

## FORM 1 & 1A

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# FORM 1

## I. Basic Information

S.No.	Item	Details
1.	Name of the project/s	"Redevelopment of Existing Motel building"
2.	S. No. in the schedule	8 (a)
3.	Proposed capacity/ area/length/ tonnage to be handled/ command area/ lease area/ number of wells to be drilled	Total Plot Area: 14838.49 sqm Net plot area: 12558.216 sqm Total Built-up area: 44563.495 sqm
4.	New/ Expansion/ Modernization	New
5.	Existing Capacity/ Area etc.	Existing built-up area= 3933.985 sqm which will be demolished.
6.	Category of Project i.e. 'A' or 'B'	B
7.	Does it attract the general condition? If yes, please specify.	Not Applicable
8.	Does it attract the specific condition? If yes, please specify.	Not Applicable
9.	Location	Village Sultanpur, Delhi
	Plot/Survey/Khasra No.	220 min,221,221/1,223/2, and 225 min
	Village	-
	Tehsil	-
	District	South West
	State	Delhi
10.	Nearest railway station/ airport along with distance in kms.	<b>Nearest Railway Station:</b> Tuglakabad Railway Station - 11.81 Km E  Okhala Railway station - 11.27 Km NE  <b>Nearest Airport:</b> Safdarjung Airport - 9.41 Km NE  IGI Airport - 6.78 Km NW
11.	Nearest Town, city, District Headquarters along with distance in kms.	New Delhi
12.	Village Panchayats, Zilla Parishad, Municipal Corporation, Local body (complete postal addresses with telephone nos. to be given)	Municipal Corporation of Delhi

13.	Name of the applicant	M/s Unique Innovation Pvt. Ltd.
14.	Registered Address	M/s Unique Innovation Pvt. Ltd. 222/223, Mehrauli Gurgaon Road, New Delhi-110030
15.	Address for correspondence:	
	Name	Lalit Kumar
	Designation (Owner/Partner/CEO)	Authorised Signatory
	Address	222/223, Mehrauli Gurgaon Road, New Delhi
	Pin Code	110030
	E-mail	fin@lutyensresort.com
	Telephone No.	9811191329
	Fax no.	-
16.	Details of Alternative Sites examined, if any. Location of these sites should be shown on a toposheet.	No alternate site has been examined as it is redevelopment project on existing plot only.
17.	Interlinked Projects	No, it is not an interlinked project
18.	Whether separate application of interlinked project has been submitted?	Not Applicable
19.	If yes, date of submission	Not Applicable
20.	If no, reason	Not Applicable
21.	Whether the proposal involves approval/clearance under: if yes, details of the same and their status to be given.  (a) The Forest (Conservation) Act, 1980? (b) The Wildlife (Protection) Act, 1972? (c) The C.R.Z. Notification, 1991?	  Not Applicable Not Applicable Not Applicable
22.	Whether there is any Government Order/ Policy relevant/ relating to the site?	Not Applicable
23.	Forest land involved (hectares)	No

24.	<p>Whether there is any litigation pending against the project and/or land in which the project is propose to be set up?</p> <p>(a) Name of the Court</p> <p>(b) Case No.</p> <p>(c) Orders/ directions of the Court, if any and its relevance with the proposed project.</p>	<p>Not Applicable</p> <p>Not Applicable</p> <p>Not Applicable</p>
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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.)

S.No.	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities /rates, wherever possible) with source of information data
1.1	Permanent or temporary change in land use, land cover or topography including increase in intensity of land use (with respect to local land use plan)	Yes	Redevelopment of existing Motel building is proposed at Village Sultanpur, Delhi. The project will be developed by M/s Unique Innovation Pvt. Ltd. Land use is already existing Motel building and there will be no further change.
1.2	Clearance of existing land, vegetation and buildings?	No	For the proposed redevelopment, no trees shall be cut. Only transplantation of 4 no. of trees shall be done and 20 no. of existing trees shall be retained.
1.3	Creation of new land uses?	Yes	The project will be redevelopment of Motel building.
1.4	Pre-construction investigations e.g. bore houses, soil testing?	Yes	Pre-construction geo-technical investigation has been done.
1.5	Construction works?	Yes	Redevelopment of existing Motel building will be done as per Master plan of Delhi.
1.6	Demolition works?	Yes	3933.985 sqm of builtup area of existing Motel building will be demolished and redeveloped.

1.7	Temporary sites used for construction works or housing of construction workers?	No	Workers during construction phase will be hired from nearby areas and hence there will be no need of providing housing. Only temporary shelters will be provided.
1.8	Above ground buildings, structures or earthworks including linear structures, cut and fill or excavations	Yes	After redevelopment above ground, the building shall be elevated up to maximum G+8 no. of floors and excavated up to 4 no. of basement level.
1.9	Underground works including mining or tunnelling?	No	It's a Motel building and hence no underground works are required except for excavation of basement & foundation.
1.10	Reclamation works?	No	No reclamation work will be done
1.11	Dredging?	No	Not Applicable
1.12	Offshore structures?	No	Not Applicable
1.13	Production and manufacturing processes?	No	No production or manufacturing processes shall be carried out.
1.14	Facilities for storage of goods or materials?	Yes	<p><b>During Construction Phase:</b></p> <ul style="list-style-type: none"> <li>◆ Separate raw material yard shall be made within the project site.</li> <li>◆ Cement Shall be separately stored under cover in bales.</li> <li>◆ Sand Shall be stacked nearby under tarpaulin cover.</li> <li>◆ Bricks and steel shall be laid in open.</li> </ul> <p><b>During Operation Phase:</b></p> <p>As the project will be redeveloped into existing Motel building, the raw material will be food, stationary and other household items which will be stored in respective store rooms.</p>
1.15	Facilities for treatment or disposal of solid waste or liquid effluents?	Yes	<p><b>During Construction Phase:</b></p> <p>Total 150 labourers shall work during the construction phase and hence the solid waste generation shall be 23 kg/day which shall be disposed off at municipal solid waste site.</p> <p>Construction and demolition debris like concrete will be recycled and will be used</p>

			<p>in lean concrete, brick work wastage will be used waterproofing for terrace, toilets etc. and rest will be sent to the construction and demolition facility.</p> <p>Total 6 KLD of waste water shall be generated which shall be discharged to septic tank followed by soak pit.</p> <p><b>During Operation Phase:</b> Approx. 510 kg/day of solid waste shall be generated from the project. The total waste water of 141 KLD generated from the project site will be treated in STP of total capacity 170 KLD. Details of Water Management and Solid Waste Management are given in Environmental Report.</p>
1.16	Facilities for long term housing of operational workers?	<b>No</b>	<p><b>During Construction Phase:</b> The workers during construction phase shall be hired from nearby areas. Facility for hutment will be provided for staying labours.</p> <p><b>During operation phase:</b> As this is Motel project supporting staff and working staff is envisaged. Separate housing will not be provided.</p>
1.17	New road, rail or sea traffic during construction or operation?	<b>No</b>	No new road, rail or sea traffic is proposed. Existing transportation facilities will be used during construction or operation phase.
1.18	New road, rail, air, waterborne or other transport infrastructure including new or altered routes and stations, ports, airports etc.?	<b>No</b>	<p>No new road, rail or sea traffic is proposed.</p> <p>The transportation measures already existing near site are as follows: <b>Nearest Railway Station:</b> Okhla Railway station– 11.27 Km NE <b>Nearest Airport:</b> IGI Airport- 6.78 Km NW</p>

1.19	Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements?	<b>No</b>	No closure or `diversion of existing transport routes or infrastructure leading to changes in traffic movements will be made.
1.20	New or diverted transmission lines or pipelines?	<b>No</b>	No such closure or diversion of transmission lines is required.
1.21	Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers?	<b>No</b>	No impoundment, damming, culverting, realignment or other changes to the hydrology of surface water courses is required.
1.22	Stream crossings?	<b>No</b>	No stream crossing
1.23	Abstraction or transfers of water from ground or surface waters?	<b>No</b>	No abstraction of ground water will be done.
1.24	Changes in water bodies or the land surface affecting drainage or run-off?	<b>No</b>	There will be no change in water bodies or the land surface effective drainage or run-off.
1.25	Transport of personnel or materials for construction, operation or decommissioning?	<b>Yes</b>	<b>During Construction phase:</b> Materials during construction phase shall be transported by truck, trolley etc. <b>During Operation Phase:</b> Car, two-wheeler, etc. will be used.
1.26	Long-term dismantling or decommissioning or restoration works?	<b>No</b>	Not Applicable
1.27	Ongoing activity during decommissioning which could have an impact on the environment?	<b>No</b>	Not Applicable
1.28	Influx of people to an area in either temporarily or permanently?	<b>Yes</b>	<b>During Construction Phase:</b> Temporary influx of people in the form of labours is envisaged. Approx. 150 no. of labours shall be employed.  <b>During Operation Phase:</b> As this is a Motel Building, 304 person in guest room ,30 no. of Motel staff and 455 no. of office staff, 2001 other floating population in different areas.

1.29	Introduction of alien species?	<b>No</b>	Not Applicable
1.30	Loss of native species or genetic diversity?	<b>No</b>	Not applicable
1.31	Any other actions?	<b>No</b>	Not Applicable

**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):**

<b>S.No.</b>	<b>Information/checklist confirmation</b>	<b>Yes/No</b>	<b>Details thereof (with approximate quantities /rates, wherever possible) with source of information data</b>
2.1	Land especially undeveloped or agricultural land (ha)	<b>No</b>	Plot Area of 14838.49 sqm has been allotted by DDA for the development of motel building. Existing motel building already exists there which shall be redeveloped.
2.2	Water (expected source & competing users) unit: KLD	<b>Yes</b>	<p><b>Source &amp; Quantity During Construction Phase:</b> Water during construction phase shall be taken from tanker water supplier which supply treated water from nearby STP.</p> <p><b>Source &amp; Quantity During Operation Phase:</b> The ultimate source of water will be through Delhi Jal Board. Total water requirement of the project after redevelopment will be 303 KLD out of which 176 KLD will be fresh water. Rest of the 127 KLD water requirement will be fulfilled by treated water. Detailed water Management &amp; water balance is given in Environment Report.</p>
2.3	Minerals (MT)	<b>No</b>	Not Applicable
2.4	Construction material – stone, aggregates, sand / soil (expected source – MT)	<b>Yes</b>	The major materials required for construction of the project are steel, tiles, glass, cement, agate, bricks, flooring tiles/stones, sanitary and hardware items, electrical fittings etc.



2.5	Forests and timber (source – MT)	<b>Yes</b>	Plywood for doors and windows shall be used which shall be procured from local market.
2.6	Energy including electricity and fuels (source, competing users) Unit: fuel (MT), energy (MW)	<b>Yes</b>	<b>Source of electricity-</b> BSES <b>Total Electrical Load-</b> 1584 KW. <b>DG sets for power back-up:</b> 3X750 KVA
2.7	Any other natural resources (use appropriate standard units)	<b>No</b>	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.**

S. No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
<b>3.1</b>	Use of substances or materials, which are hazardous (as per MSIHC rules) to human health or the environment (flora, fauna, and water supplies)	<b>Yes</b>	No storage of hazardous substances (as per MSIHC rules) will be done. However used shall be generated which will be given to approved vendor of CPCB.
<b>3.2</b>	Changes in occurrence of disease or affect disease vectors (e.g. insect or water borne diseases)	<b>Yes</b>	Suitable drainage and waste management measures will be adopted in both the construction and operational phase which will restrict stagnation of water or accumulation of water. This will effectively restrict the reproduction and growth of disease vectors.
<b>3.3</b>	Affect the welfare of people e.g. by changing living conditions?	<b>Yes</b>	<b>During Construction Phase:</b> Employment opportunities provided due to the project will lead to better quality of life and will also set a standard for future developments in the area. Moreover, this project will provide employment to about 150 local labours during construction phase.

			<b>During Operation Phase:</b> As it is a Motel building, there shall be several services required which will generate direct and indirect employment for the people of nearby area.
<b>3.4</b>	Vulnerable groups of people who could be affected by the project e.g. hospital patients, children, the elderly etc.,	<b>No</b>	No vulnerable group of people will be affected by the project.
<b>3.5</b>	Any other causes	<b>No</b>	None

#### 4. Production of solid wastes during construction or operation or

S.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
4.1	Spoil, overburden or mine wastes.	<b>Yes</b>	Excavated surplus earth will be used for backfilling in the project premises and also used for development of green belt.
4.2	Municipal waste (domestic and or commercial wastes)	<b>Yes</b>	<b>During Construction phase:</b> Solid waste during construction phase will be 23 kg/day which shall be disposed off at municipal solid waste site.  <b>During Operation Phase:</b> Approx.510 kg/day of solid waste shall be generated from the project during operational phase. Around 510 kg/day of municipal waste shall be generated from the proposed site out of which 357 kg/day will be bio-degradable ,128 kg/day non-biodegradable and 25 kg/day plastic waste will be generated.
4.3	Hazardous wastes (as per Hazardous Waste Management Rules)	<b>Yes</b>	<b>During Construction Phase:</b> Used oil whenever generated from the DG sets shall be kept in leak proof containers in an isolated area and shall be sent to approved recycler.

4.4	Other industrial process wastes	<b>No</b>	Not Applicable
4.5	Surplus product	<b>No</b>	Not Applicable
4.6	Sewage sludge or other sludge from effluent treatment	<b>Yes</b>	About 10 Kg/day of dried sludge will be generated from STP within project during operation phase and this sludge will be passed through filter press where it will be dewatered/dried to form a cake and then will be used as manure in green areas. The unused sludge shall be given to farmers or nursery.
4.7	Construction or demolition wastes	<b>Yes</b>	Existing built-up area of 3933.985 sqm will be demolished. Construction & demolition debris like concrete will be recycled and will be used in lean concrete, brick work wastage will be used waterproofing for terrace, toilets etc. tiles will be used in creating pathways in the landscape area etc. Also generate C&D waste from demolition will be sent to the construction and demolition facility.
4.8	Redundant machinery or equipment	<b>No</b>	Not applicable
4.9	Contaminated soils or other materials	<b>No</b>	Not applicable
4.10	Agricultural wastes	<b>No</b>	Not applicable
4.11	Other solid wastes	<b>No</b>	<p><b>During Construction Phase:</b> No E-waste shall be generated.</p> <p><b>During operation Phase:</b> 3-4 kg/month E-waste shall be generated. It shall be given to approved recycler of SPCB. Battery waste shall be generated from inverters &amp; UPS which shall be disposed off as per the Batteries (Management &amp; Handling) Rules, 2001.</p>

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

S.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
5.1	Emissions from combustion of fossil fuels from stationary or mobile sources	Yes	<p><b>During Construction Phase:</b> DG sets of capacity 62.5 KVA shall be installed acoustically enclosed with adequate stack height.</p> <p><b>During Operation Phase:</b> The only source of emission from combustion of fuel in DG set of capacity 3 x 750 KVA. Hence, to avoid the emissions, stack height of 5 m above roof level for the DG set shall be provided. The DG set shall meet all the norms prescribed by CPCB.</p>
5.2	Emissions from production processes	No	Not applicable
5.3	Emissions from materials handling including storage or transport	Yes	<p>Dust shall be generated during construction from the movement of transport vehicles and other construction activities. The effect will be restricted to construction phase only.</p> <p>Water sprinklers shall be used for dust suppression.</p> <p>Material will be stored under Tarpaulin cover.</p>
5.4	Emissions from construction activities including plant and equipment	Yes	<p>RMC shall be used for the project. Dust and emissions are likely to be generated during construction activities which shall be reduced by sprinkling of water in a specific time interval and timely maintenance schedule for machinery.</p> <p>Also, the machines shall be shut down during idle period.</p>

5.5	Dust or odours from handling of materials including construction materials, sewage and waste	<b>Yes</b>	During loading and unloading of construction material dust is likely to be generated during construction phase. Water shall be sprinkled and tarpaulin cover shall be provided over stored raw material to reduce dust emission. Mobile toilets during construction phase shall be provided and waste water shall be disposed off in septic tank followed by soak pits.
5.6	Emissions from incineration of waste.	<b>No</b>	Not applicable
5.7	Emissions from burning of waste in open air (e.g. slash materials, construction debris).	<b>No</b>	Open burning of biomass/other material will be prohibited.
5.8	Emissions from any other sources.	<b>No</b>	None

#### 6. Generation of Noise and Vibration, and Emissions of Light and Heat:

S.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data with source of information data
6.1	From operation of equipment e.g. engines, ventilation plant, crushers	Yes	<p><b>During construction phase:</b></p> <p>DG sets of capacity 62.5 KVA shall be installed acoustically enclosed. The equipment such as mixer machines, bulldozers, cranes, compactors and excavators shall be used which will be of highest standard of reputed make and adhere to international standards. Hence an insignificant impact due to construction machinery is envisaged. Apart from this, the construction activities shall be restricted to daytime only and timely maintenance of machinery will be ensured.</p> <p><b>During operation phase:</b></p>

			Source of noise in the operational phase will be DG sets. The DG set shall be installed with anti-vibration pads and will be used during Power failure only. They may generate noise level maximum upto 75 dB (A).
6.2	From industrial or similar processes	No	Not applicable
6.3	From construction or demolition	Yes	Due to the various activities, there are short-term noise impacts in the construction & demolition work will be limited to day time only.
6.4	From blasting or piling	No	No blasting or piling will be done
6.5	From construction or operational traffic	Yes	Some amount of noise (70-75 Db (A)) will be generated from vehicular movement in the construction and operational phase. Plantation around the boundary wall shall be done to reduce noise from traffic.
6.6	From lighting or cooling systems	No	Not applicable
6.7	From any other sources	No	None

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

S. No.	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
7.1	From handling, storage, use or spillage of hazardous materials	Yes	The hazardous waste generated will be used oil only and it will be stored in HDPE drums and kept in covered rooms and will be sold to authorized vendors only. Special care will be taken to prevent leakages and spills.
7.2	From discharge of sewage or other effluents to water or the land (expected mode and place of discharge)	Yes	During operational phase, 170 KLD STP will be installed for treating the waste water and 127 KLD of treated water will be reused in flushing, DG & HVAC cooling

			and gardening. It will be a zero discharge complex.
7.3	By deposition of pollutants emitted to air into the land or into water	No	None
7.4	From any other sources	No	Not applicable
7.5	Is there a risk of long term build-up of pollutants in the environment from these sources?	No	Not applicable

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

S. No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
8.1	From explosions, spillages, fires etc. from storage, handling, use or production of hazardous substances	Yes	<b>During Construction Phase:</b> All appropriate measures shall be taken to avoid accidents. <b>During Operational Phase:</b> Proper Disaster management and firefighting system will be installed at site.
8.2	From any other causes	Yes	<b>During construction phase:</b> All the labours shall be provided with suitable personal protective equipment (PPE) as required under the health and safety norms. Training and awareness about the safety norms shall be provided to all supervisors and labours involved in construction activity.
8.3	Could the project be affected by natural disasters causing environmental damage (e.g. floods, earthquakes, landslides, cloudburst etc.)?	<b>Yes</b>	The area under study falls in seismic zone-IV, according to the Indian Standard Seismic Zoning Map. Suitable seismic coefficients in horizontal and vertical directions respectively, will be adopted while designing the structure.

**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.**

S. No.	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
9.1	<p>Lead to development of supporting facilities, ancillary development or development stimulated by the project which could have impact on the environment e.g.:</p> <ul style="list-style-type: none"> <li>Supporting infrastructure (roads, power supply, waste or waste water treatment, etc.)</li> <li>Housing development</li> <li>Extractive industries</li> <li>Supply industries</li> <li>Other</li> </ul>	<p>No</p> <p>Yes</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p>	<p>STP of 170 KLD will be installed for the treatment of wastewater.</p> <p>Not applicable</p> <p>Not applicable</p> <p>Not applicable</p> <p>Not applicable</p>
9.2	Lead to after-use of the site, which could have an impact on the environment.	No	Not applicable
9.3	Set a precedent for later developments	Yes	It will attract people to develop organized motel building.
9.4	Have cumulative effects due to proximity to other existing or planned projects with similar effects	No	No impact



### III. Environmental Sensitivity

Sl. No.	Areas	Name/ Identity/ Aerial distance (within 10-15 km.) from Proposed project location boundary
1	Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value	<b>Wild Life Sanctuary-</b> Asola wildlife sanctuary with ESZ - 2.85 Km SE
2	Areas which are important or sensitive for ecological reasons - Wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests	<b>Water bodies</b> Yamuna River - 13.45 Km NE Hauz Khas Tank -6.05 Km NE Tuklaqabad pond -9.6 Km E Neela Hauz -2.90 Km N Shmashi Talab -1.37 Km NE Ghitorni Lake -3.08 Km SW  <b>Forests</b> Jahapanah City Forest -6.76 Km NE Central Ridge Reserve Forest -10.41 Km N Rajokari Protected Forest- 4.23 Km NW
3	Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, over wintering, migration	<b>Wild Life Sanctuary-</b> Asola wildlife sanctuary with ESZ - 2.85 Km SE
4	Inland, coastal, marine or underground waters.	None

<b>5</b>	State, National boundaries	Delhi- Haryana State Boundary - 6.30 Km SWW
<b>6</b>	Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas	<b>Roads</b> NH- 236 - Adjacent to site in NW direction NH-8 - 7.37 Km W Sultanpur- Madir Marg - Adjacent to site in East Direction Abdul Gaffar Khan Marg - 0.79 Km NE <b>Railway Station</b> Tuglakabad Railway Station - 11.81 Km E Okhala Railway station - 11.27 Km NE <b>Airport</b> Safdarjung Airport -9.41 Km NE IGI Airport - 6.78 Km NW
<b>7</b>	Defense installations	None
<b>8</b>	Densely populated or built-up area	New Mangalapuri - Adjacent to project in west direction

9	<p>Areas occupied by sensitive man-made land uses (<i>hospitals, schools, places of worship, community facilities</i>)</p>	<p><b>Hospital</b>  Institute of Liver and Biliary Sciences -0.67 Km NW  Subhan Medical Center -0.81 Km NE  Nanda Medical Center -1.64 Km SE  Vikas Hospital -1.97 Km NNE</p> <p><b>Schools</b>  Bal Bharti Public School - 0.29 Km SW  S.D.M.C Primary School New Mangalapuri -0.31 Km SW  The Heritage School - 0.83 Km NW  Deep Public School - 1.26 Km NW</p> <p><b>Place of Worship</b>  Shiv jii and Mata Mandir - 0.31 km SW  Chattarpur Hanuman Sthal -0.68 Km E  Kali Mata Mandir - 1.93 Km NNE</p> <p><b>Community Facilities</b>  Post Office, Mehrauli - 2.38 Km NE  Post Office, Block A -1.85 Km SEE  Post Office, TB Hospital - 3.48 Km NE</p>
10	<p>Areas containing important, high quality or scarce resources  (<i>Ground water resources, surface resources, forestry,</i></p>	<p>Qutub minar - 2.88 Km NE  Tuglakabad Fort - 9.40 Km E  Hauj Khas -5.47 Km NE</p>


	<i>agriculture, fisheries, tourism, minerals)</i>	
11	Areas already subjected to pollution or environmental damage. <i>(Those where existing legal environmental standards are exceeded)</i>	Okhla Industrial area -10.30 Km NE Naraina Industrial area -14.26 Km NNE
12	Areas susceptible to natural hazard which could cause the project to present environmental problems <i>(Earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions)</i>	Area falls in seismic zone IV according to seismic zone map of India. No flooding in the area according to previous record

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

Date: 31.08.2018

Place: NEW DELHI

For UNIQUE INNOVATION PVT. LTD.



AUTHORIZED SIGNATORY

Authorized signatory

## FORM 1A

### CHECK LIST OF ENVIRONMENTAL IMPACTS

(Project proponents are required to provide full information and wherever necessary attach explanatory notes with the Form and submit along with proposed environmental management plan & monitoring programme)

#### I. LAND ENVIRONMENT

(Attach panoramic view of the project site and the vicinity)

1.1	<p>Will the existing landuse get significantly altered from the project that is not consistent with the surroundings? (Proposed landuse must conform to the approved Master Plan / Development Plan of the area. Change of landuse if any and the statutory approval from the competent authority be submitted). Attach Maps of</p> <p>(i) Site location</p> <p>(ii) Surrounding features of the proposed site (within 500 meters)</p> <p>(iii) The site (indicating levels &amp; contours) to appropriate scales. If not available attach only conceptual plans.</p>	<p>The existing land-use of the project is Motel building. The proposed project is redevelopment of existing Motel building located at Village Sultanpur, Delhi.</p> <p>The development shall confirm to the master plan of the area.</p> <p>The site location shown on Google Map is given in Environment Report.</p> <p>Map showing vicinity around the site is given in Environment Report.</p> <p>Conceptual plan is given in Environment Report..</p>
1.2	<p>List out all the major project requirements in terms of the Land area,</p> <p>Built up area</p> <p>Water consumption</p> <p>Power requirement</p> <p>Connectivity</p> <p>Community facilities</p>	<p>Total Plot Area: 14838.49 sqm</p> <p>Net Plot Area: 12558.216 sqm</p> <p>Total Built-up area: 44563.495 sqm</p> <p><b>Water Consumption= 303 KLD</b></p> <p>1584 KW</p> <p><b>NH- 8: 7.37 Km W</b></p> <p>Banquet, Spa fitness centre &amp; Pre-function area.</p>

	Parking needs etc.	<b>Parking requirements:</b> 659 ECS <b>Parking Provision:</b> 669 ECS
1.3	<p>What are the likely impacts of the proposed activity on the existing facilities adjacent to the proposed site?</p> <p>(Such as open spaces, community facilities, details of the existing land use, and disturbance to the local ecology).</p>	<p>The entire project influenced area will be developed as per the provision of Master Plan, thus no induced development is foreseen due to the proposed project.</p> <p>Also, the proposed development shall be carried out as per the defined building by-laws; hence no impact is envisaged due to proposed development. Construction phase as well as operation Phase of the project, will generate direct and indirect employment opportunities for a large section of society. The employment will have positive impact thereby increasing the quality of life.</p>
1.4	<p>Will there be any significant land disturbance resulting in erosion, subsidence &amp; instability?</p> <p>(Details of soil type, slope analysis, vulnerability to subsidence, seismicity etc. may be given).</p>	<p>No such significant land disturbance will result. However, care will be taken so that no erosion, subsidence &amp; instability takes place.</p> <p><b>Soil Type:</b> Silt Loam</p> <p><b>Slope Analysis:</b> The project area possesses fairly plain terrain.</p> <p><b>Erosion / Subsidence:</b> Proper greening &amp; paving of area will not cause any soil erosion problem and subsidence.</p> <p><b>Seismicity:</b> The area under study falls in Seismic zone-IV according to the Indian Standard Seismic Map. Suitable seismic coefficients in horizontal and vertical directions respectively, will be adopted while designing the structure.</p>
1.5	<p>Will the proposal involve alteration of natural drainage systems?</p> <p>(Give details on a contour map showing the natural drainage near the proposed project site)</p>	<p>The proposed project activities will not cause any alteration of natural drainage system.</p>

1.6	<p>What are the quantities of earthwork involved in the construction activity cutting, filling, reclamation etc.</p> <p>(Give details of the quantities of earthwork involved, transport of fill materials from outside the site etc.)</p>	<p>During construction phase, approx. 77732.516 cu m. of soil will be excavated to provide basement. This excavated soil will be properly stacked within site under tarpaulin cover and will be reused for back filling purposes. The top soil will be preserved for landscaping purpose only. Hence, no adverse impacts on the land environment are envisaged.</p>
1.7	<p>Give details regarding water supply, waste handling etc. during the construction period.</p>	<p><b>Water Supply:</b> During Construction stage, water will be sourced through nearby STP/ through tanker supplier.</p> <p><b>Waste Generation / Handling:</b> Spillage of oil from the machinery or cement residual from concrete mixer plants will be properly collected and reused in construction site. For construction labour, proper sanitary facilities &amp; wash areas will be constructed such as mobile toilets and good hygienic conditions will be maintained.</p>
1.8	<p>Will the low-lying areas &amp; wetlands get altered?</p> <p>(Provide details of how low lying and wetlands are getting modified from the proposed activity)</p>	<p>No low lying and wetlands area are present in and around the project site.</p>
1.9	<p>Whether construction debris &amp; waste during construction cause health hazard? (Give quantities of various types of wastes generated during construction including the construction labour and the means of disposal)</p>	<p>The construction waste generated from the project will be common in nature and will not cause any health hazard to associate and nearby population. The construction debris will be used for land levelling /back filling. Waste concrete will be reused as aggregate in construction process.</p> <p>Mobile toilets &amp; drinking water for construction labour shall be provided. The sewage and waste water generated shall be disposed off to septic tank via soak pit.</p>



## 2. WATER ENVIRONMENT

2.1	<p>Give the total quantity of water requirement for the proposed project with the breakup of requirements for various uses.</p> <p>How will the water requirement met?</p> <p>State the sources &amp; quantities and furnish a water balance statement.</p>	<p>The <b>total quantity of water requirement</b> shall be 303 KLD after redevelopment &amp; shall be met by Delhi Jal Board.</p> <p>Domestic : 101 KLD  Flushing : 48 KLD  Gardening : 23 KLD  DG &amp; HVAC cooling: 98 KLD  Kitchen: 21 KLD  Laundry: 12 KLD</p> <hr/> <p><b>Total Water Requirement : 303 KLD</b>  Fresh water : 176 KLD  Treated Water Reuse : 127 KLD  <b>Total Waste Water generation: 141 KLD</b></p>
2.2	What is the capacity (dependable flow or yield) of the proposed source of water?	Delhi Jal Board will supply water to the project and it is a dependable source of water.
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)	Delhi Jal Board will supply water.
2.4	<p>How much of the water requirement can be met from the recycling of treated wastewater?</p> <p>(Give the details of quantities, sources and usage)</p>	Total treated water of 127 KLD shall be generated from the S.T.P, out of which 127 KLD shall be reused in flushing, gardening & DG&HVAC cooling within the project premises. It will be zero discharge complex.
2.5	<p>Will there be diversion of water from other users?</p> <p>(Please assess the impacts of the project on other existing uses and quantities of consumption)</p>	There will not be any substantial effect on water demand of this region as the development will be done as per the development plan of the area.

2.6	<p>What is the incremental pollution load from wastewater generated from the proposed activity?</p> <p>(Give details of the quantities and composition of wastewater generated from the proposed activity)</p>	<p>The total waste water generation from the project will be 141 KLD which will be treated in in-house S.T.P of capacity 170 KLD. 127 KLD of the treated water will be reused for flushing, gardening, &amp; DG&amp;HVAC cooling. It will be zero discharge complex after redevelopment.</p>
2.7	<p>Give details of the water requirements met from water harvesting? Furnish details of the facilities created.</p>	<p>4 number of rain water harvesting pits shall be provided at site. (Details of Rain Water harvesting pits are given in Environment Report).</p>
2.8	<p>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?</p> <p>Would it aggravate the problems of flooding or water logging in any way?</p>	<p>As it is a redevelopment of existing Motel building, thus there will be no surface run off creating water logging during rainy days as existing drainage pattern shall be maintained.</p> <p>No, it will not aggravate the problem of flooding or water logging in any way, rather will reduce the same.</p>
2.9	<p>What are the impacts of the proposal on the ground water?</p> <p>(Will there be tapping of ground water; give the details of ground water table, recharging capacity, and approvals obtained from competent authority, if any)</p>	<p>No Ground water extraction will be done. However, ground water recharging is proposed through rain water harvesting scheme, so, there will be either no impact or a positive impact on ground water levels.</p>

2.10	<p>What precautions/ measures are taken to prevent the runoff from construction activities polluting land &amp; aquifers?</p> <p>(Give details of quantities and the measures taken to avoid the adverse impacts)</p>	<p>During the construction phase, runoff from the construction site shall not be allowed into the roadside. It will be collected in a tank &amp; after pre-treatment it will be reused for sprinkling, etc.</p>
2.11	<p>How is the storm water from within the site managed?</p> <p>(State the provisions made to avoid flooding of the area, details of the drainage facilities provided along with a site layout indication contour levels)</p>	<p>During construction phase, Adequate measures shall be taken to channelize such storm water and the same shall be collected in a tank &amp; after pre-treatment it will be reused for sprinkling etc.</p> <p>During operation phase Storm water, will be channelized to 4 no. of rainwater harvesting pits proposed within the project site.</p>
2.12	<p>Will the deployment of construction labourers particularly in the peak period lead to unsanitary conditions around the project site (Justify with proper explanation)</p>	<p>Mobile toilets will be provided for labourers during construction period.</p> <p>The waste shall be disposed off to septic tank followed by soak pit.</p>
2.13	<p>What on-site facilities are provided for the collection, treatment &amp; safe disposal of sewage?</p> <p>(Give details of the quantities of wastewater generation, treatment capacities with technology &amp; facilities for recycling and disposal)</p>	<p>Waste water during construction phase from labours shall be discharged into septic tanks followed by soak pit.</p> <p>During operation phase 141 KLD of waste water will be treated in the proposed S.T.P. of 170 KLD capacity based on technology. 127 KLD of treated water, will be reused.</p>
2.14	<p>Give details of dual plumbing system if treated waste used is used for flushing of toilets or any other use.</p>	<p>Dual Plumbing line will be provided in the project for reuse of treated water.</p>

### 3. VEGETATION

3.1	Is there any threat of the project to the biodiversity? (Give a description of the local ecosystem with its unique features, if any)	<p><u>Core Zone:</u> No trees shall be cut, there will not be major threat to existing trees. Existing trees – 20 Trees to be transplanted – 4 Proposed no. of - 136</p> <p><u>Buffer Zone:</u></p> <table border="1"> <tr> <td>Shisham</td><td>Champak</td><td>Chhota Gulmohar</td></tr> <tr> <td>Pilkhan</td><td>Arjun</td><td>Champa</td></tr> <tr> <td>Ashoka</td><td>Ficus</td><td>Dhayti</td></tr> <tr> <td>Madhu</td><td>Roheda</td><td>Harisinghar</td></tr> </table>	Shisham	Champak	Chhota Gulmohar	Pilkhan	Arjun	Champa	Ashoka	Ficus	Dhayti	Madhu	Roheda	Harisinghar
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3.2	Will the construction involve extensive clearing or modification of vegetation? (Provide a detailed account of the trees & vegetation affected by the project)	Transplantation of 4 no. of trees shall be done.												
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)	<p>The Shelter belt for the proposed project has been planned to provide a clean, healthy and beautiful green environment for the people to live in within the proposed project site.</p> <p>To minimize the impact, the provision of plantation area of 3805.139 sq. m area, with lawns, ornamental plants and trees shall be provided after redevelopment.</p>												

### 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.	<p><u>Core Zone:</u> The proposed project is a redevelopment of the existing Motel building hence, the place is not the habitat for local fauna. There will not be any type of displacement or any other effect on the local fauna due to proposed project activities.</p> <p><u>Buffer Zone:</u> Asola wildlife sanctuary with ESZ - 2.85 Km SE</p>
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4.2	Any direct or indirect impacts on the avifauna of the area? Provide details.	Avifauna will be increased after increase in plantation area. Proper landscaping has been planned to provide a clean, healthy and beautiful green environment for the population. Common native variety of trees and ornamental flowering species will be planted in the green space which will attract avifauna & hence will have direct positive impact on the local avifauna & this will provide shelter to local birds.
4.3	Prescribe measures such as corridors, fish ladders etc. to mitigate adverse impacts on fauna.	Not applicable

## 5. AIR ENVIRONMENT

5.1	<p>Will the project increase atmospheric concentration of gases &amp; result in heat islands?</p> <p>(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)</p>	<p>The traffic will increase due to operation of project. Increased traffic generation of vehicles due to project will not cause significant increase in atmospheric concentration of gases and do not result in heat island formation.</p> <p>Tree plantation in the project will be provided such that the impact of air pollution shall be minimized.</p> <p>D.G. Set will be installed in the project which will be operated during power cut only.</p>
5.2	<p>What are the impacts on generation of dust, smoke, odorous fumes or other hazardous gases? Give details in relation to all the meteorological parameters.</p>	<p>No dust, odour will be generated at site. Smoke will be generated from the operation of DG sets. Proper emission standards will be maintained as per CPCB guidelines.</p>
5.3	<p>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 &amp; exit to the project site.</p>	<p>The optimum parking provision is proposed in the basement &amp; surface area. Hence, there will be no shortage of parking space for vehicles. Total parking provision of project is 669 ECS.</p>
5.4	<p>Provide details of the movement patterns with internal roads, bicycle tracks, pedestrian pathways, footpaths etc., wit areas under each category.</p>	<p>Maximum capacity of parking shall be provided on basement and surface. Proper route shall be provided for the traffic movement as well as pedestrian movement.</p>
5.5	<p>Will there be significant increase in traffic noise and vibrations? Give details of the sources and the measures proposed for mitigation of the above.</p>	<p>During construction, noise barriers shall be installed to reduce traffic noise &amp; vibrations and during operation Shelter belt developed within the Motel building which will mitigate the traffic noise. Proper care shall be taken during design that there will not be any increase in traffic noise by providing two-way traffic movement, hence no conjunction will cause, and hence, no honking within the Motel building will be maintained.</p>

		The foundation shall be made very hard and paved with rubber flooring to minimize the vibration, also all other measures shall be adopted during designing that there will not be any causes of vibrations during the traffic density.
5.6	What will be the impact of DG sets and other equipment on noise levels and vibration in and ambient air quality around the project site? Provide details.	<p>There would be slight impact of D.G. Sets on noise levels, vibration and in ambient air quality around the project site.</p> <ol style="list-style-type: none"> <li>1. All the D.G. Sets of the proposed project would be acoustically enclosed.</li> <li>2. Stack height as per C.P.C.B. norms to reduce the impacts on air quality around the project site will be provided</li> <li>3. The noise from D.G. Sets will meet the desired standard as per C.P.C.B guidelines. Low Sulphur fuel will be used to run these D.G. Sets.</li> <li>4. Vibration pads will be used in DG sets to minimize the vibration effect.</li> </ol>

## 6. AESTHETICS

6.1	<p>Will the proposed constructions in any way result in the obstruction of a view, scenic amenity or landscapes?</p> <p>Are these considerations taken into account by the proponents?</p>	<p>Since, the project is a redevelopment of the existing Motel building hence, no obstruction of a view, scenic amenity or landscapes shall be there.</p> <p>However, all considerations shall be taken by the proponents.</p>
6.2	<p>Will there be any adverse impacts from new constructions on the existing structures? What are the considerations taken into account?</p>	<p>Since, the existing structures will be demolished and will be redeveloped into Motel building. Hence, the aesthetic value will be increased.</p>

6.3	<p>Whether there are any local considerations of urban form &amp; urban design influencing the design criteria? They may be explicitly spelt out.</p> <p>Are there any anthropological or archaeological sites or artifacts nearby?</p> <p>State if any other significant features in the vicinity of the proposed site have been considered.</p>	<p>There are no typical urban form &amp; urban design influencing the design criteria.</p> <p>Anthropological or Archaeological sites or artifacts within 10 km radius.</p> <ul style="list-style-type: none"> <li>• Ramp and gateways of Rai Pithora's Fort, Adchini - 3.59 KM NE</li> <li>• Walls of Lal Kot and Rai Pithora's fort from Sohan Gate to Adham Khan's tomb including the ditch where there is an outer wall - 3.41 KM NNE</li> <li>• Mandi Mosque - 1.99 KM NE</li> <li>• Rajon-ki-Bain with Mosque and Chatri - 2.37 KM NE</li> <li>• Iron Pillar, Hindu remains - 2.87 KM NNE</li> <li>• Unknown tomb said to be of Azim Khan - 2.92 KM NNE</li> <li>• Area between Balban Khan's Tomb &amp; Jamli Kamali - 2.57 KM NNE</li> <li>• Bastion, where a wall of Jahan panah meets the wall of Rai Pithora's fort, Adchini-5.80 km NE</li> <li>• Begumpuri Masjid-5.39 km NE</li> <li>• Lal Gumbad, Chirag Delhi -5.94 km</li> <li>• Tomb of Bahlol Lodi – 6.81 km NE</li> <li>• Bagh-i-Alam Gumbad with a Mosque – 6.57 Km NE</li> <li>• Kali Gumti – 6.61 km NNE</li> <li>• Tohfewala Gumbad – 6.58 km NE</li> <li>• Bijay Mandal, neighbouring domes, buildings and dalan to north of Begumpur – 5.48 km NE</li> <li>• Bandi or Potika Gumbad III-280 – 6.54 km NE</li> <li>• Bara Khamba-285 – 6.40 km NE</li> <li>• Biran-Ka-Gumbad-282 – 6.70 km NE</li> <li>• Idgah of Kharehra – 6.15 km NE</li> <li>• Nili Mosque – 6.70 Km NE</li> <li>• Sakri Gumti-284 – 6.42 Km NE</li> <li>• Khirkee Masjid – 5.79 Km NE</li> <li>• Tomb of Usuf-Quttal situated at Khirki – 5.89 Km NE</li> </ul>
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## 7. SOCIO-ECONOMIC ASPECTS



7.1	Will the proposal result in any changes to the demographic structure of local population? Provide the details.	The proposed project is a redevelopment of existing Motel building & thus there will be influx of population in the form of guests, staffs & visitors. Thus, there will be some change in the demographic structure of the area.
7.2	Give details of the existing social infrastructure around the proposed project.	<p><b>Hospital</b></p> <p>Institute of Liver and Biliary Sciences - 0.67 Km  Subhan Medical Center - 0.81 Km NE  Nanda Medical Center - 1.64 Km SE  Vikas Hospital - 1.97 Km NNE</p> <p><b>School</b></p> <p>Bal Bharti Public School - 0.29 Km SW  S.D.M.C Primary School New Mangalapuri - 0.31 Km SW  The Heritage School - 0.83 Km NW  Deep Public School - 1.26 Km NW</p> <p><b>Place of Worship</b></p> <p>Kali Mata Mandir- 1.93 Km, NNE  Shiv jii and Mata Mandir - 0.31 km SW  Chattarpur Hanuman Sthal - 0.68 Km E</p> <p><b>Community Facilities</b></p> <p>Post Office, Mehrauli - 2.38 Km NE  Post Office, Block A - 1.85 Km SEE  Post Office, TB Hospital - 3.48 Km NE</p>
7.3	Will the project cause adverse effects on local communities, disturbance to sacred sites or other cultural values? What are the safeguards proposed?	The proposed project will be constructed within the designated site as per the defined building by-laws of government authority. There is no sacred site or cultural heritage site within vicinity of proposed project; hence no adverse impacts are envisaged.

## 8. BUILDING MATERIALS

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 major materials required for construction of the project will be steel, cement, bricks, flooring tiles/stones, sanitary and hardware items, electrical fittings, etc. Energy efficient building material will be used.
8.2	Transport and handling of materials during construction may result in pollution, noise & public nuisance. What measures are taken to minimize the impacts?	Yes, transportation and handling of material will result in air & noise pollution; however, it will be minimized by covering material by the tarpaulin and ensuring PUC certificate of vehicles and good condition silencers.
8.3	Are recycled materials used in roads and structures? State the extent of savings achieved?	The debris of construction and demolition material will be also used in backfilling, roads etc.
8.4	Give details of the methods of collection, segregation & disposal of the garbage generated during the operation phases of the project.	The solid waste will be disposed off as per Municipal Solid Waste (Management and Handling) Rules, 2016. Details are given in Environment Report.

## 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?	<b>Power Requirement-</b> 1584 KW <b>Source of Power-</b> BSES <b>Back-Up sources-</b> D.G. Sets of ultra- low sulphur (3 X 750 KVA) To Minimize energy consumption following measures shall be adopted. <ul style="list-style-type: none"> <li>• Energy Efficient LED shall be used.</li> <li>• All cables shall be derated to avoid heating during use. This also indirectly reduces losses and imposes reliability.</li> <li>• Power factor shall be maintained 0.9 or higher. This will reduce electrical power distribution losses in the installation.</li> <li>• Solar conservation norms shall be provided.</li> </ul>
9.2	What type of and capacity of power back-up do you plan to provide?	Type of power backup: Ultra Low Sulphur Diesel Generator.

9.3	<p>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?</p>	Double Reflective Glass will be used.
9.4	<p>What passive solar architectural features are being used in the building? Illustrate the applications made in the proposed project.</p>	<p>Building design and envelope shall be optimized through selection of appropriate wall and roof construction and through adoption of solar measures. The architectural features will be such that max daylight provision will be provided.</p>
9.5	<p>Does the layout of streets &amp; 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? Substantiate with details.</p>	<p>Yes, the layout of buildings shall be designed to maximize the potential for use of solar lighting per day devices. Yes, solar lights shall be used.</p>
9.6.	<p>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?</p>	<p>Solar Measures shall be adopted to provide shading devices for windows and roof which would effectively reduce heating up of building envelope. Louvers and sunshades will be used around windows in order to protect from direct sunlight. Shading devices and fenestration have been adequately designed to cut off, summer sun and to let in winter sun.</p>

9.7	<p>Do the structures use energy-efficient space conditioning, lighting and mechanical systems? Provide technical details.</p> <p>Provide details of the transformers and motor efficiencies, lighting intensity and air-conditioning load assumptions?</p> <p>Are you using CFC and HCFC free chillers? Provide specifications</p>	<p>Suitable energy optimization will be adopted during the calculation of energy load of the proposed project. The space heating load will be minimized using solar structure and suitable buildings envelop material. Uses of incandescent lamp and halogen lamps have been avoided and energy efficient LED light shall be used for all common area.</p> <p>The diesel generator sets shall be automatically controlled to optimize their usage based on the actual load requirements at any time. Space conditioning will be provided as per norms of National Building Code – Part 8; Building Services Section 3–Mechanical Ventilation. Lighting intensity will be done as per the National Building Code Guidelines.</p> <p>It is Motel building project.</p>															
9.8	<p>What are the likely effects of the building activity in altering the micro-climates?</p> <p>Provide a self-assessment on the likely impacts of the proposed construction on creation of heat island &amp; inversion effects?</p>	<p>No significant effect is envisaged on the surrounding environment of project. Increased traffic generation and use of diesel generators sets in the project will not cause significant increase in atmospheric concentration of gases and will not result in heat island formation.</p>															
9.9	<p>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.</p>	<table><tr><th>S. No</th><th>BUILDING MATERIAL PROPOSED WITH U &amp; R VALUES</th><th>‘R’ Values (in Sq m. Deg C/ Watts )</th><th>‘U’ Values (in Watts/ Sq m. Deg C)</th></tr><tr><td>1.</td><td>Wall Brick &amp; ACC Blocks wall (230 mm thick), both side thick sand cement plaster (12-18mm) with insulation.</td><td>2.28</td><td>0.44</td></tr><tr><td>2.</td><td>Roof 200 mm RCC slab with mud phuska &amp; clay tiles with</td><td>2.04</td><td>0.49</td></tr></table>	S. No	BUILDING MATERIAL PROPOSED WITH U & R VALUES	‘R’ Values (in Sq m. Deg C/ Watts )	‘U’ Values (in Watts/ Sq m. Deg C)	1.	Wall Brick & ACC Blocks wall (230 mm thick), both side thick sand cement plaster (12-18mm) with insulation.	2.28	0.44	2.	Roof 200 mm RCC slab with mud phuska & clay tiles with	2.04	0.49			
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9.10	What precautions & safety measures are proposed against fire hazards? Furnish details of emergency plans.	<p>The basic system of Fire Fighting shall be designed as per the provisions of the National Building Code 2016</p> <p><b>Fire Safety:</b></p> <p>The building materials shall be of appropriate fire resistance standards. Further, design shall include provisions for the following:</p> <ul style="list-style-type: none"><li>◆ The electrical systems shall be provided with automatic circuit breakers activated by the rise of current as well as activated by over current.</li><li>◆ Fire detection system.</li><li>◆ Fire alarm system at appropriate places.</li><li>◆ Means of escape</li><li>◆ Access for fireman</li><li>◆ Adequate fire-fighting requirement shall be taken into account while designing the electrical distribution system.</li><li>◆ Emergency Lighting:</li><li>◆ The emergency lights operated on battery power should be provided at appropriate locations such as corridors, common area, staircase, exit and entrance doors, parking etc.</li></ul>								
9.11	If you are using glass as wall material provides details and specifications including emissive and thermal characteristics.	Double Reflective Glass will be used.								

9.12	<p>What is the rate of air infiltration into the building?</p> <p>Provide details of how you are mitigating the effects of infiltration.</p>	<p>The air inflow and outflow shall be maintained as per norms. All the window and door will be airtight quality; hence we don't foresee any air infiltration. Proper inflow and outflow of air shall be maintained and proper dilution shall be provided by using air exhaust to maintain air quality.</p>
9.13	<p>To what extent the non-conventional energy technologies are utilized in the overall energy consumption?</p> <p>Provide details of the renewable energy technologies used.</p>	<p>1% of Power load i.e., 15.84 as solar energy will be used inside the project.</p>

## 10. ENVIRONMENT MANAGEMENT PLAN

10.1	<p>The Environment Management Plan would consist of all mitigation measures for each item wise activity to be undertaken during the construction, operation and the entire life cycle to minimize adverse environmental impacts as a result of the activities of the project. It would also delineate the environmental monitoring plan for compliance of various environmental regulations. It will state the steps to be taken in case of emergency such as accidents at the site including fire.</p>	<p>Environment Management Plan is given in environment Report attached as Enclosure- 3</p>
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