP-PLN-0504, PDP-FP-PLN-0505, PDP-FP-PLN-0506, PDP-FP-PLN-0507, PDP-FP-PLN-0508, PDP-FP-PLN-0509, PDP-FP-PLN-0510 and PDP-FP-PLN-0511.
- ii) SMOKE DETECTORS: Smoke Detectors of Optical type as per Indian Standard Specification should be installed in the Shops on the Ground floor, Restaurant on the Fourth & Fifth floor and Club House on the Seventh floor of the building as per fire fighting drawing No.PDP-FP-PLN-0501, PDP-FP-PLN-0505, PDP-FP-PLN-0508, PDP-FP-PLN-0509 and PDP-FP-PLN-0511.



iii) <u>HEAT DETECTORS:</u> Rate of Rise type Heat Detectors as per Indian Standard Specification should be provided in the Kitchen on the Fifth floor of the building as per fire fighting drawing No.PDP-FP-PLN-0509.

The entire building shall be provided with Analogue addressable type Automatic Fire Alarm system conforming to BIS:2189/1999.

Visual Warning Arrangement through Visual Strobes/Beacons shall be installed in the building to ensure visual as well as alarm for persons with hearing impairment.

- i) <u>KITCHEN FIRE PROTECTION:</u> The kitchen Hoods shall be suitably protected with Automatic Fire detection-cum-suppression system in the Restaurant Kitchen on the Fifth floor. The L.P.G installation shall be constructed outside the kitchen/ building and the construction should conform to IS:6044 (Part-I). The L.P.G manifold and pipeline should be tested as per the standards. The L.P.G bank and kitchen shall be provided with L.P.G leak detectors of commercial grade coupled to Leak Detection Alarm Panel for early detection incase of LPG Leakage.
- j) GAS BASED DETECTION CUM SUPPRESSION SYSTEM: The Main Electrical Panel, Server Room and UPS/Battery Room shall be suitably protected with Gas Based Detection cum Suppression System.
- k) ALTERNATE SOURCE OF POWER SUPPLY: Independent Secondary Circuit fed by Secondary source of Power supply with appropriate change over switch shall be provided for the Fire Protection Systems viz. Corridor Lighting, Manual Fire Alarm system, Smoke Detectors, Heat Detectors, Fire Pumps, Lift in the building.

The installation of Alternate Source of Power Supply in the Premises shall conform to the requirements of Clause 3.4.6.4 of National Building Code of India 2016, Fire & Life Safety (Part-4).

- PORTABLE FIRE EXTINGUISHERS:- The type/distribution of Fire Extinguishers shall be in accordance with BIS:2190/2010 in the Buildings Tower 1, 2 & 3. All Fire Extinguishers shall confirm to IS:15683/2006.
- m) <u>DIRECTIONAL EXIT</u>, <u>FIRE SAFETY & BARRIER FREE ACCESS</u>

 <u>SIGNAGES:-</u> The Directional Exit, Fire Safety & Person with disability Signages shall be installed at appropriate places on all the floors the Signages shall correspond to the specimen and size enclosed in Annexure "B"& "C".



o) BASEMENT:-

- a) Automatic Sprinkler system confirming to Bureau of India Standard should be provided in the Basement floor as per fire fighting drawing No. PDP-FF-SCH-0501 and PDP-FP-PLN-0503.
- b) All the requirements of the Car Parking Facilities shall conform to Annex 'H', Clause H-4 'Enclosed Parking Structures' of National Building Code of India 2016, Fire & Life Safety (Part-4).

XII. THE RIGHTS OF PERSONS WITH DISABILITIES ACT, 2016:-

The Rights of Persons with Disabilities Act, 2016, is inforce as such the requirements as stipulated in the Act, shall be implemented for Sasety, Accessibility, Transportation, Information and Communication for Persons with Disabilities.

- a) The requirements for accessibility in built environment for Elders and Persons with Disabilities shall confirm to Section 13, Annex B (Clauses 4.6.1.3(g), 13.3.1, 13.4 and 13.5) of National Building Code of India, 2016, Development Control Rules and General Building Requirements (Part 3).
- b) <u>EVAC + CHAIR</u>:- 01 No. Evac + Chair in each Fire Tower for stairway Evacuation shall be provided for safe evacuation of disabled and injured patients in case of emergency.

XIII. FIRE COMMAND CENTRE:-The building shall have a centralized Fire Command Centre located on the Ground floor with the controls and monitoring of the Active & Passive Fire Protection System connected to this system centre. This will be manned by a qualified Fire Officer as per Clause 3.4.12 of National Building Code of India 2016, Fire & Life Safety (Part-4).

ASHOK MENON)
DIRECTOR

FIRE & EMERGENCY SERVICES

ANNEXURE "B"

The colour of the Directional and Fire Safety signages shall be **RED** with Graphic symbol in **WHITE** colour and the colour of the Emergency escape signages shall be **GREEN** with Graphic symbol in **WHITE** colour as per IS 9457:2005.

Sr. No.	DESCRIPTION	SIZE (mm)	IMAGES
	Emergency Exit Signages (Photoluminescent)		
1	Emergency Exit light Wall mounted with Rechargeable Battery Backup		
2	Exit Signage	100 X 300	EXIT
3	Staircase Identification Signage (Photoluminescent)		<u></u>
4	Staircase Identification Signage (Photoluminescent)	100 X 300	*
5	Fire Alarm Signage	200 X 250	Fire alarm
6	Fire Extinguisher Signage	200 X 200	
7	Hose Reel Hose Signage	200 X 250	Tire.
8	Assembly Point Signage	600 X 600	
9	Emergency Escape Plan Signage	A3 Size	
10	Агтоw Tape (Line of Escape) Signage	80mm x 10mtr	11.54
11	Signage to be installed near AHU Room, Hub Room, UPS Room Battery Room, Electrical Panel Room etc.	100 X 300	AUTHORISE DI PERSONALI DI PERSO
12	Stairway Marking Sign	300 X 200	STAIRCASE NG FLOOR [No.]

01 803.

(ASHOK MENON)
DIRECTOR

FIRE & EMERGENCY SERVICES

ANNEXURE "C"

The colour of the Signages will be **BLUE** with Graphic symbol in **WHITE** colour as per IS 9457:2005.

Sr. No.	DESCRIPTION	SIZE (mm)	IMAGES
	Signages (Photoluminescent)		
1	Access symbol	50 X 50	E.
2	Ramp	50 X 50	8
3	Telephone	50 X 50	去)
4	Lift	50 X 50	نخ
5	Parking	50 X 50	5
6	Directional Signs	50 X 50	क्षा 🛓

(ASHOK MENON) DIRECTOR

FIRE & EMERGENCY SERVICES







GOVERNMENT OF GOA DIRECTORATE OF HEALTH SERVICES URBAN HEALTH CENTRE - PANAJI

Panaji-Tiswadi Goa.

Tel./ Fax :- (0832) 2426495 , Email :uhcpanaji-heal.goa@gov.in

No.UHCP/DHS/NOC/18-19/31/8

Date:- //- /- / 9.

NO OBJECTION CERTIFICATE

This is to certify that I /My representative have /has inspected site of the <u>proposed</u> Construction of group housing scheme (Revised plan) by **Mr Joe Mathias, Mathias** Construction Pvt.ltd. ,bearing Survey no.249/1,situated at ,Dona Paula ,Taleigao village Tiswadi Taluka Goa and I have no objection to the said construction from the sanitary point of view as under:- Ref:-Nil

Approximate No. of persons:- 5/unit

		Approximate No. of persons:- 5/unit
a)	No. of Units for residential purpose:	117
b)	No. of units for commercial purpose	-
c)	Total;	117
d)	Size of the septic tank & soak pit for the above person	L. B. Volume ST fortype 4 230 1-10 2-50 units 2 STP
e)	Whether the Sewege Line has been shown on the plan & if so, which side.	Yes,
f)	Whether the Soak pit /Septic tank is adequate to the above units/persons and if not what should be done	NA
g)	Distance of the Soak pit /Septic Tank /STP from any drinking water well	NA
h)	Whether the drains in the complex have been properly shown to discharge rain water	Yes
i)	Whether there is any possibility of contaminating water in the nearby wells due to construction of septic tank and soak pit:	NA

This NOC is issued on the condition that the applicant and /or builder shall observe the following requirements:

1 The soak pit should not be located within a distance of 15.00 meters from any

other existing well in the plot area/ plan.

All the labourers employed in the construction activity shall possess valid Health Cards and the same shall be renewed every three months. NO labourers shall be engaged by the Builder/Contractor unless he/she has a valid Health Card, whoever contravenes the above provision of the Health Act shall be Punishable with fine of 10,000 ,per labour as specified in the Act.

3 The NOC shall be revoked if the construction of the Septic tank, Soak pit and

Drainage system of the premises are not as per the approved plan.

4 The applicant shall construct a separate soak pit in order to absorb the sewage water from the kitchen and from other non sewage resources.

5 Accumulation of water shall be prevented in pits in and around the site so as to

avoid the breeding of mosquitoes.

- 6 The builder/contractor shall take adequate anti-larval measures at the construction site in consultation with the Health Officer/Medical Officer I/c or Sanitary Inspector
- 7 NOC from the authority shall be obtained before obtaining the Occupancy Certificate.
- 8 The sanitary toilets have to be provided to all labourers residing at the construction site.
- 9 The NOC is liable to be withdrawn if the conditions stipulated above are not complied with or if it is established that this NOC has been obtained using fraudulent means.
- 10 Construction board with details should be displayed at the construction site.

Yours faithfully

(Dr.Preetam P.Naik) **Health Officer** Urban Health Centre, Panaji

Mr Joe Mathias Mathias Construction Pvt.ltd. "MATHIAS HOUSE"

Opp.to Luis Gomes Garden Campal Panaji-Goa.

Copy to:- Copy to:- 1) The Secretary, Village Panchayat Taleigao-Goa 2). Office Copy