



**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL  
EASTERN ZONE BENCH, KOLKATA  
ORIGINAL APPLICATION NO. 38 OF 2022**

**IN THE MATTER OF:**

Dr. Bina Basnett

.....Applicant

-Versus-

State of Sikkim & Ors.

.....Respondents

**CONVENIENCE COMPILATION ON BEHALF OF RESPONDENT NO.  
12 - M/S MESASO INFRASTRUCTURE PVT. LTD.**

<b>R1:</b> State of Sikkim	<b>R2:</b> Gangtok Smart City Development Limited
<b>R3:</b> Department Of Mines & Geology	<b>R4:</b> Urban Development Department
<b>R5:</b> Sikkim State Disaster Management Authority	<b>R6:</b> Sikkim State Pollution Control Board
<b>R7:</b> District Magistrate/ Collector, East District, Sikkim	<b>R8:</b> SEIAA
<b>R9:</b> Forest & Environment Department	<b>R10:</b> Gangtok Municipal Corporation
<b>R11:</b> MoEF&CC	<b>R12:</b> M/s MESASO Infrastructure Private Limited

**INDEX**

**NDoH: 09.09.2024**

<b>S. No.</b>	<b>Date</b>	<b>Document/ Particulars</b>	<b>Reference (S) In Pleadings</b>	<b>Page No.</b>
1.	16.10.2001	Notification issued by Urban Development and Housing Department, Gangtok amending the Sikkim Building Construction Regulations, 1991 by amending Regulation 17 and inserting Regulation 39 (Power to Relax norms laid down under the said regulation).	Annexure R/7, Page 572 of the Common Counter Affidavit of State of Sikkim Authorities - R1, R3, R4, R7 and R9; Annexure R/27, Pg. 845 Counter Affidavit dated 16.03.2024 of GSCDL - R2.	30
2.	18.10.2011	Geological and Geo-Technical study conducted by Mines and Geology Department, R-3 of a multi-storied Secretariat Complex in Gangtok having	Annexure R/9, Pg. 575-602 of the Common Counter Affidavit of State of Sikkim Authorities - R1, R3, R4, R7 and R9.	31-58



		geological conditions and rock type similar to the proposed site of R-12 at Old West Point School Area.		
3.	23.11.2019	Letter issued by Gangtok Smart City Development Ltd. (GSCDL)-R-2 to Mines and Geological Department, Government of Sikkim-R-3 requesting to conduct the geological investigation at Old West Point School Area.	Annexure R/11, Pg. 605 of Common Counter Affidavit of the State of Sikkim Authorities - R1, R3, R4, R7 and R9; Annexure R/31, Pg. 868 of Counter Affidavit dated 16.03.2024 of GSCDL-R-2.	59
4.	March 2020	Geological & Geo-Technical Investigation Report prepared by the Department of Mines and Geology, Government of Sikkim-R-3 for the land proposed for the construction of proposed structures at Old West Point, School, Gangtok, East Sikkim.	Annexure R12/10, Pg. 1105-1123 of Reply dated 16.03.2024 of M/s MESASO - R12; Annexure R/12, Pg. 606-624 of Common Counter Affidavit of the State of Sikkim Authorities - R1, R3, R4, R7 and R9; Annexure R/32, Pg. 869-873 of Counter Affidavit dated 16.03.2024 of GSCDL-R-2.	60-78
5.	16.09.2020	Project Information Memorandum (PIM) prepared by GSCDL-R-2 explaining the necessity behind constructing the Multi-Level Car Parking cum Commercial Development at the Old West Point School Area.	Annexure R12/1, Pg. 1062-1079 of Reply dated 16.03.2024 of M/s MESASO - R12.	79-96
6.	16.09.2020	Request for Proposal for Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area on Design, Build,	Annexure A/3, Pg. 61-128 of Original Application dated 07.03.2022.	97-165



		Finance, Operate and Transfer Basis. Clause 2.1.6 of the said proposal stipulates that selected bidder will have to form a Special Purpose Vehicle (“SPV”) to implement the project in accordance with Concession Agreement and shall act as the Concessionaire.		
7.	16.09.2020	Notice issued by GSCDL-R-2 inviting bids to take up the project of implementation of Multi Level Car Parking (MLCP) cum Commercial Development at Old West Point School Area, Gangtok.	Annexure R/3 (Colly), Pg. 765-766 of Counter Affidavit dated 16.03.2024 of GSCDL R-2.	166-167
8.	March 2021	Geological, Geo-technical & Geo-Physical Investigation Report prepared by M/s Geo-Informatic Consultancy & Services Tadong of the land proposed for construction of MLCP cum Plaza at Old West Point School Complex.	Annexure R12/11, Pg. 1124-1175 of Reply dated 16.03.2024 of M/s MESASO - R12.	168-219
9.	19.03.2021	Notification dated 19.03.2021 issued by the Department of Mines and Geology, Government of Sikkim, R-3 notifying the parameters for determination of stability zones.	Annexure A/4, Pg. 129-133 of Original Application dated 07.03.2022; Annexure R/13, Page 625-629 of Common Counter Affidavit of the State of Sikkim Authorities - R1, R3, R4, R7 and R9.	220-224
10.	26.05.2021	Quotation raised by Department of Civil Engineering, Indian Institute	Annexure R12/17, Pg. 1189 of Reply dated 16.03.2024 of M/s MESASO - R12.	225



		of Technology, Guwahati to M/s Tirupati Plaza Pvt. Ltd. towards the work of proof checking the design and drawings of the proposed 04 level parking + 10 level commercial development.		
11.	27.05.2021	Cabinet Memorandum issued by the Urban Development Department, Gangtok- R-4 for approval of the bid of M/s Tirupati Plaza Pvt Ltd before the Cabinet, for demolition of existing Government structure and for relaxation of norms for the proposed building having eleven floors.	Annexure R/14, Pg. 630-634 of the Common Counter Affidavit of the State of Sikkim Authorities - R1, R3, R4, R7 and R9; Annexure R/4, Pg. 767-771 of Counter Affidavit dated 16.03.2024 of GSCDL-R-2; Annexure R/7, Pg. 1564-1568 of the Counter Affidavit dated 01.05.2024 of Gangtok Municipal Corporation (GMC) - R10.	226-230
12.	11.06.2021	Approval granted by the Cabinet dated 11.06.2021 to proposal for relaxation of eleven floors for construction of Multi-level Car Parking cum Shopping Plaza at Old West Point School, subject to Geotechnical Investigation and Report.	Annexure R12/9, Pg. 1104 of Reply dated 16.03.2024 of M/s MESASO - R12; Annexure R/15, Pg. 635 - 636 of the Common Counter Affidavit of the State of Sikkim Authorities - R1, R3, R4, R7 and R9; Annexure R/5, Pg. 772 of Counter Affidavit dated 16.03.2024 of GSCDL-R-2; Annexure R/8, Pg. 1569 of the Counter Affidavit dated 01.05.2024 of GMC - R10.	231
13.	18.06.2021	Letter of acceptance issued by GSCDL - R2 to M/s Tirupati Plaza Private Limited approving its bid for the implementation of	Annexure R12/4, Pg. 1082-1089 of Reply dated 16.03.2024 of M/s MESASO-R12; Annexure R/6, Pg. 773-774	232-238



		Multi-Level Car Parking cum Commercial Development at Old West Point School Area on Design, Build, Finance, Operate and Transfer (DBFOT) basis.	of Counter Affidavit dated 16.03.2024 of GSCDL-R-2.	
14.	30.06.2021	Letter issued by GSCDL-R-2 appointing M/s MESASO – R12 as Concessionaire for implementation of Multi Level Car Parking Cum Commercial Development at Old West Point School Area, Gangtok on Design, Built, Finance, Operate and Transfer (DBFOT) basis under PPP mode.	Annexure R/7, Pg. 775 of Counter Affidavit dated 16.03.2024 of GSCDL-R-2.	239
15.	30.06.2021	No Objection Certificate issued by GMC - R10 for shifting water supply pipes, and sewerage connection from Old West Point School for demolition of the old parking structure and for the purpose of constructing MLCP cum Commercial Development by M/s MESASO.	Annexure R12/41, Pg. 1284 of Reply dated 16.03.2024 of M/s MESASO - R12; Annexure R/9, Pg. 1570 of Counter Affidavit dated 01.05.2024 of GMC-R10.	240
16.	20.08.2021	Letter issued by the Department of Roads and Bridges in response to the correspondence of the M/s MESASO – R12 dated 19.08.2021 stating that the project of Multi-Level Car Parking cum Commercial Development does not fall under Right of Way (R.O.W), hence it has no objection for	Annexure R12/52, Pg. 1296 of Reply dated 16.03.2024 of M/s MESASO - R12.	241

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		implementation of the said work.		
17.	07.09.2021	Proposal submitted by Department of Civil Engineering, IIT Guwahati to M/s MESASO – R12 for providing technical expertise for the proposed Integrated Commercial Cum Multi Level Car Parking Complex for the entire duration of the project.	Annexure R12/18 (Colly), Pg. 1190-1192 of Reply dated 16.03.2024 of M/s MESASO - R12.	242-244
18.	13.09.2021	Letter issued by Sikkim State Pollution Control Board – R-6 to M/s MESASO. -R-12 directing it to apply for Consent to Establish/Operate on the online portal developed by the Board.	Annexure R12/28, Pg. 1233 of Reply dated 16.03.2024 of M/s MESASO - R12.	245
19.	14.09.2021	Work Order issued by M/s MESASO– R12 to Department of Civil Engineering, IIT Guwahati accepting their proposal dated 07.09.2021 and awarded them consultancy work of vetting the design and third party quality assurance of the project.	Annexure R12/18 (Colly), Pg. 1193-1194 of R 12 Reply dated 16.03.2024 of M/s MESASO-R12.	246-247
20.	15.09.2021	Letter sent by Department of Civil Engineering, IIT Guwahati to M/s MESASO - R12 accepting the assignment of vetting of design and third party quality assurance of Integrated Commercial Cum Multi Level car Parking Complex as per Work Order dated 14.09.2021.	Annexure R12/18 (Colly), Pg 1195 of Reply dated 16.03.2024 of M/s MESASO-R12.	248



21.	17.09.2021	No Objection Certificate issued by Sikkim State Pollution Control Board-R-6 to Urban Development Department, Government of Sikkim-R-4 for demolition of the old parking lot located at Old West Point School, Gangtok.	Annexure R/2, Pg. 1080 of Reply dated 16.03.2024 of M/s MESASO-R12; Annexure R/1, Pg. 686 of Counter Affidavit dated 15.03.2024 of SPCB-R-6; Annexure R/8, Pg. 776 of Counter Affidavit dated 16.03.2024 of GSCDL-R-2.	249
22.	20.09.2021	Office Memorandum issued by MoEF&CC -R-11 wherein all SPCBs/UTPCCs were directed to ensure that the project proponent possessed a valid prior Environmental Clearance (EC) in terms of the extant EIA Notification, if applicable, at the time of grant/ renewal of CTO and no CTO shall be granted or renewed unless EC, if applicable, has been obtained.	Annexure R12/29, Pg. 1234-1235 of Reply dated 16.03.2024 of M/s MESASO-R12.	250-251
23.	21.09.2021	No Objection Certificate issued by Urban Development Department-R-4, to GSCDL- R-2, granting approval to start dismantling the old car parking structure at Old West Point School for construction of Multi level Car Parking cum Commercial Complex at Old West Point School Complex.	Annexure R12/3, Pg. 1081 of Reply dated 16.03.2024 of M/s MESASO-R12; Annexure R/16, Pg. 637 of the Common Counter Affidavit of the State of Sikkim Authorities - R1, R3, R4, R7 and R9; Annexure R/1 [Colly], Pg. 687 of Counter Affidavit dated 15.03.2024 of SPCB-R-6; Annexure R/8, Pg. 777 of Counter Affidavit dated 16.03.2024 of GSCDL-R-2.	252



24.	21.09.2021	Provisional Fire safety NOC dated 21.09.2021 granted by the Sikkim Fire and Emergency Service to M/s MESASO - R12 granting permission to execute the MLCP project subject to satisfactory compliance with fire safety requirements of National Building Code of India 2016.	Annexure R12/53, Pg. 1297-1301 of Reply dated 16.03.2024 of M/s MESASO - R12.	253-257
25.	21.09.2021	Letter sent by M/s MESASO - R12 to the Department of Mines and Geology, Gangtok, R-3 requesting for a Stability Report for the implementation of Multi Level Car Parking Cum Commercial Development at Old West Point School, Gangtok.	Annexure R12/14, Pg. 1186 of Reply dated 16.03.2024 of M/s MESASO- R12; Annexure R/17, Pg. 638 of the Common Counter Affidavit of the State of Sikkim Authorities - R1, R3, R4, R7 and R9.	258
26.	September, 2021	Geotechnical Investigation Report for Proposed Multi-storied Building at Gangtok, Sikkim was prepared by JP Geo Consultants wherein the soil parameters and the safe bearing capacity of the subsoil was determined by conducting Plate Load Tests.	Annexure R12/12, Pg. 1176-1184 of Reply dated 16.03.2024 of M/s MESASO - R12.	259-267
27.	01.10.2021	Letter issued by M/s MESASO -R-12 to GSCDL – R2 submitting architectural plans viz., Key plan, Site plan, Building plan, Structural plan and Geo-technical report for implementation of Multi-	Annexure R12/15, Pg. 1187 of Reply dated 16.03.2024 of M/s MESASO - R 12; Annexure R/9, Pg. 778 of Counter Affidavit dated 16.03.2024 of GSCDL-R-2.	268



		Level Car Parking cum Commercial Development at Old West Point School.		
28.	04.10.2021	Certificate issued by Department of Civil Engineering, Indian Institute of Technology Guwahati certifying that the design and drawing of the proposed 04 Level Parking + 10 Level Commercial Development at Old West Point School was vetted by the IIT Guwahati team as per the relevant BIS Code and the same has been found to be satisfactory for the execution of the project. The structure can withstand seismic load up to Richter scale 8 as per norms of IS 1893-2016.	Annexure R12/16, Pg. 1188 of Reply dated 16.03.2024 of M/s MESASO - R 12.	269
29.	04.10.2021	True copy of the letter dated 04.10.2021 of the GSCDL- Respondent No. 2, to the Forest, Environment and Wildlife Management Department - Respondent No. 9, requesting a joint visit to the site for relocation of the few trees located in the project area.	Annexure R12/48, Pg. 1292 of the Reply dated 16.03.2024 of M/s MESASO - R12.	270
30.	04.10.2021	Letter sent by GSCDL- R-2 to GMC- R-10 submitting one set of architectural and structural drawing pertaining to the Multi-Level Car Parking Cum Commercial Development.	Annexure R12/19, Pg. 1196 of R 12 Reply dated 16.03.2024 of M/s MESASO - R12; Annexure R/10, Pg. 779 of Counter Affidavit dated 16.03.2024 of GSCDL-R-2; Annexure R/10, Pg. 1571 of	271

			the Counter Affidavit dated 01.05.2024 of GMC-R10.	
31.	07.10.2021	Invoice raised by Jadavpur University to M/s MESASO -R12 towards charges for vetting of Plate Load Test Report dated September 2021 by the Associate Professor of Department of Construction Engineering, Jadavpur University.	Annexure R12/13, Pg. 1185 of Reply dated 16.03.2024 of M/s MESASO- R 12.	272
32.	08.10.2021	Letter sent by GMC-R-10 to GSCDL-R-2 requesting for various documents viz. Land documents, site stability report, Construction Management Plan, Sale Deed, Structural Details & Analysis among others.	Annexure R12/43, Pg. 1286 of Reply dated 16.03.2024 of M/s MESASO-R 12; Annexure R/11, Pg. 780 of Counter Affidavit dated 16.03.2024 of GSCDL-R-2; Annexure R/11, Pg. 1572 of the Counter Affidavit dated 01.05.2024 of GMC-R10.	273
33.	12.10.2021	Letter sent by GSCDL-R-2 to GMC-R-10 furnishing the documents requested in letter dated 08.10.2021.	Annexure R12/44, Pg. 1287 of Reply dated 16.03.2024 of M/s MESASO-R 12; Annexure R/11, Pg. 781 of Counter Affidavit dated 16.03.2024 of GSCDL-R-2; Annexure R/13, Pg. 1574 of the Counter Affidavit dated 01.05.2024 of GMC-R10.	274
34.	12.10.2021	Interoffice correspondence between Office of the Conservator of Forest, and the Divisional Forest Officer, (T) East (Forest and Environment Department-R-9) showing that approval was granted by the	Annexure R12/50, Pg. 1294 of Reply dated 16.03.2024 of M/s MESASO-R 12.	275



		appropriate authority for removal of two trees and seven poles that were in the project site and also directed the same to be handed over to Utilization Division.		
35.	12.10.2021	Letter issued by GMC-R-10 to GSCDL-R-2 requesting to provide any approval or documents from the Government of Sikkim for relaxation of floors above five and half storey as per Sikkim Building Construction Regulation, 1991 and mentioning that the approval of the Blue Print Plant (BPP) will be accorded for only 11 floors.	Annexure R/12, Pg. 782 of Counter Affidavit dated 16.03.2024 of GSCDL-R-2; Annexure R/12, Pg. 1573 of Counter Affidavit dated 01.05.2024 of GMC-R10.	276
36.	01.11.2021	Letter issued by M/s MESASO -R-12 to GSCDL-R-2 submitting Detailed Project Report for implementation of Multi-Level Car Parking cum Commercial Development in accordance with the Concession Agreement dated 29.06.2021.	Annexure R12/20, Pg. 1197 of Reply dated 16.03.2024 of M/s MESASO-R 12; Annexure R/13, Pg. 783 of Counter Affidavit dated 16.03.2024 of GSCDL-R-2.	277
37.	13.11.2021	Minutes of Meeting of the stakeholder discussion on Multi Level Car Parking cum Commercial Development organized by GSCDL-R-2.	Annexure R/14, Pg. 784-791 of Counter Affidavit dated 16.03.2024 of GSCDL-R-2.	278-285
38.	November - December 2021	Relevant pages of the Geo Technical Investigation Report prepared by JP Geo Consultants based on the soil investigation undertaken during	Annexure R12/21, Pg. 1198 - 1212 of Reply dated 16.03.2024 of M/s MESASO - R12.	286-300

		November – December 2021 for the proposed Multi-Storied Building at Gangtok, Sikkim. Pertinently, the said report was vetted by Jadavpur University which observed that the structural engineer had taken extreme caution in designing a safe foundation for the proposed structure.		
39.	20.12.2021	Press clip dated 20.12.2021 pertaining to “Hamro Sikkim Party”, a political party politicising various issues including PPP Models entered into by the State respondents and Private parties.	Annexure R12/58, Pg 1306 of Reply dated 16.03.2024 of M/s MESASO-R12.	301
40.	27.12.2021	Invoice raised by Jadavpur University to M/s MESASO -R-12 towards the vetting of the soil investigation report dated November- December 2021.	Annexure R12/22, Pg. 1213 of Reply dated 16.03.2024 of M/s MESASO-R12.	302
41.	27.12.2021	Letter issued by M/s MESASO -R-12 to GSCDL-R-2 requesting permission to do the Plain Cement Concrete as recommended by the Soil Consultant for implementation of Multi-Level Car Parking cum Commercial Development.	Annexure R/34, Pg. 912 of Counter Affidavit dated 16.03.2024 of GSCDL-R-2.	303
42.	27.12.2021	Letter issued by M/s MESASO -R-12 to GSCDL-R-2 submitting the Environmental Impact Assessment Report,	Annexure R12/23, Pg. 1214 of Reply dated 16.03.2024 of M/s MESASO-R12; Annexure R/15, Pg. 792 of	304



		Geotechnical Investigation Report (Soil Test Report), Geotechnical Investigation Report (Plate Load Test Report) and Structural Vetting Certificate from IIT, Guwahati in terms of the Concessionaire Agreement dated 29.06.2021.	Counter Affidavit dated 16.03.2024 of GSCDL - R-2.	
43.	29.12.2021	Site Stability Report issued by Department of Mines and Geology, Government of Sikkim-R-3 to the M/s MESASO Infrastructure Pvt. Ltd-R-12 in response to the letter dated 21.09.2021. The Report <i>inter alia</i> recommends that the foundation of the structures should be footed at considerable depth with uniform condition. It further proposed that as Sikkim lies over young fold mountains, seismic zone IV and fragile geological conditions, load impact assessment of the surrounding areas be carried out prior to the construction of proposed project.	Annexure R12/24, Pg. 1215 of Reply dated 16.03.2024 of M/s MESASO-R 12; Annexure R/18, Pg. 639 of the Common Counter Affidavit of the State of Sikkim Authorities - R1, R3, R4, R7 and R9; Annexure R/14, Pg. 1575 of the Counter Affidavit dated 01.05.2024 of GMC-R10.	305
44.	30.12.2021	Letter issued by SPA Consultants to M/s MESASO Infrastructure Pvt. Ltd.-R-12 stating that Site Specific micro Seismic studies is not required as per the soil test report of M/s Geo Informatic Consultancy & Services Tadong.	Annexure R/19, Pg. 641 of the Common Counter Affidavit of the State of Sikkim Authorities - R1, R3, R4, R7 and R9.	306
45.	30.12.2021	Letter from M/s MESASO Infrastructure Pvt. Ltd.-R-12	Annexure R/22, Pg. 647 of the Common Counter	307



		to Jadavpur University requesting to provide a certificate/guideline for Load Impact Assessment in view of the Site Stability Report prepared by Department of Mines and Geology-R-3.	Affidavit of R1, R3, R4, R7 and R9.	
46.	31.12.2021	Letter sent by M/s MESASO Infrastructure Pvt. Ltd.-R-12 to Mines and Geology Department – R3, in response to site stability report dated 29.12.2021, providing a copy of letter dated 30.12.2021 issued by S.P.A Consultants which states that Site Specific Micro Seismic studies are not required as per the soil test report of M/s Geo Informatic Consultancy & Services Tadong.	Annexure R/19, Pg. 640-641 of the Common Counter Affidavit of State of Sikkim Authorities - R1, R3, R4, R7 and R9.	308-309
47.	31.12.2021	Construction Order dated 31.12.2021 issued by GMC-R-10 to GSCDL-R-2 and M/s MESASO Infrastructure Pvt. Ltd.-R-12 granting approval for construction of eleven storied building at Old West Point parking area, Gangtok under the Sikkim Allotment of Housing Sites and Construction of Building (Regulation and Control) Act, 1985 and the Regulations made therein.	Annexure R12/45, Pg. 1288-1289 of Reply dated 16.03.2024 of M/s MESASO-R 12; Annexure R/20, Pg. 642-643 of the Common Counter Affidavit of State of Sikkim Authorities R1, R3, R4, R7 and R9; Annexure R/18, Pg. 796-797 of Counter Affidavit dated 16.03.2024 of GSCDL-R-2; Annexure R/15, Page 1576-1577 of the Counter Affidavit dated 01.05.2024 of GMC- R10.	310

48.	31.12.2021	Notice to Proceed issued by GSCDL-R-2 to M/s MESASO Infrastructure Pvt. Ltd.-R-12 directing R12 to execute the foundational security works immediately prior to the onset of monsoon season in order to avoid any hazards due to rain.	Annexure R/16, Pg. 793 of Counter Affidavit dated 16.03.2024 of GSCDL-R-2.	311
49.	31.12.2021	Letter issued by M/s MESASO Infrastructure Pvt. Ltd.-R-12 to GSCDL-R-2 submitting applicable permits viz., National Highway Clearance, Building Plan Approval, Tree Felling, Water & Sewage Connection, Shifting of Services and Utilities, electricity Connection and Fire Safety Equipment in compliance with the Concession Agreement dated 29.06.2021.	Annexure R/19, Page 640 of the Common Counter Affidavit of State of Sikkim Authorities - R1, R3, R4, R7 and R9; Annexure R/17, Pg. 794-795 of Counter Affidavit dated 16.03.2024 of GSCDL-R-2.	312
50.	January, 2022	Report of Geological and Geo physical investigation of the landslide area at Arithang, East Sikkim by Himalayan Research Consultancy and Services.	Annexure R/28 (Colly), Pg. 846-862 of Counter Affidavit dated 16.03.2024 of GSCDL-R-2.	313-328
51.	10.01.2022	Letter issued by M/s MESASO Infrastructure Pvt. Ltd.-R-12 to GSCDL-R-2 submitting revised scheme for construction of additional 3 floors.	Annexure R/19, Pg. 798-799 of Counter Affidavit dated 16.03.2024 of GSCDL-R-2.	329-330
52.	10.01.2022	Note sheet of GSCDL-R-2 forwarding the letter dated 10.01.2022 of M/s	Annexure R/20, Pg. 800-801 of Counter Affidavit dated 16.03.2024 of	331-332

		MESASO-R12 regarding request for additional three floors to Urban Development Department, R-4 for directions.	GSCDL-R-2.	
53.	10.01.2022	Form V submitted by M/s MESASO Infrastructure Pvt. Ltd.-R-12 to GMC-R-10 undertaking that construction activities will only commence as per construction order dated 31.12.2021.	Annexure R/21, Pg. 644 of the Common Counter Affidavit of State of Sikkim Authorities - R1, R3, R4, R7 and R9; Annexure R/16, Pg. 1578 of the Counter Affidavit dated 01.05.2024 of GMC - R10.	333
54.	11.01.2022	Note sheet of GSCDL-R-2 requesting to examine file of request for additional floors.	Annexure R/26 (Colly.), Pg. 821-822 of Counter Affidavit dated 16.03.2024 of GSCDL-R-2.	334-335
55.	12.01.2022	Site visit note dated 12.01.2022 of GMC-R-10 with respect to the site visit undertaken by GMC for supervising the demarcation work of the project site.	Annexure R12/46, Pg 1290 of Reply dated 16.03.2024 of M/s MESASO-R 12; Annexure R/17, Pg. 1579 of the Counter Affidavit dated 01.05.2024 of GMC - R10.	336
56.	18.01.2022	Order passed by this Hon'ble Tribunal in in Original Application No. 05/2022/EZ imposing a stay on the construction of the Multi-Level Car Parking-cum-Shopping Hub.	Annexure R/21, Pg. 802-804 of Counter Affidavit dated 16.03.2024 of GSCDL-R-2.	337-339
57.	24.01.2022	Minutes of the Meeting of State Expert Appraisal Committee, Sikkim held on 24.01.2022 whereby the Environment Clearance application for the proposed development of "West Point" – Integrated Commercial Cum MLCP Complex at Old West Point	Annexure R/3, Pg. 213 - 217 of the Reply Affidavit dated 14.03.2024 of SEIAA-R-8.	340-344



		School Area, East Sikkim was considered and M/s MESASO – R12 directed to re-submit Form-1 and Form-1A with amendments.		
58.	26.01.2022	Structural Design Basis Report obtained by M/s MESASO Infrastructure Pvt. – R-12 Ltd. from SPA Consultants for ensuring load bearing capacity of the project viz. seismic activity.	Annexure R12/25, Pg. 1216-1230 of Reply dated 16.03.2024 of M/s MESASO-R 12.	345-359
59.	28.01.2022	Letter by SEAC to M/s MESASO Infrastructure Pvt. Ltd.-R-12 raising certain queries/ suggestions/ additional information with respect to the application for EC.	Annexure R/4, Pg. 218 of the Reply Affidavit dated 14.03.2024 of SEIAA-R-8.	360
60.	04.02.2022	Response of M/s MESASO Infrastructure Ltd.-R-12 to queries raised by SEAC vide letter dated 28.01.2022.	Annexure R/5, Pg. 219-224 of the Reply Affidavit dated 14.03.2024 of SEIAA-R-8.	361-366
61.	09.02.2022	True copy of the letter of the Cultural Affairs and Heritage Department to GSCDL-R-2 clarifying that apart from the three monuments in West Sikkim which are Monuments of National Importance under the administrative control of Archaeological Survey of India and protected under Ancient Monuments, Archaeological Sites and Remains Act (AMASR), there is no structure/site which has been declared as historical monuments in Sikkim.	Annexure R12/51, Pg. 1295 of Reply dated 16.03.2024 of M/s MESASO-R 12; Annexure R/37 (Colly.), Pg. 991 of Counter Affidavit dated 16.03.2024 of GSCDLR-2.	367

62.	11.02.2022	Letter issued by Sikkim State disaster Management Authority to Urban Development Department-R-4 providing the data obtained from the Indian Meteorological Department, the nodal agency for compilation of earthquake data in India.	Annexure R/38, Pg. 994-1006 of Counter Affidavit dated 16.03.2024 of GSCDL-R-2.	368-380
63.	14.02.2022	Minutes of the State Level Expert Appraisal Committee, Sikkim (SEAC) held on 14.02.2022 wherein the Committee recommended grant of Environment Clearance to M/s MESASO Infrastructure Pvt. Ltd.-R-12 for the MLCP project with general as well as specific conditions under the provisions of EIA Notification, 2006.	Annexure R12/37, Pg. 1247-1250 of Reply dated 16.03.2024 of M/s MESASO-R12; Annexure R/6, Pg. 225-228 of the Reply Affidavit dated 14.03.2024 of SEIAA-R-8.	381-384
64.	February 2022	Certificate issued by Department of Construction Engineering, Faculty of Engineering & Technology, Jadavpur University, at the request of M/s MESASO Infrastructure Pvt. Ltd.R-12 certifying that the proposed MLCP project is designed as per the relevant IS Code and designed load on foundation is 21 ton/sqm. As Mica schist rock has been encountered below the foundation level, there shall be no load impact in the surrounding area of the	Annexure R12/26, Pg 1231 of Reply dated 16.03.2024 of M/s MESASO-R12.	385

		project site. It further observed that load impact assessment of the surrounding area is not required as the load of the proposed structure is less than 50% of the soil bearing capacity.		
65.	15.02.2022	Letter by M/s MESASO Infrastructure Pvt. Ltd.-R-12 to Mines and Geology Department-R3 submitting the certificate of Jadavpur University which states <i>inter alia</i> that the load of the proposed structure is less than 50% of soil bearing capacity and consequently load impact assessment of surrounding area is not required.	Annexure R/22, Pg. 645-647 of the Common Counter Affidavit of State of Sikkim Authorities - R1, R3, R4, R7 and R9.	386-387
66.	17.02.2022	Letter sent by Department of Mines and Geology-R-3 to M/s MESASO Infrastructure Pvt. Ltd.-R12 observing that load impact assessment of the surrounding areas, as suggested in the Site Stability Report dated 29.12.2021, is not required in light of the certificate provided by Jadavpur University dated February 2022.	Annexure R12/27, Pg. 1232 of Reply dated 16.03.2024 of M/s MESASO-R12; Annexure R/23, Page 648 of the Common Counter Affidavit of State of Sikkim Authorities - R1, R3, R4, R7 and R9.	388-389
67.	22.02.2022	Minutes of the Meeting of State Environment Impact Assessment Authority, Sikkim held on 22.02.2022 wherein specific and general conditions were laid down	Annexure R/7, Pg. 229-230 of the Reply Affidavit dated 14.03.2024 of SEIAA-R8.	390-391

		for pre and post implementation stages of the project.		
68.	24.02.2022	Consent to Establish issued by the Sikkim State Pollution Control Board-R-6 to M/s MESASO Infrastructure Pvt. Ltd.-R-12 for establishing 11 storied Gold Rated Building and Construction Project in Gangtok under the provisions of the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act 1981.	Annexure R12/5, Pg. 1090 – 1091 of Reply dated 16.03.2024 of M/s MESASO-R12; Annexure R/2, Pg. 688-689 of Counter Affidavit dated 15.03.2024 of SPCB- R-6; Annexure R/22, Pg. 805-806 of Counter Affidavit dated 16.03.2024 of GSCDL-R-2.	392-393
69.	February 2022	Precertification by ASSOCHAM GEM Green Building Council awarded to the project under the ASSOCHAM GEM New building Rating System with 86 points.	Annexure R12/57, Pg. 1305 of Reply dated 16.03.2024 of M/s MESASO-R12.	394
70.	25.02.2022	Environmental Clearance dated 25.02.2022 granted by SEIAA, Sikkim-R-8 to the M/s MESASO Infrastructure Pvt. Ltd.-R-12 for the proposed development of MLCP cum Commercial Development at Old West Point for eleven storeys.	Annexure R12/38, Pg. 1251-1256 of Reply dated 16.03.2024 of M/s MESASO-R 12; Annexure R/23, Pg. 807-812 of Counter Affidavit dated 16.03.2024 of GSCDL-R-2; Annexure R/8, Pg. 231-236 of Counter Affidavit dated 14.03.2024 of SEIAA-R-8.	395-400
71.	28.02.2022	Letter by Department of Mines and Geology-R-3 to M/s MESASO Infrastructure Pvt. Ltd.-R-12 stating that the structure should be designed as per	Annexure R-24, Page of 649 the Common Counter Affidavit of State of Sikkim Authorities - R1, R3, R4,R7 and R9.	401



		the earthquake inventory history.		
72.	02.03.2022	Order passed by this Hon'ble Tribunal in Original Application No. 05/2022/EZ wherein this Hon'ble Tribunal observed that the said case has been filed and interim order has been secured on misleading facts. Accordingly, this Hon'ble Tribunal dismissed the said case as withdrawn while imposing a cost of Rs. 5,000/- against the Applicant for such conduct.	Annexure R12/6, Pg. 1092-1095 of Reply dated 16.03.2024 of M/s MESASO-R12; Annexure R/24, Pg. 813-816 of Counter Affidavit dated 16.03.2024 of GSCDL-R-2.	402-405
73.	12.05.2022	Note sheet of GMC-R10 forwarding the file requesting permission for additional three floors and construction of front plaza over Church Road for Cabinet approval.	Annexure R/18, Pg. 1580-1581 of the Counter Affidavit dated 01.05.2024 of GMC-R10.	406-407
74.	31.05.2022	State Pollution Control Board Sikkim-R6 granted renewed Consent to Establish 2 D.G. sets having capacity of 82.5 kVA to M/s MESASO Infrastructure Pvt. Ltd.-R-12 under the Air Act, 1981.	Annexure R12/33, Pg. 1240 of Reply dated 16.03.2024 of M/s MESASO-R12.	408
75.	11.07.2022	Minutes of 28th meeting of Board of Directors of GSCDL-R-12 to discuss the Agenda of approval of 3 additional floors for the MLCP with Shopping Plaza.	Annexure R/26 (Colly), Pg. 827 of Counter Affidavit dated 16.03.2024 of GSCDL-R-2.	409
76.	29.07.2022	Cabinet Memorandum, Urban Development Department, Government of Sikkim regarding Multi	Annexure R/25, Page 650-654 of the Common Counter Affidavit of State of Sikkim Authorities -R1, R3,R4,R7	410-414

		Level Car Parking Cum Shopping Plaza Project at West Point School under Public Private Partnership (PPP) with Gangtok Smart City Development Ltd whereby the proposal for adding three floors, in addition to eleven floors in the Multi-Level Car Parking while relaxing the Sikkim Building Construction (Amendment) Regulations 2021 as well as proposal for constructing an open air plaza, was considered and directed to be placed before the Council of Ministers for approval.	and R9; Annexure R/26 (Colly), Pg. 823-827 of the Counter Affidavit dated 16.03.2024 of GSCDL-R-2.	
77.	01.08.2022	Indian Green Building Council pre-certification dated 01.08.2022 rating the project as „Gold“ and noting that the project West Point, Gangtok had demonstrated intent to design and build high performance building in accordance with IGBC Green New Buildings Rating System.	Annexure R12/56, Pg. 1304 of Reply dated 16.03.2024 of M/s MESASO-R12.	415
78.	05.08.2022	Note Sheet of Cabinet Meeting held on 03.08.2022 wherein the Cabinet accorded its approval for the proposal of constructing additional 3 floors over partial horizontal area of the building by relaxing the Sikkim Building Construction (Amendment) Regulations 2001 and	Annexure R/26 (Colly), Pg. 828 of Counter Affidavit dated 16.03.2024 of GSCDL-R-2.	416

		construction of open-air plaza for the project.		
79.	10.10.2022	Letter by M/s MESASO Infrastructure Pvt. Ltd.-R-12 to GMC-R-10 submitting the drawings of the additional 3 floors and front plaza.	Annexure R/19, Pg. 1582 of the Counter Affidavit dated 01.05.2024 of GMC R10.	417
80.	11.11.2022	Construction order issued by GMC-R-10 granting approval to the proposed construction of 14 storied building involving construction of additional 3 floors and front plaza over Church Road.	Annexure R/20, Pg. 1583-1584 of the Counter Affidavit dated 01.05.2024 of GMC-R10.	418-419
81.	23.11.2022	Letter from Chief Conservator of Forest, Gangtok to M/s MESASO Infrastructure Pvt. Ltd.-R-12 informing that SEIAA/SEAC of the State of Sikkim is defunct momentarily due to completion of term and directed R12 to apply directly to EAC at Parivesh Portal till SEAC and SEIAA are reconstituted.	Annexure R/27, Pg. 396 of the Common Counter Affidavit of the State of Sikkim Authorities - R1, R3, R4, R7 and R9; Annexure R/9, Pg. 237 of Counter Affidavit dated 14.03.2024 of SEIAA-R-8.	420
82.	15.03.2023	Site Inspection Report prepared by GMC-R-10 noting that the steel structure erected for the 11th floor is completed, and the mechanical, electrical and plumbing (MEP) work was seen in progress.	Annexure R/21 (Colly), Pg. 1585 of the Counter Affidavit dated 01.05.2024 of GMC-R10.	421
83.	31.05.2023	Inspection Report of the Sikkim State Pollution Control Board-R-6 of the multi-level car parking cum	Annexure R/3, Pg. 690-692 of Counter Affidavit dated 15.03.2024 of SPCB -R6.	422-424

		commercial development project.		
84.	07.07.2023	Site Inspection Report by GMC-R-10 wherein it was observed that the top floor erection of the proposed MLCP cum CD may be done with utmost care on level 14. It was also observed that the peripheral ramp is about 60% completed. It was further noted that as directed by the Government, the Respondent No. 12 shall comply with the provisions of the Concession Agreement and complete the project by 31.12.2023 as directed by the Government.	Annexure R/21 (Colly), Pg. 1586 of the Counter Affidavit dated 01.05.2024 of GMC-R10.	425
85.	23.08.2023	Environmental Clearance granted by MOEF&CC-R-11 to - M/s MESASO Infrastructure Pvt. Ltd.-R-12 for the proposed vertical expansion by 3 floors of "WEST POINT" -Integrated Commercial-cum-MLCP Complex under the provisions of the EIA Notification, 2006.	Annexure R12/39, Pg. 1257-1272 of Reply dated 16.03.2024 of M/s MESASO-R 12; Annexure R/10, Pg. 238-253 of Counter Affidavit dated 14.03.2024 of SEIAA-R-8; Annexure R-26, Pg. 655-670 of the Common Counter Affidavit of the State of Sikkim Authorities - R1, R3, R4, R7 and R9; Annexure R/26 (Colly), Pg. 829-844 of Counter Affidavit dated 16.03.2024 of GSCDL-R-2; Annexure R/5, Pg. 1663-1678 of Counter Affidavit dated 27.08.2024 of MoEF&CC – R-11.	426-441

86.	25.08.2023	Notification for reconstitution of SEIAA/SEAC, Sikkim issued by the MoEF&CC-R-11.	Annexure R/2, Pg. 208-212 of Reply Affidavit dated 14.03.2024 of SEIAA-R-8.	442-446
87.	25.09.2023	Order passed by the Hon <sup>ble</sup> Supreme Court in Civil Appeal No. 6168/ 2023 (Diary No. 32544/2022) wherein the Hon <sup>ble</sup> Court set aside the impugned order dated 10.05.2022 passed by this Hon <sup>ble</sup> Tribunal in the Original Application 38/2022/EZ and directed that the said application be restored and decided afresh by this Hon <sup>ble</sup> Tribunal while leaving all rights and contentions of the Parties open.	Annexure R12/8, Pg. 1100-1103 of Reply dated 16.03.2024 of M/s MESASO-R 12; Annexure R/1, Pg. 204-207 of Counter Affidavit dated 14.03.2024 of SEIAA-R-8; Annexure R/6, Pg. 568-571 of the Common Counter Affidavit of the State of Sikkim Authorities - R1, R3, R4, R7 and R9; Annexure R6, Pg. 1560-1563 of the Counter Affidavit dated 01.05.2024 of GMC-R10.	447-450
88.	06.10.2023	Letter by M/s MESASO Infrastructure Ltd.-R-12 to the newly constituted SEIAA-R-8 submitting the Environment Clearance dated 23.08.2023.	Annexure R/11, Pg. 254 of Counter Affidavit dated 14.03.2024 of SEIAA-R-8.	451
89.	17.10.2023	Provisional Consent to Establish issued by Sikkim Pollution Control Board-R-6 to M/s MESASO Infrastructure Pvt. Ltd.-R-12 to establish fourteen (4G+7+3) storeyed Integrated Commercial cum Multi Level Car Parking Complex in Gangtok on provisional basis under the Water Act, 1974 and the Air Act, 1981.	Annexure R12/34, Pg. 1241-1242 of Reply dated 16.03.2024 of M/s MESASO-R 12; Annexure R/4, Pg. 693-694 of Counter Affidavit dated 15.03.2024 of SPCB-R-6.	452-453
90.	05.12.2023	Clearance Certificate dated	Annexure R12/42,	454

		05.12.2023 issued by the Office of the Assistant Engineer, Public Health Engineering Department, Sewerage Sub-Division, Government of Sikkim certifying that M/s MESASO Infrastructure Pvt. Ltd.-R-12 has connected the sewer line of its premises to the Government sewer system and cleared all dues and therefore Department has no objection for the issuance of occupancy certificate.	Pg. 1285 of Reply dated 16.03.2024 of M/s MESASO-R 12.	
91.	09.12.2023	Quarterly EC Compliance Report for the period of September 2023 - November 2023 dated 09.12.2023 submitted by M/s MESASO Infrastructure Pvt. Ltd. – R-12 under their own initiative.	Annexure R12/40, Pg. 1273-1283 of Reply dated 16.03.2024 of M/s MESASO-R 12.	455-465
92.	18.01.2024	Consent to Establish issued by the Sikkim Pollution Control Board-R-6 to M/s MESASO Infrastructure Pvt. Ltd.- R-12 to establish vertical expansion of fourteen (4G+7+3) storeyed Integrated Commercial cum Multi Level Car Parking complex under the provisions of the Water Act, 1974 and the Air Act, 1981.	Annexure R12/35, Pg 1243-1244 of Reply dated 16.03.2024 of M/s MESASO-R 12; Annexure R/5, Pg. 695-696 of Counter Affidavit dated 15.03.2024 of SPCB-R-6.	466-467
93.	23.01.2024	Minutes of the meeting and site inspection of the Multi-disciplinary Committee for monitoring environmental	Annexure R/12, Pg. 255-271 of Counter Affidavit dated 14.03.2024 of SEIAA-R-8.	468-484

		safeguards for issues pertaining to the project of M/s MESASO Infrastructure Ltd.		
94.	09.02.2024	Partial No Objection Certificate granted by the Fire and Emergency Services Department, Government of Sikkim on 09.02.2024 to M/s MESASO Infrastructure Pvt. Ltd.-R-12 for eight floors of the building.	Annexure R12/54, Pg. 1302 of Reply dated 16.03.2024 of M/s MESASO-R 12.	485
95.	16.02.2024	GMC-R-10 granted permission for partial completion certificate and occupation of parking level – 04 to mall level -04 of Multi Level Car Parking cum Commercial Development to M/s MESASO Infrastructure Pvt. Ltd.-R-12.	Annexure R12/47, Pg. 1291 of Reply dated 16.03.2024 of M/s MESASO-R 12; Annexure R/23, Page 1588 of the Counter Affidavit dated 01.05.2024 of GMC-R10.	486
96.	17.02.2024	Consent to Operate issued by the Sikkim Pollution Control Board-R-6 to M/s MESASO Infrastructure Pvt. Ltd.-R-12 for Integrated Commercial cum Multi Level Car Parking Complex comprising four floors of parking facility and four floors of commercial establishment (shopping mall with multiplex & eatery) without hotel at Old West Point School, Gangtok under the Water Act, 1974 and the Air Act, 1981. The said Consent is valid till 31.03.2025.	Annexure R12/36, Pg. 1245-1246 of Reply dated 16.03.2024 of M/s MESASO-R 12.	487-488

97.	NA	Indian Green Building Council membership certification issued to M/s MESASO Infrastructure Pvt. Ltd.-R-12 and the same is valid up to December 2024.	Annexure R12/55, Pg 1303 of Reply dated 16.03.2024 of M/s MESASO-R 12.	489
98.	NA	Frequency and magnitude of earthquake data from year 2006 to 2023.	Annexure R/1, Pg. 167-180 of the Reply dated 09.03.2024 of SDMA-R-5.	490-502
99.	NA	Photographs depicting parking on roads of Gangtok city leading to impeding traffic due to unprecedented increase of Motor Vehicles.	Annexure R/1, Pg. 761-763 of Counter Affidavit dated 16.03.2024 of GSCDL-R-2.	503-505
100	NA	Photographs and location map of the project site (MLCP at Old West Point School).	Annexure R/2, Pg. 764 of Counter Affidavit dated 16.03.2024 of GSCDL-R-2.	506
101	NA	Photographs showing that Kanchenjunga is not visible from M.G. Marg and the MLCP will enable people to have a panoramic view of Kanchenjunga.	Annexure R/29, Pg. 863-865 of Counter Affidavit dated 16.03.2024 of GSCDL-R-2.	507-509
102	NA	Photographs of the Applicant in press media along with the Political symbols.	Annexure R/30, Pg. 866-867 of Counter Affidavit dated 16.03.2024 of GSCDL-R-2.	510-511
103	NA	Relevant extracts of Technical Feasibility Report (Deliverable 1) regarding Implementation of Multi-Level Car Parking Commercial Development at Old West Point School Area prepared by Grant Thornton Bharat LLP.	Annexure R/33, Pg. 874-904 of Counter Affidavit dated 16.03.2024 of GSCDL-R-2.	512-542
104	NA	Relevant extracts of Financial Feasibility Report	Annexure R/33, Pg. 905-911 of Counter Affidavit	543-549

		(Deliverable 2) regarding Implementation of Multi-Level Car Parking Cum Commercial Development at Old West Point School Area by Grant Thornton Bharat LLP.	dated 16.03.2024 of GSCDL-R-2.	
105	NA	Photos of the service road provided for ease of accessibility for nearby residential and hotel premises.	Annexure R/35, Pg. 913 of Counter Affidavit dated 16.03.2024 of GSCDL-R-2.	550
106	NA	Site Profile and land use in and around old West Point Area.	Annexure R/37 (Colly), Pg. 992-993 of Counter Affidavit dated 16.03.2024 of GSCDL-R-2.	551-552
107	02.09.2024	Letter from Department of Civil Engineering, Indian Institute of Technology Roorkee to M/s MESASO Infrastructure Pvt. Ltd.- R12 regarding vetting of drawings and design of Multi Level Car Parking cum Commercial Establishment at Old West Point School. The letter notes that the design confirms to the relevant IS Codes and has been found satisfactory for Seismic Zone -IV.	Annexure R12/59, Pg. 6 of I.A. for Additional documents dated 04.09.2024 on behalf of M/s MESASO – R12.	553

108.

Proof of Service

554.

Date: 06.09.2024

Place: Kolkata

**DRAWN & FILED BY:**


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Shri. Sanjay Upadhyay

[Senior Advocate]

**ANNEXURE R-27**  
**GOVERNMENT OF SIKKIM**  
**URBAN DEVELOPMENT AND HOUSING DEPARTMENT**  
**GANGTOK**

No.GOS/UD&HD/6 (294)2001

Dated:16/10/2001

**NOTIFICATION**

In exercise of the powers conferred by Sub-section (2) of section 7 and section 17 of the Sikkim Allotment of House Sites and Construction of Building (Regulation and Control) Act, 1985 (11 of 1985), the State Government hereby makes the following regulations further to amend the Sikkim Building Construction Regulations, 1991, namely:-

- (1) (1)These Regulations may be called the Sikkim Building Construction (Amendment) Regulations, 2001.
- (2) They shall extend to all the notified areas in Sikkim.
- (3) They shall come into force at once.
- (4) They shall apply to both Government allotted sites and private sites.
- (2) In the Sikkim Building Construction Regulation, 1991, (hereinafter referred to as the said regulations), in regulation 17, -
  - (a) for sub-regulation (I), the following shall be substituted, namely:-

“(i) The maximum height of buildings constructed in allotted sites or private holdings within a notified area shall be in accordance with the suitability and profile of the locations based on the stability map of the area as prepared by the Mines and Geology Department from time to time which shall be as follows: -

Stability zone	Admissible number of floors
1.	5 ½ storeys
2.	1 ½ storeys
3.	3 ½ storeys
4.	2 ½ storeys
5.	1 ½ storeys
6.	No construction is allowed.

Provided that the height of buildings shall be regulated in accordance with the size of the plot allotted or possessed and structural design of the foundation of the proposed building;

(b) after sub-regulation (V) the following sub regulation shall be added, namely: -

“(vi) Any structure beyond the permissible number of floors or allotted area or approved Blue print Plan completed or under construction on or before the date of notification of these regulations, shall be regularized after payment of regularization fee to be prescribed by Notification by the Government.

3. In the said regulation, after regulation 38, the following regulation shall be inserted, namely:-

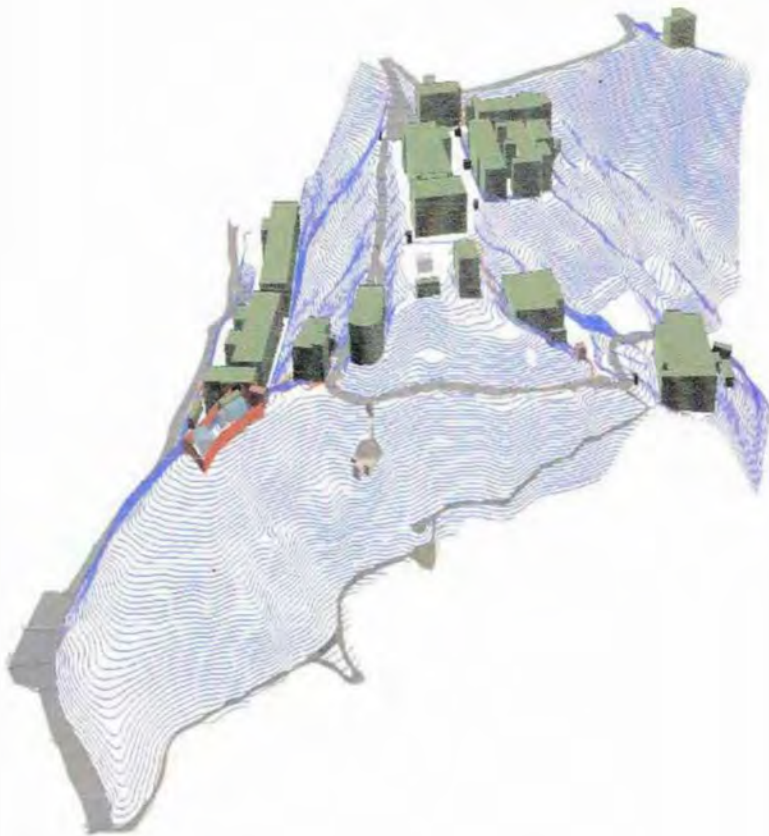
39 Power to relax      In case of genuine difficulties arising out of the implementation of any of the regulations in regard to buildings or structures proposed to be constructed by the Government of Sikkim or Government of India or any registered organization the State Government reserves the right to relax from application of any of the provisions which it considers justifiable on the merit of each case.”

Commissioner –cum- Secretary  
 Urban Development & Housing Department.

-TRUE COPY-

ANNEXURE R-9

**GEOLOGICAL AND GEO-TECHNICAL APPRAISAL OF  
TASHILING SECRETARIAT COMPLEX, POST 9/18  
SIKKIM EARTHQUAKE – 2011**



**MINES MINERALS AND GEOLOGY DEPARTMENT  
GOVERNMENT OF SIKKIM.  
18<sup>TH</sup> OCTOBER -2011**

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8. Geological Map of Tashiling Secretariat area(1:2000 Scale)
9. Slope analysis and Stability Assessment map of Tashiling Secretariat Area (1:1,500 scale).
10. Contour Map of the Tashiling Secretariat Area

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The earthquake that rattled the State of Sikkim on the evening of 18<sup>th</sup> Sept. 2011 was of the magnitude of 6.9 on Richter scale with its epicenter at 27.74° latitude and 88.113° longitude at a depth of 19.7 km (IMD). It had a devastating effect in the State and surrounding areas causing massive loss of lives and property. Many of the private as well as Govt. buildings were damaged irreparably and the heart of administrative centre, the Secretariat and its surrounding buildings at Tashiling Gangtok were also not spared of its wrath. Since these buildings were rendered unsafe, the offices housed in these buildings were shifted elsewhere. With a view to ascertain suitability of the site for the re-construction of the secretariat and other office buildings at Tashiling, the Hon'ble Chief Minister inspected the Tashiling area alongwith a team of Secretaries, HODs and technical experts on 11.10.2011. After a detailed inspection of the area, the HCM desired that a new Secretariat building needs to be constructed to house all the offices. He then directed the Department of Mines, Minerals & Geology to give a report within a week on feasibility of constructing a new Secretariat, building at Tashiling with regard to the stability and utilization aspect of the area for formulation of future plan of action. He desired that the area required for utilization as office space needs to be around 10 lakh sq. ft. to accommodate present as well as future needs of all the State Govt. departments.

As per the direction of the HCM the Department of Mines, Minerals & Geology decided to take up following works:

- a. Geological investigation of the area.
- b. Core drilling on the Secretariat complex for geotechnical studies.
- c. Contour surveying of the area and mapping.
- d. Soil sampling

The department started the work on geological studies and contour survey from 12.10.11. The drilling machine which was being used at Sangacholing, Pelling, was shifted to Tashiling on a war footing and the core drilling was started from 14.10.11.

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Sikkim Himalayas fall under zone IV of Seismic Zonation rating as per the Indian Seismic Code IS 1893 – 2002. Sikkim Himalayas are a part of tectonic mountain chain formed by collision of Indian Plate with Urasian Plate. As a result rocks are thrust, folded, faulted and highly fractured. The area has not yet attained the slope stability condition and slope modification processes are active with the triggering factors such as high rainfall, seismic tremors etc. On preliminary examination, one of the causes of damage is suspected to be the anomalies on geological characteristics of foundation over which Secretariat was built. In such scenario, geological and geo-technical investigation is a basic tool in designing appropriate infrastructural facilities considering all the natural adversaries. Thus the site selection with suitability/stability, availability of required area with feedback/data generation for safe design is the main objective of investigation.

In the prevailing geological condition with all natural adversaries and urgency, detail geo-technical investigation for design propose is time consuming and unachievable in short period of time. The scope of present investigation is limited to identification of suitable/ stable area for formulation of opinion in future course of action by the State Authorities. Present investigation is aimed at identifying the suitability of the area based on :-

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Characterization of strength of rocks on general characteristics of rocks.

Testing of major rock samples for arriving at safe assumption of load bearing capacity of area.

Analyses of soil samples collected from depth ranging from 15 – 25 ft from selected places.

Topographic survey for slope analyses and demarcation of suitable area for construction.

Preparation of geological sections for revealing overburden and different rock formation at various depth.

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Geological mapping of 65,72,000 sq ft. of areas covering Tashiling Secretariat & Palace gate on the north, Palace guest house ridge on the east, Army water supply pipe line on the south Deorali-Dukipandokan road (Namnam Assambly Complex, Annex Buildings upto Duki Pan Dokan) in south –west, west and north west. The three distinct rock types viz- Lingtse granitic gneiss, micaschist, quartzite and highly sheared/weathered micaceous rocks are the main rock formation of the area overlain by shallow to moderately thick soil overburden. The trend of foliation plane are NNE-SSW dipping North-East. The general characteristics of rocks are as follows:-

- i) Lingtse Granitic Gneiss : These rocks form the basal part of area under consideration characterized by joint massive rocks with band of mica schist in the middle part. The mica schist band is clubbed with the lingtse granitic gneiss band. Rocks are hard and brittle and weathering along joint plane is noticed. In rock mass characteristic, these rocks are considered to be grade I & II. Since the rocks are jointed, block failure at places is common. However, these rocks have contributed to the overall stability of Gangtok area.

- ii) Micaceous Quartzite : Two bands of micaceous rocks with Lintse Granitic Gneiss in between are mapped within the Tashiling Secretariat Complex. Micaceous Quartzite bands show high compressive strength with surface weathering. They are free from jointing and characterized as grade I & II depending upon the composition and weathering. These rocks are also not adverse to overall stability of area. However, Lintse granitic gneiss are subjected to jointing and capable joints extend from junction point of Secretariat main block and VIP block to Roro chhu, trending SE. In upper part i.e. between NW part of Press building to Secretariat, a wedge block of rock has dislocated and the void filled by soil. The main cause of distress on VIP block was caused due to in-homogeneity and infirmities of foundation condition. If such surface data was available prior to construction, appropriate technique would have prevented the irreparable damage.
- iii) Mica Schist : These rocks are highly sheared, jointed and weathered. The compressive strength is poor than the soil. In between a fault with displacement of approx. 30 cm has been mapped during the investigation with down through towards Palace guest house. However the extension of this fault couldn't be traced on down the slope. These rocks extend upto Nehru point on ridge area on the north and widespread on western flank (Radio station area, Sichey area) and eastern flank towards Tathangchen area. However area is mapped upto Palace Gate only.

\_\_\_\_\_ :

Three bore holes are drilled in front of Tashiling Secretariat and 8 holes for soil analysis have been carried out between Annexe building and Tashiling Secretariat. The average bearing capacity based on test results of various rocks and soil samples are as under (details provided in annexure 1 to 5).

- |    |                                 |   |  |
|----|---------------------------------|---|--|
| a) | Rock (depth 8 mts. to 9.5 mts.) | - | i) Brazillian (Tensile strength 356 tons/m <sup>2</sup> )      |
|    |                                 |   | ii) Point Load (Compressive strength 238 tons/m <sup>2</sup> ) |
| b) | Soil                            |   | i) Depth 2.4 mts. - 159 tons/m <sup>2</sup>                    |
|    |                                 |   | ii) Depth 4.2 mts. - 173.7 tons/m <sup>2</sup>                 |

Slope analyses of Approx. 10,61,700 sq. feet has been covered on 1:1000 scale contour map. Based on slope analyses the area has been divided into

- |    |                         |              |   |         |   |                  |
|----|-------------------------|--------------|---|---------|---|------------------|
| a) | Gentle slope            | (0° to 10°)  | - | 11.51 % | - | 1,22,200 sq. ft. |
| b) | Moderate sloe           | (11° to 20°) | - | 8.67%   | - | 92,100 sq. ft.   |
| c) | Moderately gentle slope | (21° to 30°) | - | 28.71%  | - | 3,04,800 sq. ft. |
| d) | Moderately steep slope  | (31° to 40°) | - | 13.69%  | - | 1,44,900 sq. ft. |
| e) | Steep slope             | (> 40°)      | - | 37.46%  | - | 3,97,700 sq. ft. |

- 
1. Stability zonation: Based on geological & geotechnical parameters test and generalized characteristics of rocks and soil, as well as, slope condition, the stability of area has been categorized. Since, the overall area falls within stable zone, suitability is based on slope condition.

The percentage distribution of areas are as under :

- a. Suitable area for construction of 3 to 4 storied building (inclusive of existing building in the area) < 30° slope - 48% - 5,19,200 sq. ft.
- b. Area suitable for other purpose 30° to 40° - 13.69% - 1,44,900 sq. ft.
- c. Unsuitable area (mainly based on slope condition) > 40° - 37.46% - 3,97,700 sq. ft.

2. For general planning purpose, average 4 storied buildings are recommended. However detailed geotechnical parameters will govern the individual planning of structures in the area. In areas with sound stability condition, the number of floors may be decided as per the bearing capacity of rock and soil.

3.

4.

5. Geological surprises are common in such geological conditions and remedial measures can be formulated at \_\_\_\_\_ only. Advice of geologist and experts plays a \_\_\_\_\_ role.

## Drill Log Data Sheet



**Mines, Minerals & Geology Department**  
**Government Of Sikkim**  
**Gangtok.**

SITE: Tashiling Secretariat, East Sikkim.						JOB NO.: 01			
DRILLING EQUIPMENT: Diamond drilling with Single tube barrel									
DRILLING METHOD: Rotary			DRILLING DIAMETER: BX,NX Size			CASHING DIAMETER: NX Size			
DRILL HOLE NO.: 01					SHEET NO.: 01		R.L. (m): 1720m amsl		
ORIENTATION: Vertical down					CO-ORDINATE: N27 <sup>0</sup> 19.48", E 88 <sup>0</sup> 36'.42"				
DETAILS OF SAMPLES:					DETAILS OF DRILL HOLE:				
RUN (mts.)		Depth (in mts.)	Log	Type of sample  in(mts. )	Core	Core	Water loss	Allowable bearing capacity/ Rock Strength	Rock Type
From	To				Recov- ery	Loss			
					(%)	(%)			
0.00	1.50	1.50		Core	7.33%	92.67%	No loss		Filling Materials
1.50	3.00	1.50		slush	00.00%	100.00%	No Loss		Filling Materials
3.00	4.50	1.50		Core	8.66%	91.64%	loss		Filling Materials
4.50	5.00	0.50		Slush	0.00%	100.67%	Loss		Filling Materials
5.00	6.50	1.50		Slush	00.00%	100.00%	loss		Filling Materials
6.50	8.00	1.50		slush	00.00%	100.00%	loss		Lingtse Granetic Gneiss
8.00	9.50	1.50		Core	8.66%	91.67%	loss	254.7T/m <sup>2</sup>	Lingtse Granetic Gneiss
9.50	11.00	1.50		Slush	0.00%	100.00%	loss		Casing Block
11.00	12.50	1.50					loss		Casing Block
12.50	14.00	1.50					loss		Casing Block

## Drill Log Data Sheet



**Mines, Minerals & Geology Department**  
**Government Of Sikkim**  
**Gangtok.**

<b>SITE:</b> Tashiling Secretariat, East Sikkim.						<b>JOB NO.:</b> 02			
<b>DRILLING EQUIPMENT:</b> Diamond drilling with Single tube barrel									
<b>DRILLING METHOD:</b> Rotary			<b>DRILLING DIAMETER:</b> BX,NX Size			<b>CASHING DIAMETER:</b> NX Size			
<b>DRILL HOLE NO.:</b> 02					<b>SHEET NO.:</b> 01		R.L. (m): 1720m amsl		
<b>ORIENTATION:</b> Vertical down					<b>CO-ORDINATE:</b> N27 <sup>0</sup> 19.48", E 88 <sup>0</sup> 36'.47"				
<b>DETAILS OF SAMPLES:</b>					<b>DETAILS OF DRILL HOLE:</b>				
RUN (mts.)		Depth (in mts.)	Log	Type of sample  in(mts. )	Core	Core	Water loss	Allowable bearing capacity/ Rock Strength	Rock Type
From	To				Recov- ery	Loss			
					(%)	(%)			
0.00	1.50	1.50		slush	0.00%	100.00%	loss		Filling Materials
1.50	3.00	1.50		slush	00.00%	100.00%	Loss		Filling Materials
3.00	4.50	1.50		Core	3.66%	96.64%	No loss		Mica Schist
4.50	6.00	1.50		core	24.00%	76.00%	No Loss	356.6T/m <sup>2</sup> 238T/m <sup>2</sup>	Lingtse Granetic Gneiss



**Drilling on Progress at Tashiling Secretariat**



**Soil Sampling on progress at Western slope of Tashiling Secretariat**



**Fracture plane (Wedge Failure in In-situ rock formation) towards South West of Present Secretariat.**

4X



Drilling on progress



Recoveries of core at drill point no 2.



Annexure I

**Geo - Technical Laboratory  
Mines, Minerals & Geology Department  
Government Of Sikkim  
Gangtok.**

**Direct Shear Test Report**

t  
pe e e ret r t  
pe t  
te  
te t 7  
epth

**IS = 72720**

SI. No.	Strain	Load(kg)		
		Proving ring reading	Proving ring reading	Proving ring reading
		0.357kg	0.714kg	1.06kg
		7	7	
7				7
8				
	7			
	8			

**A<sub>c</sub> = 36cm<sup>2</sup>, A<sub>c1</sub>= 30.60 cm<sup>2</sup>, A<sub>c2</sub>= 30.60cm<sup>2</sup>, A<sub>c3</sub>= 28.80 cm<sup>2</sup>**

**Load<sub>1</sub>=0.20 kn, Load<sub>2</sub>= 0.29 kn, Load<sub>3</sub>= 0.30 kn**

**Shear**

**Stress (Ss)**

**= Ss<sub>1</sub> = 0.65 kg/cm<sup>2</sup> = 6.50 t/m<sup>2</sup>**

**Load/Area Ss<sub>2</sub> = 0.95 kg/cm<sup>2</sup> = 9.50 t/m<sup>2</sup>**

**Ss<sub>3</sub> = 1.04 kg/cm<sup>2</sup> = 10.40 t/m<sup>2</sup>**

**Average Allowable Shear Stress as per direct Shear Test = 8.80 t/m<sup>2</sup>**



Annexure I

**Geo- Technical Laboratory  
Mines, Minerals & Geology Department  
Government Of Sikkim  
Gangtok**

**Sieve Analysis Report**

Location of Sample Point No. **Below Secretariat building**  
Date of test **17/10/2011**  
Depth **12' - 14'**

IS sieves sizes (mm)	wt.of retained sample(gms)	Sample retained (%)	Sample passing (%)
75	7	7	78
84			
100			8
150	8	8	
200	77	77	
250	7	7	
300			
425			

<b>Gravel (%)=21.74</b>	<b>very coarse sand(%)=14.61</b>	<b>coarse sand (%)=13.94</b>	<b>Medium grained sand(%)=15.03</b>
<b>Fine to very fine sand(%)=25.40</b>		<b>Silt(%)=6.42</b>	<b>Clay(%)=2.63</b>
<b>Moisture content(%) =7.84</b>		<b>Soil density =1.70g/cm<sup>3</sup>.</b>	



Annexure II

**Geo - Technical Laboratory  
Mines, Minerals & Geology Department  
Government Of Sikkim  
Gangtok.**

**Direct Shear Test Report**

Project No. 7  
Depth

**IS = 72720**

Sl. No.	Strain	Load(kg)	Load(kg)	Load(kg)
		Proving ring reading	Proving ring reading	Proving ring reading
		0.357kg	0.714kg	1.06kg
			8	
			7	7
			8	
7		8		
8				
			8	
				7
	7			8
	8			

$A_c = 36\text{cm}^2$        $A_{c1} = 29.88\text{ cm}^2$        $A_{c2} = 28.80\text{cm}^2$        $A_{c3} = 27.72\text{ cm}^2$   
 Load<sub>1</sub>=0.27 kn      Load<sub>2</sub>= 0.28 kn      Load<sub>3</sub>= 0.32 kn

**Shear Stress (Ss)**  
 =  $S_{s1} = 0.90\text{kg/cm}^2 = 9.00$        $\text{t/m}^2$   
 Load/Area       $S_{s2} = 0.97\text{ kg/cm}^2 = 9.70$        $\text{t/m}^2$   
                           $S_{s3} = 1.15\text{ kg/cm}^2 = 11.50$        $\text{t/m}^2$

**Average Allowable Shear Stress as per direct Shear Test = 10.07 t/m<sup>2</sup>**  
 Beyond this depth bed rock is encountered



Annexure II

**Geo- Technical Laboratory  
Mines, Minerals & Geology Department  
Government Of Sikkim  
Gangtok**

**Sieve Analysis Report**

Location of Sample Point No.      Below Secretariat building  
Date of test                              17/10/2011  
Depth                                        8' - 9'

8 7

IS sieves sizes (mm)	wt.of retained sample(gms)	Sample retained (%)	Sample passing ( %)
7	8	8	
	8	8	8
8	7	7	8
			7
			8
	8	8	
7	7	7	7
	7	7	

**Gravel (%)=58.93      very coarse sand(%)=8.53      coarse sand (%)=7.64      Medium grained sand(%)=8.08**

**Fine to very fine sand(%)=12.32      Silt(%)=3.17      Clay(%)=1.27**

**Moisture content(%) =7.18      Soil density =1.30g/cm<sup>3</sup>.**



Annexure III

**Geo - Technical Laboratory  
Mines, Minerals & Geology Department  
Government Of Sikkim  
Gangtok.**

**Direct Shear Test Report**

t e e r e t r t  
p e  
p e t

te te t 7  
epth 8

IS = 72720

Sl. No.	Strain	Load(kg)	Load(kg)	Load(kg)
		Proving ring reading	Proving ring reading	Proving ring reading
		0.357kg	0.714kg	1.06kg
			7	
		8		7
			7	
7				
8				
				7
		7		
		8		
	7			
	8			

 $A_c =$ 36cm<sup>2</sup> $A_{c1} = 28.80 \text{ cm}^2$  $A_{c2} = 29.88 \text{ cm}^2$  $A_{c3} = 30.60 \text{ cm}^2$ Load<sub>1</sub> = 0.27 knLoad<sub>2</sub> = 0.29knLoad<sub>3</sub> = 0.32 kn

Shear Stress

(Ss) =

 $Ss_1 = 0.94 \text{ kg/cm}^2 = 9.40$ t/m<sup>2</sup>

Load/Area

 $Ss_2 = 0.97 \text{ kg/cm}^2 = 9.70$ t/m<sup>2</sup> $Ss_3 = 1.05 \text{ kg/cm}^2 = 10.50$ t/m<sup>2</sup>Average Allowable Shear Stress as per direct Shear Test = 9.87 t/m<sup>2</sup>

Beyond this depth bed rock is encountered



Annexure III

**Geo- Technical Laboratory  
Mines, Minerals & Geology Department  
Government Of Sikkim  
Gangtok**

**Sieve Analysis Report**

Location of Sample                      **Below Secretariat building**  
 Sample Point No.  
 Date of test                                **17/10/2011**  
 Depth                                         **8' - 9'**

IS sieves sizes (mm)	wt.of retained sample(gms)	Sample retained (%)	Sample passing (%)
75	8	8	
75	8	8	8
84	7	7	8
			7
			8
	8	8	
75	7	7	7
	7	7	

<b>Gravel (%)=58.93</b>	<b>very coarse sand(%)=8.53</b>	<b>coarse sand (%)=7.64</b>	<b>Medium grained sand(%)=8.08</b>
<b>Fine to very fine sand(%)=12.32</b>		<b>Silt(%)=3.17</b>	<b>Clay(%)=1.27</b>
<b>Moisture content(%) =7.18</b>		<b>Soil density =1.30g/cm<sup>3</sup>.</b>	



**Geo - Technical Laboratory  
Mines, Minerals & Geology Department  
Government Of Sikkim  
Gangtok.**

**Brazillian Test Report**

t  
pe  
te Test 7

Te e tre th  $q_t = 2p/\pi DT$

re pe  
T Th e re pe  
re h e p t

**IS:10082- 1981**

Core No.	D= Diameter (cm)	T=Thickness(cm)	P=Pressure (Kn)	t/m <sup>2</sup>
6	5	5	9.5	254.7 t/m <sup>2</sup>

Rock Type      Lingtse Granetic Gneiss  
Rock Strength    254.7 T/m<sup>2</sup>

51



**Geo - Technical Laboratory  
Mines, Minerals & Geology Department  
Government Of Sikkim  
Gangtok.**

**Brazillian Test Report**

t  
pe  
te Test 7

Te e tre th  $q_t = 2p/\pi DT$

re pe  
T Th e re pe  
re h e p t

**IS:10082- 1981**

Core No.	D= Diameter (cm)	T=Thickness(cm)	P=Pressure (Kn)	t/m <sup>2</sup>
1	5	5	14	356.6 t/m <sup>2</sup>

**Rock Type**      **Lingtse Granetic Gneiss**  
**Rock Strength**    **356.6 T/m<sup>2</sup>**



**Geo - Technical Laboratory  
Mines, Minerals & Geology Department  
Government Of Sikkim  
Gangtok.**

**Point Load Test Report**

t  
p e  
te Te t                    r t   e ret r t  
7

pre e tre th                     $q_t = 0.96 \times p / D^2$

re p e  
re h e p t

Core No.	D= Diameter (cm)	P=Pressure (Kn)	t/m <sup>2</sup>
1	5	6.2	238 t/m <sup>2</sup>

**Rock Type**                    Lingtse Granetic Gneiss  
**Rock Strength**            238 T/m<sup>2</sup>



**GOVERNMENT OF SIKKIM  
DEPARTMENT OF MINES, MINERALS & GEOLOGY  
GANGTOK**

IS-6403: 1981





Sample point No.	Sample collection depth	Foundation type used during calculation	Value of Shear strength(C)	Phi( $\phi$ )	$\gamma$	Factor of safety	SBC	SBC
1	14'-15'	Square	1.65 T/M <sup>2</sup>	49 <sup>0</sup>	1.39 g/cm <sup>3</sup>	5	17.37 kg/cm <sup>2</sup>	173.7 T/M <sup>2</sup>
2	08'-09'	Square	1.45 T/M <sup>2</sup>	49 <sup>0</sup>	1.30 g/cm <sup>3</sup>	5	15.901kg/cm <sup>2</sup>	159.01 T/M <sup>2</sup>

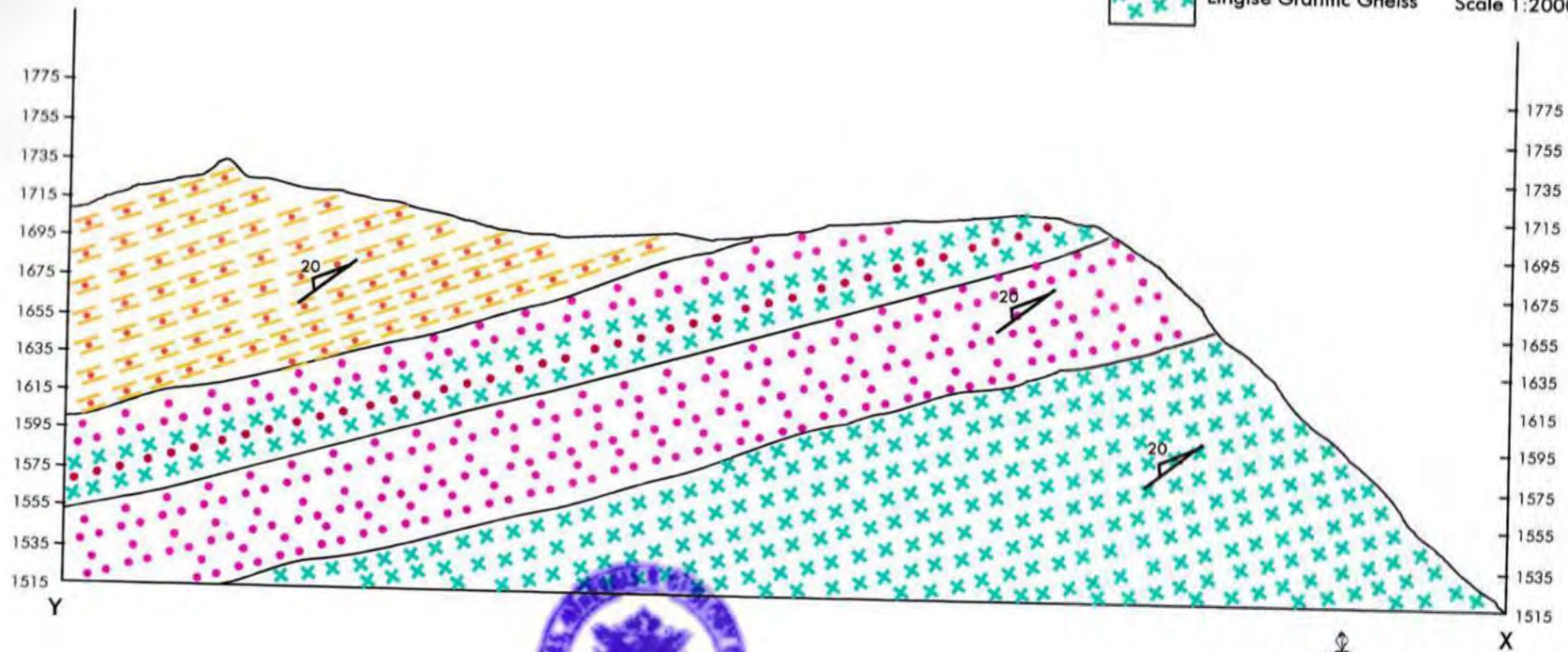
SBC=Safe Bearing Capacity

Annexure VII

### GEOLOGICAL SECTION ALONG NORTH - SOUTH DIRECTION (X- Y)

LEGEND

-  Highly Weathered Mica Schist
-  Quartzitic Mica Schist
-  Thick Soil Cover
-  Lingtse Granitic Gneiss



### GEOLOGICAL SECTION ALONG NORTH - SOUTH DIRECTION (A- B)

#### LEGEND



Quartzitic Mica Schist



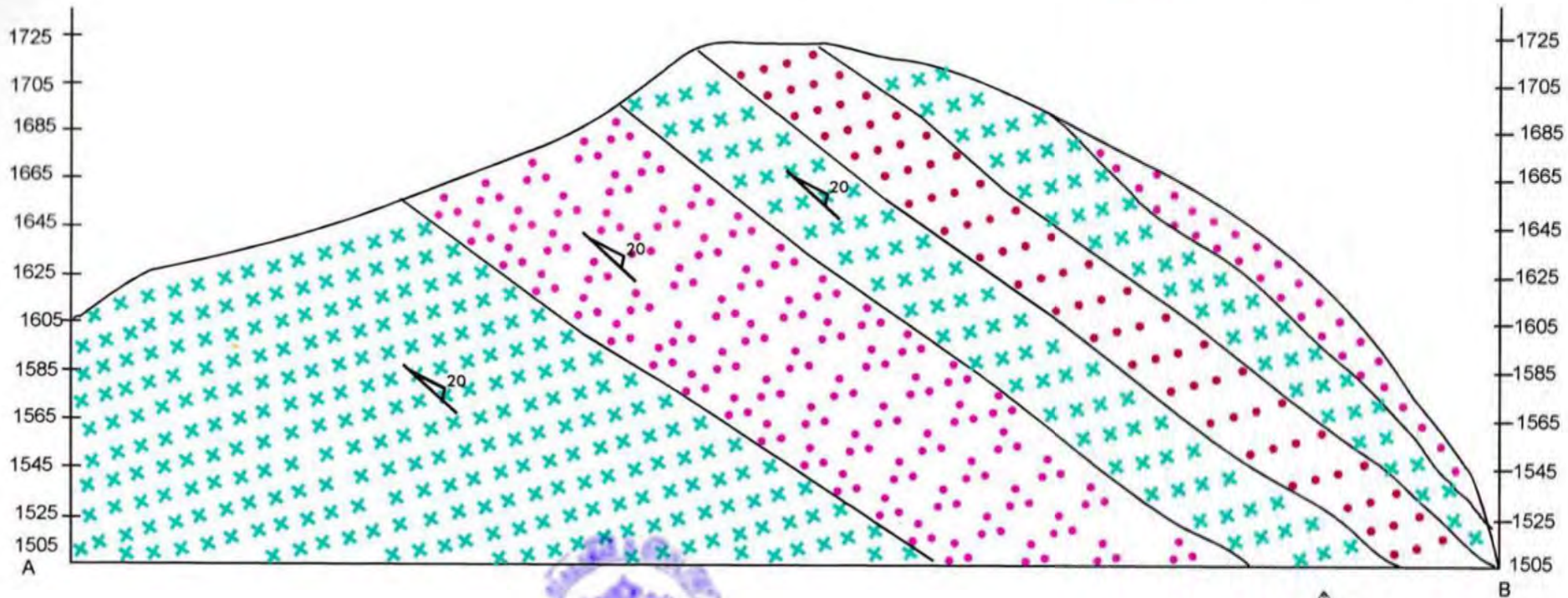
Thick Soil Cover



Lingtse Granitic Gneiss



Scale 1:2000



### GEOLOGICAL SECTION ALONG EAST - WEST DIRECTION (P- Q)

#### LEGEND



Highly Weathered Mica Schist



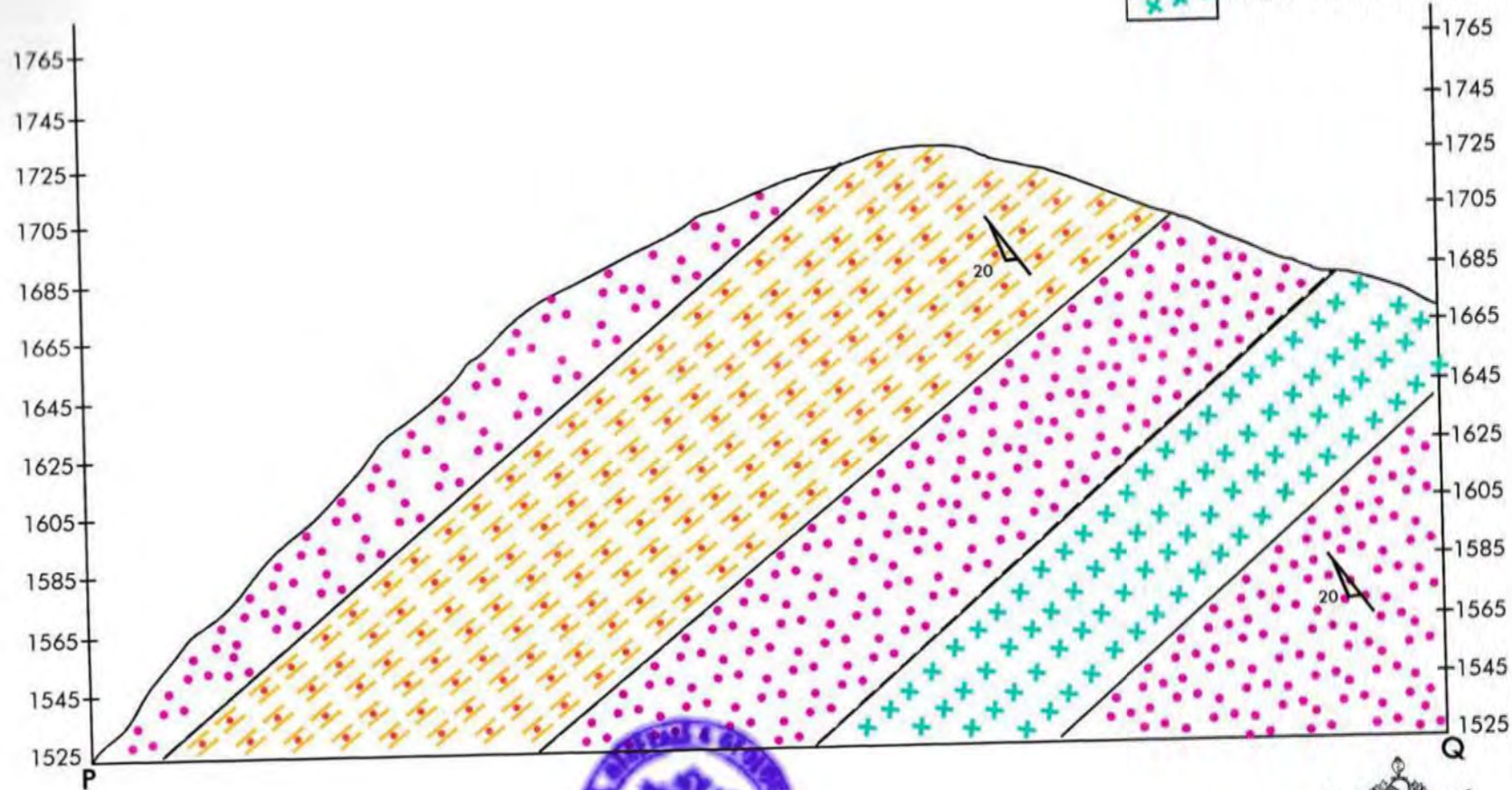
Quartzitic Mica Schist



Lingtse Granitic Gneiss

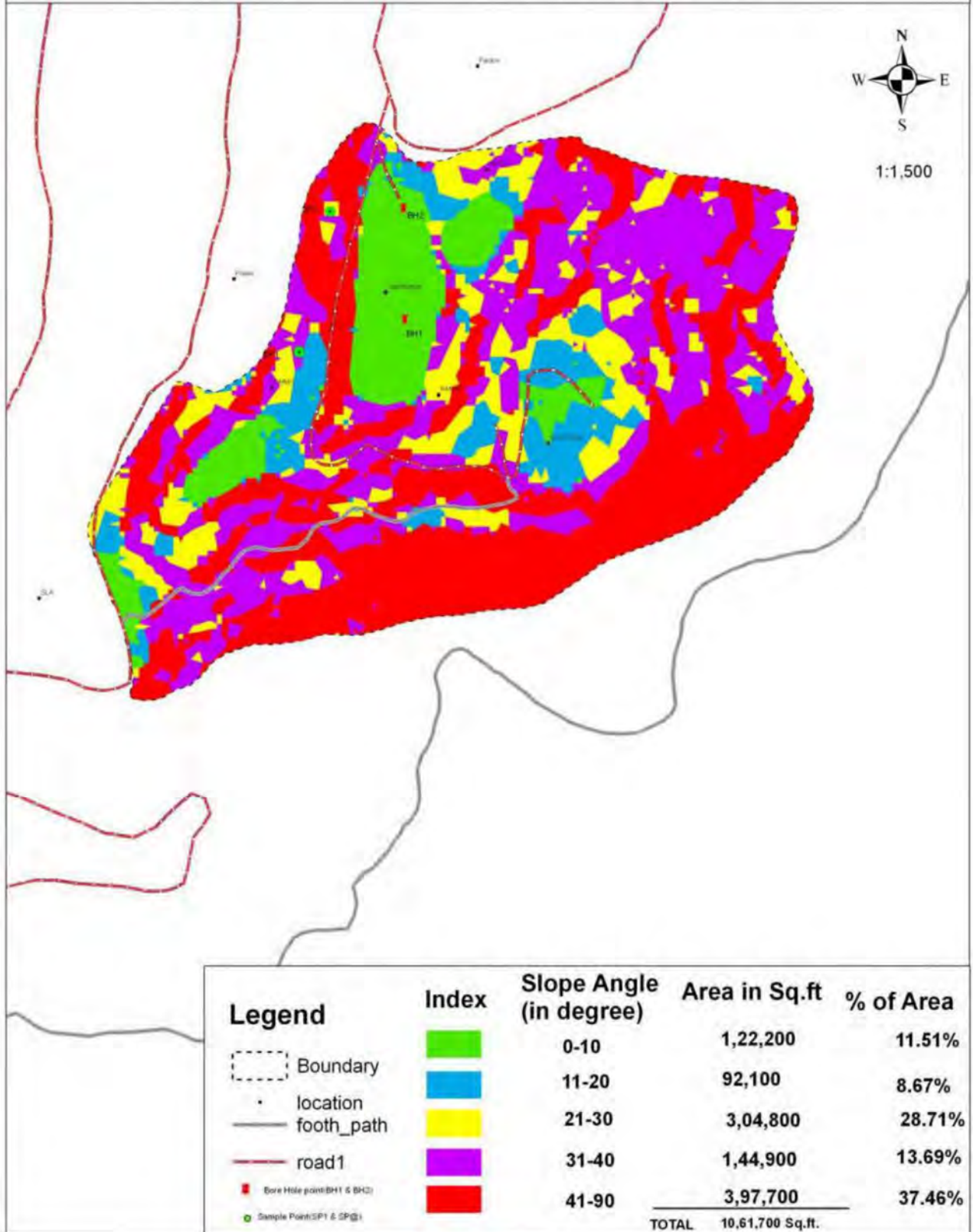


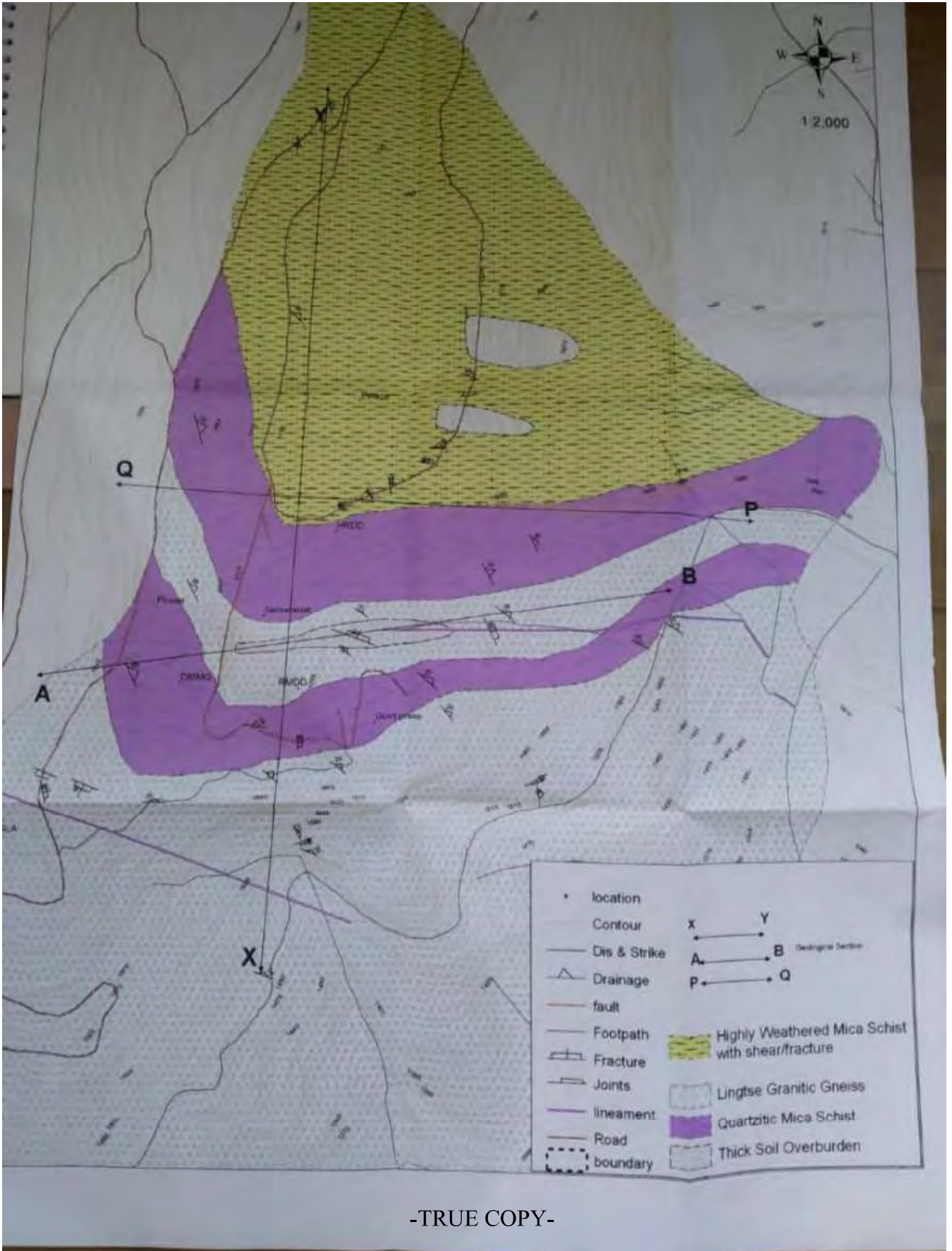
Scale 1:2000



DEPARTMENT OF MINES, MINERALS & GEOLOGY  
GOVERNMENT OF SIKKIM

# SLOPE ASSESSMENT FOR TASHILING SECRETARIAT AREA, GANGTOK





-TRUE COPY-

ANNEXURE R-11



GANGTOK SMART CITY  
DEVELOPMENT LTD

**GANGTOK SMART CITY DEVELOPMENT LIMITED**  
**LEVEL 5, KISAN BAZAAR, LAL MARKET ROAD,**  
**GANGTOK - 737101, SIKKIM, INDIA**  
**CIN - U93090WB2017SGC223807**

Memo no: - 84/SPV/GSCDL/2018-19

Dated: - 23/11/2019

To,

The Secretary,  
Mines & Geology Department,  
Government of Sikkim,

**Sub: - Geological & Geo-technical Investigation at Old West Point School Area**

Sir,

The undersigned has been directed to inform your good office that Gangtok Smart City Dev. Ltd. is implementing the project "**Multi-Level Car Parking cum commercial development at Old West Point School Area**". In this regard, it is requested that geological & geo-technical investigation of the project area may be carried out by your department.

In view of the above, the letter is submitted for further n.a, please.

*23/11/2019*

Nodal Officer  
Gangtok Smart City Dev. Ltd.

NODAL OFFICER  
GANGTOK SMART CITY DEV. LTD.  
GANGTOK, EAST SIKKIM

-TRUE COPY-

ANNEXURE R-10

**Geological and Geo-Technical investigation report of the  
land proposed for the construction of various structures  
at Old West Point, School, Gangtok, East-Sikkim**



DEPARTMENT OF MINES AND GEOLOGY  
GOVT. OF SIKKIM  
GANGTOK  
MARCH 2020



6X

**CONTENTS:-**

1. INTRODUCTION.
2. GEOLOGY OF THE AREA.
3. SITE GEOLOGY.
4. GEO-TECHNICAL INVESTIGATION.
5. ROCK QUALITY DESIGNATION.
6. CONCLUSIONS AND RECOMMENDATIONS.
7. ANNEXURE I
8. ANNEXURE II
9. ANNEXURE III
10. ANNEXURE IV
11. GEOLOGICAL MAP OF THE AREA
12. LOCATION MAP OF BOREHOLES DRILLED IN THE AREA



## INTRODUCTION

Apropos to letter No. 84/SPV/GSCDL/2018-19 dated 23/11/2019 from Nodal Officer, Gangtok Smart City Development Limited, Gangtok requisition for geological and geo-technical investigation of the land at old STNM complex Gangtok, east Sikkim. Accordingly, a team of Geologists along with technical team from the Department of Mines and Geology, Government of Sikkim conducted a detail Geo-technical investigation by means of diamond core drilling of the area proposed for the construction of various structures at Old West Point School, Gangtok, East Sikkim from February 2020 to March 2020.

Geographically the proposed area is located between N27°19.46' latitude and E88°36.59' longitude at an elevation of 1720 m amsl. The proposed area is located adjacent to Pakyong Main line Taxi stand at Gangtok, East Sikkim.

## GEOLOGY OF THE AREA

Sikkim-Darjeeling Himalayas are Techno-stratigraphically defined by four domains with characteristic stratigraphic and structural attributes. From south to north they are:

- i. Foot hill belt
- ii. Inner Belt
- iii. Axial Belt and
- iv. Trans-Axial Belt.

The state is mostly covered by Precambrian metamorphites of low to medium grade (Daling Group), high grade gneisses (Darjeeling Gneiss and Kanchendzonga Gneiss), Chungthang Formation (quartzite, calc-silicate rocks, marbles, graphite schist's and occasionally amphibolites) with intrusive granites (Lingtse granite gneiss) and Phanerozoic rocks including Gondwana and Tethyan sedimentary. The Paleozoic and Mesozoic (Tethyan) sequence in the northern and north-western part of Sikkim are fossiliferous.



The Gondwana super Group consists of sandstone, shale and carbonaceous shale with occasional thin bands of coal and pebbly shale horizon.

Daling group of rocks can be classified into three formations:

- a. Gorubathan Formation: characterized by quartz-chloride-sericite schists, phyllite and quartzite's.
- b. Reyang Formation: characterized by quartzite's (occasionally calcareous), phyllite interbanded with carbonaceous slate.
- c. Buxa Formation: characterized by presence of dolomitic limestone occasionally interbanded with phyllite and development of organo sedimentary structure (stromatolites).

The Kanchendzonga Gneiss comprises mainly high-grade gneiss. The Chungthang gneiss is a quartz-biotite gneiss. A streaky sheared granite gneiss known as "Lingtse Gneiss" occur as a NE-SW to N-S trending strip of rocks and forms a general line of separation between the Daling and high grade Kanchendzonga Gneiss. The Tethyan sedimentaries, exposed in the northern part of Sikkim represent Everest Phyllite series (shale's/phyllite), Mount Everest Limestone series, Lachi Formation (conglomerate with thick diamictite base) and TsoLhamo Formation (calcareous shale, limestone band, calcareous sandstone).

#### **Site Geology**

Geologically, the proposed area falls within medium to high grade metamorphic rock formation represented in the area by Garnetiferous Mica Schist and mica schist with quartzite intercalations underlain by a streaky sheared Lingtse Granitic Gneiss. The foliation of the rock strikes NW-SE and dip gently towards North East. The area has moderate to gentle slope gradient with westerly facing slope aspect. The area in consideration has medium to thick soil overburden with low groundwater activity.



### GEO-TECHNICAL INVESTIGATION

Diamond drilling is a form of core drilling which uses a rotary drill with a diamond drill bit mounted to a core barrel which is then connected to the drill stem with barrels of various lengths. In this method the movement of drilling is vertically down, the drill bit cuts the rock in a rotatory manner and accordingly rock cores are retrieved in the core barrel from various depths.

Accordingly, two number of boreholes were drilled at Old West Point School Complex which is located adjacent to the Pakyong Main Line Taxi stand, Gangtok, East Sikkim. Bore hole no. 01 (**Geographical coordinates-E 27° 19'47.96" latitude N 88° 36'39.77" longitude, elevation 1606m**) was drilled in front of Old West Point School building a upto 15 m depth. Following type of sub-surface strata is present as per the samples recovered during the drilling i.e. light brown clayey /silty soil is encountered from 3.00m depth, Garnetiferrous Mica Schist with quartz veins is found from 3.00m to 9.00m depth followed by Moderately weathered Garnetiferrous Mica Schist between 9.00m to 13.00m depth underlain by highly weathered Garnetiferrous Mica Schist between 13.00m to 15.00m depth. The photo of the core box containing rock samples from various depth in given below in Photo 01.



**Photo 01:-core box showing recovered core samples from various depth of Bore hole no.01.**



Borehole number 02 (**Geographical coordinates-E 27° 19'48.19" latitude N 88° 36'38.92" longitude, elevation 1604m**) was drilled behind Old West Point School building upto depth of 15 m. micaceous silty soil overburden can be encountered upto depth of 3.00m followed by highly weathered Garnetiferous Mica Schist between 3.00m to 6.00m depth. Following strata is present as per the drilling data i.e. Garnetiferous Mica Schist with quartz veins between 6.00m depth to 9.00m depth followed by fresh Garnetiferous Mica Schist with quartz veins between 9.00m to 10.50m depth. Moderately weathered Garnetiferous Mica Schist can be encountered between 10.50m to 13.50 m depth followed by moderately weathered Garnetiferous Mica Schist and fresh Garnetiferous Mica Schist. The photo of the core box is shown below. The details of logging of the Boreholes are provided in the enclosed Drill Log Data Sheets. (Annexure I & II)



**Photo 02:-core box showing recovered core samples from various depth of Bore hole no.02.**

Accordingly, Standard Penetration Test (SPT) were also carried out simultaneously along with drilling in the area. Six numbers of SPT were performed



and the Safe bearing pressure of the soil samples are as under (details provided in Annexure I & II)

**Borehole no.01 (Front of Old West Point School building)**

- Rock (depth 10.50m) i) Brazilian (Tensile strength 70.10 T/m<sup>2</sup>)  
 ii) Point load (Compressive strength 115.20 T/m<sup>2</sup>)  
 (depth 12.00m) iii) Brazilian (Tensile strength 121.00 T/m<sup>2</sup>)  
 iv) Point load (Compressive strength 96.00 T/m<sup>2</sup>)
- Soil i) Depth 1.50 m - 13.84 T/m<sup>2</sup>  
 ii) Depth 3.00 m - 20.15 T/m<sup>2</sup>

**Borehole no.02 (Behind Old West Point School building)**

- Rock (depth 9.00 m) i) Brazilian (Tensile strength 331.20 T/m<sup>2</sup>)  
 ii) Point load (Compressive strength 345.60 T/m<sup>2</sup>)
- Soil i) Depth 1.50 m - 6.92 T/m<sup>2</sup>  
 ii) Depth 3.00 m - 11.51 T/m<sup>2</sup>  
 iii) Depth 4.50 m - 46.50 T/m<sup>2</sup>

**Rock Quality Designation (RQD)**

Rock Quality Designation is a measure of quality of rock core taken from a borehole. RQD signifies the degree of jointing or fracture in a rock mass measured in percentage where RQD of 75% or more shows good quality rocks and less than 50% shows low quality weathered rocks.

**Bore hole no. 01**



Depth - 0.00m to 1.50m

Lithology - Light brown clayey soil.

Weathering - N.A.

RQD- N.A.

Quality of rock - N.A.

Depth - 1.50m to 3.00m

Lithology - Light brown silty soil.

Weathering - N.A.

RQD- N.A.

Quality of rock - N.A.

Depth - 3.00m to 9.00m

Lithology - Garnetiferrous Mica schist with quartz veins.

Weathering - highly weathered.

RQD- < 25%

Quality of rock - Very Poor quality.

Depth - 9.00m to 13.00m

Lithology - Garnetiferrous Mica schist.

Weathering - Moderately weathered.

RQD- > 50%

Quality of rock - Good quality

Depth - 13.00m to 15.00m

Lithology - Garnetiferrous Mica schist.

Weathering - Highly weathered.

RQD- < 25%



Quality of rock – Very poor quality

**Borehole no. 02**

Depth - 0.00m to 3.00m

Lithology – Micaceous silty soil.

Weathering – N.A.

RQD- N.A.

Quality of rock – N.A.

Depth - 3.00m to 6.00m

Lithology – Garnetiferrous Mica Schist.

Weathering – Highly weathered.

RQD- <25%

Quality of rock – Very poor quality.

Depth - 6.00m to 9.00m

Lithology – Garnetiferrous Mica schist with quartz veins.

Weathering – highly weathered.

RQD- <25%.

Quality of rock – Very poor quality.

Depth - 9.00m to 12.00m

Lithology – Garnetiferrous Mica schist.

Weathering – very low weathering.

RQD- >50%

Quality of rock – Good quality.

Depth - 12.00m to 15.00m



Lithology – Garnetiferrous Mica Schist.

Weathering – low weathering.

RQD- >50%

Quality of rock – Good quality.



### Conclusions and recommendations.

1. Geologically, the area comprises of medium to high grade metamorphic rock sequence represented by Garnetiferrous Mica schist and Mica schist with quartzite intercalations underlain by Lingtse Granitic Gneiss. The foliation of rocks strike NW-SE and dip gently towards North east with Westerly facing slope aspect which makes the area geologically favourable for proposed construction of structures at Old West Point School area.
2. Based on the drilling data of Borehole no. 01 light brown clayey /silty soil is encountered from 3.00m depth, Garnetiferrous Mica Schist with quartz veins is found from 3.00m to 9.00m depth followed by Moderately weathered Garnetiferrous Mica Schist between 9.00m to 13.00m depth underlain by highly weathered Garnetiferrous Mica Schist between 13.00m to 15.00m depth.
3. For Borehole no. 02 micaceous silty soil overburden can be encountered upto depth of 3.00m followed by highly weathered Garnetiferrous Mica Schist between 3.00m to 6.00m depth. Further Garnetiferrous Mica Schist with quartz veins between 6.00m depth to 9.00m depth followed by fresh Garnetiferrous Mica Schist with quartz veins between 9.00m to 10.50m depth. Moderately weathered Garnetiferrous Mica Schist can be encountered between 10.50m to 13.50 m depth followed by moderately weathered Garnetiferrous Mica Schist and fresh Garnetiferrous Mica Schist.
4. The tensile strength of rock core for Borehole no. 01 of depth 10.50 m is  $70.10 \text{ T/m}^2$  and 12 m depth is  $115.20 \text{ T/m}^2$  and compressive strength is  $121.00 \text{ T/m}^2$  &  $96.00 \text{ T/m}^2$  whereas tensile strength of rock core for Borehole no.02 of depth 9 m is  $331.20 \text{ T/m}^2$  and compressive strength is  $345.60 \text{ T/m}^2$ . The low value of strength of the rock is due to high degrees of weathering and nature of flaky micaceous rock. However, strength of the strata greater than  $35 \text{ T/m}^2$  in hilly terrain is recommended for construction as per IS CODE.
5. As Garnetiferrous Mica Schist is a foliated and becomes non-competent metamorphic rock when contact continuously with water activity in which incidences of differential settlement is a natural phenomenon under such condition. Therefore, suitable foundation design to be designed by a competent structural engineer based on the sub-surface geological condition of rock strata.



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6. The Safe bearing capacity for Bh. 01 at depth of 1.50 m is 13.84 T/M<sup>2</sup> and 3.0m depth is 20.15 T/M<sup>2</sup> and SBC for Bh. 02 at depth of 1.50m is 6.92 T/m<sup>2</sup>, 3.00m depth is 11.51T/m<sup>2</sup> and 4.50m depth is 46.50T/m<sup>2</sup>.



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## Annexure I

## DRILL LOG DATA SHEET

Name of Project : Geo Technical Investigation of the land proposed for construction of various structure at Old West Point School.

SITE : Old West Point School Complex, Gangtok, East Sikkim (Front of the school building)												
DRILLING EQUIPMENT: Diamond core drilling with double tube barrel											Co-ordinates: E 27° 19'47.96" latitude N 88° 36'39.77" longitude	
DRILLING METHOD: Rotary				DRILLING DIAMETER/ CASING DIAMETER NX Size								R.L.(m): 1606m
DRILL HOLE NO: 03				ORIENTATION: Vertical down								LITHOLOGY
Date	From (In m)	To (In m)	Total Run	Drilling log	Core recovery length(m)	Core recovery %	Water loss	Core no.(length in cm)	RQD	Strength(T/M <sup>2</sup> )	SPT N-Value	
31/01/2020	0.00	1.50	1.50		0	0%	No loss	-	-	13.84	16	Light brown clayey soil.
1/02/2020	1.50	3.00	1.50		0	0%	No loss	-	-	20.15	18	Light brown silty soil.
1/02/2020	3.00	4.50	1.50		0.10	6%	No loss	1(3)	<25%	-	core	Garnetiferrous Mica Schist with quartz viena.
2/02/2020	4.50	6.00	1.50		0.15	10%	No loss	2(4)	<25%	-	core	Garnetiferrous Mica Schist with quartz viena
2/02/2020	6.00	7.50	1.50		0.10	6%	No loss	3(1.3)	<25%	-	core	Garnetiferrous Mica Schist with quartz viena
3/02/2020	7.50	9.00	1.50		0.40	26%	No loss	4(2.8),5(1.8),6(2),7(1.8),8(4),9(1.3),10(1.5),11(5)	>50%	-	core	Garnetiferrous Mica Schist with quartz viena
3/02/2020	9.00	10.50	1.50		1.10	73%	100%	12(4.7),13(4.8),14(6),15(6.4),16(6.2),17(9.8),18(10.5),19(4.6),20(18.3),21(5.5),22(17)	>50%	70.10T/m <sup>2</sup> & 115.20T/m <sup>2</sup>	core	Moderately weathered Garnetiferrous Mica Schist.
4/02/2020	10.50	12.00	1.50		0.77	51%	100%	23(4.5),24(6),25(5),26(4.3),27(7.8),28(2.8),29(3.2)	>50%	121.00T/m <sup>2</sup> & 96.00 /m <sup>2</sup>	core	Moderately weathered Garnetiferrous Mica Schist
5/02/2020	12.00	13.00	1.00		0.80	80%	100%	30(3.7),31(11.2),32(1.9),33(0.5),34(3.9),35(6.3),36(6.5),37(6.4),38(2.4),39(8.6),40(3.3)	<25%	-	core	Moderately weathered Garnetiferrous Mica Schist
7/02/2020	13.00	14.00	1.00		0.50	50%	100%	41(3.7),42(2.4)	<25%	-	core	Highly weathered Garnetiferrous Mica Schist
7/02/2020	14.00	15.00	1.00		0.55	55%	100%	43(2.8)	<25%	-	core	Highly weathered Garnetiferrous Mica Schist



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## ANNEXURE II

## DRILL LOG DATA SHEET

Name of Project : Geo Technical Investigation of the land proposed for construction of various structures at Old West Point School.

SITE : Old West Point School Complex, Gangtok, East Sikkim. (Behind School Building)

DRILLING EQUIPMENT: Diamond core drilling with double tube barrel

Co-ordinates: E 27° 19'48.19"  
latitude N 88° 36'38.92"  
longitude,

DRILLING METHOD: Rotary

DRILLING DIAMETER/ CASING DIAMETER NX Size  
BX, NX Size

R.L.(m): elevation 1604m

DRILL HOLE NO: 04

ORIENTATION: Vertical down

LITHOLOGY

Date	From (in m)	To (in m)	Total Run	Drilling log	Core recovery length(m)	Core recovery %	Water loss	Core no.(length in cm)	RQD	Strength(T/M <sup>2</sup> )	SPT N-Value	Lithology
10/02/2020	0.00	1.50	1.50		0	0%	No loss	-	-	6.92	8	Micaceous silty soil.
11/02/2020	1.50	3.00	1.50		0	0%	No loss	-	-	11.51	10	Micaceous silty soil.
11/02/2020	3.00	4.50	1.50		0	0%	No loss	-	<25%	46.50	28	Highly weathered Garnetiferrous Mica Schist.
11/02/2020	4.50	6.00	1.50		0	0%	No loss	-	<25%	-	-	Highly weathered Garnetiferrous Mica Schist.
12/02/2020	6.00	7.50	1.50		0	0%	100%	-	<25%	-	core	Garnetiferrous Mica schist with quartz veins.
13/02/2020	7.50	9.00	1.50		0.60	40%	100%	1(9.4),2(6.2),3(4.4)	<25%	331.20T/m <sup>2</sup> & 345.60 T/m <sup>2</sup>	core	Garnetiferrous Mica schist with quartz veins
13/02/2020	9.00	10.50	1.50		0.80	53%	100%	4(9.3),5(6.2),6(3),7(3.6),8(2.5),9(4.5),10(1.6),11(5.2),12(5.4)	>50%	-	core	Fresh Garnetiferrous Mica Schist with quartz veins.
14/02/2020	10.50	12.00	1.50		0.43	28%	100%	13(7),14(6.9),15(11),16(4.7)	>50%	-	core	Fresh Garnetiferrous Mica Schist with quartz veins.
15/02/2020	12.00	13.50	1.50		0.50	33%	100%	17(3.8),18(4),19(1.3),20(2.5),21(3),22(4.3)	<50%	-	core	Moderately weathered Garnetiferrous mica schist.
16/02/2020	13.50	15.00	1.50		0.40	26%	100%	-	>50%	-	core	Moderately weathered Garnetiferrous mica schist underlain by fresh Garnetiferrous mica schist.



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**(Annexure III)****Point Load Test**

Location of sample: Old West Point School, Gangtok, East Sikkim

Date of Test: 13.03.2020

Rock type - Garnetiferrous Mica Schist

Point Load =  $q_t = 0.96 \times p/D^2$ 

IS:8764-1978

Sample No.	Depth (in m)	D, Diameter	Load (KN)	$q_t$
BH 01	9.00m	5 cm	9 KN	345.60T/m <sup>2</sup>
BH 02	10.5m	5 cm	3 KN	115.20T/m <sup>2</sup>
BH 02	12.0m	5 cm	2.5KN	96.00T/m <sup>2</sup>

**Brazilian Test**

Location of sample - Old West Point School, Gangtok, East Sikkim

Date of test - 13.03.2020

Rock type - Garnetiferrous Mica Schist

**Tensile Strength =  $q_t = 2p/\pi DL$** 

P = Load (KN)

D = Diameter of core sample (cm)

L = Length of core sample(cm)

IS:10082- 1981

Sample No.	Depth (in m)	D= Diameter (cm)	L=Length(cm)	P=Pressure (KN)	T/m <sup>2</sup>
BH 01	9.00	5	10	26	331.20T/m <sup>2</sup>
BH 01	10.5	5	10	5.5	70.10T/m <sup>2</sup>
BH 02	13.5	5	10	9.5	121.00 T/m <sup>2</sup>



**(ANNEXURE IV)**

**Field Photos**



**Photos:- Diamond core drilling of Borehole number 01 in progress in front of Old West Point School building at Gangtok, East Sikkim.**





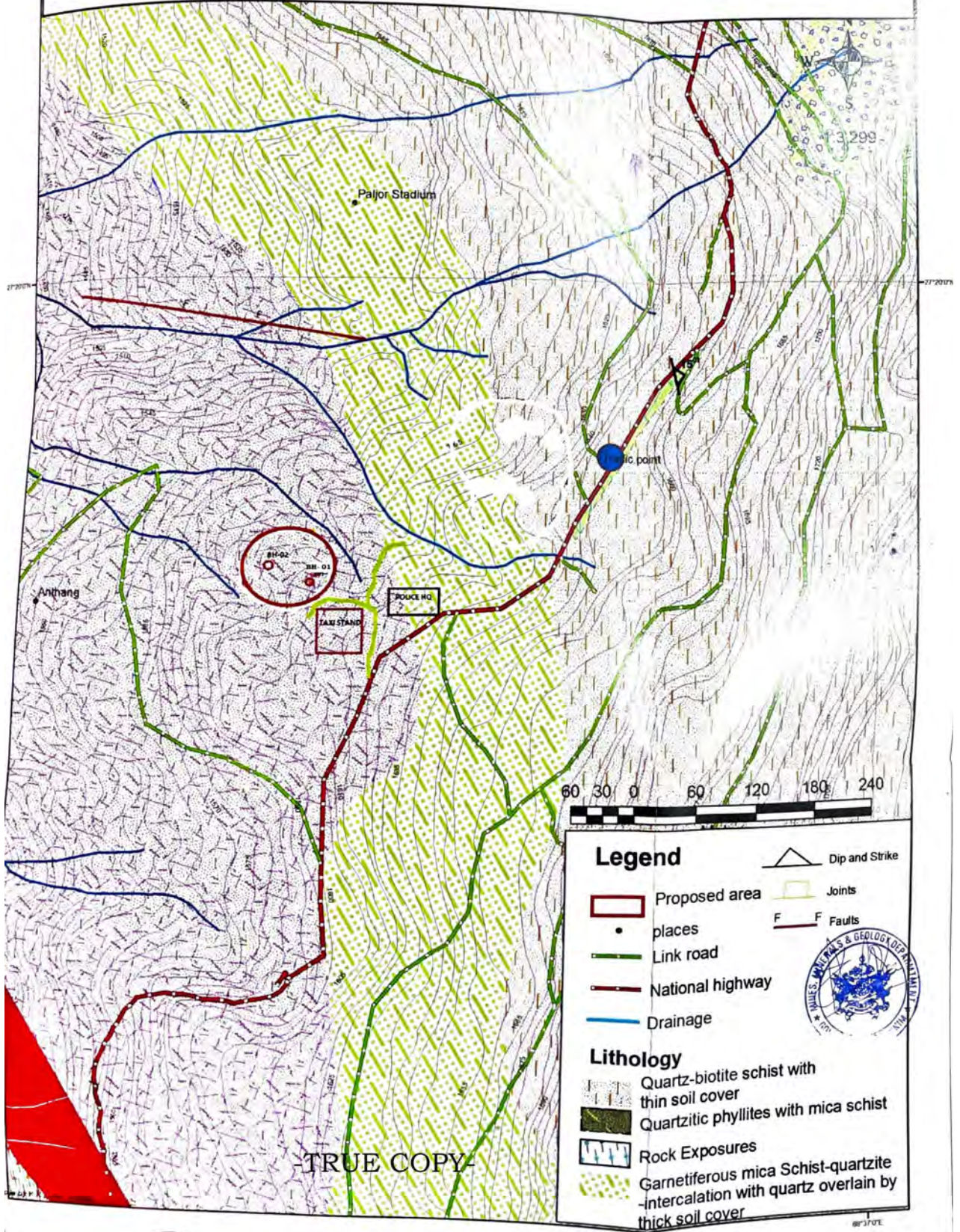
**Photos:- Diamond core drilling of Borehole number 02 behind Old West Point School building at Gangtok, East Sikkim**



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# GENERAL GEOLOGICAL/LITHOLOGICAL MAP OF OLD WEST POINT SCHOOL (BELOW MAINLINE TAXI STAND), GANGTOK, EAST SIKKIM.



## ANNEXURE R-1

**Implementation of Multi-Level Car Parking cum  
Commercial Development at Old West Point  
School Area**

on

**Design, Build, Finance, Operate and Transfer (DBFOT)  
Basis**

**VOLUME III- PROJECT INFORMATION MEMORANDUM**

**Dated [●]**



*Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area on Design, Build, Finance, Operate and Transfer (DBFOT) Basis*

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*Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area on Design, Build, Finance, Operate and Transfer (DBFOT) Basis*

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## 1 Introduction



Sikkim is a state in northeast India. It borders Tibet in the north and northeast, Bhutan in the east, Nepal in the west, and West Bengal in the south. Sikkim is the least populous and second smallest among the Indian states. A part of the Eastern Himalaya, Sikkim is notable for its biodiversity, including alpine and subtropical climates, as well as being a host to Kanchenjunga, third highest on Earth. A referendum in 1975 led to Sikkim joining India as its 22<sup>nd</sup> state.

The state's economy is largely agrarian based on the terraced farming of rice and the cultivation of crops such as maize, millet, wheat, barley, oranges, tea, and cardamom.

Tourism in Sikkim has emerged as the new profession of the Sikkimese people with its vast natural potential. Promotion of village tourism, homestay, cultural tourism, trekking tourism, ecotourism, wellness tourism, flori-tourism and adventure tourism has given fillip to the tourism trade in the state where a large of number of people are engaged under different employment opportunities.

Because of its hilly terrain and poor transport infrastructure, Sikkim lacks a large-scale industrial base. Brewing, distilling, tanning, and pharmaceuticals are the main industries. In recent years, the government of Sikkim has extensively promoted tourism.

### 1.1 Gangtok



Gangtok is a city, municipality, the capital, and the largest town of Sikkim. It also is the headquarters of the East Sikkim district. Gangtok is in the eastern Himalayan range, at

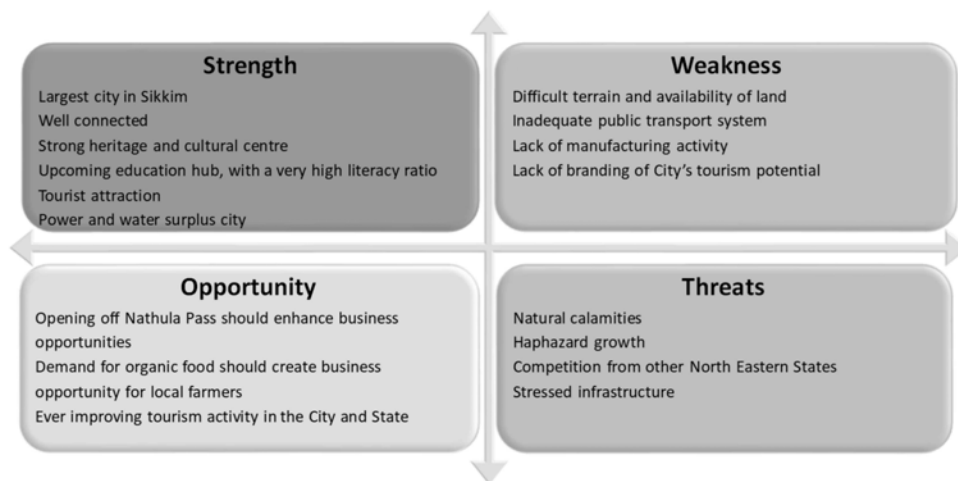


an elevation of 1,650 m (5,410 ft). Nestled within higher peaks of the Himalaya and enjoying a year-round mild temperate climate, Gangtok is at the centre of Sikkim's tourism industry.

Gangtok is the main base for Sikkim tourism. Summer and spring seasons are the most popular tourist seasons. Many of Gangtok's residents are employed directly and indirectly in the tourism industry, with many residents owning and working in hotels and restaurants. M. G. Marg is one of the main shopping and cultural activity streets in Gangtok.



The main market in Gangtok provides many of the state's rural residents a place to offer their produce during the harvest seasons. Following schematic depicts the SWOT analysis of Gangtok:



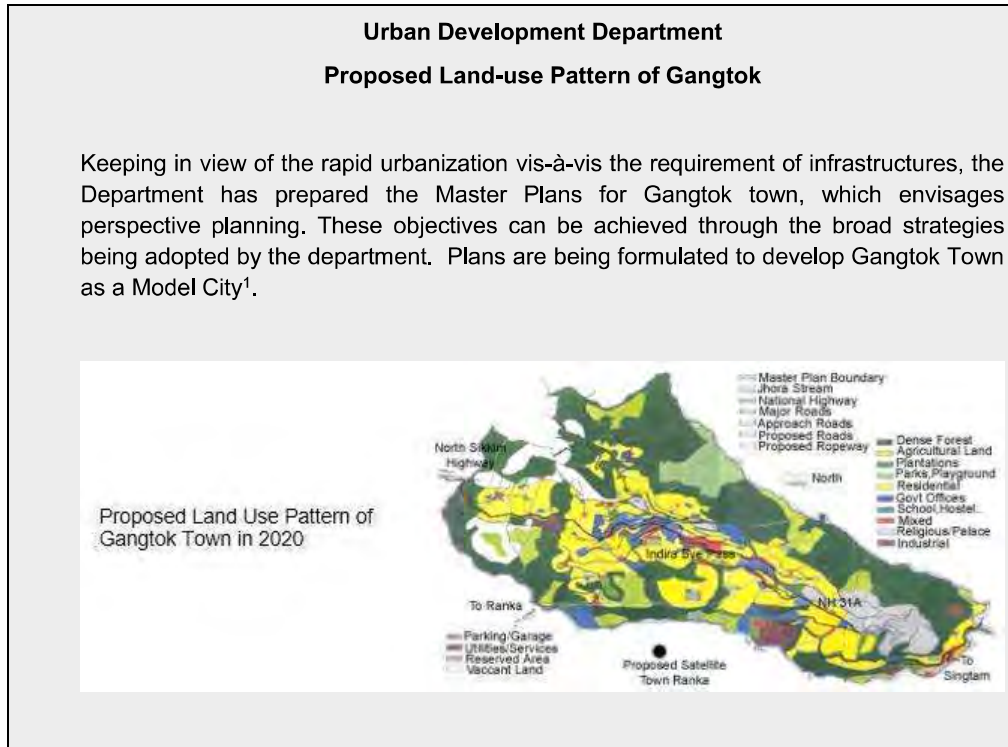
### 1.2 Gangtok Civic Administration

Gangtok is administered by the Gangtok Municipal Corporation along with the various departments of the Government of Sikkim, particularly the Urban Development Department (UDD) and the Public Health Engineering Department (PHED). These departments provide municipal functions such as garbage disposal, water supply, tax collection, license allotments, and civic infrastructure.



As the headquarters of East Sikkim district, Gangtok houses the offices of the district Magistrate/ District collector. Gangtok is also the seat of the Sikkim High Court, which is India's smallest High Court in terms of area and population of jurisdiction. Gangtok does not have its own police Commissionerate

like other major cities in India. Instead, it comes under the jurisdiction of the state police, which is headed by a Director General of Police.



### 1.2.1 Gangtok Smart City Development Limited

The Smart Cities Mission is an initiative by the Government of India to drive economic growth and improve the quality of life of people by enabling local development and harnessing technology as a means to create smart outcomes for citizens.

The Gangtok Smart City Development Limited (GSCDL), the Authority of the Project, has been formed by the Gangtok Municipal Corporation along with Government of Sikkim to implement various area based as well as pan-city level projects under Smart City Mission. The Gangtok Municipal Corporation has entrusted GSCDL to implement the said Project. The GSCDL will plan, appraise, approve, release funds, implement, manage, operate, monitor, and evaluate various Smart City development projects in Gangtok.

<sup>1</sup> Source: Urban Development and Housing Department, Government of Sikkim [www.sikkim.nic.in](http://www.sikkim.nic.in)

### 1.3 Gangtok Utility Services

Electricity is supplied by the power department of the Government of Sikkim. Gangtok has a nearly uninterrupted electricity supply. The rural roads around Gangtok are maintained by the Border Roads Organisation, a division of the Indian army. Most households are supplied by the central water system maintained and operated by the PHED. The main source of PHED water supply is the Rateychu River, located about 16 km from the city, at an altitude of 2,621 m (8,599 ft). Its water treatment plant is located at Selep. The river Rateychu is snow-fed and has perennial streams.

Around 40% of the population has access to sewers. However, only the toilet waste is connected to the sewer while sullage is discharged into the drains. Without a proper sanitation system, the practice of disposing sewage through septic tanks. The entire city drains into the two rivers, Ranikhola and Roro Chu, through numerous small streams and Jhoras. Ranikhola and Roro Chu rivers confluence with Teesta River, the major source of drinking water to the population downstream. The densely populated urban area of Gangtok does not have a combined drainage system to drain out the storm water and wastewater from the buildings.

### 1.4 Connectivity

**Road:** Taxis are the most widely available public transport within Gangtok. Most of the residents stay within a few kilometres of the town centre and many have their own vehicles such as two-wheelers and cars. The share of personal vehicles and taxis combined is 98% of Gangtok's total vehicles, a high percentage when compared to other Indian cities. City buses comprise less than one percent of vehicles. Those travelling longer distances generally make use of share-jeps, a kind of public taxis. Four-wheel drives are used to easily navigate the steep slopes of the roads.

Gangtok is connected to the rest of India by an all-weather metalled highway, National Highway 10, earlier known as National Highway 31A, which links Gangtok to Siliguri, located 114 km away in the neighbouring state of West Bengal. The highway also provides a link to the neighbouring hill station towns of Darjeeling and Kalimpong, which are the nearest urban areas. Regular jeep, van, and bus services link these towns to Gangtok. Gangtok is a linear city that

has developed along the arterial roads, especially National Highway 10. Most of the road length in Gangtok is of two-lane undivided carriageway with footpath on one side of the road and drain on the other. The steep gradient of the different road stretches coupled with unplanned road configuration constrain the smooth flow of vehicular as well as pedestrian traffic.





*Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area on Design, Build, Finance, Operate and Transfer (DBFOT) Basis*

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**Rail:** The nearest railhead connected to the rest of India is the station of New Jalpaiguri in Siliguri, situated 124 km away from Gangtok. Work has commenced for a broad-gauge railway link from Sevoke in West Bengal to Rangpo in Sikkim.

**Air:** Bagdogra Airport, in Siliguri (West Bengal) is about 130 km from Gangtok.



## 2 The Project Site

### 2.1 Introduction

Parking is an essential component of any city's transportation system. Managing public and private parking spaces is an integrated aspect of a planned urban transportation system. This plays an important role in increasing the capacity of existing roadways, improving traffic circulation, and reducing urban chaos in the city. The unprecedented growth in the number of motor vehicles, especially the taxis and cars along with the concentration of activities has led to acute parking problems in the Gangtok City area. As the road space is limited and On-Street parking is not possible on all roads, parking demand far outstrips the supply equation. Moreover, there are limited parking lots leading to spill-over of on-street parking on the main carriageway and impeding the movement of the traffic stream.

Accordingly, GSCDL, under smart city program has identified various Multi-Level Car Parking projects to be implemented on priority. Under the program, GSCDL has identified an existing MLCP, which will be demolished and upgrade into a state of the art, modern MLCP cum Commercial Development at Old West Point School Area near M.G. Marg.



**Figure 1 Location of project Site**

The identified Project Site of about 5708 Sqm. of area is an existing MLCP, without any commercial development at Old West Point School area near M.G. Marg, which is in the heart of the city of Gangtok, located adjacent the NH 10 and M.G. Marg market. The



existing MLCP houses majorly taxi parking along with private car parking. The predominant landuse in the vicinity of the Project Site is commercial with limited shops on the ground floor and hotels on upper floors of the buildings. As per stability map prepared by Mines and Geology Department, Gangtok, the site chosen is in Zone 3.

## 2.2 SWOT Analysis

### Strength:

- Commercial Landuse within surrounding area
- Parking Demand within the influence area of the site
- Good accessibility and feasible approach to the site though the NH10
- Appropriate Site Area for proposed MLCP cum Commercial development
- No adaptability issues as Existing parking facility is already functioning
- Advantageous locations due to commercial landuse

### Weakness:

- Irregular Shape of Site

### Opportunity:

- High Commercial and rental potential for the site
- Parking Demand from the adjoining site location
- Location of site within the vicinity of the MG Market.

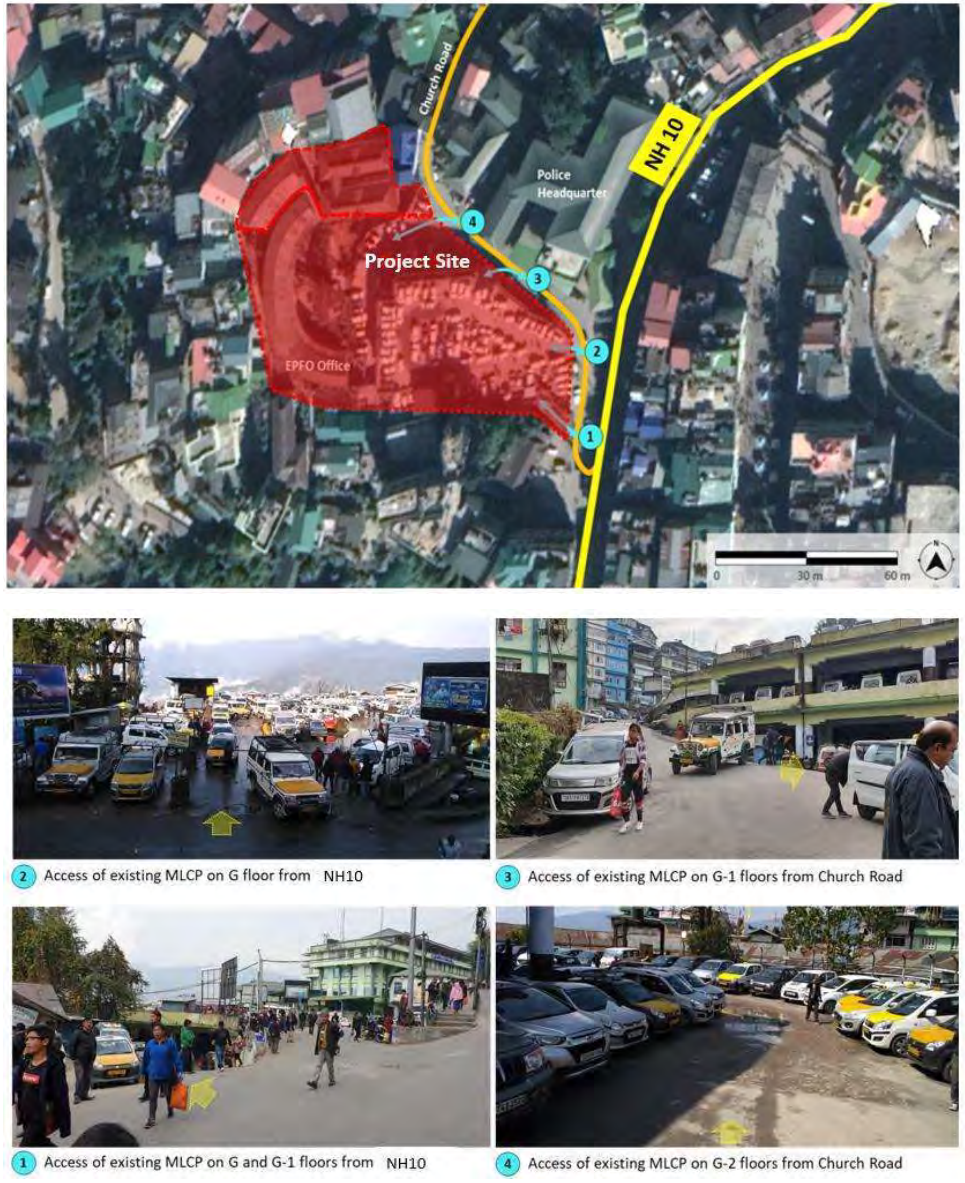
### Threat:

- Immediate parking locations
- Lower parking rates

## 2.3 Access to the Project Site

The site's has multiple accesses from NH10 in the East and Church Road in the North. The existing MLCP structure is built on the natural land slope with Ground level and G-1 levels accessible from NH10. Level G-2 is accessible from Church road. The exit from Level G-1 is at Church road with linkage to NH10 as well. The Access roads are shown in subsequent figures given below.

*Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area on Design, Build, Finance, Operate and Transfer (DBFOT) Basis*



**Figure 2 Access to the project site**

**2.4 Existing Parking Situation at The MLCP**

The Existing parking facility is being used by long route intercity taxis as well local taxis and private vehicles. Level G-1 and G-2 are majorly used by long route taxis. However, Local taxis use almost 1/4<sup>th</sup> of the parking bays on Level G-1 and Private vehicles use level G-2 for parking. Ground floor mostly sees mix parking with Cars/ jeep/ Taxis and

*Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area on Design, Build, Finance, Operate and Transfer (DBFOT) Basis*

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private vehicles. 2 Wheelers are also seen parked on Ground floor level i.e. NH10 level. Figures below depict the Parking conditions within various levels of the existing MLCP.



**Figure 3: Parking at NH10 Level**



**Figure 4: Parking at NH10 Level**



**Figure 5: Parking at Level G-1**



**Figure 6: Parking at Level G-2**



**Figure 7: Parking at Level G-2; within Setback Area**

At present, no proper parking bay system is followed. Due to high demand, the parking facility is under tremendous pressure and operates beyond its capacity. As such, even the parking aisles are used for parking activity and vehicles are shifted manually by parking attendants to give way to an incoming or outgoing vehicle.

## 2.5 Passenger Amenities

The Existing MLCP is of considerably basic nature in terms of passenger amenities and other infrastructural facilities with poorly maintained public toilet and an unplanned passenger waiting area. In absence of a regularised canteen, many unorganised eatery points are operational, mostly at level G-1 and level G-2. Levels G-1 and G-2 are connected by staircase within the building footprint. Although a passenger enquiry counter is operational, no IT based information system is found to be in place. Signage, rate card and input & output terminals were missing at all levels.

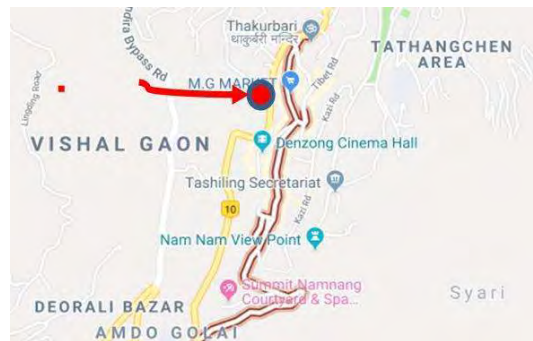
## 2.6 Commercial Development

### 2.6.1 PROJECT SITE – VICINITY TO M.G. MARG



M.G. Marg is a 'must visit' place in Gangtok and this is the town centre of the hill town. M.G. Marg is also the main market area of Gangtok. The road and the area around it have transformed over the years. It is now more like a long stretch of open mall or boulevard square where locals and tourists take leisure stroll or just sit and relax on one of the many benches laid along the middle and both sides of the road to soak in the ambience.

The road is lined up with glittering shops, restaurants, cafes & bars on both sides. Many tourists take a table on a roadside restaurant and watch the activities on the street. It is like a carnival-like atmosphere out here. In line with government's green initiative, all buildings on both sides of this road are painted green. The Statue of Unity overlooks MG Marg. The statue comprises of the figures of



Bhutia Chieftain Khye Bumsa, the Lepcha leader Thetong Tek and his wife Ngo-Kongngol. The statue depicts peace, love, and harmony. About midway is an imposing statue of Mahatma Gandhi. There are Victorian lamps along this road. When lit up after dark, the entire place looks magical. As part of Gangtok Annual Food and Culture Festival that takes place in the month of December, many different food stalls are set up at the Titanic park in MG Road, cultural shows take place here opposite to Sikkim Tourism & Civil Aviation Department where ethnic dance performances and musical shows are organized.

**Table 1: Proposed Site Details**

S. No	Particulars	Details
1	Site Area (sqm.)	5707.8
2	Commercial floor Coverage (sqm.)	50%
3	Parking floor Coverage	<75%
4	Total no. of floors (Nos.)	11*
5	Lower parking Floors (Nos.)	4; Level 0 to 3
6	Ground and Above (Nos.)	7; Level 4 to 10
7	Commercial Built up Area (sqm.)	13,680#
8	Total Built up Area (Sqm.)	30,780*

*\*The concessionaire shall perform detailed environmental assessment and geo technical studies and obtain the approvals of the relevant authority. The concessionaire shall further submit to GSCDL the detailed structure design and traffic flow designs characteristics duly vetted by one of the IIT's.*

*# The areas are indicative, and deviation will be allowed up to +/-10% at the DPR stage and subject to approval of GSCDL.*

### **2.6.2 COMMERCIAL DEVELOPMENT**

The Concessionaire shall be entitled to construct/ develop such components which it deems appropriate from commercial viability point of view provided however that such component does not fall in the category of prohibitive item as per Authority or GoS or GOI norms or applicable law.

- Shopping Mall
- Multiplex
- Hotel
- Food Courts/Restaurants/ coffee shop
- Commercial (Retail cum Office) Area would include retail shopping, branded showrooms, anchor stores, Entertainment Complex/ Zone and business spaces
- Banks
- Coaching Institutes
- Gaming Zone/children play home
- Gymnasium or Health Centre
- Any other activity with the approval of Authority

### **2.6.3 RESTRICTED COMMERCIAL DEVELOPMENT**

Following functions / products are not permitted for development:

- Industrial activities
- Hostel
- Warehousing (except such warehousing facility which is incidental to the use of the Project)
- Wholesale Activity
- Car Service Garage
- Workshops
- Hospitals or health centres
- Other environmentally incompatible functions

A foot over bridge connection is also proposed to connect the proposed MLCP cum commercial building to the MG Marg.

## **2.7 POTENTIAL PARKING DEMAND**

Redevelopment of Old West Point MLCP will attract following set of parking:

- Existing parking demand at Old West Point: 100% (As the existing facility is being redeveloped, it is assumed that all existing demand will remain intact)
- Potential parking demand to be generated by commercial development at Old West Point: 100%

### **2.7.1 POTENTIAL PARKING DEMAND .**

The maximum demand from the existing Old West point school (Hungry Jack), is estimated at 355 ECS. The demand assessed is including of private cars, taxis, govt. Cars and two wheelers. The LCVs and heavy trucks have not been considered for the proposed parking facility.

### **2.7.2 POTENTIAL PARKING DEMAND THAT CAN BE GENERATED BY PROPOSED COMMERCIAL DEVELOPMENT AT OLD WEST POINT**

It is essential to consider the parking demand that can be generated by commercial built up area planned at Old West Point. It has been estimated that the parking demand could be generated by the commercial area up to **415 ECS**.

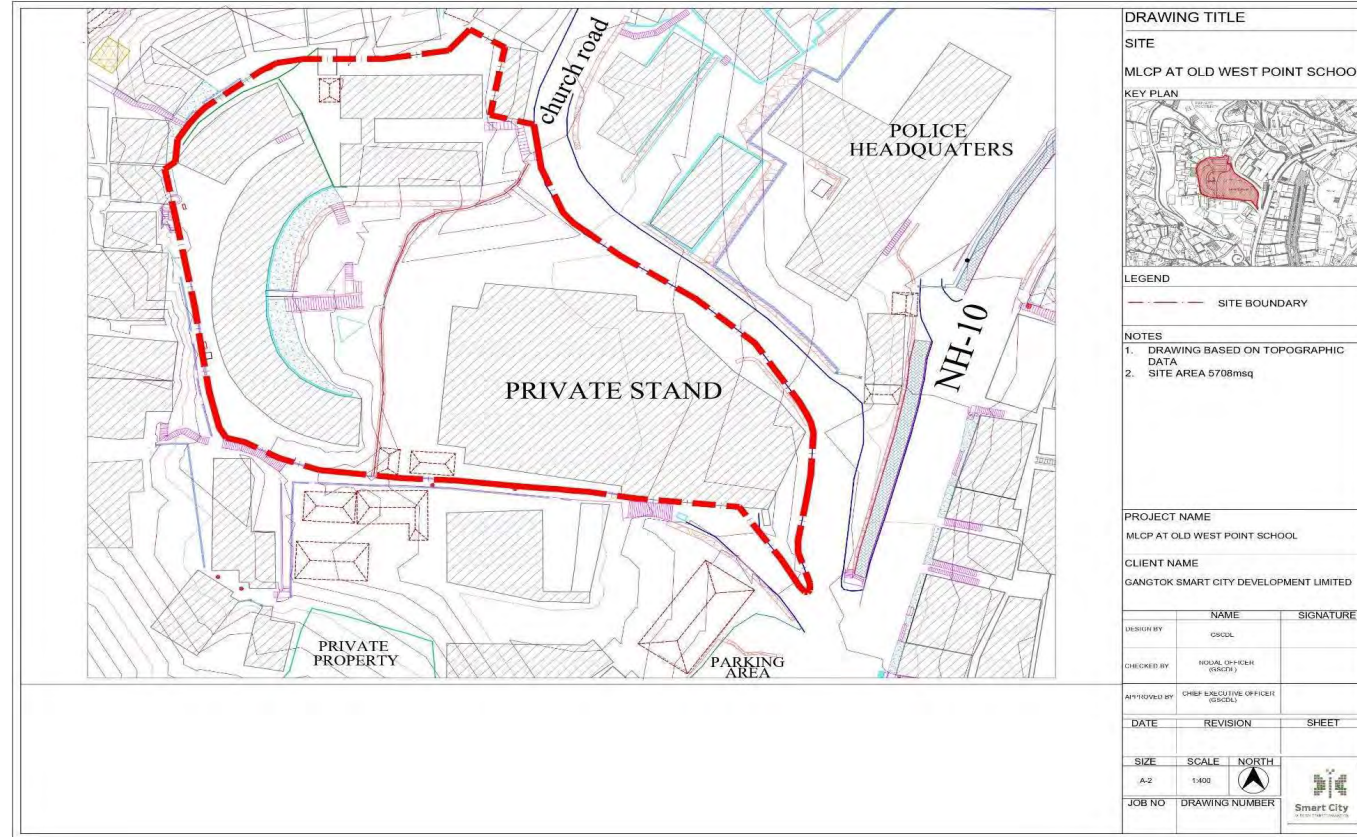
## **2.8 PARKING SUPPLY**

- a. The level 0 and level 1 shall be ordinary parking floors, to be handed over to the authority for running the intercity stand.
- b. The level 2 and level 3 shall be puzzle / Stack parking within the revenue stream of the concessionaire.

The traffic flowing in or out of the MLCP shall be so designed so as to ensure that the traffic movement in the NH is not delayed due to spillage.



### 3 PROJECT SITE MAP



-TRUE COPY-

Annexure A-3

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[Tender Notice No: -----]



Gangtok Smart City Development Limited

**Request for Proposal****For****Implementation of Multi-Level Car Parking cum  
Commercial Development at Old West Point School  
Area****on****Design, Build, Finance, Operate and Transfer  
(DBFOT) basis****Volume I - Instructions to Bidders**

This section specifies procedures to be followed by Bidders in the preparation and submission of their Bids and provides information on submission, opening, evaluation of Bids.

*Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area on Design, Build, Finance, Operate and Transfer (DBFOT) basis*

## NOTE

Gangtok Smart City Development Limited (the "Authority"), in its endeavor to improve the transport and parking infrastructure in Gangtok, has undertaken concerted efforts to upgrade and rehabilitate City's existing multi-level car parking at Old West Point School Area, near M.G. Marg. The Authority has received requisite approvals and support from Government of Sikkim and other department(s) concerned for the project.

The primary objective of the project is to demolish existing multi-level car parking with a modern, smart, aesthetic, sleek, commuter and environment friendly Multi-Level Car Parking cum Commercial Development in order to achieve substantial service improvement for the local public, tourists, commuters and vehicle owners/ operators. The Authority is developing this project on the DBFOT basis (the "Project"). Project implementation has been divided into two phases, i.e. (1) maximum Development Period of 4 (four) years and (2) 26 (twenty six) years of Operations Period, i.e. the Concession Period of 30 (thirty) years (the "Concession Period"), which will be extendable, by another 26 years, subject to Concessionaire adhere to the terms & conditions of the Concession Agreement and further subject to the Concessionaire paying to the Authority, on and from the year following the expiry of the year of the Concession Period, (within 30 (thirty) days of every English calendar year for the English calendar year immediately preceding) an annual concession fee to be calculated at the rate of 14% (fourteen per cent) of all amounts to be received by the Concessionaire, every year following the expiry of the year of the Concession Period on account of rent, lease premium, consideration, license fee, user charges of parking spaces, and/or occupation charges and/or any other receipts on any account, whatsoever from letting out, sub letting, transferring and/or assigning, and/or licensing out the project facilities and/or the constructed spaces as also the open spaces of any or every type whatsoever within the Project including signages, wall signages, kiosks, hoardings, neon/glow signages etc. in the Project which can yield any receipt to the Concessionaire. For the avoidance of doubt it is clarified that the reimbursements of amounts to be received by the Concessionaire on account of usage of electricity, DG usage charges and water as also charges for common area maintenance of the Project by all the occupants of all spaces (of each and every type both open and covered) and shall be and shall always be deemed to be reimbursements against the expenses to be incurred by the Concessionaire and shall not be treated by the Concessionaire as receipts for the purpose of calculating the annual license fee and the Authority shall be and shall always be deemed to have consented to the same. For the Concession Period and for the purpose of construction of the Multi Level Car Parking and/or the Commercial Development. The Authority shall compensate Concessionaire by way of payment of construction grant (the "Grant") and by way of concession to generate revenue from the Project components. The Grant will be payable by the Authority, in stages, starting from the signing of the Concession Agreement till the conclusion of the Development Period. The Bidders are required to bid for the required Grant from the Authority, with a cap of maximum 37% (thirty seven percentages) of the Project Cost estimated by the Authority. The Authority intends to appoint Concessionaire for the implementation of the Project through a transparent bidding procedure. Towards this, the Authority is now inviting Bids from the Eligible Bidders as per the laid-out norms in this Request for Proposal. The Request for Proposal is organized in three volumes as given below:

1. **VOLUME-I: INSTRUCTION TO BIDDERS**
2. **VOLUME-II: DRAFT CONCESSION AGREEMENT**
3. **VOLUME-III: PROJECT INFORMATION MEMORANDUM**

Bidders are advised to visit the Project site, read all three volumes in conjunction and are also advised to comply with the terms and conditions for submission of their Bid as defined in this RFP Document.

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*Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area on  
Design, Build, Finance, Operate and Transfer (DBFOT) basis*

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Selection of the Selected Bidder will be through evaluation of the Bids which are to be submitted by the prospective Bidders. All queries regarding the RFP Document may be submitted in the format as provided in **Appendix VII**, in writing to:

**Issuing Office:** The Chief Executive Officer

**Address:** Gangtok Smart City Development Limited

Sokaythang, Below ICAR office,

Gangtok, Sikkim – 737102

**Phone:** +91 8116679989

**Email:** ceosmartcity.gangtok@gmail.com

## Disclaimer

The information contained in this Request for Proposal (the "RFP") document or subsequently provided to Bidder(s), whether verbally or in documentary or any other form, by or on behalf of the Authority or any of their employees or advisors, is provided to Bidder(s) on the terms and conditions set out in this RFP and such other terms and conditions subject to which such information is provided.

This RFP is not an agreement and is neither an offer nor invitation by the Authority to the prospective Bidders or any other person. The purpose of this RFP is to provide interested parties with information that may be useful to them in the formulation of their application for qualification (the "Application for Qualification") and financial proposal pursuant to this RFP (the "Financial Proposal"), collectively called as the "Bid". This RFP includes statements, which reflect various assumptions and assessments arrived at by the Authority in relation to the Project. Such assumptions, assessments and statements do not purport to contain all the information that each Bidder may require. This RFP may not be appropriate for all persons, and it is not possible for the Authority, its employees or advisors to consider the professional expertise, financial situation and particular need of each party who reads or uses this RFP. The assumptions, assessments, statements and information contained in this RFP may not be complete, accurate, and adequate or correct for all parties. Each Bidder should therefore, conduct its own investigations and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments, statements and information contained in this RFP and obtain independent advice from appropriate sources.

Information provided in this RFP to the Bidder(s) is on a wide range of matters, some of which depends upon interpretation of law. The information provided is not an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. The Authority accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on law expressed herein.

The Authority, their employees and advisors make no representation or warranty and shall have no liability to any person, including any Bidder, under any law, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this RFP or otherwise, including the accuracy, adequacy, correctness, completeness or reliability of the RFP and any assessment, assumption, statement or information contained therein or deemed to form part of this RFP or arising in any way with for participation in the Bidding Process or submitting the Bid.

The Concession Agreement with all other Agreements (being collectively Volume II of this RFP) are only the specimen draft agreements containing the broad terms and conditions. The said Agreements are subject to changes and/or amendments and/or modifications which may be necessitated to comply with the requirements of this RFP after completion of the bid process and selection of the successful bidder in terms of this RFP.

The Authority also accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any Bidders upon the statements

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*Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area on Design, Build, Finance, Operate and Transfer (DBFOT) basis*

contained in this RFP. The Authority may, in its absolute discretion but without being under any obligation to do so, update, amend or supplement the information, assessment or assumptions contained in this RFP.

The issue of this RFP does not imply that the Authority is bound to select Bidder or Concessionaire, as the case may be, for the Project and the Authority reserves the right to reject all or any of the Application for Qualification and/or the Financial Proposals and/or the Bids without assigning any reasons whatsoever.

The Bidder shall bear all its costs associated with or relating to the preparation and submission of its Bid including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by the Authority or any other costs incurred in connection with or relating to its Bid. All such costs and expenses will remain with the Bidder and the Authority shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by the Bidder in preparation or submission of the Bid, regardless of the conduct or outcome of the Bidding Process.

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*Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area on Design, Build, Finance, Operate and Transfer (DBFOT) basis*

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*Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area on Design, Build, Finance, Operate and Transfer (DBFOT) basis*

## Glossary

Definition	As defined in
Application for Qualification	Disclaimer
Associate	Clause 3.2.14 (a)
Authority	Gangtok Smart City Development Limited
Project	Note
Bid	Clause 2.2.2
Bid Due Date	Clause 2.1.9
Bid Security	Clause 2.2.8
Bid Validity Period	Clause 2.2.7
Bid Documents	Clause 2.2.1
Bidding Process	Clause 2.2.1
Concession Agreement	Clause 2.1.6
Concession Period	Note
Concessionaire	Clause 2.1.6
Conflict of Interest	Clause 3.2.5
Consortium	Clause 3.2.1
Consortium Member	Clause 3.2.10
Contract	Clause 2.1.6
Cut-off Time	Clause 3.16.1
DBFOT	Clause 2.1.1
Development Period Performance Security	Clause 2.2.8
Estimated Project Cost	Clause 2.1.4
Financial Capacity	Clause 3.4.2
Financial Model	Clause 2.2.10
Financial Proposal	Clause 2.2.9
first round of bidding	Clause 3.24.3
GST	Goods and Services Tax
GoS	Government of Sikkim
Grant	Clause 2.2.9
Lowest Bidder	Clause 2.2.9
Holding Company	Clause 3.2.14 (b)
Jt. Bidding Agreement	Clause 3.2.9
Lead Consortium Member	Clause 3.2.10
Authority	Note
LOA	Clause 3.24.5
Nationalised Bank	Clause 2.2.8
Preferred Bidder	Clause 2.2.9
Physical Bid Submission	Clause 3.13.1
Responsive	Clause 3.21.1
RFP Document	Clause 2.2.1
second round of bidding	Clause 3.24.3
Selected Bidder	Clause 2.2.11
Service Area	Clause 2.1.7
SPV	Clause 2.1.6

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*Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area on Design, Build, Finance, Operate and Transfer (DBFOT) basis*

Definition	As defined in
Technical Capacity	Clause 3.4.2
third round of bidding	Clause 3.24.4
Qualification	Clause 2.2.3
Qualified Bidders	Clause 2.2.4

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Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area on Design, Build, Finance, Operate and Transfer (DBFOT) basis

## 1. Project Summary

Sr. No.	Project Details	Description	Remarks
1	Name of the Project	Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area on Design, Build, Finance, Operate and Transfer (DBFOT) basis	
2	Authority	Gangtok Smart City Development Limited	
3	Project Area, in sqmtr	About 5,708 Sqmtr.	Volume I Instruction to Bidders Clause No. 2.1.7
4	Ground Coverage	<ul style="list-style-type: none"> <li>▪ Commercial Floor coverage 50%, Level 4 to Level 10</li> <li>▪ Parking Floor coverage: &lt;75% Level 0 to level 3.</li> </ul>	Volume III PIM Chapter 2 (2.6.1)
5	Area Requirement	<p><b>Multi-Level Car Parking:</b></p> <ul style="list-style-type: none"> <li>▪ Four levels – Level 0 to 3.</li> <li>▪ Level 0 and Level 1 shall be ordinary parking floors, to be handed over to the Authority for running the intercity stand.</li> <li>▪ Level 2 and Level 3 shall be puzzle/ stack parking, within the revenue streams of the Concessionaire.</li> </ul> <p><b>Commercial Development: Maximum 13,680 Sqm.</b></p> <ul style="list-style-type: none"> <li>▪ Seven levels – Level 4 to 10</li> <li>▪ The areas are indicative, and deviation will be allowed up to +/- 10% at the DPR stage and subject to approval of GSCDL.</li> <li>▪ The Concessionaire shall perform detailed environmental assessment and geo technical studies and obtain approvals of the relevant authority.</li> <li>▪ The concessionaire shall further submit to GSCDL the detailed structure design and traffic flow designs characteristics duly vetted by one of the IIT's.</li> <li>▪ The traffic flowing in or out of the MLCP shall be so designed so as to ensure that the traffic movement in the NH is not delayed due to spillage.</li> </ul>	Volume II - Concession Agreement: Chapter 1 Article 2- Scope of Work
6	Timeline	<ul style="list-style-type: none"> <li>▪ Preparatory Period: 12 months from signing of Concession Agreement</li> <li>▪ Concession Period: 30.0 Years, which will be extendable, by another 26 years, subject to Concessionaire adhere to the terms &amp; conditions of the Concession Agreement and paying the annual</li> </ul>	Volume II - Concession Agreement Chapter II No. 4.1 & 3.1

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Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area on Design, Build, Finance, Operate and Transfer (DBFOT) basis

Sr. No.	Project Details	Description	Remarks
		<p>concession fee in the manner mentioned in the 'NOTE' hereinabove.</p> <ul style="list-style-type: none"> <li>• Development Period – Construction of Multi-Level Car Parking cum Commercial Development: Maximum of 4.0 Years from Effective Date</li> <li>• Operations Period – 26 Years from COD for Project extendable, by another 26 years, subject to the Concessionaire adhere to the terms &amp; conditions of the Concession Agreement and paying the annual concession fee in the manner mentioned in the 'NOTE' hereinabove.</li> </ul>	
7	Estimated Project Cost	About Rs 294.98 Crore, including contingency, loan processing fees, stamp duty & registration fees, and cost escalation, etc.	Volume I Instruction to Bidders Clause 2.1.4
8	Shortlisting of Bidder	<p><b>Technical Capacity</b> The Bidder shall, over the past 10 (ten) financial years preceding the Bid Due Date, have:</p> <p>a) Successfully commissioned at least one multi-level car parking project having total project cost above Rs 50 Crore (Rupees fifty crore) OR Successfully commissioned at least two multi-level car parking projects, having total project cost above Rs 25 Crore (Rupees twenty five crore) OR Successfully commissioned at least three multi-level car parking projects, having total project cost above Rs 17 Crore (Rupees seventeen crore)</p> <p style="text-align: center;"><b>AND</b></p> <p>b) Successfully commissioned at least one residential/ commercial /industrial real estate project, having total development area above 4,750 Sqmtr.</p>	Volume I Instruction to Bidders Clause 3.4.2
9		<p><b>Financial Capacity</b> The Bidder shall, have a minimum:</p> <p>a) Net Worth of Rs 15 Crore (Rupees fifteen crore) at the close of the last financial year, preceding Bid Due Date</p> <p style="text-align: center;"><b>AND</b></p>	Volume I Instruction to Bidders Clause 3.4.2

**Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area on  
Design, Build, Finance, Operate and Transfer (DBFOT) basis**

Sr. No.	Project Details	Description	Remarks																														
		b) Average annual turnover of Rs 20 Crore (Rupees twenty crore) over the three preceding financial years.																															
10	Consortium	Allowed – Maximum 6 Members <ul style="list-style-type: none"> <li>▪ Mandatory equity contribution – Minimum 3 Consortium Members</li> <li>▪ Optional equity contribution – remaining Consortium Members</li> </ul>	Volume I Instruction to Bidders Clause 3.2.1. and Clause 3.2.10																														
11	Bid Security	Rs 1.50 Crore (Rupees one crore and fifty lakh only)	Volume I Instruction to Bidders Clause 2.2.8																														
12	Development Period Performance Security	Rs 14.75 Crore (Rupees fourteen crore and seventy five lakh only). It will be proportionately reduced over a period of time, as per progress of work during Development Period.	Volume I Instruction to Bidders Clause No 2.2.8																														
13	Operations Period Performance Security	Rs 7.38 Crore (Rupees seven crore and thirty eight lakh only)	Volume II- Concession Agreement Clause 7.2																														
14	Schedule of Bidding Process	<table border="1"> <thead> <tr> <th>Sr. No</th> <th>Event Description</th> <th>Timeline</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Release of Bid Document</td> <td>07.10.2020</td> </tr> <tr> <td>2</td> <td>Submission of Queries by Bidders</td> <td>16.10.2020</td> </tr> <tr> <td>3</td> <td>Pre-Bid Meeting</td> <td>19.10.2020</td> </tr> <tr> <td>4</td> <td>Reply to Pre-Bid Queries</td> <td>23.10.2020</td> </tr> <tr> <td>5</td> <td>Submission of Bid</td> <td>20.11.2020</td> </tr> <tr> <td>6</td> <td>Opening of Technical Bid</td> <td>20.11.2020</td> </tr> <tr> <td>7</td> <td>Opening of Financial Bid</td> <td>07.12.2020</td> </tr> <tr> <td>8</td> <td>Letter of Award (LoA) to the Preferred Bidder</td> <td>22.12.2020</td> </tr> <tr> <td>9</td> <td>Signing of Concession Agreement</td> <td>05.01.2021</td> </tr> </tbody> </table>	Sr. No	Event Description	Timeline	1	Release of Bid Document	07.10.2020	2	Submission of Queries by Bidders	16.10.2020	3	Pre-Bid Meeting	19.10.2020	4	Reply to Pre-Bid Queries	23.10.2020	5	Submission of Bid	20.11.2020	6	Opening of Technical Bid	20.11.2020	7	Opening of Financial Bid	07.12.2020	8	Letter of Award (LoA) to the Preferred Bidder	22.12.2020	9	Signing of Concession Agreement	05.01.2021	Volume I Instruction to Bidders Clause 2.3
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8	Letter of Award (LoA) to the Preferred Bidder	22.12.2020																															
9	Signing of Concession Agreement	05.01.2021																															
15	Bid Parameter	Required Grant, with a cap of 37% of Estimated Project Cost of Rs 294.98 Crore	Volume I Instruction to Bidders Clause 2.1.4																														
16	Bid Submission Mode	Physical – On Bid Due Date	Volume I Instruction to Bidders Clause 3.13																														

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*Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area on Design, Build, Finance, Operate and Transfer (DBFOT) basis*

Sr. No.	Project Details	Description	Remarks
17	Pre-Bid Meeting Address	Gangtok Smart City Development Limited Sokaythang, Below ICAR office, Gangtok, Sikkim – 737102	
18	Cost of the RFP Document	Rs 200,000/- (Rupees two lakh only)	Volume I Instruction to Bidders Clause 3.13.4
19	Revenue Streams for the Concessionaire	1. Lease – Annual and One-time, as the case may be; 2. Advertisement; 3. Parking Charges; 4. Wi-Fi operator's lease; 5. Mobile booster's lease; 6. Public facilities like car wash, public toilet, etc. 7. Any other, with an approval of the Authority	Volume II Concession Agreement Chapter 2
20	Commercial Facility	Following functions / products will not be permitted for development: a) Industrial activities b) Hostel c) Warehousing, except such warehousing facility which is incidental to the use of the Project d) Wholesale Activity e) Car Service Garage, except car wash f) Workshops g) Hospitals and health centres h) Other environmentally incompatible functions	Volume II Concession Agreement Chapter IV Clause 16.1 and Schedule D
21	Dispute Resolution	a) Steering Committee b) Arbitration – Under Indian Arbitration and Conciliation Act, 1996	Volume II Concession Agreement Chapter V Article 30
22	Comfort to the Lender	Substitution Agreement	Volume II Concession Agreement Schedule S
23	Termination and Termination Payment	a) Termination under Force Majeure and Events of Default (Concessionaire and the Authority) b) Termination Payment	Volume II Concession Agreement Chapter VII
24	Protection of Interests of the Concessionaire	Provisions under Change in Scope and Change in Law	Volume II Concession Agreement Chapter IV Article 20 and

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Sr. No.	Project Details	Description	Remarks
			Chapter VIII Article 38
25	Working Capital Requirement	Availability of 1 month's funding requirement in a liquid form	Volume I Instruction to Bidders Appendix I, Annex V

## 2. Introduction

### 2.1. Background

- 2.1.1. The Authority is a special purpose vehicle company which came into being under the provisions of the Companies Act, 2013, and formed for the sole purpose of implementation of the smart city mission at the city level in Gangtok, Sikkim. The Authority plan, appraise, approve, release funds, implement, manage, operate, monitor and evaluate the Gangtok smart city development projects. The Authority is desirous of redeveloping existing multi-level car parking at Old West Point School area near M.G. Marg with modern, smart, aesthetic, sleek, commuter and environment friendly Multi-Level Car Parking cum Commercial Development (the "Project"). As part of this endeavour, the Authority has been authorised by GoS to select a suitable entity through a competitive bidding process, who would implement the Project and undertake its operation and maintenance on Design, Build, Finance, Operate and Transfer (the "DBFOT") basis through a Concession Period of 30 (thirty) years, which will be extendable, by another 26 years, subject to Concessionaire adhere to the terms & conditions of the Concession Agreement. and paying the annual concession fee in the manner mentioned in the 'NOTE' herein above and Pursuant thereto, the Authority, has decided to carry out the Bidding Process for selection of the Concessionaire to whom the Project may be awarded.
- 2.1.2. The Board of Directors of the Authority have approved the Project to be developed through private participation on DBFOT basis. The GoS has approved the Project to be developed through private participation on DBFOT basis.
- 2.1.3. The details of the Project have been provided at RFP Volume III – Project Information Memorandum.
- 2.1.4. The cost of the Project is estimated at about Rs 294.98 Crore (the "**Estimated Project Cost**"), including contingency, loan processing fees, stamp duty & registration fees, etc. The assessment of actual costs, however, will have to be made by the Bidder. The Authority shall compensate Concessionaire by way of paying Grant, which will be determined through Financial Proposal submitted by the eligible Bidders, with a cap of 37% (thirty seven percentage) of the Estimated Project Cost and that will be paid in the manner as detailed in the Draft Concession Agreement.
- 2.1.5. The Authority intends, through this RFP, to pre-qualify suitable Bidder(s) (the "**Bidder(s)**"), whose Financial Proposals will be opened, for the evaluation purpose.
- 2.1.6. The Selected Bidder will have to form a special purpose vehicle (the "**SPV**"), which shall be the limited liability company, established under the Companies Act, 2013 and its amendments thereof OR the limited liability partnership, established under the LLP Act, 2008 and its amendments thereof, to implement the Project in accordance with the Concession Agreement, and shall act as the Concessionaire (the "**Concessionaire**") of the Project. The Concessionaire shall be responsible for designing, engineering, building, procurement, construction, operation and

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maintenance of the Project in accordance with the provisions of the draft Concession Agreement (the "**Concession Agreement**"), provided as **Request for Proposal Volume II** to all Bidders. The draft Concession Agreement would set forth the detailed terms and conditions for grant of the contract to the Concessionaire, including the scope of the Concessionaire's scope-of-work and obligations (the "**Contract**").

- 2.1.7. The Concessionaire shall have to develop the Project and provide services to the citizens in the service area, in accordance with the Concession Agreement. The service area, which is estimated at around 5,708 sqmtrs (the "**Service Area**") at Old West Point School Area, near M.G. Marg, Gangtok - Sikkim. As per the scope of work specified in the Concession Agreement, the Concessionaire is broadly required to undertake the construction works and operation and maintenance of the Project.
- 2.1.8. The statements and explanations contained in this RFP are intended to provide a better understanding to the Bidders about the subject matter of this RFP and should not be construed or interpreted as limiting in any way or manner the scope of services and obligations of the Concessionaire or the Authority's rights to amend, alter, change, supplement or clarify the scope of work, the contract to be awarded pursuant to this RFP or the terms thereof or herein contained. Consequently, any omissions, conflicts or contradictions in the Bid Documents including this RFP Document are to be noted, interpreted and applied appropriately to give effect to this intent, and no claims on that account shall be entertained by the Authority.
- 2.1.9. The Authority shall receive the Bids pursuant to this RFP in accordance with the terms set forth herein as modified, altered, amended and clarified from time to time by the Authority, and all Bids shall be prepared and submitted in accordance with such terms on or before the Bid due date (the "**Bid Due Date**") as specified in **Clause 2.3** of this RFP Document.

**2.2. Brief description of the Bidding Process**

- 2.2.1. The Authority has adopted a single-stage, two envelope bidding process (the "**Bidding Process**") for selection of the Concessionaire. The Authority has issued following bid documents (the "**Bid Documents**") for the purpose of Bidding Process:
- a) Request for Proposal Volume I – Instructions to Bidders
  - b) Request for Proposal Volume II – Draft Concession Agreement, to be signed between the Authority and the Concessionaire
  - c) Request for Proposal Volume III – Project Information Memorandum
- Collectively these Bid Documents are called as the RFP document (the "**RFP Document**")
- 2.2.2. The Bidder shall submit following envelopes, in a manner described in **Clause 3.13** of this RFP Document Volume I, as a part of his bid:
- a) **Envelope-1:** Application for Qualification; and
  - b) **Envelope-2:** Financial Proposal

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Collectively this is called as the bid (the "Bid")

- 2.2.3. The first envelope (the "Envelope-1") of the Bid involves qualification (the "Qualification") of Bidders that make Application for Qualification in accordance with the provisions of this RFP Document.
- 2.2.4. On evaluation of Envelope-1, in accordance with the provision of this RFP Document, submitted by the Bidders, as a part of their respective Bids, the Authority will announce a list of qualified Bidders (the "Qualified Bidders"), securing 60% score in accordance with the matrix provided in **Clause 3.23.1**, whose second envelope (the "Envelope-2"), containing the Financial Proposal will be opened.
- 2.2.5. The Bidders would be required to furnish the information, for the purpose of the Qualification, as specified in this RFP. The Financial Proposal, to be submitted as Envelope-2, shall be opened only for the Qualified Bidders on their Qualification.
- 2.2.6. The Bidders are advised to go through **Request for Proposal Volume II** and **Request for Proposal Volume III**, and familiarize themselves with the Project, examine the Project requirements in greater detail, and to carry out, at their cost, such studies as may be required for submitting their respective Bids for award of the Project. The Authority is likely to provide relatively short time span for submission of the Bids for the Project. The Bidders are, therefore, advised to visit the Service Area and familiarize themselves with the Project.
- 2.2.7. The Bid shall be valid for a period of 180 days from the Bid Due Date (the "Bid Validity Period"), as specified in **Clause 2.3** of this RFP Document.
- 2.2.8. In terms of the RFP, a Bidder will be required to deposit, along with its Bid, a bid security (the "Bid Security") of Rs 1.50 Crore (Rupees One Crore and Fifty lakh only), refundable not later than 180 days from the Bid Due Date, except in the case of the Preferred Bidder. The Authority will refund the Bid Security of the Preferred Bidder, on furnishing the Development Period performance security (the "Development Period Performance Security") of Rs 14.75 Crore (Rupees fourteen crore and seventy five lakh only). It will be proportionately reduced over a period of time, as per progress of work during Development Period. The Selected Bidder shall provide the Development Period Performance Security at the time of signing of a Concession Agreement with the Authority, in a format provided as a schedule to the draft Concession Agreement. The Bidders will have an option to provide the Bid Security in the form of a demand draft or a bank guarantee drawn on nationalised scheduled bank, whose shareholding either fully or majority is with the Government of India (the "Nationalised Bank"), having a branch office in the city of Gangtok and net worth of Rs 1000/- crore (Rupees one thousand crore) or more. The validity period of the Bid Security shall not be less than 180 (one hundred and eighty) days from the Bid Due Date and may be extended as may be mutually agreed between the Authority and the Bidder(s) from time to time. The Bid shall be summarily rejected if it is not accompanied by the Bid Security.

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- 2.2.9. The Financial Proposal has been invited for the Project on the basis of the lowest Grant required for the Concessionaire (the "Grant"). The Grant quoted by the Bidder (the "Financial Proposal") shall constitute the sole criteria for evaluation of Financial Proposal of the Qualified Bidders. The Bidder quoting the lowest Financial Proposal (the "Lowest Bidder"), will be the preferred Bidder (the "Preferred Bidder") for the Project.
- 2.2.10. The Preferred Bidder shall also submit his financial model, which would be reflecting a detailed calculation of various calculations for the Concession Period including but not limited to financial model assumptions, CAPEX/OPEX calculation, Grant receivable, profit & loss statement, balance sheet calculation, cash flow, free cash flow calculation, Equity IRR and Project IRR calculations, ratios, Concession Period, etc. resulting into a Financial Proposal (the "Financial Model") calculation submitted by the Bidder, in a soft copy, i.e. an MS Excel format, in support to his Financial Proposal.
- 2.2.11. Generally, the Preferred Bidder will be the selected Bidder (the "Selected Bidder"), to be selected as the Concessionaire for the Project. The remaining Bidders shall be kept in reserve and may, in accordance with the process specified in the RFP Document, be invited to match or improve the Bid submitted by the Preferred Bidder, in case such Preferred Bidder withdraws or is not selected for any reason. In the event that none of the other Bidders match or improve the Bid of the Lowest Bidder, the Authority may, in its discretion, invite fresh Bids from all Bidders or annul the Bidding Process, as the case may be.
- 2.2.12. Bidders are requested to send their queries or request for additional information, if any, with respect to this RFP Document, in writing by speed post or by fax or by e-mail to the officer designated in the Note of this RFP Document, in a format provided in Appendix X of this RFP Document. The envelope and/or communication shall clearly bear the following identification/ title:

**Queries/Request for Additional Information: RFP for "Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area on Design, Build, Finance, Operate and Transfer (DBFOT) basis"**

### 2.3. Schedule of Bidding Process

The Bidders are requested to adhere to the following schedule:

Sr. No	Event Description	Timeline
1	Release of Bid Document	07.10.2020
2	Submission of Queries by Bidders	16.10.2020
3	Pre-Bid Meeting	19.10.2020
4	Reply to Pre-Bid Queries	23.10.2020
5	Submission of Bid	20.11.2020
6	Opening of Technical Bid	20.11.2020
7	Opening of Financial Bid	07.12.2020
8	Letter of Award (LoA) to the Preferred Bidder	22.12.2020
9	Signing of Concession Agreement	05.01.2021

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### 3. Instruction to Bidders

#### A. GENERAL

##### 3.1. Scope of Bid

- 3.1.1. The Authority wishes to receive Application for Qualification, as an Envelope-1 of the Bid submission, in order to declare the Qualified Bidders, for opening of Financial Proposal. The Authority shall open the Financial Proposal, i.e. the Envelope-2, only of the Qualified Bidders.

##### 3.2. Eligibility of Bidders

- 3.2.1. The Bidder shall be single entity or a group of six entities (the "Consortium"), coming together to implement the Project. However, no Bidder submitting Bid either as a single entity or as a Consortium, as the case may be, can be member of the other Bidder. The term Bidder used herein would apply to both a single entity and a Consortium.
- 3.2.2. The Bidder shall be allowed to submit only one Bid.
- 3.2.3. The Bidder or any of the Consortium Member, participated in the Bidding Process, but not selected as the Lowest Bidder or Selected Bidder or Concessionaire, as the case may be, shall not be allowed to hold an equity stake in the Concessionaire, before completion of the two years of the Operations Period.
- 3.2.4. The Bidder or the Consortium Members, as the case may be, must be a corporate entity incorporated under Companies Act, 1956 or Companies Act, 2013 or Sikkim Companies Act, 1961 OR Partnership Act, 1932 or Limited Liability Partnership Act, 2008 and amendments thereof, as the case may be or the relevant and equitable laws in the respective foreign country of their incorporation.
- 3.2.5. The Bidder shall not have a conflict of interest (the "Conflict of Interest") that affects the Bidding Process. Any Bidder found to have a Conflict of Interest will be disqualified. The Bidder may be considered to have a Conflict of Interest that affects the Bidding Process, if:
- a) The Bidder, or Associates (or any constituent thereof) and any other Bidder, or its Associates (or any constituent thereof) have common controlling shareholders or other ownership interest; provided that this disqualification shall not apply in cases where the direct or indirect shareholding in Bidder, or an Associate thereof (or any shareholder thereof having a shareholding of more than 5% of the paid up and subscribed share capital of such Bidder, or Associate, as the case may be) in the other Bidder, or an Associate is less than 5% of its subscribed and paid up equity share capital thereof; provided further that this disqualification shall not apply to any ownership by a bank, insurance company, pension fund or a public financial institution referred to in section 4A of the Companies Act, 1956. For the purpose of this Clause 3.2.5 (a), indirect shareholding held through one or more immediate persons shall be computed as follows: (aa) where any intermediary is controlled

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by a person through management control or otherwise, the entire shareholding held by such controlled intermediary in any other person (the "Subject Person") shall be taken into account for computing the shareholding of such controlling person in the Subject Person; and (bb) subject always to sub-clause (aa) above, where a person does not exercise control over an intermediary, which has shareholding in the Subject Person shall be undertaken on a proportionate basis; provided, however, that no such shareholding shall be reckoned under this sub-clause (bb) if the shareholding of such person in the intermediary is less than 26% of the subscribed and paid up equity shareholding of such intermediary; or

- b) a constituent of such Bidder is also a constituent of another Bidder; or
- c) such Bidder receives or has received any direct or indirect subsidy, grant, concessional loan, or subordinated debt from any other Bidder, or any Associate thereof or has provided any such subsidy, grant, concessional loan, or subordinated debt to any other Bidder or any Associate thereof; or
- d) such Bidder has the same legal representative for purposes of this Bid as any other Bidder; or
- e) such Bidder has a relationship with another Bidder, directly or through common third parties, that puts them in a position to have access to each others' information about, or to influence the Bid of either or each of the other Bidder; or
- f) such Bidder, or any Associate thereof has participated as a consultant to the Authority in preparation of any documents, design or technical specification of the Project

3.2.6. A Bidder shall be liable for disqualification and forfeiture of Bid Security if any legal, financial or technical adviser of the Authority in relation to the Project is engaged by the Bidder, or any Associate thereof, as the case may be, in any manner for matters related to or incidental to such Project during the Bidding Process or subsequent to the (i) issue of the LOA or (ii) execution of the Concession Agreement. In the event any such adviser is engaged by the Selected Bidder or Concessionaire, as the case may be, after issue of the LOA or execution of the Concession Agreement for matters related or incidental to the Project, then notwithstanding anything to the contrary contained herein or in the LOA or the Concession Agreement and without prejudice to any other right or remedy of the Authority, including the forfeiture and appropriation of the Bid Security or Performance Security, as the case may be, which the Authority may have thereunder or otherwise, the LOA or the Concession Agreement, as the case may be, shall be liable to be terminated without the Authority being liable in any manner whatsoever to the Selected Bidder or Concessionaire for the same. For the avoidance of doubt, this disqualification shall not apply where such adviser was engaged by the Bidder, or its Associate in the past but its assignment expired or was terminated 6 (six) months prior to the date of issue of RFP for the Project. Nor will this disqualification apply where such adviser is engaged after a period of 3 (three) years from the date of commercial operation of the Project.

3.2.7. The Bidder shall submit a Power of Attorney as per the format at **Appendix V**, authorizing the signatory of the Bid to commit the Bidder. In the case of a Consortium, the Members should submit a Power of Attorney in favour of the Lead Consortium Member as per the format at **Appendix VI**.

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- 3.2.8. If the Bidder is a single entity, then the Bidder shall:
- a) Will have to form an SPV with shareholding/ ownership equity commitments in accordance with this RFP Document, which would enter into the Concession Agreement and subsequently perform all the obligations of the Concessionaire in terms of the Concession Agreement, in case the contract to undertake the Project is awarded to the Bidder;
  - b) Commit that the Bidder shall directly and through its Directors/ shareholders, and not through any subsidiary or Associate company, hold minimum 100% (one hundred percent) equity stake in an SPV from a commencement of the Concession Period to 2 (two) years from the date of commencement of the Operations Period;
  - c) Commit that the Bidder shall directly, and through its Directors and Shareholders and not through any subsidiary or Associate company, hold minimum 51% (fifty one percent) equity stake in an SPV throughout Concession Period and shall be the largest shareholder of the SPV throughout Concession Period; and
  - d) Solely be liable for all obligations of the Concessionaire in relation to the Project
- 3.2.9. If the Bidder is Consortium, then the Consortium Members shall submit a joint Bidding Agreement (the "Jt. Bidding Agreement"), in a format provided at **Appendix VII. Jt. Bidding Agreement**, shall, inter alia:
- a) Convey the intent to form an SPV with shareholding/ ownership equity commitments in accordance with this RFP Document, which would enter into the Concession Agreement and subsequently perform all the obligations of the Concessionaire in terms of the Concession Agreement, in case the contract to undertake the Project is awarded to the Consortium;
  - b) Clearly outline, with a brief description, about the roles and responsibilities of each Consortium Member mainly with respect to the financial, technical and O&M matters;
  - c) Will have to form an SPV with shareholding/ ownership equity commitments in accordance with this RFP Document, which would enter into the Concession Agreement and subsequently perform all the obligations of the Concessionaire in terms of the Concession Agreement, in case the contract to undertake the Project is awarded to the Bidder;
  - d) Commit the minimum shareholding to be held by each Consortium Member in the SPV;
  - e) Commit that each Consortium Member shall hold the committed shareholding in the SPV directly and not through any subsidiary or Associate company;
  - f) Commit that the Lead Consortium Member shall directly, and not through any subsidiary or Associate company, hold minimum 51% (fifty one percent) equity stake in an SPV from a commencement of the Concession Period to 2 (two) years from the date of commencement of the Operations Period;
  - g) Commit that the other Consortium Member shall directly, and not through any subsidiary or Associate company, hold minimum 20% (twenty percent) equity stake in an SPV from a commencement of the Concession Period to 2 (two) years from the date of commencement of the Operations Period;
  - h) Commit that the Consortium Members shall directly, and not through any subsidiary or Associate company, hold minimum 100% (one hundred percent)

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equity stake in an SPV from a commencement of the Concession Period to 2 (two) years from the date of commencement of the Operations Period;

- i) Commit that the Consortium Members shall directly, and not through any subsidiary or Associate company, hold minimum 51% (fifty one percent) equity stake in an SPV throughout Concession Period and the Lead Consortium Member shall be the largest shareholder of the SPV throughout Concession Period; and
- j) Include a statement to the effect that Consortium Members shall be liable jointly and severally for all obligations of the Concessionaire in relation to the Project

3.2.10. If the Bidder is Consortium, it shall comply with the following additional requirements:

- a) Number of members in the Consortium shall not exceed 6 (six) (the "Consortium Member(s)");
- b) The Consortium Members shall nominate one member as the lead Consortium Member (the "Lead Consortium Member"), who shall have equity shareholding of at least 51% (fifty one percent) of the paid up and subscribed share capital of the SPV;
- c) Other two Consortium Member(s) shall have equity shareholding of at least 20% (twenty percent) of the paid up and subscribed share capital of the SPV; and
- d) Balance Consortium Member(s) will have an option either to hold or not hold an equity stake in such SPV

3.2.11. Any entity which has been barred by the Government of India or any State Government in India or any urban local body in India, or any entity controlled by them, from participating in any project, and the bar subsists as on the date of Bid, would not be eligible to submit the Bid, and shall be liable for disqualification.

3.2.12. A Bidder or any Consortium Member should, in the last 3 (three) years, have neither failed to perform on any contract, as evidenced by imposition of a penalty by an arbitral or judicial process of the Authority or a judicial pronouncement or arbitration award against the Bidder, nor been expelled from any project or contract nor have had any contract terminated for breach by such Bidder. The Bidder shall be liable for disqualification in such case.

3.2.13. The Bidder or the Consortium Member shall promptly inform the Authority of any change in its shareholding, during the Bidding Process, and failure to do so shall render the Bidder liable for disqualification from the Bidding Process.

3.2.14. For the purpose of evaluating Technical Capacity and Financial Capacity of Bidder, under various provisions of **Clause 3.4**:

- a) The Technical Capacity of their respective Associates would also be eligible. For purposes hereof, Associate means, in relation to the Bidder, a person who controls, is controlled by, or is under the common control with such Bidder (the "Associate"); and
- b) For the purpose of the demonstrating the Financial Capacity, the Bidder may use the Financial Capacity of its parent company, which would be controlling equal to

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or more than 51% equity stake of the Bidder (the "Holding Company") or any of Associate company.

3.2.15. Following conditions shall be adhered to while submitting the Bid:

- a) Bidders should attach clearly marked and referenced continuation sheets in the event that the space provided in the prescribed forms in the Appendices is insufficient. Alternatively, Bidders may format the prescribed forms making due provision for incorporation of the requested information;
- b) Information supplied by Bidder must apply to the Bidder named in the Bid, and not otherwise; and
- c) In responding to the Application for Qualification submissions, Bidders should demonstrate their capabilities in accordance with various provisions of Clause 3.4 below.

3.3. General terms

3.3.1. The Financial Proposal should be furnished in the format at Appendix XI, clearly indicating Concession Period required by the Bidder in both figures and words, in a format of (years/months/days) and signed by the Bidder's authorised signatory. In the event of any difference between figures and words, the amount indicated in words shall be taken into account.

3.3.2. The Change in Consortium shall not be allowed by the Authority.

3.3.3. The Concessionaire shall have the right to take loan from Nationalised Bank or State Bank of Sikkim as per their requirement. The mortgage of land may be allowed subject to approval of the State Government of Sikkim for which the Concessionaire will be required to draw a separate agreement in this regard.

3.4. Qualification criteria

3.4.1. The Bidder must fulfil the criteria stipulated in Clause 3.2 hereinabove. The Bidder must possess the relevant certification of incorporation and the copy duly signed and sealed by the authorized signatory should be attached with the Bid document.

3.4.2. To be eligible for Qualification for opening of Envelope-2, the Bidder shall fulfil the following conditions of eligibility of Technical Capacity and Financial Capacity as described below:

(A) **Technical Capacity:** for demonstrating the technical capacity and experience (the "Technical Capacity"), the Bidder shall, over the past 10 (ten) financial years preceding the Bid Due Date, have:

Successfully commissioned at least one multi-level car parking project having total project cost above Rs 50 Crore (Rupees fifty crore) OR Successfully commissioned at least two multi-level car parking projects, having total project cost above Rs 25 Crore (Rupees twenty five crore) OR Successfully

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commissioned at least three multi-level car parking projects, having total project cost above Rs 17 Crore (Rupees seventeen crore)

**AND**

Successfully commissioned at least one residential/ commercial /industrial real estate project, having total development area above 4,750 Sqmtr.

**(B) Financial Capacity:** for demonstrating the financial capacity (the "Financial Capacity"), the Bidder shall, have a minimum:

(i) Net Worth<sup>1</sup> of Rs 15 Crore (Rupees fifteen crore) at the close of the last financial year, preceding Bid Due Date;

**AND**

(ii) Average annual turnover of Rs 20 Crore (Rupees twenty crore) over the three preceding financial years.

3.4.3. The Bidder shall enclose with its Bid, complete with all Appendix and respective Annexes, the following:

- a) Certificates from its statutory auditors or the client concerned, stating the relevant experience sought for demonstrating the Technical Capacity. If in case, a particular job / contract has been jointly executed by the Bidder, as a part of the consortium, it should further support its claim for the share of work done for that particular job/ contract by producing a certificate from its statutory auditors or the client concerned. For avoidance of doubt, it is expressly clarified that the Authority shall consider the experience of the Bidder, only in infrastructure projects, where it is/had holding minimum 26% stake in the consortium;
- b) Certificates from its statutory auditors specifying the Net Worth and the Average annual turnover, as stipulated as a requirement for the Financial Capacity, and also specifying the methodology adopted for calculation; and
- c) Audited annual reports of the Bidder, for the last 5 (five) financial years preceding Bid Due Date.

3.4.4. In case the annual accounts for the latest financial year, preceding Bid Due Date, are not audited and therefore the Bidder cannot make it available, the Bidder shall give an undertaking to this effect and the statutory auditor shall certify the same. In such a case, the Bidder shall provide the audited annual reports for 5 (five) financial years preceding the financial year, for which the audited annual report is not being provided.

3.4.5. Notwithstanding anything contrary contained herein, in the event that the Bid Due Date falls within three months of the closing of the latest financial year of the Bidder, it shall ignore such financial year for the purposes of its Bid and furnish all its information and certification with reference to the 10 (ten), or 5 (five), or 3 (three), or 1 (one) financial years, as the case may be, preceding its latest financial year. For the avoidance of

<sup>1</sup> Net Worth = (Paid up & Subscribed Equity Capital + Reserves) LESS (Revaluation reserves + miscellaneous expenditure not written off + reserves not available for the distribution to the equity shareholders + accumulated losses)

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doubt, financial year shall, for the purposes of the Bid hereunder, mean the accounting year followed by the Bidder in the course of its normal business.

### **3.5. Change in Ownership**

- 3.5.1. By submitting the Bid, the Bidder shall be deemed to have acknowledged and agreed that in the event of a change in control of the Bidder itself or an Associate whose Technical Capacity or the Holding Company whose Financial Capacity was taken into consideration for the purposes of Short Listing and Qualification under and in accordance with this RFP, the Bidder shall be deemed to have knowledge of the same and shall be required to inform the Authority and the Authority forthwith along with all relevant particulars about the same and the Authority may, in its sole discretion, approve the same or disqualify the Bidder or withdraw the LOA from the Selected Bidder, as the case may be. In the event such change in control occurs after signing of the Concession Agreement but prior to financial close of the Project, it would, notwithstanding anything to the contrary contained in the Concession Agreement, be deemed to be a breach of the Concession Agreement, and the same shall be liable to be terminated without the Authority being liable in any manner whatsoever to the Concessionaire. In such an event, notwithstanding anything to the contrary contained in the Concession Agreement, the Authority shall be entitled to forfeit and appropriate the Bid Security or Performance Security, as the case may be, as damages, without prejudice to any other right or remedy that may be available to the Authority under the Bid Documents and/ or the Concession Agreement or otherwise.

### **3.6. Number of Bids**

- 3.6.1. The Bidder is eligible to submit only one Bid for the Project.

### **3.7. Bid and other costs**

- 3.7.1. The Bidders shall be responsible for all the costs associated with the preparation of their Bids. The Authority shall not be responsible or in any way liable for such costs, regardless of the conduct or outcome of the Bidding Process.

### **3.8. Site visit and the verification of information**

- 3.8.1. Bidders are encouraged to submit their respective Bids after visiting the Service Area, and ascertaining for themselves the site conditions, the quality and quantity of water requirement, project site surroundings for compliance of environment protection, availability of power, and other utilities for construction, availability and access to site, handling and storage of materials, seismic data, soil testing, applicable laws and regulations, labour laws, local bye-laws and any other matter considered relevant by them which will affect the outcome of the Project.
- 3.8.2. It shall be deemed that by submitting the Bid, the Bidder has:
- a) made a complete and careful examination of the RFP Document;
  - b) received all relevant Information requested from the Authority;

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- c) acknowledged and accepted the risk of inadequacy, error or mistake in the information provided in the RFP or furnished by or on behalf of the Authority relating to any of the matters referred to in Clause 3.8.1 above; and
- d) agreed to be bound by the undertakings provided by it under and in terms hereof.

3.8.3. The Authority shall not be liable for any omission, mistake or error on the part of the Bidder in respect of any of the above or on account of any matter or thing arising out of or concerning or relating to the RFP Document or the Bidding Process, including any error or mistake therein or in any information or data given by the Authority or Authority's advisor. It is the sole responsibility of the Bidder to ascertain the accuracy of the data provided by the Authority or Authority's advisor.

### **3.9. Right to accept or reject any or all Bids**

3.9.1. Notwithstanding anything to the contrary contained in this RFP, the Authority reserves the right to accept or reject any Bid and to annul the Bidding Process and reject all Bids, at any time without any liability or any obligation for such acceptance, rejection or annulment, and without assigning any reasons thereof.

3.9.2. The Authority reserves the right to reject any Bid if the Bidder does not provide, within the time specified by the Authority, the supplemental or supportive or additional information sought by the Authority for evaluation of the Bid.

3.9.3. The Authority reserves the right to reject any Bid and appropriate the Bid Security if at any time a material misrepresentation is made or uncovered. Such misrepresentation and/or improper response shall lead to the disqualification of the Bidder. If such disqualification occurs after the Financial Proposal has been opened and the Lowest Bidder gets disqualified, then the Authority reserves the right to:

- a) declare the next lowest Bidder, as the Lowest Bidder; or
- b) invite the remaining Bidders to re-submit their Financial Proposals in accordance with the RFP, matching or better the Lowest Bidder's Financial Proposal; or
- c) take any such measure as may be deemed fit and is the sole discretion of the Authority, including annulment of the Bidding Process.

3.9.4. In case it is found during the evaluation or at any time before signing of the Concession Agreement or after its execution and during the period of subsistence thereof that one or more of the Qualification Criteria have not been met by the Bidder, or the Bidder has made material misrepresentation or has given any materially incorrect or false information, the Bidder shall be disqualified forthwith if not yet appointed as the Concessionaire either by issue of the LOA or entering into of the Concession Agreement, and if the Selected Bidder has already been issued the LOA or has entered into the Concession Agreement, as the case may be, the same shall, notwithstanding anything to the contrary contained therein or in this RFP Document, be liable to be terminated, by a communication in writing by the Authority to the Selected Bidder or the Concessionaire, as the case may be, without Authority being liable in any manner whatsoever to the Selected Bidder or Concessionaire. In such event the Authority shall be entitled to forfeit and appropriate the Bid Security or Performance Security, as the

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case may be, as damages, without prejudice to any other right or remedy that may be available to the Authority under the Bid Documents and/ or the Concession Agreement, or otherwise.

- 3.9.5. The Authority reserves the right to verify all statements, information and documents submitted by the Bidder in response to the RFP. Failure of Authority to undertake such verification shall not relieve the Bidder of its obligations or liabilities hereunder nor will it affect any rights of the Authority there under.
- 3.9.6. The Authority shall be entitled to forfeit and appropriate the Bid Security as damages inter alia in any of the events specified in **Clause 3.9.7** herein below. The Bidder, by submitting its Bid pursuant to this RFP, shall be deemed to have acknowledged and confirmed that the Authority will suffer loss and damage on account of withdrawal of its Bid or for any other default by the Bidder during the period of Bid Validity Period as specified in this RFP Document. No relaxation of any kind on Bid Security shall be given to any Bidder.
- 3.9.7. The Bid Security shall be forfeited as damages without prejudice to any other right or remedy that may be available to the Authority under the Bid Documents and/ or under the Concession Agreement, or otherwise, under the following conditions:
- a) If a Bidder, at any time makes a material misrepresentation or Authority uncover such material misrepresentation;
  - b) If a Bidder engages in a corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice as specified in **Section 4** of this RFP;
  - c) If a Bidder withdraws its Bid during the period of Bid Validity Period as specified in this RFP and as extended by mutual consent of the respective Bidder(s) and the Authority;
  - d) In the case of Preferred Bidder, if it fails within the specified time limit -
    - i. to sign and return the duplicate copy of LOA; or
    - ii. to sign the Concession Agreement; or
    - iii. to furnish the Development Period Performance Security within the period prescribed therefor in the Concession Agreement
  - e) In case the Selected Bidder, having signed the Concession Agreement, commits any breach thereof prior to furnishing the Development Period Performance Security.

**B. DOCUMENTS**

**3.10. Contents of the RFP**

- 3.10.1. This RFP Document is divided into following three volumes:
- a) **Volume I:** Instruction to Bidders
  - b) **Volume II:** Draft Concession Agreement
  - c) **Volume III:** Project Information Memorandum

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3.10.2. This RFP Volume I comprise the disclaimer set forth hereinabove, the contents as listed below, and will additionally include any Addenda issued in accordance with **Clause 3.12.**

- Invitation for Qualification
- Section 1 – Project Summary
- Section 2 – Introduction
- Section 3 – Instructions to Bidders
- Section 4 – Fraud & Corrupt Practices
- Section 5 – Pre-Bid Conference
- Section 6 – Miscellaneous

**Appendices**

- **Appendix I:** Letter comprising the Application for Qualification
  - **Annex I:** Details of Bidder
  - **Annex II:** Technical Capacity of the Bidder
  - **Annex III:** Financial Capacity of the Bidder
  - **Annex IV:** Statement of Legal Capacity
  - **Annex V:** Undertaking for Working Capital Capacity
- **Appendix II:** Project Design Capability
- **Appendix III:** Project Concept Design
- **Appendix IV:** Traffic Management Plan
- **Appendix V:** Power of Attorney for signing of Bid
- **Appendix VI:** Power of Attorney for Lead Consortium Member of Consortium
- **Appendix VII:** Joint Bidding Agreement
- **Appendix VIII:** Anti-Collusion Certificate
- **Appendix IX:** Bank Guarantee for Bid Security
- **Appendix X:** Clarifications
- **Appendix XI:** Financial Proposal

**3.11. Clarifications**

3.11.1. Bidders requiring any clarification on the RFP may notify the Authority in accordance with **Clause 2.2.12**, before the date specified in the schedule of Bidding Process contained in **Clause 2.3**.

3.11.2. The Authority shall endeavour to respond to the queries within the period specified in **Clause 2.3** of this RFP Document, but no later than 15 (fifteen) days prior to the Bid Due Date. The responses will be uploaded on the Authority's website [provide website]. The Authority will share all the queries and its responses thereto, to all Bidders, without identifying the source of queries.

3.11.3. The Authority reserves the right not to respond to any question or provide any clarification, in its sole discretion, and nothing in this Clause shall be taken or read as compelling or requiring the Authority to respond to any question or to provide any clarification.

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3.11.4. The Authority may also on its own motion, if deemed necessary, issue interpretations and clarifications to all Bidders. All clarifications and interpretations issued by the Authority shall be deemed to be part of the RFP. Verbal clarifications and information given by the Authority or its employees or representatives shall not in any way or manner be binding on the Authority.

### **3.12. Amendment of RFP**

3.12.1. At any time, but no later than 15 (fifteen) days prior to the Bid Due Date, the Authority may for any reason, whether at its own initiative or in response to clarifications requested by the Bidder(s), modify the RFP by the issuance of Addenda.

3.12.2. Any Addendum thus issued will be uploaded on the Authority's website [www.smartcitygangtok.com](http://www.smartcitygangtok.com).

3.12.3. In order to afford the Bidders a reasonable time for taking an Addendum into account, and in line with the **Clause 3.11.2** of this RFP Document, or for any other reason, the Authority may, at its own discretion, extend the Bid Due Date.

## **C. PREPARATION AND SUBMISSION OF BID**

### **3.13. Submission of Bid**

3.13.1. The Bidder shall submit the Bid in a physical form in a sealed outer envelope with a marking as **"Bid Submission – Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area on Design, Build, Finance, Operate and Transfer (DBFOT) basis"**

3.13.2. The Bidder shall submit the Bid before Cut-off Time on Bid Due Date, including any extension thereof pursuant to **Clause 2.3**.

3.13.3. The envelope should be addressed to:  
 The Chief Executive Officer  
 Gangtok Smart City Development Limited  
 Sokaythang, Below ICAR office,  
 Gangtok, Sikkim – 737102  
**Phone:** +918116679989  
**Email:** [ceosmartcity.gangtok@gmail.com](mailto:ceosmartcity.gangtok@gmail.com)

If the envelope is not sealed and marked as instructed above, the Authority assumes no responsibility for the misplacement or premature opening of the contents of the Physical Bid Submission submitted.

3.13.4. The Bidder shall make a payment of Rs 2,00,000/- (Rupees two lakh) plus applicable GST as a cost of the RFP Document, on or before Cut-off Time on Bid Due Date, including any extension thereof pursuant to **Clause 2.3**. The Bidder shall draw demand

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draft on name of "Chief Executive Officer, Gangtok Smart City Development Limited", payable at Gangtok, Sikkim.

3.13.5. Bids submitted by fax, telex, telegram or e-mail shall not be entertained and shall be summarily rejected.

**3.14. Language**

3.14.1. The Bid and all related correspondence and documents in relation to the Bidding Process shall be in English language. Supporting documents and printed literature furnished by the Bidder with the Bid may be in any other language that they are accompanied by appropriate translations, duly notarized, of the pertinent passages in the English language. Supporting material that is not translated into English, and not duly notarized, shall not be considered for determining the Qualification. For the purpose of interpretation and evaluation of the Bid, the notarized English language translation shall prevail.

**3.15. Signing of Bid**

3.15.1. The Bidder shall provide all the information sought under this RFP. The Authority will evaluate only those Bids that are received in the required formats and complete in all respects. Incomplete and /or conditional Bids shall be liable to rejection.

3.15.2. The Bid shall be signed by the authorized signatory of the Bidder who shall also initial each page. In case of printed and published documents, only the cover shall be initialed. All the alterations, omissions, additions or any other amendments made to the Bid shall be initialed by the person signing the Bid.

**3.16. Bid Due Date**

3.16.1. Bid must be submitted before 1500 hours IST on the Bid Due Date (the "Cut-off Time"), in accordance with the provisions of this RFP Document.

3.16.2. The Authority may, in its sole discretion, extend the Bid Due Date by issuing an Addendum, on its website <http://smartcitygangtok.com>, in accordance with provision of Clause 3.12.3 uniformly for all Bidders.

**3.17. Late Bids**

3.17.1. Bids, which includes Physical Bid Submission in accordance with Clause 3.13.1, received by The Authority after the Cut-off Time on the Bid Due Date shall not be eligible for consideration and shall be summarily rejected. For avoidance of doubt, it is expressly clarified that the receipt of Bid, after the Cut-off Time on the Bid Due Date shall not be eligible for consideration and shall be summarily rejected, and the Bidder shall be disqualified from the Bidding Process.

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### **3.18. Modifications/substitution/withdrawal of Bids**

- 3.18.1. The Bidder may modify, substitute or withdraw its Bid after submission, but before Cut-off Time on the Bid Due Date. No Bid shall be allowed to be modified, substituted or withdrawn by the Bidder on or after the Cut-Off Time on Bid Due Date.
- 3.18.2. Any alteration/ modification in the Bid or additional information supplied subsequent to the Bid Due Date, unless the Authority has expressly sought the same after the Bid Due Date, shall be disregarded and shall not be considered for the evaluation of the Bid.

### **D. EVALUATION PROCESS**

#### **3.19. Opening and Evaluation of Bids**

- 3.19.1. The Authority shall open the Bids at 1600 hours IST on the Bid Due Date at the place specified in **Clause 3.13.3** and in the presence of the authorized person(s) of Bidder(s), who choose to attend.
- 3.19.2. The Authority will subsequently examine and evaluate Bids in accordance with the provisions set out in this **Section 3**.
- 3.19.3. To facilitate evaluation of Bids, the Authority may, at its sole discretion, seek clarifications or additional information, in writing from any Bidder regarding its Bid.
- 3.19.4. The Qualification of Bidders shall be entirely at the discretion of the Authority, and in accordance with this RFP Document. Bidders will be deemed to have understood and agreed that no explanation or justification on any aspect of the Bidding Process or Qualification shall be provided.
- 3.19.5. Any information contained in the Bid shall not in any way be construed as binding on the Authority, its consultants/advisors, successors or assigns, but shall be binding on the Bidder if the contract is subsequently awarded to it under the Bidding Process on the basis of such information.
- 3.19.6. The Authority reserves the right not to proceed with the Bidding Process at any time without notice or liability and to reject any Bid without assigning any reasons.

#### **3.20. Confidentiality**

- 3.20.1. Information relating to the examination, clarification, evaluation, and recommendation for the Bidders and Qualified Bidders shall not be disclosed to any Person who is not officially concerned with the process or is not a retained professional advisor advising to the Authority in relation to, or matters arising out of, or concerning the Bidding Process. The Authority will treat all information, submitted as part of Bid, in confidence and shall require all those who have access to such material to treat the same in confidence. The Authority shall not divulge any such information unless it is directed to

do so by any statutory entity that has the power under law to require its disclosure or is to enforce or assert any right or privilege of the statutory entity and/ or the Authority.

### **3.21. Tests of Responsiveness**

3.21.1. Prior to evaluation of Bids, the Authority shall determine whether each Bid is responsive to the requirements of the RFP. The Bid shall be considered responsive (the "Responsive") only if:

- a) It is received before Cut-off Time on Bid Due Date, including any extension thereof pursuant to **Clause 2.3**;
- b) It is received as per the contents and supporting documents stipulated in this RFP Document;
- c) It is signed, as stipulated in provisions set out in this RFP Document;
- d) It is accompanied by the Bid Security as specified in **Clause 2.2.8**;
- e) the Physical Bid Submission submitted before Cut-off Time, and in accordance with **Clause 3.13.1**;
- f) it contains all the information (complete in all respects) as requested in this RFP Document and/or Bid Documents (in formats same as those specified);
- g) It does not contain any condition on Application for Qualification and/or Financial Proposal; and
- h) It is not non-responsive in terms hereof.

3.21.2. The Authority reserves the right to reject any Bid which is non-responsive and no request for alteration, modification, substitution or withdrawal shall be entertained by the Authority in respect of such Bid.

### **3.22. Clarifications**

3.22.1. To facilitate evaluation of Bids, the Authority may, at its sole discretion, seek written clarifications or additional information or supporting information, from any Bidder regarding its Bid through email or fax. Such clarification(s) shall be provided within the time specified by the Authority for this purpose. The extension for the clarification date will be at the sole discretion of the Authority. If the extension sought by the Bidder is beyond the due date, then the Authority may consider providing such extension, at its own discretion.

3.22.2. If the Bidder does not provide clarifications sought under **Clause 3.22.1** above within the prescribed time, its Bid shall be liable to be rejected. In case the Bid is not rejected, the Authority may proceed to evaluate the Bid by construing the particulars requiring clarification to the best of the Authority's understandings, and the Bidder shall be barred from subsequently questioning such interpretation of the Authority.

### **3.23. Short listing of Bidders**

3.23.1. The Bidder whose Bid is adjudged as Responsive in terms of **Clause 3.21** shall be evaluated for declaring Qualified Bidders, in a following manner:

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Sr. No.	Particulars	Maximum Score	Marking Criteria							
1	Technical Capacity	20	<table border="1"> <thead> <tr> <th>Sub Parameter</th> <th>Score</th> </tr> </thead> <tbody> <tr> <td>Successfully commissioned at least one multi-level car parking project, having total project cost above Rs 50 Crore (Rupees fifty crore) OR Successfully commissioned at least two multi-level car parking projects, having total project cost above Rs 25 Crore (Rupees twenty five crore) OR Successfully commissioned at least three multi-level car parking projects, having total project cost above Rs 17 Crore (Rupees seventeen crore)</td> <td>10</td> </tr> <tr> <td>Successfully commissioned at least one residential/ commercial /industrial real estate project, having total development area above 4,750 Sqmtr.</td> <td>10</td> </tr> </tbody> </table>	Sub Parameter	Score	Successfully commissioned at least one multi-level car parking project, having total project cost above Rs 50 Crore (Rupees fifty crore) OR Successfully commissioned at least two multi-level car parking projects, having total project cost above Rs 25 Crore (Rupees twenty five crore) OR Successfully commissioned at least three multi-level car parking projects, having total project cost above Rs 17 Crore (Rupees seventeen crore)	10	Successfully commissioned at least one residential/ commercial /industrial real estate project, having total development area above 4,750 Sqmtr.	10	
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2	Financial Capacity	20	<table border="1"> <thead> <tr> <th>Sub Parameter</th> <th>Score</th> </tr> </thead> <tbody> <tr> <td>Net Worth of Rs 15 Crore (Rupees fifteen crore) at the close of the last financial year, preceding Bid Due Date</td> <td>10</td> </tr> <tr> <td>Average annual turnover of Rs 20 Crore (Rupees fifteen crore) over the three preceding financial years</td> <td>10</td> </tr> </tbody> </table>	Sub Parameter	Score	Net Worth of Rs 15 Crore (Rupees fifteen crore) at the close of the last financial year, preceding Bid Due Date	10	Average annual turnover of Rs 20 Crore (Rupees fifteen crore) over the three preceding financial years	10	
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Sub Parameter	Score									
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Sr. No.	Particulars	Maximum Score	Marking Criteria														
			Organisation team structure and in-house availability of the requisite expertise for the Project Proposed team structure for designing of the Project														
			2 3														
4	Project Concept Design	20	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;">Sub Parameter</th> <th style="width: 20%;">Score</th> </tr> </thead> <tbody> <tr> <td>Design configuration – Conceptual planning and architectural layouts of the facilities</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Contingency plans – Safety and disaster management plans</td> <td style="text-align: center;">3</td> </tr> <tr> <td>Design attractiveness – Aesthetics, façade, environmental friendliness, and energy efficiency</td> <td style="text-align: center;">3</td> </tr> <tr> <td>Sequencing and activity time schedule</td> <td style="text-align: center;">3</td> </tr> <tr> <td>Methodology for construction</td> <td style="text-align: center;">3</td> </tr> <tr> <td>Methodology for operations &amp; maintenance</td> <td style="text-align: center;">3</td> </tr> </tbody> </table>	Sub Parameter	Score	Design configuration – Conceptual planning and architectural layouts of the facilities	5	Contingency plans – Safety and disaster management plans	3	Design attractiveness – Aesthetics, façade, environmental friendliness, and energy efficiency	3	Sequencing and activity time schedule	3	Methodology for construction	3	Methodology for operations & maintenance	3
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5	Traffic Management Plan	20	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;">Sub Parameter</th> <th style="width: 20%;">Score</th> </tr> </thead> <tbody> <tr> <td>Adequacy of traffic management plan during construction</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Efficiency of circulation plan within and around parking facility</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Efficiency of pedestrian movement plan</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Adequacy of emergency of traffic plan</td> <td style="text-align: center;">5</td> </tr> </tbody> </table>	Sub Parameter	Score	Adequacy of traffic management plan during construction	5	Efficiency of circulation plan within and around parking facility	5	Efficiency of pedestrian movement plan	5	Adequacy of emergency of traffic plan	5				
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Efficiency of pedestrian movement plan	5																
Adequacy of emergency of traffic plan	5																
6	Presence in Sikkim	5	Presence through either directly or Associate or Holding Company or its Directors/ Shareholders, having an office in Sikkim														
7	Experience in managing, operating and running at least one mall in the region	5	Successfully running at least one mall in the region.														
<b>Total</b>		<b>100</b>															

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3.23.2. The Bidders may be required to make a presentation to the Authority to demonstrate the submission made hereinabove in **Clause 3.23.1**.

3.23.3. The Authority shall notify Bidders on the status of their Application for Qualification. The Authority will not entertain any query or clarifications from Bidders, who failed to qualify as Qualified Bidder.

**3.24. Selection of Bidder**

3.24.1. The Authority shall open Envelope-2, Financial Proposal of the Bidders, declared as the Qualified Bidder, in the presence of the Bidders' representatives who choose to attend on the date and time as may be intimated to the Qualified Bidders. The Authority will determine whether the Financial Proposal of the Bidder is complete, unqualified and unconditional. The Concession Period indicated in the Financial Proposal shall be deemed as final. The Authority shall list all Qualified Bidders in ascending order, with lowest Financial Proposal at top, followed by other increasing Financial Proposals. Qualified Bidder, submitted the lowest Financial Proposal shall be declared as the Preferred Bidder.

3.24.2. In the event that two or more Bidders quote the same Financial Proposal, and in turn becomes the Lowest Bidder (the "**Tie Bidders**"), the Authority shall identify the Preferred Bidder by draw of lots, which shall be conducted, with prior notice, in the presence of the Tie Bidders, who choose to attend.

3.24.3. In the event that the Lowest Bidder withdraws or is not selected for any reason in the first instance (the "**first round of bidding**"), the Authority may invite all the remaining Bidders to revalidate or extend their respective Bid Security, as necessary, and match or better the Bid of the aforesaid Lowest Bidder (the "**second round of bidding**"). If in the second round of bidding, only one Bidder matches or betters the Lowest Bidder, it shall be declared as the Preferred Bidder. If two or more Bidders match or better the said Lowest Bidder in the second round of bidding, then the Lowest Bidder between these Bidders shall be declared as the Preferred Bidder. If two or more Bidders match or better the said Lowest Bidder in the second round of bidding, and they are Tie Bidders, then the Bidder whose Bid was lower as compared to other Bidder(s) in the first round of bidding, shall be declared as the Preferred Bidder. For example, if the third and fifth Lowest Bidders in the first round of bidding offer to match or better the said Lowest Bidder in the second round of bidding, and if they are Tie Bidders in the second round of bidding, the said third Lowest Bidder shall be the Selected Bidder.

3.24.4. In the event that no Bidder offers to match or better the Lowest Bidder in the second round of bidding as specified in **Clause 3.24.3**, the Authority may, in its discretion, invite fresh Bids (the "**third round of bidding**") from all Qualified Bidders except the Lowest Bidder of the first round of bidding, or annul the Bidding Process, as the case may be. In case the Qualified Bidders are invited in the third round of bidding to revalidate or extend their Bid Security, as necessary, and offer fresh Bids, they shall be eligible for submission of fresh Bids provided, however, that in such third round of

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bidding only such Bids shall be eligible for consideration which are lower than the Bid of the second Lowest Bidder in the first round of bidding.

3.24.5. After selection, a Letter of Award (the "LOA") shall be issued, in duplicate, by the Authority to the Preferred Bidder and the Preferred Bidder shall, within 7 (seven) days of the receipt of the LOA, sign and return the duplicate copy of the LOA in acknowledgement thereof. In the event the duplicate copy of the LOA duly signed by the Preferred Bidder is not received by the stipulated date, the Authority may, unless it consents to extension of time for submission thereof, appropriate the Bid Security of such Bidder as damages on account of failure of the Preferred Bidder to acknowledge the LOA, and the next Lowest Bidder may be considered.

3.24.6. After acknowledgement of the LOA as aforesaid by the Preferred Bidder, it shall become the selected Bidder (the "Selected Bidder") to execute the Concession Agreement within the period prescribed in **Clause 2.3**.

**E. MISCELLANEOUS**

**3.25. Proprietary data**

3.25.1. All documents and other information supplied by the Authority or submitted by Bidder(s) to the Authority shall remain or become the property of the Authority. Bidders are to treat all information as strictly confidential and shall not use it for any purpose other than for preparation and submission of their Bid. The Authority will not return any of the Bid submitted or any information provided along therewith.

**3.26. Correspondence with Bidder**

3.26.1. The Authority shall not entertain any correspondence with any Bidder in relation to the acceptance or rejection of any Bid during the Bidding Process or in future.

## 4. Fraud and Corrupt Practices

- 4.1. The Bidders and their respective officers, employees, agents and advisers shall observe the highest standard of ethics during the Bidding Process. Notwithstanding anything to the contrary contained herein, the Authority shall reject any Bid without being liable in any manner whatsoever to the Bidder if it determines that the Bidder has, directly or indirectly or through an agent, engaged in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice in the Bidding Process.
- 4.2. Without prejudice to the rights of the Authority under Clause 4.1 hereinabove, if an Bidder is found by the Authority to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice during the Bidding Process, such Bidder shall not be eligible to participate in any tender or RFP issued by the Authority during a period of 2 (two) years from the date such Bidder is found by the Authority to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice, as the case may be.
- 4.3. For the purposes of this RFP Document, the following terms shall have the meaning hereinafter respectively assigned to them:
- a) "**corrupt practice**" means (i) the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the actions of any person connected with the Bidding Process (for avoidance of doubt, offering of employment to or employing or engaging in any manner whatsoever, directly or indirectly, any official of the Authority who is or has been associated in any manner, directly or indirectly with the Bidding Process or the LOA or has dealt with matters concerning the Concession Agreement or arising there from, before or after the execution thereof, at any time prior to the expiry of one year from the date such official resigns or retires from or otherwise ceases to be in the service of the Authority, shall be deemed to constitute influencing the actions of a person connected with the Bidding Process); or (ii) engaging in any manner whatsoever, whether during the Bidding Process or after the issue of the LOA or after the execution of the Concession Agreement, as the case may be, any person in respect of any matter relating to the Project or the LOA or the Concession Agreement, who at any time has been or is a legal, financial or technical adviser of the Authority in relation to any matter concerning the Project;
  - b) "**fraudulent practice**" means a misrepresentation or omission of facts or suppression of facts or disclosure of incomplete facts, in order to influence the Bidding Process;
  - c) "**coercive practice**" means impairing or harming or threatening to impair or harm, directly or indirectly, any person or property to influence any person's participation or action in the Bidding Process;
  - d) "**undesirable practice**" means (i) establishing contact with any person connected with or employed or engaged by the Authority with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the Bidding Process; or (ii) having a Conflict of Interest; and

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- e) "**restrictive practice**" means forming a cartel or arriving at any understanding or arrangement among Bidders with the objective of restricting or manipulating a full and fair competition in the Bidding Process.

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## **5. Pre-Bid Meeting**

- 5.1. A pre-Bid meeting of the interested Bidders shall be held at 1500 hrs IST, on the designated date, as mentioned in **Clause 2.3** of this RFP Document, at:

Gangtok Smart City Development Limited  
Sokaythang, Below ICAR office,  
Gangtok, Sikkim – 737102

- 5.2. A maximum of two representatives of each Bidder shall be allowed to participate on production of Authority letter from the Bidder.
- 5.3. During the course of pre-Bid meeting, the Bidders will be free to seek clarifications and make suggestions for consideration of the Authority. The Authority shall endeavour to provide clarifications and such further information as it may, in its sole discretion, consider appropriate for facilitating a fair, transparent and competitive Bidding Process.

## **6. Miscellaneous**

- 6.1. The Bidding Process shall be governed by, and construed in accordance with, the laws of India and the Courts at Gangtok, India shall have exclusive jurisdiction over all disputes arising under, pursuant to and/ or in connection with the Bidding Process.
- 6.2. The Authority, in its sole discretion and without incurring any obligation or liability, reserves the right, at any time, to:
- a) suspend and/ or cancel the Bidding Process and/ or amend and/ or supplement the Bidding Process or modify the dates or other terms and conditions relating thereto;
  - b) consult with any Bidder in order to receive clarification or further information;
  - c) Qualify or disqualify any Bidder and/ or to consult with any Bidder in order to receive clarification or further information;
  - d) retain any information and/ or evidence submitted to the Authority by, on behalf of, and/ or in relation to any Bidder; and/ or
  - e) independently verify, disqualify, reject and/ or accept any and all submissions or other information and/ or evidence submitted by or on behalf of any Bidder.
- 6.3. It shall be deemed that by submitting the Bid, the Bidder agrees and releases the Authority, their employees, agents and advisers, irrevocably, unconditionally, fully and finally from any and all liability for claims, losses, damages, costs, expenses or liabilities in any way related to or arising from the exercise of any rights and/ or performance of any obligations hereunder, pursuant hereto and/ or in connection herewith and waives any and all rights and/ or claims it may have in this respect, whether actual or contingent, whether present or future.

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## **Appendix I: Letter comprising the Application for Qualification**

*[on letterhead of Bidder]*

Dated:

To:  
The Chief Executive Officer,  
Gangtok Smart City Development Limited  
Sokaythang, Below ICAR office,  
Gangtok, Sikkim – 737102

**Subject:** Application for Qualification – Technical Capacity and Financial Capacity for Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area near M.G. Marg, Gangtok – East Sikkim on Design, Build, Finance, Operate and Transfer (DBFOT) basis (the "Project")

Dear Sir,

With reference to your RFP Document for Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area near M.G. Marg, Gangtok – East Sikkim on Design, Build, Finance, Operate and Transfer (DBFOT) basis, [dated \*\*\*\*], we, having examined the RFP Document and understood its contents, hereby submit our Bid for the aforesaid Project. The Bid is unconditional and unqualified.

1. All information provided in the Bid and in the Appendices is true and correct and all documents accompanying such Bid are true copies of their respective originals.
2. This statement is made for the express purpose of qualifying as the Concessionaire for the aforesaid Project.
3. We shall make available to the Authority any additional information it may find necessary or require to supplement or to authenticate the Qualification statement.
4. We acknowledge the right of the Authority to reject our Bid without assigning any reason or otherwise and hereby waive our right to challenge the same on any account whatsoever.
5. We certify that in the last 3 (three) years, we have neither failed to perform on any contract, as evidenced by imposition of a penalty or a judicial pronouncement or arbitration award, nor been expelled from any project or contract nor have had any contract terminated for breach on our part.
6. We declare that:

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- a) We have examined and have no reservations to the RFP Document, including any Addendum issued by the Authority.
  - b) We do not have any conflict of interest in accordance with **Clauses 3.2.5** of the RFP Document; and
  - c) We have not directly or indirectly or through an agent engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice, as defined in **Clause 4.3** of the RFP Document, in respect of any tender or request for proposal issued by or any agreement entered into with the Authority or any other public sector enterprise or any government, Central or State; and
  - d) We hereby certify that we have taken steps to ensure that in conformity with the provisions of **Section 4** of the RFP Document, no person acting for us or on our behalf has engaged or shall engage in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice.
7. We understand that you may cancel the Bidding Process at any time and that you are neither bound to accept any Bid that you may receive nor to invite the Bidders to Bid for the Project, without incurring any liability to the Bidders, in accordance with **Clause 3.9** of the RFP Document.
  8. We declare that we are not a part of any other Bidder, participating in this Bidding Process.
  9. We certify that in regard to matters other than security and integrity of the country, we have not been convicted by a Court of Law or indicted or adverse orders passed by a regulatory Authority which could cast a doubt on our ability to undertake the Project or which relates to a grave offence that outrages the moral sense of the community.
  10. We further certify that in regard to matters relating to security and Integrity of the country, we have not been charge-sheeted by any agency of the Government or convicted by a Court of Law for any offence committed by us or by any of our associates.
  11. We further certify that no investigation by a regulatory Authority is pending either against us or against our associates or against our partners or any of our managers/ employees.
  12. We undertake that in case due to any change in facts or circumstances during the Bidding Process, we are attracted by the provisions of disqualification in terms of the guidelines referred to above, we shall intimate the Authority of the same immediately.
  13. The Statement of Legal Capacity as per format provided at **Annex IV** in **Appendix I** of the RFP Document, and duly signed, is enclosed.
  14. We, hereby irrevocably waive any right which we may have at any stage at law or howsoever otherwise arising to challenge or question any decision taken by the Authority in connection with the selection of Bidders, selection of the Bidder, or in connection with the selection/ Bidding Process itself, in respect of the above-mentioned Project and the terms and implementation thereof.

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15. We agree and undertake to abide by all the terms and conditions of the RFP Document.

In witness thereof, we submit this Bid under and in accordance with the terms of the RFP Document.

Yours faithfully,

Date:

(Signature of the Authorized Signatory)

Place:  
Signatory)

(Name and designation of the Authorized

Name and Seal of the Bidder

## Annex I: Details of Bidder<sup>2</sup>

### 1. The Bidder

- (a) Name:
- (b) Country of incorporation:
- (c) Address of the corporate headquarters and its branch office(s), if any, in India:
- (a) Date of incorporation and/ or commencement of business:

### 2. Brief description of the Bidder including details of its main lines of business and proposed role and responsibilities in this Project[s]:

### 3. Details of individual(s) who will serve as the point of contact/ communication:

- (a) Name:
- (b) Designation:
- (c) Company:
- (d) Address:
- (e) Telephone Number:
- (f) E-Mail Address:
- (g) Fax Number:

### 4. Particulars of the Authorized Signatory of the Bidder:

- (a) Name:
- (b) Designation:
- (c) Address:
- (d) Phone Number:
- (e) Fax Number:

### 5. In case of a Consortium,

- a) the information above (1-4) should be provided for all the Members of the Consortium.
- b) Jt. Bidding Agreement, as envisaged in Clause 3.2.9 (g) should be attached to the Proposal.
- c) Information regarding role of each Consortium Member should be provided as per table below:

Sl. No	Name of Consortium Member	Role of Consortium Member	Percentage of equity in the Consortium
1.			
2.			
3.			

- a) The following information shall also be provided for each Consortium Member

<sup>2</sup> In case of Consortium, provide these details for all Consortium Members

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Sl No.	Criteria	Yes	No
1.	Has the Bidder/ any of the Consortium Member been barred by the Central/ State Government, or any entity controlled by it from participating in any project (DBFOT or otherwise)?		
2.	If the answer to Sr. No. 1 is yes, does the bar subsist as on Bid Due Date?		
3.	Has the Bidder/ any of the Consortium Member paid liquidated damages of more than 5% of the contract value in a contract due to delay or has been penalised due to any other reason in relation to execution of a contract, in the last three years?		

If the answer is "Yes" for any of the above three questions, then the Bidder shall provide required information in detail.

6. A statement by the Bidder disclosing material non-performance or contractual non-compliance in past projects, contractual disputes and litigation/ arbitration in the recent past is given below (Attach extra sheets, if necessary)

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## Annex II: Technical Capacity of the Bidder

Particulars	Details of the project
Name of the project	
Name of the project Authority	
Entity claiming for the Technical Capacity – Bidder/ Associate	
If in case of Associate, then the relationship with the Bidder and details (Attach extra sheets, if necessary)	
Client name	
Period of the project construction and commencement	Construction period – from ddmmyyyy to ddmmyyyy Project commencement date – ddmmyyyy
Location	
Project cost, Rs crore	
Project scope	
Role played by the Bidder / Associate	
Equity holding of the Bidder/ Associate in the project executing company/ consortium	
Certificate provided by the Bidder/ Associate	

### Instructions:

1. The Bidder is expected to provide information in a format provided above for a project, matching Qualification criteria as stipulated in Clause 3.4, of this RFP Document.
2. Certificates from the Bidder's statutory auditor or the client concerned must be furnished for the project. In jurisdictions, that do not have the statutory auditors, the auditors who audit the annual accounts of the Bidder should provide the requisite certification.
3. It may be noted that, in case of an absence of the proper certificate, as mentioned hereinabove, the information would be considered an inadequate and would lead to the exclusion of the project, in determining the Technical Capacity of the Bidder.

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### Annex III: Financial Capacity of the Bidder

In Rupees crore<sup>3</sup>

Name of Bidder	Year 1	Year 2	Year 3
Net Worth			
Annual turnover			

#### Instructions:

1. The Bidder shall attach copies of the financial statements/ annual reports for the five financial years, preceding Bid Due Date. The financial statements/ annual reports, must:
  - i. Reflect the financial situation of the Bidder;
  - ii. Be audited by the statutory auditor;
  - iii. Be complete, including all notes to the financial statements; and
  - iv. Correspond to the accounting periods already completed and audited; no statements for partial periods shall be requested or accepted
2. Year 1 will be the latest completed financial year, preceding Bid Due Date. Year 2 will be the year, immediately preceding the Year 1, and so on. If in case the Bid Due Date falls within 3 months of the close of the latest financial year of the Bidder, refer Clause 3.4.5.

<sup>3</sup> if in case the financial details are available in the foreign currency, other than Indian Rupee, then the same may be converted into Indian Rupee. The rate applicable for such conversion shall be the RBI Reference Rate, provided and published by the Reserve Bank of India, on its website [www.rbi.org.in](http://www.rbi.org.in) for 11-09-2020. If in case, the financial details are available other than tradable currencies, i.e. USD, GBP, Euro or YEN, then the same may be converted first into these tradable currencies, before converting into Indian Rupee. For converting the financial data, into the tradable currency, the Bidder may consider the convertible rate provided and published by the central bank of the respective country for 11-09-2020.

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**Annex IV: Statement of Legal Capacity**

(To be forwarded on the letterhead of the Bidder)

Ref.

Date:

To,  
The Chief Executive Officer,  
Gangtok Smart City Development Limited  
[Address]

Dear Sir,

We hereby confirm that we satisfy the terms and conditions laid out in the RFP Document.

We have agreed that \_\_\_\_\_ (insert individual's name) will act as our representative and has been duly authorized to submit the RFP. Further, the authorized signatory is vested with requisite powers to furnish such letter and authenticate the same.

Thanking you,

Yours faithfully,

Authorised Signatory

For and on behalf of

*Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area on Design, Build, Finance, Operate and Transfer (DBFOT) basis*

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## **Annex V: Undertaking for Working Capital Capacity**

(To be forwarded on the letterhead of the Bidder)

Ref.

Date:

To,  
The Chief Executive Officer,  
Gangtok Smart City Development Limited  
[Address]

Dear Sir,

We hereby confirm that we satisfy the terms and conditions laid out in the RFP Document.

We agree that, if appointed as a Concessionaire for the Project "Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area near M.G. Marg, Gangtok – East Sikkim on Design, Build, Finance, Operate and Transfer (DBFOT) basis", we shall always maintain, during the Concession Period, the working capital requirement of the Project for subsequent One months' requirement in liquid assests.

Thanking you,

Yours faithfully,

Authorised Signatory

For and on behalf of

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## **Appendix II: Project Design Capability**

The Bidder should demonstrate its Project design capacity by way of:

- I. Past experience in designing similar projects
- II. Organisation team structure and in-house availability of the requisite expertise for the Project; and
- III. Proposed team structure for designing of the Project

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### **Appendix III: Project Concept Design**

The Bidder's concept design for the Project should have following:

- I. Design configuration – Conceptual planning and architectural layouts of the facilities
- II. Contingency plans – Safety and disaster management plans
- III. Design attractiveness – Aesthetics, façade, environmental friendliness, and energy efficiency
- IV. Sequencing and activity time schedule
- V. Methodology for construction; and
- VI. Methodology for operations & maintenance

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## **Appendix IV: Traffic Management Plan**

Bidder's traffic management plan shall cover following:

- I. Adequacy of traffic management plan during construction
- II. Efficiency of circulation plan within and around parking facility
- III. Efficiency of pedestrian movement plan
- IV. Adequacy of emergency of traffic plan

The traffic management plan shall ensure that the traffic flowing in or out of the MLCP shall be so designed so as to ensure that the traffic movement in the NH is not delayed due to spillage.

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(1)

**Appendix V: Power of Attorney for signing of Bid**

Know all men by these presents, We \_\_\_\_\_ (name of the firm and address of the registered office) do hereby irrevocably constitute, nominate, appoint and authorize Mr/ Ms (name), \_\_\_\_\_ son/daughter/wife of \_\_\_\_\_ and currently residing at \_\_\_\_\_, who is [currently employed with us and holding the position of \_\_\_\_\_], as our true and lawful attorney (hereinafter referred to as the "Attorney") to do in our name and on our behalf, all such acts, deeds and things as are necessary or required in connection with or incidental to submission of our Bid for pre-qualification and submission of our Bid for "Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area near M.G. Marg, Gangtok – East Sikkim on Design, Build, Finance, Operate and Transfer (DBFOT) basis" (the "Project"), proposed or being developed by the Gangtok Smart City Development Limited, including but not limited to signing and submission of Bid, and other documents and writings, participate in Pre-Bids and other conferences and providing information/ responses to the Authority, representing us in all matters before the Authority, signing and execution of all contracts including the Concession Agreement and undertakings consequent to acceptance of our bid, and generally dealing with the Gangtok Smart City Development Limited in all matters in connection with or relating to or arising out of our Bid for the said Project and/ or upon award thereof to us and/or till the entering into of the Concession Agreement with the Gangtok Smart City Development Limited.

AND we hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things lawfully done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us.

IN WITNESS WHEREOF WE, \_\_\_\_\_, THE ABOVE NAMED PRINCIPAL HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS \_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_

FOR \_\_\_\_\_  
(SIGNATURE)  
(NAME, TITLE, ADDRESS)

WITNESS:

1.  
2.  
(ACCEPTED) \_\_\_\_\_ (SIGNATURE)  
(NAME, TITLE, ADDRESS OF THE ATTORNEY)

**[NOTARIZED]**

- The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executants(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure.

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- Also, wherever required, the Bidder should submit for verification the extract of the charter documents and documents such as a resolution/ power of attorney in favour of the person executing this Power of Attorney for the delegation of power hereunder on behalf of the Bidder.
- For a Power of Attorney executed and issued overseas, the document will also have to be legalized by the Indian Embassy and notarised in the jurisdiction where the Power of Attorney is being issued.

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**Appendix VI: Power of Attorney for Lead Consortium Member of Consortium**

*(To be executed on non-judicial stamp paper of appropriate value)*

Whereas Gangtok Smart City Development Limited has invited Bids from interested parties for an Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area near M.G. Marg, Gangtok – East Sikkim on Design, Build, Finance, Operate and Transfer (DBFOT) basis (the "Project").

Whereas, the Consortium Members are interested in submitting Bid for the Project and implementing the Project in accordance with the terms and conditions of the Request for Proposal (RFP) Document and Concession Agreement, and

Whereas, it is necessary for the Consortium Members to designate one of the Consortium Members as the Lead Consortium Member with all necessary power and Authority to do for and on behalf of the Consortium, all acts, deeds and things as may be necessary in connection with the Consortium's Bid for the Project and its execution.

We, ..... having our registered office at ....., and M/s. ...., having our registered office at ....., (hereinafter collectively referred to as the "Principals") do hereby irrevocably designate, nominate, constitute, appoint and authorise M/s ....., having its registered office at ....., being one of the Consortium Members, as the Lead Consortium Member and true and lawful attorney of the Consortium (hereinafter referred to as the "Attorney") and hereby irrevocably authorise the Attorney (with power to subdelegate) to conduct all business for and on behalf of the Consortium and any one of us during the Bidding Process and, in the event the Consortium is awarded the Project, during the execution of the Project, and in this regard, to do on our behalf and on behalf of the Consortium, all or any of such acts, deeds or things as are necessary or required or incidental to the submission of its Bid for the Project, including but not limited to signing and submission of all applications, Bids and other documents and writings, accept the Letter of Award, participate in Bidders' and other conferences, respond to queries, submit information/ documents, sign and execute contracts and undertakings consequent to acceptance of the Bid of the Consortium and generally to represent the Consortium in all its dealings with the Authority, and/ or any other Government Agency or any person, in all matters in connection with or relating to or arising out of the Consortium's Bid for the Project and/ or upon award thereof till the Concession Agreement is entered into with the Authority.

AND hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us/ Consortium.

IN WITNESS WHEREOF WE THE PRINCIPALS ABOVE NAMED HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS ..... DAY OF ....., 20....

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For .....  
(Signature, Name & Title)

For .....  
(Signature, Name & Title)  
(Executants)

(To be executed by all Consortium Members)

Witnesses:

- 1.
- 2.

Notes:

*The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure.*

*Wherever required, the Bidder should submit for verification the extract of the charter documents and documents such as a board or shareholders resolution/ power of attorney in favour of the person executing this Power of Attorney for the delegation of power hereunder on behalf of the Bidder.*

*For a Power of Attorney executed and issued overseas, the document will also have to be legalised by the Indian Embassy and notarised in the jurisdiction where the Power of Attorney is being issued. However, the Power of Attorney provided by Bidders from countries that have signed the Hague Legislation Convention, 1961 are not required to be legalised by the Indian Embassy if it carries a conforming Appostille certificate.*

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## Appendix VII: Joint Bidding Agreement

*(To be executed on stamp paper of appropriate value and to be authenticated by the Magistrate)*

THIS JOINT BIDDING AGREEMENT is entered into on this the ..... day of ..... 20... (the "Jt. Bidding Agreement")

### AMONGST

1. {....., a company incorporated under the (Indian) Companies Act, 1956 or Companies Act, 2013 or Sikkim Companies Act, 1961 OR Partnership Act, 1932 or Limited Liability Partnership Act, 2008) and having its registered office at ..... (hereinafter referred to as the "**First Part**" which expression shall, unless repugnant to the context include its successors and permitted assigns);

### AND

2. ...., a company incorporated under the (Indian) Companies Act, 1956 or Companies Act, 2013 or Sikkim Companies Act, 1961 OR Partnership Act, 1932 or Limited Liability Partnership Act, 2008) and having its registered office at ..... (hereinafter referred to as the "**Second Part**" which expression shall, unless repugnant to the context include its successors and permitted assigns)

### AND

3. ...., a company incorporated under the (Indian) Companies Act, 1956 or Companies Act, 2013 or Sikkim Companies Act, 1961 OR Partnership Act, 1932 or Limited Liability Partnership Act, 2008) and having its registered office at ..... (hereinafter referred to as the "**Third Part**" which expression shall, unless repugnant to the context include its successors and permitted assigns)

The above-mentioned parties of the FIRST, SECOND and THIRD PART are collectively referred to as the "**Parties**" and each is individually referred to as a "**Party**".

### WHEREAS,

- A. The Gangtok Smart City Development Limited hereinafter referred to as "[ABC]" has invited Bids by its Request for Proposal Tender No. .... dated ..... (the "**RFP**") for "Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area near M.G. Marg, Gangtok – East Sikkim on Design, Build, Finance, Operate and Transfer (DBFOT) basis" (the "**Project**");
- B. The Parties are interested in jointly bidding for the Project as Consortium Members (as defined below) and in accordance with the terms and conditions of the Bidding Documents including the RFP; and

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- C. It is a necessary condition under the RFP that the members of the Consortium shall enter into a Jt. Bidding Agreement and furnish a copy thereof with the Bid.

NOW IT IS HEREBY AGREED as follows:

**1. Definitions and Interpretations**

In this Agreement, the capitalised terms shall, unless the context otherwise requires, have the meaning ascribed thereto under the RFP.

**2. Consortium**

The Parties do hereby irrevocably constitute a consortium (the "Consortium") for the purposes of jointly participating in the Bidding Process for the Project.

The Parties hereby undertake to participate in the Bidding Process only through this Consortium and not individually and/or through any other consortium constituted for the Project, either directly or indirectly.

**3. Covenants**

The Parties hereby undertake that in the event the Consortium is declared the Preferred Bidder and awarded the Project, it shall incorporate the SPV as required by and in accordance with the Bidding Documents for performing all its obligations as the Concessionaire in terms of the Concession Agreement for the Project.

**4. Role of the Parties**

The Parties hereby undertake to perform the roles and responsibilities as described below:

a. Party of the First Part shall be the Lead Consortium Member of the Consortium and shall have the power of attorney from Second Part for conducting all business for and on behalf of the Consortium during the Bidding Process and until the Effective Date under the Concession Agreement when all the obligations of the SPV shall become effective;

b. (Party of the Second Part shall be \_\_\_\_\_.)

c. (Party of the Third Part shall be \_\_\_\_\_.)

**5. Joint and Several Liability**

The Parties do hereby undertake to be jointly and severally responsible for all obligations and liabilities relating to the Project in accordance with the terms of the RFP, the Concession Agreement and for the performance of the Concessionaire's obligations under the Concession Agreement.

**6. Shareholding in the SPV**

(a) The Parties agree that the proportion of shareholding among the Parties in the SPV shall be as follows:

First Part:

Second Part:

The Parties undertake that they shall comply with all equity lock-in requirements set forth in the Concession Agreement.

**7. Representation of the Parties**

Each Party represents to the other Parties as of the date of this Agreement that

- a. such Party is duly organised, validly existing and in good standing under the laws of its incorporation and has all requisite power and Authority to enter into this Agreement;
- b. the execution, delivery and performance by such Party of this Agreement has been authorised by all necessary and appropriate corporate or governmental action and a copy of the extract of the charter documents and board resolution/power of attorney in favour of the person executing this Jt. Bidding Agreement for the delegation of power and Authority to execute this Jt. Bidding Agreement on behalf of the Consortium Member is annexed to this Agreement, and will not, to the best of its knowledge:
  - i. require any consent or approval not already obtained;
  - ii. violate any applicable law presently in effect and having applicability to it;
  - iii. violate the memorandum of association and articles of association, by-laws or other applicable organisational documents thereof;
  - iv. violate any clearance, permit, concession, grant, license or other governmental authorisation, approval, judgment, order or decree or any mortgage agreement, indenture or any other instrument to which such Party is a party or by which such Party or any of its properties or assets are bound or that is otherwise applicable to such Party; and
  - v. create or impose any liens, mortgages, pledges, claims, security interests, charges or any other encumbrances or obligations to create a lien, charge, pledge, security interest, encumbrances or mortgage in or on the property of such Party, except for encumbrances that would not, individually or in the aggregate, have a material adverse effect on the financial condition or prospects or business of such Party so as to prevent such Party from fulfilling its obligations under this Agreement;
- c. this Agreement is the legal and binding obligation of such Party, enforceable in accordance with its terms against it; and
- d. there is no litigation pending or, to the best of such Party's knowledge, threatened to which it or any of its affiliates is a party that presently affects or which would have a material adverse effect on the financial condition or prospects or business of such Party in the fulfillment of its obligations under this Agreement.

**8. Termination**

This Agreement shall be effective from the date hereof and shall continue in full force and effect till the full and final satisfaction of all obligations under the Concession Agreement in accordance with the terms thereof, in case the Project is awarded to the

*Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area on Design, Build, Finance, Operate and Transfer (DBFOT) basis*

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Consortium. However, in case the Consortium is either not qualified for the Project or does not get selected for award of the Project as the Selected Bidder, the Agreement will stand terminated, in accordance with the mutual agreement of the Parties.

**9. Miscellaneous**

This Joint Bidding Agreement shall be governed by laws of India.

The Parties acknowledge and accept that this Agreement shall not be amended by the Parties without the prior written consent of Gangtok Smart City Development Limited.

IN WITNESS WHEREOF THE PARTIES ABOVE NAMED HAVE EXECUTED AND DELIVERED THIS AGREEMENT AS OF THE DATE FIRST ABOVE WRITTEN.

SIGNED, SEALED AND DELIVERED  
For and on behalf of

LEAD CONSORTIUM MEMBER by:  
(Signature)  
(Name)  
(Designation)  
(Address)

SIGNED, SEALED AND DELIVERED  
For and on behalf of

SECOND PART  
(Signature)  
(Name)  
(Designation)  
(Address)

SIGNED, SEALED AND DELIVERED  
For and on behalf of

THIRD PART  
(Signature)  
(Name)  
(Designation)  
(Address)

In the presence of:  
1.  
2.

*Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area on Design, Build, Finance, Operate and Transfer (DBFOT) basis*

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**Notes:**

1. *The mode of execution of the Joint Bidding Agreement should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure.*
2. *Each Joint Bidding Agreement should attach a copy of the extract of the charter documents and documents such as resolution/power of attorney in favour of the person executing this Agreement for the delegation of power and Authority to execute this Agreement on behalf of the Consortium Member.*
3. *For a Joint Bidding Agreement executed and issued overseas, the document shall be legalized by the Indian Embassy and notarized in the jurisdiction where the Power of Attorney has been executed.*

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**Appendix VIII: Anti-Collusion Certificate**

*(To be executed on stamp paper of appropriate value)*

We undertake that, in competing for (and, if the award is made to us, in executing) the above Project, we will strictly observe the laws against fraud and corruption in force in India namely "Prevention of Corruption Act, 1988" and subsequent amendments thereof.

We hereby certify and confirm that in the preparation and submission of our Bid, we have not acted in concert or in collusion with any other Bidder or other person(s) and also not done any act, deed or thing which is or could be regarded as anti-competitive.

We further confirm that we have not offered nor shall offer any illegal gratification in cash or kind to any person or agency in connection with the instant Bid.

Dated this .....Day of .....20

.....  
(Name of the Bidder)

.....  
(Signature of the Bidder / Authorised Person)

.....  
(Name of the Authorised Person)

## Appendix IX: Bank Guarantee for Bid Security

B.G.No.

Dated:

1. In consideration of you, The Chief Executive Officer, Gangtok Smart City Development Limited having its office at [provide office address], State of Sikkim, India (hereinafter referred to as the "**Authority**", which expression shall unless it be repugnant to the subject or context thereof include its, successors and assigns) having agreed to receive the Bid, a Company registered under provision of the [Companies Act, 1956 or Companies Act, 2013 or Sikkim Companies Act, 1961 OR Partnership Act, 1932 or Limited Liability Partnership Act, 2008] and having its registered office at [xx] and acting on behalf of its Consortium (hereinafter referred to as the "**Bidder**" which expression shall unless it be repugnant to the subject or context thereof include its/their executors administrators, successors and assigns), for Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area near M.G. Marg, Gangtok – East Sikkim on Design, Build, Finance, Operate and Transfer (DBFOT) basis, (hereinafter referred to as the "**Project**") pursuant to the request for proposal document dated [xx] issued in respect of the Project ("**RFP**"), we [Name of the Nationalized Bank] having our registered office at [xx] and one of its branches at [xx] (hereinafter referred to as the "**Bank**"), at the request of the Bidder, do hereby in terms of **Clause 2.2.8** the RFP Document, irrevocably, unconditionally and without reservation guarantee the due and faithful fulfillment and compliance of the terms and conditions of the RFP Document by the said Bidder and unconditionally and irrevocably undertake to pay forthwith to the Authority an amount of [provide Bid Security amount here] only as bid security (hereinafter referred to as the "**Bid Security**") as our primary obligation without any demur, reservation, recourse, contest or protest and without reference to the Bidder, if the Bidder shall fail to fulfill or comply with all or any of the terms and conditions contained in the said RFP.
2. Any such written demand made by the Authority stating that the Bidder is in default of the due and faithful fulfillment and compliance with the terms and conditions contained in the RFP shall be final, conclusive and binding on the Bank.
3. We, the Bank, do hereby unconditionally undertake to pay the amounts due and payable under this Guarantee without any demur, reservation, recourse, contest or protest and without any reference to the Bidder or any other person and irrespective of whether the claim of the Authority is disputed by the Bidder or not merely on the first demand from the Authority stating that the amount claimed is due to the Authority by reason of failure of the Bidder to fulfill and comply with the terms and conditions contained in the RFP including failure of the said Bidder to keep its Bid open during the Bid validity period as set forth in the said RFP for any reason whatsoever. Any such demand made on the Bank shall be conclusive as regards amount due and payable by the Bank under this Guarantee. However, our liability under this Guarantee shall be restricted to an amount not exceeding the Bid Security.

*Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area on Design, Build, Finance, Operate and Transfer (DBFOT) basis*

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4. This Guarantee shall be irrevocable and remain in full force for a period of 180 (one hundred and eighty) days from the Bid Due Date or for such extended period as may be mutually agreed between the Authority and the Bidder, and agreed to by the Bank, and shall continue to be enforceable till all amounts under this Guarantee have been paid.
5. We, the Bank, further agree that the Authority shall be the sole judge to decide as to whether the Bidder is in default of due and faithful fulfillment and compliance with the terms and conditions contained in the RFP including, inter alia, the failure of the Bidder to keep its Bid open during the Bid validity period set forth in the said RFP, and the decision of the Authority that the Bidder is in default as aforesaid shall be final and binding on us, notwithstanding any differences between the Authority and the Bidder or any dispute pending before any Court, Tribunal, Arbitrator or any other Authority.
6. The Guarantee shall not be affected by any change in the constitution or winding up of the Bidder or the Bank or any absorption, merger or amalgamation of the Bidder or the Bank with any other person.
7. In order to give full effect to this Guarantee, the Authority shall be entitled to treat the Bank as the principal debtor. The Authority shall have the fullest liberty without affecting in any way the liability of the Bank under this Guarantee from time to time to vary any of the terms and conditions contained in the said RFP or to extend time for submission of the Bids or the Bid validity period or the period for conveying acceptance of Letter of Award by the Bidder or the period for fulfillment and compliance with all or any of the terms and conditions contained in the said RFP by the said Bidder or to postpone for any time and from time to time any of the powers exercisable by it against the said Bidder and either to enforce or forbear from enforcing any of the terms and conditions contained in the said RFP or the securities available to the Authority, and the Bank shall not be released from its liability under these presents by any exercise by the Authority of the liberty with reference to the matters aforesaid or by reason of time being given to the said Bidder or any other forbearance, act or omission on the part of the Authority or any indulgence by the Authority to the said Bidder or by any change in the constitution of the Authority or its absorption, merger or amalgamation with any other person or any other matter or thing whatsoever which under the law relating to sureties would but for this provision have the effect of releasing the Bank from its such liability.
8. Any notice by way of request, demand or otherwise hereunder shall be sufficiently given or made if addressed to the Bank and sent by courier or by registered mail to the Bank at the address set forth herein.
9. We undertake to make the payment on receipt of Authority's notice of claim on us addressed to [name of Bank along with branch address] and delivered at our above branch who shall be deemed to have been duly authorized to receive the said notice of claim.

*Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area on Design, Build, Finance, Operate and Transfer (DBFOT) basis*

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10. It shall not be necessary for the Authority to proceed against the said Bidder before proceeding against the Bank and the guarantee herein contained shall be enforceable against the Bank, notwithstanding, any other security which the Authority may have obtained from the said Bidder or any other person and which shall, at the time when proceedings are taken against the Bank hereunder, be outstanding or unrealized.
11. We, the Bank, further undertake not to revoke this Guarantee during its currency except with the previous express consent of the Authority in writing.
12. The Bank declares that it has power to issue this Guarantee and discharge the obligations contemplated herein, the undersigned is duly authorized and has full power to execute this Guarantee for and on behalf of the Bank.
13. This Bank Guarantee and all questions of its interpretation shall be construed in accordance with the laws of India. The courts at Gangtok shall have jurisdiction over matters arising out of or relating to this Bank Guarantee.

Signed and Delivered by [xx] Bank  
By the hand of Mr./Ms. [xx], its [xx] and authorized official.

(Signature of the Authorized Signatory)  
(Official Seal)

*Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area on Design, Build, Finance, Operate and Transfer (DBFOT) basis*

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### Appendix X: Clarifications

Sr. No	RFP Document – Clause reference	Issue with current Clause or Provision / Rationale for change	Comment or Clarification/ Change sought
1			
2			
-			
N			

*Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area on Design, Build, Finance, Operate and Transfer (DBFOT) basis*

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## Appendix XI: Financial Proposal

Dated:

To,  
The Chief Executive Officer,  
Gangtok Smart City Development Limited  
Sokaythang, Below ICAR office,  
Gangtok, Sikkim – 737102

**Subject:** Financial Proposal for "Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area near M.G. Marg, Gangtok – East Sikkim on Design, Build, Finance, Operate and Transfer (DBFOT) basis"

Dear Sir,

With reference to your RFP Document for "Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area near M.G. Marg, Gangtok – East Sikkim on Design, Build, Finance, Operate and Transfer (DBFOT) basis", dated \*\*\*\*\*, I/we, having examined the RFP Document and understood its contents, hereby submit my/our Financial Proposal for the aforesaid Project. The Bid is unconditional and unqualified.

1. The Financial Proposal is unconditional and unqualified.
2. I/ We acknowledge that the Authority will be relying on the information provided in the Bid and the documents accompanying the Bid for selection of the Concessionaire for the aforesaid Project, and we certify that all information provided therein is true and correct; nothing has been omitted which renders such information misleading; and all documents accompanying the Bid are true copies of their respective originals.
3. This statement is made for the express purpose of our selection as Concessionaire for the "Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area near M.G. Marg, Gangtok – East Sikkim on Design, Build, Finance, Operate and Transfer (DBFOT) basis" (the "Project").
4. I/ We shall make available to the Authority any additional information it may find necessary or require to supplement or to authenticate the Financial Proposal.
5. I/ We acknowledge the right of the Authority to reject our Financial Proposal without assigning any reason or otherwise and hereby waive, to the fullest extent permitted by applicable law, our right to challenge the same on any account whatsoever.
6. I/ We certify that in the last three years, we/ any of our Associates have neither failed to perform on any contract, as evidenced by imposition of a penalty by an arbitral or judicial Authority or a judicial pronouncement or arbitration award, nor been expelled from any project or contract by any public Authority nor have had any contract terminated by any public Authority for breach on our part.

7. I/ We declare that
- a) I/ We have examined and have no reservations to the Bid Documents, including any Addendum issued by the Authority; and
  - b) I/ We do not have any Conflict of Interest in accordance with Clauses 3.2.5 of the RFP Document; and
  - c) I/ We have not directly or indirectly or through an agent engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice, as defined in Clause 4.3 of the RFP Document, in respect of any tender or request for proposal issued by or any agreement entered into with the Authority or any other public sector enterprise or any government, Central or State; and
  - d) I/ We hereby certify that we have taken steps to ensure that in conformity with the provisions of Section 4 of the RFP, no person acting for us or on our behalf has engaged or will engage in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice; and
  - e) the undertakings given by us along with the Bid in response to the RFP Document for the Project were true and correct as on the date of making the Bid and are also true and correct as on the Bid Due Date and I/we shall continue to abide by them.
8. I/ We understand that you may cancel the Bidding Process at any time and that you are neither bound to accept any Bid that you may receive nor to invite the Bidders to Bid for the Project, without incurring any liability to the Bidders, in accordance with Clause 3.9 of the RFP Document.
9. I/ We believe that we satisfy(s) the Net Worth and Average Cash Accrual and meet(s) the requirements as specified in the RFP Document.
10. I/ We declare that we or our Associates are not a part of any other Bidder submitting a Bid for the Project.
11. I/ We certify that in regard to matters other than security and integrity of the country, we or any of our Associates have not been convicted by a Court of Law or indicted or adverse orders passed by a regulatory Authority which could cast a doubt on our ability to undertake the Project or which relates to a grave offence that outrages the moral sense of the community.
12. I/ We further certify that in regard to matters relating to security and integrity of the country, we or any of our Associates have not been charge-sheeted by any agency of the Government or convicted by a Court of Law.
13. I/ We further certify that no investigation by a regulatory Authority is pending either against us or against our Associates or against our CEO or any of our directors/ managers/employees.

*Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area on Design, Build, Finance, Operate and Transfer (DBFOT) basis*

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14. I/ We undertake that in case due to any change in facts or circumstances during the Bidding Process, we are attracted by the provisions of disqualification in terms of the guidelines referred to above, we shall intimate Authority of the same immediately.
15. I/ We understand that the Selected Bidder shall incorporate SPV under the Indian Companies Act, 2013, as the case may be, prior to execution of the Concession Agreement.
16. I/ We hereby irrevocably waive any right or remedy which we may have at any stage at law or howsoever otherwise arising to challenge or question any decision taken by the Authority in connection with the selection of the Bidder, or in connection with the Bidding Process itself, in respect of the above-mentioned Project and the terms and implementation thereof.
17. In the event of our company being declared as the Preferred Bidder, I/we agree to enter into a Concession Agreement in accordance with the draft that has been provided to us prior to the Bid Due Date [and Addenda thereof]. We agree not to seek any changes in the aforesaid draft and agree to abide by the same.
18. I/ We have studied all the Bid Documents carefully. We understand that except to the extent as expressly set forth in the Concession Agreement, we shall have no claim, right or title arising out of any documents or information provided to us by the Authority or in respect of any matter arising out of or relating to the Bidding Process including the award of Contract.
19. I/ We offer a Bid Security of [provide amount here] to the Authority in accordance with the RFP Document.
20. The Bid Security in the form of a [Demand Draft/ Bank Guarantee] is enclosed.
21. I/ We agree and understand that the Financial Proposal is subject to the provisions of the Bid Documents. In no case, I/we shall have any claim or right of whatsoever nature if the Project/ Contract is not awarded to me/us or our Bid is not opened or rejected.
22. The Concession Period has been quoted by me/us after taking into consideration all the terms and conditions stated in the RFP, draft Concession Agreement, our own estimates of costs and after a careful assessment of the site and all the conditions that may affect the Project cost and implementation of the project.
23. I/ We agree and undertake to abide by all the terms and conditions of the RFP Document.
24. We shall be liable for all the obligations of the Concessionaire under the Concession Agreement.
25. I/ We shall keep this offer valid for 180 (one hundred and eighty) days from the Bid Due Date specified in the RFP.

*Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area on  
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26. I/ We hereby submit our Bid and seek Grant of Rs XX Crore (Rupees XX only),  
i.e. XX% (XX percentage) of Estimated Project Cost to execute the Project in  
accordance with the provisions of the draft Concession Agreement.

27. I/ We shall submit our Financial Model in a soft copy, i.e. in MS Excel in support of our  
Bid, in accordance with the provisions of the RFP Document.

In witness thereof, I/we submit this Bid under and in accordance with the terms of the RFP  
Document.

Yours faithfully,

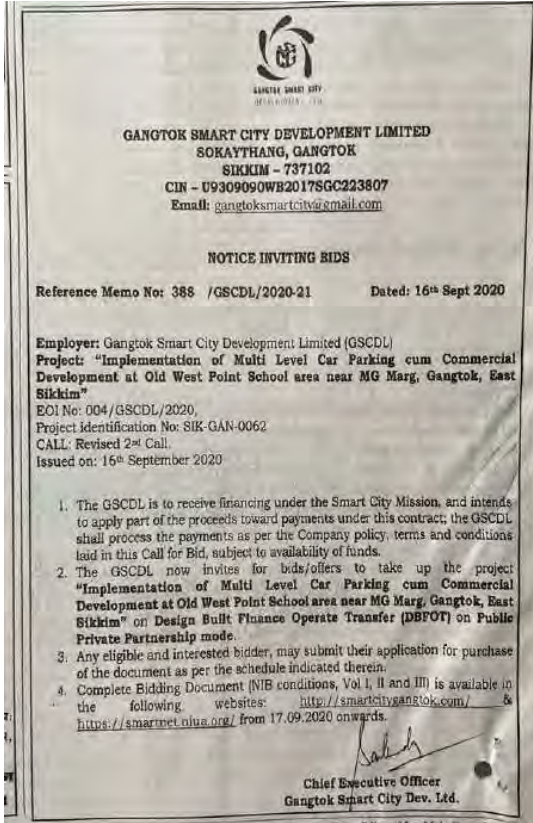
Date: (Signature, name and designation of the Authorised signatory)

Place: Name and seal of Bidder

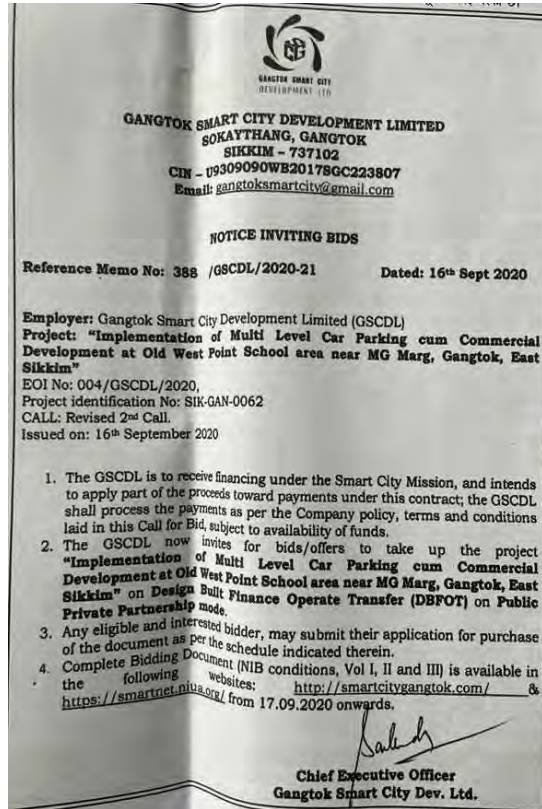
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Annexure 9

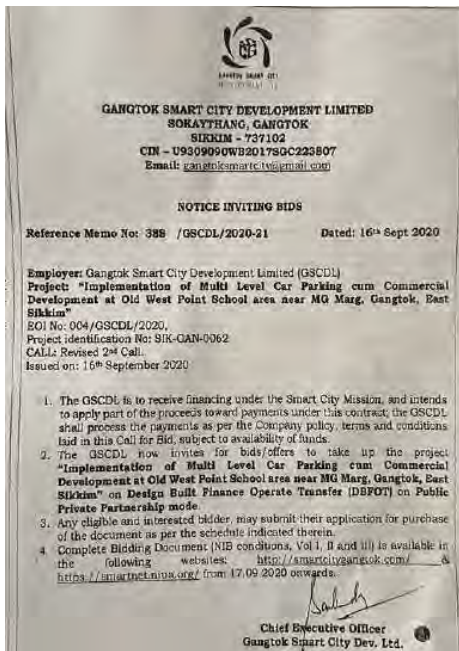
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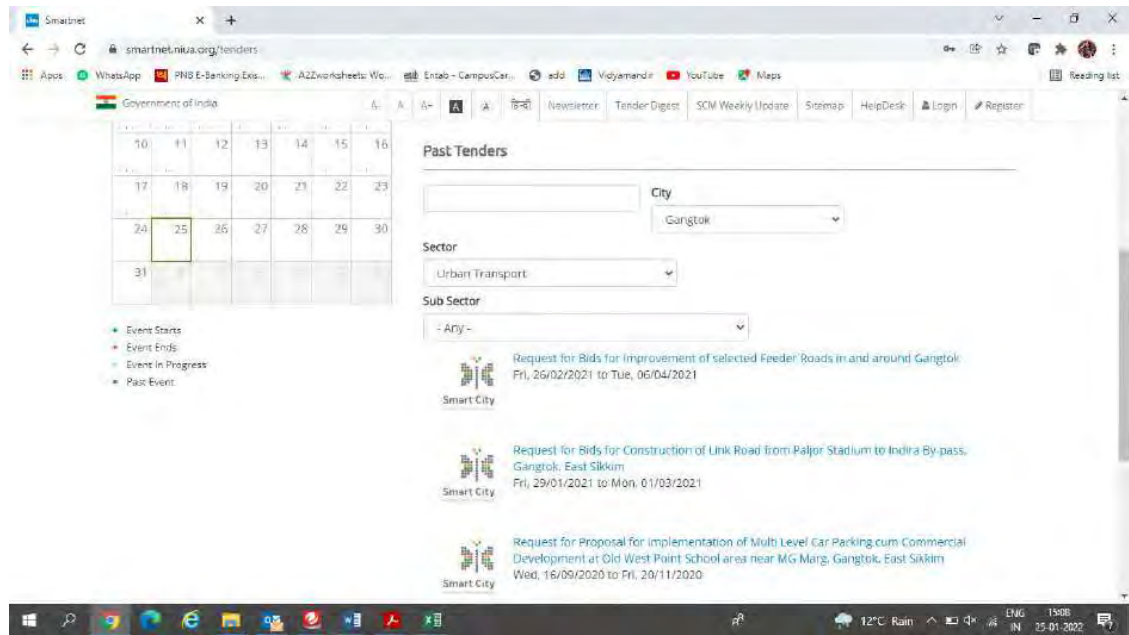


Himali Mulyankan



Sikkim Express

Smartnet



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ANNEXURE R-11

**REPORT ON DETAIL GEOLOGICAL, GEO-TECHNICAL & GEO-  
PHYSICAL INVESTIGATION OF THE LAND PROPOSED FOR  
CONSTRUCTION OF MULTI-LEVEL CAR PARKING CUM PLAZA  
AT OLD WEST POINT SCHOOL COMPLEX (PRESENT TAXI  
STAND) GANGTOK, EAST SIKKIM**



**WORK CARRIED OUT BY:-**

**M/S GEO-INFORMATIC CONSULTANCY & SERVICES  
TADONG, GANGTOK - 737102, Reg. no.32/DCE**

**MARCH 2021**

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**Summary of the report**

The area proposed for construction of multi-level car parking cum plaza is located at Old West Point school Complex, Gangtok, East Sikkim, Geographically the area is located at N 27° 20.310' latitude and E 88° 36.702' longitude at an elevation of 1609 m above mean sea level and it lies on 10 meters South East of Police Headquarter, Gangtok, East Sikkim.

M/S GEO-INFORMATIC CONSULTANCY & SERVICES TADONG, GANGTOK- 737102, Reg. no.32/DCE is entrusted by M/S Trupati Plaza ltd. Gangtok to carry out the detail geological, geo-technical and geo-physical investigation of the land proposed for construction of multi-level car parking cum plaza at Old West Point school Complex, Gangtok, East Sikkim.

Accordingly, Eight (06+02) nos. Boreholes were drilled up to 15m depth in the proposed construction site. The client demarcated the location. As per the samples recovered from drilling, the type of sub-surface strata found are as follows; filling materials, sandy soil mixed with rock fragments were encountered up to depth of 2 meters from existing ground level followed by highly weathered rock garnetiferous mica schist (with and without quartz veins) were encountered in all the locations upto 15meters depth. During conduction of drilling works loss of water has occurred at maximum locations except at BH-06, however core recovery percentage is less due to high degree of weathering in rock mica schist which easily break during rotary drilling, flaky in nature. However at BH-01 the recovery is 47% and at BH-07, 12m-13m highest core recovery is 80%. Few of the recovered core sizes were more than 5cm length, hence testing of



strength in point load test and Brazillian test was done only for seven core samples. The highest point load test strength was found to be 691.20 T/m<sup>2</sup>. However, the least strength obtained is 192 T/M<sup>2</sup>. The Standard Penetration Test (SPT) was also conducted at the weathered strata and safe bearing pressure was estimated using 25mm settlement and 1.5m bottom of footings. The strata having strength more than 30T/M<sup>2</sup> is obtained at 3.0 meter depth, however the strength increases with achieving depth.

Geologically the area falls under medium to high-grade metamorphic rock sequence, represented in the area by garnetiferous mica schist with and without quartz veins, amphibolites bands and underlain by lingtse granitic gneiss occurred as per the regional geo-stratigraphic sequence in the area. The degree of weathering in the country rock is moderate to high. The dip of foliation of the rock is N50<sup>0</sup>E direction and the amount of foliation is 15<sup>0</sup>NE. whereas, the slope facing towards West direction makes the area geologically favourable for construction. The proposed area has uniform and highly weathered rock strata, during drilling no geological anomaly was observed except high degree of weathering.

The thickness of soil in the area is less than 2m depth followed by highly weathered rock GMS/ biotite schist from 2m depth onwards. The area has medium ground water circulation zone leading to high degree of weathering in the underlain country rock mica schist. Country rock is not exposed at proposed location, however at downslope of the area granitic gneiss having horizontal foliation exist.



The soil samples collected from the two different locations were tested by direct shear test method. The soil samples have least cohesion and maximum angle of frictional resistance which is more than  $30^{\circ}$ . The safe bearing capacity of the soil has been estimated and found to be more than  $45\text{T/M}^2$  at 3.0m depth, which is higher than the safe bearing capacity of soil as per IS CODE recommended ( $35\text{T/M}^2$ ) in hilly terrain (detail soil parameters are enclosed).

One electrical resistivity profiling has been conducted along the profile section perpendicular to slope direction. The profile runs from SE to NW thus, reveals that uniform strata exist along the profile section. However, a high-water circulation zone is suspected in the NW boundary of the plot this is due to seepage of household waste water in the area.

Sikkim Himalayas located over young fold mountain and occurrence of seismic event in the region is frequent. The Sikkim state is placed as seismic zone IV –V by Seismic hazard map of India published by Government of India, hence suitable measures to be incorporated to design of the proposed structures.

The BH-07 and BH-08 was drilled by the department of Mines and Geology, government of Sikkim, Gangtok during January 2020 and the drill log data is enclosed in this report for reference only.



**Detail report on Geological, Geo-technical & geo-physical investigation of the land proposed for construction of multi-level Car parking cum Plaza Gangtok, East Sikkim**

**Introduction**

M/S GEO-INFORMATIC CONSULTANCY & SERVICES TADONG, GANGTOK-737102, Reg. no.32/DCE is entrusted by M/S Trupati Plaza Ltd. Gangtok to carry out the detail geological, geo-technical and geo-physical investigation of the land proposed for construction of multi-level car parking cum plaza at Old West Point school Complex, Gangtok, East Sikkim.

Geographically the area is located at N 27° 20.310' latitude and E 88° 36.702' longitude at an elevation of 1609 m above mean sea level and it lies on 10 meters South East of Police Headquarter, Gangtok, East Sikkim.

**Scope of the work**

The main objective of the work is to carry out the 90 meters drilling at 06 numbers of boreholes vertically down up to 15 meters depth or 60% core recovery whichever is earlier. The location of the drilling point was demarcated by the client. The following are the work components.

1. To carry out detail geological mapping of the area.
2. To conduct 90 meters drilling in 06 different locations (vertically down upto 15 meters depth or 60% core recovery) and logging all complete.
3. To conduct one electrical resistivity survey by geo-physical technique along perpendicular to slope direction.
4. Collection of soil samples from two different locations and estimation of soil bearing capacity.



#### GEOLOGY OF THE AREA

Sikkim-Darjeeling Himalayas are Techno-stratigraphically defined by four domains with characteristic stratigraphic and structural attributes. From south to north they are classified as follows:

- i. Foot hill belt
- ii. Inner Belt
- iii. Axial Belt
- iv. Trans-Axial Belt.

The state is mostly covered by Precambrian metamorphic rocks of low to medium grade (Daling Group), high grade gneisses (Darjeeling Gneiss and Kanchendzonga Gneiss), Chungthang Formation (quartzite, calc-silicate rocks, marbles, graphite schists and occasionally amphibolites) with intrusive granites (Lingtse granite gneiss) and Phanerozoic rocks including Gondwana and Tethyan sedimentary. The Paleozoic and Mesozoic (Tethyan) sequence in the northern and north-western part of Sikkim are fossiliferous. The Gondwana super Group consists of sandstone, shale and carbonaceous shale with occasional thin bands of coal and pebbly shale horizon.

Daling group of rocks can be classified into three formations:

- a. Gorubathan Formation: characterized by quartz-chloride-sericite-schists, phyllite and quartzites.
- b. Reyang Formation: characterized by quartzites (occasionally calcareous), phyllite interbanded with carbonaceous slate.
- c. Buxa Formation: characterized by presence of dolomitic limestone, occasionally interbanded with phyllite and development of organo sedimentary structure (stromatolites).

The Kanchendzonga Gneiss comprises mainly of high-grade gneisses. The Chungthang gneiss is a quartz-biotite-gneiss. A streaky sheared granite gneiss known as "Lingtse Gneiss" occur as a NE-SW to N-S trending strip of rocks and forms a general line of separation between the Daling and high grade Kanchendzonga Gneiss. The Tethyan sedimentaries; exposed in the northern part of Sikkim represent Everest Phyllite series (shales/phyllite),



Mount Everest Limestone series, Lachi Formation (conglomerate with thick diamictite base) and Tso-Lhamo Formation (calcareous shale, limestone band, calcareous sandstone).

**Site geology of the area:**

Geologically, the proposed area falls within medium to high grade metamorphic rock formation represented in the area by Garnetiferous Mica Schist and mica schist with quartzite intercalations underlain by a streaky sheared Lingtse Granitic Gneiss/amphibolites bands (black colour). The foliation of the rock strikes NW-SE and dip gently towards North East. The area has moderate to gentle slope gradient with westerly facing slope aspect. The area in consideration has medium to thin soil overburden (upto 2 meters depth maximum) with low groundwater activity.

**GEO-TECHNICAL INVESTIGATION**

**i. Diamond Core Drilling**

Diamond drilling is a form of core drilling which uses a rotary drill with a diamond drill bit mounted to a core barrel which is then connected to the drill stem with barrels of various lengths. In this method, the movement of drilling is vertically down, the drill bit cuts the rock in a rotatory manner and accordingly rock cores are retrieved in the core barrel from various depths in the area.

Accordingly, six numbers of boreholes was drilled at the area on the proposed construction site. The location was demarcated by the client. The Bore hole upto 15m depth was drilled. The following type of sub-surface strata is present as per the samples recovered during the drilling i.e. filling materials sandy soil mixed with rock fragments can be encountered up to depth of 2 meters from existing ground level followed by highly weathered rock garnetiferous mica schist with or without quartz veins encountered in all the locations. The maximum core recovery is along BH-01 depth 8.00m to 9.50meters where 47% of core recovery was obtained. The photo of the core box containing rock samples from various depth in given below in Photo 01.





**Photo 01: core box showing recovered core samples from various depth of Bore hole no.01.**

Accordingly, Standard Penetration Test (SPT) was also carried out simultaneously along with drilling in the area and the safe bearing capacity of the soil samples is as under (details provided in below).



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SITE : Old West Point School Complex, Gangtok, East Sikkim										JOB NO 01		
DRILLING EQUIPMENT: Diamond core drilling with single tube barrel												
DRILLING METHOD: Rotary				DRILLING DIAMETER BX,NX Size						CASING DIAMTER NX Size		
DRILL HOLE NO: O1(BH-01)										R.L.(m): 1605m		
ORIENTATION: Vertical down										Co-ordinates: N27° 19.793',E 88° 36.654'		
Date	From (in m)	To (in m)	Run	Core %	Core %	Wat er loss	Water colour	SPT N60- Value	SBC/stre ngth	Formation		Log
										Remarks	lithology	
26/02/2021	0.00	0.50	0.50	Slush	10%	NO LOSS	Dark Brown			NX Casing	Dark brown colored silty clayey soil overburden.	
27/02/2021	0.50	2.00	1.50	10cm	15%	LOSS	White			NX Casing	Rock boulders intermixed with soil cover	
	2.00	3.50	1.50	33cm	22%	NO LOSS	Brown			NX Casing	Moderately weathered Garnetiferous mica schist	
28/02/2021	3.50	5.00	1.50	32cm	21%	LOSS	White			NX Casing	Moderately weathered Garnetiferous mica schist	
	5.00	6.50	1.50	93cm	25%	LOSS	White			NX Barrel	Moderately weathered Garnetiferous mica schist	
01/03/2021	6.50	8.00	1.50	65cm	43%	LOSS	White		192 T/m <sup>2</sup>	Casing Rib	Moderately weathered Garnetiferous mica schist	
02/03/2021	8.00	9.50	1.50	70cm	47%	LOSS	White			NX Barrel	Moderately weathered Garnetiferous mica schist with quartz veins	
03/03/2021	9.50	11.00	1.50	50cm	33%	LOSS	White			NX Barrel		
	11.00	12.50	1.50	Slush (28cm)		LOSS	White	30	86T/M <sup>2</sup>	NX Barrel		
04/03/2021	12.50	14.00	1.50	15cm	21%	NO LOSS	White			NX Barrel	highly weathered Garnetiferous mica schist with quartz veins	
	14.00	15.00	1.00	11cm	18%	NO LOSS	White			NX Barrel		



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SITE : Old West Point School Complex, Gangtok, East Sikkim										JOB NO 02		
DRILLING EQUIPMENT: Diamond core drilling with single tube barrel												
DRILLING METHOD: Rotary				DRILLING DIAMETER BX,NX Size				CASING DIAMTER NX Size				
DRILL HOLE NO: 02(BH-02)										R.L.(m): 1609m		
ORIENTATION: Vertical down					Co-ordinates: N27° 19.701', E 88° 36.665'							
Date	From (in m)	To (in m)	Run	Sample type	Sample length( SPT)	Water loss	Water colour	SPT N60 Value	SBC/strengt h	Formation		Log
										Remarks	Lithology	
05/03/2021	0.00	0.50	0.50	Slush	21cm	NO LOSS	Dark Brown	8	7.7T/M <sup>2</sup>	NX Casing	Dark brown colored silty clayey soil overburden.	
	0.50	2.00	1.50	Slush	30cm	NO LOSS	White	9	9.5T/M <sup>2</sup>	NX Casing	Rock boulders intermixed with soil cover	
	2.00	3.50	1.50	Slush	18cm	NO LOSS	Brown	12	14.9T/M <sup>2</sup>	NX Casing	Moderately weathered Garnetiferous mica schist	
	3.50	5.00	1.50	Slush	12cm	NO LOSS	Brown	29	44.5T/M <sup>2</sup>	NX Casing	Moderately weathered Garnetiferous mica schist	
	5.00	6.50	1.50	Slush	13cm	LOSS	Brown	26	47.3T/M <sup>2</sup>	NX Barrel	Moderately weathered Garnetiferous mica schist	
06/03/2021	6.50	8.00	1.50	Slush /core	15cm	NO LOSS	Brown	22	48.2T/M <sup>2</sup>	Casing Rlb	Moderately weathered Garnetiferous mica schist	
06/03/2021	8.00	9.50	1.50	Slush	27cm	NO LOSS	Brown	30	71.8T/M <sup>2</sup>	NX Barrel	Moderately weathered Garnetiferous mica schist with quartz veins	
07/03/2021	9.50	11.00	1.50	Slush	24cm	NO LOSS	Brown	30	83.2T/M <sup>2</sup>	NX Barrel	Moderately weathered Garnetiferous mica schist with quartz veins	
	11.00	12.50	1.50	Slush	12cm	NO LOSS	Brown	29	86.0T/M <sup>2</sup>	NX Barrel	Moderately weathered Garnetiferous mica schist with quartz veins	
08/03/2021	12.50	14.00	1.50	Slush	17cm	NO LOSS	Brown	36	120.5T/M <sup>2</sup>	NX Barrel	Weathered Garnetiferous mica schist with quartz veins	
	14.00	15.00	1.00	Slush	15cm	NO LOSS	Brown	40	141.5T/M <sup>2</sup>	NX Barrel		



SITE : Old West Point School Complex, Gangtok, East Sikkim										JOB NO 03		
DRILLING EQUIPMENT: Diamond core drilling with single tube barrel												
DRILLING METHOD: Rotary				DRILLING DIAMETER EX,NX Size				CASING DIAMETER NX Size				
DRILL HOLE NO: 03(BH-03)										R.L.(m): 1609m		
ORIENTATION: Vertical down										Co-ordinates: N27° 19.800', E 88° 36.672'		
Date	From (in m)	To (in m)	Run	Core	Sample length	Water loss	Water colour	SPT N60- Value	SBC/stren- gth	Formation		Log
										Remarks	Lithology	
09/03/2021	0.00	0.50	0.50	Slush	21cm	NO LOSS	Dark Brown	-		NX Casing	Dark brown colored silty clayey soil overburden.	
	0.50	2.00	1.50	Slush	18cm	NO LOSS	Brown	23	22.1T/M <sup>2</sup>	NX Casing	Highly weathered mica schist	
	2.00	3.50	1.50	Slush	30cm	NO LOSS	Brown	15	18.7T/M <sup>2</sup>	NX Casing	Highly weathered mica schist	
10/03/2021	3.50	5.00	1.50	Slush	16cm	NO LOSS	Brown	24	36.8T/M <sup>2</sup>	NX Casing	Highly weathered mica schist	
	5.00	6.50	1.50	Slush	20cm	NO LOSS	Brown	30	54.6T/M <sup>2</sup>	NX Barrel	Highly weathered Garnetiferous mica schist	
	6.50	8.00	1.50	Slush	32cm	LOSS	Brown	16	33.7T/M <sup>2</sup>	Casing Rib	Highly weathered Garnetiferous mica schist	
11/03/2021	8.00	9.50	1.50	Slush	26cm	LOSS	Brown	15	35.9T/M <sup>2</sup>	NX Barrel	Highly weathered Garnetiferous mica schist with quartz veins	
	9.50	11.00	1.50	Slush	19cm	LOSS	Brown	25	66.9T/M <sup>2</sup>	NX Barrel	Moderately weathered Biotite schist	
	11.00	12.50	1.50	core	14cm	LOSS	Brown	-		NX Barrel	Fresh rock Biotite schist	
12/03/2021	12.50	14.00	1.50	Slush	22cm	LOSS	Brown	30	97.5T/M <sup>2</sup>	NX Barrel	Highly weathered mica schist	
	14.00	15.00	1.00	Slush	23cm	LOSS	Brown	24	84.9T/M <sup>2</sup>	NX Barrel		



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SITE : Old West Point school complex, Gangtok, East Sikkim										JOB NO 04		
DRILLING EQUIPMENT: Diamond core drilling with single tube barrel												
DRILLING METHOD: Rotary				DRILLING DIAMETER BX,NX Size						CASING DIAMTER NX Size		
DRILL HOLE NO: 04(Bh-04)										R.L.(m): 1609m		
ORIENTATION: Vertical down										Co-ordinates: N27° 19.790',E 88° 36.684'		
Date	From (in m)	To (in m)	Run	Sample type	Sample length	Water loss	Water colour	SPT N60- Value	SBC/strengt h	Formation		Log
										Remarks	Lithology	
14/03/2021	0.00	0.50	0.50	Slush	21cm	NO LOSS	Dark Brown	24	23.1T/M <sup>2</sup>	NX Barrel	Dark brown colored silty clayey soil overburden.	
	0.50	2.00	1.50	Slush	42cm	NO LOSS	Brown	17	17.9T/M <sup>2</sup>	NX Barrel	Light brown colour Parent soil.	
	2.00	3.50	1.50	Slush	26cm	NO LOSS	Brown	18	22.4T/M <sup>2</sup>	NX Barrel	Highly weathered Mica Schist	
	3.50	5.00	1.50	Slush	32cm	NO LOSS	Brown	20	30.7T/M <sup>2</sup>	NX Barrel	Highly weathered Mica Schist	
15/03/2021	5.00	6.50	1.50	core	14%	LOSS	Brown			NX Barrel	Highly weathered Garnetiferous Mica Schist with quartz veins	
	6.50	8.00	1.50	core	08%	LOSS	Brown			Casing Rib	Highly weathered Garnetiferous Mica Schist with quartz veins	
	8.00	9.50	1.50	core	07%	LOSS	Brown			NX Barrel	Moderately weathered Mica Schist with quartz veins	
16/03/2021	9.50	11.00	1.50	core	07%	LOSS	Brown			NX Barrel	Highly weathered Garnetiferous mica schist	
17/03/2021	11.00	12.50	1.50	Slush	-	LOSS	Brown	32	94.9T/M <sup>2</sup>	NX Barrel	Highly weathered Mica schist	
	12.50	14.00	1.50	Slush	-	LOSS	Brown	24	78.0T/M <sup>2</sup>	NX Barrel	Highly weathered Mica schist	
	14.00	15.00	1.00	Slush	-	LOSS	Brown	30	106.1T/M <sup>2</sup>	NX Barrel	Highly weathered Mica schist	



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SITE : Old West Point school complex, Gangtok, East Sikkim										JOB NO 05		
DRILLING EQUIPMENT: Diamond core drilling with single tube barrel												
DRILLING METHOD: Rotary				DRILLING DIAMETER BX,NX Size				CASING DIAMTER NX Size				
DRILL HOLE NO: 05(Bh-05)										R.L.(m): 16012m		
ORIENTATION: Vertical down										Co-ordinates: N27° 19.792', E 88° 36.685'		
Date	From (in m)	To (in m)	Run	Sample type	Sample length	Wat er loss	Core recy. %	SPT N60- Value	SBC/strengt h	Formation		Log
										Rema rks	Lithology	
21/03/2021	0.00	0.50	0.50	Core	25cm	LOSS	18%			NX Barrel	Rock fragments/boulders	
22/03/2021	0.50	2.00	1.50	Slush	42cm	LOSS		14	17.48T/M <sup>2</sup>	NX Barrel	Highly weathered rock mica schist	
	2.00	3.50	1.50	Slush	26cm	LOSS		23	33.11T/M <sup>2</sup>	NX Barrel	Highly weathered Mica Schist	
	3.50	5.00	1.50	core	40cm	LOSS	22%		422.4T/M <sup>2</sup>	NX Barrel	Highly weathered Garnetiferous Mica Schist	
23/03/2021	5.00	6.50	1.50	core	50cm	LOSS	31%			NX Barrel	Highly weathered Garnetiferous Mica Schist	
	6.50	8.00	1.50	core	41cm	LOSS	23%			NX Barrel	Highly weathered Mica Schist with quartz veins	
24/03/2021	8.00	9.50	1.50	core	20cm	LOSS	18%			NX Barrel	Highly weathered Mica Schist with quartz veins	
	9.50	11.00	1.50	core	35cm	LOSS	24%			NX Barrel	moderately weathered Mica Schist (muscovite)	
25/03/2021	11.00	12.00	1.00	Slush	38cm	LOSS	33%			NX Barrel	Casing Jam onwards depth	



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SITE : Old West Point school complex, Gangtok, East Sikkim										JOB NO 06		
DRILLING EQUIPMENT: Diamond core drilling with single tube barrel												
DRILLING METHOD: Rotary				DRILLING DIAMETER BX,NX Size						CASING DIAMTER NX Size		
DRILL HOLE NO: 06(Bh-06)										R.L.(m): 1615m		
ORIENTATION: Vertical down										Co-ordinates: N27° 19.793',E 88° 36.686'		
Date	From (in m)	To (in m)	Run	Sample type	Sample length	Water loss	Water colour	SPT N60- Value	SBC/strengt h	Formation		Log
										Remarks	Lithology	
28/03/2021	0.00	0.50	0.50	core	27%	LOSS				NX Barrel	Rock fragments/boulders	
	0.50	2.00	1.50	core	29%	LOSS				NX Barrel	Rock fragments/boulders .	
29/03/2021	2.00	3.50	1.50	Slush	27cm	NO LOSS	Brown	15	15.83T/M <sup>2</sup>	NX Barrel	Highly weathered rock GMS	
	3.50	5.00	1.50	Slush	22cm	NO LOSS	Brown	29	35.86T/M <sup>2</sup>	NX Barrel	Highly weathered rock GMS	
29/03/2021	5.00	6.50	1.50	Slush	27cm	NO LOSS	Brown	29	56.33T/M <sup>2</sup>	NX Barrel	Highly weathered rock GMS	
	6.50	8.00	1.50	Slush	30cm	NO LOSS	Brown	26	55.06T/M <sup>2</sup>	Casin g Rib	Highly weathered rock GMS	
	8.00	9.50	1.50	Slush	19cm	NO LOSS	Brown	18	43.93T/M <sup>2</sup>	NX Barrel	Highly weathered rock GMS	
30/03/2021	9.50	11.00	1.50	Slush	18cm	NO LOSS	Brown	28	74.92T/M <sup>2</sup>	NX Barrel	Highly weathered rock GMS	
30/03/2021	11.00	12.50	1.50	Slush	22cm	NO LOSS	Brown	21	66.29T/M <sup>2</sup>	NX Barrel	Highly weathered rock GMS	
	12.50	14.00	1.50	core	12%	NO LOSS	Brown			NX Barrel	Amphibolites band black colour	
	14.00	15.00	1.00	Slush	15cm	NO LOSS	Brown	19	67.28T/M <sup>2</sup>	NX Barrel	Highly weathered rock GMS	



SITE : Old West Point School Complex, Gangtok, East Sikkim (Front of the school building)(BH-07)											
DRILLING EQUIPMENT: Diamond core drilling with double					Co-ordinates: E 27° 19'47.96" latitude N 88° 36'39.77" longitude						
DRILLING METHOD: Rotary				DRILLING DIAMETER/ CASING DIAMETER NX Size BX, NX Size					R.L.(m): 1606m		
DRILL HOLE NO: 07				ORIENTATION: Vertical down					LITHOLOGY		
Date	From (in m)	To (in m)	Total Run	Drillin g log	Core recovery length(m)	Core recover y %	Water loss	RQD	Strength(T/M <sup>2</sup> )	SPT N- Value	
31/01/2020	0.00	1.50	1.50		0	0%	No loss	-	13.84	16	Light brown clayey soil.
1/02/2020	1.50	3.00	1.50		0	0%	No loss	-	20.15	18	Light brown silty soil.
1/02/2020	3.00	4.50	1.50		0.10	6%	No loss	<25%	-	core	Garnetiferrous Mica Schist with quartz viens.
2/02/2020	4.50	6.00	1.50		0.15	10%	No loss	<25%	-	core	
2/02/2020	6.00	7.50	1.50		0.10	6%	No loss	<25%	-	core	
3/02/2020	7.50	9.00	1.50		0.40	26%	No loss	>50%	-	core	
3/02/2020	9.00	10.50	1.50		1.10	73%	100%	>50%	70.10T/m <sup>2</sup> & 115.20T/m <sup>2</sup>	core	Moderately weathered Garnetiferrous Mica Schist.
4/02/2020	10.50	12.00	1.50		0.77	51%	100%	>50%	121.00T/m <sup>2</sup> & 96.00 /m <sup>2</sup>	core	
5/02/2020	12.00	13.00	1.00		0.80	80%	100%	<25%	-	core	Highly weathered Garnetiferrous Mica Schist
7/02/2020	13.00	14.00	1.00		0.50	50%	100%	<25%	-	core	
7/02/2020	14.00	15.00	1.00		0.55	55%	100%	<25%	-	core	

Data Source: Mines & Geology Report.



SITE : Old West Point School Complex, Gangtok, East Sikkim. (Behind School Building)(BH-08)											
DRILLING EQUIPMENT: Diamond core drilling with double tube barrel					Co-ordinates: E 27° 19'48.19" latitude N 88° 36'38.92" longitude,						
DRILLING METHOD: Rotary					DRILLING DIAMETER/ CASING DIAMETER NX Size BX,NX Size				R.L.(m): elevation 1604m		
DRILL HOLE NO: 08					ORIENTATION: Vertical down				LITHOLOGY		
Date	From (in m)	To (in m)	Total Run	Drilling log	Core recovery length(m)	Core recovery %	Water loss	RQD	Strength(T/M <sup>2</sup> )	SPT N-Value	
10/02/2020	0.00	1.50	1.50		0	0%	No loss	-	6.92	8	Micaceous silty soil.
11/02/2020	1.50	3.00	1.50		0	0%	No loss	-	11.51	10	Micaceous silty soil.
11/02/2020	3.00	4.50	1.50		0	0%	No loss	<25%	46.50	28	Highly weathered Garnetiferrous Mica Schist.
11/02/2020	4.50	6.00	1.50		0	0%	No loss	<25%	22.13	12	Highly weathered Garnetiferrous Mica Schist.
12/02/2020	6.00	7.50	1.50		0	0%	100%	<25%	-	core	Garnetiferrous Mica schist with quartz veins.
13/02/2020	7.50	9.00	1.50		0.60	40%	100%	<25%	331.20T/m <sup>2</sup> & 345.60 T/m <sup>2</sup>	core	
13/02/2020	9.00	10.50	1.50		0.80	53%	100%	>50%	-	core	Fresh Garnetiferrous Mica Schist with quartz veins.
14/02/2020	10.50	12.00	1.50		0.43	28%	100%	>50%	-	core	
15/02/2020	12.00	13.50	1.50		0.50	33%	100%	<50%	-	core	Moderately weathered Garnetiferrous mica schist.
16/02/2020	13.50	15.00	1.50		0.40	26%	100%	>50%	-	core	Moderately weathered Garnetiferrous mica schist underlain by fresh Garnetiferrous mica schist.

Data source: Mines & Geology report.



### **ESTIMATION OF SAFE BEARING PRESSURE (N value obtained during drilling)**

N-value observed in the field is corrected according to the following relation

$$N_{60} = N * C_s * C_R * C_b * E_m / 60$$

Where:

$N_{60}$  = Standard penetration number corrected for field conditions to an average energy ratio 60%.

N = measured penetration number

$C_s$  = correction for sampler

$C_R$  = Correction for rod length

$C_b$  = correction for borehole diameter

$E_m$  = hammer efficiency in percent

$N_{60}$  obtained in this manner is corrected again for overburden pressure as given below:

$$(N_1)_{60} = [100/P'_0]^{0.5} N_{60}$$

$(N_1)_{60}$  = N value corrected for both field testing procedures and overburden pressure.

$P'_0$  = effective overburden pressure, kN/m<sup>2</sup>

Corrected values of N are given in Table -1.

Net allowable bearing pressure of a footing of width 3m, placed at 3m below the ground level, is calculated from the following relation:

$$q_a = 11.98 N_{60} \left( \frac{3.28B + 1}{3.28B} \right)^2 K_d R_w (S_c / 25)$$

Where:

$$K_d = (1 + 0.33d_f / B) \leq 1.33$$

$d_f$  = depth of foundation, m

B = width of foundation, m

$R_w$  = correction factor

$S_c$  = settlement, mm

$q_a$  = net allowable bearing pressure, T/m<sup>2</sup>

The value of  $R_w$  equals to 0.5 is considered.



$q_{net\ allowable}$  for 1.50m sizes of footings are calculated for 25 mm settlement and placed in table 2., the allowable bearing pressure is calculated from N60 i.e corrected penetration value from field, further considering overburden pressure the N 1(60) is also obtained and can be calculated from above relations.

If the tolerable settlement is other than 25 mm, say  $S_a$  (mm), the  $q'_{net\ allowable}$  can be obtained from

$$q'_{net\ allowable} = q_{net\ allowable} \cdot S_a / 25$$

BH-No.	Depth in meters		Allowable bearing pressure with 1.5mX 1.5 bottom of footing having settlement 25mm
BH-01	11.00M-12.50M		86.00T/M <sup>2</sup>
BH-02	0.00m	0.50m	7.7T/M <sup>2</sup>
BH-02	0.50m	2.00m	9.5T/M <sup>2</sup>
BH-02	2.00m	3.50m	14.9T/M <sup>2</sup>
BH-02	3.50m	5.00m	44.5T/M <sup>2</sup>
BH-02	5.00m	6.50m	47.3T/M <sup>2</sup>
BH-02	6.50m	8.00m	48.2T/M <sup>2</sup>
BH-02	8.00m	9.50m	71.8T/M <sup>2</sup>
BH-02	9.50m	11.00m	83.2T/M <sup>2</sup>
BH-02	11.00m	12.50m	86.0T/M <sup>2</sup>
BH-02	12.50m	14.00m	120.5T/M <sup>2</sup>
BH-02	14.00m	15.00m	141.5T/M <sup>2</sup>
BH-03	0.00m	0.50m	22.1T/M <sup>2</sup>
BH-03	0.50m	2.00m	18.7T/M <sup>2</sup>
BH-03	2.00m	3.50m	36.8T/M <sup>2</sup>
BH-03	3.50m	5.00m	54.6T/M <sup>2</sup>
BH-03	5.00m	6.50m	33.7T/M <sup>2</sup>



BH-03	6.50m	8.00m	35.9T/M <sup>2</sup>
BH-03	8.00m	9.50m	66.9T/M <sup>2</sup>
BH-03	11.00m	12.50m	97.5T/M <sup>2</sup>
BH-03	12.50m	14.00m	84.9T/M <sup>2</sup>
BH-03	14.00m	15.00m	22.1T/M <sup>2</sup>
BH-04	0.00m	0.50m	23.1T/M <sup>2</sup>
BH-04	0.50m	2.00m	17.9T/M <sup>2</sup>
BH-04	2.00m	3.50m	22.4T/M <sup>2</sup>
BH-04	3.50m	5.00m	30.7T/M <sup>2</sup>
BH-04	12.50m	14.00m	94.9T/M <sup>2</sup>
BH-04	14.00m	15.00m	78.0T/M <sup>2</sup>
BH-05	1.50m	2.00m	17.48T/M <sup>2</sup>
BH-05	3.50m	5.00m	33.11T/M <sup>2</sup>
BH-06	2.00m	3.50m	15.83T/M <sup>2</sup>
BH-06	3.50m	5.00m	35.86T/M <sup>2</sup>
BH-06	5.00m	6.50m	56.33T/M <sup>2</sup>
BH-06	6.50m	8.00m	55.06T/M <sup>2</sup>
BH-06	8.00m	9.50m	43.93T/M <sup>2</sup>
BH-06	9.50m	11.00m	74.92T/M <sup>2</sup>
BH-06	11.00m	12.50m	66.29T/M <sup>2</sup>
BH-06	14.00m	15.00m	67.28T/M <sup>2</sup>



### **Geo-physical investigation (2D-Electrical Resistivity Tomography)**

Electrical resistivity determination is usually made by injecting a specified amount of electric current through a pair of electrodes and with the aid of a pair of potential electrodes. The potential difference between any two points at the surface caused by the flow of the electric current in the sub-surface is measured. From the measured current (I) and the voltage (V) values, the ensuing resistivity is determined.

The approach of geophysical study is to reveal the sub-surface characteristics materials based on the subsurface geology and hydrological conditions. Geophysical investigation provides us the in-situ subsurface conditions, which can be translated into geo-technical information, which provides complete understanding of physical behavior of a sub-surface geology. Feasibility of various direct and indirect geophysical techniques resolve details of sub-surface masses present there on, such as movement of ground water, thickness, relief of bed rock, water saturated zone (Bogoslovsky et al.1977; Mills.1990; Caris and Van Asch,1991; Hermann et al. 2000). Recently, the role of Electrical Resistivity Tomography (ERT) or electrical imaging (I.B osazuwa and E. ChiiChii 2010) in Lake Investigations is on wide practice, due to cost, time and other parameters.

Electrical resistivity surveys with vertical electrical soundings (Schlumberger method) which provides characteristics of sub surface layer, depths and resistivities at a single place. Furthermore 2D resistivity imaging techniques provide 2D and even 3D high resolution electrical images of sub surfaces (Griffiths and Baker 1993).

#### **Objectives:**

- 1. To investigate the sub-surface water activity, if any.**
- 2. Thickness of overburden in the area.**
- 3. Type of materials present/inferred geological condition.**



#### 4. Approximate Depth of rock and their physical properties.

##### Methodology:

##### Electrical Resistivity Tomography Method

Two-dimensional (2D) electrical imaging surveys are widely used to map areas of moderately complex geology where conventional resistivity sounding and profiling techniques are inadequate. The data from such surveys are plotted in the form of a pseudo-section which gives an approximate and sub-surface geology is slightly distorted. The data collected in saturated zone of study areas were interpreted by 2D Resistivity Imaging software. Integrated Geo-Instrumentation Service resistivity meter model **SSR-MP1**, is used to obtain the resistivity data to reasonable depths of 20- 30 m (depth of investigation depends on local geological conditions) from the ground surface. For a good lateral, vertical and horizontal resolution, **hybrid Wenner-Schlumberger profiling is preferred**. Multi-electrode Resistivity imaging techniques were used in the area. A GARMIN made GPS was used for the position location of electrodes along the profile.

Resistivity data were collected using **Wenner-Schlumberger** (Vertical Electrical Sounding) array configuration with electrode separation 2-5 m. Topographic corrections and 2D inversion model were carried out using **Res2Divin of GEOTOMO Software**. This resistivity inversion software based on the least - square method proposed by Locke and Barker (1996) is used during the investigation. In all inversion 5 attempts of iteration was kept.

one number of resistivity tomography profile were carried out in the area, PS 01 – PS 01' was carried along SE-NW direction perpendicular to the slope direction (marked slope forming materials map). The adopted contour color code provides the key information on parameters of deposited material like presence of low resistivity saturated sandy soil horizons and the depth of bed rock.



Tentative true resistivity versus sub-surface depth is inferred from geological literature (Telford et al.1990). The data so obtained are used in the preparation of subsurface lithological sections along each profile and also inferred geohydrological regimes were carried out. The details of inferred sub-surface strata and tomography are described in details which are given below.

**Profile section (PS01-PS01'):**

**Site Geology:** Medium thick soil overburden underlain by highly weathered mica schist rock and its variants are inferred in PS01-PS01'. The depth wise inferred geology is formulated in the table1.

**Results and analysis of Geophysical observations:**

Multi-electrode resistivity survey with Schlumberger-Wenner array was carried out in profile section, PS01-PS01', the first electrode is placed at location 0.00 meter of section. (Geographically it is located at N27<sup>0</sup> 19.789' latitude E88<sup>0</sup> 36.660' at an elevation of 1609 m amsl). The direction of the profile section runs SE-NW from the first electrode. The last electrode was placed at a distance at 70 meters, geographically it is located at N27<sup>0</sup> 19.822' latitude to E88<sup>0</sup> 36.649' longitude at an elevation of 1604 m amsl) (profile section 01-01'), to delineate probable sub-surface geology. Observation from 2D-inversion resistivity in the profile section 01-01' shows that the top layer consists of highly weathered mica schist rock followed by moderately weathered mica schist rock. Groundwater circulation zone exists between 34-67m horizontal distance with depth between 2m to 16 m(average) as seen in the tomography.



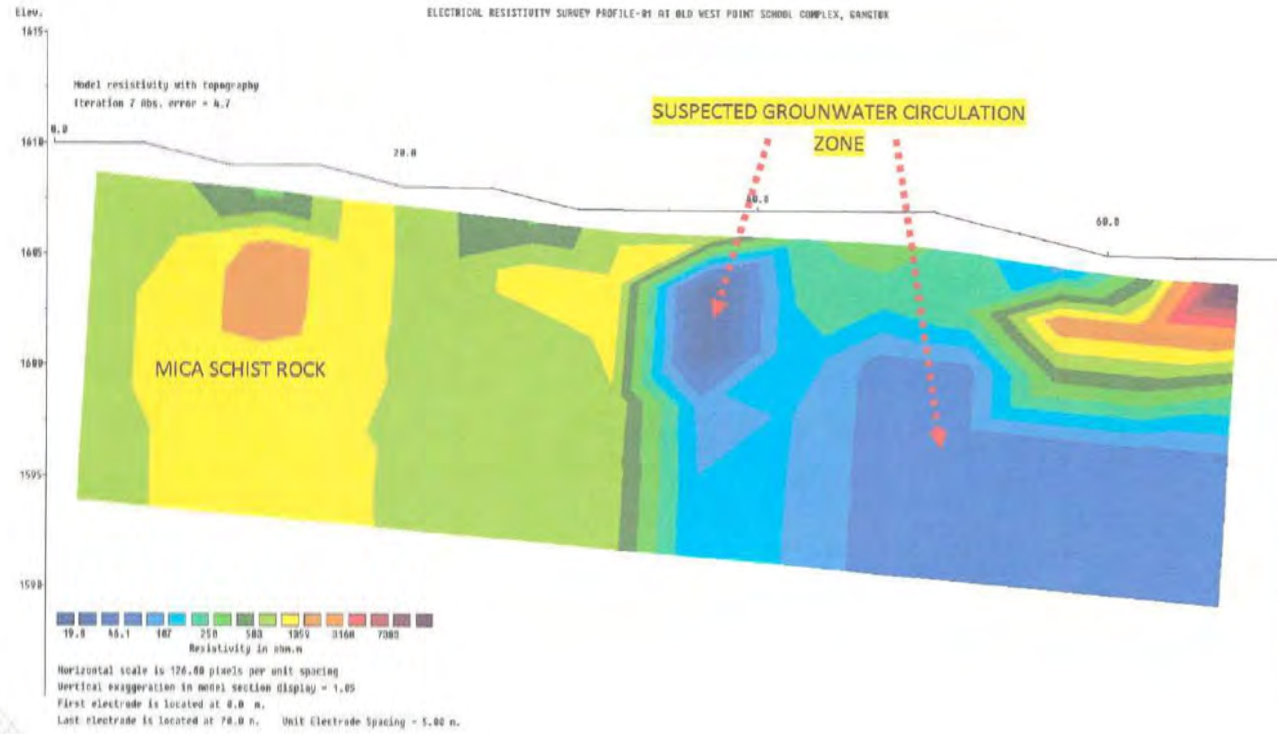


Table: 1 showing the inferred geology of sub-surface at PS-01 to PS-01'.

Sl. No.	PS01-PS01' (0.0mts.-70mts.)	Depth (m)	Resistivity(ohm-meter)	Inferred geology/type of materials Present
1	0m - 3m	-	-	Field Data Gap(no information)
2	3m - 5m	0m -16m	500 Ωm-600 Ωm	Moderately saturated mica schist rock.
3	5m - 8m	0m - 3m	500 Ωm-600 Ωm	Moderately saturated mica schist rock.
		3m - 16m	900 Ωm-1200 Ωm	Highly weathered mica schist rock.
4	8m - 15m	0m - 2.5m	300 Ωm-500 Ωm	Highly saturated mica schist rock
		2.5m - 3m	500 Ωm-600 Ωm	Moderately saturated mica schist rock
		3m - 4m	900 Ωm-1200 Ωm	Highly weathered mica schist rock.
		4m - 7.5m	1500 Ωm-3000 Ωm	Moderately weathered mica schist rock.
		7.5m-16m	900 Ωm-1200 Ωm	Highly weathered mica schist rock.
5	15m - 16m	0m - 2.5m	500 Ωm-600 Ωm	Moderately saturated mica schist rock.
		2.5m - 16m	900 Ωm-1200 Ωm	Highly weathered mica schist rock.
6	16m - 19m	0m-16m	900 Ωm-1200 Ωm	Highly weathered mica schist rock.
7	19m - 23m	0m -16m	500 Ωm-600 Ωm	Moderately saturated mica schist rock.
8	23m - 25m	0m-2.5m	300 Ωm-500 Ωm	Highly saturated mica schist rock.
		2.5m - 16m	500 Ωm-600 Ωm	Moderately saturated mica schist rock.
9	25m - 30m	0m - 2m	200 Ωm-500 Ωm	Highly saturated mica schist rock.
		2m-3m	1000 Ωm-1500 Ωm	Highly weathered mica schist rock.
		3m-7m	1500 Ωm-3000 Ωm	Moderately weathered mica schist
		7m-16m	1000 Ωm-1500 Ωm	Highly weathered mica schist rock.
7	30m - 32m	0m -3m	1000 Ωm-1500 Ωm	Highly weathered mica schist rock.
		3m - 7m	1500 Ωm-3000 Ωm	Moderately weathered mica schist
		7m-16m	1000 Ωm-1500 Ωm	Highly weathered mica schist rock.
8	32m - 34m	0m -1m	1000 Ωm-1500 Ωm	Highly weathered mica schist rock.
		1m-2.5m	1500 Ωm-3000 Ωm	Moderately weathered mica schist
		2.5m - 16m	200 Ωm-500 Ωm	Highly saturated mica schist rock.
9	34m - 41m	0m - 2m	200 Ωm-500 Ωm	Highly saturated mica schist rock.
		2m-16m	20 Ωm-200 Ωm	Groundwater circulation zone between 2m-7m depth surrounded by highly saturated weathered flaky materials composed of micaceous rock.
10.	41m -46m	0m-16m	200 Ωm-300 Ωm	Highly saturated weathered flaky mica schist.



11.	46m-50m	0m-2.5m	200 Ωm-500 Ωm	<i>Highly saturated mica schist rock.</i>
		2.5m-6m	200 Ωm-300 Ωm	<i>Highly saturated weathered flaky mica schist.</i>
		6m-16m	<b>20 Ωm-100 Ωm</b>	<b><i>Highly saturated micaceous rock</i></b>
12.	50m-52m	0m-5m	200 Ωm-300 Ωm	<i>Highly saturated weathered flaky mica schist.</i>
		5m-16m	<b>20 Ωm-100 Ωm</b>	<b><i>Highly saturated micaceous rock</i></b>
13.	52m-56m	0m-3m	200 Ωm-300 Ωm	<i>Highly saturated weathered silty soil.</i>
		3m-6m	200 Ωm-500 Ωm	<i>Highly saturated mica schist rock.</i>
		6m-7.5m	200 Ωm-300 Ωm	<i>Highly saturated weathered flaky mica schist.</i>
		7.5m-16m	<b>20 Ωm-100 Ωm</b>	<b><i>Highly saturated micaceous rock</i></b>
14.	56m-60m	0m-2.5m	200 Ωm-300 Ωm	<i>Highly saturated weathered silty soil.</i>
		2.5m-3m	200 Ωm-500 Ωm	<i>Highly saturated mica schist rock.</i>
		3m-5m	900 Ωm-3000 Ωm	<i>Highly weathered mica schist rock intermixed with moderately weathered rock.</i>
		5m-7m	200 Ωm-500 Ωm	<i>Highly saturated mica schist rock.</i>
		7m-8m	200 Ωm-300 Ωm	<i>Highly saturated weathered flaky mica schist.</i>
		8m-16m	<b>20 Ωm-100 Ωm</b>	<b><i>Highly saturated micaceous rock</i></b>
14.	60m-63m	0m-3m	200 Ωm-500 Ωm	<i>Highly saturated mica schist rock.</i>
		3m-5m	900 Ωm-3000 Ωm	<i>Highly weathered mica schist rock intermixed with moderately weathered rock.</i>
		5m-6m	200 Ωm-500 Ωm	<i>Highly saturated mica schist rock.</i>
		6m-8m	200 Ωm-300 Ωm	<i>Highly saturated weathered flaky mica schist.</i>
		8m-16m	<b>20 Ωm-100 Ωm</b>	<b><i>Highly saturated micaceous rock</i></b>
15.	63m-65m	0m-4m	200 Ωm-500 Ωm	<i>Highly saturated mica schist rock.</i>
		4m-5m	1000 Ωm-1500 Ωm	<i>Highly weathered mica schist rock.</i>
		5m-6m	200 Ωm-500 Ωm	<i>Highly saturated mica schist rock.</i>
		6m-9m	200 Ωm-300 Ωm	<i>Highly saturated weathered flaky mica schist.</i>
		9m-16m	<b>20 Ωm-100 Ωm</b>	<b><i>Highly saturated micaceous rock</i></b>
16.	65m-67m	0m-3m	7000 Ωm-8000 Ωm	<i>Mica schist with low density of quartz veins.</i>
		3m-4m	200 Ωm-500 Ωm	<i>Highly saturated mica schist rock.</i>
		4m-5m	1000 Ωm-1500 Ωm	<i>Highly weathered mica schist rock.</i>
		5m-7m	1500 Ωm-3000 Ωm	<i>Moderately weathered mica schist rock.</i>
		7m-9m	200 Ωm-300 Ωm	<i>Highly saturated weathered flaky mica schist.</i>
		9m-16m	<b>20 Ωm-100 Ωm</b>	<b><i>Highly saturated micaceous rock</i></b>
17.	67m-70m	-	-	<i>Field Data Gap(no information)</i>





PHOTO;- DRILLING UNDER PROGRESS AT LOCATION BH-05.



PHOTO;- CORE RECOVERY AT BH-01 LOCATION.

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PHOTO; - CORE RECOVERY AT LOCATION BH-02.



FIG;- CORE RECOVERY AT LOCATION BH-03.



FIG;- CORE RECOVERY AT LOCATION BH-04.





FIG;- CORE RECOVERY AT LOCATION BH-05.



Photo;- Selec on of core recovery samples for laboratory tes ng.





Photo: - Identified/selected core samples for testing of its strength.



Photo:-Electrical resistivity Profiling Survey is at progress along, N20°W-S20°E direction at site.



### Excavation of pits and soil profile in the area

Two pits were excavated in the area and four soil samples were collected from the site (1.5m depth and 3.0m depth from each location). The samples were packed in moisture tight polythene bags and sent for analysis at Kolkata (NABL accredited laboratory) for analysis. The soil is characterised by sandy silty in nature where high percentage of sand followed by silt and gravels, clay is the least percentage present in the area. The soil bearing capacity of the soil was calculated as per IS code: 6403:1981 considering square type of footing with 04 as factor of safety. The soil gave more than 45 T/M<sup>2</sup> which is more than the recommended soil bearing capacity as per IS Code in hilly terrain (35T/M<sup>2</sup>). The details of soil profile along with photographs and soil bearing capacity are as follows.



Fig;- Soil profile of the Pit-01 at old west point school complex, Gangtok.





Fig:- Soil profile of pit-02 at old west point school complex, Gangtok.

#### **DETAILS OF LABORATORY TESTING OF SOIL SAMPLES.**

##### **MOISTURE CONTENT**

The water content of samples has been evaluated after drying each sample in an oven at 100°C – 110°C for 24 hours as per procedure laid down in the Indian Standard 2720(Part II).

##### **GRAIN SIZE DISTRIBUTION**

To obtain the information concerning the soil found at various depths and to classify each strata of soil, it was necessary to conduct grain size distribution analysis. This has been done by passing dried samples over a net of sieves. The grain size distribution was evaluated and the percentage of gravel, coarse sand, medium sand, fine sand, silt and clay, fractions are calculated. These percentages are indicated in annexure and represented in graph at annexure. The overall grain size distribution in the soil gave highest percentage of sands



followed by silt, gravels and least percentage of clay. The uniformity coefficient of the soil gives the uniformly graded in nature. Hence, the chances of differential settlement in future are minimum.

#### **BULK DENSITY**

Bulk density was determined by measuring the weight and dimension of the undisturbed samples.

#### **DIRECT SHEAR TEST:**

Direct shear test of soil samples was conducted in laboratory as per IS code: 72720 and soil parameters were obtained and placed in annexure. The graph between shear stress and Normal stress is also plotted and placed as annexure II. Only four graphs are shown in annexure and cohesion value is obtained from the graph, angle of frictional resistance.

#### **ESTIMATION OF NET ULTIMATE BEARING CAPACITY (NUBC) and soil bearing capacity.**

**The Net Ultimate Bearing capacity of soil is calculated considering the shear failure as per IS:6403-1981.the result is placed in annexure I.**

The ultimate net bearing capacity obtained and modified to take into account, the shape of the footing, inclination of loading, depth of embedment and effect of water table. The modified bearing capacity formulas are given as under:

- a) In case of general shear failure  $(Q_d) = cN_c S_c d_c i_c + q(N_q - 1) S_q d_q i_q + \frac{1}{2} B \gamma N_\gamma S_\gamma d_\gamma i_\gamma W'$ .
- b) In case of local shear failure  $(Q_d) = \frac{2}{3} cN_c S_c d_c i_c + q(N_q - 1) S_q d_q i_q + \frac{1}{2} B \gamma N_\gamma S_\gamma d_\gamma i_\gamma W'$ .

**Symbols used for calculation of Net Ultimate Bearing Capacity of soil.**

**$B$  = Width of strip footing, width of footing, side of square footing, diameter of circular footing in cm**

**$c$  = Cohesion in  $\text{kgf/cm}^2$**

**$d_c, d_q, d_\gamma$  = Depth factors**



$i_c, i_q, i_\gamma =$  Inclination factors

$N_c, N'_c, N_q, N'_q, N_\gamma, N'_\gamma =$  Bearing capacity factors

$q =$  Effective surcharge at the base level of foundation in  $\text{kgf/cm}^2$

$q_d =$  Net ultimate bearing capacity based on general shear failure in  $\text{kgf/cm}^2$

$W' =$  Correction factor for location of water table

$s_c, s_q, s_\gamma =$  Shape factors

$\alpha =$  Inclination of the load to the vertical in degrees

$\phi =$  Angle of shearing resistance of soil in degrees

$\gamma =$  Bulk unit weight of foundation soil  $\text{kgf/cm}^3$



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**Table: Safe bearing capacity of soil at various depth below ground level as per IS code: 6403-1981**

Location	Depth, (m)	Surcharge $q_s$ (kN/m <sup>2</sup> )	Bulk density(kN/m <sup>3</sup> )	Width of foundation(m)/ bottom of footing	Factor of safety	SBC(T/M <sup>2</sup> )
PIT -01	1.50m	26.34	17.56	1.50 X 1.50	4	25.89 T/M <sup>2</sup>
				2.00 X 2.00		26.88 T/M <sup>2</sup>
				2.50 X 2.50		28.00 T/M <sup>2</sup>
				3.00 X 3.00		29.22 T/M <sup>2</sup>
PIT-01	3.00m	52.38	17.46	1.50 X 1.50	4	45.04 T/M <sup>2</sup>
				2.00 X 2.00		44.75 T/M <sup>2</sup>
				2.50 X 2.50		45.05 T/M <sup>2</sup>
				3.00 X 3.00		45.65 T/M <sup>2</sup>
PIT -02	1.50m	37.00	17.76	1.50 X 1.50	4	33.59 T/M <sup>2</sup>
				2.00 X 2.00		34.97 T/M <sup>2</sup>
				2.50 X 2.50		36.58 T/M <sup>2</sup>
				3.00 X 3.00		38.30 T/M <sup>2</sup>
PIT-02	3.00m	52.38	17.46	1.50 X 1.50	4	44.99 T/M <sup>2</sup>
				2.00 X 2.00		44.70 T/M <sup>2</sup>
				2.50 X 2.50		45.00 T/M <sup>2</sup>
				3.00 X 3.00		44.68 T/M <sup>2</sup>



**SBC Safe Bearing Capacity**

*Note: The above soil samples and soil parameters were collected & determine during absolute dry condition*

### Conclusion and suggestions

1. Geologically, the area comprises of medium to high grade metamorphic rock sequence represented by Garnetiferous Mica schist and Mica schist with quartzite intercalations underlain by Lingtse Granitic Gneiss/amphibolites band. The foliation of rocks strike NW-SE and dip gently towards North east with southerly facing slope aspect which makes the area geologically favourable for proposed construction of structures at Old West Point School area.
2. The thickness of soil in the area is less than 2m depth followed by highly weathered rock GMS from 2m depth onwards. The area has medium to high ground water circulation zone leading to high degree of weathering in the underlain country rock mica schist. Country rock is not exposed at present location, however in surrounding areas the rock shows no joint spacing but degree of weathering is high.
3. During conduction of drilling works loss of water has occurred at maximum locations except at BH-06, however core recovery percentage is less due to highly degree of weathering in rock mica schist which easily break during rotary drilling, flaky in nature. However at bh-01 the recovery at 47% and at BH-07 12m-13m highest core recovery percentage is 80%.
4. The recovered core size few having more than 5cm length hence testing of strength in point load and Brazillian in was done only for five core samples. The highest point load strength is **691.20 T/m<sup>2</sup> however least strength is 192 T/M<sup>2</sup>.**
5. The SPT conducted during weathered strata has been noted and safe bearing pressure is estimated using 25mm settlement and 1.5m bottom of footings. The calculation gives the strata having more than 30T/M<sup>2</sup> at 3.0m depth however at greater depth the strength is continuously increasing.



6. The soil samples collected from the two different location was tested by direct shear test method and the soil are least cohesion and maximum angle of frictional resistance which is more than  $30^\circ$ . The safe bearing capacity of the soil has been estimated and soil gave more than  $45T/M^2$  at 3.0m depth, which is higher than safe bearing capacity of soil as per IS CODE recommended in hilly terrain.(detail soil parameters are enclosed).
7. One electrical resistivity profiling has been conducted along the profile section diagonal to slope direction. The profile runs from SE to NW reveals that uniform strata exist along the profile section. However high water circulation zone suspected at the towards North West boundary of the plot. The water activity is due to high moisture retention capacity and nature of rock Garnetiferous mica schist exist in the area.
8. Sikkim Himalayas located over young fold mountain and occurrence of seismic event in the region is frequent. The Sikkim is placed as seismic zone IV –V by Seismic hazard map of India published by Government of India hence suitable measures to be incorporated to design of the proposed structures.
9. The BH-07 and BH-08 was drilled by the department of Mines and Geology, government of Sikkim, Gangtok during January 2020 and the drill log data is enclosed in this report for reference only.



### Point Load Test

Location of sample: **Old West Point School Complex, Gangtok**

Date of Test: 30/03/2021

Rock type – Garnetiferous mica schist (GMS) with or without quartz veins

Point Load =  $q_t = 0.96 \times p/D^2$

IS:8764-1978

Bore Hole No.	Depth (in m)	D, Diameter	Load (P)	$q_t$ ( T/m <sup>2</sup> )
01	6.5 m	5 cm	5 KN	192 T/m <sup>2</sup>
02	6.5 m	5 cm	18 KN	691.20 T/m <sup>2</sup>
03	10 m	5cm	13 KN	499.20 T/m <sup>2</sup>
04	9m	5cm	8 KN	307 T/m <sup>2</sup>
05	4.5m	5cm	11 KN	422.4 T/m <sup>2</sup>



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P= Load (KN) D= Minimum Dia sample (cm)

### Brazilian Test

Location of sample – **Old West Point School Complex, Gangtok**

Date of test – 30/03/2021

Rock type - Garnetiferous mica schist(GMS) with or without quartz veins

**Tensile Strength** =  $q_t = 2p/\pi DL$

P = Load (Kn)

D = Diameter of core sample (cm)

L = Length of core sample(cm)

IS:10082- 1981

Bore Hole No.	Depth (in m)	D= Diameter (cm)	L=Length(cm)	P=Pressure (Kn)	T/m <sup>2</sup>
01	5.5m	5cm	10cm	22KN	280.25 T/m <sup>2</sup>
05	4.5m	5cm	10cm	50.5KN	643.31 T/m <sup>2</sup>



**COMPUTATION OF SOIL BEARING CAPACITY AS PER IS CODE 6403-1981 AT PIT-01,DEPTH 1.50M WITH 1.5 X1.5 M SIZE OF FOOTING AT OLD WEST POINT SCHOOL COMPLEX, GANGTOK**

Cohesion, c	0.10
Bulk density(kN/m <sup>3</sup> )	17.56
Depth(df)	1.50
Surcharge q,kN/m <sup>2</sup>	26.34
Phi	34.00
Water table w'	0.50
width B (m)	1.50
<b>Shape factor</b>	
sc	1.30
Sq	1.20
Sr	0.80
<b>Depth factor</b>	
dc	1.33
dq	1.10
dr	1.10
<b>inclination factor</b>	
lc	1.00
lq	1.00
lr	1.00
<b>Bearing capacity factor</b>	
Nc	46.12
Nq	33.30
Nr	48.03
<b>out put</b>	
$c*Nc*Sc*Dc*lc$	7.97
$Q(Nq-1)*Sq*dq*Iq$	1123.03
$0.5*B*r*Nr*Sr*dr*lr*W'$	278.32
UBC in kN/m <sup>2</sup>	1409.32
UBC in T/m <sup>2</sup>	140.93
FOS	4.00
NUBC Ton/m <sup>2</sup>	35.23
SBC	<b>NUBC(LOCAL/GENERAL)+ Q</b>
Safe Bearing Capacity(SBC)	25.89 T/m <sup>2</sup>



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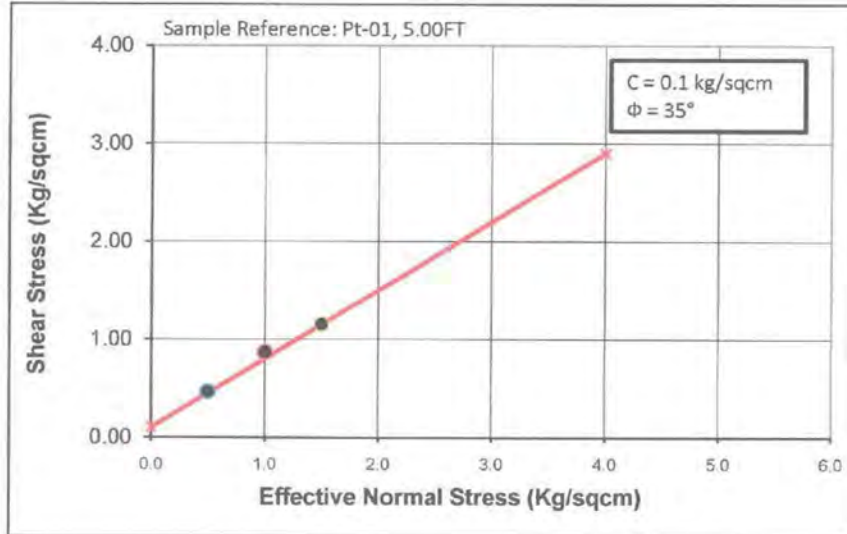


### SUMMARY OF LABORATORY TEST RESULTS

SL No	Sample ID	Location	Depth	NMC (%)	Density (gm/cc)	Grain Size Analysis (%)			Direct Shear Test	
						Gravel	Sand	Silt + Clay	C (Kg/sqcm)	$\Phi$ (Degree)
1	Pt-01	Old West Point Complex, Gangtok	5 Ft	13.30	1.79	24	60	16	0.10	35
2	Pt-01		10 Ft	6.70	1.78	10	61	29	0.12	34
3	Pt-02	Old West Point Complex, Gangtok	5 Ft	6.30	1.81	39	49	12	0.13	37
4	Pt-02		10 Ft	9.80	1.78	19	62	19	0.08	34



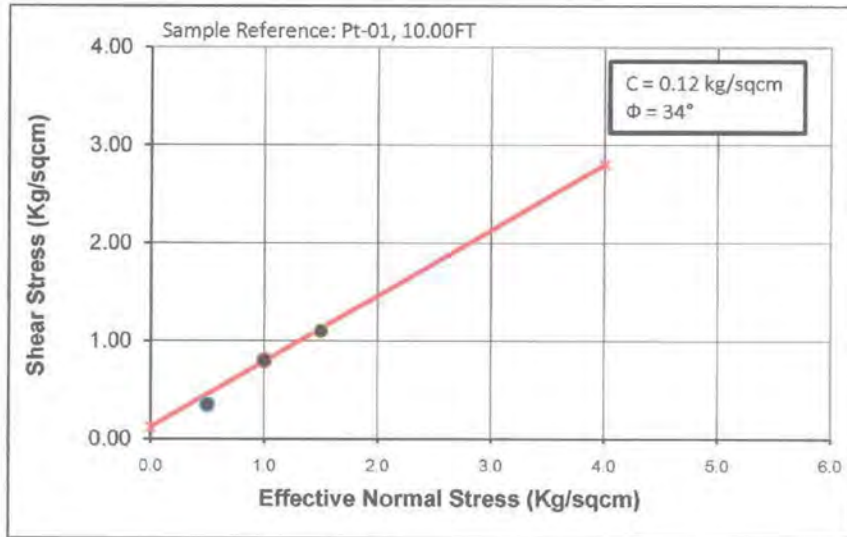
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59/2, BANGUR AVENUE, BLOCK-C, KOLKATA - 700 055  
Phone : (033) 2574 2130, 4067 6109, Email : cae.india@gmail.com

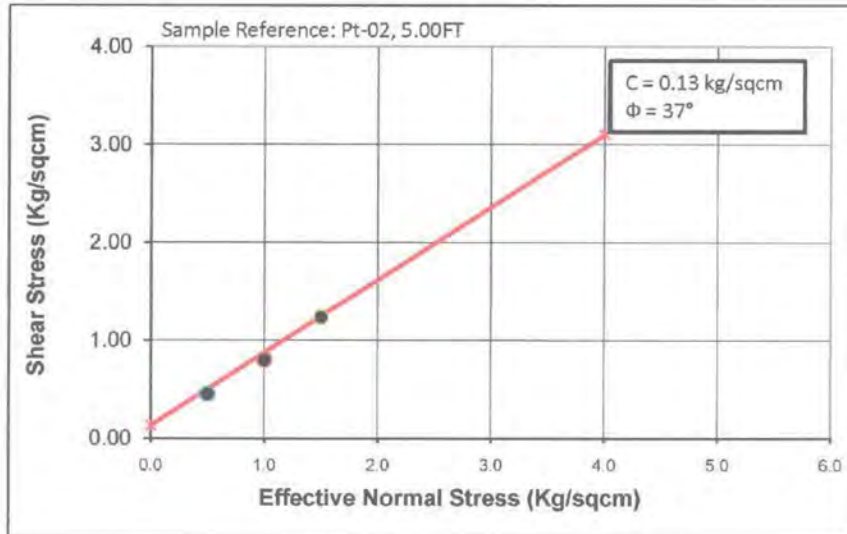


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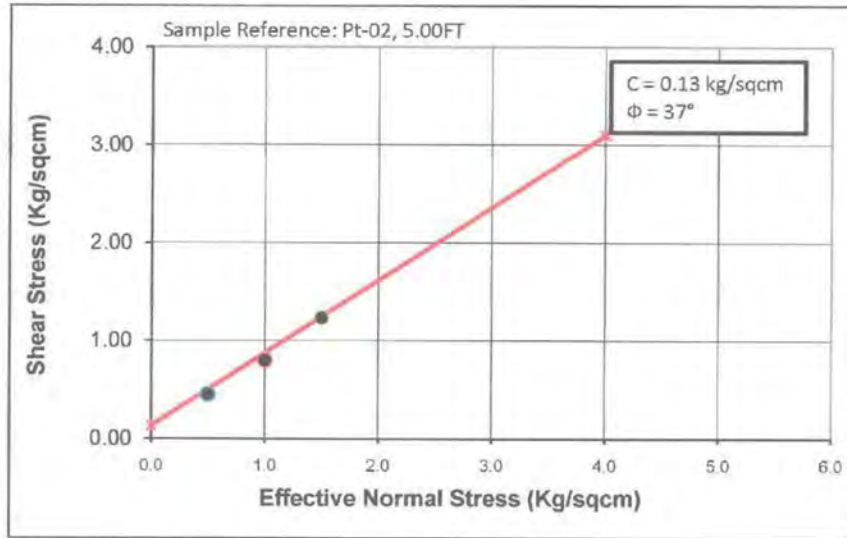


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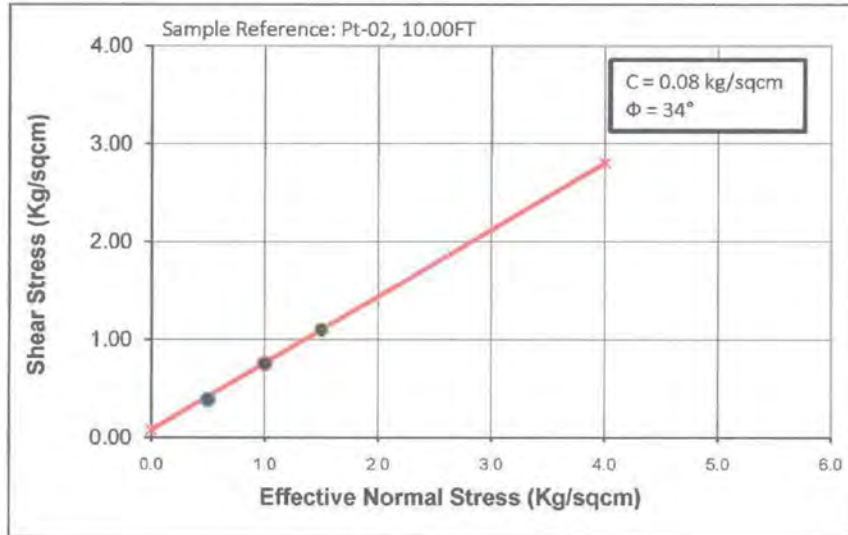
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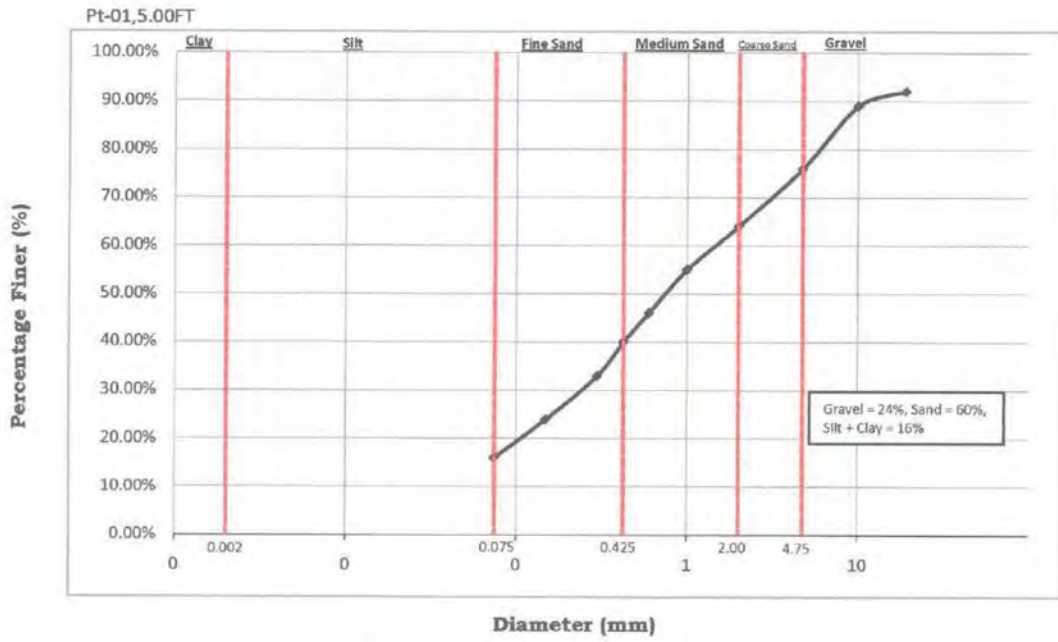
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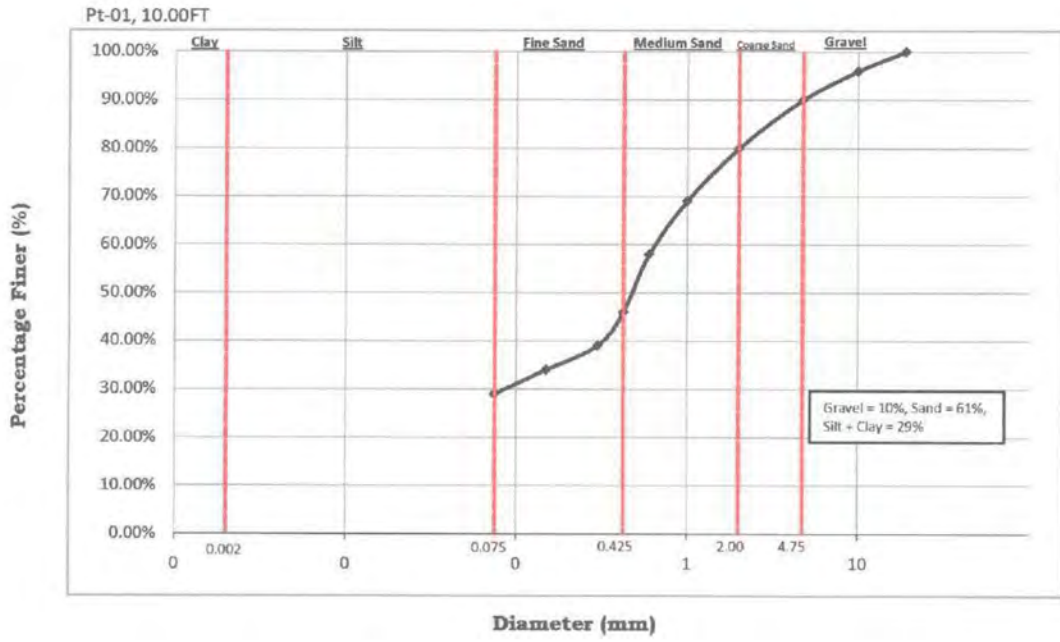


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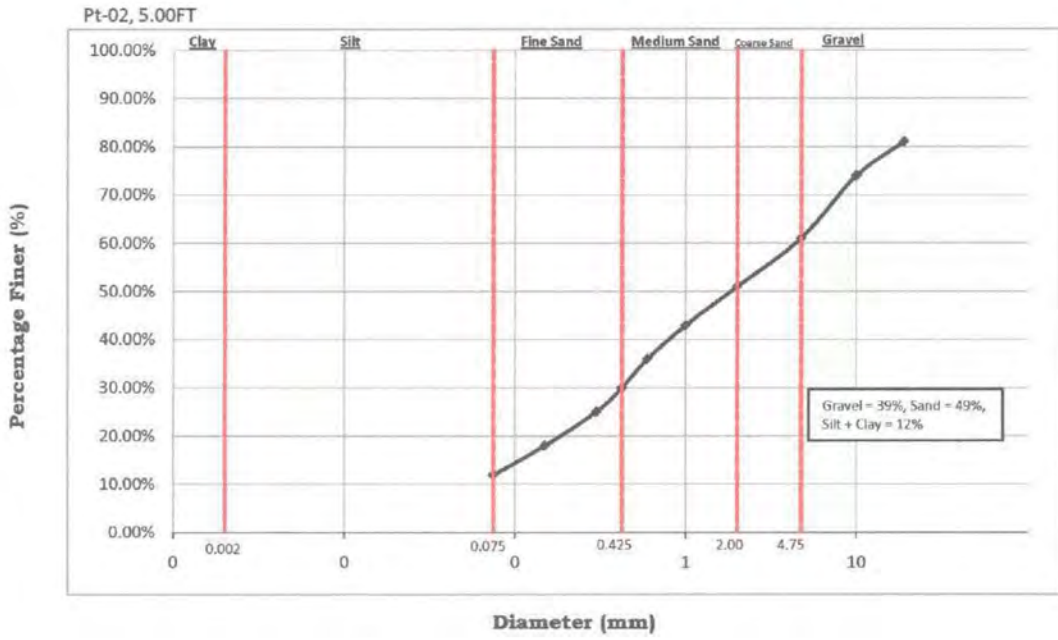


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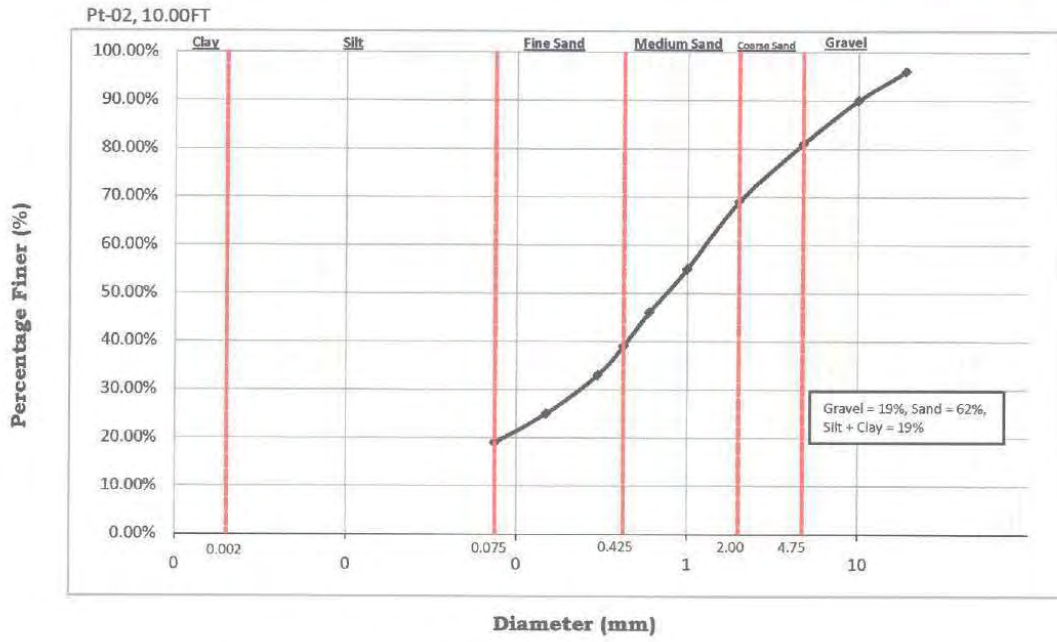




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Centre for Advanced Engineering



Centre for Advanced Engineering



Date :20/03/2021

**TO WHOM IT MAY CONCERN**

This is to certify that the soil samples send by M/s Geo-Informatics Consultancy & Services, Gangtok is tested in our laboratory (NABL Accredited) using the specification prescribed in IS Codes and manuals.



\_\_\_\_\_  
Authorized Signatory



### SLOPE FORMING MATERIALS MAP OF THE AREA AT OLD WEST POINT SCHOOL COMPLEX, GANGTOK, EAST SIKKIM.



- ELECTRICAL RESISTIVITY PROFILING ALONG SE TO NW DIRECTION
- LOCATION OF DRILLING POINT DEMARCATED BY THE CLIENT
- LOCATION OF PITS

#### Legend

- CONTOUR MINOR
- stairs
- ROAD
- CONTOUR MAJOR




-TRUE COPY-

#### SLOPE FORMING MATERIALS

- Medium thick to thin Soil Cover underlain by highly weathered rock Garnetiferous mica schist
- Medium thick to thin Soil Cover underlain by moderately weathered rock Garnetiferous mica schist

ANNEXURE R-13

**SIKKIM**



**GOVERNMENT** **GAZETTE**

**EXTRAORDINARY  
PUBLISHED BY AUTHORITY**

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Gangtok Tuesday 06<sup>th</sup> April, 2021 No. 86

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GOVERNMENT OF SIKKIM  
DEPARTMENT OF MINES AND GEOLOGY  
GANGTOK – 737101

No. 17/DMG/20-21

Date:- 19.03.2021

**NOTIFICATION**

In continuation with notification no. GOS/UD&HD/6(294)2001/A dated 15.10.2001 and gazette no. 387 dated 15/10/2001 which notified that the maximum height of buildings constructed in allotted sites or private holdings within a notified area shall be in accordance with the suitability and profile of the locations based on the stability map of the area as prepared by Mines and Geology Department from time to time which shall be as follows:

<b>Stability Zone</b>	<b>Admissible no. of floors</b>
1.	5 ½ storeys
2.	4 ½ storeys
3.	3 ½ storeys
4.	2 ½ storeys
5.	1 ½ storeys
6.	No construction is allowed

The department of Mines and Geology hereby notifies the parameters for determination of stability zones of each zone as follows. These parameters are known as site stability zonation parameters and will be strictly followed during categorization of zones:

<b>Zone 1</b>	
<b>Rock Properties:</b>	Bed rock/parent soil is expected at foundation depth. Unweathered/ surfacial weathering, compact with no joint spacing, moderate to high compressive strength, high frictional resistance.
<b>Built up area:</b>	Training of jhoras/drains have been completed and done properly (with safe distance)
<b>Overburden:</b>	Thin to medium thick having good bearing capacity of soil.
<b>Bearing Capacity:</b>	> 35 T/m <sup>2</sup>
<b>Ground Water</b>	
<b>Activity:</b>	Low
<b>Relation Between Natural Slope And</b>	

**Rock Bed/Foliation:** Favourable, >30°  
**Adverse Geo-Environment:** Nil  
**Upslope pressure:** Nil  
**Vibration Impact:** Minimum  
**Slope:** Gentle to moderate, <15°  
**Depth of soil:** <3m  
**Relative relief:** <100m  
**Hydrological conditions:** Dry/nil  
**Category:** Suitable after taking appropriate measures to slip/precautionary and preventive measures at the time of foundation levelling.

### Zone 2

**Rock Properties:** Bed rock/parent soil is not expected at foundation level. weathering on surface of contact zone is suspected, medium to high compressive strength, jointed rocks with minimum spacing, joint plane undulating with high frictional resistance.  
**Built up area:** Training jhora/drain was done but not properly maintained.  
**Overburden:** Medium thick (rock expected at considerable depth)  
**Bearing Capacity:** 15-35 T/m<sup>2</sup>  
**Ground Water Activity:** Low to medium  
**Relation Between Natural Slope And Rock Bed/Foliation:** Favourable, 20-30°  
**Adverse Geo-Environment:** Nil.  
**Upslope pressure:** Suspected  
**Slope:** Gentle to moderate, 16-25°  
**Upslope pressure:** Nil  
**Vibration Impact:** Minimum  
**Depth of soil:** 3-8 metres  
**Relative relief:** 101-300 metres  
**Hydrological conditions:** Damp  
**Category:** Suitable after taking proper surface/sub-surface drainage system.

### Zone 3

**Rock Properties:** Bed rock/parent soil is not expected at foundation level. Weathering on surface of contact zone is suspected, low to medium compressive strength, jointed rocks with minimum spacing, and joint plane smooth with low frictional resistance.  
**Built-up area:** Jhora training is required/annual maintenance of drain is necessary.  
**Overburden:** Thick soil overburden, having moderate to low soil bearing capacity.  
**Bearing capacity:** <15 T/m<sup>2</sup>  
**Ground Water Activity:** Medium to high  
**Relation Between Natural Slope And**

<b>Rock Bed/Foliation:</b>	Rock dips at some angle to direction of slope, <20°
<b>Adverse Geo-Environment:</b>	Rocks are subjected to folding, fracturing & weathering.
<b>Slope:</b>	Moderate to high. slope which reflects the competency of slope forming material's 26-35°
<b>Upslope pressure:</b>	Suspected.
<b>Vibration Impact:</b>	Low to medium
<b>Depth of soil:</b>	>8m
<b>Relative relief:</b>	>300m
<b>Hydrological conditions:</b>	Wet
<b>Category:</b>	Suitable after taking various geotechnical corrective measures.
<b>Zone 4</b>	
<b>Rock Properties:</b>	Bed rock/parent soil is beyond foundation level. high degree of weathering is suspected, low compressive strength, jointed rocks, joint plane smooth with low frictional resistance
<b>Built up area:</b>	Untrained jhora/ erosional potential jhora
<b>Overburden:</b>	Medium thick to thick soil overburden
<b>Bearing capacity:</b>	<10 T/m <sup>2</sup>
<b>Ground Water Activity:</b>	Higher water regime.
<b>Relation Between Natural Slope And Rock Bed/Foliation:</b>	Slightly adverse to adverse.
<b>Adverse Geo-Environment:</b>	Gully erosion & collapse of jhora facing slopes at isolated places, formation of cracks or fissures on the ground. Creep movement suspected.
<b>Slope:</b>	Steep, 36-45°
<b>Upslope pressure:</b>	Suspected.
<b>Vibration Impact:</b>	Low to medium
<b>Depth of soil:</b>	>8m
<b>Relative relief:</b>	>300m
<b>Hydrological conditions:</b>	Dripping
<b>Category:</b>	Not suitable for habitation unless immediate protective measures to safeguard upslope/ minimise further degradation of stability condition of upslope area.
<b>Zone 5</b>	
<b>Rock Type:</b>	Bed rock/parent soil is beyond foundation level. high degree of weathering is suspected, low compressive strength, jointed rocks, joint plane smooth with low frictional resistance
<b>Built up area:</b>	Nil
<b>Overburden:</b>	Thick with low soil bearing capacity.
<b>Bearing capacity:</b>	<10 T/m <sup>2</sup>
<b>Ground Water Activity:</b>	High.
<b>Relation Between Natural Slope And</b>	

Rock Bed/Foliation:	Slightly adverse to adverse.
Adverse Geo-Environment:	Area subjected to isolated slope failure, creep movement widespread. wide cracks on ground.
Slope:	high to steep slope, >45°
Upslope pressure:	Present.
Vibration Impact:	Medium
Depth of soil:	>10m
Relative relief:	>300m
Hydrological conditions:	Flowing
Category:	Area not suitable needs immediate protective measures to protect upslope area.
<b>Zone 6</b>	
Rock Type:	Bed rock/parent soil is beyond foundation level. high degree of weathering is suspected, very low compressive strength, jointed rocks. joint plane smooth with low frictional resistance
Built up area:	Nil
Overburden:	Thick with low soil bearing capacity.
Bearing Capacity:	<5 T/m <sup>2</sup>
Ground Water Activity:	High.
Relation Between Natural Slope And Rock Bed/Foliation:	Adverse.
Adverse Geo-Environment:	Incidences of slope failure, gully erosion, adverse slope facing towards jhora section etc.
Slope:	High slope >45°
Upslope pressure:	Present.
Vibration Impact:	medium
Depth of soil:	>10m
Relative relief:	>300m
Hydrological conditions:	Flowing
Category:	Area not suitable needs immediate protection for arresting further aggravation of instability problems.

Further, the department will be reviewing the zonation ratings on the following conditions.

**Conditions and pre-requisite for review of site stability report/up-gradation of Land Stability Zonation for particular site.**

1. Recommendation suggested in site stability report should be adopted during construction of structures.
2. Training of untrained Jhora and maintenance at regular intervals which is located adjacent to the plot.
3. Construction of structure below the building which was barren before which also aids in improving the stability of the upslope area. Further, construction of building in the downslope area also acts a retaining/protective wall for the houses located in the upslope area.

Minimum of three (03) years after the completion of house construction so as to observe the incidences of differential settlement as per the IS Code of Practice for calculation of settlements of foundations (IS Code:- 8009(Part 1)-1978(Reaffirmed 2003)). The review of the rating on zonation can be done.

Proper channelization of surface runoff by providing catchment drains especially during the rainy seasons and connect it to natural waterways/Jhora which also improves the stability of the area due to reduced erosions and percolation of water in the slope concerned.

Any site improvement activities/works like grouting/micro-pilling/retaining works/rock bolting/anchoring/shot creting works as per site requirement has been done in the area which will re-strengthen the stability condition shall be entertained for review of stability zonation rating.

-Sd/  
(B.P Pradhan, IFS)  
Secretary

File No. 17/DMG/20-21. n.s.p - 10

## ANNEXURE R-17

**Dr. H. Sharma**  
Assistant Professor

Indian Institute of Technology,  
Guwahati,  
North Guwahati, Guwahati-781 039,  
Assam, India.

Phone : +91-361-258- 3326  
Fax : +91-361-258-2440  
email : shrishi@iitg.ac.in



DEPT. OF CIVIL  
ENGINEERING

Date: 26<sup>th</sup> May 2021

To,  
Tirupati Plaza Pvt Ltd  
Vega circle Mall  
3rd Mile Sevoke Road  
Siliguri west Bengal.  
GST No. 19AACCT3538M1ZW

**Subject:** Quotation for Proof checking of design and drawings of Project titled, "Mixed use development - WESTPOINT" located at Gangtok.

Dear Director

The charges for the work are as follows:-

Sr. No.	Nature of Work	Consultancy Fee	GST (18%)	Total Amount
1	Proof checking of design and drawings of Project titled, "Mixed use development - WESTPOINT located at Gangtok".	Rs. 8,75,000	Rs. 1,57,500	Rs. 10,32,500

i) IIT Guwahati is exempt from income tax under Section 10 (23 C) and 194J of the Income Tax Act 1961. No Income Tax deduction has to be made and the amount is required to be paid in full. ii) A/c Name: IIT Guwahati II&SI Consultancy A/c No.: 8652101030326, Bank: Canara Bank, IIT Guwahati Branch Guwahati-781039, IFSC: CNR80008652 MICR Code: 78'1015008, Swifl Code: CNRBINBBGUD iii) GSTIN: 18AAAJI0130P1Z8, PAN : AAAJI0130P iv) **The total amount has to be paid in full in IIT Guwahati account before the start of the work.**

With regards



Dr. Hrishikesh Sharma  
Assistant Professor, Department of Civil Engineering  
Indian Institute of Technology, Guwahati, Guwahati-781 039, Assam, India  
Email id: [shrishi@iitg.ac.in](mailto:shrishi@iitg.ac.in), Ph No: +91-9435321894

-TRUE COPY-

## ANNEXURE R-4



GOVERNMENT OF SIKKIM  
URBAN DEVELOPMENT DEPARTMENT  
GANGTOK, SIKKIM

Memo No: 215/Secy/UIDD/2021

Dated: 27-05-2021

CABINET MEMORANDUM

Minister in Charge  
Secretary in Charge

-

Mr. Arun Kumar Upreti  
Ms. Sarala Rai, I.A.S.

Subject: Multi Level Car Parking cum Shopping Plaza at old West Point School-PPP Project under Gangtok Smart City Development Ltd.

1. The construction of Multilevel Car Parking cum Commercial Development at Old West Point School having its Project ID as SIK GAN 062 is a part of Smart City Proposal under Gangtok Smart City Development Limited.
2. The approval of the Board of Directors of the company has been obtained for implementation of the Project under Public Private Partnership (PPP Mode) on its 17<sup>th</sup> Board Meeting held on 23<sup>rd</sup> October 2020.
3. The 1<sup>st</sup> call for bids for development of a multi level car park cum commercial plaza, by demolishing the existing Taxi Stand as well as the old school buildings in the Old West Point School Complex area was invited on 9<sup>th</sup> January 2019. Unfortunately, the 1<sup>st</sup> call for bid was invited without verification of the status of land. Besides, owing to changed specifications and requirements the entire bidding process was cancelled. The changed criteria/concept of the project, envisages the construction of a structure with Green Building Concept. Moreover, on verification of the title deed of the land, it is found recorded in the name of Private Estate, and a separate file has been processed to acquire the same, in-principle approval of the Government has been obtained for its acquisition.
4. The second call for bids was invited on 07.10.2020. The approval of the Board of Directors of the Company has been obtained for the project, however, as the 'project aspects' requires further administrative considerations, formal approval of the State Government is also being solicited duly highlighting the salient features and aspects related to the project as indicated hereunder.
5. The project is being taken up on PPP mode with an estimated investment of Rs 294.98 crore. As per the requirements for PPP projects, the bid has been evaluated for the lowest viability gap funding (VGF) keeping all other parameters fixed. The financial modelling for the project was done before inviting the bids and the VGF of 37% of the project cost viz., Rs 109 crore approx. was considered reasonable.
6. The other fixed parameters are (a) Development period of 4 years, (b) Lease Rent to be paid by concessionaire @ Rs 1 per sqm per annum of the maximum carpet area, (c) Concession Fee to be paid by Concessionaire @ Rs 1 per accounting year, (d) Operation period of 26 years.  
  
The other parameters have been fixed so as to ensure that bid evaluation is error free; if the bids are invited on multiple parameters, the evaluation and identification of the preferred bidder becomes cumbersome and generally leads to litigation with different parties having different justifications for selection of the preferred bidder.
7. Briefly, the salient features of the Project as per Request for Proposal (Bidding Document) is indicated as follows:-
  - a. As per the preliminary survey, the land area in the old West Point complex is 5707.80 square metre.
  - b. Proposal envisages construction of 11 storeyed structure. The structure will have four levels of car parking. Level 0 and 1 are ordinary parkings and the upper levels viz.,

-Page 2-

level 2 and 3 will be electro-mechanically operated stack/puzzle parking, to accommodate 415 equivalent car spaces, approximately. The structure shall be 11 storeyed building subject to norms of the Government. The details are tabulated as below: -

Sl No.	Particulars	Details
1.	Site Area at Old West Point School	5707.80 sqm
2.	Commercial Floor Coverage	50%
3.	Parking Floor coverage	< 75%
4.	Total Nos of Floors	11 storied
5.	Lower Parking Floors	4 Nos (Levels :0 to 3)
6.	Ground and above(Nos)	7 Nos (Levels :4 to 10)
7.	Commercial Carpet area (sqm)	13,680.00 sqm +/- 10%
8.	Parking levels	4 Levels (0,1,2 &3)

- c. The Concessionaire shall be entitled to construct/ develop such components which it deems appropriate from commercial viability point of view provided; however, such component shall not fall in the category of prohibitive item as per Authority or Govt. of Sikkim or Govt. of India, norms or applicable law. Broadly the following components are allowed: -
- Shopping Mall and Multiplex
  - Hotel, Food Courts/Restaurants/coffee shop
  - Commercial (Retail cum Office) area would include retail shopping, branded showrooms, anchor stores, and entertainment complex/zone and business spaces.
  - Banks, Coaching institutes
  - Gaming zone/children play home, Gymnasium or Health Centre,
  - Any other activity with the approval of the authority.
- d. Level 0 and 1 will be handed over to the authority during the operation period and rest of the floors will be with the concessionaire for 26 years of operation after which it is to be handed over to the authority in terms of the agreement. However, the period of operation may be extended by another 26 years subject to approval of the Government., by entering into a separate agreement, the process of which can only be taken up after finalizing the DPR and all aspects of the building known to both the concessionaire and the authority.
- e. The documents viz., Volume I- Instruction to Bidders, Volume II- Concession Agreement and Volume III- Project Information Memorandum is appended for perusal.
8. The timelines of the Bid process that has been completed is tabulated below:

Sl No	Event Description	Date
1	Publication of 2 <sup>nd</sup> Call for Bids	07.10.2020
2	Submission of Queries by Bidders	12. 11.2020
3	Pre-Bid Meeting	12. 11.2020
4	Reply to Pre-Bid Queries	24.12.2020
5	Submission of Bid	11. 01.2021
6	Opening of Technical Bid	11. 01.2021
7	Opening of Financial Bid	22.01.2021
8	Letter of Award LOA to the Preferred Bidder*	15.02.2021
9	Signing of Concession Agreement *	27.02.2021
10	Submission of Performance Security, preparation of DPR and its approval and environmental management plan, employee deployment plan, construction / rehabilitation plan etc. Opening of Escrow Account, establishment of SPV specifically for the project, obtaining of permits etc.*	26.02.2022
11	Construction and Development period*	After approval
12	Operation period*	26 years

\* after accord of Government approval.

-Page 3-

9. An Independent Engineer has to be appointed for overseeing the works during the development period plus first 4 (four) years of operation period, as well as one year before the expiry of the concession period. In the event of termination, such independent Engineer will be appointed to perform such roles as required to complete the termination proceedings. The salary of the Independent Engineer will have to be borne equally by the authority and the concessionaire.
10. Within the indicated timelines, six applicants had submitted their Expression of Interest, for the project and the bid documents were sold to all six applicants:
1. Pave Infrastructure Pvt. Ltd., Salugara, Siliguri
  2. Tirupati Plaza Pvt Ltd, Sevoke Rd, Siliguri
  3. Sotia Infratech, HB Road, Guwahati
  4. SIBIN Group, Middle Sichey, Gangtok
  5. SM Infrastructure Pvt Ltd, GS Road, Guwahati
  6. Mungipa Trade Links Pvt Ltd, Singtam.

However only the following three submitted their bids for the project quoting the VGF as follows:

- |  |              |
|--|--------------|
| 1. Pave Infrastructure Pvt. Ltd., Salugara, Siliguri | Rs 106.19 cr |
| 2. Tirupati Plaza Pvt Ltd, Sevoke Rd, Siliguri       | Rs 103.98 cr |
| 3. Mungipa Trade Links Pvt. Ltd, Singtam.            | Rs 107.67 cr |

11. The lowest VGF has been quoted by Tirupati Plaza Private Limited and is the preferred bidder (L1). Accordingly based on the pre-bid estimated cost of Rs 294.98 cr the lowest bid is of 35.25% (Rs 103.98 cr) which is within the estimated VGF. The difference amount of Rs 191 cr has to be invested by the concessionaire. The project development period is of 4 years. The investor (concessionaire) will operate and maintain the asset for 26 years operation period. The VGF will be released as per the terms of the agreement into an Escrow Account created for the purpose. The Bank fees for the Escrow account has to be shared equally by the authority and the Concessionaire. During the operation period, the concessionaire will have complete freedom for O&M including leasing and rental and will remit the prescribed fees to the authority.

12. The VGF has to be released as per the terms of the agreement laid in schedule M: Project Grant to the concessionaire as follows: -

Sl No	Project Milestone	% of the Project Grant	Project Grant (Crore)	State share (50%) crore	Central Share (50%) in crore
1	Signing of Concession Agreement	Rs 294.98 X 35.25% X 15%	15.60	7.80	7.80
2	Project Mile stone-I	Rs 294.98 X 35.25% X 15%	15.60	7.80	7.80
3	Project Mile stone-II	Rs 294.98 X 35.25% X 15%	15.60	7.80	7.80
4	Project Milestone-III	Rs 294.98 X 35.25% X 15%	15.60	7.80	7.80
5	Car Parking Facility Completion Date .	Rs 294.98 X 35.25% X 20%	20.80	10.40	10.40
6	Project Milestone-IV	Rs 294.98 X 35.25% X 05%	5.20	2.60	2.60
7	Project Milestone-V	Rs 294.98 X 35.25% X 05%	5.20	2.60	2.60
8	Project Milestone-VI	Rs 294.98 X 35.25% X 05%	5.20	2.60	2.60
9	Commercial Development Completion Date	Rs 294.98 X 35.25% X 05%	5.20	2.60	2.60
		Total	103.98	51.99	51.99

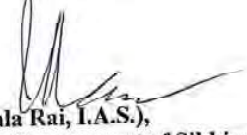
13. The above matching fund to the ratio of 50:50; is in line with the revised administrative approval approved by the Cabinet vide Memo No: 002/SPV/GSCDL/2018-(II)/203/SECY Dated 15/02/2021. The funds as required as highlighted above for the construction of the project under Smart City Guidelines has to be made available during the Development period which is targeted to be completed within 4 years. However, during the current financial year Rs 31.20 crore will be required to meet the expenditure against Sl (1) and (2) for this specific project during 2021-22.

14. The Concept drawing submitted by the preferred bidder proposes the construction of 14 number of floors. The bottom 4 floors are to be car parking (MLCP); Level 0 and Level 1 as ordinary parking and Level 2 and 3 as electro mechanically operated stacked / puzzle parking. Tentatively the parking is proposed for 415 car parking spaces; the actual capacity, however, will be known after finalization of the DPR and its approval by the authority. Rest of the floors will be for commercial development with a maximum carpet area of 13,680 sqm with permissible deviation of plus or minus 10%.

15. For the city, this will be the first ever multi level car park with commercial development (shopping mall + hotel) on the upper floors having modern aesthetics and green concepts. It will change the skyline of the city and will be point of tourist interest as well as a convenient place for the city dwellers for shopping and leisure. The facility will have an atmosphere of modern comfort and convenience, cleanliness and hygiene with top quality ambience, whilst enjoying the panorama of the majestic mountains and underlying valleys in the backdrop of the setting sun. It is expected that the living quality index of the city will improve due to this asset. As per the concept, the elevation of the structure is of a reducing building profile, instead of a solid building mass as is generally seen in other building projects; as the building rises in elevation its commercial area will reduce and will have open plazas and green spaces for the public to enjoy. This further justifies the need to add extra floors to compensate the revenue loss on account of the open spaces being kept at the lower levels. Moreover, the structure will have its own sewage treatment plant with partial solar lighting for green energy.
16. As per the bid requirements, Level 4 to 10 shall be commercial development. To achieve open public plazas and green plantation areas, the building floor plate shall be reduced gradually so that every upper level will have reduced floor area as a result. Accordingly, in the concept plan submitted by the preferred bidder, the bidder has proposed for additional 3 floors (Level 11,12 and 13) on partial horizontal area in order to achieve the required carpet area. This is within the permissible carpet area as mentioned in the tender document. This decreasing or reducing building profile or building mass is also conducive for setting up green spaces on such open areas as well as improved aesthetics and green performance of the building. The proposed commercial development submitted by the preferred bidder comprises of 10 levels; level 4 to 9 shall be shopping plaza / mall and level 10 to 13 shall be hotel.
17. Also, the bidder has conceived for a plaza of about 600 – 650 sqmtr. which will improve the ambience and quality of exposure / experience in the facility. Hence, keeping in view the concept presented by the selected bidder, the extra floors could be considered, subject to the condition that the maximum carpet area of 13680 sqmtr., with a deviation of plus or minus 10% is not exceeded.
18. The actual details with regard to the structure will be availed only after conducting thorough geo-technical investigation, engineering / structural design and architectural drawings by the concessionaire as per the timeline given above- which is the DPR stage. Though the preferred bidder has submitted a concept drawing for 14 levels, in view of the RFP, we may at present consider for 11 floors only. Accordingly, approval of the Government is solicited for relaxation of norms to build the structure having 11 floors. However, keeping in view the reduction in the building mass as the floor level rises, we may consider additional 3 floors once clarity is obtained after completion of geo-technical investigation and design reports, as the DPR will have to be approved by the authority later.
19. Status of land at Old West Point:-The construction of Multilevel car parking cum Commercial Development at Old West Point School is to be constructed on plot no.715 & 716 which is found recorded in the name of Private Estate as per the verification report received from the Revenue Authorities vide memo no.71/765/G/DD/DC(E) dated 22/02/2021. However, on the request of the Department, the Estate Manager, Private Estate & Authorized Attorney of Chogyal Wangchuk Namgyal has agreed to transfer the land measuring 61,398.00 sft to the Urban Development Department as per the Circle rate of Gangtok Block vide application Dated 15<sup>th</sup> March 2021 addressed to the Hon'ble Minister, UDD . The same has been approved by the Government.
20. The Smart City Mission is funded as a 50:50 centrally sponsored scheme and the Government of India has already released Rs 243 crores. Therefore, in terms of the mission guidelines, equal matching share has to be provided by the State Government. Till date only Rs 5 crore State Share has been released, hence to match the GOI release, an amount of Rs 238 crore need to be released for implementing the mission activities.

21. In view of the timely requirement of funds for the project, requirement of land free from encumbrances and high value of the project as well as the need for relaxation of norms for building the structure having 11 floors, proposal is being submitted for consideration by Council of Ministers for the following: -

- i) approval for demolition of existing Government structures in the Project Area and removal of debris as a separate contract;
- ii) approval for mortgage of land by the Concessionaire to fund the project, subject to entering into a separate agreement with the administrative Department for the purpose;
- iii) approval for accepting of the Bid of the L1 Bidder M/S Tirupati Plaza Pvt. Ltd with a VGF of Rs 103.98 crores in terms of Volume- I, II and III of the Bidding documents. The letter of award to the lowest bidder as per the event description was scheduled for 15/02/2021 as per the Request for Proposal;
- iv) approval to allow the concessionaire to undertake operation and maintenance including leasing and rental during the operation period.
- v) approval for appointment of Independent Engineer as described herein above and for sharing the salary of such independent engineer equally by the authority and the concessionaire.
- vi) approval for relaxation of the norms of the proposed building having 11 floors subject to confirmation of the geotechnical investigation and report.
- vii) approval for extending the operation period by another 26 years subject to signing of a separate agreement, after finalizing the DPR and all aspects of the building being known to both the concessionaire and the authority and
- viii) approval for provisioning the State Share of Rs 238 crore in the Budget 2021-22 equivalent to the amount already released by the Central Government.

  
(Sarala Rai, I.A.S.),

Secretary to the Government of Sikkim.

File no: J (536) / GOS/UDD/MISC/2021

-TRUE COPY-

## ANNEXURE R-9

**EXTRACT OF THE CABINET MEETING HELD ON 11<sup>th</sup> JUNE, 2021, AT 10 A.M IN THE CABINET HALL OF TASHILING SECRETARIAT, GANGTOK, SIKKIM**

**URBAN DEVELOPMENT DEPARTMENT**

**283.5** The proposal seeks of approval to take up various activities for construction of Multi Level Car Parking cum Shopping Plaza at old West Point School under Gangtok Smart City Development Limited, as detailed in the Cabinet Memo.No.215/Secy/UDD/2021 Dated 27.06.2021.

**CABINET DECISION: The Cabinet approved the proposals contained in para 21 (i) to 21 (vi) only.**


sd/-  
(S.C GUPTA)IAS  
Cabinet Secretary

Cabinet Extract No. CON/CAB/283/2021/6655


Dated: 11.06.2021

To,  
The Secretary  
Urban Development Department  
Government of Sikkim, Gangtok

Copy forwarded for onward action, please.

  
Joint Secretary, Cabinet  
11.06.2021



  
14.6.21

-TRUE COPY-

ANNEXURE R-4



**GANGTOK SMART CITY DEVELOPMENT LIMITE  
LEVEL 5, KISAN BAZAAR, LAL MARKET ROAD,  
GANGTOK- 737101, SIKKIM, INDIA  
CIN-U93090WB2017SGC223807**

Memo No: -137/GSCDL/2020-21

Dated: - 18/06/2021

**LETTER OF ACCEPTANCE (LOA)**

To,

**M/s. Tirupati Plaza Private Limited**  
Mr. Akhil Dalmia  
Gangtok, Sikkim

**Subject: Letter of Acceptance ("LOA") for "Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area on Design, Build, Finance, Operate and Transfer (DBFOT) basis" (the "Project").**

Sir,

This is with reference to the Bid submitted by your company M/s. Tirupati Plaza Private Limited in accordance with the **RFP Volume-I Clause No. 2.2.2**, dated 7<sup>th</sup> October 2020 and the corrigendum/ addendum thereto dated 24<sup>th</sup> November 2020 issued by Gangtok Smart City Development Limited, Sikkim (the "**Authority**"), towards qualification and short listing of Eligible Bidders for evaluation of their respective Financial Proposals in accordance with the **RFP Volume-I Clause No. 2.2.9**, submitted on 11.01.2021.

Pursuant to the evaluation of your Bid in accordance with the terms of the RFP Document, the Authority is pleased to inform that based on your company's Financial Proposal, dated 22.01.2021 (copy attached as **Annexure 'A'**), your company has been identified as the Preferred Bidder for the Project. Further, you are requested to comply with and fulfill the following terms and conditions within the time and in the manner & sequence, as prescribed hereunder:

  
**Chief Executive Officer**  
Gangtok Smart City Development Ltd.  
Gangtok-737102 Sikkim

- That within 7 (seven) working days of the issuance of LOA, sign and return the duplicate copy of the LOA in acknowledgement thereof along with the Letter of Acknowledgement in the format attached with this LOA as **Annexure 'B'**.
- That Within 14 (fourteen) days of the issuance of this LOA, furnish an irrevocable Development Period Performance Security of Rs 14.75 Crore (Rs. Fourteen Crore Seventy Five Lakhs Only) in accordance with **RFP Volume-I Clause No. 2.2.8**
- That within 14 (fourteen) days from the date of issuance of this LOA, and in accordance with **RFP Volume-I Clause 3.2.8**, you shall incorporate a Special Purpose Vehicle (SPV) to act as the Concessionaire and for executing the Concession Agreement with the Authority and implementing the Project in accordance with the terms thereof, and submit all the documents related to SPV incorporation to Gangtok Smart City Development Limited.
- That within 14 (fourteen) days of date of this LOA and after absolute & unconditional fulfilment of the conditions mentioned hereinabove and in addition thereof, you are requested to execute and ensure execution by the Concessionaire of the, Concession Agreement, in the format set forth in the RFP Document, with the Authority.

Thanking You

  
 Chief Executive Officer  
 Gangtok Smart City Development Ltd.  
 Gangtok, Sikkim  
 Date: 18/06/2021



**VEGA**  
CIRCLE

Dated: 05.01.2021

## Appendix XI: Financial Proposal

To,  
The Chief Executive Officer,  
Gangtok Smart City Development Limited  
Sokaythang, Below ICAR office,  
Gangtok, Sikkim – 737102

**Subject:** Financial Proposal for "Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area near M.G. Marg, Gangtok – East Sikkim on Design, Build, Finance, Operate and Transfer (DBFOT) basis"

Dear Sir,

With reference to your RFP Document for "Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area near M.G. Marg, Gangtok – East Sikkim on Design, Build, Finance, Operate and Transfer (DBFOT) basis", dated 16.09.2020, I/we, having examined the RFP Document and understood its contents, hereby submit my/our Financial Proposal for the aforesaid Project. The Bid is unconditional and unqualified.

1. The Financial Proposal is unconditional and unqualified.
2. I/ We acknowledge that the Authority will be relying on the information provided in the Bid and the documents accompanying the Bid for selection of the Concessionaire for the aforesaid Project, and we certify that all information provided therein is true and correct; nothing has been omitted which renders such information misleading; and all documents accompanying the Bid are true copies of their respective originals.
3. This statement is made for the express purpose of our selection as Concessionaire for the "Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area near M.G. Marg, Gangtok – East Sikkim on Design, Build, Finance, Operate and Transfer (DBFOT) basis" (the "**Project**").
4. I/ We shall make available to the Authority any additional information it may find necessary or require to supplement or to authenticate the Financial Proposal.
5. I/ We acknowledge the right of the Authority to reject our Financial Proposal without assigning any reason or otherwise and hereby waive, to the fullest extent permitted by applicable law, our right to challenge the same on any account whatsoever.
6. I/ We certify that in the last three years, we/ any of our Associates have neither failed to perform on any contract, as evidenced by imposition of a penalty by an arbitral or judicial Authority or a judicial pronouncement or arbitration award, nor been expelled from any project or contract by any public Authority nor have had any contract terminated by any public Authority for breach on our part.

TIRUPATI PLAZA PVT. LTD.

Chief Financial Officer

---

**Tirupati Plaza Pvt. Ltd.**

Corporate office : Basics Floor, Vega Circle Mall, 3rd Mile, Sevoke Road, Siliguri-734008



**VEGA**  
CIRCLE

7. I/ We declare that:
- a) I/ We have examined and have no reservations to the Bid Documents, including any Addendum issued by the Authority; and
  - b) I/ We do not have any Conflict of Interest in accordance with **Clauses 3.2.5** of the RFP Document; and
  - c) I/ We have not directly or indirectly or through an agent engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice, as defined in **Clause 4.3** of the RFP Document, in respect of any tender or request for proposal issued by or any agreement entered into with the Authority or any other public sector enterprise or any government, Central or State; and
  - d) I/ We hereby certify that we have taken steps to ensure that in conformity with the provisions of **Section 4** of the RFP, no person acting for us or on our behalf has engaged or will engage in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice; and
  - e) the undertakings given by us along with the Bid in response to the RFP Document for the Project were true and correct as on the date of making the Bid and are also true and correct as on the Bid Due Date and I/we shall continue to abide by them.
8. I/ We understand that you may cancel the Bidding Process at any time and that you are neither bound to accept any Bid that you may receive nor to invite the Bidders to Bid for the Project, without incurring any liability to the Bidders, in accordance with **Clause 3.9** of the RFP Document.
9. I/ We believe that we satisfy(s) the Net Worth and Average Cash Accrual and meet(s) the requirements as specified in the RFP Document.
10. I/ We declare that we or our Associates are not a part of any other Bidder submitting a Bid for the Project.
11. I/ We certify that in regard to matters other than security and integrity of the country, we or any of our Associates have not been convicted by a Court of Law or indicted or adverse orders passed by a regulatory Authority which could cast a doubt on our ability to undertake the Project or which relates to a grave offence that outrages the moral sense of the community.
12. I/ We further certify that in regard to matters relating to security and integrity of the country, we or any of our Associates have not been charge-sheeted by any agency of the Government or convicted by a Court of Law.
13. I/ We further certify that no investigation by a regulatory Authority is pending either against us or against our Associates or against our CEO or any of our directors/ managers/employees.
14. I/ We undertake that in case due to any change in facts or circumstances during the Bidding Process, we are attracted by the provisions of disqualification in terms of the guidelines referred to above, we shall intimate Authority of the same immediately.

TIRUPATI PLAZA PVT. LTD.

*Ashish Raju*

Chief Financial Officer

**Tirupati Plaza Pvt. Ltd.**

Corporate office : Basics Floor, Vega Circle Mall, 3rd Mile, Sevoke Road, Siliguri-734008



15. I/ We understand that the Selected Bidder shall incorporate SPV under the Indian Companies Act, 2013, as the case may be, prior to execution of the Concession Agreement.
16. I/ We hereby irrevocably waive any right or remedy which we may have at any stage at law or howsoever otherwise arising to challenge or question any decision taken by the Authority in connection with the selection of the Bidder, or in connection with the Bidding Process itself, in respect of the above-mentioned Project and the terms and implementation thereof.
17. In the event of our company being declared as the Preferred Bidder, I/we agree to enter into a Concession Agreement in accordance with the draft that has been provided to us prior to the Bid Due Date [and Addenda thereof]. We agree not to seek any changes in the aforesaid draft and agree to abide by the same.
18. I/ We have studied all the Bid Documents carefully. We understand that except to the extent as expressly set forth in the Concession Agreement, we shall have no claim, right or title arising out of any documents or information provided to us by the Authority or in respect of any matter arising out of or relating to the Bidding Process including the award of Contract.
19. I/ We offer a Bid Security of Rs. 1,50,00,000/- (Rupees One Crore Fifty Lakh Only) to the Authority in accordance with the RFP Document.
20. The Bid Security in the form of a Bank Guarantee is enclosed.
21. I/ We agree and understand that the Financial Proposal is subject to the provisions of the Bid Documents. In no case, I/we shall have any claim or right of whatsoever nature if the Project / Contract is not awarded to me/us or our Bid is not opened or rejected.
22. The Concession Period has been quoted by me/us after taking into consideration all the terms and conditions stated in the RFP, draft Concession Agreement, our own estimates of costs and after a careful assessment of the site and all the conditions that may affect the Project cost and implementation of the project.
23. I/ We agree and undertake to abide by all the terms and conditions of the RFP Document.
24. We shall be liable for all the obligations of the Concessionaire under the Concession Agreement.
25. I/ We shall keep this offer valid for 180 (one hundred and eighty) days from the Bid Due Date specified in the RFP.

TIRUPATI PLAZA PVT. LTD.

*Ashish Saha*

Chief Financial Officer

---

**Tirupati Plaza Pvt. Ltd.**

Corporate office : Basics Floor, Vega Circle Mall, 3rd Mile, Sevoke Road, Siliguri-734008



26. I/ We hereby submit our Bid and seek Grant of Rs. 103.98 Crore (Rupees One Hundred Three Crore Ninety-Eight Lakh only), i.e., 35.25% (Thirty-Five Point Two Five Percentage) of Estimated Project Cost to execute the Project in accordance with the provisions of the draft Concession Agreement.

27. I/ We shall submit our Financial Model in a soft copy, i.e. in MS Excel in support of our Bid, in accordance with the provisions of the RFP Document.

In witness thereof, I/we submit this Bid under and in accordance with the terms of the RFP Document.

TIRUPATI PLAZA PVT. LTD.  
Yours faithfully,  
*Akhil Dalmia*  
Chief Financial Officer

Date: 05.01.2021

Tirupati Plaza Private Limited  
Akhil Dalmia (FCA)  
Chief Financial Officer

Place: Siliguri

---

**Tirupati Plaza Pvt. Ltd.**

Corporate office : Basics Floor, Vega Circle Mall, 3rd Mile, Sevoke Road, Siliguri-734008

**Annexure B: Letter of Acknowledgement**

*(to be submitted by the Preferred Bidder on its letter head along with the signed Duplicate Copy of the LoA)*

To  
Chief Executive Officer,  
Gangtok Smart City Development Limited,  
Gangtok, Sikkim

**Sub:** Letter of Acknowledgement of the Letter of Acceptance ("LOA") for "Multi-Level Car Parking cum Commercial Development at Old West Point School Area on Design, Build, Finance, Operate and Transfer (DBFOT) basis" (the 'Project').

Sir,

We,....., a company incorporated under the Companies Act, [1956 / 2013] and having its Registered Office at \_\_\_\_\_, do hereby acknowledge the receipt of the Letter of Acceptance ("LOA") for Implementation of "**Multi-Level Car Parking cum Commercial Development at Old West Point School Area on Design, Build, Finance, Operate and Transfer (DBFOT) basis**" project in the state of Sikkim on PPP basis (the "**Project**") issued by Gangtok Smart City Development Limited, Sikkim, vide their Letter no. \_\_\_\_\_ dated, and undertake to absolutely and unconditionally comply with the terms and conditions contained therein.

Signature \_\_\_\_\_ (Authorised Signatory)

Name:

Address:

Place:

Date:

Enclosed: Signed Duplicate Copy of LOA

CC:

## ANNEUXRE R-7

File No:106/GSCDL/2019

Gangtok Smart City Development Limited,  
5<sup>th</sup> Floor Kissan Bazar, Lal Bazar Road,  
Gangtok, Sikkim - 737101  
E Mail - [gangtoksmartcity@gmail.com](mailto:gangtoksmartcity@gmail.com)  
CIN - U9309090WB2017SGC223807

Memo No:.....197...../GSCDL/2021-22Dated: 30 / 06 / 2021

To,

MESASO Infrastructure Pvt Ltd.,  
3<sup>rd</sup> Mile, Sevoke Road  
Siliguri- 734008

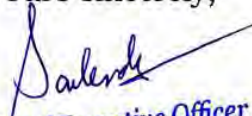
**Subject: Appointment of Concessionaire for implementation of Multi level car parking cum commercial development at Old West Point School Area, Gangtok**

Sir,

With Reference to Concession agreement entered between Gangtok Smart City Development Limited and MESASO Infrastructure Private Limited; Dated 29.06.2021, we have hereby appointed you as a concessionaire for "Implementation of Multi level car parking cum commercial development at Old West Point School Area, Gangtok" on Design, Built, Finance, Operate and Transfer (DBFOT) basis under PPP mode.

Thanking You,

Yours sincerely,

  
Chief Executive Officer  
Gangtok Smart City Development Limited,  
Gangtok

-TRUE COPY-



ANNEXURE R-41

GANGTOK MUNICIPAL CORPORATION  
DEORALI, EAST SIKKIM

Email:- [gmc.sikkim@gmail.com](mailto:gmc.sikkim@gmail.com)  
Website:-[www.gmc.sikkim.in](http://www.gmc.sikkim.in)

Memo No: 138 /GMC/2021

Dated: 30.06.2021

**TO WHOM IT MAY CONCERN**

The Gangtok Municipal Corporation has 'no objection' on shifting of water supply pipes and Sewerage connection from Old West Point School (South West Taxi Stand parking area) for demolition of said structure for purpose of constructing new Multi-Level Car Parking cum Commercial Development by Mesaso Infrastructure Private Limited.



*[Handwritten Signature]*  
Municipal Commissioner  
Gangtok Municipal Corporation

**Municipal Commissioner**  
**Gangtok Municipal Corporation**

-TRUE COPY-



## ANNEXURE R-52

GOVERNMENT OF SIKKIM  
ROADS & BRIDGES DEPARTMENT  
NIRMAN BHAWAN, GANGTOK-737101  
e-mail: nhwingsikkim@gmail.com

No. 04/608/R&amp;B/NH/2019-20/165

Date 20/08/2021

To

MESASO Infrastructure Private Limited,  
3<sup>rd</sup> Mile Sevoke Road,  
Siliguri, 734008.

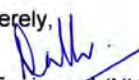
**Subject: NOC to proceed with the work "Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School, Near M.G. Marg, Gangtok".**

Sir/Madam,

Reference your letter no. MIPL/HO/14/2021-22 Dated: 19/08/2021, it is to inform you that the said construction work does not fall under Right of Way (R.O.W.) of NH-10, hence the competent authority has no objection for the implementation of said work.

Thanking you,

Yours Sincerely,

  
Divisional Engineer-I (NH),  
Roads & Bridges Department,  
Gangtok  
Divisional Engineer (NH)-III  
Roads & Bridges Department  
Govt. of Sikkim  
Gangtok



-TRUE COPY-

ANNEXURE R-18  
(Colly)

**Dr. H. Sharma**  
Assistant Professor

Indian Institute of Technology,  
Guwahati,

North Guwahati, Guwahati-781 039,  
Assam, India.

Phone : +91-361-258- 3326  
Fax : +91-361-258-2440  
email : shrishi@iitg.ac.in



DEPT. OF CIVIL  
ENGINEERING

Date: 7<sup>th</sup> September 2021

To,  
**Shri Kumar Manish**  
V.P.-Project  
West Point  
Gangtok

Dear Shri Kumar Manish

In response to the discussions held for association for the upcoming Project Integrated Commercial Cum MLCP Complex at GANGTOK, SIKKIM, we are happy to accept the offer and give our consent for the same for the prestigious project.

The proposal includes the a) Team from IIT Guwahati b) topics covered, c) the scope of the work, d) consultancy charges and, e) rules and regulations as per IIT Guwahati norms.

The project is of National importance and our dedicated technical expertise with utmost diligence and care will be provided for the project.



With regard

Dr. Hrishikesh Sharma

Assistant Professor, Department of Civil Engineering

Indian Institute of Technology, Guwahati, Guwahati-781 039, Assam, India

Email id: [shrishi@iitg.ac.in](mailto:shrishi@iitg.ac.in), Ph No: +91-9435321894

**Proposal for Association for providing Technical Expertise on construction of  
Upcoming Project Integrated Commercial Cum MLCP Complex at  
GANGTOK, SIKKIM**

Dear **Shri Kumar Manish, V.P.-Project, West Point, Gangtok, I, Dr. Hrishikesh Sharma,** Structural Engg expert, Department of Civil Engineering, express Interest for providing technical support for the prestigious project of construction of **Integrated Commercial Cum MLCP Complex at GANGTOK, SIKKIM for the entire duration of project.**

The detailed scope of the work and Consultancy charges are mentioned below.

- 1) Technical expertise on the Structural Components including design, fabrication and installation aspects.
- 2) Technical expertise on the Geotechnical Components and aspects including the feasibility and implementation aspects.
- 3) Concrete design for to Sustain Design Life – Detailed RECOMMENDATIONS
- 4) Soil Stabilizing measures that has greater longevity
- 5) Special treatment for water logging, structural protection and/or similar that are deemed fit for the survival and performance of the Whole system. - Recommendations only
- 6) Specified Testing requirements and TPQA measures for the field implementation – Detailed Testing and Evaluation
- 7) Detailed technical recommendations on different aspects of project during the entire duration of project including regular site visits.

## 244

## C) CONSULTANCY CHARGES

SI No	Nature of Work	Amount (Rs) including IIT Guwahati OH Charges (30% on Total)	Taxes GST (18%)	Total Amount (Rs)
1	Technical expertise on the Structural Components including design, fabrication and installation aspects.	<b>15,00,000</b>		
2	Technical expertise on the Geotechnical Components and aspects including the feasibility and implementation aspects.			
3	Concrete design for to Sustain Design Life – Detailed RECOMMENDATIONS			
4	Specified Testing requirements and TPQA measures for the field implementation			
5	Soil Stabilizing measures that has greater longevity			
6	Special treatment for water logging, structural protection and/or similar that are deemed fit for the survival and performance of the Whole system. - Recommendations only			
7	Specified Testing requirements and TPQA measures for the field implementation – Detailed Testing and Evaluation			
8	Detailed technical recommendations on different aspects of project during the entire duration of project including regular site visits.			
	<b>Total</b>		<b>2,70,000</b>	<b>17,70,000</b>
9	<b>Regular site visit as per the progress of work during the entire duration of project is required. The costs including travel expenses persons, boarding, lodging cost and arranging necessary permissions as per the on-going CoVID19 protocol has to be arranged by Office of V.P.-Project, West Point, Gangtok</b>	Arranged by Office of <b>Office of V.P.-Project, West Point, Gangtok</b>  (Separate from the Consultancy Charges as detailed in SL No 1-8 Above)		

Note: IIT Guwahati is exempt from income tax under Section 10 (23 C) and 194J of the Income Tax Act 1961. No Income Tax deduction has to be made and the amount is required to be paid in two equal installments. ii) A/c Name: IIT Guwahati II&SI Consultancy A/c No.: 8652101030326, Bank: Canara Bank, IIT Guwahati Branch Guwahati-781039, IFSC: CNR80008652 MICR Code: 78'1015008, Swift Code: CNRBINBBGUD iii) GSTIN: 18AAAJI0130P1Z8, PAN : AAAJI0130P iv) An advance amount of 50% has to be paid to IIT Guwahati account before the start of the work



ANNEXURE R-28  
Email: spcbsikkim@gmail.com

**STATE POLLUTION CONTROL BOARD SIKKIM**  
FOREST & ENVIRONMENT DEPARTMENT  
GOVERNMENT OF SIKKIM  
DEORALI-GANGTOK – 737102

F. No. 1097 SPCB/ 3184

Dated 13/9 /2021

To,

The Managing Director  
MESASO Infrastructure Pvt. Ltd  
3<sup>rd</sup> floor, Vega Circle Mall  
Sevok road Siliguri,  
West Bengal

**Sub: Regarding the request for Consent to Establish for Implementation of Multi-level Car Parking cum Commercial Development at Old West Point School, Near M.G Marg Gangtok East Sikkim.**


Sir,

Kindly refer to your letter Ref.No. MIPL/HO/12/2021-22 dated 19.08.2021 regarding the above mentioned subject, this is to inform you that State Pollution Control Board Sikkim have developed the online portal for application for Consent to Establish/Operate.

Therefore, you are requested to apply for Consent to Establish/Operate online through [www.skocmms.nic.in](http://www.skocmms.nic.in) duly submitting relevant information/documents for the consideration of your request.

Thanking you,

Yours faithfully,

  
(Ranjan Rai)  
Executive Environment Engineer  
State Pollution Control Board-Sikkim



-TRUE COPY-



Ref. No.-MIPL/SITE/WO/01/2021-22

Date: 14.09.2021

To,  
**Dr. Hrishikesh Sharma**  
 Associate Professor  
 Department of Civil Engineering  
 Indian Institute of Technology  
 Guwahati – 781039, Assam, India



(Kind Attention: Dr. Hrishikesh Sharma)

**Subject:** Consultancy for “Vetting of Design and Third-Party Quality Assurance of Integrated Commercial cum MLCP Complex at Old West Point School, Near M.G. Marg, Gangtok, Sikkim”.

Reference: 1. Your offer dated 7<sup>th</sup> September, 2021

Dear Sir,

With reference to the proposal submitted by you on behalf of IIT Guwahati and subsequent references mentioned above, we are pleased to award the Consultancy works of “Vetting of Design and Third-Party Quality Assurance of Integrated Commercial cum MLCP Complex at Old West Point School, Near M.G.Marg, Gangtok, Sikkim” subject to following terms & conditions:

**1. Scope of work:** Vetting of Design and Third-Party Quality Assurance of Integrated Commercial cum MLCP Complex at Old West Point School, Near M.G.Marg, Gangtok, Sikkim”.

The detailed scope of the work and Consultancy charges are mentioned below:

- a. Technical expertise on the Structural Components including design, fabrication and installation aspects, vetting of design.
- b. Technical expertise on the Geotechnical Components and aspects including the feasibility and implementation aspects.
- c. Concrete design for to Sustain Design Life – Detailed Recommendations.
- d. Soil Stabilizing measures that has greater longevity.
- e. Special treatment for water logging, structural protection and/or similar that are deemed fit for the survival and



MESASO Infrastructure Private Limited, 3rd Floor, Vega Circle Mall, 3rd Mile, Sevoke Road, Siliguri, West Bengal - 734001 | info@mesaso.in | + 91 9907311645  
 CIN: U45309WB2021PTC243031 | PAN: AAOCM2843E | GSTIN: 11AAOCM2843E1ZQ



- performance of the Whole system recommendation.
- f. Specified testing requirements and TPQA measures for the field implementation detailed testing and evaluation.
- g. Detailed technical recommendations on different aspects of project during the entire duration of project including regular site visits.

**2. Time Frame:** From September.2021 to March.2026

**3. Submission of the Reports/Deliverables:** The key deliverables for the project are:

- i. Vetted Drawings, Designs.
- ii. Quality Assurance /Inspection Reports.

**4. Consultancy Fee:** Rs.15,00,000/- (Rupees Fifteen Lacs only) including Institute Administrative & Overhead Charges and GST 18% extra.

**5. Schedule of Payment:**

**i) The schedule of payment shall be as under:**


i) The initial advance of 10% of the Consultancy charge shall be released after acknowledgement and acceptance of the award letter along with its terms and conditions.

ii) Balance 90% of the total project cost shall be released during execution of the Project on quarterly or pro-rata basis of financial progress of the Project only after submission of quarterly report.

It is requested that a duplicate of this Work Order duly stamped signed and accepted.

Thanking You.

For Mesaso Infrastructure Pvt. Ltd.

  
Vice President Project



**Dr. H. Sharma**  
Associate Professor

Indian Institute of Technology,  
Guwahati,  
North Guwahati, Guwahati-781 039,  
Assam, India.

Phone : +91-361-258- 3326  
Fax : +91-361-258-2440  
email : shrishi@iitg.ac.in



DEPT. OF CIVIL  
ENGINEERING

**Date: 15<sup>th</sup> September 2021**

To,  
**Shri Kumar Manish**  
V.P.-Project, West Point, Gangtok, Sikkim

**Subject:** Consultancy for “Vetting of Design and Third-Party Quality Assurance of Integrated Commercial Cum MLCP Complex at Old West Point School, Near M.G. Marg, GANGTOK, SIKKIM.”– Acceptance of the Work Order

**Ref: Work Order dated MIPL/SITE/WO/01/2021-22 dated 14.09.2021**

Dear Shri Kumar Manish, V.P.-Project, West Point, Gangtok

Pursuant to your request to associate with your organization Vetting of Design and Third-Party Quality Assurance of Integrated Commercial Cum MLCP Complex at Old West Point School, Near M.G. Marg, GANGTOK, SIKKIM, I do hereby give my consent for association.

I also hereby accept the assignment for Vetting of Design and Third-Party Quality Assurance of Integrated Commercial Cum MLCP Complex at Old West Point School, Near M.G. Marg, GANGTOK, SIKKIM as per **Work Order dated MIPL/SITE/WO/01/2021-22 dated 14.09.2021.**

**As a mark of acceptance your letter duly signed is also attached along.**

Kindly let me know in case you need additional information.


with regards



Dr. Hrishikesh Sharma  
Associate Professor  
Department of Civil Engineering  
Indian Institute of Technology, Guwahati, Guwahati-781 039, Assam, India  
Email id: [shrishi@iitg.ernet.in](mailto:shrishi@iitg.ernet.in), Ph No: +91-9435321894

## ANNEXURE R-2

Email: snchsikkim@gmail.com



**STATE POLLUTION CONTROL BOARD-SIKKIM**  
 FOREST & ENVIRONMENT DEPARTMENT  
 GOVERNMENT OF SIKKIM  
 DEORALI, GANGTOK - 737102


E. No. 2021/SPCB/ 3715 Dated 17/09/2021


To,  
 The Secretary,  
 Urban Development Department,  
 Government of Sikkim,  
 Gangtok-737101.

**Sub: No Objection Certificate.**

In consideration of your letter no. 250/UDD/Secy dated 08/09/2021, this is to inform you that the State Pollution Control Board-Sikkim does not have any objection for dismantling/demolition of the existing facility located at Old West Point School, Gangtok, East Sikkim subject to the following conditions:

1. That, you shall ensure that the project proponent carries out the dismantling/demolition work without causing any environmental pollution duly installing pollution control measures such as suppression of dust/fugitive emission, noise controlling measures in the premises by erecting barriers & limiting work during day time only and proper management of demolition waste within the premises, further, that any such dismantling/demolition shall ensure foundational security of the area in question;
2. That, all forms of Demolition waste shall be managed and disposed in accordance with the provisions of the Construction & Demolition Waste Rules, 2016;
3. That, the project proponent shall construct temporary labour camp duly providing proper sanitation & solid waste management facility within the premises in accordance to the Solid Waste Management Rules, 2016;
4. That, you shall obtain any other NOC, wherever required before taking up the demolition work.

  
 Member Secretary  
 State Pollution Control Board-Sikkim  
 Dr. Gopal Pradhan  
 Member Secretary  
 State Pollution Control Board  
 Forest Env. & W.L. Mangt. Deptt  
 Govt. of Sikkim, Gangtok



-TRUE COPY-

**F. No. IA3-22/19/2021-IA.III [E 164361] ANNEXURE R-29**  
**Government of India**  
**Ministry of Environment, Forest and Climate Change**  
**(Impact Assessment Division)**

\*\*\*\*\*

Indira Paryavaran Bhawan  
 Aliganj, Jorbagh Road  
 New Delhi-110 003

Dated: 20<sup>th</sup> September, 2021

**ORDER**

**Sub: Directions under Section 5 of the Environment (Protection) Act, 1986 to not grant or renew CTO unless Environment Clearance, as applicable, has been obtained – regarding.**

Whereas, prior Environmental Clearance is a statutory requirement for project/activities covered in the schedule of the EIA Notification 2006, issued under section 3 of the Environment (Protection) Act, 1986.

2. And whereas, obtaining the consents under Water (Prevention & Control of Pollution) Act, 1974 & Air (Prevention & Control of Pollution) Act, 1981 is mandatory for all industrial units in Red, Orange and Green categories.
3. And whereas, the grant of EC and Consents are requirements under different statutes and are not inter-dependent and can be carried out as a parallel process.
4. And whereas, many a times it has been observed that while industrial units are in possession of valid 'Consent to Establish' (CTE)/ 'Consent to Operate' (CTO) issued by State Pollution Control Boards (SPCBs)/ UT Pollution Control Committees (UTPCC), however, they have not obtained the Environmental Clearance (EC), even though it was required as per provisions of EIA Notification 2006.
5. And whereas, it has been observed that this situation is arising because majority of the SPCBs/ UTPCCs are issuing CTE/CTO to projects without ascertaining the applicability of prior EC to projects/ activities, resulting in an avoidable situation of closure for even those industries also who seek to carry out their activities following due procedure.

6. Now therefore, in exercise of powers conferred by section 5 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government, hereby directs that all SPCB/UTPCC shall:

- i. Ascertain the applicability of EIA Notification at the time of grant/renewal of CTE and stipulate appropriate condition for obtaining Environmental Clearance (EC), if applicable, before construction/commencement of project/activity.
  - ii. Ensure that the project proponent possesses a valid Prior EC in terms of the extant EIA Notification, if applicable, at the time of grant/renewal of CTO and no CTO shall be granted or renewed unless EC, if applicable, has been obtained.
7. This is issued with the approval of the Competent Authority.

  
(A K Agrawal)  
Director

To

Chairmen of all State/UT Pollution Control Boards and Pollution Control Committees

Copy for information to:

1. PS to Hon'ble Minister for Environment, Forest and Climate Change
2. PS to Hon'ble MoS (EF&CC)
3. PPS to Secretary (EF&CC)
4. PPS to AS(RA)/JS(SKB)
5. Chairman of all the Expert Appraisal Committees
6. Chairperson/Member Secretaries of all the SEIAAs/SEACs
7. All the Officers of IA Division, MOEFCC
8. Website MoEF&CC/ Guard file.

## ANNEXURE R-3

(18)



GOVERNMENT OF SIKKIM  
URBAN DEVELOPMENT DEPARTMENT  
GANGTOK

No: 255/UDD/Seq.

Dated: 21/09/2021

To,

The Chief Executive Officer  
Gangtok Smart City Development Limited  
Gangtok.

**Sub: - Proposal for construction of Multi level Car Parking cum Commercial Complex at Old West Point School complex Gangtok.**

Reference proposal for construction of Multi level Car Parking cum Commercial Complex at Old West Point School complex Gangtok, I am directed to convey the approval to start dismantling of existing structure of Old West Point School for construction of the aforesaid work subject to no objection from Private Estate for commencement of the dismantling work, as the said land is yet to be transferred to Urban Development Department.



Special Secretary  
Urban Development Department

SPECIAL SECRETARY  
Urban Dev. Department  
Government of Sikkim  
Gangtok

-TRUE COPY-



HEADQUARTERS  
SIKKIM FIRE & EMERGENCY SERVICE  
[27°33'21.36"N 88°61'42.01"E]

ANNEXURE R-53

No: 388/POL/F&amp;ES/2021

Date: 21.09.2021

**PROVISIONAL N.O.C.**

With reference to your letter No. MIPL/HO/13/2021-22 dated 19.08.2021, requesting Fire NOC for 'Implementation of 'Multi-Level Car Parking cum Commercial Development at Old West Point School', near M.G. Marg, Gangtok, East Sikkim, you are granted this certificate as permission to execute the said project subject to satisfactory compliance with the fire safety requirements of the National Building Code of India 2016.

**1. ACCESS:**

- (i) The premises should be located as to provide easy access to fire brigade.
- (ii) Adequate passageway and clearance required for fire fighting vehicle to enter the each premises should be provide at the main entrance. The width of such entrance shall not be less than 4.5 meters. If an arch or covered gate is constructed, it shall have clear headroom of not less than 5 meters.

**2. COURTYARDS/OPEN SPACES:**

- (i) The open spaces around the building shall be not less than 4.5 meters and shall be hard surface so as take load of the fire engine weighing up to 45 tons each.
- (ii) Courtyard as above all around the building shall be free from obstruction and encroachment for fire brigade access at all the times.

**3. STAIRCASE:**

- (i) The staircase shall be terminated at ground floor level and divert to the basement if any.
- (ii) The staircase of not less than 1.5 meters width shall be provided on each floor of the building.
- (iii) No gas piping or electrical panels shall be allowed in the stairway.
- (iv) The exit signs with arrows indicating the escape routes shall be provided at a height of 1.5 m. from the floor level on the wall and shall painted with fluorescent paints.
- (v) All exists signs should be flush with the wall and so designated that no mechanical damage to them can result from the removing furniture, material or any other equipments.

**4. ESCAPE ROUTE LIGHTING:**

- (i) Escape route that i.e. staircase and common corridor, left, etc. Lighting shall be on independent/separate circuits and shall be independently connected so as it could be operated by one switch installation on the ground floor easily accessible to fire staff at any time irrespective of the position of the individual control of the light points, if any.

**5. D.G. SET:**

- (i) A Stand- by D.G. Set with appropriate change over switch shall be provided to supply power to staircase and common corridor lighting circuit, fire lift, the stand-by fire pump, pressurization fans and blowers, smoke extraction and damper systems in case of failure of normal electric supply.

The generator shall be capable of taking starting current of all the machines and circuits started above simultaneously.

- (ii) Diesel generator shall not be installed at any floor other than ground/ first basement. If installed indoors, proper ventilation and exhaust shall be planned. The DG room shall be separated by 120 min fire resistance rated walls and doors.
6. **All transformers** above 10 MVA shall be protected by high velocity water spray system or nitrogen injection system.
7. **Electric panel** shall be protected of clean agent flooding system.

**8. FIRE PROTECTION REQUIREMENT:**

**A. PORTABLE FIRE EXTINGUISHER:**

- (i) First aid fire extinguishers bearing ISI mark shall be installed in the building as per the scale laid down in IS 2190:1992 and shall be maintained periodically. So as to ensure their perfect serviceability at all time and keep ready for inspection by officer from the fire department in time to time.

**B. HOSE REEL:**

- (i) The first aid hose reel shall be installed on each floor in the staircase landing of the building for fire fighting and first aid hose reel shall be connected directly to the wet/dry riser main and diameter of the hose reel shall be not less than 19 mm.

**C. WET RISER:**

- (i) The Wet Riser system connected to a fire pump at ground level and having main not less than 100 mm internal diameter G.I. "C" class pipe shall be provided with single landing valve on each floor/landing in the premises.
- (ii) Landing valve should be provided with hose box along with 2 delivery hoses and a standard branch pipe 19 mm diameter.

**D. AUTOMATIC SPRINKLER SYSTEM**

- (i) The automatic sprinkler system should be provided on each floor of the building.

**E. YARD HYDRANT:**

- (i) External fire hydrant system shall be also installed in the premises at appropriate distance and having main not less than 200/150 mm internal diameter G.I. "C" class pipe with connect to the diesel/electric centrifugal fire pump to charge hydrant system.
- (ii) Hydrant point shall be provided with hose box along with 2 delivery hoses and a standard branch pipe 19 mm dia meter.
- (iii) It shall also fit with inlet connection (two way collection head with non return valve) near at main gate for charging with water by pumping by first service appliances.

**F. FIRE ALARM SYSTEM:**

- (i) The manually operated electric fire alarm (MOEFA) system with main control panel at ground floor level and bell-boxes and hooter at each upper floor level shall be provided at appropriate places in the building.

**G. AUTOMATIC DETECTION & ALARM SYSTEM:**

- (i) Automatic detection and alarm system with control panel (addressable) shall be provided on common corridor on each floor of the building.

**H. UNDER GROUND WATER STORAGE TANK:**

250K ltrs.

**I. OVERHEAD TANK :**

20K Ltrs.

**J. FIRE PUMP:**

1 set for hydrant system and 1 set for sprinkler system. Each set consisting of

- (i) one Electrical driven pump 2850 LPM, Head – 105 M :
- (ii) one Jockey pump 180 lpm 105 M and
- (iii) one Diesel driven pump 2850 LPM, Head – 105 M (may keep common)

**K. LIGHTNING PROTECTION OF BUILDINGS:**

- (i) The lightning arrester shall be provided for protection of the building.

**L. SMOKE VENTILATION REQUIREMENTS:**

- (i) Shall be provided as per NBC 2016.

**M. OTHER REQUIREMENTS:**

1. Openings in walls or floors which are necessary to be provided to allow passages of all building services like cables, electrical wirings, telephone cables, plumbing pipes, etc. shall be protected by enclosure in the form of ducts/shafts having a fire resistance not less than 120 min. The inspection door for electrical shafts/ducts shall be not less than 120 min. Further, medium and low voltage wiring running in shafts/ducts, shall either be armoured type or run through metal conduits.
2. The space between the electrical cables/conduits and the walls/slabs shall be filled in by a fire stop material having fire resistance rating of not less than 120 min. This shall exclude requirement of fire stop sealing for low voltage services shaft.
3. For plumbing shafts in the core of the building, with shaft door opening inside the building, the shafts shall have inspection doors having fire resistance rating not less than 30 min.
4. Every vertical opening between the floors of a building shall be suitably enclosed or protected, as necessary, to provide the following:
  - a) Reasonable safety to the occupants while using the means of egress by preventing spread of fire, smoke, or fumes through vertical openings from floor to floor to allow occupants to complete their use of the means of egress. Further it shall be ensured to provide a clear height of 2 100 mm in the exit access.
  - b) Limitation of damage to the building and its contents.
5. Emergency power supplying distribution system for critical requirement for functioning of fire and life safety system and equipment shall be planned for efficient and reliable power and control supply to the following systems and equipment where provided:
  - a) Fire pumps.

- b) Pressurization and smoke venting; including its ancillary systems such as dampers and actuators.
- c) Fireman's lifts (including all lifts).
- d) Exit signage lighting.
- e) Emergency lighting.
- f) Fire alarm system.
- g) Public address (PA) system (relating to emergency voice evacuation and annunciation).
- h) Magnetic door hold open devices.
- j) Lighting in fire command centre and security room.

Power supply to these systems and equipment shall be from normal and emergency (standby generator) power sources with changeover facility.

6. Refuge area shall be provided and planned to accommodate the occupants of two consecutive floors, based on the occupant load served by the area of refuge or a minimum of 15 m<sup>2</sup>, whichever is higher as :
  - 1) The refuge area shall be provided on the periphery of the floor and open to air at least on one side protected with suitable railings.
  - 2) Refuge areas shall be provided at/or immediately above 24 m and thereafter at 15 m.
  - 3) A prominent sign bearing the words **REFUGE AREA** shall be installed at the entry of the refuge area, having height of letters of minimum 75 mm and also containing information about the location of refuge areas on the floors above and below this floor. The same signage shall also be conspicuously located within the refuge area.
  - 4) Each refuge area shall be ventilated and provided with first aid box, fire extinguishers, public address speaker, fire man talk back, and adequate emergency lighting as well as drinking water facility.
  
9. Egress components as number and size of exits to which access is provided, capacity of exit access, travel distance to an exit, the obviousness of the direction to an exit, and any hindrance including due to security issues shall be in accordance with the NBC 2016.

#### 10. GENERAL REQUIREMENT:

- (i) Any compartmentation in addition to the proposed plan/ existing structure shall be made only with the prior approval of the Sikkim Fire & Emergency Service failing which legal action shall be initiated against the applicant.
- (ii) The storage, use and handling of gasoline, fuel oil and other flammable liquids/ gases shall not be permitted in any group occupancy unless it complies with the regulations of explosive materials.
- (iii) "NO SMOKING" "FIRE EXTINGUISHER" and "DANGER" caution boards should be displayed at the appropriate places physically shown wherever required & the caution boards should be easily visible.
- (iv) Emergency telephone numbers like "police - 100", "Fire -101", "Ambulance-102" "Responsible Persons" should be displayed in security cabin reception hall and Fire Control Room.

- (v) Emergency / Fire Evacuation floor plan shall be displayed on each floor at appropriate places in the building.
- (vi) All signs with the arrows indicating the escape routes shall be provided at appropriate places in the building.
- (vii) The competent authority reserves rights to amend any additional recommendations amended from time to time and in the interest of the protection of the occupants and building.
- (viii) Right to reject/ withdrawing of N.O.C. at any time without any notice vested/ reserved with the competent authority if the conditions stipulated above are not complied with.
- (ix) The safety instructions detailed in Annex A shall be complied with during the construction period.
- (x) This " Provisional NOC " for the details given above, which shall be treated valid for the period of " one year" or till the completion of the work whichever is earlier from the date of issue and it is the responsibility of the proprietor to get the same renewed after satisfactory inspection of the fire safety installations and arrangements provided by you.
- (xi) Quarterly progress report of the project and compliance shall be submitted to the Fire Station Officer, Gangtok Fire Station.



  
 Dy. Chief Fire Officer,  
 Sikkim Fire & Emergency Service,  
 Gangtok.

Dy. Chief Fire Officer-I  
 Sikkim Fire & Emergency Service  
 Govt. of Sikkim, G

To.

MESASO Infrastructure Pvt. Ltd.,  
 3<sup>rd</sup> Mile, Sevoke road,  
 Siliguri – 734008.

Copy to :

- (i) Secretary, U.D.H.D. – for kind information pl.
- (ii) Secretary, Labour – for kind information pl.
- (iii) DC, East – for kind information pl.
- (iv) S.P., East – for kind information pl.
- (v) Commissioner, GMC – for kind information pl.
- (vi) Office copy
- (vii) Guard File.

-TRUE COPY-



ANNEXURE R-14

Ref. No. MIPL/HO/18/2021-22

Date: 21.09.2021

To,  
The Principal Secretary  
Mines & Geology Department,  
Gangtok,  
East Sikkim, Sikkim 737101

Sub.: Request letter for issue of Stability report for Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School, Near M.G. Marg, Gangtok, East Sikkim

Ref.: Appointment Letter vide Memo No. 197/GSCDL/2020-21; Dated 30/06/2021

Dear Sir,

With reference to the above subject matter, MESASO Infrastructure Private Limited is appointed as concessionaire for "Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School, Near M.G. Marg, Gangtok, East Sikkim".

We hereby request you to kindly issue a stability report.

Thanking You.

Yours Faithfully,

For, MESASO Infrastructure Private Limited

  
(Authorised Signatory)  




MESASO Infrastructure Private Limited, 3rd Floor, Vega Circle Mall, 3rd Mile, Sevoke Road, Siliguri, West Bengal - 734001 | info@mesaso.in | + 91 9907311645  
CIN: U45309WB2021PTC243031 | PAN: AAOCM2843E | GSTIN: 11AAOCM2843E1ZQ

-TRUE COPY-

ANNEXURE R-12

**GEOTECHNICAL INVESTIGATION REPORT**

**FOR**

**PROPOSED MULTISTORIED BUILDING**

**AT**

**GANGTOK, SIKKIM**

**JOB ENTRUSTED BY**

**M/S MESASO INFRASTRUCTURES  
PRIVATE LIMITED  
OLD WEST POINT SCHOOL, M.G.MARG  
GANGTOK, EAST SIKKIM**

*Vetted*  
*Manoj Kumar Sahis*

**Manoj Kumar Sahis**  
BE, MEGeotechnical Engineering, MGS, MIE, MCI, Chartered Engineer  
Associate Professor  
Department of Construction Engineering  
Jadavpur University

**JOB CONDUCTED BY**

**JP GEO CONSULTANTS  
AN ISO 9001:2015 CERTIFIED ORGANISATION**



**REG. OFFICE- 66, ANDUL ROAD, HOWRAH – 711 109  
CORPORATE OFFICE & LABORATORY  
AC-73, PRAFULLA KANON, KESTOPUR, KOLKATA – 101  
EMAIL: [jpgeoconsultants@gmail.com](mailto:jpgeoconsultants@gmail.com), Mob: 9830813308**

### P R E F A C E

A detailed geotechnical investigation including laboratory testing was carried out for the **proposed Multi-Storied Building at Gangtok, Sikkim**. The objective of this investigation was to evaluate the soil parameters for design of foundation for proposed structure with particular reference to safe bearing capacity and anticipated settlement.

The Geo-technical investigation work was awarded by **M/s Mesaso Infrastructures Private Limited, Old West Point School, M.G.Marg, Gangtok, East Sikkim**. The investigation work for this project was commenced on **22<sup>nd</sup> September 2021** and completed on **28<sup>th</sup> September 2021**.

The report has been prepared after careful study of all data collected during fieldwork and laboratory testing and it deals with geotechnical properties of the sub-soil. **Section – I** of this report covers the fieldwork while **Section – II** contains the results of all the laboratory test and discussions thereon. **Section – III** deals with the engineering appraisal and recommendations.

## SECTION - I

### 1.0 INTRODUCTION

M/s Mesaso Infrastructures Private Limited, Old West Point School, M.G.Marg, Gangtok, East Sikkim, entrusted the soil investigation work for the proposed Multi-Storied Building at Gangtok, Sikkim. At the onset of the work, four (04) no. of PLT have been envisaged.

### 2.0 AIMS AND OBJECTIVES

The aim of the present study was to determine the Safe Bearing Capacity of the subsoil based upon physical test at site.

### 3.0 INVESTIGATION SCHEME AND LOCATION OF TESTS

The scheme of investigation was formulated by the Consultants, which involved carrying out four (04) nos of Plate Load Tests at suitable depth below the existing ground level, at the locations finalized by clients.

### 4.0 FIELD EXPLORATION

Routine plate load test (PLT) was conducted at specified location and depth in accordance with IS: 1888. Size of test plate was 45 cm x 45 cm. Load on test plate was applied by hydraulic jack through ball & socket joint reacting against a gravity type kentledge made of R.S. joists, drum sheets and earth filled bags. At first a seating load was applied. Subsequent load increments were applied in stages up to required intensity. Settlement of plate with elapsed time was recorded through multiple dial gauges for every stage of loading and unloading. After reaching final settlement/load, load was released in stages and settlements were recorded with time. Net settlement of plate sufficiently after completion of unloading was recorded.

The test pit log, load – settlement have been drawn and enclosed in Appendix-I of this report.

**5.0 PLATE LOAD TESTS**

**Bearing Capacity from Plate Load Tests:**

Safe Bearing Capacity (SBC) and settlement of foundation given in the table have been determined using the following formula given below:

$$S_f = S_p \times \left[ \frac{B(bp + 0.3)}{bp(B + 0.3)} \right]^2$$

Where, B = size of footing in metre  
 bp = size of test plate in metre  
 S<sub>f</sub> = Settlement of footing in mm  
 S<sub>p</sub> = settlement of test plate in mm

PLT No.	Soil Type	Max Load (T/m <sup>2</sup> )	Settlement (mm)	
			Gross	Net
PLT-01	Yellowish brown decomposed mica-schist	54.3	6.025	3.53
PLT-02	Yellowish brown decomposed mica-schist	54.3	6.23	3.66
PLT-03	Yellowish brown decomposed mica-schist	54.3	5.785	3.29
PLT-04	Yellowish brown decomposed mica-schist	54.3	6.45	3.89

PLT No.	Safe Bearing Capacity (T/m <sup>2</sup> )	Settlement of plate under imposed loading (mm)	Settlement of prototype footing having width 3.0m under the imposed loading
PLT-01	36.21	4.20	8.45
PLT-02	36.21	4.24	8.54
PLT-03	36.21	4.00	8.06
PLT-04	36.21	4.40	8.88

**Conclusion:** Depending upon the load test done, it can be observed from the graphs that no specific yield load is obtained up to the ultimate load applied and even the settlement occurring under the imposed loading is well within the acceptable limit hence the design load may be selected by applying a factor of safety of 1.50 over the ultimate load.

Vetted

*M. K. Sahis*  
**Manoj Kumar Sahis**  
 BE, ME(Geotechnical) Chartered Engineer  
 Associate Professor  
 Department of Construction Engineering  
 Jadavpur University



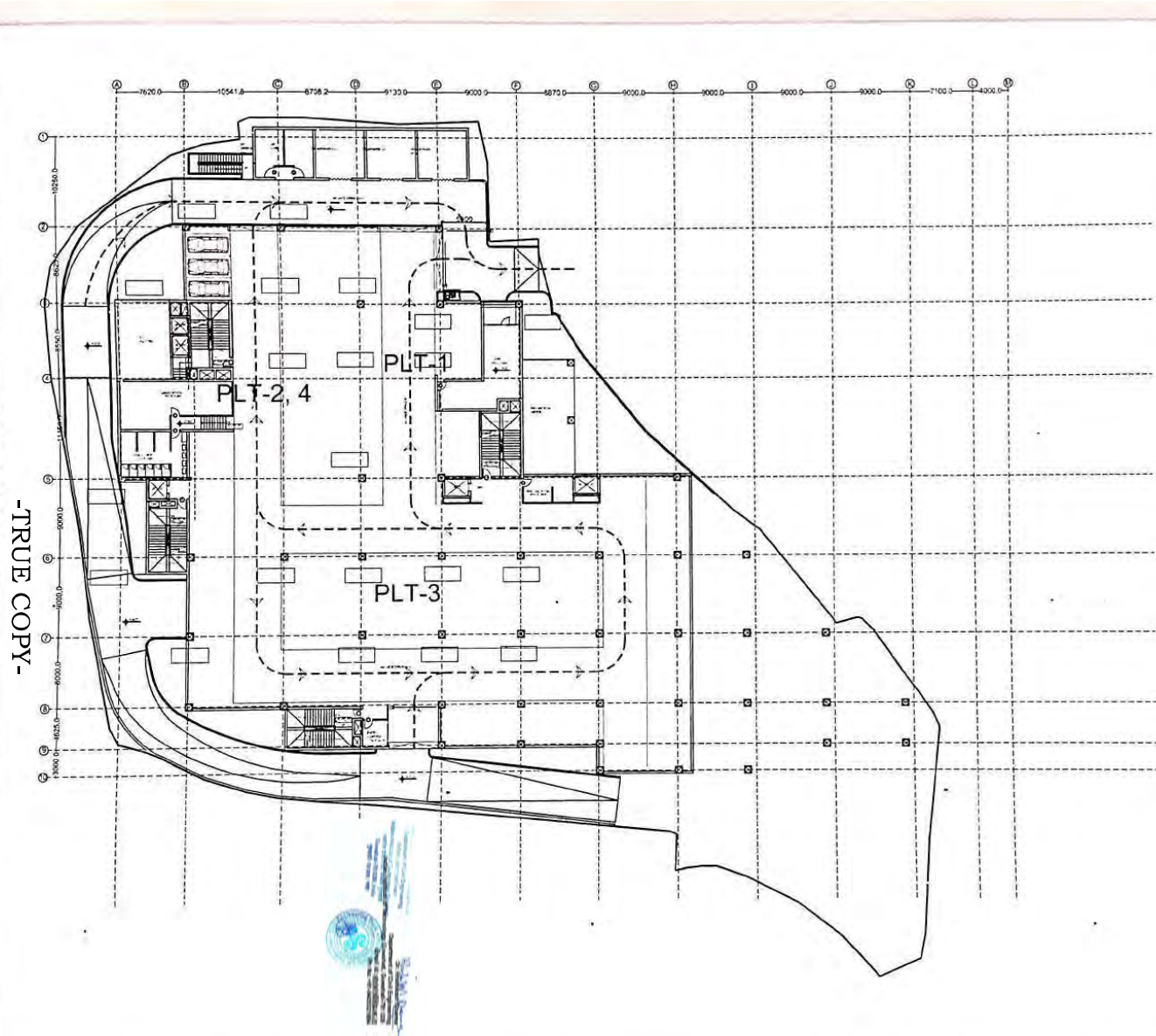
FOR JP Geo Consultants  
*Jishnu Pal*  
**Jishnu Pal**  
 Tech(Civil), M.E(Geo-tech)












-TRUE COPY-

REVISION		NO	DATE
ISSUED FOR			
PROJECT			
CLIENT NAME			
PROJECT MANAGEMENT CONSULTANT			
TITLE <b>BORE HOLE LOCATION PLAN</b>			
CONSULTANT: ARCHITECTURE LANSCAPE AND INTERIOR			
 E-0010001 - 8th Floor, Sector V Salt Lake, Kolkata - 700091, India Email: <a href="mailto:projects@salientdesignstudio.com">projects@salientdesignstudio.com</a> Tel: 033-23670979, 23679089, 21 <a href="http://www.salientdesignstudio.com">www.salientdesignstudio.com</a>			
<b>STRUCTURAL ENGINEERS</b> <b>S.P.A. CONSULTANTS</b> 34, RAM MOHAN DUTTA ROAD, CALCUTTA - 700020 PH. NO 2485-5448, 92475 7614, TELE FAX E-mail: <a href="mailto:spa_consult@alhoce.in">spa_consult@alhoce.in</a>			
DRAWN BY - DLBASIS	CHECKED BY - SPA	DATE - 16.11.2021	SCALE - N T S
JOB NO - 2019_154	SALIENT SPA	VLL-PA-AN-108	
DRG NO - 2019_154_SALIENT_SPA_MLP GANGTOK_BH-01 R0			



ANNEXURE R-15

Ref. No. MIPL/HO/23/2021-22

Date: 01.10.2021

To,  
Chief Executive Officer,  
Gangtok Smart City Development Limited,  
Level 5, Kisan Bazaar, Lal Market Road,  
Gangtok, East Sikkim - 737101

Sub.: Submission of Architectural Plans for Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School, Near M.G. Marg, Gangtok, East Sikkim.

Dear Sir,

With reference to above subject matter, we are submitting herewith the following plans & specifications in triplicate copy duly signed as per concession agreement between Gangtok Smart City Development Limited and MESASO Infrastructure Private Limited; Dated 29.06.2021 and in accordance with the building code of India:

1. Key plan
2. Site plan
3. Building plan
4. Structural plan
5. Geo technical report

Kindly do the needful.

Thanking You.

Yours Faithfully,

For, MESASO Infrastructure Private Limited

MESASO Infrastructure Private Limited

Director

Received  
[Signature]  
1/10/2021

**Assistant Engineer**  
Gangtok Smart City Dev. Ltd.  
Gangtok, East Sikkim

MESASO Infrastructure Private Limited, 3rd Floor, Vega Circle Mall, 3rd Mile, Sevoke Road, Siliguri, West Bengal - 734001 | cfo@mesaso.in | + 91 8101789686

CIN: U45309WB2021PTC243031 | PAN: AAOCM2843E | GSTIN: 11AAOCM2843E1ZQ

-TRUE COPY-

## ANNEXURE R-16

**Dr. H. Sharma**  
Associate Professor

**Indian Institute of Technology,**  
**Guwahati,**  
North Guwahati, Guwahati-781 039,  
Assam, India.

Phone : +91-361-258- 3326  
Fax : +91-361-258-2440  
email : shrishi@iitg.ac.in



DEPT. OF CIVIL  
ENGINEERING

To,  
MESASO Infrastructure Private Limited  
3<sup>rd</sup> Floor, Vega Circle Mall,  
3<sup>rd</sup> Mile Sevoke Road,  
Siliguri-734001

Date: 04-10-2021

Sub:-Structural Vetting of design and drawing of Proposed 04 Level Parking + 10 Level Commercial Development at Old West Point School, Near M.G. Marg, Gangtok, East Sikkim

Dear Sir,

This is to certify that the above-mentioned Project the composite steel structure design with steel and concrete structure, drawing & design is being checked, and vetted by IIT Guwahati team, Department of Civil Engineering, as per relevant BIS Code and as per design it's found satisfactory for the execution of 04 Level Parking + 10 Level Composite Steel Structure. The Structure can withstand seismic load up to Richter scale 8 as per norms of IS 1893 – 2016.

with regards



Dr. Hrishikesh Sharma  
Associate Professor  
Department of Civil Engineering  
Indian Institute of Technology, Guwahati, Guwahati-781 039, Assam, India  
Email id: [shrishi@iitg.ernet.in](mailto:shrishi@iitg.ernet.in), Ph No: +91-9435321894

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ANNEXURE R-48



GANGTOK SMART CITY  
DEVELOPMENT LIMITED

GANGTOK SMART CITY DEVELOPMENT LIMITED  
LEVEL 5, KISAN BAZAAR, LAL MARKET ROAD,  
GANGTOK - 737101, SIKKIM, INDIA  
CIN - U93090WB2017SGC223807

Memo no: 437/GSCDL/2021-22

Dated: - 04/10/2021

To,  
The Divisional Forest Officer-Territorial,  
Forest, Environment & Wildlife Management Department,  
Government of Sikkim,  
Gangtok, East Sikkim - 737101

**Sub: - Request for removal/relocation of tree from old West Point  
School Complex to a suitable location**

Sir/Ma'am,

This is to inform you that Gangtok Smart City Dev. Ltd. is undertaking the work "**Construction of Multi-Level Car Parking cum commercial development at Old West Point School Complex**" wherein there are 2-3 trees that needs to be relocated. Hence, in this regard I would like to request that your staff may be deputed for a joint visit so that the same could be worked out.

Thanking you

Yours sincerely

Nodal Officer  
Gangtok Smart City Dev. Ltd.  
GANGTOK SMART CITY DEV. LTD.  
GANGTOK, EAST SIKKIM



ANNEXURE R-19



Gangtok Smart City Development Limited,  
 Level 5 Kissan Bazar, Gangtok,  
 Sikkim - 737101  
 E Mail - [gangtoksmartcity@gmail.com](mailto:gangtoksmartcity@gmail.com)  
 CIN - U9309090WB2017SGC223807

①

Memo No: 608/GSCDL/2021

Dated: 04/10/2021

To  
 The Additional Chief Town Planner,  
 Gangtok Municipal Corporation,  
 Gangtok, East Sikkim.

**Subject: Submission of one set of architectural & structural drawing pertaining to the work 'Multilevel-Level Car Parking cum Commercial Development at old West Point School near MG Marg, Gangtok, East Sikkim'.**

Sir,

I am forwarding herewith one set of architectural & structural drawing pertaining to the work 'Multilevel-Level Car Parking cum Commercial Development at old West Point School near MG Marg, Gangtok, East Sikkim' for accord of approval from Gangtok Municipal Corporation.

*[Handwritten signature]*  
 04/10/21

Thanking you

Yours faithfully

*[Handwritten signature]*

**Chief Executive Officer**  
**Gangtok Smart City Dev. Ltd.**

**Chief Executive Officer**  
 Gangtok Smart City Development, Ltd.  
 Kishan Bazar, Gangtok-737101  
 Sikkim.

Enclosure: as above

*ATP-I*  
*for needful pl.*

*[Handwritten signature]*  
 04/10/21

*UPC*  
*Pls open a new file*  
 04/10/2021

-TRUE COPY-

যাদবপুর বিশ্ববিদ্যালয়

ANNEXURE R-13

Faculty of Engineering & Technology  
DEPT. OF CONSTRUCTION ENGINEERING**JADAVPUR UNIVERSITY**BLOCK - LB, PLOT - 8, SECTOR - III, SALT LAKE,  
KOLKATA - 700 098, INDIA**Quotation**

Ref: JU/CON/21-22/MKS/G/15

Date: 07.10.2021

To  
**MESASO Infrastructure Private Limited**  
 3rd Floor, Vega Circle Mall, 3rd Mile  
 Sevoke Road, Siliguri, West Bengal - 734001

Ref. No: MIPL/SITE/01/2021-22 Dated: 04.10.2021

Sl. No.	Description of Jobs	Unit	Qnt.	Rate	Amount
1	Charges for Vetting of Plate Load test report for the site at Old West Point School, MG Marg, Gangtok, East Sikkim			Lumpsum	15000.00
				Total	15000.00
				CGST @ 9%	1350.00
				SGST @ 9%	1350.00
				<b>Grand Total</b>	<b>17700.00</b>

Rupees seventeen thousand seven hundred only

The payment should be made in advance by ECS / Demand Draft in favour of "Jadavpur University"  
 payable at Kolkata.

GST No: 19AAAJJ0500E1ZU

(M. K. Sahjs)

**Scanned by Scanner Go**

ANNEXURE R-43



GANGTOK MUNICIPAL CORPORATION

DEORALI, SIKKIM

Issue No. 3839 / Misc. / TPC / Gme / 2021 / 936

Date 8 / 10 / 2021

To,  
The Chief Executive Officer,  
Gangtok Smart City Dev. Ltd.,  
Gangtok, Sikkim

**Sub: for Documents**

Sir,

As directed by the higher authority and as per the Ref. Memo No. 608/GSCDL/2021 dated: 04/10/2021 from Gangtok Smart City Dev. Ltd. regarding approval of drawings for BPP purpose the Gangtok Municipal Corporation is in receipt of Architectural & Structural drawings for the project "**Multi-Level Car Parking cum Commercial Development**" at old West Point School, Gangtok, East Sikkim.

However for the purpose of BPP process following document may be kindly furnished please:

- i) Parcha / Land Documents / Land Details
- ii) Sale Deed/Gift Deed/Lease Deed / Lease Agreement
- iii) Stability Report / Site Stability Report vetted by Mines & Geology Department, GOS
- iv) Cadastral Map
- v) Site Plan / Master Plan by Empanelled Architect
- vi) Details of Consultants / Project Management Team
- vii) Company Registration & Signatory Authority
- viii) Structural Details & Analysis
- ix) Construction Management Plan
- x) Green Building Implementation (if any) & by which group whether GRIHA / IGBC

Thanking you

Yours faithfully

*ok*

*Imita Shenga*  
Assistant Town Planner II  
Gangtok Municipal Corporation

Assistant Town Planner - II  
Gangtok Municipal Corporation

-TRUE COPY-



ANNEXURE R-44

**GANGTOK SMART CITY DEVELOPMENT LIMITED**  
LEVEL 5, KISAN BAZAAR, LAL MARKET ROAD,  
GANGTOK- 737101, SIKKIM, INDIA  
CIN-U93090WB2017SGC223807

Memo No: - 651/GSCDL/2021-22

Dated: - 12/10/2021

To,  
The Assistant Town Planner-II,  
Gangtok Municipal Corporation,  
Gangtok, East Sikkim.

**Ref letter no: - 3839/Misc/TPC/GMC/2021/936 Dated: - 08/10/2021**

**Sub: - Forwarding of documents**

Sir,  
With reference to the afore-mentioned letter, the undersigned is hereby forwarding the documents as requested by your office.

Thanking you

Yours sincerely

Assistant Engineer  
Gangtok Smart City Dev. Ltd.

Enclosed: as above

**Assistant Engineer**  
Gangtok Smart City Dev. Ltd.  
Gangtok, East Sikkim

-TRUE COPY-

ANNEXURE R-50



**GOVERNMENT OF SIKKIM**  
**OFFICE OF THE CONSERVATOR OF FORESTS (TERRITORIAL)**  
**FOREST AND ENVIRONMENT DEPARTMENT**  
 Forest Secretariat, Deorali, Gangtok

Ref. No. GOS/F & ED/ETC/5.36 / 598

Date: 12/10/2021

To,  
 The Divisional Forest Officer, (T)East,  
 Forest and Environment Department,  
 Government of Sikkim,  
 P.S. Road, Gangtok.

Sub: **Removal of trees posing danger .**


Reference letter no. 20/ED/T/F&ED/ date 07/10/2021 regarding the subject cited above, the authority has accorded approval for issuing marking order/removal of trees with details as follows;

S N	Location	Status of Land	Range	Spp.	Girth	No. of tree	No.of poles
1	Old West Point School plot no 715/716, Gangtok East Sikkim	Private Estate	Gangtok	Cherry	4'10",4'11"	2	07
				Araucaria	2'0"		
				Malato	1,0",1'0"		
<b>Total</b>						<b>02</b>	<b>07</b>

You may take steps to issuing marking order and hand over the marked trees to Utilisation for removal/disposal. Accordingly compliance report is to be submitted.

**(Enclosed find herewith letter relevant document).**

Copy to:-  
 1. Addl. Director (Utilisation)

  
 (Karma Legshey D., IFS)  
 Conservator of Forests (T)

(Karma Legshey D., IFS)  
 Conservator of Forests (T)  
 (Territorial Circle)  
 Forest & Environment Department

-TRUE COPY-



## ANNEXURE R/12

## GANGTOK MUNICIPAL CORPORATION

DEORALI, SIKKIM.

Issue No. 381(CA)/GMC/2021

Date 12/10/2021

To,

Chief Executive Officer,  
Gangtok Smart City Dev. Ltd,  
Gangtok, Sikkim.

***Sub: Submission of architectural & structural drawing pertaining to the work " Multi-Level Car Parking cum Commercial Development at old West Point School near MG Marg".***

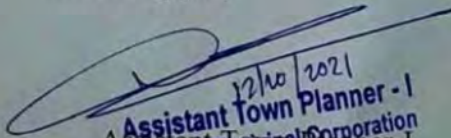
Sir,

The undersigned has been directed to send this letter pertaining to the above mentioned project regarding any approval or documents from the Government of Sikkim for relaxation of floors above five and half storey and horizontal coverage as per Sikkim Building Construction Regulation 1991.

The documents mentioned above may be kindly be furnished which would enable GMC to further process the above mentioned project for approval.

Further, it is to inform you that the approval of B.P.P will be accorded for only 11 floors against the 14 floors as submitted in accordance to the cabinet approval.

Thanking you,

  
12/10/2021  
Assistant Town Planner - I  
Gangtok Municipal Corporation

Gangtok Municipal Corporation.



ANNEXURE R-20

Ref. No. MIPL/08/2021-22

Date: 01.11.2021

To,  
Chief Executive Officer  
Gangtok Smart City Development Limited,  
Level 5, Kisan Bazaar, Lal Market Road,  
Gangtok, East Sikkim - 737101

Sub.: Detail Project Report (DPR) for "Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area on Design, Build, Finance, Operate and Transfer (DBFOT) basis"

Ref.: Concession Agreement, Dated 29.06.2021

Sir,

With reference to above subject matter, as per the Article 4 "Conditions Precedent" of the Concession Agreement dated 29.06.2021 we hereby enclosed Detail Project Report (DPR) along with annexures for your record.

Thanking You.

Yours Faithfully,

For, MESASO Infrastructure Private Limited  
MESASO Infrastructure Private Limited

A handwritten signature in blue ink, appearing to be 'Abhishek', written over a blue circular stamp.

Chief Financial Officer  
Chief Financial Officer

Encl.: Detail Project Report along with annexures

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
MESASO Infrastructure Private Limited, 3rd Floor, Vega Circle Mall, 3rd Mile, Sevoke  
Road, Siliguri, West Bengal - 734001 | info@mesaso.in | + 91 9907311645  
CIN: U45309WB2021PTC243031 | PAN: AAOCM2843E | GSTIN: 11AAOCM2843E1ZQ

## ANNEXURE R-14

**Minutes of Meeting (MoM) for the Stakeholder Consultation  
on "Multi Level Car Parking cum Commercial development  
on D.B.F.O.T basis on PPP mode"**

<b>Objective/ Agenda</b>	Stakeholder discussion on "Multi Level Car Parking cum Commercial development on DBFOT basis on PPP mode "	
<b>Date</b>	13-11-2021	
<b>Time</b>	11 pm - 1 pm	
<b>Place</b>	Banquet Hall, Hotel Hungry Jack, Gangtok	
<b>Attendees</b>	<b>Name</b>	<b>Designation</b>
	Shri Arun Upreti	Hon'ble Minister Urban Development Department
	Shri Ashok Prasad Sharma	Hon'ble Executive Councillor 11- Lower MG Marg, Lall Bazaar
	Smt. Sabita Pradhan	Hon'ble Councillor 14- Deorali-Upper Syari
	Shri K. Tempo Rapgyal	Hon'ble Councillor 9- Arithang - I
	Shri Pasang Tamang	Hon'ble Councillor 10- Arithang - II
	Smt. Chung Chung Bhutia	Chairperson, Sikkim Khadi & Industrial Board
	Smart City Officials & Stake holders	



  
**Chief Executive Officer**  
 Gangtok Smart City Development Ltd.  
 Kishan Bazar, Gangtok-737102  
 Sikkim

Smt. Chung Chung Bhutia, Chairperson initiated the meeting by welcoming all the dignitaries, officials and stakeholders to the meeting regarding discussion on "Multi Level Car Parking cum Commercial development on DBFOT basis on PPP mode" being taken up by Gangtok Smart City Development Limited.



Shri K. Tempo Rapgyal, Councillor (9- Arithang - I ward) then introduced all the members present and also stated the agenda of the meeting with due permission of the Chief Guest. The agenda of the meeting was to discuss and talk over the project "MultiLevel Car Parking cum Commercial development on DBFOT basis on PPP mode" being taken up at Old West Point School Area, near Hungry Jack, Gangtok.

Hon'ble Minister, Urban Development Department welcomed all the dignitaries, officials and stakeholders and then conveyed to start with the meeting

**The meeting proceeded as follows: -**

- Chief Executive Officer, GSCDL gave a brief introduction of the Gangtok Smart city and its one of the projects being done in PPP mode taken up in Old West point school area. He also showcased the 3D model display of the final structure which is going to be completed within 4 years of its construction phase.



*Handwritten signature*  
 Chief Executive Officer  
 Gangtok Smart City Development, Ltd.  
 Kishan Bazar, Gangtok  
 Sikkim

He also stated that the area of the project i.e. 5708 sqm and the basic features of the upcoming project.

- a) Multi-level Car Parking – 4 floors of parking
- b) Commercial Development
- c) Open air plaza having view points and park where lots of activities like jogging, sunbathing etc can be done by common citizens & tourists.

- He also informed the stakeholders that the project is made on a notion of green concept which shall be the first Gold Rated Building which also has its own sewage treatment plant, rain water harvesting facility, e-charging facility, solar photo voltaic panels for renewable energy, Organic waste converter and has taken into consideration of safety features.

- Based on the query raised by a concerned stakeholder regarding the foundation work being carried out, he informed that the foundation of the project will be based on raft foundation and not pile foundation which was a misconception of the public.

-A raft foundation, also called a mat foundation, is essentially a continuous slab resting on the soil that extends over the entire footprint of the building, thereby supporting the building and transferring its weight to the ground evenly on a larger surface area.

-A pile foundation is defined as a series of columns constructed or inserted into the ground to transmit loads to a lower level of subsoil. A pile is a long cylinder made up of a strong material, such as concrete. Piles are pushed into the ground to act as a steady support for structures built on top of them.



- Based on the query raised by a concerned stakeholder regarding the slight trembling experienced a month back, he stated that it may be due to some other reason or may be plate test carried out to ascertain the load bearing capacity of the soil. As per the report it was found that the soil below the foundation is highly weathered rock (similar to mica schist) and has a load bearing capacity of around 40 ton/m<sup>2</sup> and the bearing pressure from the structure was around 21 ton/m<sup>2</sup> which means that the soil is capable of bearing the load of the proposed structure.

He also informed that the composite structure building has been designed with steel and concrete which shall make the building light in weight and more ductile, so that it shall be capable of withstanding the earthquake load.



- Nodal Officer, GSCDL then informed that the project comprises of 30% of open space which shall be accessible to all citizens and the access roads around the built-up area may also be accessed by the residents in the vicinity.
- Additional Chief Town planner, GMC also informed about setbacks maintained by the structure and the no. of storeys coming along the NH-10 road level. He also mentioned about the compliance of NBC 2016 and further stated that the plaza comprises of 20% of green. He also informed that the design is in the lines of IGBC Gold Rating system.



*[Signature]*  
 Chief Executive Officer  
 Gangtok Smart City Development, Ltd  
 Kishan Bazar, Gangtok-737102  
 Sikkim

Based on the query raised by a concerned stakeholder regarding the no. of storeys being constructed and its uses, Hon'ble Minister, Urban Development Department informed that 2 floors of the structure will be general parking including south west taxi stand, and 2 floors of commercialised parking and 10 floors of commercial development with a combination of small and large retails along with open space which will be accessible to all the citizens.



- Based on the query raised by a concerned stakeholder regarding the grievance redressal method in case of damages occurring to the private and commercial buildings during the construction phase.

Hon'ble Minister concurred to have a separate discussion with the concerned officials and the executing agency regarding the same. Following which a commitment letter was to be submitted by the concessionaire and the authority in case of any damage occurring to the buildings in the immediate vicinity of the project area.

- He also informed the public that the project is under public private partnership mode whereby the land is not being sold but is only being leased and shall be returned to the Government of Sikkim at the end of the concessionaire agreement period.
- He also requested that the public should not heed to the rumours being spread on social media and encourage that the same should be enquired in a positive manner to himself or the Smart city office.
- He informed the stakeholders that the project has been initiated in a very transparent manner and shall have a significant role in boosting tourism, providing employment opportunities to the locals and shall be a model of civic pride.
- Hon'ble Minister then concluded the meeting and offered vote of thanks to all.
- The meeting was followed by the viewing of the 3D model and tea -snacks.



*[Signature]*  
Chief Executive Officer  
Gangtok Smart City Dev. Ltd.

**ATTENDANCE SHEET FOR THE MEETING HELD ON 13<sup>TH</sup>  
NOVEMBER 2021 WITH REGARD TO THE PROJECT "MULTI-  
LEVEL CAR PARKING CUM COMMERCIAL DEVELOPMENT ON  
DBFOT BASIS ON PPP MODE"**

Sl. No.	NAME	DESIGNATION	MOBILE NUMBER	SIGNATURE
1	Arun Kr. Upreti	MLA - Minister	9434318876	Arun
2	(Cabila) Pradhan	Councilor	8016273316	Pradhan
3	PASSANG TAMANG	COUNCILOR	9002819973	Tamang
4	ASHOKKUMAR PRASAD	EXECUTIVE COUNSELLOR	7432088977	Prasad
5	Suman Shrivastava	Resident	9732854058	Suman
6	Obed Rai	Leader	9933445442	Obed
7	Soram Bhukta	Retired	8327677724	Soram
8	Wangyal T.	Postal Govt Officer	9424213957	Wangyal
9	C. C. Bhukta	Chairperson Khadi	9832026207	Bhukta
10	C. C. Wangyal	Stakeholder	9434066098	Wangyal
11	Somnath P. Chaurhara	Stakeholder	9434062744	Somnath
12	Eden Chandel	-	9773534330	Eden
13	Kanma Tempo Paspa	Councilor	9753461116	Kanma
14	G. Chotal	Stakeholder	9434143448	Chotal
15	Ajita Tamang	Govt. Employee	9145880330	Ajita
16	Palju Lepcha	Self-employed	9775981341	Palju
17	T. Wangyal Bhukta		9434137214	T. Wangyal
18	Tanmika Tashi	Sonia	8918869078	Tashi

**ATTENDANCE SHEET FOR THE MEETING HELD ON 13<sup>TH</sup>  
NOVEMBER 2021 WITH REGARD TO THE PROJECT "MULTI-  
LEVEL CAR PARKING CUM COMMERCIAL DEVELOPMENT ON  
DBFOT BASIS ON PPP MODE"**

Sl. No.	NAME	DESIGNATION	MOBILE NUMBER	SIGNATURE
19	Lachen mayas		9609869148	Lachen
20	Reeta Rai		7872996346	Reeta
21	Dechen Doma Bhuki		9434487689	Dechen
22	Z.W. Bhuber		7368805243	Z.W. Bhuber
23	Bhim Tamang		9434153375	Bhim
24	md. Jamiluddin	Resident Masjid	9434357075	Jamil
25	md. Faruque	G.S. Masjid	9434109876	Faruque
26	K. Shrestha		983236920	K. Shrestha
27	Dipendra Nepal		814696282	Dipendra
28	D.W. Bhuber		9800500626	D.W. Bhuber
29	Binita Pradhan		9434196333	Binita
30	Gyantra Tamang		9832034252	Gyantra
31	Ugen Tsh. Bhuber		944204758	Ugen
32	Meljames		8280888739	Meljames
33	Karma Tseten		9775834025	Karma
34	Khedup Tshering		8001262805	Khedup
35	Mani Yonzon		9933064745	Mani
36	Rajchetan		7602653153	Rajchetan

**ATTENDANCE SHEET FOR THE MEETING HELD ON 13<sup>TH</sup>  
NOVEMBER 2021 WITH REGARD TO THE PROJECT "MULTI-  
LEVEL CAR PARKING CUM COMMERCIAL DEVELOPMENT ON  
DBFOT BASIS ON PPP MODE"**

Sl. No.	NAME	DESIGNATION	MOBILE NUMBER	SIGNATURE
37	Aden wangi Bhatia	Self Emp	8597085816	
38	Neelu sharma	Home wife	943411787735	
39	Lt. Dawa sharma wife of pushpa sharma	self emp	9818218631 <del>983237740</del>	
40	Gyaltzen sharma	self emp	983200310364	
41	Aswin Nirola	AE (GSCDL)	747740424	
42	Dorjee Loden	SE (GSCDL)	9434410137	
43	Binay Lama	DE (GSCDL)	9434103796	
44	Deepankar Lama	Nodal Officer	9749878247	
45	Bhupendra Kothari	CEO (GSCDL)	8116679989	
46	Nraya Bgul	UP (GSCDL)	896780824	
47	Jayesh Bhusari	Structural Engg	9948240115	
48	Nimanku . N . K	Engineer	9702473803	
49	Kalzan R. Lepcha	AE-GSCDL	7584931469	
50				
51				
52				
53				
54				

-TRUE COPY-

ANNEXURE R-21

**GEOTECHNICAL INVESTIGATION REPORT****FOR****PROPOSED MULTISTORIED BUILDING****AT****GANGTOK, SIKKIM****JOB ENTRUSTED BY****M/S MESASO INFRASTRUCTURES  
PRIVATE LIMITED****OLD WEST POINT SCHOOL, M.G.MARG  
GANGTOK, EAST SIKKIM****JOB CONDUCTED BY****JP GEO CONSULTANTS  
AN ISO 9001:2015 CERTIFIED ORGANISATION****REG. OFFICE- 66, ANDUL ROAD, HOWRAH – 711 109  
CORPORATE OFFICE & LABORATORY  
AC-73, PRAFULLA KANON, KESTOPUR, KOLKATA – 101  
EMAIL: [jpgeoconsultants@gmail.com](mailto:jpgeoconsultants@gmail.com), Mob: 9830813308**

**GEOTECHNICAL INVESTIGATION REPORT**

**FOR**

**PROPOSED MULTISTORIED BUILDING**

**AT**

**GANGTOK, SIKKIM**

**JOB ENTRUSTED BY**

**M/S MESASO INFRASTRUCTURES PRIVATE LIMITED  
OLD WEST POINT SCHOOL, M.G.MARG  
GANGTOK, EAST SIKKIM**

**JOB CONDUCTED BY**

**JP GEO CONSULTANTS  
AN ISO 9001:2015 CERTIFIED ORGANISATION**

Department of Civil Engineering  
Indian Institute of Technology  
Guwahati-781039, India  
Phone-261039, 9856



Dr. Hrishikesh Sharma  
Department of Civil Engineering  
Indian Institute of Technology Guwahati, Guwahati-781 039  
Email id: shrishk@iitg.ac.in  
Ph No: +91-9435321894



**REG. OFFICE- 66, ANDUL ROAD, HOWRAH – 711 109  
CORPORATE OFFICE & LABORATORY  
AC-73, PRAFULLA KANON, KESTOPUR, KOLKATA – 101  
EMAIL: [jpgeoconsultants@gmail.com](mailto:jpgeoconsultants@gmail.com), Mob: 9830813308**

Verified

*Manoj Kumar Sa...*  
Manoj Kumar Sa...  
Associate Professor  
Department of Construction Engineering  
Jadavpur University

### P R E F A C E

A detailed geotechnical investigation including laboratory testing was carried out for the **proposed Multi-Storied Building at Gangtok, Sikkim**. The objective of this investigation was to evaluate the soil parameters for design of foundation for proposed structure with particular reference to safe bearing capacity and anticipated settlement.

The Geo-technical investigation work was awarded M/s **Mesaso Infrastructures Private Limited, Old West Point School, M.G.Marg, Gangtok, East Sikkim**. The investigation work for this project was started on **7th November 2021** and completed on **10<sup>th</sup> December 2021**.

The report has been prepared after careful study of all data collected during fieldwork and laboratory testing and it deals with geotechnical properties of the sub-soil. **Section – I** of this report covers the fieldwork while **Section – II** contains the results of all the laboratory test and discussions thereon. **Section – III** deals with the engineering appraisal and recommendations.

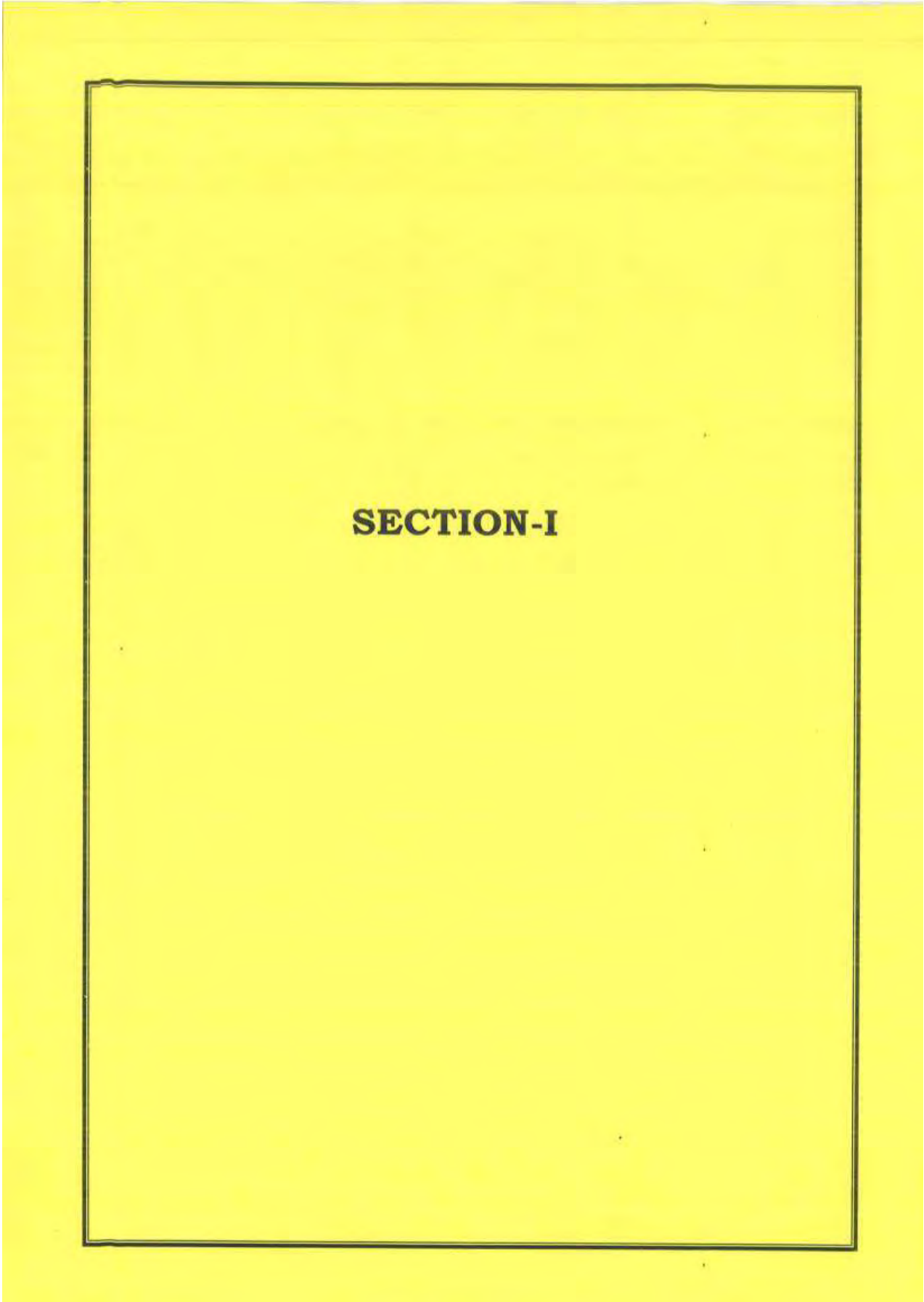
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**SECTION-I**

## SECTION - I

### 1.0 INTRODUCTION

M/s Mesaso Infrastructures Private Limited, Old West Point School, M.G. Marg, Gangtok, East Sikkim, entrusted the soil investigation work for the **proposed Multi-Storeyed Building at Gangtok, Sikkim**. At the onset of the work, thirty three (33) nos. of boreholes have been envisaged.

### 2.0 AIMS AND OBJECTIVES

The aim of the present study was to bring out the stratigraphy, strength characteristics of the sub-strata at the site, by conducting bore holes studies including in situ tests and laboratory investigations the findings were to be applied for realistic selection.

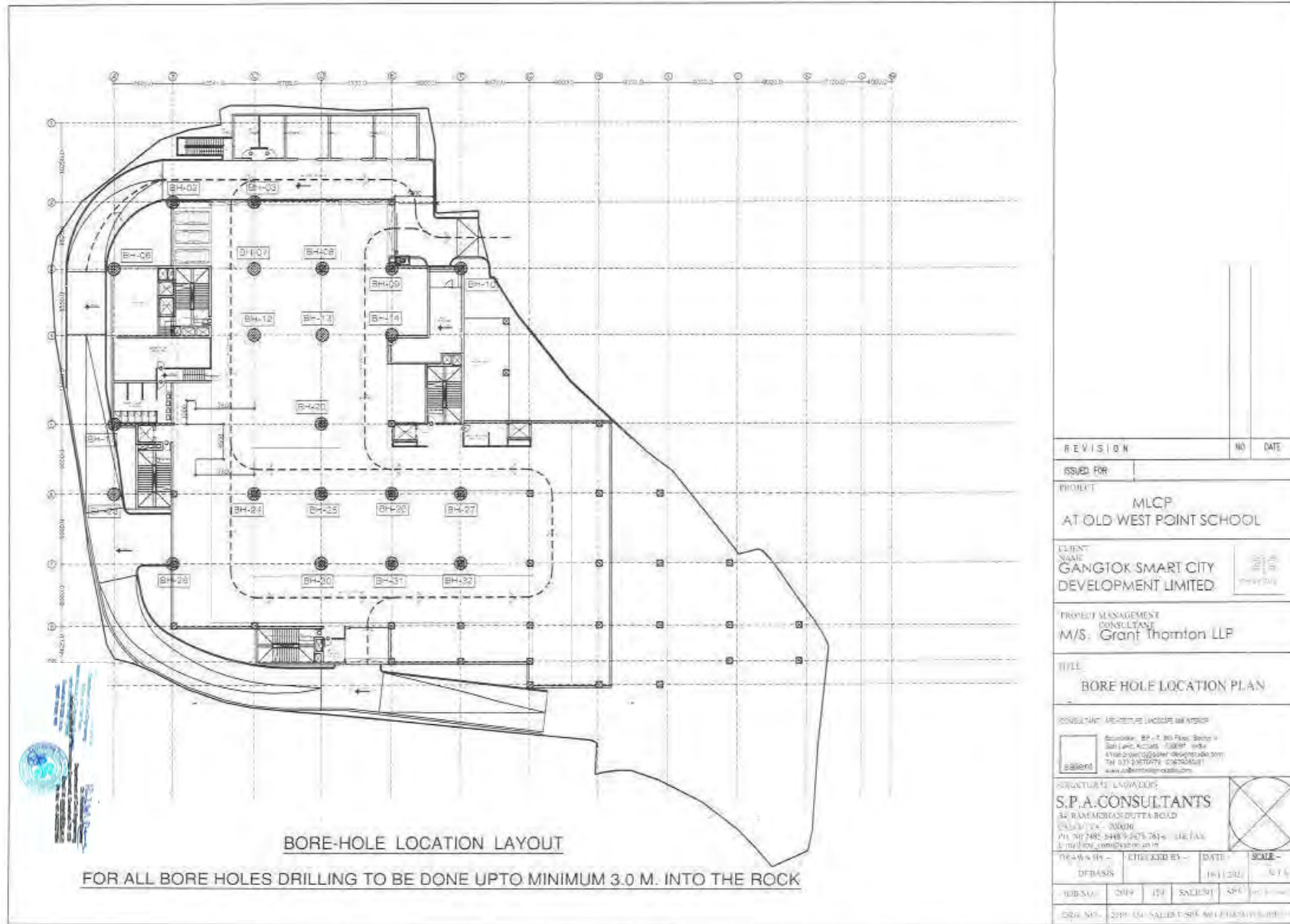
### 3.0 INVESTIGATION SCHEME AND LOCATION OF TESTS

The scheme of investigation was formulated by the Clients, which involved sinking of thirty three (33) Nos. of boreholes with the an average depth of 12.00m depth respectively from existing ground level, collection of undisturbed samples from cohesive deposit, carrying out standard penetration tests within the borehole, performing necessary laboratory tests on selected soil samples and submission of a report.

### 4.0 FIELD EXPLORATION

At the proposed project site, thirty three (33) Nos. of boreholes were sunk. Locations were finalized by client/consultants. The field operations consisted of boring, field test, and collection of disturbed and undisturbed samples, identification, labeling and preservations of the samples collected. The soil samples were collected by pushing a sampling tube in the bore hole at suitable intervals and depth and then taken out. The samples so recovered and collected in plastic bags, sealed, marked and taken for laboratory analysis. The boring operation has been done in two stages ( Shell and Rotary Drilling).

*Sketch showing location of boreholes is given in the following page*



#### **4.1 BORING**

The boring was done by a combination of Shell & Rotary Drilling at lower depths. Flush jointed steel casing tubes were used to prevent side collapse of boreholes in Shell method of boring. No casing was provided in the Rotary wash borings since stabilization of hole was made by circulation of bentonite mud. The depth of casings at various stages of sampling, borehole depths, depth of collection of undisturbed soil samples (UDS), description of soil, 'N' values during SPT at various depths and the depth at which ground water was encountered at different locations are shown in the respective borehole logs in Appendix-I of this report.

#### **4.2 SAMPLING**

Disturbed samples were taken at suitable intervals of depth and at changes of strata in order to physical examination of the nature of all the representative strata. These were collected from the auger and the barrel of the split spoon sampler after the standard penetration tests. The depth wise locations of the entire disturbed and standard penetration test samples have been given in the bore log data sheets, enclosed with this report.

##### **4.2.1 COLLECTION OF UN-DISTURBED SAMPLES**

Un-disturbed samples were collected as per specifications given in IS: 1892-1979. After recovery of the samples, the sample tubes were properly sealed at both ends by wax, marked and sent for laboratory testing.

#### **4.3 IN-SITU TEST**

##### **a) Standard Penetration Test:**

Standard penetration tests (SPT) were carried out in soil strata inside boreholes to determine consistency and strength characteristics of the subsoil in accordance with IS: 2131. The number of blows (N-value) required to drive the standard split spoon sampler of 50mm diameter for a penetration of last 30cm when driven with a 63.5kg monkey falling freely from a height of 750mm is given in the borehole logs at corresponding depths (Appendix-I).

**SECTION-II**

## SECTION – II

### 5.0 LABORATORY TESTS

All laboratory tests have been done by through NABL Accredited laboratory of M/s **SoilTech Consultants, 106/E, South S.K.Puri, Patna, Bihar, India**. The results and graphs are attached herewith.

### 6.0 GROUND CONDITION

On the basis of findings in the field, onsite identification & examination of samples the subsoil deposits of this site have been subdivided into **three (03) different strata for the site**. Following table gives a brief description about the subsoil conditions and subsoil parameters at site obtained at site.

Stratum & Thickness (m)	Description of Soil	Average Field N value	Liquid Limit (%)	Plastic Limit (%)	$\gamma_s$ KN/m <sup>3</sup>	Shear Parameters		$(m_v) m^2/kN \times 10^{-4}$ Range(kPa)		
						C (kPa)	$\Phi^0$	25-50	50-100	100-200
I 0 to 15.00	Medium dense greyish brown to brown micaceous silty sand	32	NP	NP	19.5*	-	34*	E = 35MPa, $\mu = 0.38$		
II 0.00 to 9.00	Dense to very dense greyish brown to brown micaceous silty sand	51	NP	NP	20.0*	-	35*	E = 80MPa, $\mu = 0.35$		
III >3.00	Highly weathered highly fractured whitish grey micaschist	>100	Core Recovery (%)	RQD (%)	22	-	Rock Strength (MPa)	E = 120 MPa, $\mu = 0.3$		
			0 to 56	0			qc = 4.01			

\* Suggested Value

Generalized Soil Profile With Design Parameters

**SECTION-III**

### SECTION - III

#### 7.0 ENGINEERING APPRAISAL & RECOMMENDATIONS

The proposed structure for the sites will be Multi-storeyed Building. It is expected to have a load of around **210 to 225 kPa**. It is known from client/consultants that the proposed structure will have a partial UGR along the foot print of the building and in the remaining portion the basement will continue. As per structural requirement the depth of the UGR is expected to be at a depth of 4.50m below EGL and the the basement will be placed at a depth of 4.50m below EGL. The borehole location plan attached shows the region of UGR in thick line.

Boreholes are sunk at the site at individual column locations at close intervals to identify any variation in the subsoil conditions. During the period of field work the entire site was excavated upto a level of 1.00m below EGL and all the boring activity have been carried out from this level. Hence 0.00m marked in the borelogs refer to -1.00m from the EGL.

Now as per the borehole data it was observed that there was no major variation in the subsoil conditions. Individual bore-logs and cross sections may be referred to identify the stratum. The subsoil condition mainly comprised medium dense micaceous silty sand (Stratum-I) followed by dense to very dense micaceous silty sand (Stratum-II) and finally the rocky strata (Stratum-III).

Safe carrying capacities of raft foundations placed at a depth of 4.50m below Finished Ground level is given below in the following table. The calculations have been computed considering the average subsoil condition of the site.

Footing Size (m <sup>2</sup> )		Depth of foundation below FGL (m)	Settlement(mm) corresponding to following imposed pressure (kPa)					
Width	Length		125 kPa	150	175	200	210	225
57.00	67.00	4.50	33	40	46	53	55	59

Based upon the above table it can be understood that as per IS 1904, the overall settlement of the raft foundation under an applied load of 210 to 225 kPa is well within the acceptable limit of 75mm. The subsoil encountered at site is non plastic and sandy in nature, hence it can be understood that the settlement occurring at site will be of immediate type i.e. during the period of construction and no long term settlement is predicted.

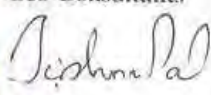
It may be noted that the stress relief for excavation of basement may be considered as **90 kPa** for excavation of 4.50m. Hence it can be understood that upto a pressure of **90 kPa** there will be theoretically no settlement. **It shall be noted that there shall be minimum disturbance to the founding level due to excavation process or due to ingress of seepage water to use the additional stress relief with theoretically no settlement.**

**9.0 GENERAL RECOMMENDATIONS**

- a) All foundation design should be carried out as per latest BIS code of practice.
- b) Backfilling should be done with excavated earth in layers with proper compaction and addition of water, as required.
- c) The surface of the excavated area should not be left exposed and immediate mud mat must be carried out.
- d) Special care needs to be taken during excavation for foundations so that the founding stratum does not get disturbed by excavation process and especially by ground/seepage water.
- e) The foundation bed should be properly shaped, levelled and properly compacted before laying the mud mat and the mud mat should also be compacted.

Vetter  
  
**Manoj Kumar Sahis**  
 BE, M.E. Geotechnical Engineering, M.Tech. Associate Professor  
 Department of Construction Engineering  
 Jodhpur University



**FOR JP Geo Consultants**  
  
**Jishnu Pal**  
 B.Tech (Civil), M.E (Geo-tech)



ANNEXURE R-58



CBI should investigate both previous government and current government scams .

It is heartening to know the SKM Govt is bringing CBI to Sikkim early next year. This was announced by the HCM Mr. P S Golay in a speech recently. i hope this time he does keep his word and not be like any other promises he has made in the past. We would like the SKM Govt to let CBI investigate everything from the last Government's scams to all the scams that are happening during the tenure of the present Government as well. Starting from scams related to Smart TV given to students, Su Swastha Yojna Scheme, all the kick backs from construction of hospital to new Universities and all PPP models given to private companies.

It is high time that the present Government makes public all these deals that have been signed. Hamro Sikkim Party welcomes the announcement regarding CBI but the govt cannot pick and choose which scams should be investigated. Hamro Sikkim as a party has zero tolerance policy on corruption and we want our Sikkim to be a corruption free state.

The parivartan (change) the people of Sikkim can see is the only in the envelopes (lifa) getting thicker. Hamro Sikkim Party will make the youth of Sikkim Gari khane and not Thapi khane. Let us all unite to fight corruption that benefits only a small portion of people.

Bhaichung Bhutia  
Hamro Sikkim Party

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ANNEXURE R-22

যাদবপুর বিশ্ববিদ্যালয়

Faculty of Engineering & Technology  
DEPT. OF CONSTRUCTION ENGINEERING
**JADAVPUR UNIVERSITY**  
 BLOCK - LB, PLOT - 8, SECTOR - III, SALT LAKE,  
 KOLKATA - 700 098, INDIA
**Quotation**

Ref: JU/CON/21-22/MKS/G/26

Date: 27.12.2021

 To  
**MESASO Infrastructure Private Limited**  
 3rd Floor, Vega Circle Mall, 3rd Mile  
 Sevoke Road, Siliguri, West Bengal - 734001


Ref. No: MIPL/SITE/05/2021-22 Dated: 24.12.2021

Sl. No.	Description of Jobs	Unit	Qty.	Rate	Amount
1	Charges for Vetting of Soil Investigation report for the site at Old West Point School, MG Marg, Gangtok, East Sikkim			Lumpsum	30000.00
				Total	30000.00
				CGST @ 9%	2700.00
				SGST @ 9%	2700.00
				<b>Grand Total</b>	<b>35400.00</b>

Rupees thirty five thousand four hundred only

 The payment should be made in advance by ECS / Demand Draft in favour of "Jadavpur University"  
 payable at Kolkata.

GST No: 19AAAJJ0500E1ZU

  
 (M. K. Sahis)

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ANNEXURE R-34



Ref. No. MIPL/Site/04/2021-22

Date: 27.12.2021

To  
The Chief Executive Officer  
Gangtok Smart City Development Ltd.  
Level 5, Kisan Bazar, Lal Market Road,  
Gangtok, East Sikkim-737101

Sub: Prayer for allowing us to do the Plain Cement Concrete (PCC) as recommended by our Soil Consultant S. K. Mitra & Associates for Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School, Near M.G. Marg, Gangtok, East Sikkim.

Dear Sir,

This is with reference to the Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School, Near M.G. Marg, Gangtok, East Sikkim. Please refer to the soil consultant's additional recommendation letter dated 27.12.2021, further to the Geo Technical recommendations, a copy of which is enclosed. As per the said recommendations, after the soil exposure due to dismantling of existing structure and removal of foundation of existing structure, there is a need to cover the exposed soil strata immediately with Plain Cement Concrete. In view of the same, we request you to allow us to do Plain Cement Concrete of the area for foundational security where the proposed construction of multi-level car parking cum commercial development is sought to be undertaken.

Thanking You.

Yours Faithfully,

MESASO Infrastructure Private Limited

Vice President Project



Received  
27/12/2021

Enclosed: Soil Consultant S. K. Mitra &amp; Associates Recommendation dated 27.12.2021

MESASO Infrastructure Private Limited | Reg. Off. : 3rd Floor, Vega Circle Mall, 3rd Mile, Sevoke  
Road, Siliguri, West Bengal - 734001 | info@mesaso.in | + 91 9907311645  
Project Site : Old West Point School Area, Near M.G. Marg, Gangtok, East Sikkim 737101  
CIN: U45309WB2021PTC243031 | PAN: AAOCM2843E | GSTIN: 11AAOCM2843E1ZQ  
IGBC Membership No. : IGBCBD210233 | IGBC Project Reg. No. : IGBCNBT210211

-TRUE COPY-



ANNEXURE R-23

Ref. No. MIPL/10/2021-22

Date: 27.12.2021

To,  
Chief Executive Officer  
Gangtok Smart City Development Limited,  
Level 5, Kisan Bazaar, Lal Market Road,  
Gangtok, East Sikkim - 737101

Sub.: Detailed Environmental Impact Assessment and Geo Technical Studies for  
"Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point  
School Area on Design, Build, Finance, Operate and Transfer (DBFOT) basis"

Ref.: Concession Agreement, Dated 29.06.2021

Sir,

With reference to above subject matter, as per the Article 12 "Obligations of The  
Concessionaire" of the Concession Agreement dated 29.06.2021 we hereby enclosed following  
documents for your record:

1. Environmental Impact Assessment Report
2. Geotechnical Investigation Report (Soil Test Report)
3. Geotechnical Investigation Report (Plate Load Test Report)
4. Structural Vetting Certificate from Indian Institution of Technology, Guwahati

Thanking You.

Yours Faithfully,

For, MESASO Infrastructure Private Limited  
MESASO Infrastructure Private Limited

A handwritten signature in blue ink, appearing to read "Anil D...".

Chief Financial Officer  
Chief Financial Officer

-TRUE COPY-

MESASO Infrastructure Private Limited, 3rd Floor, Vega Circle Mall, 3rd Mile, Sevoke  
Road, Siliguri, West Bengal - 734001 | info@mesaso.in | + 91 9907311645  
CIN: U45309WB2021PTC243031 | PAN: AAOCM2843E | GSTIN: 11AAOCM2843E1ZQ



ANNEXURE R-24

**DEPARTMENT OF MINES & GEOLOGY  
GOVERNMENT OF SIKKIM**

Ref.No:F.1/62 (3)DM&G/21-22/478  
Challan No:33300/SI. No:138545

Date: 29/12/21

**Site Stability Report**

Reference: - Applicant's Letter.

Dated: 29.12.2021

1. (i) **Name of Applicant-** M/S Mesaso Infrastructure Pvt. Ltd. (Authorized vide Memo no. 197/GSCDL/2021-22 dated 30.06.2021).

(ii) **Name of Land owner-** Secretary, UD & HD, Government of Sikkim.

2. **Location of Site-** Old West point school Complex, Gangtok, East Sikkim

3. **Location (with reference to prominent Structure within area and physical features with appropriate distance & direction)-** 10 meters SW of the Police Headquarter at Gangtok, East Sikkim land bearing plot no.683/P,715,716 under Gangtok Revenue Block, East Sikkim.

4. **Bounded by-** East: Road Leading to Primula lodge.

West: Footpath

North: Footpath

South: Footpath

**5. Physical features**

a) Slope- Gentle.

b) Drainage system – No erosion potential Jhora present nearby plot.

c) Status of structure in the vicinity – No adverse situation presents at the time of inspection.

**6. Geological setup**

a) Type & condition of Lithology – The area comprises of medium grade metamorphic rock sequence represented in the area by mica schist with and without quartz veins overlain by medium thick to thin soil cover.

b) Fractures / Faults / Weathering- Surficial weathering.

c) Overburden – Medium thick to thin soil cover.

d) Dip of bed rock – Favourably oriented.

e) Ground water activities – Low surface/sub-surface water regime.

f) Nature of contact zone of rock & overburden materials – Undulating surface with high frictional resistance is expected.

g) Other geo-features – No any other adverse geological features were observed at the time of inspection.

7. **Conclusion** – Falls within Zone one (1) of areal Stability Zonation Mapping System adopted by department of Mines & Geology.

8. **Recommendation** – The foundation of the structures should be footed at considerable depth with uniform condition, also consult a competent structural engineer for appropriate foundation design of the structures including earthquake resilience.

**Further,**

1. The proposed area falls under zone one (1) as per the parameters notified by the department of Mines and Geology vide Gazette no.86 dated 06<sup>th</sup> April 2021. However as Sikkim lies over young fold mountains, seismic zone IV and with fragile geological condition micro seismic studies in the area and load impact assessment of the surrounding areas, to be carried out prior to construction of multi-storied structures and provide suitable mitigation measures, if required, to avoid future complications.

*Kehra*  
Joint Director (Geology)  
Mines & Geology Department  
Government of Sikkim,  
Gangtok

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*Shrestha*  
Senior Geologist  
Deptt of Mines & Geology  
Govt of Sikkim  
Gangtok

**S. P. A. CONSULTANTS**  
CONSULTING STRUCTURAL ENGINEERS

To,  
The Director  
Mesaso Infrastructure Pvt Ltd.  
3<sup>rd</sup> Floor, Vega Circle Mall,  
3<sup>rd</sup> Mile, Sevoke Road,  
Siliguri – 734001

Date : 30.12.2021

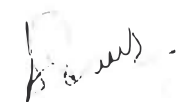
Sub : With Reference to Site Stability Report Ref. No. 1/62(3)DM&G/21-22/478  
dated : 29-12-2021

Sir,

With reference to the above subject Matter Site Specific micro Seismic studies is not required as per the soil test report of M/S Geo Informatic Consultancy & Services Tandong. Gangtok average N value is 22 and as per the IS-1893 if the Soil corrected N Value is more than 15 then specific seismic are not required.

Thanking You

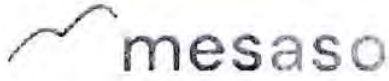
For S.P.A. Consultants



**SANJIV J. PAREKH**  
M.E.(STRUCT.), M.E.(CONST. ENG.),  
B.C.E., FIE-(F-018202-4)  
E. S. E. No. 104 (D. K. M. C.)

Sanjiv J. Parekh

*A*  
TRUE COPY



Date :30/12/2021

To,  
Dr. Dipesh Majumdar  
Assistant Professor  
Jadavpur University  
Salt Lake Campus  
Kolkata-106

Sub: - Regarding Site Stability Report Provided by Department of Mines & Geology  
Government Of Sikkim

Dear Sir,

We received Site Stability Report by Department of Mines & Geology Government Of Sikkim  
for our project INTEGRATED COMMERCIAL CUM MLCP COMPEX at GANGTOK, SIKKIM.

Which States that the Load Impact Assessment of the Surrounding areas to be carried out  
prior to construction of multi storied structure and provide suitable mitigation measures,in  
this regard we require the certificate/guideline for the same

Kindly do the needful.

Enclosure:-

- 1. Soil Test Report
- 2. Design Load detail Calculation

Thanking You.

Yours Faithfully

Mesaso Infrastructure Private Limited

*[Signature]*  
Vice President

*[Handwritten signature]*  
30/12/2021

A

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*[Faint background text and stamps, including 'GBC Membership' and 'INTEGRATED COMMERCIAL CUM MLCP COMPEX']*



P.R.No. 473 / 2021-22  
dt. 28/02/22



ANNEXURE R-19

Ref. No. MIPL/12/2021-22

Date: 31.12.2021

To,  
The Additional Director  
Mines & Geology Department,  
Gangtok,  
East Sikkim, Sikkim 737101

Sub.: With Reference to Site Stability Report Ref. No.1/62(3)DM&G/21-22/478  
dated :29-12-2021.

Sir,

With reference to the above subject Matter, we received site stability report from your department in which as per the Recommendation claus no.1 states that the proposed area falls under zone (1) as per the parameters notified by the department of Mines and Geology vide Gazette no 86 dated 6<sup>th</sup> April 2021. However, as Sikkim lies over young fold mountains, seismic zone IV and with fragile geological conditions micro seismic studies in the area and load impact assessment of the surrounding areas, to be carried out prior to construction of multi storied structure and provide suitable mitigation measures, if required to avoid future complication. In this regard we approached to our Structural Consultant and they issued a certificate as annexed for your reference.

Kindly do the needful.

*JD (G)*

*For. required action M*

Thanking You.

Yours Faithfully.

For. MESASO Infrastructure Private Limited *[Signature]*  
*28/2*

*Sr. Geo*  
*Per-Ann. Pls.*

Mesaso Infrastructure Private Limited

*[Signature]*  
(Authorised Signatory)  
Vice President

*Received*  
*1-03-2022*  
*[Signature]*

*[Signature]*  
Joint Director (Geology),  
Mines & Geology Department  
Government of Sikkim,  
Gangtok

MESASO Infrastructure Private Limited | Reg. Off. : 3rd Floor, Vega Circle Mall, 3rd Mile, Sevoke  
Road, Siliguri, West Bengal - 734001 | info@mesaso.in | + 91 9907311645  
Project Site : Old West Point School Area, Near M.G. Marg, Gangtok, East Sikkim 737101  
CIN: U45309WB2021PTC243031 | PAN: AAOCM2843E | GSTIN: 11AAOCM2843E1ZQ  
IGBC Membership No. : IGBCBD210233 | IGBC Project Reg. No. : IGBCNBT210211

**S. P. A. CONSULTANTS**  
CONSULTING STRUCTURAL ENGINEERS

To,  
The Director  
Mesaso Infrastructure Pvt Ltd.  
3<sup>rd</sup> Floor, Vega Circle Mall,  
3<sup>rd</sup> Mile, Sevoke Road,  
Siliguri – 734001

Date : 30.12.2021

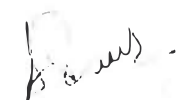
Sub : With Reference to Site Stability Report Ref. No. 1/62(3)DM&G/21-22/478  
dated : 29-12-2021

Sir,

With reference to the above subject Matter Site Specific micro Seismic studies is not required as per the soil test report of M/S Geo Informatic Consultancy & Services Tandong. Gangtok average N value is 22 and as per the IS-1893 if the Soil corrected N Value is more than 15 then specific seismic are not required.

Thanking You

For S.P.A. Consultants



**SANJIV J. PAREKH**  
M.E.(STRUCT.), M.E.(CONST. ENG.),  
B.C.E., FIE-(F-018202-4)  
E. S. E. No. 104 (D. K. M. C.)

Sanjiv J. Parekh

*A*  
TRUE COPY



ANNEXURE R-16

**GANGTOK SMART CITY DEVELOPMENT LIMITED  
LEVEL 5, KISAN BAZAAR, LAL MARKET ROAD,  
GANGTOK- 737101, SIKKIM, INDIA  
CIN-U93090WB2017SGC223807**

Memo No: - 868/GSCDL/2021-22

Dated: - 31/12/2021

To,

M/s Mesaso Infrastructure Pvt. Ltd.  
3<sup>rd</sup> Mile, Vega Circle Mall,  
Sevoke Road, Siliguri – 743003

**Sub: - Notice to Proceed**

Sir,

With reference to the letter bearing memo no: MIPL/Site/04/2021-22 dated: - 27/12/2021 received from your firm wherein it was requested that Gangtok Smart City Development Limited (Authority) may authorize the firm to execute Plain Cement Concrete work of the proposed project site to be developed in view of the recommendation of the soil Consultant S. K. Mitra & Associates for **“Multi-Level Car Parking cum commercial development at Old West Point School Complex, Gangtok.”**

This is to inform your firm that the foundational security works can be initiated in view of the recommendations of the soil consultant dated 27.12.2021. However, no construction work for the project as approved by the competent authorities should be commenced without obtaining the requisite statutory clearances from the concerned authorities.

In view of the above facts, your firm is hereby instructed to execute the foundational security works immediately prior to the onset of the monsoon season in order to avoid any hazards due to rain.

Thanking you

Yours sincerely



Chief Executive Officer  
Gangtok Smart City Dev. Ltd

Enclosed: as stated above

-TRUE COPY-



P.R.No. 473 / 2021-22  
dt. 28/02/22



ANNEXURE R-19

Ref. No. MIPL/12/2021-22

Date: 31.12.2021

To,  
The Additional Director  
Mines & Geology Department,  
Gangtok,  
East Sikkim, Sikkim 737101

Sub.: With Reference to Site Stability Report Ref. No.1/62(3)DM&G/21-22/478  
dated :29-12-2021.

Sir,

With reference to the above subject Matter, we received site stability report from your department in which as per the Recommendation claus no.1 states that the proposed area falls under zone (1) as per the parameters notified by the department of Mines and Geology vide Gazette no 86 dated 6<sup>th</sup> April 2021. However, as Sikkim lies over young fold mountains, seismic zone IV and with fragile geological conditions micro seismic studies in the area and load impact assessment of the surrounding areas, to be carried out prior to construction of multi storied structure and provide suitable mitigation measures, if required to avoid future complication. In this regard we approached to our Structural Consultant and they issued a certificate as annexed for your reference.

Kindly do the needful.

*JD (G)*

*For. required action M*

Thanking You.

Yours Faithfully.

For. MESASO Infrastructure Private Limited *[Signature]*  
*28/2*

*Sr. Geo*  
*Per-A.G. P.S.*

Mesaso Infrastructure Private Limited

*[Signature]*  
(Authorised Signatory)  
Vice President

*Received*  
*1-03-2022*  
*[Signature]*

*[Signature]*  
Joint Director (Geology),  
Mines & Geology Department  
Government of Sikkim,  
Gangtok

MESASO Infrastructure Private Limited | Reg. Off. : 3rd Floor, Vega Circle Mall, 3rd Mile, Sevoke  
Road, Siliguri, West Bengal - 734001 | info@mesaso.in | + 91 9907311645  
Project Site : Old West Point School Area, Near M.G. Marg, Gangtok, East Sikkim 737101  
CIN: U45309WB2021PTC243031 | PAN: AAOCM2843E | GSTIN: 11AAOCM2843E1ZQ  
IGBC Membership No. : IGBCBD210233 | IGBC Project Reg. No. : IGBCNBT210211

ANNEXURE R- 28  
(Colly)

REPORT ON GEOLOGICAL AND GEO-PHYSICAL INVESTIGATION  
OF THE LANDSLIDE AREA AT ARITHANG, EAST SIKKIM.



Work carried out by: -

Himalayan Research Consultancy and Services, Gangtok

Regd. No. BOOK NO.1V, VOL NO.1B, SL.NO.1.

JANUARY 2022



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5. CONCLUSIONS AND RECOMMENDATIONS.	Page 4 -5
6. GEO-PHYSICAL TOMOGRAPHY AND DESCRIPTION.	Page 6-13
7. FIELD PHOTOS.	Page 14-18
10. GEOLOGICAL MAP OF THE AREA .	Page 19.
11. LOCATION MAP OF ERT PROFILES CARRIED IN THE AREA.	Page 20.



### **Introduction**

The report is with reference to request from site contractor for Geological & Geo-physical investigation of the landslide zone at Arithang, Gangtok along Indira Bye pass road section (hill side area) accordingly, a technical expert from M/S Himalayan Research consultancy and services, Gangtok conducted the geological and geo-physical investigation of the landslide area during the month of January 2022 and accordingly prepared a detailed report.

Geographically, the proposed area is located between  $N27^{\circ}19.911'$  to  $N 27^{\circ}19.115'$  latitude  $E88^{\circ} 36.420'$  to  $E 88^{\circ} 36.480'$  elevation of 1470m to 1476 m amsl. The slide zone is located 300 meters (approximately) towards North-East from Arithang-Byepass road junction along Indira Bye pass Road section at Arithang, East Sikkim.

### **Scope of work: -**

1. Geological map of the area.
2. Geo-physical investigation through Electrical Resistivity Method to identify the depth of bed rock.

### **Geology of the area**

Geologically, the area is part of medium grade metamorphic rock sequence represented by Mica schist rock overlain by medium-thick to thin soil cover. The general dip of foliation of rock is NE with north westerly slope facing aspect.

The slide zone is approximately 25 meters wide and 70 meters long in dimensions. Further, the landslide zone is characterized by moderate to gentle slope gradient. The area has high groundwater activity indicated by presence of water running on the body of the slide. During the visit it can be seen that highly disintegrated weathered Mica schist rock is exposed at some areas on the slide zone. The quality of the exposed country rock is very poor due to prolonged exposure of the rock with high groundwater circulation in the area.

1 | P a g e



Further, moderately to highly weathered rock can be seen exposed at the base of the slide area on the hill side of Indira Bye-pass Road section. Hence, the following tests were conducted in the field which is as follows: -

**Geo-physical investigation (2D-Electrical Resistivity Tomography)**

Electrical resistivity determination is usually made by injecting a specified amount of electric current electrodes and with the aid of a pair of potential electrodes. The potential difference between any two points at the surface caused by the flow of the electric current in the sub-surface is measured. From the measured current (I) and the voltage (V) values the ensuing resistivity is determined.

The approach of geophysical study is to reveal the sub-surface characteristics materials based on the subsurface geology and hydrological conditions. Geophysical investigation provides us the in-situ subsurface conditions, which can be translated into geo-technical information, which provides complete understanding of physical behavior of a sub-surface geology. Feasibility of various direct and indirect geophysical techniques resolve details of sub-surface masses present there on, such as movement of ground water, thickness, relief of bed rock, water saturated zone (Bogoslovsky et al.1977; Mills.1990; Caris and Van Asch,1991; Hermann et al. 2000). Recently, the role of Electrical Resistivity Tomography (ERT) or electrical imaging (I.B Osazuwa and E. ChiiChii 2010) in Lake Investigations is on wide practice, due to cost, time and other parameters.

Electrical resistivity surveys with vertical electrical soundings (Schlumberger method) which provides characteristics of sub surface layer, depths and resistivities at a single place. Furthermore, 2D resistivity imaging techniques provide 2D and even 3D high resolution electrical images of sub surfaces (Griffiths and Baker 1993).



**Objectives:**

1. To investigate the sub-surface water activity if any.
2. Thickness of overburden in the area.
3. Type of materials present/inferred geological condition.
4. Approximate Depth of rock and their physical properties.

**Methodology:**

**Electrical Resistivity Tomography Method**

Two-dimensional (2D) electrical imaging surveys are widely used to map areas of moderately complex geology where conventional resistivity sounding and profiling techniques are inadequate. The data from such surveys are plotted in the form of a pseudo-section which gives an approximate and sub-surface geology is slightly distorted. The data collected in saturated zone of study areas were interpreted by 2D Resistivity Imaging software. Integrated Geo-Instrumentation Service resistivity meter model **SSR-MP1**, is used to obtain the resistivity data to reasonable depths of 20- 30 m (depth of investigation depends on local geological conditions) from the ground surface of the lake. For a good lateral, vertical and horizontal resolution, **hybrid Wenner-Schlumberger profiling is preferred**. Multi-electrode Resistivity imaging techniques were used in the area. A GARMIN made GPS was used for the position location of electrodes along the profile.

Resistivity data were collected using **Wenner-Schlumberger** (Vertical Electrical Sounding) array configuration with electrode separation 2-5 m. Topographic corrections and 2D inversion model were carried out using **Res2D inv** of **GEOTOMO Software**. This resistivity inversion software based on the least - square method proposed by Locke and Barker (1996) is used during the investigation. In all inversion 5 attempts of iteration was kept.



Two (02) numbers of resistivity tomography profiles i.e. PS 01 – PS 01 along NE-SW direction and PS 02 – PS 02 along SE-NW directions were carried out in the area. The adopted contour color code provides the key information on parameters of deposited material like presence of low resistivity saturated sandy soil horizons and the depth of bed rock. Tentative true resistivities versus subsurface depth are inferred from geological literature (Telford et al.1990). The data so obtained are used in the preparation of subsurface lithological sections along each profile and also inferred geo-hydrological regimes were carried out. The details of inferred subsurface strata and tomography are placed at Annexure.

**Keeping in the view of the above facts following observations and recommendation are made:**

1. Geologically, the area comprises of medium grade metamorphic rock sequence represented by Mica schist overlain by medium thick to thin soil overburden. Further, the area has gentle- moderate slope gradient with high water activity. **The dip of foliation of rock is NE with NW facing slope aspect. The causes of slide is due to loose muck was dumped in the area in the past with increase in rainfall and water activities resulted into shallow slip of loose materials. Further, the slide is localized in the area.**
2. **The ERT tomography of Profile Section 01-01' reveals groundwater circulation zone exists between 22m-53m horizontally with variable depths ranging from 0m-5m as seen in the tomography below and high to moderate weathered Mica Schist rock is encountered between 0m – 125m horizontal distance with depth ranging from 0m – 24 metres whereas Profile Section 02-02' reveals groundwater circulation zone exists between 6m-77m horizontally with variable depths between 0m-5m as seen in the tomography and Weathered Mica Schist is encountered from 0 meters-80 meters horizontal distance with variable depths ranging from 0m-16m depth. The**



details of the sub-surface geology, groundwater circulation, depth of overburden, bedrock is given in below along with the tomography of ERT survey.

3. The soil cover can be removed as much as possible during the dry seasons followed by channelization of encountered groundwater with provision of multiple drains connecting to nearby Jhoras. Further, the foundation of the RCC wall to be done **beyond 5 meters depth on average on in-situ rock with proper anchoring**. The RCC wall to be provided with sufficient weep holes to avoid negative impacts of pore water pressure on the protective work in near future.
4. **The bed rock in the proposed area is encountered at 5m depth onwards(average). Hence, the foundation of the proposed retaining structure can be done in phase wise manner with span of 3m-5m length to avoid up slope failure. However, the minimum foundation depth can be 5meters.**



### **Profile section (PS01-PS01'):**

**Site Geology:** Medium thick-thin soil overburden overlain by highly weathered Mica schist with groundwater circulation at some intervals are inferred in PS01-PS01'. The depth wise inferred geology is formulated in the table1.

### **Results and analysis of Geophysical observations:**

Multi-electrode resistivity survey with Schlumberger-Wenner array was carried out in profile section, PS01-PS01', the first electrode is placed at location 0.00 meter of section. (Geographically it is located at N27° 19.911' latitude E88° 36.420' at an elevation of 1475 m amsl). The direction of the profile section runs NE-SW from the first electrode. The last electrode was placed at a distance at 125 meters, geographically it is located at N27° 19.974' latitude E88° 36.470' longitude at an elevation of 1475 m amsl) (profile section 01-01'), to delineate probable sub-surface geology. Observation from 2D-inversion resistivity in the profile section, 01-01' shows that groundwater circulation zone exists between 22m-58m horizontally with variable depths ranging from 0m-7m as seen in the tomography below and high to moderate weathered Mica Schist rock is encountered between 0m - 125m horizontal distance with depth ranging from 0m - 24 metres horizontally with variable depths ranging from 0m-25 m as seen in the tomography.



Groundwater circulation zone

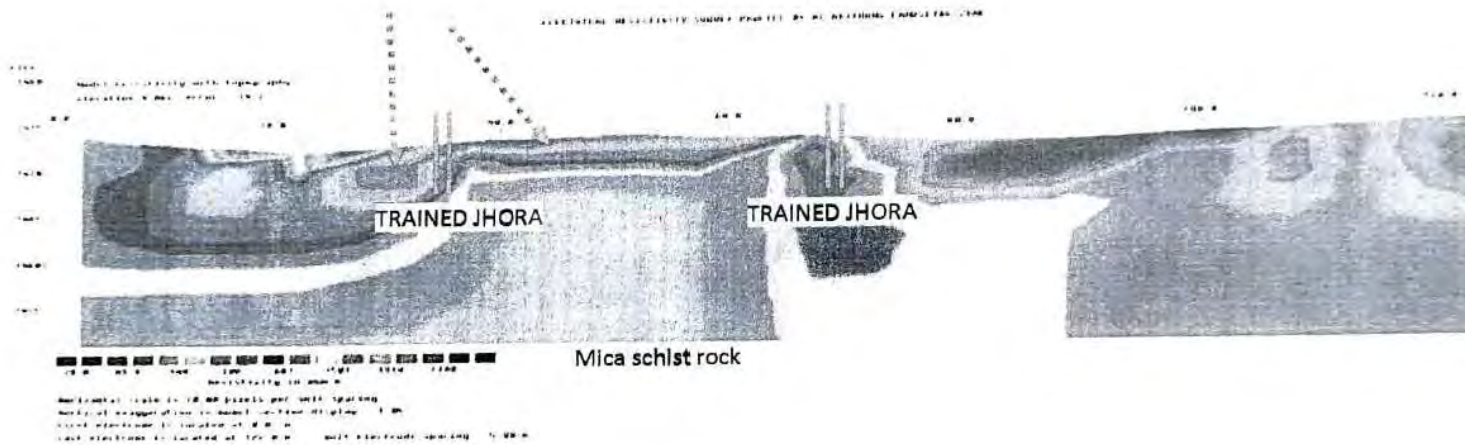


Table: 1 showing the inferred geology of sub-surface at PS-01 to PS-01'.

Sl. No.	PS01-PS01' (0.0mts.-125 mts.)	Depth (m)	Resistivity(ohm-meter)	Inferred geology/type of materials Present
1	0m - 3m	-	-	Field Data Gap (no information)
2	3m - 11m	0m - 15m	300Ωm-700Ωm	Highly saturated with high disintegrated weathered Mica Schist rock
		15m-24m	1,000Ωm-3,000Ωm	Highly weathered Mica Schist rock
3	11m - 21m	0m - 2m	3,300 Ωm-7,500 Ωm	Moderately weathered Mica Schist rock with occasional quartz veins.
		2m - 3m	1,000Ωm-3,000Ωm	Highly weathered Mica Schist rock.
		3m-4m	300Ωm-700Ωm	Highly saturated with high disintegrated weathered Mica Schist rock.
		4m-11m	220Ωm-280Ωm	Water logged micaceous silty soil.
		11m-15m	300Ωm-700Ωm	Highly saturated with high disintegrated weathered Mica Schist rock.
		15m-24m	1,000Ωm-3,000Ωm	Highly weathered Mica Schist rock.
4	21m - 22m	0m - 2m	1,000Ωm-3,000Ωm	Highly weathered Mica Schist rock.
		2m-15m	300Ωm-700Ωm	Highly saturated with high disintegrated weathered Mica Schist rock.
		15m-24m	1,000Ωm-3,000Ωm	Highly weathered Mica Schist rock.
5	22m - 31m	0m - 2m	3,300 Ωm-7,500 Ωm	Moderately weathered Mica Schist rock with occasional quartz veins.
		2m-3m	1,000Ωm-3,000Ωm	Highly weathered Mica Schist rock.
		3m-4m	300Ωm-700Ωm	Highly saturated with high disintegrated weathered Mica Schist rock.
		4m - 5m	220Ωm-280Ωm	Water logged micaceous silty soil.
		5m-7m	20Ωm-200Ωm	Groundwater circulation zone.
		7m-11m	220Ωm-280Ωm	Water logged micaceous silty soil.
		11m-15m	300Ωm-700Ωm	Highly saturated with high disintegrated weathered Mica Schist rock.
		15m-24m	1,000Ωm-3,000Ωm	Highly weathered Mica Schist rock.
6	31m - 38m	0m - 2m	220Ωm-280Ωm	Water logged micaceous silty soil.
		2m - 5m	20Ωm-200Ωm	Groundwater circulation zone.
		5m-8m	220Ωm-280Ωm	Water logged micaceous silty soil.
		8m - 13m	300Ωm-700Ωm	Highly saturated with high disintegrated weathered Mica Schist rock.
		13m-24m	1,000Ωm-3,000Ωm	Highly weathered Mica Schist rock.
7	38m - 58m	0m - 3m	20Ωm-200Ωm	Groundwater circulation zone.
		3m - 4m	220Ωm-280Ωm	Water logged micaceous silty soil.



		4m-5m	300Ωm-700Ωm	Highly saturated with high disintegrated weathered Mica Schist rock.
		5m-24m	1,000Ωm-3,000Ωm	Highly weathered Mica Schist rock.
8	58m - 64m	0m - 3m	220Ωm-280Ωm	Water logged micaceous silty soil.
		3m-4m	300Ωm-700Ωm	Highly saturated with high disintegrated weathered Mica Schist rock.
		4m-24m	1,000Ωm-3,000Ωm	Highly weathered Mica Schist rock.
9	64m - 66m	0m - 2m	300Ωm-700Ωm	Highly saturated with high disintegrated weathered Mica Schist rock.
		2m-24m	1,000Ωm-3,000Ωm	Highly weathered Mica Schist rock.
10	66m-70m	0m-17m	300Ωm-700Ωm	Highly saturated with high disintegrated weathered Mica Schist rock.
		17m-24m	1,000Ωm-3,000Ωm	Highly weathered Mica Schist rock.
11	70m-77m	0m-24m	1,000Ωm-3,000Ωm	Highly weathered Mica Schist rock.
12	77m-90m	0m-10m	3,300 Ωm-7,500 Ωm	Moderately weathered Mica Schist rock with occasional quartz veins.
		10m-24m	1,000Ωm-3,000Ωm	Highly weathered Mica Schist rock.
13	90m-106m	0m-5m	3,300 Ωm-7,500 Ωm	Moderately weathered Mica Schist rock with occasional quartz veins.
		5m-24m	1,000Ωm-3,000Ωm	Highly weathered Mica Schist rock.
14.	106m-116m	5m-24m	1,000Ωm-3,000Ωm	Highly weathered Mica Schist rock.
15.	116m-122m	0m-10m	3,300 Ωm-7,500 Ωm	Moderately weathered Mica Schist rock with occasional quartz veins.
		10m-24m	1,000Ωm-3,000Ωm	Highly weathered Mica Schist rock.
16.	122m-125m	-	-	Field Data Gap (no information)



**Profile section (PS02-PS02'):**

**Site Geology:** Medium thick to thin soil overburden overlain by highly weathered mica schist with groundwater circulation at regular intervals is inferred in PS02-PS02'. The depth wise inferred geology is formulated in the table 1.

**Results and analysis of Geophysical observations:**

Multi-electrode resistivity survey with Schlumberger-Wenner array was carried out in profile section, PS02-PS02', the first electrode is placed at location 0.00 meter of section. (Geographically it is located at N27° 19.937' latitude E88° 36.438' at an elevation of 1470 m amsl). The direction of the profile section runs NW-SE from the first electrode. The last electrode was placed at a distance at 80 meters, (Geographically it is located at N27° 19.928' latitude to E88° 36.480' longitude at an elevation of 1476m amsl) (profile section 02-02'), to delineate probable sub-surface geology. Observation from 2D-inversion resistivity in the profile section 02-02' shows reveal groundwater circulation zone exists between 6m-77m horizontally with variable depths between 0m-5m as seen in the tomography and Weathered Mica Schist is encountered from 0 meters-80 meters horizontal distance with variable depths ranging from 0m-16m depth as seen in the tomography.



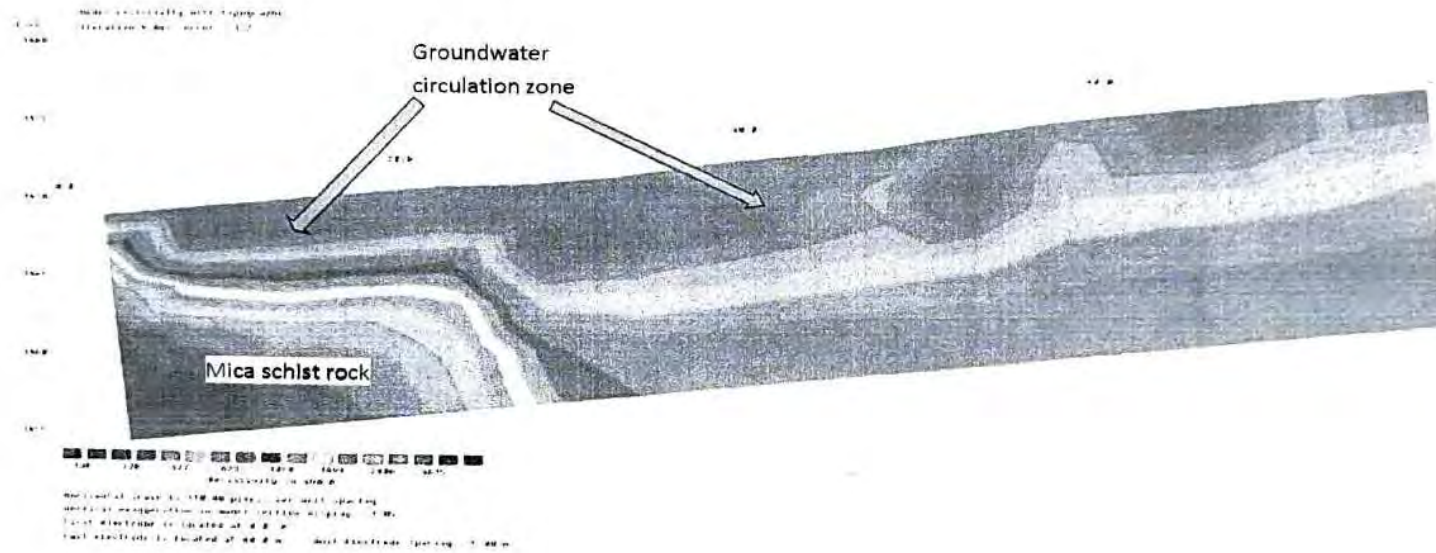


Table 2: - showing inferred geology of sub-surface at PS02-PS02'.

Sl. No.	PS02-PS02' (0.0mts. - 80 mts.)	Depth (m)	Resistivity(ohm-meter)	Inferred geology/type of materials Present
1	0m - 3m	-	-	Field Data Gap (no information)
2	3m - 6m	0m - 2m	100 $\Omega$ m-200 $\Omega$ m	Groundwater circulation zone.
		2m - 3m	300 $\Omega$ m-600 $\Omega$ m	Highly saturated with highly disintegrated weathered mica schist rock.
		3m-4m	650 $\Omega$ m-1,000 $\Omega$ m	Moderately saturated with high weathered Mica schist rock.
		4m-6m	1,100 $\Omega$ m-3,000 $\Omega$ m	Highly weathered Mica schist rock.
		6m-16m	1,100 $\Omega$ m-3,000 $\Omega$ m	Moderately weathered Mica schist rock.
3	6m - 20m	0m - 4m	100 $\Omega$ m-200 $\Omega$ m	Groundwater circulation zone.
		4m-5m	300 $\Omega$ m-600 $\Omega$ m	Highly saturated with highly disintegrated weathered mica schist rock.
		5m-6m	650 $\Omega$ m-1,000 $\Omega$ m	Moderately saturated with high weathered Mica schist rock.
		6m-8m	1,100 $\Omega$ m-3,000 $\Omega$ m	Highly weathered Mica schist rock.
		8m-16m	1,100 $\Omega$ m-3,000 $\Omega$ m	Moderately weathered Mica schist rock.
4	20m - 25m	0m - 4m	100 $\Omega$ m-200 $\Omega$ m	Groundwater circulation zone.
		4m - 5m	300 $\Omega$ m-600 $\Omega$ m	Highly saturated with highly disintegrated weathered mica schist rock.
		5m-6m	650 $\Omega$ m-1,000 $\Omega$ m	Moderately saturated with high weathered Mica schist rock.
		6m-16m	1,100 $\Omega$ m-3,000 $\Omega$ m	Highly weathered Mica schist rock.
5	25m - 56m	0m - 5m	100 $\Omega$ m-200 $\Omega$ m	Groundwater circulation zone.
		5m-10m	300 $\Omega$ m-600 $\Omega$ m	Highly saturated with highly disintegrated weathered mica schist rock.
		10m-16m	650 $\Omega$ m-1,000 $\Omega$ m	Moderately saturated with high weathered Mica schist rock.
6	56m - 72m	0m - 4m	100 $\Omega$ m-200 $\Omega$ m	Groundwater circulation zone.
		4m-10m	300 $\Omega$ m-600 $\Omega$ m	Highly saturated with highly disintegrated weathered mica schist rock.
		10m-16m	650 $\Omega$ m-1,000 $\Omega$ m	Moderately saturated with high weathered Mica schist rock.
7	72m - 77m	0m - 2m	100 $\Omega$ m-200 $\Omega$ m	Groundwater circulation zone.
		2m-10m	300 $\Omega$ m-600 $\Omega$ m	Highly saturated with highly disintegrated weathered mica schist rock.
		10m-16m	650 $\Omega$ m-1,000 $\Omega$ m	Moderately saturated with high weathered Mica schist rock.
8.	77m-80m	-	-	Field Data Gap (no information)



Field Photos

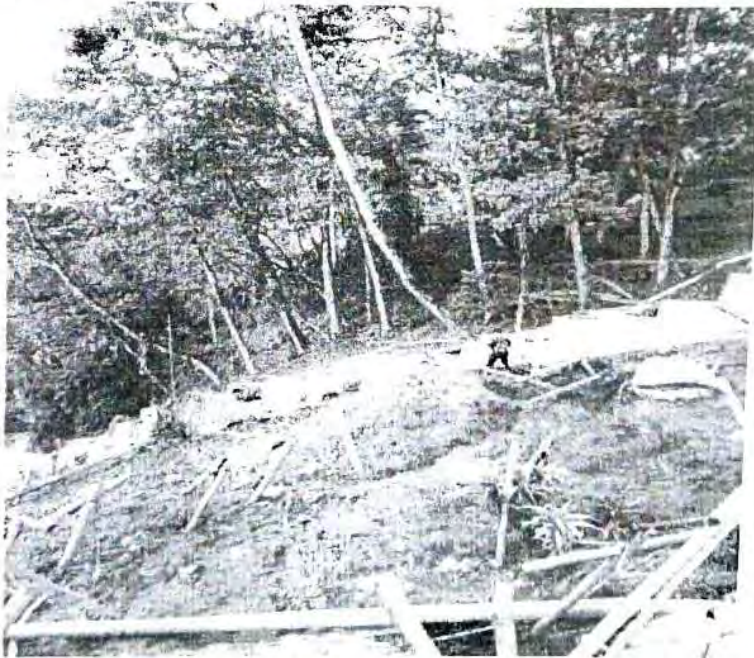


Photo: - The slide area characterized by medium thick to thin soil overburden.





Photo 2,3 & 4: - Electrical Resistivity Profile 01 in progress at the slide area.





Photo 5,6 & 7:- Electrical Resistivity survey profile 02 in progress at the slide area.

-TRUE COPY-





ANNEXURE R-19



Ref. No. MIPL/HO/31/2021-22

Date: 10.01.2022

To,  
Chief Executive Officer  
Gangtok Smart City Development Limited,  
Level 5, Kisan Bazaar, Lal Market Road,  
Gangtok, East Sikkim – 737101

**Sub: Additional floors for west point against the approval. Matter regd.**

Sir,

Reference approval of Form of Sanction (Form-III) issue no: 3839/Misc/TPC/GMC/2021/979 dated 31/12/2021 regarding Construction Order for west point project from Gangtok Municipal Corporation, the following points are submitted for consideration from the competent authority pl:

- 1) This state-of-the-art building has been developed keeping best construction practices adhering to National Building Codes while keeping local byelaws in mind.
- 2) While the SBCR building byelaws for area above 10000sqft mandates only 5ft clear setback to be left from the edge of the site boundary, here in our case as desired by GSCDL & GMC, we have left a clear 20ft wide gap from the edge of the boundary so that a circular road could be developed between the proposed building and the neighborhood boundary which will be used by all and also serve as a fire access way and for any exigency.
- 3) While this has been accommodated in the design in the larger interest of the city, it has greatly reduced the buildup area available to us thereby making rentable/ usable project area much lesser. This has created genuine difficulty in the feasibility of the project and will have a great impact on the cost implication.
- 4) The only way possible is by permitting more FAR so that the lost/ reduced built up area is compensated to some extent thereby making the project feasible and beneficial to all. Even the amended SBCR- 2001 (GOS/UD&HD/6(294)2001 dated: 16/10/2001) allows this under Section-39 "Power to Relax" wherein the state govt. can consider extra floors rising out of 'genuine difficulty'.

MESASO Infrastructure Private Limited | Reg. Off. : 3rd Floor, Vega Circle Mall, 3rd Mile, Sevoke Road, Siliguri, West Bengal - 734001 | info@mesaso.in | + 91 9907311645  
Project Site : Old West Point School Area, Near M.G. Marg, Gangtok, East Sikkim 737101  
CIN: U45309WB2021FTC243031 | PAN: AAOCM2843E | GSTIN: 11AAOCM2843E1ZQ  
IGBC Membership No. : IGBCBD210233 | IGBC Project Reg. No. : IGBCNBT210211





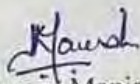
- 5) Hence, a revised scheme for proposed 3 additional floors, on one part of the project site, is enclosed for perusal and approval of the competent authority whereby the lost built-up area is recovered while maintaining the 20ft wide open circular road which will be beneficial for the city at large. This revised proposal will also be developed to keep the sunlight and views uninterrupted in the neighborhood and not be a hindrance in any way.

Sir, while it is our endeavor to establish a world class facility which will be Sikkim's first IGBC Gold Rated Green Building with best practices and workmanship, it is our humble submission that our request for three additional floors (as submitted in the revised proposal) is considered favorably so that our difficulty is addressed. This flagship building while being a jewel in Gangtok shall be the pride of the neighborhood and no stone shall be left unturned to ensure that quality and timely completion is achieved to the delight of the citizens.

Thanking you,

Yours faithfully,

For, MESASO Infrastructure Private Limited

  
Kumar Manish

Vice President Project



-TRUE COPY-

MESASO Infrastructure Private Limited | Reg. Off. : 3rd Floor, Vega Circle Mall, 3rd Mile, Sevoke Road, Siliguri, West Bengal - 734001 | info@mesaso.in | + 91 9907311645  
Project Site : Old West Point School Area, Near M.G. Marg, Gangtok, East Sikkim 737101  
CIN: U45309WB2021PTC243031 | PAN: AAOCM2843E | GSTIN: 11AAOCM2843E1ZQ  
IGBC Membership No. : IGBCBD210233 | IGBC Project Reg. No. : IGBCNBT210211

GANGTOK SMART CITY DEVELOPMENT LIMITED

ANNEXURE R-20

Note Sheet

Page No. 01

For kind perusal

Reference letter bearing memo no: - MIPL/HO/31/2021-22 dated: - 10/01/2022 wherein letter has been received from M/S Mesaso Infrastructure Private Limited requesting for 3 additional floors beyond the approved floors for the project being undertaken on PPP basis at Old West Point School Complex.

They have enclosed a proposed design of a 14 storied GREEN building complete with all necessary test reports for evaluation and approval of the competent authority.

Hence file is being forwarded for further n.a, please.

Handwritten signature and date: 10/01/2022

Ref above:

We are in receipt of a letter bearing no: MIPL/HO/31/2021-22 dated: 10/01/2022 from M/S Mesaso Infrastructure Pvt. Ltd. requesting for 3 additional floors for Construction of Multi Level Car parking cum commercial development. The additional three floors have been requested in lieu of the lost built-up area while maintaining 20 ft wide open circular road along the periphery of the proposed structure. The 20 feet setback for circular road has been proposed keeping in view of the uninterrupted vehicular movement and sunlight for the houses in proximity to the proposed project site.

Approval for relaxation of norms of the proposed building having 11 floors subject to confirmation of the geotechnical investigation and report have been accorded by Council of Ministers vide Cabinet Memorandum no: 215/Secy/UDD/2021 dated: 27.05.2021.

All the relevant documents have been placed below for kind perusal please.

- 1. Letter requesting additional floors : Flag A
- 2. Cabinet Memorandum: Flag B
- 3. Plan Layout (4 Floors Parking & 10 Floors Commercial Development) : Flag C
- 4. Geo-technical Investigation Report: Flag D

Since Urban Development Department is the competent authority regulating Sikkim Building Bye laws in the State. Hence, the file is forwarded for information and direction of Urban Development Department, please.

CEO on leave

State Mission Director

(1) The CEO may see the proposal but his comment on return by 10/02/2022 period.  
(2) GMC may examine the proposal in view of approval, but any already accorded by it for 11 floors. As per the bye laws for 11 floors.

Handwritten signatures: S, GMC, mfgmc

As directed by say sir at 10/01/2022  
sr. no. 2, GMC may kindly take up the

GANGTOK SMART CITY DEVELOPMENT LIMITED

Note Sheet

Page No. .... 02 .....

matter and submit report to UDD.

lal  
18/1/22

ANNEXURE R-21



GANGTOK MUNICIPAL CORPORATION  
DEORALI, SIKKIM

**FORM - V**

(See regulation 10 of the Sikkim Building Construction Regulation, 1990)

To,  
The Municipal Commissioner,  
Gangtok Municipal Corporation,  
Deorali, Sikkim.

Date: 10/01/2022

**Subject: Notice of commencement of the Construction / reconstruction / alteration / repair of building**

Dear Sir/Madam,

I/We, hereby certify that the construction / reconstruction / alteration / repair in  
Khasara No. 683/3114, 715, 716 Khatiyan No. 1440 at  
*Old West Point School Area, Gangtok* will be commenced on \_\_\_\_\_ as per your  
approval vide construction order no. 3889/misc/TPC/GMC/2021/999 dated 31.12.2022  
in accordance with the Blue Print Plan approved.

Yours faithfully,

Signature of Owner:- \_\_\_\_\_ For, **Messso Infrastructure Private Limited**

Name (in Block letter):- SHUBHAM MALU

Add:- Old West Point School Complex,  
Near M.G. Marg, Gangtok, Sikkim

Phone no:- 6380944250

*Shubham*  
**Authorised Signatory**  
10-01-2022

*ACP*  
*9/1*  
10/01

*JP*  
10/01/22

ATP-I  
*Ph. process.*

*Received*  
*Tulsi*  
Town Planner  
Gangtok Municipal Corporation

-TRUE COPY-

ANNEXURE R-26 (Colly)

GANGTOK SMART CITY DEVELOPMENT LIMITED

Note Sheet

Page No. 01

For kind perusal

Reference letter bearing memo no: - MIPL/HO/31/2021-22 dated: - 10/01/2022 wherein letter has been received from M/S Mesaso Infrastructure Private Limited requesting for 3 additional floors beyond the approved floors for the project being undertaken on PPP basis at Old West Point School Complex.

They have enclosed a proposed design of a 14 storied GREEN building complete with all necessary test reports for evaluation and approval of the competent authority.

Hence file is being forwarded for further n.a, please.

*10/01/2022*

Ref above:

We are in receipt of a letter bearing no: MIPL/HO/31/2021-22 dated: 10/01/2022 from M/S Mesaso Infrastructure Pvt. Ltd. requesting for 3 additional floors for Construction of Multi Level Car parking cum commercial development. The additional three floors have been requested in lieu of the lost built-up area while maintaining 20 ft wide open circular road along the periphery of the proposed structure. The 20 feet setback for circular road has been proposed keeping in view of the uninterrupted vehicular movement and sunlight for the houses in proximity to the proposed project site.

Approval for relaxation of norms of the proposed building having 11 floors subject to confirmation of the geotechnical investigation and report have been accorded by Council of Ministers vide Cabinet Memorandum no: 215/Secy/UDD/2021 dated: 27.05.2021.

All the relevant documents have been placed below for kind perusal please.

- 1. Letter requesting additional floors : Flag A
- 2. Cabinet Memorandum: Flag B
- 3. Plan Layout (4 Floors Parking & 10 Floors Commercial Development) : Flag C
- 4. Geo-technical Investigation Report: Flag D

Since Urban Development Department is the competent authority regulating Sikkim Building Bye laws in the State. Hence, the file is forwarded for information and direction of Urban Development Department, please.

CEO on leave

State Mission Director

(1) The CEO may see the proposal for his comment on return by his leave period. *10/01/2022*

(2) GMC may examine the proposal in view of approval, but already accorded by it for 11 floors. He ascertains responsibility for floors.

*SS*  
*GM/GMC*  
*MS/GMC*

*As directed by Secy in dt. 10/01/2022*  
*SI. no-2, GMC may kindly take up the*

GANGTOK SMART CITY DEVELOPMENT LIMITED

Note Sheet

Page No. 02

matter and submit report to UDD.

lald  
18/1/22

JP

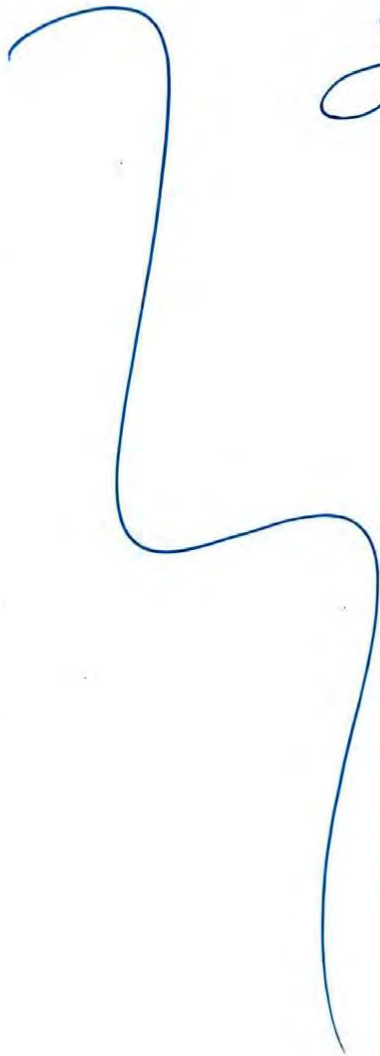
PC examine this in detail.

SP  
11/01/22

ATN-I

As directed above for.

J  
1/10/22



ANNEXURE R-46

Dated - 12/01/2022

The undersigned visited the site of proposed 04 level parking + 10 level commercial development @ Old West Point School, Gyaltoe Sikkim along with the Kumar Manish, VP-Project, Asit Mukhopadhyay (Site Engineer), Subham Mahu (Engineer) of Mesaso Infrastructures Private Limited dated 12/01/2022 for demarcation.

Further this to certify that the site-bound has been maintained as the per the approved Blue print plan in G.M.C.

Further, 04 level parking + 10 level plan has to be demarcated. Later on the office of TPC of GMC may be informed.

Infrastructures Private Limited  
 Infrastructures Private Limited  
 Acknowledged by:  
 Authorised Signatory  
 Authorised Signatory

*[Signature]*  
 Sem.

*[Signature]*

*[Signature]*  
 12/01/2022  
 Assistant Town Planner - I  
 Gangtok Municipal Corporation

## ANNEXURE R-21

Item No. 01

Court No.1

**BEFORE THE NATIONAL GREEN TRIBUNAL  
EASTERN ZONE BENCH, KOLKATA  
(Through Video Conferencing)**

Original Application No. 05/2022/EZ  
(I.A. No. 03/2022/EZ & I.A. No. 04/2022/EZ)

Dr. Bina Basnett

Applicant(s)

Versus

State of Sikkim &amp; Ors.

Respondent(s)

Date of hearing: 18.01.2022

**CORAM: HON'BLE MR. JUSTICE B. AMIT STHALEKAR, JUDICIAL MEMBER  
HON'BLE MR. SAIBAL DASGUPTA, EXPERT MEMBER**

For Applicant(s) : Mr. Pratap Shanker, Advocate

For Respondent(s):

**ORDER**

1. Heard Mr. Pratap Shanker, learned Counsel for the Applicant.
2. This Original Application has been filed with the allegation that in the city of Gangtok in Sikkim, an illegal construction of Multilevel Car Parking cum Shopping Hub (STNM-Kanchanjunga square below NH) at Old West Point School Area near Hotel Hungry Jack Gangtok is being undertaken by the Respondent No.2.
3. The contention of the Applicant is that as per the Government of Sikkim, Gazette Notification dated 05.04.2021, it is provided that the maximum height of buildings constructed in allotted sites or private holdings within a notified area shall be in accordance with the suitability and profile of the locations based on the stability map of the area as prepared by Mines and Geology Department from time to time which is given in the notification and which reads as under:-

"No. 17/DMG/20-21

Date:- 19.03.2021

**Notification**

*In continuation with notification no. GOS/UD&HD/6(294)2001/A dated 15.10.2001 and gazette no. 387 dated 15/10/2001 which notified that the maximum height of buildings constructed in allotted sites or private holdings within a notified area shall be in accordance with the suitability and profile of the locations based on the stability map of the area as prepared by Mines and Geology Department from time to time which shall be as follows:*

<b>Stability Zone</b>	<b>Admissible no. of floors</b>
1.	5 ½ storeys
2.	4 ½ storeys
3.	3 ½ storeys
4.	2 ½ storeys
5.	No construction is allowed

*The department of Mines and Geology hereby notifies the parameters for determination of stability zones of each zone as follows. These parameters are known as site stability zonation parameters and will be strictly followed during categorization of zones."*

4. The further contention of the Applicant is that as per the notification at no point of time, can a construction be more than 5<sup>1/2</sup> storeys in height whereas the construction of the multilevel parking under construction is to the extent of 14 storeys which is wholly impermissible.
5. The further contention of the Applicant is that as per Earthquake Induced Landslides in the Sikkim-Darjeeling Himalayas-An Aftermath Study report of the 18.09.2011, earthquake in the State of Sikkim, the State of Sikkim comes under Seismic Zone IV- a zone of considerable vulnerability and in this area earthquakes are commonly of 4.5 to 5.5 magnitudes on the Richter Scale.
6. The contention of the Applicant therefore is that a parking complex of 14 storeys is a grave threat to the fragile ecology of the area and also to the life and limb of the people residing in the area.
7. In our opinion, matter requires consideration.

8. Issue notice to the respondents, returnable within four weeks.
9. All the Respondents shall file their counter-affidavits within four weeks.
10. The Applicant shall provide e-copy/soft copy of the Original Application along with all its annexures to the learned Counsel for the Respondents within 24 hours.
11. **List on 02.03.2022.**
12. We direct that till the next date of listing there shall be a stay on construction in the area with reference to the multilevel car parking-cum-Shopping Hub in the area in question.

**I.A. No. 03/2022/EZ:-**

1. This application has been filed seeking stay on the illegal construction of multistory building. Since, we have already passed order in the original application, this I.A. No.03/2022/EZ has now become infructuous and is accordingly dismissed.

**I.A. No. 04/2022/EZ:-**

1. This application has been filed seeking exemption from filing typed copy of dim annexures. Such an exemption cannot be granted, since all the documents should be legible.
2. We, therefore, reject this application and direct the applicant to file legible copies of all such documents on record which are otherwise dim by the next date of listing.
3. The I.A. No. 04/2022/EZ is accordingly rejected.

.....  
**B. Amit Sthalekar, JM**

.....  
**Saibal Dasgupta, EM**

January 18, 2022  
 Original Application No. 05/2022/EZ  
 (I.A. No. 03/2022/EZ & I.A. No. 04/2022/EZ)  
 MN

## ANNEXURE R/3

**MINUTES OF STATE LEVEL EXPERT APPRAISAL COMMITTEE, SIKKIM  
HELD ON 24<sup>TH</sup> JANUARY 2022.****VENUE: Through Physical and Video Conferencing****Date: 24<sup>th</sup> January, 2022****PROCEEDINGS**

A meeting of the State Level Expert Appraisal Committee, Sikkim held on 24<sup>th</sup> January, 2022 through dual mode seeing the protocols of Covid – 19 Pandemic. Shri P. Shrestha, Retd. PCE, Member attended physically and rest of the members including Chairman and participants attended through Video Conferencing. Attendance is as under;

1. Shri H.P Pradhan	Chairman	P
2. Shri Tshering Tashi	Member	P
3. Shri Pradhumna Shrestha	Member	P
4. Shri D.R. Chettri	Member	A
5. Dr. B.C Basistha	Member	P
6. Shri B.K Chettri	Member	P
7. Dr. Dinesh Agarwal	Member	P
8. Dr. Satya Deep Chettri	Member	P
9. Shri B.B Gurung	Member Secretary	P
10. Shri Chandan Kumar	Master Trainer	P

I. **Opening Remarks of the Chairman:** The Chairman welcomed all the members and participants and informed the house about **the Proposed Development of “WEST POINT”- Integrated Commercial cum MLCP Complex at Old West Point School Area, Near M.G Marg, Gangtok, East Sikkim**. The meeting was opened for proceeding as per the agenda of the meeting set on 11<sup>th</sup> January, 2022.

II. **Consideration of Proposal:** The SEAC considered the proposal as per the agenda adopted for the meeting. The Details of deliberations, discussion held and decision taken in the meeting are as under;

**Agenda Item:**

**Proposed Development of “WEST POINT”- Integrated Commercial cum MLCP Complex at Old West Point School Area, Near M.G Marg, Gangtok, East Sikkim by MESASO Infrastructure Pvt. Ltd. – Environment Clearance.**

**Proposal No. SIA/SK/MIS/244081/2021**

1. The Project Proponent, M/S MESASO Infrastructure Pvt. Ltd. along with their consultant, M/S Envirotech East made a presentation on the key parameters, salient features of the project before the members of SEAC. After hearing from the Project

Proponent, the SEAC took note of the following key parameters and salient features of the project as presented, provided in the reports and application for the project.

- i). The project is located at Plot / Survey / Khasra No.686/P, 715, 716 at Gangtok Revenue Block / City, East District, Sikkim with coordinates 27°19'47.24" N Latitude and 88°36'40.93" E Longitude.
- ii). The project is construction of integrated commercial cum multi level car parking facility, hotel and allied services and has been submitted for prior Environment Clearance.
- iii). The total land area is 5665.55 sqm with Built Up Area of 33801.25 sqm. The mixed use development building of configuration 4G+10 (Fourteen storey) shall comprise of Parking for 448 car park in the lower 4 floors; Mall with multiplex (52 retail outlets + 6 anchor stores) and food court; Boutique hotel having 55 keys (49 deluxe rooms + 6 suites) with a roof top swimming pool.
- iv). Other details and requirement during construction and operational phase of the project are as under;
 

a. Population	5374 persons
b. Total water requirement	153 KLD
c. Fresh water requirement	105 KLD
d. Waste water generation (to STP)	100 KLD
e. Treated waste water from STP	98 KLD
f. Treated waste water recycling	48 KLD
g. Treated waste water discharged	50 KLD
h. Solid waste generation	664.4 kg/day
i. No. of car parking	443 nos.
j. Power requirement	1606 KW
k. Backup power	3x650 KVA and 2x500 KVA
l. Project cost	Rs.298.2 crores
- v). Project is not located in critically polluted area.
- vi). Project is not located within the Eco-Sensitive Zone
- vii). Forest clearance is not required as no forest land is involved as stated.
- viii) Proposed area is devoid of vegetation and no felling requires as per the statement.
  2. The SEAC noted that the project is covered under category 'B' item No.8 (a) "Building and Construction Projects" of the Schedule of the EIA Notification, 2006 and requires appraisal at State Level by the SEAC.
  3. The SEAC observed following certain discrepancies, inconsistencies and incomplete information during its meeting and details submitted by Project Proponent in Form – I, Form – IA and many facts and figures are not given correctly;

- i. Project Proponent made statement that waste water shall be dispose in Municipal Sewage. This is not permissible unless permitted by the concerned department.
- ii. Noise Pollution, Soil pollution, dust pollution, Air pollution are not sufficiently spelled out.
- iii. The report submitted by project proponent doesn't include the E-waste and Mitigation Plan during construction and operational phase of the project.
- iv. Point 6.2 of Form – IA needs detailed elaboration regarding adverse impacts from new constructions on the existing structures, especially spill over due to weight of the present structure.
- v. Point 7.2, Demographic details needs to be elaborated. Employment and other oppurtunities during construction and operational phase of the project should be provided to the locals as per state government rules and policy.
- vi. Point 9.4 of Form IA, what efforts will be taken needs to be elaborated.
- vii. Point 9.6 of Form IA, How much energy saving is effected needs elaboration.
- viii. Point 9.7 of Form IA, regarding CFC and HCFC free chillers - needs reply on this because it's affecting environment.
- ix. Point 9.10, the report which submitted for fire emergency plan is for 1 year and what needs to be done after that is not mentioned. Clear statement should be in place for the project.
- x. Load Impact Assessment and its sustenance later is required to build the 14 storey building and that needs the approval from the Concerned, Department of Govt. of Sikkim, approved Blue Print / document from GMC/UDD needs to be submitted. A clear permission to go ahead with the project may be enclosed.
- xi. Vertical profiling / carrying capacity needs to be carried out from Indira Bye Pass road below the project site to Gangtok by competent agency / Department. Member suggested that this can be done by a geologist. Geologist appointed by a competent/authorized agency should do the study.
- xii. The report which User Agency has submitted doesn't mention the range and height of construction / building.
- xiii. Reports submitted by project proponent needs to be signed by the Authorized Department page wise.
- xiv. The information given by the Project proponent in application form are not consistent as car parking 448 and 443 are mismatching and also NH31 is now NH10. Needs correction.
- xv. More car parking facilities can do by increasing up to 500 nos by replacing 5 g so that the natural beauty of mountains can seen as usual.
- xvi. MFR should be clearly mentioned in the report.
- xvii. Huge quantity of quarry materials like stone chips, sand, aggregates and cement are being used, their total weight to be assessed properly and the load bearing capacity of the area needs elaboration.
- xviii. Proper Drainage system is properly required.
- xix. Sikkim falls within seismic Zone IV/V in regard to earthquake that needs to be properly mentioned. The Mines and Geology report categorically mentioned at the last para that *micro seismic studies in the area and load impact assessment of the surrounding areas to be carried out prior to construction of multi –storey*

*structures and provide a suitable mitigation measures if required to avoid future complications.* Needs to be complied and completed.

- xx. Type of jobs / employment that are being generated needs to be properly mentioned in the DPR following the Sikkim Govt rules and policies.
- xxi. Geological figure is not correct in the DPR.
- xxii. Summing pool at the top floor is not advisable considering the earthquake zone in Sikkim.
- xxiii. The four parking floors, auditoria and other huge halls can be considered as 'soft floors' and they must be provided special seismic load bearing shear walls and/or especially designed/size columns. The project proponent must incorporate these provisions without fail considering the high Seismicity prone nature of Sikkim Himalaya.
- xxiv. The Doors in the building seems to be opening provision from outside. This should be open from inside the floor considering the fact that in case of emergency / disaster the people can evacuate easily.
- xxv. Roofs can be removed because of high load or justification for stability may be provided.
- xxvi. The Report which the Project Proponent has submitted, has no stability report. The Notification no.17/DMG/20-21 dated 19/03/2021 has specified the maximum allowable number of floors for construction as 5 and half storey. In the present condition 14 storied building concrete structure is not permitted as per the notification. Needs approval from the concerned Department for proposed 14 storey building.
- xxvii. Have the PP obtained the approval of the structural design from the competent department?
- xxviii. The report which project proponent has submitted doesn't have the document proof of 14-storey building.
- xxix. Point 1.8 of Form I, how much excavated material will be utilized and how much quantity will be disposed off, excess quantity if any and where the excess muck will be disposed of, needs to be properly elaborated.
- xxx. Point 8.3 of Form I, the PP doesn't mention the regular health check-ups of labours.
- xxxi. Some important names of Schools, Colleges, places of worships are missing as asked in the Standard Format of the Form 1 under Environmental Sensitivity like Nar Bahadur Bhandari Degree College, Masjid nearby the construction site, Enchey Monastery, Thakurbari Temple etc.
- xxxii. Page 5 of Form 1A, Under Water Environment 48KLD waste water shall be recycled for flushing, landscaping and Car washing purpose. How will the PP propose to manage or dispose car washed waste water, needs to be properly elaborated.
- xxxiii. Point 2.3 of Form IA, whatever has been desired in this points needs to be elaborated with quality, physicochemical and biological characteristics of the water requirement with source of water to be collected in tankers.
- xxxiv. Point 2.7 Form 1A, 2<sup>nd</sup> Paragraph to be elaborated clearly.

- xxxv. Under sl.no.6.1 of Form IA, the PP states that ... there will be no obstruction of a view, scenic amenity or landscape. The SEAC observed that there will be some obstructions of the aesthetics.
- xxxvi. At 1.4 of Form IA, the PP states that no history of major earthquake has been recorded in the region. This statement is not correct.
4. The SEAC decided to defer the proposal and asked the project proponent to provide / clarify above details and submit additional information. Resubmit Form – I and Form – IA with amendments. The project proposal may be restructured and resubmitted in a standard approved format.

-TRUE COPY-

**1 PROPOSED MIXED USE DEVELOPMENT BUILDING  
4 LEVEL PARKING + 10LEVEL COMMERCIAL  
DEVELOPMENT AT OLD WEST POINT SCHOOL,  
NEAR M.G. MARG, GANGTOK, EAST SIKKIM**

**EXECUTIVE SUMMARY-STRUCTURAL DESIGN**

**Architects**

**SALIENT**

**Kolkata**

**Structural Consultants**

**SPA Consultants**

**Kolkata**



Date: 26<sup>TH</sup> January, 2022

**SANJIV J. PAREKH**  
M.E.(STRUCT.), M.E.(CONST. ENG.),  
B.C.E., FIE-(F-018202-4)  
E. S. E. No. 104 (I) K. M. C.

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STRUCTURAL DESIGN BASIS REPORT

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**CONTENTS**

- 1. PROJECT BRIEF**
- 2. STRUCTURAL SYSTEM**

**SANJIV J. PAREKH**  
M.E.(STRUCT.), M.E.(CONST. ENG.),  
B.C.E., FIE-(F-018202-4)  
E. S. E. No. 104 (I) K. M. C.



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S.P.A CONSULTANTS

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 STRUCTURAL DESIGN BASIS REPORT
 

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**1. PROJECT BRIEF**

<b><u>Project</u></b>	: STRUCTURAL DESIGN OF PROPOSED MIXED USE DEVELOPMENT BUILDING 4 LEVEL PARKING +10LEVEL COMMERCIAL DEVELOPMENT AT OLD WEST POINT SCHOOL, NEAR M.G. MARG, GANGTOK, EAST SIKKIM
<b><u>Architect</u></b>	: SALIENT
<b><u>Structural Consultants</u></b>	: M/S. S.P.A.CONSULTANTS,

**1.1. Description of the Site**


The general topography of the plot is almost flat and partly hilly. The lower four parking shall be constructed as per natural contour of the site so that minimum excavation could be required.

**1.2. Executive Summary:**

The proposed commercial building of 4 level of parking +10 level commercial stories. Parking floor level from 1- 4 are mainly used for car parking and mechanical car parking. The commercial floor level 1 onwards up to 3rd floor level is used for anchor shops, retails shop, atrium café and plaza. The 4th level floor is consist of auditorium, restaurant, food court, staff area, lobby, and toilet. The 5th level floor is mainly used for auditorium, bowling alley, and food zones. The 6<sup>th</sup> level and 7th level floors are used for alfresco dinning, plaza café, speciality restaurant and spa. The level 8,9,10 are mainly used for hotel rooms' suites. The terrace is mainly used for sunset terrace, infinity swimming pool.

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 S.P.A CONSULTANTS

  
 SANJIV J. PAREKH  
 M.E.(STRUCT), M.E.(CONST,ENG),  
 B.C.E., FIE-(F-018202-4)  
 E. S. E. No. 104 (I) K. M. C.

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 STRUCTURAL DESIGN BASIS REPORT
 

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It has been envisaged to construct a composite steel building with RSJ/built up sections and decking sheet because of the following reasons:

- a) The building is being constructed in the mountains and is situated in high seismic zone IV
- b) It has been designed as composite structure, part concrete and rest steel for better performance and stability against the seismic forces.
- c) The weight of the building has been kept light by doing a steel structure, as it is in a high seismic zone area.
- d) Major part of the structure can be fabricated in the factory in the plains and can be transported to the site ready to erect. This would involve very less labour and low volume of material needs to be transported to the site hence less pollution.
- e) The foundation proposed is raft foundation. The soil has highly weathered mica schist rock below having a bearing capacity of about 35t/sqm as per the soil test report and the load coming on the soil is approximately 21t/sqm.

Hence this shall not affect the adjoining structures in any way.

### 2.13 DESIGN CRITERIA FOR SUPER STRUCTURE

The composite structural system has been adopted which consists of steel columns encased with concrete, steel beams and rcc slab over decking sheet.

The beam and column locations and configurations adopted are suitable to accommodate functional and architectural requirements.

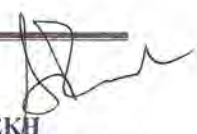
The Structural design of the proposed project is based on Indian Standard Codes, and is analyzed for Dead, Live, Wind, Seismic and Temperature Load conditions taking into account relevant load combinations recommended by the codes.

The Vertical Loads including the dead and super imposed loads are transferred to the soil through columns, raft foundation. The Lateral loads due to seismic forces are dissipated to soil through the proposed Reinforced Concrete columns.

In the process of evolving the building system (structural) many options were looked into taking into consideration aspects of economy, ease and speed of construction as well as simplicity in design and aesthetic appearance, keeping in

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 STRUCTURAL DESIGN BASIS REPORT
 

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mind the environmental impact, and safety of neighboring buildings and structures.

#### 2.14 DESIGN CRITERIA FOR FOUNDATION

- i) Raft Foundations has been considered based upon the Geo technical investigation report prepared by M/S Geo Informatic Consultancy & Services, Tadong, Gangtok and further the Plate Load test and soil test done by J.P. Geo Consultants of Kolkata, all the samples have been tested in NABL approved laboratory, which has been further vetted by Jadavpur University, Kolkata. Jadavpur university is a premier institute of India. This will dissipate all the vertical and horizontal loads safely to the soil/rock below. The type of foundations proposed is raft foundation as the available bearing capacity is more around 35t/sqm.
- ii) About 4.5 meter of over burden soil was removed to reach the foundation level of bottom of raft therefore a relief of pressure on the foundation rock was actually  $21 \text{ Ton/sqm} - 4.5 \times 2.0 \text{ Ton/sqm} = 12 \text{ Ton/sqm}$ , Whereas bearing capacity of rock is much higher as indicated by SPT and plate Load test conducted at various level during soil testing.
- iii) As per IS Code 1892-1979 Claus 2.3.1 the boring of the soil requires 7-8 Nos of boreholes but in this project we have done as a measure of taking abundant precaution for the safety of structure number of bore holes spread all over the site at close intervals. It is by far very dense probing of sub surface condition usually done in any project be it building, dams, steel plant etc. It only conforms that the Structural Engineer took extreme caution in designing a safe foundation for a proposed structure.


#### 2.15 PROPOSED APPROACH TO STRUCTURAL ANALYSIS:

The buildings are predominantly composite steel framed structures. The structure is designed as a special moment resisting frame (SMRF) as per IS-1893-2016. The lateral force resisting system is diaphragm and the steel / concrete column system. Slabs shall have decking sheet and rcc on the top. A computer model of the

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 STRUCTURAL DESIGN BASIS REPORT
 

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structural frame of the building was generated for carrying out analysis for the effects of vertical and lateral load that are likely to be imposed on the structure. The building structure is analysed using the ETABS and SAFE software for the following computer models of the building.

Space frame analysis (Static and dynamic) of the entire structure - for dead, live, seismic and wind loads.

Dynamic analysis with lumped mass at roof level has been performed considering the swimming pool at the top. The structure has been designed considering the affect of the lumped mass at the terrace level. As per IS-1893-2016.

ETABS has been thoroughly tested, validated and recognized internationally by several organizations and is well suited for the analysis of building systems.

Geometrical dimensions, member properties and member-node connectivity, including eccentricities have been modelled in the analysis. Variation in material grades, if present, has also been considered.


The seismic loads have been derived from the results of Equivalent Static analysis and Dynamic analysis of the structure in accordance with the code IS 1893 (part 1): 2016 and relevant code of practice. Design of the composite members shall be done by the relevant IS codes.

The permissible values of the load factors and stresses have been utilized within the purview of the Indian Standards.

The following checks have been done to comply with the requirements of the relevant codes IS-1893-2016, IS-13920-2016, IS-456-2000, IS-875(Part 3), IS-800-2007 with reference to ASTM codes for structural steel.

- 1) Torsion irregularity: table 5 of IS-1893-2016
- 2) Drift and deflection: Clause 7.11 of IS-1893-2016
- 3) Mass Participation: table 6-vii of IS-1893-2016
- 4) Time period: Clause 7.6 of IS-1893-2016
- 5) Eccentricities: Clause 7.8.2 of IS-1893-2016
- 6) Soft storey: Clause 7.10 of IS-1893-2016
- 7)

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**STRUCTURAL DESIGN BASIS REPORT**


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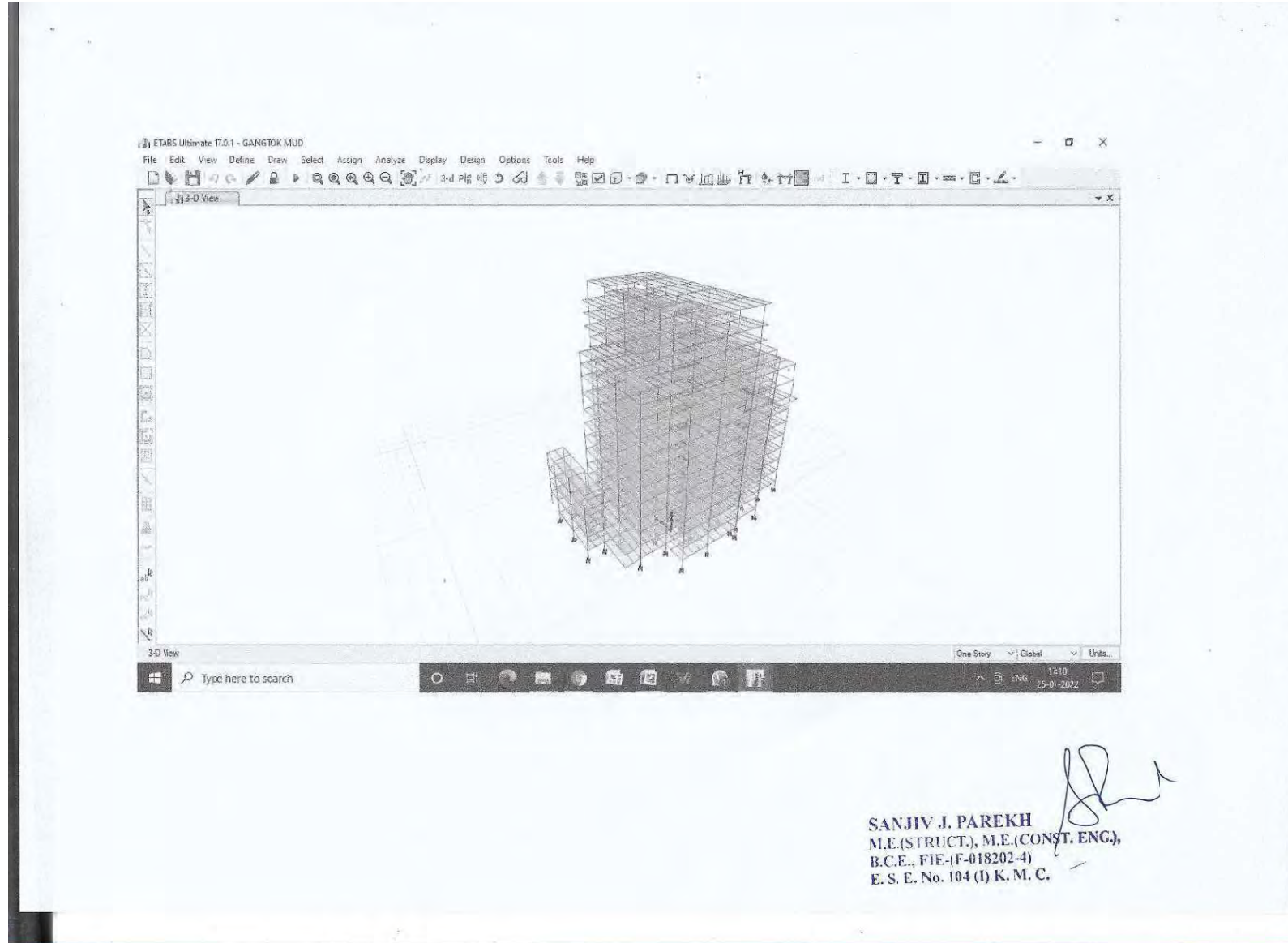
All the calculations, etabs and safe file along with the drawings have been vetted and approved by, structural Engineering Department of IIT Guwahati. IIT Guwahati is one of the premier engineering colleges in India, recognised nationally and internationally. They have immense experience of working in the hilly terrains of Arunachal Pradesh, Upper Assam, Sikkim, which are all falling in high seismic zones, some of the areas fall in Zone V, whereas our project is in Zone IV.

**2. FIRE PROTECTION**

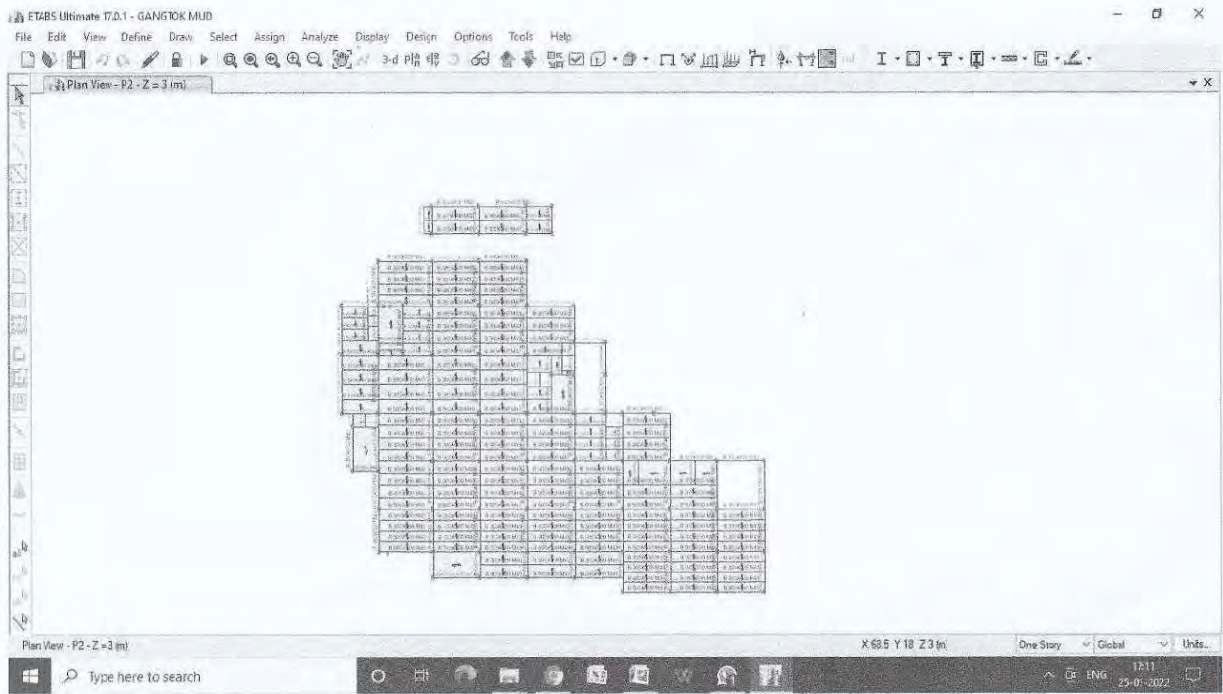
The steel structure for the slab shall be protected for fire, for up to 2hr fire resistance by vermiculite spray/ intumescent paint and the columns are protected by encasing with concrete.

**SANJIV J. PAREKH**  
M.E.(STRUCT.), M.E.(CONST. ENG.),  
B.C.E., FIE-(F-018202-4)  
E. S. E. No. 104 (I) K. M. C.





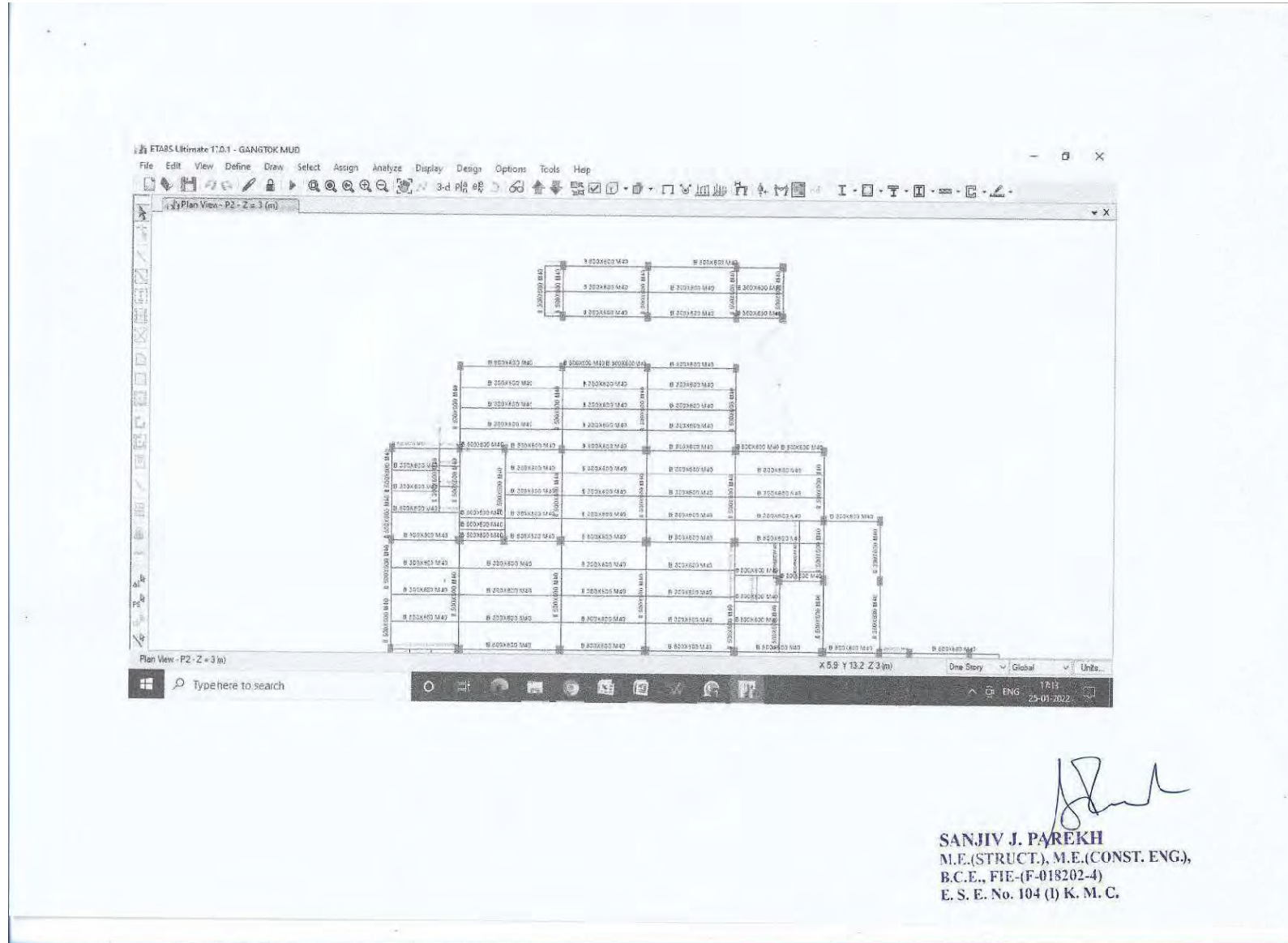
*[Handwritten Signature]*  
**SANJIV J. PAREKH**  
M.E.(STRUCT.), M.E.(CONST. ENG.),  
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E. S. E. No. 104 (I) K. M. C.



The image is a screenshot of the ETABS Ultimate 17.0.1 software interface. The main window displays a structural plan view of a building, showing a grid of columns and beams. The view is titled "Plan View - P2 - Z = 3 (m)". The software interface includes a menu bar (File, Edit, View, Define, Draw, Select, Assign, Analyze, Display, Design, Options, Tools, Help) and a toolbar with various icons for navigation and analysis. The status bar at the bottom indicates "One Story", "Global", and "Units...". The Windows taskbar is visible at the bottom of the screen, showing the search bar and system tray.


*[Handwritten Signature]*

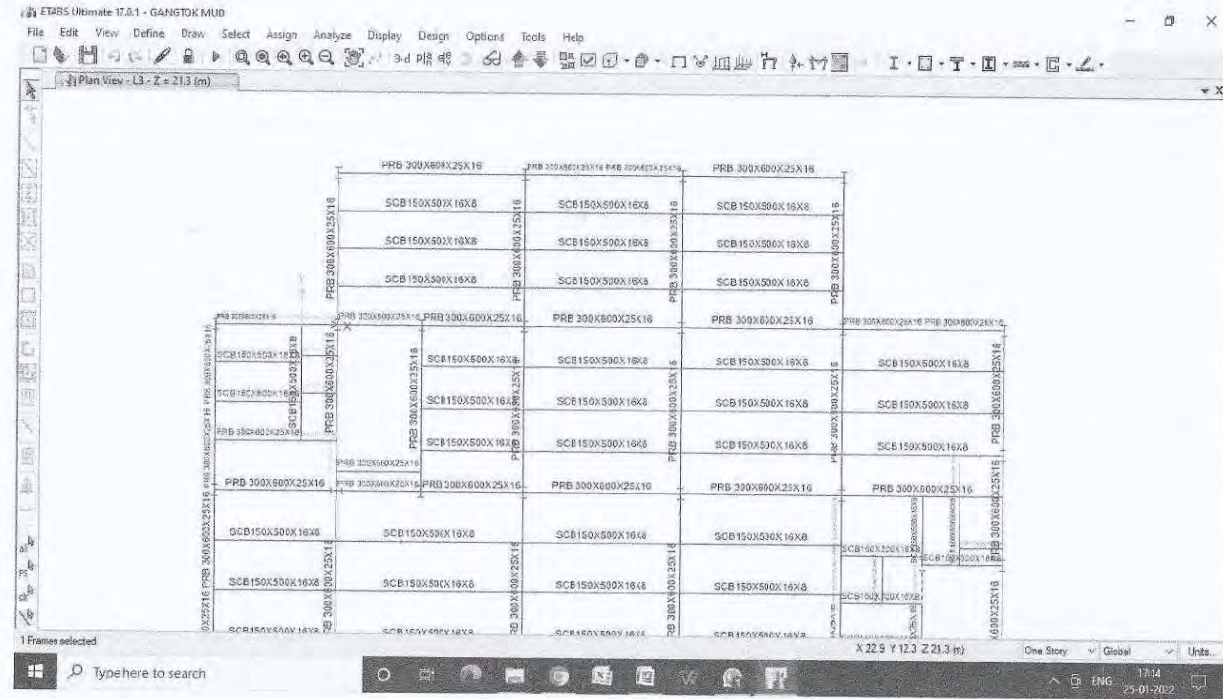
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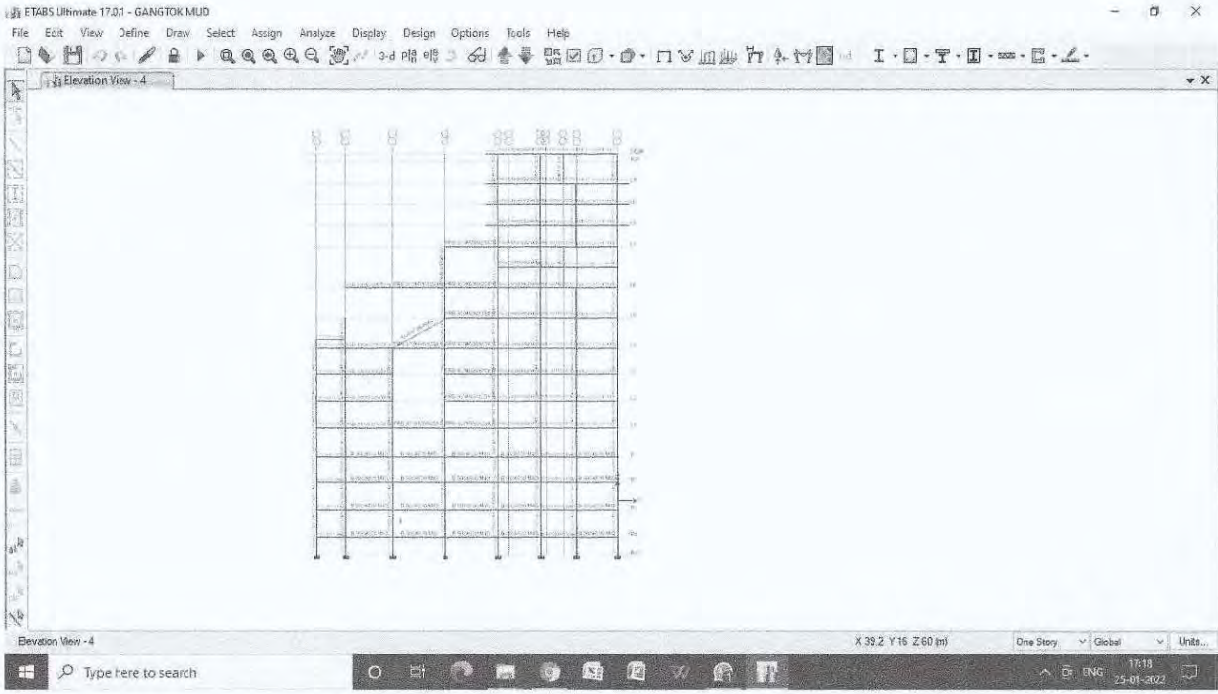
  
**SANJIV J. PAREKH**  
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B.C.E., FIE-(F-018202-4)  
E. S. E. No. 104 (I) K. M. C.

The image is a screenshot of the ETABS Ultimate 17.0.1 software interface. The title bar reads "ETABS Ultimate 17.0.1 - GANGTOR MUD". The menu bar includes "File", "Edit", "View", "Define", "Draw", "Select", "Assign", "Analyze", "Display", "Design", "Options", "Tools", and "Help". The toolbar contains various icons for file operations, viewing, and analysis. The main window displays a structural frame model in a plan view, labeled "Plan View - L3 - Z = 213 (m)". The model consists of a grid of columns and beams forming an irregular shape. The status bar at the bottom indicates "1 Frame selected", "X 59.5 Y 12.5 Z 213 (m)", "One Story", "Global", and "Units...". The Windows taskbar is visible at the bottom, showing the search bar and system tray with the date "25-01-2022".

  
**SANJIV J. PAREKH**  
M.E.(STRUCT.), M.E.(CONST. ENG.),  
B.C.E., FIE-(F-018202-4)  
E. S. E. No. 104 (1) K. M. C.



SANJIV J. PAREKH  
 M.E.(STRUCT.), M.E.(CONST. ENG.),  
 B.C.E., FIE-(F-018202-4)  
 E. S. E. No. 104 (I) K. M. C.



The screenshot displays the ETABS Ultimate 17.01 software interface. The main window shows a structural elevation view of a building frame, labeled 'Elevation View - 4'. The frame consists of a grid of columns and beams, with a central vertical column and several horizontal beams. The software interface includes a menu bar (File, Edit, View, Define, Draw, Select, Assign, Analyze, Display, Design, Options, Tools, Help) and a toolbar with various icons for drawing and analysis. The status bar at the bottom indicates 'One Story', 'Global' units, and coordinates 'X 39.2 Y 16 Z 60 (m)'. A search bar is visible at the bottom left of the interface.

*[Handwritten Signature]*

**SANJIV J. PAREKH**  
M.E.(STRUCT.), M.E.(CONST. ENG.),  
B.C.E., FIE-(F-018202-4)  
E. S. E. No. 104 (I) K. M. C.



The screenshot displays the ETABS Ultimate 17.0.1 software interface. The main window shows an elevation view of a building structure, characterized by a grid of columns and rows. The interface includes a menu bar at the top with options like File, Edit, View, Define, Draw, Select, Assign, Analyze, Display, Design, Options, Tools, and Help. A toolbar with various icons is located below the menu bar. The status bar at the bottom indicates the current view is 'Elevation View - 9', with coordinates X: 43.5, Y: -20.2514, Z: 33.5 (m). It also shows 'One Story' and 'Global' settings, and the date '25-01-2022'. A Windows taskbar is visible at the very bottom with a search bar and system tray icons.

*[Handwritten Signature]*

**SANJIV J. PAREKH**  
M.E.(STRUCT.), M.É.(CONST. ENG.),  
B.C.E., FIE-(F-018202-4)  
E. S. E. No. 104 (I) K. M. C.

The image is a screenshot of the ETABS software interface. The main window displays an elevation view of a building structure, showing a grid of columns and levels. The software title bar reads "ETABS Ultimate T7.0.1 - GANGTOK MUD". The menu bar includes "File", "Edit", "View", "Define", "Draw", "Select", "Assign", "Analyze", "Display", "Design", "Options", "Tools", and "Help". The status bar at the bottom indicates "Elevation View - 6", "X:16 Y:0 Z:29 (m)", "One Story", "Global", and "Units...".

-TRUE COPY-

*Sanjiv J. Parekh*  
**SANJIV J. PAREKH**  
M.E.(STRUCT.), M.E.(CONST. ENG.),  
B.C.E., FIE-(F-018202-4)  
E. S. E. No. 104 (I) K. M. C.



GOVERNMENT OF SIKKIM  
DEPARTMENT OF FOREST AND ENVIRONMENT  
DEORALI, GANGTOK

ANNEXURE R/4

Ref. No.../S...../GOS/E & SC/F&ED

Dated...28/01/2022.

To,

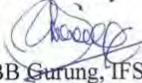
Ms. Meenakshi Mittal Agarwal  
Director  
Mesaso Infrastructure Pvt. Ltd  
Vega Circle Mall, 3rd Floor, 3rd Mile, Sevok Road, Siliguri  
Mal Jalpaiguri, West Bengal- 734008

Sub: Application of Project proponent (Proposed Development of "West Point "- Integrated Commercial Cum MLCP Complex at Old West Point School Area, Near M.G Marg, Gangtok, East Sikkim) for Environmental Clearance.

Madam,

The SEAC, Sikkim deliberated on the applications, PFR, Conceptual plan submitted by the project proponent for the project named Proposed Development of "West Point "- Integrated Commercial Cum MLCP Complex at Old West Point School Area, Near M.G Marg, Gangtok, East Sikkim for Environmental Clearance on its meeting held on 24.01.2022. Minutes of meeting is uploaded in the Parivesh Portal([www.parivesh.nic.in](http://www.parivesh.nic.in)). The queries, suggestion and additional details/documents asked by the SEAC related to the Project as per the Minutes of Meeting may be complied and submitted details to SEAC(State Expert Appraisal Committee) online.

Yours sincerely

  
(BB Gurung, IFS)

Director-cum-Member secretary  
State Expert Appraisal Committee  
Sikkim

-TRUE COPY-



## ANNEXURE R/5

Date: 4<sup>th</sup> February, 2022

To  
**The Director cum Member Secretary,**  
 State Expert Appraisal Committee (SEAC), Sikkim  
 Govt. of Sikkim,  
 Department of Forest & Environment  
 Deorali, Gangtok

**Sub.: Reply to Queries raised regarding Application for Environmental Clearance for Proposed Development of “WEST POINT” - Integrated Commercial cum MLCP Complex at M. G. Marg, Gangtok, Sikkim by Mesaso Infrastructure Pvt. Ltd.**

**Refer: Letter having Ref. No. 15/GOS/E&SC/F&ED dated 28<sup>th</sup> January, 2022**

Sir,

This has reference to the EDS raised by SEAC, Sikkim after the meeting on 24<sup>th</sup> January, 2022 regarding the subject project. We are giving here under our reply against the respective points raised:

Sl. No.	Query Raised	Reply
i.	Project Proponent made statement that waste water shall be disposed in Municipal Sewage. This is not permissible unless permitted by the concerned department.	Revised Water Requirement and wastewater generation along with water balance diagram submitted. Zero liquid discharge has been considered for the project.  Permission obtained from Concerned Authorities has been attached as <b>Annexure-1.</b>
ii.	Noise Pollution, Soil pollution, dust pollution, Air pollution are not sufficiently spelled out.	Attached as <b>Annexure-2.</b>
iii.	The report submitted by project proponent doesn't include the E-waste and Mitigation Plan during construction and operational phase of the project.	<b>Annexure - 3</b> i.e. Environment Management Plan (EMP) has been revised including E-waste management as suggested.
iv.	Point 6.2 of Form – IA needs detailed	Letter in this regard from



	elaboration regarding adverse impacts from new constructions on the existing structures, especially spill over due to weight of the present structure.	Department of Construction Engineering, Jadavpur University has been attached as <b>Annexure - 4</b> .
v	Point 7.2, Demographic details needs to be elaborated. Employment and other opportunities during construction and operational phase of the project should be provided to the locals as per state government rules and policy.	Revised in Form-1A
vi	Point 9.4 of Form IA, what efforts will be taken needs to be elaborated.	Revised in Form-1A
vii	Point 9.6 of Form IA, How much energy saving is effected needs elaboration.	Revised in Form-1A
viii	Point 9.7 of Form IA, regarding CFC and HCFC free chillers - needs reply on this because it's affecting environment.	Revised in Form-1A
ix	Point 9.10, the report which submitted for fire emergency plan is for 1 year and what needs to be done after that is not mentioned. Clear statement should be in place for the project.	The provisional NOC issued by Sikkim Fire and Emergency Service shall be renewed after its expiry. Revised in Form-1A.
x	Load Impact Assessment and its sustenance later is required to build the 14 storey building and that needs the approval from the Concerned, Department of Govt. of Sikkim, approved Blue Print / document from GMC / UDD needs to be submitted. A clear permission to go ahead with the project may be enclosed.	Sanction Letter from Gangtok Municipal Corporation has been attached as <b>Annexure - 5</b> .
xi	Vertical profiling / carrying capacity needs to be carried out from Indira Bye Pass road below the project site to Gangtok by competent agency / Department. Member suggested that this can be done by a geologist. Geologist appointed by a Competent / authorized agency should do the study.	Letter in this regard from Department of Construction Engineering, Jadavpur University has been attached as <b>Annexure - 4</b> .
xii	The report which User Agency has submitted doesn't mention the range and height of construction / building.	The height of the building in reference to the abutting road is 52 m.
xiii	Reports submitted by project proponent needs to be signed by the Authorized Department page wise.	Complied
xiv	The information given by the Project	Total car parking for the proposed



	proponent in application form are not consistent as car parking 448 and 443 are mismatching and also NH31 is now NH10. Needs correction.	project will be 448 nos. Corrections made.
xv	More car parking facilities can do by increasing up to 500 nos by replacing 5 g so that the natural beauty of mountains can seen as usual.	West Point has been designed in a manner to respect the local surroundings. The massing has a hierarchy and gradually increases in scale while moving further from the road. This gives an improved field of view from the road to the vast extents of mountain ranges forming the backdrop of the structure. Moreover, it's a one of its kind public oriented proposal in Gangtok. The ascending plazas are proposed as large gathering courts, which will invite city dwellers and tourists to capture unparalleled views of the mountain ranges against the setting sun.
xvi	MFR should be clearly mentioned in the report.	Mentioned
xvii	Huge quantity of quarry materials like stone chips, sand, aggregates and cement are being used, their total weight to be assessed properly and the load bearing capacity of the area needs elaboration.	Letter in this regard from Department of Construction Engineering, Jadavpur University has been attached as <b>Annexure - 4</b> .
xviii	Proper Drainage system is properly required.	Drainage Plan of the site has been attached as <b>Annexure - 6</b> .
xix	Sikkim falls within seismic Zone IV/V in regard to earthquake that needs to be properly mentioned. The Mines and Geology report categorically mentioned at the last para that micro seismic studies in the area and load impact assessment of the surrounding areas to be carried out prior to construction of multi-storey structures and provide a suitable mitigation measures if required to avoid future complications. Needs to be complied and completed.	Letter in this regard from Department of Construction Engineering, Jadavpur University has been attached as <b>Annexure - 4</b> .
xx	Type of jobs / employment that are being generated needs to be properly mentioned in the DPR following the Sikkim Govt rules and policies.	At the onset of construction, local casual and skilled labourers could find means of employment through the project. The company shall



		<p>employ local labours as far as possible and in special case, if field and technical manpower is not available then the company will be hiring from outside the state and it will be registered with the Labour Department of the state. Secondly, this construction population will require a certain level of infrastructure, which may be supplied by the local population, amounting to mutual benefit in the process. The consumption pattern of these labourers will spur business in the surrounding areas. The small time shopkeepers and motor mechanics will directly draw benefit from this.</p> <p>In the operational phase, there will be employment of local people as service population, staff at the mall, auditoriums, restaurants, etc.</p>
xxi	Geological figure is not correct in the DPR.	Corrected
xxii	Swimming pool at the top floor is not advisable considering the earthquake zone in Sikkim.	Seismic load has been considered in structural design. Letter in this regard from Department of Construction Engineering, Jadavpur University has been attached as <b>Annexure - 4</b> .
xxiii	The four parking floors, auditoria and other huge halls can be considered as 'soft floors' and they must be provided special seismic load bearing shear walls and/or especially designed/size columns. The project proponent must incorporate these provisions without fail considering the high Seismicity prone nature of Sikkim Himalaya.	Seismic load has been considered in structural design. Letter in this regard from Department of Construction Engineering, Jadavpur University has been attached as <b>Annexure - 4</b> .
xxiv	The Doors in the building seems to be opening provision from outside. This should be open from inside the floor considering the fact that in case of emergency / disaster the people can evacuate easily.	The door at multiplex is two way. In case of emergency evacuation, the door shall open in the inside without hindering the movement.
xxv	Roofs can be removed because of high load or justification for stability may be provided.	Letter in this regard from Department of Construction Engineering, Jadavpur University has



		been attached as <b>Annexure - 4.</b>
xxvi	The Report which the Project Proponent has submitted, has no stability report. The Notification no.17/DMG/20-21 dated 19/03/2021 has specified the maximum allowable number of floors for construction as 5 and half storey. In the present condition 14 storied building concrete structure is not permitted as per the notification. Needs approval from the concerned Department for proposed 14 storey building.	Sanction Letter from Gangtok Municipal Corporation has been attached as <b>Annexure - 5.</b>
xxvii	Have the PP obtained the approval of the structural design from the competent department?	Sanction Letter from Gangtok Municipal Corporation has been attached as <b>Annexure - 5.</b>
xxviii	The report which project proponent has submitted doesn't have the document proof of 14-storey building.	Sanction Letter from Gangtok Municipal Corporation has been attached as <b>Annexure - 5.</b>
xxix	Point 1.8 of Form I, how much excavated material will be utilized and how much quantity will be disposed off, excess quantity if any and where the excess muck will be disposed of, needs to be properly elaborated.	Revised in Form-1
xxx	Point 8.3 of Form I, the PP doesn't mention the regular health check-ups of labours.	Revised in Form-1
xxxi	Some important names of Schools, Colleges, places of worships are missing as asked in the Standard Format of the Form-1 under Environmental Sensitivity like Nar Bahadur Bhandari Degree College, Masjid nearby the construction site, Enchey Monastery, Thakurbari Temple etc.	Revised in Form-1
xxxii	Page 5 of Form 1A, Under Water Environment 48 KLD waste water shall be recycled for flushing, landscaping and Car washing purpose. How will the PP propose to manage or dispose car washed waste water, needs to be properly elaborated.	The wastewater generated after car washing shall be passed through oil and grease traps before reaching the STP where it shall be treated. Car wash water management plan has been attached as <b>Annexure - 7.</b>
xxxiii	Point 2.3 of Form IA, whatever has been desired in this points needs to be elaborated with quality, physicochemical and biological characteristics of the water requirement with source of water to be collected in tankers.	Water shall be supplied by Municipal water supply system.
xxxiv	Point 2.7 Form 1A, 2 <sup>nd</sup> Paragraph to be elaborated clearly.	Revised in Form-1A
xxxv	Under sl.no.6.1 of Form IA, the PP states	Reply attached as <b>Annexure - 8.</b>



	that ... there will be no obstruction of a view, scenic amenity or landscape. The SEAC observed that there will be some obstructions of the aesthetics.	
xxxvi	At 1.4 of Form IA, the PP states that no history of major earthquake has been recorded in the region. This statement is not correct.	Revised in Form-1A

In compliance to the above, we are uploading all the revised documents as advised in the above points.

We hereby request your good office to consider our proposal and take the necessary action so that an early Environmental Clearance could be issued for the proposed project.

Thanking you,

Yours Sincerely,  
For **Mesaso Infrastructure Pvt. Ltd.**

Meenakshi Mittal  
(Director)

-TRUE COPY-

MESASO Infrastructure Private Limited, 3rd Floor, Vega Circle Mall, 3rd Mile, Sevoke Road, Siliguri, West Bengal - 734001 | cfo@mesaso.in | +91 8101789686  
CIN: U45309WB2021PTC243031 | PAN: AAOCM2843E | GSTIN: 11AAOCM2843E1ZQ



GOVERNMENT OF SIKKIM  
CULTURE DEPARTMENT  
GANGTOK-737101, SIKKIM

ANNEXURE R-51

No. 48/SSA/CD.

Dated: 09/02/2022

To  
The Chief Executive Officer,  
Gangtok Smart City Development Ltd.  
Kisan Bazar, Lal Market Road,  
Gangtok.

**Sub** : Information sought about historical monuments in M.G. Marg.

Sir,

With reference to your letter no. 67/GSCDL/2021-22, dated 28/01/2022 on the above cited subject this is to inform you that apart from the three monuments in West Sikkim which are Monuments of National Importance under the administrative control of Archaeological Survey of India and protected under Ancient Monuments, Archaeological Sites and Remains Act (AMASR), there is no structure/site which has been declared as historical monuments in Sikkim.

This is being issued with the formal approval of the Competent Authority, please.

Thanking you,

Yours sincerely,

Additional Director (Archives)  
Culture Department.

-TRUE COPY-

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ANNEXURE R-38  
SIKKIM STATE DISASTER MANAGEMENT AUTHORITY (SSDMA)  
LAND REVENUE AND DISASTER MANAGEMENT DEPARTMENT

GOVERNMENT OF SIKKIM

Tashiling Secretariat, Block-B, Gangtok, East Sikkim-737101  
Phone No:03592-201145/Fax:03592-201075/Website:www.ssdma.nic.in  
Email :ssdma 01@gmail.com



Ref.No:339/SSDMA/LR&DMD/GoS/2022

Date: 11/02/2022

To  
The Special Secretary  
Urban Development Department  
Government of Sikkim


**Subject: Data of frequency and magnitude of Earthquake in Sikkim**

Madam,

This is in reference to your letter no. 307/UDD/Secy dated 03.02.2022 with above mentioned subject. Please find enclosed the data as has been obtained from Indian Metrological Department, the nodal agency for compilation of earthquake data in India.

Thanking you.

Yours Sincerely,

  
Director/SSDMA

Enclosed: as above



ALISHA  
He found this  
to CEO, smart city, GK  
Kah  
15/2/22

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DATE	TIME (UTC)	LAT (deg. N)	LONG (deg.E)	Depth (km)	Magnitude	Region
03/2/2006	1:57:47.2	27.4°N	86.7°E	31.5	5.3	NEPAL ( REMARK : CLOSE TO SIKKIM - BIHAR BORDER )
14/2/2006	0:55:18.2	27.7°N	88.8°E	33.0	5.7	SIKKIM
18/5/2007	12:39:58.1	27.7°N	88.6°E	33.0	4.5	NORTH, SIKKIM
20/5/2007	14:18:16.5	27.5°N	88.3°E	15.0	5.0	SOUTH, SIKKIM
23/5/2007	17:40:44.8	27.6°N	88.0°E	10.0	3.5	SIKKIM
26/5/2007	10:28:10.5	27.2°N	88.3°E	10.0	3.3	WEST, SIKKIM
11/8/2007	14:35:52	27.5°N	88.0°E	33.0	4.9	NEPAL
2/12/2008	05:11:39	27.5 N	88.0 E	10	4.2	NEPAL-INDIA(SIKKIM) BORDER REGION
25/12/2008	00:26:41	27.2 N	87.9 E	33	4.4	NEPAL-INDIA(SIKKIM) BORDER REGION
26/1/2009	06:57:18	27.4°N	88.7°E	7	3.2	INDIA(SIKKIM)- BHUTAN BORDER
3/06/2011	00:53:21	27.5°N	88.0°E	26	4.9	NEPAL - SIKKIM (INDIA) BORDER REGION
18/09/2011	12:40:47	27.7°N	88.2°E	10	6.8	SIKKIM-- NEPAL BORDER REGION
18/09/2011	13:11:59	27.6°N	88.5°E	16	5.0	INDIA(SIKKIM)-- NEPAL BORDER REGION
18/09/2011	13:54:17	27.5°N	88.4°E	9	4.5	INDIA(SIKKIM)-- NEPAL BORDER REGION
18/09/2011	21:51:52	27.6°N	88.4°E	28	4.2	INDIA(SIKKIM)-- NEPAL BORDER REGION
22/09/2011	16:44:43	27.6°N	88.4°E	30	3.9	SIKKIM
17/10/2011	13:04:50	27.3°N	88.4°E	5	3.5	SIKKIM
29/10/2011	00:43:41	27.4°N	88.4°E	5	3.5	SIKKIM, INDIA

09/12/2011	22:56:56	27.9°N	88.2°E	33	3.7	INDIA ( SIKKIM) - NEPAL BORDER REGION
13/12/2011	01:26:43	27.3°N	88.6°E	5	2.9	GANGTOK,SIKKIM
14/12/2011	20:20:55	27.7°N	88.0°E	50	4.5	INDIA(SIKKIM) - NEPAL BORDER REGION
18/12/2011	21:35:25	28.0°N	88.2°E	35	3.7	INDIA (SIKKIM)- NEPAL BORDER REGION
18/01/2012	14:12:52	27.3°N	88.5°E	5	3.4	SIKKIM, INDIA
14/02/2012	13:48:43	27.3°N	88.2°E	05	3.6	SIKKIM - NEPAL BORDER REGION
27/03/2012	23:40:08	26.1°N	87.8°E	12.0	4.9	INDIA - NEPAL BORDER REGION
30/05/2012	01:54:28	27.4°N	88.0°E	10	4.0	SIKKIM-NEPAL BORDER REGION
11/06/2012	04:35:56	27.2°N	88.3°E	5	3.8	SIKKIM-NEPAL BORDER REGION
18/09/2012	12:26:21	27.4°N	88.5°E	10	4.1	SIKKIM
11/10/2012	13:56:04	28.0°N	88.2°E	15	3.3	INDIA (SIKKIM) - TIBET BORDER REGION
22/10/2012	06:56:51	28.0°N	87.8°E	68	3.9	NEPAL-INDIA (SIKKIM) BORDER REGION
30/11/2012	19:39:29	27.3°N	88.3°E	10	4.1	WEST, SIKKIM
02/01/2013	14:53:41	27.3°N	88.6°E	10	3.0	GANGTOK, SIKKIM
03/10/2013	06:12:40	27.4°N	88.5°E	10	5.0	SIKKIM
04/07/2014	05:58:39	27.8°N	87.9°E	19	3.9	NEPAL - SIKKIM (INDIA) BORDER REGION
17/09/2014	10:29:12	27.8°N	87.8°E	20	3.9	Nepal - India (Sikkim) Border Region

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2015-04-23	20:26:37	27.3 N	88.1 E	10	4.0	West Sikkim
2015-04-27	12:35:49	26.7 N	88.1 E	10	5.1	Nepal-India Border
2015-08-15	05:42:24	27.4 N	88.0 E	35	4.0	Sikkim
2015-10-10	01:48:43	27.2 N	88.8 E	15	4.5	Sikkim
2016-03-12	16:15:16	26.7 N	89.4 E	21	3.8	Jalpaiguri, West Bengal
2016-07-07	22:24:02	26.8 N	89.5 E	40	3.3	Jalpaiguri, West Bengal

2016-08-28	12:54:51	28.0 N	88.7 E	90	4.2	India (sikkim)- China Border Region
2016-09-18	14:34:36	26.7 N	88.3 E	10	3.2	DARJILING, WEST BENGAL
2016-12-01	19:41:19	27.2 N	88.9 E	10	3.5	Bhutan-India(Sikkim) Border region
2017-01-17	15:22:16	27.6 N	88.6 E	10	3.6	North Sikkim
2017-3-26	21:42:11	27.142N	88.553E	24.39	4.5	Rangpo Sikkim
2017-5-16	22:13:19	27.327°N	88.171°E	10	4.2	Naya Bazar, India
2017-12-02	23:43:44	27.286°N	88.081°E	10	4.2	Naya Bazar, India

2018-06-17	15:07:37	27.420°N	88.474°E	4.4	49.76 km	12km SSW of Mangan, India
2018-10-31	21:23:34	27.3N	88.6E	2.8	10	East Sikkim
2019-01-07	21:08:44	27.3N	88.4E	3.0	10	South Sikkim
2019-04-12	23:33:07	27.3N	88.2E	3.9	10	West Sikkim Sikkim
2019-08-09	18:10:32	27.5N	84.7E	4.6	39	Nepal-India Border
2019-12-24	20:07:02	26.6N	88.8E	3.2	32	Jalpiguri, West Bengal
2020-04-08	01:33:18	27.3N	88.6E	3.2	5	East sikkim

2020-04-26	10:59:24 (IST)	27.0N	88.8E	4.0	10	42 Km SSE of Gangtok, Sikkim
2020-08-09	06:49:03 IST	27.37N	88.85E	3.8	10	East Sikkim
2020-10-25	12:06:00 IST	27.22N	88.68E	3.6	5	14 km SSE of Gangtok
2020-12-24	19:51:07 IST	27.11N	88.34E	2.5	5	South Sikkim
2020-12-31	13:30:28 IST	27.07N	89.16	2.5	5	62km ESE of Gangtok, Sikkim India (Bhutan)
2021-02-05	03:43:10 IST	27.86N	88.14E	4	10	Nepal - India (Sikkim) Border
2021-02-09	07:20:07 IST	27.95N	87.91E	4.5	90	Xizang (Tibet Sikkim Border)

2021-03-11	03:48:10 IST	27.38N	88.76E	2.1	15	Gangtok, Sikkim
2021-03-20	07:30:37 IST	28.00N	88.92E	3.5	75	Xizang (Tibet Sikkim Border)
2021-04-05	20:49:58 IST	27.23N	88.84E	5.4	10	25 Km ESE of Gangtok, Sikkim
2021-04-06	07:07:02 IST	26.72N	89.04E	4.1	10	Jalpaiguri, West Bengal
2021-05-07	22:46:41 IST	27.25 N	88.68E	3.1	10	11 Km SE of Gangtok Sikkim
2021-05-26	13:11:23 IST	26.85N	88.72 E	3.8	5	Jalpaiguri, WB
2021-07-19	18:46:58 IST	27.40 N	88.62 E	3.2	10	6 KM N of Gangtok, Sikkim, India (North District)

2021-7-21	12:45:04 IST	27.32 N	88.86 E	2.8	10	24 Km E of Gangtok, Sikkim (East Sikkim)
2021-7-25	20:39:22 IST	27.29 N	88.50 E	4.0	10	11 Km WSW of Gangtok
2021-9-12	23:16:07 IST	27.61 N	88.26 E	2.7	10	26 KM N of Yuksom
2021-10-08	01:15:17 IST	27.45 N	88.47 E	2.4	5	North District, Sikkim
2021-11-07	21:50:45 IST	27.25 N	88.77 E	4.3	6	18 Km ESE of Gangtok, Sikkim East District, Sikkim
2022-01-05	03:01:59 IST	27.42 N	88.39 E	3.7	5	South District, Sikkim

-TRUE COPY-

**Data of frequency and magnitude of Earthquake in Sikkim**

<b>DATE</b>	<b>TIME</b> <b>(UTC)</b>	<b>LAT</b> <b>(deg. N)</b>	<b>LONG</b> <b>(deg. E)</b>	<b>Depth</b> <b>(Km)</b>	<b>Magnitude</b>	<b>Region</b>
2018.06.17	15:07:37	27.420N	88.474E	49.76	4.4	12 km SSW of Mangan, India
2018.10.31	21:23:34	27.3N	88.6E	10	2.8	East Sikkim
2019.01.07	21:08:44	27.3N	88.4E	10	3.0	South Sikkim
2019.04.12	23:33:07	27.3N	88.2E	10	3.9	West Sikkim
2019.08.09	18:10:32	27.5N	84.7E	39	4.6	Nepal-India Border
2019.12.24	20:07:02	26.6N	88.8E	32	3.2	Jalpiguri, West Bengal
2020.04.08	01:33:18	27.3N	88.6E	5	3.2	East Sikkim

2020.04.26	10:59:24 IST	27.0N	88.8E	10	4.0	42 km SSE of Gangtok, Sikkim
2020.08.09	06:49:03 IST	27.37N	88.85E	10	3.8	East Sikkim
2020.10.25	12:06:00 IST	27.22N	88.68E	5	3.6	14 Km SSE of Gangtok
2020.12.24	19:51:07 IST	27.11N	88.34E	5	2.5	South Sikkim
2020.12.31	13:30:28 IST	27.07N	89.16E	5	2.5	62Km ESE of Gangtok, Sikkim India (Bhutan)
2021.02.05	03:43:10 IST	27.86N	88.14E	10	4	Nepal- India (Sikkim) Border
2021.02.09	07:20:07 IST	27.95N	87.91E	90	4.5	Xizang (Tibet Sikkim Border)

2021.03.11	03:48:10 IST	27.38N	88.76E	15	2.1	Gangtok, Sikkim
2021.03.20	07:30:37 IST	28.00N	88.92E	75	3.5	Xizang (Tibet Sikkim Border)
2021.04.05	20:49:58 IST	27.23N	88.84E	10	5.4	25 Km ESE of Gangtok, Sikkim
2021.04.06	07:07:02 IST	26.72N	89.04E	10	4.1	Jalpaiguri, West Bengal
2021.05.07	22:46:41 IST	27.25N	88.68E	10	3.1	11km SE of Gangtok, Sikkim
2021.05.26	13:11:23 IST	26.85N	88.72E	5	3.8	Jalpaiguri, West Bengal
2021.07.19	18:46:58 IST	27.40N	88.62E	10	3.2	6 Km N of Gangtok, Sikkim, India (North District)

2021.07.21	12:45:04 IST	27.32N	88.86E	10	2.8	24 Km N of Gangtok Sikkim (East Sikkim)1
2021.07.25	20:39:22 IST	27.29N	88.50E	10	4.0	1 Km WSW of Gangtok
2021.09.12	23:16:07 IST	27.61N	88.26E	10	2.7	26 Km N of Yuksom
2021.10.08	01:15:17 IST	27.45N	88.47E	5	2.4	North District, Sikkim
2021.11.07	21:50:45 IST	27.25N	88.77E	6	4.3	11 Km ESE of Gangtok Sikkim, East District Sikkim
2022.01.05	03:01:59 IST	27.42N	88.39E	5	3.7	South District, Sikkim

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## ANNEXURE R-37

**MINUTES OF STATE LEVEL EXPERT APPRAISAL COMMITTEE, SIKKIM HELD ON 14<sup>TH</sup> FEBRUARY 2022.****VENUE: Through Physical Mode at Sidkeong Tulku Memorial Hall of Forest & Environment Department and Video Conferencing****Date: 14<sup>th</sup> February, 2022****PROCEEDINGS**

A meeting of the State Level Expert Appraisal Committee, Sikkim held on 14<sup>th</sup> February, 2022 through dual mode (both physical and video conferencing). One of the members attended through Video Conferencing. Project Proponent and his consultants also attended the meeting. Attendance is as under;

1. Shri H.P Pradhan	Chairman	P
2. Shri B.B Gurung	Member Secretary	P
3. Mrs Urmila Thapa	Joint Director(Environment)	P
4. Shri Tshering Tashi	Member	P
5. Shri Pradhumna Shrestha	Member	P
6. Dr. B.C Basistha	Member	P
7. Shri B.K Chettri	Member	P
8. Dr. Dinesh Agarwal	Member (Attended through VC)	
9. Dr. Satya Deep Chettri	Member	P
10. Shri D.R. Chettri	Member	A
11. Shri Chandan Kumar	Master Trainer	P

- Opening Remarks of the Chairman:** The Chairman welcomed all the members and participants and informed the house about 2<sup>nd</sup> meeting of SEAC for **the Proposed Development of “WEST POINT”- Integrated Commercial cum MLCP Complex at Old West Point School Area, Near M.G Marg, Gangtok, East Sikkim.** The meeting was opened for proceeding as per the agenda of the meeting set on 09<sup>th</sup> February, 2022.
- The SEAC confirmed the Minutes of earlier meeting held on 24<sup>th</sup> January 2022.

**Agenda Item:**

**Appraisal of the Proposed Development of “WEST POINT”- Integrated Commercial cum MLCP Complex at Old West Point School Area, Near M.G Marg, Gangtok, East Sikkim by MESASO Infrastructure Pvt. Ltd. – Environment Clearance.**

**Proposal No. SIA/SK/MIS/244081/2021**

- The Committee members after thorough interaction and deliberation in each and every points, observations of MoMs drawn on 24.01.2022 and their reply with clarification and justification given by the Project Proponents, the following specific and general conditions has been laid down to comply within pre & post project implementation stages by Project Proponent.

2. The SEAC also deliberated and discussed on the revised Form – I and Form – IA and ADS submitted by the Project Proponent on 4<sup>th</sup> January 2022.
  - i. The official permissible height for building in Sikkim is 5 ½ for domestic and 7 for Commercial purpose as per the existing bye laws in Sikkim. However the Project Proponent has procured Certification from Mr. Majumdar of Jadavpur University for construction of 11 storeys building. The SEAC informed the PP to get this certification to be validated/vetted by Mines & Geology Department, Government of Sikkim.
  - ii. Under point 29:1.8 Structural Engineers from GMC also have to be included in the project.
  - iii. 1.16 of 19, Project Proponent has to follow the labour laws of Sikkim and engage local people.
  - iv. Corporate Environment responsibility to be taken up and Environment measures to be implemented in consultation with Environment sector of the Forest Department, Government of Sikkim.
  - v. Parking/ ventilation structure design to be submitted to SEIAA.
  - vi. Disposal of sludge from STP to be specified till its end point.
  - vii. Rain water harvesting plan, Composting & disposal plan to be submitted with specification till its end point.
  - viii. Dumping of extra excavated muck (unutilisable) should be done at pre identified and approved sites. No muck should be washed away during rainy seasons and cause choking of nallahs, jhoras or water bodies or damage the surrounding environment. Clearances from the concerned department (s) or agency (ies) to be taken for the dumping sites. Rehabilitation of such dumping sites may be done at the cost of PP by providing suitable structures for holding the muck and do plantation with suitable local species.
  - ix. The number of storey of the proposed building should be restricted to 11 storeys only as per the approval of GMC.
  - x. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Management Rules 2016.
  - xi. The extra excavated muck / soil to be disposed at designated sites as stated at sl.no.x above to avoid choking of drains and flooding
  - xii. Utilisation of water from Rain water harvesting structure to be maximized to minimize the load on fresh water demand.
  - xiii. Commitment letter to the effect that no damage is caused to the surrounding areas and habitation as per the stake holders meeting held on 13.11.2021 is insisted.
  - xiv. Environment Management Plan further needs to be prepared to strengthen the existing EMP spell out in the instant proposal to ensure intensive mitigation measure to maintain overall ecological balance.
  - xv. Green Cover Plan needs to be covered 30% of the total areas of proposed MLCP for beautification of the blank areas, creation of hanging garden in all the flyover falling within the Gangtok Municipal Areas (GMC).
  - xvi. Local labours to be employed as far as possible and train them also to get the desired output.

- xxvii. Permission from State Pollution Control Board for E-waste, DG set and Hazardous waste to be obtained by the Project proponent.
- xxviii. Taxi Driver's Union/Association consent letter copy to be submitted.
- xix. The environment safeguard measures to be monitored by the Multidisciplinary committee to be constituted by Forest Department/Smart City / Project proponent.
- xx. The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc. as per National Building Code including protection measures from lightning etc.
- xxi. The provisions of the Solid Waste Management Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste Management Rules, 2016, shall be followed.
- xxii. Construction site shall be adequately barricaded before the construction begins.
- xxiii. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
- xxiv. Total fresh water use shall not exceed the proposed requirement as provided in the project details.
- xxv. Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, no treated water shall be disposed in to municipal drain.
- xxvi. No sewage or untreated effluent water would be discharged through storm water drains.
- xxvii. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.
- xxviii. Outdoor and common area lighting shall be LED.
- xxix. Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.
- xxx. Organic waste compost/Vermiculture pit/Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day must be installed.
- xxxi. Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
- xxxii. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.
- xxxiii. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.
- xxxiv. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- xxxv. A First Aid Room shall be provided in the project both during construction and operations of the project.

In view of the above and **considering provisions of EIA Notification 2006 process and Timelines**, the SEAC recommends instant proposal to SEIAA for further examination

and consideration of prior Environment Clearance subject to strict compliance of the observations made by the SEAC in its meeting of 24/01/2022, submission of documents as desired and above mentioned conditions.

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যাদবপুর বিশ্ববিদ্যালয়

ANNEXURE R-26

Faculty of Engineering & Technology  
DEPT. OF CONSTRUCTION ENGINEERING



**JADAVPUR UNIVERSITY**  
BLOCK - LB, PLOT - 8, SECTOR - III, SALT LAKE,  
KOLKATA - 700 098, INDIA

**TO WHOM IT MAY CONCERN**

This is to certify that the Proposed Multi Level Car Parking cum Commercial Development at Old West Point School, Near M.G. Marg, Gangtok, East Sikkim is designed as per the relevant IS Code 1893 2016, IS-13920-2016, IS-800-2007, IS-875, IS-456-2000 and designed load on foundation is 21Ton/sqm. As Mica schist rock has been encountered below the foundation level, then there shall be no load impact in the surrounding area of the project site. The Soil Bearing Capacity is estimated as 46.5 Ton/sqm. (As per IS Code:6403-1981) and load of the proposed structure is less than 50% of the Soil Bearing Capacity that's why the Load Impact assessment of the surrounding area is not required.

Thanking you

*Dipesh Majumdar*

Dr. Dipesh Majumdar

Department of Construction Engineering

Jadavpur University

**Dr. Dipesh Majumdar**  
Assistant Professor  
Department of Construction Engineering  
Jadavpur University

-TRUE COPY-



ANNEXURE R-22



Ref. No. MIPL/SH/09/2021-22

Date: 15.02.2022

To,  
The Additional Director  
Mines & Geology Department,  
Gangtok,  
East Sikkim, Sikkim 737101

Sub.: With Reference to Site Stability Report Ref. No. I 62(3)DM&G/21-22-478  
dated :29-12-2021.

Sir,

With reference to the above subject Matter we received site stability report from your department in which as per the Recommendation claus no.1 states that the proposed area falls under zone (1) as per the parameters notified by the department of Mines and Geology vide Gazette no 86 dated 6<sup>th</sup> April 2021. However as Sikkim lies over young fold mountains, seismic zone IV and with fragile geological conditions micro seismic studies in the area and load impact assessment of the surrounding areas, to be carried out prior to construction of multi storied structure and provide suitable mitigation measures, if required to avoid future complication. In this regard we approached to the Jadavpur University Department of Construction Engineering and they issued a certificate as annexed for your reference.

Kindly do the needfull.

Thanking You.

Yours Faithfully,

For, MESASO Infrastructure Private Limited

*SP(G)*  
*Harish*  
Authorized Signatory)  
*15/2/22*



*Sr. Adm - II*  
*Pr. n.n. AS.*

*A.G.I*  
*Pl. put up.*  
*P.K.V.*  
*15/2/22*

*15/2/22*  
Joint Director(Geology)  
Mines & Geology Department  
Government of Sikkim,  
Gangtok

MESASO Infrastructure Private Limited | Reg. Off. : 3rd Floor, Vega Circle Mall, 3rd Mile, Sevoke  
Road, Siliguri, West Bengal - 734001 | info@mesaso.in | + 91 9907311645  
Project Site : Old West Point School Area, Near M.G. Marg, Gangtok, East Sikkim 737101  
CIN: U45309WB2021PTC243031 | PAN: AAOCM2843E | GSTIN: 11AAOCM2843E1ZQ  
IGBC Membership No. : IGBCBD210233 | IGBC Project Reg. No. : IGBCNBT210211

যাদবপুর বিশ্ববিদ্যালয়

Faculty of Engineering & Technology  
DEPT. OF CONSTRUCTION ENGINEERING



**JADAVPUR UNIVERSITY**  
BLOCK - LB, PLOT - 8, SECTOR - III, SALT LAKE,  
KOLKATA - 700 098, INDIA

**TO WHOM IT MAY CONCERN**

This is to certify that the Proposed Multi Level Car Parking cum Commercial Development at Old West Point School, Near M.G. Marg, Gangtok, East Sikkim is designed as per the relevant IS Code 1893 2016, IS-13920-2016, IS-800-2007, IS-875, IS-456-2000 and designed load on foundation is 21Ton/sqm. As Mica schist rock has been encountered below the foundation level, then there shall be no load impact in the surrounding area of the project site. The Soil Bearing Capacity is estimated as 46.5 Ton/sqm. (As per IS Code:6403-1981) and load of the proposed structure is less than 50% of the Soil Bearing Capacity that's why the Load Impact assessment of the surrounding area is not required.

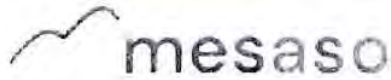
Thanking you

Dr. Dipesh Majumdar

Department of Construction Engineering

Jadavpur University

**Dr. Dipesh Majumdar**  
Assistant Professor  
Department of Construction Engineering  
Jadavpur University



Date :30/12/2021

To,  
Dr. Dipesh Majumdar  
Assistant Professor  
Jadavpur University  
Salt Lake Campus  
Kolkata-106

Sub: - Regarding Site Stability Report Provided by Department of Mines & Geology  
Government Of Sikkim

Dear Sir,

We received Site Stability Report by Department of Mines & Geology Government Of Sikkim  
for our project INTEGRATED COMMERCIAL CUM MLCP COMPEX at GANGTOK, SIKKIM.

Which States that the Load Impact Assessment of the Surrounding areas to be carried out  
prior to construction of multi storied structure and provide suitable mitigation measures,in  
this regard we require the certificate/guideline for the same

Kindly do the needful.

Enclosure:-

- 1. Soil Test Report
- 2. Design Load detail Calculation

Thanking You.

Yours Faithfully

Mesaso Infrastructure Private Limited

*[Signature]*  
Vice President

*[Handwritten signature]*  
30/12/2021

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*[Faint background text and stamps]*

ANNEXURE R-27

Fax No. : 03592 206836  
Phone No.: 03592 206192



**DEPARTMENT OF MINES & GEOLOGY  
GOVERNMENT OF SIKKIM  
GANGTOK.**

Ref No: 766/DM&G/21-22

Date: 17/2/22

To,  
The Mesaso Infrastructure Private Ltd.,  
3<sup>rd</sup> floor, Vega Circle Mall,  
3<sup>rd</sup> Mile, Sevoke Road, Siliguri,  
West Bengal.

**Sub: Reply to the letter no. MIPL/SITE/09/2021-22 dated 15.02.2022.**

Sir,

This is in reference to the letter No. MIPL/SITE/09/2021-22 dated 15.02.2022, regarding the site stability report issued by Department of Mines and Geology of the land situated at Old West Point School Complex vide reference No. 1/62(3) DM&G/21-22/478 dated 29. 12.2021, where it was recommended to do "the load impact assessment of the surrounding areas" before the construction of multistoried structure.

The applicant has submitted the certificate provided by Jadavpur university, (Ref. No. nil, dated. Nil) which state that the load of the proposed structure is 21T/M<sup>2</sup> which is less than the soil bearing capacity in the area. Hence, they recommended that the load of the structure is confined within the construction area. Therefore, the suggestions in the site Stability report on above matter is not required.

Yours Faithfully,

*Pamny*  
**Senior Geologist**  
Deptt. of Mines & Geology  
Government of Sikkim  
Senior Geologist  
Gangtok



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## ANENXURE R/7

**MINUTES OF STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY  
SIKKIM HELD ON 22<sup>ND</sup> FEBRUARY 2022.****VENUE: Through Physical Mode at Tragopan Memorial Hall of Forest & Environment  
Department and Video Conferencing****Date: 22<sup>nd</sup> February, 2022****PROCEEDINGS**

A meeting of the State Environment Impact Assessment Authority (SEIAA), Sikkim held on 22<sup>nd</sup> February, 2022 through dual mode (both physical and video conferencing). One of the members attended through Video Conferencing. Attendance is as under;

1. Shri S.T Lachungpa	Chairman	P
2. Shri N.W Tamang	Member Secretary	P
3. Dr. Bina Pradhan	Member	(Attended through VC)
4. Shri Chandan Kumar	Master Trainer	P

- I. **Opening Remarks of the Chairman:** The Chairman welcomed all the members and participants and informed the house about 1<sup>st</sup> meeting of SEIAA for **the Proposed Development of “WEST POINT”- Integrated Commercial cum MLCP Complex at Old West Point School Area, Near M.G Marg, Gangtok, East Sikkim**. The meeting was opened for proceeding as per the agenda of the meeting set on 21<sup>st</sup> February, 2022.

**Agenda Item:**

**Examination of the Proposed Development of “WEST POINT”- Integrated Commercial cum MLCP Complex at Old West Point School Area, Near M.G Marg, Gangtok, East Sikkim by MESASO Infrastructure Pvt. Ltd. and Documentation made by SEAC for Environment Clearance.**

**Proposal No. SIA/SK/MIS/244081/2021**

- The Committee members after thorough interaction and deliberation in each and every points, observations of MoMs drawn on 17.02.2022 by SEAC and their reply with clarification and justification given by the Project Proponents, the following specific and general conditions has been laid down to comply within pre & post project implementation stages by Project Proponent.
- The SEIAA also deliberated and discussed on the ADS and observation made by SEAC and replied by Project Proponent, pointwise considered the condition laid by the SEAC.
  - The condition laid down by the GMC as mentioned in DPR should strictly adhere to by the Project Proponent.
  - The User Agency needs to quantify muck generated during construction and proper estimation must be spell out to avoid future problem in the vicinity of Project site due to pilling of muck.

- (iii) The Project Proponent should calculate total quantity of rain water discharge during the construction period and shall accordingly prepare water harvesting plant.
- (iv) Green Cover Plan needs to be covered 50% of the total areas of proposed MLCP for beautification of the blank areas, creation of hanging garden in all the flyover falling within the Gangtok Municipal Areas (GMC).

The cost of maintenance should be provided including cost of creation of garden, beautification, quality planting materials of ornamentals and other evergreen shrubs and herbs till the expiry of the agreement with the State Government.
- (v) The Multi- Disciplinary Committee comprising of members from Forest and Environment Department, State Pollution Control Board (SPCB), UDHD Department, Smart city, Mines & Geology, NGOs (Non- Government Organization), Power Department, Health Department, Fire & Emergency Services, PHE (Water Supply) and PHE (Sewage) which will do quarterly field monitoring and submit report.
- (vi) The condition, recommendation lay down by GMC, Sikkim Fire & Emergency Services, Power Department, Mines & Geology should strictly adhere by project proponent.
- (vii) Quarterly inspect project site and submit report accordingly. If committee feels need to visit of the project site besides stipulated dates, may visit the site to ensure proper execution of the Project and follow of all the guidelines and condition laid down by various agencies (Government and Non-Government).
- (viii) Half-yearly progress report for implementation of different work components under the project should furnished to SEIAA and State Forest Department by project proponent.

-TRUE COPY-

## ANNEXURE R-5



Email : [spcsikkim@gmail.com](mailto:spcsikkim@gmail.com)

**STATE POLLUTION CONTROL BOARD-SIKKIM**  
**FOREST & ENVIRONMENT DEPARTMENT**  
**GOVERNMENT OF SIKKIM**  
 DEORALI - 737102

Ref. No. 1142/SPCB

Date: 21/2/2022

To,

The Vice President (Project),  
 M/s MESASO Infrastructure Pvt. Ltd.,  
 Old West Point School, Near M.G. Marg,  
 Gangtok, Gangtok District, Sikkim-737101.

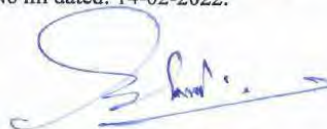
**Sub: Consent to Establish.**

In consideration of your application no. 258779 dated 15-02-2022, the State Pollution Control Board – Sikkim, hereby grants you Consent to Establish eleven (11) storied Gold Rated Building and Construction Project in Gangtok, Gangtok District under the provisions of **Section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and Section 21 of the Air (Prevention & Control of Pollution) Act, 1981** subject to the following conditions:

1. That, this consent is meant for specific purpose only and any alteration in the project shall require prior permission from the Board;
2. That, you shall have facilities to prevent and control water, air & noise pollution in the project area as per the conditions specified in relevant Acts;
3. That, you shall obtain Environmental Clearance prior to commencement of work in your project and abide by its terms & conditions;
4. That, you shall obtain Consent to Operate prior to operation of your project;
5. That, you shall construct temporary labour camp duly providing proper sanitation & solid waste management facility within the premises in accordance to the **Solid Waste Management Rules, 2016**;
6. That, you shall carry out third party environmental monitoring from a registered NABL accredited and MoEF&CC registered consultants and submit Report to SPCB-Sikkim on a quarterly basis;
7. That, you shall carry out the dismantling/demolition and construction work without causing any environmental pollution duly installing pollution control measures such as suppression of dust/fugitive emission, noise controlling measures in the premises by erecting barriers & limiting work during day time only and proper management of demolition waste within the premises, further, that any such dismantling/demolition shall ensure foundational security of the area in question;
8. That, all forms of Construction and Demolition waste shall be managed and disposed off in accordance with the provisions of the Construction & Demolition Waste Rules, 2016;
9. That, you shall ensure the general waste generated by your unit shall be collected & disposed off in accordance with **Solid Waste Management Rules, 2016 and Plastic Waste Management Rules, 2016**;



10. That, you shall ensure the scrap generated by your unit shall be disposed off through authorized vendor only;
11. That, you shall obtain authorization from the SPCB-Sikkim through the OCMMS portal for handling Bio Medical Waste generated during construction of your project;
12. That, you shall obtain authorization from the SPCB-Sikkim through the OCMMS portal for handling Hazardous Waste generated during construction of your project;
13. That, you shall ensure compliance to the provisions of the **Hazardous Chemicals Rules, 1989** for safe storage and management of fuel & other flammable materials;
14. That you shall provide Personal Protective Equipment to the employees to avoid any health hazard;
15. That, you shall prepare an Emergency Response Procedure/Protocol (ERP) and submit a copy of the same to the Board and you shall ensure compliance to the ERP for incidents such as fire, flood, landslides, earthquakes and accidents;
16. That, you shall conduct regular mock drill as per the specifications of the ERP;
17. That, you shall establish and operate the Sewage Treatment Plant to treat sewage/waste generated from operation of various ancillary units of the building project adhering to the standards prescribed under the Environment (Protection) Act, 1986 and Rules made there under from time to time, whichever is stringent;
18. That, you shall develop green belt within your premises;
19. That, you shall apply for renewal of the consent one month in advance before its expiry;
20. That, you shall abide by all the conditions given by the Board from time to time;
21. That, this consent is valid subject to obtaining other required permission/licenses/clearances wherever required;
22. That, the Board reserves the right to cancel and withdraw the consent in the event of any environmental problems arising out of your project;
23. That, this consent to establish is valid till 31st March 2025;
24. Rs. 4,00,000/- (Rupees four lakhs for four years i.e. 2021- 2025) only has been received as consent fees vide Receipt no. 4660466 & Bank ID No nil dated: 14-02-2022.



**(Dr. Gopal Pradhan)**  
 Member Secretary,  
 State Pollution Control Board-Sikkim.  
 Dr. Gopal Pradhan  
 Member Secretary  
 State Pollution Control Board  
 Forest Env. & W/L Mangt. Deptt.  
 Govt. of Sikkim, Gangtok



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ANNEXURE R-57

Mr. Sanjay Mittal  
 Managing Director  
 MESASO Infrastructure Pvt. Ltd.

Sub - ASSOCHAM GEM Pre-certification - West Point, Gangtok, Sikkim Project (GEM-CB-C4040)

Dear Sir,

Greetings from ASSOCHAM GEM Green Building Council,

Congratulations to the project team,

Please find attached the e-Certificate for the **West Point, Gangtok, Sikkim Project (Project registration number - GEM-CB-C4040)**.

**The project is awarded with GEM 4 Pre-certification under ASSOCHAM GEM New Building Rating System, with 86 points.**

We wish the project team best of luck and extend our support and guidance during the Certification process.

We will also send hard copy of **GEM 4 Pre-certification Certificate and Plaque** for the project.

We would also like to have a VC meeting with the project team for training and capacity building. Kindly let us know the convenient time for the same.

We value your association with ASSOCHAM.

Regards

Neeraj Arora

Senior Director & Head  
 GEM Green Building Certification Program  
 Councils on Water, Env. & Climate Change  
 Councils on Education & Skill

-TRUE COPY-

THE ASSOCIATED CHAMBERS OF COMMERCE AND INDUSTRY OF INDIA  
 (CIN : U91990DL1920PLC008223)

ASSOCHAM Corporate Office : 4th Floor, YMCA Cultural Centre and Library Building, 1, Jai Singh Road, New Delhi-110001  
 Tel. : +91-11-46550555 (Hunting line) • Fax : +91-11-23347008/09 • E-mail : assocham@nic.in • Website : www.assochem.org

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ANNEXURE R-38

ENVIRONMENTAL  
EIA PARANCI

**Government of India**  
**Ministry of Environment, Forest and Climate Change**  
**(Issued by the State Environment Impact Assessment Authority(SEIAA), Sikkim)**

To,

The Director  
 MESASO INFRASTRUCTURE PVT. LTD.  
 Vega Circle Mall, 3rd Floor, 3rd Mile, Sevoke Road, Siliguri -734008

**Subject:** Grant of Environmental Clearance (EC) to the proposed Project Activity under the provision of EIA Notification 2006-regarding

Sir/Madam,

This is in reference to your application for Environmental Clearance (EC) in respect of project submitted to the SEIAA vide proposal number SIA/SK/MIS/244081/2021 dated 10 Dec 2021. The particulars of the environmental clearance granted to the project are as below.

1. EC Identification No.	EC22B038SK115854
2. File No.	214/E &SC
3. Project Type	New
4. Category	B2
5. Project/Activity including Schedule No.	8(a) Building and Construction projects
6. Name of Project	Proposed Development of "WEST POINT" - Integrated Commercial cum MLCP Complex at Old West Point School Area, Near M.G. Marg, Gangtok, East Sikkim
7. Name of Company/Organization	MESASO INFRASTRUCTURE PVT. LTD.
8. Location of Project	Sikkim
9. TOR Date	N/A

The project details along with terms and conditions are appended herewith from page no 2 onwards.

Date: 25/02/2022

(e-signed)  
 N.W Tamang(IFS)  
 Member Secretary  
 SEIAA - (Sikkim)

PARIVESH

(Pro-Active and Responsive Facilitation by Interactive,  
 and Virtuous Environmental Single-Window Hub)



*Note: A valid environmental clearance shall be one that has EC identification number & E-Sign generated from PARIVESH. Please quote identification number in all future correspondence.*

*This is a computer generated cover page.*



GOVERNMENT OF SIKKIM  
OFFICE OF THE CHIEF CONSERVATOR OF FOREST (T/HQ)  
DEPARTMENT OF FOREST & ENVIRONMENT  
DEORALI, GANGTOK-737102  
EAST SIKKIM.

Memo no.: 75/Secy/FEWMD/SEIAA

Date: 25/2/22

To,

M/S MESASO INFRASTRUCTURE PVT. LTD  
3<sup>RD</sup> Floor Vega Circle Mall, 3<sup>RD</sup> Miles,  
Sevok Road, Siliguri  
West Bengal- 734001

**Subject: Proposed Development of "WEST Point"- Integrated Commercial cum MLCP Complex at Od West Point School Area, Near M.G Marg, Gangtok, East Sikkim taken by MESASO INFRASTRUCTURE PVT. LTD.- Environmental Clearance- Regarding.**

Proposal No. SIA/SK/MIS/244081/2021.

Sir,

This has reference to your application dated 10<sup>th</sup> December, 2021 on above project. The above referred proposal was considered by the State Environment Assessment Authority (SEIAA) for prior Environmental Clearance for construction of Building Projects on 22.02.2022. The project envisages construction of 11-storeys building covering buildup area of 28806.37 Sqm for Development of "WEST POINT"- Integrated Commercial cum MLCP Complex at Old West Point School Area, Near M.G Marg, Gangtok, East Sikkim. No Forest land is involved.

The committee members after thorough interaction and deliberation in each points, observation of Minutes of Meeting (MoMs) drawn on dated 17.02.2022 by SEAC and further confirmed by SEIAA on 22.02.2022 on their reply with clarification and justification given by the project proponent, the following terms and condition has been laid down to comply during the construction phase & post implementation stages by project proponent.

- i. The official permissible height for building in Sikkim is 5 ½ for domestic and 7 for Commercial purpose as per the existing bye laws in Sikkim. However, the Project Proponent has procured Certification from Mr. Majumdar of Jadavpur University for construction of 11 storeys building. The SEAC informed the PP to get this certification to be validated/vetted by Mines & Geology Department, Government of Sikkim.
- ii. Structural Engineers from GMC also have to be included in the project.
- iii. Project Proponent has to follow the labour laws of Sikkim and engage local people.
- iv. Corporate Environment responsibility to be taken up and Environment measures to be implemented in consultation with Environment sector of the Forest Department, Government of Sikkim.
- v. Parking/ ventilation structure design to be submitted to SEIAA.
- vi. Disposal of sludge from STP to be specified till its end point.

- vii. Rain water harvesting plan, Composting & disposal plan to be submitted with specification till its end point.
- viii. Dumping of extra excavated muck (unutilisable) should be done at pre identified and approved sites. No muck should be washed away during rainy seasons and cause choking of nallahs, jhoras or water bodies or damage the surrounding environment. Clearances from the concerned department (s) or agency (ies) to be taken for the dumping sites. Rehabilitation of such dumping sites may be done at the cost of PP by providing suitable structures for holding the muck and do plantation with suitable local species.
- ix. The number of storeys of the proposed building should be restricted to 11 storeys only as per the approval of GMC.
- x. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Management Rules 2016.
- xi. The extra excavated muck / soil to be disposed at designated sites as stated at sl.no.x above to avoid choking of drains and flooding
- xii. Utilisation of water from Rain water harvesting structure to be maximized to minimize the load on fresh water demand.
- xiii. Commitment letter to the effect that no damage is caused to the surrounding areas and habitation as per the stake holders meeting held on 13.11.2021 is insisted.
- xiv. Environment Management Plan further needs to be prepared to strengthen the existing EMP spell out in the instant proposal to ensure intensive mitigation measure to maintain overall ecological balance.
- xv. Green Cover Plan needs to be covered 30% of the total areas of proposed MLCP for beautification of the blank areas, creation of hanging garden in all the flyover falling within the Gangtok Municipal Areas (GMC).
- xvi. Local labours to be employed as far as possible and train them also to get the desired output.
- xvii. Permission from State Pollution Control Board for E-waste, DG set and Hazardous waste to be obtained by the Project proponent.
- xviii. Taxi Driver's Union/Association consent letter copy to be submitted.
- xix. The environment safeguard measures to be monitored by the Multidisciplinary committee to be constituted by Forest Department/Smart City / Project proponent.
- xx. The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc. as per National Building Code including protection measures from lightning etc.
- xxi. The provisions of the Solid Waste Management Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste Management Rules, 2016, shall be followed.
- xxii. Construction site shall be adequately barricaded before the construction begins.
- xxiii. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
- xxiv. Total fresh water use shall not exceed the proposed requirement as provided in the project details.
- xxv. Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, no treated water shall be disposed in to municipal drain.
- xxvi. No sewage or untreated effluent water would be discharged through storm water drains.
- xxvii. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.
- xxviii. Outdoor and common area lighting shall be LED.
- xxix. Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.
- xxx. Organic waste compost/Vermiculture pit/Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day must be installed.
- xxxi. Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.



- xxxii. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.
  - xxxiii. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.
  - xxxiv. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
  - xxxv. A First Aid Room shall be provided in the project both during construction and operations of the project.
  - xxxvi. The condition laid down by the GMC as mentioned in DPR should strictly adhere to by the Project Proponent.
  - xxxvii. The User Agency needs to quantify muck generated during construction and proper estimation must be spell out to avoid future problem in the vicinity of Project site due to pilling of muck.
  - xxxviii. The Project Proponent should calculate total quantity of rain water discharge during the construction period and shall accordingly prepare water harvesting plant.
  - xxxix. Green Cover Plan needs to be covered 50% of the total areas of proposed MLCP for beautification of the blank areas, creation of hanging garden in all the flyover falling within the Gangtok Municipal Areas (GMC).
  - xl. The cost of maintenance should be provided including cost of creation of garden, beautification, quality planting materials of ornamentals and other evergreen shrubs and herbs till the expiry of the agreement with the State Government.
  - xli. The Multi- Disciplinary Committee comprising of members from Forest and Environment Department, State Pollution Control Board (SPCB), UDHD Department, Smart city, Mines & Geology, NGOs (Non- Government Organization), Power Department, Health Department, Fire & Emergency Services, PHE (Water Supply) and PHE (Sewage) which will do quarterly field monitoring and submit report.
  - xlii. Quarterly inspect project site and submit report accordingly. If committee feels need to visit of the project site besides stipulated dates, may visit the site to ensure proper execution of the Project and follow of all the guidelines and condition laid down by various agencies (Government and Non-Government).
  - xliii. Half-yearly progress report for implementation of different work components under the project should furnished to SEIAA and State Forest Department by projectproponent.
  - xliv. In case of change in the scope of the project would require to obtain fresh appraisal.
  - xlv. The SEIAA reserves the right to add additional safeguard measures subsequently, if found necessary.
- Non- Compliance of above terms and conditions by the Project Proponent shall attracts revocation of Environmental Clearance.

This clearance is valid for a period of five years from the date of issue for commencement of construction work. The project proponent should submit this environmental Clearance copies to the following.

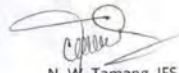
3



1. District Collector, East.
2. DFO (Territorial) and Environment and Soil Conservation, East.
3. Local Panchayat / Councillor
4. Local NGOs
5. And other stake holder of the locality for information and about Environment Clearance. The copy of this Clearance will also be available in the ENVIS website [www.sikenvis.nic.in](http://www.sikenvis.nic.in) of the Department of Forest, Environment and Wildlife Management.

Thanking you.

Yours faithfully



N. W. Tamang, IFS  
CCF-cum Member Secretary (SEIAA)  
Forest, Env. & Wildlife management Department.

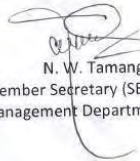


Memo no:...../CCF/(T/HQ)/ FEWMD

Date:.....

Copy for favour of kind information:

- 1. Principal Secretary to HCM.
- 2. Chief Secretary, Government of Sikkim
- 3. Pr. Secretary-cum, PCCF, FEWMD
- 4. Chairperson (SPCB)
- 5. Member Secretary (SEAC)
- 6. Sr. program Officer ( Envis) : For uploading in the website.



N. W. Tamang, IFS  
 CCF-cum Member Secretary (SEIAA)  
 Forest, Env. & Wildlife management Department.



-TRUE COPY-

Signature Not Verified

Digitally signed by N.W  
 Tamang(IFS)  
 Member Secretary  
 Date: 2/25/2022 4:38:03 PM  
 Page 6 of 6

ANNEXURE R-24

o/c

Fax No.: 03592 206836  
Phone No.: 03592 206192



**DEPARTMENT OF MINES & GEOLOGY  
GOVERNMENT OF SIKKIM  
GANGTOK.**

Ref No: 789/DMG/21-22

Date: 28-2-22

To,

The Mesaso Infrastructure Private Ltd.,  
3<sup>rd</sup> floor, Vega Circle Mall,  
3<sup>rd</sup> Mile, Sevoke Road, Siliguri,  
West Bengal.

**Sub: Reply to the letter no. MIPL/12/2021-22 Dated 31.12.2021 (Letter received dated: 28.02.2022.)**

Sir,

This is in reference to the letter No. MIPL/12/2021-22 Dated 31.12.2021 (Letter received dated: 28.02.2022.) regarding the site stability report issued by Department of Mines and Geology of the land situated at Old West Point School Complex vide reference No. 1/62(3)DM&G/21-22/478 dated 29.12.2021. In addition, structural engineer of the proposed construction mentioned in the letter dated: 30.12.2021 that as per IS Code 1893 where N value above 15 was obtained in the site, micro-seismic study is not required. Therefore, the suggestions in the site stability report are not necessary in the case. However, the proposed structure should be designed as per the earthquake inventory history of Sikkim.

Thanking You

*Received:*  
1.03.2022



TRUE COPY

Yours Faithfully,

*P. Nayak*  
Senior Geologist  
Deptt. of Mines & Geology  
Government of Sikkim  
Gangtok

(File no. 421/DMG/18-19)

## ANNEXURE R-6

Item No. 11

Court No.1

**BEFORE THE NATIONAL GREEN TRIBUNAL  
EASTERN ZONE BENCH, KOLKATA  
(Through Video Conferencing)**

Original Application No. 05/2022/EZ  
(I.A. No.26/2022/EZ)

In the matter of:

Dr. Bina Basnett  
D/o Mr. P.B. Basnett  
Rani Pool, East Sikkim-737135

.....Applicant(s)

Versus

1. State of Sikkim  
Through Chief Secretary,  
New Secretariat, Gangtok-737101
2. Gangtok Smart City Development Limited  
Through its Chief Executive Officer,  
Sokaythang, Below ICAR Office,  
Gangtok, Sikkim-737102
3. Department of Mines & Geology,  
Through its Secretary,  
Secretariat Road, Below Tashiling Secretariat,  
Government of Sikkim, Gangtok-737101
4. Urban Development and Housing Department  
Through its Secretary,  
Government of Sikkim,  
Paljor Stadium Road, Gangtok-737101, Sikkim
5. Sikkim State Disaster Management Authority  
Through its Chairman,  
Manan Bhawan, Gangtok-737101, Sikkim
6. Sikkim State Pollution Control Board,  
Through its Chairman,  
Forest Secretariat, C Block,  
Deorali, Gangtok-737102,  
East Sikkim
7. Deputy Commissioner,  
Upper Sichey Road, Sungava,  
Gangtok, Sikkim-737101
8. State Environment Impact Assessment Authority (SEIAA)  
Through Chairman,  
Annexe 1, Top Floor, Kazi Road,  
Gangtok-737101, Sikkim
9. Forest and Environment Department, Government of Sikkim  
Through Secretary,  
Forest Secretariat, Deorali,

Gangtok-737102, East Sikkim

10. Gangtok Municipal Corporation,  
Through Chairman,  
Near Deorali Stand, Gangtok-737101, Sikkim

11. Union of India  
Through Secretary,  
Jor Bagh, Lodhi Colony,  
New Delhi

12. M/s MESASO Infrastructure Pvt. Ltd.  
Sevoke Road, Siliguri

.....Respondent(s)

Date of hearing: 02.03.2022

**CORAM: HON'BLE MR. JUSTICE B. AMIT STHALEKAR, JUDICIAL MEMBER  
HON'BLE MR. SAIBAL DASGUPTA, EXPERT MEMBER**

For Applicant(s) : Mr. Swetank Shantanu, Advocate

For Respondent(s) : Mr. Pinaki Misra, Sr. Advocate a/w Mr. Sudesh Joshi, AAG  
and Ms. Fizza Zaidi, Advocate for R-1, 3, 4, 7, 9 & 10,  
Mr. ADN Rao, Sr. Advocate a/w Dr. Doma T. Bhutia,  
Advocate and Ms. Mansi Bachani, Advocate for R-2,  
Mr. Salik Shafique, Advocate for R-6,  
Mr. Saumitra Jaiswal, Advocate for R-8,  
Mr. Sanjay Upadhyay, Advocate for R-12

### **ORDER**

1. Mr. Swetank Shantanu, learned Counsel is present for the Applicant.
2. One counter-affidavit dated 18.02.2022 has been filed by Respondent No.6, Sikkim Pollution Control Board; same is taken on record.
3. One reply affidavit dated 23.02.2022 has been filed by Respondent No.12, M/s MESASO Infrastructure Private Limited; same is taken on record.
4. One counter-affidavit dated 25.02.2022 has been filed by Respondent No.10; Gangtok Municipal Corporation; same is taken on record.
5. One reply affidavit dated 25.02.2022 has been filed by Respondent No.3, Department of Mines and Geology, Government of Sikkim; same is taken on record.
6. One counter-affidavit dated 25.02.2022 has been filed by Respondent No.3, Department of Mines and Geology, Government of Sikkim; same is taken on record.

7. One counter-affidavit dated 25.02.2022 has been filed by Respondent No.8, State Environment Impact Assessment Authority (SEIAA); same is taken on record.
8. One counter-affidavit dated 25.02.2022 has been filed by Respondent Nos.1, 4, 7 & 9; same is taken on record.
9. One counter-affidavit dated 27.02.2022 has been filed by Respondent No.2, Gangtok Smart City Development Limited; same is taken on record.
10. One counter-affidavit dated 01.03.2022 has been filed by Respondent No.5; same is taken on record.
11. Mr. Pinaki Misra, learned Senior Counsel assisted by Mr. Sudesh Joshi, learned Additional Advocate General for Respondent Nos., 3, 4, 7, 9 & 10, Mr. ADN Rao, learned Senior Counsel assisted by Dr. Doma Bhutia, learned Counsel and Mr. Sanjay Upadhyay, learned Counsel have raised a preliminary objection that the original application has been filed on misrepresentation inasmuch as in paragraph 1 of the original application itself it is alleged that illegal construction of Multilevel Car Parking cum Shopping Hub (STNM-Kanchenzonga Square below NH) at Old West Point School Area, Near Hotel Hungry Jack, Gangtok is coming up which is in a seismic zone and therefore not permissible. The learned Senior Counsels submit that STNM-Kanchenzonga Square below NH is not at Old West Point, Gangtok.
12. The learned Counsel submits that this original application has been filed on absolutely misleading facts, since even the Expression of Interest dated 15.09.2020 (page no. 46 of the paper book) which has been filed in support of the original application, only refers to construction of Multilevel Car Parking cum Shopping Hub (STNM-Kanchenzonga Square below NH) and does not mention that the same is located at Old West Point, Gangtok. This fact is today admitted by Mr. Swetank Shantanu, learned Counsel for the Applicant.

13. The learned Counsel for the Respondents submits that the interim order has been obtained by the Applicant on false representations of facts made in the original application.
14. At this stage, Mr. Swetank Shantanu, learned Counsel submitted that he may be permitted to withdraw this original application.
15. The learned Counsel for the Applicant is therefore permitted to withdraw the original application and the same is dismissed as withdrawn with a cost of Rs. 5,000/- (Rupees five thousand only) on the Applicant to be deposited with the Registrar, National Green Tribunal within 15 days.
16. The I.A. No.26/2022/EZ also stands disposed of accordingly.
17. The interim order, if any, also stands vacated.

.....  
**B. Amit Sthalekar, JM**

.....  
**Saibal Dasgupta, EM**

March 02, 2022  
Original Application No. 05/2022/EZ  
(I.A. No.26/2022/EZ)  
MN

-TRUE COPY-

**ANNEXURE R/18****Note Sheet**Page No. - 07 -MC

Ref notes of Town Planner at pre page, there are two issues at hand that needs consideration: - Additional three floors and Front Plaza.

**1) Additional Floors:**

It has been observed that from the 'stepped terrace' approach of the design the city will benefit largely in terms of the build mass which is receding at every level thereby allowing for more sunlight, visual appreciation of the surroundings and most importantly adding to open terraces in the building at many level which will be accessible for all public use as an open space.

However, this 'stepped terrace' approach along with 20ft clear access road all around the site, which is much more than what the Sikkim Building Construction Regulations or SBCR states, has created a hurdle for the Concessioner as his built up area has been horizontally limited. Therefore, to make the project feasible and also ensure the 'stepped terrace' concept, an application requesting extra 3 floors on the western corner of the building has been requested by the Concessioner. This will not be applicable for the entire built-up but is proposed to be limited to only one corner of the site. (the design and details area enclosed for reference).

**2) Plaza connecting the site to existing pedestrian footpath at highway:**

It was further observed that the site boundary was actually away from the main road thereby making the public open spaces disconnected and alienated from the existing pedestrian network. This would be of a lesser benefit to the citizens as a whole therefore it was suggested to the Concessioner to explore connecting the building to the existing pedestrian network along the highway. In view of this the Concessioner has prepared a detail plan of the 'Plaza' for feasibility of the proposal.

This plaza is planned as a open yard connecting the MLCP cum Mall (WestPoint Mall) and the existing pedestrian footpath along the highway so that citizens can have a direct access and serve as a arrival yard to connect the city with this infrastructure. This yard is proposed to be built as a Pre Engineered Structure (PES) to be made in steel for ease and speed of construction so that minimum inconvenience is made to the users of church road at any given point of time. Further, this Plaza is planned as a 674sqM single floor structure to connect at the level of the road thereby allowing a height of 18ft clear as an underpass to Church road.

**OBSERVATION:**

For Additional floor request: upon technical scrutiny it is found that the structure is already designed and foundation design have all been vetted by Indian Institute of Technology. (Certificate enclosed at 'X').

The Structure has been actually designed as a 14 storey building by Sh. S. J. Parekh (SPA Consultants) who is one of the foremost structural designers in the country and has been vetted by Indian Institute of Technology, Guwahati (Department of Civil Engineering) a premier institute of the country for design vetting etc. Detailed geological investigations conducted by Mines & Geology Deptt have been adapted by the structural designer to achieve the design of 14 floors.

**RECOMENDATION:** In view of the above, it is possible to consider three additional floors only and can be covered by Order Amended vide order no. GOS/UD&HD/6(294) 2001 dated 16/10/2001 in Sikkim Building Construction Regulation 1991 the Regulation No. 39 states "Power to relax". This clause has not been invoked for this project at any point of time till now and the earlier stated approved floor height clearly states construction of a 11story building with Parking of 4 floors as per the RFP floated by GSCDL.

Note SheetPage No. 08**OBSERVATION:**

For Plaza at Road lvl. The plaza is the best part of the project in many ways. Firstly, it will not be above the road level thereby not being visible virtually. It will encourage universal accessibility to public spaces and be disable friendly open space which the city needs and should facilitate.

An area of 674sqM of open yard will be added to the pedestrian network which will be for the use of the citizens. The plaza will also add to the quality of street life as one can have small temporary installations and kiosks during special days and events for the enjoyment of the citizens.

Now to construct this plaza of 674sqM, we must refer to the notes of TP at NSP-05 wherein the illustration mentions that out of the total area of the plaza, the proposed plaza spreads over three entities namely:

- (A) Within site area: 200sqM
- (B) Over Church Road: 357sqM
- (C) In Police Service Yard: 117sqM

While (A) is well within the custody of the Concessioner, the area under (B) and (C) are under the State govt. with UDD and Sikkim Police as the custodian respectively.

**RECOMENDATION:** While creation of this open space has many benefits and use for the city, it is also felt prudent that a project of this magnitude should have a large arrival area which can also double up as a disaster mitigation open yard. Also on any given day the yard will be a enjoyable destination for morning joggers, pedestrians and useful for all walks of life.

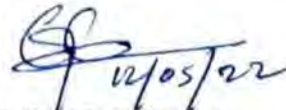
This plaza should be considered as a complete open space only and no permanent structure of any kind should be allowed on this. Further the area of 117sqM falling in the custody of Police Dept should be re-allotted to Police Dept. and the same can be well accommodated under the yard along Church Road and not in any way over the Plaza to retain and protect the pedestrian priority.

As the portion (B) falls under urban roads, Urban Development Deptt. can decide on the method of its use and utility post plaza creation. Likewise, Police Department will need to be kept in loop for utilising part of their service yard as proposed in (C).

Hence, file is forwarded to the competent authority to seek cabinet approval for: -

- 1) Allowing three additional floors under Amended vide order no. GOS/UD&HD/6(294) 2001 dated 16/10/2001 in Sikkim Building Construction Regulation 1991 the Regulation No. 39 states "Power to relax" and
- 2) Permission to construct the part of plaza proposed to come up Over Church Road: 357sqM & Police service Yard: 117sqM. (details and conditions can be worked out post approval) to be used exclusively as an open space for public and pedestrian use only.

Secretary  
UD Deptt.



Addl. Chief Town Planner  
Gangtok Municipal Corporation.

Forwarded file -  
Parag rfs

-//TRUE COPY//-



Email: spcbsikkim@gmail.com

ANNEXURE R-33

**STATE POLLUTION CONTROL BOARD-SIKKIM**  
**FOREST & ENVIRONMENT DEPARTMENT**  
**GOVERNMENT OF SIKKIM**  
**DEORALI, GANGTOK – 737102**

Ref. No. 1415/SPCB/

Dated: 31/5 /2022

To,

**Shri. Meenakshi Mittal Agarwal,**  
**M/s. Mesaso Infrastructure (P) Limited,**  
**Vega circle Mall, 3<sup>rd</sup> Floor,**  
**3<sup>rd</sup> Mile, Sevoke Road,**  
**Siliguri-West Bengal.**

**Sub: CONSENT TO ESTABLISH 2 NOS. OF D.G SET.**

In consideration of your application no. 259577 dated: 18.05.2022, the State Pollution Control Board – Sikkim, hereby grants you renewed Consent to establish 2 Nos of D.G. set having a capacity of 82.5 kVA (M/s. Mesaso Infrastructure (P) Limited) at your project premises located at Old West Point School Complex, Near MG Marg-Gangtok, Gangtok District-Sikkim under the provision of **Section 21 of the Air (Prevention & Control of Pollution) Act, 1981**, subject to the following conditions:

1. That, this consent is meant for specific purpose only and any alteration in the process and capacity shall require the prior approval of the Board;
2. That, Noise from D.G. Set shall be controlled by providing an acoustic enclosure or by treating the room acoustically, at the user end;
3. The acoustic enclosure or acoustic treatment of the room shall provide minimum 25 dB (A) insertion loss;
4. That, noise from the D.G sets shall not exceed the ambient noise standard;
5. That, the D.G set shall be provided with proper exhaust muffler with insertion loss of minimum 25 dB (A)
6. That, you shall have proper siting of the D.G set and control measures adopted so as to bring down noise level outside the premises where the set is installed;
7. That, the installation of the D.G set shall be strictly in compliance with the recommendations of the D.G set manufacturer;
8. That, the D.G set shall conform with the norm notified under Environment (Protection) Act, 1986;
9. That, the minimum stack height shall be 6m for 82.5 kVA from the ground where DG sets have been installed;
10. That, the emission from the DG set shall not exceed the emission standard listed at Sr. No.96 of schedule III of the Environment (Protection) Rule, 1986.
11. That, you shall develop green belt along the periphery of your premises;
12. That, this consent is valid till 31<sup>st</sup> March 2023;
13. That, you shall abide by all the instructions given by the Board from time to time;
14. Rs.10000/- (Rupees ten thousand) only has been received as consent fee vide receipt no.713038897 & Bank ID. No.nil dated: 16.02.2022;
15. That, you shall apply for renewal of consent 60 days in advance before its expiry;
16. That, non-compliance of any of the above conditions shall lead to withdrawal of the consent and imposition of fine which shall be prescribed by the Board;
17. That, the Board reserves the right to cancel the consent in the event of any environmental problems arising out of your D.G. set;



**(Dr. Gopal Pradhan)**  
 Member Secretary,  
 State Pollution Control Board-Sikkim

Dr. Gopal Pradhan  
 Member Secretary  
 State Pollution Control Board  
 Forest & W/L Mangt. Dept.  
 Govt. of Sikkim, Gangtok

-TRUE COPY-

Annexure - I

EXTRACT OF THE MINUTES OF THE 28th MEETING OF THE BOARD OF DIRECTORS OF GANGTOK SMART CITY DEVELOPMENT LIMITED TO BE HELD ON MONDAY, THE 11<sup>th</sup> DAY OF JULY, 2022 AT 11 A.M. AT CONFERENCE HALL, GANGTOK SMART CITY DEVELOPMENT LIMITED, 5<sup>th</sup> FLOOR, KISSAN BAZAAR, LAL BAZAAR ROAD, GANGTOK, SIKKIM.

**AGENDA No.19: APPROVAL FOR ADDITIONAL THREE FLOORS FOR MULTI LEVEL PARK WITH SHOPPING PLAZA OLD WEST POINT AREA (SIK-GAN-062)**

Mr Bhupendra Kothari, CTO informed the board that the cabinet had approved construction of 11 floor of the work subject to geotechnical investigation. Further the concessionaire has requested for an additional 3 (three) floors for which he has submitted the drawings and geotechnical investigation report. As per the geotechnical investigation, the safe bearing capacity of the soil as found to be 35-40 ton/m<sup>2</sup> and as per the design model of the structure provided by the concessionaire, the building is expected to exert a load of 21-22.5 ton/m<sup>2</sup>. The board approval is sought for submitting the proposal to the Government for cabinet approval of additional three floors of the structure subject to structural design as per geotechnical investigation and vetted by reputed Engineering College. The Board discussed the subject and recommended for submission to Government for consideration.

**RESOLVED THAT** the process for obtaining cabinet approval of additional three floors of the structure subject to structural design as per geotechnical investigation vetted by reputed Engineering College to be initiated.

**RESOLVED FURTHER THAT** Mr Lakpa Sherpa, Chief Executive Officer be and is hereby authorized to do all necessary acts and deeds to give effect to this resolution.

CERTIFIED TO BE TRUE COPY

LAKPA SHERPA

Director cum C.E.O.

Gangtok Smart City Development Limited

DIN 09654003

ANNEXURE R-25 (Colly)



**GOVERNMENT OF SIKKIM  
URBAN DEVELOPMENT DEPARTMENT  
GANGTOK, SIKKIM.**

No: 386/UDD/Secy

Dated:29/07/2022

MINISTER -IN -CHARGE : SHRI ARUN KUMAR UPRETI  
SECRETARY- IN -CHARGE : SHRI M.T. SHERPA, IAS

**CABINET MEMORANDUM**

**Subject: Multi Level Car Parking cum Shopping Plaza (MLCP) Project at West Point School under Public Private Partnership(PPP) under Gangtok Smart City Development Ltd.**

1. The construction of Multi Level Car Parking cum Commercial Development at Old West Point School is a project being executed by Gangtok Smart City Development Ltd. under the Public Private Partnership (PPP) mode.
2. The concept drawing submitted by the preferred bidder proposes the construction of fourteen (14) numbers of floors. The bottom four floors are to be for car parking purposes in which Levels 0 and 1 as ordinary parking and Levels 2 and 3 as mechanically operated stack puzzle parking. The parking is proposed for four hundred and fifteen (415) car parking spaces, the rest of the ten floors will be for commercial development with a maximum carpet area of 13,680 sqm with permissible deviation of plus or minus 10%.
3. Accordingly, the Cabinet in its meeting held on 11/06/2021 had accorded approval for relaxation of norms of the proposed building and had allowed construction of eleven (11) floors duly relaxing the Building Regulation norms.
4. The proposal was also submitted vide sl.no. 18 of the cabinet memorandum submitted vide 215/Secy/UDD/2021 Dated : 27/05/2021 for construction of fourteen (14) floors subject to certain terms and conditions as elaborated in the said cabinet memo.
5. The geotechnical report submitted by the Department of Mines and Geology, Government of Sikkim states that the bearing capacity of soil is 40T/m<sup>2</sup>.
6. The site stability report as submitted by the Department of Mines & Geology indicates that the area comprises of medium grade metamorphic rock sequence represented in the area by mica schist with a conclusion

*MS*

that the area falls within Zone one (1) of area stability Zonation Mapping System adopted by the Department of Mines & Geology. Further, the Notification bearing number: 17/DMG/20-21 dated: 19.03.2021 specifies that the safe bearing capacity of Zone 1 (Area Zonation made by Mines & Geology Department) is greater than  $35T/m^2$  and since the project site is located in the afore-mentioned Zone-1 region. It may be concluded that the existing soil strata can sustain the expected load of the proposed fourteen (14) floors structure comprising of four (4) floors car parking and ten(10) floors commercial development which shall induce a total load (dead and live load) between 210 to 225 kpa (21 to 22.5 T/m<sup>2</sup>). Hence, the construction of the building is safe from the geological investigation as conducted by the Department of the Mines & Geology.

7. The concessionaire i.e M/S Mesaso Infrastructure Private Limited, had further engaged following two agencies for carrying out the detailed geo-technical investigation as a confirmation to the geo-technical investigation carried out earlier by Mines and Geology Department:-
  - a. M/S Geo-informatics Consultancy and Services, Tadong, Gangtok for conducting Standard Penetration Test and to ascertain the soil characteristic and the safe bearing capacity of the soil. Critical locations were identified and soil investigation was carried out at this location to know the safe bearing capacity of soil. As per the soil sample collected from a depth of 12 m to 15m, geologically the area falls under medium and high-grade metamorphic rock sequence represented in the area by garnet ferrous mica schist (with and without quartz veins). Based on core data at various depth the safe bearing capacity of the soil was estimated to 40 ton/m<sup>2</sup> which was higher than the safe bearing capacity of soil as per IS Code recommended (35 ton per sqm) in hilly terrain.
  - b. M/S JP Geo Consultants, Andul Road, Howrah, Kolkata for conducting Plate Load Test for confirming the safe bearing capacity of the soil. The safe bearing capacity of the soil has been estimated and was found to be more than  $40T/m^2$  at 3m depth which is higher than the load of the structure being imposed @  $21ton/m^2$  on the existing soil. Also, the settlement corresponding to the imposed pressure of 125 kpa, 150 kpa, 175 kpa, 200kpa, 210 kpa and 225 kpa resulted in a settlement of 33mm, 40mm, 46mm, 53mm, 55mm and 59 mm respectively. As a result, it is understood that the overall settlement of the raft foundation under an applied load of 210 to 225 kpa which shall fall on the foundation is well within the acceptable limit of 75 mm as per IS code 1904.
8. The building will be a composite steel structure built up with steel and concrete for better performance and stability against seismic forces on

*M/S*


available land having plain topography. It is designed as being light in weight, more ductile and seismic resistant. The building is designed to resist an earthquake intensity/magnitude of about 8 on Richter scale, the highest ever that is expected to occur in Zone-IV of the Seismic Zonation. The building is designed by SPA Consultant, a leading structural consultant in the country and the same has also been vetted by Indian Institute of Technology, Guwahati. The foundation of the structure is a raft foundation based on geological investigation and on the recommendation of the geo-technical investigation conducted by the Mines & Geology Department, Government of Sikkim, Plate load test/soil test by M/S Jp Geo Consultant & M/S Geo-Informatic Consultancy & Services. Hence, the building has been designed duly keeping in mind the overall safety of the structure as well as the project.

9. Now, the concessionaire vide letter no: MIPL/HO/31/2021-22 dated: 10.01.2022 and letter MIPL/HO/33/2021-22, dated 15/02/2022 has requested for allowing additional three (3) floors over and above eleven (11) floors already approved by the Government. For the same, the concessionaire has submitted the drawings and geotechnical investigation reports as mentioned at sl.no.7 above. On review of the drawings as submitted by M/S Mesaso Infrastructure Private Limited, it was revealed that the project has a provision of open-air spaces in each of the floors pertaining to the commercial development space. These open-air spaces were meant for creating green parks, open air plaza etc to accommodate 3000 people and shall be open to the general public at all times. Further, the concessionaire has proposed to construct a 5 meter wide road on the periphery of the proposed MLCP which shall not only be utilized by the MLCP but also by the public residing in the vicinity of the project site. In order to compensate the reduced commercial area while creating the open air plazas and the peripheral road, the concessionaire has proposed that the structure would rise in a tapered/stepped manner to accommodate the commercial development area of 13,680 sqm with a permissible deviation of plus or minus 10% which has resulted in the number of floors of the proposed structure to increase to fourteen (14) floors.
10. Further, the proposal is also for seeking permission to construct a plaza, from Church Road and a piece of land currently under Sikkim Police utilization for running canteen etc. With respect to permission to construct/ create a plaza, the area measuring 357sqm and 117 sqm an airspace over Church Road and portion of Sikkim Police property respectively falls outside the lease land but it is part and parcel of the project. At present one (1) floor building with GCI Roof of the Sikkim Police exists on the land and this is being used as canteen by the Sikkim

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Police. The canteen will be incorporated in the structure which will be below the open air plaza and shall be subsequently handed over to the Sikkim Police. As per the proposal this stage is going to be an integral part which will not only be used as an open multipurpose space but would also alternate as an additional space for pedestrians to access the property. The image of the project shows creation of an open front yard without any super structure over it. The State Government may grant permission for the same without altering the status of the land as recommended by the Town Planning Cell of Gangtok Municipal Corporation and the Town Planning Cell of Urban Development Department.

11. The proposal for addition of three (3) more floors on the already approved eleven (11) floors project was placed in the 28<sup>th</sup> Board Meeting of Gangtok Smart City Development Ltd held on 11.07.2022. The Board discussed the matter and recommended for onward submission to the Government for approval of the Cabinet. The extracts of the minutes of the meeting is placed at **Annexure -I**.
12. The proposal has been approved by the Hon'ble Minister, Urban Development Department for placing the same in the meeting of the Council of Ministers for consideration.
13. The proposal is now placed before the Council of Ministers for consideration of the following: -
  - a) Approval for granting permission to add three (3) more floors in addition to eleven (11) floors over partial horizontal area of the building duly relaxing the Sikkim Building Construction (Amendment) Regulation 2001 as provided under Regulation 39 of the said Regulation within the approved project cost.
  - b) Permission to construct an open-air plaza over the Church Road and portion of land under the utilization by Sikkim Police as specified in sl.no. 10 above.



M.T. Sherpa, IAS  
Secretary

Urban Development Department.  
File no: J(563)/GOS/UDD/MISC/2021

**SECRETARY**  
Urban Dev Department  
Government of Sikkim, Gangtok

Annexure - I

EXTRACT OF THE MINUTES OF THE 28th MEETING OF THE BOARD OF DIRECTORS OF GANGTOK SMART CITY DEVELOPMENT LIMITED TO BE HELD ON MONDAY, THE 11<sup>th</sup> DAY OF JULY, 2022 AT 11 A.M. AT CONFERENCE HALL, GANGTOK SMART CITY DEVELOPMENT LIMITED, 5<sup>th</sup> FLOOR, KISSAN BAZAAR, LAL BAZAAR ROAD, GANGTOK, SIKKIM.

**AGENDA No.19: APPROVAL FOR ADDITIONAL THREE FLOORS FOR MULTI LEVEL PARK WITH SHOPPING PLAZA OLD WEST POINT AREA (SIK-GAN-062)**

Mr. Bhupendra Kothari, CTO informed the board that the cabinet had approved construction of 11 floor of the work subject to geotechnical investigation. Further the concessionaire has requested for an additional 3 (three) floors for which he has submitted the drawings and geotechnical investigation report. As per the geotechnical investigation, the safe bearing capacity of the soil as found to be 35-40 ton/m<sup>2</sup> and as per the design model of the structure provided by the concessionaire, the building is expected to exert a load of 21-22.5 ton/m<sup>2</sup>. The board approval is sought for submitting the proposal to the Government for cabinet approval of additional three floors of the structure subject to structural design as per geotechnical investigation and vetted by reputed Engineering College. The Board discussed the subject and recommended for submission to Government for consideration.

**RESOLVED THAT** the process for obtaining cabinet approval of additional three floors of the structure subject to structural design as per geotechnical investigation vetted by reputed Engineering College to be initiated.

**RESOLVED FURTHER THAT** Mr. Lakpa Sherpa, Chief Executive Officer be and is hereby authorized to do all necessary acts and deeds to give effect to this resolution.

CERTIFIED TO BE TRUE COPY

LAKPA SHERPA  
Director cum C.E.O.  
Gangtok Smart City Development Limited  
DIN 09654003

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### Note Sheet

The Cabinet in its meeting held on 3<sup>rd</sup> August, 2022 at Cabinet Hall, Tashiling Secretariat at 09:00 am discussed the following proposal and gave its decision as under:

307.97. The proposal seeks approval for (i) additional 3 floors over partial horizontal area of the building duly relaxing the Sikkim Building Construction (Amendment) Regulation 2001, within the approved project cost; and (ii) construction of an open – air plaza for the project "Multi Level Car Parking cum Shopping Plaza (MLCP) Project at West Point School", as detailed in Cabinet Memorandum No. 386/UDD/Secy Dated: 29.07.2022.

**CABINET DECISION:** Cabinet approved the proposal.

*Rohini Pradhan*  
4/8/2022  
(Rohini Pradhan) SCS  
Addl. Secretary  
Cabinet Section

~~Secretary/Urban Dev. Department~~

*Mang*  
5/8/22

~~SS~~  
~~Deputy Dir.~~  
~~Calu~~  
5/8/22



## ANNEXURE R/19

Ref. No. MIPL/SITE/29/2022-23

Date: 10<sup>th</sup> October, 2022

To,  
**The Town Planner,**  
**Gangtok Municipal Corporation**  
**Deorali, Gangtok - 737102**

**Sub.:** In reference to the approval of Form of Sanction (Form-III) issue no. 3839/Misc/TPL/GMC/2021/979 dated 31/12/2021 regarding Construction Order for WEST POINT™ - Integrated Commercial cum MLCP Complex at Old West Point School, near M. G. Marg, Gangtok, Sikkim by MESASO Infrastructure Pvt. Ltd.

Sir,

This is to inform you that we are submitting the additional 3 Floors drawing over and above 11 floors already approved as per the above mentioned construction order and also plaza drawing for the approval

For **Mesaso Infrastructure Pvt. Ltd.**



Kumar Manish  
 Vice President Project

*Received*  
*Ji* 10/10/22  
 Town Planner  
 Gangtok Municipal Corporation

MESASO Infrastructure Private Limited | Reg. Off. : 3rd Floor, Vega Circle Mall, 3rd Mile, Sevoke Road, Siliguri, West Bengal - 734001 | info@mesaso.in | + 91 9907311645  
 Project Site : Old West Point School Area, Near M.G. Marg, Gangtok, East Sikkim 737101  
 CIN: U45309WB2021PTC243031 | PAN: AAOCM2843E | GSTIN: 11AAOCM2843E1ZQ  
 IGBC Membership No. : IGBCBD210233 | IGBC Project Reg. No. : IGBCNBT210211

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## ANNEXURE R/20



## GANGTOK MUNICIPAL CORPORATION

DEORALI, SIKKIM

Issue No. 3898/M.E.S./11/11/2022/1322

Date 11/11/2022

**FORM – III**

(See regulation 09 of the Sikkim Building Construction Regulation, 1991)

**Form of Sanction**

To,

(Party -1)

The C.E.O.,

Gangtok Smart City Dev. Ltd.,

Gangtok, Sikkim

(Party – 2)

M/s MESASO Infrastructure Pvt. Ltd.

3<sup>rd</sup> mile, Siliguri,

West Bengal - 734003

**CONSTRUCTION ORDER**

(VALIDITY OF THIS ORDER IS FOR THREE YEARS )

With reference to your application dated 10/10/2022, approval has been granted [as per Cabinet Approval held on 03/08/2022 vide 307.97 the proposal sought (i) additional 3 floors over partial horizontal area of the building duly relaxing the Sikkim Building Construction (Amendment) Regulation 2001 within the approved project cost, and (ii) construction of an open air plaza over the Church Road and portion of land under the utilisation by Sikkim Police Hq.] for construction of proposed fourteen storied GOLD RATED Green Building measuring 35,385.69 sq.m. to come up at old West Point parking area, Gangtok revenue block. Arithang Ward No. 09

The proposed structure is approved for registered landed property having Private Site Measuring: 60984sq.ft. (1.40 acre) vide Parcha/Sale Deed bearing Khatiyon No. 686(P), 715 & 716.

Project Mode : PPP under Gangtok Smart City Dev. Ltd.

**Key Consultant's for the Project:**

	<b>EXPERTISE</b>	<b>Name of expert</b>
1	Independent Engineer	Mr. Eshwar Shrestha
2	Architecture, Landscape & Interior Design	Mr. Vivek Singh Rathore (SALIENT Consultants)
3	Structural Design	Mr. Sanjiv Parekh (SPA Consultants)
4	MEPF	Pankaj Dharkar Associates, Ahmedabad
5	Green Building Consultant	Pankaj Dharkar Associates, Ahmedabad
6	Hospitality Consultant	ENVEE Engineering Pvt. Ltd. New Delhi

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This construction order is approved on the following conditions:-

1. In case, the ownership is found to be defective at any stage of time the approval accorded and this order shall stand automatically revoked and the structure/work building thus constructed shall be considered as without proper approval and shall be dealt accordingly.
2. The construction of the building should be completed no later than three years from the date of issue of construction order. Failure to do so the B.P. Plan automatically shall stand cancelled and the B.P. Plan should be submitted for renewal.
3. No new building or part thereof shall be occupied or allowed to be occupied or used or permitted to be used by any person until permission has granted in that behalf.
4. The construction should be as per approved BPP and no deviation is permissible without the prior permission of the Government.
5. The construction should be as per the order and supervision of Gangtok Municipal Corporation Town Planner/Engineer.
6. The Engineer/Town planner of Gangtok Municipal Corporation must be informed before the foundation is laid. Only after the foundation is passed by Divisional Engineer/Town planner, the construction shall be allowed to continue.
7. Strict quality control to be maintained in the process of construction.
8. There should be enough facilities for good sanitation and drainage system.
9. The door or window panels shall be fixed in such a way that they shall not, when open project on any street.
10. The building shall not be constructed within 10 ft. of the live electric wire running on any public street.
11. The land vacated in consequence of the enforcement of the set back limit shall form part of the public street.
12. The excavated earth obtained from site development & foundation, shall not be dumped on public street, road, gully and jhoras. Moreover any building materials found lying on the road setback or over drains shall be seized and auctioned without any notice whatsoever, and action shall be taken as per the bye-laws against the defaulters.
13. **No construction involving earth excavation works shall be allowed with effect from 1<sup>st</sup> of June 2022 to 30<sup>th</sup> of September 2022.** Anyone found carrying out construction in contravention of the above shall be penalized as per the relevant clause of the Sikkim Allotment and House Sites and Construction of Building (Regulation and Control) Act, 1985 as amended in 2000, and the Sikkim Building Construction Regulation, 1991 as amended in 2000. Such person shall also be solely responsible for the loss of life and property, as a result of such unauthorized excavation/construction.

Two copies of the approved B.P. Plans are returned herewith for your record.

  
Town Planner  
Gangtok Municipal Corporation

Town Planner  
Gangtok Municipal Corporation.

Note: Contact: Mr. Naresh Pradhan, Assistant Town Planner - I, G.M.C, Mob No: 94344 47827

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ANNEXURE R-27

GOVERNMENT OF SIKKIM  
OFFICE OF THE CHIEF CONSERVATOR OF FOREST (HQ)  
FOREST AND ENVIRONMENT DEPARTMENT  
DEORALI, GANGTOK

Phone No: 03592-281240  
Fax No.:03592-281778  
Email:nwtamang@gmail.com

Ref. No. 47 / E&SC/Circle

Date...23/11/22.....

To,

Mrs Meenakshi Mittal Agarwal  
Director,  
MESASO INFRASTRUCTURE PVT. LTD.

Sub: Vertical Expansion of West Point Project- reg.

Madam,

This is to inform you that SEIAA/SEAC of the state of Sikkim is defunct momentarily due to completion of term. Hence, you may apply directly to Central Expert Appraisal Committee (EAC) at the PARIVESH Portal till such a date that SEAC and SEIAA are reconstituted for a fresh term in the state.

(N.W. Tamang, IFS)  
Chief Conservator of Forests (HQ/T/Env.)  
Forest, **Yours faithfully**  
Government of Sikkim


SD/-  
N.W. Tamang, IFS  
Chief Conservator of Forest/HQ.

Memo.No. 47 ..... Env.&SC,

Dated: 23/11/22.....

Copy to:

1. Project Proponent
2. Director, Env.&SC,
3. File

  
N.W. Tamang, IFS  
Chief Conservator of Forest/HQ  
(N.W. Tamang, IFS)  
Chief Conservator of Forests (HQ/T/Env.&SC)  
Forests and Environment Department  
Government of Sikkim

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SITE INSPECTION

ANNEXURE R/21(COLLY)

15/03/23

Inspected the site along with officers of GME, GSEDC, MESASO and the following points were observed at site :-

- 1) 11<sup>th</sup> level steel structure erection is complete. Concrete of the level may be of best quality and waterproof.
- 2) Installation of metal components should be well secured & braced.
- 3) Perimeter ramp is to be completed ASAP.
- 4) Maximum care to be given for external foundation anchorage of piling.
- 5) Quality is to be ascertained.

Proj of team to take note of the above pt

*[Signature]*  
 Addl. Chief Town Planner  
 Gangtok Municipal Corporation

Mesaso Infrastructure Private Limited  
*[Signature]*  
 Vice President



Email: spcbsikkim@gmail.com

## Annexure R/3


**STATE POLLUTION CONTROL BOARD-SIKKIM**  
**FOREST & ENVIRONMENT DEPARTMENT**  
**GOVERNMENT OF SIKKIM**  
**DEORALI, GANGTOK – 737102**

### INSPECTION PROTOCOL

Date of inspection		Inspection Team
31/05/2023		1. Kunzang Z. Bhutia, SSO 2. Shamir Raj Gurung, JSA 3. Durga Pd. Sharma, LA
1.	Name and address of the unit	West Point by Mesaso Infrastructure Pvt. Ltd., Old West Point School Area, Near M.G. Marg, Gangtok District - 737101
2.	Contact Person/ Contact Nos.	Smt. Meenakshi Mittal Agarwal, 9836209656
3.	Type of unit	<b>Multi level car Parking cum commercial development</b> Project comes under Building and construction projects having more than 20,000 sq.m built up area and having wastewater generation 100 KLD and above
4.	Category	RED
5.	Capital Investment	29800.00 Lakhs
6.	Status of Environmental Clearance	Granted by SEIAA vide EC No. – EC22B038SK115854 dated 25/02/2022.
7.	Status of Consent	Granted by SPCB-Sikkim vide Ref. No. 1142/SPCB dated 24/02/2022. Consent valid till 31/03/2025.
8.	Source of water	PHE Department, GoS. Dedicated water supply work has been granted vide Memo no. PHE/4061/MTC/21-22/84 dated 16/10/2021.
9.	Land details	Plot no. 1440. Under the control of Secretary, Urban Development Department, Government of Sikkim LOA granted vide Memo no. 137/GSCDL/2020-21 dated 18/06/2021
10.	Size of the land	1.4 acres
11.	Waste water treatment system/Reuse	PHE Sewer Connection for labour camp. Permission has been granted by the department vide Memo no. 7123/Rev/Sew/PHED/7dated 08/11/2021. Provisions for Sewage Treatment Plant for the project have been included in the DPR.
12.	D.G Set (If available provide details) Spent oil/stack height/capacity/acoustic/non- acoustic Consent of D.G Set	82.5 kVA – 2nos. Acoustic. Consent has been granted vide Ref. No. 1415/SPCB dated 31/05/2022 Stack Height – 12 m from ground level
13.	Fire safety measures	Extinguishers available. Provisional NOC from Fire & Emergency Department

		has been issued vide Ref no. 338/POL/F&ES/2021/39 dated 26/08/2021
14.	Solid Waste Management System/Segregation of waste and its disposal	It was informed that the solid waste generated shall be collected by GMC. Payment challan verified. They have been instructed to practice proper segregation of waste generated. It was informed that scrap generated during construction shall be channelized to recyclers. They have been informed to utilised authorised vendors only.
15.	Construction & Demolition Waste Management	Work completion certificate for disposal of C&D waste has been provide by Shri Sangay Lama vide Ref. No. SL/MIPL30/2022-23 dated 30/04/2022.
16.	Third Party Environmental Monitoring	Conducted by M/s Envirotech East Pvt. Ltd. for the quarter March-May, 2023. Report has been submitted o the Board for record.
17.	Green belt development/Garden area	Not initiated.
18.	Rain water harvesting	Not available. Provisions have been included in the DPR.
19.	Safety gear	Provided to employees. Records maintained
<b>Other observations</b>		
<ol style="list-style-type: none"> <li>1. Consent for batching plant of capacity 18m<sup>3</sup>/hr has been granted vide Ref. No. 1399/SPCB dated 25/05/2022</li> <li>2. Wind breaking wall has been constructed to control fugitive dust that is generated from operation of the batching plant.</li> <li>3. As per the DPR the proposed project is for 14 storied structure whereas the Gangtok Municipal Corporation has sanctioned only 11 storied structure vide issue no. 3839/Misc/TPL/GMC/2021/979 dated 31/12/2021.</li> <li>4. It was informed that sanction plans for additional 3 floors have been obtained. Application to obtain EC for additional 3 floors has been submitted to Central Expert Appraisal Committee as the term for SEIAA members have expired.</li> <li>5. It was informed that Hazardous was has not been generated. The hazardous waste that shall be generated is used/spent oil from maintenance of DG set. They have been informed to ensure that application in SPCB-Sikkim OCMMS portal is submitted for authorization when generation of such waste has commenced.</li> <li>6. Photographs have been attached for information.</li> </ol>		

  
(Kunzang Z. Bhutia)  
SSO - SPCB

  
(Durga Pd. Sharma)  
LA - SPCB

  
(Shamir R. Gurung)  
JSA-SPCB



Fig. 1, 2 3 & 4 - View of progress in construction



//TRUE COPY//

STRE INSPECTIONS

07/07/23

- 1) Top floor evaluation may be done at that time on lot- 14 pt.
- 2) Utmost supervision on Met may be awarded. The program is, Suburban.
- 3) Program on Ramp is about 60%. This may be expedited while ensuring safety of the neighbourhood.
- 4) 40% program on external facade  
→ sum.

As directed by the govt the concerned shall deploy all means & method to complete the project on time for regular on the 31/12/23 as decided by the govt.

*Gayden Chapel*  
**Gayden Chapel**  
 CHIEF TOWN PLANNER  
 Gangtokh Municipal Corporation.

Mesaso Infrastructure Private Limited  
*Kanish*  
 Vice President

## ANNEXURE R-39



सत्यमेव जयते

**File No: 21/1/2023-IA.III**  
**Government of India**  
**Ministry of Environment, Forest and Climate Change**  
**IA Division**

\*\*\*



Dated 23/08/2023



To,

MESASO INFRASTRUCTURE PVT. LTD.  
 Vega Circle Mall, 3rd Floor, 3rd Mile, Sevoke Road, Siliguri , Siliguri, DARJEELING, WEST  
 BENGAL, , 734008  
 vpprojects@mesaso.in

**Subject:** Grant of EC under the provision of the EIA Notification 2006-regarding.

**Sir/Madam,**

This is in reference to your application for Grant of EC under the provision of the EIA Notification 2006-regarding in respect of project Proposed Vertical Expansion by 3 Floors of "WEST POINT" - Integrated Commercial cum MLCP Complex by Mesaso Infrastructure Pvt. Ltd. submitted to Ministry vide proposal number IA/SK/INFRA2/417703/2023 dated 25/04/2023.

2. The particulars of the proposal are as below :

<b>(i) Ec Identification No.</b>	EC23C3802SK5858756E
<b>(ii) File No.</b>	21/1/2023-IA.III
<b>(iii) Clearance Type</b>	Expansion EC
<b>(iv) Category</b>	B2
<b>(v) Project/Activity Included Schedule No.</b>	8(a) Building / Construction
<b>(vi) Sector</b>	INFRA-2
<b>(vii) Name of Project</b>	Proposed Vertical Expansion by 3 Floors of "WEST POINT" - Integrated Commercial cum MLCP Complex by Mesaso Infrastructure Pvt. Ltd.
<b>(viii) Name of Company/Organization</b>	MESASO INFRASTRUCTURE PVT. LTD.
<b>(ix) Location of Project (District, State)</b>	Gangtok, SIKKIM
<b>(x) Issuing Authority</b>	MoEF&CC
<b>(xi) EC Date</b>	23/08/2023
<b>(xii) Applicability of General Conditions</b>	no
<b>(xiii) Applicability of Specific Conditions</b>	no

This has reference to proposal no. IA/SK/INFRA2/417703/2023 for seeking environmental clearance for Proposed Vertical Expansion by 3 Floors of "WEST POINT" - Integrated Commercial cum MLCP Complex at

Old West Point School Area, Near M.G. Marg, Gangtok, East Sikkim by Mesaso Infrastructure Pvt. Ltd.

2. The project/activity is covered under category 'B' of item 8(a) 'Building and Construction projects' of the Schedule to the EIA Notification, 2006 and its subsequent amendments, and requires appraisal at the State level. However, due to the non-existence of SEIAA in Sikkim, the proposal required appraisal by sectoral EAC at central level.

3. Accordingly, the above-mentioned proposal for Environmental Clearance has been examined by the Expert Appraisal Committee (Infra-2) in its 104<sup>th</sup> meeting held on 11-12.05.2023 and 106<sup>th</sup> meeting held on 30.06.2023.

4. The details of the project, as per the application form, documents submitted by the project proponent, and also as informed during the aforesaid meeting of EAC, are provided below for reference:

i. The project is located at 27°19'47.24"N Latitude and 88°36'40.93"E Longitude.

ii. The project is an expansion project.

iii. PP has obtained EC from SEIAA, Sikkim vide EC Identification no. EC22B038SK115854 dated 25.02.2022, for 4G+7 storey after appraisal on 22<sup>nd</sup> February, 2022. Construction of 25,675 sqm out of 33801.25 sqm has been done as on date as per EC obtained.

iv. The total plot area is 5665.55 sqm, Total construction (Built-up) area of 33801.25 sqm. Maximum height of the building is 62 m. The mixed-use development building of configuration 4G+10, shall comprise of Parking for 448 car parks on the lower 4 floors, Mall with a multiplex (44 retail outlets + 3 anchor stores) & food court, a Boutique hotel having 60 keys (52 deluxe rooms + 8 suites).

v. During construction phase, total water requirement is expected to be 50 KLD which is met by Municipal supply. During the construction phase, soak pits and septic tanks are provided for disposal of waste water. Temporary sanitary toilets are provided during peak labor force.

vi. During operational phase, total water requirement of the project is expected to be 160 KLD and the same will be met by 108 KLD fresh water from Municipal supply and 52 KLD recycled water. Wastewater generated (120 KLD) will be treated in STP of total 120 KLD capacity. 102 KLD of treated wastewater will be recycled and re-used (52 KLD for flushing and rest 50 KLD for gardening, car washing, etc.). 0 KLD will be disposed in to municipal drain.

vii. About 670 kg/day solid wastes will be generated in the project. The biodegradable waste (335 kg/day) will be processed in OWC and the non-biodegradable waste generated (335 kg/day) will be handed over to authorized local vendor.

viii. The total power requirement during construction phase is 100 KVA and will be met from Power & Energy Department, Sikkim and total power requirement during operation phase is 2198 KW and will be met from Power & Energy Department, Sikkim.

ix. Provision for capturing rain water, tank of capacity of 240 KLD with retention time of 30 minutes shall be provided.

x. Parking facility for 448 four wheelers has been provided in the lower 4 floors of the MLCP cum Commercial complex.

xi. Proposed energy saving measures would save about 12.18% of power. The following energy saving measures shall be undertaken:

xii. Materials preferred for construction shall be environment friendly & have a low embodied energy. This will help in keeping the environment cleaner & greener.

xiii. The building made of prefabricated steel members with nominal use of concrete which is only used in wet cores and as deck slabs, reduces the consumption of water during construction. This method of construction also doesn't create air pollution during construction stages.

xiv. Proposed MEP System shall use state of the art technology. The target is to optimize minimum possible resources and optimize the system.

xv. LED & other appliances having higher BEE rating shall be used to reduce power consumption. Likewise, Low flow water sanitary fixtures shall be used to reduce water consumption. The aim is achieving GRIHA Gold rating.

xvi. A building management system has been proposed for resource optimization and efficiency in energy consumption.

xvii. Building services such as the HVAC system, pumping system would be centrally controlled. It is envisaged to provide a state-of-the-art Building Management System for the services of the Mall / Cinema / Hotel areas of Mixed Use Project at Gangtok.

xviii. Comparative analysis of existing / envision pollution load (in case of expansion / modernization)

xix. The current proposal is for vertical expansion of 3 floors above the 4G+7 Integrated Commercial cum MLCP complex. Environmental Clearance vide File No. : 214/E & SC and EC Identification no. EC22B038SK115854 dated 25.02.2022 and Consent to Establish vide Ref. No. 1142/SPCB dated 24.02.2022, has already been obtained for construction of the 4G+7 Integrated Commercial cum MLCP complex.

xx. Impact of proposed project/activity on Air, Water, Noise, Ecology and proposed mitigation measures (**Table -1** and **Table -2**).

xxi. Proposed project is not located in Critically Polluted area.

xxii. No NBWL Clearance is required

xxiii. No Forest Clearance is required for this project

xxiv. No court case is pending against this project

xxv. Green cover plan shall cover 30% of total areas of the proposed MLCP for beautification of the blank areas, creation of hanging garden in all the flyover falling within the Gangtok Municipal Areas (GMC). A total of 15,000 sqft of landscaped area including green terraces have been proposed.

xxvi. It is expected that around 4 years would be required for completion of the project.

xxvii. Total Cost of the project is Rs. 298.2 Crores.

xxviii. 250 construction workers have been employed during the construction phase. About 2500 people will get employment during operation phase of the project.

xxix. Benefits of the project: There will be employment of local people as service population, staff at the mall, auditoriums, restaurants, etc. This area will become one of the most prosperous commercial hub in the vicinity with world-class facilities. This will uplift the entire socio-economic profile of the area. Thus it is envisaged that this project will help the local population immensely.

5. The proposal was earlier appraised by the EAC in its 104<sup>th</sup> meeting held on 11-12 May, 2023 when it noted that a point of concern in this project was the presence of a swimming pool on the top floor of the expansion now proposed. In view of the fact that this site is located in the high-risk zone 4 of the earthquake vulnerability map of India, the EAC deferred the proposal and asked the PP to get the proposal technically examined by the Central Building Research Institute (CBRI), Roorkee.

6. Thereafter, PP requested through PARIVESH on 20.06.2023, the CBRI authorities have informed them that a minimum of 5-6 months' time would be required for reviewing, vetting the design, and providing their report. The project proponent further informed that the proposed project is being developed under PP mode with the lower 4 floors of the project dedicated to car parking among which 2 floors are dedicated exclusively for taxi parking. There was an existing old taxi stand at the site which has been temporarily shifted to another site. These two floors for taxi parking need to be completed and handed over to the Government of Sikkim / Smart City latest by December 2023, because of the acute shortage of parking space in Gangtok. The temporary site where the taxi parking has been rehabilitated needs to be vacated by December 2023. In view of this urgency, the project proponent requested EC to complete the project *without the swimming pool* and the permission to build the swimming pool may be granted later if the CBRI gives positive recommendations.

7. The proposal was appraised by the EAC in its 106<sup>th</sup> meeting held on 30.06.2023. The EAC, after detailed deliberations, found merit in the request of the PP to go ahead with the project without the roof-top swimming pool the addition of which can be considered at a later date after the issue is examined by the CBRI. The EAC further agreed that if the CBRI is unable to undertake this task early enough then the PP may get the issue of construction of roof-top swimming pool examined by some other institution of national repute having expertise in the construction of buildings in zones of high seismic activity.

8. The EAC, based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended granting environmental clearance to the project **without roof-top swimming pool** and subject to specific conditions stipulated in its 106<sup>th</sup> meeting and other Standard EC Conditions as specified by the Ministry vide OM dated 4<sup>th</sup> January, 2019 for the said project/activity, while considering for accord of environmental clearance.

9. Based on recommendations of EAC, the Ministry of Environment, Forest and Climate Change hereby accords Environmental Clearance for the 'Proposed Vertical Expansion by 3 Floors of "WEST POINT" - Integrated Commercial cum MLCP Complex at Old West Point School Area, Near M.G. Marg, Gangtok, East Sikkim by Mesaso Infrastructure Pvt. Ltd.', under the provisions of the EIA Notification, 2006 and amendments/circulars issued thereon, and subject to the specific and standard conditions (Annexure 1):

10. The Environmental Clearance is being granted to M/s Mesaso Infrastructure Pvt. Ltd' for proposed Vertical Expansion by 3 Floors of "WEST POINT" - Integrated Commercial cum MLCP Complex at Old West Point School Area, Near M.G. Marg, Gangtok, East Sikkim.

11. This issue with the approval of the Competent Authority.

**Annexure 1**

**Specific EC Conditions for (Building / Construction )**

**1. Specific Condition**

S. No	EC Conditions
1.1	The PP shall obtain the Fire safety certification from Fire Department and also height clearance from the Airports Authority of India and submit the same to the concerned Integrated Regional Office of the Ministry within six months of the issue of EC letter.
1.2	As proposed, 1 RWH tank with capacity of 240 KLD shall be provided by the PP for rain water harvesting after filtration. The local municipal regulations on rainwater harvesting should be followed. If local provisions are not available then adequate provision for storage and recharge should be made in accordance with the Ministry of Housing and Urban Affairs (erstwhile Ministry of Urban Development), Model Building Bye-laws, 2016.
1.3	The project proponents would commission a third-party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing, comparative bacteriological studies using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats.
1.4	The Environmental Clearance to the project is primarily under provisions of EIA Notification, 2006. The Project Proponent is under obligation to obtain approvals/clearances under any other Acts/Regulations or Statutes as applicable to the project.
1.5	As proposed, waste water shall be treated onsite in STP of 120 KLD capacity.
1.6	Fresh water requirement shall not exceed 160 KLD during the operational phase and the extraction of groundwater shall be subject to permission by the Central Ground Water Authority (CGWA).
1.7	Green cover plan shall cover 30% of total areas of the proposed MLCP for beautification of the blank areas, creation of hanging garden in all the flyover falling within the Gangtok Municipal Areas (GMC). A total of 15,000 sqft of landscaped area including green terraces have been proposed.
1.8	As committed, parking facility for 448 four wheelers is to be provided in the lower 4 floors of the MLCP cum Commercial complex.
1.9	The solid waste shall be duly segregated into biodegradable and non- biodegradable components and handled in separate areas earmarked for segregation of solid waste, as per SWM Rules, 2016.

S. No	EC Conditions
	As committed, biodegradable waste shall be utilized through the OWC to be installed within the site. Inert waste shall be disposed of as per norms at authorized sites. Recyclable waste shall be sold to authorized vendors/recyclers. Construction & Demolition (C&D) waste shall be segregated and managed as per C&D Waste Management Rules, 2016.
1.10	As committed, Proponent shall ensure installation of solar-based lighting and LEDs to meet 10 % of total power requirement.
1.11	Proponent is required to carry out 'compliance audit' of the building through NABL accredited Consultant once every year and an internal security drill as mandated under the Disaster Management Plan.

**Standard EC Conditions for (Building / Construction )**

**1 Statutory compliance**

S. No	EC Conditions
1.1	The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
1.2	The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc. as per National Building Code including protection measures from lightening etc.
1.3	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
1.4	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
1.5	The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
1.6	The project proponent shall obtain the necessary permission for drawl of ground water / surface water required for the project from the competent authority.
1.7	A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
1.8	All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.
1.9	The provisions of the Solid Waste Management Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste Management Rules, 2016, shall be followed.

S. No	EC Conditions
1.10	The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.

## 2 Air quality monitoring and preservation

S. No	EC Conditions
2.1	Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.
2.2	A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
2.3	The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5) covering upwind and downwind directions during the construction period.
2.4	Diesel power generating sets proposed as source of backup power 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 State Pollution Control Board.
2.5	Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3-meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
2.6	Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
2.7	Wet jet shall be provided for grinding and stone cutting.
2.8	Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
2.9	All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Management Rules 2016.
2.10	The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.
2.11	The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the

S. No	EC Conditions
	provisions of the Central Pollution Control Board (CPCB) norms.
2.12	For indoor air quality the ventilation provisions as per National Building Code of India.

### 3 Water quality monitoring and preservation

S. No	EC Conditions
3.1	The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water.
3.2	Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
3.3	Total fresh water use shall not exceed the proposed requirement as provided in the project details.
3.4	The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
3.5	A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
3.6	At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
3.7	Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
3.8	Use of water saving devices/fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
3.9	Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
3.10	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
3.11	The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge

S. No	EC Conditions
	pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.
3.12	A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.
3.13	All recharge should be limited to shallow aquifer.
3.14	No ground water shall be used during construction phase of the project.
3.15	Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering.
3.16	Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, no treated water shall be disposed in to municipal drain.
3.17	No sewage or untreated effluent water would be discharged through storm water drains.
3.18	Onsite sewage treatment of capacity of treating 100% waste water to be installed. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.
3.19	Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
3.20	Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.

#### 4 Noise monitoring and prevention

S. No	EC Conditions
4.1	Ambient noise levels shall conform to residential area/commercial area/industrial area/silence zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.
4.2	Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

S. No	EC Conditions
4.3	Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

#### 5 Energy Conservation measures

S. No	EC Conditions
5.1	Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.
5.2	Outdoor and common area lighting shall be LED.
5.3	Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.
5.4	Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning.
5.5	Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher.
5.6	Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.

#### 6 Waste Management

S. No	EC Conditions
6.1	A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project shall be obtained.
6.2	Disposal of muck during construction phase shall not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
6.3	Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.
6.4	Organic waste compost/Vermiculture pit/Organic Waste Converter within the premises with a

S. No	EC Conditions
	minimum capacity of 0.3 kg /person/day must be installed.
6.5	All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
6.6	Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
6.7	Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.
6.8	Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.
6.9	Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.
6.10	Used 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.

#### 7 Green Cover

S. No	EC Conditions
7.1	No tree can be felled/transplant unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concerned regulatory authority. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Plantations to be ensured species (cut) to species (planted).
7.2	Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.
7.3	Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

#### 8 Transport

S. No	EC Conditions
8.1	A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be

S. No	EC Conditions
	designed with these basic criteria. a. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic. b. Traffic calming measures. c. Proper design of entry and exit points. d. Parking norms as per local regulation.
8.2	Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.

9

S. No	EC Conditions
9.1	A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

**10 Human health issues**

S. No	EC Conditions
10.1	All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.
10.2	For indoor air quality the ventilation provisions as per National Building Code of India.
10.3	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
10.4	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
10.5	Occupational health surveillance of the workers shall be done on a regular basis.
10.6	A First Aid Room shall be provided in the project both during construction and operations of the project.

**11 Miscellaneous**

S. No	EC Conditions
11.1	The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.
11.2	ii. environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
11.3	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
11.4	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
11.5	The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest/wildlife norms/conditions. The company shall have defined system of reporting infringements/deviation/violation of the environmental/forest/wildlife norms/conditions and/or shareholders/stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
11.6	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
11.7	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report
11.8	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
11.9	The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
11.10	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
11.11	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report and also that during their presentation to the Expert Appraisal Committee.

S. No	EC Conditions
11.12	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change (MoEF&CC).
11.13	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
11.14	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
11.15	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
11.16	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
11.17	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
11.18	Any appeal against this EC 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.

Annexure 2

**Copy To**

1. The Secretary, Forest and Environment Department, Government of Sikkim, Forest Secretariat, Deorali -- 737102, Gangtok, East Sikkim.
2. The IGF(Central), Ministry of Environment, Forest and Climate Change, Integrated Regional Office, 1st Floor, IB-198, IB Block, Sector III, Bidhannagar, Kolkata, West Bengal 700106.
3. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 110 032.
4. The Member Secretary, State Pollution Control Board Sikkim, Forest Secretariat, C-Block, Deorali, Gangtok -- 737102, East Sikkim, India.
5. The Member Secretary, Central Ground Water Authority, A2, W-3 Curzon Road Barracks, K.G. Marg, New Delhi-110 001.
6. Guard File/ Record File / MoEF Website.

**Table - 1. Impact and proposed mitigation measures during construction**

<b>A</b>	<b>Work force</b>	Local labourers shall be employed.
<b>B</b>	<b>Facilities at site</b>	Provision of drinking water, waste water disposal and solid waste management has been provided for site office & labour restrooms. Water usage during construction & curing is optimized. Proper sanitation for site office & construction workers have been provided. Health and safety, of the workers has been ensured during construction.
<b>C</b>	<b>Steps to avoid disturbance</b>	DG sets have acoustic enclosures and conform to E (P) Rules. Ambient noise levels conform to local standards during day and night. Only limited necessary construction is done during night time. Excessive energy consumption and fuel usage is avoided.
<b>D</b>	<b>Selection of material</b>	Materials preferred for construction are environment friendly & have a low embodied energy. This helps in keeping the environment cleaner & greener. The building is made of prefabricated steel members with nominal use of concrete which is only used in wet cores and as deck slabs, to reduce the consumption of water during construction. This method of construction also doesn't create air pollution during construction stages. Proposed MEP System shall use state of the art technology. The target is to ptimiz minimum possible resources and ptimiza the system. LED & other appliances having higher BEE rating shall be used to reduce power consumption. Likewise, Low flow water sanitary fixtures shall be used to reduce water consumption. The aim is achieve GRIHA Gold rating. A building management system has been proposed for resource ptimization and efficiency in energy consumption. Building services such as the HVAC system, pumping system would be centrally controlled. It is envisaged to provide a state-of-the-art Building Management System for the services of the Mall/Cinema/Hotel areas of Mixed Use Project at Gangtok. Adequate open space, greenery will be provided as per rules.
<b>E</b>	<b>Concreting work</b>	Adequate screen wall has been provided to a height to control fugitive emission generated during construction. Using of Ready Mixed Concrete (RMC) further reduces fugitive emission.
<b>F</b>	<b>Dust</b>	Water sprinkling is done regularly in the material dumping area, to avoid spreading of dust. Screening wall is placed all around the project site to arrest fugitive dust from spreading out of the site.
<b>G</b>	<b>Debris</b>	Construction debris including bricks, gravel, rubbish, waste of plaster, concrete debris, metal tiles, etc. is used within the project site for land filling activities, road work, etc. The construction and

		demolition wastes are utilized as per the Construction and Demolition (C & D) Waste Management Rules, 2016. Other wastes like, pieces of steel, cement bags, waste paper and cardboard packing material are sold off to recyclers.
<b>I</b>	<b>Dumping of material</b>	The construction materials are not dumped in public roads around the property.
<b>J</b>	<b>Construction equipment</b>	Vehicles / equipment deployed during construction are in good condition, properly maintained and conform to applicable air / noise emission standards & (PUC) norms. Underneath of the vehicles are regularly washed & cleaned before leaving the site, to avoid spillage outside the site.  The contractor will remove all construction equipment and scrap materials from the site on completion of construction activity.
<b>K</b>	<b>Water Accumulation</b>	No water accumulation is allowed in the construction site. Proper disposal system is made to prevent stagnation of water.
<b>L</b>	<b>Others</b>	Construction conforms to the sanction plan by the concerned authority and requirement of local seismic regulations. All statutory / necessary permission will be obtained prior to & post construction. Fire-fighting systems will be designed in compliance with the local authority.  Construction site is disinfected periodically.  Walking platforms at height are of sound construction and provided with safety rails or belts.

**Table – 2. Impact and proposed mitigation measures during Operation**

<b>A</b>	<b>Water Supply</b>	Total 108 KLD of fresh water will be required which will be supplied by Tankers / Municipal Authorities. Groundwater will not be abstracted.
<b>B</b>	<b>Storm water Management</b>	Adequate in-house drainage network has been designed for the project without disturbing the surrounding areas.  Heat island effect has been minimized by use of shading and reducing hard surfaces viz. roads, paving etc.
<b>C</b>	<b>Rain Water Harvesting</b>	Rain water Harvesting plan has been formulated.  Adequate fire fighting storage tank has been provided as per norms.
<b>D</b>	<b>Plantation / Landscaping</b>	Green belt development programme shall be taken up once the construction work is completed.
<b>E</b>	<b>Waste water Management</b>	The treated wastewater from STP shall be reused for flushing, landscaping & car washing purposes. A Centralized STP plant of

		120 KL capacity has been proposed. Balance treated wastewater shall be disposed off into the Municipal sewer network.
<b>F</b>	<b>Solid waste Management</b>	Solid waste during operational phase in general will be of domestic nature. Garbage will be segregated at source for biodegradable, inorganic recyclables and inorganic inert material during operational phase (670 kg/day). Total MSW will be stored at a place within the site. Organic component will be managed in house by installing mechanical composter, inorganic recyclables will be sold to vendors and inorganic inert material will be stored at a place within the site. From there it be collected, transported, treated and disposed off by local authority as per Rules.
<b>H</b>	<b>Hazardous Waste Management</b>	Spent Oil from DG sets will be carefully stored in HDPE drums in isolated covered facility and disposed as per the guidance of competent authority. Suitable care will be taken so that spills/leaks of spent oil from storage could be avoided.
<b>I</b>	<b>Emission from Diesel Generator</b>	DG sets will be provided with acoustic enclosures as per CPCB norms. The stack height and emissions from D.G. sets will conform to CPCB norms.
<b>H</b>	<b>Energy Efficiency</b>	The lighting design, heating, ventilation and air conditioning systems will conform to the ECBC recommendations. Use of energy efficient electrical systems will be promoted. High efficiency lamps, etc. will be used. Energy efficient Motors and properly rated Transformers will be installed.

Signature Not Verified

Digitally Signed by: Mr Ashish Kumar  
Member Secretary, MoEFCC (EC)

Date: 23/08/2023

-TRUE COPY-

## ANNEXURE R/2

रजिस्ट्री सं. डी.एल.- 33004/99

REGD. No. D. L.-33004/99

  
**भारत का राजपत्र**  
**The Gazette of India**

सी.जी.-डी.एल.-अ.-25082023-248339

CG-DL-E-25082023-248339

असाधारण

EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (ii)

PART II—Section 3—Sub-section (ii)

प्राधिकार से प्रकाशित

PUBLISHED BY AUTHORITY

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नई दिल्ली, शुक्रवार, अगस्त 25, 2023/भाद्र 3, 1945

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पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय

अधिसूचना

नई दिल्ली, 25 अगस्त, 2023

**का.आ. 3804(अ).**—केन्द्रीय सरकार, पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की धारा 3 की उपधारा (3) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए और भारत सरकार के तत्कालीन पर्यावरण और वन मंत्रालय की अधिसूचना संख्यांक का.आ. 1533(अ), तारीख 14 सितंबर, 2006 (जिसे इसमें इसके पश्चात् उक्त अधिसूचना कहा गया है) के अनुसरण में राज्य स्तरीय पर्यावरण प्रभाव मूल्यांकन प्राधिकरण सिक्किम (जिसे इसमें इसके पश्चात् प्राधिकरण कहा गया है) का गठन करती है, जिसमें निम्नलिखित सदस्य होंगे, अर्थात् :-

- (i) श्री बी.एस. सिक्कल, अध्यक्ष;  
मुख्य वन संरक्षक (सेवानिवृत्त),  
वन और पर्यावरण विभाग,  
सिक्किम सरकार,  
6वां मील, टडांग, गंगटोक,  
महिन्द्रा एंड महिन्द्रा शोरूम के पास,  
रानीपूल पीएस, गंगटोक – 737102, सिक्किम।
- (ii) डॉ. लक्ष्मण शर्मा, सदस्य;

- प्रचार्य और प्रमुख,  
उद्यान कृषि विभाग,  
सिक्किम विश्वविद्यालय,  
गंगटोक – 737102, सिक्किम ।
- (iii) मुख्य वन संरक्षक, सदस्य-सचिव।  
(पर्यावरण एवं मृदा संरक्षण),  
वन और पर्यावरण विभाग,  
सिक्किम सरकार, वन सचिवालय,  
देवराली, गंगटोक – 737102, सिक्किम ।
2. प्राधिकरण के अध्यक्ष और सदस्य इस अधिसूचना के राजपत्र में प्रकाशन की तारीख से तीन वर्ष की अवधि के लिए पद धारण करेंगे ।
3. प्राधिकरण, उक्त अधिसूचना में यथाविनिर्दिष्ट शक्तियों का प्रयोग करेगा और ऐसी प्रक्रियाओं का अनुसरण करेगा ।
4. प्राधिकरण, सिक्किम सरकार के लिए पैरा 5 के अधीन गठित राज्य स्तरीय विशेषज्ञ मूल्यांकन समिति की सिफारिशों के आधार पर अपने निर्णय देगा ।
5. केन्द्रीय सरकार, सिक्किम राज्य सरकार से परामर्श करके, प्राधिकरण की सहायता के प्रयोजन के लिए, राज्य स्तरीय विशेषज्ञ मूल्यांकन समिति (जिसे इसमें इसके पश्चात् समिति कहा गया है) का गठन करती है, जिसमें निम्नलिखित सदस्य होंगे, अर्थात्:--
- (i) श्री जे.बी. सुब्बा, -अध्यक्ष;  
एच. नं. –गंग/016/एल/2(1) मनवीर कॉलोनी,  
इंदिरा बाईपास रोड, लोअर बुरटुक,  
गंगटोक – 737101, सिक्किम ।
- (ii) श्री बी.के. छेत्री, सदस्य;  
मुख्य वैज्ञानिक अधिकारी,  
राज्य प्रदूषण नियंत्रण बोर्ड,  
सिक्किम, वन सचिवालय,  
देवराली, गंगटोक – 737102, सिक्किम ।
- (iii) श्री एम.के. प्रधान, सदस्य;  
मुख्य अप्रिशनर अधिकारी (सेवानिवृत्त)  
सिक्किम सरकार,  
बार पीपल एरिया, सिन्चे  
पूर्वी सिक्किम – 737101 ।
- (iv) श्री डी.जी. श्रेष्ठ, सदस्य;  
प्रधान निदेशक,  
विज्ञान, प्रौद्योगिकी और जलवायु परिवर्तन विभाग,  
विज्ञान भवन,  
देवराली, गंगटोक – 737102, सिक्किम ।
- (v) गनेश चंद्र खनाल, सदस्य;  
बहाई स्कूल रोड, टडांग,  
गंगटोक सिक्किम – 737102 ।
- (vi) वन संरक्षक या निदेशक या अपर निदेशक, सदस्य-सचिव।  
(पर्यावरण और मृदा संरक्षण),  
वन और पर्यावरण विभाग,

सिक्किम सरकार, वन सचिवालय,  
देवराली, गंगटोक – 737102, सिक्किम।

6. समिति के अध्यक्ष और सदस्य, राजपत्र में इस अधिसूचना के प्रकाशन की तारीख से तीन वर्ष की अवधि के लिए पदधारण करेंगे।
7. हितों के किसी विरोध से बचने के लिए,-
- (i) प्राधिकरण और समिति के अध्यक्ष और सदस्य—
- (क) घोषणा करेंगे कि वे किस परामर्शी संगठन से सहयुक्त हैं और किस परियोजना प्रस्तावकों के साथ जुड़े हुए हैं;
- (ख) परियोजना के लिए पर्यावरण प्रभाव मूल्यांकन और पर्यावरण प्रबंधन योजना की तैयारी से संबंधित कोई परामर्श या सहयोग नहीं लेगा, जो प्राधिकरण द्वारा विनिश्चित किया जाने वाला है या उनके कार्यकाल के दौरान समिति द्वारा मूल्यांकित किया जाने वाला है; और
- (ii) यदि पूर्ववर्ती पांच वर्षों में, समिति के अध्यक्ष या किसी सदस्य ने परामर्शी सेवाएं प्रदान की हैं या किसी परियोजना प्रस्तावक के लिए पर्यावरण प्रभाव मूल्यांकन अध्ययन संचालित किया है उस स्थिति में, वे ऐसे प्रस्तावकों द्वारा प्रस्तावित किसी परियोजना के मूल्यांकन की प्रक्रिया से समिति की बैठकों से स्वयं को अलग कर लेंगे।
8. समिति, उक्त अधिसूचना में यथाविनिर्दिष्ट शक्तियों का प्रयोग करेगी और प्रक्रियाओं का अनुकरण करेगी।
9. समिति, सामूहिक उत्तरदायित्व के सिद्धांत पर कार्य करेगी और अध्यक्ष प्रत्येक मामले में एकमत होने का प्रयास करेगा और यदि एकमत नहीं हो सकता तो बहुमत का विचार अभिभावी होगा।
10. (1) सिक्किम राज्य सरकार, प्राधिकरण और समिति के सचिवालय के रूप में कार्य करने वाले अभिकरण को विनिर्दिष्ट करेगी।
- (2) सचिवालय वित्तीय और संचारिक सहायता, जिसके अंतर्गत वास-सुविधा, परिवहन भी है और उक्त अधिसूचना के अधीन उनके कृत्यों के बावत ऐसी अन्य सुविधाएं प्रदान करेगा।
11. प्राधिकरण और समिति के अध्यक्ष और सदस्यों को बैठक फीस, यात्रा भत्ता और मंहगाई भत्ता सिक्किम राज्य सरकार के तत्समय प्रवृत्त सुसंगत उपबंधों के अनुसार संदत्त किए जाएंगे।

[फा.सं. आईए3-13/3/2023-आईए.III]

डॉ. सुजीत कुमार बाजपेयी, संयुक्त सचिव

**MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE**

**NOTIFICATION**

New Delhi, the 25th August, 2023

**S.O. 3804(E).**—In exercise of the powers conferred by sub-section (3) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) and in pursuance of the notification of the Government of India in the *erstwhile* Ministry of Environment and Forests, number S.O. 1533(E), dated the 14<sup>th</sup> September, 2006 (hereinafter referred to as the said notification), the Central Government, hereby constitutes the State Level Environment Impact Assessment Authority for Sikkim (hereinafter referred to as the Authority) comprising of the following persons, namely: -

- (i) Shri B.S. Siktel, -Chairman;  
Chief Conservator of Forest (Retd.),  
Forest and Environment Department, Government of Sikkim,  
6th Mile, Tadong, Gangtok,  
Near Mahindra & Mahindra Showroom, Ranipool PS, Gangtok-  
737102, Sikkim.
- (ii) Dr. Laxuman Sharma, -Member;  
Professor and Head,  
Department of Horticulture,

- Sikkim University, Gangtok-737102,  
Sikkim.
- (iii). Chief Conservator of Forest (Environment & Soil Conservation),  
Forest and Environment Department,  
Government of Sikkim, Forest Secretariat, Deorali, Gangtok-737102,  
Sikkim. -Member-Secretary.
2. The Chairman and Members of the Authority shall hold office for a period of three years from the date of publication of this notification in the Official Gazette.
3. The Authority shall exercise such powers and follow such procedures as specified in the said notification.
4. The Authority shall take its decision on the recommendations of the State Level Expert Appraisal Committee constituted under paragraph 5 for the State of Sikkim.
5. The Central Government, in consultation with the State Government of Sikkim, for the purpose of assisting the Authority, hereby constitutes the State Level Expert Appraisal Committee (hereinafter referred to as the Committee), comprising of the following persons, namely: -
- (i). Shri. J.B Subba, -Chairman;  
H.No-Gtk/016/L/2 (1), Manbir Colony,  
Indira Bypass Road, Lower Burtuk, Gangtok-737101, Sikkim
- (ii). Shri. B.K Chettri -Member;  
Chief Scientific Officer,  
State Pollution Control Board,  
Sikkim, Forest Secretariat,  
Deorali, Gangtok -737102, Sikkim.
- (iii). Shri M.K Pradhan, -Member;  
Chief Fire Officer (Retd.),  
Government of Sikkim,  
Bar Pipal Area, Sichey,  
East Sikkim-737101.
- (iv). Shri D.G Shrestha, -Member;  
Principal Director,  
Department of Science, Technology and Climate Change,  
Vigyan Bhawan,  
Deorali, Gangtok -737102, Sikkim.
- (v). Ganesh Chandra Khanal -Member;  
Bahai School Road, Tadong, Gangtok,  
Sikkim-737102
- (vi). Conservator of Forest or Director or Additional Director, -Member-Secretary.  
(Environment and Soil Conservation),  
Forest and Environment Department,  
Government of Sikkim, Forest Secretariat, Deorali, Gangtok-737102,  
Sikkim.
6. The Chairman and Members of the Committee, shall hold office for a period of three years from the date of publication of this notification in the Official Gazette.
7. In order to avoid any conflict of interest,-
- (i) the Chairman and Members of the Authority, and the Committee shall-
- (a) declare to which consulting organisation they have been associated with and also the project proponents;
- (b) not undertake any consultation or associate with regard to preparation of Environment Impact Assessment and Environment Management Plan for project, which is to be decided by the Authority, or to be appraised by the Committee during their tenure; and
- (ii) if in the preceding five years, the Chairman or any Member of the Committee has provided consultancy services or conducted Environment Impact Assessment studies for any project proponent, in that situation they shall recuse themselves from the meetings of the Committee from the process of appraisal of any project proposed by such proponents.
8. The Committee shall exercise such powers and follow such procedures as specified in the said notification.

9. The Committee shall function on the principle of collective responsibility and the Chairman shall endeavour to reach consensus in each case, and if they fail to reach consensus, the view of the majority shall prevail.

10. (1) The State Government of Sikkim shall specify an agency to act as secretariat of the Authority and the Committee.

(2) The secretariat shall provide financial and logistic support including accommodation, transportation and such other facilities in respect of their functions under the said notification.

11. The sitting fee, travelling allowances and dearness allowances to the Chairman and Members of the Authority and the Committee, shall be paid in accordance with the provisions of relevant rules for the time being in force of the State Government of Sikkim.

[F. No. IA3-13/3/2023-IA.III]

Dr. SUJIT KUMAR BAJPAYEE, Jt. Secy.

## ANNEXURE R-8

IN THE SUPREME COURT OF INDIA  
 CIVIL APPELLATE JURISDICTION  
 CIVIL APPEAL NO. \_\_\_\_\_ OF 2023  
 (@ Diary No. 32544/2022)

BINA BASNETT

APPELLANT(S)

VERSUS

STATE OF SIKKIM &amp; ORS.

RESPONDENT(S)

**O R D E R**

Delay condoned.

This appeal impugns the order dated 10.05.2022 passed by the National Green Tribunal (NGT), Eastern Zone Bench, Kolkata. Paragraph 5 of the impugned order states that the proceedings initiated before the NGT were premature, as the construction, subject matter of the proceedings, had not yet reached 5½ storeys. We do not agree with the said finding and reason to dismiss the petition, as the construction post the permissions had admittedly commenced. It is informed at the bar that the construction is now complete.

Without expressing any opinion on the merits of the case, we set aside the impugned order and restore O.A. no. 38/2022/EZ to its original position, to be decided afresh without being influenced by

Signature Not Verified  
 Digitally signed by  
 Deepak Gupta  
 Date: 2023.03.26  
 17:53:44 IST  
 Reason:

Impugned order.

Learned counsel for the respondents have submitted that there has been a considerable delay in listing of the present appeal on

account of lapses on the part of the appellant - Bina Basnett. This is disputed by the appellant - Bina Basnett, who also submits that the plea is contradictory. We express no opinion in this regard. As an order of remand, hearing and decision is being passed, all pleas and contentions of the parties are left open.

The appeal is allowed and disposed of in the above terms. No costs. Parties will appear before the NGT on 18.10.2023, when a date of hearing will be fixed.

Pending application(s), if any, shall stand disposed of.

.....J.  
(SANJIV KHANNA)

.....J.  
(S.V.N. BHATTI)

NEW DELHI;  
SEPTEMBER 25, 2023.

ITEM NO.61

COURT NO.3

SECTION XVII

S U P R E M E C O U R T O F I N D I A  
R E C O R D O F P R O C E E D I N G S

CIVIL APPEAL Diary No. 32544/2022

(Arising out of impugned final judgment and order dated 10-05-2022 in OA No. 38/2022 passed by the National Green Tribunal, Eastern Zone Bench, Kolkata)

BINA BASNETT

Petitioner(s)

VERSUS

STATE OF SIKKIM &amp; ORS.

Respondent(s)

(IA No.171217/2023-CONDONATION OF DELAY IN FILING and IA No.171216/2023-STAY APPLICATION and IA No.171219/2023-CONDONATION OF DELAY IN REFILING / CURING THE DEFECTS)

Date : 25-09-2023 This matter was called on for hearing today.

CORAM :

HON'BLE MR. JUSTICE SANJIV KHANNA  
HON'BLE MR. JUSTICE S.V.N. BHATTI

For Petitioner(s)

Mr. Sukumar Pattjoshi, Sr. Adv.  
Mr. Prakash Kumar, Adv.  
Mr. Pratap Shanker, Adv.  
Mr. Rahul Ranjan Singh, Adv.  
Mr. Ankit Kumar, Adv.  
Mr. Manoj Bhardwaj, Adv.  
Mr. Swetank Shantanu, AOR

For Respondent(s)

Mr. Basava Prabhu S. Patil, Sr. Adv./AG  
Mr. Sameer Abhyankar, Adv./AOR  
Ms. Nishi Sangtani, Adv.  
Ms. Vani Vandana Chhetri, Adv.  
Mr. Naman Jain, Adv.

Mr. Pinaki Misra, Sr. Adv.  
Mr. Sanjay Upadhyay, Adv.  
Ms. Mayuri Raghuvanshi, AOR  
Ms. Mansi Bachani, Adv.  
Ms. Sonali Sen Gupta, Adv.  
Mr. Kazi Sangay Thupdan, Adv.  
Mr. Soumitra Jaswal, Adv.  
Mr. Vyom Raghuvanshi, Adv.

Mr. Balbir Singh, ASG

Mr. Shyam Gopal, Adv./AOR

UPON hearing the counsel the Court made the following  
O R D E R

Delay condoned.

The appeal is allowed and disposed of in terms of the signed  
order.

Pending application(s), if any, shall stand disposed of.

(DEEPAK GUGLANI)  
AR-cum-PS

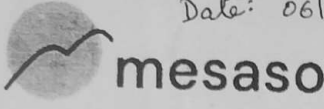
(R.S. NARAYANAN)  
ASSISTANT REGISTRAR

(signed order is placed on the file)

-TRUE COPY-

ANNEXURE R/11

DYN0: 579/CCF/HQ  
Date: 06/10/23



*1. S (SEIAA) / CF (E&CC)*  
*second and*  
*average field +*  
*to kisetab*  
Date: 6<sup>th</sup> October, 2023  
*and*  
*07/10/23*

To  
The CCF cum Member Secretary,  
State Level Environment Impact Assessment Authority (SEIAA), Sikkim  
Forest, Environment & Wildlife Management Department  
Govt. of Sikkim  
Deorali, Gangtok - 737102

**Sub: Copy of Environmental Clearance from MoEF&CC for vertical expansion by 3 floors above the 4G+7 storied "WEST POINT" - Integrated Commercial cum MLCP Complex at Old West Point School Area, Near M. G. Marg, Gangtok, East Sikkim by M/s. Mesaso Infrastructure Pvt. Ltd.**

Dear Sir,

Please find attached herewith a copy of the Environmental Clearance dated 23.08.2023 obtained from Ministry of Environment, Forest and Climate Change (MoEF&CC), Govt. of India, for vertical expansion by 3 floors above the 4G+7 storied for which EC was already granted, thus making the total configuration as 4G+10 stories.

We hope these would solve your purpose.

Thanking you,

Yours faithfully,  
For **M/s Mesaso Infrastructure Pvt. Ltd.**

MESASO Infrastructure Private Limited  
*Meenakshi*  
Director

Meenakshi Mittal  
(Director)

Encl : As above

*check (Supporting staff SEIAA/SEAC)*  
*Put up in concerned file pl.*  
*07-10-2023*

MESASO Infrastructure Private Limited, 3rd Floor, Vega Circle Mall, 3rd Mile, Sevoke

-TRUE COPY-

## ANNEXURE R-34



Email: spcbsikkim@gmail.com  
Phone no – 03592-281913



**STATE POLLUTION CONTROL BOARD- SIKKIM**  
**FOREST & ENVIRONMENT DEPARTMENT**  
**GOVERNMENT OF SIKKIM**  
**DEORALI, GANGTOK – 737102**

Ref. No. 1097/SPCB 2023

Date: 17/10/2023

To,

The Vice President (Project),  
M/s MESASO Infrastructure Pvt. Ltd.,  
Old West Point School, Near M.G. Marg,  
Gangtok, Gangtok District, Sikkim-737101.

**Sub: Provisional Consent to Establish.**

In consideration of your letter no. nil dated 29/08/2023 and on the basis of Environmental Clearance granted by Ministry of Environment, Forest & Climate Change, Government of India vide F. no. 21/1/2023-IA.II dated 23/08/2023 bearing EC no. EC23C3802SK5858756E. the State Pollution Control Board – Sikkim, hereby grants you Consent to Establish fourteen (4G+7+3) storeyed Integrated Commercial cum Multi Level Car Parking Complex in Gangtok, Gangtok District on **provisional basis only** under the provisions of **Section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and Section 21 of the Air (Prevention & Control of Pollution) Act, 1981** subject to the following conditions:

1. That, this consent is meant for specific purpose only and any alteration in the project shall require prior permission from the Board;
2. That, you shall have facilities to prevent and control water, air & noise pollution in the project area as per the conditions specified in relevant Acts;
3. That, you shall strictly adhere/comply to the conditions stated in the Environmental Clearance granted by SEIAA bearing EC no. EC22B038SK11585 issued vide F. No. 214E&SC dated 25/02/2022;
4. That, you shall strictly adhere/comply to the conditions stated in the Environmental Clearance granted by MoEF&CC bearing EC no. EC23C3802SK5858756E issued vide F. no. 21/1/2023-IA.II dated 23/08/2023;
5. That, you shall ensure that vertical expansion of 3 storeys shall not include swimming pool as specified in the Environmental Clearance granted by the MoEF&CC. Technical examination by Institutes of national repute such as Central Building Research Institute, Roorkee is mandatory;
6. That, you shall obtain Consent to Operate prior to operation of your project after compliance of all the stipulated conditions in the Consent to Establish;
7. That, you shall construct temporary labour camp duly providing proper sanitation & solid waste management facility within the premises in accordance to the **Solid Waste Management Rules, 2016**;



8. That, you shall carry out third party environmental monitoring from a registered NABL accredited and MoEF&CC registered consultants and submit Report to SPCB-Sikkim on a quarterly basis;
9. That, you shall carry out the dismantling/demolition and construction work without causing any environmental pollution duly installing pollution control measures such as suppression of dust/fugitive emission , noise controlling measures in the premises by erecting barriers & limiting work during day time only and proper management of demolition waste within the premises, further, that any such dismantling/demolition shall ensure foundational security of the area in question;
10. That, all forms of Construction and Demolition waste shall be managed and disposed off in accordance with the provisions of the Construction & Demolition Waste Rules, 2016;
11. That, you shall ensure the general waste generated by your unit shall be collected & disposed off in accordance with **Solid Waste Management Rules, 2016** and **Plastic Waste Management Rules, 2016**;
12. That, you shall ensure the scrap generated by your unit shall be disposed off through authorized vendor only;
13. That, you shall obtain authorization from the SPCB-Sikkim through the OCMMS portal for handling Bio Medical Waste generated during construction of your project without fail;
14. That, you shall obtain authorization from the SPCB-Sikkim through the OCMMS portal for handling Hazardous Waste generated during construction of your project without fail;
15. That, you shall ensure compliance to the provisions of the **Hazardous Chemicals Rules, 1989** for safe storage and management of fuel & other flammable materials;
16. That you shall provide Personal Protective Equipment to the employees to avoid any health hazard;
17. That, you shall prepare an Emergency Response Procedure/Protocol (ERP) and submit a copy of the same to the Board and you shall ensure compliance to the ERP for incidents such as fire, flood, landslides, earthquakes and accidents;
18. That, you shall conduct regular mock drill as per the specifications of the ERP;
19. That, you shall establish and operate the Sewage Treatment Plant (120 KLD) to treat sewage/waste generated from operation of various ancillary units of the building project adhering to the standards prescribed under the Environment (Protection) Act, 1986 and Rules made there under from time to time, whichever is stringent;
20. That, provisions for Ambient Air Quality Monitoring System shall be in place before commissioning of the project;
21. That, you shall develop green belt within your premises;
22. That, you shall abide by all the conditions given by the Board from time to time;
23. That, this consent is valid subject to obtaining other required permission/licenses/clearances wherever required;
24. That, the Board reserves the right to cancel and withdraw the consent in the event of any environmental problems arising out of your project;
25. That, the application no. 402402 dated 12/09/2023 submitted in the SPCB-Sikkim OCMMS portal is faulty and requires submission of clarification & requisite documents within 15(fifteen) days of issue of this consent.



(Dr. Gopal Pradhan)  
Member Secretary,  
State Pollution Control Board-Sikkim.

Dr Gopal Pradhan  
Member Secretary  
State Pollution Control Board  
Forest & Environment Deptt.  
Govt of Sikkim

-TRUE COPY-

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ANNEXURE R-42

**OFFICE OF THE ASSISTANT ENGINEER  
PUBLIC HEALTH ENGINEERING DEPARTMENT  
SEWERAGE SUB-DIVISION  
GOVERNMENT OF SIKKIM  
GANGTOK**

NO : Sew/Rev/9tk/101

Dated Gangtok the : 05.../12...2023

**CLEARANCE CERTIFICATE**

This is to certify that Mr./Mrs./Miss. Mesaso Infrastructure Pvt. Ltd. of the address Old west point School Area Gangtok has/~~has~~ ~~not~~ connected the sewer line of his premises to the Government sewer system and cleared all the dues / ~~no dues~~ on account of sewer connection up to 30th Day of month Nov' 2023

Therefore, Department has no objection for the issuance of occupancy certificate & other official purpose.

Consumer ID number S.W./P5/80A

Bank Receipt for NOC Fee, amounting Rs. 60/-

Vide B R No. 11001-43729 / 05 / 12 / 2023

Note : This NOC is valid for a period of six month only from the date of issue.

**Assistant Engineer (Sewerage)**  
for **WS & PHE Department**  
**Government of Sikkim**  
W.S. & P.H.E. Deptt.  
Gangtok  
Govt. of Sikkim  
Gangtok

-TRUE COPY-

**Quarterly Compliance Report of Environmental Clearance for Proposed Development of  
"WEST POINT" - Integrated Commercial cum MLCP Complex at Old West Point School Area,  
Near M.G. Marg, Gangtok, East Sikkim by MESASO INFRASTRUCTURE PVT. LTD.**

**ANNEXURE R-40**

1. **File No.** : 214/E &SC
2. **EC Identification no. with date** : EC22B038SK115854 dated 25.02.2022
3. **Category** : B2
4. **Project / Activity including Schedule No.** : 8(a) Building and Construction projects
5. **Name of the Project** : Proposed Development of "WEST POINT" - Integrated Commercial cum MLCP Complex at Old West Point School Area, Near M.G. Marg, Gangtok, East Sikkim
6. **Name of Company / Organization** : MESASO Infrastructure Pvt. Ltd.
7. **Consent to Establish** : Ref. No. 1142/SPCB dated 24.02.2022
8. **Period of Compliance Report** : 7<sup>th</sup> Quarter Ending September, 2023 to November, 2023

Our project, "Development of "WEST POINT" - Integrated Commercial cum MLCP Complex at Old West Point School Area, Near M.G. Marg, Gangtok, East Sikkim" was granted Environmental Clearance (EC) vide EC Identification no. EC22B038SK115854 dated 25.02.2022 by State Environment Impact Assessment Authority (SEIAA), Sikkim for construction of 4G+7 storeys. According to conditions given in the EC, we are required to submit Quarterly Compliance Status Report (QCR) of the project.

Consent to Establish (NOC) was obtained from State Pollution Control Board, Sikkim, vide Ref. No. 1142/SPCB dated 24.02.2022.

After obtaining sanction plan for 4G+10 storeys, application was made for obtaining EC for the additional 3 floors at State level on 21<sup>st</sup> October, 2022 for appraisal.

A letter vide Ref. No. 47/E&SC/Circle dated 23<sup>rd</sup> November, 2022 was received by the project proponent from Office of the Chief Conservator of Forest (HQ), Forest and Environment Department, Government of Sikkim, stating that SEIAA / SEAC of the state of Sikkim is momentarily defunct due to completion of term.

Hence, it was suggested in the letter that application may be made directly to Central Expert Appraisal Committee (EAC) till SEAC & SEIAA are reconstituted for a fresh term in the state.

Accordingly, application was made to Expert Appraisal Committee (EAC) of MoEF&CC vide Proposal No. IA/SK/INFRA2/417703/2023.

Environment Clearance vide EC Identification no. EC23C3802SK5858756E dated 23.08.2023 was obtained for construction of the additional 3 floors from the Ministry of Environment, Forests and Climate Change (MoEF&CC).

Photographs of current construction status of the project have been presented below:

**Quarterly Compliance Report of Environmental Clearance for Proposed Development of  
"WEST POINT" - Integrated Commercial cum MLCP Complex at Old West Point School Area,  
Near M.G. Marg, Gangtok, East Sikkim by MESASO INFRASTRUCTURE PVT. LTD.**



**Quarterly Compliance Report of Environmental Clearance for Proposed Development of  
“WEST POINT” - Integrated Commercial cum MLCP Complex at Old West Point School Area,  
Near M.G. Marg, Gangtok, East Sikkim by MESASO INFRASTRUCTURE PVT. LTD.**



Sl. No.	Conditions	Compliance
i.	The official permissible height for building in Sikkim is 5 ½ for domestic and 7 for Commercial purpose as per the existing bye laws in Sikkim. However the Project Proponent has procured Certification from Mr. Majumdar of Jadavpur University for construction of 11 storeys building. The SEAC informed the PP to get this certification to be validated / vetted by Mines & Geology Department, Government of Sikkim.	Department of Mines & Geology, Government of Sikkim has validated the Certification procured from Mr. Majumdar of Jadavpur University for construction of 11 storeys building. The letter from Department of Mines & Geology, Government of Sikkim is attached as <b>Annexure - 1</b> .
ii.	Structural Engineers from GMC also have to be included in the project.	GMC Engineers are already a part of the project as they are involved in the drawing sanction of the proposal. Documents in this regard have been attached as <b>Annexure - 2</b> .
iii	Project Proponent has to follow the labour laws of Sikkim and engage local people.	Labour Laws of Sikkim are being followed and the company has employed local labours as far as possible and in special case, if field and technical manpower is not available then the company is hiring from outside the state and it has been registered with the

**Quarterly Compliance Report of Environmental Clearance for Proposed Development of  
“WEST POINT” - Integrated Commercial cum MLCP Complex at Old West Point School Area,  
Near M.G. Marg, Gangtok, East Sikkim by MESASO INFRASTRUCTURE PVT. LTD.**

		Labour Department of the state.  Copy of Work orders granted to the local contractors have been attached as <b>Annexure - 3.</b>
iv	Corporate Environment Responsibility to be taken up and Environment measures to be implemented in consultation with Environment sector of the Forest Department, Government of Sikkim.	Corporate Environment responsibility (CER) - 1.5% of the total project cost is admissible under the provision of F.No.22-65/2017-IA.III dated 1 <sup>st</sup> May, 2018 and its subsequent amendments.  Environment protection measures like regular water sprinkling to prevent dust emissions, construction of screen around the project site, using fit vehicles with proper PUC certificates, tyre washing, etc. have been implemented.
v	Parking / ventilation structure design to be submitted to SEIAA.	Attached as <b>Annexure - 4.</b>
vi	Disposal of sludge from STP to be specified till its end point.	STP Schematic Flow Diagram and Request Letter to Star Cement Pvt. Ltd. For utilization of the STP sludge cake as fuel in their cement plant is attached as <b>Annexure - 5.</b>
vii	Rain water harvesting plan, Composting & disposal plan to be submitted with specification till its end point.	Water Balance Diagram, Rain water harvesting plan, Composting & disposal plan, Letter from Khayerbari Tea Company Limited regarding buying of compost cakes have been attached as <b>Annexure - 6.</b>
viii	Dumping of extra excavated muck (unutilisable) should be done at pre identified and approved sites. No muck should be washed away during rainy seasons and cause choking of nallahs, jhoras or water bodies or damage the surrounding environment. Clearances from the concerned department(s) or agency(ies) to be taken for the dumping sites. Rehabilitation of such dumping sites may be done at the cost of PP by providing suitable structures for holding the muck and do plantation with suitable local species.	Complied and Being Complied. Construction wastes and muck is being dumped at designated place. Permission in this regard had been obtained from Government of Sikkim vide letter dated 25 <sup>th</sup> November, 2021.
ix	The number of storey of the proposed building should be restricted to 11 storeys only as per the approval of GMC.	Project Proponent, MESASO Infrastructure Pvt. Ltd., had applied for obtaining EC from SEIAA, Sikkim, for the construction of “WEST POINT” - integrated Commercial cum MLCP Complex of configuration 4G+10 storey.

**Quarterly Compliance Report of Environmental Clearance for Proposed Development of  
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		<p>At that time, sanction plan was available for 4G+7 storey. Hence, EC was also granted by SEIAA, Sikkim for G+7 storey.</p> <p>Now, sanction plan for constructing additional 3 floors above the 4G+7 stories has already been obtained. Accordingly, application was made to Central Expert Appraisal Committee (EAC) for obtaining EC for the additional 3 floors.</p> <p>Environment Clearance vide EC Identification no. EC23C3802SK5858756E dated 23.08.2023 has been obtained for construction of the additional 3 floors from the Ministry of Environment, Forests and Climate Change (MoEF&amp;CC). Copy attached as <b>Annexure - 7.</b></p> <p>No construction work for the additional 3 floors shall be initiated until and unless Consent to Establish is obtained for the additional 3 floors.</p>
x	All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Management Rules 2016.	<p>To be complied / being complied.</p> <p>There was an obsolete existing parking block at the site which was demolished. The land was handed over to MESASO Infrastructure Pvt. Ltd. for development in barren condition.</p> <p>All construction debris are being stored at a designated place within the site and not being dumped on the roads or open spaces outside, before they are properly reused for landfilling or disposed.</p> <p>All construction waste are being managed as per the provisions of the Construction and Demolition Waste Management Rules 2016.</p>
xi	The extra excavated muck / soil to be disposed at designated sites as stated at Sl.no.x above to avoid choking of drains and flooding.	<p>To be complied / being complied.</p> <p>The extra excavated muck / soil is stored at a designated place within the site and not being disposed into drains, nallahs, jhoras or any other water bodies to avoid choking of drains and flooding.</p>

**Quarterly Compliance Report of Environmental Clearance for Proposed Development of  
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Near M.G. Marg, Gangtok, East Sikkim by MESASO INFRASTRUCTURE PVT. LTD.**

		Construction wastes and muck is being dumped at designated place. Permission in this regard has been obtained from Government of Sikkim vide letter dated 25 <sup>th</sup> November, 2021.
xii	Utilisation of water from Rain water harvesting structure to be maximized to minimize the load on fresh water demand.	Being complied and water balance diagram has been attached as <b>Annexure - 6.</b>
xiii	Commitment letter to the effect that no damage is caused to the surrounding areas and habitation as per the stake holders meeting held on 13.11.2021 is insisted.	Being complied and copy of the letter has been attached as <b>Annexure - 8.</b>
xiv	Environment Management Plan further needs to be prepared to strengthen the existing EMP spell out in the instant proposal to ensure intensive mitigation measure to maintain overall ecological balance.	Being complied and Environment Management Plan (EMP) has been attached as <b>Annexure - 9.</b>
xv	Green Cover Plan needs to be covered 30% of the total areas of proposed MLCP for beautification of the blank areas, creation of hanging garden in all the flyover falling within the Gangtok Municipal Areas (GMC).	Being complied as per the plan and consent of the department. Vertical gardens, rooftop gardening and greening of blank areas for beautification of proposed MLCP and creation of hanging garden in all the flyover falling within the Gangtok Municipal Areas (GMC) shall be undertaken juxtaposing during the construction phase of the project to mitigate adverse impact on local surrounding environment.
xvi	Local labours to be employed as far as possible and train them also to get the desired output.	Labour Laws of Sikkim are being followed and the company has employed only local labours except skilled and proficient workers for the project.  Copy of Work orders granted to the local contractors have been attached as <b>Annexure - 3.</b>
xvii	Permission from State Pollution Control Board for E-waste, DG set and Hazardous waste to be obtained by the Project proponent.	Permission from State Pollution Control Board for E-waste and Hazardous waste shall be obtained. NOC for DG sets has been obtained from State Pollution Control Board, Sikkim vide Ref. No. 1415/SPCB/ dated 31.05.2022. The NOC Certificate has been attached as <b>Annexure - 10.</b>
xviii	Taxi Driver's Union / Association consent letter copy to be submitted.	Being complied and copy of the document has been attached as <b>Annexure - 11.</b>
xix	The environment safeguard measures to be monitored by the Multidisciplinary	Agreed.

**Quarterly Compliance Report of Environmental Clearance for Proposed Development of  
"WEST POINT" - Integrated Commercial cum MLCP Complex at Old West Point School Area,  
Near M.G. Marg, Gangtok, East Sikkim by MESASO INFRASTRUCTURE PVT. LTD.**

	committee to be constituted by Forest Department / Smart City / Project proponent.	
xx	The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc. as per National Building Code including protection measures from lightening etc.	Complied and Being complied. GMC construction order, Mines & Geology Department Report and Fire NOC has already been obtained. Copy of the NOC attached as <b>Annexure - 12.</b>
xxi	The provisions of the Solid Waste Management Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste Management Rules, 2016, shall be followed.	<p>Solid waste during construction phase mainly comprises of excavation earth, concrete debris with bits and pieces of steel, cement bags, waste paper and cardboard packing materials etc. Usable / recyclable materials are being sold off to waste recyclers. Unusable construction wastes are being dumped at a designated site.</p> <p>During the construction phase solid wastes of domestic origin are generated. Such wastes are being collected, transported and disposed off by local authority as per Rules.</p> <p>Solid waste during operational phase in general will be of domestic nature. Garbage will be segregated at source for biodegradable, in-organic recyclables and in-organic inert material during operational phase (664.4 kg/day). Total MSW will be stored at a place within the site. Organic component will be managed in house by installing mechanical composter, inorganic recyclables will be sold to vendors and inorganic inert material will be stored at a place within the site. From there it be collected, transported, treated and disposed off by local authority as per Rules.</p> <p>Negligible quantity of e-waste shall be generated during the operational phase of the project. Plastics Waste Management Rules, 2016, shall be followed during the operational phase of the project and necessary permission in this regard shall be obtained.</p>
xxii	Construction site shall be adequately	Complied and Being complied.

**Quarterly Compliance Report of Environmental Clearance for Proposed Development of  
“WEST POINT” - Integrated Commercial cum MLCP Complex at Old West Point School Area,  
Near M.G. Marg, Gangtok, East Sikkim by MESASO INFRASTRUCTURE PVT. LTD.**

	barricaded before the construction begins.	Screen of adequate height has been constructed all along the boundary of the site and the site has been adequately barricaded to ensure that the pollutants don't disperse into the surrounding areas.												
xxiii	Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.	Complied and Being Complied. Water sprinkling arrangements have been made at site and the loose soil is adequately sprinkled with water to suppress dust at regular intervals.												
xxiv	Total fresh water use shall not exceed the proposed requirement as provided in the project details.	To be complied. Total fresh water use will not exceed the requirement amount as provided in the project details. Water Balance Diagram has been attached as <b>Annexure - 6.</b>												
xxv	Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled / re-used for flushing, AC make up water and gardening. As proposed, no treated water shall be disposed in to municipal drain.	To be complied. The STP shall have tertiary treatment facility. The treated effluent from STP will be recycled for flushing, AC make up water and gardening purposes. Zero liquid discharge will be followed. No treated water will be disposed into the municipal drain. STP Schematic Flow Diagram has been attached as <b>Annexure - 5.</b> Water Balance Diagram has been attached as <b>Annexure - 6.</b>												
xxvi	No sewage or untreated effluent water would be discharged through storm water drains.	STP shall be installed for treatment of wastewater generated. Zero liquid discharge will be followed. No sewage or untreated effluent water will be discharged through storm water drains.												
xxvii	Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.	Being complied / to be complied The U-values of the roof, external wall and fenestration of the building will meet the requirements as specified in the Energy Conservation Building Code (ECBC). <table border="1"> <thead> <tr> <th>Component</th> <th>Material Used</th> <th>Permissible U-Value as per ECBC (W/m<sup>2</sup>.°C)</th> </tr> </thead> <tbody> <tr> <td>Roof</td> <td>Concrete</td> <td>0.04</td> </tr> <tr> <td>External Wall</td> <td>Brick</td> <td>0.07</td> </tr> <tr> <td>Fenestration</td> <td>Glass Facade</td> <td>3.3</td> </tr> </tbody> </table>	Component	Material Used	Permissible U-Value as per ECBC (W/m <sup>2</sup> .°C)	Roof	Concrete	0.04	External Wall	Brick	0.07	Fenestration	Glass Facade	3.3
Component	Material Used	Permissible U-Value as per ECBC (W/m <sup>2</sup> .°C)												
Roof	Concrete	0.04												
External Wall	Brick	0.07												
Fenestration	Glass Facade	3.3												
xxviii	Outdoor and common area lighting shall be LED.	To be complied.												
xxix	Separate wet and dry bins must be provided in each unit and at the ground	To be complied. Separate wet and dry bins will be												

**Quarterly Compliance Report of Environmental Clearance for Proposed Development of  
"WEST POINT" - Integrated Commercial cum MLCP Complex at Old West Point School Area,  
Near M.G. Marg, Gangtok, East Sikkim by MESASO INFRASTRUCTURE PVT. LTD.**

	level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.	provided in each unit and at the ground level for facilitating segregation of waste. Solid waste will be segregated into wet garbage and inert materials. Solid waste during operational phase in general will be of domestic nature. Garbage will be segregated at source for biodegradable, in-organic recyclables and in-organic inert material during operational phase. Total MSW will be stored at a place within the site. Organic component will be managed in house by installing mechanical composter, inorganic recyclables will be sold to vendors and inorganic inert material will be stored at a place within the site. From there it be collected, transported, treated and disposed off by local authority as per Rules.
xxx	Organic waste compost / Vermi-culture pit / Organic Waste Converter within the premises with a minimum capacity of 0.3 kg/person/day must be installed.	To be complied. Organic waste composter will be installed at site for treatment of the organic waste generated. Composting & disposal plan has been attached as <b>Annexure - 6.</b>
xxxii	Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.	Being complied. Construction waste does not contain any remarkable harmful substances that can cause health hazards. Therefore, possibility of any health hazard will be negligible. Other wastes like, pieces of steel, cement bags, waste paper and cardboard packing material will be sold off to recyclers.
xxxiii	Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.	Vehicles in good condition have been hired for bringing construction material to the site. Photographs of PUC certificates of the trucks carrying construction materials and wastes and tyre washing of the trucks before leaving the project site have been attached as <b>Annexure -13.</b>
xxxiiii	All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.	Complied and Being complied. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution have been provided with safety equipment like helmets and dust masks.

**Quarterly Compliance Report of Environmental Clearance for Proposed Development of  
"WEST POINT" - Integrated Commercial cum MLCP Complex at Old West Point School Area,  
Near M.G. Marg, Gangtok, East Sikkim by MESASO INFRASTRUCTURE PVT. LTD.**

xxxiv	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Being complied / to be complied. Most of the workers are from surrounding areas. Temporary arrangements were made at site for the housing of construction labour within the site with all necessary infrastructure and facilities. Now since the structure is complete the arrangement for the workers have been shifted within the building.
xxxv	A First Aid Room shall be provided in the project both during construction and operations of the project.	Being complied / to be complied. A First Aid Room with adequate medical facilities will be provided in the project both during construction phase for the workers as well as the operation phase of the project.
xxxvi	The condition laid down by the GMC as mentioned in DPR should strictly adhere to by the project proponent.	The conditions laid down by GMC as mentioned in DPR shall be adhered to by the project proponent.
xxxvii	The User Agency needs to quantify muck generated during construction and proper estimation must be spell out to avoid future problem in the vicinity of project site due to spilling of muck	Excavated Soil / muck generation register was maintained at site. Photographs have been attached as <b>Annexure - 14.</b>
xxxviii	The Project Proponent should calculate total quantity of rainwater discharge during the construction period and shall accordingly prepare water harvesting plan.	Rainwater harvesting plan has been prepared based on the quantity of rainwater discharge. The rainwater harvesting plan has been attached as <b>Annexure - 6.</b>
xxxix	Green cover plan needs to be covered 50% of the total areas of proposed MLCP for beautification of the blank areas, creation of hanging garden in all the flyover falling within the Gangtok Municipal Areas (GMC).	Vertical gardens, rooftop gardening and greening of blank areas for beautification of proposed MLCP and covering 50% of the total area and creation of hanging garden in all the flyover falling within the Gangtok Municipal Areas (GMC) shall be undertaken juxtaposing during the construction phase of the project to mitigate adverse impact on local surrounding environment.
xl	The cost of maintenance should be provided including cost of creation of garden, beautification, quality planting materials of ornamentals and other evergreen shrubs & herbs till the expiry of the agreement with the state Government.	Agreed. The cost of creation and maintenance of garden, beautification, quality planting materials of ornamentals and other evergreen shrubs & herbs for a period of five years shall be provided by the Project Proponent to the Environment Cells of the State Forest Department, GoS based on the Annual Plan of Operation (APO) prepared by the Department as a part of <b>Environment</b>

**Quarterly Compliance Report of Environmental Clearance for Proposed Development of  
"WEST POINT" - Integrated Commercial cum MLCP Complex at Old West Point School Area,  
Near M.G. Marg, Gangtok, East Sikkim by MESASO INFRASTRUCTURE PVT. LTD.**

		<b>Compensatory Green Project</b> within the GMC areas.
xli	The Multi-Disciplinary Committee comprising of members from Forest and Environment Department, State Pollution Control Board (SPCB), UDHD Department, Smart City, Mines & Geology, NGOs (Non-Government Organization), Power Department, Health department, Fire & Emergency Services, PHE (Water Supply) and PHE (Sewage) which will do quarterly field monitoring and submit report.	Agreed
xlii	Quarterly inspect project site and submit report accordingly. If committee feels need to visit the project site besides stipulated dates, may visit the site to ensure proper execution of the project and follow all the guidelines and condition laid down by the various agencies.	Agreed
xliii	Half-yearly progress report for implementation of different work components under the project should be furnished to SEIAA and State Forest Department by project proponent.	Half-yearly progress report for implementation of different work components under the project shall be submitted to SEIAA and State Forest Department by project proponent.
xliv	The SEIAA reserves the right to add additional safeguard measures subsequently, if found necessary.	Agreed

-TRUE COPY-

ANNEXURE R-35



**STATE POLLUTION CONTROL BOARD- SIKKIM**  
**FOREST & ENVIRONMENT DEPARTMENT**  
**GOVERNMENT OF SIKKIM**  
**DEORALI, GANGTOK – 737102**

F. No. 2436/SPCB/

Dated: 18/01/2024

To,

The Vice President (Project),  
 M/s MESASO Infrastructure (P) Limited,  
 Old West Point School, Near M.G. Marg,  
 Gangtok, Gangtok District, Sikkim-737101.

**Sub: CONSENT TO ESTABLISH.**

In consideration of your online application no. 412043 dated 08.11.2023 and on the basis of Environmental Clearance granted by Ministry of Environment, Forest & Climate Change, Government of India vide F. no. 21/1/2023-IA.II dated 23/08/2023 bearing EC no. EC23C3802SK5858756E. the State Pollution Control Board – Sikkim, hereby grants you Consent to Establish Vertical Expansion of fourteen (4G+7+3) storied Integrated Commercial cum Multi Level Car Parking Complex situated at Near M.G Marg-Gangtok, Gangtok District-Sikkim, under the provisions of Section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 subject to the following conditions:

1. That, this consent is meant for specific purpose only and any alteration in the project shall require prior permission from the Board;
2. That, you shall have facilities to prevent and control water, air & noise pollution in the project area as per the conditions specified in relevant Acts;
3. That, you shall strictly adhere/comply to the conditions stated in the Environmental Clearance granted by SEIAA bearing EC no. EC22B038SK11585 issued vide F. No. 214E&SC dated 25/02/2022;
4. That, you shall strictly adhere/comply to the conditions stated in the Environmental Clearance granted by MoEF&CC bearing EC no. EC23C3802SK5858756E issued vide F. no. 21/1/2023-IA.II dated 23/08/2023;
5. That, you shall obtain consent to operate before commercial operation of the fourteen (4G+7+3) storied Integrated Commercial cum Multi Level Car Parking Complex;
6. That, you shall ensure that vertical expansion of 3 storeys shall not include swimming pool as specified in the Environmental Clearance granted by the MoEF&CC. Technical examination by Institutes of national repute such as Central Building Research Institute, Roorkee is mandatory;
7. That, you shall obtain Consent to Operate prior to operation of your project after compliance of all the stipulated conditions in the Consent to Establish;
8. That, you shall construct temporary labour camp duly providing proper sanitation & solid waste management facility within the premises in accordance to the Solid Waste Management Rules, 2016;
9. That, you shall carry out third party environmental monitoring from a registered NABL accredited and MoEF&CC registered consultants and submit Report to SPCB-Sikkim on a quarterly basis;



P.T.O

10. That, you shall carry out the dismantling/demolition and construction work without causing any environmental pollution duly installing pollution control measures such as suppression of dust/fugitive emission, noise controlling measures in the premises by erecting barriers & limiting work during day time only and proper management of demolition waste within the premises, further, that any such dismantling/demolition shall ensure foundational security of the area in question;
11. That, this Consent is valid till 31<sup>st</sup> March 2024;
12. That, all forms of Construction and Demolition waste shall be managed and disposed off in accordance with the provisions of the Construction & Demolition Waste Rules, 2016;
13. That, you shall ensure the general waste generated by your unit shall be collected & disposed off in accordance with **Solid Waste Management Rules, 2016 and Plastic Waste Management Rules, 2016**;
14. That, you shall ensure the scrap generated by your unit shall be disposed off through authorized vendor only;
15. That, you shall obtain authorization from the SPCB-Sikkim through the OCMMS portal for handling Bio Medical Waste generated during construction of your project without fail;
16. That, you shall obtain authorization from the SPCB-Sikkim through the OCMMS portal for handling Hazardous Waste generated during construction of your project without fail;
17. That, you shall ensure compliance to the provisions of the **Hazardous Chemicals Rules, 1989** for safe storage and management of fuel & other flammable materials;
18. That you shall provide Personal Protective Equipment to the employees to avoid any health hazard;
19. That, you shall prepare an Emergency Response Procedure/Protocol (ERP) and submit a copy of the same to the Board and you shall ensure compliance to the ERP for incidents such as fire, flood, landslides, earthquakes and accidents;
20. That, you shall conduct regular mock drill as per the specifications of the ERP;
21. That, you shall establish and operate the Sewage Treatment Plant (120 KLD) to treat sewage/waste generated from operation of various ancillary units of the building project adhering to the standards prescribed under the Environment (Protection) Act, 1986 and Rules made there under from time to time, whichever is stringent;
22. That, provisions for Ambient Air Quality Monitoring System shall be in place before commissioning of the project;
23. That, you shall develop green belt within your premises;
24. That, you shall abide by all the conditions given by the Board from time to time;
25. That, this consent is valid subject to obtaining other required permission/licenses/clearances wherever required;
26. Rs.150000/- (Rupees one lakh fifty thousand) only has been received as consent fee Vide Receipt No. 490473534 & Bank ID 1540, dated: 11.09.2023;
27. That, the provisional consent granted earlier vide Ref. No. 1097/SPCB/2039 dated 17.10.2023 shall stand cancel;
28. That, the Board reserves the right to cancel and withdraw the consent in the event of any environmental problems arising out of your project.



*(Signature)*  
**(Dr. Gopal Pradhan)**  
 Member Secretary,  
 State Pollution Control Board-Sikkim.

## ANNEXURE R/12



**MINUTES OF MEETING & SITE INSPECTION**  
**of Multidisciplinary committee for monitoring environmental safeguard for**  
**issues pertaining to Implementation of Multilevel Car Parking cum**  
**Commercial Development at Old West Point School Complex on Design,**  
**Build, Finance, Operate and Transfer (D.B.F.O.T) basis under Public Private**  
**Partnership (P.P.P) mode.**



<b>Objective/ Agenda</b>	Monitoring the environmental safeguards from time to time and submit Six Monthly Monitoring report to the Chairman SEIAA, with a copy to Member Secretary SEAC (State Level Expert Appraisal Committee) and Director Env. & SC, F&ED.		
<b>Date</b>	23.01.2024		
<b>Time</b>	11:00 am		
<b>Place</b>	Tragopan Conference Hall, Block A, Forest Secretariat		
<b>Officials</b>	Name	Designation	
	N.W.Tamang, IFS ( Chairman )	C.C.F( Env Sc.)	Forest Department
	Bhupendra Kothari ( Member Secretary)	Chief Executive Officer	G.S.C.D.L
	Karma Tempo Rapgyal	Hon'ble Councillor-Arithang	G.M.C
	Richard Lepcha	A.C.E	P.H.E.D
	Kusum Gurung	Joint Director	S.P.C.B
	Keshar Kr. Luitel	Joint Director	Mines & Geology
	Smita Shilal	D.F.O. (T)Gangtok	Forest Department
Karma Choden Bhutia	D.F.O. ( Env Sc.)	Forest Department	

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	Prakriti Pradhan	Sr. Geologist	Mines & Geology
	Naresh Pradhan	Town Planner cum Nodal Officer( SWM)	G.M.C
	C.M Bhandari	A.C.F( Env Sc.)	Forest Department
	S.D.Bhutia	A.C.F( Env Sc.)	Forest Department
	Niranjan Kapil	Urban Planning Expert	G.S.C.D.L
Executing Agency	Manish Kumar	Project Head	MESSASO ltd.

Chairman initiated the meeting by welcoming all officials to the meeting cum discussion regarding Multidisciplinary committee for monitoring environmental safeguard for issues pertaining to Implementation of Multilevel Car Parking cum Commercial Development at Old West Point School Complex on Design, Build, Finance, Operate and Transfer (D.B.F.O.T) basis under Public Private Partnership (P.P.P) mode.

The agenda of the meeting was to discuss the monitoring aspects of the environmental safeguards from time to time and submit Six Monthly Monitoring report to the Chairman SEIAA, with a copy to Member Secretary SEAC (State Level Expert Appraisal Committee) and Director Env. & SC, F&ED.

A round of an introductory session was carried out and Chairman initiated the meeting by informing about the Grant of Environment clearance by Ministry of Environment, Forest and Climate Change and State Level Environment Impact Assessment Authority (SEIAA) Sikkim. The quarterly compliance report of Environmental Clearance was also discussed in detail and the meeting proceeded with a site visit for the inspection of various compliances.

The meeting proceeded with an audio video presentation of the project followed by the series of discussion listed as below as per the Department/Agency involved: -

Department	Discussion	Action Points
1. Mines & Geology	As per the EC, The SEAC had informed the PP to get this certification to be validated / vetted by Mines & Geology Department, Government of Sikkim. The concessionaire informed that all documents have been submitted to Mines and Geology but the department have informed that all document is required to be resubmitted to Mines and Geology including the supporting documents of Jadavpur University certificate. Earlier, certificate from Jadavpur University was brought to the notice of the Department for other purpose. The representative present in the meeting suggested that all relevant documents including application	The documents requesting for vetting and validation of the certificate from Jadavpur University has been submitted to the department. The department will reverify the documents and vetting of the report shall be submitted to the

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	<p>mentioning the vetting/validation of the certificate from Jadavpur university needs to be submitted to Mines and Geology department and the department will process for necessary action. Therefore, the committee has decided that all relevant details are to be rediscussed and resubmitted to Mines and Geology for approval.</p>	<p>committee in the next meeting.</p>
2. Gangtok Municipal Corporation	<p>a) Also, it was enquired whether any damage has been done on residential buildings in the vicinity, where GMC and Mines &amp; Geology informed that in order to assess the damages, continuous assessment and monitoring needs to be carried out since the inception of the Project.</p> <p>b) It was also informed that Solid waste generated at the construction site is being collected by GMC and payment of same is also done.</p> <p>c) In regards to organic waste generated during operational phase, an organic composter is already placed at the site but not yet operational.</p> <p>d) In regards to 14 stories construction, drawings and plan has already been submitted to G.M.C. and approval has been accorded.</p>	<p>a) No damages have been incurred and reported till date as confirmed by the public representative-councillor.</p> <p>b) Complied</p> <p>c) Complied</p> <p>d) Complied</p>
3. P.H.E.D	<p>a) Upon enquiry about water supply to the project site, Messaso Pvt. Ltd. briefed about taking a lease line with metering and payment to P.H.E.D on a monthly basis.</p> <p>b) In regards to Rain water harvesting, concessionaire informed the committee that 4,10,000 litres of rain water harvesting tank has been installed and was reverified in the site.</p>	<p>a) Complied</p> <p>b) Complied</p>
4. Hon'ble Councillor-Arithang	<p>a) Hon'ble Councillor informed that there have been several issues of safety regards to falling of debris on private household premises, where concessionaire has assured of scaffolding and safety nets. They also informed of the joint site visit carried out, where many had opted for protection except one in the vicinity.</p> <p>b) Hon'ble Councillor also placed submission on addressing of public grievances, where GMC officials also stressed on the extra protective works. Chairman proposed for a legally binding undertaking from concessionaire. CEO, GSCDL</p>	<p>a) Complied</p> <p>b) Complied</p>

	then explained regarding the undertaking already done by concessionaire. CEO also informed the committee that there have been several R.T.I in regards to the project but each one has been addressed judiciously.	
5. Forest Department	<p>a) As Corporate Environment Responsibility, 1.5% of the total project cost is admissible and an implementation plan needs to be worked out by D.F.O (East) and Concessionaire and submit to the committee.</p> <p>b) Upon enquiry of disposal of debris from the project site, Concessionaire explained that no debris is disposed off during construction phase as all the debris are compacted and reused as filling materials under the ramps. CEO explained the debris were disposed off during demolition phase only and the details of same shall be send to the committee.</p> <p>c) Chairman also enquired about the compliance of Environment Management Plan where Concessionaire explained the compliances being taken forward also in coherence to the gold rated green building and NBC norms.</p>	<p>a) Concessionaire has agreed upon</p> <p>b) Complied &amp; verified during site inspection</p> <p>c) Complied</p>
6. State Pollution Control Board	a) Upon enquiry of the Sewage, Concessionaire explained about the zero discharge from their STP during the operational phase and they have signed an agreement with Tea Garden, Siliguri to use the faecal waste as cake for manure in the tea gardens.	a) SPCB emphasised on the analysis of the faecal sludge before it is used for manure, to which concessionaire has agreed to do so. The agreement with Tea Garden will be sent to CEO, GSCDL who then will circulate to committee members. Concessionaire has mentioned installation of STP with tertiary treatment however on detail perusal of their submitted schematic diagrams, compliance report no such arrangement has been spelt out. Tertiary treatment shall include treatment in carbon filters and sand filters and then reverse

	<p>b) In regards to Hazardous waste the online application of unit was returned back with observations to submit additional documents. The unit has to resubmit the application immediately with required documents.</p> <p>c) In Regards to DG Set being installed in the project Site, Concessionaire informed that they have already taken consent to operate for the previous DG set and for a new one they will be applying soon to SPCB.</p>	<p>osmosis. It was also observed and felt necessary during the site visit that technical manpower be hired by the unit to look after Environment, Health and Safety measures.</p> <p>b) Complied</p> <p>c) Being complied</p>
<p>All</p>	<p>Upon enquiry about local labours being employed or not at the project Site, the concessionaire explained that the labour required right now needs to be skilled, however security personnel, maintenance and housekeeping are all locals who have been employed.</p>	<p>Complied</p>

CEO has assured that there is no discrepancy in compliance and assured for a quality level of execution for the welfare of Public. The meeting then proceeded with a point wise discussion on the compliance for Environmental clearance quarterly compliance report September 23 -November,23. The meeting concluded with a vote of thanks by CEO, GSCDL (Member Secretary) for the successful meeting and site visit in a short notice and thanked every member, concessionaire and officials.

*Handwritten signature*

**Point wise discussion for compliance of Environmental clearance of Quarterly Compliance Report : 7<sup>th</sup> Quarter Ending September, 2023 to November**

Sl. No.	Conditions	Compliance
i.	The official permissible height for building in Sikkim is 5 ½ for domestic and 7 for Commercial purpose as per the existing bye laws in Sikkim. However the Project Proponent has procured Certification from Mr. Majumdar of Jadavpur University for construction of 11 storeys building. The SEAC informed the PP to get this certification to be validated / vetted by Mines & Geology Department, Government of Sikkim.	As discussed in the meeting.
ii.	Structural Engineers from GMC also have to be included in the project.	Complied.
iii.	Project Proponent has to follow the labour laws of Sikkim and engage local people.	Complied.
iv.	Corporate Environment Responsibility to be taken up and Environment measures to be implemented in consultation with Environment sector of the Forest Department, Government of Sikkim.	As discussed in the meeting
v.	Parking / ventilation structure design to be submitted to SEIAA.	Complied.
vi.	Disposal of sludge from STP to be specified till its end point.	As discussed in meeting, complied. And verified in site inspection..
vii.	Rain water harvesting plan, Composting & disposal plan to be submitted with specification till its end point.	As discussed in meeting, complied.
viii.	Dumping of extra excavated muck (unutilisable) should be done at pre identified and approved sites. No muck should be washed away during rainy seasons and cause choking of nallahs, jhoras or water bodies or damage the surrounding environment. Clearances from the concerned department(s) or agency(ies) to be taken for the dumping sites. Rehabilitation of such dumping sites may be done at the cost of PP by providing suitable	As discussed in meeting, complied.

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 Chief Executive Officer  
 Gangtok Smart City Development, Ltd  
 Kishan Bazar, Gangtok - 737101

	structures for holding the muck and do plantation with suitable local species.	
ix	The number of storeys of the proposed building should be restricted to 11 storeys only as per the approval of GMC.	Environment Clearance vide EC Identification no. EC23C3802SK5858756E dated 23.08.2023 has been obtained for construction of the additional 3 floors from the Ministry of Environment, Forests and Climate Change (MoEF&CC).
x	All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Management Rules 2016.	As discussed in meeting, complied.
xi	The extra excavated muck / soil to be disposed at designated sites as stated at Sl.no.x above to avoid choking of drains and flooding.	As discussed in meeting, complied.
xii	Utilisation of water from Rain water harvesting structure to be maximized to minimize the load on fresh water demand.	As discussed in meeting, complied and water-balance diagram
xiii	Commitment letter to the effect that no damage is caused to the surrounding areas and habitation as per the stake holders meeting held on 13.11.2021 is insisted.	As discussed in meeting, complied.
xiv	Environment Management Plan further needs to prepared to strengthen the existing EMP spell out in the instant proposal to ensure intensive mitigation measure to maintain overall ecological balance.	As discussed in meeting, complied.
xv	Green Cover Plan needs to be covered 30% of the total areas of proposed MLCP for beautification of the blank areas, creation of hanging garden in all the flyover falling within the Gangtok Municipal Areas (GMC).	Being complied as per the plan and consent of the department.
xvi	Local labours to be employed as far as possible and train them also to get the desired output.	As discussed in meeting, complied.
xvii	Permission from State Pollution Control Board for E-waste, DG set and Hazardous waste to be obtained by the Project proponent.	As discussed in meeting, complied.

xxviii	Taxi Driver's Union / Association consent letter copy to be submitted.	As discussed in meeting, complied.
xix	The environment safeguard measures to be monitored by the Multidisciplinary committee to be constituted by Forest Department / Smart City / Project proponent.	Agreed.
xx	The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc. as per National Building Code including protection measures from lightening etc.	Complied and Being complied. As discussed in meeting, complied.
xxi	The provisions of the Solid Waste Management Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste Management Rules, 2016, shall be followed.	As discussed in meeting, complied.
xxii	Construction site shall be adequately barricaded before the construction begins.	As discussed in meeting, complied.
xxiii	Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.	As discussed in meeting, complied.
xxiv	Total fresh water use shall not exceed the proposed requirement as provided in the project details.	As discussed in meeting, complied.
xxv	Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled / re-used for flushing, AC make up water and gardening. As proposed, no treated water shall be disposed in to municipal drain.	As discussed in meeting, complied.
xxvi	No sewage or untreated effluent water would be discharged through storm water drains.	As discussed in meeting, complied.
xxvii	Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.	Being complied
xxviii	Outdoor and common area lighting shall be LED.	To be complied when project is completed.
xxix	Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.	As discussed in meeting, complied.
xxx	Organic waste compost / Vermi-culture pit / Organic Waste Converter within the premises with a minimum capacity of 0.3 kg/person/day must be installed.	As discussed in meeting, complied.
xxxi	Any hazardous waste generated during construction phase, shall be disposed of as per applicable rules and norms with necessary approvals of the State Pollution Control Board.	As discussed in meeting, complied.

xxxii	Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.	As discussed in meeting, complied.
xxxiii	All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.	Complied and being complied. As discussed in meeting and site inspection, complied.
xxxiv	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	As discussed in meeting, complied.
xxxv	A First Aid Room shall be provided in the project both during construction and operations of the project.	As discussed in meeting, complied.
xxxvi	The condition laid down by the GMC as mentioned in DPR should strictly adhere to by the project proponent.	As discussed in meeting, complied.
xxxvii	The User Agency needs to quantify muck generated during construction and proper estimation must be spell out to avoid future problem in the vicinity of project site due to spilling of muck	As discussed in meeting, complied.
xxxviii	The Project Proponent should calculate total quantity of rainwater discharge during the construction period and shall accordingly prepare water harvesting plan.	As discussed in meeting, complied.
xxxix	Green cover plan needs to be covered 50% of the total areas of proposed MLCP for beautification of the blank areas, creation of hanging garden in all the flyover falling within the Gangtok Municipal Areas (GMC).	As discussed in meeting, complied. GMC to coordinate
xl	The cost of maintenance should be provided including cost of creation of garden, beautification, quality planting materials of ornamentals and other evergreen shrubs & herbs till the expiry of the agreement with the state Government.	Agreed.
xli	The Multi-Disciplinary Committee comprising of members from Forest and Environment Department, State Pollution Control Board (SPCB), UDHD Department, Smart City, Mines & Geology, NGOs (Non-Government Organization), Power Department, Health department, Fire & Emergency	Agreed

	Services, PHE (Water Supply) and PHE (Sewage) which will do quarterly field monitoring and submit report.	
xlii	Quarterly inspect project site and submit report accordingly. If committee feels need to visit the project site besides stipulated dates, may visit the site to ensure proper execution of the project and follow all the guidelines and condition laid down by the various agencies.	Agreed
xliii	Half-yearly progress report for implementation of different work components under the project should be furnished to SEIAA and State Forest Department by project proponent.	Agreed
xliv	The SEIAA reserves the right to add additional safeguard measures subsequently, if found necessary.	Agreed

*Chellu*

Chief Executive  
Gangtok Smart City Development Pvt. Ltd  
Kishan Bazar, Gangtok - 737101

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### SITE INSPECTION REPORT OF WEST POINT SCHOOL COMPLEX

The site was inspected on 23/01/2024 by the monitoring committee along with Mr. Manish, Project In-charge, Mr. Ishwar Shrestha, Independent Engineer & Mr. Shubham Malu, Site Engineer, from (M/s Mesaso Infrastructure Pvt. Ltd.)



The inspection started at the ground floor of the under construction MLCP wherein two floors of the structure have been proposed to be handed over to the Government upon its completion. The proceedings of the site inspection are as follows: -


- a. The CCF started the inspection by stating that there was an issue of falling debris i.e. roads, pebbles which was made by the residents to the Ward Councillor who have properties in the vicinity of the project site. The Project-in-charge hereinafter referred to as Mr. Manish showed that aggro-nets have been provided all around the external façade of the project site so as to arrest the falling debris. Further, scaffolding has also been provided to slow down the fall of said debris.

*Manish*  
 Chief Executive Officer  
 Gangtok Smart City Development Ltd.  
 Kishan Bazar, Gangtok - 737101

- b. Upon inspection of the ground floor of the parking premises, the CCF enquired about the provision of emergency exits. Mr. Manish then promptly stated and demonstrated that 4 number of fire exits have been provided on each floor of the MLCP and also the doors of said fire exits have been made with fire resistant materials.
- c. The CCF then enquired about the fire-fighting facilities like hydrants, sprinklers, fire detectors. Mr. Manish then stated that such facilities have been installed however they shall be only made functional during the time of operation of the parking. Further, it was showcased that smoke extract fumes have also been installed and that NOC from the Fire Department shall duly be obtained prior to the operation phase.
- d. The Joint Director of the Mines and Geology Department then enquired about the depth of foundation of said structure. Mr. Manish clarified that 1.2 m depth of raft foundation has been provided and that the deepest part of the foundation is 9.9 m and varies from section to section.
- e. Then the inspection proceeded towards the Sewage Treatment Plant that has been constructed in the underground reservoir level of the MLCP. The CCF enquired about the process of the STP wherein Mr. Manish clarified that the water collected in the Rain water harvesting tank shall be directed towards the water softener tanks which shall then be utilised for non-potable usages. He also clarified that the same shall be made functional during the time of operation of the MLCP.
- f. The CCF then enquired about the well being and safety of labourers at site. A labour was then promptly presented before him who stated that they are being well paid, medical facilities are also being availed to them by the concessionaire and that fooding and lodging facilities are also as per needs.
- g. The Joint Director – Pollution Control Board enquired about the stagnant water that was present in the drain beside the STP plant wherein the Independent Engineer stated that the water present was the left-over water that was used to clean the sump and that the water in the drain would eventually drain out into the sump. She also enquired about the appointment of a STP expert to monitor the installed facilities wherein it was stated that said expert would be appointed during the time of operation of the facilities.
- h. Additional Chief Engineer- PHED, during the site inspection, observed that water tank have been constructed at the basement level for all kinds of requirement during the construction period as well as after the completion of the structure. A roof rain water harvesting tank was also found to be constructed at the basement. The drain near the S.T.P. site needs minor rectification

for proper slope as some stagnant water was found in the drain. With regards to sewage being produced by the construction workers, the same has been temporarily connected to the nearby sewage line of the department. The project has its own Water Treatment Plant as well as Sewage Treatment Plant which will be operational after the construction of the project. The treated waste water shall be recycled for its use in washrooms and for irrigation in gardens. Once the project starts, it has to be ensured that the treated water is well within the permissible and no detrimental impact on water environment is caused by this project.

- i. The Independent Engineer also stated that there is a provision of submersible sensor in sump which would only be operational when the water level in the sump reaches a certain level.
- j. The Independent Engineer stated that the total capacity of the STP is 110 KLD.
- k. The CCF then enquired about the noise pollution that is potentially being caused by the Diesel Generating Set. The Project Engineers then demonstrated by operating the DG set which was said to be CPCB II compliant and that it is soundproof to a certain extent. Also, that the DG (82.5 kva for the use of construction power only) sets which are present beneath the parking premises shall be removed and that the 4 DG sets ( 2 of 625 kva and 2 of 500 kva ) shall be used during operational phase and shall be placed in the service block separated from the main building.





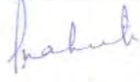


  
Govt of Sikkim

**Meeting and Site Inspection of the Multidisciplinary Committee  
for monitoring of environmental safeguards, issues arising during  
the Implementation of Multilevel Car parking cum Commercial  
Development at Old west Point school area near MG Marg,  
Gangtok, East Sikkim**

Date: 23.01.2024 11 a.m. onwards


Venue: Tragopan hall, Block A Forest Secretariat, Deorali

**ATTENDANCE**


Sl. No.	Name	Designation, Organisation	Ph. No./Email	Signature
1	N. W. Tamang/A	BBF (Env &)	7434152022 nwtamang@gmail.com	
2	Bhupendra Kulkarni	C. E. O. GSCDE	8116679988 bhupendra.kulkarni@gscde.com	
3	Richard Lepcha	ACE (PHED)	96410 91137 richardlepcha@gmail.com	
4	Keshav Kr. Luitel	Joint Director Mines & Geology	9471982284 keshav.luitel@gmail.com	
5	Prashanti Pradhan	Senior Geologist Mines & Geology Dept	79088-75703 prashantipradhan@gmail.com	
6	Navab Pradhan	Town Planner cum Model officer (SWM), GMC	9434447827 navabpradhan@yahoo.com	
7	Kanun Tenzin Rajyogyal	Councillor	925050615 kanun@gmail.com	

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**Jukka**  
Chief Executive Officer  
Gangtok Smart City Development, Ltd  
Kishan Bazar, Gangtok - 737101



Govt of Sikkim





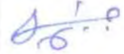
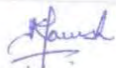




**Meeting and Site Inspection of the Multidisciplinary Committee for monitoring of environmental safeguards, issues arising during the Implementation of Multilevel Car parking cum Commercial Development at Old west Point school area near MG Marg, Gangtok, East Sikkim**


Date: 23.01.2024 11 a.m. onwards

Venue: Tragopan hall, Block A Forest Secretariat, Deorali

**ATTENDANCE**

Sl. No.	Name	Designation, Organisation	Ph. No./Email	Signature
8	Karna Choden Bhutan	DFD/ESC.	7439116414	
9.	C. M. Bhundari	A. C. F. Env & SC Gangtok	935988952	
10	D R Sharma	A. C. F Car & SC GtK	9872542426	
11	S.D. Bhutia	A CF Env & SC, GtK	9593267802	
12	Smriti Lalital	DFD (G) GtK.	9749898690	
13	Kumar Manish	Project head Masaxo	9836209656	
14	Kusum Gupte	JD (SPLB) PED	782291719	
15.	Nirajan Kp	UP, CC&DL	9967009215	

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Chief Executive Officer  
Gangtok Smart City Development, Ltd.  
Kishan Bazar, Gangtok - 737101

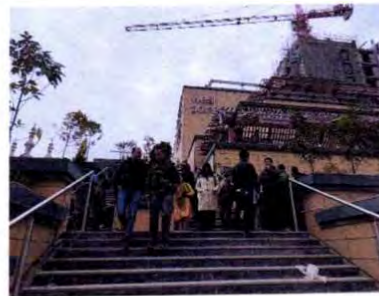
Monitoring Committee Meeting pictures 23.01.2024



*Chilla*

Chief Executive Officer  
Gangtok Smart City Development Ltd.  
Kishan Bazar, Gangtok - 737101

Site inspection pictures 23.01.2024



*Jalla*  
Chief Executive Officer  
Gangtok Smart City Development Ltd.  
Kishan Bazar, Gangtok - 737101

-TRUE COPY-



SIKKIM FIRE & EMERGENCY SERVICE  
HEADQUARTERS  
GANGTOK

Phone: 03592 202748 Email: [director@sikkimfire.nic.in](mailto:director@sikkimfire.nic.in)

ANNEXURE R-54

No. 806/POL/SF&ES/2022/98.

Dated:- 09/02/2024

**NO OBJECTION CERTIFICATE**

The premises of **Project West Point**, located at Old West Point School Area, Gangtok, Sikkim has been inspected on 05/02/2024 by the Sikkim Fire & Emergency Service officials in respect of implementation of inbuilt Fire Fighting/Fire Prevention and Life Safety measures. Sufficient Fire Safety Systems have been provided to 08 floors of the building upto level 04 (27.08 mtr)

The Sikkim Fire & Emergency Service grant the Partial No Objection Certificate for its Occupation for the purpose of Multilevel Car Parking and Malls including underground water tank and pump, subject to the following conditions:-

1. The life safety and means of escape systems shall not be tempered and shall be kept in maintained and functional conditions.
2. No loose or naked electric wirings shall be permitted in the premises.
3. Electrical load shall not be more than sanctioned and approved load.
4. No storage of highly flammable and combustible items shall be permitted in the premises.
5. Fire Detection System shall be kept in maintained and functional condition.
6. Fire Prevention System shall be kept in maintained condition and shall not be tempered.
7. Installed Fire Fighting System as required shall be properly maintained/ updated and ready to use condition.
8. Smoke Exhaust System shall be in maintained and working condition.
9. A qualified Fire Safety Officer shall be appointed solely responsible for the maintenance and operation of fire safety systems round the clock.
10. Fire safety classes/trainings and fire drills shall be conducted periodically by all the employees.
11. The premises shall always be open for safety inspection to the fire officers from SF & ES between sunrise and sunset.
12. The final Fire Safety Certificate shall be applied and obtained on completion of the project.

The NOC becomes void in the event of violation, removal or dilution of any of the above conditions.

Note: Validity is one year from the date of issuance.

B.R. No : 11001-50601 dated 24/01/2024



To,

Vice President - Projects,  
Mesaso Infrastructure Pvt. Ltd,  
Gangtok.

*[Signature]*  
09/02/2024  
Dy. Chief Fire Officer (N.E.),  
Sikkim Fire & Emergency Service,  
Gangtok.

**Dy. Chief Fire Officer/HQ**  
**Sikkim Fire & Emergency Service**  
**Gangtok**

Fire Safety Certificate cancelled due to: \_\_\_\_\_

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ANNEXURE R-47

**GANGTOK MUNICIPAL CORPORATION  
DEORALI, SIKKIM**

No. LOSSE/G.M.C./T.P.C./24.....Date 16/02/2024.....

**FORM – VII**

(See regulation 13 of the Sikkim Building Construction Regulation, 1990)

**OCCUPANCY CERTIFICATE**

To,

MESASO Infrastructure Private Limited  
Arithang - 1, Ward no 9,  
Gangtok Municipal Area.

With reference to your application, dated 06.01.2024 permission is hereby granted for the partial completion certificate & occupation of parking level – 04 to mall level -04 of Multi-Level Car Parking cum Commercial Development (West-Point) at Old West Point School Area, Near M.G Marg Gangtok, East-Sikkim.

This occupancy certificate is for the following landed property:

- Name of the Landowner -Government of Sikkim.
- Location of Landed Property - Arithang - 1, WardNo.9
- Details of holding  
Khatiyon no. 1440  
Plot no. 686/3114,715,716  
Area of Plot: 61398 Sqft ( 1.41 Acres)

  
 Assistant Town Planner IV  
 Gangtok Municipal Corporation

**Assistant Town Planner**  
Gangtok Municipal Corporation

-TRUE COPY-

ANNEXURE R-36



**STATE POLLUTION CONTROL BOARD- SIKKIM**  
**FOREST & ENVIRONMENT DEPARTMENT**  
**GOVERNMENT OF SIKKIM**  
**DEORALI, GANGTOK – 737102**

F. No. 2453/SPCB/

Dated: 17/02/2024

To,

The Vice President (Project),  
M/s MESASO Infrastructure (P) Limited,  
Old West Point School, Near M.G. Marg,  
Gangtok, Gangtok District, Sikkim-737101.

**Sub: CONSENT TO OPERATE.**

In consideration of your online application no. 420022 dated 18.01.2024 and on the basis of Environmental Clearance granted by Ministry of Environment, Forest & Climate Change, Government of India vide F. no. 21/1/2023-IA.II dated 23/08/2023 bearing EC no. EC23C3802SK5858756E, the State Pollution Control Board – Sikkim, hereby grants you Consent to Operate Integrated Commercial cum Multi Level Car Parking Complex comprising parking facility in four (04) floors and commercial establishment (shopping mall with multiplex & eatery) in four (04) floors (total 8 floors) without hotel situated at Old West Point School, near Police headquarters, Gangtok District-Sikkim, under the provisions of Section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 subject to the following conditions:

1. That, this consent is meant for specific purpose only and any alteration in the project shall require prior permission from the Board;
2. That, you shall have facilities to prevent and control water, air & noise pollution in the project area as per the conditions specified in relevant Acts;
3. That, you shall strictly adhere/comply to the conditions stated in the Environmental Clearance granted by SEIAA bearing EC no. EC22B038SK11585 issued vide F. No. 214E&SC dated 25/02/2022;
4. That, you shall strictly adhere/comply to the conditions stated in the Environmental Clearance granted by MoEF&CC bearing EC no. EC23C3802SK5858756E issued vide F. no. 21/1/2023-IA.II dated 23/08/2023;
5. That, you shall obtain consent to operate hotel separately after establishment is completed;
6. That, you shall ensure that vertical expansion of 3 storeys shall not include swimming pool as specified in the Environmental Clearance granted by the MoEF&CC. Technical examination by Institutes of national repute such as Central Building Research Institute, Roorkee is mandatory;
7. That, you shall provide proper sanitation & solid waste management facility within the premises in accordance to the **Solid Waste Management Rules, 2016**;
8. That, you shall carry out third party environmental monitoring from a registered NABL accredited and MoEF&CC registered consultants and submit Report to SPCB-Sikkim on a quarterly basis;

P.T.O



9. That, this Consent is valid till 31<sup>st</sup> March 2025;
10. That, you shall ensure the general waste generated by your unit shall be collected & disposed off in accordance with **Solid Waste Management Rules, 2016 and Plastic Waste Management Rules, 2016**;
11. That, you shall ensure the scrap generated by your unit shall be disposed off through authorized vendor only;
12. That, you shall ensure compliance to the provisions of the **Hazardous Chemicals Rules, 1989** for safe storage and management of fuel & other flammable materials;
13. That you shall provide Personal Protective Equipment to the employees to avoid any health hazard;
14. That, you shall prepare an Emergency Response Procedure/Protocol (ERP) and submit a copy of the same to the Board and you shall ensure compliance to the ERP for incidents such as fire, flood, landslides, earthquakes and accidents;
15. That, you shall conduct regular mock drill as per the specifications of the ERP;
16. That, you shall establish and operate the Sewage Treatment Plant (120 KLD) to treat sewage/waste generated from operation of various ancillary units of the building project adhering to the standards prescribed under the Environment (Protection) Act, 1986 and Rules made there under from time to time, whichever is stringent and maintain zero liquid discharge (ZLD).
17. That, you shall develop green belt within your premises;
18. That, you shall abide by all the conditions given by the Board from time to time;
19. That, this consent is valid subject to obtaining other required permission/licenses/clearances wherever required;
20. That, the trained and qualified manpower/ Environment Health & Safety personnel (EHS) shall be engaged for operation and maintenance of STP duly establishing in-house environmental lab.
21. That, the waste water generated from STP shall be analyzed by NABL accredited, lab/ MoEF&CC certified laboratories before utilization of the same" for flushing or irrigation of vegetation in the premises.
22. That, the treated biomass generated from organic waste convertor "shall be analyzed by NABL accredited or MoEF&CC certified laboratories before utilization of the same" as manure for the vegetation in the premises.
23. That, you shall provide the detailed mechanism for disposal of treated sewage /duly furnishing test report from accredited lab and obtain prior permission from the Board for the same.
24. That, no waste water shall be discharged from the premises.
25. That, you shall maintain noise level during the operation of your facility within 65dB (A) Leq and 55dB (A) Leq during day time (6 AM - 10 PM) and night time (10 PM - 6 AM) respectively as per the Noise pollution (Regulation & Control) Rules 2000.
26. Rs.5,00,000/- (Rupees Five lakhs) only) has been received as consent fee Vide Receipt No. 308637596 & Bank ID NA, dated: 18.01.2024;
27. That, the provisional consent granted earlier vide Ref. No. 1097/SPCB/2039 dated 17.10.2023 shall stand cancelled;
28. That, the Board reserves the right to cancel and withdraw the consent in the event of any environmental problems arising out of your project.



(Dr. Gopal Pradhan)  
Member Secretary,  
State Pollution Control Board-Sikkim.

Dr Gopal Pradhan  
Member Secretary  
State Pollution Control Board  
Forest & Environment Deptt.  
Govt of Sikkim

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## Earthquake Data 2006- 2023

## ANNEXURE R-1

DATE	TIME (UTC)	LAT (deg. N)	LONG (deg.E)	Depth (km)	Magnitude	Region	
03/2/2006	1:57:47.2	27.4°N	86.7°E	31.5	5.3	NEPAL ( REMARK : CLOSE TO SIKKIM - BIHAR BORDER )	
14/2/2006	0:55:18.2	27.7°N	88.8°E	33.0	5.7	SIKKIM	
18/5/2007	12:39:58.1	27.7°N	88.6°E	33.0	4.5	NORTH, SIKKIM	
20/5/2007	14:18:16.5	27.5°N	88.3°E	15.0	5.0	SOUTH, SIKKIM	
23/5/2007	17:40:44.8	27.6°N	88.0°E	10.0	3.5	SIKKIM	
26/5/2007	10:28:10.5	27.2°N	88.3°E	10.0	3.3	WEST, SIKKIM	
11/8/2007	14:35:52	27.5°N	88.0°E	33.0	4.9	NEPAL	
2/12/2008	05:11:39	27.5 N	88.0 E	10	4.2	NEPAL-INDIA(SIKKIM) BORDER REGION	
25/12/2008	00:26:41	27.2 N	87.9 E	33	4.4	NEPAL-INDIA(SIKKIM) BORDER REGION	
26/1/2009	06:57:18	27.4°N	88.7°E	7	3.2	INDIA(SIKKIM)-BHUTAN BORDER	
3/06/2011	00:53:21	27.5°N	88.0°E	26	4.9	NEPAL - SIKKIM (INDIA) BORDER REGION	
18/09/2011	12:40:47	27.7°N	88.2°E	10	6.8	SIKKIM-- NEPAL BORDER REGION	
18/09/2011	13:11:59	27.6°N	88.5°E	16	5.0	INDIA(SIKKIM)-- NEPAL BORDER REGION	
18/09/2011	13:54:17	27.5°N	88.4°E	9	4.5	INDIA(SIKKIM)-- NEPAL BORDER REGION	
18/09/2011	21:51:52	27.6°N	88.4°E	28	4.2	INDIA(SIKKIM)-- NEPAL BORDER REGION	
22/09/2011	16:44:43	27.6°N	88.4°E	30	3.9	SIKKIM	
17/10/2011	13:04:50	27.3°N	88.4°E	5	3.5	SIKKIM	

29/10/2011	00:43:41	27.4°N	88.4°E	5	3.5	SIKKIM, INDIA	
09/12/2011	22:56:56	27.9°N	88.2°E	33	3.7	INDIA ( SIKKIM) - NEPAL BORDER REGION	
13/12/2011	01:26:43	27.3°N	88.6°E	5	2.9	GANGTOK,SIKKIM	
14/12/2011	20:20:55	27.7°N	88.0°E	50	4.5	INDIA(SIKKIM) - NEPAL BORDER REGION	
18/12/2011	21:35:25	28.0°N	88.2°E	35	3.7	INDIA (SIKKIM)- NEPAL BORDER REGION	
18/01/2012	14:12:52	27.3°N	88.5°E	5	3.4	SIKKIM, INDIA	
14/02/2012	13:48:43	27.3°N	88.2°E	05	3.6	SIKKIM - NEPAL BORDER REGION	
27/03/2012	23:40:08	26.1°N	87.8°E	12.0	4.9	INDIA - NEPAL BORDER REGION	
30/05/2012	01:54:28	27.4°N	88.0°E	10	4.0	SIKKIM-NEPAL BORDER REGION	
11/06/2012	04:35:56	27.2°N	88.3°E	5	3.8	SIKKIM-NEPAL BORDER REGION	
18/09/2012	12:26:21	27.4°N	88.5°E	10	4.1	SIKKIM	
11/10/2012	13:56:04	28.0°N	88.2°E	15	3.3	INDIA (SIKKIM) - TIBET BORDER REGION	
22/10/2012	06:56:51	28.0°N	87.8°E	68	3.9	NEPAL-INDIA (SIKKIM) BORDER REGION	
30/11/2012	19:39:29	27.3°N	88.3°E	10	4.1	WEST, SIKKIM	
02/01/2013	14:53:41	27.3°N	88.6°E	10	3.0	GANGTOK, SIKKIM	
03/10/2013	06:12:40	27.4°N	88.5°E	10	5.0	SIKKIM	
04/07/2014	05:58:39	27.8°N	87.9°E	19	3.9	NEPAL - SIKKIM (INDIA) BORDER REGION	
17/09/2014	10:29:12	27.8°N	87.8°E	20	3.9	Nepal - India	

						(Sikkim) Border Region	
2015-04-23	20:26:37	27.3 N	88.1 E	10	4.0	West Sikkim	
2015-04-27	12:35:49	26.7 N	88.1 E	10	5.1	Nepal-India Border	
2015-08-15	05:42:24	27.4 N	88.0 E	35	4.0	Sikkim	
2015-10-10	01:48:43	27.2 N	88.8 E	15	4.5	Sikkim	
2016-03-12	16:15:16	26.7 N	89.4 E	21	3.8	Jalpaiguri, West Bengal	
2016-07-07	22:24:02	26.8 N	89.5 E	40	3.3	Jalpaiguri, West Bengal	

2016-08-28	12:54:51	28.0 N	88.7 E	90	4.2	India (sikkim)- China Border Region	
2016-09-18	14:34:36	26.7 N	88.3 E	10	3.2	DARJILING, WEST BENGAL	
2016-12-01	19:41:19	27.2 N	88.9 E	10	3.5	Bhutan-India(Sikkim) Border region	
2017-01-17	15:22:16	27.6 N	88.6 E	10	3.6	North Sikkim	
2017-3-26	21:42:11	27.142N	88.553E	24.39	4.5	Rangpo Sikkim	
2017-5-16	22:13:19	27.327°N	88.171°E	10	4.2	Naya Bazar, India	
2017-12-02	23:43:44	27.286°N	88.081°E	10	4.2	Naya Bazar, India	

2018-06-17	15:07:37	27.420°N	88.474°E	49.76 km	4.4	12km SSW of Mangan, India	
2018-10-31	21:23:34	27.3N	88.6E	10	2.8	East Sikkim	
2019-01-07	21:08:44	27.3N	88.4E	10	3.0	South Sikkim	
2019-04-12	23:33:07	27.3N	88.2E	10	3.9	West Sikkim Sikkim	
2019-08-09	18:10:32	27.5N	84.7E	39	4.6	Nepal-India Border	
2019-12-24	20:07:02	26.6N	88.8E	32	3.2	Jalpiguri, West Bengal	
2020-04-08	01:33:18	27.3N	88.6E	5	3.2	East sikkim	

2020-04-26	10:59:24 (IST)	27.0N	88.8E	10	4.0	42 Km SSE of Gangtok, Sikkim	
2020-08-09	06:49:03 IST	27.37N	88.85E	10	3.8	East Sikkim	
2020-10-25	12:06:00 IST	27.22N	88.68E	5	3.6	14 km SSE of Gangtok	
2020-12-24	19:51:07 IST	27.11N	88.34E	5	2.5	South Sikkim	
2020-12-31	13:30:28 IST	27.07N	89.16	5	2.5	62km ESE of Gangtok, Sikkim India (Bhutan)	
2021-02-05	03:43:10 IST	27.86N	88.14E	10	4	Nepal - India (Sikkim) Border	
2021-02-09	07:20:07 IST	27.95N	87.91E	90	4.5	Xizang (Tibet Sikkim Border)	

2021-03-11	03:48:10 IST	27.38N	88.76E	15	2.1	Gangtok, Sikkim	
2021-03-20	07:30:37 IST	28.00N	88.92E	75	3.5	Xizang (Tibet Sikkim Border)	
2021-04-05	20:49:58 IST	27.23N	88.84E	10	5.4	25 Km ESE of Gangtok, Sikkim	
2021-04-06	07:07:02 IST	26.72N	89.04E	10	4.1	Jalpaiguri, West Bengal	
2021-05-07	22:46:41 IST	27.25 N	88.68E	10	3.1	11 Km SE of Gangtok Sikkim	
2021-05-26	13:11:23 IST	26.85N	88.72 E	5	3.8	Jalpaiguri, WB	
2021-07-19	18:46:58 IST	27.40 N	88.62 E	10	3.2	6 KM N of Gangtok, Sikkim, India (North District)	

2021-7-21	12:45:04 IST	27.32 N	88.86 E	10	2.8	24 Km E of Gangtok, Sikkim (East Sikkim)	
2021-7-25	20:39:22 IST	27.29 N	88.50 E	10	4.0	11 Km WSW of Gangtok	
2021-9-12	23:16:07 IST	27.61 N	88.26 E	10	2.7	26 KM N of Yuksom	
2021-10-08	01:15:17 IST	27.45 N	88.47 E	5	2.4	North District, Sikkim	
2021-11-07	21:50:45 IST	27.25 N	88.77 E	6	4.3	18 Km ESE of Gangtok, Sikkim East District, Sikkim	
2022-01-05	03:01:59 IST	27.42 N	88.39 E	5	3.7	South District, Sikkim	
2022-02-06	07:28:22 IST	27.87N	87.9E	80	3.9	63km NNW of Yuksom, Sikkim, India (NEPAL)	

2022-02-27	02:06:08 IST	27.24 N	88.44 E	10	2.9	10km SE of Ravangla, Sikkim, India	
2022-02-27	03:31:24 IST	28.66N	87.47E	60	3.9	161km NNW of Yuksom, Sikkim, India	
2022-03-23	23:32:58	28.04 N	87.86 E	40	3.9	82km NNW of Yuksom, Sikkim, India	
2022-05-03	18:00:05	29.74 N	89.26 E	10	4.1	233km NNE of Lachung, Sikkim, India	
2022-05-03	20:44:43	28.64 N	87.42 E	133	3.9	161km NNW of Yuksom, Sikkim, India	
2022-05-23	14:45:35	27.4 N	87.95 E	05	3.2	27km W of Yuksom, Sikkim, India	
2022-05-23	14:54:36	27.48 N	87.94 E	10	3.2	30km WNW of Yuksom, Sikkim, India	

2022-06-22	18:41:59	26.2 N	87.38 E	29	3.8	116km WSW of Siliguri, West Bengal, India	
2022-07-02	02:53:47	27.13	89.10	10	4.3	53km ESE of Gangtok, Sikkim	
2022-08-15	18:34:33	36.27	90.00	170	4.4	961km N of Lachung, Sikkim, India	
2022-08-16	07:52:53	33.88	90.20	145	4.4	702km N of Lachung, Sikkim, India	
2022-08-18	03:16:46	27.20	88.14	10	2.9	16km SW of Pelling, Sikkim, India	
2022-09-05	06:18:52	33.37	88.79	200	4	631km N of Lachung, Sikkim, India	
2022-09-15	13:05:09	26.29	88.78	14	2.8	61km SE of Siliguri, West Bengal, India	

2022-09-21	03:04:03	28.10	87.80	50	3.6	91km NNW of Yuksom, Sikkim, India
2022-09-22	13:51:22	26.09	88.70	12	3.3	77km SSE of Siliguri, West Bengal, India
2022-11-06	21:58:41	27.76	87.84	10	4.4	57km NW of Yuksom, Sikkim, India
2022-12-17	13:24:16	26.22	89.26	10	3.1	102km ESE of Siliguri, West Bengal, India
2023-01-31	00:49:50	29.52	88.03	10	3	215km NNW of Lachung, Sikkim, India
2023-02-01	00:09:48	27.86	87.01	10	3.4	131km WNW of Yuksom, Sikkim, India
2023-02-05	22:32:54	26.91	88.80	10	2.6	45km ENE of Siliguri, West Bengal, India

## 501

2023-02-07	23:44:32	27.37	89.06	5	44km E of Gangtok, 2.3 Sikkim
2023-02-13	04:15:04	27.81	87.71	10	70km NW of Yuksom, 4.3 Sikkim, India
2023-04-10	06:31:37	28.01	87.54	10	97km NW of Yuksom, 3.6 Sikkim, India
2023-04-10	09:19:11	28.12	87.59	10	103km NW of Yuksom, 3.6 Sikkim, India
2023-04-12	05:35:10	25.98	87.26	19	140km SW of Siliguri, 4.3 West Bengal, India
2023-04-23	05:34:06	27.56	88.65	5	17km SSW of Lachung, 2.6 Sikkim, India
2023-04-25	00:48:28	27.14	88.45	5	20km SSE of Ravangla, 2.6 Sikkim, India

2023-05-03	02:52:02	28.11	87.32	15	3.2	120km NW of Yuksom, Sikkim, India
2023-05-18	14:30:46	27.46	88.17	5	2.9	11km NNW of Yuksom, Sikkim, India
2023-05-27	04:15:53	27.00	89.14	5	3.5	64km SE of Gangtok, Sikkim
2023-06-15	22:17:24	28.25	87.44	10	3.5	124km NW of Yuksom, Sikkim, India
2023-06-21	01:48:48	28.05	87.81	34	4	85km NNW of Yuksom, Sikkim, India
2023-11-22	13:16:49	27.06	88.76	5	3.5	Kalimpong, West Bengal
2023-11-22	13:44:05	27.11	88.81	1	2.3	Kalimpong, West Bengal

### ANNEXURE R-1 (Colly)

SC Sikkim Chronicle



Parking problems & traffic congestion- Battles that Gangtok loses everyday

732d



Parking of motor vehicles is one of the major problems in every urban area. Sikkim, a rapidly growing place in terms of urbanisation too, is not left behind when it comes to issues related to parking. The ever increasing ownership of motor vehicles in the state is considered to be one of the main reasons behind this, especially Gangtok.



## Gangtok seeks modern solutions to mounting traffic woes

by NE NOW NEWS December 2, 2019 9:14 pm



Gangtok is facing huge traffic congestion, just like other metropolitan cities.

Sikkim's capital city—otherwise known for being plastic- and litter-free with disciplined traffic, where lane-driving is the cultural norm—is facing huge traffic congestion, just like other metropolitan cities.

The only road connectivity to Gangtok is NH10, which forms the artery of the road network in the city. The major problems are traffic congestion, lack of parking space, lack of public transport and inadequate footpaths which cause vehicle and public conflicts.

This is especially critical for Gangtok, which, as a mountain city, has inherent constraints of space. The city is now considering alternative, non-road modes of transport like cable cars to ease public mobility.

Search...



#### Latest

Bangladesh makes 'J national slogan  
February 21, 2022 9:00 am

UP Election 2022: BJ injured in firing  
February 21, 2022 8:00 am

Two ITBP personnel blast in poll-bound  
February 20, 2022 9:40 am

President Kovind to from February 25  
February 20, 2022 11:10 pm

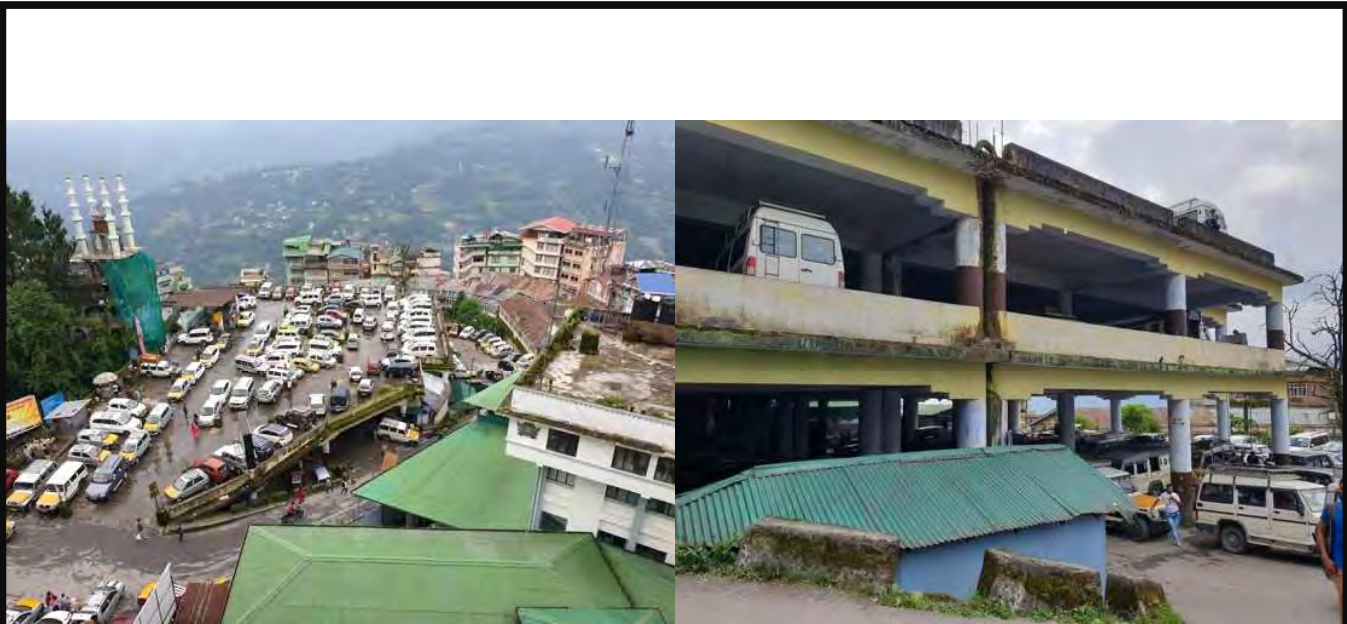




There were no proper parking bay system being followed at the MLCP prior to the project. Due to overspill of demand, the parking facility was under tremendous pressure and operated beyond its capacity. As such, even the parking aisles are used for parking wherein cars continuously shifted to give way to an incoming or outgoing vehicle.

Parking is an essential component of any city's transportation system. Managing public and private parking spaces is an integrated aspect of a planned urban transportation system. This plays an important role in increasing the capacity of existing roadways, improving traffic circulation and reducing urban chaos in the city. The unprecedented growth in the number of motor vehicles, especially the taxis and cars along with the concentration of activities has led to acute parking problems in the Gangtok City area. As the road space is limited and On-Street parking is not possible on all roads, parking demand far outstrips the supply equation. Moreover, there were limited parking lots leading to spill-over of on-street parking on the main carriageway and impeding the movement of the traffic stream.





**BEFORE THE COMMENCEMENT OF THE PROJECT**

-true copy-



ANNEXURE R-29



KANCHENDZONGA NOT VISIBLE FROM MG MARG





**MG MARG IS BEHIND THESE BUILDINGS AND HENCE VIEW OF KANCHENDZONGA IS NOT RESTRICTED FOR MGMARG DWELLERES**

**-TRUE COPY-**

# Dr. Bina Basnett elected as President of HSP Party

ANNEXURE R- 30

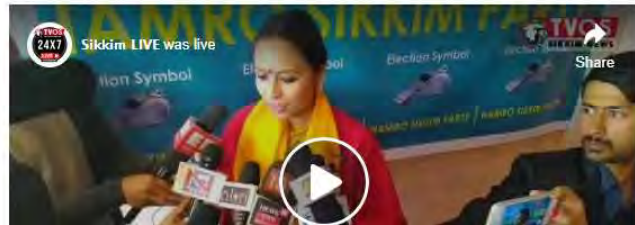
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Lalit Dahal



Dr. Bina Basnett elected as President of HSP Party

Gangtok, 24 Jan : Breaking the silence in Sikkim Political arena, most awaited moment comes here in the capital Gangtok at Hamro Sikkim Party (HSP) Headquarter attended by all Central Executive Committee CEC members an election was held where Dr. Bina Basnett was elected as the President of HSP. Senior Politician and Former Minister RB Subba and Former Indian Football Captain Bhaichung Bhutia were unanimously nominated as the working presidents respectively.



## SIKKIM EXPRESS

OF THIS LAND, FOR ITS PEOPLE

### NGT imposes stay on construction at Old West Point School area

SE Report

GANGTOK, January 18: The National Green Tribunal (NGT), Eastern Zone Bench, Kolkata on Tuesday imposed an interim stay on the construction of the multi-level PPP project being developed at Old West Point School area in Gangtok.

We direct that till next date listing there shall be a stay on construction in the area with reference to the multi-level car parking-cum-shopping hub in the area in question, ordered by the NGT bench during the hearing held through video conferencing.

The matter is listed for next hearing on 02.03.2022.

The tribunal was responding to a petition filed by Dr. Bina Basnett against the alleged illegal construction of the multi-level complex in the heart of the town.

It was contended that the multi-level complex under



A SE file pic of the demolition of old structure for the new PPP complex at Old West Point School area.

construction is to the extent of 14 storeys which is "wholly impermissible", the petitioner submitted.

It was also contended that Sikkim comes under seismic zone-IV and is prone to earthquakes of magnitudes of 4.5 to 5.5 on Richter Scale.

Thus, a parking complex of 14 storeys is a grave threat to the fragile ecology of the area and also to the life and limb of the people living in the area, the petitioner submitted.

In our opinion, matter requires consideration, noted the NGT bench which issued notices to the respondents which includes the Centre and Sikkim government. All the respondents were directed to file their counter-affidavits within four weeks.

The controversial complex at old West Point School area is being developed by a Siliguri-based company as a PPP model with the State government.

the needs of around 70 households.

the needs of around 70 households.

### Dr Bina Basnett is Hamro Sikkim Party president



SAGAR CHETTRI

GANGTOK, 24 JAN:

Dr Bina Basnett was unanimously elected as the president of Hamro Sikkim Party today. She was serving as the vice-president of the party since its formation. HSP vice-presidents, RB Subba and Bhaichung Bhutia have been unanimously elected as working presidents of the party. These important decisions were taken during a meeting held here on Thursday.

Dr Basnett hails from Tadong, Gangtok in East Sikkim and completed her schooling from Deorali Girls Senior Secondary School. She completed her MBBS from Sikkim Manipal Institute of Medical Sciences, 5th Mile Tadong and then did her MD from the same institute. She practiced at AIIMS Patna before moving to Lady Harding Medical College in Delhi. She resigned from her job to start her political career from Hamro Sikkim Party, which was launched last year.

In her address, Dr Basnett stated that she will work in the interest of the party and people of Sikkim. "I would like to dedicate this historic day to the party workers who have been working at the grassroots level selflessly to take the party forward and they have been working to give a better

turn to pg02

SE Sikkim Express

16 January at 17:45

Even right to view Khangchendzonga is at stake: Dr. Bina Basnett

GANGTOK: "Everything belonging to Sikkimese including their right to view their guardian deity Mount Khangchendzonga has been put at stake. Few outside companies who are close to the power in Sikkim are taking over every resource here. Rules are being bent to accommodate these companies run by outsiders," said Hamro Sikkim Party president Dr. Bina Basnett on Sunday.

Dr. Basnett was referring to the proposed 14-storey complex under a PPP project coming up at Old West Point School area in main Gangtok. The project developer is a Siliguri-based company. "Outsiders are exploiting Sikkim while our youth here are being made to pelt stones against each other by political parties. Soon the outsiders will rule Sikkim as owners while our people have to serve them as slaves. We must oppose such system and practice," said the HSP president. Dr. Basnet appealed the youth not to pay heed to those political parties that engage them into destructive activities. Time has come for youth of Sikkim to choose right political leaders who can guide and engage them in productive activities, she said.

- BUOY GURUNG/SE Report



Newspaper article and press conferences were carried out at various media houses as soon as NGT order for stay was issued

EastMojo

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# Sikkim: NGT stays construction on '14-storey complex' in Gangtok

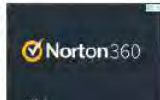
The NGT Eastern zone Bench in Kolkata has listed the next hearing on March 2, until when no construction can be carried out.

In: Gangtok (Gangtok)  
Updated: 19/03/2022



**Gangtok:** The National Green Tribunal (NGT) issued an interim stay on the alleged 'illegal' construction of a multi-level car parking and shopping hub at the Old West Point school area in Sikkim's capital Gangtok.

The NGT Eastern Zone Bench in Kolkata has listed the next hearing on March 2. Until then, no construction can be carried out at the site.



# Sikkim : Rapid Environmental Exploitation Occurring Under SKM Government; Accuses HSP Leader Bina Basnett

January 22, 2022 by North East Today



Social Worker and HSP Leader - Dr. Bina Basnett

• Sujal Pradhan, NET Correspondent, Sikkim

Social Worker and President of Hamro Sikkim Party (HSP) Dr. Bina Basnett today asserted there are rapid environmental exploitation during the regime of Sikkim Krantikari Morcha (SKM) government while attending a press conference – jointly addressed by Dr. Bina Basnet, Kedarnath Tiwari and Durba Regmi in Gangtok.

She appealed to the state Government to form an independent environment commission and work on finding suitable solutions for the same. "I appeal to the state government to form an independent Environment commission consisting of Environmentalists, Intellectuals so that they can enquire on all these kinds of events in Sikkim and advise the government for suitable solutions".

Basnett also questioned the government for no transparency; no accountability and how without environment clearance, constructions works are permitted. "We thought now the Paribartan government is in power, which will work for the betterment of the state but instead what we

**HAMRO SIKKIM PARTY**

**HAMRO SIKKIM**

**Whistle [Election Symbol]**

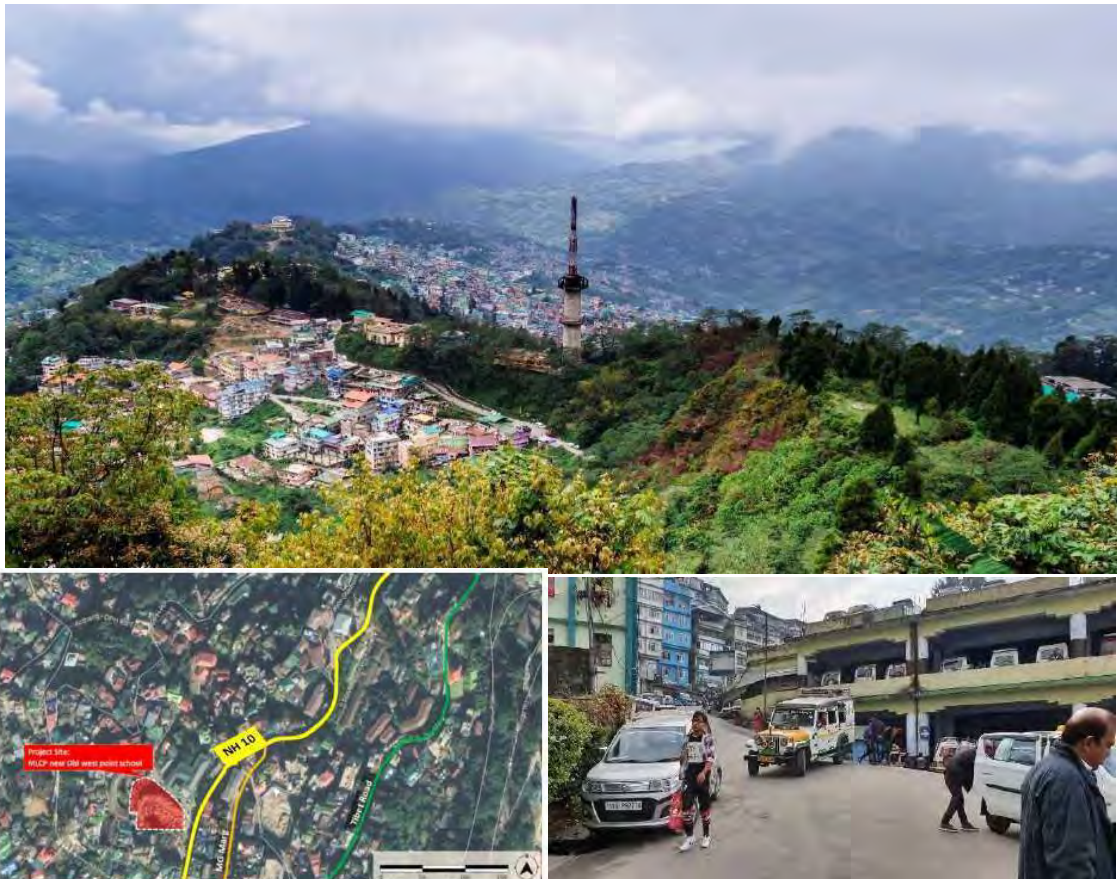
f 1hamrosikkim | @1HamroSikkim | hamrosikkimparty | 8327269055

TRUE COPY

ANNEXURE R- 33  
(Colly)

**IMPLEMENTATION OF MULTI-LEVEL CAR PARKING  
COMMERCIAL DEVELOPMENT  
AT  
OLD WEST POINT SCHOOL AREA  
ASSESSMENT REPORT**

***DELIVERABLE 1: Technical Feasibility***



**GANGTOK SMART CITY**

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*Implementation of Multi-Level Car Parking cum Commercial Development at Old West Point School Area  
Technical Feasibility Report*

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## List of Abbreviations

DCR: Development Control Regulations

ECS: Equivalent Car Space

FACPS: Fully automated car parking structure

FAR: Floor Area Ratio

FSI: Floor Space Index

GSCDL: Ganagtok Smart City Development Limited

GT: Grant Thornton India LLP

MG: Mahatma Gandhi

MLCP: Multi level car parking

MOHUA: Ministry of Housing and Urban Affairs

NH: National Highway

PARI: Precision Automation & Robotics India Ltd

PDMC: Project Development and Management Consultancy

SPV: Special Purpose Vehicle

STNM: Sir Thutob Namgyal Memorial

URDPFI: Urban and Regional Development Plans Formulation and Implementation

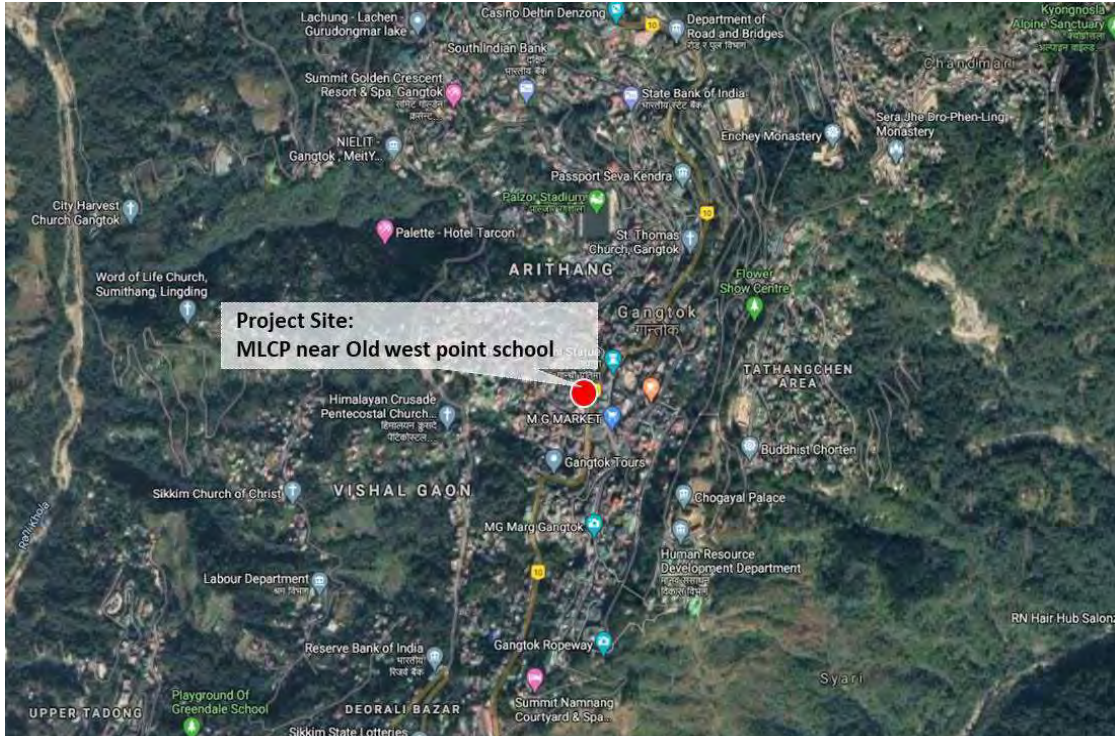
## 1 INTRODUCTION

### 1.1. Proposed Project

Parking is an essential component of any city's transportation system. Managing Public and private parking spaces is an integral aspect of a planned urban transportation system. Parking plays an important role in increasing the capacity of existing roadways, improving traffic circulation and reducing urban chaos in the city.

The unprecedented growth in the number of motor vehicles, especially the taxis and cars along with the concentration of activities has led to acute parking problems in the Gangtok City area. There are limited parking lots leading to spill-over of on-street parking on the main carriageway. As the road space is limited, on street parking hinders the traffic stream. Also, as on-street parking is not possible on all roads, parking demand has far outstripped the supply in the City.

With this background, Gangtok Smart City SPV (GSCDL), under the Smart City Program, intends to develop Multi Level Car Parking (MLCP) lots for easing overall traffic situation in the City. For this purpose, an existing MLCP at MG Road at Old West Point School Area (5708 sqm) has been identified to be redeveloped into a state of the art, modern MLCP cum commercial complex.



Accordingly, Grant Thornton India LLP (PDMC) on behalf of GSCDL has taken up the work to assess Feasibility and prepare of Detailed Project Report (DPR) for development of

MLCP at Old West Point School Area (Hungry Jack). This report is the first deliverable of the study providing site details, assessment of parking demand and recommendation on parking technology for the area.

## 1.2. Study Objectives

The overall objective of the study is to assess the Technical and Financial feasibility for developing the proposed MLCP under a comprehensive PPP model. To achieve this objective, study involves the following components:

- **Reconnaissance Survey:** Conducting the reconnaissance survey of the Identified Site and its Influence Area.
- **Parking Studies:** Conducting parking surveys in the influence area of project site to assess demand for organised and unorganised on-street / off-street parking and user's willingness to pay.
- **MLCP Feasibility:** Preparing a feasibility study based on existing and forecasted parking demand, space requirement, capacity of MLCP, fare structure and estimation of project cost.
- **Detailed Project Report:** Establishing Financial Viability and Revenue generation model under PPP structure.

## 1.3. Approach and Methodology

The approach adopted for undertaking the study is given in the figure below:



Reconnaissance survey was carried out for identification of parking issues and available parking facilities. Parking surveys and willingness to pay surveys were carried out to assess the existing demand and user's willingness to pay. Future parking demand has been estimated based on applicable DCR and existing industry practices. Further, the technical feasibility of proposed site was assessed in view of estimated demand.

In the presence of various technologies for the Smart Parking and other Smart Parking solutions, the most appropriate technologies have been considered and are included in this report. The technologies were compared based on following criteria in discussion with the client:

- Maximum usability
- Compatibility with manual ramp based MLCP
- Short term parking feasibility
- Area required to accommodate maximum vehicles on proposed site using each technology
- Cost per Equivalent Car Space (ECS)

Further, the project cost shall be calculated based on the following

- Construction Cost
- Per ECS cost
- O&M cost per year
- Dismantling Cost of Existing Structure
- Other services including Safety, Security, Fire, IT requirements etc.

#### **1.4. Key Concerns and Issues**

Key concerns and issues identified from Reconnaissance Survey and Technical Assessments are listed below.

- **Site Access:** The Site is mainly accessed through NH10, the busiest corridor in Gangtok. The concern is to manage the traffic effectively during the construction phase of the development/ building.
- **Existing Parking capacity:** Allocation of proper alternative space for existing parking during the construction phase. As the existing facility is used for parking of almost 333 cars during peak hours, GSCDL will require to come up with alternate parking sites during construction.
- **Existing Parking Charges:** The existing parking charges are on a lower side as compared to industry practice across the country. To make the project successful under PPP model, user acceptance of higher parking rates would be essential.

#### **1.5. Broad Guidelines for the Consultant**

A Kick-off meeting was conducted with GSCDL followed by field surveys. Based on the discussions held during kick-off meeting and with PDMC broad guidelines finalized for the consultant are as listed below:

- Signing Authority of the project is GSCDL.

- Local bylaws and DCR to be referred for guidelines on height restrictions, setbacks and FAR/FSI.
- Project site ownership documentation to be provided by GSCDL.
- Project site map with approved measurement to be verified and submitted.
- Land use notification of site to be collected.
- Existing parking rates to be collected.
- Parking bylaws / policy for increase in parking charges, if any, to be considered.
- Direct and indirect tax structure i.e. income tax and GST respectively to be considered.
- Consultant to take cognizance of existing assets at site with their respective detail.
- Existing parking demand at the site as well as parking demand in nearby areas to be considered.
- Ground coverage of 50% and basement coverage of 75% to be considered by consultant.
- 4 Basements for parking and G+6 floors above NH10 level for Commercial development to be considered.
- Options for mechanized parking to be investigated for enhancing parking capacity for site.

### **1.6. Report Structure**

The report begins with providing an overview of the city of Gangtok, context of the current study, comprehensive profile of the proposed project location including the physical profile of the project site, description of its surrounding areas and a brief real estate profile. This is followed by the section on the traffic demand survey that incorporates the methodology followed for the traffic study leading to parking demand estimates and required parking capacity.

Based on this data, the financial feasibility assessment shall be carried out providing project cost estimate, revenues forecasts and estimated project returns. Based on the magnitude of the project and the results of the financial feasibility, alternative transaction structures shall be assessed for suitability to the project. A recommendation for project structure shall be made in the final chapter.

## 2 PROFILE OF THE CITY

Gangtok is the capital and the largest town of the Indian state of Sikkim. It is also the headquarter of the East Sikkim district. Gangtok is in the eastern Himalayan range, at an elevation of 1,650 m (5,410 ft). Nestled within higher peaks of the Himalaya and enjoying a year-round mild temperate climate, Gangtok is at the centre of Sikkim's tourism industry.

Gangtok is located at about 120 km from Bagdogra International Airport and nearest railway station is at New Jalpaiguri. NH-10 highway connects Gangtok to rest of India via West Bengal. Proximity to international border of Nepal, Tibet and Bhutan provides a perfect base for international trade with the neighbouring countries. The existence of Nathu La Pass, Jelap La Pass, and Donkia Pass provides a gateway for international trade.



### 2.1. Economy

As per census 2011, Gangtok has a population of 100,000 persons with a density of 257 persons per square kilometre. The economy of Gangtok is primarily agrarian with a strong tourism industry. Cottage and small-scale industry are also good contributors to the economy of the capital city. The average per capita income in 2011 stood at

₹81,159. The domestic tourism has increased by about 25 percent since 2011 to 2016 and the foreign tourist has increased by 64 percent (*source: Smart City Phase II*) in the same period. This growing trend establishes Gangtok as one of the most preferred tourist destinations in India, generating high volumes of traffic, contributing to the huge parking demand.

## **2.2. Traffic and Transport System**

National Highway 10 links Siliguri to Gangtok. The highway is an all-weather metalled road which runs parallel to the river Teesta, entering Sikkim at Rangpo. Numerous public and privately run bus and maxi-cab services connect Siliguri to Gangtok. A branch of the highway from Melli connects western and southern Sikkim. Towns in southern and western Sikkim are connected to the northern West Bengal hill stations of Kalimpong and Darjeeling. Maxicabs operating on a shared basis are the most prevalent mode of transport in the state.



## **2.3. Need of the project**

As given above, Gangtok is experiencing unprecedented demand for parking owing to increase in tourist activities and car ownership in general. In lieu of adequate off street parking spaces, extensive on street parking is observed, affecting the traffic stream on already constrained network. This project has been conceptualized as a parking cum commercial complex project wherein an existing multi-level car park has been proposed to be redeveloped into a parking cum commercial complex. The MLCP will form the lower 4 floors of the structure whereas the upper 7 floors are envisaged to be developed

as commercial complex. It has been envisaged that the new MLCP will house higher parking capacity than the existing MLCP, able to cater to following demands:

1. Existing parking demand of the MLCP
2. Existing on-street parking demand near the MLCP site
3. Potential parking demand to be generated from the envisaged 4 story commercial development

Gangtok Smart City Development Limited, the Special Purpose Vehicle (SPV) formed under Smart Cities Mission from Ministry of Housing and Urban Affairs (MOHUA), Government of India, has envisaged this project to build on PPP basis to address city's parking issues as well give a boost to the local economy.

### 3 SITE CHARACTERISTICS

#### 3.1. Location

The identified site is the existing MLCP at West Point School Area, located in the heart of the city of Gangtok, adjacent the busy NH10 and MG Road market. Mahatma Gandhi Road is the commercial hub of Gangtok city. The road and the area around it have transformed over the years and has become one of the prime attractions for tourists with a long stretch of boulevard square. MG Marg is one of the most densely populated Areas of the city with a maximum density of 330 persons per Sq Km. The road network in the immediate vicinity of MG Marg is busiest in the City because of many work centres and commercial establishments and easy access to the commercial hub of Tibet Road and Namnang.



Ground floor of existing MLCP



G-2 floor of existing MLCP

**Figure 1: Proposed Site: Existing MLCP and EPF Office**

Being adjacent to the MG Marg, the site has tremendous potential to be developed as a modern commercial complex. With roads around MG Marg and existing MLCP facility experiencing parking spill over, the case of redeveloping existing facility as a MLCP cum commercial complex becomes stronger.

### **3.2. Geology**

The existing MLCP houses taxi parking with private car parking. Plot area of the site is 5708 Sqm. The pre-dominant landuse in the vicinity is commercial with limited shops on the ground floor and hotels on upper floors of the buildings. As per the notification of the Mines & Geology Department Government of Sikkim the area has been classified as Zone 1 with respect to the existing soil characteristics and conditions.

*Source: Department of Mines and Geology*

#### **Figure 2: Stability Map of Gangtok**

### **3.3. Geotechnical Investigation report:**

Department of mines and Geology conducted Geological and Geotechnical investigations at site in March 2020. The conclusion of the report is given in the snapshot below.

1. Geologically, the area comprises of medium to high grade metamorphic rock sequence represented by Garnetiferrous Mica schist and Mica schist with quartzite intercalations underlain by Lingtse Granitic Gneiss. The foliation of rocks strike NW-SE and dip gently towards North east with southerly facing slope aspect which makes the area geologically favourable for proposed construction of structures at Old West Point School area.
2. Based on the drilling data of Borehole no. 01 light brown clayey /silty soil is encountered from 3.00m depth, Garnetiferrous Mica Schist with quartz veins is found from 3.00m to 9.00m depth followed by Moderately weathered Garnetiferrous Mica Schist between 9.00m to 13.00m depth underlain by highly weathered Garnetiferrous Mica Schist between 13.00m to 15.00m depth.
3. For Borehole no. 02 micaceous silty soil overburden can be encountered upto depth of 3.00m followed by highly weathered Garnetiferrous Mica Schist between 3.00m to 6.00m depth. Further Garnetiferrous Mica Schist with quartz veins between 6.00m depth to 9.00m depth followed by fresh Garnetiferrous Mica Schist with quartz veins between 9.00m to 10.50m depth. Moderately weathered Garnetiferrous Mica Schist can be encountered between 10.50m to 13.50 m depth followed by moderately weathered Garnetiferrous Mica Schist and fresh Garnetiferrous Mica Schist.
4. The tensile strength of rock core for Borehole no. 01 of depth 10.50 m is  $70.10 \text{ T/m}^2$  and 12 m depth is  $121.00 \text{ T/m}^2$  and compressive strength is  $121.00 \text{ T/m}^2$  &  $96.00 \text{ T/m}^2$  whereas tensile strength of rock core for Borehole no.02 of depth 9 m is  $331.20 \text{ T/m}^2$  and compressive strength is  $3454.60 \text{ T/m}^2$ .
5. As Garnetiferrous Mica Schist is a foliated and becomes non-competent metamorphic rock when contact continuously with water activity in which incidences of differential settlement is a natural phenomenon under such condition. Therefore, suitable foundation design to be designed by a competent structural engineer based on the sub-surface geological condition of rock strata.
6. The Safe bearing capacity for Bh. 01 at depth of 1.50 m is  $13.84 \text{ T/M}^2$  and 3.00m depth is  $20.15 \text{ T/M}^2$  and SBC for Bh. 02 at depth of 1.50m is  $6.92 \text{ T/m}^2$ , 3.00m depth is  $11.51 \text{ T/m}^2$ , 4.50m depth is  $46.50 \text{ T/m}^2$  and 6.00m depth is  $22.13 \text{ T/m}^2$ .

The report is attached as an annexure III of this report.

- Based on geotechnical investigation it is found that metamorphic rock strata is present more in sub-surface. Thus, pile foundation shall be suggested for the

proposed multi storey building. This shall be also convenient to avoid differential settlement and shall be opt for high seismic zone.

- However, it is strictly suggested that all structural members of the proposed building shall be in compliance with IS-1893 'Criteria for Earthquake Resistant Design of Structures latest revision' and IS 13920:1993 Ductile Detailing of Reinforced Concrete Structures Subjected to Seismic Force.
- Since highly weathered rock is predominant in site, Reinforced Cement Concrete Retaining wall has to be designed all-round the basement suggested with additional seepage pressure calculations as per IS-14458 'Retaining Wall for Hill Area Guidelines' to avoid land slide and accidents.
- Proper shoring of earth during excavation is required considering the earth slope stability calculations for given sections in different seasons. IS 14680-2004 LANDSLIDE CONTROL — GUIDELINES shall be referred for the earth slope stability calculations and IS code 14804:2000 for Siting, Design and Selection of Materials for Residential Buildings in Hilly Areas -Guidelines.

### 3.4. Site Visit

Consultant has carried out the Reconnaissance survey at the site on 4<sup>th</sup> of March, 2020. The site experiences peak demand during the day for taxis and private cars during the office hours. The G-1 level of the parking generally sees maximum turn over with short distances taxis along with local Gangtok taxis. Night Parking is allowed for Taxis and Private cars alike. Figures below depict the present parking scenario in the existing MLCP and its vicinity.



**Figure 3: Existing MLCP, at Old West Point School Area**

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**Figure 4: Existing MLCP, at Old West Point School Area**

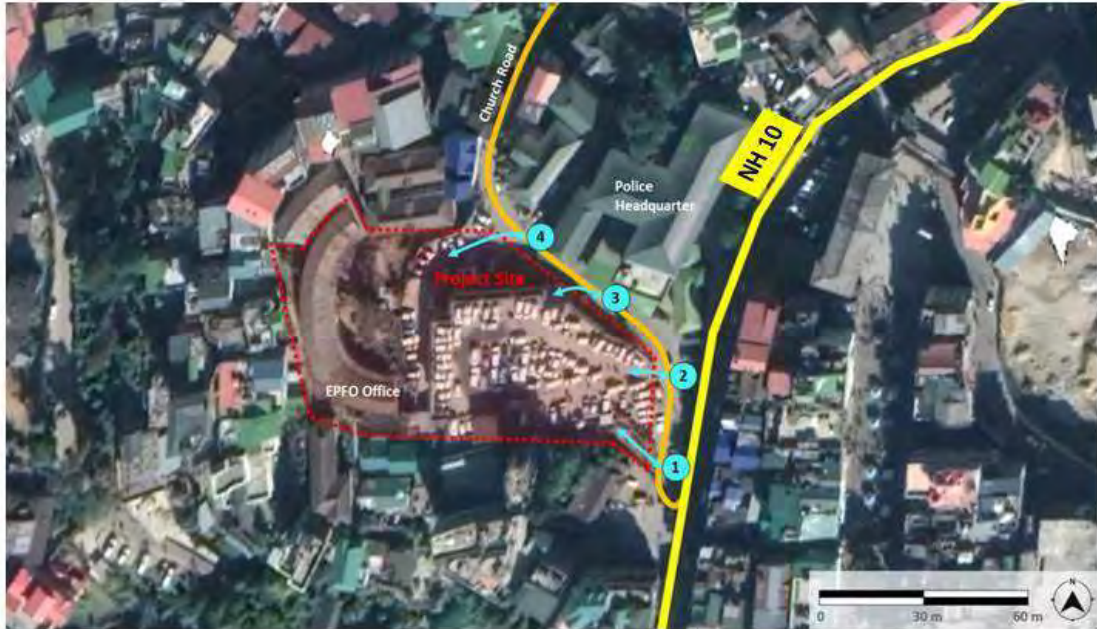


**Figure 5: Existing MLCP, at Old West Point School Area**

### **3.5. Accessibility to the MLCP**

The site's main access is from NH10 from East with optional access from Church Road on the North. The existing MLCP structure is built on the natural land slope with Ground level and G-1 levels accessible from NH10. Level G-2 is accessible from Church road. The exit from Level G-1 is at Church road with linkage to NH10 as well. The Access roads are shown in subsequent figures given below.

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2 Access of existing MLCP on G floor from NH10



3 Access of existing MLCP on G-1 floors from Church Road



1 Access of existing MLCP on G and G-1 floors from NH10



4 Access of existing MLCP on G-2 floors from Church Road

**Figure 6: Parking at NH10 Level**

**3.6. Existing Parking Demand at MLCP**

The Existing parking facility is being used by long route intercity taxis as well local taxis and private vehicles. Level G-1 and G-2 are majorly used by long route taxis. However, Local taxis use almost 1/4<sup>th</sup> of the parking bays on Level G-1 and Private vehicles use level G-2 for parking. Ground floor mostly sees mix parking with Cars/ jeep/ Taxis and

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private vehicles. 2 Wheelers are also seen parked on Ground floor level i.e. NH10 level. Figures below depict the Parking conditions within various levels of the existing MLCP.



**Figure 7: Parking at NH10 Level**



**Figure 8: Parking at NH10 Level**

At present, no proper parking bay system is followed. Due to high demand, the parking facility is under tremendous pressure and operates beyond its capacity. As such, even the parking aisles are used for parking activity and vehicles are shifted manually by parking attendants to give way to an incoming or outgoing vehicle.

### 3.7. Passenger Amenities

The Existing MLCP is of very basic nature in terms of passenger amenities and other infrastructural facilities with poorly maintained public toilet and an unplanned passenger waiting area. In absence of a regularised canteen, many unorganised eatery points are operational, mostly at level G-1 and level G-2. Levels G-1 and G-2 are connected by staircase within the building footprint. Although a passenger enquiry counter is operational, no IT based information system is found to be in place. Signage, rate card and input & output terminals were missing at all levels.

### 3.8. SWOT Analysis

#### Strength:

- Commercial Landuse within surrounding area
- Parking Demand within the influence area of the site
- Good accessibility and feasible approach to the site though the NH10
- Appropriate Site Area for proposed MLCP cum Commercial development
- No adaptability issues as Existing parking facility is already functioning
- Advantageous locations due to commercial landuse

#### Weakness:

- Irregular Shape of Site

#### Opportunity:

- High Commercial and rental potential for the site
- Parking Demand from the adjoining site location
- Location of site within the vicinity of the MG Market.

#### Threat:

- Immediate parking locations
- Lower parking rates

## 4 PARKING SURVEY

In order to understand the parking characteristics such as parking pattern, duration, turnover, demand, physical characteristics following surveys has been conducted at identified off street parking locations and its nearby on-street parking locations

- Parking Inventory Survey (on-street and off-street)
- Registration Plate survey

### 4.1.1. Parking Inventory Survey (On-Street and Off-Street)

Parking inventory is a survey used to estimate the parking supply details. It also helps understand the parking occupancy levels of the facility. It is a physical count of existing parking spaces and captures the details of parking design, orientation etc. It includes both on-and off-street parking.

#### a. Need for Parking Inventory

The parking inventory will help build the database of overall parking supply in the identified area. The reasons to conduct parking inventory surveys are discussed below in detail:

- To establish a clear understanding, within a small area, of the numbers of parking spaces and key characteristics relevant to parking management.
- An inventory provides essential insight on the parking options available.
- An inventory is necessary to enable reliable occupancy surveys. Such surveys, count parked vehicles, and divide by the number of legal spaces, to calculate the proportion of spaces that are occupied i.e. to assess the occupancy rate.

$$\text{Occupancy Rate} = \frac{\text{Occupancy}}{\text{Number of Spaces}}$$

The denominator comes from an inventory survey.

### 4.1.2. Registration plate parking survey

The registration plate survey shall be done through manually entering the registration number of the vehicles using survey forms. Different approaches shall be adopted for carrying out surveys at on street and off-street survey locations. These methods are briefed in the following.

- **On-Street:** In this survey, the road network will be divided into different smaller stretches which shall be assigned to one enumerator who monitors the vehicle registration numbers of all the parked vehicles along the stretch. The survey shall be conducted considering minimum 500 m long stretch as 1 on-street location, with 30 minutes turnaround time, for 12 hours of the day. The duration of the surveys may depend on the street and its abutting landuse activities and associated business hours.

- **Off-Street:** The registration plates of the vehicles occupying the parking lots shall be noted down at the starting and ending of the survey. Further, the vehicle registration numbers of the vehicles that enter and leave the parking lot are noted down during the surveying process for every 30 minutes duration. The duration of the surveys may depend on the street and its abutting landuse activities and associated business hours.

The registration plate survey gives the data regarding the duration for which a particular vehicle uses the parking bay. If time interval is shorter, then there are less chances of missing short-term parking. The analysis of the collected data will help to estimate the parking characteristics for the on-street and off-street parking locations as discussed in following table.

S. No.	Type of Analysis	Description
1	Parking occupancy	Parking Occupancy of a zone is a measure of the ratio of parking demand to supply. It reveals whether existing parking is sufficient and if unregulated parking is taking place. It is defined as vehicle accumulation w.r.t total number of parking spaces available.
2	Parking duration	Parking duration provides a measure of average length of time that vehicles are parked in particular areas. Parking duration is defined as ratio of time for which vehicles are parked to total number of vehicles parked. Typically, the length of time is categorized into short (less than 2 hours), and long term (more than 2 hours). This provides information on nature of parking i.e. type of users and subsequently type of controls
3.	Avg. Hourly parking volume	Average hourly parking volume is defined as total vehicles accumulated divided by total hours of survey period.
4.	Avg. Parking turnover	Average Parking turnover is defined as no. of times particular parking bay has been utilized. It is total no. of vehicles parked by total number of parking spaces.
5.	Parking accumulation	The total number of vehicles parked in a given area at a specific point of time is defined as parking accumulation.
6.	Parking turnover	The number of vehicles that are parked in a given space over a set period of time is referred to as parking turnover.
7.	Capacity Utilization	It is the percentage of space utilized against the number of parking bays available in given duration. This gives an idea whether the parking capacity is getting under or over utilized.

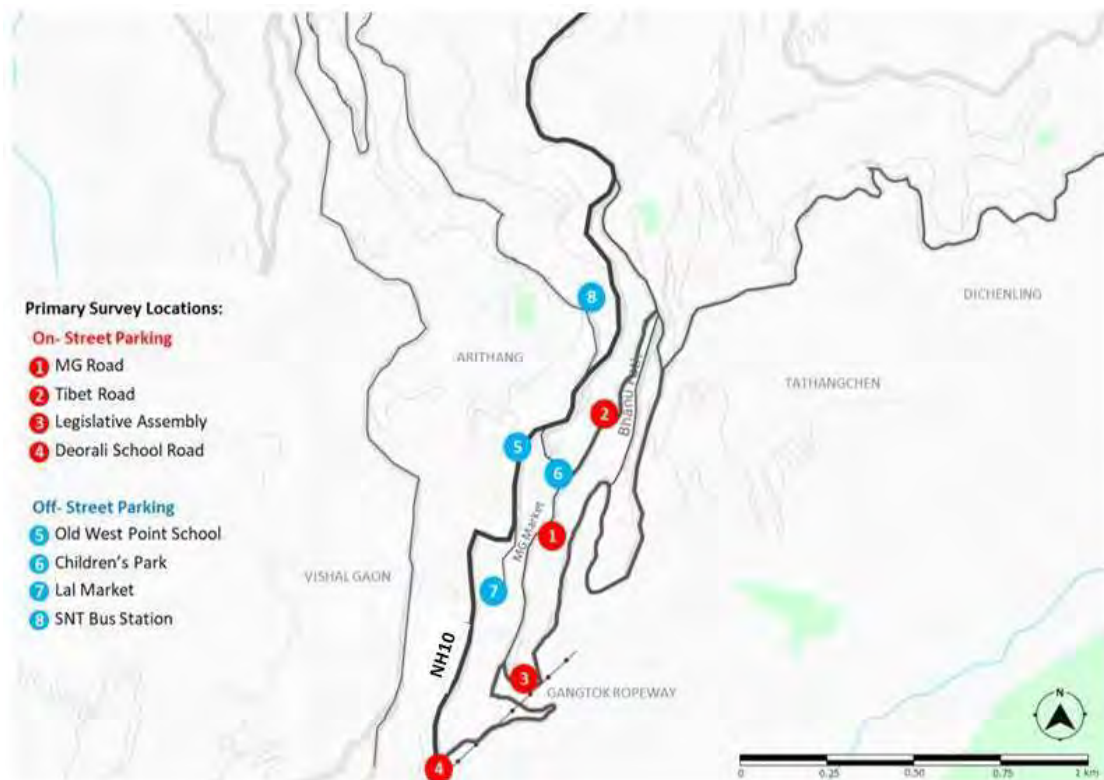
Above data shall be utilized to assess the existing utilization of parking facilities along with the temporal characteristics of parking behaviour for example, if majority of parking in a commercial area is long term, the parking is majorly being used by the shop owners and thus can be relocated, if required.

#### **4.1.3. User willingness to pay survey**

User willingness to pay survey shall be conducted as part of vehicle registration plate survey to understand the user perception towards the parking policy, pricing and its impact on parking behaviour. Methodology to be adopted for this survey shall entail interviewing parking users based on pre-defined questionnaire and identify users' willingness to pay for parking per hour. It will help estimate the impact of revised pricing on the existing level of parking usage. This survey will also help to analyse the financial viability of new parking facilities being planned in the city. A sample size of 10% shall be maintained for this survey at each location.

## 5 PARKING DEMAND ASSESSMENT

Reconnaissance survey for the proposed MLCP site was carried out on 4<sup>th</sup> of March 2020 followed by parking surveys conducted on 5<sup>th</sup> and 6<sup>th</sup> of March 2020 to acquire data on parking accumulation, duration, parking turnover and user opinion. Parking surveys were conducted for the existing MLCP and across the influence area of the project site. **On-street and off-street parking surveys were carried out at 8 locations for 12 hrs duration as per the approved survey formats.** Surveys conducted include registration number plate survey, occupancy survey and willingness to shift and pay. This information is utilized to infer the demand for parking and the extent of the parking required in terms of the number of equivalent car spaces (ECS) to be built.



**Figure 12 Parking Survey Locations**

### **6.7. Recommended Technology**

The present site is proposed to be developed on PPP basis with multi-level basement parking and commercial development above the ground. The basements of the MLCP is envisaged to be accessible by manual ramps for parking purpose.

From the analysis of various type of parking systems and technologies, it has been found that Semi-Automatic type stack parking is the best suited parking technology for the proposed MLCP development. This parking system is found economical.

At about Rs. 3 Lakhs per ECS and thus is considered feasible for the envisaged development. Technical specifications of stack type parking shall be indicated in subsequent deliverables.

In this case, the Semi-Automatic type Stack Parking is selected to be installed within the basement. The Semi-Automatic Type Stack parking system helps double up the parking numbers per parking bay. Assuming 75% efficiency of normal bays to be converted to stacked parking bays (25% discounting for inaccessible areas, low floor heights, MEP duct intrusions minimizing the overall height for accommodating two cars one above another), the overall supply can be targeted to increase by 75%, in addition to manual parking (535 ECS) within the building. Thus, with the addition of mechanical parking system, the parking may be increased by 201 spaces in lower two basements. Hence, parking of about 736 ECS may be targeted to achieve. An indicative concept layout has been given of a typical basement parking floor.

## **7 CAPEX AND OPEX**

### **7.1. Capex**

As discussed in the previous sections, the project envisages the development of MLCP at the specified location to cater to the needs of the vehicle users and help in de-congestion of the roads. Apart from the parking facility, it also envisages the creation of commercial space to cater to the users of the facility and public. This would be a value-added facility for the project. In addition to the building, a foot over bridge connection to MG Market has also been envisaged to enhance the commercial viability of the project. The capital cost thus would be a combination of both parking and commercial facility along with the common facilities. The capital estimates for the project is provided as under:

## **8 CONCLUSION**

As above, the report concludes with following key points:

- On-street and off-street parking surveys were carried out at 8 locations for 12 hrs duration as per the approved survey formats.
- The actual holding capacity of the existing site is 165 ECS (Equivalent Car Spaces) but the facility is being operated beyond its capacity at about 355 ECS in peak hours.
- The parking demand generated by the commercial area proposed in the redeveloped MLCP shall be 415 ECS.
- Overall, demand estimated at the redeveloped site shall be 770 ECS including existing parking demand and proposed commercial landuse at the proposed development.
- It is assessed that a total of 535 ECS may be provided within the proposed building footprint.
- Top two basements are reserved for local cabs and long route taxis.
- Mechanized parking is provided in only lower two basements.
- To increase capacity, mechanization is proposed. Assuming of converting 75% of surface bays into stacked parking bays, the overall supply is estimated to be increased to 736 ECS.
- 70% of the vehicles are parked for short duration of about 2 hours
- Hike in parking charges are proposed in line with the willingness to pay indicated by users
- The capex for the development of parking cum commercial building is about 255 Crores.
- Opex of 5% is proposed for present study. The opex shall increase at a rate of 5% at every 3 years of operation.

## Annexure I: Case Studies

Usually in India, automated MLCP systems are mostly used in commercial and office spaces. At present, the implementation of automated MLCP systems in India is not prevalent as compared to conventional parking systems. Yet there are few cases already implemented which are broadly studied and reviewed for this assignment purpose and understand the kind of technologies primarily adopted by them.

Project Name	Developer	Parking Technology	Area (Sq. Meter)	Capacity (ECS)	Approx. cost per ECS (In lacs)
Srinagar Lal Chowk	Simplex Project Ltd.	Semi Mechanised	NA	288	26 Cr.
Tutikandi Multi-storey Parking and Civic amenities Centre, Shimla		Manual	NA	700 Car Spaces	
Sector 17	SPML	Manual & Semi-Automatic (Ramp based and Independent stacker type)	6500 Approx.	1200	3.5 – 4
Sambhaji Park, Pune	Ram Ratan Group	Fully Automatic – Tower Parking	250	80	3.5 – 4
UB City, Bengaluru	Prestige Group	Automatic Puzzle Type	-	350	2-2.5
Bhulabhai Desai Road, South Mumbai	Municipal Corporation of Greater Mumbai (MCGM)	Fully Automatic – Tower Parking	-	240	10
Voltas House, Mumbai	Voltas	Automatic Puzzle Type	-	76	3.5 - 4
BKS Marg, New Delhi	DLF	Fully Automatic Chess Type	6,085	1,408	9-10
Sarojini Nagar, New Delhi	DLF	Fully Automatic-Chess Type	3,789	824	9-10

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» Srinagar Lal Chowk

Srinagar Lal Chowk	
Type	Semi Mechanised
Capacity:	288 ECS
Capex	26 Cr.
Year (Opening)	2017
Parking Charges	Rs 20 for First Hour and Rs 10 for every subsequent hour
	Rs. 1100/month
Contractor	Built by Simplex Project Ltd.

» Shimla: Tutikandi Multi-storey Parking and Civic amenities Centre

S. N.	Description of Features	Capacity
A.	<b>Integrated Parking and TRC Building components covered in this Package under IDIPT-HP</b>	<b>Total 700 car spaces .</b>
1.	a) Terrace/Restaurant floor(fast food, waiting hall, Shops, ladies & gents toilet, 2 stair cases, 4 lifts, fountain, 2 security guard rooms & ramps areas. b) Terrace area & Circulation area.	Buses=4.+4=8nos. Cars=32 +8 =40nos.
2.	P1) Parking, Ladies & Gents toilet 2nos. of staircase, 4nos. of lifts & circulation area.	77 car spaces
3.	P2) Parking, Dormitories, 2nos. of staircase, 4nos. of lifts, circulation area.	100 car spaces
4.	P3) Parking, Ladies &Gents toilet 2nos. of staircase, 4nos. of lifts & circulation area.	77car spaces
5.	P4) Parking, Dormitories, 2nos. of staircase, 4 nos. of lifts, circulation area.	100 car spaces
6.	P5) Parking, Ladies & Gents toilet 2nos. of staircase, 4nos. of lifts & circulation area.	77 car spaces
7.	P6) Parking, Dormitories, 2nos. of staircase, 4nos. of lifts, circulation area.	100car spaces
8.	P7) Parking, Ladies & Gents toilet 2nos. of staircase, 4nos. of lifts & circulation area.	77 car spaces
9.	P8) Parking dormitories, 2 nos. of lifts, staircase.	52 car spaces
10.	Office, lifts, staircase & toilets.	-
11.	Fire-fighting system with integrated fire-tank for total TRC Shimla.	-
12.	Lifts provision • 4 Nos. (8- storey run/lift stops)	8 persons per lift (32 persons at a time)
13.	CCTV monitoring system, Public Address System, and Electrical Power Back-up for total TRC Shimla.	-
14.	Solar water heating system for total TRC Complex	-
15.	Solar Street Lighting for total TRC Complex	-
16.	Rainwater Harvesting System (separate tanks for each building block)	-

# Annexure II: References

The screenshot shows a news article from The Indian Express dated Monday, September 10, 2018. The article is titled "Sikkim – a state with over 50,000 vehicles for 6 lakh people" and is written by PTI from Gangtok. The main text states that the transport sector is the biggest generator of employment in Sikkim and that additional vehicles are needed due to growth in tourism and industry. A sub-headline notes that vehicle registration has almost doubled in the Himalayan state in the past five years, from 30,003 in 2013 to 53,636 in January 2018. The article also mentions that Sikkim has four districts and a total population of 6,10,377.

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- Sikkim organic produce to reach market in govt vehicles
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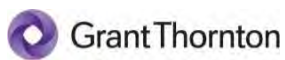
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**IMPLEMENTATION OF MULTI-LEVEL CAR PARKING  
CUM  
COMMERCIAL DEVELOPMENT  
AT  
OLD WEST POINT SCHOOL AREA  
ASSESSMENT REPORT  
*DELIVERABLE 2: Financial Feasibility***



**GANGTOK SMART CITY**



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## **2. Introduction**

The Section provides necessary background and preliminary understanding of the project requirements, project area context and overall methodology for achieving the objectives of the project. The methodology has been outlined to provide a clear understanding of activities to be undertaken at each stage of the project. The project understanding, methodology and scope of work are based on thorough review of ToR, preliminary discussions with client and extensive background review.

### **2.1. Proposed Project**

Parking is an essential component of any city's transportation system. Managing public and private parking spaces is an integrated aspect of a planned urban transportation system. This plays an important role in increasing the capacity of existing roadways, improving traffic circulation and reducing urban chaos in the city.

The unprecedented growth in the number of motor vehicles, especially the taxis and cars along with the concentration of activities has led to acute parking problems in the Gangtok City area. As the road space is limited and On-Street parking is not possible on all roads, parking demand far outstrips the supply equation. Moreover, there are limited parking lots leading to spill-over of on-street parking on the main carriageway and impeding the movement of the traffic stream.

Accordingly, GSCDL, under smart city program has identified Multi Level Car Park projects to be implemented on priority. Under the program, GSCDL has identified an existing MLCP to upgrade into a state of the Art, modern MLCP cum Commercial Development near M.G. Marg at West Point School Area.

The key objectives of this project are:

- To ensure efficient parking system at the heart of the commercial district of the Gangtok City;
- To prepare design for the MLCP cum Commercial Development including plans for pedestrian connectivity, public and private spaces and integration of diverse uses throughout the site area;
- To make an iconic, safe, comfortable and inclusive development that is attractive and accessible to all;
- To establish financial sustainability of the project; and
- To enhance the environment sustainability of the project by encouraging the standards of energy conservation (like LEED status, water management, minimize heat retention, urban heat island effect, etc.).

### **2.2. Scope of the Study**

The overall objective of the study is to assess the Technical and Financial feasibility for developing the proposed MLCP project under a comprehensive PPP model. To achieve this objective, study involves the following components:

- a) **Reconnaissance Survey:** Conducting the reconnaissance survey of the Identified Site and its Influence Area.
- b) **Parking Studies:** Conducting parking surveys in the influence area of project site to assess demand for organised and unorganised on-street / off-street parking and user's willingness to pay;
- c) **Feasibility:** Preparing a feasibility study based on existing and forecasted parking demand, space requirement, capacity of MLCP, fare structure and estimation of project cost; and
- d) **Detailed Project Report:** Establishing Financial Viability and Revenue generation model under PPP structure.

### 2.3. Methodology of the Project

→ The methodology was derived based on key objectives of flexible planning to accommodate growth and change through public investment and infrastructure to enhance development potential.



- We started with area appreciation and situation analysis by conducting reconnaissance survey for better understanding of existing site and environmental features.
- To analyze parking / traffic movement of all modes including pedestrian flow characteristics near the junction, time-based traffic and transportation surveys were conducted.
- For a comprehensive understanding of upcoming developments around Project, the team analyzed upcoming development proposals, existing acts, policies, rules and regulations applicable for the proposed project.
- Transport planning is important to ensure that surrounding transport networks are efficiently linked with the interchange hub. Therefore, transport surveys like Pedestrian Survey, Parking survey and demand forecasting assessment helped us in formulating multi-varied response modalities.
- Three MLCP technologies were critically discussed during kick-off meeting and finally a semi-automatic parking technology adopted, thereby bringing in global best practices and customize it to the needs of Gangtok and more precisely for the proposed Project Site.
- Experience from stakeholder's discussions are incorporated in final design.

- Detailed technical specifications and Block cost were finalized and
- layouts were developed along with necessary site work to establish CAPEX and OPEX.
- Financial analysis was carried out using tools like NPV, PIRR, EIRR, pay-back period and sensitivity analysis.
- Draft DPR was presented before relevant stakeholders and based on recommendations, final DPR is submitted so that Institutional Mechanism and Project Structuring are well defined.

## 2.4. Key Concerns and Issues

Key concerns and issues identified from Reconnaissance Survey and Technical Assessments are listed below:

- **Site Access:** The Site is mainly accessed through NH31A, the busiest corridor in Gangtok. The concern is to manage the traffic effectively during the construction phase of the development/ building.
- **Existing Parking capacity:** Allocation of proper alternative space for existing parking during the construction phase. As the existing facility is used for parking of almost 280 cars during peak hours, GSCDL will require to come up with alternate parking sites during construction.
- **Existing Parking Charges:** The existing parking charges are on a lower side as compared to industry practice across the country. To make the project successful under PPP model, user acceptance of higher parking rates would be essential.

## 2.5. Key Discussions during the Kick-off Meeting

Several meetings have been conducted with various stakeholders including GSCDL, GMC and Urban Development and Housing Department. Key points discussed during the meetings are:

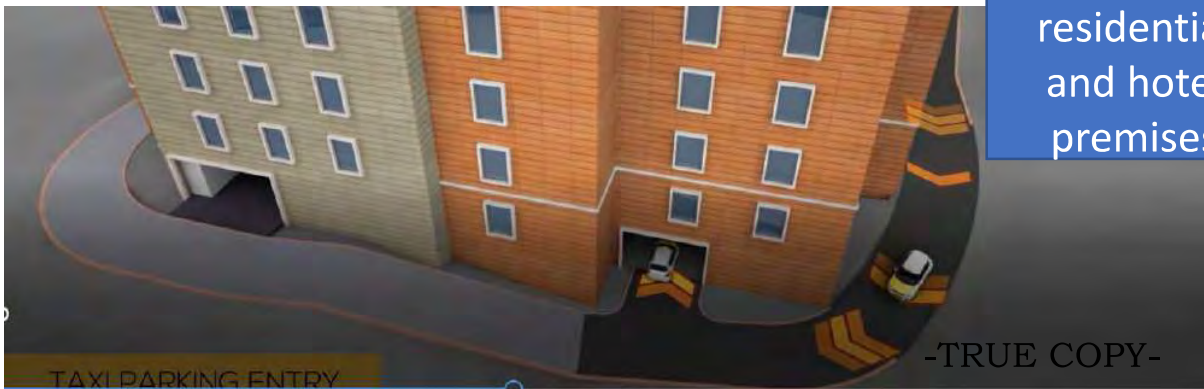
- Signing Authority of the project is GSCDL.
- Gangtok Municipal Corporation Act (with amendments) to be adhered.
- Applicable advertisement policy and prevailing advertisement rates of Gangtok to be referred.
- Local bylaws and DCR to be referred for guidelines on height restrictions, setbacks and FAR/FSI.
- Project site ownership documentation to be provided by GSCDL.
- Project site map with approved measurement to be verified and submitted.
- Land use notification of site to be collected.
- Rules and regulations regarding maximum lease period (years) allowed in Gangtok to be looked into.
- Existing parking rates to be collected.
- Parking bylaws / policy for increase in parking charges, if any, to be considered.
- Direct and indirect tax structure i.e. income tax and GST respectively to be considered.
- List of applicable permits and approvals to be provided.
- Consultant to prepare Environmental Management Plan.
- Consultant to take cognizance of existing assets at site with their respective detail.

### SERVICE ROAD PROVIDED FOR BETTER ACCESSIBILITY

ANNEXURE R-35



5 m service road provided for ease of accessibility for surrounding nearby residential and hotel premises



## SITE PROFILE OF IN AND AROUND OLD WEST POINT AREA



The Site was earlier a West point Senior Secondary School and Taxi stand . Later on Many public offices were shifted here such as Sikkim Public Service Commission, Ecclesiastical Department, Employee Provident Fund Office, Directorate of Economics, Statistical and Monitoring Evaluation etc, and mainline Taxi stand Hub for interstate and intercity vehicles.

All the public offices were laying vacant as they had set up new offices around the city and the taxi stand now comprised of South-West Sikkim Taxi stand, Ranka- Rumtek stand, Pakyong, Rhenock-Rongli, Singtam Rangpo stand. All these stands were relocated in the surrounding vicinity with due process and approvals for the upcoming MLCP project

The Old west point site is surrounded via Police headquarters and police quarters on its north side, residential buildings ,leased hotels and shops on other three side.

**It is to pertinent to mention here that this area was a always parking and transportation hub with public and private buildings around it.**

### SURROUNDING LANDUSE OF THE OLD WEST POINT SITE

Private Residential Buildings and Leased Hotels

Old DES&ME Office

Police Headquarters and Residential Quarters



Old West point School  
SPSC Office  
Ecclesiastical Department  
EPF Office

Mosque

Private Residential Buildings and Leased Hotels & Shops

Old main line Taxi Stand – Siliguri ,  
Darjeeling, Kalimpong etc  
Previous South West District Stand,  
Ranka, Rumtek, Pakyong, Rangpo,  
Rhenock, Rongli and City Cabs.

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## ANNEXURE R12/59



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**Prof. Rajib Chowdhury**  
 Professor  
 Structural Engineering Group

Date: 02.09.2024

Ref. No. CED-6607/23-24

To,  
 Vice President Projects  
 Mesaso Infrastructure Pvt. Ltd.  
 Vega Circle Mall, 3rd Floor,  
 3rd Mile Sevoke Road,  
 Siliguri

**SUB: VETTING OF DRAWING & DESIGN OF BUILDING WITH 4 LEVEL PARKING + 10 LEVEL COMMERCIAL DEVELOPMENT AT OLD WEST POINT SCHOOL, NEAR M.G. MARG, GANGTOK, EAST SIKKIM**

Sir,

This is to certify that the drawings for RCC and Steel Structure for above captioned building are found to be in order. The Etabs file and drawings were checked according to the relevant Is Code IS1893-2016, IS 13920-2016, IS-456 and other relevant codes.

All the stipulated combinations of gravity loads and the relevant loads have been considered and are duly incorporated in the analysis and design. The design confirms to relevant IS Codes and has been found satisfactory for Seismic Zone-IV hence vetted and approved. Signed drawings and design reports have been checked for design as well as detailing. The opinion contained with this letter is undersigned professional opinion.

The responsibility of the undersigned shall be limited to checking of structural design calculations and drawings only. All procedural/legal/operational matters and architectural/ functional details will be the responsibility of the owner. It is expected to use specified material grades, proper quality control and construction practice. However, it may be noted that the assurance on quality control is not within the scope of the proof check.

Thank you

Sincerely

(Dr. Rajib Chowdhury)

**Rajib Chowdhury**

Professor  
 Department of Civil Engineering  
 Indian Institute of Technology Roorkee  
 Roorkee -247667, Uttarakhand

CS Scanned with CamScanner

-TRUE COPY-



ENVIRO LEGAL DEFENCE FIRM &lt;eldflegal@gmail.com&gt;

**Service in Dr. Bina Basnett Vs. State of Sikkim & Ors. [O.A. No. 38 of 2022/EZ]**

1 message

ELDF &lt;eldflegal@gmail.com&gt;

Sat, Sep 7, 2024 at 2:02 PM

To: Legal Consultus <legalconsultus@gmail.com>, Amrita Pandey <amritalegal@gmail.com>, Advocate KS Thupden <Thupden2009@gmail.com>, Saumitra Jaiswal <saumitra.jaiswal@gmail.com>, Gitanjali Sanyal <gitanjalisanyal@gmail.com>, "advocateshubhamupadhyay@gmail.com" <advocateshubhamupadhyay@gmail.com>, Office of Sameer Abhyankar <contactadvsa@gmail.com>  
Cc: Surya Gupta <surya@eldfindia.com>

Respected Sir/Ma'am

Please find the attached copy of the Convenience Compilation on behalf of M/s MESASO Infrastructure Private Limited [Respondent No. 12].

*Thanks & Regards*

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**Sameer Manher***Clerk**Enviro Legal Defence Firm**29, Presidential Estate LGF,**Nizamuddin East New Delhi – 110013**Ph. No. 011-40573181*

CONVENIENCE COMPILATION R-12.pdf