FORM 1

(I) Basic Information

A. Name of the Project: Beach Resort by Competent Automobiles Co. Ltd.

B. Locations:

Survey Nos:
129/1,130/1,130/2,130/3,130/4,130/5,130/7,131/1,132/1,132/2,136/1,137/3

<table>
<thead>
<tr>
<th>Village</th>
<th>Tehsil</th>
<th>District</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arossim</td>
<td>Mormugoa</td>
<td>South Goa</td>
<td>Goa</td>
</tr>
</tbody>
</table>

C. Size of the Project: Beach Resort of more that 200 rooms with all amenities – Annexure – I attached with questionnaire

D. Expected Cost of the Project: Approx 100 crores.

E. Contact Information:

Amit Gupta
Chief Operating Officers
Hotels & Entertainment Division
Competent Automobiles Co Ltd.
A Unit of Competent Group of Companies
Competent House, F-14, Connaught Place
New Delhi-110001 (INDIA)
Phone: 91-11-23354572-73-74
Fax: 91-11-23327640

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(II) Activity

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

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Information/Checklist confirmation</th>
<th>Yes/No</th>
<th>Details thereof (with approximate quantities/rates, wherever possible) with sources of information data</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Permanent or temporary change in land use, land cover or topography including increase in intensity of land use (with respect to local land use plan)</td>
<td>No</td>
<td>For plot survey no 129/1, 130/1, 130/2, 130/3, 130/4, 130/5, 130/7, 131/1, 132/1, 132/2, 136/1, 137/3 of Arossim Village, Goa. Landuse and Zoning Details as per Regional Plan for Goa, 2001</td>
</tr>
<tr>
<td>1.2</td>
<td>Clearance of exiting land, vegetation and building?</td>
<td>Yes</td>
<td><strong>Land</strong>-At present the land is vacant. <strong>Vegetation</strong>- There is sparse Vegetation at the site. <strong>Building</strong>- The plot is vacant at the present.</td>
</tr>
<tr>
<td>1.3</td>
<td>Creation of New land uses?</td>
<td>No</td>
<td>The proposal is in conformity with the land use of the area as per the Development Plan of Goa.</td>
</tr>
<tr>
<td>1.4</td>
<td>Pre-construction investigation eg. Bore houses, soil testing?</td>
<td>Yes</td>
<td>As per EIA Studies attached</td>
</tr>
<tr>
<td>1.5</td>
<td>Construction works?</td>
<td>Yes</td>
<td>As per Plan attached</td>
</tr>
<tr>
<td>1.6</td>
<td>Demolition work?</td>
<td>No</td>
<td>Not applicable</td>
</tr>
<tr>
<td>1.7</td>
<td>Temporary sites used for construction works or housing of construction workers?</td>
<td>No</td>
<td>Temporary structure will be provided at the site for housing of construction work.</td>
</tr>
<tr>
<td>1.8</td>
<td>Above ground building, structure or earth works including linear structures, cut and fill or excavations</td>
<td>Yes</td>
<td>As per plan attached</td>
</tr>
<tr>
<td>1.9</td>
<td>Underground works including mining or tunneling?</td>
<td>Yes</td>
<td>Basement will be made subject to permission from Water resource Department Goa</td>
</tr>
<tr>
<td>1.10</td>
<td>Reclamation works?</td>
<td>No</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>1.11</td>
<td>Dredging?</td>
<td>No</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>1.12</td>
<td>Offshore structures?</td>
<td>No</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>1.13</td>
<td>Production and manufacturing processes?</td>
<td>No</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

Prepared by: Aditya Environmental Services Pvt. Ltd.
<table>
<thead>
<tr>
<th>1.14</th>
<th>Facilities for storage of goods or material?</th>
<th>Yes</th>
<th>Temporary sheds will be constructed for storage of construction materials.</th>
</tr>
</thead>
</table>
| 1.15  | Facilities for treatment or disposal of solid waste or liquid effluents? | Yes | **Construction Phase:**
Construction waste will be segregated and reused on site or sent for recycling. Substratum removed during foundation and excavation will be used for creation of basement. Balance construction waste will be disposed to existing authorized agency. Proper facility for storage of construction wastes will be made on site.

**Operation Phase:**
Solid waste from the Resort will consist of plastics, paper & paper products, glass, metal and biodegradable wastes (from kitchen & landscaping). Solid waste will be segregated at the point of collection itself. Recyclable materials (plastics, paper, metal etc.) and wet garbage will be collected in separate bins of different colours and stored separately, adequate covered facilities for storage of material will be provided.
A refrigerated storage for the wet garbage will be provided. The biodegradable waste along with garden waste will be composted through vermi-composting process and converted to manure. The recyclable material like dry waste like paper, plastic, glass etc will be periodically disposed by selling to scrap dealers.
The site will have sewage treatment plant (STP) for treatment and reuse of waste water.

Please refer
EIA Studies attached

<table>
<thead>
<tr>
<th>1.16</th>
<th>Facilities for long term housing of operational workers?</th>
<th>No</th>
<th>Not Applicable</th>
</tr>
</thead>
</table>
| 1.17  | New Road, rail or sea traffic during construction or | Yes | **Construction Phase:**
There will be temporary increase in |

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</thead>
<tbody>
<tr>
<td><strong>1.18</strong></td>
<td>New Road, rail, air waterborne or other transport infrastructure including new or altered routes and stations, port, airports etc.?</td>
<td>No</td>
</tr>
<tr>
<td><strong>1.19</strong></td>
<td>Closure or diversion of existing transport route or infrastructure leading to changes in traffic movement?</td>
<td>No</td>
</tr>
<tr>
<td><strong>1.20</strong></td>
<td>New or diverted transmission lines or pipelines?</td>
<td>No</td>
</tr>
<tr>
<td><strong>1.21</strong></td>
<td>Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers?</td>
<td>No</td>
</tr>
<tr>
<td><strong>1.22</strong></td>
<td>Stream crossing?</td>
<td>No</td>
</tr>
<tr>
<td><strong>1.23</strong></td>
<td>Abstraction or transfer of water from ground or surface waters?</td>
<td>No</td>
</tr>
<tr>
<td><strong>1.24</strong></td>
<td>Changes in water bodies or the land surface affecting drainage or run-off?</td>
<td>No</td>
</tr>
</tbody>
</table>
| **1.25** | Transport of personnel or materials for construction, operation or decommissioning? | Yes | **Construction Phase:**  
- Construction materials will be transported to the site.  
- There will be labour camp in the premises.  
**Operation Phase:**  
- There will be minor increase due to visitors commuting to the commercial areas from outside. |
| **1.26** | Long-term dismantling or decommissioning or restoration works? | No | Not applicable |
| **1.27** | Ongoing activity during decommissioning which could have an impact on the environment? | No | Not Applicable |
| **1.28** | Influx of people to an area in which there will be a change in land use within the project area? | Yes | During the construction phase, |

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<table>
<thead>
<tr>
<th>S.No.</th>
<th>Information/Checklist confirmation</th>
<th>Yes /No</th>
<th>Details thereof (with approximate quantities/rates, wherever possible) with sources of information data</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Land especially undeveloped or agriculture land (ha)</td>
<td>No</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>2.2</td>
<td>Water (expected source &amp; competing users) unit KLD</td>
<td>Yes</td>
<td>As per EIA Studies</td>
</tr>
<tr>
<td>2.3</td>
<td>Minerals (MT)</td>
<td>No</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>2.4</td>
<td>Construction material – stone, aggregates, and soil (expected sources – MT)</td>
<td>Yes</td>
<td>Raw material like cement, steel, metal, sand, bricks will be required for construction and materials shall be procured from local dealers and government approved quarries.</td>
</tr>
<tr>
<td>2.5</td>
<td>Forest and timber (sources – MT)</td>
<td>No</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>2.6</td>
<td>Energy including electricity and fuels (sources, competing users) Unit : fuel (MT), Energy (MW)</td>
<td>Yes</td>
<td>As per EIA studies and documents attached. However it is proposed to install Diesel Generating (DG) sets for supply of power when grid power is not available or during emergencies like power failures for common utilities and areas. 30% DG Power Back-up will be provided during Operation phase. Also project will have some solar power back up to conserve energy.</td>
</tr>
</tbody>
</table>

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

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2.7  Any other natural resources (use appropriate standard units)  No  Not Applicable

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

<table>
<thead>
<tr>
<th>S.No.</th>
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<th>Yes /No</th>
<th>Details thereof (with approximate quantities/rates, wherever possible) with sources of information data</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Use of substance or materials, which are hazardous (as per MSIHC rules) to human health or the environment (flora, fauna and water supplies)</td>
<td>No</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>3.2</td>
<td>Changes in occurrence of disease or affect disease vectors (e.g. insect or water borne diseases)</td>
<td>No</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>3.3</td>
<td>Affect the welfare of people e.g. by changing living conditions?</td>
<td>No</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>3.4</td>
<td>Vulnerable groups of people who could be affected by the project eg. hospital patient, children, the elderly etc.</td>
<td>No</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>3.5</td>
<td>Any other cause</td>
<td>No</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

4. Production of solid waste during construction or operation or decommissioning (MT/Month)

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Information/Checklist confirmation</th>
<th>Yes /No</th>
<th>Details thereof (with approximate quantities/rates, wherever possible) with sources of information data</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
<td>Spoil, overburden or mine wastes</td>
<td>No</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>4.2</td>
<td>Municipal waste (domestic and or commercial wastes)</td>
<td>Yes</td>
<td>As per EIA Studies report</td>
</tr>
<tr>
<td>4.3</td>
<td>Hazardous wastes (as per Hazardous Waste Management Rules)</td>
<td>No</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>4.4</td>
<td>Other industrial process wastes</td>
<td>No</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>4.5</td>
<td>Surplus product</td>
<td>No</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>4.6</td>
<td>Sewage sludge or other sludge from effluent treatment</td>
<td>Yes</td>
<td>As per EIA Studies report</td>
</tr>
<tr>
<td>4.7</td>
<td>Construction or demolition wastes</td>
<td>Yes</td>
<td>As per EIA Studies report</td>
</tr>
<tr>
<td>4.8</td>
<td>Redundant machinery or</td>
<td>No</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

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<p>| | | |</p>
<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>4.9</strong></td>
<td>Contaminated soils or other materials</td>
<td>No</td>
</tr>
<tr>
<td><strong>4.10</strong></td>
<td>Agriculture wastes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>4.11</strong></td>
<td>Other solid wastes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Information/Checklist confirmation</th>
<th>Yes/No</th>
<th>Details thereof (with approximate quantities/rates, wherever possible) with sources of information data</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>5.1</strong></td>
<td>Emissions from combustion of fossil fuels from stationary or mobile sources</td>
<td>Yes.</td>
<td>There will be some dust generation due to construction activity and movement of carrying raw material. Hence there will be a slight increase in SPM/SPM level during construction phase. A appropriate measure will be taken to scrub dust and noise generation during construction phase.</td>
</tr>
<tr>
<td><strong>5.2</strong></td>
<td>Emissions from production processes</td>
<td>No</td>
<td>Not Applicable</td>
</tr>
<tr>
<td><strong>5.3</strong></td>
<td>Emissions from material handling including storage or transport</td>
<td>Yes.</td>
<td>During the construction phase, there will be some dust generation due to handling of raw material and movement of vehicles carrying raw material.</td>
</tr>
<tr>
<td><strong>5.4</strong></td>
<td>Emission from construction activities including plant and equipment</td>
<td>Yes.</td>
<td>There will be minor emissions from construction equipment &amp; dust generation during construction activity &amp; raw material handling.</td>
</tr>
<tr>
<td><strong>5.5</strong></td>
<td>Dust or odours from handling of materials including construction materials, sewage and waste</td>
<td>Yes.</td>
<td>During the construction phase, there will be some dust generation due to handling of raw material and movement of vehicles carrying raw material.</td>
</tr>
<tr>
<td><strong>5.6</strong></td>
<td>Emissions from incineration waste</td>
<td>No</td>
<td>Not Applicable</td>
</tr>
<tr>
<td><strong>5.7</strong></td>
<td>Emissions from burning of waste in open air (e.g. slash materials, construction debris)</td>
<td>No</td>
<td>Not Applicable</td>
</tr>
<tr>
<td><strong>5.8</strong></td>
<td>Emissions from any other sources</td>
<td>No</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

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6. Generation of Noise and vibration, and Emission of Light and Heat:

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Information/Checklist confirmation</th>
<th>Yes/No</th>
<th>Details thereof (with approximate quantities/rates, wherever possible) with sources of information data</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1</td>
<td>From operation of equipment e.g. engines, ventilation plant crushers</td>
<td>Yes</td>
<td>As per EIA Studies Report</td>
</tr>
<tr>
<td>6.2</td>
<td>From industrial or similar processes</td>
<td>No</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>6.3</td>
<td>From construction or demolition</td>
<td>Yes</td>
<td>As per EIA Studies Report</td>
</tr>
<tr>
<td>6.4</td>
<td>From blasting or piling</td>
<td>No</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>6.5</td>
<td>From construction or operational traffic</td>
<td>Yes</td>
<td>As per EIA Studies Report</td>
</tr>
<tr>
<td>6.6</td>
<td>From lighting or cooling systems</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>6.7</td>
<td>From any other sources</td>
<td>No</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Information/Checklist confirmation</th>
<th>Yes/No</th>
<th>Details thereof (with approximate quantities/rates, wherever possible) with sources of information data</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.1</td>
<td>From handling, storage, use or spillage of hazardous materials</td>
<td>No</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>7.2</td>
<td>From discharge of sewage or other effluents to water or the land (expected mode and place of discharge)</td>
<td>No</td>
<td>Sewage generated will be treated in the sewage treatment plant. Treated sewage will be used for AC cooling; DG set cooling, flushing and gardening purpose.</td>
</tr>
<tr>
<td>7.3</td>
<td>By deposition of pollutants emitted to air into the lad or into water</td>
<td>Yes</td>
<td>Water Sprays will be used to settle dust particles during construction phase.</td>
</tr>
<tr>
<td>7.4</td>
<td>From any other sources</td>
<td>No</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>7.5</td>
<td>Is there a risk of long term build up of pollutants in the environment from these sources?</td>
<td>No</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

8. Risk of accidents during construction or operations of the Project, which could affect human health or the environment:

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Information/Checklist confirmation</th>
<th>Yes/No</th>
<th>Details thereof (with approximate quantities/rates, wherever possible) with sources of information data</th>
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</thead>
</table>

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### 8.1
From explosions, spillages, fires etc from storage, handling, use or production of hazardous substances

<table>
<thead>
<tr>
<th>No</th>
<th>Not Applicable</th>
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</table>

### 8.2
From any other causes

<table>
<thead>
<tr>
<th>No</th>
<th>Not Applicable</th>
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</thead>
</table>

### 8.3
Could the project be affected by natural disasters causing environmental damage (e.g. floods, earthquake, landslides, cloudburst etc.)?

<table>
<thead>
<tr>
<th>No</th>
<th>Goa lies in Zone-III of seismic region and design and construction will be done as per Indian standards for Zone-III seismic category</th>
</tr>
</thead>
</table>

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

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Information/Checklist confirmation</th>
<th>Yes /No</th>
<th>Details thereof (with approximate quantities/rates, wherever possible) with sources of information data</th>
</tr>
</thead>
</table>
| 9.1   | Lead to development of supporting facilities, ancillary development or development simulated by the project which could have impact on the environment e.g.: | Yes | For plot survey no 129/1, 130/1, 130/2, 130/3, 130/4, 130/5, 130/7, 131/1, 132/1, 132/2, 136/1, 137/3 of Arossim Village, Goa. Landuse and Zoning Details as per Regional Plan for Goa, 2001
The infrastructure proposed includes:
• Provision of STP for treatment and recycling of wastewater generated on site.
• Vermi composting for treatment of organic waste generated on site.
• Energy efficient electrical installations for conserving electricity.
• Tree plantation or landscaping for green belt development.
• Rainwater harvesting
For onsite traffic management internal roads, separate entry & exit, adequate parking space etc. will be provided. |

<table>
<thead>
<tr>
<th>9.2</th>
<th>Lead to after-use of the site, which could have an impact on the environment</th>
<th>No</th>
<th>Not applicable.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>9.3</th>
<th>Set a precedent for later developments</th>
<th>No</th>
<th>Not applicable.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>9.4</th>
<th>Have cumulative effects due to proximity to other existing or</th>
<th>No</th>
<th>The proposed site is located in sparsely populated area and there many</th>
</tr>
</thead>
</table>
planned projects with similar effects | settlements in the immediate site vicinity. The proposed project will help in the development of this region and will provide employment opportunities to the educated local youth.

(III) Environmental Sensitivity

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Areas</th>
<th>Name/Identity</th>
<th>Aerial distance (with in 15km) Proposed Project Locations boundary</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Area protected under international conventions national or local legislations for their ecological, landscape, cultural or other related value</td>
<td>Not Applicable</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Areas which are important or sensitive for ecological reasons – Wetlands, watercourses or water bodies, coastal zone, biospheres, mountains, forests</td>
<td>Not Applicable</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, over wintering, migration</td>
<td>Not Applicable</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Inland, coastal, marine or underground waters</td>
<td>Across Beach In South Goa</td>
<td>As per EIA Studies report attached</td>
</tr>
<tr>
<td>5</td>
<td>State, National boundaries</td>
<td>No</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>6</td>
<td>Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas</td>
<td>No</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>7</td>
<td>Defence installations</td>
<td>No</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>8</td>
<td>Densely populated or built-up area</td>
<td>No</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>9</td>
<td>Areas occupied by sensitive man-made land uses (hospital, schools, places of worship, community facilities)</td>
<td>No</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>10</td>
<td>Areas containing important, high</td>
<td>No</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th></th>
<th>Quality or scarce resources (ground water resources, surface resources, forestry, agriculture, fisheries, tourism, minerals)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Areas already subjected to pollution or environment damage. (those where existing legal environmental standards are exceeded.)</td>
<td>No</td>
</tr>
<tr>
<td>12</td>
<td>Areas susceptible to natural hazard which could cause the project to present environmental problems (earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climate conditions)</td>
<td>Goa lies in Zone-III of seismic region</td>
</tr>
</tbody>
</table>

IV Proposed Terms of Reference for EIA studies – As per EIA studies report

Prepared by: Aditya Environmental Services Pvt. Ltd.
APPENDIX - II
FORM - IA

CHECK LIST OF ENVIRONMENTAL IMPACTS

1. LAND ENVIRONMENT:

1.1 Will the existing land use get significantly altered from the project that is not consistent with the surroundings? (Proposed land use must conform to the approved Master Plan / Development Plan of the area. Change of land use if any and the statutory approval from the competent authority are submitted). Attach Maps of

(i) Site location,
(ii) Surrounding features of the proposed site (within 500 meters)
(iii) Contour plan

The Proposed Proposed 5-Star Beach Resort is located at plot survey no 129/1, 130/1, 130/2, 130/3, 130/4, 130/5, 130/7, 131/1, 132/1, 132/2, 136/1, 137/3 of Arossim Village, Goa. However, the proposed development will be as per Regional Plan for Goa, 2001 – As per EIA Studies Report attached alongwith Annexures

1.2 List out all the major project requirements in terms of the land area, built up area, water consumption, power requirement, connectivity, community facilities, parking needs etc. – As per EIA Report attached along with annexures.

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

The project proposal pertains to construction of 5-Star Beach Resort. As a part of the proposed development, facilities like

Main Building
All common facilities required for the guests (like Kitchen/ Disco/ Main + specialty restaurant/ meeting rooms/ Recreation centers/ Banquet etc.) will be provided in this building. The built-up area of this building will be 4,535.43 sq. m.

Guest Rooms
Guest rooms will be accommodated in three blocks:
Block-A: Guest rooms (5,355.44 sq. m.)
Block-B: Guest rooms (748.64 sq. m.)
Block-C: Guest rooms (2,888.89 sq. m.)

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Other Amenities
Poolside Restaurant: This will have an area of 200.88 sq. m.
Spa Building (G+1): This will have an area of 606.16 sq. m.
Car Parking: Parking facility for 109 vehicles will be provided.
Other Amenities: Landscaping, pathways, garden etc. will be provided.

1.4 Will there be any significant land disturbance resulting in erosion, subsidence & instability? (Details of soil type, slope analysis, vulnerability to subsidence, seismicity etc may be given).
As per EIA report attached – However there is no adverse impact on any thing.

1.5 Will the proposal involve alteration of natural drainage systems?
(Give details on a contour map showing the natural drainage near the proposed project site)
As per EIA report attached with contour map of the site.

1.6 What are the quantities of earthwork involved in the construction activity cutting, filling, reclamation etc. (Give details of the quantities of earthwork involved, transport of fill materials from outside the site etc.)
No – However if small quantity is there that will be completely utilized for construction work. The land will be leveled prior to construction of the buildings only at permissible area of construction and All sub-stratum removed will be used for backfilling in the foundation.

1.7 Give details regarding water supply, waste handling etc during the construction period.
Water supply: Water will be required during building construction & for domestic requirement of labour. Maximum water required for building construction & for domestic consumption of labourers, The water to be used for construction purpose will be sourced from municipal tap & tankers, whereas labourers will be provided with municipal tap water for domestic usage.

Waste handling: The details are as follows:
1. Various types of construction debris such as bricks, blocks, steel, formwork, finishing materials, etc. will be generated.
2. Bricks, metal chips, cut tiles will be used for internal paving.
3. The damaged/ cut pieces of steel, glass etc. and wastes such as empty cement bags, card boards cartons etc. will be sold to scrap dealer
4. Substratum removed during foundation and excavation will be used as far as possible as filling material.

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1.8 Will the low-lying areas & wetlands get altered? (Provide details of how low lying and wetlands are getting modified from the proposed activity)
Not applicable. The low-lying areas & wetlands will not get altered due to the project.

1.9 Whether construction debris & waste during construction cause health hazard? (Give quantities of various types of wastes generated during construction including the construction labor and the means of disposal)
There will be no health hazards as no potentially harmful substances are used for the construction activity.
• Various types of construction debris such as bricks, blocks, steel, Formwork packaging and paper products, door and window casings, tiles, glass, furnishings etc will be generated.
• Materials such as broken bricks, metal chips, cut tiles will be used for internal paving, plinth filling, etc.
• Substratum removed during foundation and excavation will be used as filling material.
• The debris will be segregated and stored in separately earmarked area at a distance from construction site.
• The damaged/ cut pieces of steel, glass etc. will be sold to scrap dealers.

2. WATER ENVIRONMENT:

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

CONSTRUCTION PHASE
Source: Water will be required during building construction & for domestic requirement of labour. Maximum water required for building construction & for domestic consumption of labourers, the water to be used for construction purpose will be sourced from municipal tap & tankers, whereas labourers will be provided with municipal tap water for domestic usage.

OPERATION PHASE
For the proposed project, water will be supplied from Public Works Department (PWD). Water for the purpose of flushing, AC cooling and irrigation will be recycled water from the Sewage Treatment Plant (STP). The total potable water requirement for the proposed Resort project is 669.11 m³/day and recycled water used is about 422.31 m³/day.

Please refer EIA Report attached

2.2 What is the capacity (dependable flow or yield) of the proposed source of water?
For the proposed project, water will be supplied from Public Works Department (PWD). Water for the purpose of flushing, AC cooling and irrigation will be recycled water from the Sewage Treatment Plant (STP). - As per EIA Report

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

For the proposed project, water will be supplied from Public Works Department (PWD). Treated water from STP is proposed to be used for flushing and gardening purposes.

Characteristics of treated sewage from proposed STP will be as follows:

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Expected Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before Treatment</td>
</tr>
<tr>
<td>BOD</td>
<td>280 mg/L</td>
</tr>
<tr>
<td>Oil &amp; Grease</td>
<td>60 mg/L</td>
</tr>
<tr>
<td>Suspended Solids</td>
<td>240 mg/L</td>
</tr>
<tr>
<td>COD</td>
<td>440 mg/L</td>
</tr>
</tbody>
</table>

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

For the proposed project, water will be supplied from Public Works Department (PWD). Water for the purpose of flushing, AC cooling and irrigation will be recycled water from the Sewage Treatment Plant (STP). The total potable water requirement for the proposed Resort project is 669.11 m$^3$/day and recycled water used is about 422.31 m$^3$/day. - As per EIA Report.

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

Not applicable. For the proposed project, water will be supplied from Public Works Department (PWD). Water for the purpose of flushing, AC cooling and irrigation will be recycled water from the Sewage Treatment Plant (STP). The total potable water requirement for the proposed Resort project is 669.11 m$^3$/day and recycled water used is about 422.31 m$^3$/day.

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

Total wastewater generation in the proposed activity is about 469 cmd. Wastewater will be recycled in STP. The recycled water will be reused for AC cooling, DG set cooling, flushing and gardening purpose.

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Characteristics of sewage at inlet of STP will be follows:

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Expected Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOD</td>
<td>Before Treatment</td>
</tr>
<tr>
<td></td>
<td>280 mg/L</td>
</tr>
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</tr>
<tr>
<td>Suspended Solids</td>
<td>240 mg/L</td>
</tr>
<tr>
<td>COD</td>
<td>440 mg/L</td>
</tr>
</tbody>
</table>

2.7 Give details of the water requirements met from water harvesting? Furnish details of the facilities created.
- Rainwater harvesting is proposed as a water conservation measure.
- Roof drainpipes will be designed considering maximum intensity of rainfall.
- Rain water will be collected by down take pipes, proper site grading, storm water drainage channels, catch basins/ pits and piped drainage system, as appropriate.

2.8 What would be the impact of the land use changes occurring due to the proposed project on the runoff characteristics (quantitative as well as qualitative) of the area in the post construction phase on a long term basis? Would it aggravate the problems of flooding or water logging in any way? There will be no major change in the run-off characteristics. The site will have a well-designed storm water drainage system, which will prevent any flooding.

2.9 What are the impacts of the proposal on the ground water? (Will there be tapping of ground water; give the details of ground water table, recharging capacity, and approvals obtained from competent authority, if any)
Use of ground water is not proposed. During operation phase, a well-designed rainwater harvesting system to recharge ground water will be implemented as a part of the project.

2.10 What precautions/measures are taken to prevent the run-off from construction activities polluting land & aquifers?
(Give details of quantities and the measures taken to avoid the adverse impacts)
Construction area will be isolated & care will be taken to divert the run-off to storm water drainage, so possibility of pollution from construction run-off will be prevented.

2.11 How is the storm water from within the site managed? (State the provisions made to avoid flooding of the area, details of the drainage facilities provided along with a site layout indication contour levels)
- The site will have a well designed storm water drainage system which will

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prevent any flooding.
- Roof drain pipes will be designed considering maximum intensity of rainfall.
- Rain water harvesting is proposed, in order to conserve water.
- Rain water will be collected by down take pipes, proper site grading, storm water drainage channels, catch basins/ pits and piped drainage system, as appropriate.

2.12 Will the deployment of construction laborers particularly in the peak period lead to unsanitary conditions around the project site (Justify with proper explanation)
No. During the construction phase, temporary sanitary facilities for construction labor shall be provided and treatment & disposal of the waste will be by septic tank and soak pits. Also clean drinking water will be provided. It will also be ensured that no accumulation of water will take place.

2.13 What on-site facilities are provided for the collection, treatment & safe disposal of sewage? (Give details of the quantities of wastewater generation, treatment capacities with technology & facilities for recycling and disposal)
1. Waste water will be conveyed to a sewage treatment plant (STP) of capacity by a well designed system.
2. The quantity of waste water generated will be 469 cmd
3. Tertiary treated waste water (422 cmd) from STP will be used for AC cooling, Dg set cooling, flushing and Gardening purpose.

2.14 Give details of dual plumbing system if treated waste used is used for flushing of toilets or any other use.
For water distribution dual plumbing lines are proposed. One line to distribute treated water for domestic supply. Another line to distribute treated wastewater for flushing and gardening.

Broad material specifications:-
a) Water from underground tank to respective overhead tanks: G.I. Pipes of required grade.
b) For distribution from OH tanks: PVC pipes of required grade
c) Valves will be of gun metal
d) Where necessary air valves, pressure reduction valves, non-return valves will be used.
e) Rising main and internal distribution system will be of G.I. Pipes heavy class

3. VEGETATION:

3.1 Is there any threat of the project to the biodiversity? (Give a description of the
local ecosystem with it’s unique features, if any)
No. - Not Applicable

3.2 Will the construction involve extensive clearing or modification of vegetation?
(Provide a detailed account of the trees & vegetation affected by the project)
At present some bushes are existing on site, adequate number of trees as per norms will be planted on site.

3.3 What are the measures proposed to be taken to minimize the likely impacts on important site features (Give details of proposal for tree plantation, landscaping, creation of water bodies etc along with a layout plan to an appropriate scale)?
Landscape areas will be created and tree plantation will be carried out at the site as a part of the development. Trees will be planted as per applicable municipal norms.

4. FAUNA:

4.1 Is there likely to be any displacement of fauna- both terrestrial and aquatic or creation of barriers for their movement? Provide the details.
No.

4.2 Any direct or indirect impacts on the avifauna of the area? Provide details.
No.

4.3 Prescribe measures such as corridors, fish ladders etc. to mitigate adverse impacts on fauna
Not applicable.

5. AIR ENVIRONMENT:

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

There will be temporary increase in air pollution (particularly dust levels) due to transport of materials, excavation and land development during the construction phase.

During operation phase, there will be a minor increase in air pollution due to increase in vehicular exhausts generated due to traffic. Due to presence of open spaces and landscaped areas; there will be no heat island effects.

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

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• There will be some increase in the SPM/ RSPM levels during construction phase, which will have a temporary impact.
• During operational phase, vehicular exhausts will be the only source of air pollution

5.3 Will the proposal create shortage of parking space for vehicles? Furnish details of the present level of transport infrastructure and measures proposed for improvement including the traffic management at the entry & exit to the project site.- Adequate facility will be provided for parking as per DC regulations

5.4 Provide details of the movement patterns with internal roads, bicycle tracks, pedestrian pathways, footpaths etc., with areas under each category. Adequate provisions have been made of internal roads for smooth vehicle entry and exit as well as walkways for pedestrian movements.

5.5 Will there be significant increase in traffic noise & vibrations? Give details of the sources and the measures proposed for mitigation of the above. No. The internal roads will be designed with adequate width to minimize traffic congestion inside the plot.

5.6 What will be the impact of DG sets & other equipment on noise levels & vibration in & ambient air quality around the project site? Provide details. DG sets are proposed to supply power as the emergency supply system in case of shut down/ break down of main power supply. All DG sets will be housed in noise insulated enclosures designed to meet standards as laid under Environment (Protection) Act. Noise and vibrations from DG sets will be eliminated with vibration mounts and silencers.

6. AESTHETICS:

6.1 Will the proposed constructions in any way result in the obstruction of a view, scenic amenity or landscapes? Are these considerations taken into account by the proponents? There will be no obstructions in the landscape views due to the project.

6.2 Will there be any adverse impacts from new constructions on the existing structures? What are the considerations taken into account? No, Not applicable.

6.3 Whether there are any local considerations of urban form & urban design influencing the design criteria? They may be explicitly spelt out. No. Not Applicable.

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

Prepared by: Aditya Environmental Services Pvt. Ltd.
No, Not applicable.

7. **SOCIOECONOMIC IMPACT:**

7.1 Will the proposal result in any changes to the demographic structure of local population? Provide the details.
There will be some change in the demographic structure with the proposed development. There will be temporary increase in the number of people during the construction phase and a marginal influx of people in the local area after completion of the project.

7.2 Give details of the existing social infrastructure around the proposed project.
The proposed project is in the village Arossim, Marmugoa and amenities/ facilities are provided in the vicinity.

7.3 Will the project cause adverse effects on local communities, disturbance to sacred sites or other cultural values? What are the safeguards proposed?
No. The project will not cause any adverse effects on the local communities or disturb sacred sites or cultural values.

8. **BUILDING MATERIAL:**

8.1 May involve the use of building materials with high-embodied energy. Are the construction materials produced with energy efficient processes?
(Give details of energy conservation measures in the selection of building materials and their energy efficiency)
The project is designed to be energy efficient and special care has been taken in the planning stage to ensure an efficient system. The salient features in the design and planning of the project aimed at energy conservation are:

1. Energy efficient fluorescent tube lights & CFL lamps which give approx. 30% more light output for the same watts consumed and therefore require less nos. of fixtures and corresponding lower point wiring costs.
2. All fluorescent light fixtures will be specified to incorporate electronic chokes, which have less watt-loss, compared to electromagnetic chokes and result in superior operating power factor. Electronic chokes also improve the life of the fluorescent lamps.
3. Bus bars in all distribution panels are specified as copper bus bars to reduce losses and improve reliability.
4. Copper conductor cables will be specified for sizes of 16 mm and below, this will reduce losses and improve reliability.
5. All cables will be de-rated to avoid heating during use. This also indirectly reduces losses and improves reliability.

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6. Variable frequency drives will be incorporated on motor feeders, which will save considerable energy.

Power factor of the complete electrical system will be maintained close to unity. This will reduce electrical power distribution losses in the installation.

6. An APFC relay based on thistier switching will be proposed to effect the power factor correction / improvement within a few cycles of deviation from the setting & also to reduce inrush currents.

7. Solar operated pole lights will be proposed to power pathway lights at some strategic locations or solar water heaters will be provided for 20% of the households.

8. Presence sensors & day-light sensors will be provided where ever feasible.

8.2 Transport and handling of materials during construction may result in pollution, noise & public nuisance. What measures are taken to minimize the impacts?

Following measures will be taken to minimize the impacts caused by transportation & handling of materials during construction:

1. Materials will be purchased from the nearest authorized supplier.
2. Transportation of raw material will be done in covered trucks.
3. The movement of these vehicles will be restricted only during non-peak hours.
4. Water will be sprinkled on the site to prevent dust emissions.
5. Barricades will be raised along the boundary of the plot to prevent noise pollution.

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

Following measures will be taken to minimize the impacts caused by transportation & handling of materials during construction:

1. Materials will be purchased from the nearest authorized supplier.
2. Transportation of raw material will be done in covered trucks.
3. The movement of these vehicles will be restricted only during non-peak hours.
4. Water will be sprinkled on the site to prevent dust emissions.
5. Barricades will be raised along the boundary of the plot to prevent noise pollution.

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

Recycled Materials (eg mixing scrap tyres in tar for road) are proposed to be used to reduce road noise. All structures are designed with minimum use of glass, granite & aluminum composite panel. Recycled material will be used for concrete & building material. Fly ash bricks will be used for construction of buildings. Recycled water will be used during the operation phase. Bricks, metal, chips, cut tiles will be used for internal paving. Substratum removed during foundation and excavation will be used for plot filling and for making pathways.

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9. **ENERGY CONSERVATION:**

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

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

It is proposed to install Diesel Generating (DG) sets for supply of power when grid power is not available or during emergencies like power failures for common utilities and areas. – AS per EIA report attached

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

Minimum amount of glass will be used. Only plain annealed glass will be used.

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

Attempts will be made to maximize the use of natural lighting through design. Besides this, a green cover consisting of trees of native species with large canopy size will be made. Only plain annealed glass to be used. Sloping roofs with decorative tiles are planned which will assist in heat reduction.

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

Solar energy will be used for heating the water and also for street lights and garden lights.

9.6 Is shading effectively used to reduce cooling/ heating loads? What principles have been used to maximize the shading of Walls on the East and the West and the Roof? How much energy saving has been effected?

Yes, attempts will be made to maximize the use of natural lighting through design. Only plain annealed glass to be used. Sloping roofs are being planned which will assist in heat reduction. Besides this, a green cover consisting of trees of native species with large canopy size will be made.

9.7 Do the structures use energy-efficient space conditioning, lighting and mechanical systems? Provide technical details. Provide details of the transformers and motor efficiencies, lighting intensity and air-conditioning

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Lighting: Lighting of Common Area, Utility Rooms shall be based on the following average lighting level considerations which are as per NBC 2005

<table>
<thead>
<tr>
<th>Area/Space</th>
<th>Average Illumination Range in lux</th>
<th>Type of Lamps / Fixtures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service areas/Utility Areas such as DG Set Room, substation area, Electrical Room, Pump Room, Plant Room</td>
<td>100-150-200</td>
<td>T-5's Fluorescent/MH Lamps in high bay area</td>
</tr>
</tbody>
</table>

External and Landscaping lighting shall be provided in consultation with the landscape architect. Road, Parking and Area lighting shall be provided for visual guidance and security purposes. Around 5 to 10 lux shall be maintained for road lighting. Pathways, Garden and landscape lighting shall be designed keeping in mind the architectural features.

<table>
<thead>
<tr>
<th>Area/Space</th>
<th>Average Illumination Range in lux</th>
<th>Type of Lamps / Fixtures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road and Parking Areas</td>
<td>5 to 10 Lux</td>
<td>HPS/V/HI lamps in street light fixtures</td>
</tr>
<tr>
<td>Path and landscape areas</td>
<td>Aesthetics important</td>
<td>more Bollards with CFL’s</td>
</tr>
</tbody>
</table>

Energy Conservation Measures for lighting:
- Using energy efficient light fixtures with good photometric properties.
- Using CFL’s in external lighting bollards.
- Using T-5 (28W) fluorescent lamps in place of T-8 lamps (26W) in basements, stilts and underground parking areas.
- Putting external lighting control on time switch / timer control.
- Using time switch control / timer control for basements lighting.
- Employing LED light sources for some of the external lighting fixtures.
- Employing solar powered lighting for part of the external lighting fixtures.

9.8 What are the likely effects of the building activity in altering the microclimates? Provide a self assessment on the likely impacts of the proposed construction on creation of heat island & inversion effects?
Energy conservation will be one of the focuses during the building planning. Attempts will be made to maximize the use of natural lighting through design. Besides this, a green cover consisting of trees of native species with large canopy size will be made. All these factors will help in reducing heat island effects.

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

Prepared by: Aditya Environmental Services Pvt. Ltd.
(a) **Roof design:** Roof will meet prescriptive requirement as per ECBC by using appropriate thermal insulation material to fulfill requirement.

(b) **Vertical fenestration:** Vertical fenestration will comply with SHGC requirements to meet prescriptive requirement as per ECBC by use of appropriate solar control strategies.

(c) **Glazing:** Tinted glass absorbs a large fraction of the incoming solar radiation through a window. This reduces the solar heat gain coefficient, visible transmittance, and glare.

Following is the Envelope Performance Factor coefficients for building with 24 hour occupancy located in hot humid climate:

### Envelope Performance Factor Coefficients

<table>
<thead>
<tr>
<th>Building Components</th>
<th>U-factor (W/sq mtr. deg C)</th>
<th>R-Value (sq mtr. deg C/W)</th>
<th>SHGC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vertical Fenestration</td>
<td>0.17</td>
<td></td>
<td>0.20</td>
</tr>
<tr>
<td>Walls</td>
<td>0.35</td>
<td>2.35</td>
<td>+</td>
</tr>
<tr>
<td>Roofs</td>
<td>0.26</td>
<td>3.5</td>
<td>+</td>
</tr>
</tbody>
</table>

9.10 **What precautions & safety measures are proposed against fire hazards?**

**Furnish details of emergency plans.**

All safety measures will be incorporated to avoid any accidents during the construction phase and operation phases. Buildings will have sufficient open spaces all around to have easy turning for fire engines.

- Fire Protection for the proposed site is specified as per NBC/ DC rules.
  - Fire hydrant system along the buildings.
  - Fire over head and underground storage tank.
  - Sprinkler system for covered car parking.
  - Refuge area is provided in each building.
  - Roads and open spaces are provided around the building in such a way that fire engine can function easily in case of fire.

9.11 **If you are using glass as wall material provides details and specifications including emissive and thermal characteristics.**

The specifications including emissive & thermal characteristics are as follows:

### Characteristics of Vertical Fenestration

<table>
<thead>
<tr>
<th>Climate Zone</th>
<th>Maximum WWR&lt;40%</th>
<th>Maximum 40%&lt;WWR&lt;90%</th>
<th>Maximum WWR&lt;90%</th>
<th>Minimum SHGC</th>
<th>Minimum SHGC</th>
<th>Minimum SHGC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WWR</td>
<td>LT</td>
<td>R-value</td>
<td>SHGC</td>
<td>WWR</td>
<td>LT</td>
</tr>
<tr>
<td>Warm and Humid</td>
<td>3.3</td>
<td>0.25</td>
<td>0.2</td>
<td>0.27</td>
<td>0.3</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Prepared by: Aditya Environmental Services Pvt. Ltd.
9.12 What is the rate of air infiltration into the building? Provide details of how you are mitigating the effects of infiltration.
Mechanical ventilation & exhaust will be provided for the following spaces:
1. Mechanical plant rooms, DG room and electrical substation & panel rooms.
2. Fans will be centrifugal limit load, centrifugal cabinet, axial flow or propeller type depending on the application.
3. Fans will be complete with filters and gravity louvers wherever required

9.13 To what extent the non-conventional energy technologies are utilized in the overall energy consumption? Provide details of the renewable energy technologies used.
Solar energy will be used for street lights and garden lights and /or for water heating.

10. ENVIRONMENTAL MANAGEMENT PLAN:
Environment Management Plan would consist of all mitigation measures for each item wise activity to be undertaken during the construction, operation and the entire life cycle to minimize adverse environmental impacts as a result of the activities of the project. It would also delineate the environmental monitoring plan for compliance of various environmental regulations. It will state the steps to be taken in case of emergency such as accidents at the site including fire.
Please refer Environment Management Plan as per EIA shows the stage wise activities that may be potential sources of pollution and the mitigation measures for the same.
GOA COASTAL ZONE MANAGEMENT AUTHORITY
C/o Department of Science, Technology & Environment,
Opp. Saligao Seminary, P.O. Saligao, Bardez, Goa – 403 511
Phone: (0832) 2407186, 2407187, 2407189 Fax: (0832) 2407186

Ref: No. GCZMA/MOR/AROS/07/17/1905
Dated: 08/12/2003

To,

Dr. A. Senthil Vel,
Additional Director, MoEF
(Member Secretary, National Coastal Zone Management Authority),
IA-III Division,
Parvatanagar, CGO Complex,
New Delhi 110003.

Sub: Proposed development of a Hotel (Beach Resort) in Survey Nos. 129/1
130/1, 130/2, 130/3, 130/4, 130/5, 130/7, 131/1, 132/2, 136/1 & 137/3 at
Arroyim village at Mormugao, Taluka by M/s. Competent Automobiles
Company Ltd. - forwarding of the construction plans and other documents for environmental clearance.

Ref: Order of the Hon'ble Supreme Court in SLP (Civil) No. 6229 of 2007 and

Sir,

The above mentioned proposal by M/s. Competent Automobiles, requesting Environmental Clearance from the Ministry of Environment & Forests (MoEF) (GoI), has been examined by the Goa Coastal Zone Management Authority (GCZMA), in its 44th meeting held on 13th November, 2008.

2. Earlier the proposal was forwarded to the Town & Country Planning (TCP) Department, Government of Goa, who have conveyed their approval after examining that the proposal adheres to all the norms specified for "hotel/beach resort" projects as per Annexure -II of the CRZ Notification, 1991 and conforms to the local Town and Country Planning guidelines and local building bye-laws. (copy of the letter no. DH/402/MTP/08/559 dated 13/11/2008 along with the note no. DH/402/MTP/08/543 dated 04/11/2008 is enclosed).

3. The project proponents have undertaken an Environment Impact Assessment (EIA) report for the proposed project which has been examined by the Goa State Pollution Control Board (GSPCB). (EIA Report enclosed).

It is further informed that:

The proposed construction is located on the landward side beyond 200 mts. of the HFL.
(b) the proposed resort involves no significant disturbance to any ecological asset, as the entire area in the vicinity of the Resort is occupied by existing authorised residential houses/resorts, with no forest area or wild life, and classified as "Settlement Zone" in the Statutory Regional Plan of Goa.

It is informed that pursuant to the direction of the Hon'ble High Court of Bombay on Goa, Panaji Bench in W.P. No. 422 of 1998 and W.P. No.99 of 1999 dated 13/10/2006; the GCZMA is not processing any application of 'hotels/beach resorts' projects in CRZ areas of Goa. However, the project proponent has obtained orders of the Hon'ble Supreme Court in SLP(C) No. 6229 of 2007 and SLP(C) No.5400 of 2007 dated 07/04/2008 (copy enclosed) in the matter of the proposed project.

6. In view of the direction of the Hon'ble Supreme Court, GCZMA in its 46th meeting held on 13/11/2008 has decided to forward the said project proposal to the MoEF for its general and decision at their end in respect of grant of Environmental Clearances. Accordingly the project papers along with one set of relevant documents are forwarded herewith. The project proponent has been advised to send additional 20 sets of the relevant documents directly to the Ministry, as required.

Yours faithfully,

[Signature]

Michael M. D'souza
Member Secretary, GCZMA &
Director/Ex-Officio, Jt. Secretary (STE)

Enclosures:
1. Project proposal with Questionnaire filled in by project proponent
2. Environmental Impact Assessment (EIA) Report
3. Set of plans including the Site Plan

Copy to:
1. Shri. Amit Gupta, M/s. Competent Automphiles, P-14, Competent,
    Connaught Place, New Delhi 110001 (India) for information and
    needed action at his end

2. P.S to Chief Secretary/Chairman(GCZMA) for kind information.
F.No. 16-1/2009-IA-III
Government of India
Ministry of Environment & Forests,

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

Dated: 11th April, 2013

To
M/s. Competent Automobiles,
F-14, Competent, Connaught Place,
New Delhi – 110 001.

Subject: CRZ Clearance for development of Hotel (Beach Resort) at Survey Nos. 129/1, 130/1, 130/2, 130/3, 130/4, 130/5, 130/7, 131/1, 132/2, 136/1, 137/3 at Arrosim village, Mormugao Taluka, District South Goa by M/s. Competent Automobiles Company Ltd. – Reg.

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2. It is inter-alia noted that the project involves the construction of a Hotel (beach resort) on a plot area of 78,506.80 sq.m. The total built up area proposed is 20,050.04 sq.m. (basement + ground + 1 floor). The total water requirement proposed is 1091 KLD (fresh water requirement will be 669 KLD). The capacity of STP proposed is 500 KLD. The treated waste water to be used for flushing of toilets - 114 KLD, AC cooling - 250 KLD, DG set cooling - 1 KLD and horticulture purposes - 57 KLD. Domestic waste generation during operation phase will be 0.33MT/day. Waste collection during construction and operation phase will be through waste segregation measures, optimum reuse and recycling mechanisms are proposed to be followed. There are about 520 existing trees on the site, out of which, 470 are coconut trees. In the proposed construction about 200 trees will be affected and about 400-500 trees will be planted. A green buffer and landscaped plan to improve visual quality and minimize the diffusion of noise and dust is proposed. Total parking provisions made are for 109 cars. The total cost of the project is 100 crores.
3. As per the CRZ Notification, 1991, the project site falls within CRZ-III, 24,012 sq.m. falls between 0 mts to 200 mts. (No Development Zone). The proposed construction is located on the landward side beyond 200 mts. of the HTL. The entire area in the vicinity of the resort is occupied by existing authorized residential houses/resorts with no forest area or wild life and classified as settlement zone in the statutory Regional Plan of Goa.

4. The Expert Appraisal Committee, after due consideration of the relevant documents submitted by the project proponent and additional clarifications furnished in response to its observations, have recommended for the issue of CRZ Clearance for the project.

5. In pursuance to the directions of the Hon'ble High Court of Bombay at Goa, Panaji Bench in W.P. No. 422 of 1998 and W.P. No.99 of 1999 dated 13.10.2006; the Goa Coastal Zone Management Authority was not processing any application of hotels/beach resorts projects in CRZ area of Goa. However, the project proponent obtained orders from the Hon'ble Supreme Court of India in SLP (Civil) No. 6229 of 2007 and SLP (Civil) No. 5400 of 2007 dated 07.04.2008, regarding the above project. Based on the directions of the Hon'ble Supreme Court, GCZMA in its 46th meeting held on 13.11.2008 considered the project and decided to forward the project along with the recommendations of GSPCB to MoEF for its perusal and decision at their end for the issue of Environmental Clearance. As per the Hon'ble Supreme Court orders that if all formalities are completed and in the event of petitioner securing all clearances required for securing a licence for construction, the High Court may, on an application by the petitioner in the said proceedings for exemption/exclusion from the operation of the ban in para 32 (E) of its judgement, pass appropriate orders. Further, the Hon'ble Supreme Court passed an order dated 16.03.2010 that "MoEF may take a decision at the earliest preferably within a period of four weeks".

6. However, clearance has not been granted since the State Government has not finalized village maps and not formulated the Policy for hotel/resort projects as per the direction of High Court. Hon'ble High Court in WP No. 513 of 2012 filed by M/s Competent Automobile Company Ltd, directed the Ministry to take appropriate decision on the proposal of Competent Automobiles within a period of eight weeks and communicate in a week time thereafter.

7. Though the State government of Goa notified policy in compliance with the Order of High Court, however, it is revealed from the Order of High Court dated 19th March, 2012 in a Public Interest Litigation No. 29/2011 filed by Goa Foundation that State Government has not specifically identified open plots in CRZ-III areas for construction of Hotel / beach resorts, detailed site inspection and verification as required in the hotel policy, is not yet carried out. Therefore, it was felt that the matter is sub judice and decided to await the final order of the Court.
It has been brought to the notice that based on the Order of Supreme Court dated 07.04.2008, the GCZMA along with representative of GPCB, Dy Collector and SDM, Mormugao have inspected the site and opined that the site is suitable for hotel project and not reported any violation. From the reply affidavit and report of Goa CZMA filed before the Hon’ble Supreme Court, it appears that the GCZMA team has identified the plot as ‘vacant plot’ and suitable for hotel project therefore, have complied with the direction (D) in WP No. 422/1998. The team has also not reported any violation. Accordingly, the Ministry hereby accord necessary CRZ Clearance for the above project as per the provisions of CRZ Notification, 2011 and its subsequent amendments, subject to strict compliance of the terms and conditions as follows:

9. **Specific Conditions:**

1. **Construction Phase**

   (i) The proposal has been examined as per the orders of the Hon’ble Supreme Court. The proponent M/s. Competent Automobiles Co. Ltd. shall comply the direction of the Hon’ble Supreme Court as applicable.

   (ii) Necessary prior environment clearance under Environment Impact Assessment Notification, 2006, as applicable shall be obtained from the State Environment Impact Assessment Authority (SEIAA), Goa.

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

   (iv) All the conditions stipulated by the Goa Coastal Zone Management Authority vide its letter No. GCZMA/MOR/AROS/ 07/17/905, dated 08.12.2008 including protection of existing sand dunes and the comments on the EIA report shall be strictly complied with.

   (v) There shall be no development in 0 to 200 mt from HTL (No Development Zone). There shall be no ground water drawal within No Development Zone and between 200 to 500 mts, it can be tapped only with the concurrence of the Central or State Ground Water Board;

   (vi) Efforts shall be made to widen the road on the south side of the project to 15 m. for easy and smooth movement of traffic.

   (vii) All height and coverage of the construction work shall confirm the provisions of the CRZ Notification, 2011.
(xix) 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/GSPCB.

(xx) 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.

(xxi) Usage of ready mixed concrete shall be explored in building construction.

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

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

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

(xxv) 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.

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

(xxvii) 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.

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

II. Operation Phase

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

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

iii) 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.

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

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

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

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

viii) 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.

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

x) Energy conservation measures like installation of CFLs/TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Use CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination. Use of solar panels may be done to the extent possible.
xi) Central air-conditioning energy efficient system having at least 3 star rating of BEE may be providing for the proposed hotel-cum-resort.

xii) Efforts may be made to use solar energy to the maximum extent possible.

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

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

10. **General Conditions:**

(i) The construction of the structures should be undertaken as per the plans approved by the concerned local authorities/local administration, meticulously conforming to the existing local and Central rules and regulations including the provisions of Coastal Regulation Zone Notification 2011 and the approved Coastal Zone Management Plan of Goa.

(ii) In the event of any change in the project profile a fresh reference shall be made to the Ministry of Environment and Forests.

(iii) This Ministry reserves the right to revoke this clearance, if any, of the conditions stipulated are not complied with to the satisfaction of this Ministry.

(iv) This Ministry or any other competent authority may stipulate any additional conditions subsequently, if deemed necessary, for environmental protection, which shall be complied with.

(v) Full support should be extended to the officers of this Ministry’s Regional Office and the offices of the Central and Goa State Pollution Control Board by the project proponents during their inspection for monitoring purposes, by furnishing full details and action plans including the action taken reports in respect of mitigative measures and other environmental protection activities.

12. 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 Municipal Solid Wastes (Management and Handling) Rules, 2000 including the amendments and rules made thereafter.

13. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.
14. The project proponent should advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the Goa State Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at http://www.envfor.nic.in. The advertisement should be made within 10 days from the date of receipt of the Clearance letter and a copy of the same should be forwarded to the Regional office of this Ministry.

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

16. Any appeal against this environment clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

17. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban Local Body 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.

18. The proponent shall upload the status of compliance of the stipulated 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 GSPCB. The criteria pollutant levels namely; SPM, RSPM, SO₂, NOₓ (ambient levels as well as stack emissions) or critical sectoral 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.

19. 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 GSPCB.

20. 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 Goa 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 Clearance conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.

(Lalit Kapur)
Director (IA-III)
Copy to:

1. The Chief Secretary and Chairman, Goa State Coastal Zone Management Authority, Environment Department, Government of Goa, Panaji.
2. The Chairman, Goa State Pollution Control Board, Dempo Towers, EDC Plaza, Patta, Panaji - 403 001, Goa.
3. The Chief Conservator of Forests, Ministry of Environment and Forests, Regional Office, Western Region, Kendriya Paryavaran Bhavan, Link Road No. 3, Ravishankar Nagar, Bhopal-462016 (M.P.)
4. Guard File.
5. Monitoring Cell.

(Lalit Kapur)
Director (IA-III)