Initial Environmental Examination

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India: Promoting Research and Innovation through Development of Fintech Institute at GIFT

Detailed Design and Construction of the International Fintech Institute at GIFT, Gandhinagar

Prepared by the Government of Gujarat for the Asian Development Bank.

CURRENCY EQUIVALENTS
(as of 4 July 2023)

Currency unit	–	Indian rupees (₹)
₹1.00	=	$0.01219
$1.00	=	₹82.0202

ABBREVIATIONS

ADB	–	Asian Development Bank
ASI	–	Archaeological Survey of India
BIS	–	Bureau of Indian Standards
CPCB	–	Central Pollution Control Board
CTE	–	consent to establish
CTO	–	consent to operate
CSQA	–	construction supervision and quality assurance
DMP	–	disaster management plan
EA	–	executing agency
EIA	–	Environmental Impact Assessment
EMP	–	Environmental Management Plan
GIFT	–	Gujarat International Finance Tec-City
GIFTCL	–	Gujarat International Finance Tec-City Company Limited
GOG	–	Government of Gujarat
GOI	–	Government of India
GPCB	–	Gujarat Pollution Control Board
GRC	–	grievance redress committee
GRM	–	grievance redress mechanism
IA	–	implementing agency
IEE	–	Initial Environmental Examination
IFI	–	International Fintech Institute
IFSC	–	international finance services centre
IP	–	indigenous people
ISR	–	Indian Seismological Research Institute
IUCN	–	International Union for Conservation of Nature
MOEFCC	–	Ministry of Environment, Forest and Climate Change
MSME	–	micro, small and medium enterprises
NAAQS	–	National Ambient Air Quality Standards
PMC	–	project management consultant
PMU	–	project management unit
PSC	–	project steering committee
PUC	–	pollution under control
R&D	–	research and development
RMC	–	ready-mix concrete
SPS	–	Safeguard Policy Statement
UD&UHD	–	Urban Development & Urban Housing Department

WEIGHTS AND MEASURES

µg	–	microgram
µS/cm	–	microsiemens per cubic meter
µg/m^3	–	microgram per cubic meter
dB(A)	–	weighted decibel
g	–	gram
g/cc	–	gram per cubic centimeter
kg	–	kilogram
km	–	kilometer
km^2	–	square kilometer
m	–	meter
m^2	–	square meter
mg	–	milligram
mm	–	millimeter
%v/v	–	percent volume per volume

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EXECUTIVE SUMMARY

1. As of 2022, India has the third largest fintech ecosystem globally (behind the United States and the People's Republic of China) and is benchmarked for growth, innovation, and inclusion. Fintech has unbundled financial services and created solutions—especially in payments, lending, and insurance—for the underserved in the country. This has led to greater financial access, more informed choices, better financial outcomes, increased opportunities, and resilience for women and low-income groups in India. As of June 2022, the market size of Indian fintech industry was $584 billion (3% of India's gross domestic product). It is expected to grow at a compound annual growth rate of 31% (during 2021–2025) to reach $1.3 trillion in 2025 and will play a key role in achieving India's goal of becoming a $5 trillion economy. The current education institutes in India do not fully cater to the demands of the emerging fintech roles in India. The country faces a shortage of skilled workforce in fintech sector coupled with inadequate job readiness among its young population. The current education programs in India are not designed for the 21st century skills in areas such as blockchain, cybersecurity, artificial intelligence, etc. that are required for the fintech industry. There are approximately 2.7 million graduates with an orientation in Science, Technology, Engineering, and Mathematics (STEM) that enter the workforce every year. However, majority of the potential workforce is male and they do possess limited job-ready skills, creating a demand–supply mismatch for the fintech sector. [1] A survey of fintech firms indicate that 50% of the firms face a shortage of skilled resources, particularly in the areas of artificial intelligence and machine learning (41%), data analytics (22%), programming (22%), blockchain (3%), and customer service (12%).[2] The skills gap is the highest at the entry-level (100%) followed by middle-level job roles (60%). To meet demand of skilled manpower, an International Fintech Institute is planned at the GIFT Gandhinagar. The Urban Development and Urban Housing Department (UD&UHD) of the Government of Gujarat (GOG) will be the executing agency (EA) and Gujarat International Finance-Tec City Company Limited (GIFTCL) will be the implementing agency (IA) of the project. The GIFTCL has established a project management unit (PMU) to carry out day-to-day project management activities.

2. The IFI will be established at two plots at GIFT. One plot will be for the institutional building and the other is for residential facilities for staff and students. The building footprint of the IFI institutional building is 5,000 m^2 and built-up area of all floors is 72,000 m^2. The latitude and longitude of Institutional Block site are 23.16328 N and 72.67554 E, respectively.

3. The IFI Institutional Block site is about 18 km from Ahmedabad airport, 24 km from Ahmedabad city, 10 km from Gandhinagar and 126 km city of Vadodara. The National Highway-8 (NH-8) is about 600 m from the site. The distance of nearest railway station at Medra is about 3.47 km. The built-up area of the IFI building will be around 72,000 m^2. The total cost of project is estimated to be $100 million.

4. The IFI Institutional Block site is an unencumbered land owned by the government within GIFT's gated boundary. The project is categorized as 'B' for environment. To comply with the Asian Development Bank (ADB) Safeguard Policy Statement (SPS), 2009, this initial environmental examination (IEE) report has been prepared for the latest sub-project configuration and the site identified for the IFI Institutional Block at GIFT.

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[1] While 43% of the STEM graduates in India are women, the gender gap in the financial services workforce points to concerns of retaining women in STEM fields. This is also indicated by the low share of women in advanced studies.

[2] Department for International Department. 2019. *BFSI Industry, a future skills perspective.* UK Government.

5. For ease of implementation, the IFI construction and development has been divided into few sub-projects. Some of these sub-projects will be prepared and supported under the project, while the others will be prepared after the construction is completed. The current sub-project involves the preliminary design and construction of the IFI Institutional Block building. This building will be of 31 floors plus 3 basements. The Institutional Block building will be located on plot no. 58-B and measuring approximately 5,000 m^2 area (basement extent). A fire driveway will be provided around the tower area on the given basement extent (10 m of roadside margin from the edge of the median to the edge of the building and 9 m margin from the edge approximate plotline on all other sides). The maximum permissible height is approximately 120 m above ground level. The targeted construction area is approximately 72,000 m^2. Construction area may vary as per design. The IFI Institutional Block building is proposed to house about 2,800 students, 100 faculty members, 100 support staff and around 1,400 fintech related workers who will be provided with start-up, incubation, and research opportunities. A conference/convention center will be used both by the fintech hub and by outsiders. The key spaces proposed are:

a. commercial facilities (Commercial Facilities (Foyer of 757 sqm, Bank -202 sqm, GIFT city experience center plus Lobby -783 sqm, Crèche of approx. 38 sqm, Café of approx. 83 sqm);
b. common facilities (students' breakout room of approximately 200 m^2, 9 in number; and 1 room of 380-400 m^2, sleeping pod for male and female of approximately 175 m^2 each, gym of approximately 250 m^2, girls common room of approximately 30 m^2, 7 in number, boys common room of approximately 30 m^2, 7 in number, dance/yoga room of approximately 165-175 m^2, refuge areas (Verandah), of approximately 80 m^2, 2 in number, and open play area of approximately 100 m^2);
c. conference and educational (conference of approximately following sizes are required: 70 m^2, 2 in number, and 1 each of 120 m^2, 165 m^2 and 325 m^2, reception, lounge and waiting area of approximately 500 m^2 for academic block, classroom for 36-seater (approximately size 70 m^2 and 9 in number), 60-seater (approximately size 160-175 m^2 and 39 in number), and 120-seater (approximately size 110 m^2 and 7 in number and 2 classrooms of approximately 225 m^2.), faculty meeting room of approximately 80 m^2, other meeting rooms of approximately 70-75 m^2, 9 in number; and 1 meeting room of approximately 200-225 m^2, principal meeting room and the personal assistants room of approximately 75 m^2, vice chancellor's room of 30 m^2, faculties room, 2 in number each of 430 m^2, offices of approximately 150-160 m^2, 200 m^2, 300-325 m^2, and 425-450 m^2 each, two auditoriums of approximately 300-350 m^2, and 70 m^2 each and libraries of 200 m^2 and 400-450 m^2), research and innovation (room for research associates of 200 m^2, IT Labs of 150-175 $m^2$and 200-225 m^2 each, and workspaces for research and innovations of approximately 40-50 sq. m, 130 in number; and 45 number of 90-120 m^2); and
d. services and circulation for IFI building (janitor, M&E services, common toilets (for male, female, and trans-gender; with special provision of wheelchair access as per standards) and passenger lift/service lift/fire exit stairs).

6. The utility infrastructure of GIFT will be utilized for water supply, electricity supply and wastewater treatment. This IEE report has been prepared based on the overall plot of site, preliminary design, the Environmental Impact Assessment (EIA) completed in 2021, the environmental clearance and other information pertaining to the IFI project.

7. This IEE report provides details of the sub-project and associated potential environmental impacts during pre-construction, construction, and operation phases. The IEE report also

suggests ways of mitigating and addressing these identified environmental impacts.[3] In the vicinity of IFI Institutional Block site, there are no environmentally and/or ecologically protected areas (national parks, wild-life or bird sanctuaries, tiger reserves, biospheres, forests, etc.), wetlands, mangroves, or estuaries in or near the IFI site. There are no archeologically protected monuments, structures, or heritage sites within 300 m distance of the IFI plot boundary (nearest protected structure at about 35 km distance from IFI site). The IFI site is a plain terrain.

8. Since the sub-project will involve civil works, consumption of natural resources (water, construction materials), transportation of construction materials, usage of construction equipment and machinery and consumption of power supply, there will be environmental impacts. Similar to the construction stage impacts, there will be environmental impacts during the operation phase. However, environmental impacts during both construction and operation phases are not likely to be significant as these will be limited to IFI site with no tree cutting requirements for the IFI Institutional Block building. The routine and localized impacts associated with construction and operation can be mitigated easily by following the measures laid down in the Environment Management Plan (EMP) included in the IEE report. The EMP will be included in the contract of the finalized contractor. The IEE confirms the sub-project as environment category "B". No further special study or detailed EIA needs to be undertaken to comply with ADB Safeguard Policy Statement (SPS), 2009 or Government of India EIA Notification, 2006.

9. A 'with' and 'without' IFI project scenario has been considered to justify the sub-project. Location and usage of alternative materials have also been analyzed from environmental and sustainability considerations. The sustainability considerations have also been discussed for the project scenario.

10. The PMU at GIFTCL will be responsible for supervising overall planning and implementation of civil works. The PMU will have environmental and social safeguard specialists. To assist the PMU in supervision, project management consultants (PMC) (firm) and a construction supervision and quality assurance (CSQA) firm will be appointed. The PMU and PMC will ensure that the Environmental Management and Monitoring Plan (EMMP) is followed during pre-construction and construction phases. The EMMP implementation will be monitored by the environment safeguard specialists of the PMU and appointed PMC firm.

11. A grievance redress mechanism (GRM) will be established under the project to address grievances of aggrieved parties or persons. The GRM will be transparent, easily accessible and time-bound for the resolution of grievances. UD&UHD will issue an office order for the establishment of the GRM. The GRM will be started once GOG approval is obtained. The details of GRM are provided in the IEE report.

[3] Local stakeholders were involved in developing the IEE through discussions on-site and public consultation during December 2022. Their views were incorporated into the IEE, and the design of the project. The IEE will be made available at public locations in the town such as site office, district administration office, and GIFT PMU office. It will be disclosed to a wider audience via the ADB and GIFTCL websites.

I. INTRODUCTION

A. Background

1. **Location.** The proposed location of International Fintech Institute (IFI) is near the entrance gate of Gujarat International Finance Tec-City (GIFT) and is adjacent to International Financial Services Centre Authority (IFSCA) building under construction. GIFT is located on the outskirts of Gandhinagar City in the Gandhinagar Tehsil of Gandhinagar District. The latitude and longitude of the IFI site are 23.16328 N and 72.67554 E, respectively.

2. The nearest rail head to IFI Institutional Block is the Medra Rail Station at about 8 km and Gandhinagar Railway Station at about 10 km. The project site is well-connected to important destinations such as Gandhinagar, Ahmedabad, Rajkot and Vadodara. The distances of important destinations are given below:

Name of Facility	Altitude	District	Distance from IFI site		
IFI Institutional Block Building, GIFT, Gandhinagar	97.17 m	Gandhinagar	Gandhinagar Airport	:	10 km
			Ahmedabad City	:	18 km
			Vadodara	:	24 km
			Rajkot	:	126 km
			IIT Gandhinagar	:	244 km
			Himmat Nagar	:	7 km
			New Delhi	:	61 km
			Mumbai	:	894 km
				:	554 km

3. The proposed IFI site is a vacant land under the ownership of GIFT in Gandhinagar District. The Gandhinagar District geographically lies between the latitude 23°15´N to 23°38' north and longitude 72°42´ east to 73°15´ east.

4. **Present status of the IFI site.** The IFI site is a plain terrain. The site ownership is with Gujarat International Finance Tec-City Company Limited (GIFTCL). There are no permanent or temporary structures on the IFI site. There are also no trees at site. The photographs of the IFI site are shown below.

View of IFI the site

View of site showing plain terrain

View of site showing presence of shrubs at some portion

No presence of trees at the site

B. Compliance with India's Environmental Regulatory Framework

5. India's environmental rules and regulations, as relevant for the construction of IFI, are shown in Table 1. The Environmental Impact Assessment (EIA) Notification, 2006 issued by the Ministry of Environment, Forests and Climate Change (MOEFCC) specifies the requirements for mandatory environmental clearances. All projects and activities are broadly categorized into two categories—category 'A' and category 'B', based on the spatial extent of potential impacts on the environment, human health, and natural and man-made resources.[4] As per the MOEFCC Notification S.O. 3252 dated 22 December 2014, educational and training institutions are exempted from prior environmental clearance, but the project is located in GIFT and thus, GIFTCL has obtained environmental clearance under the area development and construction category. Hence, this sub-project will not require any prior environmental clearances according to the environmental rules and regulations of India. Further, as shown in Table 1, most other rules pertaining to India's regulatory framework such as Ancient Monuments and Archaeological Sites and Remains Act, 1958; the Wildlife (Protection) Act, 1972, amended in 2003 and 2006; and the Forest (Conservation) Act, 1980, will also not apply to the construction of the IFI. Permission (consent to establish and consent to operate) will be required from the State Pollution Control Board, Government of Gujarat (GOG) for the construction phase of the sub-project. Moreover, according to ADB's Safeguard Policy Statement (SPS) 2009, all ADB funded activities/projects

[4] All projects or activities included as Category 'A' in the schedule, including expansion and modernization of existing projects or activities and change in product mix, will require prior environmental clearance from the Central Government in the Ministry of Environment, Forest and Climate Change (MOEFCC) on the recommendations of an Expert Appraisal Committee (EAC) to be constituted by the Central Government for the purposes of this notification. All projects or activities included as Category 'B' in the schedule, including expansion and modernization of existing projects or activities as specified in sub paragraph (ii) of paragraph 2, or change in product mix as specified in sub paragraph (iii) of paragraph 2, but excluding those which fulfill the general conditions stipulated in the Schedule, will require prior environmental clearance from the State/Union territory Environment Impact Assessment Authority (SEIAA). The SEIAA shall base its decision on the recommendations of a State or Union territory level Expert Appraisal Committee (SEAC) as to be constituted for in this notification. In addition, General Condition (GC) of the notification specifies that any project or activity specified in Category 'B' will be treated as Category A, if located in whole or in part within 5 km from the boundary of: (i) Protected Areas notified under the Wildlife (Protection) Act, 1972, (ii) Critically Polluted Areas as notified by the Central Pollution Control Board from time to time, (iii) Notified eco-sensitive areas, and (iv) inter-state boundaries and international boundaries.

are required to comply with the borrower country's environmental regulations. Therefore, no civil works related activities would commence until relevant regulations of India are complied with. During pre-construction, construction and operation phases of the project, compliance with the National Ambient Air Quality Standards (NAAQS) for air quality, ambient noise standards for noise levels, General Standards for Discharge of Treated Effluents for wastewater discharge and Drinking Water Standards specified by Bureau of Indian Standards (BIS) will be ensured. The above standards have been specified under various acts and rules promulgated by the Government of India.

Table 1: Environmental Regulatory Compliance

Sub-Project	Applicability of Acts/Guidelines	Compliance Criteria
Detailed design and construction of IFI building	The EIA notification, 2006 (and its subsequent amendments till date) provides for categorization of projects into category 'A' and 'B', based on extent of impacts.	The sub-project is not covered in the ambit of the EIA notification (amended to date), either as a Category 'A' or Category' B' project. As per the MOEFCC Notification S.O. 3252 dated 22 December 2014, educational and training institutions are exempted from prior environmental clearance, but project is located in GIFT, so GIFTCL has obtained environmental clearance under the area development and construction category (Annexure-1). As a result, the categorization, and the subsequent environmental assessment and clearance requirements, either from the state or the Government of India, are not triggered. **Not Applicable**
	The Ancient Monuments and Archaeological Sites and Remains Act, 1958, and the rules, 1959 provide guidance for carrying out activities including conservation, construction and reuse in and around the protected monuments.	The IFI site is not close to any monument which is protected by the Archaeological Survey of India (ASI). Hence, no clearance is needed from ASI. **Not Applicable**
	Water (Prevention and control of pollution) Act, 1974 and Air (prevention and control of pollution) Act, 1981	CTE and CTO from the State Pollution Control Board will be required during construction for installation of RMC plant. The CTE for the entire GIFT has been obtained (Annexure-2) so no separate CTE will be required for the IFI. The CTO has also been obtained (Annexure-3) for the GIFT so there is separate requirement for obtaining CTO for the IFI. **Applicable**
	The Wildlife (Protection) Act, 1972, amended in 2003 and 2006, provides for protection and management of Protected Areas.	No wildlife protected areas within 15 km aerial distance from the IFI site. Nearest Wildlife sanctuary is at about 50 km from IFI site. **Not Applicable**
	Forest (Conservation) Act, 1980	This act provides guidelines for conservation of forests and diversion of forest land for non-forest use. It describes the penalties for contravention of the provisions of the Act. If forest land has to be acquired, clearance is required from the Forest

Sub-Project	Applicability of Acts/Guidelines	Compliance Criteria
		Department. No forest land is required for the IFI. Hence, this is not applicable. **Not Applicable**
	Saurashtra Felling of Trees (Infliction of Punishment) Act, 1951	It requires prior approval from the competent authority for cutting down identified species in the project. Proposed sites consist of trees. Proposed IFI site is devoid of trees. **Not Applicable**
	Solid Waste Management Rules, 2016	These rules have been notified by the MOEFCC for collection, transportation and disposal of municipal waste. In the case of IFI, these rules will be applicable both during construction and operation. **Applicable**
	Hazardous Wastes (Management, Handling and Trans-boundary Movements) Rules 2016	These rules are for safe handling, storage, transportation and disposal of hazardous wastes. The hazardous waste mainly discarded fuel and lubricants on account of vehicle, equipment and machinery maintenance during construction will be generated. In the operation phase hazardous waste is not anticipated as academic and research work for the financial solutions will be taken up. Hence these rules will be applicable during construction phase only. **Applicable**
	Battery Waste Management Rules 2020	These rules have been promulgated for safe recycling of lead acid batteries. These will be applicable both during construction and operation phases. **Applicable**
	Noise Pollution (Regulation and Control) Act, 1990	This act prescribes ambient noise levels for various land uses. This act will be applicable both during construction and operation phases of IFI project. **Applicable**
	E-Waste (Management) Rules, 2016	These rules have been formulated to channelize the E-waste to authorized dismantlers for possible re-use and recycle of waste. These will be applicable during operation phase of IFI project. **Applicable**
	Permission to withdraw Ground Water	During construction and operation phase of IFI water from GIFT water supply will be used. The water supply to GIFT is from Narmada main canal. Hence, groundwater will not be used so no permission required. **Not Applicable**
	Bio-Medical Waste Management Rules 2016	The IFI project will not have a medical center to provide first aid and referral to the hospital. Waste Management facility through hospital shall be used. The bio-medical waste generated being stored and disposed of as per provisions stipulated in Bio-Medical Waste Management Rules, 2016. **Applicable**
	Construction and Demolition Waste Management Rules	The rules have been formulated for safe storage, transportation, and disposal of construction and

Sub-Project	Applicability of Acts/Guidelines	Compliance Criteria
	2016	demolition waste. There will be generation of construction waste during construction phase. Hence these rules will be applicable during construction phase. **Applicable**
	Building and Other Construction Workers (Regulations of Employment and Conditions of Service) Act, 1996 and Gujarat Building and Other Construction Rules, 2003	The rules have been formulated and notified under this Act in 1998 for the regulation of employment and safe working conditions for the construction workers. The workers will be employed by the contractor(s) for the construction and these rules will be applicable during construction phase for proper occupational, health and safety measures at site. **Applicable**
	The Workmen Compensation Act, 1923 and Fatal Accident Act, 1955	Under these Acts, the contractor need to provide compensation for any injury and /or fatal accident. The construction workers need to be insured for any untoward accident or injury. **Applicable**
	The Contract Labor (Regulations and Abolition Rules, 1973 and Inter State Migrant Workmen (Regulations of Employment and Conditions of Service) Act, 1979	Under these Acts, the contractor has to obtain labor license for local and migrant labor after registration of GIFTCL in the labor and employment department. **Applicable**
	Green Building Norms (national and international) for energy efficiency, indoor air quality, sustainable site selection, material and resource use	The IFI project will follow necessary codes and standards both national and international during building design, construction and operation for energy efficiency, materials and resource conservation and sustainability. The project will follow GRIHA rating system because GIFT follows this system for all buildings. The GRIHA rating system specifies 9 Criterion for 'Resource conservation and Efficient Utilization of Resources', 22 criterion for 'Building Planning and Construction', and 2 criterion for ' Building Operation and Maintenance'. The Green Building design requirements are also indicated in 'Development Control Rules', of GIFT as well as one of the conditions of environmental clearance (condition number 7) of GIFT. **Applicable**
	Energy Conservation Building Code Rules, 2018	Government of India through the Ministry of Power has notified Energy Conservation Building Code Rules, 2018 under the provision of Energy Conservation Act 2001. It applies to the building having connected load greater than 100 KVA. **Applicable**
	GIFT Development Control Regulation 2011	The IFI is proposed to be developed in GIFT Area. It falls under the jurisdiction of GIFT Urban Development Authority. Developments in the GIFT

Sub-Project	Applicability of Acts/Guidelines	Compliance Criteria
		area is governed by the development by law "Development, Control Regulations, 2011". **Applicable**

ASI = Archaeological Survey of India, CTE = consent to establish, CTO = consent to operate, EIA = environmental impact assessment, GIFT = Gujarat International Finance Tec-City, GIFTCL = Gujarat International Finance Tec-City Company Limited, GRIHA = Green Rating for Integrated Habitat Assessment, IFI = International Fintech Institute, KVA = kilo volt amps, MOEFCC = Ministry of Environment, Forests, and Climate Change, RMC = ready-mix concrete.
Source: Source: Asian Development Bank and Gujarat International Finance Tec-City Company Limited.

C. International Agreements and Commitments of Government of India

6. The Republic of India is party to various international agreements/conventions/treaties for conservation of environment at global level. The construction, development and operations of IFI will not trigger most of the convention/agreements including Ramsar Convention on Wetlands, 1971, Convention on World Cultural and Natural Heritage, 1972, Vienna Convention on Protection of Ozone Layer, 1985, and Montreal Protocol on Substances Depleting the Ozone layer, 1987 and the Convention on Biological Diversity (CBD), 1992 because the IFI site is not close to any notified wetlands nor cultural and natural heritage sites. There is no production of ozone depleting substances from the project and no biodiversity rich areas close to project site. Only the convention pertaining to climate change (United Nations Framework Convention on Climate Change (UNFCCC), 1994) will be triggered.

7. As per the convention policies, the reduction/limitation requirements of greenhouse gases (GHG) apply only to developed countries. The only reporting obligation for developing countries relates to the preparation of GHG inventory (GHG sources and sinks, potential vulnerability to climate change, adaptation measures and other steps being taken to address climate change). India acceded to the Kyoto Protocol in 2002 and voluntarily agreed to reduce the GHG emissions in 2018.

8. The IFI project activities will not have direct GHG emissions, but on account of slight increase in traffic both during construction and operation phases, there will be increased SO_2 and NOx emissions through vehicular emissions.

9. The project aims to adopt environmentally-friendly construction materials, energy conservation measures (energy efficient fixtures, usage of solar energy for water heating and campus-lighting), minimization of natural resource consumption and landscaping and tree plantation.

D. Asian Development Bank's Environmental Safeguard Policy Principles

10. Since the proposed project is being funded by the ADB, it has to comply with ADB SPS, 2009, in addition to the India's environmental laws and regulations applicable at the national, state and local levels. The environmental safeguard policy principles embodied in ADB SPS 2009 aim to avoid adverse impacts on the environment and on affected people or communities; minimize, mitigate and/or compensate for adverse project impacts, if unavoidable; help borrowers to strengthen their safeguard systems and to develop their capacity in managing the environmental and social risks. ADB SPS, 2009 categorizes all projects into 3 environmental categories (A, B or

C) based on their potential impacts.[5] Similarly, ADB's rapid environmental assessment (REA) checklist was used to assess the potential impacts of the construction and development of IFI (Annexure-4). As explained in Annexure-1, this sub-project has been categorized as 'B'. Accordingly, this Initial Environmental Examination (IEE) has been prepared to address the potential impacts in line with the requirements for category 'B' projects. The IEE is based mainly on environmental screening of IFI site and secondary sources of information and field reconnaissance surveys. Stakeholder consultations at IFI site are an integral part of the IEE. An EMP outlining the specific environmental measures to be adhered to during implementation of the sub-project is included in the current version of IEE document. This environmental management plan (EMP) will be made part of contract for the selected contractor and will be implemented.

E. Review and Approval Procedure

11. For Category 'B' projects, the draft IEE report is prepared by the executing agency (EA) and submitted to ADB for clearance. The IEE report is reviewed by the relevant ADB department and comments, if any, are provided. The EA then modifies the report by incorporating comments and the final IEE document is submitted for clearance. After clearance from ADB, the final IEE report will be disclosed in ADB's website in accordance with ADB SPS, 2009 and Access to Information Policy, 2018. The EA will also disclose this the final IEE report to the stakeholders in a form and language understandable to the communities (Gujarati) by making hardcopies available at IFI site office, GIFT office at Gandhinagar. The soft copy of the final IEE report will be disclosed at GIFT website.

F. Report Structure

12. This report contains nine sections including: (i) Introduction; (ii) description of sub-project components; (iii) description of the existing environment around the sub-projects; (iv) environmental impacts and mitigation measures; (v) analysis of alternatives; (vi) EMP; (vii) public consultation and information disclosure; (viii) findings and recommendations; and (ix) conclusions.

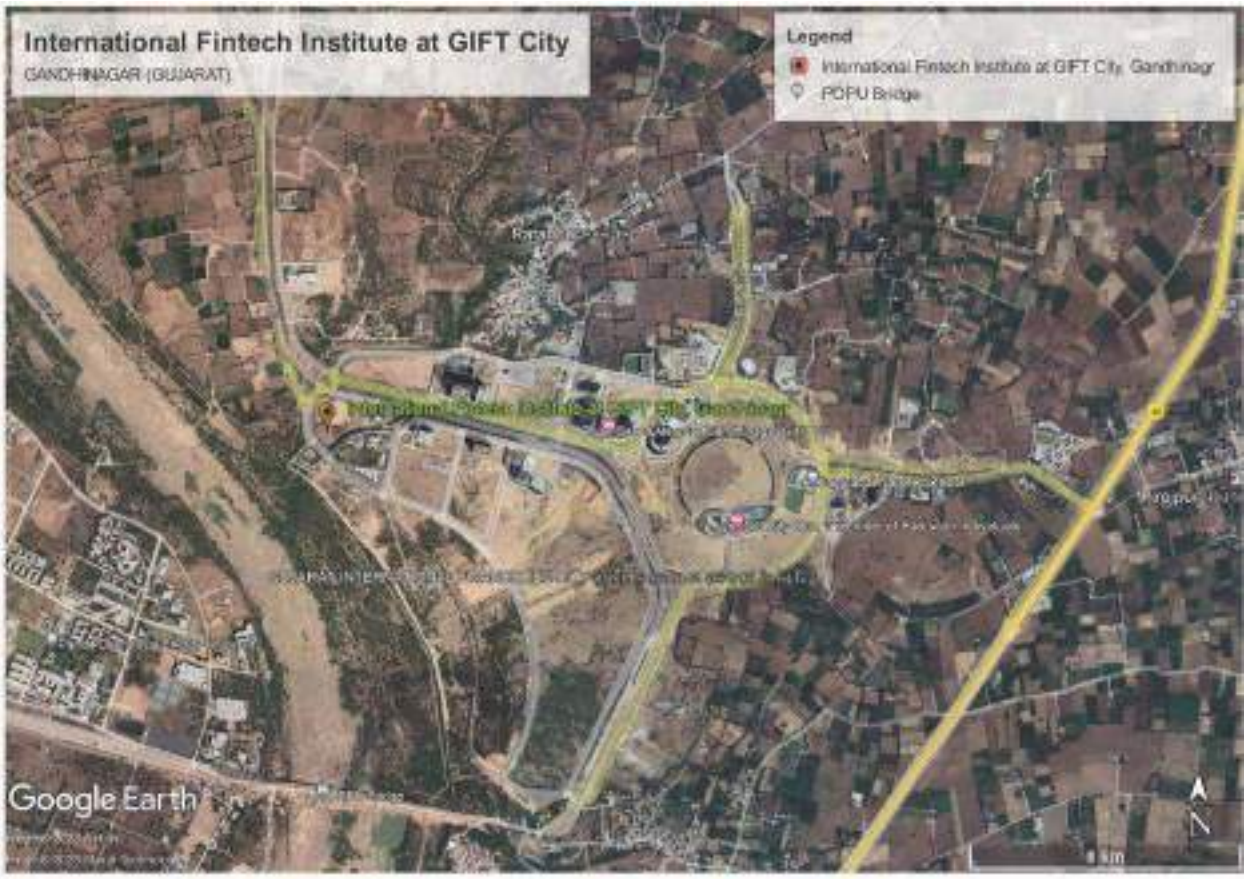
[5] As per SPS 2009, projects are assigned to one of the following four categories: (i) Category A. A proposed project is classified as category A if it is likely to have significant adverse environmental impacts that are irreversible, diverse, or unprecedented. These impacts may affect an area larger than the sites or facilities subject to physical works. An environmental impact assessment is required. (ii) Category B. A proposed project is classified as category B if its potential adverse environmental impacts are less adverse than those of category a project. These impacts are site-specific, few if any of them are irreversible, and in most cases mitigation measures can be designed more readily than for category B Project. An initial environmental examination is required. (iii) Category C. A proposed project is classified as category C if it is likely to have minimal or no adverse environmental impacts. No environmental assessment is required although environmental implications need to be reviewed (iv) Category FI. A proposed project is classified as category FI if it involves investment of ADB funds to or through a financial intermediary (FI) (paras. 65-67).

II. DESCRIPTION OF THE PROJECT COMPONENTS

A. Components of the IFI Project

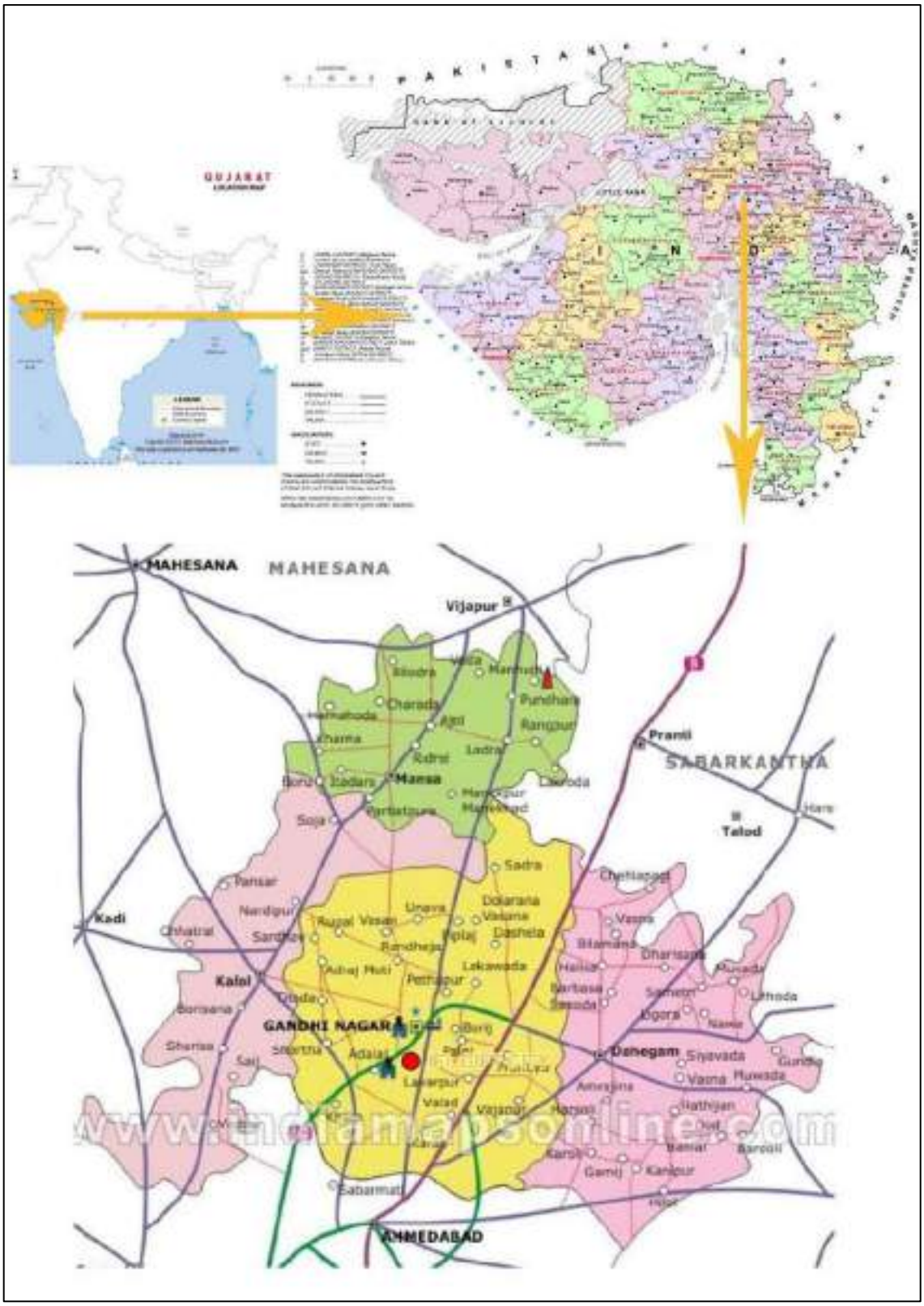
13. The location of the IFI plot in GIFT is shown in Figures 1 and 2. Table 2 summarizes the need for the project and brief description of IFI components.

Figure 1: Location of International Fintech Institute Site



Source: Google Earth.

Figure 2: Location of IFI Site



Source: Gujarat International Finance Tec-City Company Limited and Asian Development Bank.

Table 2: Description of the IFI Institutional Building Components

Description	Need of the sub-project	Proposed components
Construction of IFI building	The 'India Fintech Opportunities Review Report 2017-18' has highlighted key challenges that could hamper growth in the Indian fintech sector. Mainly, is the access to deep tech skills and hiring challenges for aspiring fintech companies including but not limited to the lack of technology expertise as well as the inability to attract talent. Lack of skilled workers and talent deficiency is a key concern in the region. There is a minimal pool of skilled people having expertise in the intersection of finance and technology in the state. Therefore, many companies prefer to pay higher rents and operate out of Mumbai because of easy availability of people skilled in finance and technology in the region. In order to sustain the high-growth fintech sector including building the much needed eco-infrastructure of GIFT, like many other emerging sectors before, it is inevitable that a vast and diverse pool of appropriate skilled manpower and talent is needed not only in the surrounding Gujarat vicinity but across the country who can build and operate these new or fast-growing fintech companies.	1. The Institutional Block will be located on plot no. 58-B admeasuring approximately 5,000 m^2 area (basement extent). A fire driveway will be provided around the tower area on the given basement extent (10 m of roadside margin from the edge of the median to the edge of the building and 9m margin from the edge of the plotline on all other sides). The maximum ppermissible height is approximately 120 m above ground level. Targeted construction area is approximately 72,000 m^2. Construction area may vary as per design. In the plot proposed for IFI plot, it is proposed to house about 2,800 students, 100 faculty members, 100 support staff and around 1,400 fintech related workers who will be provided with start-up, incubation, and research opportunities. conference/convention center will be used both by the fintech hub and by outsiders. Incubation and research facilities are inward facing functions whereas retails will be outward facing functions. There shall be varying levels of access and security for functions like research and innovation, education and conference, and common facilities. Research and innovations shall have maximum security and limited access whereas common facilities shall be available to all. The area proposed for various usages is detailed below: a. Commercial Facilities o Foyer of 757 sqm, o Bank of 202 sqm, o (GIFT city experience center + Lobby) of 783 sqm, o Crèche of approx. 38 sqm, o Café of approx. 83 sqm b. Common facilities o Students' breakout room of approximately 200 m^2, 9 in number; and 1 room of 380-400 m^2 o Sleeping pod for male and female of

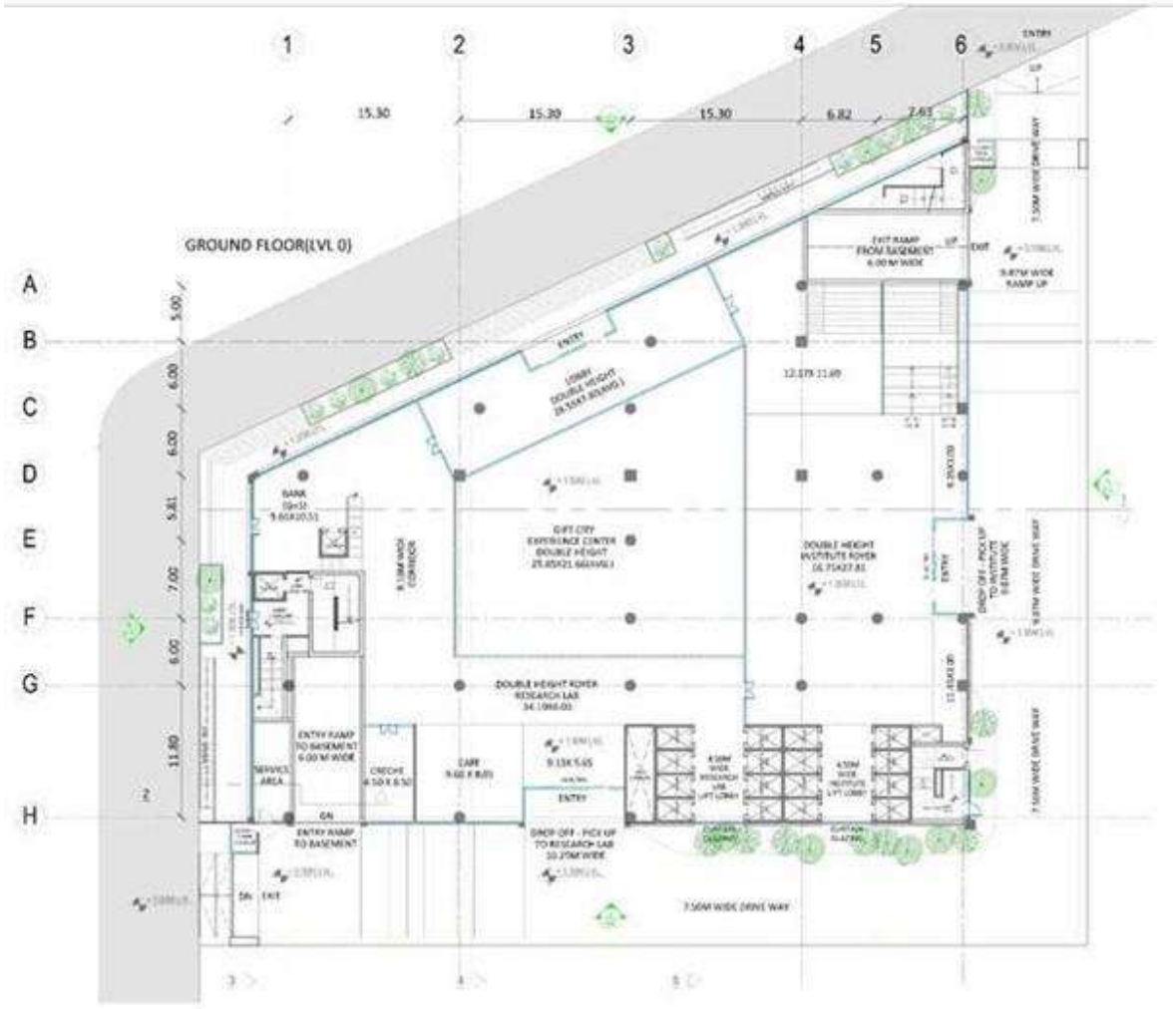
		approximately 175 m^2 each. o Gym of approximately 250sq.m o Girls common room of approximately 30 m^2, 7 in number o Boys common room of approximately 30 m^2, 7 in number o Dance/Yoga room of approximately 165-175 m^2 o Refuge areas (Verandah), of approximately 80 m^2, 2 in number o Open Play Area of approximately 100 m^2 c. Conference and Educational o Conference of approximately the following sizes are required: 70 m^2, 2 in number, and 1 each of 120 m^2, 165 m^2 and 325 m^2 o Reception, lounge and waiting area of approximately 500 m^2 for academic block. o Classroom for 36-seater (approximately size 70 $m^2$and 9 in number), 60-seater (approximately size 160-175 m^2 and 39 in number), and 120-seater (approximately size 110 $m^2$and 7 in number and 2 classrooms of approximately 225 m^2) o Faculty meeting room of approximately 80 m^2 o Other meeting rooms of approximately 70-75 m^2, 9 in number; and 1 meeting room of approximately 200-225 m^2 o Principal meeting room and the Personal Assistants room of approximately 75 m^2 o Vice Chancellor's room of 30 m^2

		○ Faculties room, 2 in number each of 430 m^2 ○ Offices of approximately 150-160 m^2, 200 m^2, 300-325 m^2, and 425-450 m^2 each ○ Two auditoriums of approximately 300-350 m^2 and 70 m^2 each ○ Libraries of 200 m^2 and 400-450 m^2 d. Research and Innovation ○ Room for Research Associates of 200 m^2 ○ IT Labs of 150-175 m^2 and 200-225 m^2 each ○ Workspaces for research and innovations of approximately 40-50 m^2, 130 in number; and 45 number of 90-120 m^2 2. Utility infrastructure GIFT will be utilized for water supply, electricity supply and wastewater treatment. 3. The plantation scope for shrubs and trees will be as per space availability in the plot. 4. The roof top rainwater collection and utilization will be as per Development Control Rules of GIFT.

GIFT = Gujarat International Finance Tec-City, IFI = International Fintech Institute.
Source: Asian Development Bank and Gujarat International Finance Tec-City Company Limited.

14. The layout plan of the IFI is shown below in Figure 3. The floor-wise drawings for the IFI building are given in Annexure-5. These are preliminary architectural drawings. The detailed engineering will be completed in future (after bidding process and by the selected contractor) and should there be any environmental implications, these will be assessed and included in the final and updated IEE report. This draft IEE report is for submission to ADB and further disclosure.

Figure 3: Layout Plan of IFI and Floor Plans Drawings



Source: Gujarat International Finance Tec-City Company Limited.

B. Executing and Implementing Agencies

15. The Urban Development and Urban Housing Department (UD&UHD) of the Government of Gujarat (GOG) is the executing agency (EA). The Gujarat International Finance Tec-City Company Limited (GIFTCL) is the implementing agency (IA). The GIFTCL will establish a project management unit (PMU) for the overall project implementation. For the civil works components of the IFI, the GIFTCL will be supported by the PMC team and the construction supervision and quality assurance (CSQA) firm. The PMC and CSQA firm teams will be multi-disciplinary, which will include an environmental specialist with intermittent inputs. The PMC environmental specialist will have adequate experience and knowledge of environmental rules and regulations of the State and the Government of India and other environmental management aspects. The PMC consulting firm has been appointed. In addition to the PMC, CSQA firm has also been hired for construction

supervision and quality check. The civil work contractor engaged for the construction \will also have environment, health and safety officers in their team until closure of their respective contracts. The GIFTCL will be responsible for supervising overall planning and implementation of civil works with the assistance of CSQA firm and PMC team. GIFTCL will ensure that the IFI and all activities financed under the ADB comply with environmental rules and regulations of Government of India, GOG and ADB SPS, 2009. No civil works-related activities would commence until relevant regulations of the Government of India and GOG are complied with.

C. Implementation Schedule

16. The implementation period for the proposed IFI campus is 24 months. The preliminary architectural drawings for the IFI have been prepared (Annexure-5). The preliminary drawings are under the approval process. The bidding process for the detailed design and construction of IFI and facilities will start by March 2023. The works contract is expected to be awarded by the end of June 2023. The contractor will be mobilized to the site by October 2023 and construction works are expected to be started by the end of October 2023. The works are planned to be completed by September 2025.

III. DESCRIPTION OF THE EXISTING ENVIRONMENT FOR IFI CAMPUS SITE

17. This section presents a brief description of the existing environment around the IFI site, including its physical resources, ecological resources, socio-economic development, and social and cultural resources. Broad aspects on various environmental parameters such as geography, climate, and meteorology, physiographic, geology, seismology, ecology, socio-cultural and economic development parameters that are likely to be affected by the proposed IFI construction and development are presented. Secondary information was collected from relevant government agencies like the State Forest Department, State Environment Department and State Pollution Control Board, and Meteorological Department.

A. Environmental Profile

18. **Air Quality.** No air pollution sources were seen in the surroundings of project site as site is in open area near the entrance gate of GIFT. There are no environmental sensitive receptors (forests, schools, hospitals, etc.) close to the IFI plot. The GIFT office and Special Economic Zone (SEZ) area is about 50 m from the boundary of IFI plot. The minimum distance of construction activity from the GIFT SEZ building is about 100 m. The baseline ambient air quality data is available from the EIA study of GIFT completed in 2021. This data is shown in Table 3. The results indicate that all parameters of ambient air quality are well within the limits stipulated in the national ambient air quality standards. Baseline ambient air quality monitoring for the IFI site will be carried out by the contractor during the pre-construction phase immediately after mobilization. The sampling station for the EIA study was at GIFT office, 50 m from the IFI site. The sampling period of all parameters except CO was 24 hours. For CO sampling, duration was 8 hours. If the values are compared with WHO ambient air quality guidelines in respect of SO_2, PM10, PM2.5, it is concluded that values of SO_2 are within the limits of guidelines but exceed in respect of PM10 and PM2.5. With respect to NOx, measured values averaging time and guideline values averaging time differ and so cannot be compared. CO measurement is also within specified in WHO guidelines. The sampling location is shown in Figure 4.

Table 3: Ambient Air Quality Results

Parameter	Unit	Range	Averaging Time	Permissible Limit	IFC EHS Guidelines 2007 (WHO Ambient Air Quality Guidelines)
$PM_{2.5}$	µg/m^3	50.3-67.3	24 Hours	60	75 (Interim Target 1) 50 (Interim Target 2) 37.5 (Interim Target 3) 25 (guideline)
PM_{10}	µg/m^3	29.1-45.3	24 Hours	100	150 (Interim Target 1) 100 (Interim Target 2) 75 (Interim Target 3) 50 (guideline)
SO_2	µg/m^3	6.4-8.9	24 Hours	80	120 (Interim Target 1) 50 (Interim Target 2) 20 (guideline)
NOx	µg/m^3	8.5-16.8	24 Hours	80	200 (guideline) for 1 hour averaging time
CO	µg/m^3	687-916	8 Hours	2000	10,000 ug/m^3 (limit specified WHO air quality guidelines 2021)

Source: Environmental Impact Assessment Study of GIFT, 2021.

19. **Noise levels.** Noise levels data for GIFT is available from the EIA study and the same has been referred for baseline purpose of the IFI site. The noise level monitoring station during the

GIFT EIA study was near GIFT Office, about 50 m from IFI location. The location of noise sampling is shown in Figure 4. The noise level data is in Table 4. Results show that ambient noise levels are well within the permissible limits specified in ambient noise standards. To have site specific ambient noise levels data, monitoring will be conducted by the contractor prior to start of construction works with the aim of establishing baseline conditions.

Table 4: Ambient Noise Levels in GIFT City

Parameter	Unit	Range	Permissible Limits as per Ambient Noise Standards
Leq (Day)	dB(A)	54.5	55
Leq (Night)	dB(A)	43.2	45

Source: Environmental Impact Assessment Study of GIFT, 2021.

Figure 4: Location of Ambient Air Quality and Noise Level Monitoring

Source: Gujarat International Finance-Tec Company Limited.

20. **Climate.** Gandhinagar has a tropical wet and dry climate with three main seasons: summer, monsoon, and winter. The weather is hot to severely hot from March to June when the maximum temperature stays in the range of 36 to 42°C, and the minimum in the range of 19 to 27°C. It is pleasant in the winter days and quite chilling in the night during December to February. The average maximum temperature is around 29 °C, the average minimum is 14°C and the climate is extremely dry. The southwest monsoon brings a humid climate from mid-June to mid-September. The average annual rainfall is around 803.4 mm.

21. **Temperature.** The temperature exhibits seasonal variation with minimum during the winter and higher temperatures during the summer. May, June, and early part of July are the hottest months while January and December are the cold months. The maximum temperature rises to about 40.2°C in the month of May and the minimum temperature falls to about 13.5°C in the month of January. Table 5 shows month-wise temperature data at Gandhinagar.

Table 5: Climate Data of Gandhinagar

	January	February	March	April	May	June	July	August	September	October	November	December
Average Temperature °C (°F)	20 (68.1)	22.6 (72.7)	27.1 (80.8)	31.3 (88.3)	33.2 (91.7)	32.0 (89.5)	28.5 (83.2)	27.3 (81.2)	27.9 (82.1)	27.8 (82)	24.8 (76.6)	21.1 (70)
Minimum Temperature °C (°F)	13.5 (56.3)	15.4 (59.7)	19.3 (66.8)	23.4 (74.1)	26.4 (79.5)	27.5 (81.5)	25.9 (78.6)	24.9 (76.9)	24.3 (75.8)	21.8 (71.2)	18.5 (65.3)	14.9 (58.7)
Maximum Temperature °C (°F)	27.3 (81.1)	30.0 (86.1)	34.7 (94.5)	38.9 (101.9)	40.2 (104.4)	37.2 (98.9)	31.7 (89.1)	30.3 (86.6)	31.9 (89.3)	34.2 (93.5)	31.7 (89.1)	28.3 (83)
Precipitation/ Rainfall mm (in)	1 (0)	1 (0)	1 (0)	1 (0)	2 (0)	73 (2)	323 (12)	238 (9)	108 (4)	17 (0)	3 (0)	1 (0)
Humidity (%)	43%	39%	30%	29%	40%	56%	76%	80%	73%	51%	45%	46%
Rainy days (days)	0	0	0	0	0	5	15	16	7	2	1	0
Average Sun hours (hours)	9.7	10.2	10.8	11.4	11.3	9.3	6.6	5.8	7.8	10.1	9.8	9.6

Source: https://en.climate-data.org/asia/india/gujarat/gandhinagar-5583/

22. **Rainfall.** The sub-project area experiences maximum rainfall during monsoon season from June to September while least rainfall is received in November to April. Average annual rainfall at Gandhinagar is around 803.4 mm. Month-wise data for rainfall in Gandhinagar is also shown in Table 5.

23. **Humidity**. Based on climatological data of Gandhinagar, it is found that relative humidity increases rapidly with the onset of monsoon and reaches maximum of around 80% in August, when peak monsoon period sets in. Relative humidity is minimum during the summer months (from March to May) with April being the driest month (around 29%). Skies are heavily clouded during the monsoon months.

24. **Wind speed and directions.** The windier part of the year lasts for 4.0 months, from 22 April to 21 August, with average wind speeds of more than 8.3 miles per hour. The windiest month of the year in Gandhinagar is June, with an average hourly wind speed of 11.5 miles per hour. The calmer time of year lasts for 8 months, from August to April. The calmest month of the year in Gandhinagar is October, with an average hourly wind speed of 5.1 miles per hour. The predominant wind direction at GIFT site is from northeast, north-northeast, and east-northeast directions.

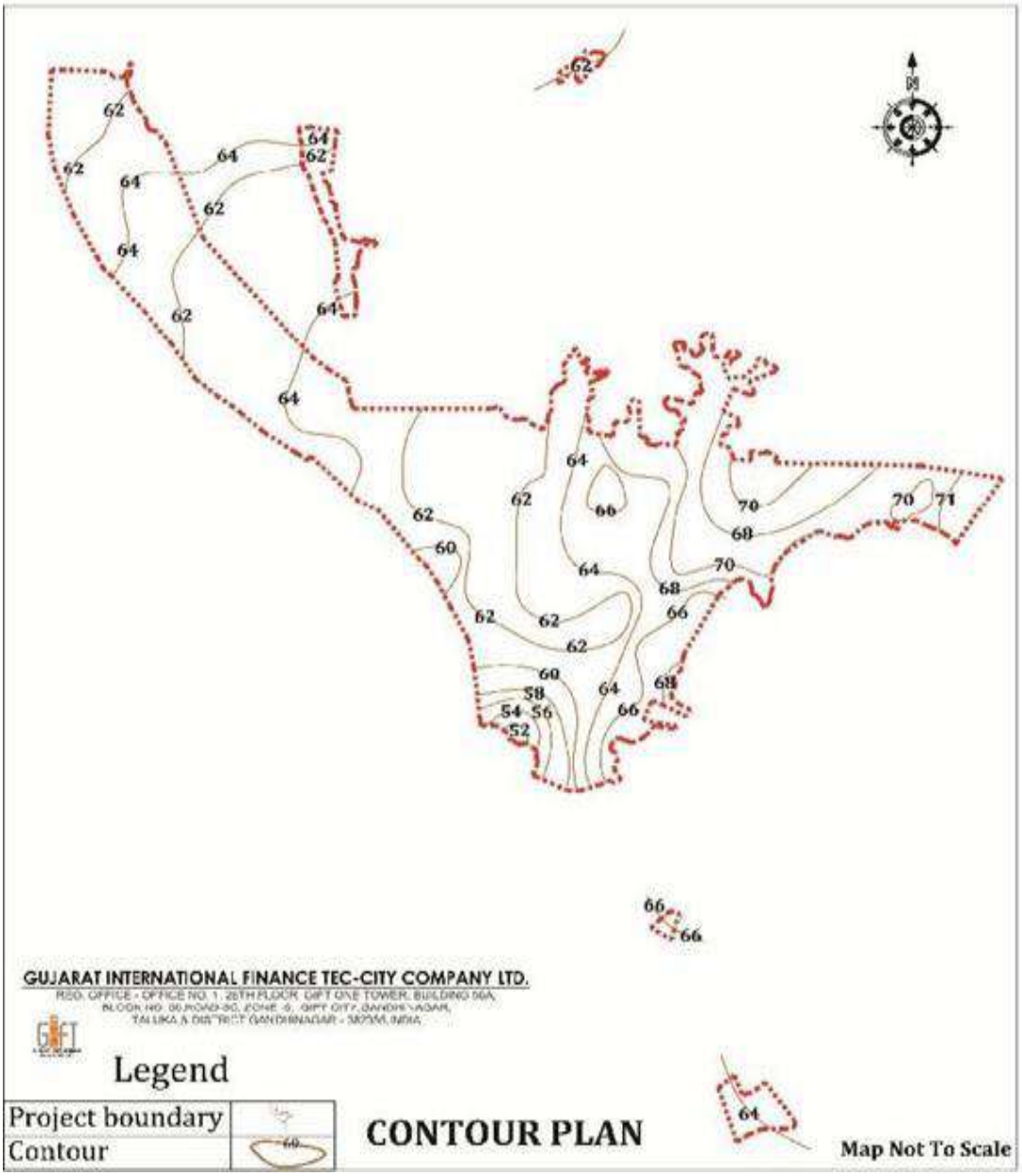
25. **Topography**. The topography of the project site is plain. It is influenced by relief, climate, vegetation and economic use by man. But even then, regionally, there is considerable local variation. The average elevation of the site is around 97.17 m above mean sea level. The IFI site and surroundings are sloping from southwest to northeast direction. The project location is part of slightly undulating topography. The contour map of project location is presented in Figure 5.

26. **Soils.** The soils in the project site and surroundings have clay texture and neutral in nature. The nutrient and organic matter contents are medium, and the soil is normally fertile. The soils are brown in color and of recent age. To characterize the baseline soil quality, data was collected from secondary published sources for project region. It is shown in Table 6. Following inferences are drawn from the soil results.

27. The pH of the soil in the in the sub-project site and surroundings ranges from 7.16 to 7.81. The maximum pH value of 7.81 has been observed at Ratanpur (S3) and minimum value of 7.16 has been observed at Valad (S4). The electrical conductivity is observed to be in the range of 235 µS/cm to 288 µS/cm with the maximum observed at Lavarpur (S2) and the minimum observed in Ratanpur (S4). The nitrogen values range between 37-88 mg/100 gm. with the maximum observed at Project site (S1) and the minimum observed in Juna Koba (S6). The phosphorus values range between 32.72 to 82.91 kg/ha, indicating that the phosphorus content in the study area falls in medium to more than sufficient category. The potassium values range between 2 to 5 mg/100 g. The chlorides were found to be in the range of 160 to 260 mg/kg of soil.

28. GIFT has also conducted soil investigations pertaining to liquefaction as part of their master plan preparation. As per these investigations, the water level in GIFT is quite deep, but due to the development of Sabarmati Riverfront, chances of groundwater level to rise cannot be neglected. Hence, the liquefaction potential evaluation was done considering groundwater level at 5.0 m depth from existing ground level. Through the analysis, it was estimated that the area shows a very low effect to liquefaction potentiality which is due to the predominance of clayey nature of soils. Hence, overall, the area is least prone to any liquefaction hazard. However, the detailed structural design of IFI building will be completed after detailed soil testing at the IFI site.

Figure 5: Contour Map of GIFT City and IFI Site



Source: Gujarat International Finance Tec-City Company Limited.

29. Soil testing for the IFI site has been completed for building design. The findings indicate that from existing ground level to a depth varying from 1.20m to 2.40m depth, yellowish brown, fine to very fine grained, filled-up clayey sand with little to some gravels is found, followed by yellowish brown, fine to medium grained, clayey sand with occasional to some gravels up to about 10 m depth. From 10 to 20 m depth, yellowish brown, fine to very fine grained, clays of intermediate to high plasticity with occasional gravels is encountered. From 20 to 31 m depth, yellowish brown, fine to very fine grained, clayey sand with little gravels is encountered. From 31 to 47.55 m depth, yellowish brown, fine to very fine grained, silty sand with occasional gravels is encountered. The underlying layer consists of yellowish brown, fine to medium grained, sandy clays of high plasticity with occasional gravels up to about 53 m depth. The bulk density of soil is 1.81 g/cc (at a depth of 1.8 m). The natural moisture content is about 16.75 % at a depth of 3 m.

The grain size analysis indicates gravel, sand and silt and clay contents of 14, 54 and 32 % respectively at a depth of 3 m. The water table is encountered at 12-13 m depth. The soil testing report is shown in Annexure-6.

Table 6: Soil Quality Data for Sub-Project Region

Parameters		Unit	GIFT	Lavarpur Village	Ratanpur Village	Valad Village	Raisan Village	Juna Koba
Color		-	Brown	Brown	Brown	Brown	Brown	Brown
Texture		-	Sandy clay	Sandy clay	Sandy clay	Sandy clay	Sandy clay	Sandy clay
Particle size Distributions	Sand	%	35	32	33	34	33	34
	Silt	%	28	30	27	28	30	30
	Clay	%	37	38	40	38	37	36
pH (1:5 Solution)		-	7.22	7.41	7.81	7.16	7.54	7.67
Electrical Conductivity		µS/cm	242	288	235	252	280	263
Bulk Density		g/cm^3	1.36	1.6	1.28	1.38	1.41	1.35
Porosity		%v/v	40	41	38	32	30	31
Organic Carbon		%	0.92	1.2	0.89	1.15	1.18	1.13
Sodium (Na)		mg/100g	8	12	11	12	10	17
Potassium (K)		mg/100g	2	3	3	5	2	4
Moisture Content		%	3.66	4.78	7.61	8.95	7.43	6.28
Total Nitrogen		mg/100g	88	52	63	52	70	37
Available Phosphorous		kg/ha	33.5	82.91	32.72	41.8	40.98	76.7
Organic Matter		%	1.88	2.34	1.23	1.88	1.46	2.1
Total Soluble Chloride		mg/kg	260	180	160	200	240	190
Total Soluble Sulphate		%	0.07	0.05	0.03	0.05	0.04	0.02
Water Holding Capacity		%	35	32	34	36	35	31

Source: Environmental Impact Assessment Study of GIFT, 2021.

30. **Surface water.** GIFT and the IFI site are located close to Sabarmati river (at a distance of about 1 km in monsoon season). The other surface water source in the project site surroundings is Narmada Canal at about 2 km.

31. **Groundwater.** The groundwater quality data for the sub-project surroundings was collected from secondary sources and provided in Table 7. Results show that that all the parameters in groundwater fairly meet the standard limits of IS:10500. The contractor, immediately after mobilization, will collect groundwater sample from the sub-project site before start of construction activities with an aim to establish baseline for groundwater quality at IFI site. The Central Ground Water Board (CGWB-West Central Region Office) has conducted some groundwater survey and studies in Gandhinagar District in 2010 and published 'Ground Water Information Booklet-Gandhinagar District' in 2014. As per their study, the groundwater of district is fresh and suitable for both domestic and irrigation purposes. Based on 2012 data of CGWB, the depth of the water level during pre-monsoon months in Gandhinagar District ranged from 7.55 to 59.40 m below ground level (bgl) and 6.27 to 59.17 m in post-monsoon months. The stage of groundwater development in Gandhinagar District is only 120.05% and the district falls in over exploited category for groundwater development. The total reserves/potential of groundwater in the district is 543.84 million m^3 whereas development/usage is only 453.0005 million m^3. The hydrogeology map of Gandhinagar District is shown in Figure 6.

Table 7: Groundwater Quality in Sub-Project Region

Parameter	Test Method	Units	*Village Shahpur	**Village Ratanpur	Acceptable Limit	Permissible Limits (as Specified in IS:10500 for Drinking Water)
Color	APHA (23rdEdition) 2120 B	Hazen	< 1	< 1	5	15
pH	APHA (23rdEdition) 4500- H	-	8.06	7.71	6.5-8.5	No Relaxation
Turbidity	APHA (23rdEdition) 2130	NTU	0.15	0.26	1	5
Dissolved Solids	APHA (23rdEdition) 2540 C	mg/L	643	951	500	2000
Aluminum as Al	APHA (23rdEdition) 3111D	mg/L	< 0.01	< 0.01	0.03	0.2
Ammonia (as total ammonia-N)	IS: 3025 Part 34 - 1988	mg/L	< 0.2	< 0.2	0.5	No Relaxation
Anionic detergents as MBAS	APHA (23rdEdition) 5540 C	mg/L	< 0.1	< 0.1	0.2	1.0
Barium as Ba	IS:13428: 2005, RA 2020	mg/L	< 0.1	< 0.1	0.7	No Relaxation
Boron as B	APHA (23rdEdition) 4500B-B	mg/L	< 0.1	< 0.1	0.5	1.0
Calcium as Ca	APHA (23rdEdition) 3500 Ca B	mg/L	20.8	48	75	200
Chloramines as Cl_2	IS: 3025 Part26 - 1986, RA 2003	mg/L	< 1.0	< 1.0	4.0	No Relaxation
Chloride as Cl	APHA (23rdEdition) 4500 Cl- B	mg/L	79.96	221.89	250	1000
Copper as Cu	APHA (23rdEdition) 3111B	mg/L	< 0.01	< 0.01	0.05	1.5
Fluoride as F	APHA (23rdEdition) 4500 F D	mg/L	1.17	0.91	1.0	1.5
Free Residual Chlorine	APHA (23rdEdition) 4500 Cl B	mg/L	< 0.1	< 0.1	0.2	1.0
Iron as Fe	APHA (23rdEdition) 3111B	mg/L	0.05	0.02	0.3	No Relaxation
Magnesium as Mg	APHA (23rdEdition) 3500 Mg B	mg/L	13.61	35	30	100
Manganese as Mn	APHA (23rdEdition) 3111B	mg/L	< 0.01	< 0.01	0.1	0.3
Nitrate as NO_3	APHA (23rdEdition) 4500 NO3-B	mg/L	33.91	110.79	45	No Relaxation
Phenolic Compounds as C_6H_5OH	APHA (23rdEdition) 5530C	mg/L	< 0.001	< 0.001	0.001	0.002
Selenium as Se	APHA (23rdEdition) 3114B&C	mg/L	< 0.01	< 0.01	0.01	No Relaxation
Sulphate as SO_4	APHA (23rdEdition) 4500 E	mg/L	40.28	36.36	200	400
Total Alkalinity as $CaCO_3$	APHA (23rdEdition) 2320	mg/L	388	324	200	600
Total Hardness as $CaCO_3$	APHA (23rdEdition) 2340 C	mg/L	108	264	200	600
Zinc as Zn	APHA (23rdEdition) 3111B	mg/L	< 0.01	< 0.01	5	15
Cadmium as Cd	APHA (23rdEdition) 3111B	mg/L	< 0.001	< 0.001	0.003	No Relaxation
Lead as Pb	APHA (23rdEdition) 3111B	mg/L	< 0.01	< 0.01	0.1	No Relaxation

Parameter	Test Method	Units	*Village Shahpur	**Village Ratanpur	Acceptable Limit	Permissible Limits (as Specified in IS:10500 for Drinking Water)
Mercury as Hg	APHA (23rdEdition) 3112B	mg/L	< 0.001	< 0.001	0.001	No Relaxation
Total Arsenic as	APHA (23rdEdition) 3114B	mg/L	< 0.005	< 0.005	0.01	0.05
Total Chromium as Cr	APHA (23rdEdition) 3111B	mg/L	< 0.01	< 0.01	0.05	No Relaxation
Sulfide as S	APHA (23rdEdition) 4500 F	mg/L	< 0.05	< 0.05	0.05	No Relaxation

Notes:
* At about 1.0 km from IFI site.
** At about 500 m from IFI site.
Source: Environmental Impact Assessment Study of GIFT, 2021.

32. As mentioned, Narmada Canal and Sabarmati River are two surface water sources in the vicinity of sub-project site. The water quality data of both these surface water sources has been obtained from the secondary sources. This water quality data has been given in Table 8. Results show that surface water quality parameters are found to be well-within the prescribed standards limits (Class C). It means that both the surface water sources are suitable for drinking water after conventional treatment and disinfection.

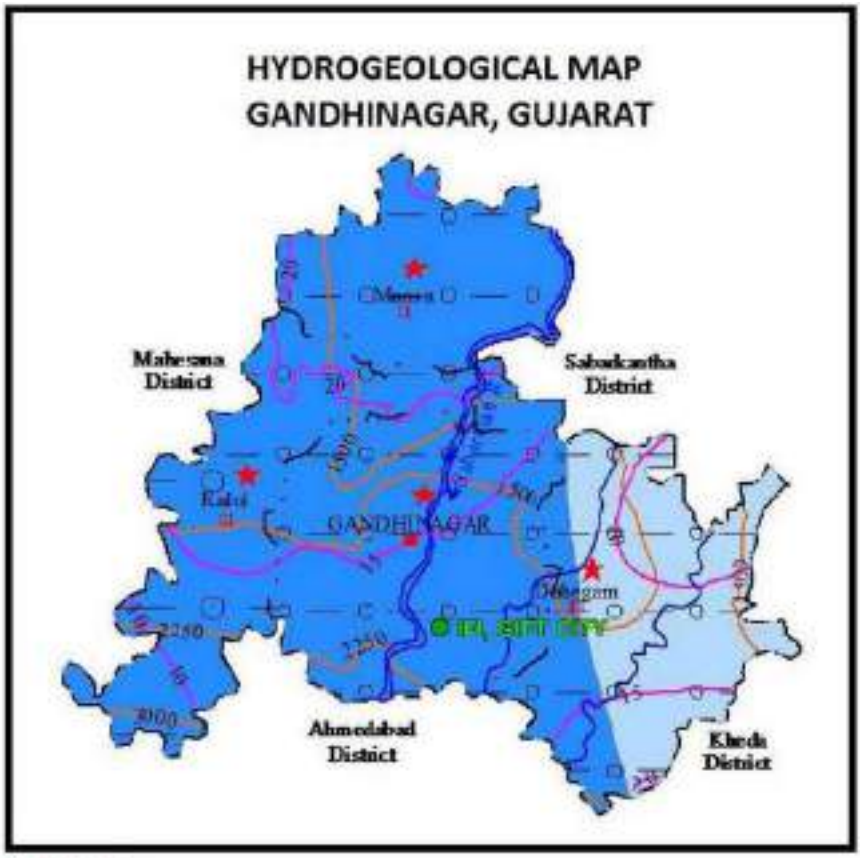
Table 8: Surface Water Quality in Sub-Project Region

Parameters	Unit	Test Method	Narmada Canal	Sabarmati River Upstream GIFT City	Sabarmati River Downstream GIFT City	Permissible CPCB Criteria	
						Class B (Suitable for outer Bathing)	Class C (Drinking Water source after conventional treatment and disinfection)
pH	-	APHA (23rdEdition) 4500 H	8.09	8.24	8.01	6.5 to 8.5	6 to 9
Turbidity	NTU	APHA (23rdEdition) 2130	0.11	0.14	0.27	Not Stipulated	Not Stipulated
Total Hardness as $CaCO_3$	mg/L	APHA (23rdEdition) 2340 C	108	104	108	Not Stipulated	Not Stipulated
Total Alkalinity as $CaCO_3$	mg/L	APHA (23rdEdition) 2320	116	116	116	Not Stipulated	Not Stipulated
Chlorides as Cl	mg/L	APHA (23rdEdition) 4500 Cl^-B	39.99	39.98	39.98	Not Stipulated	Not Stipulated
Sulphate as SO_4	mg/L	APHA (23rdEdition) 4500 E	14.81	15.23	16.46	Not Stipulated	Not Stipulated
Nitrate (as NO_3^-)	mg/L	APHA (23rdEdition) 4500 NO_3^- B	0.78	0.77	1.41	Not Stipulated	Not Stipulated
Fluoride as F	mg/L	APHA (23rdEdition) 4500 F D	0.25	0.25	0.28	Not Stipulated	Not Stipulated
BOD 3 Days at 27ºC	mg/L	IS 3025 (Part 44): 1993	< 2	< 2	< 2	3 or less	3 or less
COD	mg/L	APHA (23rdEdition) 5220 B	< 5	< 5	< 5	Not Stipulated	Not Stipulated
Phenolic Compounds as C_6H_5OH	mg/L	APHA (23rdEdition) 5530C	< 0.001	< 0.001	< 0.001	Not Stipulated	Not Stipulated
Lead as Pb	mg/L	APHA (23rdEdition) 3111B	< 0.01	< 0.01	< 0.01	Not Stipulated	Not Stipulated
Iron as Fe	mg/L	APHA (23rdEdition) 3111B	< 0.01	< 0.01	< 0.01	Not Stipulated	Not Stipulated
Arsenic as As	mg/L	APHA (23rdEdition) 3114B	< 0.005	< 0.005	< 0.005	Not Stipulated	Not Stipulated
Cadmium as Cd	mg/L	APHA (23rdEdition) 3111B	< 0.003	< 0.003	< 0.003	Not Stipulated	Not Stipulated
Total Chromium as Cr	mg/L	APHA (23rdEdition) 3111B	< 0.01	< 0.01	< 0.01	Not Stipulated	Not Stipulated
Mercury as Hg	mg/L	APHA (23rdEdition) 3112B	< 0.001	< 0.001	< 0.001	Not Stipulated	Not Stipulated
Copper as Cu	mg/L	APHA (23rdEdition) 3111B	< 0.01	< 0.01	< 0.01	Not Stipulated	Not Stipulated
Zinc as Zn	mg/L	APHA (23rdEdition) 3111B	< 0.01	< 0.01	< 0.01	Not Stipulated	Not Stipulated
Selenium as Se	mg/L	APHA (23rdEdition) 3114B&C	< 0.01	< 0.01	< 0.01	Not Stipulated	Not Stipulated
Oil & grease	mg/L	APHA (23rdEdition) 5520 B	< 5	< 5	< 5	Not Stipulated	Not Stipulated
Color	Hazen	APHA (23rdEdition) 2120B	< 1	< 1	< 1	Not Stipulated	Not Stipulated
Dissolved Solids	mg/L	APHA (23rdEdition) 2540 C	235	239	241	Not Stipulated	Not Stipulated

Parameters	Unit	Test Method	Narmada Canal	Sabarmati River Upstream GIFT City	Sabarmati River Downstream GIFT City	Permissible CPCB Criteria	
						Class B (Suitable for outer Bathing)	Class C (Drinking Water source after conventional treatment and disinfection)
Residual Free Chlorine	mg/L	APHA (23rdEdition) 4500 Cl B	< 0.2	< 0.2	< 0.2	Not Stipulated	Not Stipulated
Boron as B	mg/L	APHA (23rdEdition) 4500B-B	< 0.1	< 0.1	< 0.1	Not Stipulated	Not Stipulated
Calcium as Ca	mg/L	APHA (23rdEdition) 3500 Ca B	22.4	24	22.4	Not Stipulated	Not Stipulated
Magnesium as Mg	mg/L	APHA (23rdEdition) 3500 Mg B	12.64	10.69	12.64	Not Stipulated	Not Stipulated
Dissolved Oxygen	mg/L	APHA (23rdEdition) 4500 DO C	4.8	4.7	4.6	5 or more	4 or more
Total Coliform	CFU/ 100ml	IS: 15185 – 2016	19	23	32	500 or less	5000 or less
E. Coli	CFU/ 100ml	IS: 15185 – 2016	Absent	Absent	Absent	Not Stipulated	Not Stipulated

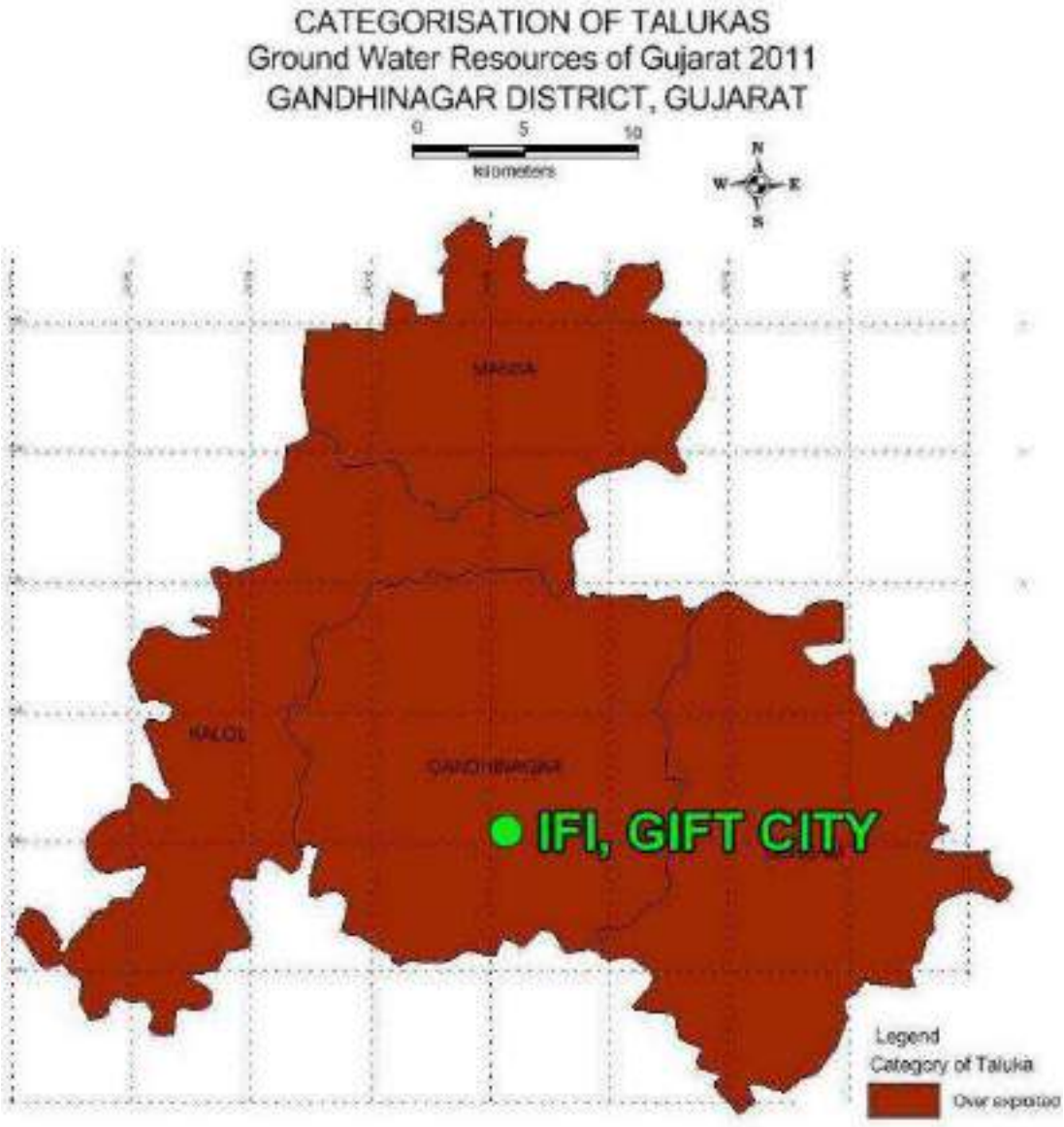
Source: Environmental Impact Assessment Study of GIFT, 2021.

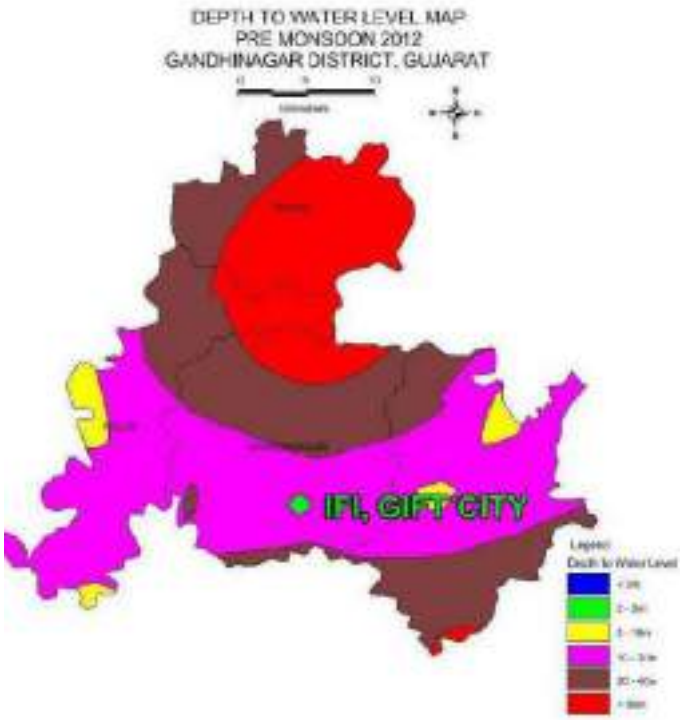
Figure 6: Hydrogeology Map for Gandhinagar District

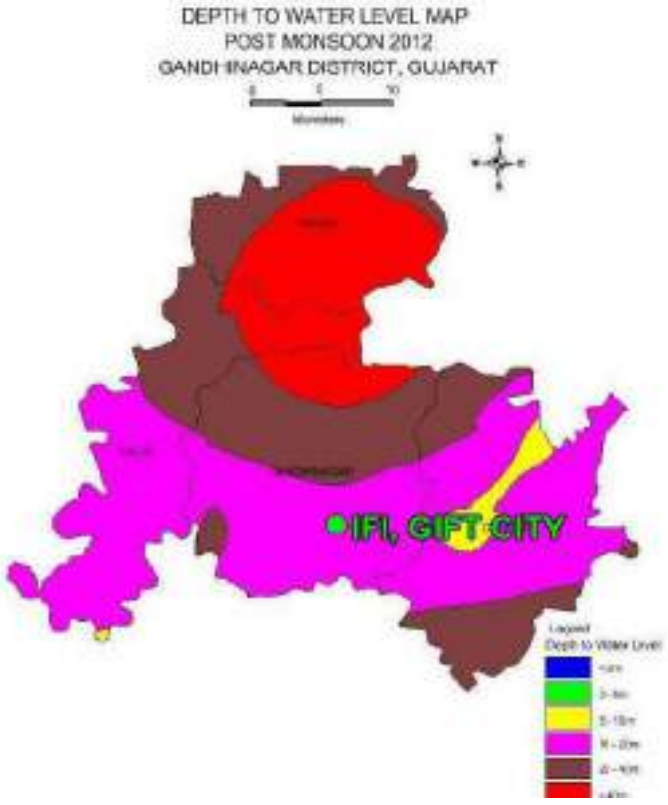


LEGEND

	Wells Feasible	Rigs Suitable	Depth of Well (m)	Discharge (lpm)	Artificial Recharge Structure Suitable
Soft Rock Aquifer	Dug Well	Manual	10-25	200-300	Percolation Tanks/ Ponds, Recharge Wells,
	Tubewell	Direct Rotary, Reverse Rotary	50-100	600-800	
Soft Rock Aquifer	Tubewell	Direct Rotary Reverse Rotary	100-300	600-1200	Percolation Tanks/ Ponds, Recharge Wells, Recharge Shaft
	Pre-monsoon Decadal mean (1993-2003) Depth to Water Level (mbgl)			Electrical Conductivity (µS/cm at 25° C)	
	Over Exploited Taluka				
	Drainage			District/Taluka HQ	


CATEGORISATION OF TALUKAS
Ground Water Resources of Gujarat 2011
GANDHINAGAR DISTRICT, GUJARAT
0
5
10
kilometers
N
W
E
S
MANSA
KALOL
GANDHINAGAR
IFI, GIFT CITY
Legend
Category of Taluka
Over exploited

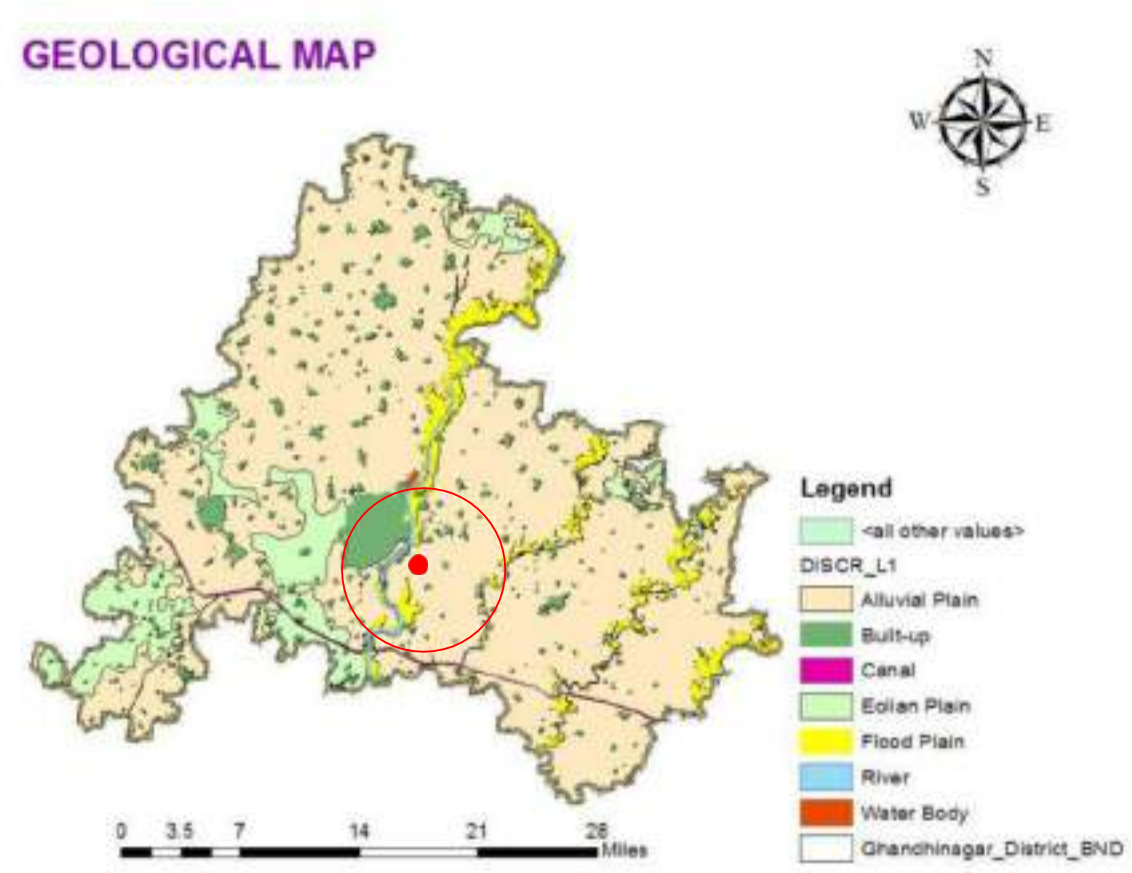




Source: Ground Water Information Booklet Gandhinagar District, Gujarat-Central Ground Water Board, 2014.

33. **Geology and Seismology.** GIFT and its surroundings form part of Cambay basin and is occupied by quaternary alluvium comprising mainly of sand, gravel, silt clay and Kankar. The Miocene formations are encountered within 611 m at the deepest borehole drilled in the Gandhinagar District at Sardhao. There is a sequence of alternating layers of granular sandy and clayey horizons, the uppermost granular zone varies in thickness from 5 to 65 m. it is underlain by a thick clay bed followed by alternating sequence of arenaceous and argillaceous horizons. The geological map of Gandhinagar is presented in Figure 7.

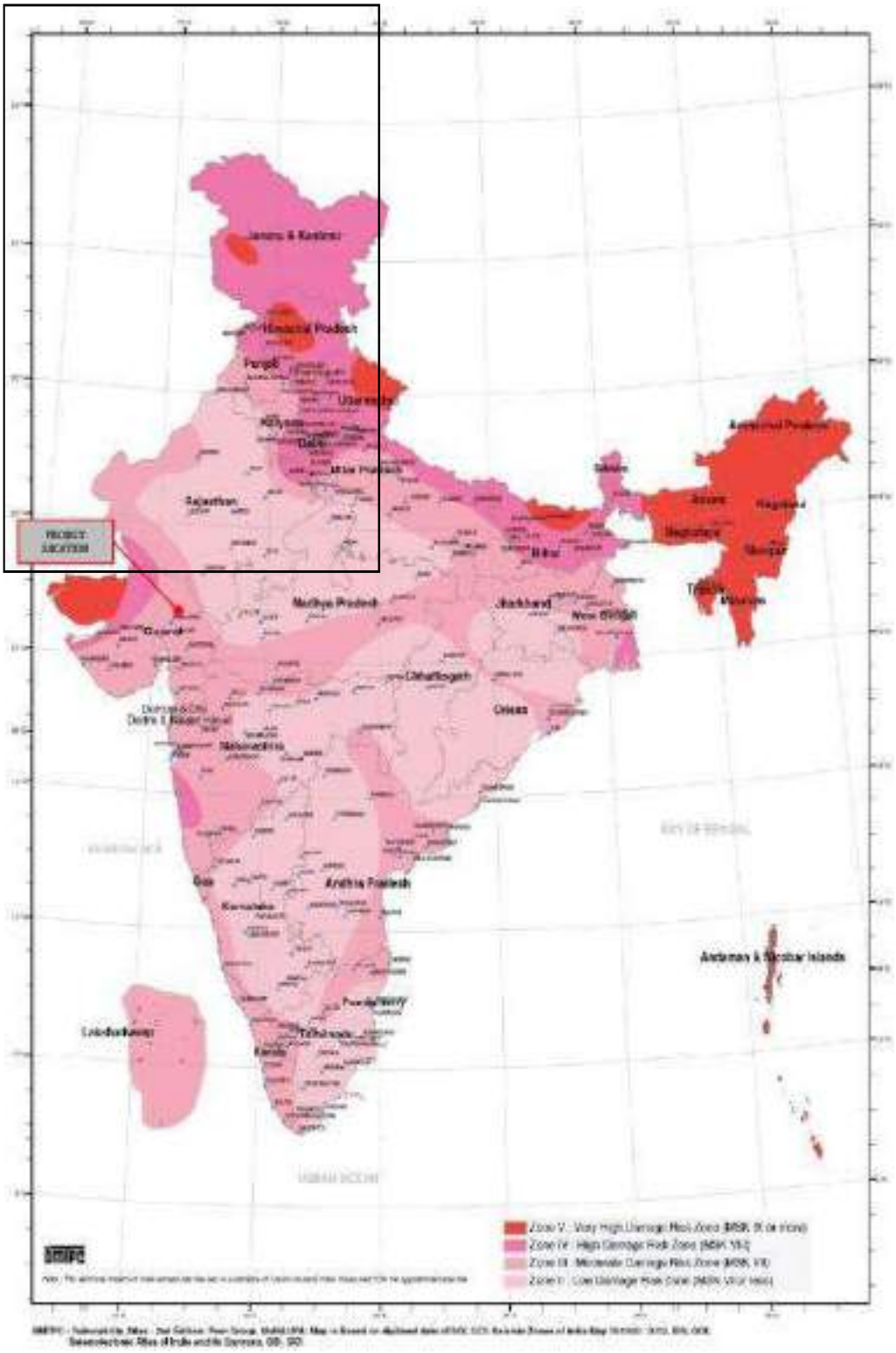
Figure 7: Geological Map of Gandhinagar District



Source: Gujarat International Finance Tec-City.

34. As per Bureau of Indian Standards [IS-1893: 2002], India has been grouped into four seismic zones viz., Zone-II, III, IV and V. Of these, zone V is rated as the most seismically prone region, while zone II is the least. The project and 10 km radius study area falls in Zone III which is *Moderate Damage Risk Zone* while in macro seismic intensity scale i.e. Medvedev–Sponheuer–Karnik Scale (MSK) the project falls in MSK VI or less. The seismic zone map of India with project location marked is shown in Figure 8.

Figure 8: Seismological Map of India



Source: Environmental Impact Assessment Study of GIFT, 2021

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35. During the submission for environmental clearance in 2009, GIFT has undertaken a seismology study through Indian Seismological Research Institute (ISR) Gandhinagar. ISR report states that GIFT is located in the Cambay basin bound by east and west marginal faults. The east marginal fault is 15 km east of the city and the west marginal fault is 48 km west of its location. In between these two major faults, several small parallel faults crisscross the area. GIFT comes under Zone III of the seismic zoning map of India (BIS 2002), where maximum expected earthquake is of magnitude 6.0. There has been no earthquake in the project site or surroundings in the last 20 years.

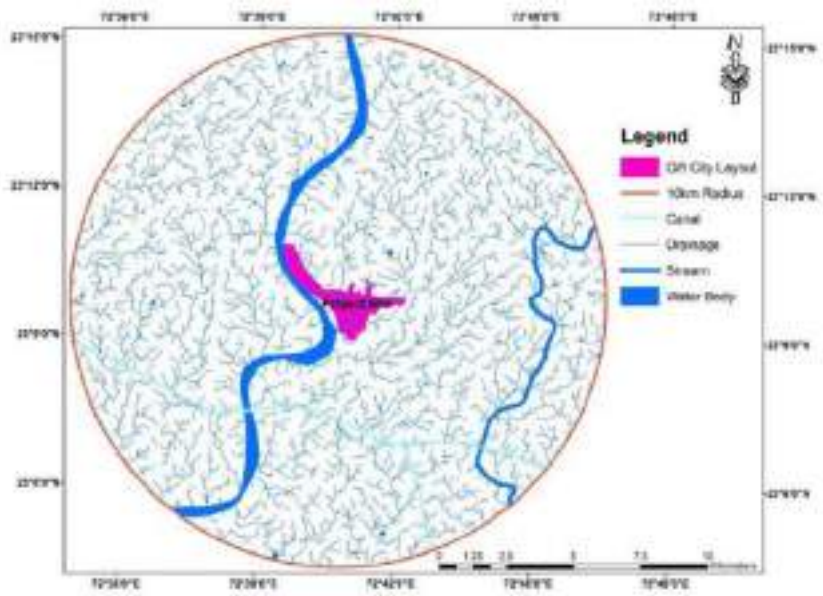
36. **Drainage.** Dendrite type of drainage pattern is observed in the sub-project site and surroundings with high drainage density. The main river at GIFT is the Sabarmati River. The Sabarmati River is one of the major west-flowing rivers in India. It originates in the Aravalli Range of the Udaipur District of Rajasthan and meets the Gulf of Khambhat of Arabian Sea after 371 km in a south-westerly direction across Rajasthan and Gujarat. About 48 km river length is in Rajasthan, while 323 km is in Gujarat. The catchment area of the Sabarmati basin is 21,674 km^2, out of which 4,124 km^2 lies in Rajasthan State and the remaining 18,550 km^2 in Gujarat. The Sabarmati is a seasonal river whose flows are dominated by the monsoon, with little or no flows post-monsoon. The major tributaries are the Watrak, Wakal, Hathmati, Harnav, and Sei rivers. There are several reservoirs on Sabarmati and its tributaries. The Dharoi dam is located on the main river. Hathmati dam, Harnav dam and Guhai dam are located on the tributaries meeting the main river upstream of Ahmedabad while Meshvo reservoir, Meshvo pick-up weir, Mazam dam and Watrak dam are located on tributaries meeting downstream. The Khari Nadi, and Narmada Main Canal are two other water bodies of prominence in the surroundings of GIFT. The project area has a gentle slope towards Sabarmati River. The distance and directions of major water bodies in the surroundings of IFI site are given in Table 9. The drainage pattern of sub-project region is in Figure 9.

Table 9: Distance and Direction of Rivers/Stream/Nallah in Surroundings of IFI Site

Name of the River/Stream/Nallah	Distance from IFI Site (km)	Direction from IFI Site
Sabarmati River	0.150	east
Khari Nadi	4.8	east
Narmada Main Canal	2	south-southwest

Source: Environmental Impact Assessment Study of GIFT, 2021.

Figure 9: Drainage Pattern of Sub-Project Site and Surroundings



Source: Environmental Impact Assessment Study of GIFT, 2021.

B. Ecological Resources

i. Forests

37. Various types of forests in Gujarat currently cover an area of nearly 14,660 km^2, which is about 7.48% of the total land area of the state. The variation in the landscape has created great diversity of flora and fauna. In terms of forest canopy density classes, the State has 376 km^2 under Very Dense Forest (VDF), 5,220 km^2 under Moderately Dense Forest (MDF) and 9,064 km^2 under Open Forest (OF). Gandhinagar has about 1.14% forest of total geographic area of the district. The most portions of these forest areas are managed by the Forest Department. Gandhinagar forest areas under very dense, moderately dense and open category are in Table 10.

Table 10: Different Categories of Forests in Gandhinagar District

District	Very Dense Forest Area (km^2)	Moderately Dense Forest Area (km^2)	Open Forest Area (km^2)
Gandhinagar	0	6.0	35

Source: State Forest Department (Forest Survey of India Report - 2019).

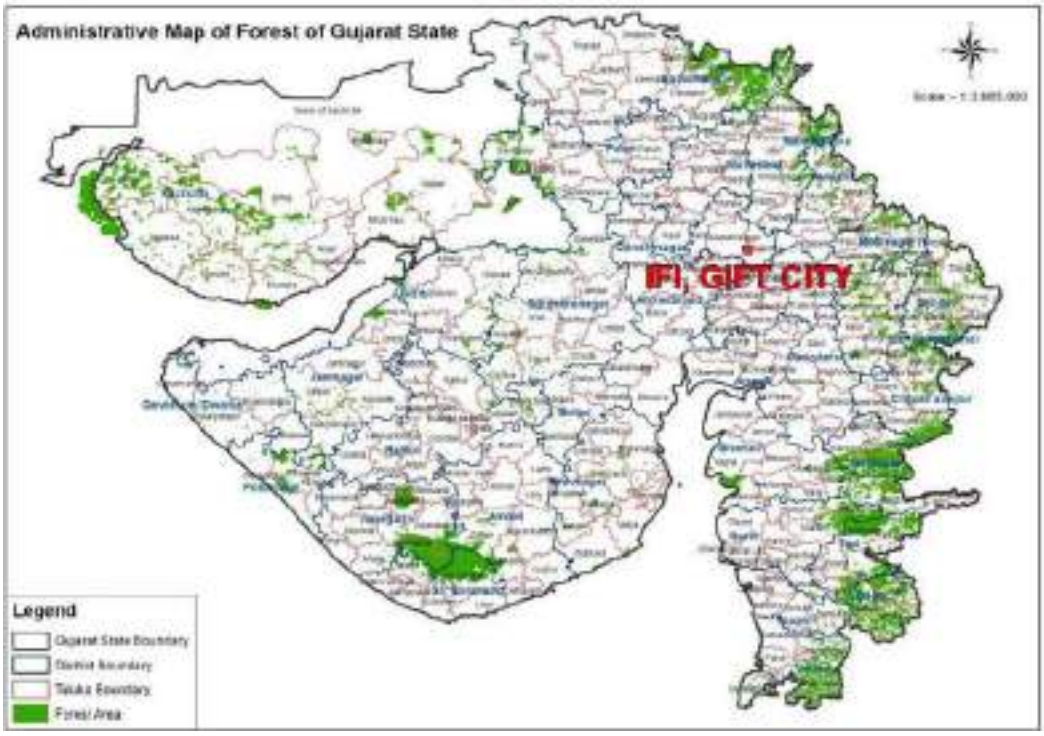
38. The occurrence of eight agro-climatic zones in the state reflect the diversity of ecosystems in the state. The state has vast grasslands and scrub forests in Kachchh, Central Gujarat and Saurashtra regions while coastal ecosystems such as mangroves, coral reefs and sea grasses are located in western parts of the state. Further, saline deserts are located in the north while moist deciduous tropical forests are found in southern areas. The hilly forests are found in eastern parts and Saurashtra regions. As per the Champion and Seth Classification system, out of 16 major forest types found in the country, following four main types of forest ecosystems are found in Gujarat. Forest cover map for Gujarat is shown in Figure 10.

- Type 3B Tropical Moist Deciduous Forests
- Type 4B Littoral and Swamp Forests

- Type 5A Tropical Dry Deciduous Forests
- Type 6B Northern Tropical Thorn Forests

39. The IFI site does not fall within any reserved, protected, or revenue forest areas.

Figure 10: Forest cover Map of Gujarat



Source: Forest Survey of India, 2020.

ii. Flora and Fauna around the IFI Site and GIFT

40. The IFI site is well within GIFT. The GIFT project is under execution stage, some of the buildings are in operational stage and still some of the buildings are under construction. Some of the developments are yet to start. As it is in operation, the well-developed greenbelt is seen along roads and at designated open places. There are no protected areas within 15 km radius of GIFT. At present there are no trees at site. There is presence of shrubs. The common trees in the surroundings of IFI site (in the green belt developed and in open areas) are given in Table 11. The International Union for Conservation of Nature (IUCN) category of each tree species is also given in the Table 11. It is clear from the table that no tree species belong to near threatened (NT), vulnerable (VU) and endangered (EN) categories.

Table 11: Common Tree Species around IFI Site and GIFT Campus

Sl. No.	Scientific Name	Common Name	IUCN Status
1	*Aegle marmelos L.*	Billipatra	Not mentioned
2	*Albizia lebbeck*	Shiras	Stable LC
3	*Alstonia scholaris*	Saptaparni	Unknown LC
4	*Annona squamosal*	Sitafal	Not mentioned
5	*Azadirachta indica*	Neem	Stable LC
6	*Bauhinia blakeana*	Bauhinia	Not mentioned
7	*Bombax ceiba*	Simlo	Stable LC

Sl. No.	Scientific Name	Common Name	IUCN Status
8	*Butea monosperma*	Khakharo	Unknown LC
9	*Cassia fistula*	Garmalo	Stable LC
10	*Cassia javanica*	Pink cassia	Unknown LC
11	*Cassia siamea*	Kashid	Decreasing LC
12	*Cassia renigera*	Cassia	Not mentioned
13	*Ceiba speciosa*	Maxican semal	Stable LC
14	*Ceiba pentandra*	Kapok	Unknown LC
15	*Citrus limon*	Lemon tree	Decreasing LC
16	*Conocarpus erectus*	Conocarpus	Decreasing LC
17	*Cordia dichotoma*	Vargunda	Stable LC
18	*Cordia sebestena*	Cordia	Unknown LC
19	*Couroupita guianensis*	Kailashpati	LC
20	*Dalbergia sissoo*	Shishu	Unknown LC
21	*Delonix regia*	Gulmohar	Unknown LC
22	*Ficus benghalensis*	Vad	Not mentioned
23	*Ficus benjamina*	Weeping fig	Stable LC
24	*Ficus infectoria, f. virens*	Pilkhan	Not mentioned
25	*Ficus krishnae*	Krishna fig	Not mentioned
26	*Ficus religiosa*	Pipal	Stable LC
27	*Kigelia africana, k. pinnata*	Kigelia	Not mentioned
28	*Limonia acidissima*	Kothu, wood apple	Not mentioned
29	*Madhuca longifolia*	Mahuda	Not mentioned
30	*Mangifera*	Aamba	Not mentioned
31	*Manilkara hexandra*	Rayan	Not mentioned
32	*Millettia pinnata*	Millettia	Unknown LC
33	*Mimusops elengi*	Borsalli	Stable LC
34	*Morus Nigra*	Setur	Not mentioned
35	*Nyctanthes arbor-tristis*	Parijat	Stable LC
36	*Peltophorum pterocarpum*	Peltophorum	Not mentioned
37	*Phyllanthus emblica*	Amla	Decreasing LC
38	*Pithecellobium dulce*	Goras Imli	Stable LC
39	*Plumeria alba*	Champa_White	Stable LC
40	*Plumeria rubra*	Champa_Red	Stable LC
41	*Pongamia pinnata*	Kanaj	Stable LC
42	*Psidium guajava*	Jamphal	Unknown LC
43	*Punica granatum*	Dadam	Least Concern
44	*Putranjiva roxburghii*	Putranjiva	Unknown LC
45	*Samanea saman*	Rain tree	Stable LC
46	*Sapindus*	Aritha	Stable LC
47	*Spathodea campanulata*	Spathodea	Stable LC
48	*Sterculia foetida*	Sterculia	Not mentioned
49	*Sterculia urens*	Kadayo	Not mentioned
50	*Syzygium cumini*	Jamun	Stable LC
51	*Tabebuia argentea*	Tabebuia yellow	Not mentioned
52	*Tabebuia rosea*	Tabebuia rosea	Stable LC
53	*Tabebuia avellandae*	Tabebuia light pink	Not mentioned
54	*Tamarindus indica*	Khati Imli	Stable LC
55	*Terminalia arjuna*	Arjun Sadad	Not mentioned
56	*Terminalia catappa*	Badam	Stable LC
57	*Terminalia mantaly*	American Badam	Stable LC
58	*Thespesia populnea*	Thespesia	Stable LC
59	*Vitex negundo*	Nagod	Stable LC

Source: Gujarat International Finance Tec-City Company Limited and

primary observations.

41. As part of GIFT is under development and part in operation, there is little presence of fauna. During the EIA study of GIFT, faunal observation was conducted in the surroundings (within 3 km aerial distance). This list of observed fauna is given in Table 12. None of these are in the threatened or endangered category.

Table 12: List of Fauna Found in and Around GIFT City

Sl. No.	Zoological Name	Common Name	Family	Conservation Status as Per WL(P)A,1972
Avifauna				
1.	*Acridotherestristis*	Common Myna	Sturnidae	Sch-IV
2.	*Actitishypoleucos*	Common Sandpiper	Scolopacidae	Sch-IV
3.	*Bubo*	Indian Great Horned Owl	Strigidae	Sch-IV
4.	*Bubulcus ibis*	Cattle Egret	Ardeidae	Sch-IV
5.	*Columba livia*	Rock Pigeon	Columbidae	Sch-IV
6.	*Corvusmacrorhynchos*	Jungle Crow	Corvidae	Sch-IV
7.	*Corvussplendens*	House Crow	Corvidae	Sch-IV
8.	*Pycnonotuscafer*	Red-vented Bulbul	Pycnonotidae	Sch-IV
9.	*Streptopeliachinensis*	Spotted Dove	Columbidae	Sch-IV
10.	*Dendrocittavagabunda*	Rufous treepie	Corvidae	Sch-IV
11.	*Passer domesticus*	House Sparrow	Passeridae	Sch-IV
12.	*Pavo cristatus*	Indian Peafowl	Phasianidae	Sch-I(LC)
Reptiles				
13.	*Calotes versicolor*	Garden Lizard	Agamidae	Sch-IV
14.	*Hemidactylus flaviviridis*	House Gecko	Gekkonidae	Sch-IV
15.	*Calotes rouxii*	Forest Calotes	Agamidae	Sch-IV
16.	*Ptyus mucosus*	Common Rate Snake	Colubridae	Sch-IV
Butterflies				
17.	*Danaus chrysippus*	Plain Tiger	Nymphalidae	Sch-IV
Mammals				
18.	*Funamnibuluspennant*	Five Stripped squirrel	Sciuridae	Sch-IV
19.	*Rattus*	House rat	Muridae	Sch- IV

WL(P) A = Wild Life Protection Act, 1972.
Source: Environmental Impact Assessment Study of GIFT, 2021.

42. The natural water bodies (Sabarmati River and Khari Nadi) around IFI site are seasonal (flow only during monsoon months) in nature and Narmada Canal is a lined canal. There is little presence of aquatic life in these water bodies.

iii. Protected Areas

43. The list of protected areas (National Parks and Wildlife Sanctuaries) in Gujarat is given in Table 13. In the Gandhinagar District, there is no National Park or wildlife sanctuary. The boundary of nearest wildlife sanctuary is about 40 km from IFI site. The map of protected areas is shown in Figure 11.

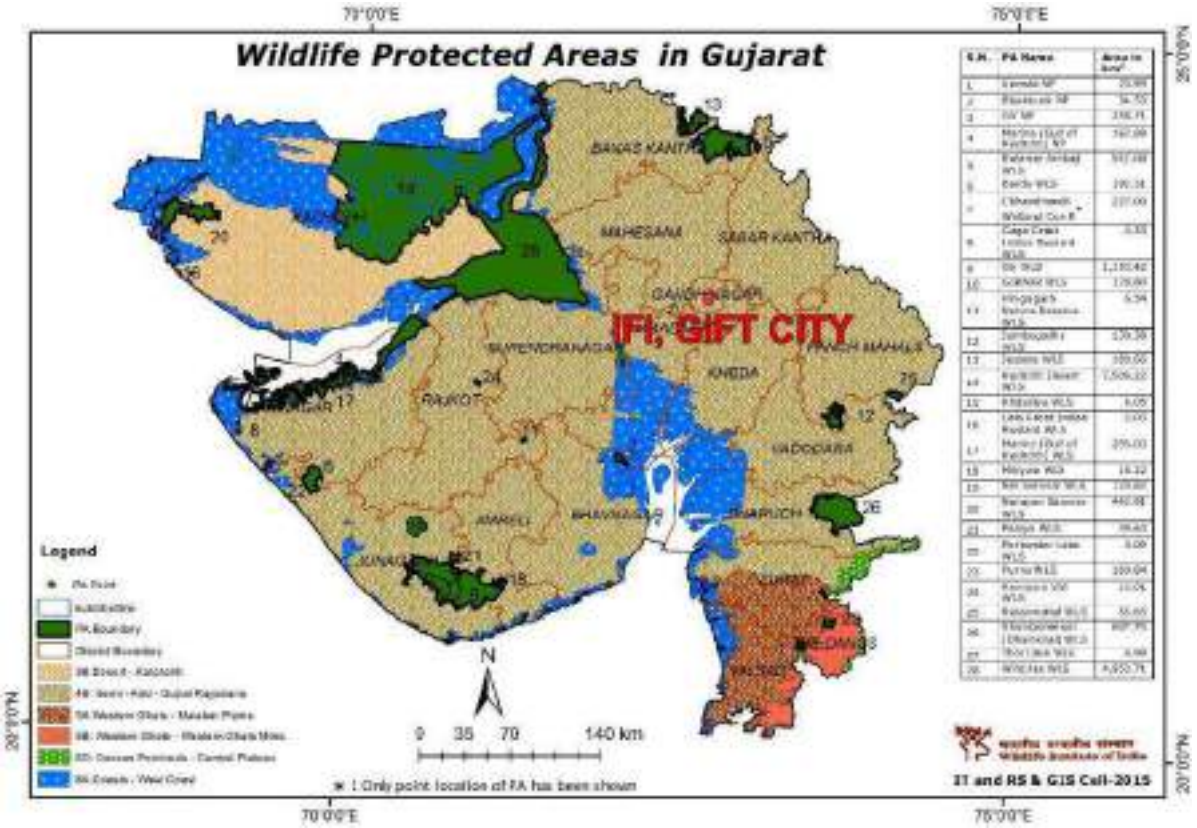
Table 13: Protected Areas in Gujarat

Protected Area	Area (km^2)	District	Year Notified
National Parks			
Gir Forest National Park	258.71	Junagadh	1975

Blackbuck National Park, Velavadar	34.53	Bhavnagar	1976
Vansda National Park	23.99	Navsari	1979
Marine National Park, Gulf of Kutch	162.89	Jamnagar, Devbhumi Dwarka	1982
Wildlife Sanctuaries			
Kutch Desert Wildlife Sanctuary	7506.22	Kutch	1986
Wild Ass Sanctuary	4953.70	Kutch	1973
Gir Wildlife Sanctuary & National Parks	1213.42	Junagadh, Gir Somnath, Amreli	1965
Shoolpaneshwar Wildlife Sanctuary	607.70	Narmada	1982
Balaram Ambaji Wildlife Sanctuary	542.08	Banaskantha	1989
Narayan Sarovar Sanctuary	444.23	Kutch	1981
Marine Sanctuary	295.03	Jamnagar, Devbhumi Dwarka, Gulf of Kutch	1980
Barda Wildlife Sanctuary	192.31	Porbandar	1979
Jessore Sloth Bear Sanctuary	180.66	Banaskantha	1978
Purna Wildlife Sanctuary	160.84	Dangs	1990
Jambughoda Wildlife Sanctuary	130.38	Panchmahal	1990
Nal Sarovar Bird Sanctuary	120.82	Ahmedabad, Surendranagar	1969
Ratanmahal Sloth Bear Sanctuary	55.65	Dahod	1982
Pania Wildlife Sanctuary	39.63	Amreli	1989
Rampara Wildlife Sanctuary	15.01	Morbi	1988
Thol Lake Bird Sanctuary	6.99	Mehsana	1988
Hingolgadh Nature Education Sanctuary	6.54	Rajkot	1980
Khijadiya Bird Sanctuary	6.05	Jamnagar	1981
Gaga Wildlife Sanctuary	3.33	Devbhumi Dwarka district	1988
Kutch Bustard Sanctuary	2.03	Kutch	1992
Porbandar Bird Sanctuary	0.09	Porbandar	1988
Mitiyala Wildlife Sanctuary	18.22	Amreli	2004
Girnar Wildlife Sanctuary	178.87	Junagadh	2008

Source: Department of Environment and Forest, Government of Gujarat, 2020.

Figure 11: Protected Areas of Gujarat



Source: Department of Environment and Forest, Government of Gujarat, 2020.

C. Economic Resources Industries

44. Being an agriculture-prominent district, there are no large industrial units in GIFT, Gandhinagar and its surroundings. As shown in Table 14 for Gandhinagar district, there are micro, small, and medium enterprises focusing on agro-products, food, cotton textiles, among others.

Table 14: Details of Existing Micro and Small Enterprises and Artisan Units in Gandhinagar District

NIC Code No.	Type of Industry	Number of Units	Employment
20	Agro-based	336	1,124
22	Soda water	25	212
23	Cotton textile	125	1,825
24	Woolen, silk & artificial Thread based clothes.	1,331	2,545
27	Wood/wooden based furniture	292	950
28	Paper and Paper Products	152	1,125
29	Leather Based	50	90
30	Rubber, Plastic and Petro Products	302	2,855
31.	Chemical/Chemical based	355	5,290
32	Mineral Based	180	3,120
33	Metal Based (Steel Fabrication)	477	5,670
35	Engineering Units	322	2,630

36	Electrical and Machinery Transport Equipment	258	2,330
97	Repairing and Servicing	2,340	3,372
01	Others	1,606	3,550

Source: Brief Industrial Potentiality Report of Gandhinagar, 2016.

45. **Transportation.** The GIFT and IFI sites are well connected with Ahmedabad, Gandhinagar, and other cities and neighboring states the country through rail, road and air. The nearest rail head is Medra at about 3.47 km from IFI site. The nearest operating airport is Ahmedabad from the IFI site and its distance is about 18 km. No clearance or permission from Airport Authority of India (AAI) is needed for the construction of IFI building.

46. **Land use.** A study of the land use (Table 15) shows that majority of the area in Gandhinagar District is under agriculture and non-agriculture uses. It is also clear that forest land and waste land is not significant. The land use of IFI site is urban and commercial land under the ownership of GIFTCL. If land use of IFI site is to be seen in terms of classification of Table 15, it will fall 'Land put to non-agriculture uses'.

Table 15: Land Use Pattern of Gandhinagar District

Land use	Area (%)
Forest land	1.37
Culturable Wasteland	1.91
Barren and Uncultivable Land	3.87
Land put to Non-Agriculture Uses	4.25
Land under Miscellaneous Tree Crops	0.37
Permanent Pasture and other Grazing Land	4.61
Fallow Land other than current Fallow	2.58
Current Fallows	1.69
Net Area Sown	79.34

Source: District Census Handbook for Gandhinagar District.

47. **Agricultural development**. Gandhinagar District is basically agrarian, where more than 56 percent of the population is engaged in agriculture and allied activities. About 78% of land holdings are with small and marginal farmers and the average size of the holdings is 1.43 ha. The wheat and cotton are the predominant crops. The other major crops cultivated are castor, bajra, pulses, vegetable, fennel, among others.

48. **Electrification.** The Rural Electrification in Gandhinagar District is 100%.

D. Social and Cultural Resources

49. **Population and communities.** As per 2011 census, the total population of Gandhinagar was 1,391,753 with density of population 650 per km^2, which is higher than the state average of 308 persons per km^2. The decadal variation of population for 2001-2011 was 4.29%. The growth rates for the rural and urban areas of the district are -8.8 and 28.5% respectively, witnessing a reduction in rural population due to rapid urbanization. The district is predominantly rural with more than 56.84% of the total population in the district residing in rural area while the urban population is 43.16% which is higher than the state average of 42.60%. In terms of religious composition, around 94.81% of the total population in the district is Hindu while the Muslim constitutes more than 4.12% of the total population. The other minority communities constitute less than 1.07% of the total population of the district. In the district, Gandhinagar Taluka is the most populous having 292,797 individuals while Mansa Taluka is the least populous having 15% population of the district. Total workers (main and marginal) in the district are 38%. Percentage

of male workers and female workers are 56% and 19%, respectively. Percentage of male workers is the highest in Dehgam sub-district and female percentage is the highest in Mansa sub-district. Percent of non-worker is highest in Gandhinagar sub-district and lowest in Mansa sub-district. Economic activity-wise percentage of cultivators and agricultural laborers are highest in Dehgam sub-district. For cultivator male percentage is more reverse is the situation for agricultural laborers. As a whole, percentage of household industry workers is quite less as compared to other three categories; however, in comparison to males, female percentage is more. Percentage of other workers is highest for Gandhinagar (67%) followed by Kalol (62%).

50. **Health facilities.** Gandhinagar District has one civil hospital, 12 government dispensaries, 8 private hospitals and 154 private clinics.

51. **Education facilities.** There are 34 colleges in Gandhinagar District which includes 9 arts/commerce and science stream. Besides these there are 11 engineering colleges, 2 medical colleges, 9 Management Institute and 3 polytechnics in the district. National Institute of Fashion Technology (NIFT) and Indian Institute of Technology are also in Gandhinagar District.

52. **Archaeological resources.** There are no heritage sites notified ASI within 5 km distance from the IFI site. The nearest archaeological site is ‘Adalaj Vav (Step Well) at 9.8 km in the west and the site with cultural and tourism value is ‘Akshardham Temple at a distance of 7.4 km in the north. Similarly, no common property resources such as public wells, water tanks, playgrounds, common grassing grounds or pastures, market areas and community buildings exist at the IFI site.

IV. ENVIRONMENTAL IMPACT AND MITIGATION MEASURES

A. Environmental Impacts

53. Any project creating physical infrastructure will cause some impacts on the environment. This IEE examines the potential impacts anticipated during the construction and operation phases due to construction and development of the IFI institutional building:

(i) **Location impacts:** Impact associated with location of the project including effect on the environment and resettlement or livelihood related impacts on communities.
(ii) **Design impacts and pre-construction impacts:** Impact arising from project design, including the technology used, scale of operations, discharge standards, topographic survey, geotechnical survey, etc.
(iii) **Construction impacts:** Impact resulting from construction activities including site clearance, earthworks, civil works, etc.; and
(iv) **Operation and maintenance impacts:** Impact associated with the operation and maintenance of the IFI Institutional Block.

54. ADB's REA checklist for buildings was used while screening the site and location of the IFI and recommending mitigation measures.

B. Location Impacts

55. The plot earmarked for IFI is located on unencumbered land owned by GIFTCL, GOG. The construction works will be on this allotted plot as per drawings given in Annexure-3. There are no ecological resources other than naturally grown shrubs on the allotted plot in GIFT. Close to the IFI allotted plot, there are some buildings under construction and GIFT SEZ building under the occupancy and operation. There are no heritage sites notified by ASI or the State Archaeological Department within the delineated site or in the immediate surroundings (300 m distance). The nearest archaeological site to IFI is Adalaj Vav at 9.8 km. No significant impacts can arise due to IFI location as its components will not impinge upon any area of ecological, archaeological, or historical importance. The IFI site is not in the immediate vicinity of national highway or state highway. The distance of National Highway-8 (connecting Gandhinagar to Udaipur and Ahmedabad) is about 600 m, so air and noise pollution impact on IFI are not anticipated on account of vehicular traffic. The IFI site is connected to NH with the existing GIFT road.

56. The IFI site is located within seismic zone III and earthquakes of major magnitude are not anticipated.

C. Impacts during Design and Pre-Construction Phase

57. The proposed project site of IFI is owned by GIFTCL, GOG. In the absence of trees at the site, there are no issues pertaining in terms of tree cutting. There is presence of shrubs in small portions of the site. Based on the environmental screening of the IFI site, it is concluded that there are no significant adverse environmental impacts during the design and pre-construction phases of the project. There are also no activities pertaining to obtaining environmental and forest clearances for the IFI as overall environmental clearance for GIFT has been obtained. This clearance cover IFI activities. The building plans will be approved by the GIFTCL Authority as per Development Control Regulations/Rules approved for GIFT by the UD&UHD, GOG. In the design, sustainable environmental management measures have been built in. The storm water drainage

of GIFT has been integrated with local drains which have outfall in Sabarmati river. Geotech studies taken up by GIFT as part of EIA study (for environmental clearance) have confirmed that there is no liquefaction phenomenon. However, detailed design of IFI building will be completed after soil testing and Geotech investigations.

D. Impacts during Construction Phase

58. All construction activities to be undertaken at the IFI site will be approved by the GIFTCL-PMU through PMC and CSQA firm. Before giving approval, PMU will take GOG approvals from UD&UHD. The regulatory approvals required for building plans will be obtained from authorities before the start of construction activities. The construction stage impacts due to the sub-project are generic to the construction activities. The EMP emphasizes on the construction impacts and necessary mitigation measures to be strictly followed by the contractor and supervised by the PMU and its authorized agency appointed PMC by the GIFTCL. The key potential impacts are covered in the following paragraphs.

59. **Impact due to stockpiles of construction materials.** Improper stockpiling of construction materials could obstruct movement on GIFT access road, if stored outside delineated site boundary in open area. Hence, due consideration will be given for proper materials storage within the construction site. Stockpiles (sand, subgrade, and earth) will be covered (with covered bricks or polythene sheet) to protect from dust and erosion. Special care needs to be taken in monsoon months to prevent any wash off along with storm water.

60. **Disposal of construction wastes.** Construction waste could lead to untidy conditions at the site and its surroundings. These wastes will comprise broken pieces of bricks, surplus earth, discarded and/or spilled construction materials, shuttering materials, etc. In the IFI construction, it shall be mandatory for the contractor to ensure proper disposal of construction wastes at the disposal site as designated by the PMU and CSQA firm. Necessary financial provisions for waste disposal shall be kept in overall project budget.

61. **Quarry and borrow pits operation.** Since the civil works are of a small size, all construction material will be procured from market/sources compliant with the environmental regulations of India. There will be no need for direct procurement of stone dust and sand and other building materials from quarries. The borrow pit operations are not required as site is plain.

62. **Increase in noise levels.** Noise levels in the immediate proximity of the IFI Institutional Block site are expected to increase during construction. However, these will be largely imperceptible as civil works will be confined to a relatively small area because nature of building construction works is such that it would not generate noises large enough to cause any difficulties. Further, there are no rock formations at site, so there will not be any requirement for blasting. The GIFT House and GIFT SEZ building is about 50 m from the IFI site. The least distance of construction activity from operating building will be 50 m. Further, well raised (about 2.0 m height above ground level) site barricading will also act as noise barrier. Transportation of construction materials will be confined to daytime as far as possible in case of compulsions noise levels specified by the CPCB shall be adhered to. The increase in noise levels is expected to be between 3-5 dB (A) for the nature of construction works involved in the IFI site. This increase will be felt up to 50 m only. This noise will be intermittent in nature and will last only during the construction phase. Necessary monitoring of noise levels will be taken up as part of environmental monitoring plan.

63. **Impacts on biodiversity during construction phase.** No major impacts are expected

on biodiversity during the construction phase as the current IFI Institutional Block site is within GIFT and devoid of any trees and there is very minimal presence of shrubs in the open area. There are no endangered or rare species of flora and fauna in the surroundings of proposed IFI site. The site is not on migratory route of birds.

64. **Disturbance due to traffic during construction phase.** At the time of construction, inconvenience to locals and GIFT population is not anticipated as site is accessible through a wide access road from the NH-8. Traffic on the connecting road to the IFI Institutional Block site from NH-8 is not significant. However, a sample Traffic Management Plan is attached in Annexure-7.

65. **Impact on cultural properties.** The IFI Institutional Block construction and development will not have any impact on any religious structure or any other structure of historical and/or cultural significance.

66. **Groundwater**. Groundwater will not be extracted and used for construction purposes. The contractor will arrange for water from the market. It will be supplied by the authorized water tankers. The problem of groundwater contamination is also not anticipated during the construction phase since there will be proper disposal of the wastewater generated from the construction camp and workers' camp.

67. **Ambient air quality.** Generation of dust is anticipated during transportation, excavation, and construction activities. Some dust and gaseous emissions will also be generated during the construction period from machines such as mixers, and vehicles engaged in transportation of construction materials. Pollutants of primary concern at this stage include respirable and suspended particulate matter (RSPM) and gaseous emissions (NO_X, SO_2, CO, etc.). However, transportation of construction materials will be confined to a few trips per day depending upon the extent of construction activity. Therefore, impact at this stage will be temporary and restricted to the close vicinity of the IFI Institutional Block construction site only.

68. All vehicles and construction equipment operating for the contractor, CSQA firm, and PMU GIFT will ensure compliance with regulatory standards and these will be maintained. The "Pollution under Control" (PUC) certificates will be obtained for these during project implementation. To control dust emissions, vehicles deployed for sand and aggregate haulage, will be covered with tarpaulins to prevent spillage. Regular sprinkling of water during excavations, loading, unloading, vehicular movement on approach roads, and raw material transport will prevent spread of dust and other contaminants. Periodic air quality monitoring will be conducted to ensure that emissions comply with the vehicle emission standards specified by the GOI and ambient air quality standards specified by the Central Pollution Control Board. The contractor will submit emission monitoring results as compliance with environmental monitoring plan. The impacts related to air pollution on account of construction activities will be felt close to the IFI Institutional Block site.

69. **Construction wastes.** Some wastes will be generated due to excavated earth material and waste from construction. Debris and excavated earth material can be reused subject to the approval of the engineer during the construction. Waste generated during construction will be disposed of as per provisions of 'Construction and Demolition Waste Management Rules, 2016' and to the satisfaction of the engineer. Necessary cost for the disposal shall be budgeted in overall project cost. The disposal locations for wastes will be finalized in consultation with local civic authorities and in compliance with construction and demolition waste management rules of 2016. The clean-up and restoration operations will be implemented by the contractor prior to

demobilization. The contractor will clear all temporary structures and dispose of all garbage from project site. Entire construction site and surrounding vacant area will be left tidy, at the contractors' expense as per the satisfaction of the engineer.

70. The contractor is likely to engage local labor for various construction activities. However, in cases when migrant labor must be engaged, the contractor will establish properly designed labor camp with all basic amenities such as dignified well-ventilated and well-lit accommodation, potable water supply, gender segregated sanitation facilities, including provision of septic tanks and soak pits, and COVID-19 protection facilities. The permission for labor employment (registration with local labor office) should be obtained (under the Inter State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979). Dust bins, hand sanitizer and hand washing facilities will be provided in adequate numbers at camp site. The EMP lays down some measures to address likely adverse impacts associated with the labor camps.

71. **Occupational health and safety and COVID-19.** The occupational health and safety - related impacts will include injury to the construction work force, chances of more accidents at site and adverse impacts on health of workers if proper measures are not adopted and necessary protection gadgets are not used. COVID-19 related impacts will cause chances of more infections, if protection measures are not provided. COVID-19-related measures should be taken up at site as per the guidelines issued by the Ministry of Health and Family Welfare and Government of Gujarat for construction projects.

72. **Site enclosure to avoid washing of lose earth and other construction materials during monsoon.** The contractor needs to take appropriate measures such as proper enclosure of site with mild steel sheets to avoid washing of construction materials during rains and possible damage to crops and houses in the surroundings.

E. Environmental Impacts during Operation Phase

73. Since financial activities (by and large pollution free) will be undertaken at the IFI Institutional Block, there will not be any adverse environmental impact during operation. Necessary regulatory permissions (such as occupancy certificate, permission from fire department, consent to operate from Gujarat Pollution control Board, etc.) will be obtained from civic authorities before start of operations of the IFI Institutional Block site. The IFI Institutional Block design provides for adequate parking. The wastewater and solid waste disposal will be integrated to GIFT sewage network and solid waste disposal system. Since a solid waste treatment plant (STP) is operational for the wastewater treatment, effective operation, and maintenance of STP is being taken up by the GIFT management. Bio-medical waste generation at IFI is not anticipated to be significant as IFI will use existing medical facilities of GIFT which have arrangement for bio-medical waste handling and disposal. Small waste generated from first aid center/medical center, if any, will be taken care through tie-up with some hospital within and/or outside GIFT.

74. Given the residential nature of IFI (student’s hostels and staff quarters planned at a separate plot in GIFT), there will not be any significant vehicular increase on account of its operations. Traffic on the road connecting to the GIFT with NH-8 will be marginal. Hence, vehicular emissions on account of traffic movement will be insignificant. No diesel generator set for emergency power is planned as GIFT has a centralized electricity supply for emergency purposes.

75. The water requirements for the IFI Institutional Block during the operation phase will be

met from the centralized GIFT water supply. The water requirement has been estimated around 400 kilo liters per day. The water source is from Narmada Canal, so no impact on groundwater table is anticipated.

76. In the operation phase, there will be generation of different types of solid wastes (municipal wastes and e-wastes from IT and computer facilities and discarded lead acid batteries). These wastes will require handling, transport, and disposal as per regulatory requirements of their respective categories to avoid environmental impacts.

77. There will be minimal occupational risks and no handling of chemicals and toxic substances is foreseen in the operation phase.

78. **Safety measures**. The design of the IFI building includes structural and seismic safety measures required by India's latest building codes (in seismic zone III). The other safety features are explained below:

- The IFI Institutional Block will be equipped with fire-fighting systems with portable fire extinguishers and smoke detectors. The staircase will have adequate width to allow for people to exit the building during any fire-related or other eventuality.
- During natural calamities, operations will be stopped. The trainees and staff will be safely evicted as per the disaster management plan of GIFT.
- Medical facilities of GIFT will be used for first aid and preliminary treatment.
- The plinth level of IFI building will be kept above high flood level with the consideration of 50 year return period (Sabarmati River is a seasonal river and originates in Aravalli range in Udaipur district of Rajasthan).

79. **Socio-economic impacts.** The project will have a positive socio-economic impact during construction as it will provide employment and business opportunities. In the operation phase, the IFI will also have a positive socio-economic impact since it will provide the youth and new entrepreneurs an opportunity to enhance job-oriented skills for the latest financial solutions, at an affordable price.

80. **Flora and fauna.** The IFI Institutional Block site is within GIFT and owned by GIFTCL. In the absence of any trees or vegetation, and being within the GIFT boundary, no adverse impact on fauna and flora is anticipated. No tree cutting is required. The plantation of trees and shrubs in GIFT open area has been taken up as per the master plan of GIFTCL. There is no existence of any wildlife/bird sanctuary, national park or any other area notified by the GOG or MoEFCC for ecological importance within an aerial distance of 15 km from the IFI site.

81. **Emergency plan for accidents and natural hazards.** For the operation phase, an onsite emergency plan will be prepared by the IFI. For natural calamities, the Disaster Management Plan prepared by GIFTCL will be followed. The GIFTCL has prepared disaster management plans as per provisions of Disaster Management Act 2005 of Government of India.

82. **Maintenance of the drainage system in the campus.** The drainage system for the GIFT has been designed and storm water from GIFT is diverted to local drains (constructed and protected with gabions to ensure adequate width and depth) which have outfall point in Sabarmati River. These are of adequate capacity to handle storm water flow.

83. **Climate risk.** The climate-related risks to the project are extremely high temperatures,

strong winds, droughts, and floods. A detailed climate risk assessment has been carried out to plan the climate-resilient building and other infrastructures related to the project.

F. Description of Planned Mitigation Measures for the Identified Impacts

84. Screening of environmental impacts is based on the magnitude and duration of the impact. Table 16 summarizes the potential environmental impacts for IFI for the project life cycle. The mitigation measures including the institutional responsibilities for implementing the same have also been summarized. The sub-project site is located sufficiently away from protected areas and the components proposed will not impact any environmentally sensitive or protected areas. All sub-project activities including construction and operation will take place within the available plot and under the ownership of GIFTCL. When national regulations differ from the performance levels and measures presented in WBEHS Guidelines, projects are expected to achieve whichever is more stringent. If the NAAQS are compared with WBEHS guidelines recommended levels (WHO levels) it is found that NAAQS are less stringent in respect of PM_{10}, $PM_{2.5}$ and SO_2 and equivalent in respect of NO_2 levels. The ambient noise standards of CPCB are also equivalent to WBEHS recommended levels. The wastewater discharge standards specified by the CPCB in 'The Environment (Protection) Rules, 1986' also compare well in respect of pH, BOD, Oil and Grease (equivalent to WBEHS guidelines specified values) and slighter lesser stringent in respect of total suspended solids, phosphorus and nitrogen. Project activities will not, in any way, contribute to the wastewater contents with respect to these parameters. Hence, complying with the GOI regulations and keeping the air quality, water quality and noise levels within baseline values, with the implementation of mitigation measures, will be sufficient for this project.

85. The baseline monitoring for ambient air quality of the project area would be undertaken by the civil works contractor prior to commencing with the works. The proposed mitigation measures are expected to maintain the overall ambient air quality during construction and operation stages. The interventions proposed through the mitigation measures are not expected to improve the prevailing ambient air quality. The air emissions from the construction activities would be monitored for compliance with the national standards as required by the regulatory framework. During implementation, no activities are envisaged that would contribute to deterioration of ambient air quality. As mentioned above, WBEHS guidelines have emission limits more stringent than the NAAQS for PM_{10}, $PM_{2.5}$ and $SO_{2.}$ and equivalent for NO2. If the prevailing ambient air quality is observed to be exceeding WBEHS guidelines and/or NAAQS, the efforts would be made to maintain the ambient air quality through the mitigation measures.

86. **Land ownership of IFI plot.** The proposed IFI Institutional Block is planned within the plot in GIFT. The land ownership of entire GIFT is with the GIFTCL. The revenue records showing ownership of GIFTCL, GOG for the project site are in Annexure-8.

Table 16: Summary of Environmental Impacts and Planned Mitigation Measures

Sl. No.	Potential Environmental Issues	Duration or Extent	Magnitude	Proposed Mitigation Measures	Institutional Responsibilities
1	**Location Impacts**				
1.1	(a) Lack of sufficient planning to ensure long term sustainability of the IFI building and ensure protection especially from earthquake and other natural disasters	(a) Permanent	(a) Major	(a)The detailed design of IFI building will be completed considering earthquake coefficient of zone III. To take care of building safety appropriate foundation with adequate strength will be adopted as per findings of geotechnical and soil investigation reports. The geo-technical soil investigations will be taken up as part of detailed design. The site is sufficiently away from Sabarmati River bank. During the earthquake or any other natural calamity, Disaster Management Plan prepared by the GIFTCL will be followed. It will be updated for IFI building in coordination with GIFTCL management. No water logging issues are anticipated as GIFT has well designed operating storm water drainage system.	Contractor, PMU, GIFTCL
	(b) Climate Related Risks	(b) Occasionally	(b) Major	(b) Climate risks pertaining to floods have been taken account through keeping plinth level 20 cm above 20 years return flood period. The drought related mitigations planned through water conservation, groundwater recharge and recycle of wastewater after treatment. The building has been designed taking into consideration of high wind speed of 39m/s to account for any strong windstorms. The building cooling and temperature control is designed considering historical data.	(b) PMU, GIFTCL
2	**Design and Pre-construction Impacts**				

Sl. No.	Potential Environmental Issues	Duration or Extent	Magnitude	Proposed Mitigation Measures	Institutional Responsibilities
2.1	Consents, permits, clearances, no objection certificates, etc.	Permanent	Minor	Obtain all necessary consents, permits, clearance, NOCs, etc. prior to start of civil works. The CTE and CTO for GIFTCL have been obtained and activity pertaining to IFI are covered in the CTE and CTO. Acknowledge in writing and provide report on compliance with all the obtained consents, permits, clearance, NOCs, etc. Include in detailed design drawings and documents all conditions and provisions, if necessary. The contractor needs to obtain CTE and CTO for concrete batching plant and relevant labor licenses including those for migrant laborers from Department of Labor and Employment. The laborers would be provided with adequate insurance cover. The contractor with close coordination with GIFT-PMU will also complete BOCW registration for the project.	Contractor, GIFTCL, and PMU
2.2	Environmental monitoring in respect of ambient air quality, water quality and noise levels to establish baseline levels	Preconstruction, immediately after mobilization	Nil	Contractor to carry out environmental monitoring immediately after mobilization to establish baseline in respect of ambient air quality, water quality (ground and surface), and noise levels.	Contractor, GIFTCL, and PMU
2.3	Layout of components to avoid impact on the aesthetics of the IFI site and surroundings.	Permanent	Minor	The IFI institutional building will not have any adverse impacts on aesthetics of project site and surroundings and exteriors of IFI building will be similar to the exteriors of buildings in the GIFT as well as matching with institutional looks.	Contractor, GIFTCL, and PMU
2.4	Increased storm water runoff from alterations of the site's natural drainage patterns due to excavation works, construction of parking lots, and addition of paved surface	Permanent	Moderate	The detailed IFI layout and design have considered storm water runoff. The storm water from IFI plot will be diverted to the existing drains. The effective drainage plan shall be prepared by the contractor (for the construction period), and it will be reviewed	Contractor, GIFTCL, PMU

Sl. No.	Potential Environmental Issues	Duration or Extent	Magnitude	Proposed Mitigation Measures	Institutional Responsibilities
				by the PMU and PMC for the implementation in the construction phase.	
2.5	Integration of energy efficiency and energy conservation programs in the IFI campus planning and design and incorporation of necessary measures comply with green building norms	Permanent	Moderate	The following energy efficiency measures have been adopted in the IFI design and subsequent implementation: • Installation of BEE-certified equipment, air conditioning system, and other facilities. • Usage of energy efficient lighting fixtures (LED and solar). The disposal of discarded LED should be done in consultation with civic bodies and supplier. • The project detailed design shall incorporate all necessary measures for green building norms • Consideration for elements of energy conservation building code 2017 such as building envelope, HVAC, lighting, Renewables in the design and operation.	Contractor, GIFTCL, and PMU
2.6	Impacts on flora and fauna	Temporary	Minor	There is no requirement for tree cutting for the development of IFI institutional building. There may be requirement for removal of locally grown shrubs in some portion of IFI plot. This loss of shrubs will be made up during landscaping works of IFI plot. The detailed plantation and landscaping plan shall be prepared during pre-construction phase.	Contractor, PMU, and PMC
3	**Construction Impacts**				
3.1	Construction camps - location, selection, design and layouts	Temporary	Moderate	Construction camp at the site will be located within the IFI plot or area allotted to contractor in GIFT by the GIFTCL. The construction camp will not affect the day-to-day activities of other operating companies and facilities of GIFTCL, as workforce will	Contractor, GIFTCL, and PMU

Sl. No.	Potential Environmental Issues	Duration or Extent	Magnitude	Proposed Mitigation Measures	Institutional Responsibilities
				not exceed 300. Adequate sanitation facilities or mobile toilet or portable sewage treatment plant) shall be provided at camp site so that no wastewater will be discharged outside.	
3.2	Traffic circulation plan during construction	Temporary	Minor	Prior to commencement of site activities and mobilization on ground, the contractor will prepare a traffic circulation plan for safe passage of local traffic during construction stage. This will include alternative access routes (for any emergency access), traffic regulations, signages, etc. The contractor will get these plans approved from the traffic police as well as from GIFTCL management with the assistance of CSQA firm and PMU. In the peak time construction related traffic will not exceed 20-25 vehicles per hour, including vehicles in use of construction crew to travel to site. The contractor will disseminate the traffic circulation plan around the project site.	Contractor, CSQA firm, and PMU
3.3	Impacts on flora and fauna	Temporary	Minor	The PMU and PMC will conduct site induction and environmental awareness program for the construction workers and CSQA team at site. The workers will be sensitized not cut the trees (outside site) for firewood and not to hunt local fauna. The construction related activities will be limited within the site of IFI to minimize impacts on flora and fauna. Storage of construction materials will be within the project site limits to avoid impacts on flora (local shrubs).	Contractor, PMU, PMC, and CSQA firm
3.4	Clearance activities, including delineation of construction areas for	Temporary	Moderate	The commencement of clearance activities for the IFI building will be undertaken with due permission local civic authorities and from the environment specialist of the	Contractor, CSQA firm, PMU, and PMC

Sl. No.	Potential Environmental Issues	Duration or Extent	Magnitude	Proposed Mitigation Measures	Institutional Responsibilities
	various buildings and facilities			PMU/PMC to minimize environmental impacts. All areas used for temporary construction operations will be subject to complete restoration to their former conditions with appropriate rehabilitation procedures.	
3.5	Drinking water availability	Temporary	Major	Sufficient supply of potable water will be provided and maintained at the construction site and construction camp. If the drinking water is obtained from an intermittent public water supply, then storage tanks will be provided. The contractor will arrange water either from authorized vendors or from GIFT water supply through necessary approvals with GIFT management.	Contractor, CSQA firm, PMU, and PMC
3.6	Waste disposal	Permanent	Major	Location of disposal site for construction waste will be finalized by the environmental specialists of the PMU and PMC. The PMU will confirm the location of disposal. Further, it will be ensured that disposal of the material will not impact the seasonal water body (Sabarmati River) or environmentally sensitive areas. In the disposal Construction and Demolition Waste Management Rules, 2016 will be followed.	Contractor, CSQA firm, PMU, and PMC
3.7	Stockpiling of construction materials	Temporary	Moderate	Stockpiling of construction materials should not impact or obstruct the local small drains and stockpiles will be covered to protect from dust and erosion. The stockpiles shall be bunded so that these are not washed away during intense rainfall.	Contractor, CSQA firm, PMU, and PMC
3.9	Soil and water pollution due to fuel and lubricants, construction waste	Temporary	Moderate	The fuel storage and vehicle cleaning at site should be avoided as far as possible. In case of unavoidable circumstances, fuel storage should be in the leak proof drums	Contractor, CSQA firm, PMU, and PMC

Sl. No.	Potential Environmental Issues	Duration or Extent	Magnitude	Proposed Mitigation Measures	Institutional Responsibilities
				and storage of drums should be on temporary raised paved platform. The vehicle and equipment maintenance should be taken at the authorized workshops only to avoid pollution at site.	
3.10	Soil erosion	Temporary	Moderate	Temporary slope protection (side slopes of roads, side drains along roads near the IFI site and excavated locations of plinths) may be required during construction at the excavated areas. Adequate measures will be taken up so that there is no soil erosion causing risks in the vicinity.	Contractor, CSQA firm, PMU, and PMC
3.11	Siltation of existing water ponds due to spillage of construction wastes	Temporary	Moderate	No disposal of construction wastes will be carried out into the water bodies such as Sabarmati River, Narmada canal or any local drain.. The waste materials will be transported to the pre-identified disposal site for safe disposal. This disposal site will be identified by the PMC, PMU, and CSQA firm in consultation with local civic authorities.	Contractor, CSQA firm, PMU, and PMC
3.12	Generation of dust	Temporary	Moderate	The contractor will take every precaution to reduce the levels of dust at construction site. The IFI plot will be properly barricaded with adequate height (2-3 m) (following GIFT guidelines) prefabricated mild steel sheets from all sides to avoid air emissions and dust impacts in the surroundings of site due to construction activities.	Contractor, CSQA firm, PMU, and PMC
3.13	Emission from construction vehicles, equipment, and machinery	Temporary	Moderate	Vehicles, equipment and machinery used for construction will conform to the relevant standards (vehicular emission standards of GOI and CPCB specified standards for equipment and machinery) and will be regularly maintained to ensure that	Contractor, CSQA firm, PMU, and PMC

Sl. No.	Potential Environmental Issues	Duration or Extent	Magnitude	Proposed Mitigation Measures	Institutional Responsibilities
				pollution emission levels comply with the relevant requirements. The materials shall be covered while transportation. The vehicles will also have reverse horns and blinkers.	
3.14	Noise pollution	Temporary	Moderate	Noise limits for construction equipment used in this project will not exceed 70 dB (A). Regular monitoring will be taken up at the site as per monitoring plan provided in this document.	Contractor, CSQA firm, PMU, and PMC
3.15	Material handling at site	Temporary	Moderate	The workers would be provided with appropriate personal protective equipment commensurate with the safety and health risks associated with the activities such as workers employed (i) on mixing cement, lime mortars, concrete, etc., would be provided with protective footwear and protective goggles; and (ii) in welding works, would be provided with welder's protective eye-shields. Workers engaged in stone breaking activities (if required for building construction works) will be provided with protective goggles, masks and clothing. The use of any toxic chemical (paints, thinners and anti-corrosive and anti-termite materials, etc.) will be strictly in accordance with the manufacturer's instructions. The CSQA firm will be given at least 6 working days' notice of the proposed use of any chemical. A register of all toxic chemicals delivered to the site will be kept and maintained up to date by the contractor.	Contractor, CSQA firm, PMU, and PMC
3.16	Occupational health and safety and measures during construction	Temporary	Moderate	Adequate safety measures for workers during handling of materials at the IFI site will be taken up. Necessary safety	Contractor, CSQA firm, PMC, and PMU

Sl. No.	Potential Environmental Issues	Duration or Extent	Magnitude	Proposed Mitigation Measures	Institutional Responsibilities
	COVID-19 Health and Safety Plan			measures will also be taken for working at heights and trenches as per the instructions of CSQA firm team and PMC/PMU environmental specialists. The contractor must comply with all regulations for the occupational safety of workers. Precaution will be taken to prevent danger of the workers from fire, accidental injury, etc. First aid treatment will be made available for all injuries likely to be sustained during work. An ambulance would be kept ready at site. The Contractor will comply with all anti-malaria instructions/advisories given by the PMU, PMC or CSQA firm. Necessary awareness program will be carried out for HIV/AIDS and STD. All protection measures pertaining to COVID-19 will be taken at the site as per the protocol specified by the GOG and GOI for the construction sites. For this, a COVID-19 Health and Safety Plan will be prepared by the contractor after mobilization. The protection measures for COVID-19 will continue till pandemic threat continues.	
3.17	Clearing of construction of camps and restoration	Temporary	Major	Contractor at the IFI site will prepare site restoration plan for approval by the CSQA and PMC. These camp site restoration plans are to be implemented by the contractor prior to demobilization. On completion of the works, all temporary structures will be cleared away, all rubbish burnt, excreta or other disposal pits or trenches filled in and effectively sealed-off, and the site left clean and tidy, at the contractor's expense, to the entire satisfaction of the engineer (PMU and	Contractor, CSQA firm, PMU, and PMC

Sl. No.	Potential Environmental Issues	Duration or Extent	Magnitude	Proposed Mitigation Measures	Institutional Responsibilities
				CSQA firm site team).This will be taken up comply with the condition of contract.	
3.18	Onsite emergency plan for accidents and mishaps and disaster management plan for natural calamities	Temporary	Major	The onsite emergency plan will be prepared by the contractor in consultation with PMC and PMU. For natural calamities, disaster management plan prepared by the GIFT Administration under the provisions of Disaster Management Act 2005 and GIFT DCR 2011 will be followed. The updating of DMP shall be followed up by the IFI management (for inclusion of IFI operations) with the district administration.	Contractor
3.19	Flooding and Water Logging and construction materials accidental flow with food waters	Temporary	Major	• The contractor will take all measures to barricade the site with MS sheet and will follow GIFT guidelines. • The contractor will maintain quick drainage of site to avoid any water logging and flow of lose construction material with rainwater. • The contractor will take all necessary mitigatory measures to ensure that mud and construction materials along with storm water do not enter any nearby buildings or plots.	Contractor, CSQA Firm
4	**Operation and Maintenance impacts**				
4.1	Regulatory permissions for IFI operations	Regularly as per requirements	Moderate	All regulatory permissions such as building occupancy certificate from civic authorities, NOC from fire department, consent to operate (updating, if required) from Gujarat Pollution Control Board, etc. will be obtained before start of IFI operations.	IFI management team, PMU, PMC, GIFTCL
4.2	Environmental conditions	Permanent	Moderate	Air, water and noise quality will be monitored periodically (once in a season except monsoon season) as per the environmental monitoring plan prepared. This monitoring shall be continued for the first two years. The boundary wall and	IFI management team, PMU, PMC, and GIFTCL

Sl. No.	Potential Environmental Issues	Duration or Extent	Magnitude	Proposed Mitigation Measures	Institutional Responsibilities
				plantation along the periphery will be maintained to avoid any impacts from the IFI campus in the surroundings.	
4.3	Safety risks	Permanent	Moderate	1. Proper demarcation and flagging of the area requiring safety observations will be taken up after completion of construction works. 2. Necessary precaution measures to be observed by visitors will be printed on boards and will be prominently put inside the IFI building.	IFI management team, PMU, PMC, and GIFTCL
4.4	Unhygienic conditions due to poor maintenance of sanitation facilities and irregular solid waste collection, handling and disposal	Permanent	Severe	The IFI Management will carry out maintenance of the toilets and carry out the regular waste collection and disposal of the waste to the GIFT disposal system. The wastewater will be diverted to the sewage network of GIFT for treatment in the centralized STP of GIFT. The STP capacity has been kept considering full development of GIFT as per master plan document. The organic and inorganic waste will be segregated. Any other waste generated will also be sent to GIFT waste disposal system. Any hazardous waste generated (due to white wash or maintenance of building) will be handled as per the provisions of 'Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2016. The e-waste generated will be handled and disposed of as per provisions of 'E-Waste Management Rules, 2016'. The used and discarded lead acid batteries for recycling and disposal as per Battery Waste Management Rules, 2020'.	IFI management team, PMU, PMC, and GIFTCL

Sl. No.	Potential Environmental Issues	Duration or Extent	Magnitude	Proposed Mitigation Measures	Institutional Responsibilities
4.5	Onsite emergency plan for accidents and mishaps and disaster management plan for natural calamities	Temporary	Major	The management team of IFI will prepare on site emergency plan for possible accidents and mishaps during operation phase (due to fire, handling and storage of hazardous and toxic chemicals etc.). This plan will cover all types of accidents. For natural calamities, the disaster management plan prepared by GIFT administration as per DCR 2013 will be followed. The updating of DMP shall be followed up by the IFI management (for inclusion of IFI operations) with the district administration.	IFI management team, PMU, PMC, and GIFTCL
4.6	Waste generated on account operation and maintenance of rooftop solar system	Intermittent	Minor	The supplier of solar panels cells will maintain the system. Any waste generated (damaged panels, discarded pipes and storage batteries) will be collected by the supplier for possible reuse and recycling. For this, necessary agreement will be prepared at the time of supply and installation. Any wastewater generated will be diverted to sewage network.	Operator of solar panels, IFI management team, PMU, PMC, and GIFTCL

BCOW = Building and Other Construction Workers Act 1996, CPCB = Central Pollution Control Board, CTE = consent to establish, CSQA = construction supervision and quality assurance, CTO = consent to operate, DCR = Development Control Regulations, DMP = Disaster Management Plan, HVAC = heating, ventilation, and air conditioning, GIFTCL = Gujarat International Finance Tec-City, GIFTCL = Gujarat International Finance Tec-City Company Limited, IFI = International Fintech Institute, MS = mild sheet, NOC = no objection certificate, PMU = project management unit, STP = sewage treatment plant.
Source: Gujarat International Finance Tec-City Company Limited and Asian Development Bank.

V. ANALYSIS OF ALTERNATIVES

A. Introduction

87. In this chapter, analysis of alternatives has been carried out for 'with' and 'without' IFI project, location selection, project implementation scheduling and materials usage in the detailed design and construction of IFI Institutional Block and other facilities.

B. Without Project Scenario

88. The financial solutions especially IT-based are evolving very rapidly due to globalization. The country, being a world leader in information technology and available trained manpower holds tremendous growth in the fintech sector. The IFI will develop the fintech talent pool and optimize the potential of developing Gujarat into a leading international fintech destination. The IFI will (i) pioneer evidence-based research in fintech technologies and solutions for industry application; (ii) promote startup and incubation in fintech; (iii) develop multi-disciplinary courses in fintech applicable across different economic sectors. Hence, without project scenario is undesirable. The IFI will not only help the youth and highly-skilled financial professionals in new areas of specialization but also promote self-employment through promotion of incubation and startups. Although, there will be minor environmental impacts during construction and operations of IFI, these will be reversible and manageable with mitigation measures. The minor impacts will far outweigh the economic and knowledge pool development for the financial sector in India.

C. With Project Scenario

89. The project scenario will help develop Gujarat into a lead destination in fintech and will provide opportunities to the youth to enhance their skills in the fintech sector. This will provide value addition to their academics for better and lucrative employment in India and abroad. Further, the new startups and incubations will develop new entrepreneurs in the state as well as the country. Hence, the project scenario is highly desirable. While the 'with sub-project scenario' may have negative environmental impacts from construction activities, the environmental impacts are projected to be temporary and short-term in nature. The impacts during construction and operation phase are not irreversible and can be readily mitigated. GIFT is a planned city and in master planning, all other issues such as drainage, sustainability, wastewater water treatment, solid waste collection and disposal, etc. have been addressed and necessary infrastructure and operation of facilities for these are in place.

D. IFI Location Alternatives

90. Various locations within GIFT for IFI were evaluated. Since GIFT is already planned and developed by the GOG for financial-related investment, establishing IFI at GIFT Gujarat will help supply trained and skilled manpower in fintech to the investors. Further, establishment of startups and incubation will also get technical as well as financial support easily at GIFT. The current location of IFI is justified at Gandhinagar as this is the state capital and many educational and academic institutes rendering courses in financial sectors are also located at Gandhinagar and Ahmedabad. The IFI site is encumbrance free land under the ownership of GIFTCL. The IFI site is more than 15 km from notified ecologically sensitive area such as national park, wildlife sanctuary and bird sanctuary. The IFI site is also devoid of any revenue, reserved or protected forest. There are no sites of cultural and heritage importance within the 300 m distance of boundary of IFI site.

E. Material Usage and Sustaibaility considerations

91. In terms of design, materials (steel bars, cement and bricks) will be appropriately selected (as per approved design specification) considering that the area is within the seismic zone III classification. There will be no use of asbestos containing sheets or pipes. Further, to conserve natural resources, treated wastewater in GIFT will be recycled through double plumbing piping system for flushing, air conditioning and irrigation of green areas. The IFI also plans to have energy-efficient lighting system.

F. Conclusion

92. It is clear that 'without project' scenario is undesirable and the location of IFI has been strategically selected with only short-term and reversible environmental impacts. To make the project outcome and outputs sustainable, necessary measures have been included in the project design.

VI. ENVIRONMENT MANAGEMENT PLAN (EMP)

A. Institutional Arrangements for Project Implementation

93. The Urban Development and Urban Housing Department (UD&UHD), Government of Gujarat is the executing agency (EA). The EA (i) assumes overall responsibility for the execution of the project and reporting; (ii) engages adequate permanent or fixed-term staff to implement the project; (iii) provides overall strategic guidance on technical supervision and project execution; and (iv) ensures overall compliance with the loan covenants.

94. The implementing agency (IA) for the project is GIFTCL. GIFTCL is a public limited company. The IA responsibilities include (i) project planning and budgeting; (ii) day-to-day assistance, supervision and guidance for the project site team and consultant; (iii) reviewing IFI components for due diligence requirements and approve sub-project proposals; (iv) bidding, evaluation and contract award; (v) managing and disbursing funds; (vi) review compliance with loan covenants, contract specifications, work plans and quality control; (viii) monitoring and reporting of environmental safeguards; and (viii) consolidating and submitting progress reports, finance and accounting/audit reports, and matters requiring higher level decision to project steering committee (PSC) and ADB.

95. In Gujarat, a state-level PSC has been established. This committee is chaired by the Secretary of the Urban Development and Urban Housing Department (UD&UHD), with secretaries of industry, information technology, health, planning and finance and Managing Director of GIFTCL. The PSC has been empowered to take all decisions on behalf of the state and will provide overall advice and guidance to the EA, IA, and PMU.

96. The GIFTCL has established a PMU, headed by a full-time Project Director (PD)/CEO at GIFTCL, and consisting of personnel drawn from relevant line departments and market. This PMU will also have safeguards specialists (social and environment). These specialists will be hired from market and/or from other GOG departments on deputation. This PMU will exclusively implement IFI project. The PMU will be supported by the project management consultants (PMC). The PMC is yet to be engaged. The PMU will be the nodal agency for overall management of all project activities and will be responsible for: (i) project planning and budgeting; (ii) providing day-to-day assistance, supervision and guidance for the site team, contractors and consultants; (iii) reviewing IFI components to satisfy ADB's due diligence requirements and coordinating approvals for proposals submitted by contractors, CS QA firm team, and site team of PMU; (iv) bidding, evaluation and contract award; (v) managing and disbursing funds; (vi) reviewing compliance with loan covenants, contract specifications, work plans and quality control; (vii) monitoring and reporting of environmental safeguards;(viii) consolidating and submitting progress reports, finance and accounting/audit reports, and matters requiring higher-level decision, to the PSC and ADB; and (ix) engaging and mobilization of CSQA firm at IFI site for quality check and construction works supervision. To implement the construction of IFI project smoothly, the contractor will establish an IFI site office. In this office, space will be available for GIFTCL team, CSQA team and contractor team for better coordination of project activities. This office will be temporary and will be dismantled on completion of construction activities.

97. The construction of the IFI and facilities at site will be supervised by the CSQA firm multidisciplinary team. This CSQA firm team will be headed by the Team Leader. The CSQA firm team will be responsible for: (i) providing day-to-day assistance, supervision and guidance to the contractor; (iii) reporting to PMU; (iv) supervising construction, conducting quality control, advising PMU on approval of progress payments to contractors; and (v) maintaining records and accounts

on an up-to-date basis and making these available to ADB, its missions, or auditors for inspection.

98. Project management consultants (PMC) will be engaged to provide support to the PMU in overall planning, risk management, implementation, monitoring, reporting, and evaluation under the project. The PMC team will have experienced professionals specializing in areas such as procurement, social safeguards, environmental safeguard, finance, among others. The PMC will assist the PMU and GIFTCL in meeting the relevant requirements of ADB, GOG, and GOI for project implementation. The PMC team will report and work under the overall guidance of the PMU.

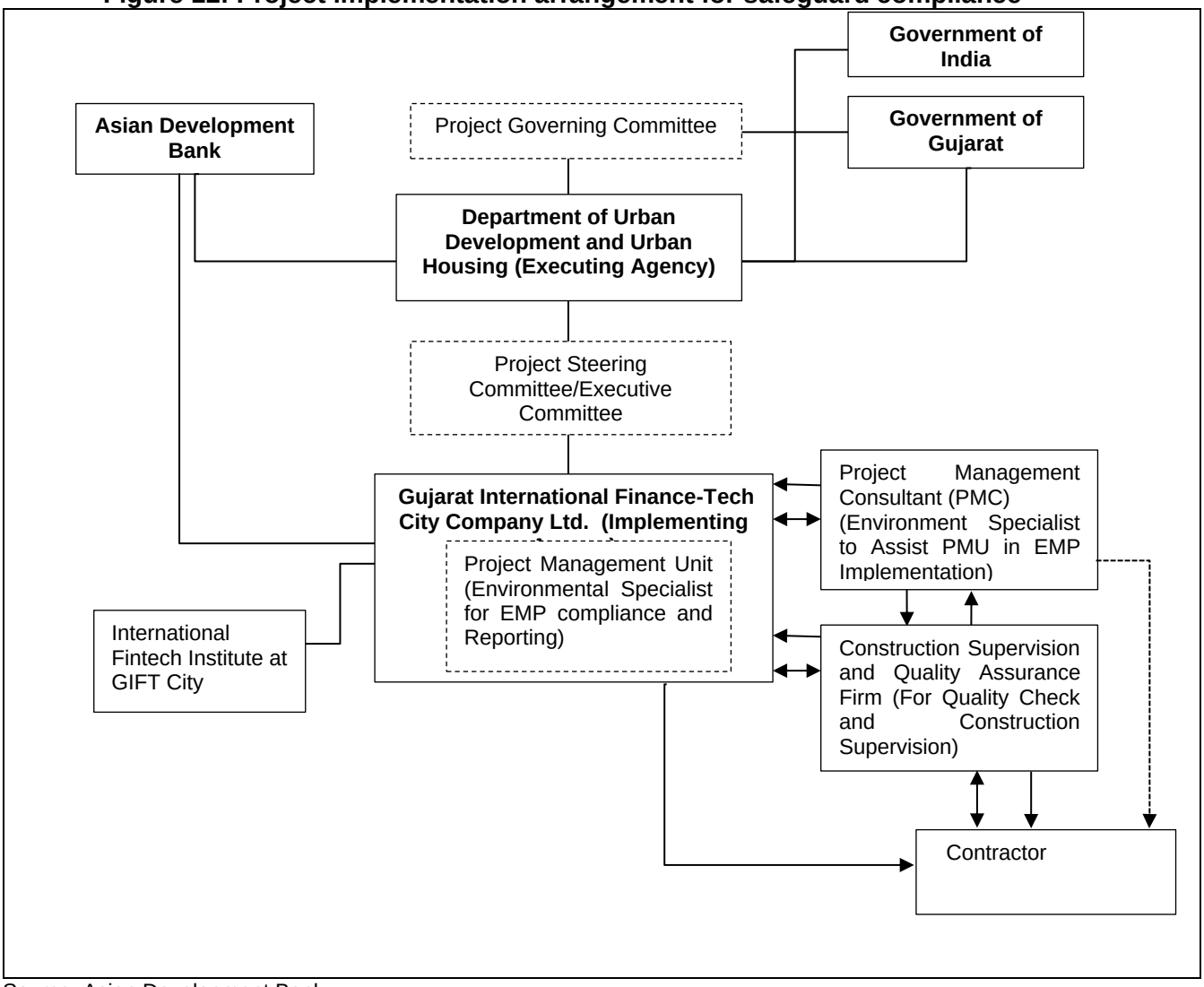
99. In order to ensure effective implementation of safeguard-related components in the project, the PMU will have safeguard experts (one environmental specialist and one social development specialist). These safeguard experts will ensure implementation of the environmental management plan and social safeguard actions under the project.

100. The PMC will have one environmental safeguard specialist in the team. This environmental specialist will be a qualified graduate in environmental sciences with 10 years of professional experience in environmental assessment and management in projects financed by international financial institutions. The environmental safeguard specialist of PMC will provide support to PMU safeguard specialists for EMP implementation during construction, reporting, safeguards related documents preparation, disclosure, and capacity building of CSQA firm team and contractors.

101. The contractor in the current sub-project will appoint one environmental and safety officer for the implementation of IEE and EMP requirements at site. The project implementation arrangements for safeguard compliance is shown in Figure 12.

102. The EMP for the detailed design and construction of IFI and facilities for pre-construction, construction and operation phases is given in Tables 17 to 19.

Figure 12: Project implementation arrangement for safeguard compliance



Source: Asian Development Bank.

B. Responsibility for updating IEE during Pre-Construction and Construction

103. **Responsibility for monitoring.** During construction, the environmental specialist of the PMU and the environmental specialist of the PMC will monitor the contractor's EMP implementation at the site and will update IEE, if there is change in scope of IFI components or a new component is added. During the operation phase, monitoring will be the responsibility of the PMU and/or the IFI management handling operations. The environmental specialist of the PMU, with the assistance of PMC environmental specialist, will prepare semi-annual environmental monitoring reports for submission to ADB. The frequency of submission of environmental monitoring report will be revised from semi-annual to annual in the operation phase. The environmental monitoring reports would be submitted until the project completion report is issued by ADB.

104. **Responsibility for reporting.** The PMU will submit semi-annual reports on the implementation of the EMP to ADB. It will permit ADB to field environmental review missions to examine in detail the environmental aspects of the project. Any major lapses (such as non-

compliances with regulatory requirements, etc.) in adhering to the IEE and/or EMPs for specific sub-projects should be reported to ADB immediately. The PMC's environment specialist will assist the PMU in finalizing the semi-annual environmental monitoring reports. For any non-compliance observed, corrective actions will be agreed with ADB and implemented in a time-bound manner to achieve compliance. The cost for mitigating non-compliance will be borne by either the facility owner or by the contractor as per contract provisions. During the bidding process, prospective contractors will be made aware of these requirements and conditions during pre-bid meetings and inclusion of IEE document as General Conditions in the contract of selected contractor. In case that mitigation costs of any unforeseen impacts are not in the scope of the contract, these will be met out of contingencies built in the overall project cost.

Table 17: Pre-Construction Phase Environmental Management Plan for Detailed Design and Construction of IFI and Facilities

Sl. No.	Environmental Issues	Mitigation Measures	Parameters (Indicators for Compliance)	Responsible for Implementation	Responsible for Supervision	Frequency for Monitoring	Sources of Fund for Implementing Mitigation Measure
1	Lack of sufficient planning to ensure long term sustainability of the IFI building and its facilities and protection of assets and making building climate resilient	The detailed design will have provisions for ensuring effective maintenance of IFI infrastructure, so as to ensure the long-term sustainability. The long-term sustainability has been ensured by taking into consideration appropriate Bureau of Indian Standards Codes (BIS) in the design of IFI infrastructure considering seismic Zone III coefficient. Appropriate wind load factor (corresponding to 39 m/s wind speed, maximum possible load) has been considered in the building design (maximum wind. The detailed design has been completed after topographic survey of IFI site. Roof Top rainwater will be collected for re-use and will be diverted to central collection pit of rainwater in the vicinity of building. . The plinth level has been kept about 20 cm above highest flood level to ensure long term sustainability as well as flooding risks. No water logging issues have been identified at GIFT and IFI plot site.	Verification of site-specific design parameters	Contractor	CSQA firm with assistance from PMU, and PMC	Review after completion of detailed design	Contractor

Sl. No.	Environmental Issues	Mitigation Measures	Parameters (Indicators for Compliance)	Responsible for Implementation	Responsible for Supervision	Frequency for Monitoring	Sources of Fund for Implementing Mitigation Measure
		Climate risks mitigations pertaining to drought planned through water conservation, groundwater recharge and recycle of wastewater after treatment. The building has been designed taking into consideration of high wind speed of 39m/s to withstand any strong windstorms. The building cooling and temperature control is designed considering historical data.					
2	Environmental monitoring to establish baseline monitoring	Environmental monitoring in respect of ambient air quality, water quality (Ground and surface) and noise levels immediately after mobilization to establish baseline at IFI site. Locations for sample collections may be finalized in consultations with PMU and PMC environmental specialists and following regulatory guidelines.	Sample collection, finalization of locations for monitoring	Contractor	PMU and PMC environmental specialist	Once before start of construction activities	Contractor
3	Layout of components to avoid impacts on the aesthetics of the project site and surroundings	The IFI building will not have any adverse impacts on aesthetics of GIFT and surroundings and exteriors of campus building will be similar to the exteriors of other buildings in the GIFT as well as matching with institutional looks. The open area in IFI	Campus buildings exteriors	Contractor	CSQA firm, PMU, and PMC	Review of exterior color of buildings after completion of brickwork and plaster	Contractor

Sl. No.	Environmental Issues	Mitigation Measures	Parameters (Indicators for Compliance)	Responsible for Implementation	Responsible for Supervision	Frequency for Monitoring	Sources of Fund for Implementing Mitigation Measure
		shall be developed as per Development Control Regulations of GIFT.					
4	Increased storm water runoff from alterations of the site's natural drainage patterns due to landscaping, excavation works, construction of parking lot, and addition of paved surfaces	The IFI layout and design have consideration for storm water runoff. The storm water generated at the IFI plot will be diverted to storm water drain of GIFT in the vicinity of IFI plot. For the construction phase, effective drainage plan shall be prepared by the contractor, and it will be reviewed by the PMU and PMC for the implementation in the construction phase.	Arrangement for proper diversion of storm water runoff	Contractor	CSQA firm, PMU, and PMC	Design of drainage system and layout of IFI	Contractor
5	Consents, permits, clearances, NOC, building drawings approvals from civic authorities, labor licenses of contractors, insurance for workers, registration under BoCW Act, 1996, etc.	Obtain all necessary consents, permits, clearances, NOCs, etc. prior to start of civil works Acknowledge in writing and provide report on compliance (with terms and conditions) for, all obtained consents, permits, clearances, NOCs, etc.	Consents, permits, clearance and NOCs Records and communications	Contractor	CSQA firm, PMU, GIFTCL	Check permission from district administration	Contractor

Sl. No.	Environmental Issues	Mitigation Measures	Parameters (Indicators for Compliance)	Responsible for Implementation	Responsible for Supervision	Frequency for Monitoring	Sources of Fund for Implementing Mitigation Measure
6	Integration of energy efficiency and energy conservation programs in the IFI planning and design and detailed design meeting the requirements of green building norms	The following energy efficiency measures have been adopted in the IFI design and subsequent implementation: • Installation of BEE certified equipment and infrastructure at the IFI facilities. • Usage of energy efficient lighting fixtures (LED and solar). The disposal of discarded LED should be done in consultation with GIFT management and supplier. • Solar energy utilization for lighting. • The project detailed design shall incorporate all necessary measures for green building norms. • Consideration elements for inclusion of energy conservation building code 2017 such as building envelope, HVAC, lighting, Renewables The implementation of above measures to planned and completed.	Specifications of equipment, LED lights, solar panels specifications,	Contractor	CSQA firm, PMU, and PMC	During installation of solar system for heating, electrification and equipment installation During detailed design incorporation of all requirements for green building norms	Contractor,
7	Establishment of baseline environmental conditions prior	1. Conduct documentation of location of components, areas for construction zone	Records and photographs, baseline environmental	Contractor	PMC and PMU environmental specialist	Once prior to start of construction works	Contractor

Sl. No.	Environmental Issues	Mitigation Measures	Parameters (Indicators for Compliance)	Responsible for Implementation	Responsible for Supervision	Frequency for Monitoring	Sources of Fund for Implementing Mitigation Measure
	to start of civil works	(camp, staging, storage, stockpiling, etc.) and surroundings (within direct impact zones). Include photos and GPS coordinates. 2. Carry out environmental monitoring at IFI site for ambient air quality, water quality and noise levels to establish baseline environmental monitoring for the parameters indicated in the monitoring plan.	monitoring results				
8	Utilities (mainly electric line and possibility of underground cables)	• The locations and operators of utilities to be impacted for the sub-project should be identified and documented in detailed design documents to prevent unnecessary disruption of services during the construction phase. • Require contractor to prepare a contingency plan to include actions to be done in case of unintentional interruption of services. • Obtain the list of affected utilities and operators. • If relocations are necessary; contractor will coordinate with the providers to relocate the utility.	List and maps showing utilities to be shifted Contingency plan for services disruption	• Contractor will prepare preliminary list and maps of utilities to be shifted • During detailed design phase, contractor to prepare(i) list and operators of utilities to be shifted; and (ii) contingency plan	CSQA Firm Team and PMU	After delineation of IFI site	Contractor

Sl. No.	Environmental Issues	Mitigation Measures	Parameters (Indicators for Compliance)	Responsible for Implementation	Responsible for Supervision	Frequency for Monitoring	Sources of Fund for Implementing Mitigation Measure
9	Social and cultural resources	Develop a protocol for use by the contractor in conducting any excavation work, to ensure that any chance finds are recognized, and measures are taken to ensure they are protected and conserved.	Chance find protocol	PMU and PMC safeguard specialists to develop protocol for chance finds	PMU	Prior to start of construction activities	PMU operation costs
10	Construction camp-locations, selection, design and layout	Sitting of the construction camp, if required, at project site shall be as per the guidelines below and details of layout to be approved by PMU. The potential sites for labor camp and construction camp shall be identified by the contractor and this identified site shall be visited by the environmental specialists of PMU and PMC and the one having least impacts on environment will be approved by the PMU. The camp may be established on vacant plot of GIFT after approval from management of GIFTCL. Locations for storage of construction materials shall be identified at the site or surrounding plots. Sanitation facilities at construction camps shall be adequately planned.	Construction Camp sites, and locations of material storage areas, sanitation facilities	Contractor	PMU and PMC	At the time of construction camp establishment and finalization of storage areas	Contractor
11	Sources of construction materials	Use quarry sites and sources compliant with environmental	Environmental permissions issued to	Contractor	PMU and CSQA firm	Upon submission by contractor	Contractor

Sl. No.	Environmental Issues	Mitigation Measures	Parameters (Indicators for Compliance)	Responsible for Implementation	Responsible for Supervision	Frequency for Monitoring	Sources of Fund for Implementing Mitigation Measure
		regulations of India at the national, state and local levels. Verify suitability of all material sources and obtain approvals from PMU. There will be no use of asbestos containing sheets or pipes. Submit to PMU on a monthly basis documentation of sources of materials (Environmental product declaration needed in GIFT).	quarries, mines and sources of materials Environmental permissions of concrete batching plants and hot mix plants if concrete and pre-mix are obtained from the above.	PMU and CSQA firm to verify sources (including permits) if additional is requested by contractor			
12	Access for construction material transportation	Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of IFI site. Schedule transport and hauling activities during non-peak hours (between 1,100 to 1,700 hours). Locate entry and exit points for the site in a way that traffic congestion is minimum on access roads to site. Keep the site free from all unnecessary obstructions. Drive vehicles in a considerate manner.	Traffic management plan	Contractor	CSQA Firm and PMU	During delivery of construction materials	Contractor

Sl. No.	Environmental Issues	Mitigation Measures	Parameters (Indicators for Compliance)	Responsible for Implementation	Responsible for Supervision	Frequency for Monitoring	Sources of Fund for Implementing Mitigation Measure
		Coordinate with the Traffic Police Department for temporary road diversions and for provision of traffic aids if transportation activities cannot be avoided during peak hours (in case of exigencies).					
13	Occupational health and safety	Comply with IFC EHS, guidelines as well as with local labor law requirements (GOI and GOG regulations) on Occupational Health and Safety. As per analysis, IFC EHS guidelines are comparable with GOI regulations. The guidelines of GIFT Urban Development Authority should also be followed. Develop comprehensive site-specific health and safety plan. The overall objective is to provide guidance to contractor on establishing a management strategy and applying practices that are intended to eliminate, or reduce, fatalities, injuries and illnesses for workers performing activities and tasks associated with the project.	Health and safety (H&S) plan	Contractor	CSQA Firm, PMU, and PMC	During pre-construction phase	Contractor

Sl. No.	Environmental Issues	Mitigation Measures	Parameters (Indicators for Compliance)	Responsible for Implementation	Responsible for Supervision	Frequency for Monitoring	Sources of Fund for Implementing Mitigation Measure
		Include in health and safety plan measures such as: (i) type of hazards at construction site; (ii) corresponding personal protective equipment for each identified hazard; (iii) health and safety training for all site personnel; (iv) procedures to be followed for all site activities; and (v) documentation of work-related accidents. Ensure that there will be no use of asbestos containing materials such as roofing sheets and pipes. Provide medical insurance and accident coverage for all workers (skilled, semi-skilled and unskilled) of contractors and sub-contractors. The PMU and PMC will conduct safeguard training program to make aware contractor about safeguards requirements and other guidelines of ADB for the environmental safeguards.					
14	Measures for the protection of COVID-19 at IFI site	All protection measures pertaining to COVID-19 will be taken at the site as per the protocol specified by the GOG	COVID-19 screening and protection facilities	Contractor	PMU, CSQA Firm, and PMC	During pre-construction phase	Contractor

Sl. No.	Environmental Issues	Mitigation Measures	Parameters (Indicators for Compliance)	Responsible for Implementation	Responsible for Supervision	Frequency for Monitoring	Sources of Fund for Implementing Mitigation Measure
		and GOI for the construction site. For this, a COVID-19 Health and safety Plan will be prepared by the contractor after mobilization. The protection measures for COVID-19 will continue till pandemic threat continues.					
15	Stakeholder consultations	Continue information dissemination, stakeholder consultations, and involvement/participation of stakeholders during project implementation.	Disclosure records Consultations	Contractor, PMU, and PMC	GIFTCL	• During updating of IEE Report (if required) • During preparation of site- and activity-specific plans as per EMP • Prior to start of construction • During construction	PMU and contractor
16	Disclosure of IEE and revised EMP	The final IEE report including EMP and monitoring table to be disclosed in English and Gujarati language at GIFTCL website and hard copies to be made available at IFI site office, and GIFT PMU office.	IEE, EMP and environmental monitoring table	PMU	GIFTCL	Before start of construction works	PMU
17	Establishment of grievance redress	Grievance Redress Mechanism (formation of	Committees and contact details at site,	PMU	GIFTCL	Notification before start of	PMU

Sl. No.	Environmental Issues	Mitigation Measures	Parameters (Indicators for Compliance)	Responsible for Implementation	Responsible for Supervision	Frequency for Monitoring	Sources of Fund for Implementing Mitigation Measure
	committee and functionality	committees) to be notified by the IA (GIFTCL).	PMU and state level			construction works	

CPCB = Central Pollution Control Board, CTE = consent to establish, CSQA = construction supervision and quality assurance, CTO = consent to operate, IA = implementing agency, GIFT = Gujarat International Finance Tec-City, GIFTCL = Gujarat International Finance Tec-City Company Limited, GOI = Government of India, GOG = Government of Gujarat, IFC EHS = International Finance Corporation Environment, Health and Safety Guidelines, IFI = International Fintech Institute, MOEFCC = Ministry of Environment, Forest and Climate Change, MS = mild sheet, NOC = no objection certificate, PMU = project management unit, STP = sewage treatment plant.
Source: Gujarat International Finance Tec-City Company Limited and Asian Development Bank.

Table 18: Construction Phase Environmental Management Plan for Construction of IFI Building and Facilities

Sl. No.	Environmental Issues	Mitigation Measures	Parameter (Indicators for Compliance)	Responsible Implementation	Responsible Supervision	Frequency for Monitoring	Sources of Fund for Implementing Mitigation Measure
1	Regulatory compliances	Following regulatory compliances shall be ensured at site: 1. Environmental clearances of sand and subgrade quarries/crushers, concrete batching plant and hot mix plants (construction material sources) 2. Labor including for migratory laborers license from Government of Gujarat and registration under the BOCW Act, 1996. 3. Copies of medical insurance and accident insurance coverage for all workers at site 4. Utility shifting permissions 5. CTE and CTO (updated for GIFT, if required)	Compliance clearance copies	Contractor and PMU	GIFTCL	Validity during entire construction phase	Contractor and PMU

Sl. No.	Environmental Issues	Mitigation Measures	Parameter (Indicators for Compliance)	Responsible Implementation	Responsible Supervision	Frequency for Monitoring	Sources of Fund for Implementing Mitigation Measure
2	Sanitation, Drinking water facilities and accommodation of construction workers at construction camp	The contractor shall provide sanitation facilities at the camp site. These facilities will include dust bins in adequate numbers for solid waste collection, drinking water facilities, and separate toilets for male and females. These toilets facilities shall be well maintained. Else, portable toilet blocks or portable sewage treatment plant shall be installed. The dust bins shall be regularly emptied and waste from camp site shall be disposed of at designated locations. The accommodation shall be well lighted and ventilated and will have amenities such as water supply and sanitation as explained above.	Construction camp sanitation and drinking water facilities	Contractor	CSQA firm, PMU, and PMC	Regularly during construction phase	Contractor
3	Traffic circulation plan during construction phase	Prior to commencement of site activities and mobilization on ground, the contractor will prepare and get approved (from local traffic police after the review of CSQA firm) traffic circulation plan during construction for safe passage of public vehicles so that GIFT and locals are not at inconvenience. The contractor will carry out dissemination of these information and traffic circulation plan at IFI construction site.	Safe movement of traffic	Contractor	CSQA firm and PMU	Every day during construction phase	Contractor
3	Clearance activities, including delineation of	Only ground cover shrubs, if any, that impinge directly on the permanent works or necessary temporary works shall be removed	Pre-construction records of site and	Contractor	PMU, PMC, and CSQA firm	During site clearance activities	Contractor

Sl. No.	Environmental Issues	Mitigation Measures	Parameter (Indicators for Compliance)	Responsible Implementation	Responsible Supervision	Frequency for Monitoring	Sources of Fund for Implementing Mitigation Measure
	construction areas	with prior approval from the environmental specialists of PMU and PMC. All areas used for temporary construction operations will be subjected to complete restoration to their former conditions with appropriate rehabilitation procedures. The photographic records shall be maintained for the temporary sites used for construction. These will help in proper restoration.	vegetation in area of construction				
4	Drinking water availability at construction camp and construction site	Sufficient supply of cold potable water to be provided and maintained. If the drinking water is obtained from an intermittent public water supply, then storage tanks will be provided. For this, contractor will submit plans which detail how availability of drinking water shall be assured.	Water supply source and availability of water	Contractor	CSQA firm and PMU	During construction phase regularly	Contractor
5	Waste disposal	The pre-identified disposal location shall be part of comprehensive waste disposal plan. Solid waste management plan to be prepared by the contractor in consultation with local civic authorities. The environmental specialist of PMU shall approve these disposal sites after conducting a joint inspection on the site with the	Waste disposal sites, waste management plan	Contractor	PMU, PMC, and CSQA firm	Regularly during construction phase	Contractor

Sl. No.	Environmental Issues	Mitigation Measures	Parameter (Indicators for Compliance)	Responsible Implementation	Responsible Supervision	Frequency for Monitoring	Sources of Fund for Implementing Mitigation Measure
		contractor and PMC environmental specialist. Contractor shall ensure that waste shall not be disposed off near water stream in the surroundings of site and along the access path.					
6	Stockpiling of construction materials	Stockpiling of construction materials will be done in such a way that it does not impact and obstructs the drainage and movements of GIFT bound vehicles. The stockpiles will be covered by tarpaulin sheet to protect from dust and erosion. The stockpiles shall be bunded so that these are not washed away during intense rainfall.	Stockpiling locations at IFI site	Contractor	CSQA firm, PMU and PMC	Regularly during construction phase	Contractor
7	Arrangement for construction water	The Contractor shall provide a list of locations and type of sources from where water for construction shall be acquired. To avoid disruption/ disturbance to other water users, the contractor shall arrange water from market or from GIFTCL supply and consult PMU before finalizing the source.	Water availability at identified water source locations	Contractor	PMU, CSQA firm	Regularly during construction phase	Contractor
8	Siltation of water bodies due to spillage of construction wastes	No disposal of construction wastes will be carried out into the existing water bodies (Narmada canal and Sabarmati River) in the surroundings of GIFT. The waste materials will be transported to the	Water bodies in surroundings of GIFT	Contractor	PMU, PMC, and CSQA firm	Regularly during construction phase	Contractor

Sl. No.	Environmental Issues	Mitigation Measures	Parameter (Indicators for Compliance)	Responsible Implementation	Responsible Supervision	Frequency for Monitoring	Sources of Fund for Implementing Mitigation Measure
		pre-identified disposal site for safe disposal.					
9	Water pollution from fuel and lubricants	The contractor shall not store fuel and lubricants at site to avoid water pollution on account of spillage. These will be purchased on need basis. The maintenance of vehicle and equipment shall be avoided at site. It will be taken up at authorized workshops. The contractor shall ensure that all vehicle/machinery and equipment operation and refueling shall be carried out in such a manner that spillage of fuels and lubricants does not contaminate the ground. The monitoring of groundwater quality will be taken up as per monitoring plan.	Vehicle parking, refueling sites, etc.	Contractor	PMU, PMC, and CSQA firm	Regularly during construction phase	Contractor
10	Soil pollution due to fuel and lubricants and construction wastes	Fuel and lubricants storage at site will be avoided to avoid soil pollution on account of spillage. These will be purchased on need basis from market. Vehicle and equipment cleaning and washing shall be avoided at site.	Vehicle parking area	Contractor	PMU, PMC and CSQA firm	Regularly during construction phase	Contractor
11	Soil erosion	Temporary slope protection may be required during construction at the excavated areas.	Excavated areas, erosion measures taken	Contractor	PMU, PMC and CSQA firm	Regularly during construction phase	Contractor

Sl. No.	Environmental Issues	Mitigation Measures	Parameter (Indicators for Compliance)	Responsible Implementation	Responsible Supervision	Frequency for Monitoring	Sources of Fund for Implementing Mitigation Measure
		Adequate measures will be taken up so that there is no soil erosion causing risks in the vicinity. The construction site will be properly barricaded so that lose material and earth at site are not eroded during intense rain and carried way with storm water.					
12	Generation of dust	The contractor will take every precaution to reduce the levels of dust at construction site. The IFI site will be properly barricaded with adequate height prefabricated mild steel sheets from all sides to avoid air emissions and dust impacts in the surroundings of site. All filling works to be protected/covered in a manner to minimize dust generation.	IFI site, air quality monitoring results	Contractor	PMU, PMC, and CSQA firm	Regularly during construction phase	Contractor
13	Emission from construction vehicles, equipment and machinery	All vehicles, equipment and machinery used for construction shall conform to the relevant Bureau of India Standard norms. The discharge standards promulgated under the Environment Protection Act, 1986 shall be strictly adhered to. The silent/quiet equipment available in the market shall be used in the construction. The contractor shall maintain a record of Pollution under Control Certificates (PUCs) for all vehicles and machinery used during the contract period which shall be	PUC certificates of vehicles and machinery	Contractor	PMU, PMC and CSQA firm	Regularly during construction phase	Contractor

Sl. No.	Environmental Issues	Mitigation Measures	Parameter (Indicators for Compliance)	Responsible Implementation	Responsible Supervision	Frequency for Monitoring	Sources of Fund for Implementing Mitigation Measure
		produced for verification whenever required.					
14	Noise pollution	The contractor shall confirm that all construction equipment used in construction shall strictly conform to the MOEFCC and CPCB noise standards and all vehicles and equipment used in construction shall be fitted with exhaust silencers. At the construction sites noisy construction work such as operation of DG sets, use of high noise generation equipment shall be stopped during the nighttime between 10.00 pm to 6.00 am. Noise limits for construction equipment used in this project will follow IFC EHS standards. No construction activities will be taken up in nighttime (22:00 hours to 06:00 hours) to avoid noise impacts. Similar to construction activities, no construction vehicle movement will be allowed in the night hours. Noise monitoring will be taken up as per monitoring plan.	Certificates of vehicles conforming noise standards, noise monitoring results	Contractor	PMU, PMC, and CSQA firm	Regularly during construction phase	Contractor
15	Impacts on flora and fauna	Minimize impacts on flora and fauna during construction phase by limiting site clearance bare	Landscaping area and tree plantation	Contractor	PMU, PMC, and CSQA firm	Regularly during	Contractor

Sl. No.	Environmental Issues	Mitigation Measures	Parameter (Indicators for Compliance)	Responsible Implementation	Responsible Supervision	Frequency for Monitoring	Sources of Fund for Implementing Mitigation Measure
		minimum and limiting all types of pollution generation. The detailed landscaping and tree plantation plan will be prepared during project implementation. Broadly plantation will be taken up along boundary wall, open area in front side, etc.				construction phase	
16	Material handling at construction site	Workers employed on mixing cement, lime mortars, concrete, etc. will be provided with protective footwear and protective goggles. Workers who are engaged in welding works will be provided with welder's protective eye shields. Workers engaged in stone breaking activities (If required) will be provided with protective goggles and clothing. The use of any toxic chemical (paints, thinners and anti-corrosive and anti-termite materials, etc.) will be strictly in accordance with the manufacturer's instructions. The PMU site in-charge will be given at least 6 working days' notice of the proposed use of any chemical. A register of all toxic chemicals delivered to the site will be kept and maintained up to date by the contractor.	Data on available personal protective equipment	Contractor	PMU and CSQA firm	Regularly during construction phase	Contractor

Sl. No.	Environmental Issues	Mitigation Measures	Parameter (Indicators for Compliance)	Responsible Implementation	Responsible Supervision	Frequency for Monitoring	Sources of Fund for Implementing Mitigation Measure
17	Disposal of construction waste, and debris	The contractor shall confirm that safe disposal of the construction waste will be ensured in the pre-identified disposal locations. In no case, any construction waste will be disposed off around the GIFT and IFI site within the GIFT.	Disposal site	Contractor	PMU, PMC and CSQA firm	Regularly during construction phase	Contractor
18	Onsite emergency plan for minor accidents and mishaps and disaster management plan for natural calamities	The onsite emergency plan will be prepared by the contractor in consultation with CSQA firm, PMU and PMC. For natural calamities, disaster management plan prepared by the GIFT administration under the provisions of Disaster Management Act 2005 and GIFT DCR 2011 will be followed.	Onsite emergency plan document and disaster management plan document of GIFT	Contractor	PMU, CSQA firm, and PMC	Mock drill every quarter	Contractor
19	Occupational Health and Safety and COVID-19 measures during construction	Adequate safety measures for workers during handling of materials at the construction site will be taken up. The contractor has to comply with all regulations for the safety of workers. Precaution will be taken to prevent danger of the workers from accidental injuries, fire, etc. First aid treatment will be made available for all injuries likely to be sustained during the course of work. The contractor will comply with all anti-malaria instructions given by the PMU, PMC, and CSQA firm Necessary COVID-19 protection measures will be taken up as per	Records of availability of personal protective equipment, availability of first aid kits	Contractor	PMU, PMC, and CSQA firm	Regularly during construction phase	Contractor

Sl. No.	Environmental Issues	Mitigation Measures	Parameter (Indicators for Compliance)	Responsible Implementation	Responsible Supervision	Frequency for Monitoring	Sources of Fund for Implementing Mitigation Measure
		prescribed protocols of GOG and GOI guidelines. There will not be any use or handling of asbestos containing materials such as roofing sheet and plumbing pipes.					
20	Flooding and Water Logging and construction materials accidental flow with food waters	• The contractor will take all measures to barricade the site with MS sheet. • The contractor will maintain quick drainage of site to avoid any water logging and flow of lose construction material with rainwater • The contractor will take all necessary mitigatory measures to ensure that mud and construction materials do not enter neighboring plots and other buildings.	Flooding and water logging	Contractor	PMU, PMC, and CSQA firm	Regularly during construction phase and especially during monsoon months	Contractor
21	Clearing of construction of camp and restoration	The contractor to prepare site restoration plan for approval by the PMU or its authorized agency (such as CSQA Firm). The plan is to be implemented by the contractor prior to demobilization. On completion of the works, all temporary structures will be cleared away, all rubbish burnt, excreta or other disposal pits or trenches filled in and effectively sealed off, and the site left clean and tidy, at the contractor's expense, to the entire	Restoration plan, and records of pre-construction of temporary sites	Contractor	PMU, GIFTCL, CSQA firm	End of construction phase	Contractor

Sl. No.	Environmental Issues	Mitigation Measures	Parameter (Indicators for Compliance)	Responsible Implementation	Responsible Supervision	Frequency for Monitoring	Sources of Fund for Implementing Mitigation Measure
		satisfaction of the GIFTCL management.					

CPCB = Central Pollution Control Board, CTE = consent to establish, CSQA = construction supervision and quality assurance, CTO = consent to operate, IA = implementing agency, GIFT = Gujarat International Finance Tec-City, GIFTCL = Gujarat International Finance Tec-City Company Limited, GOI = Government of India, GOG = Government of Gujarat, IFC EHS = International Finance Corporation Environment, Health and Safety Guidelines, IFI = International Fintech Institute, MOEFCC = Ministry of Environment, Forest and Climate Change, MS = mild sheet, NOC = no objection certificate, PMU = project management unit, STP = sewage treatment plant.
Source: Gujarat International Finance Tec-City Company Limited and Asian Development Bank.

Table 19: Operation Phase Environmental Management Plan for IFI and Facilities

Sl. No.	Environmental Issues	Mitigation Measures	Parameter (Indicators for Compliance)	Responsible Implementation	Responsible Supervision	Frequency for Monitoring	Sources of Fund for Implementing Mitigation Measure
1	All regulatory permissions for operations of IFI	All regulatory permissions such as building occupancy certificate from GIFT City management, NOC from fire department, updated CTO (if required) for GIFT, etc. will be obtained before start of IFI operations.	List of permissions /NOCs required	IFI management team, PMU, and PMC	GIFTCL	Regularly for validation/ renewal of permissions	IFI operational budget
2	Environmental Conditions	Air, water and noise quality will be monitored periodically as per the environmental monitoring plan prepared. The boundary wall and plantation along the periphery will be maintained to avoid any impacts from the IFI campus in the surroundings.	Ambient air quality standards, drinking water quality standards, and ambient noise standards	IFI management team, PMU, and PMC	GIFTCL	Every season except monsoon for first two years	IFI's operational budgets
3	Safety risks	1. Proper demarcation and flagging of the area requiring safety observations will be taken up after completion of construction works.	Risk area identification, boards for	IFI management team, PMU, and PMC	GIFTCL	Regularly during operation phase	IFI's operational budgets

Sl. No.	Environmental Issues	Mitigation Measures	Parameter (Indicators for Compliance)	Responsible Implementation	Responsible Supervision	Frequency for Monitoring	Sources of Fund for Implementing Mitigation Measure
		2. Necessary precaution measures to be observed by visitors will be printed on boards and will be prominently put inside the IFI Residential Block building. 3. The hazardous and toxic materials at the buildings or working laboratories will be handled, stored and disposed as per instructions provided in material safety data sheets.	precautionary measures				
4	Unhygienic conditions due to poor maintenance of sanitation facilities and irregular solid waste collection	The IFI operations and management team will carry out maintenance of the toilets and carry out the regular waste collection and disposal of the waste to the GIFT disposal system/ site. Wastewater will be diverted to the GIFT sewage network system. No industrial effluent or wastewater is anticipated at IFI. Any hazardous waste generated waste generated will be handled as per the provisions of 'Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2016. The e-waste generated will be handled and disposed off as per provisions of 'E-Waste Management Rules, 2016'. The used and discarded lead acid batteries for recycling and disposal as per Battery Waste Management Rules, 2020.	Maintenance schedule of the sanitation piping system and toilet blocks, disposal plans of various solid wastes	IFI management team, PMU, and PMC	GIFTCL	Every quarter	IFI's operational budgets

Sl. No.	Environmental Issues	Mitigation Measures	Parameter (Indicators for Compliance)	Responsible Implementation	Responsible Supervision	Frequency for Monitoring	Sources of Fund for Implementing Mitigation Measure
5	Natural disasters	Necessary procedures to be followed by the visitors, students, IFI staff during natural disasters shall be written at prominent locations.	Warnings of disasters by Meteorological Department	IFI management team, PMU, and PMC	District Administration	During disasters	Government of Gujarat
6	Onsite emergency plan for minor accidents and mishaps and	The operations and management team of IFI will prepare on site emergency plan for possible minor accidents and mishaps. during operation phase.	Onsite emergency plan document	IFI management team	GIFTCL	Mock drills every quarter	IFI operational budgets
7	Waste generated on account of operation and maintenance of roof top solar system	The supplier of solar panels cells will maintain the system. Any waste generated will be collected by the supplier for possible reuse and recycling. For this, necessary agreement will be prepared at the time of supply and installation.	Waste generation from solar system	Suppliers of solar panel cell	IFI operations and management team, PMU, and PMC	Regularly	IFI operational budgets
8	Disposal of waste from IFI	The IFI operations and management team will prepare waste disposal plans for municipal waste, and hazardous waste in consultations with GIFT management	Waste disposal plans for various types of wastes	IFI management team, PMU, and PMC	GIFTCL	Regularly	IFI operational budgets

CPCB = Central Pollution Control Board, CSQA = construction supervision and quality assurance, CTO = consent to operate, HVAC = heating, ventilation, and air conditioning, GIFT = Gujarat International Finance Tec-City, GIFTCL = Gujarat International Finance Tec-City Company Limited, IFI = International Fintech Institute, NOC = no objection certificate, PMC = project management consultant, PMU = project management unit.
Source: Gujarat International Finance Tec-City Company Limited and Asian Development Bank.

C. Environmental Monitoring Plan

105. Environmental monitoring will be undertaken during construction at three levels. Environmental monitoring (which covers EMP implementation and compliance with rules and regulations with respect to the environment, and handling of solid and liquid waste) at site will be undertaken by the contractor during pre-construction and construction phases and will be supervised by the PMU with support from PMC and CSQA firm teams. Environmental monitoring during operation phase will be taken up by the PMU through an accredited laboratory. Water logging is not anticipated as the IFI site is located at GIFT, which has an effective drainage system. The environment safeguards specialists of the PMU and PMC will ensure that final IEE and EMP are updated for any changes in the future, in accordance with ADB and GOG's requirements. The CSQA firm team and environmental specialists of PMC and PMU will ensure that all the provisions of the EMP are being adhered to by the contractor.

106. To ensure effective implementation of mitigation measures and revised EMP during pre-construction and construction phases of this sub-project, it is essential that an effective environmental monitoring plan is followed as shown in Table 20. The proposed monitoring of all relevant environmental parameters, with a description of the sampling stations, frequency of monitoring, applicable standards and responsible agencies are presented in the table.

Table 20: Environmental Monitoring Plan for the Detailed Design and Construction of IFI and Facilities during Pre-construction, Construction and Operation Phases

Sl. No.	Field (Environmental Attribute)	Phase	Parameters to be Monitored and applicable standards	Locations	Frequency	Responsibility	Cost ($)
1	Air quality	During pre-construction phase	CO, NOx, PM_{10}, $PM_{2.5}$, and SO_2 (Applicable standards – national-National Ambient Air Quality Standards)	Location of maximum construction activity at the IFI site	Once in the pre-construction phase to establish baseline	Contractor through NABL accredited monitoring agency during pre-construction and construction phase and IFI management team during operation phase	$2,300
		During construction phase			Once in a quarter except monsoon quarter (June to September) during construction phase		
		During operation phase for first two years			Once in a quarter except monsoon quarter for first two years		
2	Ground water quality	During pre-construction phase	TDS, TSS, pH, Hardness, BOD, Fecal Coliform (Applicable standards – national-Drinking Water Quality Standards specified in IS:10500)	Ground water close to IFI construction site	Once in the pre-construction phase to establish baseline	Contractor through NABL accredited monitoring agency during pre-construction and construction phase and IFI management team during operation phase	$2,300
		During construction phase			Once in in a quarter except monsoon quarter during construction phase		
		During operation phase for first two years			Once in a quarter except monsoon quarter for first two years		
3	Treated Waste Water in Recycle use in IFI building	During operation phase	TDS, TSS, pH, Hardness, BOD, Fecal Coliform (applicable standards – national-Drinking Water Quality	Treated water from GIFT STP used for recycling	No separate monitoring required at GIFTCL management is operating STP and undertakes periodic monitoring as per conditions of CTO of GIFT.	IFI management team	0

Sl. No.	Field (Environmental Attribute)	Phase	Parameters to be Monitored and applicable standards	Locations	Frequency	Responsibility	Cost ($)
			Standards specified in IS:10500)				
4	Noise Levels	During pre-construction phase	Noise Levels as per National Ambient Noise Standards on dB(A) scale (Applicable standards – national-National Ambient Noise Standards)	Noise levels at location of maximum construction activity at IFI site	Once in the pre-construction phase to establish baseline	Contractor through NABL accredited monitoring agency during pre-construction and construction phase and IFI management team during operation phase	$700
		During construction phase			Once in quarter except monsoon quarter during construction phase		
		During operation phase for first two years			Once in a quarter except monsoon quarter for first two years		

BOD = biological oxygen demand, CTO = consent to operate, IFI = International Fintech Institute, GIFT = Gujarat International Finance Tec-City, GIFTCL = Gujarat International Finance Tec-City Company Limited, NABL = National Accreditation Board for Testing and Calibration Laboratories, PM = particulate matter, STP = sewage treatment plant, TDS = total dissolved solids, TSS = total suspended solids.
Source: Gujarat International Finance Tec-City Company Limited and Asian Development Bank.

107. Table 21 summarizes site- and activity-specific plans to be prepared as per EMP tables.

Table 21: Site- and Activity-Specific Plans/Programs as per EMP

To be Prepared During	Specific Plan/Program	Purpose	Responsible for Preparation	Responsible for Implementation
Pre-construction phase	Environmental monitoring program as per detailed design	Indicate sampling locations, methodology and parameters to the contractor	PMU and PMC	Contractor
Pre-construction phase	Chance find protocol	Address archaeological or historical chance finds	PMU and PMC environment specialists	Contractor
Pre-construction phase	List of pre-approved sites for construction camp, stockpiles, and waste disposal sites	Location/s for construction camp, areas for stockpile, storage and disposal for minimization of impacts	PMU and PMC environment specialists, CSQA firm, and contractor	Contractor
Pre-construction phase	Waste management plan	Mitigate impacts due to waste generation	Contractor	Contractor
Pre-construction phase	Spill prevention and containment plan	Mitigate impacts of accidental spills of oil, lubricants, fuels, concrete, and other hazardous materials	Contractor	Contractor
Construction phase	Traffic management plan	Mitigate impacts due to transport of materials and project related traffic movement	Contractor	Contractor
Construction phase	COVID-19 health and safety plan	To comply with COVID-19 guidelines issued by the GOG and Ministry of Health and Family Welfare, GOI (MOHFW)	Contractor	Contractor
Construction phase	Health and safety (H&S) plan	To comply with IFC's EHS guidelines on occupational health and safety. In addition to this comply with GIFT environmental clearance	Contractor	Contractor

To be Prepared During	Specific Plan/Program	Purpose	Responsible for Preparation	Responsible for Implementation
		conditions on H&S, and 'BOCW Act, 1996 stipulations.		
Construction phase	Environmental monitoring plan implementation	To check efficacy of mitigation measures	Environment specialists of PMU, PMC and contractor	Contractor
Operation Phase	Environmental monitoring plan implementation for first two years	To check efficacy of mitigation measures	IFI management team in close coordination with PMU	IFI management team
Operation Phase	Solid waste management plan	For effective disposal of all types of wastes	IFI management team in close coordination with PMU	IFI management team
Operation Phase	Onsite emergency plan	For handling any mishap at IFI campus on account of fire, explosion, accident, etc.	IFI management team	IFI management team

BOCW = Building and Other Construction Workers Act 1996, CSQA = construction supervision and quality assurance, GIFT = Gujarat International Finance Tec-City, GOG = Government of Gujarat, GOI = Government of India, IFC EHS = International Finance Corporation Environment, IFI = International Fintech Institute, MOHFW = Ministry of Health and Family Welfare, PMU = project management unit, PMC = project management consultants.
Source: Gujarat International Finance Tec-City Company Limited and Asian Development Bank.

108. The guidelines for preparation of site-specific traffic management plans are in Annexure-4.

D. Capacity Building

109. In addition to the primary objective of the project in strengthening skills of the youth in the financial sector, the sub-project will also raise awareness about environmental conservation amongst implementing agency, contractors, CSQA firm team, and local communities. The environmental awareness for the local communities will be carried out during stakeholder consultations. The project will have the opportunity to build capacity in environment protection for the above-mentioned stakeholders. In the operation phase, the IFI management team will take up awareness about environmental conservation with the assistance of the PMU.

110. The environment specialists at the PMU and PMC will provide basic training required for environmental awareness. Specific modules customized for the available skill set will be devised after assessing the capabilities of the members of the training program and the requirements of the project. The training would cover basic principles of environmental assessment and management, mitigation plans and programs, implementation techniques, monitoring methods and tools. The proposed training program along with the frequency of sessions is in Table 22.

Table 22: Training Modules for Environmental Management

Program	Description	Participants	Duration	Training Conducting Agency
A. PRE-CONSTRUCTION STAGE				
Sensitization workshop on environment	• Introduction to Environment: environmental assessment and social due diligence requirements in the project, regulatory clearances, and permission requirements in the project • Environmental management plan implementation, environmental and resource conservation, introduction of ADB Safeguard Policy Statement, 2009, and ADB guidelines on environmental considerations in planning, design and implementing projects	PMU, CSQA firm, GIFT city officials involved in the project, other engineering staff associated with the sub-project, and contractors' technical staff	½ working day	Environment specialists of PMU and PMC
Session 1	• Environmental impacts due to IFI project during construction and operation phases, pollution generation activities during preconstruction and construction phases • Environmental management, environmental provisions, implementation arrangements, methodology of assessment, and good engineering practices to be integrated into contract documents	PMU, CSQA firm, GIFTCL officials involved in the project, other engineering staff associated with the sub-project, and contractors' technical staff	½ working day	Environment specialists of PMU and PMC
B. CONSTRUCTION STAGE				
Session 2	• Roles and responsibilities of officials, contractors, consultants toward protection of environment • Implementation arrangements and environmental monitoring during construction phase	PMU, CSQA firm, GIFT management team officials involved in the project, other engineering staff associated with the IFI project, and contractors' technical staff	½ working day	Environment specialists of PMU and PMC
Session 3	• Monitoring and reporting system	PMU, CSQA firm, GIFT officials involved in the project, and other engineering staff associated with the IFI project	¼ working day	Environment specialists of PMU and PMC

ADB = Asian Development Bank, CSQA = construction supervision and quality assurance, GIFT = Gujarat International Finance Tec-City, GIFTCL = Gujarat International Finance Tec-City Company Limited, IFI = International Fintech Institute, PMU = project management unit, PMC = project management consultants.
Source: Gujarat International Finance Tec-City Company Limited and Asian Development Bank.

E. Budget

111. Most of the mitigation measures require the contractor to adopt good site practices, which should be part of normal procedures, and these are mandated under the prevailing regulations and standards. It is unlikely that there will be major costs associated with compliance. Only those items not covered under budgets for construction are included in the IEE budget. The final IEE costs include mitigation, monitoring and capacity building costs. The summary budget for the environmental management costs for the sub-project is in Table 23.

Table 23: Environmental Management and Monitoring Costs

Monitoring Component	Rate	Amount (₹)	Source of Fund
Pre-Construction and Construction Phase			
Ambient Air Quality: One location at location of maximum construction activity at IFI site (one sample during pre- construction phase and nine samples during construction phase - Total 10 samples)	10,000	100,000	Contractor
Water Quality: One groundwater sample from IFI construction site from existing bore well/hand pump (one sample during pre- construction phase and Nine samples during construction phase - Total 10 samples)	10,000	100,000	Contractor
Ambient Noise Quality: One location of maximum construction activity at IFI construction site (one sample during pre- construction phase and nine samples during construction phase - Total 10 samples)	3,000	30,000	Contractor
Cost for Occupational Health and Safety Measures Occupational health and safety measures at construction site and workers' camp as per the requirements specified in Gujarat BOCW Rules, 2003	Covered in the construction cost of contractor as EMP is part of bid and contract document.		Contractor
Consultancy Charges for environmental sustainability compliance of GIFT Urban Development Authority (Green Building Certification and ECBC compliance)	Lump sum	500,000	PMU and IFI
Installation of Air Pollution Control measures at site (Installation of wheel washing and Fogging system)	Lump sum	2,000,000	Contractor
Waste Management Expenses (Construction and Demolition waste Membership, TSDF site membership for hazardous waste and Hospital Tie-up for medical waste)	Lump sum	200,000	PMU and IFI
Capacity Building Training Program	Covered in the consultancy cost of the PMC and operation cost of PMU		
Total: Pre-Construction and Construction Phase Monitoring Cost (A)		**2,930,000**	
O&M Phase			
Ambient Air Quality One location at IFI, thrice a year, for first 2 years (three samples a year, total of six samples)	10,000	60,000	PMU and IFI
Drinking Water Quality One treated drinking water sample at IFI, thrice a year, for first 2 years (three samples a year, total of six samples)	10,000	60,000	PMU and IFI
Ambient Noise Quality One location at IFI campus, thrice a year, for first 2 years (three samples a year, total of six samples)	3,000	18,000	PMU and IFI
Maintenance of Plantation, Shrubs and Landscape Areas	Covered in operation and maintenance cost of IFI campus.		

Monitoring Component	Rate	Amount (₹)	Source of Fund
Capacity Building	Covered in operation and maintenance cost of IFI campus.		
Maintenance of drainage system of IFI campus to avoid water logging and flooding	Covered in operation and maintenance cost of IFI campus.		
Total O&M Phase Monitoring Cost (B)		**138,000**	
Total Cost (A+B)		**3,068,000**	
Contingencies @ 5%		**153,400**	
Total Budgeted Cost (₹)		**3,221,400 (approx. 3,200,000)**	

BOCW = Building and Other Construction Workers Act 1996, GIFT = Gujarat International Finance Tec-City, GOG = Government of Gujarat, IFI = International Fintech Institute, PMU = project management unit, PMC = project management consultants.
Source: Gujarat International Finance Tec-City Company Limited estimates.

F. Environmental Monitoring and Reporting

112. The PMU, with assistance of the PMC, will monitor and measure the progress of EMP implementation during the construction phase. During operation phase, the PMU safeguard cell, in close coordination with IFI operations and management team, will take care of the EMP implementation.

113. During construction phase, the CSQA firm team, with guidance from the PMC and PMU environmental specialists will submit monthly monitoring and implementation reports to GIFTCL PMU. The PMU environmental specialist, with the assistance of PMC environmental specialist, will prepare semi-annual environmental monitoring reports for submission to ADB on behalf of EA. The semi-annual monitoring report will document monitoring results, identify the necessary corrective actions, and reflect them in a corrective action plan. The frequency of submission of environmental monitoring reports to ADB will be reduced to annual in the operation phase. These reports on annual basis will be prepared by the PMU environmental specialist and submitted to ADB until project completion report is issued by the ADB. Monitoring reports will be posted in the ADB website and in other IA locations accessible to the public.

114. If there are any unanticipated impacts found during implementation, the EA, through the PMU will update the IEE and EMP or prepare a new environmental assessment and EMP to assess the potential impacts, evaluate the alternatives, and outline mitigation measures and resources to address those impacts.

115. ADB will review project performance against the EA's commitments as agreed in the legal documents. The extent of ADB's monitoring and supervision activities will be commensurate with the project's risks and impacts. Monitoring and supervising of social and environmental safeguards will be integrated into the project performance management system. ADB will monitor the project on an ongoing basis until a project completion report is prepared.

VII. PUBLIC CONSULTATION AND INFORMATION DISCLOSURE

A. Process for Consultations

116. The preliminary design and construction of the IFI building does not involve any elements which could have an adverse impact on the community, as the site is within the delineated GIFT boundaries. There is no deprivation of any sort for the residents or displacement of any groups. Particularly, with regard to environmental impacts, this sub-project can be characterized as having no significant adverse impacts.

117. In view of this, the need for holding a public hearing (as defined in EIA Notification 2006 of Government of India) is not perceived at this stage as EIA Notification is not applicable to the IFI project. However, in compliance with ADB's guidelines, focused public consultations were undertaken during the site visit to GIFT and its surrounding areas. The consultations were also held with institutional stakeholders such as the Gujarat Pollution Control Board, the State Forest Department and revenue authorities. The stakeholders were informed about the IFI project components and subsequent implementation in their area and their views were obtained. During the preparation of this IEE, consultations were also held with the GIFTCL Management. The details of the dates of consultations, and the number of participants (male and female) is in Table 24.

118. The process of consultations is an integral part of the IFI design and environmental assessment, in accordance with ADB's guidelines to achieve the following objectives:

- To educate the public, specially potentially impacted or benefited communities, individuals and stakeholders about the proposed IFI project and its detailed design and construction;
- To familiarize the people with technical and environmental issues of the detailed design and construction of IFI and facilities for better understanding.
- To solicit the opinion of the communities, local authorities and individuals on environmental issues and assess the significance of impacts due to the project components;
- To foster cooperation among officers of EA and IA, the community, and the stakeholders to achieve a cordial working relationship for smooth implementation of the project; and
- To identify the environmental issues relating to the proposed activity.

119. During the consultations, residents opened that there is need to provide skills and job-oriented education to the youth of Gujarat in the financial sector as well as to promote entrepreneurship for future prosperity. The project will help in achieving both goals. The project will also provide employment and business opportunities to local population during construction and operation phases. The local people demanded fast implementation of the project. The dates of consultations and stakeholders consulted are summarized in Table 24. The views, comments and suggestions of stakeholders and their incorporation in project design are presented in Tables 25 and 26. The records of consultations (list of participants with signatures) and consultation photographs are given in Annexure-9.

Table 24: Dates and Stakeholders Consulted

Stakeholders Consulted	Dates of Consultation	Number of Participants	
		Male	Female
GIFTCL Management	7 December 2022	12	4
Shahpur Village near GIFT boundary	8 December 2022	10	0
State Forest Department	8 December 2022	11	0
Gujarat Pollution Control Board	8 December 2022	6	0
Ratanpur Village	8 December 2022	8	3

GIFT = Gujarat International Finance Tec-City, GIFTCL = Gujarat International Finance Tec-City Company Limited.
Source: Asian Development Bank.

120. Most of the suggestions of stakeholders were considered in the project design, as in Tables 25 and 26.

Table 25: Views, Comments, and Suggestions of Stakeholders at Local Level and Considerations in IFI Design

Sl. No.	Place	Date	Consultations held with	Issues discussed	Outcome of discussions and consideration in project design and implementation
1	GIFT City Management Team	7 December 2022	GIFTCL management team comprising of Managing Director, Planning Head, Finance Head, General Manager, Technical Team Head, etc.	Project components, benefits of project, implementation schedule, environmental and social impacts during project implementation, etc.	1. The Managing Director GIFTCL welcomed the ADB mission team and informed that environmental clearance, CTE and CTO for the GIFT have been obtained so there will not be any legal issue pertaining to environment for the IFI project. The ADB team thanked and requested GIFCL team to provide documents pertaining to environment clearance, CTE and CTO. 2. The technical team informed that for water requirements, waste water treatment and solid waste disposal, emergency power and electricity supply for the IFI will be met from centralized facilities of GIFT. The environmental specialist welcomed this told that existing and operating system for the utilities will be of immense help for the project implementation. 3. The environmental specialist enquired about the land ownership of IFI plots, the GIFTCL replied that entire land of GIFT under the ownership of GIFTCL, GOG and there were no encroachers and squatters on the proposed plots. 4. The environmental specialist solicited suggestions for environment protection from the participants. The participants suggested that building design should follow green building norms and DCRs of the GIFT.
2	Shahpur Village near GIFT boundary	8 December 2022	With local people , GIFTCL officials, and village Panchayat elected representatives	IFI Project components, benefits of project, implementation schedule, environmental and social impacts during project implementation, etc.	1. The local residents and elected representatives of Shahpur village Panchayat welcomed the establishment of IFI and assured full support for the project. 2. The Panchayat head demanded that locals should be given preference in jobs in IFI as well as admission in courses offered by the IFI. 3. One participant suggested that necessary measures for dust spray should be taken up at site and road to Shahpur village should not be blocked. The environmental specialist replied that EMP for the project is being prepared and this EMP will be implemented for mitigating adverse impacts including dust suppression measures. The road to village will not be blocked during construction as there will be round the clock supervision of construction works by the QAQC firm site team. 4. One participant suggested that locals should get advantage of GIFT as well as IFI in future jobs. The GIFTCL official replied that jobs will

Sl. No.	Place	Date	Consultations held with	Issues discussed	Outcome of discussions and consideration in project design and implementation
					be offered based on qualification and experience and candidates based on merit shall be recruited. 5. One participant suggested that few courses at IFI should be in local language also for the better understanding of locals. The environmental specialist replied that suggestion has been noted and will be conveyed to GIFTCL management.
3	Ratanpur Village	9 December 2022	With local people, GIFTCL officials, and village Panchayat elected representatives	IFI Project components, benefits of project, implementation schedule, environmental and social impacts during project implementation, etc.	1. The locals participating in the project requested early start of construction works and were happy about the project in the GIFT. One of local participant suggested that preference to locals should be given in the employment in the GIFT as they have lost their land and other assets for the GIFT. The GIFTCL replied that employment in GIFTCL based on merit of candidate. 2. One local participant suggested that training courses in IFI should be for students passing out senior secondary school. The environmental specialist replied that suggestion has been noted and will be conveyed to GIFTCL management. 3. One participant suggested that course fee at IFI should be kept reasonable so that locals can afford. The GIFTCL officials replied that suggestion has been noted and will be conveyed to GIFTCL management. 4. On environmental management, one participant suggested that water consumption should be minimized during construction and operation of IFI as well as necessary dust and noise suppression measures should be taken up during construction. The environmental specialist replied that water conservation measures will be adopted during construction and operation and necessary measures for noise and dust mitigations will also be taken up through implementation of EMP and necessary environmental monitoring. 5. One participant suggested that awareness about available training courses at IFI should be provided to locals when IFI is started. The GIFTCL officials replied that necessary measures for awareness about available courses shall be taken up through awareness campaign through various methods and sources.

CTE = consent to establish, CTO = consent to operate, DCR = Development Control Rules, EMP = Environmental Management Plan, GIFT = Gujarat International Finance Tec-City, GIFTCL = Gujarat International Finance Tec-City Company Limited, IFI = International Fintech Institute.
Source: Asian Development Bank.

Table 26: **Summary of Stakeholder Consultations at Institutional Level**

Sl. No.	Place and date	Consultations held with	Issues discussed	Outcome of discussions and consideration in project design and Implementation
1	Gujarat State Forest Department on 8 December 2022	Officials of State Forest Department	IFI Project components, benefits of project, implementation schedule, environmental and social impacts during project implementation, etc.	1. The Deputy Chief Conservator of Forest welcomed the project and informed that within the GIFT no clearance is required from the Forest Department for the IFI project. The environmental specialist and GIFTCL official in the meeting thanked the Deputy Chief for the information. 2. One official participating from the forest department informed that forest department can provide help if required for the plantation within the GIFT open area. The environmental specialist thanked forest department for extending the support. 3. One participating official informed that temperature at Gandhinagar reaches up to 40.2^{o}C so necessary measures in building for climate related issues should be considered in the design. The environmental specialist informed that climate change adaptation measures will be adopted in the design for this a climate related study has been taken up by the ADB as part of project preparation. 4. The participating forest department officials suggested that water conservation measures as well as erosion protection measures should be considered in GIFT projects because project site is in Gandhinagar and district falls in over exploited category for groundwater usage and close to Sabarmati river. The environmental specialist replied that suggestion has been noted and it will be considered in the project design.
2	Gujarat Pollution Control Board on 8 December 2022	Officials of Gujarat Pollution Control Board	IFI Project components, benefits of project, implementation schedule, environmental and social impacts during project implementation, etc.	1. The Regional Officer of GPCB informed that there will not be requirement for amendment in Environmental clearance of GIFT as activity pertaining to IFI is covered in the environmental clearance. The environmental specialist thanked the GPCB officials for the information. 2. One participating officer of GPCB suggested that CTE and CTO will be required for Ready Mix Concrete plant if installed during the construction phase. The environmental specialist replied that all construction activities will be started only obtaining CTE/CTO and other permissions by the contractor. 3. The GPCB officials during the consultation meeting suggested that wastewater from the construction camp should be properly treated before discharge. The GIFTCL official replied that a package type STP will be installed at camp site to take care of wastewater.

Sl. No.	Place and date	Consultations held with	Issues discussed	Outcome of discussions and consideration in project design and Implementation
				4. The Regional Officer also suggested that exclusive solid waste handling and disposal facility should be developed for the entire GIFT and this facility should also have pyrolysis plant for plastic waste burning. The environmental specialist replied that suggestion has been noted and will be conveyed to the GIFTCL management. 5. One of the officials of GPCB enquired about green areas in GIFT. The GIFTCL official participating in the meeting replied that 40% area of GIFT is open and green and about 54000 trees have been planted in lawns and open area. At present only 10 % area is developed. 6. Based on the experience of other projects, one GPCB official recommended that BOCW certificate should be obtained for the construction camp from the labor and employment department. The environmental specialist replied that it will be obtained if applicable after the mobilization of the contractor.

BOCW = Building and Other Construction Works, CTE = consent to establish, CTO = consent to operate, DCR = Development Control Rules, EMP = Environmental Management Plan, GIFT = Gujarat International Finance Tec-City, GIFTCL = Gujarat International Finance Tec-City Company Limited, GPCB = Gujarat Pollution Control Board, IFI = International Fintech Institute.
Source: Asian Development Bank.

B. Future Consultations and Information Disclosure

121. To ensure continued public and stakeholder participation in the IFI project life cycle, periodic consultations and focus group discussions should be continued. A grievance redress committee (GRC) will be formed at the site and also at the PMU level to register grievances regarding technical, social and environmental issues. The participatory process will ensure that all views are adequately reviewed and suitably incorporated in the design and implementation process. Further, to ensure an effective disclosure of the IFI project proposal to the stakeholders and the communities in the vicinity of site, an extensive project awareness campaign will be carried out.

122. **Information disclosure.** Electronic version of this IEE will be disclosed in the official websites of the GIFTCL and ADB (after clearance of this document by the GOG and ADB). On demand, any person seeking information can obtain a hard copy of the complete IEE document by paying cost of photocopy from the office of the PMU and IFI site office on a written request. The hard copies of approved IEE report summary in Gujarati language will be available at PMU office, and project site office for reference.

123. The PMU will issue notification on the disclosure mechanism on its website ahead of the beginning of the sub-project detailing start and end date of construction works. This will create awareness of the project implementation among the public.

C. Grievance Redress Mechanism (GRC)

124. The affected person(s)/aggrieved party can give their grievance verbally or in written form to the IFI site office. Grievances of affected person will first be brought to the attention of the officer in charge of the site (PMU official deployed at site), who can resolve the issue at the site level. If the matter is not solved within 7 days period by the site in charge, it will be brought to the GRC constituted for the purpose at site. This GRC shall discuss the issue in its monthly meeting and resolve the issues within one month after receiving the grievance. If the matter is not resolved by the GRC at the site level within the stipulated time, it shall be referred to the GRC at the PMU level by the officer in-charge of the site.

125. The GRC at the PMU shall discuss the issue and try to resolve it and inform the IFI site office. If the matter is not resolved by the GRC at the PMU level within one month, the matter will be referred to the state-level project steering committee (SPC), who will resolve the complaint within one month. However, the aggrieved person/party can bring the matter to the Court of Law any time during the process or even without approaching the GRC. The PMU and the IFI site office shall keep records of all grievances received, including contact details of the complainant, date of receiving the complaint, nature of grievance, agreed corrective actions and the date the actions were taken and their final outcome. A complaint register will be maintained at the construction site. The grievance redress process is shown below. The cost for the operation of GRM will be accounted for in project cost as part of PMU operation.

126. Further, person(s)/aggrieved party who are, or may be, adversely affected by the project may submit complaints to ADB's Accountability Mechanism. The accountability mechanism provides an independent forum and process whereby people can voice, and seek a resolution of their problems, as well as report alleged violations of ADB's operational policies and procedures. Before submitting a complaint to the Accountability Mechanism, affected person(s)/aggrieved party should first make a good faith effort to solve their problems by working with the ADB South Asia operations department including the India Resident Mission.

D. Composition and Functions of the Grievance Redress Committee

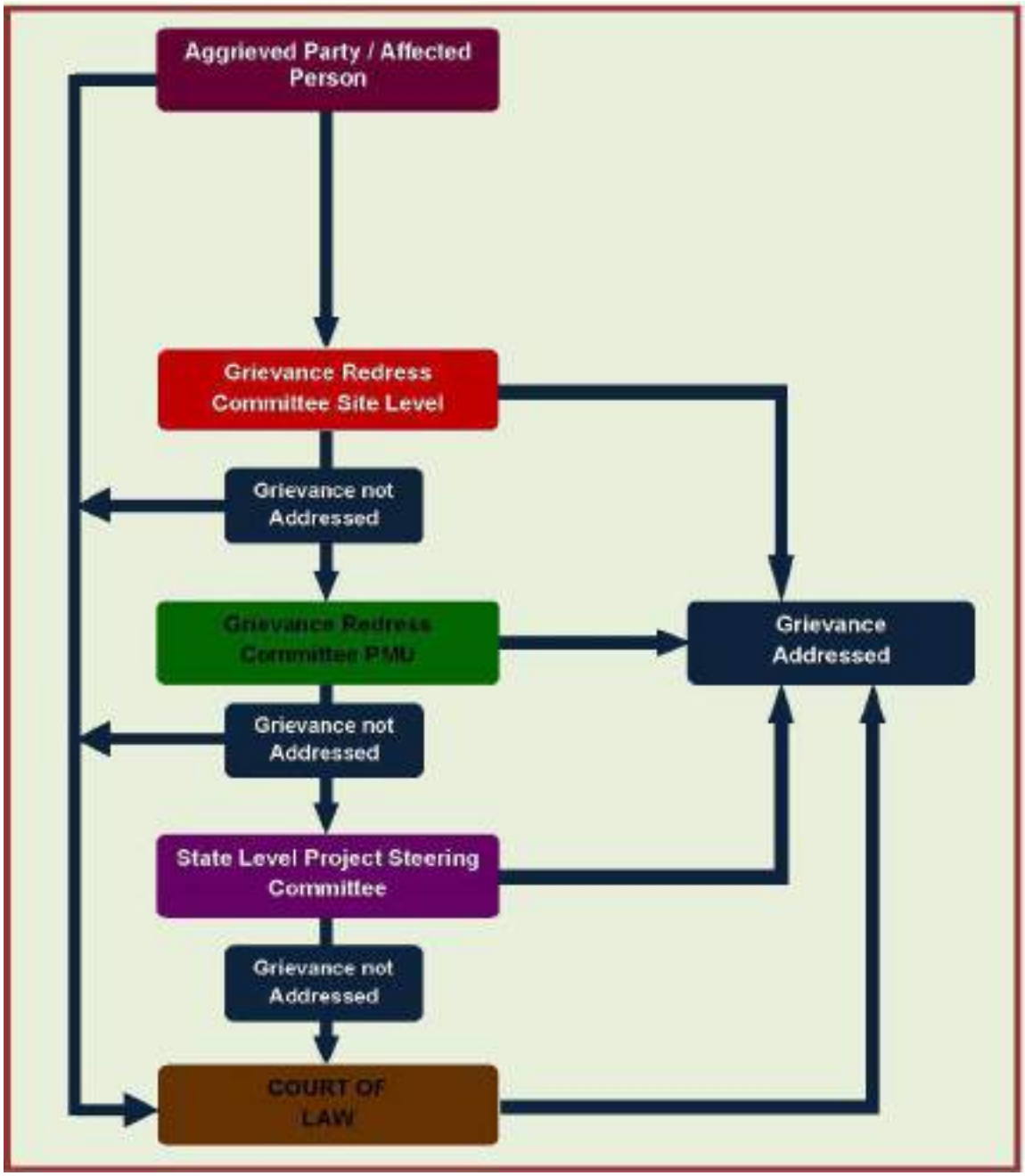
127. **Site-level grievance redress committee (GRC-Site).** This committee will comprise of the PMU civil engineer, the PMU environment specialist, the PMU gender and indigenous peoples specialist, and one local elected representative from Panchayat of Shahpur Village. The GRC-Site will be headed by the project officer of the PMU. It will meet at least once a month. The agenda of the meeting will be circulated to all the members and the affected persons/aggrieved party along with venue, date and time at least a week prior to the meeting. The matters shall remain with the GRC at site level for one month.

128. **Grievance redress committee at the project management unit.** There shall be one GRC in the PMU. The GRC at the PMU will include the Project Director/CEO, IFI project, safeguard specialists (Environmental and Social) and Finance Officer/Manager. The Committee shall be headed by the Project Director/CEO, IFI. This committee shall look into the matters, which are referred to and not resolved by the GRC at site level. If the matter is not resolved by the GRC at PMU level within one month, then the aggrieved person or party can bring the matter to the state level project steering committee (PSC) which is in-charge of the project. The GRC mechanism at the PMU will also refer the compliant to the PSC. However, the aggrieved person/party can bring the matter to the Court of Law any time during the process or even without approaching the GRC. The PMU and site office shall keep records of all grievances received including contact details of complainant, date of receiving the complaint, nature of grievance, agreed corrective actions and the date these were affected and final outcome. For this a complaint register will be maintained at IFI site office. The grievance redress process is shown below. The cost for functioning of GRM will be accounted for in project cost as part of PMU functions.

129. **Approach to grievance redress committee.** Affected person(s)/aggrieved party can approach the GRC for redress of his/her/their grievances through any of the following modes:

- Web-based. A separate corner will be developed at the GIFTCL/IFI website(s) so that the public and the affected person(s) can register their complaints in the online column.
- An IFI project information board will be installed at the site and on the board, contact details (name, phone number and email) of the complaints receiving officer will be available.
- Telephone-based. A telephone number will be available on the website of IFI/GIFTCL and at the construction site so that general public can register their complaint through telephone and mobile phone to the IFI site office and PMU office. One complaint register will also be maintained at the construction site.
- The EA (UD&UHD) will issue an order for the establishment of GRM. It will be functional once the PMC, contractor and QAQC firm are mobilized.
- Construction site. The grievance redress mechanism for the project for safeguards related issues is shown in Figure 13.

Figure 13: Grievance Redress Mechanism (IFI Project)



Notes:

1. Time limit to resolve complaint at GRC-Site is one month.
2. Time limit to resolve complaint at PMU-level Grievance Redress Committee is one month.
3. Time limit to resolve complaint at State-level PMU Steering Committee is one month.

Source: Gujarat International Finance Tec-City Company Limited.

VIII. FINDINGS AND RECOMMENDATIONS

130. The construction and development of International Fintech Institute does not involve any interventions in and around the natural and cultural heritage destinations and have no significant (direct and indirect) environmental impacts. It is expected that the IFI will offer industry-aligned courses and promote start-ups for emergence of new entrepreneurs. This will help them in getting gainful employment locally and internationally.

131. This revised IEE has identified minor likely impacts on water, air and noise during construction and has defined mitigation measures. Minor impacts have also been identified during the operation phase and mitigation measures have also been given in the IEE. Mitigation measures will be implemented and monitored during project implementation. The overall environmental quality of IFI project site and surroundings will not be affected as a result of construction and operation of the IFI.

132. The specific management measures laid down in the IEE will effectively address any adverse environmental impacts due to the project. The effective implementation of the measures proposed will be ensured through capacity building towards environmental management within the PMU, supplemented by the technical expertise of safeguards specialists of the PMU and PMC. Further, the environmental monitoring plan provides adequate opportunities towards course correction to address any residual impacts during boundary wall construction.

IX. CONCLUSIONS

133. Based on the IEE, it is expected that the IFI project has only minor, localized, temporary and reversible environmental impacts. The identified impacts can be easily mitigated through adequate mitigation measures and regular monitoring during the design, construction, and post construction phases of the project. Negative impacts on water, air quality and noise levels during civil works will be appropriately monitored and adequately mitigated. This report has not identified any comprehensive, broad, diverse, or irreversible adverse impacts caused by the IFI project. Based on the findings of the IEE, the classification of the project as Category “B” is confirmed. No further special study or detailed EIA needs to be undertaken to comply with ADB SPS (2009).

ANNEXURE-1: ENVIRONMENTAL CLEARANCE LETTER OF GIFT

S. J. PANDIT, IFS (Retd.)
MEMBER SECRETARY
SEIAA (GUJARAT)

Government of Gujarat

STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY GUJARAT

No. SEIAA/GUJ/EC/8(b)/903 /2021 Date: 19 JUN 2021 BY R.P.A.D Time Limit

Sub: Environment Clearance for the Area Development Project - Gujarat International Finance Tec-city (GIFT-DTA& SEZ) at Ratanpur Village (289, 290, 291, 292, 292/1, 292/4, 292/6, 292/5),Pirozpur village (2, 20, 22, 12, 13, 15, 16,16, 19, 71, 71/P, 72/P, 73, 75, 76, 77), Shahpur village (12/A, 48, 164, 219, 268) & Valad Village (259/P, 328, 329, Gandhinagar, New Survey Number as per GoG Revenue Map 2016: Ratanpur Village (580), Pirozpur Village (179, 189, 316, 190, 188, 265, 264, 262, 323, 317, 318, 319, 186, 187), Shahpur Village (412, 353, 354, 456, 446, 452, 296, 198, 364, 365, 366, 367, 368) and Valad Village (449, 556, 557). District Gandhinagar by Gujarat International Finance Tec-City Company Limited (wholly own Subsidiary of GoG). Township project in Category 8 (b) of Schedule annexed with EIA Notification dated 14/09/2006.

Ref: Your Proposal No. SIA/GJ/MIS/61217/2020.

Dear Sir,

This has reference to your application along with Form-I, Form-I A dated 02/03/2021, seeking Environmental Clearance under Environment Impact Assessment Notification, 2006. The project was scheduled for hearing in the SEAC meeting held on 08/04/2021.

The proposal is for Environmental Clearance for the Area Development Project - Gujarat International Finance Tec-city (GIFT-DTA& SEZ) at Ratanpur Village (289, 290, 291, 292, 292/1, 292/4, 292/6, 292/5),Pirozpur village (2, 20, 22, 12, 13, 15, 16,16, 19, 71, 71/P, 72/P, 73, 75, 76, 77), Shahpur village (12/A, 48, 164, 219, 268) & Valad Village (259/P, 328, 329, Gandhinagar, New Survey Number as per GoG Revenue Map 2016: Ratanpur Village (580), Pirozpur Village (179, 189, 316, 190, 188, 265, 264, 262, 323, 317, 318, 319, 186, 187), Shahpur Village (412, 353, 354, 456, 446, 452, 296, 198, 364, 365, 366, 367, 368) and Valad Village (449, 556, 557). District Gandhinagar by Gujarat International Finance Tec-City Company Limited (wholly own Subsidiary of GoG). This is a proposed building construction project having plot area of 758 acre (30,67,619.65 sq. m.) and the proposed FSI area of the project is 105,46,521.60 sq. m. with proposed built up area of 84,35,375 sq. m. As the built up area>1,50,000 m^2 and plot area is > 50 hectare, it falls in the category 8(b) of the Schedule of EIA Notification, 2006.

The project activity is covered in 8(b) and falls in Category 'B'. Since the proposed project is in item no.8 of the EIA notification, 2006, it does not need Public Consultation as per Para 7(ii) III, Stage (3) (d) – Public Consultation of EIA Notification, 2006.

The SEAC, Gujarat had recommended the project vide their letter dated 11/05/2021 to grant Environmental Clearance to the SEIAA, Gujarat based on the decision taken during SEAC meeting held on 08/04/2021. The proposal was considered by SEIAA, Gujarat in its meeting held on 17/05/2021 at Gandhinagar. After careful consideration, the SEIAA hereby accords Environmental Clearance to above project under the provisions of EIA Notification dated 14th September, 2006 subject to the compliance of the following conditions.

A. PROJECT SPECIFIC CONDITIONS:

1. This Environmental Clearance supersedes the Environmental Clearance granted vide No. SEIAA/GUJ/EC/8(b)/276/2009 dated 03/11/2009.
2. Salient features of the proposed project of M/s Gujarat International Finance Tec-City Company Limited (GIFTCL) shall be as below:

S. No.	Project Particulars	Unit	Project Configuration (DTA + SEZ Area)
City Built Up Area :			
1	Commercial/Residential/Mixed Uses	m^2	49,71,162
2	Public & Semipublic & Amenities	m^2	9,94,130
3	Recreation	m^2	11,10,993
4	Transportation	m^2	5,78,620

SEIAA

5	Utility Infrastructure	m^2	7,80,480
Total Built up Area (BUA)		m^2	84,35,379
City Infrastructure Services :			
6	Water Treatment Plant	MLD	40
7	Sewage Treatment Plant	MLD	36
8	Power Requirement	MWh	370
9	Emergency Power Requirement (DG set)	MW	20
10	District Cooling Station	TR	1,44,000

3. The Environment Clearance is recommended based on the submitted master plan having GIFT DTA & GIFT SEZ Area, consisting of commercial, residential, and institutional buildings etc. based on Development Plan approved by the Urban Development & Urban Housing Department (UD&UHD), GoG. However, the project proponent shall also comply with the provisions of the EIA Notification, 2006, as amended from time to time, for this purpose.
4. All the recommendations, mitigation measures, environmental protection measures and safeguards proposed in the EIA report of the project prepared by M/s. Enkay Enviro Services Pvt. Ltd. and submitted by project proponent and commitments made during presentation before SEAC and proposed in the EIA report shall be strictly adhered to in letter and spirit.
5. All the building in GIFT City shall comply to the provisions given in 'GIFT Development Control Regulations (GDCR). Individual building plans shall be approved by the competent authority as per GIFT Area DCR, prior to commencement of the construction while incorporating the suggestions made by the SEAC during the appraisal process.
6. All the commitments / undertakings given to the SEAC during the appraisal process for the purpose of environmental protection and management shall be strictly adhered to.
7. All the Building in GIFT City shall be designed as Green Building and accord certifications from agency of National/International repute.
8. Any kind of manufacturing activity shall not be allowed in the proposed commercial land use.
9. GIFTCL shall not sell / allot any commercial unit for storage of chemicals, flammable substances, explosives, fire crackers or any other material of hazardous characteristics.
10. Adequate common amenities like drinking water facility, sanitation blocks separate for male & female, fire fighting facility etc. shall be provided in consonance to the concerned bye-laws.
11. GIFTCL shall participate in the traffic study jointly with other Government Agencies to improve the regional connectivity.
12. GIFTCL shall carry out study to reduce heat island effect and impact due to reflection because of glass facade in proposed buildings and implement the recommendation.
13. GIFTCL shall update on Land Transfer status from Government as presented.
14. It shall be the responsibility of the GIFTCL to obtain all the necessary clearances/ approvals from the concerned authorities & to ensure compliances under all other relevant Acts/ Rules/ Regulations/ Guidelines/ Instructions/ Court orders/ Tribunal orders as applicable to the proposed development as per the prescribed time lines. All the Terms & Conditions stipulated in the clearances / approvals shall be strictly adhered to.

A. I CONSTRUCTION PHASE:

A. I.1 WATER:

15. Fresh water requirement during the construction phase shall be 0.7 MLD (0.22MLD for domestic purposes and 0.48 MLD for construction activities) and it shall be met through Narmada main canal (50%) & Treated water from STP (40%) respectively. No ground water shall be tapped during the construction phase.
16. Waste water generation quantity shall not exceed 0.58 MLD. Domestic wastewater shall be collected and treated in STP and it shall be used within construction site for dust suppression & greenbelt etc.
17. Necessary arrangement shall be ensured during excavation of earth material to control fugitive emission.
18. Top soil shall be preserved for its reuse as soil conditioner. Log on top soil generated and its use shall be maintained.
19. Construction waste shall be collected, segregated and disposed off as per C & D waste management rules, 2016.
20. Necessary arrangement to ensure health & wellbeing of construction workers viz. Drinking water & tap water, sanitation facilities, first aid box, free medicines, doctor service, PPEs, mess & welfare facilities shall be provided for workers. All the Building developers shall fulfil Building and Other Construction Worker (BOCW) Act 1996 requirement.
21. Emergency Planning & Response plan considering construction scenario shall be prepared and implemented.

A.2 OPERATION PHASE

A.2.1 WATER

22. Total water requirement during the operation phase shall not exceed 70 MLD, out of which freshwater requirement of 40 MLD shall be met through Narmada main canal (NMC) and the remaining 30 MLD of water requirement shall be met through treated sewage. Reduction in Fresh water consumption through reuse of treated water shall be accounted as proposed. No ground water shall be tapped during the operation phase. Metering of the water shall be done and its records shall be maintained.
23. Effluent from Domestic, Commercial & Institutional establishments (Sewage) including Cooling Tower Blow down and WTP Reject during operation phase shall not exceed 36 MLD which shall be treated in the proposed onsite Sewage Treatment Plants (STPs).
24. GIFTCL shall install and efficiently operate STPs of adequate capacity, comprising of primary, secondary & tertiary treatment facilities including MBBR (Membrane Bioreactor) technology and U.V treatment, for treating the sewage & waste water to be generated during operation phase to achieve the GPCB norms at the final outlet. Treated sewage conforming to GPCB norms shall be utilized within premises for gardening & flushing purpose at the maximum extent possible. Treated waste water shall be reused for cooling tower make up purpose within premises.
25. A proper logbook of STP operation and also showing the quantity of treated sewage & treated waste water utilization within premises & quantity discharged into the drainage line shall be maintained and furnished to the GPCB from time to time.
26. Dual plumbing system with separate tanks and lines shall be provided for utilization of treated sewage for flushing along with other Water conservation measures based on Green rating system.
27. No bore well shall be constructed and existing bore wells, if any, shall be either sealed or converted into the recharge well.
28. Study to be undertaken on Hydro geological profile (water table/subsoil strata) to estimate maximum Rainwater Harvesting potential. Before recharging the run off, pre-treatment must be done to remove suspended matter. Proposed Ground water recharging structure shall be implemented in time bound manner.

A.2.2 AIR

29. D. G. sets proposed as backup power of 26 MW capacity (Existing: 1×2750 KVA, 2×1500 KVA, 2×250 KVA, 1×100 KVA; Proposed: 14×1010 KVA) shall be of enclosed type and confirm to prescribe standards under EPA rules. Necessary acoustic enclosures with adequate stack height shall be provided at diesel generator set to mitigate the impact of noise.
30. The gaseous emissions from the D.G. Sets shall conform to the standards prescribed under EPA Rules as amended from time to time. At no time, the emission levels shall go beyond the stipulated standards.
31. The stack height of the D.G. sets shall be equal to the height needed for the combined capacity of all proposed D.G. sets.
32. The gaseous emission from the Plasma Pyrolysis plant for waste management shall conform to the standards under EPA Rules and amended from time to time.

A.2.3 MUNICIPAL SOLID WASTE:

33. The solid waste generated shall be properly collected and segregated at source. The biodegradable waste shall be converted into useful end product by treating it into the proposed onsite Organic Waste Convertor and the recyclable waste shall be sold to vendors whereas the other garbage shall be disposed off properly as per the provisions made by the GIFT UDA/GIFT NAC.
34. GIFT-City shall install composting plant and plasma pyrolysis plant of adequate capacity to ensure waste management as per the prevailing standards of CPCB/MoEF&CC guidelines.

A.2.4 BIOMEDICAL / HAZARDOUS / E-Waste

35. GIFTCL must strictly comply with the rules and regulations with regards to handling and disposal of Bio-medical waste in accordance with the Bio-Medical Waste Management Rules, 2016, as may be amended from time to time. Authorization from the GPCB must be obtained for collection / treatment / storage / disposal of Bio-medical wastes.
36. Bio-medical waste shall be segregated into different colour coded containers/bags at the point of generation in accordance with Schedule I of the Bio-Medical Waste Management Rules, 2016, prior to its storage, transportation, treatment and disposal. The containers shall be labeled according to Schedule IV of the Bio-Medical Waste Management Rules, 2016. Bio-medical wastes shall not be mixed with other wastes in any case.
37. GIFTCL must strictly comply with the rules and regulations with regards to handling and disposal of hazardous waste in accordance with the Hazardous Waste (Management, Handling and Transboundary) Rules, 2008.

Authorization from the GPCB must be obtained for collection / treatment / storage / disposal of hazardous wastes.

35. STP sludge shall be used as soil conditioner. Left over quantity, if any, shall be disposed off as per the provisions made as per applicable standard.
39. Spent Carbon from activated carbon of STP ion exchange resin shall be sent back for regeneration or disposed off at authorized TSDF site or as directed by GPCB.
40. Discarded Containers /Cartboys and Used/Lubricating Oil shall be sold to the authorized recyclers.
41. The unit shall obtain necessary permission from the Common Bio-medical Waste Treatment Facility (CBMWTF) and TSDF operator for disposal of Bio-Medical Waste and Hazardous solid wastes respectively.
42. GIFTCL shall follow provision of E waste management Rules 2016 and amendment time to time. Necessary arrangements for channelizing E-waste from generation to disposal shall be ensured.

A 2.5 SAFETY AND WELFARE

43. GIFTCL shall ensure installation of Fire fighting facilities in each building like overhead tank and underground as per applicable Gujarat Fire Prevention and Life Safety Regulations/NBC, water tank, fire hydrant, stand by pump for hydrant system, automatic fire hydrant system, fire alarm call point at each floor, one carbon dioxide type extinguisher and one dry chemical powder type extinguisher with ISI mark on each floor, automatic sprinklers system in the basement, stand by fire pump for sprinkle system, jockey pumps, booster pumps, automatic fire detection and alarm system, portable fire extinguishers, gas based fire protection system for electrical panel, fire partition between electric room and service lift, refuge areas etc. as proposed.
44. Fire fighting facilities like Extinguisher, Sprinkler system and Fire Hydrant Systems meeting the NBC & Gujarat Fire Prevention and Life Safety Regulations requirement shall be provided. Pressure of pump shall be 7-7.5 kg/cm2.A lightening arrester will be installed and properly earthed.
45. GIFTCL shall ensure that each building accord obtain fire safety certificate / Fire No-Objection Certificate (NOC) from the concern authority and a periodic fire safety audit as per the prevailing Rules / Gujarat Fire Prevention and Life Safety Measures Act, 2016.
46. All the staircases and lifts shall open out at ground level from the highest point of building (with access from each floor) foremergency evacuation.
47. In basement at least two separate ramps of adequate width and slope shall be provided, located preferably at opposite ends.
48. Provision for adequate air changes per hour in the basement shall be made so as to avoid build up of CO in the area.
49. Car park exhaust system equipped with CO (Carbon Monoxide) sensor shall be provided to ensure operation of exhaust fans as CO concentration levels.
50. Clear peripheral margin space, excluding the width for tree plantation, shall be provided in accordance to the concerned local bye laws for unobstructed & easy movement of vehicles in case of emergency.
51. Design of Conditioned & unconditioned space in building shall be in compliance with with applicable standards of Indoor Air Quality, which shall be monitored., as proposed.
52. Ensure Safety of highest standard during Operation and Maintenance of City utility services viz. Sewage Treatment Plant, Power Distribution Network, District Cooling System etc.
53. Periodic Evacuation drill shall be conducted covering Emergency scenario identified during operation of the city.

A 2.6 PARKING / TRAFFIC CONGESTION

54. GIFTCL shall ensure Minimum parking space as per GIFT DCR at each building & city level, as proposed.
55. No public space including the service road shall be used or blocked for the parking and the trained staff shall be deployed to guide the visitors for parking and helping the senior citizens and physically challenged people to park their vehicles at appropriate parking places (valet parking).
59. Necessary signage including continuous display of status of parking availability at entry, exit and at other appropriate places shall be provided which should have appropriate size of letters and shall be visible from the at least 50 meter distance.

A 2.8 ENERGY CONSERVATION

57. Energy conservation measures viz. maximum use of natural lighting through architectural design, energy efficient motors & pumps, use of LED lighting fixtures and low voltage lighting, use of reflective material at terrace, use of Fly ash bricks, cross ventilation in all areas, provision of solar lighting in open and landscape areas, roof top solar panels and other measures recommended in ECBC 2017 by Bureau of Energy Efficiency (BEE) for Building Project etc. shall be implemented as proposed.
58. The energy audit shall be conducted at regular interval for commercial/institutional buildings, city utilities &

plants etc. and the recommendations of the Audit Report shall be implemented with spirit.

59. GIFTCL shall explore the possibility of providing maximum possible capacity of solar panels based on the roof top area as well as open land area available within premises.

A.2.7 GREEN BELT :

60. Green/Open area of 267 acres (i.e. 37.39 % of the total area) shall be developed as proposed in approved land use plan. The other open spaces shall be suitably landscaped and covered with vegetation of indigenous tree species.

B. GENERAL CONDITIONS :

B1. PRE –CONSTRUCTION AND CONSTRUCTION PHASE:

61. Roads leading to or at construction site must be paved and blacktopped (i.e. – metallic roads).
62. No excavation of soil shall be carried out without adequate dust mitigation measures in place.
63. Grinding and cutting of building materials in open area shall be prohibited.
64. Construction material and waste should be stored only within earmarked area and road side storage of construction material and waste shall be prohibited.
65. Construction and demolition waste processing and disposal site shall be identified and required dust mitigation measures be notified at the site.
66. Dust mitigation measure shall be displayed prominently at the construction site for easy public viewing.
67. Environment Management Cell shall be formed, which shall supervise and monitor the environment related aspects of the project during construction and operational phases in addition to observance of Gujarat Building and other Construction Workers (Regulation of Employment & Conditions of Service) Rules 2003.
68. Prior permission from the competent authority shall be obtained for cutting of the existing trees before site preparation work is commenced.
69. Water demand during construction shall be reduced by use of curing agents, super plasticizers and other best construction practices.
70. Wind – breaker of appropriate height i.e. 1/3rd of the building height and maximum up to 10 meters shall be provided. Individual building within the project site shall also be provided with barricades.
71. Regular water sprinkling shall be done in vulnerable areas for controlling fugitive emission.
72. No uncovered vehicles carrying construction material and waste shall be permitted.
73. No loose soil or sand or construction & demolition waste or any other construction material that cause dust shall be left uncovered. Uniform piling and proper storage of sand to avoid fugitive emissions shall be ensured.
74. Structural design of the project shall strictly adhere to the seismic zone norms for earthquake resistant structures.
75. The planning, designs and construction of all buildings shall be such as to ensure safety from fire.
76. The project proponent shall ensure maximum employment to the local people.
77. All required sanitary and hygienic measures shall be provided before starting the construction activities and to be maintained throughout the construction phase.
78. Provision shall be made for housing of construction labor within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical healthcare, crèches, electricity & ventilation, canteen, rest rooms, safe disposal system for garbage, first aid, medical and emergency facilities etc. to ensure that they do no ruin the existing environmental condition. The housing may be in the form of temporary structures to be removed after completion of the project.
79. Adequate personal protective equipments shall be provided to the construction workers to ensure their safety and the project proponent shall ensure its usage by the labours.
80. First Aid Box shall be made readily available in adequate quantity at all the times.
81. Training shall be given to all workers on construction safety aspects.
82. The project proponent shall strictly comply with the Building and other Construction Workers'(Regulation of Employment & Conditions of Service) Act 1996 and Gujarat rules made there under and their subsequent amendments.
83. The overall noise level in and around the project area shall be kept well within the prescribed standards by providing noise control measures including acoustic insulation, hoods, silencers, enclosures vibration dampers etc. on all sources of noise generation.
84. Ambient noise levels shall conform to residential standards both during day and night. Incremental pollution load on the ambient air and noise quality shall be closely monitored during construction phase.
85. The noise generating equipments, machinery and vehicles shall not be operated during the night hours and shall be maintained properly to avoid generation of high noise due to wear and tear.

86. Use of diesel generator sets during construction phase shall be strictly with acoustic enclosure and shall conform to the EPA Rules for air and noise emission standards.

87. Safe disposal of wastewater and municipal solid wastes generated during the construction phase shall be ensured.

88. All topsoil excavated during construction activity shall be used in horticultural / landscape development within the project site.

89. Construction materials and debris shall be properly stored and handled to avoid negative impacts such as air pollution and public nuisances by blocking the roads and public passages.

90. Construction debris shall be reused in construction of roads, levelling the site etc. Waste packaging material (like used cement bags, waste paper, cardboard packing material), metal scraps etc. shall be sold to recyclers or shall be sent to the nearest municipal solid waste landfill site.

91. Excavated earth to be generated during the construction phase shall be utilized within the premises to the maximum extent possible and balance quantity of excavated earth shall be disposed off with the approval of the competent authority after taking the necessary precautions for general safety and health aspects. Disposal of the excavated earth during construction phase shall not create adverse effect on neighbouring communities.

92. Provisions of Construction & Demolition Waste Management Rules-2016 shall be strictly adhered to.

93. Vehicles hired for bringing construction material at the site shall be in good conditions and conform to applicable air and noise emission standards and shall be operated only during day time and non-peak hours.

94. Project proponent shall ensure use of eco-friendly building materials including fly ash bricks, fly ash paver blocks, Ready Mix Concrete (RMC) and lead free paints in the project.

95. Fly ash shall be used in construction wherever applicable as per provisions of Fly Ash Notification under the E.P. Act, 1986 and its subsequent amendments from time to time.

96. Use of glass shall be minimal and only low emissive glass shall be used in the project to reduce the electricity consumption and load on air conditioning.

B2. OPERATION PHASE AND LIFE TIME:

97. Separate Entries and Exits shall be provided to the project on the approach road.

98. Separate Entry and Exit to the basement shall be provided.

99. Low water consuming devices shall be provided. Fixtures for showers, toilet flushing and drinking shall be of low flow either by use of aerators/ diffusers or pressure reducing devices etc.

100. A water meter shall be installed on rain water harvesting & ground water recharge well system & compliance report of the same shall be submitted to concerned authorities.

101. Used oil shall be sold only to the registered recycler.

102. Provisions of Solid Waste Management Rules-2016 shall be strictly adhered to.

103. Requisite fire fighting facilities as per the requirement of NBC and Gujarat Fire Prevention and Life Safety Measures Act 2013 along with the rules & regulations made there under shall be provided.

104. Underground fire water storage tanks and surface water storage tanks of adequate capacity shall be provided as proposed. Adequate provision shall be made to ensure that water from the Fire Water Tank shall not be used for any other purpose.

105. Dedicated power back up system shall be provided in the case of power failure & emergency of fire water pumps.

106. First Aid Box shall be made readily available in adequate quantity at all the times.

107. Main entry and exit shall be separate and clearly marked in the facility.

108. Necessary emergency lighting system along with emergency power back up system shall be provided. Further necessary auto glow signage in all appropriate places shall be provided to guide the people towards exits and assembly points during emergency.

109. Sufficient peripheral open passage shall be kept in the margin area for free movement of fire tender/ emergency vehicle around the premises.

110. The overall noise level in and around the project area shall be kept well within the prescribed standards by providing noise control measures including acoustic insulation, hoods, silencers, enclosures vibrations dampers etc. on all sources of noise generation including D.G.Sets. The ambient noise levels shall confirm to the standards prescribed under the Environment (Protection) Act and Rules.

111. The area earmarked for the parking shall be used for parking only. No other activity shall be permitted in this area.

112. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site shall be avoided. No public space including the service road shall be used or blocked for the parking.

113. The project proponent shall install energy efficient devices, appliances, motors, and pumps conforming to the Bureau of Energy Efficiency norms.
114. The transformers and motors shall have minimum efficiency of 95%.
115. Only variable frequency motor drives shall be used in project.
116. Application of solar energy shall be incorporated for illumination of common areas, lighting for gardens and street lighting. In addition the provision for solar water heating system shall also be provided.
117. Use of glass shall be minimal to reduce the heat island effect as well as to reduce the electricity consumption.
118. The area earmarked as green area shall be used only for plantation and shall not be altered for any other purpose.
119. Drip irrigation/low volume, low angle sprinkler system shall be used for the lawns and other green area including tree plantation.
120. The project proponent shall inform to SEAC / SEIAA regarding the transfer of management responsibility to the Society / Association to be formed for the proposed project with all the supporting documents. The Society / Association formed for further management of the proposed project shall be responsible for compliance of all the conditions stipulated in the Environmental Clearance order.
121. Environmental Clearance granted for the project on the basis of documents related to land possession submitted shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of the project and mentioned in the EC.
122. All other statutory clearances such as N.A. permission, approvals for storage of diesel from PESO, Fire Department, Airports Authority of India etc., if applicable, shall be obtained by the project proponent from the competent authorities.
123. All the conditions as may be stipulated in the N.A. order, Development permission, Building Use permission, NOC obtained from Fire Department etc. shall be strictly complied with.
124. The project management shall also comply with all the environment protection measures, risk mitigation measures and safeguards proposed by them.
125. All the commitments / undertakings given by the SEAC during the appraisal process for the purpose of environmental protection and management shall be strictly adhered to.
126. The project proponent shall also comply with any additional condition that may be imposed by the SEAC or the SEIAA or any other competent authority for the purpose for the environmental protection and management.
127. All the terms & conditions prescribed in the amendment of EIA Notification – 2006 published by the MoEF&CC vide its Notification No. S.O. 3999(E) dated 8th December, 2016 shall be complied with letter & spirit.
128. The project proponent shall strictly comply with the Gujarat Building and other Construction Workers' (Regulation of Employment & Conditions of Service) Rules 2003 as well as Gujarat Lifts & Escalators Rules as amended from time to time.
129. No further expansion or modifications in the project likely to cause environmental impacts shall be carried out without obtaining prior Environment Clearance from the concerned authority.
130. The above conditions shall be enforced, inter-alia under the provisions of the water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act 1986 and the Hazardous Wastes (Management Handling and Trans boundary) Rules, 2008, Building and Other Construction Workers' (Regulation of Employment & Conditions of Service) Act-1996, The Gujarat Lifts and Escalators Act-2000 along with their amendments and rules.

S1. OTHER

131. GIFTCL shall allocate the separate fund of Rs. 24 Crores as committed before SEAC. The entire activities [Regional Storm water Management, Avenue Plantation in Community, Improving Connectivity of nearby village, Providing Streetlights in nearby village, Balvatika for improving Cognitive development of construction workers children, Gym for nearby villages, Sports activities to promote sports for youth as per State Policy, River Protection] proposed under Corporate Environment Responsibility (CER) shall be part of Environment Management Plan (EMP) as per the MoEF&CC's OM no. F. No. 22-65/2017-IA.III dated 30.09.2020. The said activities shall be completed within 3 years from the commencement of the project. This shall be monitored and the monitoring report shall be submitted to the regional office of MoEF&CC as a part of half-yearly compliance report and to the District Collector. The monitoring report shall be posted on the website of the project proponent.
132. Environmental Monitoring Cell (EMC) cell shall be set up to monitor the proposed mitigation measures. Environmental Air Quality Monitoring, Drinking Water Quality, Ambient Noise Level, Solid waste, Meteorology, Flue gas from DG set and Waste plant shall be monitored as per

133. The project authorities shall earmark adequate funds to implement the conditions stipulated by SEIAA as well as GPCB along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.

134. The project proponent shall adhere to provisions made for Corporate Environment Responsibility "CER" in Office Memorandum dated 01/05/2018 by Ministry of Environment, Forests & Climate Change and its amendments from time to time in a letter and spirit.

135. The applicant shall inform the public that the project has been accorded environmental clearance by the SEIAA and that the copies of the clearance letter are available with the GPCB and may also be seen at the Website of SEIAA/ SEAC/ GPCB. This shall be advertised within seven days from the date of the clearance letter in at least two local newspapers that are widely circulated in the region, one of which shall be in the Gujarati language and the other in English. A copy each of the same shall be forwarded to the concerned Regional Office of the Ministry.

136. It shall be mandatory for the project management to submit half-yearly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard and soft copies to the regulatory authority concerned and shall be uploaded on website of Gujarat Real Estate Regulatory Authority, on 1st June and 1st December of each calendar year.

137. The project authorities shall also adhere to the stipulations made by the Gujarat Pollution Control Board.

138. The project authorities shall inform the GPCB, Regional Office of MoEF&CC and SEIAA about the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.

139. The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not found satisfactory. This environmental clearance is valid for seven years from the date of issue.

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

141. Submission of any false or misleading information or data which is material to screening or scoping or appraisal or decision on the application makes this environment clearance cancelled.

With regards.

Yours sincerely,

(S. J. PANDIT)
Member Secretary

SEIAA

Issued to:

Lovaleen Garg
Vice President
Gujarat International Finance Tec-city Company Limited
EPS Building No. 49A, Block 49,
Gyan Marg, Gandhinagar – 382355.

ANNEXURE-2: CONSENT TO ESTABLISH OBTAINED FOR GIFT

GPCB

GUJARAT POLLUTION CONTROL BOARD
Regional Office : Gandhinagar
"Paryavaran Bhavan (Old Building)"
Sector -10'A', Gandhinagar
Website : http://gpcbxgn.gujarat.gov.in
Email ID : ro-gpcb-gana@gujarat.gov.in
Ph. No. : (079) 232 22096

CONSENT TO ESTABLISH
AFTER ENVIRONMENTAL CLEARNACE

No. GPCB/RO-GNR-714/ID-34006/16856/9305 DATE: 18/09/2021

To,
M/S.GUJARAT INTERNATIONAL FINANCE TEC-CITY LTD,
BLOCK NO. 262- RATANPUR VILLAGE,
BLOCK NO. 22 & 2 FIROZPUR,
TAL & DIST: GANDHINAGAR

Subject: Consent to Establish (After obtaining Environmental Clearance) under Section 25 of the Water Act 1974 and Section 21 of the Air Act 1981.
Ref: (1) Your online Application No. 202158 dated 26/08/2021.
(2) Environment Clearance issued by State Authority vide letter No. SEIAA/GUJ/EC/8(b)/903/2021 Dated 19/06/2021.

Sir,

Without prejudice to the power of this Board under the Water (Prevention and Control of Pollution) Act – 1974, the Air (Prevention and Control of Pollution) Act – 1981 and the Environment (Protection) Act – 1986 and without reducing your responsibilities under the said Acts in any way, this is to inform you that this Board grants Consent to Establish (After obtaining Environmental Clearance) under section 25 of the Water Act 1974 and Section 21 of the Air Act 1981 for manufacturing of products as mentioned in to the Environment Clearance (EC) granted vide letter under reference No. 2 above.

CONSENT TO ESTABLISH IS GRANTED SUBJECT TO THE FOLLOWING CONDITIONS:

1) The Validity period of this CTE shall be Seven years from the issue of this order.
2) Applicant shall strictly comply with all conditions stipulated by Competent Authority in the Order of Environmental Clearance issued vide letter under reference No. 2 above.
3) The applicant shall, however, not without prior consent of the Board bring in to use any other new or altered outlet for the discharge of effluent or gaseous emission or sewage waste from the proposed industrial plant.
4) The applicant is required to make application to this Board for that purpose in the prescribed forms under the provisions of the Water Act 1974, the Air act 1981 and the Environment (Protection) Act 1986.

For and On Behalf of
Gujarat Pollution Control Board

Dvankani
18/09/2021.

(D.C.VANKANI)
Environmental Engineer

Clean Gujarat Green Gujarat

ANNEXURE-3: CONSENT TO OPERATE OBTAINED FOR GIFT

GPCB

GUJARAT POLLUTION CONTROL BOARD
PARYAVARAN BHAVAN
Sector-10-A, Gandhinagar-382 010
Phone : (079) 23226295
Fax : (079) 23232156
Website : www.gpcb.gov.in

BY R.P.A.D.

In exercise of the power conferred under section-25of the Water (Prevention and Control of Pollution) Act-1974, under section-21 of the Air (Prevention and Control of Pollution) Act-1981 and Authorization under rule 3(c) & 5(5) of the Hazardous Waste and other wastes (Management and Trans boundary Movement) Rules'2016 framed under the E (P) Act-1986.This Board is empowered to grant CC&A.

And whereas Board has received consolidated consent application vide No.234867 Dated: 20/10/2021 for the consolidated consent and authorization (CC & A- Renewal) of this Board under the provisions / rules of the aforesaid Acts. Consent & Authorization is hereby granted as under.

CONSENTS AND AUTHORISATION:
(Under the provisions / rules of the aforesaid environmental acts)

INWARD NO 2037

To,
M/s. Gujarat International Finance Tec-City Ltd.,
Block No. 262-Ratanpur Vill., Block No. 22 & 2 Firozpur,
Gandhinagar- 382355,
Tal: & Dist: Gandhinagar.

1. Consent Order No: AWH-116240, Date of Issue: - 14/12/2021.

1.1 The consent shall be valid up to 03/02/2027 under Water Act– 1974 for the use of outlet for the discharge of treated effluent, under the Air Act– 1981 for air emission Authorization under Environment (Protection) Act, 1986 for hazardous waste management and to operate industrial plant for manufacture of the following products:

Sr. No.	Type of construction	Area of the Development
1	Building Construction (BUA)	9,29,030 m^2

1.2 Applicant shall comply with the all the conditions of Environment Clearance (EC) issued by State Level Environment Impact Assessment Authority, Gujarat under the provisions of the Environment Impact Assessment Notification dated 14/09/2006 vide order no. SEIAA/GUJ/EC/8(b)/276/2009 dated 03/11/2009 and also SEIAA/GUJ/EC/8(b)/903/2021 dated 19/06/2021 for construction of future development. In no case any other activity which attracts prior EC shall be carried out.

1.3 Applicant shall inform regarding completion of project and shall obtain CCA amendment for the remaining part.

1.4 Unit shall submit MoU and copy of CCA of authorized cement facility for co-processing of Spent Carbon.

1.5 Unit shall comply with the guidelines/standards/conditions issued by CPCB regarding disposal of Municipal solid waste/plastic waste through Plasma Pyrolysis System.

1.5 No ground water shall be abstracted from bore well without permission from Central Ground Water Authority.

1.6 Applicant shall not start any construction activities or project related activity without getting Environment Clearance Certificate from the Ministry of Environment, Forests& Climate Change, New Delhi/State Level Environment Impact Assessment Authority, Gujarat under Environment Impact Assessment Notification dated 14/09/2006.

1.7 In no case any type of hazardous waste shall be procured for reuse/recycling or shall be reused/recycled/ utilized as raw material or for product manufacturing as raw material without prior permission of the Board under the Rule-9 of the Hazardous Waste and Other wastes (Management and Trans boundary Movement) Rules'2016.). (If applicable)

1.8 Management of Solid Waste generated from industrial activities shall be as per Solid Waste Management Rules-2016 (solid waste as defined in Rule-3 (46) and has to comply with the guidelines published time to time by the Central Pollution Control Board, New Delhi. (if applicable).

1.9 Applicant shall comply with the provisions of the Plastic Waste Management Rules'2016 and has to comply with the guidelines published time to time by the Central Pollution Control Board, New Delhi. (if applicable).

1.10 Applicant shall comply with the provisions of the E-Waste Management Rules'2016 and has to comply with the guidelines published time to time by the Central Pollution Control Board, New Delhi. (if applicable).

1.11 Applicant shall comply with the provisions of the Construction and Demolition Waste Management Rules-2016 and has to comply with the guidelines published time to time by the Central Pollution Control Board, New Delhi. (If applicable).

2. CONDITIONS UNDER WATER (PREVENTION AND CONTROL OF POLLUTION) ACT-1974:

2.1 The water consumption shall not exceed 4.99 MLD (Fresh water:3 MLD and Recyled water: 1.99 MLD)

2.2 There shall be no generation of the industrial effluent from the manufacturing process and other ancillary industrial operations.

2.3 The total quantity the domestic wastewater (sewage) shall not exceed 1.74 MLD

2.4 Sewage shall be disposed off in to STP and treated sewage shall be used for plantation & gardening purpose.

2.5 Sewage shall be treated separately to conform to the following standards and shall be utilized for plantation/gardening within factory premises. (Standards derived from Hon'ble NGT order dated 30/04/02019 Original Application No. 1069/2018).

Parameter	Permissible Limit
pH	5.5 -9.0
BOD (5 days at 20° C)	20 mg/l
Total Suspended Solids	30 mg/l
Chemical Oxygen Demand	100 mg/l

GPCB

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Nitrogen-Total	15 mg/l
Fecal Coliform	Not less than 230 and more than 1000

2.4 The applicant shall provide flow meter at inlet of STP, outlet of STP and reuse line and maintain records of same.

3. CONDITIONS UNDERAIR (PREVENTION AND CONTROL OF POLLUTION) ACT-1981:

3.1 There shall be no fuel used; hence no flue gas emission.

3.2 The process gas emission through stack attached to following utilities shall conform to the following standards:

Sr. No	Stack Attached To	Stack Height	Air Pollution Control System	Parameter	Permissible Limit
1	Plasma Pyrolysis System (Capacity 150 Kg/Day)	30 meter	Venture Scrubber, Mist Eliminator and Bag filter	Particulate Matter SO_2 NO_x HC (Hydro carbon)	150 mg/NM^3 40 mg/NM^3 25 mg/NM^3 45 mg/NM^3

3.4 There shall be no odorous gaseous emission causing odour nuisance or fugitive emission. Adequate measures shall be taken thereof.

3.5 Stack monitoring facilities like port hole, platform/ladder etc., shall be provided with stacks/vents Chimney in order to facilitate sampling of gases being emitted into the atmosphere.

3.6 Applicant shall comply with the National Ambient Air Quality Standards notified by Central Pollution Control Board, New Delhi time to time under the provision of the Environment (Protection) Act-1986 for all the parameters. The concentration of all parameters in the ambient air within the premises of the industry and a distance of 10 meters from the source (other than the stack/vent) shall not exceed than the permissible limit provided in the Annexure-II.

3.7 The applicant shall provide portholes, ladder, platform etc at chimney(s) for monitoring the air emissions and the same shall be open for inspection to/and for use of Board's staff. The chimney(s) vents attached to various sources of emission shall be designed by numbers such as S-1, S-2, etc. and these shall be painted/ displayed to facilitate identification.

3.8 The Industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standards in respect of noise to less than 75 dB(A) during day time and 70 dB(A) during night time. Daytime is reckoned in between 6 a.m. and 10 p.m. and nighttime is reckoned between 10 p.m. and 6 a.m.

3.9 The applicant shall install & operate air pollution control equipment very efficiently and continuously so that the gaseous emission always conforms to the standards specified in conditions above.

4. GENERAL CONDITIONS: -

4.1 Any change in personnel, equipment or working conditions as mentioned in the consents form/order should immediately be intimated to this Board.

4.2 Whenever due to accident or other unforeseen act or ever, such emissions occur or is apprehended to occur in excess of standards laid down such information shall be forthwith reported to Board, concerned Police Station, Office of Directorate of Health Service, Department of Explosives, Inspectorate of Factories and local body. In case of failure of pollution control equipments, the production process connected to it shall be stopped. Remedial actions/measures shall be implemented immediately to bring entire situation normal.

4.3 In order to enable the board to perform its functions of ascertaining the standards of effluent laid down by it for the discharge of the effluent under the conditions of this order are complied with by the company while causing discharge of effluent, the applicant shall have to submit every month the analysis report of the samples of effluent got collected and analyzed by one of the laboratories recognized by the state Board.

4.4 The Environmental audit shall be carried out yearly and the environmental statements pertaining to the previous year shall be submitting to this State Board latest by 30th September every year.

4.5 The Board reserves the right to review and/or revoke the consent and/or make variations in the conditions, which the Board deems, fit in accordance with Section 27 of the Act.

4.6 In case of change of ownership/management the name and address of the new owners/partners/directors/proprietor should immediately be intimated to the Board.

5. AUTHORISATION UNDER HAZARDOUS & OTHER WASTES (MANAGEMENT & HANDLING & TRANS BOUNDRY MOVEMENT) RULES-2016:

FORM FOR GRANT OR RENEWAL OF AUTHORISATION TO THE OCCUPIERS, RECYCLERS, REPROCESSORS, REUSERS, USER AND OPERATORS OF DISPOSAL FACILITIES

1. Number of authorization AWH-116240, Date of Issue: - 14/12/2021.
2. Reference of application no 204867 and Date: 20/10/2021,
3. Occupier/ Operator of M/s. Gujarat International Finance Tec-City Ltd. situated at Block No. 262-Ratanpur Vill., Block No. 22 & 2 Firozpur, Gandhinagar- 382355, Tal: & Dist: Gandhinagar is hereby granted an authorization based on the signed inspection report for generation, collection, storage, transport, disposal facilities as under:

Sr. No	Type of Hazardous Waste	Category as per the Schedules	Quantity	Authorized mode
1	Used Oil or Spent oil	5.1/ Schedule-I	1.8 MT/Year	Collection, Storage, Transportation, Disposal by selling to Registered/ authorized Re-refiners.

GPCB

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2	Spent Carbon	35.2/ Schedule-I	06 MT/Year	Collection, Storage, transportation and disposal by sell out to authorized cement facility for co-processing or disposal at authorised CHWIF.

4. The authorization shall be valid for a period of 03/02/2027.
5. The authorization is subject to the following general and specific conditions.

A. GENERAL CONDITIONS OF AUTHORISATION:

1. The authorized person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.
2. The authorization or its renewal shall be produced for inspection at the request of an officer authorized by the State Pollution Control Board.
3. The person authorized shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorization.
4. Any unauthorized change in personnel, equipment or working conditions as mentioned in the application by the person authorized shall constitute a breach of his authorization.
5. The person authorized shall implement Emergency Response Procedure (ERP) for which this authorization is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time;
6. The person authorized shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty"
7. It is the duty of the authorized person to take prior permission of the State Pollution Control Board to close down the facility.
8. The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation.
9. The record of consumption and fate of the imported hazardous and other wastes shall be maintained.
10. The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilization of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorization.
11. The importer or exporter shall bear the cost of import or export and mitigation of damages if any.
12. An application for the renewal of an authorization shall be made as laid down under these Rules.

13. Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.
14. Annual return shall be filed by June 30th for the period ensuring 31st March of the year.

B. Specific conditions:

1. The waste generator shall be totally responsible for (i.e. collection, storage, encapsulation, incineration, treatment, transportation and ultimate disposal) of the wastes generated.
2. Records of waste generation, its management and annual return shall be submitted to Gujarat Pollution Control Board in Form – 4 by 30th day of June of every year for the preceding period April to March.
3. In case of any accident, details of the same shall be submitted in Form –11 to Gujarat Pollution Control Board.
4. As per "Public Liability Insurance Act - 91 "company shall get Insurance Policy, if applicable.
5. Empty drums and containers of toxic and hazards material shall be treated as per Standard Operating Procedure published by the Central Pollution Control Board, New Delhi. Records of the same shall be maintained and forwarded to Gujarat Pollution Control Board regularly.
6. Unit shall take all concrete measures to show tangible results in waste generation, reduction, avoidance, reuse and recycle. Action taken in this regards shall be submitted within three months and also along with Form-4.
7. Industry shall have to display the relevant information with regard to hazardous waste as indicated in the Courts Order in W.P. No.657 of 1995 dated 14th October-2016.
8. Applicant shall obtain membership of authorized operational (active) TSDF/ CHWIF or authorized hazardous waste treatment and disposal facility (as applicable to the nature of wastes) within a period of 90 days without fail. In case of closure of existing facility, a copy of the membership of active facility shall be submitted to the Board seeking amendment in the authorization.

For and on behalf of
Gujarat Pollution Control Board

Dipali Tank
10/01/22

(Dipali Tank)
Environment Engineer

NO:GPCB/CCA-GNR-573/ID-34006/620623 /Date: 10/01/2022

Issued to:-
M/s. Gujarat International Finance Tec-City Ltd.,
Block No. 262-Ratanpur Vill., Block No. 22 & 2 Firozpur,
Gandhinagar- 382355,
Tal: & Dist: Gandhinagar.

CCA GENERAL CONDITIONS - ANNEXURE-I

1. In case of any change either in products, its capacity or manufacturing process, the applicant shall have to obtain prior permission of this Board. The applicant shall not commence the production until consent under Water (Prevention and Control of Pollution) Act-1974, Air (Prevention and Control of Pollution) Act-1981 and authorization under the Hazardous Waste (Management ,Handling & T.M.) Rules-2008 is obtained.
2. If the products/process falls in SCHEDULE-I or II of the Environmental Audit Scheme, as specified in the order dated 13/3/97 of Hon. High Court in MCA NO.326/97 in SCA No.770/95, the applicant shall also abide by the said scheme.
3. The applicant shall have to obtain P.L.I. Policy as per P.L.I. Act, 1991 and submit the copy of the same to the G.P.C.B.
4. The unit shall have and operate all the requisite equipments/facilities for prevention and control of efficiently all its effluent treatment plant/air pollution control equipments/ facilities for management and handling of hazardous wastes. Whenever the effluent treatment plant/air pollution control equipments/ facilities for hazardous waste or any part thereof are fully of partly non-operational for any reason whatsoever (whether for maintenance/repairs/electricity failure or otherwise) unit shall closedown its manufacturing/ processing activities and shall not restart it unless and until all its the effluent treatment plants/air pollution protection and control equipments and facilities including stack monitoring/ facilities for hazardous waste management and handling are fully operational.
5. The unit shall have and use only one outlet for the discharge of its effluent and no effluent shall be discharged without requisite treatment and without meeting with the GPCB norms. Such outlet shall be near the front gate/entrance of the unit. The unit shall not keep any bypass line or system, or loose or flexible pipe for discharging effluent outside or even for transporting treated or untreated effluent within the factory premises, within effluent treatment plants or in the compound of the unit.
6. The unit shall, within one week from the date of issue of this order,
   - 6.1. Put up at the entrance the electricity consumer number and the name of the electricity consumers as on the record of the GEB/AEC.
   - 6.2. Make adequate lighting arrangements all around the Effluent Treatment Plants/ Air Pollution Control measures/ incinerator / facilities for hazardous management and handling also above the Boards mentioned in the above clause.
7. The unit shall maintain the records of production and consumption of electricity and water for each day during the period of production. The unit shall maintain separate figures for consumption of electricity for running the Air pollution control measures / incineration system by having a separate meter/sub- meter for each Air Pollution Control measures. The number of units consumed by operating the diesel generating sets, if any, shall also be maintained. In case of plants involving 'Bio-mass'

treatment, for each addition of bio-mass time and quantity, should be recorded. The uptake rate of Oxygen of the bio-mass in the aeration basin and other parameters of biological system should be recorded, every day.

8. When electricity supply or water supply is disconnected in future on account of non-compliance with the GPCB norms or on account of the closure order, which may be passed by the court or by the Govt., /GPCB under any statutory provisions relating to environmental protection and prevention and control of pollution.

   8.1. The unit shall not use any diesel generating set or any other alternative source of energy or water tankers from outside for continuing the production activities.

9. "Flow Meters" should be installed at inlet and outlet of Effluent Treatment Plant (ETP thereafter).

10. All the chemicals and nutrients, which are required to be added/dosed any where in the ETP, should be so added by using "Metering Pumps" only.

11. The printed log-books shall be maintained and get them certified for:-

   12.1 Energy/Fuel Consumption/Raw material consumption and quantity of products manufactured.

   12.2 Waste water/gaseous/ hazardous waste flow at inlet & outlet of E.T.P. & air pollution control measures/ incinerator.

   12.3 Quantity of sludge generated/ treated/ stored/ reused/ disposed off separately for each type of hazardous waste.

   12.4 Laboratory analysis/reports for each of the specified parameters of liquid effluents, gaseous discharge and hazardous waste sample.

12. Low NOx burners may be provided to avoid excessive formulation of NOx. Only LSHS will be used as fuel during the critical months to ensure that SO2 levels in the ambient air is within the norm specified.

13. A copy of approved On-site Emergency Plan as required under the Rules 13 and 14 of the Handling, Manufacture, Storage and Import of the Hazardous Chemicals Rules, 1989 should be submitted to the Board.

14. The funds earmarked for the Environmental protection measures should not be diverted for any other purpose and year wise expenditure should be reported to this Board and to the Government.

15. Storm water shall not be mixed with the industrial effluent. Disposal system for storm water shall be provided separately.

16. Good house keeping shall be maintained within the factory and industrial premises. All pipes, vents, joints valves and drains shall be leak proof. They should be checked periodically and arrangements thereof shall be indicated in the On-site Emergency Plan. Floor washing shall be admitted in to the effluent collection system for subsequent treatment and disposal.

17. The directives issued by the Board from time to time in view of direction issued by the Honorable High Court of Gujarat in the matter of S.C.A.770/95 shall have to be complied with.

18. The applicant shall make an application for renewal of the consent at least 60 days before the date of expiry of the consent.

PENALTY PROVISIONS:

If the applicant fails to comply with the conditions and other directives issued by this Board as laid down in this order, the applicant is liable for the action under section 5 of the E(P) Act and also prosecution under Section 43 & 44 and other penal provisions of the Water Act and under section 37, 38, 39 and other penal provisions of the Air Act: & under section 15 of the E(P) Act and shall on conviction, be liable for punishment and imprisonment as provided in the said Acts.

NOTE:

The Board reserves the right to review and/or revoke the consent/ authorization and/or make variations in the conditions that the Board deems fit in accordance with provisions of the Rules/Acts.

General Conditions: (for Hazardous Waste generating units)

1. The waste generator shall be totally responsible for (i.e. collection, storage, encapsulation, incineration, treatment, transportation and ultimate disposal) of the wastes generated.
2. Records of waste generation, its management and annual return shall be submitted to Gujarat Pollution Control Board in Form – 4 by 31st January of every year.
3. In case of any accident, details of the same shall be submitted in Form - 5 to Gujarat Pollution Control Board.
4. As per " Public Liability Insurance Act - 91 " company shall get Insurance Policy, if applicable.
5. Empty drums and containers of toxic and hazards material shall be treated as per guideline published for "Management & Handling of discarded containers". Records of the same shall be maintained and forwarded to Gujarat Pollution Control Board regularly.
6. In no case any kind of hazardous waste shall be imported without prior approval of appropriate authority.
7. In case of transport of hazardous wastes to a facility for (i.e. treatment, storage and disposal) existing in a State other than the State where hazardous wastes are generated, the occupier shall obtain 'No Objection Certificate' from the State Pollution Control Board or Committee of the concerned State or Union territory Administration where the facility exists.
8. Unit shall take all concrete measures to show tangible results in waste generation, reduction, avoidance, reuse and recycle. Actions taken in this regards shall be submitted within three months and also along with Form-4.

☐ Conditions for Collection and Storage facilities:

1. You shall keep complete records of the types, quantities and characteristics of hazardous waste and its management from collection to ultimate disposal.
2. Storage site shall be prepared & maintained as follows: -
    a. Storage site shall have sufficient capacity for storage of solid Hazardous waste with impervious lining having four-side adequate boundary protection.
    b. A leachate collection & drainage line at all storage sites shall be provided and connected to the inlet of Effluent Treatment Plant for treatment.
    c. Additional precautions shall be taken to prevent surface runoff through waste body during monsoon.

d. Unit shall explore the possibilities of waste minimization, avoidance, reuse, recycling etc. and submit the complete plan for the approval of GPCB.

3. Waste after required treatment shall be stored with due care that in no case any waste shall be released from this site into Environment causing surface water or under ground water or soil pollution.
4. In no case waste shall be disposed off on land, within or outside factory premises, sold out to traders/dealers or transferred, without prior approval of the Board.
5. At the storage site, "Hazardous Waste Storage Site"& "Danger" signboards shall be provided with all safety devices.
6. Hazardous waste shall be segregated at source from non-hazardous waste.
7. Each type of waste shall be stored in a separate storage cell. In no case more than one waste shall be stored in one cell.
8. Post storage monitoring shall be regularly carried out and report of the same shall be submitted to Gujarat Pollution Control Board.
9. Hazardous Waste shall be stored on site for a maximum period of 90 days & a maximum quantity of 10 MT or a truckload which ever is less. For storage of Hazardous waste more than 90 days/or more than 10 MT prior permission shall be obtained from Gujarat Pollution Control Board, Gandhinagar.
10. For 'Small Generator"(i.e. less than 1000 kg. In a month) Hazardous Waste shall be stored on site for a maximum period of one year and at the end of which it should be disposed of.
11. Preparation of containers it's total No. Map of storage site nearby Activities etc. shall be maintained and submitted to Gujarat Pollution Control Board.
12. Environment Impact Analysis and/or Risk assessment report shall be prepared and reviewed time-to-time and submitted to Gujarat Pollution Control Board, Gandhinagar.
13. Emergency plan shall be prepared for storage site of Hazardous Waste and submitted to Gujarat Pollution Control Board, Gandhinagar.
14. The occupier shall prepare six copies of the manifests comprising of color codes indicated in the rules and follow up the movement of manifests as per the rules.
15. The occupier shall provide the transporter with relevant information in Form 10, regarding the hazardous nature of the wastes and measures to be taken in case of an emergency
16. The generator shall offer his Hazardous waste to the authorized transporter.

☐ Conditions for Transportation facility:

1. For transportation of waste the generator, occupier or operator of a facility shall ensure that the hazardous wastes are packed, based on the composition in a manner suitable for handling, storage and transport.
2. The labeling and packaging shall be easily visible and be able to withstand physical conditions and climate factors.
3. Packaging, Labeling, marking on containers and transport of the Hazardous waste shall be in accordance with the provisions of the rules made by the Central Government under the Motor Vehicles Act, 1988 and other guidelines issued from time to time
4. All hazardous waste containers shall be provided with a general label as given in Form- 8 as per Amended rules.
5. The occupier shall prepare six copies of the manifests in form 9 comprising of color codes indicated in the rules and follow up the movement of manifests as per the rules. No transporter shall accept hazardous wastes from an occupier for transport unless it is accompanied by copy 2 to 5 of the manifests.
6. The transporter shall return copy number 2 of the manifest signed with date to the occupier as token of receipt of the other four copies of the manifest and retain the remaining four copies to be handled over to respective agencies in specified in the rules.
7. The transporter shall be given clear instruction in Form-10
8. Each container shall be inspected at least once in a week for any leakages or spillage problem. Due care shall be taken during transportation to avoid leakages or spillage
9. The transporter shall be responsible for taking appropriate steps to clean up spillage, which may occur during transit as specified in TREMCARD
10. Transporter and person handling Hazardous waste shall be trained and drivers shall be educated - trained properly.
11. Transporter shall be given TREMCARD. A copy of TREMCARD shall be forwarded before operation carried out to Gujarat Pollution Control Board, Gandhinagar.
12. Transporter shall be given all safety devices like goggles, gloves, mask, fire extinguisher, gumboots etc.
13. Vehicles, which are proposed to be used for transportation, shall be registered under Motor Vehicle Act.
14. Emergency Plan shall be prepared for transportation activity.
15. Source of waste generation and final destination of disposal place shall be informed to Gujarat Pollution Control Board, Regional Office in that Area.

16. Transporter shall dispose Hazardous waste only at authorised disposal facility.
17. A contingency plan shall be prepared and made known to the transporter for emergency action.

☐ Conditions for Disposal facility (Disposal at Common TSDF):

1. The hazardous waste shall be disposed of at notified and authorized secured disposal facility.
2. If the authorization of the operator of the disposal facility is withdrawn or cancelled by the Board, authorization issued to you for transportation of hazardous Waste for disposal shall be automatically treated as cancelled without further reference to you.
3. The generator/occupier or operator of facility or transporter shall prepare a manifest as per the rules and shall forward copy to each other and also to Regional Office of Gujarat Pollution Control Board in such a way that one can assure that Hazardous waste is properly transported and disposed.

☐ Disposal by selling

1. The hazardous waste shall be sold out to authorised actual reuser only.
2. If the authorisation of the reuser is withdrawn or cancelled by the Board, authorisation issued to you for transportation of Hazardous Waste for selling/ disposal shall be automatically treated as cancelled without further reference to you.
3. No owner or occupier generating non-ferrous metal waste specified in Schedule 4 or generating used oil or waste oil of ten tons or more per annum shall sell or auction such non-ferrous metal wastes, used oil or waste oil except to a registered re-refiner or recycler, as the case may be, who undertakes to re-refine of recycle the waste within the period of validity of his certificate of registration.
4. Any waste oil which does not meet the specifications laid down in Schedule 6 shall not be auctioned or sold but shall be disposed of in hazardous wastes incinerator installed with air pollution control devices and meeting emission standards.
5. The persons generating waste or auctioneers shall ensure that at the time of auction or sale, the period of validity of the certificate of registration of the registered re-refiner or recycler is sufficient to reprocess the quantity of wastes being sold or auctioned to him.

Annexure-II

NATIONAL AMBIENT AIR QUALITY STANDARDS
CENTRAL POLLUTION CONTROL BOARD
NOTIFICATION

New Delhi, the 18th November, 2009

No. B-29016/20/90/PCI-L.—In exercise of the powers conferred by Sub-section (2) (h) of section 16 of the Air (Prevention and Control of Pollution) Act, 1981 (Act No.14 of 1981), and in supersession of the Notification No(s). S.O. 384(E), dated 11th April, 1994 and S.O. 935(E), dated 14th October, 1998, the Central Pollution Control Board hereby notify the National Ambient Air Quality Standards with immediate effect, namely:-

NATIONAL AMBIENT AIR QUALITY STANDARDS

S. No.	Pollutant	Time Weighted Average	Concentration in Ambient Air		Methods of Measurement
			Industrial, Residential, Rural and Other Area	Ecologically Sensitive Area (notified by Central Government)	
(1)	(2)	(3)	(4)	(5)	(6)
1	Sulphur Dioxide (SO_2), $\mu g/m^3$	Annual*	50	20	- Improved West and Gaeke -Ultraviolet fluorescence
		24 hours**	80	80	
2	Nitrogen Dioxide (NO_2), $\mu g/m^3$	Annual*	40	30	- Modified Jacob & Hochheiser (Na-Arsenite) - Chemiluminescence
		24 hours**	80	80	
3	Particulate Matter (size less than 10µm) or PM_{10} $\mu g/m^3$	Annual*	60	60	- Gravimetric - TOEM - Beta attenuation
		24 hours**	100	100	
4	Particulate Matter (size less than 2.5µm) or $PM_{2.5}$ $\mu g/m^3$	Annual*	40	40	- Gravimetric - TOEM - Beta attenuation
		24 hours**	60	60	
5	Ozone (O_3) $\mu g/m^3$	8 hours**	100	100	- UV photometric - Chemiluminescence - Chemical Method
		1 hour**	180	180	
6	Lead (Pb) $\mu g/m^3$	Annual*	0.50	0.50	- AAS/ICP method after sampling on EPM 2000 or equivalent filter paper - ED-XRF using Teflon filter
		24 hours**	1.0	1.0	
7	Carbon Monoxide (CO) mg/m^3	8 hours**	02	02	- Non Dispersive Infra Red (NDIR) spectroscopy
		1 hour**	04	04	
8	Ammonia (NH_3) $\mu g/m^3$	Annual*	100	100	-Chemiluminescence -Indophenol blue method
		24 hours**	400	400	

(1)	(2)	(3)	(4)	(5)	(6)
9	Benzene (C_6H_6) $\mu g/m^3$	Annual*	05	05	- Gas chromatography based continuous analyzer - Adsorption and Desorption followed by GC analysis
10	Benzo(a)Pyrene (BaP) - particulate phase only, ng/m^3	Annual*	01	01	- Solvent extraction followed by HPLC/GC analysis
11	Arsenic (As), ng/m^3	Annual*	06	06	- AAS /ICP method after sampling on EPM 2000 or equivalent filter paper
12	Nickel (Ni), ng/m^3	Annual*,	20	20	- AAS /ICP method after sampling on EPM 2000 or equivalent filter paper

* Annual arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.

** 24 hourly or 08 hourly or 01 hourly monitored values, as applicable, shall be complied with 98% of the time in a year. 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.

Note. — Whenever and wherever monitoring results on two consecutive days of monitoring exceed the limits specified above for the respective category, it shall be considered adequate reason to institute regular or continuous monitoring and further investigation.

SANT PRASAD GAUTAM, Chairman
[ADVT-III/4/134/09/Engy.]

Note: The notifications on National Ambient Air Quality Standards were published by the Central Pollution Control Board in the Gazette of India, Extraordinary vide notification No(s). S.O. 384(E), dated 11th April, 1994 and S.O. 935(E), dated 14th October, 1998.

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and Published by the Controller of Publications, Delhi-110054.

ANNEXURE-4: RAPID ENVIRONMENTAL ASSESSMENT (REA) CHECKLIST

Instructions:
(i) The project team completes this checklist to support the environmental classification of a project.
(ii) This checklist focuses on environmental issues and concerns. To ensure that social dimensions are adequately considered, refer also to ADB's (a) checklists on involuntary resettlement and Indigenous Peoples; (b) poverty reduction handbook; (c) staff guide to consultation and participation; and (d) gender checklists.
(iii) Answer the questions assuming the "without mitigation" case. The purpose is to identify potential impacts. Use the "remarks" section to discuss any anticipated mitigation measures

Country/Project Title: IND: Promoting Research and Innovation through Development of Fintech Institute at GIFT

Sector Division: SAPF

Screening Questions	Yes	No	Remarks
A. Project Siting Is the project area adjacent to or within any of the following areas?			The project involves development of International Fintech Institute at GIFT in Gandhinagar, Gujarat (India) to promote research and innovation for affordable and tailor - made financial services. The project comprises of establishment of an International Fintech Institute. The approximate built- up area of International Fintech Institute is 72,000 m^2.
▪ Underground utilities		√	There are no underground utilities at the plots proposed for development of International Fintech Institute. The utilities at GIFT are centralized and distribution is through underground ducts /pipes laid along the internal road network.
▪ Cultural heritage site		√	There are no cultural heritage sites either in GIFT boundary or adjacent to it. The nearest archeologically protected monument is Adalaj Vav (Step Well) at a distance of 9.8 km from project sites.
▪ Protected Area		√	No Protected area within 15 km distance from the proposed site of IFI.
▪ Wetland		√	No wetland within 15 km distance from the proposed sites of the IFI.
▪ Mangrove		√	Since the IFI site is not close to coast or creek so there is no question of mangroves close to the project sites.
▪ Estuarine		√	The GIFT where IFI is planned is not close to sea, so not close to any estuary.

Screening Questions	Yes	No	Remarks
▪ Buffer zone of protected area		√	No Protected area/ Buffer zone within 15 km distance from the IFI site.
▪ Special area for protecting biodiversity		√	No Protected area within 15 km distance from the planned site of IFI
▪ Bay		√	The GIFT is not close to coast, so this is not applicable.
B. Potential Environmental Impacts Will the Project cause…			
▪ Encroachment on historical/cultural areas?		√	The IFI site is not close to any historical /cultural areas but provisions for 'Chance Find' will be provided in the EMP.
▪ Encroachment on precious ecology (e.g. sensitive or protected areas)?		√	There is no protected area within 15 km distance from the project site. The project components are well within the boundary limits of gated GIFT for which all regulatory permissions have been obtained.
▪ Impacts on the sustainability of associated sanitation and solid waste disposal systems?	√		The sanitation facilities will be self-sustained (connection of sewage network and treatment facilities of GIFT) and solid waste collection and disposal will be integrated with the GIFT City disposal facilities.
▪ Dislocation or involuntary resettlement of people?		√	The IFI plot is well within the GIFT boundary and under the ownership and possession of Gujarat International Financial-Tech City Company Ltd. (GIFTCL), a Government of Gujarat owned company, so no Involuntary Resettlement issues.
▪ Disproportionate impacts on the poor, women and children, Indigenous Peoples or other vulnerable groups?	√		No such impacts anticipated as IFI site is encumbrance free and there is nobody utilizing the land for any shelter or livelihood purpose. nature of intervention proposed under the Project, it is confirmed that the development and construction of IFI will not have any negative impacts in terms of involuntary resettlement and Indigenous people's safeguards.

Screening Questions	Yes	No	Remarks
▪ Accident risks associated with increased vehicular traffic, leading to loss of life?	√		The proposed plot for the IFI building is well within GIFT boundary and GIFT has a well-developed road network. There is no external traffic in the GIFT, therefore, marginal traffic increase during construction will not be problematic. During operation also, traffic increase is not anticipated as the students and working population in IFI will be staying in hostels/residential accommodations. However, to rule out any accident due to project related vehicular traffic, if required, flagmen will be deployed near the construction site to regulate the traffic. Traffic Management Plan will be prepared for the construction phase.
▪ Increased noise and air pollution resulting from increased traffic volume?	√		Since increase in the traffic is anticipated to be insignificant, therefore, marginal increase in air and noise pollution is expected.
▪ Occupational and community health and safety risks?	√		Appropriate mitigation measures will be included in the EMP.
▪ Risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during project construction and operation?	√		Appropriate mitigation measures shall be included in the EMP. No biological and radiological hazards anticipated.
▪ Generation of dust in sensitive areas during construction?	√		The IFI site is not in sensitive area. No generation of dust is anticipated during the operation phase. Minor dust generated during construction activities will be controlled through dust suppression measures and through implementation of Environmental Management Plan (EMP).

Screening Questions	Yes	No	Remarks
▪ Requirements for disposal of fill, excavation, and/or spoil materials?	√		Since IFI site is in plain terrain so no cut will be generated. There will be minor excavations for foundations and for internal drains and utilities ducts. The earth generated will be stored and will be later utilized for dressing and plantation. The generation of spoils is not anticipated except minor construction wastes. The construction waste will be utilized to the extent possible. Any remaining waste will be disposed off at disposal site identified by the GIFTCL for the GIFT City.
▪ Noise and vibration due to blasting and other civil works?	√		No blasting is planned. The noise due to construction activities will be controlled within the stipulated limits through implementation of EMP.
▪ Long-term impacts on groundwater flows as result of needing to drain the project site prior to construction?		√	Since the project sites is well within GIFT which has well developed drainage network, therefore, no adverse impact on groundwater flow is anticipated.
▪ Long-term impacts on local hydrology as a result of building hard surfaces in or near the building?		√	The master plan of GIFT has been finalized after detailed hydrological study. Adequate groundwater recharge measures have been built in master plan. Hence, no impacts on local hydrology are anticipated.
▪ Large population influx during project construction and operation that causes increased burden on social infrastructure and services (such as water supply and sanitation systems)?		√	Since the IFI building is to be constructed on small plot, so construction force shall be around 50 at any point of time. The construction workers will be mainly locals so no influx in anticipated during the construction. During operation phase also students and working population at IFI will not exceed 2000 so no influx and impacts on social infrastructure are anticipated. Social infrastructure of GIFT has been designed considering all factors during GIFT development and operation.

Screening Questions	Yes	No	Remarks
▪ Social conflicts if workers from other regions or countries are hired?	√		Preference will be given to locally available labor. The construction activities are limited in nature. . In case workers are hired from other regions, requisite awareness programs and consultations with the locals will be organized to avoid social conflicts.
▪ Risks to community safety caused by fire, electric shock, or failure of the buildings safety features during operation?		√	Since IFI building is new, the safety measures are being planned in the building design as per national and state level requirements.
▪ Risks to community health and safety caused by management and disposal of waste?	√		During construction phase waste collection and disposal system will be planned by the contractors and it will be approved by the implementing agency (GIFTCL). For operation phase adequate provisions have been made in the building design to take care disposal of wastewater and other solid waste generated. The waste disposal will be integrated with the GIFT disposal system.
▪ Community safety risks due to both accidental and natural hazards, especially where the structural elements or components of the project are accessible to members of the affected community or where their failure could result in injury to the community throughout project construction, operation and decommissioning?	√		The proposed IFI site is well within the GIFT boundary. Specific community risks are not foreseen due to operation as the end users will be students. The IFI building is being designed following applicable seismic coefficient for Gujarat to build safety in structural design. There will be periodic maintenance of building during the operation phase.

A Checklist for Preliminary Climate Risk Screening

Country/Project Title: IND: Promoting Research and Innovation through Development of Fintech Institute at GIFT
Sector: Education
Subsector: Tertiary
Division/Department: SAPF

Screening Questions		Score	Remarks*
Location and Design of project	Is siting and/or routing of the project (or its components) likely to be affected by climate conditions including extreme weather-related events such as floods, droughts, storms, landslides?	1	The GIFT including location of IFI is close to Sabarmati River. Although, this River remains dry in most part of the year but in extreme conditions, floods are not ruled out. Drought is also not ruled out as rainfall in project area is erratic. Dust laden storms in the summer months are not ruled out. The site being on plain terrain, so landslides are ruled out.
	Would the project design (e.g. the clearance for bridges) need to consider any hydro-meteorological parameters (e.g., sea-level, peak river flow, reliable water level, peak wind speed etc.)?	0	Not Applicable
Materials and Maintenance	Would weather, current and likely future climate conditions (e.g. prevailing humidity level, temperature contrast between hot summer days and cold winter days, exposure to wind and humidity hydro-meteorological parameters likely affect the selection of project inputs over the life of project outputs (e.g. construction material)?	1	Weather conditions at project site demand usage of local construction material suitable for very hot and dry weather, which is common in the building designs of the area.
	Would weather, current and likely future climate conditions, and related extreme events likely affect the maintenance (scheduling and cost) of project output(s)?	0	The weather conditions will not affect maintenance scheduling and cost in the operation phase.
Performance of project outputs	Would weather/climate conditions and related extreme events likely affect the performance (e.g. annual power production) of project output(s) (e.g. hydro-power generation facilities) throughout their design life time?	1	The extreme climate conditions may result into disruption of academic activities of IFI due to lesser number of students participating in admission.

Options for answers and corresponding score are provided below:

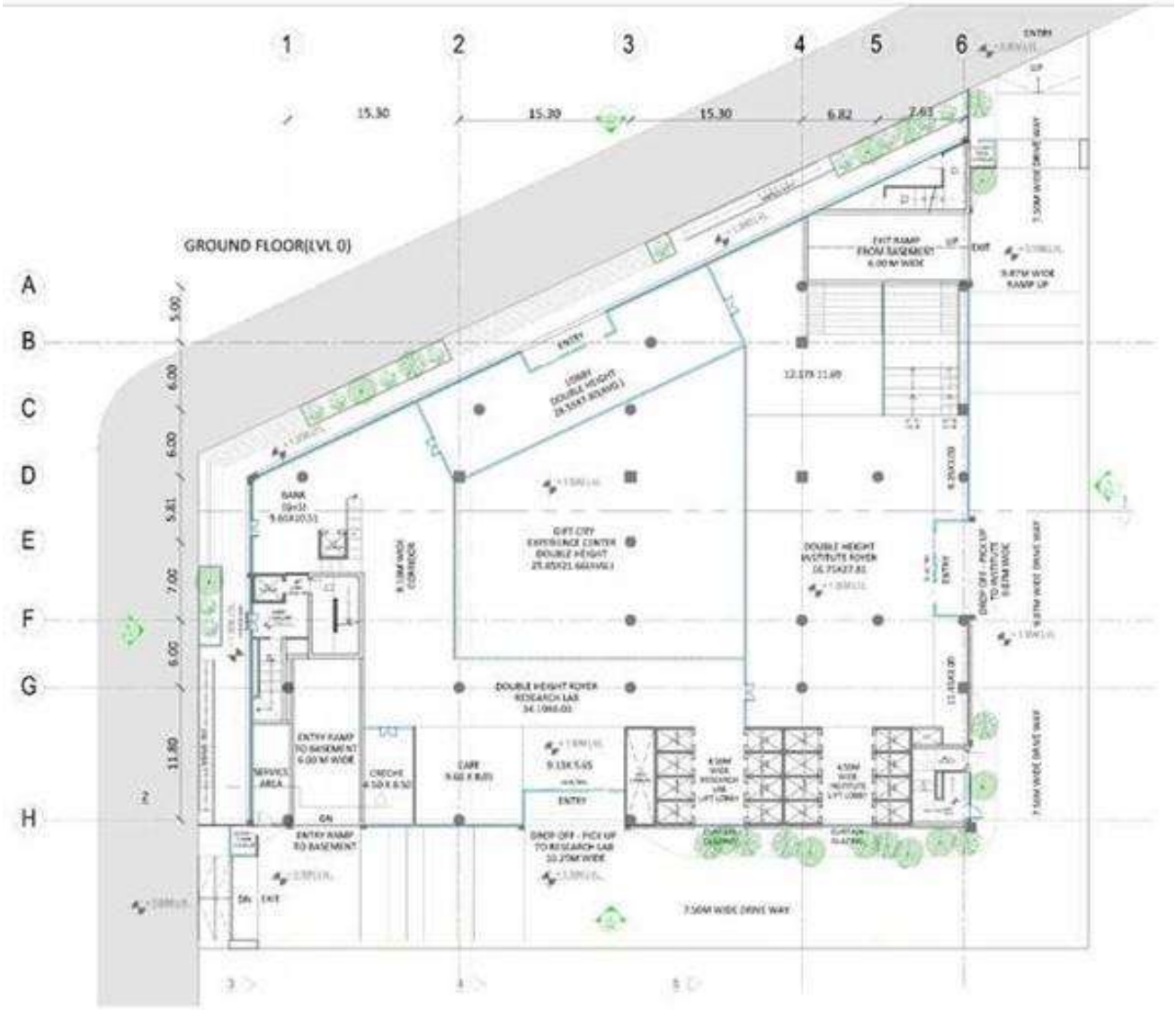
Response	Score
Not Likely	0
Likely	1
Very Likely	2

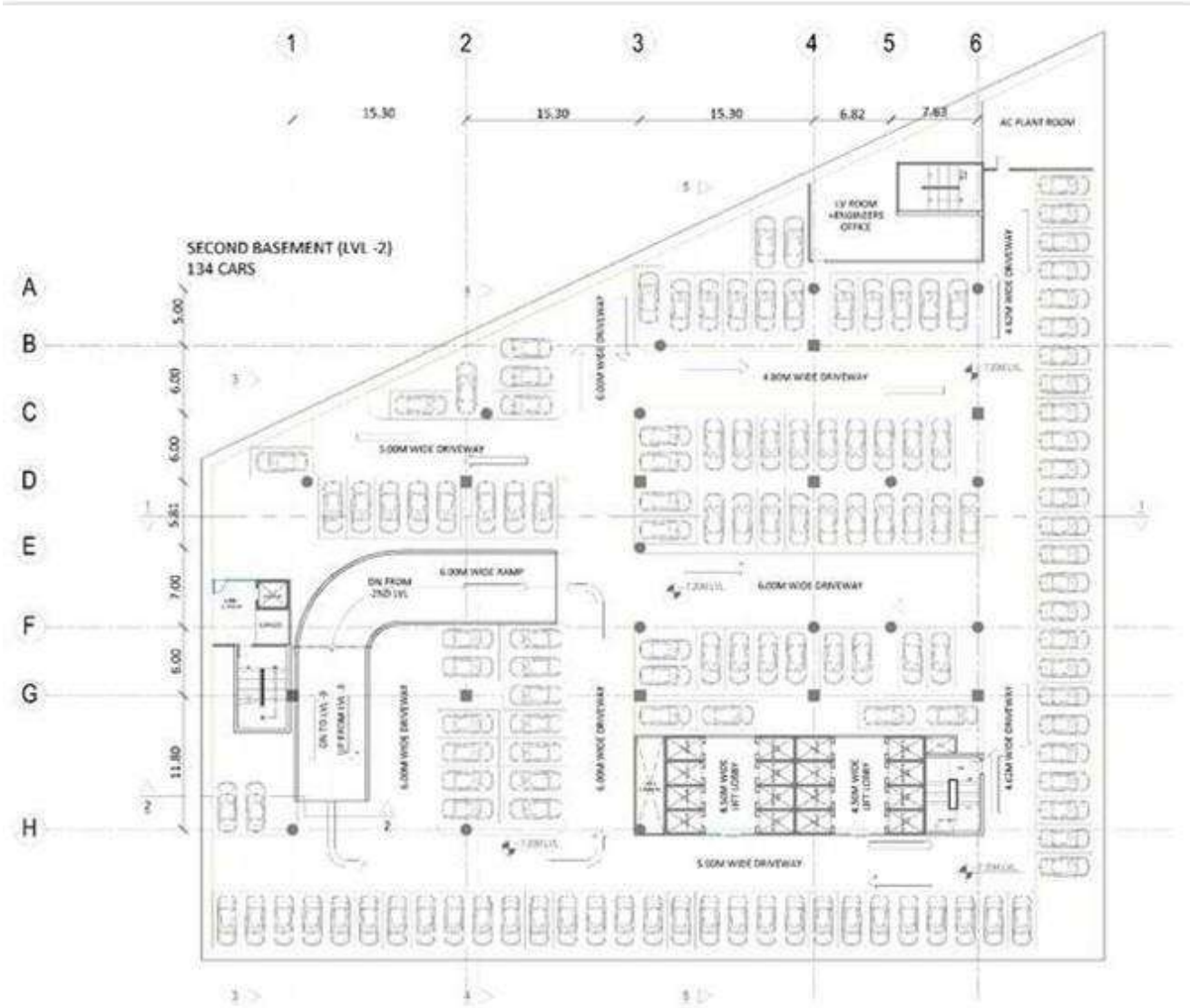
* If possible, provide details on the sensitivity of project components to climate conditions, such as how climate parameters are considered in design standards for infrastructure components, how changes in key climate parameters and sea level might affect the siting/routing of project, the selection of construction material and/or scheduling, performances and/or the maintenance cost/scheduling of project outputs.

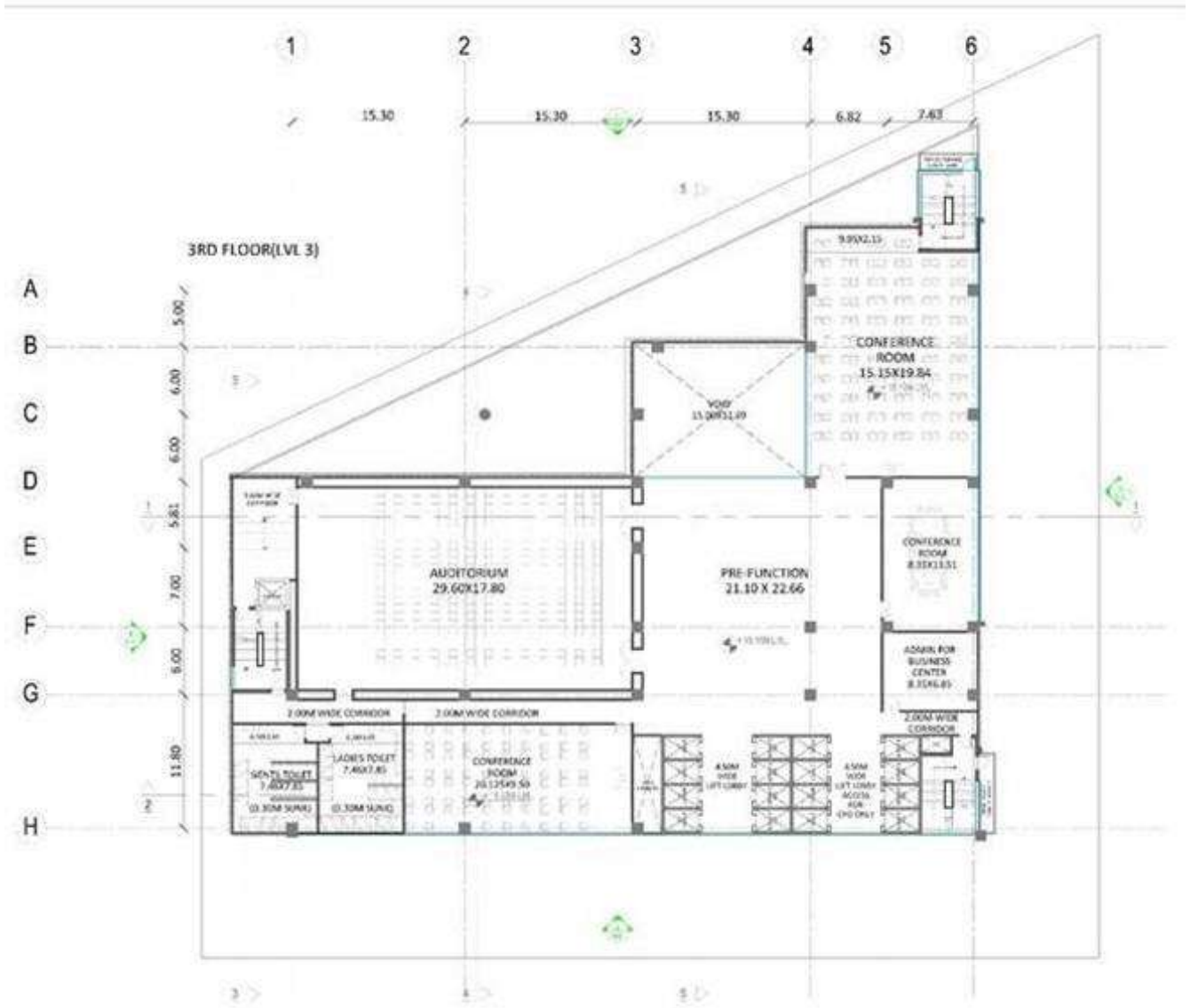
Responses when added that provide a score of 0 will be considered low risk project. If adding all responses will result to a score of 1-4 and that no score of 2 was given to any single response, the project will be assigned a medium-risk category. A total score of 5 or more (which include providing a score of 1 in all responses) or a 2 in any single response will be categorized as high-risk project.

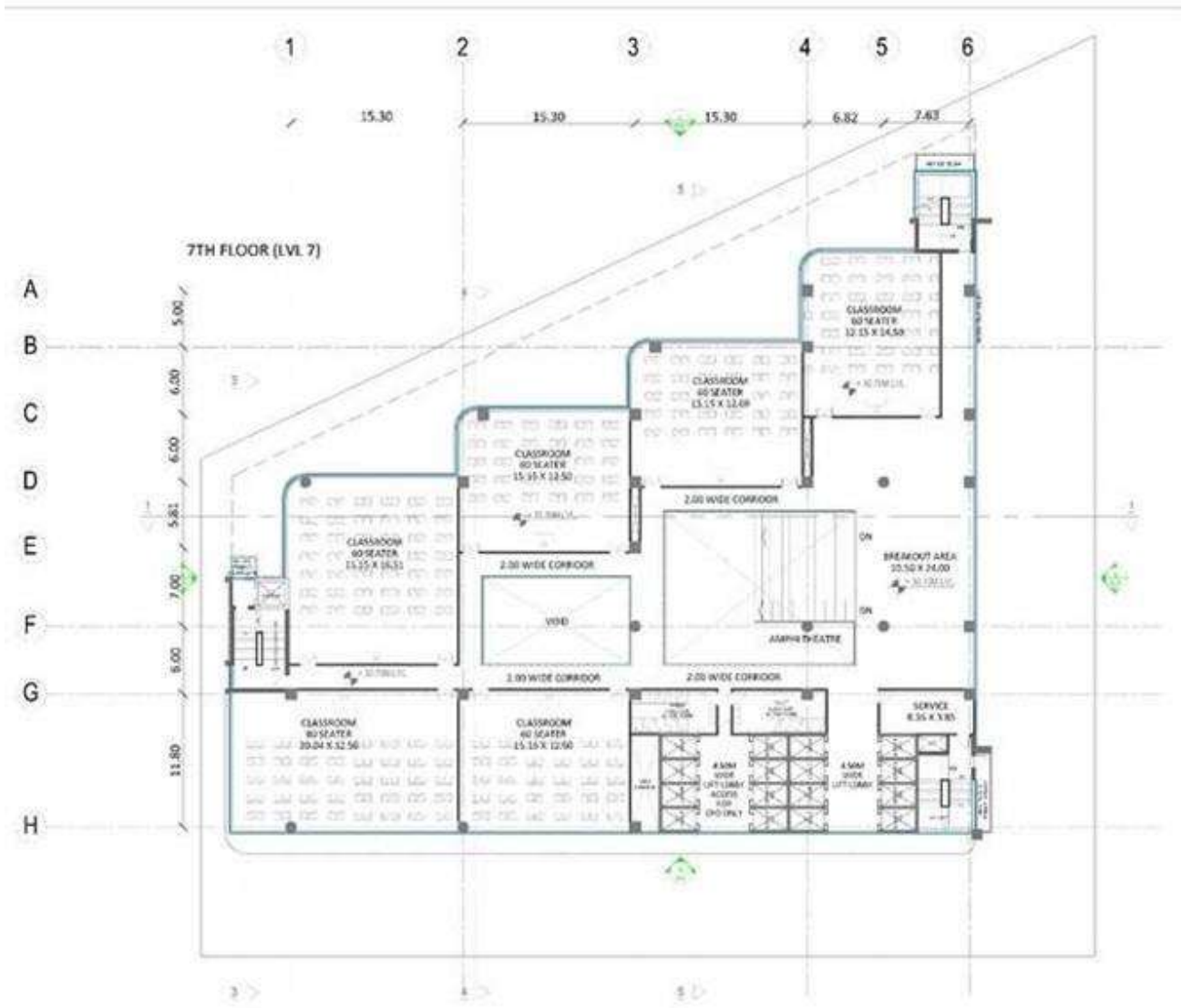
Result of Initial Screening (Low, Medium, High): Medium
Other Comments: None

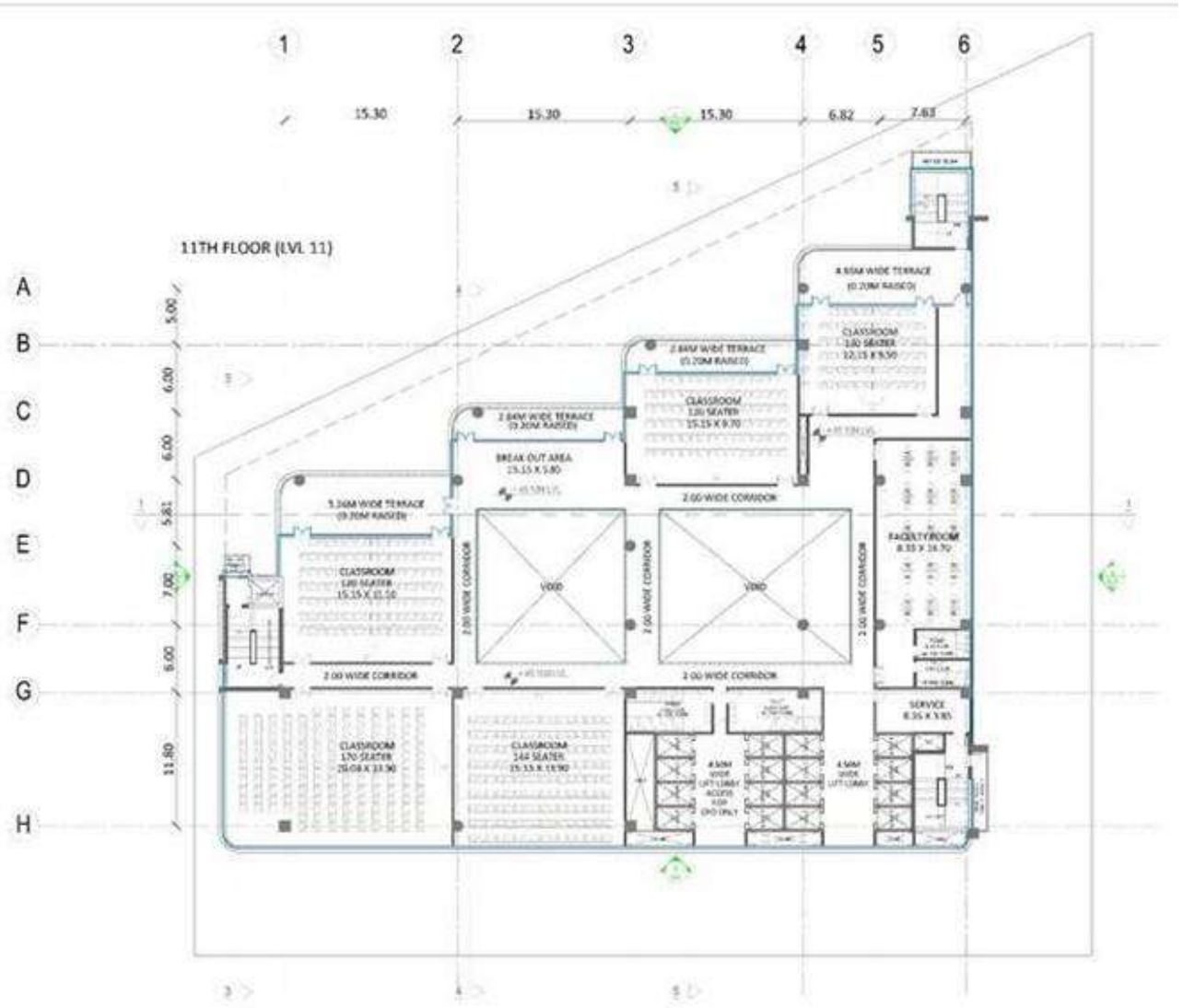
ANNEXURE-5: ACHITECTURAL DRAWINGS OF IFI CAMPUS CONSTRUCTION AND DEVELOPMENT

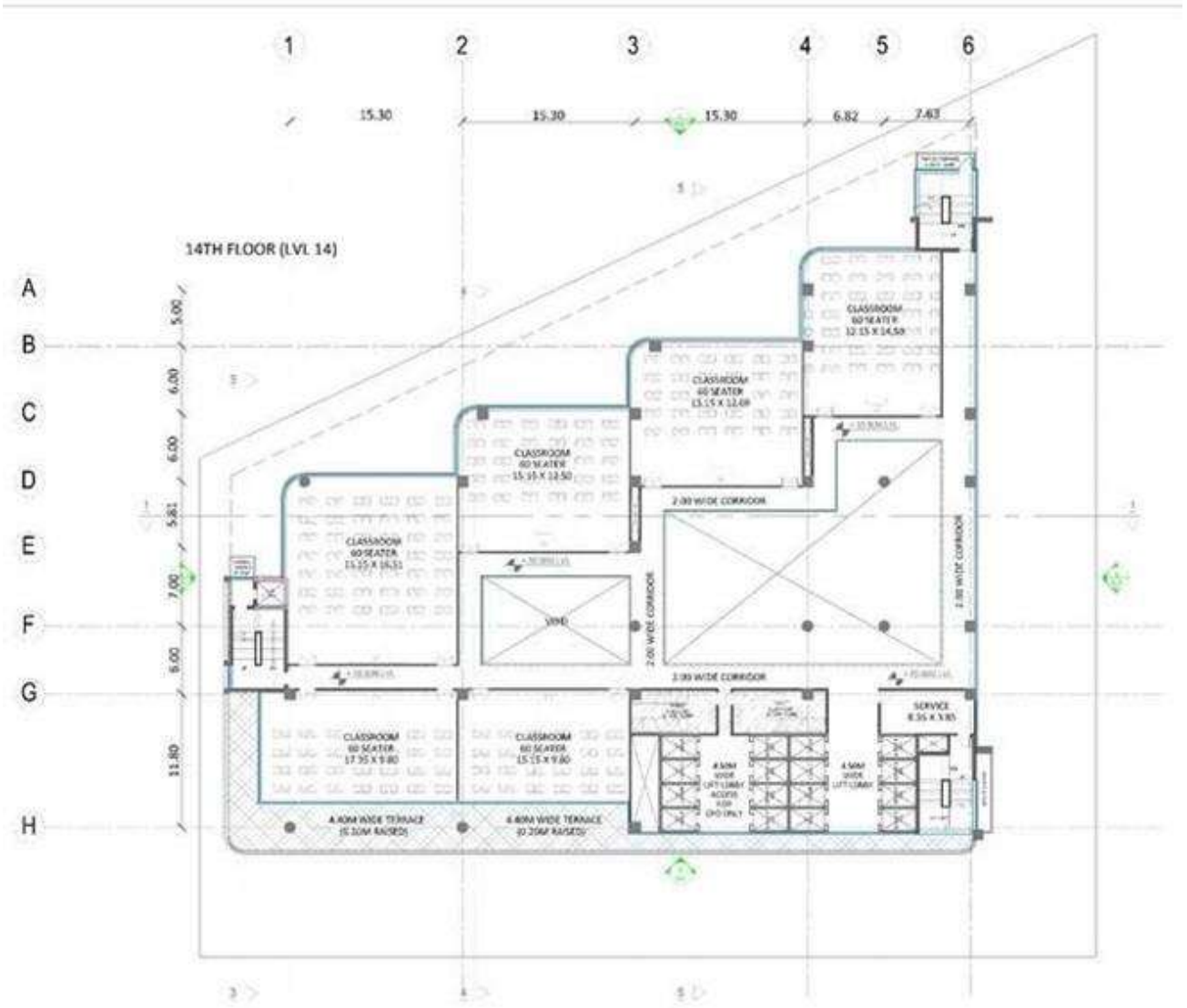



SECOND BASEMENT (LVL -2)
134 CARS
1
2
3
4
5
6
A
B
C
D
E
F
G
H
15.30
15.30
15.30
6.82
7.63
AC PLANT ROOM
LV ROOM
+ENGINEERS
OFFICE
4.80M WIDE DRIVEWAY
6.00M WIDE DRIVEWAY
5.00M WIDE DRIVEWAY
6.00M WIDE RAMP
DN FROM
2ND LVL
6.00M WIDE DRIVEWAY
4.50M WIDE
LIFT LOBBY
5.00M WIDE DRIVEWAY
5.00
6.00
6.00
5.85
7.00
6.00
11.80


3RD FLOOR(LVL 3)
1
2
3
4
5
6
A
B
C
D
E
F
G
H
15.30
15.30
15.30
6.82
7.63
5.00
6.00
6.00
5.81
7.00
6.00
11.80
CONFERENCE ROOM 15.15X19.84
VOID
AUDITORIUM 29.60X17.80
PRE-FUNCTION 21.10 X 22.66
CONFERENCE ROOM
ADMIN FOR BUSINESS CENTER
2.00M WIDE CORRIDOR
2.00M WIDE CORRIDOR
2.00M WIDE CORRIDOR
GENTS TOILET
LADIES TOILET
CONFERENCE ROOM


7TH FLOOR (LVL 7)
1
2
3
4
5
6
15.30
15.30
15.30
6.82
7.63
A
B
C
D
E
F
G
H
5.00
6.00
6.00
5.81
7.00
5.00
11.80
CLASSROOM
60 SEATER
12.15 X 14.50
CLASSROOM
60 SEATER
13.15 X 12.00
CLASSROOM
60 SEATER
15.10 X 12.50
CLASSROOM
60 SEATER
15.15 X 16.51
2.00 WIDE CORRIDOR
2.00 WIDE CORRIDOR
VOID
BREAKOUT AREA
10.50 X 24.00
AMPHITHEATRE
2.00 WIDE CORRIDOR
2.00 WIDE CORRIDOR
CLASSROOM
60 SEATER
20.04 X 12.56
CLASSROOM
60 SEATER
15.15 X 12.50
SERVICE
8.35 X 3.85
4.5KH
WIDE
LIFT LOBBY
ACCESS
FOR
CHO ONLY
4.5KH
WIDE
LIFT LOBBY

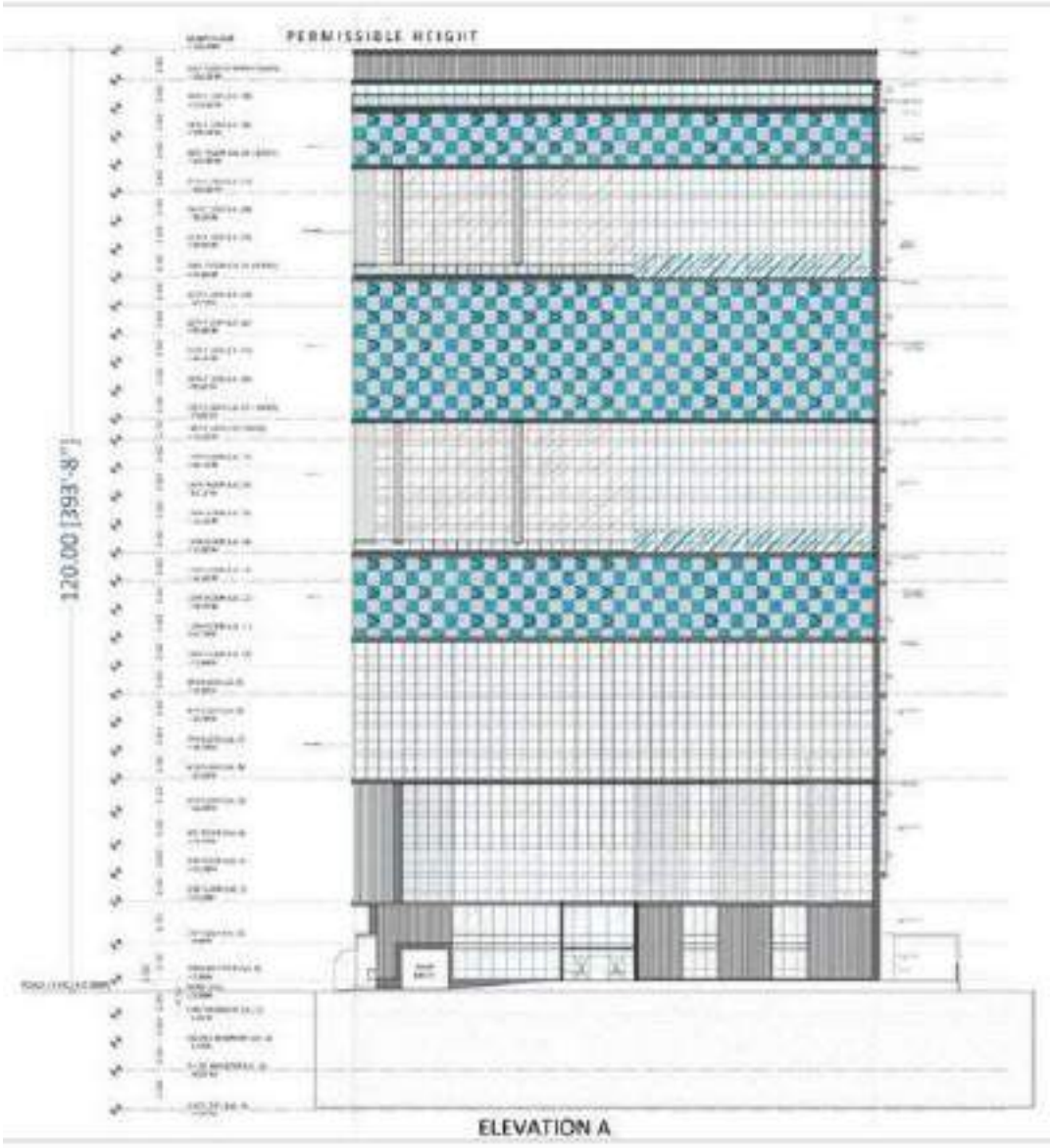

11TH FLOOR (LVL 11)
1
2
3
4
5
6
A
B
C
D
E
F
G
H
15.30
15.30
15.30
6.82
7.63
5.00
6.00
6.00
5.81
7.00
6.00
11.80
CLASSROOM
120 SEATER
12.15 X 9.50
CLASSROOM
120 SEATER
15.15 X 9.70
BREAK OUT AREA
15.15 X 5.80
2.00 WIDE CORRIDOR
FACULTYROOM
8.35 X 16.70
SERVICE
8.35 X 9.85
CLASSROOM
120 SEATER
15.15 X 11.50
CLASSROOM
170 SEATER
CLASSROOM
144 SEATER
VOID
VOID

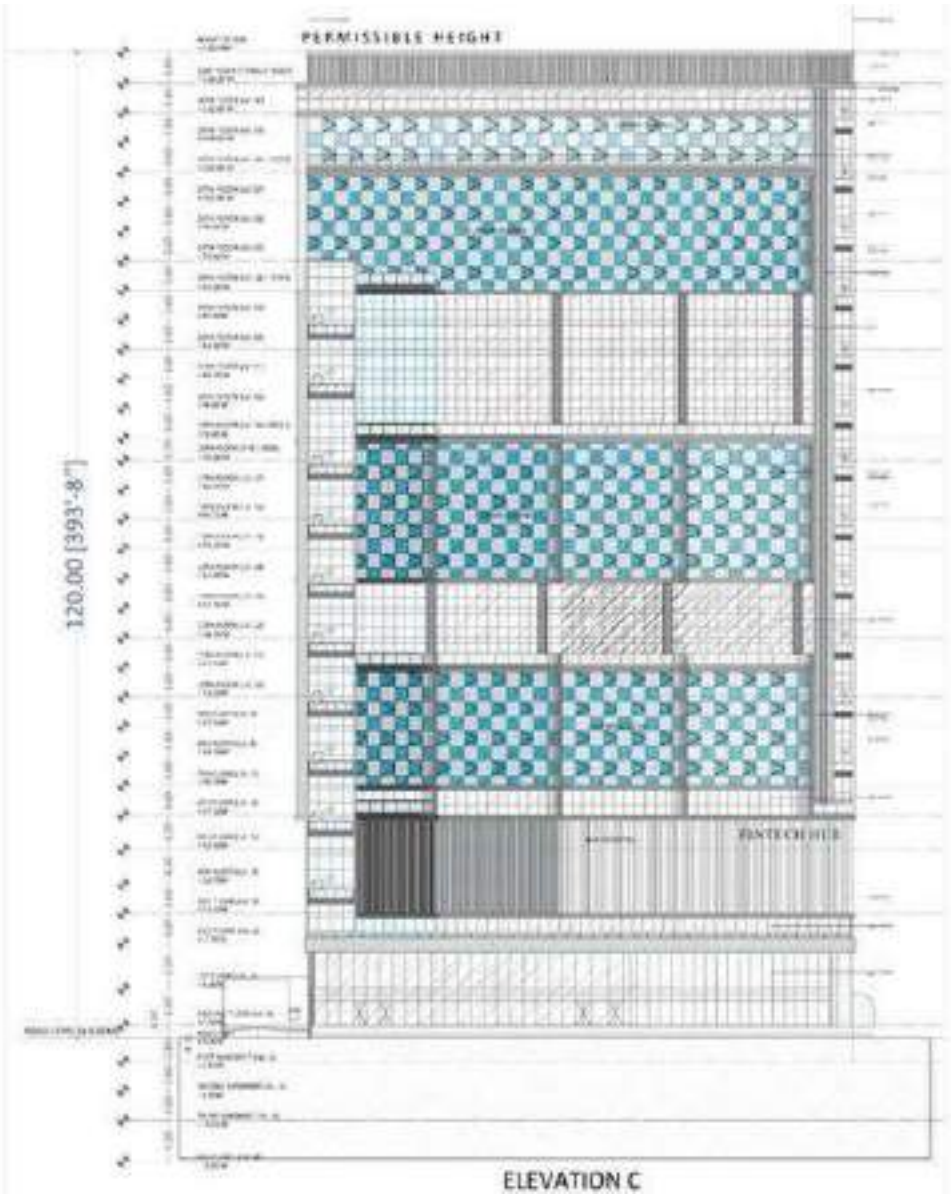

14TH FLOOR (LVL 14)
1
2
3
4
5
6
A
B
C
D
E
F
G
H
15.30
15.30
15.30
6.82
7.63
5.00
6.00
6.00
5.81
7.00
6.00
11.80
CLASSROOM 60 SEATER 15.15 X 14.50
CLASSROOM 60 SEATER 15.15 X 12.09
CLASSROOM 60 SEATER 15.15 X 12.50
CLASSROOM 60 SEATER 15.15 X 16.31
2.00 WIDE CORRIDOR
2.00 WIDE CORRIDOR
2.00 WIDE CORRIDOR
VOID
CLASSROOM 60 SEATER 17.95 X 9.80
CLASSROOM 60 SEATER 15.15 X 9.80
SERVICE 8.35 X 3.85
4.40M WIDE TERRACE
4.40M WIDE TERRACE


19TH FLOOR (LVL- 19 + EDECK)
1
2
3
4
5
6
15.30
15.30
15.30
6.82
7.63
A
B
C
D
E
F
G
H
5.00
6.00
6.00
5.81
7.00
6.00
11.80
OFFICE
6.425 X 8.20
OFFICE
6.425 X 6.27
OFFICE
6.425 X 5.65
OFFICE
6.425 X 6.01
OFFICE
6.425 X 5.64
OFFICE
6.425 X 5.64
OFFICE
6.425 X 8.50
STILT
8.725 X 25.00
STILT
23.02 X 10.79
TERRACE
45.75 X 13.86
IT LAB
15.00 X 8.05
IT LAB
16.00 X 8.50
2.00M WIDE CORRIDOR
OFFICE
12.20 X 6.00
OFFICE
7.50 X 9.00
OFFICE
7.50 X 6.00
OFFICE
7.50 X 6.00
GENTS TOILET
LADIES TOILET

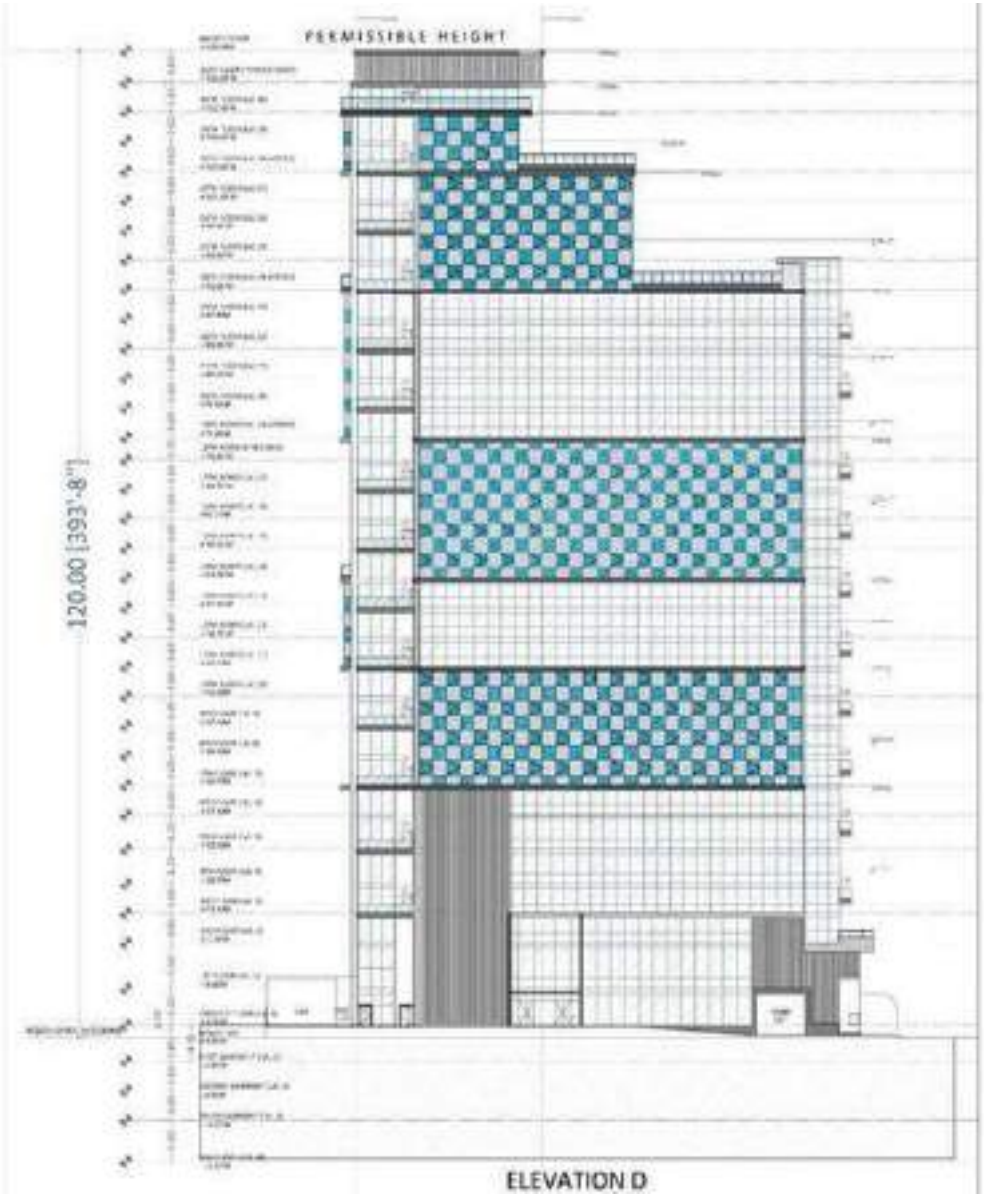

24TH FLOOR (LVL 24 + EDECK)
1
2
3
4
5
6
15.30
15.30
15.30
6.82
7.63
A
B
C
D
E
F
G
H
5.00
6.00
6.00
5.81
7.00
6.00
11.80
OFFICE 7.50 X 18.50
2.00M WIDE CORRIDOR
TERRACE
TERRACE
TERRACE

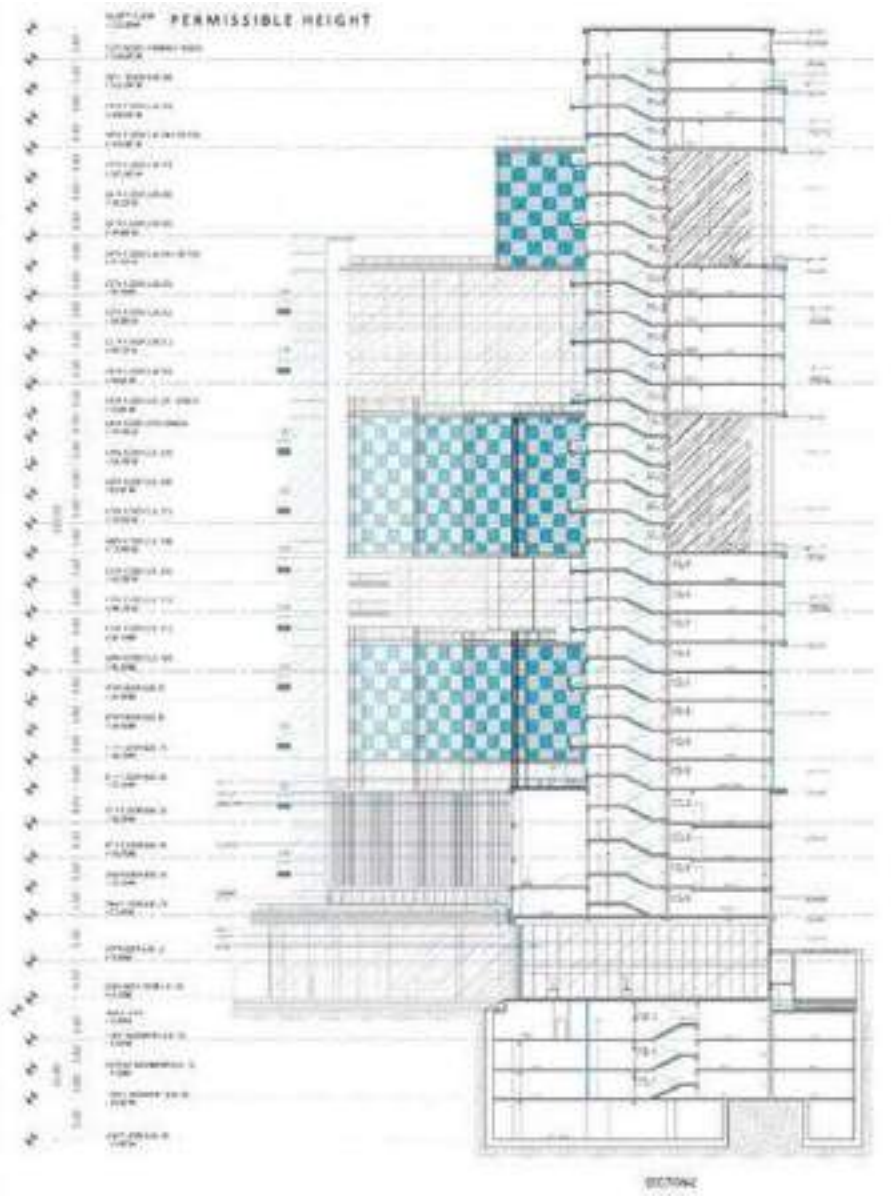

1
2
3
4
5
6
15.30
15.30
15.30
6.82
7.63
28TH FLOOR
(LVL 28 + EDECK)
A
B
C
D
E
F
G
H
5.00
6.00
6.00
5.81
7.00
6.00
11.80
OFFICE
7.50 X 8.50
2.00M WIDE CORRIDOR
2.00M WIDE CORRIDOR
OFFICE
12.40 X 8.50
4.50M WIDE LIFT LOBBY
GENTS TOILET
LADIES TOILET


PERMISSIBLE HEIGHT
ELEVATION A

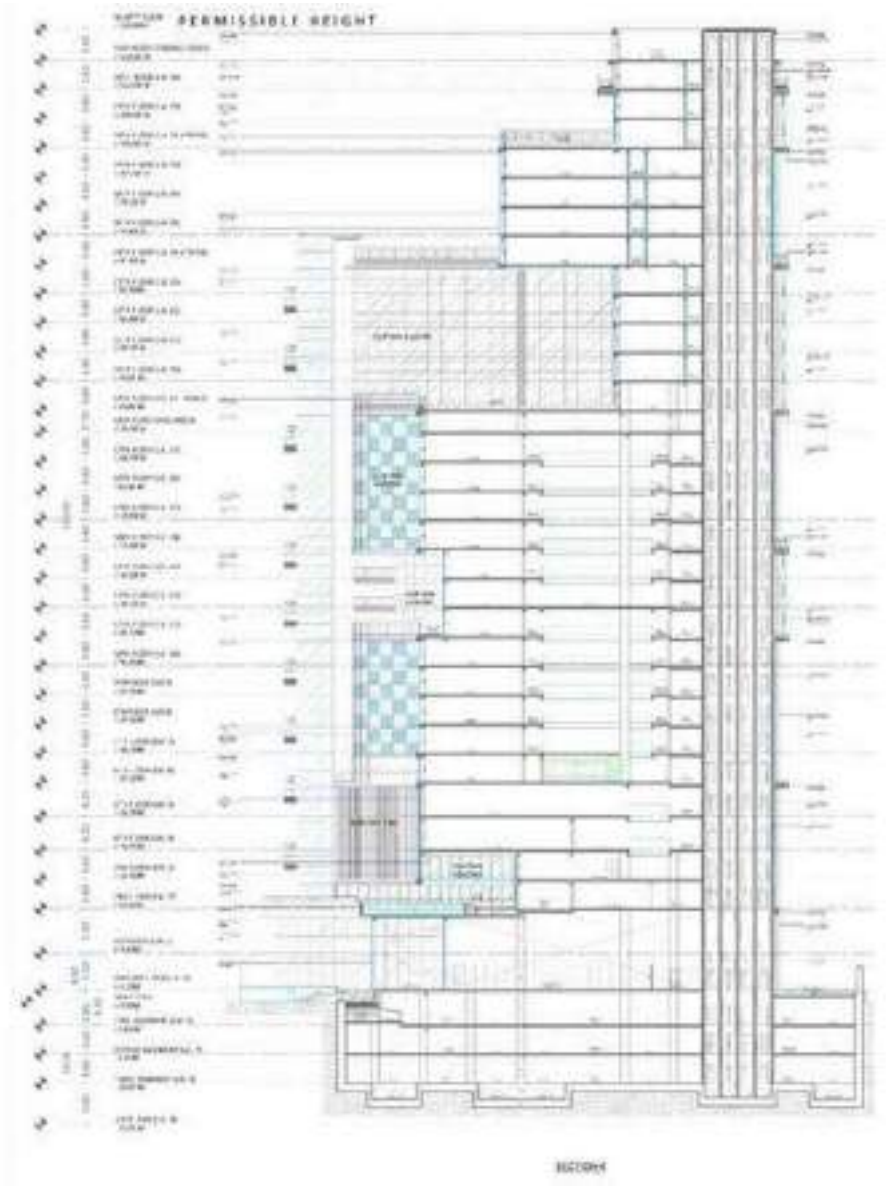


ELEVATION C


PERMISSIBLE HEIGHT
120.00 [393'-8"]
ELEVATION D


PERMISSIBLE HEIGHT


PERMISSIBLE HEIGHT


PERMISSIBLE HEIGHT

ANNEXURE-6: SOIL INVESTIGATION REPORT FOR IFI SITE

07/23/12/17829

Gujarat International Finance Tec-City Company Ltd

Of

Technical Report of Geotechnical Investigation for Proposed High rise structure on 58-B at Gift City, Gandhinagar

3 Basement + G + 29 Floor

By:

Prof. (Dr.) K.C.Thaker
Ph.D. (Geotech) (I.I.T., Bombay);
F.I.E.(India); F.I.G.S.; F.A.C.C.E.

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NABL Accredited Laboratory (ISO / IEC : 17025):
ISO : 9001, 2008
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February– 2023

INDEX

Geotechnical Investigation report for proposed High rise structure at 58-B, Gift City Gandhinagar

Introduction

The report is presented herewith analyses based on the geotechnical investigation results. The objective of the geotechnical investigation is to determine allowable bearing pressure for the High Rise structure at 58-B, Gift City Gandhinagar. For determination of allowable bearing pressure for structure on the said site, it is necessary to determine the sub soil profile and to know physical properties and strength characteristics of soil at various depths. For this purpose,
The owner of structure entrusted the geotechnical investigation to us. The following scope of work was decided by clients in consultation with clients.

1. No. Bore hole –4
2. Depth of Bore hole – 70.0 m
3. Standard penetration tests at regular interval
4. Collection of Undisturbed samples and disturbed samples at regular interval
5. To find physical properties and strength characteristics of undisturbed samples
6. To find physical properties of disturbed samples
7. To locate ground water table, if any, and tests on water samples
8. Interpretation of results, analysis and recommendations.

Based on the above points the detailed Geotechnical Investigation Program included the following:

(A) Field Investigation

1. Drilling of bore hole
2. Collection of soil samples (Disturbed and Undisturbed)
3. Conducting Standard Penetration Test

(B) Laboratory Investigation

1. Bulk Density, Dry Density, Specific Gravity and moisture content of soil
2. Particle Size distribution, Atterberg's limits of soils and soil classification
3. Triaxial compression tests or Direct shear test

(C) Recommendations

Based on above investigations, the results are to be obtained. The findings would be based on interpretation of results, analysis and computations as per relevant Indian standards.

2.0 Field Investigation

2.1 Drilling of bore holes

The exploratory drill holes of 150 mm diameter were drilled by rotary drilling method. We drilled the nos. of bore holes as suggested and also carried out specialized tests in order to characterize the sub soil profile. The locations of boreholes were dictated by clients vide their location plan.

Bore hole Designation	Co-ordinates	Depth Investigated in m from EGL
BH – 1	X 2620018.8063, Y 2563608.1224	70.0 m
BH 2	X 2620024.7958, Y 2563596.2993	70.0 m
BH – 3	X 2620032.2241, Y 2563570.0351	70.0 m
BH 4	X 2620054.4904, Y 2563599.8264	70.0 m

2.2 Sampling

2.2.1 Disturbed samples

Disturbed samples were collected during boring and from the split spoon sampler. The samples recovered were logged, labeled and placed in polyethylene bags and sent to laboratory for testing.

2.2.2 Undisturbed samples

Undisturbed soil samples were collected in thin walled tubes as per IS 2132. The samples were sealed with wax, labeled and transported to our laboratory at Gota, Ahmedabad for testing.

2.2.3 Standard penetration test

The standard penetration tests were conduct in accordance with IS: 2131-1981. The test results show, N Value, the blow counts of last 30 cm penetration of split spoon sampler with 63.5 kg hammer falling from 75 cm height.

3.0 Laboratory investigation

For measurements of soil properties in the laboratory the following table lists various laboratory tests, which were conducted in the laboratory.

Tests	Recomnd procedure	Type Samples
1. Sample Preparation	IS 2720 Pt I	DS / UDS
2. Moisture Content	IS 2720 Pt II	DS / UDS
3. Dry Unit Weight	LAMBE	UDS
4. Specific Gravity	IS 2720 Pt III	DS
5. Liquid Limit	IS 2720	DS
6. Plastic Limit	IS 2720 Pt V	DS
7. Grain Size Analysis	IS 2720 Pt IV	DS
8. Soil Classification	IS 1498	DS / UDS
9. Triaxial / Direct shear test	IS 2720 Pt XI and Pt XIII	UDS
10. Consolidation test	IS 2720 Pt XV	UDS
11. Permeability test	IS 2720 Pt-XVII	UDS

4.0 Results

1. The location plan of borehole is given in fig no. 1
2. The bore log details of Bore hole are given in fig no. 2 to 5
3. The Laboratory test results of Bore hole are appended in table no. 1 to 4

5.0 General stratification

From existing ground level to a depth varying from 1.20m to 2.40m depth, Yellowish brown, fine to very fine grained, filled up clayey sand with little to some gravels is found, followed by yellowish brown, fine to medium grained, clayey sand with occasional to some gravels upto about 10.00m depth. From 10.00m to 20.0m depth, Yellowish brown, fine to very fine grained, clays of intermediate to high plasticity with occasional gravels is encountered. From 20.00m to 31.00m depth, Yellowish brown, fine to very fine grained, clayey sand with little gravels is encountered. From 31.00m to 47.55m depth, Yellowish brown, fine to very fine grained, silty sand with occasional gravels is encountered. The underlying layer consists of yellowish brown, fine to medium grained, sandy clays of high plasticity with occasional gravels upto about 53.0m depth. From

53.00m to 57.60m depth, Yellowish brown, fine to very fine grained, clayey sand with little gravels is encountered. Last layer comprises of yellowish brown, fine to very fine grained, sandy clays of high plasticity with little gravels upto the depth of investigation.

6.0 Computation of Safe Bearing Capacity

Consistent with usual practice in region, for the proposed high rise structure raft foundation is selected as foundation to the structure. We calculated the allowable bearing pressure of the soil at probable founding level and for the approximate sizes of foundation. Depth of foundation and sizes are approximate and based on the preliminary information we got from clients. For the proposed high rise structure planed continuous raft is desirable. Safe bearing capacity of raft/isolated footings of various widths at various depths are recommended in appendix – 1 and 2 based on shear and settlement criteria of soil.

7.0 Conclusions and Suggestions

1) General stratifications are as described in 5.0 and as shown in respective bore logs.

2) We are told that the structure is three basements, ground floor and twenty nine storied.

   Based on fondling of the geotechnical investigation, net the allowable bearing pressure was calculated for raft/isolated footing. The calculations are summarized in appendix – 1 and 2 based on shear and settlement criteria of soil. The calculated allowable bearing pressure is for the sizes of foundations at the founding depths considered from GL existed at time of investigation and any change in that, requires a review of allowable bearing pressure. In the summary sheet (i.e. Appendix 1 and 2) last columns i.e. allowable bearing pressure suggested for appropriate depth and size of foundation may be considered for the design. All foundation shall be kept at same level. Proportioning of the foundation shall be carried out to avoid differential settlement. In case of any doubt we shall be consulted for clarification. Before placing the foundation the bottom soil disturbed during excavation shall be compacted. Foundation shall not be on backfill or filled up soils in any case.

3) Ground water table was encountered at 12.00m to 13.00m depth during investigation in month of January 2023. The ground water level fluctuates and depends upon the permeability of the strata and the head causing the water to flow. In cases where recuperation rate in bore hole is slow due to less permeable strata, observation during investigation may require considerable time till water level stabilizes. Practically, it is not feasible to keep bore hole open for longer time from safety consideration. There is also a possibility of there being several water tables at different levels, separated by impermeable strata. The possibility of damage to sewers, conduits and drainage systems near site may also cause localized water table due to steady seepage. Considering all such possibilities and constraints, it is advisable to consider the water table at foundation level.

4) It may please be noted that, suitable support shall be provided and used to prevent, so far as is reasonably practicable and as early as is practicable in the course of the foundation work in excavation, which may be danger to any person or adjacent property or materials from dislodgement of earth or any other material forming the side of excavation. The side slope in excavation upto about 2.0m depth may remain vertical but for short duration. It is desirable to provide the side slope of 70 degree with horizontal. In case of deeper excavation berms of 1 to 1.50m width having 3.0m interval shall be provided with a side slope of 60 degree with horizontal.

5) In certain cases the earlier uses of the site may have a very important bearing on proposed new works. This is particularly so in areas where there have been underground workings, such as old brick fields, underground storages, soak wells or any archeological remains etc. This may be known to us only if exploration points fall on it. Enquiries should be made by clients to avoid superimposition of new structure on that which may be dangerous and can cause distress to structures.

6) It may please be noted that, suitable support shall be provided and used to prevent, so far as is reasonably practicable and as early as is practicable in the course of the foundation work in excavation whether deep or shallow, which may be danger to any person or adjacent property or materials from dislodgement of earth or any other material forming the side of excavation. This report aims at the allowable bearing pressure and therefore may not have all necessary design parameters for earth retention structures and therefore detailed investigation shall be carried out for that separately. Earth retention measures are essentially temporary in nature and therefore subsequent work in deep excavation shall be initiated immediately on completion of excavation in an expeditious manner.

Limitations

We have prepared this report for the exclusive use of clients and as per the scope, objective and specification instructed by them verbally or in writing. No other use is anticipated or authorized by clients. The finding and suggestions are valid when the onsite and offsite conditions affecting the structures in project are not changed due to the actions of man or nature. Professional judgments presented in this report are based on evaluation of the technical information gathered, understanding of the proposed construction, and general experience in the geotechnical field. The findings and recommendations presented in this report are based upon soil conditions inferred from site explorations, interpolation of the soil conditions between exploration locations, and extrapolation of those conditions throughout the proposed site area. The extent of investigation as well as specific exploration locations were decided as per IS: 16700 after due discussion with structural consultants. The findings and suggestions are further based on the assumption that the subsurface conditions do not deviate appreciably from those reported and those assumed. If different subsurface conditions are encountered, the same must be brought to our attention before execution & in a timely manner so that the need for revised suggestions can be evaluated. In the event of changes in design loads or structural characteristics or in location of the structure, clients should review its design based on our suggestions and their applicability to the revision be made, in a timely manner. In general if site remains unattended for a period of two years after the report date, a specialist should be consulted regarding the adequacy of this geotechnical report.

Dr. K K Thaker **Prof. (Dr.) K C Thaker**

KCT Consultancy Services, Ahmedabad

APPENDIX - 1

SUMMARY OF ALLOWABLE BEARING PRESSURE BASED ON SHEAR AND SETTLEMENT CRITERION

Project : Proposed structure at Plot 56 B at GIFT City, Gandhinagar

Depth of Foundation (m)	Length of Foundation (m)	Width of Foundation (m)	Safe Bearing Capacities calculated based on Shear Criteria (See Appendix 1.1) (t/m²)	Safe Bearing Pressures calculated based on Settlement Criteria (See Appendix 1.2)		Allowable Bearing Pressure suggested (Min. of Shear and Settlement Criterion)	
				For 100 mm Settlement (t/m²)	For 125 mm Settlement (t/m²)	For 100 mm Settlement (t/m²)	For 125 mm Settlement (t/m²)
11.00	25.00	25.00	55	53	61	53	55
11.00	30.00	30.00	54	48	54	48	54
11.00	35.00	35.00	54	44	50	44	50
11.00	40.00	40.00	53	42	47	42	47
11.00	25.00	27.00	55	54	61	54	55
11.00	30.00	30.00	54	48	54	48	54
11.00	35.00	35.00	54	45	50	45	50
11.00	40.00	40.00	53	42	47	42	47
12.00	25.00	25.00	55	54	61	54	55
12.00	30.00	30.00	55	48	55	48	55
12.00	35.00	35.00	54	45	50	45	50
12.00	40.00	40.00	54	42	47	42	47

Notes :

1) The factor of safety of 2.5 is considered.

2) The depth of foundation is considered from the NGL at the time of exploration.

3) Calculations are considering the effect of water table at 13 m.

4) Basement upto 9.5 m depth from NGL has been considered for calculations. The effective overburden pressure has been considered for soil between basement bottom and foundation bottom.

KCT Consultancy Services, Ahmedabad

APPENDIX - 1.1

Calculation of Net Safe Bearing Capacity Based on Shear Parameters C - ϕ

qu = 1 / FS [C Nc dc Sc ic]

Project : Proposed structure at Plot 58 B at GIF City, Gandhinagar

For Raft Foundation

Sr. No.	Size of Foundation Length m	Width m	Depth of Foundation m	Shear Parameter C Kg/cm²	ϕ degree	Bearing Capacity Factors Nc	Nq - 1	Nγ	Shape Factors Sc	Sq	Sγ	Depth Factors dc	dq	dγ	Inclination Factors ic	iq	iγ	Unit Weight γ gm/cc	0.5 γ	Water Table Correction Wq	Wγ	Safe Bearing Capacity t / m²
1	25.00	25.00	11.00	1.85	0	5.14	0.00	0.00	1.30	1.20	0.80	1.09	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	0.54	**65**
2	30.00	30.00	11.00	1.89	0	5.14	0.00	0.00	1.30	1.20	0.80	1.07	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	0.53	**64**
3	35.00	35.00	11.00	1.89	0	5.14	0.00	0.00	1.30	1.20	0.80	1.06	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	0.53	**64**
4	40.00	40.00	11.00	1.85	0	5.14	0.00	0.00	1.30	1.20	0.80	1.05	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	0.53	**63**
5	25.00	25.00	11.50	1.89	0	5.14	0.00	0.00	1.30	1.20	0.80	1.09	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	0.53	**65**
6	30.00	30.00	11.50	1.89	0	5.14	0.00	0.00	1.30	1.20	0.80	1.08	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	0.53	**64**
7	35.00	35.00	11.50	1.89	0	5.14	0.00	0.00	1.30	1.20	0.80	1.07	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	0.52	**64**
8	40.00	40.00	11.50	1.89	0	5.14	0.00	0.00	1.30	1.20	0.80	1.06	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	0.52	**63**
9	25.00	25.00	12.00	1.88	0	5.14	0.00	0.00	1.30	1.20	0.80	1.10	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	0.52	**65**
10	30.00	30.00	12.00	1.89	0	5.14	0.00	0.00	1.30	1.20	0.80	1.09	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	0.52	**65**
11	35.00	35.00	12.00	1.89	0	5.14	0.00	0.00	1.30	1.20	0.80	1.07	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	0.51	**64**
12	40.00	40.00	12.00	1.88	0	5.14	0.00	0.00	1.30	1.20	0.80	1.06	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	0.51	**64**

Note :-

1) The factor of safety of 2.5 is considered.

2) The depth of foundation is considered from the NGL at the time of exploration.

3) Calculations are considering the effect of water table at 13 m.

4) Basement upto 9.5 m depth from NGL has been considered for calculations. The effective overburden pressure has been considered for soil between basement bottom and foundation bottom.

KCT Consultancy Services, Ahmedabad

APPENDIX - 1.2

Calculation of Safe Bearing Pressure for Settlement of 100 and 125 mm

Project :- Proposed structure at Plot [illegible]

Sr. No.	Foundation Details			Immediate Settlement				Consolidation Settlement					Net Safe Bearing Pressure		Gross Safe Bearing Pressure	
	Depth D	Width B	Length L	Poissons Ratio μ	Modulus of Elasticity E	Factor CI	Rigidity Factor	Coefficient of Volume Compressibility	Depth of Compressible Stratum H	Factor μ (Skempton pore pressure parameter)	Depth Factor dF	Rigidity Factor	For 100 mm Settlement	For 125 mm Settlement	For 100 mm Settlement	For 125 mm Settlement
	m	m	m		kg/cm²			cm²/kg	m				T/m²	T/m²	T/m²	T/m²
1	11.80	25.00	25.00	0.35	815	1.12	0.80	0.0051	49.08	8.50	8.87	0.80	30	36	53	41
2	11.80	30.00	30.00	0.35	815	1.12	0.80	0.0051	49.08	8.50	8.89	0.80	25	31	48	44
3	11.80	35.00	35.00	0.35	815	1.12	0.80	0.0051	49.08	8.50	8.91	0.80	21	27	44	50
4	11.80	40.00	40.00	0.35	815	1.12	0.80	0.0051	49.08	8.50	8.93	0.80	19	24	42	47
5	11.50	25.00	25.00	0.35	815	1.12	0.80	0.0051	48.58	8.50	8.86	0.80	31	38	54	61
6	11.50	30.00	30.00	0.35	815	1.12	0.80	0.0051	48.58	8.50	8.89	0.80	25	31	48	54
7	11.50	35.00	35.00	0.35	815	1.12	0.80	0.0051	48.58	8.50	8.91	0.80	20	27	46	50
8	11.50	40.00	40.00	0.35	815	1.12	0.80	0.0051	48.58	8.50	8.92	0.80	19	24	42	47
9	12.00	25.00	25.00	0.35	815	1.12	0.80	0.0051	48.08	8.50	8.86	0.80	31	38	54	61
10	12.00	30.00	30.00	0.35	815	1.12	0.80	0.0051	48.08	8.50	8.88	0.80	25	32	48	55
11	12.00	35.00	35.00	0.35	815	1.12	0.80	0.0051	48.08	8.50	8.90	0.80	22	27	45	50
12	12.00	40.00	40.00	0.35	815	1.12	0.80	0.0051	48.08	8.50	8.92	0.80	19	24	42	47

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APPENDIX - 2 (Non tower)

SUMMARY OF ALLOWABLE BEARING PRESSURE BASED ON SHEAR AND SETTLEMENT CRITERION

Project : Proposed structure at Plot 56 B at GIF City, Gandhinagar

Depth of Foundation	Length of Foundation	Width of Foundation	Safe Bearing Capacities calculated based on Shear Criteria (See Appendix 2.1)	Safe Bearing Pressures calculated based on Settlement Criteria (See Appendix 2.2)		Allowable Bearing Pressure suggested (Min. of Shear and Settlement Criterion)	
				For 25 mm Settlement	For 40 mm Settlement	For 25 mm Settlement	For 40 mm Settlement
(m)	(m)	(m)	(t/m^2)	(t/m^2)	(t/m^2)	(t/m^2)	(t/m^2)
11.00	4.00	4.00	78	57	91	57	78
11.00	5.00	5.00	73	45	72	45	72
11.00	6.00	6.00	69	37	59	37	59
11.00	7.00	7.00	66	31	50	31	50
11.00	4.00	4.00	80	57	91	57	80
11.00	5.00	5.00	74	45	72	45	72
11.00	6.00	6.00	70	37	59	37	59
11.00	7.00	7.00	67	31	50	31	50
12.00	4.00	4.00	81	57	91	57	81
12.00	5.00	5.00	75	45	72	45	72
12.00	6.00	6.00	71	37	59	37	59
12.00	7.00	7.00	68	31	50	31	50

Notes :

1) The factor of safety of 2.5 is considered.

2) The depth of foundation is considered from the NGL at the time of exploration.

3) Calculations are considering the effect of water table at 13 m.

4) Basement upto 9.5 m depth from NGL has been considered for calculations. The effective overburden pressure has been considered for soil between basement bottom and foundation bottom.

KCT Consultancy Services, Ahmedabad

APPENDIX - 2.1 (Non tower)

Calculation of Net Safe Bearing Capacity Based on Shear Parameters C - ϕ

$qu = 1 / FS [C Nc dc Sc ic]$

Project : Proposed structure at Plot 58 B at GIF City, Gandhinagar

For Square Isolated Foundation

Sr. No.	Size of Foundation		Depth of Foundation	Shear Parameter		Bearing Capacity Factors			Shape Factors			Depth Factors			Inclination Factors			Unit Weight		Water Table Correction		Safe Bearing Capacity
	Length	Width		C	ϕ	Nc	Nq - 1	Nγ	Sc	Sq	Sγ	dc	dq	dγ	ic	iq	iγ	γ	0.5 γ			
	m	m	m	Kg/cm²	degree													gm/cc		Wq	Wγ	t / m²
1	4.00	4.00	11.00	1.85	0	5.14	0.00	0.00	1.30	1.20	0.80	1.55	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	0.75	**78**
2	5.00	5.00	11.00	1.85	0	5.14	0.00	0.00	1.30	1.20	0.80	1.44	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	0.70	**73**
3	6.00	6.00	11.00	1.85	0	5.14	0.00	0.00	1.30	1.20	0.80	1.37	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	0.67	**69**
4	7.00	7.00	11.00	1.85	0	5.14	0.00	0.00	1.30	1.20	0.80	1.31	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	0.64	**66**
5	4.00	4.00	11.50	1.85	0	5.14	0.00	0.00	1.30	1.20	0.80	1.58	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	0.69	**89**
6	5.00	5.00	11.50	1.85	0	5.14	0.00	0.00	1.30	1.20	0.80	1.46	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	0.65	**74**
7	6.00	6.00	11.50	1.85	0	5.14	0.00	0.00	1.30	1.20	0.80	1.35	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	0.63	**70**
8	7.00	7.00	11.50	1.85	0	5.14	0.00	0.00	1.30	1.20	0.80	1.33	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	0.61	**67**
9	4.00	4.00	12.00	1.85	0	5.14	0.00	0.00	1.30	1.20	0.80	1.60	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	0.63	**81**
10	5.00	5.00	12.00	1.85	0	5.14	0.00	0.00	1.30	1.20	0.80	1.48	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	0.60	**75**
11	6.00	6.00	12.00	1.85	0	5.14	0.00	0.00	1.30	1.20	0.80	1.40	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	0.58	**71**
12	7.00	7.00	12.00	1.85	0	5.14	0.00	0.00	1.30	1.20	0.80	1.34	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	0.57	**68**

Note :-

1) The factor of safety of 2.5 is considered.

2) The depth of foundation is considered from the NGL at the time of exploration.

3) Calculations are considering the effect of water table at 13 m.

4) Basement upto 9.5 m depth from NGL has been considered for calculations. The effective overburden pressure has been considered for soil between basement bottom and foundation bottom.

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APPENDIX - 2.2 (Non tower)

Calculation of Safe Bearing Pressure for Settlement of 25 and 40 mm

Project :- Proposed structure at Plot 58 B at GIP City, Gandhinagar

Sr. No.	Foundation Details			Immediate Settlement				Consolidation Settlement					Net Safe Bearing Pressure	
	Depth D	Width B	Length L	Poissons ratio μ	Modulus of Elasticity E	Factor Cf	Rigidity Factor	Coefficient of Volume Compressibility	Depth of Compressible Stratum H	Ir factor related to pore pressure parameter	Depth Factor dF	Rigidity Factor	For 25 mm Settlement	For 40 mm Settlement
	m	m	m		kg/cm²			cm²/kg	m				T / m²	T / m²
1	11.00	4.00	4.00	0.35	915	0.93	0.80	0.0053	8.00	0.50	0.73	0.80	57	91
2	11.00	5.00	5.00	0.35	915	0.97	0.80	0.0053	10.00	0.50	0.73	0.80	45	72
3	11.00	6.00	6.00	0.35	915	1.00	0.80	0.0053	12.00	0.50	0.73	0.80	37	59
4	11.00	7.00	7.00	0.35	915	1.04	0.80	0.0053	14.00	0.50	0.73	0.80	31	50
5	11.50	4.00	4.00	0.35	915	0.93	0.80	0.0053	8.00	0.50	0.73	0.80	57	91
6	11.50	5.00	5.00	0.35	915	0.97	0.80	0.0053	10.00	0.50	0.73	0.80	45	72
7	11.50	6.00	6.00	0.35	915	0.99	0.80	0.0053	12.00	0.50	0.73	0.80	37	59
8	11.50	7.00	7.00	0.35	915	1.03	0.80	0.0053	14.00	0.50	0.73	0.80	31	50
9	12.00	4.00	4.00	0.35	915	0.92	0.80	0.0053	8.00	0.50	0.73	0.80	57	91
10	12.00	5.00	5.00	0.35	915	0.96	0.80	0.0053	10.00	0.50	0.73	0.80	45	72
11	12.00	6.00	6.00	0.35	915	0.98	0.80	0.0053	12.00	0.50	0.73	0.80	37	59
12	12.00	7.00	7.00	0.35	915	1.02	0.80	0.0053	14.00	0.50	0.73	0.80	31	50

NOTATIONS

C	Cohesion
ϕ	Angle of internal friction of soil
DS	Disturbed Sample
UDS	Undisturbed Sample
NMC	Natural Moisture Content
NP	Non Plastic Soils
G	Specific Gravity
G	Gravel Content
M	Silt Content
S	Sand Content
C	Clay Content
LL	Liquid Limit
PL	Plastic Limit
PI	Plasticity Index
Cc	Compression Index
K	Coefficient of Permeability
UCS	Unconfined Compression
N	SPT Value
BH	Bore Hole
Suffix	The Number of Bore Holes
N_c, N_q, N_γ	Bearing Capacity Factor
S_c, S_q, S_γ	Shape Factors
γ	Density of Soil
D	Depth of foundation
FS	Factor of Safety
Cv	Coefficient of consolidation
UU	Unconsolidated undrained triaxial test
CU	Consolidated undrained triaxial test
CD	Consolidated drained triaxial test
GC	Clayey Gravels
GP	Poorely Graded Gravels
GW	Well Graded Gravels
SC	Clayey Sand
SM	Silty Sand
SW	Wel Graded Sand
SP	Poorly Graded Sand
CH	Clays of High Plasticity
CI	Clays of Intermediate Plasticity
CL	Clays of Low Plasticity
MH	Silts of High Plasticity
MI	Silts of Intermediate Plasticity
ML	Silts of Low Plasticity

<u>REFERENCE</u>

Indian Standards	IS 2720 Pt II, III, IV, V, XIII, XXXI,XXVII,XXVIS1498,IS6403,IS 1904
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KCT Consultancy Services, Ahmedabad

ST/21/12/17626

RESULTS OF LABORATORY TEST

Project :- Proposed structure at Plot 58 B at GIFT City, Gandhinagar

BH No. :- 5

Sr. No.	Depth of Sample (m)	Type of Sample	Field Bulk Density (gm/cc)	Field Dry Density (gm/cc)	Natural Moisture Content (%)	Specific Gravity	Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Shrinkage Limit (%)	Swelling Pressure (Kg/cm²)	Free Swell Index (%)	Soil Classification	Cohesion C (Kg/cm²)	Angle of Internal Friction φ (Degree)	Unconfined Compression Test (Kg/cm²)	UCS by Point Load Index in rock (Kg/cm²)	Type of Shear Test	Compression Index Cc	Coefficient of Volume Compressibility mv (cm²/kg)	Pre-consolidation Pressure (kg/cm²)	SPT N Value	Rock Quality Designation (%)	Void Ratio	Porosity (%)
1	0.80	DS	-	-	-	-	0	76	24		20	16	4	-	-	-	SM	-	-	-	-	-	-	-	-	-	-	-	-
2	1.50	SPT	-	-	-	-	15	51	34		28	17	11	-	-	-	SC	-	-	-	-	-	-	-	-	5	-	-	-
3	3.00	UDS	1.91	1.55	16.75	2.66	14	54	32		26	16	10	-	-	-	SC	0.05	33	-	-	DSU	-	-	-	-	-	0.71	41.6
4	4.50	SPT	-	-	-	-	13	65	22		22	14	8	-	-	-	SC	-	-	-	-	-	-	-	-	14	-	-	-
5	6.00	UDS	1.84	1.88	2.87	2.65	8	74	18		21	13	8	-	-	-	SC	0.01	29	-	-	DSU	-	-	-	-	-	0.67	40.1
6	7.50	SPT	-	-	-	-	7	80	20		27	17	10	-	-	-	SC	-	-	-	-	-	-	-	-	35	-	-	-
7	9.00	UDS	1.75	1.88	9.38	2.65	0	65	35		29	18	11	-	-	-	SC	0.05	28	-	-	DSU	-	-	-	-	-	0.66	39.8
8	10.50	SPT	-	-	-	-	0	28	35	37	53	21	32	-	-	-	CH	-	-	-	-	-	-	-	-	34	-	-	-
9	12.00	UDS	2.03	1.65	22.45	2.62	0	21	35	44	59	30	29	-	-	-	CH	1.32	2	-	-	TUU	0.10	0.0054	3.61	-	-	0.59	37.0
10	13.50	SPT	-	-	-	-	4	32	38	26	56	24	32	-	-	-	CH	-	-	-	-	-	-	-	-	47	-	-	-
11	15.00	UDS	2.04	1.68	21.67	2.63	4	23	40	33	52	24	28	-	-	-	CH	1.58	3	-	-	TUU	0.10	0.0086	4.35	-	-	0.67	38.2
12	16.50	SPT	-	-	-	-	0	29	43	29	48	20	28	-	-	-	CI	-	-	-	-	-	-	-	-	37	-	-	-
13	18.00	UDS	2.05	1.68	22.12	2.67	25	25	29	23	56	18	20	-	-	-	CI	2.25	9	-	-	TUU	0.09	0.0048	4.34	-	-	0.59	37.1
14	19.50	SPT	-	-	-	-	0	30	40	30	44	18	26	-	-	-	CI	-	-	-	-	-	-	-	-	63	-	-	-
15	21.00	UDS	2.06	1.73	18.99	2.61	7	29	33	31	46	19	27	-	-	-	CI	2.08	3	-	-	TUU	0.09	0.0050	6.26	-	-	0.62	38.2
16	22.50	SPT	-	-	-	-	18	36	46		42	21	21	-	-	-	SC	-	-	-	-	-	-	-	-	>100	-	-	-
17	24.00	UDS	2.08	1.75	19.02	2.65	0	72	28		32	22	10	-	-	-	SC	0.06	32	-	-	DSU	-	-	-	-	-	0.63	34.8
18	25.50	SPT	-	-	-	-	33	49	18		29	20	9	-	-	-	SC	-	-	-	-	-	-	-	-	>100	-	-	-
19	27.00	UDS	2.18	1.77	19.07	2.65	0	72	28		31	19	12	-	-	-	SC	0.09	31	-	-	DSU	-	-	-	-	-	0.50	33.3
20	28.50	SPT	-	-	-	-	18	67	15		26	16	10	-	-	-	SC	-	-	-	-	-	-	-	-	>100	-	-	-
21	30.00	UDS	2.13	1.78	19.15	2.66	0	79	21		33	22	11	-	-	-	SC	0.07	31	-	-	DSU	-	-	-	-	-	0.49	32.6
22	31.50	SPT	-	-	-	-	0	87	13		NP	NP	NP	-	-	-	SM	-	-	-	-	-	-	-	-	>100	-	-	-
23	33.00	SPT	-	-	-	-	0	88	12		NP	NP	NP	-	-	-	SM	-	-	-	-	-	-	-	-	>100	-	-	-
24	34.50	SPT	-	-	-	-	5	72	23		19	15	4	-	-	-	SM	-	-	-	-	-	-	-	-	>100	-	-	-
25	36.00	SPT	-	-	-	-	0	69	31		23	18	5	-	-	-	SM	-	-	-	-	-	-	-	-	>100	-	-	-
26	37.50	SPT	-	-	-	-	2	86	12		NP	NP	NP	-	-	-	SM	-	-	-	-	-	-	-	-	>100	-	-	-
27	39.00	SPT	-	-	-	-	3	83	14		NP	NP	NP	-	-	-	SM	-	-	-	-	-	-	-	-	>100	-	-	-
28	40.50	SPT	-	-	-	-	0	86	14		NP	NP	NP	-	-	-	SM	-	-	-	-	-	-	-	-	>100	-	-	-
29	42.00	SPT	-	-	-	-	0	85	15		17	NP	NP	-	-	-	SM	-	-	-	-	-	-	-	-	>100	-	-	-
30	43.50	SPT	-	-	-	-	0	87	13		NP	NP	NP	-	-	-	SM	-	-	-	-	-	-	-	-	>100	-	-	-
31	45.00	SPT	-	-	-	-	0	26	41	33	52	22	30	-	-	-	CH	-	-	-	-	-	-	-	-	>100	-	-	-
32	46.50	SPT	-	-	-	-	6	24	32	38	55	20	33	-	-	-	CH	-	-	-	-	-	-	-	-	>100	-	-	-
33	48.00	UDS	2.08	1.72	19.68	2.61	7	11	39	43	56	18	38	-	-	-	CH	4.31	2	-	-	TUU	-	-	-	-	-	0.52	34.2
34	49.50	SPT	-	-	-	-	0	10	49	41	58	22	36	-	-	-	CH	-	-	-	-	-	-	-	-	>100	-	-	-
35	51.00	UDS	2.08	1.74	19.56	2.63	8	24	32	36	53	22	31	-	-	-	CH	4.20	4	-	-	TUU	-	-	-	-	-	0.51	33.7
36	52.50	SPT	-	-	-	-	0	69	30		27	18	9	-	-	-	SC	-	-	-	-	-	-	-	-	>100	-	-	-
37	54.00	UDS	2.11	1.79	18.36	2.65	0	67	33		36	25	11	-	-	-	SC	0.07	31	-	-	TUU	-	-	-	-	-	0.49	32.7
38	55.50	SPT	-	-	-	-	0	77	23		34	24	10	-	-	-	SC	-	-	-	-	-	-	-	-	>100	-	-	-
39	57.00	UDS	2.18	1.78	19.14	2.66	4	72	24		48	21	27	-	-	-	SC	0.10	33	-	-	TUU	-	-	-	-	-	0.51	33.7
40	58.50	SPT	-	-	-	-	0	22	40	38	54	18	36	-	-	-	CH	-	-	-	-	-	-	-	-	>100	-	-	-
41	60.00	UDS	2.08	1.75	19.59	2.65	0	21	38	41	57	20	37	-	-	-	CH	4.24	3	-	-	TUU	-	-	-	-	-	0.51	33.9
42	61.50	SPT	-	-	-	-	18	18	30	34	53	22	31	-	-	-	CH	-	-	-	-	-	-	-	-	>100	-	-	-
43	63.00	UDS	2.07	1.73	19.50	2.63	3	14	41	42	57	21	36	-	-	-	CH	4.31	2	-	-	TUU	-	-	-	-	-	0.52	34.4
44	64.50	SPT	-	-	-	-	0	24	41	35	54	23	31	-	-	-	CH	-	-	-	-	-	-	-	-	>100	-	-	-
45	66.00	UDS	2.18	1.77	16.60	2.64	0	29	34	37	52	20	32	-	-	-	CH	4.36	4	-	-	TUU	-	-	-	-	-	0.49	32.9
46	67.50	SPT	-	-	-	-	5	14	43	38	55	21	34	-	-	-	CH	-	-	-	-	-	-	-	-	>100	-	-	-
47	69.00	DS	-	-	-	-	18	30	23	29	53	19	34	-	-	-	CH	-	-	-	-	-	-	-	-	-	-	-	-
48	70.00	SPT	-	-	-	-	22	24	22	32	61	23	38	-	-	-	CH	-	-	-	-	-	-	-	-	>100	-	-	-

Page no. 13 of 25

UDS : Undisturbed Sample
DS : Disturbed Sample

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed residence at Plot 58 B at GIP City, Gandhinagar

Bh No. :- 2

Sr. No.	Depth of Sample m	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis: Gravel %	Sand %	Silt %	Clay %	Consistency limit: Liquid Limit %	Plastic Limit %	Plasticity Index %	Shrinkage Limit %	Swelling Pressure Kg/cm²	Free Swell Index %	Soil Classification	Shear Parameter: Cohesion C Kg/cm²	Angle of Internal Friction Φ Degree	Unconfined Compression Test Kg/cm²	UCS by Point Load Index Kg/cm²	Type of Shear Test	Consolidation Parameters: Compression Index Cc	Coefficient of Volume Compressibility mv	Pre-consolidation Pressure kg/cm²	SPT N value	Rock Quality Designation %	Void Ratio	Porosity %
1	1.50	DS	-	-	-	-	3	49	48		28	21	7	-	-	-	SM-SC	-	-	-	-	-	-	-	-	-	-	-	-
2	1.50	UDS	1.73	1.68	9.43	2.65	6	63	42		24	15	9	-	-	-	SC	0.02	33	-	-	DSU	-	-	-	-	-	0.55	35.8
3	3.00	SPT	-	-	-	-	8	47	47		30	16	14	-	-	-	SC	-	-	-	-	-	-	-	-	18	-	-	-
4	4.50	UDS	1.76	1.68	10.06	2.66	1	56	43		26	12	13	-	-	-	SC	0.04	26	-	-	DSU	-	-	-	-	-	0.57	40.5
5	6.00	SPT	-	-	-	-	18	60	46		26	15	11	-	-	-	SC	-	-	-	-	-	-	-	-	24	-	-	-
6	7.50	UDS	1.78	1.62	7.31	2.66	31	61	18		29	16	8	-	-	-	SC	0.03	32	-	-	DSU	-	-	-	-	-	0.41	37.8
7	9.00	SPT	-	-	-	-	19	45	41		29	18	11	-	-	-	SC	-	-	-	-	-	-	-	-	31	-	-	-
8	10.50	UDS	1.98	1.73	15.04	2.64	18	19	30	33	58	19	37	-	-	-	CH	1.08	4	-	-	TUU	0.89	0.0055	5.72	-	-	0.53	34.8
9	12.00	SPT	-	-	-	-	6	34	34	26	54	32	22	-	-	-	CH	-	-	-	-	-	-	-	-	62	-	-	-
10	13.50	UDS	2.08	1.73	19.79	2.64	7	29	31	33	53	24	30	-	-	-	CH	0.27	9	-	-	TUU	0.88	0.0028	4.50	-	-	0.53	34.6
11	15.00	SPT	-	-	-	-	18	37	19	17	53	21	32	-	-	-	CI	-	-	-	-	-	-	-	-	>100	-	-	-
12	16.50	UDS	1.97	1.75	12.57	2.63	0	29	30	42	58	20	38	-	-	-	CI	4.02	5	-	-	TUU	-	-	-	-	-	0.60	33.5
13	18.00	SPT	-	-	-	-	0	30	36	33	54	23	31	-	-	-	CI	-	-	-	-	-	-	-	-	>100	-	-	-
14	19.50	UDS	2.08	1.81	14.74	2.64	14	25	28	33	53	33	20	-	-	-	CI	2.21	9	-	-	TUU	0.89	0.0043	4.54	-	-	0.44	30.0
15	21.00	SPT	-	-	-	-	0	40	44		28	21	11	-	-	-	SC	-	-	-	-	-	-	-	-	37	-	-	-
16	22.50	UDS	2.01	1.63	23.01	2.66	3	32	45		41	20	21	-	-	-	SC	0.06	20	-	-	DSU	-	-	-	-	-	0.63	38.9
17	24.00	SPT	-	-	-	-	6	50	44		40	29	11	-	-	-	SC	-	-	-	-	-	-	-	-	>100	-	-	-
18	25.50	UDS	2.18	1.77	19.07	2.65	13	39	38		52	31	11	-	-	-	SC	0.06	32	-	-	DSU	-	-	-	-	-	0.50	33.5
19	27.00	SPT	-	-	-	-	0	91	19		27	17	10	-	-	-	SC	-	-	-	-	-	-	-	-	>100	-	-	-
20	28.50	UDS	2.13	1.88	17.96	2.66	18	51	28		33	19	13	-	-	-	SC	0.05	31	-	-	DSU	-	-	-	-	-	0.47	32.1
21	30.00	SPT	-	-	-	-	0	78	22		26	20	6	-	-	-	SM	-	-	-	-	-	-	-	-	>100	-	-	-
22	31.50	SPT	-	-	-	-	4	82	14		NP	NP	NP	-	-	-	SM	-	-	-	-	-	-	-	-	>100	-	-	-
23	33.00	SPT	-	-	-	-	0	84	16		19	15	4	-	-	-	SM	-	-	-	-	-	-	-	-	>100	-	-	-
24	34.50	SPT	-	-	-	-	0	89	12		NP	NP	NP	-	-	-	SM	-	-	-	-	-	-	-	-	>100	-	-	-
25	36.00	SPT	-	-	-	-	33	51	16		NP	NP	NP	-	-	-	SM	-	-	-	-	-	-	-	-	>100	-	-	-
26	37.50	SPT	-	-	-	-	3	75	22		20	16	4	-	-	-	SM	-	-	-	-	-	-	-	-	>100	-	-	-
27	39.00	SPT	-	-	-	-	6	78	16		NP	NP	NP	-	-	-	SM	-	-	-	-	-	-	-	-	>100	-	-	-
28	40.50	SPT	-	-	-	-	6	77	17		NP	NP	NP	-	-	-	SM	-	-	-	-	-	-	-	-	>100	-	-	-
29	42.00	SPT	-	-	-	-	0	87	13		NP	NP	NP	-	-	-	SM	-	-	-	-	-	-	-	-	>100	-	-	-
30	43.50	SPT	-	-	-	-	0	86	14		NP	NP	NP	-	-	-	SM	-	-	-	-	-	-	-	-	>100	-	-	-
31	45.00	SPT	-	-	-	-	9	22	29	40	57	20	37	-	-	-	CH	-	-	-	-	-	-	-	-	>100	-	-	-
32	46.50	UDS	2.13	1.85	15.05	2.65	2	26	32	35	54	23	31	-	-	-	CH	4.01	4	-	-	TUU	-	-	-	-	-	0.44	30.7
33	48.00	SPT	-	-	-	-	6	16	37	41	60	28	35	-	-	-	CH	-	-	-	-	-	-	-	-	>100	-	-	-
34	49.50	DS	-	-	-	-	28	27	20	33	53	24	29	-	-	-	CH	-	-	-	-	-	-	-	-	-	-	-	-
35	51.00	SPT	-	-	-	-	0	14	48	38	60	25	35	-	-	-	CH	-	-	-	-	-	-	-	-	>100	-	-	-
36	52.50	DS	-	-	-	-	22	37	41		27	16	11	-	-	-	SC	-	-	-	-	-	-	-	-	-	-	-	-
37	54.00	SPT	-	-	-	-	0	84	16		24	14	10	-	-	-	SC	-	-	-	-	-	-	-	-	>100	-	-	-
38	55.50	SPT	-	-	-	-	18	70	14		23	18	5	-	-	-	SC	-	-	-	-	-	-	-	-	>100	-	-	-
39	57.00	SPT	-	-	-	-	3	20	39	38	64	31	33	-	-	-	CH	-	-	-	-	-	-	-	-	>100	-	-	-
40	58.50	SPT	-	-	-	-	0	18	41	41	66	30	36	-	-	-	CH	-	-	-	-	-	-	-	-	87	-	-	-
41	60.00	SPT	-	-	-	-	0	24	45	31	60	24	36	-	-	-	CH	-	-	-	-	-	-	-	-	>100	-	-	-
42	61.50	UDS	2.08	1.78	16.82	2.60	2	13	49	36	56	22	34	-	-	-	CH	4.16	7	-	-	TUU	-	-	-	-	-	0.48	32.5
43	63.00	SPT	-	-	-	-	17	30	18	35	58	23	35	-	-	-	CH	-	-	-	-	-	-	-	-	>100	-	-	-
44	64.50	SPT	-	-	-	-	8	40	21	31	51	25	26	-	-	-	CH	-	-	-	-	-	-	-	-	>100	-	-	-
45	66.00	SPT	-	-	-	-	18	36	15	31	55	20	35	-	-	-	CH	-	-	-	-	-	-	-	-	>100	-	-	-
46	67.50	SPT	-	-	-	-	18	29	15	38	53	21	32	-	-	-	CH	-	-	-	-	-	-	-	-	>100	-	-	-
47	69.00	SPT	-	-	-	-	0	39	31	31	57	28	29	-	-	-	CH	-	-	-	-	-	-	-	-	>100	-	-	-
48	70.00	SPT	-	-	-	-	0	18	49	33	58	23	35	-	-	-	CH	-	-	-	-	-	-	-	-	>100	-	-	-

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed residence at Plot 58 B at GIP City, Gandhinagar

Bh No. :- 2

Sr. No.	Depth of Sample m	Type of sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis: Gravel %	Sand %	Silt %	Clay %	Consistency limit: Liquid Limit %	Plastic Limit %	Plasticity Index %	Shrinkage Limit %	Swelling Pressure Kg/cm²	Free Swell Index %	Soil Classification	Shear Parameter: Cohesion C Kg/cm²	Angle of Internal Friction Φ Degree	Unconfined Compression Test Kg/cm²	UCS By Point Load Index Kg/cm²	Type of Shear Test	Consolidation Parameters: Compression Index Cc	Coefficient of Volume Compressibility mv	Pre-consolidation Pressure Kg/cm²	SPT N Value	Rock Quality Designation %	Void Ratio	Porosity %
1	1.50	DS	-	-	-	-	7	69	24		26	20	6	-	-	-	Filled up Soil	-	-	-	-	-	-	-	-	-	-	-	-
2	1.50	UDS	1.76	1.67	12.07	2.66	14	67	19		29	18	10	-	-	-	SC	0.02	30	-	-	DSU	-	-	-	-	-	0.59	41.0
3	3.00	SPT	-	-	-	-	5	68	27		25	14	11	-	-	-	SC	-	-	-	-	-	-	-	-	4	-	-	-
4	4.50	UDS	1.75	1.68	10.00	2.67	33	29	42		31	16	15	-	-	-	SC	0.05	22	-	-	DSU	-	-	-	-	-	0.59	40.9
5	6.00	SPT	-	-	-	-	9	63	43		28	17	11	-	-	-	SC	-	-	-	-	-	-	-	-	7	-	-	-
6	7.50	UDS	1.79	1.68	8.15	2.66	14	67	19		24	17	8	-	-	-	SC	0.01	27	-	-	DSU	-	-	-	-	-	0.57	40.1
7	9.00	SPT	-	-	-	-	12	45	43		35	21	14	-	-	-	SC	-	-	-	-	-	-	-	-	28	-	-	-
8	10.50	UDS	1.91	1.67	21.67	2.61	2	22	40	36	56	24	32	-	-	-	CH	1.74	9	-	-	TUU	0.12	0.0063	3.50	-	-	0.66	39.6
9	12.00	SPT	-	-	-	-	0	13	31	56	76	25	51	-	-	-	CH	-	-	-	-	-	-	-	-	25	-	-	-
10	13.50	UDS	2.08	1.69	23.08	2.60	9	14	33	44	58	24	40	-	-	-	CH	1.88	9	-	-	TUU	0.10	0.0063	5.76	-	-	0.60	37.5
11	15.00	SPT	-	-	-	-	0	17	64	19	46	22	26	-	-	-	CI	-	-	-	-	-	-	-	-	28	-	-	-
12	16.50	UDS	2.08	1.81	25.95	2.63	2	31	37	30	44	18	26	-	-	-	CI	2.72	5	-	-	TUU	0.11	0.0034	4.88	-	-	0.63	38.7
13	18.00	SPT	-	-	-	-	3	35	35	27	41	17	24	-	-	-	CI	-	-	-	-	-	-	-	-	23	-	-	-
14	19.50	UDS	2.08	1.81	24.53	2.65	14	33	39	14	39	18	21	-	-	-	CI	2.02	9	-	-	TUU	0.11	0.0051	4.22	-	-	0.65	39.4
15	21.00	SPT	-	-	-	-	13	66	21		31	20	11	-	-	-	SC	-	-	-	-	-	-	-	-	48	-	-	-
16	22.50	UDS	2.06	1.69	21.92	2.68	34	39	26		43	31	22	-	-	-	SC	0.06	22	-	-	DSU	-	-	-	-	-	0.58	36.9
17	24.00	SPT	-	-	-	-	6	66	28		35	18	17	-	-	-	SC	-	-	-	-	-	-	-	-	>100	-	-	-
18	25.50	UDS	2.07	1.73	20.45	2.65	18	49	43		39	17	22	-	-	-	SC	0.12	29	-	-	DSU	-	-	-	-	-	0.54	35.2
19	27.00	SPT	-	-	-	-	9	75	16		25	15	10	-	-	-	SC	-	-	-	-	-	-	-	-	>100	-	-	-
20	28.50	UDS	2.07	1.73	20.45	2.66	8	49	43		53	35	38	-	-	-	SC	0.13	34	-	-	DSU	-	-	-	-	-	0.54	35.2
21	30.00	SPT	-	-	-	-	3	53	44		43	33	10	-	-	-	SC	-	-	-	-	-	-	-	-	>100	-	-	-
22	31.50	Remoulded	2.18	1.78	19.14	2.66	0	84	16		24	20	4	-	-	-	SM	0.05	33	-	-	DSU	-	-	-	-	-	0.51	35.7
23	33.00	SPT	-	-	-	-	0	74	26		29	24	5	-	-	-	SM	-	-	-	-	-	-	-	-	>100	-	-	-
24	34.50	SPT	-	-	-	-	4	67	29		30	25	5	-	-	-	SM	-	-	-	-	-	-	-	-	61	-	-	-
25	36.00	SPT	-	-	-	-	0	82	18		24	20	4	-	-	-	SM	-	-	-	-	-	-	-	-	67	-	-	-
26	37.50	Remoulded	2.13	1.78	19.13	2.66	0	80	18		26	20	6	-	-	-	SM	0.05	33	-	-	DSU	-	-	-	-	-	0.49	32.5
27	39.00	SPT	-	-	-	-	6	77	17		28	24	4	-	-	-	SM	-	-	-	-	-	-	-	-	>100	-	-	-
28	40.50	SPT	-	-	-	-	0	88	12		NP	NP	NP	-	-	-	SM	-	-	-	-	-	-	-	-	>100	-	-	-
29	42.00	SPT	-	-	-	-	0	87	13		NP	NP	NP	-	-	-	SM	-	-	-	-	-	-	-	-	51	-	-	-
30	43.50	SPT	-	-	-	-	0	87	13		NP	NP	NP	-	-	-	SM	-	-	-	-	-	-	-	-	>100	-	-	-
31	45.00	SPT	-	-	-	-	0	83	17		20	16	4	-	-	-	SM	-	-	-	-	-	-	-	-	>100	-	-	-
32	46.50	SPT	-	-	-	-	13	70	18		21	17	4	-	-	-	SM	-	-	-	-	-	-	-	-	>100	-	-	-
33	48.00	SPT	-	-	-	-	23	24	19	34	53	23	30	-	-	-	CH	-	-	-	-	-	-	-	-	>100	-	-	-
34	49.50	UDS	2.18	1.77	19.30	2.62	18	20	25	36	55	24	31	-	-	-	CH	3.67	4	-	-	UCS	-	-	-	-	-	0.48	32.5
35	51.00	SPT	-	-	-	-	0	24	40	36	62	30	32	-	-	-	CH	-	-	-	-	-	-	-	-	>100	-	-	-
36	52.50	UDS	2.13	1.91	11.04	2.62	0	20	40	31	51	24	27	-	-	-	CH	3.55	5	-	-	UCS	-	-	-	-	-	0.42	30.0
37	54.00	SPT	-	-	-	-	18	30	42		41	23	18	-	-	-	SC	-	-	-	-	-	-	-	-	>100	-	-	-
38	55.50	DS	-	-	-	-	6	46	48		45	20	25	-	-	-	SC	-	-	-	-	-	-	-	-	-	-	-	-
39	57.00	SPT	-	-	-	-	28	44	28		40	19	21	-	-	-	SC	-	-	-	-	-	-	-	-	>100	-	-	-
40	58.50	UDS	2.18	1.78	16.04	2.67	5	26	33	34	54	24	30	-	-	-	CH	4.04	3	-	-	UCS	-	-	-	-	-	0.47	32.1
41	60.00	SPT	-	-	-	-	9	16	39	37	55	23	32	-	-	-	CH	-	-	-	-	-	-	-	-	>100	-	-	-
42	61.50	UDS	2.05	1.71	20.16	2.60	2	19	44	35	54	23	31	-	-	-	CH	4.12	2	-	-	UCS	-	-	-	-	-	0.62	34.4
43	63.00	SPT	-	-	-	-	0	14	48	38	58	24	34	-	-	-	CH	-	-	-	-	-	-	-	-	>100	-	-	-
44	64.50	UDS	2.08	1.71	20.45	2.63	0	24	40	36	58	25	33	-	-	-	CH	4.08	3	-	-	UCS	-	-	-	-	-	0.64	35.0
45	66.00	SPT	-	-	-	-	8	26	28	38	66	34	32	-	-	-	CH	-	-	-	-	-	-	-	-	>100	-	-	-
46	67.50	DS	-	-	-	-	0	32	37	31	54	26	28	-	-	-	CH	-	-	-	-	-	-	-	-	-	-	-	-
47	69.00	SPT	-	-	-	-	0	20	39	41	60	25	35	-	-	-	CH	-	-	-	-	-	-	-	-	>100	-	-	-
48	70.00	SPT	-	-	-	-	4	14	50	32	63	34	29	-	-	-	CH	-	-	-	-	-	-	-	-	>100	-	-	-

KCT Consultancy Services, Ahmedabad

ST/2012/17626

RESULTS OF LABORATORY TEST

Project :- Proposed residence at Plot 58 B at GIP City, Gandhinagar

Bh No. :- 4

Sr. No.	Depth of Sample m	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis: Gravel %	Sand %	Silt %	Clay %	Consistency limit: Liquid Limit %	Plastic Limit %	Plasticity Index %	Shrinkage Limit %	Swelling Pressure Kg/cm²	Free Swell Index %	Soil Classification	Shear Parameter: Cohesion C Kg/cm²	Angle of Internal Friction Φ Degree	Unconfined Compression Test Kg/cm²	UCS by Point Load Index Kg/cm²	Type of Shear Test	Consolidation Parameters: Compression Index Cc	Coefficient of Volume Compressibility mv/Kg	Pre-consolidation Pressure Kg/cm²	SPT N value	Rock Quality Designation %	Void Ratio	Porosity %
1	1.50	DS	-	-	-	-	12	68	20		27	16	11	-	-	-	Filled up Soil	-	-	-	-	-	-	-	-	-	-	-	-
2	1.50	SPT	-	-	-	-	7	52	41		24	21	10	-	-	-	SC	-	-	-	-	-	-	-	-	4	-	-	-
3	3.00	UCS	1.77	1.68	11.02	2.64	5	35	45		32	16	16	-	-	-	SC	0.04	31	-	-	DSU	-	-	-	-	-	0.58	41.0
4	4.50	SPT	-	-	-	-	4	33	20		26	18	8	-	-	-	SC	-	-	-	-	-	-	-	-	18	-	-	-
5	6.00	UCS	1.78	1.61	10.60	2.65	6	46	44		30	17	13	-	-	-	SC	0.05	29	-	-	DSU	-	-	-	-	-	0.65	39.4
6	7.50	SPT	-	-	-	-	6	64	30		28	18	10	-	-	-	SC	-	-	-	-	-	-	-	-	32	-	-	-
7	9.00	UCS	1.68	1.62	15.10	2.65	2	70	28		25	14	11	-	-	-	SC	0.02	30	-	-	DSU	-	-	-	-	-	0.64	39.0
8	10.50	SPT	-	-	-	-	2	7	67	24	54	23	31	-	-	-	CH	-	-	-	-	-	-	-	-	56	-	-	-
9	12.00	UCS	1.98	1.69	19.02	2.62	0	23	35	52	71	35	36	-	-	-	CH	1.01	2	-	-	TUU	0.10	0.0056	3.60	-	-	0.61	37.8
10	13.50	SPT	-	-	-	-	0	32	31	37	60	26	34	-	-	-	CH	-	-	-	-	-	-	-	-	44	-	-	-
11	15.00	UCS	1.91	1.68	13.53	2.62	2	25	40	33	54	24	30	-	-	-	CH	0.22	5	-	-	TUU	0.09	0.0044	4.60	-	-	0.68	39.8
12	16.50	SPT	-	-	-	-	28	25	30	18	38	20	18	-	-	-	CI	-	-	-	-	-	-	-	-	58	-	-	-
13	18.00	UCS	1.97	1.67	17.03	2.63	2	37	30	31	43	21	22	-	-	-	CI	1.04	4	-	-	TUU	0.10	0.0067	4.97	-	-	0.59	36.5
14	19.50	SPT	-	-	-	-	0	47	32	21	45	33	19	-	-	-	CI	-	-	-	-	-	-	-	-	53	-	-	-
15	21.00	UCS	1.98	1.71	11.13	2.65	7	60	20		28	15	13	-	-	-	SC	0.05	28	-	-	DSU	-	-	-	-	-	0.55	35.5
16	22.50	SPT	-	-	-	-	0	70	20		27	15	12	-	-	-	SC	-	-	-	-	-	-	-	-	>100	-	-	-
17	24.00	UCS	1.92	1.78	7.48	2.66	6	70	16		24	14	10	-	-	-	SC	0.04	30	-	-	DSU	-	-	-	-	-	0.49	32.9
18	25.50	SPT	-	-	-	-	1	76	23		26	16	10	-	-	-	SC	-	-	-	-	-	-	-	-	>100	-	-	-
19	27.00	SPT	-	-	-	-	4	49	48		34	18	16	-	-	-	SC	-	-	-	-	-	-	-	-	>100	-	-	-
20	28.50	SPT	-	-	-	-	13	69	18		31	19	12	-	-	-	SC	-	-	-	-	-	-	-	-	>100	-	-	-
21	30.00	UCS	2.12	1.77	19.97	2.64	9	45	47		44	30	14	-	-	-	SC	0.06	28	-	-	DSU	-	-	-	-	-	0.65	36.5
22	31.50	SPT	-	-	-	-	0	76	24		25	18	5	-	-	-	SM	-	-	-	-	-	-	-	-	>100	-	-	-
23	33.00	SPT	-	-	-	-	0	89	11		NP	NP	NP	-	-	-	SM	-	-	-	-	-	-	-	-	>100	-	-	-
24	34.50	SPT	-	-	-	-	0	91	19		20	16	4	-	-	-	SM	-	-	-	-	-	-	-	-	>100	-	-	-
25	36.00	SPT	-	-	-	-	0	87	13		NP	NP	NP	-	-	-	SM	-	-	-	-	-	-	-	-	>100	-	-	-
26	37.50	SPT	-	-	-	-	0	66	28		26	20	6	-	-	-	SM	-	-	-	-	-	-	-	-	>100	-	-	-
27	39.00	UCS	2.04	1.67	20.15	2.65	0	69	31		25	16	4	-	-	-	SM	0.05	22	-	-	DSU	-	-	-	-	-	0.65	37.5
28	40.50	SPT	-	-	-	-	24	64	12		NP	NP	NP	-	-	-	SM	-	-	-	-	-	-	-	-	>100	-	-	-
29	42.00	DS	-	-	-	-	6	71	23		20	16	4	-	-	-	SM	-	-	-	-	-	-	-	-	-	-	-	-
30	43.50	SPT	-	-	-	-	9	80	12		NP	NP	NP	-	-	-	SM	-	-	-	-	-	-	-	-	>100	-	-	-
31	45.00	SPT	-	-	-	-	4	34	30	42	52	16	36	-	-	-	CH	-	-	-	-	-	-	-	-	>100	-	-	-
32	46.50	SPT	-	-	-	-	0	14	42	44	51	19	32	-	-	-	CH	-	-	-	-	-	-	-	-	>100	-	-	-
33	48.00	UCS	2.07	1.73	19.62	2.62	0	26	38	36	62	30	32	-	-	-	CH	4.08	3	-	-	TUU	-	-	-	-	-	0.61	34.0
34	49.50	SPT	-	-	-	-	0	47	15	38	51	16	35	-	-	-	CH	-	-	-	-	-	-	-	-	>100	-	-	-
35	51.00	UCS	2.06	1.71	20.15	2.60	8	20	30	42	58	19	39	-	-	-	CH	4.12	4	-	-	TUU	-	-	-	-	-	0.62	34.4
36	52.50	SPT	-	-	-	-	18	16	30	36	59	19	40	-	-	-	CH	-	-	-	-	-	-	-	-	>100	-	-	-
37	54.00	UCS	2.08	1.71	20.46	2.65	0	26	30	44	64	18	46	-	-	-	CH	4.12	6	-	-	TUU	-	-	-	-	-	0.64	36.0
38	55.50	SPT	-	-	-	-	2	55	43		34	18	16	-	-	-	SC	-	-	-	-	-	-	-	-	>100	-	-	-
39	57.00	DS	-	-	-	-	1	53	46		36	16	20	-	-	-	SC	-	-	-	-	-	-	-	-	-	-	-	-
40	58.50	SPT	-	-	-	-	0	19	41	40	55	20	35	-	-	-	CH	-	-	-	-	-	-	-	-	>100	-	-	-
41	60.00	UCS	2.08	1.78	20.72	2.62	0	25	40	35	55	23	32	-	-	-	CH	4.09	5	-	-	TUU	-	-	-	-	-	0.54	32.2
42	61.50	SPT	-	-	-	-	4	18	41	37	56	21	35	-	-	-	CH	-	-	-	-	-	-	-	-	>100	-	-	-
43	63.00	UCS	2.12	1.78	19.13	2.68	28	22	28	22	51	24	27	-	-	-	CH	3.34	10	-	-	TUU	-	-	-	-	-	0.48	32.8
44	64.50	SPT	-	-	-	-	3	14	47	36	57	25	32	-	-	-	CH	-	-	-	-	-	-	-	-	>100	-	-	-
45	66.00	DS	-	-	-	-	0	33	33	34	53	23	30	-	-	-	CH	-	-	-	-	-	-	-	-	-	-	-	-
46	67.50	SPT	-	-	-	-	0	11	32	57	56	24	32	-	-	-	CH	-	-	-	-	-	-	-	-	>100	-	-	-
47	69.00	SPT	-	-	-	-	0	28	40	32	54	20	34	-	-	-	CH	-	-	-	-	-	-	-	-	>100	-	-	-
48	70.00	SPT	-	-	-	-	0	26	41	33	58	27	29	-	-	-	CH	-	-	-	-	-	-	-	-	>100	-	-	-

Report No. 15 of 25


LEGEND
BLOCK BOUNDARY
BASEMENT EXTENT / LAND AREA LINE
MEDIAN
ROAD 58 EXISTING ROAD
DRIVEWAY
58-B
BLOCK : 58
EXISTING ACCESS ROAD
ROAD 58 PROPOSED ROAD

K.C.T. Consultancy Services®

ST/23/12/17628

Project : Gift city

Bore Hole No. : 1

Location : GIFT

Depth of Termination : 75.0 m

Depth of Water Table : encountered at 11.50m depth during investigation

Date of Start : 05-01-2023

Date of Completion : 09-01-2023

Diameter of Bore : 150mm

Bit used : Soil saw tooth

BORE LOG DATA SHEET 1 of 3

Method of Boring	Casing	Soil Description	Depth of Sample (m)	Drill Run From (m)	Drill Run To (m)	Type of Sample	SPT/N Value/Penetration of S.S.S. N_1	N_2	N_3	N	Remarks
Rotary Drilling by mud circulation	Not Used	Yellowish brown, fine to medium grained, silty sand with little plastic fines (SM) 0.00 to 0.50m	0.00	0.00	1.00	DS	-	-	-	-	
		Yellowish brown, fine to medium grained, clayey sand with much to some gravels (SC) 0.50 to 9.50m	1.50	1.50	3.00	SPT	1	2	4	6	
			3.00	3.00	4.50	UDS	-	-	-	-	
			4.50	4.50	6.00	SPT	4	6	8	14	
			6.00	6.00	7.50	UDS	-	-	-	-	
			7.50	7.50	9.00	SPT	8	15	20	35	
			9.00	9.00	10.50	UDS	-	-	-	-	
		Reddish yellow and yellowish brown, fine to medium grained, sandy clays of high plasticity with occasional gravels (CH) 9.50 to 16.00m	10.50	10.50	12.00	SPT	8	14	20	34	
			12.00	12.00	13.50	UDS	-	-	-	-	
			13.50	13.50	15.00	SPT	8	20	27	47	
			15.00	15.00	16.50	UDS	-	-	-	-	
		Yellowish brown, fine to very fine grained, sandy clays of intermediate plasticity with much to occasional gravels (CI) 16.00 to 22.00m	16.50	16.50	18.00	SPT	16	16	21	37	
			18.00	18.00	19.50	UDS	-	-	-	-	
			19.50	19.50	21.00	SPT	12	22	30	52	
			21.00	21.00	22.50	UDS	-	-	-	-	
		Yellowish brown, fine to very fine grained, clayey sand with little to much gravels (SC) 22.00 to 27.50m	22.50	22.50	24.00	SPT	28	50 (8 cm)	-	>100	
			24.00	24.00	25.50	UDS	-	-	-	-	
			25.50	25.50	27.00	SPT	30	50 (10 cm)	-	>100	
			27.00	27.00	28.50	UDS	-	-	-	-	
		Yellowish brown, fine to very fine grained, clayey sand with some to occasional gravels (SC) 27.50 to 30.00m	28.50	28.50	30.00	SPT	50 (12 cm)	-	-	>100	
			30.00	30.00	31.50	UDS	-	-	-	-	

K.C.T. Consultancy Services® ST/23/12/17626

Project : [illegible]

Bore Hole No. : 1
Location : [illegible]
Depth of Termination : 70.0 m
Depth of Water Table : Encountered at 10.00m depth during investigation

Date of Start : 05-01-2023
Date of Completion : 09-01-2023
Diameter of Bore : 150mm
Bit Used : Soil saw tooth

BORE LOG DATA SHEET 2 of 3

Method of Boring	Depth (m)	Casing	Soil Description	Depth of Sample (m)	Drill Run From (m)	Drill Run To (m)	Type of Sample	SPT N Value/Penetration of 15.0.0 N_1	N_2	N_3	N	Remarks
Rotary Drilling by mud circulation	30.00 – 31.60	Not Used	Yellowish brown, fine to very fine grained, clayey sand with some to occasional gravels (SC) 27.50 to 31.60m									
	31.50		Yellowish brown, fine to very fine grained, silty sand with little plastic fines and occasional gravels (SM) 31.60 to 44.70m	31.50	31.50	33.00	SPT	50 8 cm	-	-	>100	
	33.00			33.00	33.00	34.50	SPT	50 6 cm	-	-	>100	
	34.50			34.50	34.50	36.00	SPT	50 7 cm	-	-	>100	
	36.00			36.00	36.00	37.50	SPT	50 6 cm	-	-	>100	
	37.50			37.50	37.50	39.00	SPT	36	50 11 cm	-	>100	
	39.00			39.00	39.00	40.50	SPT	40	50 11 cm	-	>100	
	40.50			40.50	40.50	42.00	SPT	50 9 cm	-	-	>100	
	42.00			42.00	42.00	43.50	SPT	50 4 cm	-	-	>100	
	43.50			43.50	43.50	45.00	SPT	50 8 cm	-	-	>100	
	45.00		Yellowish brown, fine to medium grained, sandy clays of high plasticity with occasional gravels (CH) 44.70 to 51.60m	45.00	45.00	46.50	SPT	43	50 9 cm	-	>100	
	46.50			46.50	46.50	48.00	SPT	35	50 12 cm	-	>100	
	48.00			48.00	48.00	48.45	UDS	-	-	-	-	
	49.50			49.50	49.50	51.00	SPT	36	50 8 cm	-	>100	
	51.00			51.00	51.00	51.45	UDS	-	-	-	-	
	52.50		Reddish brown and light yellowish brown, fine to very fine grained, clayey sand with occasional gravels (SC) 51.60 to 57.60m	52.50	52.50	54.00	SPT	43	50 10 cm	-	>100	
	54.00			54.00	54.00	54.45	UDS	-	-	-	-	
	55.50			55.50	55.50	57.00	SPT	36	50 18 cm	-	>100	
	57.00			57.00	57.00	57.45	UDS	-	-	-	-	
	58.50		Yellowish brown, fine to very fine grained, clays of high plasticity with occasional to some gravels (CH) 57.60 to 60.00m	58.50	58.50	60.00	SPT	33	47	50 12 cm	>100	
	60.00			60.00	60.00	60.45	UDS	-	-	-	-	

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K.C.T. Consultancy Services® ST/23/12/17626

Project : Gift city

Borehole No. : 1

Location : [illegible]

Depth of Termination : 70.0 m

Depth of Water Table : Encountered at 12.00m depth during investigation

Date of Start : 05-01-2023

Date of Completion : 09-01-2023

Diameter of Bore : 150mm

Bit Used : [illegible]

BORE LOG DATA SHEET 3 of 3

Method of Boring	Depth m	Casing	Soil Description	Depth of Sample m	Drill Run From m	Drill Run To m	Type of Sample	SPT N Value/Penetration of S.S. N_1	N_2	N_3	N	Remarks
Rotary Drilling by mud circulation	60.50	Not Used	Yellowish brown, fine to very fine grained, clays of high plasticity with occasional to some gravels (CH)									
	61.00											
	61.50			61.50	61.50	62.00	SPT	50 7 cm	-	-	>100	
	62.00											
	62.50											
	63.00			63.00	63.00	63.50	UDS	-	-	-	-	
	63.50											
	64.00											
	64.50			64.50	64.50	65.00	SPT	50 7 cm	-	-	>100	
	65.00		57.00 to 65.50m									
	65.50		Reddish yellow, fine to very fine grained, clays of high plasticity with occasional gravels (CH)									
	66.00			66.00	66.00	66.50	UDS	-	-	-	-	
	66.50											
	67.00											
	67.50		65.50 to 68.00m	67.50	67.50	68.00	SPT	46	50 11 cm	-	>100	
	68.00		Brownish, fine to very fine grained, sandy clays of high plasticity with some to much gravels (CH)									
	68.50											
	69.00			69.00	69.00	70.00	DS	UDS attempted but not recovered				
	69.50								0 cm			
	70.00			70.00	70.00	70.13	SPT	50 9 cm	-	-	>100	
			68.00 to 70.00m									

5T/23/12/17626

K.C.T. Consultancy Services®

Project : Gift city

Bore Hole No. : 2

Location : SSB

Depth of Termination: 30.0 m

Depth of Water Table : Encountered at 12.00m depth during investigation

Date of Start: 08-01-2025

Date of Completion: 09-01-2025

Diameter of Bore : 150mm

Bit Used: Soil saw teeth

BORE LOG DATA SHEET 1 of 2

Method of Boring: Rotary Drilling by fluid circulation. Casing: Not Used

Depth m	Soil Description	Depth of Sample m	Drill Run From m	Drill Run To m	Type of Sample	N_1	N_2	N_3	N	Remarks
0.00	Yellowish brown, fine to medium grained, silty and clayey sand with some gravels (SM-SC) 0.00 to 0.50m	0.00	0.00	1.50	DS	-	-	-	-	
0.50 – 1.50	Yellowish brown, fine to medium grained, clayey sand with little gravels (SC) 0.50 to 2.45m	1.50	1.50	3.00	UDS	-	-	-	-	
2.00 – 3.50	Yellowish brown, fine to very fine grained, clayey sand with little gravels (SC)	3.00	3.00	4.50	SPT	3	5	8	13	
4.00 – 4.50	2.45 to 5.00m	4.50	4.50	6.00	UDS	-	-	-	-	
5.00 – 6.50	Yellowish brown and reddish yellow, fine to medium grained, clayey sand with some to much gravels (SC)	6.00	6.00	7.50	SPT	4	10	14	24	
7.00 – 8.50		7.50	7.50	9.00	UDS	-	-	-	-	
9.00 – 9.50	5.00 to 10.50m	9.00	9.00	10.50	SPT	8	13	18	31	
10.00 – 11.50	Yellowish brown, fine to very fine grained, silty clays of high plasticity with little gravels (CH)	10.50	10.50	12.00	UDS	-	-	-	-	
12.00 – 12.50		12.00	12.00	13.50	SPT	21	38	46	84	
13.00 – 14.50		13.50	13.50	15.00	UDS	-	-	-	-	
15.00 – 15.50	10.50 to 15.00m	15.00	15.00	16.50	SPT	23	41	50 16 cm	>100	
16.00 – 17.50	Yellowish brown and reddish yellow, fine to very fine grained, sandy clays of intermediate plasticity (CI)	16.50	16.50	18.00	UDS	-	-	-	-	
18.00 – 18.50	15.00 to 18.00m	18.00	18.00	19.50	SPT	26	50 18 cm	-	>100	
19.00 – 20.50	Yellowish brown, fine to very fine grained, silty clays of intermediate plasticity with little gravels (CI) 18.00 to 21.00m	19.50	19.50	21.00	UDS	-	-	-	-	
21.00 – 21.50	Yellowish brown, fine to very fine grained, clayey sand with occasional to little gravels (SC)	21.00	21.00	22.50	SPT	13	16	21	37	
22.00 – 23.50		22.50	22.50	24.00	UDS	-	-	-	-	
24.00 – 24.50		24.00	24.00	25.50	SPT	31	50 18 cm	-	>100	
25.00 – 26.50		25.50	25.50	27.00	UDS	-	-	-	-	
27.00 – 27.50	21.00 to 27.80m	27.00	27.00	28.50	SPT	50 12 cm	-	-	>100	
28.00 – 29.50	Light yellowish brown, fine to very fine grained, clayey sand with some gravels (SC) 27.80 to 29.40m	28.50	28.50	30.00	UDS	-	-	-	-	
30.00	Yellowish brown, fine to very fine grained, silty sand with some gravels (SM) 29.40 to 30.00m	30.00	30.00	31.50	SPT	50 8 cm	-	-	>100	

K.C.T. Consultancy Services® ST/23/12/17626

Project : Gift city
Bore Hole No. : 2
Location : 60B
Depth of Termination : 70.2 m
Depth of Water Table : Encountered at 12.0m depth during investigation

Date of Start : 05-01-2023
Date of Completion : 05-01-2023
Diameter of Bore : 150mm
Bit Used : Mill tooth

BORE LOG DATA SHEET 2 of 3

Method of Boring	Depth (m)	Casing	Notation	Soil Description	Depth of Sample (m)	Drill Run From (m)	Drill Run To (m)	Type of Sample	SPT N Value/Penetration of S.S.S. N_1	N_2	N_3	N	Remarks
Rotary Drilling by mud circulation	30.50	Not Used		Yellowish brown, fine to very fine grained, silty sand with some gravels (SM) **29.40 to 30.80m**									
				Yellowish brown, fine to very fine grained, silty sand with little plastic fines and occasional to some gravels (SM) 30.80 to 44.50m	31.50	31.50	33.00	SPT	50 9 cm	-	-	>100	
					33.00	33.00	34.50	SPT	50 4 cm	-	-	>100	
					34.50	34.50	36.00	SPT	50 7 cm	-	-	>100	
					36.00	36.00	37.50	SPT	50 8 cm	-	-	>100	
					37.50	37.50	39.00	SPT	46	50 8 cm	-	>100	
					39.00	39.00	40.50	SPT	50 10 cm	-	-	>100	
					40.50	40.50	42.00	SPT	50 9 cm	-	-	>100	
					42.00	42.00	43.50	SPT	50 9 cm	-	-	>100	
					43.50	43.50	45.00	SPT	50 6 cm	-	-	>100	
				Reddish yellow, fine to very fine grained, clays of high plasticity with little gravels (CH) 44.50 to **45.60m**	45.00	45.00	46.50	SPT	48	50 11 cm	-	>100	
				Reddish yellow and yellowish brown, fine to very fine grained, clays of high plasticity with little to occasional gravels (CH) **45.60 to 52.50m**	46.50	46.50	48.00	UDS	-	-	-	-	
					48.00	48.00	49.50	SPT	41	48	50 12 cm	>100	
					49.50	49.50	51.00	DS		UDS attempted but not recovered			
					51.00	51.00	52.50	SPT	48	50 7 cm	-	>100	
				Yellowish brown, fine to medium grained, clayey sand with some gravels (SC) 52.50 to 55.70m	52.50	52.50	54.00	DS		UDS attempted but not recovered			
					54.00	54.00	55.50	SPT	41	50 12 cm	-	>100	
					55.50	55.50	57.00	SPT	50 7 cm	-	-	>100	
				Brownish and yellowish brown, fine to very fine grained, clays of high plasticity with occasional to some gravels (CH) 55.70 to 62.45m	57.00	57.00	58.50	SPT	48	46	50 13 cm	>100	
					58.50	58.50	60.00	SPT	42	38	49	87	
	60.00				60.00	60.00	61.50	SPT	34	50 12 cm	-	>100	

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Project : Gift city

Bore Hole No. : 2

Location : site

Depth of Termination: 70.5 m

Depth of Water Table : Encountered at 12.6m depth during investigation

Date of Start: 05-01-2023

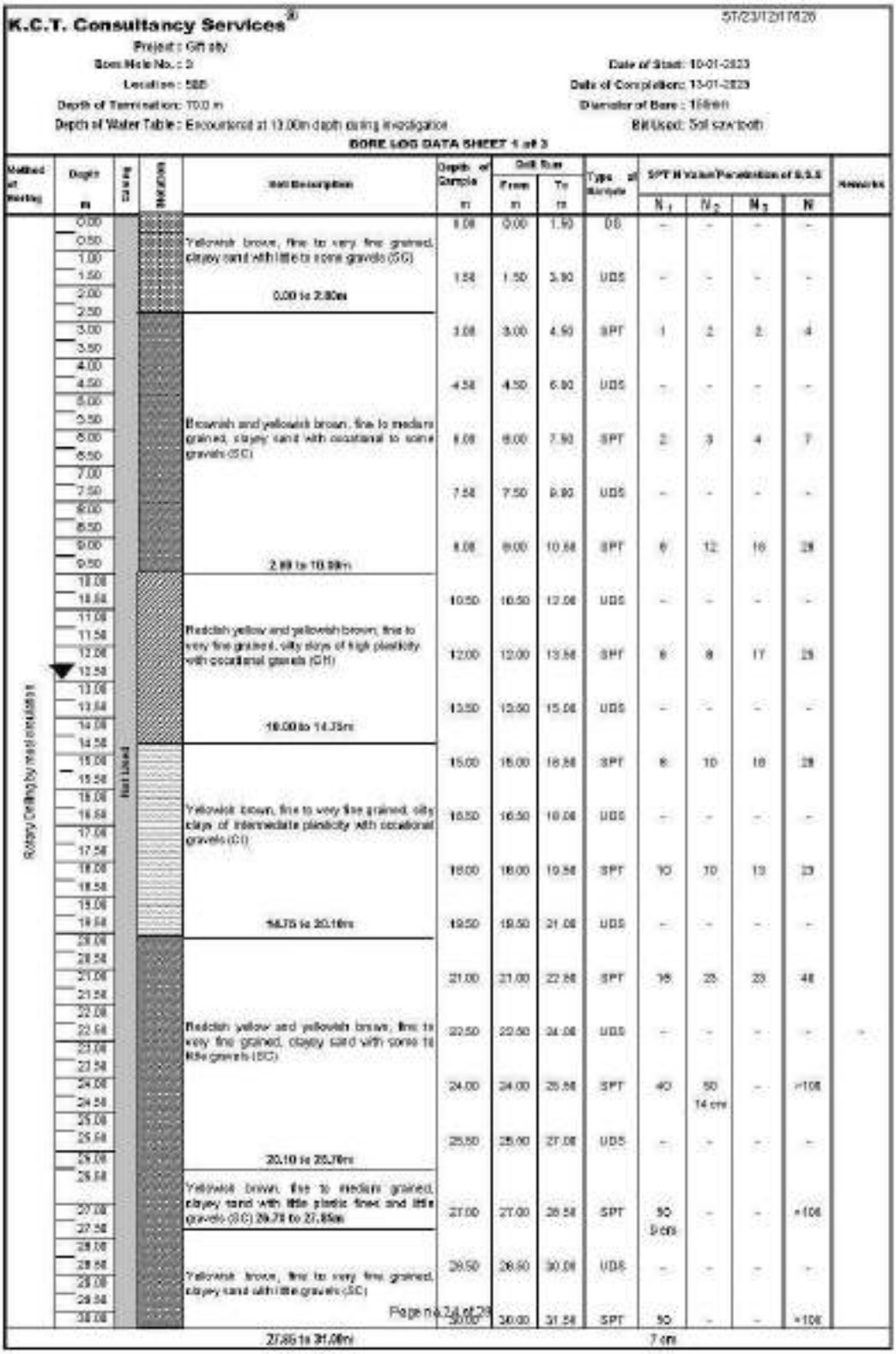
Date of Completion: 09-01-2023

Diameter of Bore : 150mm

Bit Used: Soil one tooth

BORE LOG DATA SHEET 5 of 5

Method of Boring	Depth (m)	Casing	Notation	Soil Description	Depth of Sample (m)	Drill Run From (m)	Drill Run To (m)	Type of Sample	SPT N Value/Penetration of S.S.S. N_1	N_2	N_3	N	Remarks
Rotary Drilling by mud circulation	60.50, 61.00, 61.50, 62.00	Mud Used		Brownish and yellowish brown, fine to very fine grained, clays of high plasticity with occasional to coarse gravels (CH) 60.70 to 62.45m	61.50	61.50	63.00	UDS	-	-	-	-	
	62.50, 63.00, 63.50			Yellowish brown and reddish yellow, fine to medium grained, sandy clays of high plasticity with some gravels (CH) 62.45 to 67.50m	63.00	63.00	64.50	SPT	50 7 cm	-	-	>100	
	64.00, 64.50, 65.00, 65.50				64.50	64.50	66.00	SPT	50 9 cm	-	-	>100	
	66.00, 66.50, 67.00				66.00	66.00	67.50	SPT	38	50 11 cm	-	>100	
	67.50, 68.00, 68.50			Reddish brown, fine to very fine grained, sandy clays of high plasticity (CH) 67.50 to 70.50m	67.50	67.50	69.00	SPT	48	50 10 cm	-	>100	
	69.00, 69.50				69.00	69.00	70.50	SPT	48	50 11 cm	-	>100	
	70.00				70.00	70.00	70.25	SPT	43	50 13 cm	-	>100	



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5T/23/12/21/626

Project : Gift city

Bore Hole No. : 3

Location : SBB

Depth of Termination: 100 m

Depth of Water Table : Encountered at 13.00m depth during investigation

Date of Start: 10-01-2023

Date of Completion: 13-01-2023

Diameter of Bore : 168mm

Bit Used: Soil scarpoth

BORE LOG DATA SHEET 1 of 3

Method of Boring	Depth m	Casing	Water Level	Soil Description	Depth of Sample m	Drill Run From m	Drill Run To m	Type of Sample	SPT N Value/Penetration of S.S.S N_1	N_2	N_3	N	Remarks
Rotary Drilling by mechanical means	0.00				0.00	0.00	1.50	DS	-	-	-	-	
	0.50			Yellowish brown, fine to very fine grained, clayey sand with little to some gravels (SC)									
	1.00												
	1.50				1.50	1.50	3.00	UDS	-	-	-	-	
	2.00			0.00 to 2.80m									
	2.50												
	3.00				3.00	3.00	4.50	SPT	1	2	2	4	
	3.50												
	4.00												
	4.50				4.50	4.50	6.00	UDS	-	-	-	-	
	5.00												
	5.50			Brownish and yellowish brown, fine to medium grained, clayey sand with occational to some gravels (SC)									
	6.00				6.00	6.00	7.50	SPT	2	3	4	7	
	6.50												
	7.00												
	7.50				7.50	7.50	9.00	UDS	-	-	-	-	
	8.00												
	8.50												
	9.00				9.00	9.00	10.50	SPT	6	12	16	28	
	9.50			2.80 to 10.50m									
	10.00												
	10.50				10.50	10.50	12.00	UDS	-	-	-	-	
	11.00												
	11.50			Reddish yellow and yellowish brown, fine to very fine grained, silty clays of high plasticity with occational gravels (CH)									
	12.00				12.00	12.00	13.50	SPT	6	8	17	25	
	12.50												
	13.00												
	13.50				13.50	13.50	15.00	UDS	-	-	-	-	
	14.00			10.50 to 14.35m									
	14.50												
	15.00				15.00	15.00	16.50	SPT	6	10	18	28	
	15.50												
	16.00												
	16.50			Yellowish brown, fine to very fine grained, silty clays of intermediate plasticity with occational gravels (CI)	16.50	16.50	18.00	UDS	-	-	-	-	
	17.00												
	17.50												
	18.00				18.00	18.00	19.50	SPT	10	10	13	23	
	18.50												
	19.00												
	19.50			14.75 to 20.10m	19.50	19.50	21.00	UDS	-	-	-	-	
	20.00												
	20.50												
	21.00				21.00	21.00	22.50	SPT	15	25	23	48	
	21.50												
	22.00												
	22.50			Reddish yellow and yellowish brown, fine to very fine grained, clayey sand with some to little gravels (SC)	22.50	22.50	24.00	UDS	-	-	-	-	-
	23.00												
	23.50												
	24.00				24.00	24.00	25.50	SPT	40	50 / 14 cm	-	>100	
	24.50												
	25.00												
	25.50				25.50	25.50	27.00	UDS	-	-	-	-	
	26.00			20.10 to 26.78m									
	26.50			Yellowish brown, fine to medium grained, clayey sand with little plastic fines and little gravels (SC) 26.78 to 27.85m									
	27.00				27.00	27.00	28.50	SPT	50 / 9cm	-	-	>100	
	27.50												
	28.00												
	28.50				28.50	28.50	30.00	UDS	-	-	-	-	
	29.00			Yellowish brown, fine to very fine grained, clayey sand with little gravels (SC)									
	29.50												
	30.00				30.00	30.00	31.50	SPT	50 / 7 cm	-	-	>100	
				27.85 to 31.00m									

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ST/23/12/17626

Project : Gift city

Bore Hole No. : 3

Location : SEB

Depth of Termination : 70.8 m

Depth of Water Table : Encountered at 13.00m depth during investigation

Date of Start : 10-01-2023

Date of Completion : 13-01-2023

Diameter of Bore : 150mm

Bit Used : Soil saw tooth

BORE LOG DATA SHEET 2 of 3

Method of Boring	Depth m	Casing	Notation	Soil Description	Depth of Sample m	Drill Run From m	Drill Run To m	Type of Sample	SPT N value / Penetration of 0.5 ft N1	N2	N3	N	Remarks
Rotary Drilling by mud circulation	30.00	Not Used		Yellowish brown, fine to very fine grained, clayey sand with little gravels (SC) 27.85 to 31.00m									
	31.50			Yellowish brown, fine to very fine grained silty sand with occational gravels (SM) 31.00 to 37.00m	31.50	31.50	33.00	UDS	-	-	-	-	
	33.00				33.00	33.00	34.50	SPT	40	50 14 cm	-	>100	
	34.50				34.50	34.50	36.00	SPT	18	28	36	81	
	36.00				36.00	36.00	37.50	SPT	14	28	39	67	
	37.50			Yellowish brown, fine to medium grained, silty sand with little plastic fines and occational gravels (SM) 37.00 to 47.55m	37.50	37.50	39.00	UDS	-	-	-	-	
	39.00				39.00	39.00	40.50	SPT	30	50 12 cm	-	>100	
	40.50				40.50	40.50	42.00	SPT	40	50 12 cm	-	>100	
	42.00				42.00	42.00	43.50	SPT	14	22	29	51	
	43.50				43.50	43.50	45.00	SPT	40	50 11 cm	-	>100	
	45.00				45.00	45.00	46.50	SPT	36	50 14 cm	-	>100	
	46.50				46.50	46.50	48.00	SPT	60	50 8 cm	-	>100	
	48.00			Yellowish brown, fine to medium grained, sandy clays of high plasticity with occational to same gravels (CH) 47.55 to 53.00m	48.00	48.00	49.50	SPT	50 10 cm	-	-	>100	
	49.50				49.50	49.50	51.00	UDS	-	-	-	-	
	51.00				51.00	51.00	52.50	SPT	45	50 7 cm	-	>100	
	52.50				52.50	52.00	54.00	UDS	-	-	-	-	
	54.00			Reddish yellow, fine to very fine grained clayey sand with little gravels (SC) 53.00 to 57.00m	54.00	54.00	55.50	SPT	48	50 12 cm	-	>100	
	55.50				55.50	55.50	57.00	DS	-	UDS attempted but not recovered			
	57.00				57.00	57.00	58.50	SPT	50 5 cm	-	-	>100	
	58.50			Whitish yellow, yellowish brown, fine to very fine grained, sandy clays of high plasticity with occational to little gravels (CH) 57.00 to 60.00m	58.50	58.50	60.00	UDS	-	-	-	-	
	60.00				60.00	60.00	61.50	SPT	36	50 13 cm	-	>100	

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5T/23/12/17626

Project : Gift city

Bore Hole No. : 3

Location : SBB

Depth of Termination : 70.0 m

Depth of Water Table : Encountered at 13.0 Dm depth during investigation

Date of Start : 10-01-2023

Date of Completion : 13-01-2023

Diameter of Bore : 150 m/m

Bit Used : Soil wash tooth

BORE LOG DATA SHEET 3 of 3

Method of Boring	Depth m	Casing	Notation	Soil Description	Depth of Sample m	Drill Run From m	Drill Run To m	Type of Sample	SPT N Value/Penetration of 0.0.S N_1	N_2	N_3	N	Remarks
Rotary Drilling by mud circulation	60.50												
	61.00												
	61.50				61.50	61.50	63.00	UDS	-	-	-	-	
	62.00												
	62.50												
	63.00				63.00	63.00	64.50	SPT	36	50 / 13 cm	-	>100	
	63.50												
	64.00												
	64.50				64.50	64.50	65.00	UDS	-	-	-	-	
	65.00												
	65.50												
	66.00				66.00	66.00	67.50	SPT	50 / 9 cm	-	-	>100	
	66.50												
	67.00												
	67.50			67.00 to 68.48m	67.50	67.50	69.00	DS	-	UDS attempted but not recovered			
	68.00												
	68.50												
	69.00				69.00	69.00	70.00	SPT	40	50 / 13 cm	-	>100	
	69.50												
	70.00				70.00	70.00	70.25	SPT	36	50 / 12 cm	-	>100	
				68.48 to 70.0m									

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Project : Gift city
Bore Hole No. : 4
Location : SSB
Depth of Termination : 30.9 m
Depth of Water Table : Encountered at 13.85m depth during investigation

Date of Start : 10-01-2023
Date of Completion : 13-01-2023
Diameter of Bore : 150mm
Bit Used : Drill rom tooth

BORE LOG DATA SHEET 1 of 3

Method of Boring	Casing	Soil Description	Depth of Sample (m)	Drill Run From (m)	Drill Run To (m)	Type of Sample	N_1	N_2	N_3	N	Remarks
Rotary Drilling by mud circulation	Not Used	Light yellowish brown, fine to very fine grained, filled up silty and clayey sand with some gravels **0.00 to 1.20m**	0.00	0.00	1.50	DS	-	-	-	-	
		Yellowish brown, fine to very fine grained, clayey sand with little to some gravels (SC) **1.20 to 10.00m**	1.50	1.50	3.00	SPT	1	2	2	4	
			3.00	3.00	4.50	UDS	-	-	-	-	
			4.50	4.50	6.00	SPT	3	4	6	10	
			6.00	6.00	7.50	UDS	-	-	-	-	
			7.50	7.50	9.00	SPT	10	14	18	32	
			9.00	9.00	10.50	UDS	-	-	-	-	
		Reddish yellow, fine to very fine grained, clays of high plasticity with occasional gravels (CH) **10.00 to 11.00m**	10.50	10.50	12.00	SPT	10	15	20	35	
		Yellowish brown, fine to very fine grained, sandy clays of high plasticity (CH) **11.00 to 14.00m**	12.00	12.00	13.50	UDS	-	-	-	-	
			13.50	13.50	15.00	SPT	12	18	26	44	
		Yellowish brown, fine to very fine grained, clays of high plasticity with occasional to little gravels (CH) **14.00 to 15.50m**	15.00	15.00	16.50	UDS	-	-	-	-	
			16.50	16.50	18.00	SPT	17	22	28	50	
		Yellowish brown and reddish yellow, fine to very fine grained, sandy clays of intermediate plasticity with occasional gravels (CI) **15.50 to 20.70m**	18.00	18.00	19.50	UDS	-	-	-	-	
			19.50	19.50	21.00	SPT	6	10	13	23	
		Yellowish brown, fine to medium grained, clayey sand with little gravels (SC) **20.70 to 23.00m**	21.00	21.00	22.50	UDS	-	-	-	-	
			22.50	22.50	24.00	SPT	25	40	50 14 cm	>100	
		Yellowish brown, fine to medium grained, clayey sand with little gravels (SC) **23.00 to 30.00m**	24.00	24.00	25.50	UDS	-	-	-	-	
			25.50	25.50	27.00	SPT	50 7 cm	-	-	>100	
			27.00	27.00	28.50	SPT	40	50 11 cm	-	>100	
			28.50	28.50	30.00	SPT	40	50 10 cm	-	>100	
			30.00	30.00	31.50	UDS	-	-	-	-	

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ST/23/12/17626

Project : [illegible] city

Bore Hole No. : 4

Location : SRB

Depth of Termination : 70.0 m

Depth of Water Table : Encountered at 13.85m depth during investigation

Date of Start : 10-01-2023

Date of Completion : 13-01-2023

Diameter of Bore : 150mm

Bit Used : [illegible]

BORE LOG DATA SHEET 2 of 3

Method of Boring	Soil Description (Casing: Not Used)	Depth of Sample m	Drill Run From m	Drill Run To m	Type of Sample	N1	N2	N3	N	Remarks
Rotary Drilling by mud circulation	Yellowish brown, fine to medium grained clayey sand (SC) 28.80 to 30.80m									
	Yellowish brown, fine to medium grained, silty sand (SM) 30.80 to 37.00m	31.50	31.50	33.00	SPT	28	46	54 12 cm	>100	
		33.00	33.00	34.50	SPT	28	50 11 cm	-	>100	
		34.50	34.50	36.00	SPT	22	50 13 cm	-	>100	
		36.00	36.00	37.50	SPT	38	50 13 cm	-	>100	
	Reddish yellow, fine to very fine grained, silty sand (SM) 37.00 to 39.90m	37.50	37.50	39.00	SPT	18	50 11 cm	-	>100	
		39.00	39.00	40.50	UDS	-	-	-	-	
	Yellowish brown, fine to coarse grained, silty sand with much gravels (SM) 39.90 to 44.40m	40.50	40.50	42.00	SPT	50 7 cm	-	-	>100	
		42.00	42.00	43.50	DS	-	UDS attempted but not recovered			
		43.50	43.50	45.00	SPT	50 9 cm	-	-	>100	
	Reddish yellow and yellowish brown, fine to very fine grained, silty clays of high plasticity with occational gravels (CH) 44.40 to 48.90m	45.00	45.00	46.50	SPT	50 9 cm	-	-	>100	
		46.50	46.50	48.00	SPT	43	48	50 12 cm	>100	
		48.00	48.00	49.50	UDS	-	-	-	-	
	Reddish brown and reddish yellow, fine to very fine grained, sandy clays of high plasticity with little to occational gravels (CH) 48.90 to 54.40m	49.50	49.50	51.00	SPT	43	50 8 cm	-	>100	
		51.00	51.00	52.50	UDS	-	-	-	-	
		52.50	52.50	54.00	SPT	45	50 9 cm	-	>100	
		54.00	54.00	55.50	UDS	-	-	-	-	
	Yellowish brown, fine to medium grained, clayey sand with little gravels (SC) 54.40 to 58.90m	55.50	55.50	57.00	SPT	50 10 cm	-	-	>100	
		57.00	57.00	58.50	DS	-	UDS attempted but not recovered			
	Yellowish brown and reddish yellow, fine to very fine grained, clays of high plasticity with occational gravels (CH) 58.90 to 70.00m	58.50	58.50	60.00	SPT	28	50 13 cm	-	>100	
		60.00	60.00	60.45	UDS	-	-	-	-	

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K.C.T. Consultancy Services

5T/23/12/21/1626

Project : Gift city

Bore Hole No. : 4

Location : SBB

Depth of Termination: 70.0 m

Depth of Water Table : Encountered at 13.05m depth during investigation

Date of Start: 10-01-2023

Date of Completion: 13-01-2023

Diameter of Bore : 150mm

Bit Used: Soil wash tooth

BORE LOG DATA SHEET 3 of 3

Method of Boring	Depth m	Casing	Notation	Soil Description	Depth of Sample m	Drill Run From m	Drill Run To m	Type of Sample	SPT N Value/Penetration of 0.0.S N_1	N_2	N_3	N	Remarks
Rotary Drilling by mud circulation	60.50												
	61.00												
	61.50				61.50	61.50	63.00	SPT	50 / 7 cm	-	-	>100	
	62.00												
	62.50												
	63.00				63.00	63.00	64.50	UDS	-	-	-	-	
	63.50												
	64.00												
	64.50				64.50	64.50	65.00	SPT	37	50 / 10 cm	-	>100	
	65.00												
	65.50												
	66.00				66.00	66.00	67.50	DS	UDS attempted but not recovered				
	66.50												
	67.00												
	67.50				67.50	67.50	69.00	SPT	50 / 10 cm	-	-	>100	
	68.00												
	68.50												
	69.00				69.00	69.00	70.00	SPT	36	36	50	>100	
	69.50												
	70.00				70.00	70.00	70.10	SPT	50	-	-	>100	
58.00 to 70.00m								7 nos					

ANNEXURE-7: SAMPLE TRAFFIC MANAGEMENT PLAN

A. Principles

1. Since the scale of construction work for the boundary wall is relatively small, there will not be any major or prolonged disruption of local traffic. Nevertheless, it is good to prepare a traffic management plan (TMP) to minimize and avoid public inconvenience to the extent feasible. This indicative TMP will ensure the safety of all the road users along the work zone and minimize public inconvenience. It addresses the following issues:

(i) The safety of pedestrians, bicyclists, and motorists travelling close to the construction zone.
(ii) Protection of work crews from hazards associated with vehicle and equipment movement.
(iii) Avoiding traffic congestion and
(iv) Maintenance of access to adjoining properties.

B. Operating Policies for TMP

2. The following principles will help to promote safe and efficient movement for all road users (motorists, bicyclists, and pedestrians, including persons with disabilities) through and around work zones while reasonably protecting workers and equipment.

(i) Make traffic safety and temporary traffic control an integral and high-priority element of every project from planning through design, construction, and maintenance.
(ii) Inhibit traffic movement as little as possible.
(iii) Provide clear and positive guidance to drivers, bicyclists, and pedestrians as they approach and travel through the temporary traffic control zone.
(iv) Inspect traffic control elements routinely, both day and night, and make modifications when necessary.
(v) Pay increased attention to roadside safety in the vicinity of temporary traffic control zones.
(vi) Keep the public well informed.
(vii) Make appropriate accommodation for abutting property owners, residents, businesses, emergency services, railroads, commercial vehicles, and transit operations.

C. Analyze the impact due to street closure, if required

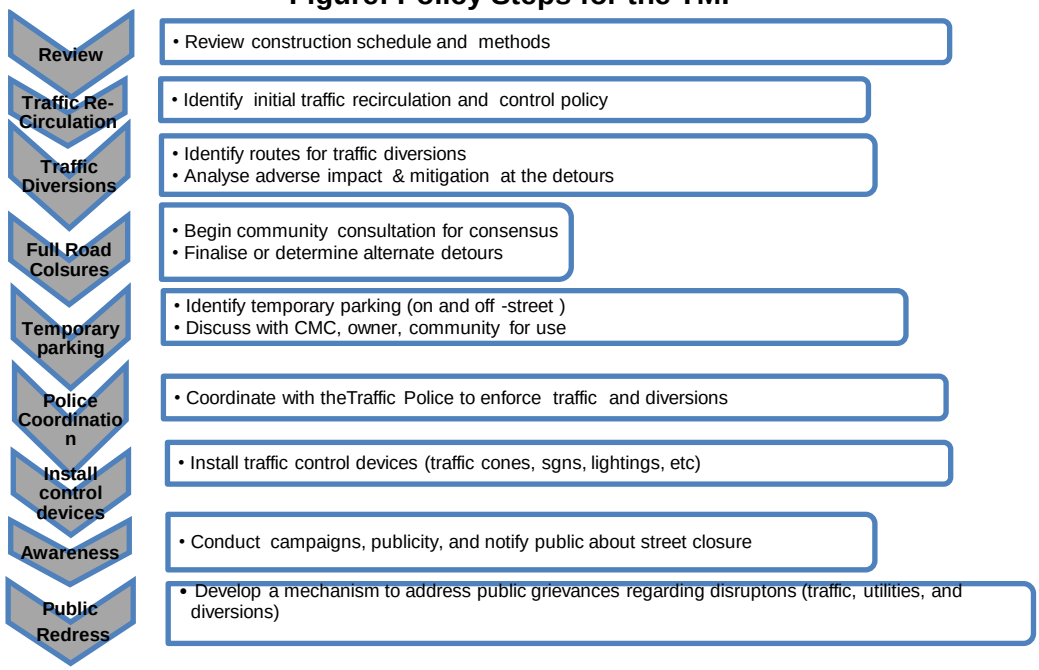
3. A final decision to close a particular street and divert the traffic should involve the following steps:

(i) Approval from the PMU site team and local administration to use alternative local streets as detours.
(ii) Consultation with businesses, community members, traffic police, PWD, etc., regarding the mitigation measures necessary at the detours where the road is diverted during the construction.
(iii) Determining of the maximum number of days allowed for road closure, and incorporation of such provisions into the contract documents.
(iv) Determining if additional traffic control or temporary improvements are needed along the detour route.

(v) Considering how access will be provided to the worksite.
(vi) Contacting emergency service, school officials, and transit authorities to determine if there is any effect on their operations; and
(vii) Developing a notification program to keep the public informed. As part of this program, the public should be advised of alternate routes that commuters can take or will have to take as result of the traffic diversion.

4. If full road-closure of certain streets within the area is not feasible due to inadequate capacity of the detour streets or public opposition, then full closure can be restricted to weekends with the construction commencing on Saturday night and ending on Monday morning prior to the morning rush hour traffic.

Figure: Policy Steps for the TMP



D. Public awareness and notifications

5. The PMU site team and the contractor will issue timely notifications to inform the public about the following issues:

(i) Road blockages and alternative routes along with the duration (as applicable)
(ii) Traffic control devices placed around the construction zones (signs, traffic cones, barriers, etc.).
(iii) Reduced speed limits to be enforced at the work zones and traffic diversions.

8. It may be necessary to conduct an awareness campaign on road safety during construction. It will target relevant groups i.e. children, adults, and drivers. Therefore, these campaigns will be conducted in schools and community centers. In addition, the project will publish a brochure for public information. These brochures will be widely circulated around the area and will also be available at the site office. The text of the brochure should be concise to be effective, with a lot of graphics. It will serve the following purpose:

(i) Explain why the brochure was prepared, along with a brief description of the project.
(ii) Advise the public to expect the unexpected.
(iii) Educate the public about the various traffic control devices and safety measures adopted at the work zones.
(iv) Educate the public about the safe road user behaviour to emulate at the work zones.
(v) Tell the public how to stay informed or where to inquire about road safety issues at the work zones (name, telephone, mobile number of the contact person; and
(vi) Indicate the office hours of relevant offices.

E. Vehicle Maintenance and Safety

10. A vehicle maintenance and safety program shall be implemented by the construction contractor. The contractor should ensure that all the vehicles are in proper running condition and comply with roadworthy and meet certification standards of GoA. All vehicles should be in good condition and meet the pollution standards of GOI and GoA. The drivers will follow the special code of conduct and road safety rules of GoA. They will ensure that all loads are covered and secured. The vehicle cleaning and maintenance will not be taken up at site.

F. Install traffic control devices at the work zones and traffic diversion routes

10. The purpose of installing traffic control devices at the work zones is to delineate these areas to warn, inform, and direct the road users about a hazard ahead, and to protect them as well as the workers. As proper delineation is the key for achieving the above objective, it is important to install good traffic signs at the work zones. The following traffic control devices will be used in work zones:

- Signs
- Pavement Markings
- Channelizing Devices
- Arrow Panels
- Warning Lights

11. Procedures for installing traffic control devices at any work zone vary depending on road configuration, location of the work, construction activity, duration, traffic speed and volume, and pedestrian traffic. Work will take place along major roads, and the minor internal roads. As such, the traffic volume and road geometry vary. However, regardless of where the construction takes place, all the work zones should be cordoned off, and traffic shifted away at least with traffic cones, barricades, and temporary signs (temporary “STOP” and “GO”).

12. The work zone should take into consideration, the space required for a buffer zone between the workers and the traffic (lateral and longitudinal) and the transition space required for delineation, as applicable. For the works, a 30 cm clearance between the traffic and the temporary STOP and GO signs should be provided. In addition, at least 60 cm is necessary to install the temporary traffic signs and cones.

13. Traffic police should regulate traffic away from the work zone and enforce the traffic diversion result from full street closure in certain areas during construction. Flaggers or personnel should be equipped with reflective jackets at all times and have traffic control batons (preferably the LED type) for regulating the traffic.

14 In addition to the delineation devices, all the construction workers should wear fluorescent safety vests and helmets in order to be visible to the motorists at all times. There should be provision for lighting beacons and illumination for night constructions. The PMU site team and contractor will coordinate with the local administration and traffic police regarding the traffic signs, detour, and any other matters related to traffic. The contractor will prepare the traffic management plan in detail and submit it along with the EMP for the final approval.

ANNEXURE-8: LAND RECORDS CERTIFIED BY THE REVENUE DEPARTMENT SHOWING GIFTCL OWNERSHIP

INDIA NON JUDICIAL

Government of Gujarat

Certificate of Stamp Duty

Certificate No.	IN-GJ52443120966036L
Certificate Issued Date	03-Aug-2013 12:44 PM
Account Reference	SHCIL (FI)/ gjshc801/ GANDHINAGAR SRO/ GJ-GN
Unique Doc. Reference	SUBIN-GJGJSHCIL017926593406542 0L
Purchased by	GUJARAT INTERNATIONAL FINANCE TEC CITY COMPANY LTD
Description of Document	Article 17 Certificate of Sale
Property Description	LAND SRV/BLOCK NO OF RATANPUR, PIROZPUR, VALAD, SHAHPUR GAM.
Consideration Price (Rs.)	1 (One only)
First Party	MAMLATDAR GANDHINAGAR
Second Party	GUJARAT INTERNATIONAL FINANCE TEC CITY COMPANY LTD
Stamp Duty Paid By	GUJARAT INTERNATIONAL FINANCE TEC CITY COMPANY LTD
Stamp Duty Amount(Rs.)	4,89,900 (Four Lakh Eighty Nine Thousand Nine Hundred only)

SCAN OK

GDR

11286 1 23

2013

0004811668

(ગુજરાત જમીન મહેસુલ નિયમો ૧૯૭૨ ના નિયમ-૮૭ હેઠળ)

ગુજરાત ઈન્ટરનેશનલ ફાયનાન્સ ટેક-સીટી કંપની લીમીટેડ, જિલ્લો અમદાવાદ, તા. અમદાવાદ સીટી, રહેવાસી એ વિંગ, બીજો માળ, ખનીજ ભવન (જી.એમ.ડી.સી.), યુનિવર્સીટી ગ્રાઉન્ડ પાસે, ૧૩૨ ફુટ રીંગ રોડ, વસ્ત્રાપુર, અમદાવાદ – ૩૮૦૦૫૨ ને ગાંધીનગર જિલ્લાના, ગાંધીનગર તાલુકાના રતનપુર ગામના સર્વે નંબર ૨૬૨/૧ પૈકી તથા સર્વે નંબર ૨૫૯ અને ફીરોઝપુર ગામનાં બ્લોક નંબર ૨ પૈકી તથા બ્લોક નંબર ૨૨ પૈકી ૧ ના નોંધાયેલા ખાતેદાર ગુજરાત ઈન્ટરનેશનલ ફાયનાન્સ ટેક-સીટી કંપની લીમીટેડ (જેનો આમાં હવે પછી "અરજદાર" તરીકે ઉલ્લેખ કર્યો છે અને જે સંદર્ભમાં સંદર્ભથી બાધ આવતો ન હોય તો તેના વારસો, એડમિનીસ્ટ્રેટરો, વહીવટદારો / કંપની એસોસિએટ્સ તથા નામફેર કરી લેનારાઓ નો સમાવેશ થાય છે તે) અને તેની જોડેલી પહેલી અનુસૂચીમાં વર્ણવેલા તથા આ સાથે જોડેલ નકશામાં બતાવેલ ગામોના સર્વે નંબર / બ્લોક નંબરની વિગતો નીચે મુજબ છે:

અ.નં.	ગામનું નામ	સરકારશ્રી / કલેકટરશ્રીના હુકમ મુજબ સર્વે નં./ બ્લોક નં. ની વિગતો		ગામના ૭ X ૧૨ મુજબ સર્વે નં./ બ્લોક નં. ની વિગત	કુલ ક્ષેત્રફળ (હે-આરે-ચોમી)
		સર્વે નં./ બ્લોક નં.	કુલ ક્ષેત્રફળ (હે-આરે-ચોમી)		
૧	રતનપુર	૨૬૨, ૨૬૨/૧	૭૩-૩૭-૫૬	૨૬૨/૧ પૈકી	૭૩-૩૭-૫૬
૨	રતનપુર	૨૫૯	૦-૬૪-૪૮	૨૫૯	૦-૬૪-૪૮
	ફીરોજપુર	૨, ૨ડી	૩૭-૪૨-૮૪	૨	૩૭-૪૨-૮૪
	ફીરોજપુર	૨૨	૧૫-૬૭-૭૨	૨૨ પૈકી ૧	૧૫-૬૭-૭૨
		કુલ ક્ષેત્રફળ	૧૨૭-૧૨-૬૦	કુલ ક્ષેત્રફળ	૧૨૭-૧૨-૬૦

ઉક્ત કોઠામાં જણાવેલ ક્ષેત્રફળ, માપણી પછી તે વધતો હોય કે ઓછો થતો હોય તો પણ જમીન (જેનો આમાં હવે પછી "સદરહું જમીન" તરીકે ઉલ્લેખ કર્યો છે) ગીફટ પ્રોજેક્ટના હેતુ માટે ઉપયોગમાં લેવાની પરવાનગી માટે ગુજરાત રાજ્યમાં અમલમાં હોય તેવા મુંબઈ જમીન મહેસુલ અધિનિયમ ૧૮૭૯ ની કલમ ૬૫, ૬૫-જ હેઠળ (જેનો આમાં હવે પછી "સદરહું અધિનિયમ" તરીકે ઉલ્લેખ કર્યો છે તે) જે સંદર્ભમાં સંદર્ભથી બાધ આવતો ન હોય તે મુજબ કરેલા નિયમો તથા હુકમોનો સમાવેશ થતો હોય તે મુજબ ગાંધીનગર જિલ્લાના કલેકટર (જેનો આમાં હવે પછી "કલેકટર" તરીકે ઉલ્લેખ કર્યો છે અને જે સંદર્ભમાં આ ગ્રાન્ટ હેઠળ સત્તા વાપરવા અને ફરજો બજાવવા જે કોઈ અધિકારીને કલેકટર નિમે તેનો સમાવેશ થશે તે) ને અરજી કરી છે.

૧. હવે પ્રમાણીત કરવામાં આવે છે કે સદરહું જમીન સરકારશ્રી ના મહેસુલ વિભાગના ઠરાવ નંબર જમન/ ૨૨૨૦૦૭/૧૯૬૬/અ.૧ તા. ૨૨/૩/૨૦૧૧ તથા જિલ્લા કલેકટરશ્રી, ગાંધીનગર ના હુકમ નંબર સીબી/જમીન/ વશી.૬૨૫૪ થી ૬૨૭૦/૨૦૧૧ તા. ૧૫/૪/૨૦૧૧ અને સરકારશ્રી ના મહેસુલ વિભાગના સુધારા ઠરાવ નંબર જમન/ ૨૨૨૦૦૭/૧૯૬૬/અ.૧ તા. ૭/૬/૨૦૧૧ તથા જિલ્લા કલેકટરશ્રી, ગાંધીનગર ના સુધારા હુકમ નંબર સીબી/જમીન/વશી.૮૪૬૬ થી ૮૪૮૦/૨૦૧૧ તા. ૧૦/૬/૨૦૧૧ થી મોજે રતનપુર, ફીરોજપુર, શાહપુર, પલાડ તા. જિ. ગાંધીનગરના જુદા જુદા સર્વે નંબરો ની જમીન પૈકી ૭૧૨ એકર જમીન Gujarat International Finance Tec-City Company Limited (GIFTCL) ને તથા ૨૫૦ એકર જમીન GIFT SEZ Ltd. ને ખાસ કિસ્સામાં ટોકન કિંમત રૂ. ૧/- (અંકે રૂપિયો એક પુરો) વસુલ લેવાની શરતે રાજ્ય સરકાર માલિકી હકના આધારે નીચે મુકી શકાય તે સ્વરૂપમાં તબદિલ કરવાની મંજુરી આપવામાં આવેલ તથા આ જમીન નવી અને અવિભાજ્ય નિયંત્રિત શરતે ગીફટ પ્રોજેકટ માટે Gujarat International Finance Tec-City Company Limited (GIFTCL) અનેGIFT SEZ Ltd. ને તબદીલ કરવા હુકમો કરવામાં આવેલ છે.

૨. <u>રૂપાંતરીત વેરો</u>:– અરજદાર કંપની તરફથી રૂપાંતરીત કર તરીકે રૂ. ૯૯,૮૬,૪૨૦/- (અંકે રૂપિયા નવાણું લાખ છયાસી હજાર ચારસો વીસ પુરા) ની રકમ જિલ્લા તીજોરી અધિકારી ગાંધીનગર ખાતે ચલણ નંબર ૧૭/૧૧ તા. ૧૮/૮/૨૦૧૧ ના રોજ ભરપાઈ કરેલ છે.

૩. <u>ઉપયોગ</u>:– અરજદારે કલેકટરની અગાઉ મંજુરી મેળવ્યા વિના ગીફટ પ્રોજેકટ ના ઉપયોગ સિવાયના કોઈ હેતુ માટે સદરહું જમીન તથા તે ઉપર બાંધેલા મકાન અથવા બાંધવામાં આવનાર મકાનોનો ઉપયોગ કરવો નહી.

૪. <u>કર માટે જવાબદારીઓ</u>:- જિલ્લા કલેકટરશ્રી ના હુકમ મુજબ રૂપિયો ૧/- (અંકે રૂપિયો એક પુરો) જિલ્લા તીજોરી અધિકારી ગાંધીનગર ખાતે ચલણ નંબર ૨૩૩/૧૧ તા. ૧૫/૪/૨૦૧૧ ના રોજ ભરપાઈ કરેલ છે તથા અરજદારે સદરહું જમીન ઉપર લેવાના તમામ કર, દર તથા સેસ આપવા પડશે.

૫. <u>બીજી શરતો</u>:-

૧. આ બન્ને કંપનીને ગીફટ પ્રોજેક્ટ ના હેતું માટે બાંધકામ પ્લાન મુજબ કરી શકશે અને પ્લાન મુજબ નો ખુલ્લો ભાગ રાખવો પડશે.

૨. આ સાથે જોડેલ ડીઆઈએલઆરશ્રી ગાંધીનગર ની માપણીસીટના નકશા ઉપર લીલા કલરથી દર્શાવેલ જમીન GIFTCLને ફાળવવામાં આવેલ છે.

૩. <u>નીચેની વિશેષ શરતો:</u>

જિલ્લા કલેકટરશ્રી, ગાંધીનગર ના હુકમ નંબર સીબી/જમીન/ વશી.૬૨૫૪ થી ૬૨૭૦/૨૦૧૧ તા. ૧૫/૪/૨૦૧૧ તથા જિલ્લા કલેકટરશ્રી, ગાંધીનગર ના સુધારા હુકમ નંબર સીબી/જમીન/વશી.૮૪૬૬ થી ૮૪૮૦/૨૦૧૧ તા. ૧૦/૬/૨૦૧૧ થી નીચેમુજબની શરતો મુજબ સનદ આપવામાં આવે છે.

૧. ઉક્ત બન્ને કંપનીઓ પ્રોજેક્ટ ના વિકાસ માટે આ જમીન વિકાસકારોને કલેકટરશ્રી / સરકારશ્રીની પુર્વ મંજુરી વિના તથા પ્રિમીયમ વસુલ કર્યા સીવાય ભાડાપટ્ટે આપી શકશે. આ ભાડાપટ્ટો૯૯ વર્ષ થી વધારે સમય માટે આપી શકાશે નહી.

૨. વિકાસકારો (Developer) ને આપવામા આવેલ આવી ભાડાપટ્ટાની જમીન ઉપર તેઓના વિકાસ હક્ક (Development Rights) રહેશે. કોઈપણ પ્રકારનો માલિકી હક્ક ઉભો થઈ શકશે નહી.

૩. વિકાસકાર પ્રોજેક્ટના વિકાસ સંબંધે નાણા ઉભા કરવા માટે પોતાને મળેલ વિકાસ હક્કો ગીરવે મુકી શકશે.

૪. સરકાર દ્વારા ગુજરાત અર્બન ડેવલોપમેન્ટ કંપનીને આગોતરા કબજાથી સોંપવામાં આવેલ જમીન જ્યારેGIFTCL કે GIFT SEZ Ltd. કંપનીને તબદીલ કરવામાં આવશે ત્યારે તેને સ્ટેમ્પ ડયુટી અને નોંધણી ફીની ચુકવણીમાંથી મુક્તિ આપવા સરકારશ્રીએ ઠરાવેલ છે.

૫. ઉક્ત બન્ને કંપનીઓ વિકાસકાર ને વિકાસ માટે જમીન ભાડાપટ્ટેથી ફાળવે ત્યારે પણ SEZ ના પ્રવર્તમાન નિયમાનુસાર તેઓને સ્ટેમ્પ ડયુટી અને નોંધણીફી તેમજ અન્ય વેરાઓમાંથી મુક્તિ આપવા સરકારશ્રીએ ઠરાવેલ છે.

૬. વિકાસકાર જ્યારે પોતાનો વિકાસ હક્ક અન્ય કંપનીને કે વ્યક્તિને તબદીલ કરે તે પ્રસંગે મહેસુલ વિભાગના તા. ૫/૯/૦૮ ના SEZ અંગેના ઠરાવમાં સુચવ્યા મુજબનું પ્રિમિયમ તથા પ્રવર્તમાન નિયમોનુસાર સ્ટેમ્પ ડયુટી અને નોંધણી ફી સરકાર વતી વસુલ કરીને સરકારમાં જમા કરાવવાની જવાબદારી ઉક્ત બન્ને કંપનીઓની રહેશે. આવી રકમ દર ત્રણ માસે અચુક પણે સરકારમાં જમા કરાવવાની રહેશે. જો તેમા ચુક થશે તો ૧૨% દરે વિલંબિત વ્યાજ કંપનીએ સરકારને ચુકવવાનું રહેશે.

૭. આ પ્રોજેક્ટના પ્રથમ તબક્કા દરમ્યાન જે કાંઈ સરપ્લસ રકમ બન્ને એકમોને મળશે જે રકમ રાજ્ય સરકાર અને બન્ને એકમો વચ્ચે સરખા હિસ્સે (૫૦-૫૦ ટકા) વહેંચવામાં આવશે. ત્યાર પછીના તમામ તબક્કાઓ દરમ્યાન મુળ કિંમત ઉપરાંત વિકાસ હક્કમાંથી મળનાર સરપ્લસ રકમ ગુજરાત સરકાર અને ગીફટ કંપની વચ્ચે ૮૦-૨૦ ના દરે વહેંચવામાં આવશે. આવી સરપ્લસ રકમની ગણતરી કરવાની ફોર્મ્યુલા રાજ્ય સરકાર અલગથી નક્કી કરશે.

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૮. પ્રોજેક્ટની કુલ કિંમત (Project Landed Cost) વસુલ કરવાના હેતુસર, ગીફ્ટ બોર્ડ નક્કી કરે તે નીતિ મુજબ ઉપયોગો માટે વિકાસ હક્કોના સંદર્ભમાં ગીફ્ટ કંપની મુખ્ય/તબક્કાની કિંમત ([illegible]) નક્કી કરશે જેને દર વર્ષે અદ્યતન કરી સરકારશ્રીની મંજૂરી લઈ તેનો અમલ કરવામાં આવશે.

૯. GIFT કોર સાઈટ અને રહેણાંકનો વિસ્તાર એક સાથે ડેવલોપ કરશે GIFT વિકાસ પામેલ રહેણાંક વિસ્તાર કોમર્શીયલ સાઈટ ખરીદનાર કંપનીના કર્મચારીઓ/ અધિકારીઓ માટેજ ઉપયોગ કરી શકશે અન્ય પ્રકારની કોઈ વ્યક્તિને લીઝ કે અન્ય રીતે તબદીલ કરી શકશે નહી.

૧૦. ફાળવી આપેલ જમીનની સરકારશ્રીના તા. ૨૭/૩/૮૪ ના ઠરાવ ક્રમાંક : જમન/૩૯૮૪/૧૬૧૫/અ તેમજ તા. ૨/૪/૧૯૮૧ ક્રમાંક જમન/૩૯૮૨/૫૦૨૮૨/અ માં જણાવ્યા મુજબ ચોક્કસ માપણી થયેથી પૂરે માપ સાથેનો પ્રત્યક્ષ કબજો સંબંધકર્તાને સોંપવાના પંચક્યાસ કાર્યવાહી મામલતદારશ્રી, ગાંધીનગરે દિન–૩૦ માં પુરી કરી સંબંધિત સંસ્થાને ફાળવેલ જમીનની નિયત નમુનામાં સનદ આપવાની કાર્યવાહી બીજા ૩૦ દિવસમાં પુરી કર્યા બાદ તેની જાણ અત્રે કરવાની રહેશે.

૧૧. આ હુકમથી તબદીલ કરેલ જમીનનો દર વર્ષે નક્કી થાય તે વિશેષધારો, તેમજ તે ઉપર નિયમ મુજબ લોકલ ફંડ, શિક્ષણ ઉપકર વિગેરે પ્રવર્તમાન કરો ઉતર વેરાઓ સાથે આગોતરા ભરવાના રહેશે. વિશેષ ધારાનો દર સરકારશ્રીના વખતો વખતના ઠરાવોને આધીન ફેરફાર ને પાત્ર રહેશે.

૧૨. આ હુકમથી તબદીલ કરેલ જમીનમાં છ માસમાં બાંધકામ શરૂ કરી અને તે અંગેની જાણ કરવાની રહેશે. આવો ઉપયોગ જાહેર હિતને નુકશાન કે અડચણરૂપ થાય તે રીતે કરી શકાશે નહી. જો સમય–મર્યાદામાં બાંધકામ કરવામાં નહી આવે તો જમીન કોઈપણ જાતના વળતર વિના, બોજા રહિત સરકાર પરત લેવામાં આવશે.

૧૩. ફાળવેલ જમીન ઉપર બાંધકામ કરવા અંગેના નકશા સક્ષમ અધિકારીશ્રી પાસે મંજુર કરાવી તે મુજબ બાંધકામ કરવાનું રહેશે. સરકારશ્રીની સ્થાયી સુચનાઓ મુજબ રૂપાંતર વેરા અને બિનખેતી આકાર ભરવાનો રહેશે.

૧૪. જમીન જે હેતુ માટે આપવામાં આવી છે તે હેતુ માટે જ તેનો ઉપયોગ કરવાનો રહેશે. તે સિવાયનો ઉપયોગ કરીશકાશે નહી.

૧૫. આ હુકમ તબદીલ કરેલ જમીનનો કબજો સુપ્રત થયા બાદ ક્ષેત્રફળમાં વધઘટ થશે તો તે પ્રમાણે સુધારા હુકમ અત્રેથી કરાવી લેવાનો રહેશે. ગ્રાન્ટ કરેલ જમીન કરતાં વધારે જમીન ઉપર કબજો જણાશે તો વધારાની જમીન વિના વળતરે સરકારશ્રીને પરત સોંપવાની રહેશે.

૧૬. સરકારશ્રીના આમુખ–૫ તથા ૬ ની જોગવાઈઓ તથા શરતો અને સરકારશ્રીના મહેસુલ વિભાગના આખરી આદેશની શરતો માંગણીદાર સંસ્થાને બંધનકર્તા રહેશે અને તેનું ચુસ્તપણે પાલન કરવાનું રહેશે.

૧૭. આ હુકમથી તબદીલ કરેલ જમીનની માપણી કંપનીએ સ્વખર્ચે કરાવી લેવાની રહેશે.

૧૮. આ હુકમથી તબદીલ કરેલ જમીનમાં જો કોઈ વૃક્ષો, સરકારી મિલ્કત કે ઈમલો આવેલ હશે તો, તેની પ્રવર્તમાન બજાર કિંમત સંસ્થાએ સરકારને ભરવાની રહેશે.

૧૯. કંપનીને તબદીલ કરેલ જમીન અંગે તથા બાંધકામ અંગે કોઈ સ્થાનિક કંપની તથા સરકારશ્રી તરફથી નાંખવામાં આવે તે કર ભરવા કંપની બંધાયેલ રહેશે.

૨૦. સંસ્થાએ સરકારશ્રી દ્વારા અધિકૃત કરેલા અધિકારી/કર્મચારીઓને વાજબી સમયે સદરહુ જમીનના કોઈ ભાગમાં તથા મકાનના કોઈ [illegible] નહી.

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૨૧. ફાળવેલ જમીન સરકારશ્રીના અથવા કોઈ સ્થાનિક મંડળના હેતુ માટે જોઈતી હશે તો, અગાઉથી એક માસની નોટીસ આપી આ જમીન પરત લઈ શકશે અને ગ્રાન્ટ રદ કરી શકાશે.

૨૨. ફાળવેલ જમીન અંગે પ્રવર્તમાન કાયદા–નિયમોનુસાર અન્ય લેવાપાત્ર મંજુરીઓ જમીનનો ઉપયોગ શરૂ કરતાં પહેલા જે તે સક્ષમ અધિકારીશ્રી પાસેથી સંસ્થાએ મેળવી લેવાની રહેશે.

૨૩. કંપની આ જમીન ઉપર જે પ્રવૃતિ કરવાની છે તેમાં જે રોજગારીની તકો ઉભી થશે તે પૈકી લાયકાત ધરાવતા સ્થાનિક લોકોને સરકારશ્રી તથા કંપનીના ભરતીના પ્રવર્તમાનઅને વખતોવખતના ધારાધોરણ મુજબ રોજગારીની તકો પુરી પાડવાની રહેશે.

૨૪. ઉપરની કોઈપણ શરત કે શરતોનો ભંગ થયેથી અથવા જમીન મહેસુલ કાયદો અને નિયમોની કોઈ જોગવાઈઓનો ભંગ તથા નિયમોનું પાલન કરવામાં ન આવે તો અને સરકારશ્રી અથવા સક્ષમ અધિકારી દ્વારા ભવિષ્યમાં નાંખવામાં આવેલ શરતોનો અમલ કરવામાં ન આવે તો, આ હુકમથી ગ્રાન્ટ કરેલ જમીન કોઈપણ પ્રકારની નોટીસ અથવા કોઈપણ વળતર આપ્યા સિવાય જમીન તે ઉપરના બાંધકામ/ઉભા ઝાડ સાથે ખાલસા કરી, વિના વળતરે કોઈપણ જાતના બોજારહિત સરકાર હસ્તક પરત લેવામાં આવશે.

૭. શિક્ષા અંગેનો ખંડ:

(ક) જેને આધીન રહીને કોઈ ખાસ બિનખેતીના ઉપયોગ માટે પરવાનગી આપી હોય તેવી શરતો સહિતની આમાં જણાવેલ કોઈ શરતોનું ઉલ્લંઘન કરે તો, સદરહુ અધિનિયમની જોગવાઈઓ હેઠળ અરજદાર પાત્ર હોય તેવી બીજી કોઈ શિક્ષાને બાધ આવ્યા સિવાય, કલેકટર ફરમાવે તેવા દંડ અનેઆકારણી આકારણી આપેથી સદરહુ પ્લોટ / જમીન અરજદારના ભોગવટામાં કલેકટર ચાલુ રાખી શકશે.

(ખ) ઉપરના પેટાખંડનું(ક)માં ગમે તે હોય તે છતાં, કલેકટર પોતે તે અર્થે ફરમાવે તે સમયની અંદરઆ સનદની જોગવાઈઓ વિરૂધ્ધ બાંધેલા અથવા ઉપયોગમાં લીધેલા કોઈ મકાન અથવા બાંધકામ તોડી પાડવા અથવા તેમાં ફેરફાર કરવા ફરમાવે તો તે કાયદેસર ગણાશે અને ઠરાવેલી મુદતની અંદર એવું બાંધકામ તોડી પાડવાનું અથવા ફેરફારનું કામ પુરૂં કરવામાં ન આવે તો તે કામ કલેકટર પુરૂં કરાવી શકશે અને તે પુરૂ કરાવવા બદલનો ખર્ચ અરજદાર પાસેથી જમીન મહેસુલની બાકી તરીકે વસુલ કરી શકશે.

૮. અધિનિયમની જોગવાઈઓ લાગુ પાડવા બાબત–

આમાં ઠરાવ્યું હોય તે સિવાય, સનદ સદરહુ અધિનિયમની જોગવાઈઓને અધીન રહેશે. માપણીનો (નકશો) ડીઆઈએલઆરશ્રી ગાંધીનગર ની માપણીશીટના નકશા ઉપર લીલા કલરથી દર્શાવેલ જમીન GIFTCLને ફાળવવામાં આવેલ છે.

અનુસૂચિ–૧

ક્ર. નં.	ગામનું નામ	સર્વે/બ્લોક નંબર	ક્ષેત્રફળ (હે–આરે–ચો.મી.)	ચતુઃસીમા: ઉત્તર	દક્ષિણ	પૂર્વ	પશ્ચિમ
૧.	રતનપુર	૧૩૨/૧ પૈકી	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
૨.	રતનપુર	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
૩	ફીરોજપુર	૧	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
૪.	ફીરોજપુર	૧૧ પૈકી ૧	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		કુલ ક્ષેત્રફળ	૧૨૭-૧૬-૦૭				

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જેની સાક્ષીમાં ગુજરાત સરકાર વતી ગાંધીનગર તાલુકાના મામલતદારશ્રી એ નીચે પોતાની સહી કરીછે અને, પોતાના હોદાનું સીલ લગાવેલ છે અને અરજદાર કંપનીએ પણ અહીં નીચે સને ૨૦૧૨ ના નવેમ્બર મહીનાની .....તારીખે પોતાની સહી કરી છે.

મામલતદાર (૨)
ગાંધીનગર

અરજદાર / કંપનીના અધિકૃત વ્યક્તિની સહી અને સીકકો

સાક્ષીની સહી અને સીકકો

(P. K. Jha)
Director

GIFT

મામલતદાર ની સહી અને સીકકો

સાક્ષીની સહી અને સીકકો

મામલતદાર ગાંધીનગર

મામલતદારનું સીલ

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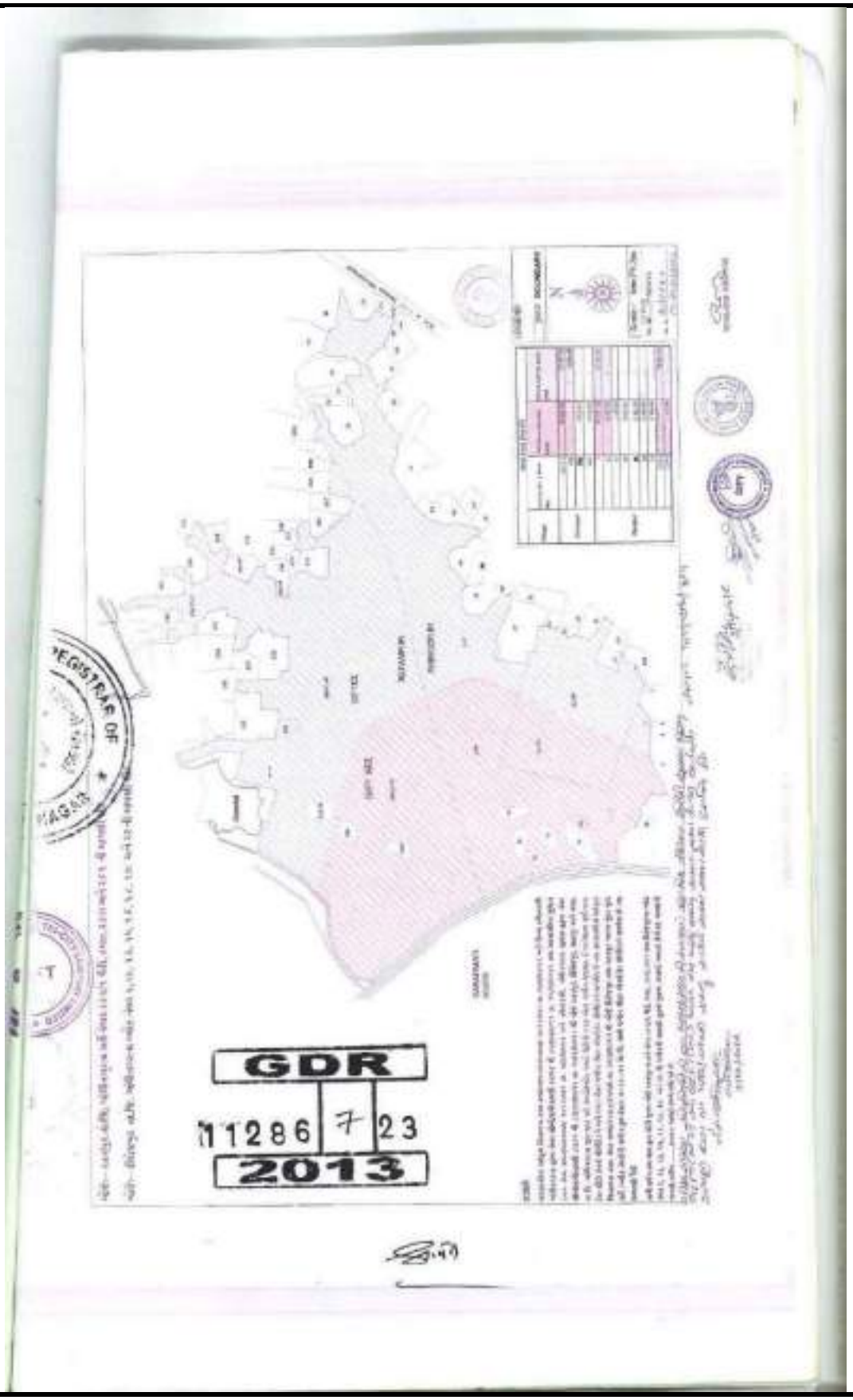
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નમૂનો-૬

જમીન ભોગવટામાં લેવા સારૂ કલમ ૬૦ મુજબ મામલતદારે આપવાની લેખિત પરવાનગીનો નમૂનો

ગુજરાત ઈન્ટરનેશનલ ફાયનાન્સ ટેક-સીટી કંપની લીમીટેડ અમદાવાદ જિલ્લાના અમદાવાદ સીટી તાલુકાના ગામના રહેવાસી 'એ' વીંગ, ખનીજ ભવન, યુનિવર્સિટી ગ્રાઉન્ડની બાજુમાં, ૧૩૨ ફુટ રીંગ રોડ, વસ્ત્રાપુર, અમદાવાદ ને ગાંધીનગર તાલુકામાંના રતનપુર અને ફીરોજપુર ગામની નીચે જણાવેલ જમીન જિલ્લા કલેક્ટર, ગાંધીનગરના હુકમ નંબર : સીબી/જમીન/વશી.૬૨૫૪ થી ૬૨૭૦/૨૦૧૧ તા.૧૫/૪/૨૦૧૧ તથા સુધારા હુકમ નંબર : સીબી/જમીન/વશી.૮૪૬૬ થી ૮૪૮૦/૨૦૧૧ તા. ૧૦/૬/૨૦૧૧ થી મંજુર કરેલ શરતો અનુસાર પોતાના ભોગવટામાં લેવાની પરવાનગી આપવામાં આવે છે.

અ.નં.	ગામનું નામ	સર્વે / બ્લોક નંબર	ક્ષેત્ર ફળ (હે-આરે-ચોમી)
૧	રતનપુર	૨૬૨/૧ પૈકી	૦૩-૩૭-૧૬
૨	રતનપુર	૨૧૯	૦-૬૪-૪૮
૩	ફીરોજપુર	૨	૩૭-૪૨-૮૪
૪	ફીરોજપુર	૨૨ પૈકી ૧	૧૫-૬૭-૭૨
		કુલ સરવાળો	૧૨૭-૧૨-૬૦

મામલતદાર ગાંધીનગર
મામલતદારની સહી અને હોદ્દો

સ્થળ : ગાંધીનગર

તારીખ : ૨૧/૧૧/૨૦૧૨

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નમૂનો-૬

(ગુજરાત જમીન મહેસુલ નિયમો ૧૯૭૨ ના નિયમ-૮૭ હેઠળ)

ગુજરાત ઈન્ટરનેશનલ ફાઈનાન્સ ટેક-સીટી કંપની લીમીટેડ, જિલ્લો અમદાવાદ, તા. અમદાવાદ સીટી, ઉદ્યોગ બિલ્ડીંગ, ત્રીજો માળ, ખનીજ ભવન (જી.એમ.ડી.સી.), યુનિવર્સીટી ગ્રાઉન્ડ પાસે, ૧૩૨ ફુટ રીંગ રોડ, વસ્ત્રાપુર, અમદાવાદ – ૩૮૦૦૫૨ ને ગાંધીનગર જિલ્લાના, ગાંધીનગર તાલુકાના શાહપુર ગામના સર્વે નંબર ૧૨/એ, ૪૮ પૈકી ૧, ૧૬૪ પૈકી ૧ તથા ૨૬૮ તથા વલાદ ગામના સર્વે નં. ૩૨૮ અને ૩૨૯ ના નોંધાયેલા ખાતેદાર ગુજરાત ઈન્ટરનેશનલ ફાઈનાન્સ ટેક-સીટી કંપની લીમીટેડ (જેનો આમાં હવે પછી "અરજદાર" તરીકે ઉલ્લેખ કર્યો છે અને જે સંદર્ભમાં સંદર્ભથી બાધ આવતો ન હોય તો તેના વારસો, એક્ઝિક્યુટરો, વહીવટદારો / કંપની ઓથોરાઈઝ તથા નામફેર કરીલેનારાઓ નો સમાવેશ થાય છે તો) અને તેણે જોડેલી પહેલી અનુસૂચીમાં વર્ણવેલા તથા આ સાથે જોડેલ નકશાથી બતાવેલ શાહપુર ગામના સર્વે નંબરની વિગતો નીચે મુજબ છે:

અ.નં.	ગામનું નામ	સરકારશ્રી / કલેક્ટરશ્રીના હુકમ મુજબ સર્વે નં./ બ્લોક નં. ની વિગતો		ગામના ૭ x ૧૨ મુજબ સર્વે નં./ બ્લોક નં. ની વિગત	કુલ ક્ષેત્રફળ (હે-આરે-ચોમી)
		સર્વે નં./ બ્લોક નં.	કુલ ક્ષેત્રફળ (હે-આરે-ચોમી)		
૧	શાહપુર	૧૨/એ	૨૧-૦૭-૫૩	૧૨/એ	૨૧-૦૭-૫૩
૨	શાહપુર	૪૮	૪-૯૦-૫૦	૪૮ પૈકી ૧	૪-૯૦-૫૦
૩	શાહપુર	૧૬૪	૩-૩૦-૪૬	૧૬૪ પૈકી ૧	૩-૩૦-૪૬
૪	શાહપુર	૨૬૮	૧-૬૧-૮૮	૨૬૮	૧-૬૧-૮૮
૫	વલાદ	૩૨૮	૩-૬૫-૨૩	૩૨૮	૩-૬૫-૨૩
૬	વલાદ	૩૨૯	૩-૦૨-૫૦	૩૨૯	૩-૦૨-૫૦

ઉક્ત કોઠામાં જણાવેલ ક્ષેત્રફળ, માપનો પાછી તે વધતો હોય કે ઓછો થતો હોય તો પણ જમીન (જેનો આમાં હવે પછી "સદરહું જમીન" તરીકે ઉલ્લેખ કર્યો છે તે) ગીફ્ટ પ્રોજેક્ટના હેતુ માટે ઉપયોગમાં લેવાની પરવાનગી માટે ગુજરાત રાજ્યમાં અમલમાં હોય તેવા મુંબઈ જમીન મહેસુલ અધિનિયમ ૧૮૭૯ ની કલમ ૬૫, ૬૫-જ હેઠળ (જેનો આમાં હવે પછી "સદરહું અધિનિયમ" તરીકે ઉલ્લેખ કર્યો છે તે) જે સંદર્ભમાં સંદર્ભથી બાધ આવતો ન હોય તે મુજબ કરેલા નિયમો તથા હુકમોનો સમાવેશ થતો હોય તે મુજબ ગાંધીનગર જિલ્લાના કલેક્ટર (જેનો આમાં હવે પછી "કલેક્ટર" તરીકે ઉલ્લેખ કર્યો છે અને જે સંદર્ભમાં આ સાથે હેઠળ સત્તા વાપરવા અને ફરજો બજાવવા જે કોઈ અધિકારીને કલેક્ટર નિમે તેનો સમાવેશ થશે તો) ને અરજી કરી છે.

1. આથી પ્રમાણીત કરવામાં આવે છે કે સદરહું જમીન સરકારશ્રી ના મહેસુલ વિભાગના ઠરાવ નંબર જમન/૩૯૨૦૦૭/૧૯૬૬/અ.૧ તા. ૨૨/૩/૨૦૧૧ તથા જિલ્લા કલેક્ટરશ્રી, ગાંધીનગર ના હુકમ નંબર સીબી/જમીન/વશી.૬૨૫૪ થી ૬૨૭૦/૨૦૧૧ તા. ૨૫/૪/૨૦૧૧ અને સરકારશ્રી ના મહેસુલ વિભાગના સુધારા ઠરાવ નંબર જમન/૩૯૨૦૦૭/૧૯૬૬/અ.૧ તા. ૩/૬/૨૦૧૧ તથા જિલ્લા કલેક્ટરશ્રી, ગાંધીનગર ના સુધારા હુકમ નંબર સીબી/જમીન/વશી.૮૪૬૬ થી ૮૪૮૦/૨૦૧૧ તા. ૧૦/૬/૨૦૧૧ થી મોજે રતનપુર, ફીરોજપુર, શાહપુર, વલાદ તા. જિ. ગાંધીનગરના જુદા જુદા સર્વે નંબરો ની જમીન પૈકી ૪૧૨ એકર જમીન Gujarat International Finance Tec-City Company Limited (GIFTCL) ને તથા ૨૫૦ એકર જમીન GIFT SEZ Ltd. ને ખાસ કિસ્સામાં ટોકન કિંમત રૂ. ૧/- (અંકે રૂપિયો એક પુરા) વસુલ લેવાની શરતે રાજ્ય સરકાર માલિકી હક્કના આધારે ગીરો મુકી શકાય તે સ્વરૂપમાં તબદીલ કરવાની મંજુરી આપવામાં આવેલ તથા આ જમીન નવી અને અવિભાજ્ય વિધિવાદિ નિયંત્રિત શરતે ગીફ્ટ પ્રોજેક્ટ માટે Gujarat International Finance Tec-City Company Limited (GIFTCL) અનેGIFT SEZ Ltd. ને તબદીલ કરવા હુકમો કરવામાં આવેલ છે.

2. રૂપાંતરીત વેરો– અરજદાર કંપની તરફથી રૂપાંતરીત કર તરીકે રૂ. ૯૯,૯૬,૪૨૦/- (અંકે રૂપિયા નવાણું લાખ છન્નું હજાર ચારસો વીસ પુરાં) ની રકમ જિલ્લા તીજોરી અધિકારી ગાંધીનગર ખાતે ચલણ નંબર ૧૭/૧૧ તા. ૧૮/૮/૨૦૧૧ ના રોજ ભરપાઈ કરેલ છે.

3. ઉપયોગ– અરજદારે કલેક્ટરની અગાઉ મંજુરી મેળવ્યા વિના ગીફ્ટ પ્રોજેક્ટ ના ઉપયોગ સિવાયના કોઈ હેતુ માટે સદરહું જમીન તથા તે ઉપર બાંધેલા મકાન અથવા બાંધવામાં આવનાર મકાનોનો ઉપયોગ કરવો નહી.

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૪. કર માટે જવાબદારીઓ:– જિલ્લા કલેકટરશ્રી ના હુકમ મુજબ રૂપિયો ૧/– (અંકે રૂપિયા [illegible]) ... તીજોરી અધિકારી ગાંધીનગર ખાતે ચલણ નંબર ૨૩૩/૧૧ તા. ૧૫/૪/૨૦૧૧ ના રોજ ભરપાઈ કરેલ છે તથા અરજદારે સદરહું જમીન ઉપર લેવાના તમામ કર, દર તથા સેસ આપવા પડશે.

૫. બીજી શરતો:–

૧. આ બન્ને કંપનીને ગીફટ પ્રોજેકટ ના હેતુ માટે બાંધકામ પ્લાન મુજબ કરી શકશે અને પ્લાન મુજબ ની ખુલ્લી ભાગ રાખવો પડશે.

આ સાથે જોડેલ ડીઆઈએલઆરશ્રી ગાંધીનગર ની માપણીશીટના નકશામાં દર્શાવેલ જમીન GIFTCLને ફાળવવામાં આવેલ છે.

નીચે-ની વિશેષ શરતો:

જિલ્લા કલેકટરશ્રી, ગાંધીનગર ના હુકમ નંબર સીબી/જમીન/ વશી.૬૨૫૪ થી ૬૨૭૦/૨૦૧૧ તા. ૧૫/૪/૨૦૧૧ તથા જિલ્લા કલેકટરશ્રી, ગાંધીનગર ના સુધારા હુકમ નંબર સીબી/જમીન/વશી.૮૪૬૬ થી ૮૪૮૦/૨૦૧૧ તા. ૧૦/૬/૨૦૧૧ થી નીચેમુજબની શરતો મુજબ સનદ આપવામાં આવે છે.

૧. ઉકત બન્ને કંપનીઓ પ્રોજેકટ ના વિકાસ માટે આ જમીન વિકાસકારોને કલેકટરશ્રી / સરકારશ્રીની પુર્વ મંજુરી વિના તથા પ્રિમીયમ વસુલ કર્યા સીવાય ભાડાપટ્ટે આપી શકશે. આ ભાડાપટ્ટો ૯૯ વર્ષ થી વધારે સમય માટે આપી શકાશે નહી.

૨. વિકાસકારો (Developer) ને આપવામાં આવેલ આવી ભાડાપટ્ટાની જમીન ઉપર તેઓના વિકાસ હકક (Development Rights) રહેશે. કોઈપણ પ્રકારનો માલિકી હકક ઉભો થઈ શકશે નહી.

૩. વિકાસકાર પ્રોજેકટના વિકાસ સંબંધે નાણા ઉભા કરવા માટે પોતાને મળેલ વિકાસ હકકો ગીરવે મુકી શકશે.

૪. સરકાર દ્વારા ગુજરાત અર્બન ડેવલોપમેન્ટ કંપનીને આયોતરા કબજાથી સોંપવામાં આવેલ જમીન જયારેGIFTCL કે GIFT SEZ Ltd. કંપનીને તબદીલ કરવામાં આવશે ત્યારે તેને સ્ટેમ્પ ડયુટી અને નોંધણી ફીની ચુકવણીમાંથી મુકિત આપવા સરકારશ્રીએ ઠરાવેલ છે.

૫. ઉકત બન્ને કંપનીઓ વિકાસકાર ને વિકાસ માટે જમીન ભાડાપટ્ટેથી ફાળવે ત્યારે પણ SEZ ના પ્રવર્તમાન નિયમાનુસાર તેઓને સ્ટેમ્પ ડયુટી અને નોંધણીફી તેમજ અન્ય વેરાઓમાંથી મુકિત આપવા સરકારશ્રીએ ઠરાવેલ છે.

૬. વિકાસકાર જયારે પોતાનો વિકાસ હકક અન્ય કંપનીને કે વ્યકિતને તબદીલ કરે તે પ્રસંગે મહેસુલ વિભાગના તા. ૫/૯/૦૮ ના SEZ અંગેના ઠરાવમાં સુચવ્યા મુજબનું પ્રિમિયમ તથા પ્રવર્તમાન નિયમોનુસાર સ્ટેમ્પ ડયુટી અને નોંધણી ફી સરકાર વતી વસુલ કરીને સરકારમાં જમા કરાવાની જવાબદારી ઉકત બન્ને કંપનીઓની રહેશે. આવી રકમ દર ત્રણ માસે અચુક પણે સરકારમાં જમા કરાવાની રહેશે. જો તેમા ચુક થશે તો ૧૨% દરે વિલંબિત વ્યાજ કંપનીએ સરકારને ચુકવવાનું રહેશે.

૭. આ પ્રોજેકટના પ્રથમ તબકકા દરમ્યાન જે કોઈ સરપ્લસ રકમ બન્ને એકમોને મળશે તે રકમ રાજય સરકાર અને બન્ને એકમો વચ્ચે સરખા હિસ્સે (૫૦–૫૦ ટકા) વહેંચવામાં આવશે. ત્યાર પછીના તમામ તબકકાઓ દરમ્યાન મુળ કિંમત ઉપરાંત વિકાસ હકકમાંથી મળનાર સરપ્લસ રકમ ગુજરાત સરકાર અને ગીફટ કંપની વચ્ચે ૮૦–૨૦ ના દરે વહેંચવામાં આવશે. આવી સરપ્લસ રકમની ગણતરી કરવાની ફોર્મુલા રાજય સરકાર અલગથી નકકી કરશે.

૮. પ્રોજેક્ટની કુલ કિંમત (Project Landed Cost) વસુલ કરવાના હેતુસર, ગીફ્ટ બોર્ડ નક્કી કરે તે નીતિ મુજબ ઉપયોગો માટે વિકાસ હક્કોના સંદર્ભમાં ગીફ્ટ કંપની મૂળ/તળિયાની કિંમત (base price) નક્કી કરશે જેને દર વર્ષે અદ્યતન કરી સરકારશ્રીની મંજૂરી લઈ તેનો અમલ કરવામાં આવશે.

૯. GIFTCL એર સાઈટ અને રહેણાંકનો વિસ્તાર એક સાથે ડેવલોપ કરશે GIFTCL વિકાસ પામેલ રહેણાંક વિસ્તાર કોમર્શીયલ સાઈટ ખરીદનાર કંપનીના કર્મચારીઓ/ અધિકારીઓ માટેજ ઉપયોગ કરી શકશે અન્ય બહારની કોઈ વ્યક્તિને લીઝ કે અન્ય રીતે તબદીલ કરી શકશે નહી.

૧૦. ફાળવી આપેલ જમીનની સરકારશ્રીના તા. ૨૭/૩/૮૪ ના ઠરાવ ક્રમાંક : જમન/૩૯૮૪/૧૬૧૫૧/અ તેમજ તા. ૨/૪/૧૯૮૧ ક્રમાંક જમન/૩૯૮૮૨/૧૫૦૨૮૨/અ માં જણાવ્યા મુજબ ચોકકસ માપણી થયેથી મૂંટ માપ સાથેનો પ્રત્યક્ષ કબજો સંબંધકર્તાને સોંપવાના પંચક્યાસ કરવાની કાર્યવાહી મામલતદારશ્રી, ગાંધીનગરે દિન–૩૦ માં પુરી કરી સંબંધિત સંસ્થાને ફાળવેલ જમીનની નિયત નમુનામાં સનદ આપવાની કાર્યવાહી બીજા ૩૦ દિવસમાં પુરી કર્યા બાદ તેની જાણ અત્રે કરવાની રહેશે.

૧૧. આ હુકમથી તબદીલ કરેલ જમીનનો દર વર્ષે નક્કી થાય તે વિશેષધારો, તેમજ તે ઉપર નિયમ મુજબ લોકલ ફંડ, શિક્ષણ ઉપકર વિગેરે પ્રવર્તમાન કરો ઈતર વેરાઓ સાથે આગોતરા ભરવાના રહેશે. વિશેષ ધારાનો દર સરકારશ્રીના વખતો વખતના ફરમાનને આધીન ફેરફાર ને પાત્ર રહેશે.

૧૨. આ હુકમથી તબદીલ કરેલ જમીનમાં છ માસમાં બાંધકામ શરૂ કરી અત્રે તે અંગેની જાણ કરવાની રહેશે. આવો ઉપયોગ જાહેર હિતને નુકશાન કે અડચણરૂપ થાય તે રીતે કરી શકાશે નહી. જો સમય–મર્યાદામાં બાંધકામ કરવામાં નહી આવે તો જમીન કોઈપણ જાતના વળતર વિના, બોજા રહિત સરકાર પરત લેવામાં આવશે.

૧૩. ફાળવેલ જમીન ઉપર બાંધકામ કરવા અંગેના નકશા સક્ષમ અધિકારીશ્રી પાસે મંજુર કરાવી તે મુજબ બાંધકામ કરવાનું રહેશે. સરકારશ્રીની સ્થાયી સૂચનાઓ મુજબ રૂપાંતર વેરા અને બિનખેતી આકાર ભરવાનો રહેશે.

૧૪. જમીન જે હેતુ માટે આપવામાં આવી છે તે હેતુ માટે જ તેનો ઉપયોગ કરવાનો રહેશે. તે સિવાયનો ઉપયોગ કરીશકાશે નહી.

૧૫. આ હુકમ તબદીલ કરેલ જમીનનો કબજો સુપ્રત થયા બાદ ક્ષેત્રફળમાં વધઘટ થશે તો તે પ્રમાણે સુધારા હુકમ અત્રેથી કરાવી લેવાનો રહેશે. ગ્રાન્ટ કરેલ જમીન કરતાં વધારે જમીન ઉપર કબજો જણાશે તો વધારાની જમીન વિના વળતરે સરકારશ્રીને પરત સોંપવાની રહેશે.

૧૬. સરકારશ્રીના આમુખ–૫ તથા ૬ ની જોગવાઈઓ તથા શરતો અને સરકારશ્રીના સંલગ્ન વિભાગના આખરી આદેશની શરતો માંગણીદાર સંસ્થાને બંધનકર્તા રહેશે અને તેનું ચુસ્તપણે પાલન કરવાનું રહેશે.

૧૭. આ હુકમથી તબદીલ કરેલ જમીનની માપણી કંપનીએ સ્વખર્ચે કરાવી લેવાની રહેશે.

૧૮. આ હુકમથી તબદીલ કરેલ જમીનમાં જો કોઈ વૃક્ષો, સરકારી મિલકત કે ઈમારતો આવેલ હશે તો, તેની પ્રવર્તમાન બજાર કિંમત સંસ્થાએ સરકારને ભરવાની રહેશે.

૧૯. કંપનીને તબદીલ કરેલ જમીન અંગે તથા બાંધકામ અંગે કોઈ સ્થાનિક કંપની તથા સરકારશ્રી તરફથી નાંખવામાં આવે તે કર ભરવા કંપની બંધાયેલ રહેશે.

૨૦. સંસ્થાએ સરકારશ્રી દ્વારા અધિકૃત કરેલા સરકારી અધિકારી/કર્મચારીઓને વ્યાજબી સમયે સદરહુ જમીનના કોઈ ભાગમાં તથા મકાનના [illegible] નહી.

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૨૧. ફાળવેલ જમીન સરકારશ્રીના અથવા કોઈ સ્થાનિક મંડળના હેતુ માટે જોઈતી હશે તો, અગાઉથી એક માસની નોટીસ આપી આ જમીન પરત લઈ શકાશે અને ગ્રાન્ટ રદ કરી શકાશે.

૨૨. ફાળવેલ જમીન અંગે પ્રવર્તમાન કાયદા–નિયમોનુસાર અન્ય વિભાગના મંજૂરીઓ જમીનનો ઉપયોગ શરૂ કરતાં પહેલા જે તે સક્ષમ અધિકારીશ્રી પાસેથી સંસ્થાએ મેળવી લેવાની રહેશે.

કંપની આ જમીન ઉપર જે પ્રવૃતિ કરવાની છે તેમાં જે રોજગારીની તકો ઉભી થશે તે પૈકી લાયકાત ધરાવતા સ્થાનિક લોકોને સરકારશ્રી તથા કંપનીના ભરતીના પ્રવર્તમાન અને વખતોવખતના ધારાધોરણ મુજબ રોજગારીની તકો પુરી પાડવાની રહેશે.

ઉપરની કોઈપણ શરત કે શરતોનો ભંગ થવેથી અથવા જમીન મહેસુલ કાયદો અને નિયમોની કોઈ જોગવાઈઓનો ભંગ તથા નિયમોનું પાલન કરવામાં ન આવે તો અને સરકારશ્રી અથવા સક્ષમ અધિકારી દ્વારા ભવિષ્યમાં નાંખવામાં આવે તે શરતોનો અમલ કરવામાં ન આવે તો, આ હુકમથી ગ્રાન્ટ કરેલ જમીન કોઈપણ પ્રકારની નોટીસ અથવા કોઈપણ વળતર આપ્યા સિવાય જમીન તે ઉપરના બાંધકામ/ઈમલા સાથે ખાલસા કરી, વિના વળતરે કોઈપણ જાતના બોજારહિત સરકાર હસ્તક પરત લેવામાં આવશે.

શિક્ષા અંગેનો ખંડ:

(ક) જેને આધીન રહીને કોઈ ખાસ બિનખેતીના ઉપયોગ માટે પરવાનગી આપી હોય તેવી શરતો સહિતની આમાં જણાવેલ કોઈ શરતોનું ઉલ્લંઘન કરે તો, સદરહુ અધિનિયમની જોગવાઈઓ હેઠળ અરજદાર પાત્ર હોય તેવી બીજી કોઈ શિક્ષાને બાધ આવ્યા સિવાય, કલેકટર ફરમાવે તેવા દંડ અને/અથવા આકારણી આપ્યેથી સદરહુ પ્લોટ / જમીન અરજદારના ભોગવટામાં કલેકટર ચાલુ રાખી શકશે.

(ખ) ઉપરના પેટાખંડનુ(ક)માં ગમે તે હોય તે છતાં, કલેકટર પોતે તે અર્થે ફરમાવે તે સમયની અંદરઆ સનદની જોગવાઈઓ વિરૂધ્ધ બાંધેલા અથવા ઉપયોગમાં લીધેલા કોઈ મકાન અથવા બાંધકામ તોડી પાડવા અથવા તેમાં ફેરફાર કરવા ફરમાવે તો તે કાયદેસર ગણાશે અને ઠરાવેલી મુદતની અંદર એવું બાંધકામ તોડી પાડવાનું અથવા ફેરફારનું કામ પુરૂં કરવામાં ન આવે તો તે કામ કલેકટર પુરૂં કરાવી શકશે અને તે પુરૂ કરાવવા અંગેનો ખર્ચ અરજદાર પાસેથી જમીન મહેસૂલની બાકી તરીકે વસૂલ કરી શકશે.

૬. અધિનિયમની જોગવાઈઓ લાગુ પાડવા બાબત–

આમાં ઠરાવ્યું હોય તે સિવાય, સનદ સદરહુ અધિનિયમની જોગવાઈઓને આધીન રહેશે. માપણીનો (નકશો) ડીઆઈએલઆરશ્રી ગાંધીનગર ની માપણીશીટના નકશામાં દર્શાવેલ જમીન GIFTCLને ફાળવવામાં આવેલ છે.

અનુસૂચિ–૧

ગામનું નામ	સર્વે/બ્લોક નંબર	ક્ષેત્ર ફળ (હે–આરે–ચોમી)	ચતુઃસીમા			
			ઉત્તર	દક્ષિણ	પૂર્વ	પશ્ચિમ
૧. શાહપુર	૧૨બી	૨૧–૦૭–૫૨	સર્વે નં. ૪ અને ૫	સર્વે નં. ૧૨ અને સાબરમતી નદી	સર્વે નં. ૧૦, ૧૧, ૧૩,૩૦, ૩૦ અને ૩૮	સાબરમતી નદી
૨. શાહપુર	૪૮ પૈકી ૧	૩–૦૦–૫૦	સર્વે નં. ૧૩૪ અને ૨૦૩૪	સર્વે નં. ૩૫૨	સર્વે નં. ૨૯૪, ૨૧૧, ૨૧૨, ૨૧૫, ૨૧૬, ૨૧૭, ૨૧૮.	સર્વે નં. ૩૫, ૬૮, ૬૬, ૪૫, ૬૫, ૫૧ અને ૬૭
૩ શાહપુર	૧૩૪ પૈકી ૧	૬–૩૦–૬૩	સર્વે નં. ૧૩૪ અને ગામનો રસ્તો	સર્વે નં. ૪૮ પૈકીની જમીન	સર્વે નં. ૧૯૮, ૨૦૧, અને ૨૦૪	સર્વે નં. ૭૦, ૭૮, ૭૭
૪. શાહપુર	૩૬૮	૧–૬૧–૮૮	સર્વે નં. ૨૭૦ અને ૨૬૯	સર્વે નં. ૨૭૭	સર્વે નં. ૨૭૩	સર્વે નં. ૩૬૧
૫. રતનપુર	૩૫૮	૩–૬૫–૨૩	સર્વે નં. ૩૧૫, ૩૩૦	[illegible]	સર્વે નં. ૩૫૦	સર્વે નં. ૩૬૭
૬. રતનપુર	૩૬૮	૩–૦૯–૫૦	સર્વે નં. ૩૩૦, ૩૩૧	સર્વે નં. ૩૧૨ તથા [illegible]	સર્વે નં. ૩૩૪	સર્વે નં. ૩૫૮

જેની સાક્ષીમાં ગુજરાત ચેરિટી કમિશનર ગાંધીનગર તાલુકાના મામલતદારશ્રી એ નીચે પોતાની સહી કરીછે અને, પોતાના હોદ્દાનું સીલ લગાવેલ છે અને અરજદાર કંપનીએ પણ અહી નીચે સને ૨૦૧૩ ના જુન મહીનાની ૨૪ તારીખે પોતાની સહી કરી છે.

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.....(Rama Kant Jha).....
અરજદાર / કંપનીના ઓથોરાઈઝડ વ્યક્તિની સહી અને સીક્કો

મામલતદાર ગાંધીનગર.....
મામલતદાર ની સહી અને સીક્કો

મામલતદારનું ઓફિસ

.....
સાક્ષીની સહી અને સીક્કો

નમૂનો-૬

જમીન ભોગવટામાં લેવા સારૂ કલમ ૬૦ મુજબ મામલતદારે આપવાની લેખિત પરવાનગીનો નમૂનો

ગુજરાત ઈન્ટરનેશનલ ફાયનાન્સ ટેક-સીટી કંપની લીમીટેડ અમદાવાદ જિલ્લાના અમદાવાદ સીટી તાલુકાના ગામના રહેવાસી 'એ' વીંગ, ખનીજ ભવન, યુનિવર્સિટી ગ્રાઉન્ડની બાજુમાં, ૧૩૨ ફુટ રીંગ રોડ, વસ્ત્રાપુર, અમદાવાદ ને ગાંધીનગર તાલુકામાંના શાહપુર તથા વલાદ ગામની નીચે જણાવેલ જમીન જિલ્લા કલેકટર, ગાંધીનગરના હુકમ નંબર : સીબી/જમીન/વશી.૬૨૫૪ થી ૬૨૭૦/૨૦૧૧ તા.૧૧/૪/૨૦૧૧ તથા સુધારા હુકમ નંબર : સીબી/જમીન/વશી.૮૪૬૬ થી ૮૪૮૦/૨૦૧૧ તા. ૧૦/૬/૨૦૧૧ થી મંજુર કરેલ શરતો અનુસાર પોતાના ભોગવટામાં લેવાની પરવાનગી આપવામાં આવે છે.

અ.નં.	ગામનું નામ	સર્વે / બ્લોક નંબર	ક્ષેત્રફળ (હે-આરે-ચોમી)
૧	શાહપુર	૧૨/અ	૨૧-૯૭-૫૩
૨	શાહપુર	૪૮ પૈકી ૧	૪-૯૦-૫૦
૩	શાહપુર	૧૬૪ પૈકી ૧	૩-૩૦-૪૬
૪	શાહપુર	૨૬૮	૧-૬૧-૮૮
૫	વલાદ	૩૨૮	૩-૬૫-૨૩
૬	વલાદ	૩૨૯	૩-૦૨-૫૦

ગાંધીનગર

તા. ૨૮/૬/૨૦૧૩

મામલતદાર ગાંધીનગર

મામલતદારની સહી અને હોદ્દો

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કબજા પાવતી

ગુજરાત ઈન્ટરનેશનલ ફાયનાન્સ ટેક-સીટી કંપની લીમીટેડ અમદાવાદ જિલ્લાના અમદાવાદ સીટી તાલુકાના ગામના રહેવાસી "એ" વીંગ, મનીષ ભવન, યુનિવર્સિટી ગ્રાઉન્ડની બાજુમાં, ૧૩૨ ફુટ રીંગ રોડ, વસ્ત્રાપુર, અમદાવાદ ને ગાંધીનગર તાલુકાના શાહપુર તથા વલાદ ગામની નીચે જણાવેલ જમીન જિલ્લા કલેક્ટર, ગાંધીનગરના હુકમ નંબર : સીબી/જમીન/વશી/૬૨૫૪ થી ૬૨૭૦/૨૦૧૧ તા.૧૫/૪/૨૦૧૧ તથા સુધારા હુકમ નંબર : સીબી/જમીન/વશી/૮૪૬૬ થી ૮૪૮૦/૨૦૧૧ તા. ૧૦/૬/૨૦૧૧ થી મંજુર કરેલ શરતો અનુસાર ફાળવવામાં આવેલ છે જેની માપણી ડીઆઈએલઆરશ્રી, ગાંધીનગરની માપણી શીટ તથા પંચનામા મુજબ જમીનનો પ્રત્યક્ષ કબજો આજ રોજ કંપનીના અધિકૃત અધિકારીને સુપ્રત કરવામાં આવે છે.

અ.નં.	ગામનું નામ	સર્વે / બ્લોક નંબર	ક્ષેત્ર ફળ (હે-આરે-ચોમી)
૧	શાહપુર	૧૨/અ	૨૧-૯૭-૫૩
૨	શાહપુર	૪૮ પૈકી ૧	૪-૯૦-૫૦
૩	શાહપુર	૧૬૪ પૈકી ૧	૩-૩૦-૪૬
૪	શાહપુર	૨૬૮	૧-૬૧-૮૮
૫	વલાદ	૩૨૮	૩-૬૫-૨૩
૬	વલાદ	૩૨૯	૩-૦૨-૫૦

તા. ૨૮/૬/૨૦૧૩

(Rajnikant Jha)
કબજો લેનારની સહી

કબજો સુપ્રત કરનારની સહી

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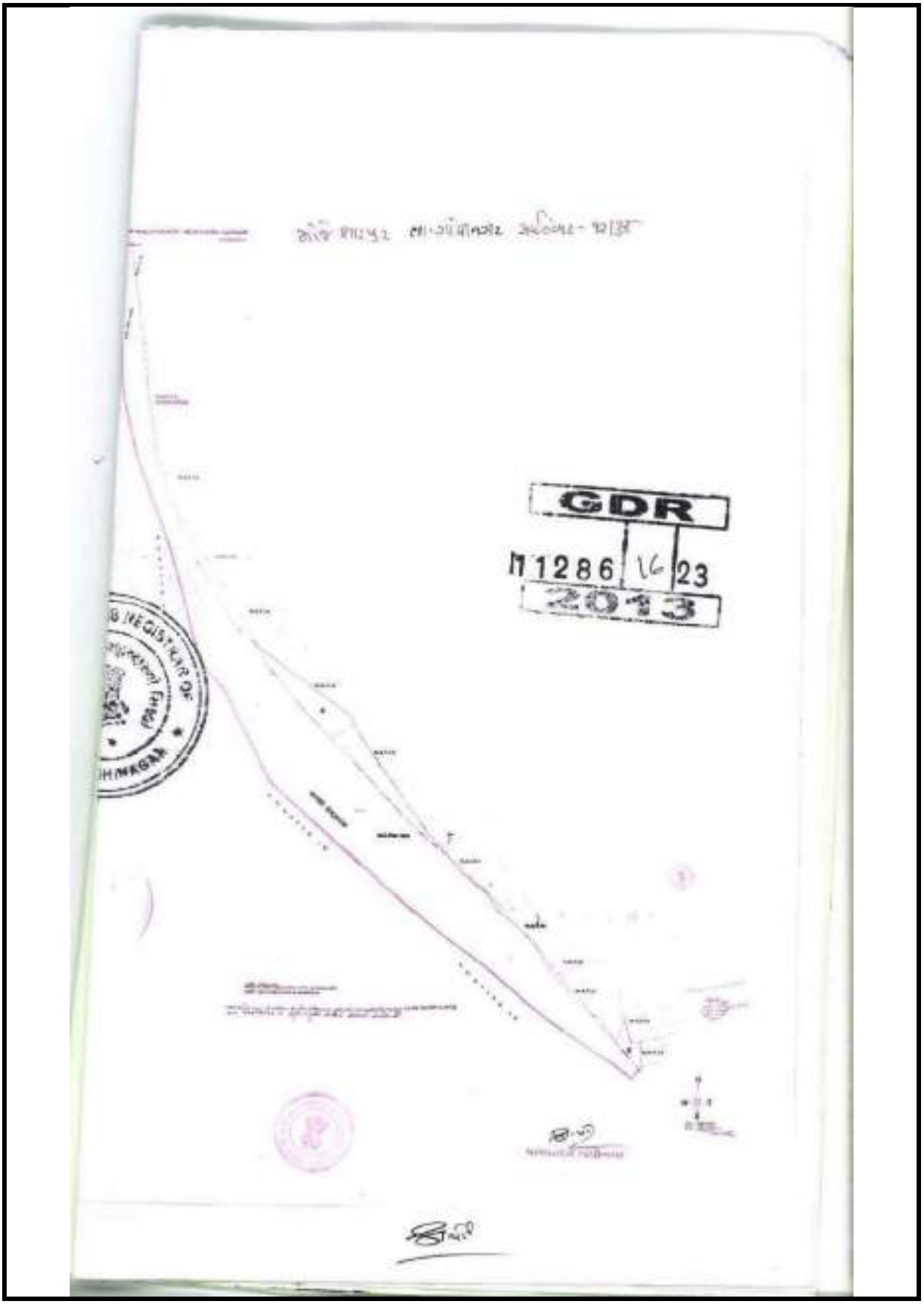
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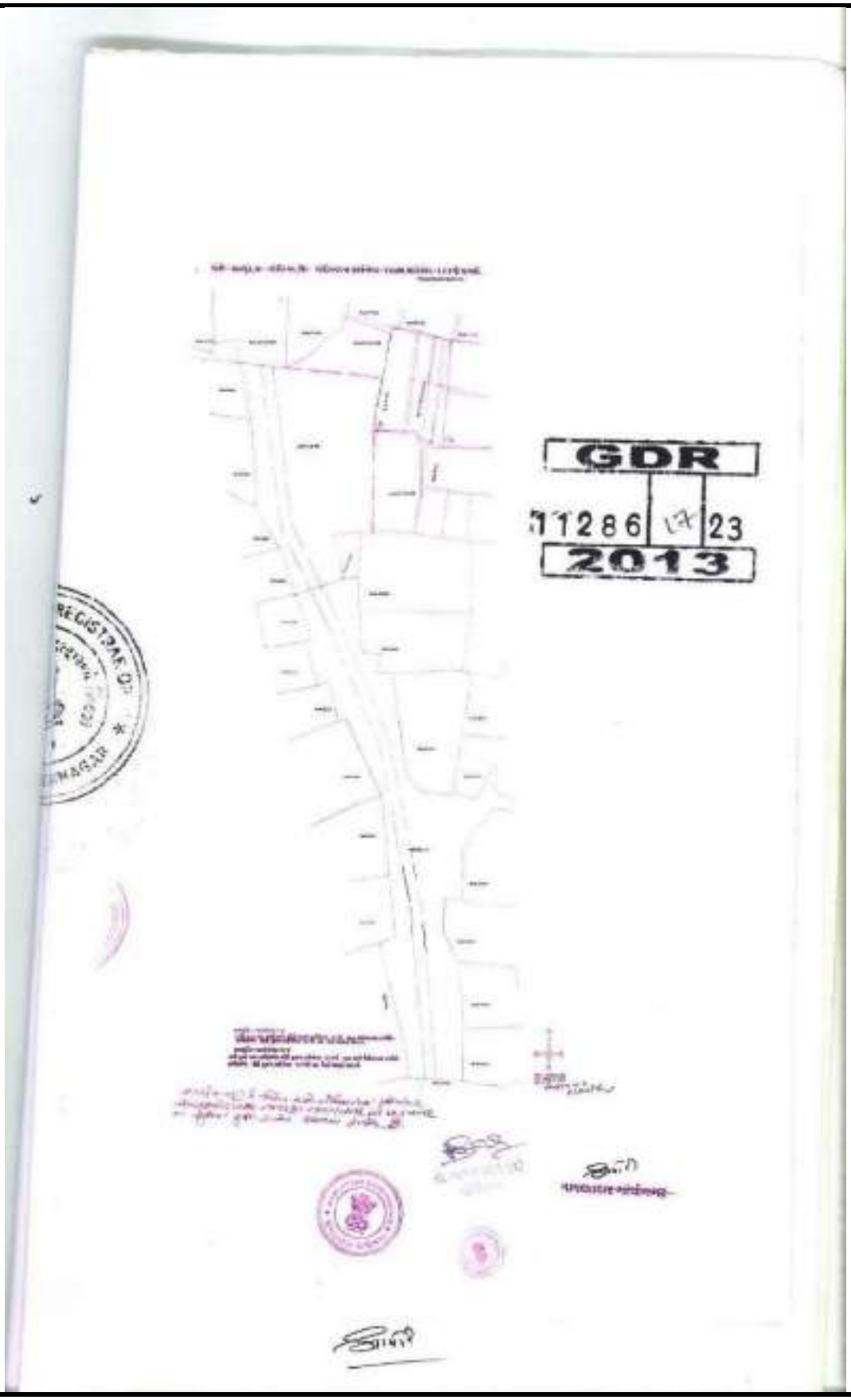
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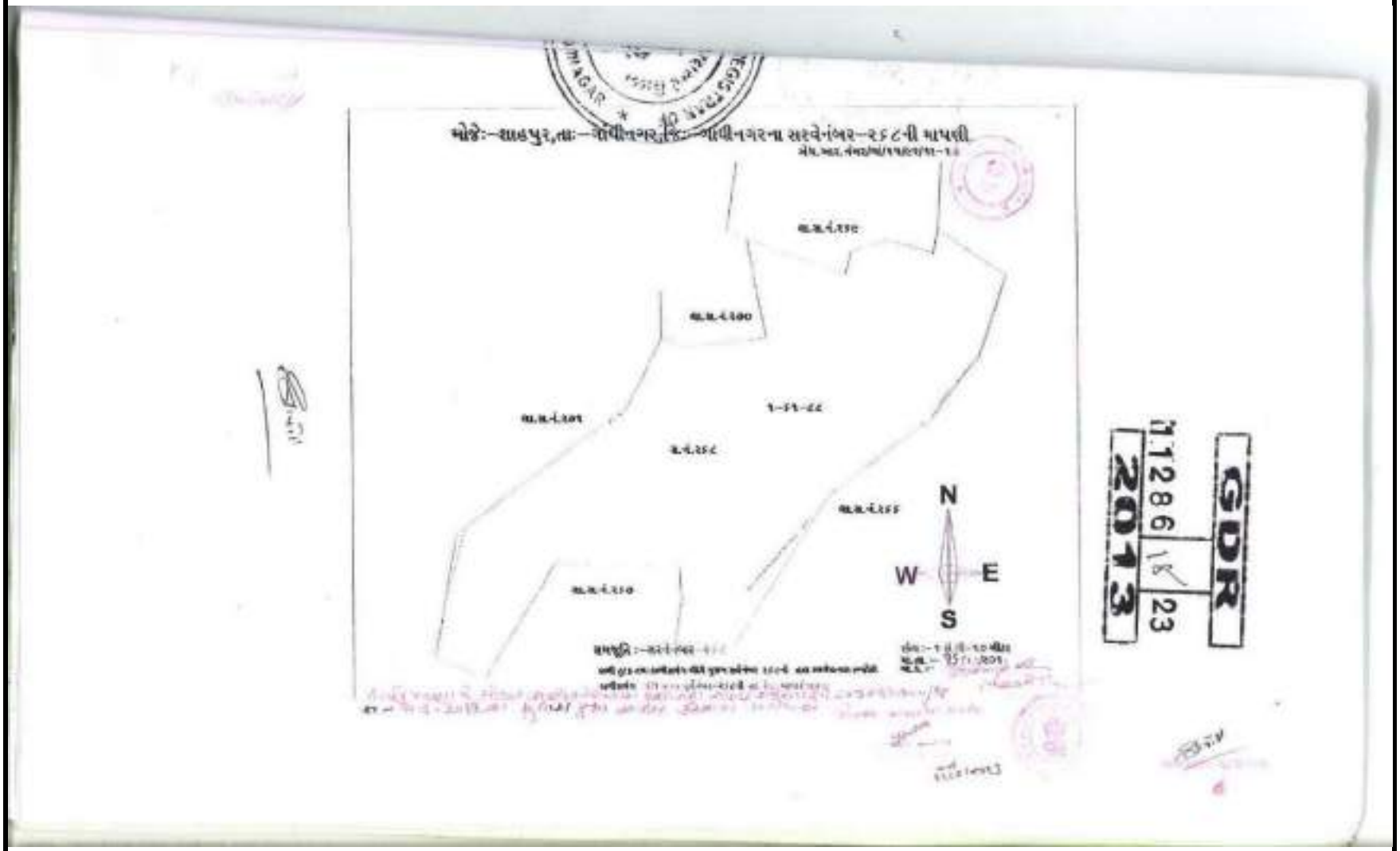
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T.O.Form No.5 vide STR-11

ચલન નં. ૬૭ /૧૧

S.B.I.માંગીનગર ખાતેની તિજોરી/પેટા- તિજોરી/પોસ્ટ ઓફિસ ખાતે ભરવાનું રોકડ રકમનું ચલન.

ખાતા નં. ખાતાધારે કે તિજોરી એ ભરવાનું		
જેના તરફથી નાણાં ભરવામાં આવ્યા હોય તે વ્યક્તિ નું નામ (અક્ષરમાં લખવું) અને સરનામું	જીપીસીટીસી, ગુજરાત ઈન્ટરનેશનલ ફાઈનાન્સ ટેક સીટી કંપની લિ. (GIFTCL), બી-વીંગ, અનીજ ભવન, યુનિવર્સિટી રોડ-ઉવારસદ પાસુમા, જીલ્લા રીજીયોનલ ઓફિસ ગાંધીનગર.	વિભાગ નું નામ ૦૦૩૫ કૃષિ વિભાગ જમીન મિશ્રામની ચલણ વિભાગ ૪૨ કર ૮૦૦ -સામાન્ય રાશિ મિન કૃષિ વિભાગ કુમાંતર કર નાણા કચેરી અધિકારી ની સહી તારીખ:
ચોકસ અરજદારે પુરેપુરી વિગત અને કેફીયત કુમાંકિત કરેલ હોવી	રકમ	
ખોજ, કુમાંતર, રીજીસ્ટ્રેશન, સાહસ, જમીન, ના ખાતીનામું, જી.માંગીનગર ના અધિકારો ને.૨૬૩, ૬, ૧૧, ૨-બી, ૨૪બી, ૪૮, ૪૨૬, ૪૨૮, ૪૩૫, ૪૪૬, ૪૪૮, ૪૪૯, ૪૫૦, ૪૫૮, ૪૫૯ વી ૧૧૧૧+૦૦ ચો.મી. જમીનમાં ગુજરાત ઈન્ટરનેશનલ ફાઈનાન્સ ટેક સીટી કંપની લિ. (GIFTCL)ના લેવુ થતો વિકાસની ખાતાધારા મારે કુમાંતર કર-ની રકમ અમાન. (૧૧૧૧+૦૦ ચો.મી. x ૬)	૫૫.૬૬૬૪૪૦ ૦૦	
કુલ	૫૫.૬૬૬૪૪૦ ૦૦	
(અક્ષરમાં) નવ્યાસું લાખ છ્યાં હજાર ચારસો ચાલીસ રૂપિયા		

(અક્ષરમાં) 8-2574.

ખજાનચી / હિસાબનીશ

તિજોરી અધિકારી/એજન્ટ

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અનુક્રમ નંબર ૧૧૨૮૬ સને ૨૦૧૩
ના ઓગસ્ટ મહિનાની ૩ જી તારીખે
૧૩ થી ૧૪ વાગ્યાની વચ્ચે ગાંધીનગર
સબ રજીસ્ટ્રારની કચેરીમાં રજુ કર્યો.

પહોંચ નંબર: ૨૦૧૩૦૪૮૦૨૪૬૨૫

ફીપેટે લીધી છે તે	રૂ. પૈસા
રજીસ્ટ્રેશન ફી	૯૯૯૭૦
નકલ કરવા ની ફી શાહિદ / ફોલીયો (50)	૫૦૦
ટપાલ ખર્ચ	૩૦
અન્ય ફી	૦
કુલ એકંદરે રૂ.	૧૦૦૫૦૦


Gujarat International Finance Tec-City Company Ltd. Through its Managing Director Ramakant Jha

(H S SUMARA)
સબ રજીસ્ટ્રાર
ગાંધીનગર

(H S SUMARA)
સબ રજીસ્ટ્રાર
ગાંધીનગર

અનુ નંબર	પક્ષકારનું નામ અને સરનામુ	ઉંમર	ફોટોગ્રાફ	ડા.હા.અ.ની છાપ	સહી
લેનાર 1.000	Gujarat International Finance Tec-City Company Ltd. Through its Managing Director Ramakant Jha Gift City, Gandhinagar	૫૮			

REGISTRAR OF ... GANDHINAGAR

દસ્તાવેજ લખી આપનાર એ દસ્તાવેજ લખી આપ્યાનું કબુલ કરે છે.

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1 [illegible]
બી-92, [illegible]


૨ [illegible]
પ્લોટ નં.611/2, [illegible]


તેઓ કહે છે કે ઉપરનું લખી આપનારને તેઓ જાતે ઓળખે છે.
અને તેમની ઓળખાણ આપે છે.

૧. ____________________

૨. ____________________

તારીખ ૭ માહે ઓગસ્ટ -૨૦૧૩

SUB REGISTRAR OF ... GANDHINAGAR

H. B. SUMARA
સબ રજીસ્ટ્રાર
ગાંધીનગર

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અનુ. નંબર	પક્ષકારનું નામ અને સરનામું	ઉંમર	ફોટોગ્રાફ	ડા.હા.અં.ની છાપ	સહી
આપનાર					
1.000	[illegible]	[illegible]			[signature]

દસ્તાવેજ લખી આપનાર આ દસ્તાવેજ લખી આપ્યાનું કબુલ કરે છે.

1 [illegible]
[illegible]-92, [illegible]

 

2 [illegible]
[illegible]-611/2, [illegible]

 

તેઓ કહે છે કે દસ્તાવેજ લખી આપનારને તેઓ જાતે ઓળખે છે. અને તેમની ઓળખાણ આપે છે.

તારીખે ૧૨ માહે ઓગસ્ટ ૨૦૧૩

H S SUMARA
સબ રજીસ્ટ્રાર
ગાંધીનગર

1 નંબરની બુકમા 11286 નંબરે નોંધ્યો છે.
તારીખ: 12/08/2013

H S SUMARA
સબ રજીસ્ટ્રાર
ગાંધીનગર

THE SEAL OF THE SUB REGISTRAR OF GANDHINAGAR

ANNEXURE-9: PHOTOGRAPHS AND ATTENDANCE SHEETS OF CONSULTATIONS

A. Photographs of Consultations

Forest Department

View of Stakeholder consultations at State Forest Department

Another Viewof Consultations at State Forest Department

Gujarat Pollution Control Board

View of Stakeholder Consultations at Gujarat Pollution Control Board

Another View of Consultations at GPCB

Ratanpur Village

View of Stakeholder Consultations at Ratanpur Village

Another View of Stakeholder consultations at Ratanpur Village

Shahpur Village

View of Stakeholder Consultations at Shahpur Village

Another View of Stakeholder Consultatios at Shahpur village

B. Attendance Sheets of Stakeholder Consultations

IND 56039-001:Promoting Research and Innovation through Development of Fintech Institute at GIFT Gandhinagar, India

Stakeholder Consultations

Date: 08/12/2022 **Location:** Forest Bhavan, Gandhinagar

S. No.	Name	Designation	Phone Number	Signature
1	Dr. Jaipal Singh	Addl. PCCF	9582784647	[illegible]
2	Vinod R. Damor	DCF Anand	9848375000	[illegible]
3	Rakesh Patra	Sr. mgr GIFT	9909902358	[illegible]
4	Shrinivasan	Environment Specialist ADB	9811221457	[illegible]
5	Jaydeep Mehta	P.A.	9979028643	[illegible]
6	Kantibhai Parmar	Accountant	9979971393	[illegible]
7	R. M. Desai	DFO (R&D)	9820096565	[illegible]
8	K. D. Chaudhary	clerk	9512649411	[illegible]
9	S. R. Thakor	Clerk	9555530212	[illegible]
10	C. D. Thakor	DEO	9466602159	[illegible]
11	mehulsinh chauhan	DEO	8780424003	[illegible]
12				
13				
14				

IND 56039-001:Promoting Research and Innovation through Development of Fintech Institute at GIFT Gandhinagar, India

Stakeholder Consultations

Date: 08.12.2022 **Location:** Shahpur Village

S. No.	Name	Designation	Phone Number	Signature
1	Patel Arpitkumar Hasmukhbhai	SARPANCH	9974119911	A.H. Patel
2	Patel Hasmukhbhai	Local Ex-delicate	9898631601	
3	Patel Mihir J	Local	9427972390	Mihir
4	Patel Devang.B	"	8128922900	Devang
5	Patel Chirag.k	"	9998051740	CKPatel.
6	Thakor Bharat	"	9081409212	
7	Patel Arvind.D	"	9913611964	
8			9811224438	
9	Rakesh	GIFT City	9909902358	
10	MOHSIN THANOT	LOCAL	9712299342	
11				
12				
13				
14				

IND 56039-001:Promoting Research and Innovation through Development of Fintech Institute at GIFT Gandhinagar, India

Stakeholder Consultations for Environment Point of view

Date: 8/12/2022 **Location:** Gandhinagar (GPCB)

S. No.	Name	Designation	Phone Number	Signature
1	S. V. Mulsetter	R.O GPCB Gandhinagar	9426931820	[illegible]
2	A.D. Chandhdiya	EO.	9427044419	[illegible]
3	R.K. Patel	AEE	9428382814	[illegible]
4	Rakesh Jain	GIFT City	[illegible]	[illegible]
5	Shreeniwas Vams	Environment Specialist	98112234[illegible]	[illegible]
6	M.M. prajapati	SSA	9624051576	M prajapati
7				
8				
9				
10				
11				
12				
13				
14				

IND 56039-001:Promoting Research and Innovation through Development of Fintech Institute at GIFT Gandhinagar, India

Stakeholder Consultations

Date: 09/12/2022 **Location:** Ratanpur Village

S. No.	Name	Designation	Phone Number	Signature
1	[illegible]	Ass. teacher	9904344502	[illegible]
2	[illegible]	Ass. teacher	9726132417	[illegible]
3	[illegible]	Assistant teacher	9725637067	[illegible]
4	[illegible]	Assistant teacher	9998260130	[illegible]
5	[illegible]	[illegible]	9429052149	[illegible]
6	[illegible]	[illegible]	9016050049	[illegible]
7	[illegible]	Gram Panchayat Ratanpur.	7226037725	[illegible]
8	Chaudhari Mahesh	Principal	9408503540	[illegible]
9	Vaghela Jaypalsinh	Ass. Teacher	9033563772	[illegible]
10	Rakesh patra	GIFT	[illegible]	[illegible]
11	[illegible]	Environment Specialist	9811223458	[illegible]
12				
13				
14				