

**Agenda Item for the First Goa-SEIAA meeting held on 24<sup>th</sup> February 2011**

**A. Consideration of following proposal seeking Prior EC as mandated under the EIA Notification, 2006**

**1. CRICKET STADIUM AT THIVIM BY GOA CRICKET ASSOCIATION**

<b>Sr. No.</b>	<b>Project Proponent</b>	<b>Proposed Activity</b>	<b>Site-specific location details</b>	<b>Project details / specification / salient features (extracted from the project details submitted)</b>	<b>Comments from Goa-SEAC members</b>	<b>Response to comments by Project Proponent (PP)</b>
1	Goa Cricket Association – GCA  Mr. Vijaykumar Sawant, Rizvi Sadan, 2 <sup>nd</sup> Floor, Near Municipal Market, Panaji, Goa – 403 001.  <a href="mailto:goacricketassociation@rediffmail.com">goacricketassociation@rediffmail.com</a>  Phone – 2421088 Fax - 2420455	Cricket Stadium	32 acres of land in Acoi village near Thivim, Bardez taluka	Total plot area – 1,30,328 sq. mt. (32 acres) Total built-up area – 45,087.59 sq. mt. (35%) Proposed ground coverage – 32,183 sq. mt. (22%) Total parking area – 24,911 sq. mts. Total green area – 1,00,352.56 sq. mt.(77%)  Estimated cost – 160 crores  Seating capacity – 46, 575 seats  Total parking (open and enclosed) – 668 cars, 198 two-wheelers  Water requirement – 1221 KLD – during Games 493 KLD – during normal days  Total waste-water generated – 1050 KLD	1.It is informed that the matter pertaining the “issuance of approval for diversion of forest land” to the Directorate of Sports and Youth Affairs granted under the Forest (Conservation) act, 1980 has been stayed by the Ministry of Environment & Forests (MoEF) pursuant to Writ Petition No. 321/2010 and PIL W. P. No. 14/2010 filed in the Hon’ble High Court of Goa at Bombay by M/s Goa Foundation.  2.The possibility of widening the State Highway – the only approach road to the proposed project site be taken on priority so as not to disturb daily vehicular movement. Further, an alternate exit-road / secondary road need to be constructed	The PP is yet to comply with comments against sr. nos. 1, 2 4 & 6.  The PP has submitted the compliance to comments against

			<p>to be treated using 1260 KLD Sewage Treatment Plant (STP) on SAFF (Submerged Aerated Fixed Film) technology which will generate 840 KLD of treated water to be used for flushing and landscape.</p> <p>Rainwater Harvesting (RWH) initiatives –  (1) 32 rainwater harvesting pits are proposed for artificial rainwater recharge.  (2) Desilting tanks and Recharge wells are proposed – LOCATION NOT DEFINED</p> <p>Power requirement – 3223 KVA to be sourced through Goa Electricity Department (GED). During emergency, proposed to be backed up with 3 DG sets of 1250 KVA each.</p> <p>Solid waste generated – 6835 kg./day (during games)  - 963 kg/day (during normal days)</p>	<p>along the north-east periphery of the plot boundary to minimize traffic congestion.</p> <p>3.Geotechnical soil analysis may please be carried out to ascertain the soil characteristics as well as groundwater status and its recharge potential. It is not advisable to opt for recharging of groundwater through recharge-pits, instead make a provision for optimum utilization/storage of rainwater to be used in fair-weather season.</p> <p>4.Location-specific details of the proposed bore well as well as 32 numbers of rainwater harvesting pits, superimposed on the contour map of the proposed plot area, be furnished.</p> <p>5.PP should make a provision for exclusive fire-escape routes / staircase to avoid stampede during such eventualities. The PP should submit ‘Stability’ as well as ‘Fire Safety’ Certificates as per the conceptual plan proposed.</p>	sr. nos. 3 & 5.
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					6.It is advisable to construct composting pits within the project site to treat the biodegradable waste – bio-composting technique and utilize the manure to maintain the green-field area.	
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2. HOSPITAL-cum-HOTEL AT TALEIGAO BY M/s ALCON CONSTRUCTIONS (GOA) PVT. LTD.,

Sr. No.	Project Proponent	Proposed Activity	Site-specific location details	Project details / specification / salient features <i>(extracted from the project details submitted)</i>	Comments from Goa-SEAC members	Response to comments by Project Proponent (PP)
2	<p>M/s Alcon Constructions (Goa) Pvt. Ltd.,</p> <p>Mr. Nanda Sadassiva Naique Counto, Director, Sukerkar Mansion, 1<sup>st</sup> Floor, M. G. Road, Panaji, Goa – 403 001</p> <p>e-mail – <a href="mailto:aakaash@bsnl.in">aakaash@bsnl.in</a></p> <p>Ph. - 2224451 / 2224452 Fax – 2225616</p> <p>Registered address – M/s Alcon Constructions (Goa) Pvt. Ltd., Velho Bldg., 1<sup>st</sup> Floor, Panaji.</p>	<p>250-bedded Hospital-cum-Hotel (42 rooms)</p> <p>G + 5 upper floors and 1 basement</p>	<p>Taleigao village, Tiswadi taluka, S. Nos. 112/1, 112/1(part) – 11,988.67 sq. mt.</p> <p>Next to Sewage Treatment Plant at Taleigao</p>	<p>Total plot area – 11,988.67 sq. mt. (effective – 10,245.53 sq. mt.) Total built-up area – 27,958.90 sq. mt. (upto 5<sup>th</sup> floor) Proposed open space – 1,542.38 sq. mt. (15.05%) Proposed ground coverage – 3,618 sq. mt. (35.32%) Proposed FAR – 21,837.64 sq. mt.</p> <p>About 30,393 m<sup>3</sup> of earth would be removed / excavated.</p> <p>Raft foundation is proposed with safe bearing capacity of 10 T/sq.mt.</p> <p>Heating Ventilation Air Conditioning (HVAC) system is proposed.</p> <p>Internal road with 10 mt. width and parking space proposed for 420 nos. (details not mentioned)</p> <p>Intermediate STP with Moving Bed Bio-Reactor (MBBR) technology is</p>	<p>1.The proposed land was used to be a landfill site earlier and as such almost 5 to 6 mts of top soil is organic-rich fertile and should be utilized for landscaping development.</p> <p>2.The PP must ensure that the effluents / waste water in the adjoining St.Inez nala should not infiltrate within the project site and contaminate the groundwater quality as E. Coli concentration and FE content is reported to be higher in the bore-well water. Accordingly, PP should treat the nala on priority as well as construct approach road to the proposed site.</p> <p>3.The proposed site, being</p>	<p>Goa-SEAC recommends the proposal subject to compliance to Goa-SEAC observations / comments.</p>

			<p>proposed – part treated sewage to transfer to authorized STP to St.inez – total treated sewage is 235 cmd, 209 cmd to be reused for gardening, flushing, AC-cooling. 26 cmd to disposed into sewers.</p> <p>Well-engineered storm-water drainage system is proposed.</p> <p>Water requirement – 9 cmd (Construction) 452 cmd (operation)</p> <p>Contd. / - Total waste-water generated – 1.6 (Construction) 247 cmd (Operation)</p> <p>60 trees are proposed to be planted.</p> <p>Power requirement – 25 KW (Construction) - 780 KW (Operation) Back-up power through diesel generator of 750 KVA.</p> <p>Solid waste generated – 1 – 3 MT/d (Construction) Operation phase - 63 kg/d – Biomedical and 570 kg.d – domestic waste.</p>	<p>very low-lying area, bears a sandy aquifer regime and as such, built individual sump rather than soak pits to treat waste-water effectively.</p>	
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				Organic Waste Converter (OWC) is proposed for biodegradable waste.  EMP enclosed as annexure – VII.		
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3. RESIDENTIAL COMPLEX AT ALTO-BATIM BY ROCKFIRST REAL ESTATE LTD.,

Sr. No.	Project Proponent	Proposed Activity	Site-specific location details	Project details / specification / salient features (extracted from the project details submitted)	Comments from Goa-SEAC members	Response to comments by Project Proponent (PP)
3	M/s Rockfirst Real Estate Ltd., Mumbai.  Mr. Rajesh Jaggi, Managing Director, 1, Peninsula Spenta, Mathurdas Mills, Senapati Bapat Marg, Lower Parel, Mumbai – 400013  Ph. – 022/66229400 – 022/66229300/01 Fax – 022/66229302  <a href="mailto:rajeshjaggi@Peninsula.co.in">rajeshjaggi@Peninsula.co.in</a> (M) - 9820505005  Corres. Add.: Mr. Sanjeev - 9890003168	Residential Apartments  “Ashoka Beleza” (G + 3 storied complex)	Alto-Betim village, Bardez taluka, S. Nos. 57/1 of Reis Magos village	Total plot area – 29,120.13 sq. mt. Total Ground coverage area – 8,751 sq. mts. Green cover area – 20,368 sq. mts. Built-up area – 22,279.67 sq. mts. Total construction built-up area – 32,452.52 sq. mts.  Ready-Mix-Concrete (RMC) to be used.  Total occupancy – 652 nos. (max.)  About 80,134 m <sup>3</sup> of earth would be removed / excavated.  Geotechnical soil investigation (enclosure – 1) as carried out through 17 boreholes with	1.The proposed project “A” appears to be an extension of the ongoing work, being developed, within two adjacent plots namely – ‘B’ and ‘C’ and is seeking prior Environmental Clearance (EC) from the Goa-SEIAA, as the built-up area, taken together, exceeds 20,000 sq. mts. as per the EIA Notification, 2006.  2.Almost 30% of the total plot area has been developed and as a result, appreciable proportion of naturally grown vegetation has been lost along the hill-	Goa-SEAC defers the proposal as the PP is seeking post-facto EC.

	<p>Peninsula Land Ltd., Peninsula Center, H. No. 850, Opp. SBI, Porvorim – 403 621</p> <p>Mr. Sanjay Ghatwal (M) - 9764005561</p>		<p>permanent benchmark of +50mt. No groundwater table was encountered.</p> <p>Reinforced concrete (i.e. Spread foundation) is proposed with maximum water: cement ratio of 0.50 at an average depth of 1.5 mt.. This foundation has a safe bearing capacity of 40 T/sq.mt. (with total settlement of 9 mm). California Bearing Ratio (CBR) of 6 is proposed for construction design. Retaining walls with weep holes with gravel filters are proposed.</p> <p>Estimated cost – 125 crores.</p> <p>Noise pollution to be controlled by restricting the usage of equipments generating more than 90 db (A) sound.</p> <p>Water requirement – During construction : 42 m<sup>3</sup>/d 12m<sup>3</sup>/d for workers from local authority 20 to 30 m<sup>3</sup>/d for construction through tankers.</p> <p>During operation : 60m<sup>3</sup>/d for domestic use</p>	<p>slopes.</p> <p>3.It is advisable to re-design the rainwater-storage tanks proposed in the already developed area (i.e. B &amp; C portion) so as to account for suitable water storage, as one of the rainwater harvesting measures.</p> <p>4.The PP, during the presentation has ensured that as a matter of Corporate Social Responsibility (CSR), it would set-up sufficient numbers of composting units in Reis-Magos village to treat and dispose-off biodegradable waste.</p>	
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				<p>(150 m<sup>3</sup>/d) 30m<sup>3</sup>/d for flushing</p> <p>60m<sup>3</sup>/d for gardening</p> <p>50 trees are proposed to be planted in lieu of 46 trees for which permission is sought.</p> <p>Power requirement – 75 kVA (Construction) - from Goa Electricity Dept. 3828 KW (from GED) during Operation. Back-up power through four diesel generator 2 nos. of 750 kVA and 2 nos. of 500 kVA.</p> <p>Solid waste generated – 291 kg/d – (Dry garbage – 89 kg. &amp; Wet garbage – 203 kg. / d) Vessel composting is proposed to manage wet garbage (i.e. biodegradable). STP using Moving Bed Bio Reactor (MBBR) technology is proposed to be provided. (Technical details of the proposed STP may please be furnished). Dry sludge to be used as manure for plants.</p> <p>RWH is proposed.</p>		
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				EMP for HW management is enclosed as Enclosure – 3.		
				Disaster Management Plan enclosed as Enclosure - 4		

4. RESIDENTIAL COMPLEX AT SOCCORRO BY M/s NITIN DEVELOPERS PVT LTD.,

Sr. No.	Project Proponent	Proposed Activity	Site-specific location details	Project details / specification / salient features (extracted from the project details submitted)	Comments from Goa-SEAC members	Response to comments by Project Proponent (PP)
4	Nitin Developres Pvt. Ltd., Mr. Nitin Saraf, La Casa Grande, Lane No.2, St. Mary's Colony, Miramar  Architect - C/o Soares & Associates, G-1, Vikas Bldg., 18 <sup>th</sup> June Rd., Next to Pharmacy College, 18 <sup>th</sup> June Road, Panaji, Goa – 403 001  Ph. – 2228040 / 2430010 / 2463365 Mobile - 9326142082	Residential complex	Socorro village, Bardez taluka, S. Nos. 402/2, 404/5 and 402/2-C	Total plot area – 22,896.38 sq. mts. FAR (permissible) – 18,317.10 sq. mts. (proposed) – 17,072.69 sq. mts. Coverage (permissible) – 9,124.15 sq. mts. (proposed) – 7,048.11 sq. mts. Total parking provide for 275 cars Total occupancy (optimum) – 746 persons  Water requirement – About 125 m <sup>3</sup> per day (sump of 1,00,000 liters capacity is proposed) to be tapped from P.W.D.  Total waste-water generated – 98,000 liters per day STP is to be	1.The PP is seeking prior EC from the Goa-SEIAA for the extension of the ongoing construction / development as the built-up area, with the proposed extension, exceeds 20,000 sq. mts. as per the EIA Notification, 2006.  2.Almost 40% of the total plot area has been developed and as a result, appreciable proportion of naturally grown vegetation has been lost along the moderate to steep sloping hill-slopes thereby disturbing the natural drainage, green cover.	The Goa-SEAC defers the proposal as the PP seeks post-fact EC.

			<p>provided with generation of sewage sludge of 1.5 m<sup>3</sup> per day - Part of this is proposed to be re-circulated and part to be disposed-off to STP through transport trucks.</p> <p>Total solid waste generated – 500 kgs. per day (max.)</p> <p>RWH is proposed for both, as storage (02 tanks) as well as groundwater recharge (02 pits) . And to be integrated with storm-water drainage. Wells existing on site to be used for plantations and would be recharged.</p> <p>Power requirement – Not provided. However, CFL to be utilized. Solar energy for garden lights and water heating system proposed.</p>	<p>3.The proposed extension would further degrade the ecological set-up of the area as the proposed construction-activity would invariably require cutting of trees (loss of green cover) hill-slope cutting (slope instability and disturbance to natural drainage).</p> <p>4.There exists a nala along the northern boundary of the plot boundary which may get affected / flooded / silted / diverted during monsoon owing to large-scale storm-water movement / soil erosion.</p>	
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**5. RESIDENTIAL-cum-COMMERCIAL COMPLEX AT KHORLIM BY BUILDMORE INFRASTRUCTURE INDIA PVT LTD.,**

<b>Sr. No.</b>	<b>Project Proponent</b>	<b>Proposed Activity</b>	<b>Site-specific location details</b>	<b>Project details / specification / salient features (extracted from the project details submitted)</b>	<b>Comments from Goa-SEAC members</b>	<b>Response to comments by Project Proponent (PP)</b>
5	Buildmore Infrastructure India Pvt. Ltd., Mr. Jerry Braganza, Souza Towers, 2 <sup>nd</sup> Floor,	Residential building-cum-commercial	Khorlim village, Bardez taluka, S. Nos. 5/1	Total plot area – 9,416 sq. mt. Total built-up area – 27,267.49 sq. mt. Proposed open space – 1521 sq. mt.	1.The PP should opt for additional provision towards storage of optimum quantity of	

<p>Near Municipal Garden, Panaji, Goa – 403 001</p> <p>Ph. – 2426662 Fax – 2431973</p> <p>e-mail – <a href="mailto:info@bminfraindia@vsnl.com">info@bminfraindia@vsnl.com</a></p> <p>Address as given on the letter head - A/6, Skylark Apartments, Menezes Braganza Road, Panaji, Goa – 403 001</p>	<p>complex  (Basement + ground floor + 7 upper floors – 152 flats)</p>	<p>and 5/2 of P. T. Sheet no. 144</p>	<p>( more than 15%) Proposed coverage – 3185 sq. mt. (less than 40%) FAR consumed – 18,826 sq. mt. Expected total occupancy – 1509 (combined)</p> <p>Geotechnical soil investigation as carried out through 03 boreholes (max. depth – 12 mt.). Groundwater is encountered at about 2.5 mt. below ground level.</p> <p>About 16,000 m<sup>3</sup> of earth would be removed / excavated.</p> <p>Spread foundation is proposed at an average depth of 1.5 mt. – 2.5 mt. with a net allowable bearing capacity of 17 to 35T/sq.mt. (with max. settlement between 30 mm – 70 mm.). Alternatively, Raft foundation is proposed at 1.5 mt. depth with net allowable bearing capacity of 12T/sq. mt.</p> <p>Heating Ventilation Air Conditioning (HVAC) system is proposed.</p> <p>Water requirement – During Construction phase - 9 cmd (2 for</p>	<p>rainwater to be utilized during fair-weather season, considering the post-project usage of water.</p> <p>2.The bore well drilled to carry out geotechnical soil investigation be recharged suitably and be utilized in case of need-based urgency.</p>	<p>Goa-SEAC recommends the proposal subject to compliance to Goa-SEAC observations / comments.</p>
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			<p>domestic use and 7 for construction purpose)</p> <ul style="list-style-type: none"> <li>- During operational phase - 147 cmd (79.6 through PWD supply, 67.4 through recycled water)</li> </ul> <p>Total waste-water generated – 122 cmd. From which 117 cmd is expected to be generated as treated water. STP of treating capacity of 130 cmd based on Moving Bed Bio-Reactor (MBBR) technology is proposed – Treated water (about 67.4 cmd) to be utilized for landscaping and flushing and remaining (49.8 cmd) to be discharged into municipal sewer. STP would generate about 5 kg./day of sludge.</p> <p>Storm water drain and RWH –</p> <p>Power requirement (to be sourced from Goa Electricity Dept.) –  Construction phase – 200 KVA  Operation phase – 5 KVA</p> <p>Back-up power through DG sets of 250 KVA capacity</p> <p>Solid waste generated – 1 – 3</p>		
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				<p>MT./day (Construction) 491 kg/day (on Operation) Organic Waste Converter (OWC) is proposed for biodegradable waste.</p> <p>EMP enclosed as Annexure – V</p>		
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6. PREMIUM HOUSING AND COMMERCIAL DEVELOPMENT BY GERA DEVELOPMNETS PVT. LTD., PUNE

Sr. No.	Project Proponent	Proposed Activity	Site-specific location details	Project details / specification / salient features (extracted from the project details submitted)	Comments from Goa-SEAC members	Response to comments by Project Proponent (PP)
6	<p>Gera Developments Pvt. Ltd., 200, Gear Plaza, Boat Club Rd., Pune – 411001</p> <p>Ph. 020-26125580 / 81 Fax. 020 – 26113653</p> <p>E-mail – <a href="mailto:info@gera.in">info@gera.in</a> Website - <a href="http://www.gera.in">www.gera.in</a></p> <p>Ms. Sunaina Gera Vice-President – Product Development &amp; Design</p>	<p>Premium housing (G + 1) and commercial development</p> <p>Five parts – 1.Garden Preserve 2.Water Preserve 3.Village Preserve 4.Town Center 5.Sky Preserve</p>	<p>Survey no. 33 of village Khandola, Ponda taluka, North Goa.</p> <p>Total Plot area – 1,21,383.27 sq. mts.</p>	<p>Total / Net plot area – 1,21,383.27 sq. mts. ( no area under road widening) Proposed open space – 41,949.52 sq. mts. Proposed coverage – 22,497.16 sq. mts. (18.53%) FAR consumed – 0.69% (permissible is 0.80%) Permissible FSI – 97,106.62 sq. mts. (80%) Expected total occupancy – About 750 (Annexure – IV) Parking provide for 1013 vehicles.</p> <p>Out of 414 trees existing on site and project proposes to maintain the maximum number.</p> <p>Geotechnical investigation was</p>	<p>1.The PP proposes to develop the project site in three phases (Phase – I, II and III). However, currently seeking prior Environmental Clearance (EC) for constructional activity for Phase-I and II as combined. Phase-III is proposed to be developed later in light of the amendment to be made in the permissible FAR, to be considered by the TCP.</p> <p>2.The PP although, has submitted the ‘Sanad’, however, it needs to submit the sale deed / power of attorney</p>	<p>Goa-SEAC recommends the proposal subject to compliance to Goa-SEAC observations / comments.</p>

			<p>carried out by College of Engineering, Pune and the inference was made through 16 boreholes (max. depth – 10 mt.). No Groundwater is encountered upto the depth of 10 mts. Below GL.</p> <p>Isolated type of foundation is proposed at an average depth of 2.5 mt. below GL with a net allowable bearing capacity of 27 T/sq.mt. (with max. settlement upto 25 mm).</p> <p>Water requirement – During Construction phase – 50 cmd ( 5 cmd for domestic use and 45 cmd for construction purpose)  - During operational phase - 212 cmd ( 90 cmd through PWD supply, 122 cmd through recycled water)</p> <p>There is a single seasonal nala passing through the proposed site.</p> <p>Total waste-water generated – about 4 cmd during construction phase.</p> <p>STP of treating capacity of 130 cmd based with SAFF technology is proposed – Treated water (about 122 cmd) to be utilized for landscaping and flushing. Dual plumbing system</p>	<p>indicating the ownership status of the said plot area.</p> <p>3.Geotechnical report (Annexure – III) enclosed with the proposal does not mention about (a) bore hole location and (b) soil profile. As such, it needs to be re-submitted, preferably superimposed on suitable contour map of the proposed plot area.</p> <p>4.Contour map of the area provided is not to a suitable scale in light of the effective gradient and contour interval vis-à-vis land development.</p> <p>5.Total waste-water generation during the operation phase needs to be indicated along with the modus operandi to treat / dispose-off the same.</p> <p>6.The PP should opt for additional provision</p>	
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			<p>is proposed for PWD water supply and use of treated waste-water.</p> <p>The project proponent proposes RWH for effective recharge of GW through construction of –</p> <ol style="list-style-type: none"> <li>1. Pond with recharge bore of 45,000 liters capacity</li> <li>2. Tank of 70,000 liters capacity (Zone C) and 66,000 liters for Zone F.</li> </ol> <p>Power requirement (to be sourced from Goa Electricity Dept.) –  Construction phase – 50 KW  Operation phase – 2037 KVA</p> <p>Energy efficient electrical and Heating Ventilation Air Conditioning (HVAC) system is proposed towards energy conservation.</p> <p>Back-up power through two DG sets of 40 KVA and 82.5 KVA capacities.</p> <p>Solid waste generated – 1 – 3 MT./day (construction)  1468 kg/day (on Operation) – to be vermicompost ed.  About 10 kg/day sludge generated from STP is to be composted on-</p>	<p>towards storage of optimum quantity of rainwater to be utilized during fair-weather season, considering the post-project usage of water. Accordingly, PP should indicate the site-specific locations of storage tanks, recharge pond, existing water body, as applicable, without affecting the natural drainage / storm water flow.</p>	
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				site. EMP enclosed as Annexure VI.		
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7. RESIDENTIAL COMPLEX BY M/s K. RAHEJA UNIVERSAL PVT. LTD., MUMBAI

Sr. No.	Project Proponent	Proposed Activity	Site-specific location details	Project details / specification / salient features (extracted from the project details submitted)	Comments from Goa-SEAC members	Response to comments by Project Proponent (PP)
7	M/s K. Raheja Universal Pvt. Ltd., Raheja Centre–Point 294, C.S.T. Road, Near Mumbai University, Off Bandra-Kurla Complex, Santacruz (E) – Mumbai – 400 098  Ph. 022-66414137/38 Fax – 022-66414242  Mr. Yogesh Yadav, Asst. Manager (M) – 9850467028 <a href="mailto:yogesh.yadav@rahejauniversal.com">yogesh.yadav@rahejauniversal.com</a>	Residential project – Raheja Chrysalis (including provision for commercial shops)	Survey Nos. 64/1 and 67/1 of Carmona village, Salcete taluka, South Goa.  Total Plot area – 88,868 sq. mts.  Built-up area – 87,250 sq. mts. (excluding road widening of 1,618 sq. mts.)	Net plot area – 88,868 sq. mts. Effective plot area – 87,250 sq. mts. Built-up area – 35, 629 sq. mts. Total construction area – 57,006 sq. mts. Proposed open space – 47,478 sq. mts. (about 54%)  Expected total occupancy – About 262 + 511 persons from commercial shops (refer sr. no. 4.2. on pg. 13 and sr. no. 8.4 on pg. 22)  Parking provided for 25 ECS on surface (i.e. open parking) and 35 ECS in garage (i.e. covered parking).  The proposed plot has a maximum elevation difference of 6 mts. (refer 1.1 in Form-1A) with no	1. NE portion of the proposed plot area has been classified as No Development Area (NDZ) and as such, top soil excavated from the remaining plot, during construction, be utilized for proposed landscape development (i.e. landscaping) within the NDZ area.  2. The PP should submit the geotechnical soil analysis report so as to understand the soil profile & its characteristics, foundation details, hydro-geological status.  3. It is advisable that the water / power	Goa-SEAC recommends the proposal subject to compliance to Goa-SEAC observations / comments.



			<p>natural watercourse passing through the site. Groundwater is encountered at a depth of 3 – 5 mts.</p> <p>Excavation will be carried out for foundation of buildings and one basement.</p> <p>Water requirement – 268 m<sup>3</sup> (216 – fresh water &amp; 52 recycled water) per day to be sourced through municipal supply. <i>(provisional NOC has been issued by PWD, Margao)</i></p> <p>Total waste-water generated – about 58 m<sup>3</sup> per day which is proposed to be transferred to STP of 65 KLD capacity (output is expected to be 52 KLD – 28 KLD for flushing and 24 KLD for green area) to be installed on -site. Dual plumbing system is proposed for PWD water supply and use of treated waste-water. Sludge to be used as manure for green area development.</p> <p>Solid waste generated – 213 kg. / day (Construction) (on Operation) – 105 kg./ day + 108 kg./day (variable) from</p>	<p>requirement, generation of optimum solid waste / sewage / waste water as well as methodology to be adopted to treat/dispose-off be indicated separately as (a) during construction, including excavation debris, if any and (b) on operationalization of the project.</p> <p>4.The PP should submit the details of the Sewage Treatment Plant (STP) proposed to be installed along with the methodology to be adopted to treat wet garbage on-site</p> <p>5.Total waste-water generation during the operation phase needs to be indicated along with the modus operandi to treat / dispose-off the same.</p> <p>6.The PP should opt for additional provision</p>	
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			<p>visitors and club entry – comprising of organic / inorganic waste.</p> <p>Power requirement is about 1247 KW to be sourced from Goa Electricity Dept. Back-up power through DG set (05 nos.) of total capacity 1867.5 KVA is proposed. Air-cooling of the DG sets are proposed instead of traditional water cooling.</p> <p>Solar water heating system is proposed to be provided for hot-water supply. Feasibility for installation of solar photovoltaic cells for street lighting is proposed to be assessed.</p> <p>Central air-conditioning system using water-cooled centrifugal chillers is proposed to be installed.</p> <p>Storm Water Management Plan (SWMP) is proposed to be developed.</p> <p>Environment Management Plan (EMP) enclosed – <i>refer pg. 31 to 35.</i></p>	<p>towards storage of optimum quantity of rainwater to be utilized during fair-weather season, considering the post-project usage of water.</p>	
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**B. Any other matter with the permission of the Chair.**

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