

Tender Notification for

Design, Engineering, Supply, Installation, Testing, Commissioning and Comprehensive Operation & Maintenance (O&M) of Grid-Connected Rooftop Solar PV systems with a cumulative capacity of approximately 2.2 MWp to be installed across 46 BRPL grid stations & buildings.

**NIT NOCMC/BR/25-26/FK/PR/KG/1307
DT 25.11.2025**

Due Date for Submission: 15/12/2025 1530HRS

BSES RAJDHANI POWER LTD (BRPL)
Corporate Identification Number: **U74899DL2001PLC111527**
Telephone Number: +91 11 3009 9999
Fax Number: +91 11 2641 9833
Website: www.bsesdelhi.com



BSES RAJDHANI POWER LIMITED

**BSES RAJDHANI POWER LTD.
BRPL BHAWAN, NEHRU PLACE, NEW DELHI
Telephone No.: 011 3009 9999; Fax No: 0112641 9833
Website: www.bsesdelhi.com**

Request for selection of firms for Design, Engineering, Supply, Installation, Testing, Commissioning and Comprehensive Operation & Maintenance (O&M) of Grid-Connected Rooftop Solar PV systems with a cumulative capacity of approximately 2.2 MWp to be installed across 46 BRPL grid stations & buildings.

BSES Rajdhani Power Limited (hereinafter called "BRPL"), invites Project Developers & System Integrators to participate in the Request for Selection (RfS) for Design, Engineering, Supply, Installation, Testing, Commissioning and Comprehensive Operation & Maintenance (O&M) of Grid-Connected Rooftop Solar PV systems with a cumulative capacity of approximately 2.2 MWp to be installed across 46 BRPL grid stations & buildings.

For the implementation of above-mentioned work, Bidders should submit their bid proposal offline complete in all aspect on or before Last date of Bid Submission as mentioned Bid Information Sheet.

Bidder shall submit bid proposal, complete in all respect as per the Bid Information sheet. Techno-Commercial bids will be opened offline as per the Bid Information Sheet in presence of authorized representatives of bidders who wish to be present. Bid proposals received without the prescribed Bid Bond will be rejected. In the event of any date indicated above is a declared Holiday, the next working day shall become operative for the respective purpose mentioned herein.

Bid documents which include Eligibility criteria, "Technical Specifications", various conditions of contract, formats, etc. can be downloaded from BSES website www.bsesdelhi.com. Any amendment(s)/corrigendum/clarifications with respect to this Bid shall be uploaded on the tender page of BSES website only. **The Bidder should regularly follow up for any Amendment/ Corrigendum/ Clarification on the above website i.e. www.bsesdelhi.com.**

Bid Information Sheet

Bid Description	Design, Engineering, Supply, Installation, Testing, Commissioning and Comprehensive Operation & Maintenance (O&M) of Grid-Connected Rooftop Solar PV systems with a cumulative capacity of approximately 2.2 MWp to be installed across 46 BRPL grid stations & buildings. Bidders meeting the Technical and Financial eligibility criteria set forth must bid for at least 2 clusters as mentioned in Table 1.
Broad Scope	Design, Engineering, Manufacture, Supply, Storage, Civil work, Erection (with and without elevated structure), Testing & Commissioning of the grid connected rooftop solar PV project including Operation and Maintenance (O&M) of the project for a period of 05 years after commissioning of project. Total timeline for the above Scope of Work up to Commissioning of project is 10 Weeks only.
Pre-Bid Conference/Clarification meeting	<i>Pre-bid conference shall be held virtually on Friday, December 5, 2025 3:00 PM</i> https://bsesbrpl.webex.com/bsesbrpl/j.php?MTID=m4cb8c163eac8d6672cf834a8c7c76cfa <i>Meeting number: 2511 573 8144</i> <i>Password: 4RqCWR7Yhv2 (47729779 when dialing from a video system)</i>
Bid submission Deadline	15/12/2025 15:30 Hrs.
Date of Techno-Commercial bids opening	15/12/2025 16:00 Hrs.
Validity of Bid	120 days after the date of Techno-Commercial Bid Opening date.
Tender Fee	The Tender fee is INR 1,180/- (Including GST) to be submitted as DD in favour of BSES Rajdhani Power Ltd payable at New Delhi.
EMD	Earnest Money Deposit (EMD) as per Table no.1 is to be deposited in shape of Demand Draft/ Bank Guarantee drawn in favour of BSES Rajdhani Power Ltd, payable at Delhi.
Bid Process	Two Part (A: Techno-Commercial Bid & B: Price Bid) followed by E-Reverse Auction of the technically and financially qualified bidders
Name, Designation, Address and other details	Mr. Kumar Gaurav, C&M Department. 1 st Floor, D-Block, BSES Rajdhani Power Ltd, BSES Baan, New Delhi – 110019 Kumar.Ga.Gaurav@reliancegroupindia.com
Important Note: Prospective bidders are requested to remain updated for any notices/amendments/clarifications etc. to the RFS document through the website www.bsesdelhi.com . No separate notifications will be issued for such notices/ amendments/ clarification etc. in the print media or individually. All the information related to this RFS shall be updated in the BRPL website www.bsesdelhi.com .	

Definitions & Abbreviations

1.0 DEFINITIONS & ABBREVIATIONS

In this "Bid/ RFS Document" the following words and expression will have the meaning as herein defined where the context so admits:

- 1.1 **"Affiliate"** shall mean a company that either directly or indirectly;
 - i. controls or
 - ii. is controlled by or
 - iii. is under common control with

A Bidding Company and "control" means ownership by one company of at least twenty six percent (26%) of the voting rights of the other company.
- 1.2 **"Appropriate Commission"** shall mean the Central Electricity Regulatory Commission referred to in section 76 of the Electricity Act or the State Electricity Regulatory Commission referred to in section 82 of the electricity Act, as the case may be.
- 1.3 **"Bid"** shall mean the Techno Commercial and Price Bid submitted by the Bidder along with all documents/credentials/attachments annexure etc., in response to this RFS, in accordance with the terms and conditions hereof.
- 1.4 **"Bidder"** shall mean Bidding Company submitting the Bid.
- 1.5 **"Bidding Company"** shall refer to such single company that has submitted the response in accordance with the provisions of this RFS.
- 1.6 **"Bid Bond"** shall mean the unconditional and irrevocable bank guarantee to be submitted along with the Bid by the Bidder under Clause of this RFS, in the prescribed Format;
- 1.7 **"Bid Deadline"** shall mean the last date and time for submission of Bid in response to this RFS as specified in Bid information Sheet;
- 1.8 **"Bid Capacity"** shall means capacity offered by the bidder in his Bid under invitation.
- 1.9 **"CEA"** shall mean Central Electricity Authority.
- 1.10 **"Chartered Accountant"** shall mean a person practicing in India or a firm whereof all the partners practicing in India as a Chartered Accountant(s) within the meaning of the Chartered Accountants Act, 1949;
- 1.11 **"Competent Authority"** shall mean XX (XX) (Name with Designation) of BSES Rajdhani Power Ltd. himself and/or a person or group of persons nominated by MD for the mentioned purpose herein;
- 1.12 **"Commissioning"** means Successful operation of the Project / Works by the Contractor, for the purpose of carrying out Performance Test(s) as defined in RFS.
- 1.13 **"Company"** shall mean a body incorporated in India under the Companies Act, 1956 or Companies Act, 2013, including any amendment thereto.

- 1.14 **"Contract Year"** shall mean the period beginning from the Effective Date and ending on the immediately succeeding March 31 and thereafter each period of 12 months beginning on April 1 and ending on March 31 provided that:
- i. in the financial year in which the Scheduled Commissioning Date would occur, the Contract Year shall end on the date immediately before the Scheduled Commissioning Date and a new Contract Year shall commence once again from the Scheduled Commissioning Date and end on the immediately succeeding March 31, and thereafter each period of twelve (12) months commencing on April 1 and ending on March 31, and provided, further that the last Contract Year of this Agreement shall end on the last day of the Term of this Agreement.
- 1.15 **"Capacity Utilization Factor" (CUF)** means the ratio of the annual output of the plant in kWh versus installed plant capacity for number of days.
- CUF = plant output in kWh / (installed plant capacity in kW * 365X24).**
- 1.16 **"Contractor"** shall mean the successful bidder to whom contract has been award to provide services under the present tender
- 1.17 **"DNI"** means Direct Normal Irradiation.
- 1.18 **"Eligibility Criteria"** shall mean the Eligibility Criteria as set forth in Clause 3.4 of this RFS.
- 1.19 **"Financially Evaluated Entity"** shall mean the company which has been evaluated for the satisfaction of the Financial Eligibility Criteria set forth in Clause 3.4.3 hereof;
- 1.20 **"IEC"** shall mean specifications of International Electro-technical Commission;
- 1.21 **"Inter-connection point/ Delivery/Metering Point"** shall mean the point at distribution voltage level where the power from the solar power Project is injected. Metering shall be done at this interconnection point where the power is injected into the Distribution System i.e. the Delivery Point. For interconnection with grid and metering, the SPD shall abide by the relevant DERC Regulations, Grid Code, Central Electricity Authority (Technical Standards for Connectivity of the Distributed Generation Resources) Regulation, 2013 and Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006 as amended and revised from time to time;
- 1.22 **"kWp"** shall mean Kilo-Watt Peak;
- 1.23 **"kWh"** shall mean Kilo-Watt-hour;
- 1.24 **"Letter of Intent" or "LOI"** shall mean the letter issued by BSES Rajdhani Power Limited (BRPL) to the Selected Bidder for award of the Project.
- 1.25 **"LOA"** shall mean Letter of Allocation.
- 1.26 **"MNRE"** shall mean Ministry of New and Renewable Energy, Government of India;
- 1.27 **"Model(s)"** shall mean CAPEX.
- 1.28 **"O&M"** shall mean Operation & Maintenance of Rooftop Solar PV System for a period of 05 Years for CAPEX Model

- 1.29 **"PBG"** shall mean performance Guarantee
- 1.30 **"Project capacity"** means Capacity in KWp/MWp allocated to the Bidder for various locations within the state of Delhi consisting of single or multiple roof tops.
- 1.31 **"Performance Ratio" (PR)** means "Performance Ratio" (PR) means the ratio of plant output versus installed plant capacity at any instance with respect to the radiation measured.
- PR= (Measured output in kW /Installed Plant capacity in kW * (1000 W/m²/Measured radiation intensity in W/m²).**
- 1.32 **"Parent Company"** shall mean a company that holds at least twenty six percent (26%) of the paid-up equity capital directly or indirectly in the Bidding Company as the case may be;
- 1.33 **"Price Bid"** shall mean Envelope II of the Bid, containing the Bidder's quoted Price as per the Section- VI of this RFS;
- 1.34 **"Project Cost"** shall mean the Cost offered by the bidder for the scope of work as per the RFS document.
- 1.35 **"Qualified Bidder"** shall mean the Bidder(s) who, after evaluation of their Techno-Commercial Bids and qualified for opening and evaluation of their Price Bid;
- 1.36 **"RFS"** shall mean Request for Selection (RFS)/Bid document/ Tender Document.
- 1.37 **"Renewable energy meter"** refers to a unidirectional energy meter, installed and used solely to record the renewable energy generation from the Renewable Energy System installed at the consumer's premises;
- 1.38 **"Rooftop Owner"** shall mean Distribution Licensee, the owner of Buildings at various locations within the state of Delhi consisting of single or multiple roof tops. In this case BSES Rajdhani Power Limited.
- 1.39 **"Statutory Auditor"** shall mean the auditor of a Company appointed under the provisions of the Companies Act,1956 or under the provisions of any other applicable governing law;
- 1.40 **"Project Developers(s)"** shall mean the Bidder(s) selected by BRPL pursuant to this RFS for Implementation of Grid Connected Rooftop Solar PV System as per the terms of the RFS Documents, and to whom an Allocation Letter/Work Order has been issued;
- 1.41 **"Solar Power Developer (SPD)"** shall mean selected Vendor to whom the project is/are allocated.
- 1.42 **"Tendered Capacity"** shall mean the Total aggregate capacity in MW/KW indicated to the prospective bidders through this bidding process as per terms and conditions specified therein;
- 1.43 **"Ultimate Parent Company"** shall mean a company which directly or indirectly owns at least twenty six percent (26%) paid up equity capital in the Bidding Company)and/or in the Financially Evaluated Entity and such Bidding Company and /or the Financially Evaluated Entity shall be under the direct control or in directly under the common control of such company;
- 1.44 **"Wp"** shall mean Watt Peak;
- 1.45 **"CAPEX model"**Is an upfront investment model where the rooftop owner/ customer pays the entire Solar

Rooftop Plant, becoming the owner of the assets & all its benefits. All the expenses towards implementation of this tender shall be completely in the scope of SPD.

- 1.46 **"System"** means the cumulative capacity of all sites as specified in RfS and includes the integrated assembly of photovoltaic panels, mounting, assemblies, inverters, converters, metering, lighting fixtures, transformers, ballasts, disconnects, combiners, switches, wiring devices and wiring, and all other material comprising the Installation Work.
- 1.47 **"Limited Liability Partnership (LLP)"** shall mean Limited Liability Partnership as per Limited Liability Partnership Act 2008.
- 1.48 **"Scheduled Commissioning Date"** means 10 (ten) weeks from the date of issuance of LOA
- 1.49 **"Unit/Part Commissioning"** means part commissioning of the System as per the test procedure and acceptance of commissioning certificate by the Power Purchaser "System" means the cumulative capacity of all sites as specified in RFS and includes the integrated assembly of photovoltaic panels, mounting, assemblies, inverters, converters, metering, lighting fixtures, transformers, ballasts, disconnects, combiners, switches, wiring devices and wiring, and all other material comprising the Installation Work.

INTERPRETATIONS

1. Words comprising the singular shall include the plural & vice versa
2. An applicable law shall be construed as reference to such applicable law including its amendments or re-enactments from time to time.
3. A time of day shall save as otherwise provided in any agreement or document be construed as a reference to Indian Standard Time.
4. Different parts of this contract are to be taken as mutually explanatory and supplementary to each other and if there is any differentiation between or among the parts of this contract, they shall be interpreted in a harmonious manner so as to give effect to each part.
5. The table of contents and any headings or sub-headings in the contract has been inserted for case of reference only & shall not affect the interpretation of this agreement.

DISCLAIMER

1. Though adequate care has been taken while preparing the RfS document, the Bidders shall satisfy them that the document is complete in all respects. Intimation of any discrepancy shall be given to this office immediately. If no intimation is received from any Bidder within fifteen (15) days from the date of notification of RfS/ Issue of the RFS document, it shall be considered that the RfS document is complete in all respects and has been received by the Bidder.
2. BSES Rajdhani Power Limited (BRPL) reserves the right to modify, amend or supplement this RFS document.
3. While this RFS has been prepared in good faith, neither BRPL nor their employees make any representation or warranty, express or implied, or accept any responsibility or liability, whatsoever, in respect of any statements or omissions herein, or the accuracy, completeness or reliability of information, and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability or completeness of this RFS, even if any loss or damage is caused by any act or omission on their part.

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SECTION – I:REQUEST FOR QUOTATION

1.00 Event Information

BRPL invites sealed tenders in 2 envelopes for following scope of work

Table no.1: Cluster Details

Sl. No.	Description	Cluster	Location	Estimated Capacity (in kWp)	Estimated Value (in Cr.)	EMD Value (in Rs.)
1	Design, Engineering, Supply, Installation, Testing, Commissioning and Comprehensive Operation & Maintenance (O&M) of Grid-Connected Rooftop Solar PV systems with a cumulative capacity of approximately 2.2 MWp to be installed across 46 BRPL grid stations & buildings.	Cluster 1	Khanpur	69	2.05	4,10,000
			NFC	229		
			RK Puram	60		
			Saket	108		
			Sarita Vihar	69		
2		Cluster 2	Alaknanda	92	2.10	4,20,000
			Bindapur	80		
			Dwarka	310		
			Janakpuri	76		
3		Cluster 3	Chhawla	66	2.09	4,18,000
			Hastsal	25		
			Jafarpur	21		
			Maya Enclave, Janakpuri	38		
			Mitraon	30		
			Mundka	148		
			Najafgarh	54		
			Nangloi	46		
			Punjabi Bagh	32		
			Tagore Garden	94		
4		Cluster 4	Mundka	290	2.06	4,12000
			Nangloi	22		
			Punjabi Bagh	233		
Total				2192	8.28	16,56,000

Bidders must submit bid for at least 2 clusters to qualify for the bid.

The bidder must qualify the requirements as specified in clause 2.0 stated below.

All envelopes shall be duly super scribed "Design, Engineering, Supply, Installation, Testing, Commissioning and Comprehensive Operation & Maintenance (O&M) of Grid-Connected Rooftop Solar PV systems with a cumulative capacity of approximately 2.2 MWp to be installed across 46 BRPL grid stations & buildings. NIT NO CMC/BR/25-26/FK/PR/KG/1307"



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1.01 The schedule of specifications with detail terms & conditions can be obtained from address given below against submission of non-refundable demand draft of **Rs.1,180/-** drawn in favour of BSES Rajdhani Power Ltd, payable at Delhi. The tender documents & detail terms and conditions can also be downloaded from the website "**www.bsesdelhi.com --> Tenders --> BSES Rajdhani Power Ltd --> Open Tenders**".
In case tender papers are downloaded from the above website, then the bidder has to enclose a demand draft covering the cost of bid documents.

1.02 Bids will be received upto 15/12/2025 1530HRS at the address given at 3.01 below. Part A of the Bid shall be opened on 15/12/2025 1600 HRS.

Part B of the Bid will be opened in case of Techno-Commercially qualified Bidders and the date of opening of same shall be intimated in due course. It is the sole responsibility of the bidder to ensure that the bid documents reach this office on or before the last date.

1.03 BSES Rajdhani Power Ltd reserves the right to accept/reject any or all Tenders without assigning any reason thereof in the event of following:

- I. Earnest Money Deposit (EMD) as per Table no.1 is not deposited in shape of Demand Draft/Pay Order/Banker's Cheque/Bank Guarantee drawn in favour of BSES Rajdhani Power Ltd, payable at Delhi.
- II. The offer does not contain prices indicating break-up towards all taxes & duties in prescribed format
- III. The offer is in-part/ partial and not for the complete **Cluster(s)**.
- IV. Complete Technical details are not enclosed.
- V. Tender is received after due date and time.
- VI. Technical offer contains any prices.
- VII. Prices are not **FIRM** and subject to Price Variation

Note: The bidder must submit bids for at least 02 Clusters. Bidder shall mention Cluster No for which they are submitting bid in Technical documents.

2.0 **Qualification Criteria: -**

Technical

The prospective bidder must qualify all of the following requirements to participate in the bidding process and bidder who meets following requirements will be considered as successful bidder and BRPL has a right to disqualify those bidders who do not meet these requirements:

- a. The bidder must have done Design, Engineering, Supply, Installation, Testing, Commissioning and Comprehensive Operation & Maintenance (O&M) of Grid-Connected Rooftop Solar PV systems of minimum aggregate of 1 MWp in the last Three (03) years from date of Bid opening. The list of such installations shall be furnished along with Technical qualification documents.
- b. The bidder should have qualified Technical & Dedicated Personnel at various stages of Installation, Testing & Commissioning. Documentary evidence in support of QR to be provided.
- c. Availability of service infrastructure and manpower for O&M within Delhi/NCR.
- d. Bidder shall submit the performance certificates for 1 year satisfactory performance from 2 reputed companies/ establishments for executed jobs. Out of these, one certificate should be more than 100kWp.

Financial:



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- a. Bidder must have average Annual Turnover of minimum Rs.1 Crores during last Three (03) financial years i.e. FY 22-23, 23-24 and 24-25, duly certified CA certificate to be submitted. Balance Sheet of 03 financial years also to be provided.

OR

Bidder shall have a Net Worth of minimum Rs.2 Crores as on March 2025, duly certified CA certificate to be submitted.

- b. The bidder shall submit a "NO LITIGATION" certificate as per attached format.
- c. The Bidder should possess valid licenses, statutory approvals issued by competent statutory agency to undertake work in Delhi/ NCR.
- d. An undertaking (self-certificate) that the bidder has not been blacklisted/debarred by any central/state government institution including electricity boards.
- e. The bidder must have valid PAN No., GST No., in addition to other statutory compliances. The bidder must submit the copy of each registration documents and submit an undertaking that the bidder shall comply with all the statutory compliances as per the applicable laws/rules etc. before the start of the work.

Note: All reference dates shall be taken as the date of technical bid opening.

Notwithstanding anything stated above, BRPL reserves the right to assess bidder's capability to perform the contract, assess the capability and installed capacity of the Bidder for carrying out the supplies, should the circumstances warrant such assessment in the overall interest of the purchaser. BRPL also reserves the right to evaluate the bidder based on performance of past supplies/projects executed in BRPL. In this regard the decision of the purchaser is final.

3.00 Bidding and Award Process

Bidders are requested to submit their offer strictly in line with this tender document. **NO DEVIATION IS ACCEPTABLE.** BRPL shall response to the clarifications raised by various bidders and the will be distributed to all participating bidders through website.

3.01 BID SUBMISSION

The bidders are required to submit the bids in Two (02) parts to the following address:

**Head of Department
Contracts & Material Department
BSES Rajdhani Power Ltd
1st Floor, C Block
BSES Bhawan, Nehru Place
New Delhi 110019**

PART A: TECHNICAL **BID** comprising of following (1 original + 1 copy)

- EMD in prescribed format.
- Non-refundable demand draft for Rs 1,180/- in case the forms are downloaded from website
- Documentary evidence in support of qualifying criteria.
- Technical Details/ Technical Drawings/ Filled in GTP/Type test report etc.
- Qualified Manpower available & Organization Chart.
- Copies of Orders, Execution/Performance Certificate & Other Documents to support the QC as per clause 2.0.
- Original Tender documents duly stamped & signed on each page as token of acceptance.

- Acceptance to Commercial Terms and Conditions viz Delivery schedule/period, Payment terms, PBG etc.

PART B: FINANCIAL **BID** comprising of (1 original only)

- Price strictly in the Format enclosed indicating Break up of basic price, taxes & duties, transportation etc

3.02 TIME SCHEDULE

The bidders should complete the following within the dates specified as under:

S. No.	Steps	Date
1	Date of sale of bid documents	25.11.2025
2	Pre-Bid meeting	05.12.2025 15:00 Hrs
3	Last date of Queries, if any	10.12.2025
4	Last date of receipt of bid documents	15.12.2025 1530HRS
5	Date & time of opening of tender – Part A	15.12.2025 1600HRS

This is a two-part bid process. Bidders are to submit the bids in 2(two) parts

Both these parts should be furnished in separate sealed covers super scribing NIT no. DUE DATE OF SUBMISSION, with particulars as **PART-A TECHNICAL BID & COMMERCIAL TERMS & CONDITIONS** and **Part-B FINANCIAL BID** and these sealed envelopes should again be placed in another sealed cover which shall be submitted before the due date & time specified.

Part – A: Technical Bid should not contain any cost information whatsoever and shall be submitted within the due date.

PART B: This envelope will be opened after techno-commercial evaluation and only of the qualified bidders.

REVERSE AUCTION: Purchaser reserves the right to use **REVERSE AUCTION** through SAP-SRM as an optional tool as an integral part of the entire tendering process. All techno-commercially qualified bidders shall participate in this event. The Reverse Auction will be conducted for each Cluster as mentioned in Table 1 of Tender Document.

Notwithstanding anything stated above, the Purchaser reserves the right to assess bidder's capability to perform the contract, should the circumstances warrant such assessment in the overall interest of the purchaser. In this regard the decision of the purchaser is final.

In case RA is not concluded/conducted for any reasons, a "final no regret" financial bid in a sealed envelope will be called for from all qualified bidders

BIDS RECEIVED AFTER DUE DATE AND TIME SHALL BE LIABLE TO REJECTION

4.00 Award Decision

4.01 Purchaser intends to award the business on a lowest bid basis, so suppliers are encouraged to submit the bid competitively. The decision to place Purchase Order/LOI solely depends on purchaser on the cost competitiveness across multiple lots, quality, delivery and bidder's capacity, in addition to other factors that Purchaser may deem relevant.

- 4.02 In the event of your bid being selected by purchaser (and/or its affiliates) and your subsequent DEFAULT on your bid; you will be required to pay purchaser (and/or its affiliates) an amount equal to the difference in your bid and the next lowest bid on the quantity declared in NIT/RFQ.
- 4.03 In case any supplier is found unsatisfactory during the delivery process, the award will be cancelled and BRPL reserves the right to award other suppliers who are found fit.
- 4.04 **In-case execution target timeline is coinciding, BRPL reserves the right to limit the award of cluster to single party depending on the contractor's turnover, execution capabilities & past performance. The decision shall be as per BRPL discretion and Vendor has to abide by the same. The purchaser reserves all the rights to award the contract to one or more bidders to meet the Project execution requirement or nullify the award decision without citing any reason**

5.00 **Market Integrity**

We have a fair and competitive marketplace. The rules for bidders are outlined in the Terms & Conditions. Bidders must agree to these rules prior to participating. In addition to other remedies available, we reserves the right to exclude a bidder from participating in future markets due to the bidder's violation of any of the rules or obligations contained in the Terms & Condition. A bidder who violates the marketplace rules or engages in behaviour that disrupts the fair execution of the marketplace shall be restricted from bidding for a length of time, depending upon the seriousness of the violation. Examples of violations include, but are not limited to:

- Failure to honour prices submitted to the marketplace.
- Breach of the terms of the published in Request for Quotation/NIT.

6.00 **Confidentiality**

All information contained in this RFQ is confidential and shall not be disclosed, published or advertised in any manner without written authorization from BRPL. This includes all bidding information submitted.

All RFQ documents remain the property of BRPL and all bidders are required to return these documents to BRPL upon request.

Bidders who do not honour these confidentiality provisions will be excluded from participating in future bidding events.

7.00 **Contact Information**

Technical or Commercial clarifications, if any, as regards this RFQ shall be sought in writing and sent by post/courier to following address. The same shall not be communicated through email/phone

	Technical	Commercial
Contact Person	Mr. Vikas Arora	Mr. Kumar Gaurav
Address	BSES Rajdhani Power Ltd ,2 nd Floor, C Block, BSES Bhawan, Nehru Place, New Delhi 110019.	BSES Rajdhani Power Ltd ,1 st Floor, D Block, BSES Bhawan, Nehru Place, New Delhi 110019
Email	vikas.arora@reliancegroupindia.com mayank.ahlawat@reliancegroupindia.com	kumar.ga.gaurav@relianceada.com kunal.govil@reliancegroupindia.com

SECTION – II: INSTRUCTION TO BIDDERS

1.00 GENERAL

BSES Rajdhani Power Ltd, hereinafter referred to as "The Company" is desirous of awarding work for "Design, Engineering, Supply, Installation, Testing, Commissioning and Comprehensive Operation & Maintenance (O&M) of Grid-Connected Rooftop Solar PV systems with a cumulative capacity of approximately 2.2 MWp to be installed across 46 BRPL grid stations & buildings" to single/multiple contractors.

2.00 SCOPE OF WORK

The selected bidder(s) shall undertake the Design, Engineering, Supply, Installation, Testing, Commissioning and Comprehensive Operation & Maintenance (O&M) of grid-connected rooftop solar PV systems with a cumulative capacity of approximately 2.2 MWp to be installed at 46 BRPL grid stations and buildings. (List enclosed as Annexure -II)

The work includes, but is not limited to:

- Conducting site survey and feasibility assessment to validate the proposed capacity at each location.
- Design and engineering of the system layout, string configuration, single-line diagram (SLD), module-mounting structure design, earthing, lightning protection, cable routing and interconnection.
- Supply of all materials, components, and accessories as per MNRE and DERC technical standards.
- Installation, testing and synchronization of each plant under net metering mechanism.
- Obtaining all statutory and electrical safety approvals required for commissioning.
- Comprehensive O&M for 5 years including performance monitoring, generation reporting, and periodic cleaning and preventive maintenance including cleaning of Solar Panels, wear, tear, overhauling, machine breakdown, insurance and replacement of defective modules, invertors/ Power Conditioning Unit (PCU), spares, consumables & other parts for a period of 05 years from Handing Over of the project(s).

The bidder shall be responsible for complete EPC execution and long-term performance of the project(s) as per BRPL specifications.

3.00 DISCLAIMER

This Document includes statements, which reflect various assumptions, which may or may not be correct. Each Bidder shall conduct its own estimation and analysis and should check the accuracy, reliability and completeness of the information in this Document and obtain independent advice from appropriate sources in their own interest.

Neither Purchaser nor its employees will have any liability whatsoever to any Bidder or any other person under the law or contract, the principles of restitution or unjust enrichment or otherwise for any loss, expense or damage whatsoever which may arise from or be incurred or suffered in connection with anything contained in this Document, any matter deemed to form part of this Document, provision of Services and any other information supplied by or on behalf of Purchaser or its employees, or otherwise arising in any way from the selection process for the Supply.

Though adequate care has been taken while issuing the Bid document, the Bidder should satisfy itself that Documents are complete in all respects. Intimation of any discrepancy shall be given to this office immediately.

This Document and the information contained herein are Strictly Confidential and are for the use of only the person(s) to whom it is issued. It may not be copied or distributed by the recipient to third parties (other than in confidence to the recipient's professional advisors).

4.00 COST OF BIDDING

The bidder shall bear all the costs associated with the preparation and submission of his offer, and the company will in no case be responsible or liable for those costs, under any conditions. The Bidder shall not be entitled to claim any costs, charges and expenses of and incidental to or incurred by him through or in connection with his submission of bid even though BRPL may elect to modify/ withdraw the invitation of Bid.

5.00 BIDDING DOCUMENTS

The Scope of Work, Bidding Procedures and Contract Terms are described in the Bidding Documents. In addition to the covering letter accompanying Bidding Documents, the Bidding Documents include:

- Request for Quotation (RFQ) - Section - I
- Instructions to Bidders (ITB) - Section - II
- Special Terms & Conditions of Contract (SCC) - Section - III
- General Terms and Condition (GCC) – Section - IV
- SLA & Performance Obligations–Section V
- Price Format – Section VI
- Grand Summary of Quoted Rates – Section VII
- Vendor Code of Conduct - Section VIII
- Technical Specifications – Annexure I

The Bidder is expected to examine the Bidding Documents, including all Instructions, Forms, Terms and Specifications. Failure to furnish all information required by the Bidding Documents or submission of a Bid not substantially responsive to the Bidding Documents in every respect will may result in the rejection of the Bid.

6.00 AMENDMENT OF BIDDING DOCUMENTS

At any time prior to the deadline for submission of Bids, the Company may for any reasons, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the Bidding Documents by amendment.

The Amendment shall be part of the Bidding Documents, pursuant to Clause 5.00, and it will be notified in web site www.bsesdelhi.com, and will be binding on them.

In order to afford prospective Bidders reasonable time in which to take the Amendment into account in preparing their Bids, the Company may, at its discretion, extend the deadline for the submission of Bids. The same shall be published as a corrigendum in website www.bsesdelhi.com.

Purchaser shall reserve the rights to following:

- Extend due date of submission
- Modify tender document in part/whole
- Cancel the entire tender

Bidders are requested to visit website regularly for any modification/clarification/corrigendum/addendum of the bid documents.

7.00 LANGUAGE OF BID

The Bid prepared by the Bidder and all correspondence and documents relating to the Bid exchanged by the Bidder and the Purchaser shall be written in the English Language. Any printed literature furnished by the Bidder may be written in another Language, provided that this literature is accompanied by English translation, in which case, for purposes of interpretation of the Bid, the English translation shall govern.

8.00 DOCUMENTS COMPRISING THE BID

The Bid prepared and submitted by the Bidder shall comprise the following components:



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- Bid Form, Price & other Schedules (STRICTLY AS PER FORMAT) and Technical Data Sheets completed in accordance with Technical Specification.
- All the Bids must be accompanied with the required EMD as mentioned in the Section-I against each tender.
- Tender documents duly stamped and signed on each page by authorized signatory.

9.00 **BID FORM**

9.01 The Bidder shall submit one "Original" and one "Copy" of the Un-priced Bid Form, Price Schedules & Technical Data Sheets duly filled in as per attached specification/BOM etc. enclosed.

9.02 **EMD**

The bidder shall furnish as part of its bid, an EMD amounting as specified in the RFQ (Table No.1). EMD for the entire cluster(s) is to be submitted by Bidder separately. The EMD is required to protect the Purchaser against the risk of Bidder's conduct which would warrant forfeiture.

The EMD shall be denominated in any of the following form:

- (a) Bank Guarantee/Demand Draft in favour of BSES Rajdhani Power Ltd, payable at Delhi.
- (b) Bank Guarantee valid for One hundred Twenty (120) days after due date of submission or amended due date of submission drawn in favour of BSES Rajdhani Power Ltd., BSES Bhawan, Nehru Place, New Delhi 110019.

The EMD may be forfeited in case of:

- (a) The Bidder withdraws its bid during the period of specified bid validity
OR
- (b) The case of a successful Bidder, if the Bidder does not
 - (i) Accept the Purchase Order/ Work Order, or
 - (ii) Furnish the required performance security BG.

10.00 **BID PRICES**

10.01 The project cost shall include all the costs related to above Scope of Work. Bidder shall quote for the entire facilities on a "single responsibility" basis such that the project cost covers all the obligations mentioned in the Bidding Documents in respect of Design, Supply, Erection, Testing and Commissioning including Warranty, Operation & Maintenance for a period of 05 years, goods and services including spares required if any during O&M period. The Bidder has to take all permits, approvals and licenses, Insurance etc., provide training and such other items and services required to complete the scope of work mentioned above. In accordance with the requirement of Bidding Documents, the Bidder shall complete the appropriate Price Schedules included herein, stating the Unit Price for each item & Total Price with taxes, duties & freight upto destination.

10.02 The prices offered shall be inclusive of all costs as well as Duties, Taxes and Levies paid or payable during execution of the supply work, breakup of price constituents, should be there. The Bidder is required, at his expense, to obtain all the information he may require to enable him to submit his tender including necessary visits to the site to ascertain the local conditions, procurement of necessary materials, labour, etc., requirements of the local/government/public authorities in such matters.

10.03 Prices quoted by the Bidder shall be "**Firm**" and not subject to any price adjustment during the performance of the Contract. **A Bid submitted with an adjustable price/ Price Variation Clause/ adjustment payable by BRPL/ roof top owner will be treated as non-responsive and rejected.**

11.00 **BID CURRENCIES**



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Prices shall be quoted in Indian Rupees Only.

12.00 **PERIOD OF VALIDITY OF BIDS**

- 12.01 Bids shall remain valid for 120 days from the due date of submission of the Bid & subsequent corrigendum/amendment/extension of due date of submission.
- 12.02 Notwithstanding Clause 12.01 above, the Purchaser may solicit the Bidder's consent to an extension of the Period of Bid Validity. The request and the responses thereto shall be made in writing and sent by post/courier.

13.00 **ALTERNATIVE BIDS**

Bidders shall submit Bids, which comply with the Bidding Documents. Alternative Bids will not be considered. The attention of Bidders is drawn to the provisions regarding the rejection of Bids in the terms and conditions, which are not substantially responsive to the requirements of the Bidding Documents.

14.00 **FORMAT AND SIGNING OF BID**

- 14.01 The original Bid Form and accompanying documents, clearly marked "Original Bid" and "copy" must be received by the Purchaser at the date, time and place specified pursuant to Clauses 15.0 and 16.0. In the event of any discrepancy between the original and the copy, the original shall govern.
- 14.02 The original and copies of the Bid shall be typed or written in indelible ink and shall be signed by the Bidder or a person or persons duly authorized to sign on behalf of the Bidder. **Such authorization shall be indicated by written Power-of-Attorney accompanying the Bid.**
- 14.03 The Bid shall contain no interlineations, erasures or overwriting except as necessary to correct errors made by the Bidder, in which case such corrections shall be initialed by the person or persons signing the Bid.

15.00 **SEALING AND MARKING OF BIDS**

- 15.01 Bid submission: One original & one Copy (hard copies) of all the Bid Documents shall be sealed and submitted to the Purchaser before the closing time for submission of the bid.
- 15.02 The Technical Documents and the EMD shall be enclosed in a sealed envelope and the said envelope shall be super scribed with — "Technical & EMD". The price bid shall be inside another sealed envelope with super scribed "Financial Bid". Both these envelopes shall be sealed inside another big envelope. All the envelopes should bear the Name and Address of the Bidder and marking for the Original and Copy. The envelopes should be super scribed with — "Tender Notice No. & Due date of opening".
- 15.03 The Bidder has the option of sending the Bids in person. Bids submitted by email/Telex/ Telegram/ Fax will be rejected. No request from any Bidder to the Purchaser to collect the proposals from Courier/Airlines/Cargo Agents, etc. shall be entertained by the Purchaser.

16.00 **DEADLINE FOR SUBMISSION OF BIDS**

- 16.01 The original Bid, together with the required copies, must be received by the Purchaser at the address specified earlier.
- 16.02 The Purchaser may at its discretion, extend the deadline for the submission of Bids by amending the Bidding Documents, in which case all rights and obligations of the Purchaser and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

17.00 **ONE BID PER BIDDER**



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Each Bidder shall submit only one Bid by itself. **No Joint Venture/ Consortium is acceptable.** A Bidder who submits or participates in more than one Bid will cause all those Bids to be rejected.

18.00 **LATE BIDS**

Any Bid received by the Purchaser after the deadline for submission of Bids prescribed by the Purchaser, pursuant to Clause 16.0, will be declared "Late" and shall be rejected and returned unopened to the Bidder.

19.00 **MODIFICATIONS AND WITHDRAWAL OF BIDS**

19.01 The Bidder is not allowed to modify or withdraw its Bid after the Bid's submission.

20.00 **PROCESS TO BE CONFIDENTIAL**

Information relating to the examination, clarification, evaluation and comparison of Bids and recommendations for the award of a contract shall not be disclosed to Bidders or any other persons not officially concerned with such process. Any effort by a Bidder to influence the Purchaser's processing of Bids or award decisions may result in the rejection of the Bidder's Bid.

21.00 **CLARIFICATION OF BIDS**

To assist in the examination, evaluation and comparison of Bids, the Purchaser may, at its discretion, ask the Bidder for a clarification of its Bid. All responses to requests for clarification shall be in writing and no change in the price or substance of the Bid shall be sought, offered or permitted.

22.0 **PRELIMINARY EXAMINATION OF BIDS/ RESPONSIVENESS**

22.01 Purchaser will examine the Bids to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the Bids are generally in order. Purchaser may ask for submission of original documents in order to verify the documents submitted in support of qualification criteria.

22.02 Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the Total Amount and the sum of the total price per item, the sum of the total price per item shall prevail and the Total Amount will be corrected.

22.03 Prior to the detailed evaluation, Purchaser will determine the substantial responsiveness of each Bid to the Bidding Documents including production capability and acceptable quality of the Goods offered. A substantially responsive Bid is one, which conforms to all the terms and conditions of the Bidding Documents without material deviation.

22.04 Bid determined as not substantially responsive will be rejected by the purchaser and/or the Purchaser and may not subsequently be made responsive by the Bidder by correction of the non-conformity.

23.00 **EVALUATION AND COMPARISON OF BIDS**

The evaluation of Bids shall be done based on the delivered cost competitiveness basis.

23.01 The evaluation of the Bids shall be a stage-wise procedure. The following stages are identified for evaluation purposes: In the first stage, the Bids would be subjected to a responsiveness check. The Technical Proposals and the Conditional ties of the Bidders would be evaluated.

23.02 Subsequently, the Financial Proposals along with Supplementary Financial Proposals, if any of Bidders with Techno-commercially Acceptable Bids shall be considered for final evaluation.

23.03 The Purchaser's evaluation of a Bid will take into account, in addition to the Bid price, the following factors, in the manner and to the extent indicated in this Clause:

- Delivery Schedule
- Conformance to Qualifying Criteria
- Deviations from Bidding Documents

Bidders shall base their Bid price on the terms and conditions specified in the Bidding Documents.

The cost of all quantifiable deviations and omissions from the specification, terms and conditions specified in Bidding Documents shall be evaluated. The Purchaser will make its own assessment of the cost of any deviation for the purpose of ensuring fair comparison of Bids.

- 23.04 Any adjustments in price, which result from the above procedures, shall be added for the purposes of comparative evaluation only to arrive at an "Evaluated Bid Price". Bid Prices quoted by Bidders shall remain unaltered.

24.00 **CONTACTING THE PURCHASER**

- 24.01 If any Bidder wishes to contact the Purchaser on any matter related to the Bid, from the time of Bid opening to the time of contract award, the same shall be done in writing only.
- 24.02 Any effort by a Bidder to influence the Purchaser and/or in the Purchaser's decisions in respect of Bid evaluation, Bid comparison or Contract Award, will result in the rejection of the Bidder's Bid.

25.00 **THE PURCHASER'S RIGHT TO ACCEPT ANY BID AND TO REJECT ANY OR ALL BIDS**

The Purchaser reserves the right to accept or reject any Bid and to annul the Bidding process and reject all Bids at any time prior to award of Contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for the Purchaser's action.

26.00 **AWARD OF CONTRACT**

- 26.01 The Purchaser will award the Contract to the successful Bidder whose Bid has been determined to be the lowest-evaluated responsive Bid, provided further that the Bidder has been determined to be qualified to satisfactorily perform the Contract. Purchaser reserves the right to award order to other bidders in the tender, provided it is required for timely execution of project & provided he agrees to come to the lowest rate.

- 26.02 The Purchaser may issue **consolidated/ separate orders** for Supply, Installation, Testing & Commissioning of the entire Cluster(s).

- 26.03 **In case execution target timelines is coinciding, BRPL reserves the right to limit the award of schemes to single party depending on the contractor's turnover, execution capabilities & past performance. The decision shall be as per BRPL discretion and Vendor has to abide by the same.** The purchaser reserves all the rights to award the contract to one or more bidders to meet the Project execution requirement or nullify the award decision without citing any reason

27.00 **THE PURCHASER'S RIGHT TO VARY QUANTITIES**

The Purchaser reserves the right to vary the quantity i.e. increase or decrease the numbers/quantities without any change in terms and conditions during the execution of the Order.

28.00 **LETTER OF INTENT/ NOTIFICATION OF AWARD**

The Letter of Intent/ Notification of Award shall be issued to the successful Bidder whose bids have been considered responsive, techno-commercially acceptable and evaluated to be the lowest (L1) bidder. The successful Bidder shall be required to furnish a letter of acceptance within 07 days of issue of the Letter of Intent/Notification of Award by Purchaser. The date of LOI/PO shall be treated as Start date of work.

29.00 CONTRACT PERFORMANCE BANK GUARANTEE

Within 15 days of the receipt of Notification of Award/ LOI/PO/ LOA from the Purchaser, the successful Bidder(s) shall furnish the Performance Bank Guarantee towards faithful performance of Contract for an amount of 10% (Ten percent) of total Contract Price. The Performance Bond shall be valid upto completion period/handling over, whichever is earlier plus 3 months of claim period. Upon submission of the performance security, the submitted EMD shall be released.

Note: The Contract Performance Bank Guarantee shall be submitted for the entire cluster(s) awarded to Bidder.

30.00 CORRUPT OR FRAUDULENT PRACTICES

30.01 The Company requires that the Bidders observe the highest standard of ethics during the procurement and execution of the Project. In pursuance of this policy, the Company:

(a) Defines, for the purposes of this provision, the terms set forth below as follows:

"Corrupt practice" means behaviour on the part of officials in the public or private sectors by which they improperly and unlawfully enrich themselves and/or those close to them, or induce others to do so, by misusing the position in which they are placed, and it includes the offering, giving, receiving, or soliciting of anything of value to influence the action of any such official in the procurement process or in contract execution; and

"Fraudulent practice" means a misrepresentation of facts in order to influence a award process or the execution of a contract to the detriment of the Company, and includes collusive practice among Bidders (prior to or after Bid submission) designed to establish Bid prices at artificial non-competitive levels and to deprive the Company of the benefits of free and open competition.

(b) Will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question;

(c) Will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, a contract.

30.02 Furthermore, Bidders shall be aware of the provision stated in the Terms and Conditions of Contract.

31.00 PROJECT ALLOCATION AND SANCTION

31.01 The Bidders, however, in their own interest are advised to make a preliminary survey of availability of rooftops for which they intend to Bid, as well as issue of Grid connectivity, as non-availability of rooftops area and non-completion of other formalities after allocation of project will result in forfeiture of Bid Bond/PBG amount submitted by them.

31.02 The Successful Bidders selected as described in Clause 26.00 above shall be issued Letter of Allocation (LOA) indicating the allocated cluster(s) & capacity etc.

31.03 The bidders who have been notified as Successful Bidders, shall be given 10 weeks from the date of issue of Letter of Allocation for commissioning of the allocated capacity.

31.09 The Bidder shall complete the roofs identification, submission of project sanction documents as per the requirement of BRPL Engineer-in-Charge design, engineering, manufacture, supply, storage, civil work, erection, testing & commissioning of sanctioned project(s) within 10 weeks from the date of issue of PO/ LOI. After the end of 10 weeks, BRPL reserves the right to further extend the completion period at their discretion. After completion period, the unexecuted sanctioned capacity will get cancelled and the PBG for unexecuted capacity is liable to be forfeited.



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31.00 COMPLETION PERIOD

10 weeks Months from the date of PO/ LOI.

The period of construction given in Time Schedule includes the time required for mobilization as well as testing, rectifications if any, retesting and completion in all respects to the entire satisfaction of the Engineer-in-Charge.

Successful bidder shall scrupulously adhere to these targets/programmes by deploying adequate personnel, tools and tackles and he shall also supply himself all materials of his scope of supply in good time to achieve the targets/programmes.

SECTION III

SPECIAL TERMS AND CONDITIONS OF CONTRACT

- 1.1. Bidders are requested to visit the site to understand the scope of work, site conditions and requirements prior to Bidding. Hence, no price/time escalation shall be admissible on these accounts.
- 1.2. The scope of this tender includes supply, survey, design, engineering, manufacturer, inspection, packing, dispatch, loading, unloading and storage at site, storage and construction insurance, assembly, erection, structural, complete pre-commissioning checks, testing and commissioning at site, obtaining any statutory clearances and handing over of the Solar Project to owner on single point responsibility basis.
- 1.3. Prices for all the activities shall be **FIRM** till the actual completion of the job. Statutory variation will be allowed for direct supplies only wherever breakup of Taxes & Duties are available in Price Bid. In case bidder has not submitted any price breakup, no variation on account of statutory variation shall be paid extra by BRPL.
- 1.4. Permissions & statutory clearances shall be taken by Bidder. The Bidder shall follow-up with local authorities and other connected person(s)/ people that may require carrying out the job under this work order.
- 1.5. Bidder has to submit the technical parameters with details of all material(s)/ equipment(s) for each rating with catalogue, reference codes etc.
- 1.6. Wherever BRPL specifications are not available relevant IS/IEC to be followed. All Drawings mentioned in the Tender Specification and other required for the completeness of the tender shall be submitted. Drawing submission process shall not be deemed complete if all the requirements are not complied during the submission of the same.
- 1.7. The Bidder should have all major tools and tackles required for installation, testing & commissioning of works.
- 1.8. Bidder has to submit the price for the entire Scope of Work. Unpriced copy must be attached with the Part A. Reverse Auction will be carried out on Lump Sum Basis/Total Landed Cost i.e. Supply + ETC.
- 1.9. Any other material not specifically mentioned above but required for successful commissioning and operation is in the scope of bidder.
- 1.10. Successful bidder has to adhere to the statutory compliances.
- 1.11. Successful bidder has to send the weekly progress report to BRPL E-I-C.
- 1.12. In case of any major deviation, deletion or addition which bidder may feel is relevant to this project & for its safe operation and completion of works; Bidder may clearly highlight and communicate the same to the purchaser with his bid.

1.13. GUARANTEE PERIOD/DEFECT LIABILITY PERIOD:

The Guarantee Period shall be as specified in the Technical Specifications for the equipment/material/service/work. In-case of no mention of the guarantee period in technical specifications, Defect liability period will be 60 Months from the Date of Commissioning or 66 months from the date of delivery of final lot of supplies made, whichever is later.

If during the defects liability period any materials/ items are found to be defective, these shall be replaced or rectified by the bidder at his own cost within 30 days from the date of receipt of intimation

1.14. FAILURE DURING GUARANTEE PERIOD:

If the equipment and material supplied/service or work rendered under the contract fails to perform its due, rated & intended quality performance, during the Guarantee period, the bidder is liable to undertake

repair/rectify/replace the equipment and material supplied/service or work rendered under the contract within time frame as specified below at bidder's cost to make the equipment and material supplied/service or work rendered under the contract of performing its due, rated and intended quality performance. If bidder fails to repair/rectify/replace the equipment or material supplied/service or work rendered under the contract, failed in Guarantee Period, purchaser will be at liberty to get the same done at bidder's risks and costs and recover all such expenses plus the purchaser own charges (@ 15% of expenses incurred), from the bidder or from the "Performance Bank Guarantee" as the case may be.

If during the Warranty/ Guarantee period some parts of the supplies are replaced owing to the defects/damages under the Warranty, the Warranty period for such replaced parts shall be until the expiry of twelve months from the date of such replacement or renewal or until the end of original Guarantee period, whichever is later.

- a) Service Engineer Availability to Attend, Identify & Restore Defects (Minor) of materials/Equipment's under Guarantee Period within 48 Working Hours (Exclusion of Material Support Cases).
- b) Spare Material Delivery for rectification of defect (Major) Under Guarantee Period within Two Weeks. Bidder must keep Requisite Inventory of Critical Spares & Other Equipments Covered in Guarantee Period to Restore Equipment within Two Weeks.
- c) In Case Of Complete Replacement of material, within a Period of 4 Weeks.

Note: BRPL is in the business of Power distribution and is committed to providing reliable and continuous power supply to its customers. In case of any fault in the system, BRPL's top most priority is to rectify the fault and restore the system as soon as possible and maintain the supply.

If during the defect liability period any fault occurs in the system due to faulty materials, design or workmanship, BRPL shall intimate the vendor of such occurrence for taking immediate corrective action.

However, if the situation, in BRPL's sole discretion warrants an emergency restoration, it reserves the right to take immediate action for identifying the fault and restoring the system with available resources & materials or with help from any other third-party agency under intimation to the Vendor. All costs of replacement, substitution, shipping, labour and other related expenses including taxes and levies incurred in connection with the restoration of fault plus 15% of expenses incurred as administrative overheads shall be for the account of Vendor. BRPL will charge the vendor for the costs incurred for fault restoration or may set off such costs against any amounts payable by BRPL to the Vendor or deduct from the PBG submitted by the Vendor. Vendor shall pay BRPL the amount within 30 days.

Root cause analysis of the fault shall be done jointly by BRPL and Vendor. In case the fault is due to any reason other than faulty materials, design or workmanship, Vendor shall be exempted from any further action or Cost.

1.15. PROJECT INFORMATION & COMPLETION

The contractor shall be fully responsible to complete the project in time. It is desired that the project should be completed as per the schedule from the date of LOA/ LOI or Order whichever is earlier. The detailed completion schedule shall be prepared by vendor and shall be submitted at the time of detailed engineering for approval.

After the end of Completion Period, the completion period may be further extended at the discretion of BRPL. After completion period, the unexecuted capacity will get cancelled and the PBG for unexecuted capacity would be forfeited.

SECTION IV GENERAL TERMS AND CONDITIONS

1.01 All the Bids shall be prepared and submitted in accordance with these instructions.



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- 1.02** Bidder shall bear all costs associated with the preparation and delivery of its Bid, and the Purchaser will in no case shall be responsible or liable for these costs.
- 1.03** The Bid should be submitted by the Bidder in whose name the bid document has been issued and under no circumstances it shall be transferred/sold to the other party.
- 1.04** The Purchaser reserves the right to request for any additional information and also reserves the right to reject the proposal of any Bidder, if in the opinion of the Purchaser, the data in support of RFQ requirement is incomplete.
- 1.05** The Bidder is expected to examine all instructions, forms, terms & conditions and specifications in the Bid Documents. Failure to furnish all information required in the Bid Documents or submission of a Bid not substantially responsive to the Bid Documents in every respect may result in rejection of the Bid. However, the Purchaser's decision in regard to the responsiveness and rejection of bids shall be final and binding without any obligation, financial or otherwise, on the Purchaser.

2.0 DEFINITION OF TERMS

- 2.01** "Purchaser" shall mean BSES Rajdhani Power Limited, on whose behalf this bid enquiry is issued by its authorized representative/ officers.
- 2.02** "Bidder" shall mean the firm who quotes against this bid enquiry issued by the Purchaser. "Supplier" or "Supplier" shall mean the successful Bidder and/or Bidders whose bid has been accepted by the Purchaser and on whom the "Letter of Acceptance" is placed by the Purchaser and shall include his heirs, legal representatives, successors and permitted assigns wherever the context so admits.
- 2.03** "Supply" shall mean the Scope of Contract as described.
- 2.04** "Specification" shall mean collectively all the terms and stipulations contained in those portions of this bid document known as RFQ, Commercial Terms & Condition, Instructions to Bidders, Technical Specifications and the Amendments, Revisions, Deletions or Additions, as may be made by the Purchaser from time to time.
- 2.05** "Letter of Acceptance" shall mean the official notice issued by the Purchaser notifying the Supplier that his proposal has been accepted and it shall include amendments thereto, if any, issued by the Purchaser. The "Letter of Acceptance" issued by the Purchaser shall be binding on the "Supplier" The date of Letter of Acceptance shall be taken as the effective date of the commencement of contract.
- 2.06** "Month" shall mean the calendar month and "Day" shall mean the calendar day.
- 2.07** "Codes and Standards" shall mean all the applicable codes and standards as indicated in the Specification.
- 2.08** "Offer Sheet" shall mean Bidder's firm offer submitted to BRPL in accordance with the specification.
- 2.09** "Contract" shall mean the "Letter of Acceptance/Order" issued by the Purchaser.
- 2.10** "Contract Price" shall mean the price referred to in the "Letter of Acceptance/Order".
- 2.11** "Contract Period" shall mean the period during which the "Contract" shall be executed as agreed between the Supplier and the Purchaser in the Contract inclusive of extended contract period for reason beyond the control of the Supplier and/or Purchaser due to force majeure.
- 2.12** "Acceptance" shall mean and deemed to include one or more of the following as will be stipulated in the specification:
 - a) The written acceptance of material by the inspector at suppliers works to ship the materials.
 - b) Acceptance of material at Purchaser site stores after its receipt and due inspection/ testing and release of material acceptance voucher.

3.0 CONTRACT DOCUMENTS & PRIORITY

Contract Documents: The terms and conditions of the contract shall consist solely of these RFQ conditions and the offer sheet. The several documents forming the Contract are to be taken as mutually explanatory of one another, but in case of ambiguities or discrepancies, the same shall be explained and adjusted by the Purchaser, who shall thereupon issue to the Contractor, instructions thereon. In such event, unless otherwise provided in the Contract, the priority of the documents forming the Contract shall be as follows:

1. Any amendments to Contract
2. Commercial Terms & Conditions of the Contract
3. Clarifications/addendum/corrigendum to Tender
4. Terms & Conditions of the Tender

4.0 SCOPE OF WORK

The selected bidder(s) shall undertake the Design, Engineering, Supply, Installation, Testing, Commissioning and Comprehensive Operation & Maintenance (O&M) of grid-connected rooftop solar PV systems with a cumulative capacity of approximately 2.2 MWp to be installed at 46 BRPL grid stations and buildings. (List enclosed as Annexure -1)

The work includes, but is not limited to:

- Conducting site survey and feasibility assessment to validate the proposed capacity at each location.
- Design and engineering of the system layout, string configuration, single-line diagram (SLD), module-mounting structure design, earthing, lightning protection, cable routing and interconnection.
- Supply of all materials, components, and accessories as per MNRE and DERC technical standards.
- Installation, testing and synchronization of each plant under net metering mechanism.
- Obtaining all statutory and electrical safety approvals required for commissioning.
- Comprehensive O&M for 5 years including performance monitoring, generation reporting, and periodic cleaning and preventive maintenance including cleaning of Solar Panels, wear, tear, overhauling, machine breakdown, insurance and replacement of defective modules, invertors/ Power Conditioning Unit (PCU), spares, consumables & other parts for a period of 05 years from Handing Over of the project(s).

The bidder shall be responsible for complete EPC execution and long-term performance of the project as per BRPL specifications.

The Bidder shall also make his own arrangement for the accommodation/conveyance requirements for its staff at site. Company will be provided at site the adequate open space for contractor's site store for storing the materials, tools, tackles etc. The entire Contractor's storage will be within the site premises. All the incoming and outgoing materials, equipment, tools, tackles and any other items related to said work shall be entered into the register kept for this purpose and shall be in the custody of Contractor, however company does not hold any responsibility for any loss or damage of Contractor's material etc.

All loading/ unloading, of materials at work-site shall be Bidder's responsibility. Involvement of Crane/ Hydra/ Tractor/ Trailer for this type of work shall be in your scope. Adequate weather protection shall be provided by the bidder to keep the materials safe from sun & rain by providing covered storage space as well as using tarpaulins.

The contractor at his own shall arrange Water and Electricity Power at his cost.

Special Instruction:-

- All Erection tools and tackles and testing equipment shall be available with contractor in event of order
- Any additional work beyond the scope enumerated in the work order above shall be carried out as per the instructions of Engineer-In-Charge. The company shall not entertain any claim or increase in the

Work Order value due to execution of such additional work if the same is not approved by Engineer in Charge.

5.0 QUALITY ASSURANCE AND INSPECTION

- 5.01 The performance of waiver of QA activity by Purchaser at any stage of manufacturing does not relieve the supplier of any obligation to perform in accordance with and meet all the requirements of the procurement documents and also all the codes & reference documents mentioned in the procurement document nor shall it preclude subsequent rejection by the purchaser.
- 5.02 On completion of manufacturing the items can only be dispatched after receipt of dispatch instructions issued by the Purchaser.
- 5.03 All in-house testing and inspection shall be done without any extra cost. The in-house inspection shall be carried out in presence of BRPL/BRPL authorized third party inspection agency. Cost of Futile/abortive visit(s) shall be debited from the invoices
- 5.04 Purchaser reserves the right to send any material being supplied to any recognized laboratory for testing, wherever necessary and the cost of testing shall be borne by the Bidder. In case the material is found not in order with the technical requirement/ specification, the charges along with any other penalty which may be levied is to be borne by the bidder. To avoid any complaint the supplier is advised to send his representative to the stores to see that the material sent for testing is being sealed in the presence of bidder's representative.

6.0 EXAMINATION OF SITE AND LOCAL CONDITIONS:

The contractor is deemed to have visited the site of the work and ascertained therefore all site conditions and information pertaining to his work. The company shall not accept any claim whatsoever arising out of the difficult site/ terrain/ local conditions, if any.

7.0 LANGUAGE AND MEASUREMENT:

The CONTRACT issued to the contractor by the company and all correspondence and documents relating to the CONTRACT placed on the Contractor shall be written in English language.

Metric System shall be followed for all dimension, units etc.

8.0 PRICE BASIS FOR SCOPE OF WORK

- The discovered project cost shall include all the costs related to above Scope of Work. Bidder shall quote for the entire cluster(s) on a "single responsibility" basis such that the project cost covers all the obligations mentioned in the Bidding Documents in respect of Design, Supply, Erection, Testing and Commissioning including Warranty, Operation & Maintenance for a period of 05 years, goods and services including spares required if any during O&M period. The Bidder has to take all permits, approvals and licenses, Insurance etc., provide training and such other items and services required to complete the scope of work mentioned above.
- The project discovered will be on turnkey lump sum basis, and the bidder is responsible for the total Scope of Work described at above.
- The Cluster(s)/ Project(s) shall remain firm and fixed and shall be binding on the Successful Bidder till completion of allocated capacity irrespective of his incurred actual cost of execution and maintaining the RTS project till 05 years. No escalation will be granted on any reason whatsoever.
- The bidder shall not be entitled to claim any additional charges, even though it may be necessary to extend the completion period for any reasons whatsoever.
- The discovered project cost shall be inclusive of all duties and taxes, insurance etc. The project cost quoted by the firm shall be complete in all respect and no price variation/ adjustment shall be payable by BRPL/ roof top owner.

- The Operation & Maintenance of Solar Photovoltaic Power Plant would include cleaning of Solar Panels, wear, tear, overhauling, machine breakdown, insurance and replacement of defective modules, invertors/Power Conditioning Unit (PCU), spares, consumables & other parts for a period of 05 years shall also be part of the Projects Scope of Work.

Note: The bidder must submit bids for at least 02 Clusters.

9.0 TERMS OF PAYMENT AND BILLING

- a) 40% pro-rata of contract value shall be payable against R/A bills for supply of equipment and materials within 30 days against receipt of material at site and submission of following documents duly certified by BRPL Project-in-charge:
 - i. Consignee copy of LR
 - ii. Detailed invoice showing commodity description, qty, unit & total price,
 - iii. Original certificate issued by BRPL confirming receipt of material at site & acceptance
 - iv. Dispatch clearance & inspection report issued by the inspection authority
 - v. Packing List, Test Reports
 - vi. Guarantee Certificate.
- b) 40% pro-rata after installation/erection/synchronization with grid, duly certified by BRPL Engineers-In-Charge.
- c) 20% after completion of successful acceptance testing, submission of all clearances, commissioning and Handing Over of **the entire cluster** and duly certified by BRPL Engineer-In-Charge and submission of PBG of 10% of contract value valid upto O&M period i.e. 05 Years from the date of Handing over of entire Installation plus 03 months towards Claim period (PBG for O&M period).

10.0 PRICE VALIDITY

- 10.01 All bids submitted shall remain valid, firm and subject to unconditional acceptance by BRPL Delhi for 120 days from the due date of submission & subsequent corrigendum/amendment/extension of due date of submission. For awarded suppliers/contractors, the prices shall remain valid and firm till contract completion.

11.0 PERFORMANCE GUARANTEE

- 11.01 Bank guarantee shall be drawn in favour of "BSES Rajdhani Power Ltd" as applicable. The performance Bank guarantee shall be in the format as specified by BRPL.
- 11.02 Contract Performance Bank Guarantee of total 10% of the contract price shall be submitted within 15 days of award of contract with the validity till completion of the contract period. The CPBG shall be submitted on a Cluster(s) Basis.
- 11.03 Contractor shall submit the performance bank guarantee equivalent to the 10% of the contract value at the time of claiming the last payment as per clause no. 9.0(C) (Terms of Payment and Billing), with the validity of the bank guarantee till Operation & Maintenance (O&M) Period of 05 years from date of Handing over plus 03 months towards Claim period.

12.0 FORFEITURE

- 12.01 The Performance Bond established under Clause 11.0 shall contain a statement that it shall be automatically and unconditionally forfeited without recourse and payable against the presentation by BRPL of this Performance Bond, to the relevant bank referred to above, together with a simple statement that supplier has failed to comply with any term or condition set forth in the Contract.

- 12.02 Performance BG established under will be automatically and unconditionally forfeited without recourse if BRPL at its sole discretion determines that supplier has failed to comply with any term or condition set forth in the contract.
- 12.03 The PBG shall be forfeited as follows without prejudice to the Bidder being liable for any further consequential loss or damage incurred to BRPL. If the Successful Bidder is not able to commission 100% of the allocated capacity to the satisfaction of BRPL, PBG amount shall be forfeited for non-commissioned capacity on pro-rate basis. The unidentified/ non-commissioned capacity shall stand cancelled.
- 12.04 The Performance Security shall be valid for period of 5 years + 03 months claim period from the date of issuance of letter of intent and shall be renewed/ extended till the commissioning of the last RTS plant + 03 months claim period. The Performance security shall be released after successful O&M period of 05 years and with the compliance of entire obligations in the contract.
- 12.05 Performance Security will be released to the bidder on successful completion of O&M period of 05 years to the satisfaction of BRPL.

13.0 RELEASE

All Performance Bonds will be released without interest within seven (07) days from the last date up to which the Performance Bond has to be kept valid (as defined in Clause 10.0) except for the case set forth in Clause 21.0.

14.0 GUARANTEE OF PERFORMANCE

The bidder shall stand guarantee that the equipment and material supplied/service or work rendered under the contract is free from design, manufacturing, material, construction, erection & installation and workmanship & quality defects and is capable of its due, rated and intended quality performance, as an integrated product delivered under the contract for a specific period termed as Guarantee Period. The bidder should also guarantee that the equipment/material is new and unused except for the usage required for the tests and checks required as part of quality assurance.

15.0 GUARANTEE PERIOD/DEFECTS LIABILITY PERIOD

The Guarantee Period shall be as specified in the Technical Specifications for the equipment/ material/ service/ work. In-case of no mention of the guarantee period in technical specifications, Defect liability period will be 60 Months from the Date of Commissioning or 66 months from the date of delivery of final lot of supplies made, whichever is later.

If during the defects liability period any materials/ items are found to be defective, these shall be replaced or rectified by the bidder at his own cost within 30 days from the date of receipt of intimation.

Cost of repairs on failure in Guarantee Period: The cost of repairs/rectification/replacement, apart from the actual cost of repairs/rectification/replacement is also inclusive of all bidder costs of required transportation, site inspection/mobilization/dismantling and re-installation costs as applicable, to be borne by the bidder. The bidder has to ensure that the interruption in the usage of intended purpose of the equipment is minimized to the maximum extent In lieu of the time taken for repairs/rectification/replacement.

16.0 RETURN, REPLACEMENT OR SUBSTITUTION

BRPL shall give Supplier notice of any defective Commodity promptly after becoming aware thereof. BRPL may at its discretion elect to return defective Commodities to Supplier for replacement, free of charge to BRPL, or may reject such Commodities and purchase the same or similar Commodities from any third party. In the latter case BRPL shall furnish proof to Supplier of the cost of such substitute purchase. In either case, all costs of any replacement, substitution, shipping, labour and other related expenses incurred in connection with the return and replacement or for the substitute purchase of a Commodity hereunder should be for the account of Supplier. BRPL may set off such costs against any amounts payable by BRPL to Supplier. Supplier shall reimburse BRPL for

the amount, if any, by which the price of a substitute Commodity exceeds the price for such Commodity as quoted in the Bid.

17.0 EFFECTIVE DATE OF COMMENCEMENT OF CONTRACT

The date of the issuance of the LOA/ LOI/ Order shall be treated as the effective date of the commencement of Contract.

18.0 TIME – THE ESSENCE OF CONTRACT

The time and the date of completion of Work as stipulated in the LOA/ LOI/ Order issued to the Supplier shall be deemed to be the essence of the "Contract". The Work has to be completed no later than the aforesaid Schedule and date of Completion of Work.

19.0 THE LAWS AND JURISDICTION OF CONTRACT

The laws applicable to this Contract shall be the Laws in force in India. To the best of their ability, the parties hereto shall endeavour to resolve amicably between themselves all disputes arising in connection with this work order. If the same remain unresolved within thirty (30) days of the matter being raised by either party, either party may refer the dispute for adjudication by arbitration. The arbitration shall be undertaken by the sole arbitrator jointly appointed by the parties. In case the parties fail to arrive at consensus to appoint the sole arbitrator, either party may approach the Court for appointing an arbitrator under Section 11 of the Arbitration and Conciliation Act, 1996 and the award of the said sole arbitrator, shall be final and binding upon the parties. The arbitration proceeding shall be conducted in accordance with these provisions of the Indian Arbitration & Conciliation Act, 1996 (as amended up to date) and the venue of such arbitration shall be the city of New Delhi only. The Arbitration shall be conducted in English language only. The courts at Delhi shall have the exclusive jurisdiction over the subject matter of Arbitration/dispute. The cost of the Arbitration shall be equally shared by the parties as per directions of the Sole Arbitrator.

20.0 EVENTS OF DEFAULT

22.01 Events of Default. Each of the following events or occurrences shall constitute an event of default ("Event of Default") under the Contract:

- (a) Supplier fails or refuses to pay any amounts due under the Contract;
- (b) Supplier fails or refuses to deliver Commodities conforming to this RFQ/ specifications, or fails to deliver Commodities within the period specified in the Order or any extension thereof.
- (c) Supplier becomes insolvent or unable to pay its debts when due, or commits any act of bankruptcy, such as filing any petition in any bankruptcy, winding-up or reorganization proceeding, or acknowledges in writing its insolvency or inability to pay its debts; or the Supplier's creditors file any petition relating to bankruptcy of Supplier;
- (d) Supplier otherwise fails or refuses to perform or observe any term or condition of the Contract and such failure is not remediable or, if remediable, continues for a period of 30 days after receipt by the Supplier of notice of such failure from BRPL.

21.0 CONSEQUENCES OF DEFAULT

- (a) If an Event of Default shall occur and be continuing, BRPL may forthwith terminate the Contract by written notice.
- (b) In the event of an Event of Default, BRPL may, without prejudice to any other right granted to it by law, or the Contract, take any or all of the following actions;
 - (i) Present for forfeiture to the relevant bank the Performance Bond;

- (ii) Purchase the same or similar Commodities from any third party; and/or
- (iii) Recover any losses and/or additional expenses BRPL may incur as a result of Supplier's default.

22.0 LIQUIDATED DAMAGES

- 22.01 If the supply of items & equipment/ installation & commissioning of SPV plant is delayed beyond the schedule as stipulated in LOA/ LOI/Order(s), then the Supplier shall be liable to pay the Purchaser for delay a sum of 0.5% (half percent) of the total price for every week of delay or part thereof for undelivered units.
- 22.02 The total amount for delay under the contract will be subject to a maximum of Tenpercent (10%) of the total contract value.
- 22.03 The Purchaser may, without prejudice to any method of recovery, deduct the amount for such damages from any amount due or which may become due to the Supplier or from the Performance Bond or file a claim against the supplier. The levy payment or deduction of such damages shall not relieve the Contractor from his obligation to complete the Supply on time or from any other part of his obligation and liabilities under the Contract. Once the maximum is reached, the Company reserves the right for termination of contract without any liabilities to the Company.

In the event of an extension of time being granted by the Project E-I-C, in writing for the Completion of the works, this clause shall be applicable after the expiry of such an extended period.

23.0 STATUTORY VARIATION IN TAXES AND DUTIES

The total order value shall remain **FIRM** within stipulated delivery period and shall not be adjusted on account of any price increase/ variations in commodities & raw materials. However Statutory Taxes, duties and Levies imposed by Competent Authorities by way of fresh notification(s) within the stipulated delivery period shall be borne by BRPL on submission of necessary documents claiming such variation.

24.0 FORCE MAJEURE**24.01 General**

An "Event of Force Majeure" shall mean any event or circumstance not within the reasonable control directly or indirectly, of the Party affected, but only if and to the extent that:

- (i) Such event or circumstance materially and adversely affects the ability of the affected Party to perform its obligations under this Contract, and the affected Party has taken all reasonable precautions, due care and reasonable alternative measures in order to prevent or avoid the effect of such event on the affected party's ability to perform its obligations under this Contract and to mitigate the consequences thereof.
- (ii) For the avoidance of doubt, if such event or circumstance would not have materially and adversely affected the performance of the affected party had such affected party followed good industry practice, such event or circumstance shall not constitute force majeure.
- (iii) Such event is not the direct or indirect result of the failure of such Party to perform any of its obligations under this Contract.
- (iv) Such Party has given the other Party prompt notice describing such events, the effect thereof and the actions being taken in order to comply with above clause.

- 24.02 Specific Events of Force Majeure subject to the provisions of above clause, Events of Force Majeure shall include only the following to the extent that they or their consequences satisfy the above requirements:

- (i) The following events and circumstances:
 - a) Effect of any natural element or other acts of God, including but not limited to storm, flood, earthquake, lightning, cyclone, landslides or other natural disasters.

b) Explosions or fires

(ii) War declared by the Government of India, provided that the ports at Mumbai are declared as a war zone.

(iii) Dangers of navigation, perils of the sea.

24.03 Notice of Events of Force Majeure If a force majeure event prevents a party from performing any obligations under the Contract in part or in full that party shall:

i) Immediately notify the other party in writing of the force majeure events within 7(seven) working days of the occurrence of the force majeure event

ii) Be entitled to suspend performance of the obligation under the Contract which is affected by force majeure event for the duration of the force majeure event.

iii) Use all reasonable efforts to resume full performance of the obligation as soon as practicable

iv) Keep the other party informed of all such efforts to resume full performance of the obligation on a regular basis.

v) Provide prompt notice of the resumption of full performance or obligation to the other party.

24.04 Mitigation of Events of Force Majeure Each Party shall:

(i) Make all reasonable efforts to prevent and reduce to a minimum and mitigate the effect of any delay occasioned by an Event of Force Majeure including recourse to alternate methods of satisfying its obligations under the Contract;

(ii) Use its best efforts to ensure resumption of normal performance after the termination of any Event of Force Majeure and shall perform its obligations to the maximum extent practicable as agreed between the Parties; and

(iii) Keep the other Party informed at regular intervals of the circumstances concerning the event of Force Majeure, with best estimates as to its likely continuation and what measures or contingency planning it is taking to mitigate and or terminate the Event of Force Majeure.

24.05 Burden of Proof In the event that the Parties are unable in good faith to agree that a Force Majeure event has occurred to an affected party, the parties shall resolve their dispute in accordance with the provisions of this Agreement. The burden of proof as to whether or not a force Majeure event has occurred shall be upon the party claiming that the force majeure event has occurred and that it is the affected party.

24.06 Termination for Certain Events of Force Majeure. If any obligation of any Party under the Contract is or is reasonably expected to be delayed or prevented by a Force Majeure event for a continuous period of more than 3 months, the Parties shall promptly discuss in good faith how to proceed with a view to reaching a solution on mutually agreed basis. If a solution on mutually agreed basis cannot be arrived at within a period of 30 days after the expiry of the period of three months, the Contract shall be terminated after the said period of 30 days and neither Party shall be liable to the other for any consequences arising on account of such termination.

24.07 The Purchaser may terminate the contract after giving 7(seven) days notice if any of following occurs:

a) Contractor fails to complete execution of works within the approved schedule of works, terms and conditions

b) In case the contractor commits any Act of Insolvency, or adjudged insolvent

c) Has abandoned the contract

d) Has failed to commence work or has suspended the progress of works

e) Has failed to proceed the works with due diligence and failed to make such due progress



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24.08 Limitation of Force Majeure event. The Supplier shall not be relieved of any obligation under the Contract solely because cost of performance is increased, whether as a consequence of adverse economic consequences or otherwise.

24.09 Extension of Contract Period due to Force Majeure event The Contract period may be extended by mutual agreement of Parties by way of an adjustment on account of any period during which an obligation of either Party is suspended due to a Force Majeure event.

24.10 Effect of Events of Force Majeure. Except as otherwise provided herein or may further be agreed between the Parties, either Party shall be excused from performance and neither Party shall be construed to be in default in respect of any obligations hereunder, for so long as failure to perform such obligations shall be due to an event of Force Majeure."

25.0 TRANSFER AND SUB-LETTING

The Supplier shall not sublet, transfer, assign or otherwise part with the Contract or any part thereof, either directly or indirectly, without prior written permission of the Purchaser.

26.0 RECOVERIES

When ever under this contract any money is recoverable from and payable by the bidder, the purchaser shall be entitled to recover such sum by appropriating in part or in whole by detecting any sum due to which any time thereafter may become due from the supplier in this or any other contract. Should the sum be not sufficient to cover, the full amount recoverable the bidder shall pay to the purchaser, on demand, the remaining balance.

27.0 WAIVER

Failure to enforce any condition herein contained shall not operate as a waiver of the condition itself or any subsequent breach thereof.

28.0 INDEMNIFICATION

Notwithstanding contrary to anything contained in this RFQ, Supplier shall at his costs and risks make good any loss or damage to the property of the Purchaser and/or the other Supplier engaged by the Purchaser and/or the employees of the Purchaser and/or employees of the other Supplier engaged by the Purchaser whatsoever arising out of the negligence of the Supplier while performing the obligations under this contract.

29.0 COMMISSIONING SPARES

Commissioning Spares shall be deemed to be included in the quoted prices

30.0 LIMITATION ON LIABILITY

Notwithstanding anything to the contrary in the Order but subject to clause 31 Consequential Damages, the aggregate liability of either Party to the other Party in respect of all claims for Liabilities arising under the Order shall not exceed the aggregate value of the Order(s) under which the Liabilities arose except that such limitation shall not apply to the Contractor's indemnification obligations in accordance with Clause 28 Indemnification herein.

31.0 CONSEQUENTIAL DAMAGES

Notwithstanding anything to the contrary in the Order, except for breach of obligations under Non-disclosure and except as expressly provided in a Purchase Order, in no event, as a result of breach of contract or breach of warranty or otherwise, shall either Party hereto or either Party's Affiliates or sub Contractors, be liable under the Purchase Order to the other Party for any consequential, special, indirect, exemplary or incidental damages, and/or for any lost profits, goodwill or revenues of such Party, howsoever arising, before or after Acceptance of the Goods and whether or not such damages are foreseeable.



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32.0 CLEANLINESS

All debris shall be removed and disposed of at assigned areas on daily basis. Surplus excavated earth shall be disposed of in an approved manner. In short, you shall be fully responsible for keeping the work site clean at all times. In case of non- compliance, company shall get the same done at Contractor's risk and costs.

33.0 WORK COMPLETION CERTIFICATION, HANDING OVER

The work carried out by the Contractor under this order has to be certified by Engineer-In-charge for satisfactory completion of work allotted to the contractor with respect to specifications/ Field Quality Procedures as per applicable standards. In case of modification/correction to be carried out, contractor shall carry out the said modifications/correction without additional cost. The Contractor shall remain in close contact with Engineer In-Charge at site to report the general findings of the fieldwork during the initial as well as later stage of the work at site.

The contractor shall be solely responsible for any shortage or damage of materials issued to them handling of and/or in storage and erection at site and cost of the same will be recovered from the contractor as certified by Engineer In-Charge. Contractor must submit a periodical material reconciliation statement in the approval format with every Running Bill raise by him or end of every month whichever is earlier. The contractor shall maintain an accurate and exhaustive record detailing out the list of all items received by him for the purpose of erection and keep such record open for the inspection of the company.

APPENDIX-I

COMMERCIAL TERMS AND CONDITIONS

SI No	Item Description	AS PER BRPL	BIDDER'S CONFIRMATION
1	Validity	120 days from the due date of submission or amended due date of submission	
2	Price basis	a) Firm , FOR Delhi store basis. Prices shall be inclusive of all taxes & duties, freight upto Delhi stores. b) Unloading in Bidders scope c) Transit insurance in Bidder scope	
3	Payment terms	Terms of Payment and Billing- a) 40% pro-rata of contract value shall be payable against R/A bills for supply of equipment and materials within 30 days against receipt of material at site and submission of following documents duly certified by BRPL Project-in-charge: i. Consignee copy of LR ii. Detailed invoice showing commodity description, qty, unit & total price, iii. Original certificate issued by BRPL confirming receipt of material at site & acceptance iv. Dispatch clearance & inspection report issued by the inspection authority v. Packing List, Test Reports vi. Guarantee Certificate. b) 40% pro-rata after installation/erection/ synchronization with grid, duly certified by BRPL Engineers-In-Charge. c) 20% after completion of successful acceptance testing, submission of all clearances, commissioning and Handing Over of the entire Cluster and duly certified by BRPL Engineer-In-Charge and submission of PBG of 10% of contract value valid up to O&M period i.e. 05 Years from the date of Handing over of entire Installation plus 03 months towards Claim period (PBG for O&M period).	
4	Completion time	10 weeks from date of LOI/Order	
5	Operation & Maintenance	05 Years from date of Handing Over of Solar Project	
6	Liquidated damages	0.5% of total price for every week delay subject to maximum of 5% of total contract value	
7	Contract Performance Bank Guarantee	10% (Ten percent) of the Contract Price valid upto completion period/handing over plus 03 months towards claim period.	
8	Performance Bank Guarantee	10% (Ten percent) of the Contract Price valid upto 05 Years plus 03 months towards claim period.	

SECTION V

SLA & PERFORMANCE OBLIGATIONS

1.0 PLANT PERFORMANCE EVALUATION

Performance Ratio(PR) should be shown minimum of 75% at the time of inspection for initial commissioning acceptance to qualify for release of project cost. The PR will be measured at Inverter output level during peak radiation conditions.

If failed to achieve the guaranteed performance levels, the bidder will at its own cost rectify all the defects identified during the test and take necessary steps/ efforts to pass the PR test within the stipulated time span. Subsequent to rectification the PR will be restarted.

$$PR = \frac{\text{Measure Output in kW} \times 1000 \text{ W/m}^2}{\text{Installed Plant Capacity in kW} \times \text{Measure radiation intensity in W/m}^2} \times 100\%$$

2.0 CUF

Minimum CUF of 15% should be maintained after considering the degradation of solar modules for a period of 05 years after considering the degradation of modules for fulfilling one of the conditions for release of PBG.

For determining the Annual CUF, the annual module degradation shall be taken from 2nd operational year. The duration for which the Generation was interrupted due to non-availability of Grid during solar hours or any other reasons not attributable to Bidder shall not be taken into account for calculation of Annual CUF.

Parameter	Target / Requirement	Penalty / Deduction
System Uptime	≥ 98% per month	₹500 per kWp per month shortfall
Preventive Maintenance	As per approved O&M plan	₹1,000 per missed PM instance
Fault Response Time	≤ 24 hours	₹2,000 per day delay
Module Cleaning	Minimum twice per month	₹1,000 per missed cycle
Data & Generation Reporting	Monthly to BRPL	₹500 per delayed report

Additional Conditions:

- SLA compliance to be verified by BRPL's monitoring team.
- Non-performance beyond 03 consecutive months may lead to contract termination and forfeiture of BG.
- Energy generation data shall be shared through remote monitoring / SCADA access.

ANNEXURE I

TECHNICAL SPECIFICATIONS

Component	Specification / Standard
Solar PV Modules	Tier-1 (MNRE ALMM listed), 560 Wp or higher, efficiency $\geq 22\%$, Solar Crystalline Modules
Power Conditioning Units /Inverter	String or Central inverter, $\geq 98\%$ efficiency, IEC 61683 / IEC 62109 certified, with anti-islanding protection
Mounting Structure	Hot-dip galvanized (80 μm min), withstand wind speed of 150 km/h, compatible with RCC/metal roofs
Cables	DC: Copper, XLPO insulated; AC: XLPE/FRLS, IEC 62930 compliant
Earthing & Lightning	As per IS 3043 & IS 2309; dual earthing and surge protection mandatory
Monitoring	Web-based remote monitoring system with real-time generation data
Warranties	PV Modules: 25 years ($\geq 90\%$ at 10 yrs, $\geq 80\%$ at 25 yrs); Inverters: 5 years; BoS: 5 years
Safety	Compliance with CEA Safety Regulations, 2010 and BIS codes

1.0 DETAILED TECHNICAL SPECIFICATION

The RTS projects under this tender shall be commissioned as per the technical specifications given below:

A Grid Tied Solar Rooftop Photo Voltaic (SPV) power plant consists of SPV array, Module Mounting Structure, Power Conditioning Unit (PCU) consisting of Maximum Power Point Tracker (MPPT), Inverter, and Controls & Protections, interconnect cables, Junction boxes, Distribution boxes and switches. PV Array is mounted on a suitable structure. Grid tied SPV system is without battery and should be designed with necessary features to supplement the grid power during day time. Components and parts used in the SPV power plants including the PV modules, metallic structures, cables, junction box, switches, PCUs etc., should conform to the BIS or IEC or international specifications, wherever such specifications are available and applicable.

1.01 Solar PV system shall consist of following equipment(s)/component(s):

- i. Solar PV modules consisting of required number of Crystalline PV cells.
- ii. Grid interactive Power Conditioning Unit with Remote Monitoring System
- iii. Mounting structures
- iv. Junction Boxes.
- v. Earthing and lightening protections.
- vi. IR/UV protected PVC Cables, pipes and accessories

2.0 Detailed Specification for each component is as follows-

2.01 SOLAR PV MODULES

- The PV modules used should be Made in India.
- The PV modules used must qualify to the latest edition of IEC PV module qualification test or equivalent BIS standards Crystalline Silicon Solar Cell Modules IEC 61215/IS14286. In addition, the modules must conform to IEC 61730 Part 1 - requirements for construction & Part 2 – requirements for testing, for safety qualification or equivalent IS.

- a) For the PV modules to be used in a highly corrosive atmosphere throughout their life time, they must qualify to IEC61701.
- b) Type of Module must be Bifacial N-Type TOPCon Modules (Glass to Glass)
- c) The total solar PV array capacity should not be less than allocated capacity (KWp) and should comprise of solar crystalline modules of minimum 560Wp and above wattage. Module capacity less than minimum 560 watts shall not be accepted. The PV Module efficiency should be minimum 22%.
- d) Protective devices against surges at the PV module shall be provided. Low voltage drops by pass diodes shall be provided.
- e) PV modules must be tested and approved by one of the IEC authorized test Centres.
- f) The module frame shall be made of corrosion resistant materials, preferably having anodized Aluminium.
- g) The bidder shall carefully design & accommodate requisite numbers of the modules to achieve the rated power in his bid. BRPL/owners shall allow only minor changes at the time of execution.
- h) Other general requirement for the PV modules and sub systems shall be the Following:
 - I. The rated output power of any supplied module shall have tolerance within + 3%.
 - II. The peak-power point voltage and the peak-power point current of any supplied Module and/or anymodule string (series connected modules) shall not vary by more than 2 (two) per cent from therespective arithmetic means for all modules and/or for all module strings, as the case may be.
 - III. The module shall be provided with a junction box with either provision of external screw terminalconnection or sealed type and with arrangement for provision of by-pass diode. The box shall havehinged, weather proof lid with captive screws and cable gland entry points or may be of sealed typeand IP-65 rated.
 - IV. I-V curves at STC should be provided by bidder.

Warranties:

- a) Material Warranty:
 - i. Material Warranty is defined as: The manufacturer should warrant the Solar Module(s) to be freefrom the defects and/or failures specified below for a period not less than five (05) years from thedate of sale to the original customer("Customer").
 - ii. Defects and/or failures due to manufacturing
 - iii. Defects and/or failures due to quality of materials
 - iv. Non conformity to specifications due to faulty manufacturing and/or inspection processes. If the solarModule(s) fails to conform to this warranty, the manufacturer will repair or replace the solarmodule(s), at the Owners sole option
- b) Performance Warranty:

The predicted electrical degradation of power generated not exceeding 20% of the minimum ratedpower over the 25-year period and not more than 10% after 12 years period of the full rated originaloutput.

2.02 ARRAY STRUCTURE

- a) Hot dip galvanized MS mounting structures should be used for mounting the modules/ panels/arrays. Eachstructure should have angle of inclination as per the site conditions to take maximum insolation. However, toaccommodate more capacity the angle inclination may be reduced until the plant meets the specifiedperformance ratio requirements.
- b) The Mounting structure shall be so designed to withstand the speed for the wind zone of the location where aPV system is proposed to be installed (like Delhi-wind speed of 150 km/ hour). It may be ensured that thedesign has been certified by a recognized Lab/Institution in this regard and submit wind loading

calculationsheet to BRPL. Suitable fastening arrangement such as grouting and calming should be provided to securethe installation against the specific wind speed.

- c) The mounting structure steel shall be as per latest IS 2062: 1992 and galvanization of the mounting structureshall be in compliance of latest IS 4759.
- d) Structural material shall be corrosion resistant and electrolytically compatible with the materials used in the module frame, its fasteners, nuts and bolts. Aluminium structures also can be used which can withstand the wind speed of respective wind zone. Protection towards rusting need to be provided either by coating or anodization.
- e) The fasteners used should be made up of stainless steel. The structures shall be designed to allow easy replacement of any module. The array structure shall be so designed that it will occupy minimum space without sacrificing the output from the SPV panels.
- f) Regarding civil structures the bidder need to take care of the load bearing capacity of the roof and need arrange suitable structures based on the quality of roof.
- g) The total load of the structure (when installed with PV) on the terrace should be less than 60kg/m².
- h) Provision for safe and secure access to rooftop shall be in the scope of vendor, if required.

2.03 JUNCTION BOXES (JBS)

- a) The junction boxes are to be provided in the PV array for termination of connecting cables. The Junction Boxes (JBs) shall be made of GRP/FRP/Powder Coated Aluminium /cast aluminium alloy with full dust, water & vermin proof arrangement. All wires/cables must be terminated through cable lugs. The JB's shall be such that input & output termination can be made through suitable cable glands.
- b) Copper bus bars/terminal blocks housed in the junction box with suitable termination threads conforming to IP65 standard and IEC 62208 Hinged door with EPDM rubber gasket to prevent water entry. Single/double compression cable glands. Provision of earthing. It should be placed at 5 feet height or above for ease of accessibility.
- c) Each Junction Box shall have High quality Suitable capacity Metal Oxide Varistors (MOVs)/ SPDs, suitable Reverse Blocking Diodes. The Junction Boxes shall have suitable arrangement monitoring and disconnection for each of the groups.
- d) Suitable markings shall be provided on the bus bar for easy identification and the cable ferrules must be fitted at the cable termination points for identification.
- e) All fuses shall have DIN rail mountable fuse holders and shall be housed in thermoplastic IP 65 enclosures with transparent covers.

2.04 DC DISTRIBUTION BOARD

- a) DC Distribution panel to receive the DC output from the array field.
- b) DC DPBs shall have sheet from enclosure of dust & vermin proof conform to IP 65 protection. the bus bars are made of copper of desired size. Suitable capacity MCBs/MCCB shall be provided for controlling the DC power output to the PCU along with necessary surge arrestors.
- c) DCDB not required, if PCU/inverter having in built DC fuses and SPD protection.

2.05 AC DISTRIBUTION PANEL BOARD

- a) AC Distribution Panel Board (DPB) shall control the AC power from PCU/ inverter, and should have necessary surge arrestors. Interconnection from ACDB to mains at LT Bus bar while in grid tied mode.
- b) All switches and the circuit breakers, connectors should conform to IEC 60947, part I, II and III/ IS 60947 part I, II and III.
- c) The changeover switches, cabling work should be under taken by the bidder as part of the project.

- d) All the Panel's shall be metal clad, totally enclosed, rigid, floor mounted, air-insulated, cubical type suitable for operation on three phase/single phase, 415 or 230 volts, 50Hz.
- e) The panels shall be designed for minimum expected ambient temperature of 45 degree Celsius, 80 percent humidity and dusty weather.
- f) All indoor panels will have protection of IP54 or better. All outdoor panels will have protection of IP 65 or better.
- g) Should conform to Indian Electricity Act and rules (till last amendment).
- h) All the 415V AC or 230 volts devices / equipment like bus support insulators, circuit breakers, SPDs, VT setc., mounted inside the switchgear shall be suitable for continuous operation and satisfactory performance under the following supply conditions

Variation in supply voltage	+/-10%
Variation in supply frequency	+/-5Hz

2.06 PCU/ ARRAY SIZE RATIO

- a) The combined watt age of all inverters should not be less than rated capacity of powerplant under STC.
- b) Maximum power point tracker shall be integrated in the PCU/ inverter to maximize energy drawn from the array.

2.07 PCU/ INVERTER

As SPV array produce direct current electricity, it is necessary to convert this direct current into alternating current and adjust the voltage levels to match the grid voltage. Conversion shall be achieved using an electronic Inverter and the associated control and protection devices. All these components of the system are termed the "Power Conditioning Unit (PCU)". In addition, the PCU house MPPT (Maximum Power Point Tracker), an interface between Solar PV array & the Inverter, to the power conditioning unit/inverter should also be DG set interactive, If necessary. Inverter output should be compatible with the grid frequency. Typical technical features of the inverter shall be as follows:

Switching devices	IGBT/MOSFET
Control	Microprocessor / DSP
Nominal AC output voltage and Frequency	415V, 3Phase, 50Hz (In-case single phase inverters are offered, suitable arrangement for balancing the phases must be made.)
Output frequency	50Hz
Grid Frequency Synchronization range	+/-5Hz
Ambient temperature considered	-20°C to 50°C
Humidity	95% non-condensing
Protection of Enclosure	IP-54(Minimum) for indoor
	IP-65(Minimum) for outdoor
Grid Frequency Tolerance range	+/-5Hz

Grid Voltage tolerance	+3 or more
No-load losses	Less than 1% of rated power
Inverter efficiency (minimum)	>93% (In case of 10kW or above within-built Galvanic isolation)
	>97%(In case of 10KW or above without in-built Galvanic isolation)
	>90% (In case of less than10kW)
THD	<3%
PF	>0.9

- Single Phase/ Three phase PCU/ inverter shall be used with each power plant system as per existing power supply of the building.
- PCU/inverter shall be capable of complete automatic operation including wake-up, synchronization & shutdown.
- The output of power factor of PCU inverter is suitable for all voltage ranges or sink of reactive power, inverter should have internal protection arrangement against any sustainable fault in feeder line and against the lightning on feeder.
- Built-in meter and data logger to monitor plant performance through external computer shall be provided.
- Anti-islanding (Protection against Islanding of grid): The PCU shall have anti islanding protection in conformity to IEEE1547/ UL1741/ IEC62116 or equivalent BIS standard.
- Successful Bidders shall be responsible for galvanic isolation of solar roof top power plant with electrical grid or LT panel.
- In PCU/Inverter, there shall be a direct current isolation provided at the output by means of a suitable isolating transformer. If Isolation Transformer is not incorporated with PCU/Inverter, there shall be a separate Isolation Transformer of suitable rating provided at the output side of PCU/PCU units for capacity more than 100kW.
- The PCU/ inverter generated harmonics, flicker, DC injection limits, Voltage Range, Frequency Range and Anti-Islanding measures at the point of connection to the utility services should follow the latest CEA(Technical Standards for Connectivity Distribution Generation Resources) Guidelines.
- The power conditioning units / inverters should comply with applicable IEC/ equivalent BIS standard for efficiency measurements and environmental tests as per standard codes IEC61683/ IS61683 and IEC60068-2 (1,2,14,30)/ Equivalent BIS Std.
- The MPPT units environmental testing should qualify IEC 60068-2(1,2,14,30)/ Equivalent BIS std. The junction boxes / enclosures should be IP 65(for outdoor)/ IP 54(indoor) and as per IEC 529 specifications.
- The PCU/ inverters should be tested from the MNRE approved test centres/ NABL/ BIS/ IEC accredited testing- calibration laboratories. In case of imported power conditioning units, these should be approved by international test houses.

2.08 INTEGRATION OF PV POWER WITH GRID

The output power from SPV would be fed to the inverters which convert DC produced by SPV array to AC and feed it into the main electricity grid after synchronization. In case of grid failure, or low or high voltage, solar PV system shall be out of synchronization and shall be disconnected from the grid. Once the DG set comes into service, PV system shall again be synchronized with DG supply and load requirement would be met to the

extent of availability of power. 4 pole isolation of inverter output with respect to the grid/DG power connection need to be provided.

2.09 DATA ACQUISITION SYSTEM/ PLANT MONITORING

- i. Data Acquisition System shall be provided for each of the solar PV plant.
- ii. Data Logging Provision for plant control and monitoring, time and date stamped system data logs for analysis with the high quality, suitable PC. Metering and Instrumentation for display of systems parameters and status indication to be provided.
- iii. The system should have feature of open API for inbuilt or external data loggers is mandatory for all plants.
- iv. Weather Monitoring for Solar Plant capacity 25KW:
 - a) Solar Irradiance: An integrating Pyranometer/ Solar cell-based irradiation sensor (along with calibration certificate) provided, with the sensor mounted in the plane of the array. Read out integrated with datalogging system.
 - b) Temperature: Temperature probes for recording the Solar panel temperature and/or ambient temperature to be provided complete with read outs integrated with the data logging system.
- v. The following parameters are accessible via the operating interface display in real time separately for solar power plant:
 - a) AC Voltage.
 - b) AC Output current.
 - c) Output Power
 - d) Power factor.
 - e) DC Input Voltage.
 - f) DC Input Current.
 - g) Time Active.
 - h) Time disabled.
 - i) Time Idle
 - j) Power produced
 - k) Protective function limits (Viz-AC Over voltage, AC Under voltage, over frequency, under frequency ground fault, PV starting voltage, PV stopping voltage).
- vi. All major parameters available on the digital bus and logging facility for energy auditing through the internal microprocessor and read on the digital front panel at any time) and logging facility (the current values, previous values for up to a month and the average values) should be made available for energy auditing through the internal microprocessor and should be read on the digital front panel.
- vii. PV array energy production: Digital Energy Meters to log the actual value of AC/ DC voltage, Current & Energy generated by the PV system provided. Energy meter along with CT/PT should be of 0.5 accuracy class.
- viii. Computerized DC String /Array monitoring and AC output monitoring shall be provided as part of the inverter and/or string/ array combiner box or separately.
- ix. String and array DC Voltage, Current and Power, Inverter AC output voltage and current (All 3 phases and lines), AC power (Active, Reactive and Apparent), Power Factor and AC energy (All 3 phases and cumulative) and frequency shall be monitored.
- x. Computerized AC energy monitoring shall be in addition to the digital AC energy meter.
- xi. The data shall be recorded in a common work sheet chronologically date wise. The data file shall be MS Excel compatible. The data shall be represented in both tabular and graphical form.

- xii. All instantaneous data shall be shown on the computer screen.
- xiii. Software shall be provided for USB download and analysis of DC and AC parametric data for Individual plant.
- xiv. Provision for instantaneous Internet monitoring and download of historical data shall be also incorporated.
- xv. Remote Server and Software for centralized Internet monitoring system shall be also provided for download and analysis of cumulative data of all the plants and the data of the solar radiation and temperature monitoring system.
- xvi. Ambient/Solar PV module back surface temperature shall be also monitored on continuous basis.
- xvii. Simultaneous monitoring of DC and AC electrical voltage, current, power, energy and other data of the plant for correlation with solar and environment data shall be provided.
- xviii. Remote Monitoring and data acquisition through Remote Monitoring System software at the owner / BRPL location with latest software/hardware configuration and service connectivity for online/ real time data monitoring/control complete to be supplied and operation and maintenance /control to be ensured by the bidder.
- xix. The bidders shall be obligated to push real-time plant monitoring data on a specified intervals (say 15 minute) through open protocol at receiver location (cloud server) in XML/JSON format, preferably. Suitable provision in this regard will be intimated to the bidders.

2.10 TRANSFORMER "IF REQUIRED" & METERING:

- a) Dry/oil type relevant kVA, 11kV/415V, 50Hz Step up along with all protections, switchgears, Vacuum circuit breakers, cables etc. along with required civil work.
- b) The bidirectional electronic energy meter (0.5 S class) shall be installed for the measurement of import/Export of energy.
- c) The bidder must take approval/NOC from the Concerned DISCOM for the connectivity, technical feasibility,
- d) and synchronization of SPV plant with distribution network and submit the same to BRPL before commissioning of SPV plant.
- e) Reverse power relay shall be provided by bidder (if necessary), as per the local DISCOM requirement.

2.11 POWER CONSUMPTION:

Regarding the generated power consumption, priority need to give for internal consumption first and thereafter any excess power can be exported to grid. Finalization of tariff is not under the purview of BRPL or EEREM centre. Decisions of appropriate authority like DISCOM, state regulator may be followed.

2.12 PROTECTION:

The system should be provided with all necessary protections like earthing, Lightning, and grid islanding as follows:

2.12.1 LIGHTNING PROTECTION

The SPV power plants shall be provided with lightning & overvoltage protection. The main aim in this protection shall be to reduce the over voltage to a tolerable value before it reaches the PV or other sub system components. The source of over voltage can be lightning, atmosphere disturbances etc. The entire space occupying the SPV array shall be suitably protected against Lightning by deploying required number of Lightning Arrestors. Lightning protection should be provided as per NFC 17-102:2011 standard. The protection against induced high-voltages shall be provided by the use of metal oxide varistors (MOVs) and suitable and separate earthing such that induced transients find an alternate route to earth. Conventional copper Lightning Arrester can be provided for LA for plants below 25 KW. The earthing conductor made up of dip galvanized steel, should be installed with GI strip insulator

2.12.2 SURGE PROTECTION

Internal surge protection shall consist of three MOV type surge-arrestors connected from +ve and -ve terminals to earth (via Y arrangement).

2.12.3 EARTHING PROTECTION

2.12.3.1 The PV module structure components shall be electrically interconnected and shall be grounded.

2.12.3.2 Earthing shall be done in accordance with IS 3043-1986, provided that earthing Conductors shall have a minimum size of 6.0 mm² copper, 10 mm² Aluminium or 70 mm² hot dip galvanized steel. Unprotected aluminium or copper-clad aluminium conductors shall not be used for final under ground connections to earth electrodes.

2.12.3.3 A minimum of two separate dedicated and interconnected earth electrodes must be used for the earthing of the solar PV system support structure with a total Earth resistance not exceeding 50Ω.

2.12.3.4 The earth electrodes shall have a precast concrete enclosure with a removable lid for inspection and maintenance. The entire earthing system shall comprise non-corrosive components.

2.12.3.5 In case LA earthing conductors made up of dip galvanized steel; the conductor should have GI Strip Insulator.

2.12.3.6 Total Nos. of Earth pits for Solar PV plant:

2.12.3.6.1 For Solar PV plant up to 50KW: 03 Nos. Earth pits: AC-01, DC-01, LA-01

2.12.3.6.2 For Solar PV plant above 50 KW: 05 Nos. Earth Pits: AC-02, DC-02, LA-01 (double runoff earthing conductors for AC & DC)

2.13 GRID ISLANDING:

- a) In the event of a power failure on the electric grid, it is required that any independent power-producing inverters attached to the grid turn off in a short period of time. This prevents the DC-to-AC inverters from continuing to feed power into small sections of the grid, known as "Islands." Powered Islands present a risk to workers who may expect the area to be unpowered, and they may also damage grid-tied equipment. The Rooftop PV system shall be equipped with islanding protection. In addition to disconnection from the grid (due to islanding protection) disconnection due to under and over voltage conditions shall also be provided.
- b) A manual disconnect 4-pole isolation switch beside automatic disconnection to grid would have to be provided at utility end to isolate the grid connection by the utility personnel to carry out any maintenance. This switch shall be locked by the utility personnel.

2.14 CABLES

Cables of appropriate size to be used in the system shall have the following characteristics:

- i. Shall meet IEC60227/ IS694, IEC60502 / IS1554 standards.
- ii. Temp. Range: -10°C to + 80°C
- iii. Voltage rating 660/1000V
- iv. Excellent resistance to heat, cold, water, oil, abrasion, UV radiation
- v. Flexible
- vi. Sizes of cables between array interconnections, array to junction boxes, junction boxes to Inverter etc. shall be so selected to keep the voltage drop (power loss) of the entire solar system to the minimum (2%).

- vii. For the DC cabling, XLPE or, XLPO insulated and sheathed, UV-stabilized single core multi-stranded flexible copper cables shall be used; multi-core cables shall not be used.
- viii. Multi Strand, annealed high conductivity Cable (As per MNRE Guideline issued) conductor PVC type 'A' pressure extruded insulation or XLPE insulation. Overall PVC/XLPE insulation for UV protection Armoured cable for underground laying.
- ix. The cables (as per IS) should be insulated with a special grade PVC compound formulated for outdoor use. Outer sheath of cables shall be electron beam cross-linked XLPO type and black in colour.
- x. The DC cables from the SPV module array shall run through a UV-stabilized PVC conduit pipe of adequate diameter with a minimum wall thickness of 1.5mm.
- xi. Cables and wires used for the interconnection of solar PV modules shall be provided with solar PV connectors (MC4) and couplers
- xii. All cables and conduit pipes shall be clamped to the rooftop, walls and ceilings with thermo-plastic clamp at intervals not exceeding 50cm; the minimum DC cable size shall be 4.0mm² copper; the minimum AC cable size shall be 4.0 mm² copper. In three phase systems, the size of the neutral wire size shall be equal to the size of the phase wires. 4 Core Aluminium/ Copper cables of required size can be used from ACDB to LT panel only.
- xiii. Cable Routing/ Marking: All cable/wires are to be routed in a GI cable tray and suitably tagged and marked with proper manner by good quality ferule or by other means so that the cable easily identified. In addition, cable drum no./Batch no. to be embossed/ printed at every one meter.
- xiv. Cable Jacket should also be electron beam cross-linked XLPO, flame retardant, UV resistant and black in colour.
- xv. All cables and connectors for use for installation of solar field must be of solar grade which can withstand harsh environment conditions including High temperatures, UV radiation, rain, humidity, dirt, salt, burial and attack by moss and microbes for 25 years and voltages as per latest IEC standards. DC cables used from solar modules to array junction box shall be solar grade copper (Cu) with XLPO insulation and rated for 1.1kV as per relevant standards only.
- xvi. The ratings given are approximate. Bidder to indicate size and length as per system design requirement. All the cables required for the plant shall be provided by the bidder. Any change in cabling sizes if desired by the bidder shall be approved after citing appropriate reasons. All cable schedules/ layout drawings shall be approved prior to installation.
- xvii. Multi Strand, annealed high conductivity copper conductor PVC type 'A' pressure extruded insulation or XLPE insulation. Overall PVC/XLPE insulation for UV protection Armoured cable for underground laying. All cable trays including covers to be provided. All cables conform to latest edition of IEC/ equivalent BIS Standards as specified below: BoS item/ component Standard Description Standard Number Cables General Test and Measuring Methods, PVC/XLPE insulated cables for working Voltage up to and
- xviii. Including 1100V, UV resistant for outdoor installation IS/IEC69947.
- xix. The total voltage drop on the cable segments from the solar grid inverter to the building distribution board shall not exceed 2.0%.
- xx. The total voltage drop on the cable segments from the solar PV modules to the solar grid inverter shall not exceed 2.0%.

2.15 CONNECTIVITY:

The maximum capacity/Supply Code of the State and amended from time to time. Following criteria have been suggested for selection of voltage level in the distribution system for ready reference of the solar suppliers.

Plant Capacity	Connecting voltage
1 KW to 10 KW	220 V – Single phase/ 415 V – Three phase (as per existing phase of the Power Supply).
10 kW and upto 25 kW	415V–three phase

- The maximum permissible capacity for rooftop shall be 1MW for a single net metering point.
- Utilities may have voltage levels other than above, DISCOMS may be consulted before finalization of the voltage level and specification be made accordingly.
- Evacuation of Solar power to LT/HT panel of Consumer at Ground floor level or as per requirement of DISCOM.

2.16 TOOLS& TACKLES AND SPARES:

- After completion of installation & commissioning of the power plant, necessary tools & tackles are to be provided free of cost by the bidder for maintenance purpose. List of tools and tackles to be supplied by the bidder for approval of specifications and make from BRPL/owner.
- A list of requisite spares in case of PCU/inverter comprising of a set of control logic cards, IGBT driver cards etc. Junction Boxes. Fuses, MOVs / arrestors, MCCBs etc along with spare set of PV modules be indicated, which shall be supplied along with the equipment. A minimum set of spares shall be maintained in the plant itself for the entire period of warranty and Operation & Maintenance which upon its use shall be replenished.

2.17 DANGER BOARDS AND SIGNAGES:

Danger boards should be provided as and where necessary as per IE Act. /IE rules as amended up to date. Three signage shall be provided one each at battery-cum-control room, solar array area and main entry from administrative block. Text of the signage may be finalized in consultation with BRPL/owner.

2.18 FIRE EXTINGUISHERS:

The firefighting system for the proposed power plant for fire protection shall be consisting of:

- Portable fire extinguishers for fire caused by electrical short circuits.
- Sand buckets.
- The installation of Fire Extinguishers should confirm to TAC regulations and BIS standards. The fire extinguishers shall be provided on the Roof or site where the PV arrays have been installed.

2.19 DRAWINGS& MANUALS:

- Two sets of Engineering, electrical drawings and Installation and O&M manuals are to be supplied. Bidders shall provide complete technical data sheets for each equipment giving details of the specifications along with make/makes in their bid along with basic design of the power plant and power evacuation, synchronization along with protection equipment.
- Approved ISI and reputed makes for equipment be used.
- For complete electro-mechanical works, bidders shall supply complete design, details and drawings for approval to BRPL/owners before progressing with the installation work.

2.20 PLANNING AND DESIGNING:

- The bidder should carry out Shadow Analysis at the site and accordingly design strings & arrays layout considering optimal usage of space, material and labour. The bidder should submit the array layout drawings along with Shadow Analysis Report to BRPL/Owner for approval.
- BRPL reserves the right to modify the landscaping design, Layout and specification of subsystems and components at any stage as per local site conditions/requirements.

- c) The bidder shall submit preliminary drawing for approval & based on any modification or recommendation, if any. The bidder submits three sets and soft copy in CD of final drawing for formal approval to proceed with construction work.

2.21 DRAWINGS TO BE FURNISHED BY BIDDER AFTER AWARD OF CONTRACT:

The SPD vendor shall furnish the following drawings Award/Intent and obtain approval:

- a) General arrangement and dimensioned layout.
- b) Schematic drawing showing the requirement of SV panel, Power conditioning Unit(s)/inverter, Junction Boxes, AC and DC Distribution Boards, meters etc.
- c) Structural drawing along with foundation details for the structure.
- d) Itemized bill of material for complete SV plant covering all the components and associated accessories.
- e) Layout of solar Power Array.
- f) Shadow analysis of the roof.

2.22 SAFETY MEASURES:

The bidder shall take entire responsibility for electrical safety of the installation(s) including connectivity with the grid and follow all the safety rules & regulations applicable as per Electricity Act, 2003 and CEA guidelines etc.

2.23 DISPLAY BOARD:

The bidder has to display a board at the project site mentioning the following:

- a) Plant Name, Capacity, Location, Date of commissioning, estimated Power generation.
- b) This information shall not be limited to project site but also be displayed at site offices/headquarter offices of the successful bidder
- c) The size and type of board and display shall be approved by Engineer-in-charge before site inspection.

All the IEC standards to be mandatorily adhered as specified in this NIT/ RfS.

SECTION VI O&M PLAN

1.0 OPERATION AND MAINTENANCE GUIDELINES OF GRID CONNECTED PV PLANTS

- i. Periodic cleaning of solar modules, once every fortnight.
- ii. O&M of Solar Power Plant shall be compliant with grid requirements to achieve committed energy generation. Refer Section V, Clause 2.0 CUF of tender document
- iii. Periodic checks of the Modules, PCUs and BoS shall be carried out as a part of routine preventive and breakdown maintenance.
- iv. Immediate replacement of defective Modules, Invertors/ PCUs and other equipment as and when required.
- v. Supply of all spares, consumables and fixtures as required. Such stock shall be maintained for all associated equipments and materials as per manufacturer/ supplier's recommendations.
- vi. All the equipment testing instrument required for Testing, Commissioning and O&M for the healthy operation of the Plant shall be maintained by the Bidder. The testing equipments must be calibrated once every 2 years from NABL accredited labs and the certificate of calibration must be kept for reference as required.
- vii. If negligence/mal-operation on part of the Bidder's operator results in failure of equipment, such equipment should be repaired/replaced by the Bidder free of cost.
- viii. If any jobs covered in O&M Scope as per RFS are not carried out by the contractor/ Bidders during the O&M period, the Engineer-In-Charge shall take appropriate action as deemed fit.
- ix. BRPL reserves the right to make surprise checks/ inspection visits at its own or through authorized representative to verify the O&M activities being carried out by the Bidder. Failure to adhere to above guidelines will result in penal action mentioned in Section 5, Clause 2.0 CUF of tender document.
- x. The persons employed should wear the uniform along with safety devices such as gloves, shoes including necessary required tools.
- xi. The earthing and the Lightning Arrestors must be maintained as per the I.E. rules.

2.0 MONTHLY O&M REPORT

Month and year:
Name of the bidder:
RFP ref no.:
Project Capacity:
Address of the site:

Component	Activity	Description	Date	Name/ Signature	*Remarks
PV Module	Cleaning	Immediately clean any bird droppings/dark spots on module.			
	Cleaning	Clean PV modules with plain water or mild dishwashing detergent.			
	Inspection (for plants> 100 kWp)	Infrared camera inspection for hot spots; bypass diode failure.			
PV Array	Inspection	Check the PV modules and rack for any damage.			

	Inspection	If any new objects, such as vegetation growth etc., are causing shading of the array. Remove if any.			
	Vermin Removal	Remove bird nests or vermin from array and rack area.			
Junction Boxes	Inspection	Inspect electrical boxes for corrosion, intrusion of water or vermin. Check position of switches and breakers. Check status of all protection devices.			
Wiring	Inspection	Inspect cabling for signs of cracks, defects; loose connections, corrosion, overheating, arcing, short or open circuits, and ground faults.			
Inverter	Inspection	Observe instantaneous operational indicators on the faceplate. Inspect Inverter housing or shelter for any physical maintenance. Check for connection tightness.			
Inverter	Service	Clean or replace any air filters.			
Instruments	Validation	Verify monitoring instruments (pyranometer etc.) with standard instruments to verify their operation within tolerance limits.			
Transformer	Inspection	Inspect transformer oil level, temperature gauges, breather, silica gel, meter, connections etc.			
Plant	Monitoring	Daily Operation and Performance Monitoring.			
Spare Parts	Management	Manage inventory of spare parts.			
Logbook	Documentation	Maintain daily log records.			
Tracker (if any)	Inspection	Inspect gears, gear boxes, bearings, motors.			
	Service	Lubricate bearings, gear as required.			

*Provide details of any replacement of systems/components, damages, plant/inverter shut down (planned/forced), breakdown, etc under remarks.

The same may be inspected by respective DISCOM or its authorized representative at any time 5 years of O&M period. The Register will have the information about the daily generation, Inverter downtime if any, Grid outages.

SECTION VI PRICE FORMAT

CLUSTER 1:

SITE: KHANPUR

Sl. No.	Description	Qty	UOM	Basic (in Rs.)	GST (In Rs.)	Unit Landed (in Rs.)
1	Panels	1	Lump Sum			
2	Inverter	1	Lump Sum			
3	Structure	1	Lump Sum			
4	Balance of System (BOS)	1	Lump Sum			
5	Installation, Erection, Testing & Commissioning+05 Years O&M	1	Lump Sum			
Total (incl. GST)						
Note: For detail description, kindly refer Technical Specifications						

SITE: NFC

Sl. No.	Description	Qty	UOM	Basic (in Rs.)	GST (In Rs.)	Unit Landed (in Rs.)
1	Panels	1	Lump Sum			
2	Inverter	1	Lump Sum			
3	Structure	1	Lump Sum			
4	Balance of System (BOS)	1	Lump Sum			
5	Installation, Erection, Testing & Commissioning+05 Years O&M	1	Lump Sum			
Total (incl. GST)						
Note: For detail description, kindly refer Technical Specifications						



BSES RAJDHANI POWER LIMITED

SITE: RK PURAM

Sl. No.	Description	Qty	UOM	Basic (in Rs.)	GST (In Rs.)	Unit Landed (in Rs.)
1	Panels	1	Lump Sum			
2	Inverter	1	Lump Sum			
3	Structure	1	Lump Sum			
4	Balance of System (BOS)	1	Lump Sum			
5	Installation, Erection, Testing & Commissioning+05 Years O&M	1	Lump Sum			
Total (incl. GST)						
Note: For detail description, kindly refer Technical Specifications						

SITE: SAKET

Sl. No.	Description	Qty	UOM	Basic (in Rs.)	GST (In Rs.)	Unit Landed (in Rs.)
1	Panels	1	Lump Sum			
2	Inverter	1	Lump Sum			
3	Structure	1	Lump Sum			
4	Balance of System (BOS)	1	Lump Sum			
5	Installation, Erection, Testing & Commissioning+05 Years O&M	1	Lump Sum			
Total (incl. GST)						
Note: For detail description, kindly refer Technical Specifications						

SITE: SARITA VIHAR

Sl. No.	Description	Qty	UOM	Basic (in Rs.)	GST (In Rs.)	Unit Landed (in Rs.)
1	Panels	1	Lump Sum			
2	Inverter	1	Lump Sum			
3	Structure	1	Lump Sum			
4	Balance of System (BOS)	1	Lump Sum			
5	Installation, Erection, Testing & Commissioning+05 Years O&M	1	Lump Sum			
Total (incl. GST)						
Note: For detail description, kindly refer Technical Specifications						



BSES RAJDHANI POWER LIMITED

CLUSTER 2:

SITE: ALAKNANDA

Sl. No.	Description	Qty	UOM	Basic (in Rs.)	GST (In Rs.)	Unit Landed (in Rs.)
1	Panels	1	Lump Sum			
2	Inverter	1	Lump Sum			
3	Structure	1	Lump Sum			
4	Balance of System (BOS)	1	Lump Sum			
5	Installation, Erection, Testing & Commissioning+05 Years O&M	1	Lump Sum			
Total (incl. GST)						
Note: For detail description, kindly refer Technical Specifications						

SITE: BINDAPUR

Sl. No.	Description	Qty	UOM	Basic (in Rs.)	GST (In Rs.)	Unit Landed (in Rs.)
1	Panels	1	Lump Sum			
2	Inverter	1	Lump Sum			
3	Structure	1	Lump Sum			
4	Balance of System (BOS)	1	Lump Sum			
5	Installation, Erection, Testing & Commissioning+05 Years O&M	1	Lump Sum			
Total (incl. GST)						
Note: For detail description, kindly refer Technical Specifications						

SITE: DWARKA

Sl. No.	Description	Qty	UOM	Basic (in Rs.)	GST (In Rs.)	Unit Landed (in Rs.)
1	Panels	1	Lump Sum			
2	Inverter	1	Lump Sum			
3	Structure	1	Lump Sum			
4	Balance of System (BOS)	1	Lump Sum			
5	Installation, Erection, Testing & Commissioning+05 Years O&M	1	Lump Sum			
Total (incl. GST)						
Note: For detail description, kindly refer Technical Specifications						



BSES RAJDHANI POWER LIMITED

SITE: JANAKPURI

Sl. No.	Description	Qty	UOM	Basic (in Rs.)	GST (In Rs.)	Unit Landed (in Rs.)
1	Panels	1	Lump Sum			
2	Inverter	1	Lump Sum			
3	Structure	1	Lump Sum			
4	Balance of System (BOS)	1	Lump Sum			
5	Installation, Erection, Testing & Commissioning+05 Years O&M	1	Lump Sum			
Total (incl. GST)						
Note: For detail description, kindly refer Technical Specifications						



BSES RAJDHANI POWER LIMITED

CLUSTER 3:

SITE: CHHAWLA

Sl. No.	Description	Qty	UOM	Basic (in Rs.)	GST (In Rs.)	Unit Landed (in Rs.)
1	Panels	1	Lump Sum			
2	Inverter	1	Lump Sum			
3	Structure	1	Lump Sum			
4	Balance of System (BOS)	1	Lump Sum			
5	Installation, Erection, Testing & Commissioning+05 Years O&M	1	Lump Sum			
Total (incl. GST)						
Note: For detail description, kindly refer Technical Specifications						

SITE: HASTSAL

Sl. No.	Description	Qty	UOM	Basic (in Rs.)	GST (In Rs.)	Unit Landed (in Rs.)
1	Panels	1	Lump Sum			
2	Inverter	1	Lump Sum			
3	Structure	1	Lump Sum			
4	Balance of System (BOS)	1	Lump Sum			
5	Installation, Erection, Testing & Commissioning+05 Years O&M	1	Lump Sum			
Total (incl. GST)						
Note: For detail description, kindly refer Technical Specifications						

SITE: JAFARPUR

Sl. No.	Description	Qty	UOM	Basic (in Rs.)	GST (In Rs.)	Unit Landed (in Rs.)
1	Panels	1	Lump Sum			
2	Inverter	1	Lump Sum			
3	Structure	1	Lump Sum			
4	Balance of System (BOS)	1	Lump Sum			
5	Installation, Erection, Testing & Commissioning+05 Years O&M	1	Lump Sum			
Total (incl. GST)						
Note: For detail description, kindly refer Technical Specifications						



BSES RAJDHANI POWER LIMITED

SITE: MAYA ENCLAVE, JANAKPURI

Sl. No.	Description	Qty	UOM	Basic (in Rs.)	GST (In Rs.)	Unit Landed (in Rs.)
1	Panels	1	Lump Sum			
2	Inverter	1	Lump Sum			
3	Structure	1	Lump Sum			
4	Balance of System (BOS)	1	Lump Sum			
5	Installation, Erection, Testing & Commissioning+05 Years O&M	1	Lump Sum			
Total (incl. GST)						
Note: For detail description, kindly refer Technical Specifications						

SITE: MITRAON

Sl. No.	Description	Qty	UOM	Basic (in Rs.)	GST (In Rs.)	Unit Landed (in Rs.)
1	Panels	1	Lump Sum			
2	Inverter	1	Lump Sum			
3	Structure	1	Lump Sum			
4	Balance of System (BOS)	1	Lump Sum			
5	Installation, Erection, Testing & Commissioning+05 Years O&M	1	Lump Sum			
Total (incl. GST)						
Note: For detail description, kindly refer Technical Specifications						

SITE: MUNDKA

Sl. No.	Description	Qty	UOM	Basic (in Rs.)	GST (In Rs.)	Unit Landed (in Rs.)
1	Panels	1	Lump Sum			
2	Inverter	1	Lump Sum			
3	Structure	1	Lump Sum			
4	Balance of System (BOS)	1	Lump Sum			
5	Installation, Erection, Testing & Commissioning+05 Years O&M	1	Lump Sum			
Total (incl. GST)						
Note: For detail description, kindly refer Technical Specifications						



BSES RAJDHANI POWER LIMITED

SITE: NAJAFGARH

Sl. No.	Description	Qty	UOM	Basic (in Rs.)	GST (In Rs.)	Unit Landed (in Rs.)
1	Panels	1	Lump Sum			
2	Inverter	1	Lump Sum			
3	Structure	1	Lump Sum			
4	Balance of System (BOS)	1	Lump Sum			
5	Installation, Erection, Testing & Commissioning+05 Years O&M	1	Lump Sum			
Total (incl. GST)						
Note: For detail description, kindly refer Technical Specifications						

SITE: NANGLOI

Sl. No.	Description	Qty	UOM	Basic (in Rs.)	GST (In Rs.)	Unit Landed (in Rs.)
1	Panels	1	Lump Sum			
2	Inverter	1	Lump Sum			
3	Structure	1	Lump Sum			
4	Balance of System (BOS)	1	Lump Sum			
5	Installation, Erection, Testing & Commissioning+05 Years O&M	1	Lump Sum			
Total (incl. GST)						
Note: For detail description, kindly refer Technical Specifications						

SITE: PUNJABI BAGH

Sl. No.	Description	Qty	UOM	Basic (in Rs.)	GST (In Rs.)	Unit Landed (in Rs.)
1	Panels	1	Lump Sum			
2	Inverter	1	Lump Sum			
3	Structure	1	Lump Sum			
4	Balance of System (BOS)	1	Lump Sum			
5	Installation, Erection, Testing & Commissioning+05 Years O&M	1	Lump Sum			
Total (incl. GST)						
Note: For detail description, kindly refer Technical Specifications						



BSES RAJDHANI POWER LIMITED

SITE: TAGORE GARDEN

Sl. No.	Description	Qty	UOM	Basic (in Rs.)	GST (In Rs.)	Unit Landed (in Rs.)
1	Panels	1	Lump Sum			
2	Inverter	1	Lump Sum			
3	Structure	1	Lump Sum			
4	Balance of System (BOS)	1	Lump Sum			
5	Installation, Erection, Testing & Commissioning+05 Years O&M	1	Lump Sum			
Total (incl. GST)						
Note: For detail description, kindly refer Technical Specifications						

Bill of quantities mentioned in the order is " Indicative for billingpurpose only" and any other items/equipment/machinery to be supplied,required to complete the work as per given scope shall be supplied by contractor without any extracost or claim.



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CLUSTER 4:

SITE: CHHAWLA

Sl. No.	Description	Qty	UOM	Basic (in Rs.)	GST (In Rs.)	Unit Landed (in Rs.)
1	Panels	1	Lump Sum			
2	Inverter	1	Lump Sum			
3	Structure	1	Lump Sum			
4	Balance of System (BOS)	1	Lump Sum			
5	Installation, Erection, Testing & Commissioning+05 Years O&M	1	Lump Sum			
Total (incl. GST)						
Note: For detail description, kindly refer Technical Specifications						

SITE: HASTSAL

Sl. No.	Description	Qty	UOM	Basic (in Rs.)	GST (In Rs.)	Unit Landed (in Rs.)
1	Panels	1	Lump Sum			
2	Inverter	1	Lump Sum			
3	Structure	1	Lump Sum			
4	Balance of System (BOS)	1	Lump Sum			
5	Installation, Erection, Testing & Commissioning+05 Years O&M	1	Lump Sum			
Total (incl. GST)						
Note: For detail description, kindly refer Technical Specifications						

SITE: JAFARPUR

Sl. No.	Description	Qty	UOM	Basic (in Rs.)	GST (In Rs.)	Unit Landed (in Rs.)
1	Panels	1	Lump Sum			
2	Inverter	1	Lump Sum			
3	Structure	1	Lump Sum			
4	Balance of System (BOS)	1	Lump Sum			
5	Installation, Erection, Testing & Commissioning+05 Years O&M	1	Lump Sum			
Total (incl. GST)						
Note: For detail description, kindly refer Technical Specifications						

S. N.	Description	Cluster	Location	Estimated Capacity (in kWp)	Total for Supply, Installation, Erection, Testing, Commissioning & O&M for 05 Years inclusive all Taxes(in INR)
1	Design, Engineering, Supply, Installation, Testing, Commissioning and Comprehensive Operation & Maintenance (O&M) of Grid-Connected Rooftop Solar PV systems with a cumulative capacity of approximately 2.2 MWp to be installed across 46 BRPL grid stations & buildings.	Cluster 1	Khanpur	69	
			NFC	229	
			RK Puram	60	
			Saket	108	
			Sarita Vihar	69	
2		Cluster 2	Alaknanda	92	
			Bindapur	80	
			Dwarka	310	
			Janakpuri	76	
3		Cluster 3	Chhawla	66	
			Hastsal	25	
			Jafarpur	21	
			Maya Enclave, Janakpuri	38	
			Mitraon	30	
			Mundka	148	
			Najafgarh	54	
			Nangloi	46	
			Punjabi Bagh	32	
			Tagore Garden	94	
4	Cluster 4	Mundka	290		
		Nangloi	22		
		Punjabi Bagh	233		
Total				2192	

SECTION VII

GRAND SUMMARY OF QUOTED RATES

Sl. No.	DESCRIPTION	Cluster	Total for Supply, Installation, Erection, Testing, Commissioning & O&M for 05 Years inclusive all Taxes(in INR)
1	Design, Engineering, Supply, Installation, Testing, Commissioning and Comprehensive Operation & Maintenance (O&M) of Grid-Connected Rooftop Solar PV systems with a cumulative capacity of approximately 2.2 MWp to be installed across 46 BRPL grid stations & buildings.	Cluster 1	
2		Cluster 2	
3		Cluster 3	
4		Cluster 4	
Total Cluster Value			

We declare that the following are our quoted prices in INR for the entire cluster(s)/ project(s).

Date:

Bidder Name:

Place:

Bidders Address:

Name & Signature

Designation:

Common Seal:.....

APPENDIX II
BID FORM

To

Head of Department
Contracts&Material Dept.
BSES Rajdhani Power Ltd
New Delhi 110019

Sir,

1 We understand that BRPL is desirous of execution of
.....(Name of work)

2 Having examined the Bidding Documents for the above named works, we the undersigned, offer to deliver the goods in full conformity with the Terms and Conditions and technical specifications for the sum indicated in Price Bid or such other sums as may be determined in accordance with the terms and conditions of the contract .The above amounts are in accordance with the Price Schedules attached herewith and are made part of this bid.

3 If our Bid is accepted, we undertake to deliver the entire goods as) as per delivery schedule mentioned in Section IV from the date of award of purchase order/letter of intent.

4 If our Bid is accepted, we will furnish a performance bank guarantee for an amount of 10% (Ten)percent of the total contract value for due performance of the Contract in accordance with the Terms and Conditions.

5 We agree to abide by this Bid for a period of 120 days from the due date of bid submission & subsequent corrigendum/amendment/extension of due date of submission. It shall remain binding upon us and may be accepted at any time before the expiration of that period.

6 We declare that we have studied the provision of Indian Laws for supply of equipments/materials and the prices have been quoted accordingly.

7 Unless and until Letter of Intent is issued, this Bid, together with your written acceptance thereof, shall constitute a binding contract between us.

8 We understand that you are not bound to accept the lowest, or any bid you may receive.

9 There is provision for Resolution of Disputes under this Contract, in accordance with the Laws and Jurisdiction of Contract.

Dated this..... day of..... 20.....

Signature..... In the capacity of

.....duly authorized to sign for

and on behalf of

(IN BLOCK CAPITALS).....

APPENDIX III

ACCEPTANCE FORM FOR PARTICIPATION IN REVERSE AUCTION EVENT

(To be signed & stamped by the bidder along-with bid)

BSES Rajdhani Power Ltd (BRPL) intends to use reverse auction through SAP-SRM tool as an integral part of entire tendering process. All techno-commercially qualified bidders shall participate in the reverse auction.

The following terms and conditions are deemed as accepted by the bidder on participation in the bid:-

1. In case of bidding through Internet medium, bidders are advised to ensure availability of all associated infrastructure as required to participate in the reverse auction event. Inability to bid due to telephone glitch, internet response issues, software & hardware hangs/failures, power failures or any other reason shall not be the responsibility of BRPL.
2. In case bidder fails to participate in the reverse auction event due to any reason whatsoever, it shall be presumed that the bidder has no further discounts to offer and the initial bid submitted by them as a part of tender shall be considered as bidder's Final No Regret offer. Any off-line price bids received from a bidder in lieu of non-participation in the reverse auction event shall be rejected by BRPL.
3. The bidder is advised to understand the auto bid process & safeguard themselves against any possibility of non-participation in the reverse auction event.
4. The bidder shall be prepared with competitive price quotes during the day of reverse auction event.
5. The prices quoted by bidder in reverse auction event shall be on FOR Landed cost BRPL Store/site basis inclusive of all relevant taxes, duties, levies, transportation charges etc.
6. The prices submitted by the bidder during reverse auction event shall be binding on the Bidder.
7. The bidder agrees to non-disclosure of trade information regarding bid details e.g. purchase, Identity, bid process/technology, bid documentation etc.
8. BRPL will make every effort to make the bid process transparent. However award decision of BRPL will be final and binding on the bidder.
9. The prices submitted during reverse auction event shall be binding on the bidder.
10. No request for Time extension of the reverse auction event shall be considered by BRPL.
11. BRPL shall provide the user id and password to the authorized representative of the bidder. Authorization letter in lieu of the same shall be submitted along with the signed and stamped acceptance form.
12. The original price bids of the bidders shall be reduced on pro-rata basis against each line item based on the final all inclusive prices offered during conclusion of the reverse auction event for arriving at contract amount

APPENDIX IV
FORMAT FOR EMD BANK GUARANTEE

(To be issued in a Non Judicial Stamp Paper of Rs.50/-purchased in the name of the bank)

Whereas [*name of the Bidder*] (herein after called the "Bidder") has submitted its bid dated [*date of submission of bid*] for the supply of [*name and/or description of the goods*] (here after called the "Bid").

KNOW ALL PEOPLE by these presents that WE [name of bank] at [*Branch Name and address*], having our registered office at [*address of the registered office of the bank*] (herein after called the "Bank"), are bound unto BSES Rajdhani Power Ltd., with its Corporate Office at BSES Bhawan Nehru Place, New Delhi -110019, (herein after called —the "Purchaser") in the sum of Rs./- (Rupees only) for which payment well and truly to be made to the said Purchaser, the Bank binds itself, its successors, and assigns by these presents.

Sealed with the Common Seal of the said Bank this _____ day of _____ 20_____.

THE CONDITIONS of this obligation are:

- 1 If the Bidder withdraws its Bid during the period of bid validity specified by the Bidder on the Bid Form ; or
2. If the Bidder, having been notified of the acceptance of its Bid by the Purchaser during the period of bid validity:
 - (a) Fails or refuses to execute the Contract Form, if required; or
 - (b) Fails or refuses to furnish the performance security, In accordance with the Instructions to Bidders/ Terms and Conditions;

We undertake to pay to the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that is its demand the purchaser will note that amount claimed by it is due to it, owing to the occurrence of one or both of the two condition(s), specifying the occurred condition or condition(s).

This guarantee will remain in force up to and including One Hundred Twenty (120) days after the due date of submission bid, and any demand in respect thereof should reach the Bank not later than the above date.

(Stamp & signature of the bank)

Signature of the witness

APPENDIX - V LITIGATION HISTORY

Year	Name of client	Details of contract & date	Cause of Litigation/ arbitration and dispute	Disputed amount

APPENDIX - VI

FINANCIAL DATA

(Duly Certified by Chartered Accountant)

	FY 22-23	FY 23-24	FY 24-25
Total assets			
Current assets			
Total Liability			
Current Liability			
Profit before taxes			
Profit after taxes			
Sales Turnover			

APPENDIX - VII CHECK LIST

Sl No	Description	Compliance
1	INDEX	YES/NO
2	COVERING LETTER	YES/NO
3	BID FORM (UNPRICED) DULY SIGNED	YES/NO
4	BILL OF MATERIAL (UNPRICED)	YES/NO
5	DOCUMENTS IN SUPPORT OF QUALIFICATION CRITERIA	YES/NO
6	TECHNICAL BID	YES/NO
7	ACCEPTANCE TO COMMERCIAL TERMS AND CONDITIONS	YES/NO
8	FINANCIAL BID (IN SEALED ENVELOPE)	YES/NO
9	EMD IN PRESCRIBED FORMAT	YES/NO
10	DEMAND DRAFT OF RS 1,180/- DRAWN IN FAVOUR OF BSES RAJDHANI POWER LTD	YES/NO
11	POWER OF ATTORNEY/AUTHORISATION LETTER FOR SIGNING THE BID (IF REQUIRED)	YES/NO
12	FINANCIAL DATA IN TABULAR FORMAT	YES/NO
13	LIST OF CURRENT COMMITMENTS/ WORK IN PROGRESS	YES/NO
14	BANK SOLVENCY CERTIFICATE	YES/NO
15	NO LITIGATION CERTIFICATE	YES/NO
16	NO BLACKLISTING CERTIFICATE	YES/NO
17	STATUTORY COMPLIANCE CERTIFICATE	YES/NO



BSES RAJDHANI POWER LIMITED

APPENDIX-VIII

FORMAT FOR PERFORMANCE BANK GUARANTEE

(TO BE ISSUED ON RS 100/- STAMP PAPER)

Bank Guarantee No.

Place:

Date:

To
BSES Rajdhani Power Limited

Whereas BSES RAJDHANI POWER LTD (hereinafter referred to as the "Purchaser", which expression shall unless repugnant to the context or meaning thereof include its successors, administrators and assigns) has awarded to M/s. _____ with its Registered/ Head Office at _____

(Hereinafter referred to as the "Supplier" which expression shall unless repugnant to the context or meaning thereof, include its successors administrators, executors and assigns), a contract no. _____ Dated _____ (the Contract);

And whereas the value of the Contract is Rs. _____ (The Contract Value).

And whereas it is a condition of the Contract that the Supplier shall provide a Performance Bank Guarantee for the due and faithful performance of the entire Contract for a sum equivalent to - % of the Contract Value to the Purchaser on or before _____

And whereas the Bank under instructions from the Supplier has agreed to guarantee the due performance of the Contract.

Now it is agreed as follows:

1. We _____ (Name of the Bank) having its Head Office at _____ (hereinafter referred to as the Bank, which expression shall unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns) shall indemnify and keep indemnified the Purchaser for, and guarantee and undertake to pay to the Purchaser immediately on written demand, a sum equivalent to _____ % of the Contract Value as aforesaid at any time up to _____ (day/month/year) without any demur, reservation, contest, recourse or protest and/or without any reference to the Supplier, against all losses, damages, costs and expenses that may be caused to or suffered by the Purchaser by reason of any default on the part of the Supplier in performing and observing any and all the terms and conditions of the Contract or breach on the part of the Supplier of terms or conditions of the Contract.
2. The demand shall consist only of an original letter issued by Purchaser stating that the Supplier has failed to fulfil its obligations under the Contract. Such demand made by the Purchaser on the Bank shall be conclusive and binding notwithstanding any difference or dispute between the Purchaser and the Supplier or any difference or dispute pending before any Court, Tribunal, Arbitrator or any other authority.
3. The Bank undertakes not to revoke this guarantee during its currency without previous written consent of the Purchaser and further agrees that the guarantee herein contained shall continue to be enforceable during the period that would be taken for satisfactory performance and fulfilment in all respects of the Contract or in the event of any dispute between the Purchaser and Supplier until the dispute is settled (provided that the claim/ demand under this guarantee is _____)



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lodged /referred during the currency of this guarantee) or till the Purchaser discharges this guarantee whichever is earlier.

4. The Purchaser shall have the fullest liberty without affecting in any way the liability of the Bank under this guarantee from time to time to extend the time for performance of the Contract by the Supplier. The Purchaser shall have the fullest liberty, without affecting the liability of the Bank under this guarantee, to postpone from time to time the exercise of any powers vested in them or of any right which they might have against the Supplier, and to exercise the same at any time in any manner, and either to enforce or to forbear to enforce any covenants, contained or implied, in the Contract. or any other course or remedy or security available to the Purchaser. The Bank shall not be released of its obligations under these presents by any exercise by the Purchaser of its liberty with reference: to the matters aforesaid or any of them or by reason of any other act or forbearance or other acts of omission or commission on the part of the Purchaser or any other indulgence shown by the Purchaser of by any other matter or thing whatsoever which under law would, but for this provision, have the effect of relieving the Bank.

5. The Bank agrees that the Purchaser and its option shall be entitled to enforce this guarantee against the Bank as a principal debtor, in the first instance without proceeding against the Supplier and notwithstanding any security or other guarantee that the Purchaser may have in relation to the Supplier's liabilities.

6. Notwithstanding anything contained hereinabove the liability of the Bank under this guarantee is restricted to a sum equivalent to % of the Contract Value i.e. Rs.(Rupees) and it shall remain in force up to and including. Unless a demand to enforce a claim under this guarantee is made against the Bank within 3 months from the above date of expiry i.e. up to all the rights of the Purchaser under the said guarantee shall be forfeited and the Bank shall be released and discharged from all liabilities thereafter.

7. This Performance Bank Guarantee shall be governed by the laws of India.

Dated this Witness

day of 20..... at

1. For Bank

2. Signature
Name Power of Attorney No:

Banker's Seal

APPENDIX-VIII

ENGINEERING, PROCUREMENT, CONSTRUCTION & O&M AGREEMENT

This Engineering, Procurement & Construction Agreement (hereinafter referred to as the "**Agreement**") is entered into on this _____(date), at (Location) **BY** and **BETWEEN** a company incorporated under the Companies Act, 1956/ 2013 and having its registered office(hereinafter referred to as the "**CONTRACTOR**" which expression shall where the context so admits be deemed to include its executors, administrators, representatives and permitted assigns) of the ONE PART; **AND** _____legal owner of the premises intend to get installed the Solar PV System, say **Rooftop Beneficiary**), (hereinafter referred to as the "**CUSTOMER/ BENEFICIARY**" which expression shall where the context so admits be deemed to include its heirs, executors, administrators, representatives and permitted assigns) of the OTHERPART; The expressions "**CONTRACTOR**" and "**CUSTOMER/ BENEFICIARY**", wherever the context so permits or requires shall collectively be referred to as "**Parties**" and individually as the "**Party**".

WHEREAS:

- A. CONTRACTOR is a fully integrated solar solutions provider that offers comprehensive solar solutions to governments, corporate houses, villages, industries, and other consumers.
- B. CUSTOMER/ BENEFICIARY is a <Roof-top beneficiary>
- C. CONTRACTOR and CUSTOMER/ BENEFICIARY enter into this Agreement for Engineering, Procurement, Construction & O&M of a Roof-Top Solar PV Power System.

NOW, THIS AGREEMENT WITNESSETH AS FOLLOWS:

PURPOSE & SCOPE OF THE AGREEMENT

The purpose of this Agreement includes design, manufacture, supply, erection, testing and commissioning including warranty, operation & maintenance for a period of 5years of a _____KWp Roof-top Solar PV Power System (hereinafter referred to as the "**Solar Power System**") for the CUSTOMER/ BENEFICIARY, (hereinafter cumulatively referred to as the "**Works**"), for which the CUSTOMER/ BENEFICIARY has handed over the premises, which is with a clear title and is encumbrance free, to the CONTRACTOR,along with requiredapprovalsfrom concerned authorities,andtheCUSTOMER/ BENEFICIARY' centeringinto this Agreement is proof enough of its consent to start workthereon.

The technical specifications (hereinafter referred to as the "**Technical Specifications**") that need to be adhered to by the CONTRACTOR in implementing the Roof-Top Solar PV Plant for the CUSTOMER/ BENEFICIARY shall be in accordance with the Tender No. NIT NOCMC/BR/25-26/FK/PR/KG/1307 dated 25.11.2025 and the performance parameters (hereinafter referred to as the "**Performance Parameters**") that shall govern the Scope of Duty of the CONTRACTOR regarding the Works for the CUSTOMER/ BENEFICIARY.

All the pedestals meant for mounting the modules must be casted on the lintel by removing the tiles and other loose material in the area where the pedestals are to be casted. The surface of the lintel should be thoroughly cleaned and an adhesive should be applied on the lintel surface before casting the pedestals in order to have strong bonding with the lintel. After casting of the pedestals the water proofing material should be applied surrounding the pedestals in order to avoid any water seepage during rainfall.

Contractor shall ensure that SPV modules, parts of MS structures, other hardware like nuts, bolts and grouting hardware etc., are not loosely scattered over the terrace of a building. These items must be securely stored in an enclosed room where they cannot be affected by winds or such loose materials must be tied properly. Further, Successful bidders hall



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ensure that rooftop Solar PV system should be designed and installed in such a way that its performance should not be affected due to the problem of water logging at site etc.

The design, engineering, manufacture, supply, installation, testing including warranty, operation & maintenance for a period of 5 years and performance of the equipment shall be in accordance with latest appropriate IEC/ Indian Standards as well as the Technical Specifications detailed in the Tender Document. Where appropriate Indian Standards and Codes are not available, other suitable standards and codes as approved by the MNRE shall be used.

Any supplies which have not been specifically mentioned in this Contract but which are necessary for the design, engineering, manufacture, supply & performance or completeness of the project shall be provided by the Bidder without any extra cost and within the time schedule for efficient and smooth operation and maintenance of the SPV Plant.

This Agreement, along with the Tender Schedules, in and of itself is an enforceable binding contract and constitutes the entire agreement between the Parties with respect to the subject matter hereof to the exclusion of all other understandings and assurances, either written or oral. The clauses contained in this Agreement shall not be construed as creating a partnership or joint-venture, agency or employment relationship among the Parties. The relationship between the Parties under this Agreement is as principal-to-principal basis.

IN WITNESS WHEREOF the authorized signatories of the Parties hereto have signed this Agreement on the day, month and year first above written:

FOR AND ON BEHALF OF <Name of Contractor>	FOR AND ON BEHALF OF <Name of Customer/ beneficiary>
AUTHORISED SIGNATORY Name: Designation:	AUTHORISED SIGNATORY (Of Beneficiary) Name: Designation:
Witness Name:	Witness Name:

SECTION VIII

VENDOR CODE OF CONDUCT

Bidder shall agree to comply with Vendor code of Conduct as mentioned in BRPL Website. Purchaser is committed to conducting its business in an ethical, legal and socially responsible manner. To encourage compliance with all legal requirements and ethical business practices, Purchaser has established this Vendor Code of Conduct (the "Code") for Purchaser's Vendors. For the purposes of this document, "Vendor" means any company, corporation or other entity that sells, or seeks to sell goods or services, to Purchaser, including the Vendor's employees, agents and other representatives. Fundamental to adopting the Code is the understanding that a business, in all of its activities, must operate in full compliance with the laws, rules and regulations of the countries in which it operates. This Code encourages Vendors to go beyond legal compliance, drawing upon internationally recognized standards, in order to advance social and environmental responsibility.

I. Labour and Human Rights

Vendors must uphold the human rights of workers, and treat them with dignity and respect as understood by the international community.

- Fair Treatment - Vendors must be committed to a workplace free of harassment. Vendors shall not threaten workers with or subject them to harsh or inhumane treatment, including sexual harassment, sexual abuse, corporal punishment, mental coercion, physical coercion, verbal abuse or unreasonable restrictions on entering or exiting company provided facilities.
- Antidiscrimination - Vendors shall not discriminate against any worker based on race, colour, age, gender, sexual orientation, ethnicity, disability, religion, political affiliation, union membership, national origin, or marital status in hiring and employment practices such as applications for employment, promotions, rewards, access to training, job assignments, wages, benefits, discipline, and termination. Vendors shall not require a pregnancy test or discriminate against pregnant workers except where required by applicable laws or regulations or prudent for workplace safety. In addition, Vendors shall not require workers or potential workers to undergo medical tests that could be used in a discriminatory way except where required by applicable law or regulation or prudent for workplace safety.
- Freely Chosen Employment - Forced, bonded or indentured labour or involuntary prison labour is not to be used. All work will be voluntary, and workers should be free to leave upon reasonable notice. Workers shall not be required to hand over government-issued identification, passports or work permits as a condition of employment.
- Prevention of Under Age Labour - Child labour is strictly prohibited. Vendors shall not employ children. The minimum age for employment or work shall be 15 years of age, the minimum age for employment in that country, or the age for completing compulsory education in that country, whichever is higher. This Code does not prohibit participation in legitimate workplace apprenticeship programs that are consistent with

Article 6 of ILO Minimum Age Convention No. 138 or light work consistent with Article 7 of ILO Minimum Age Convention No. 138.

- Juvenile Labour - Vendors may employ juveniles who are older than the applicable legal minimum age for employment but are younger than 18 years of age, provided they do not perform work likely to jeopardize their health, safety, or morals, consistent with ILO Minimum Age Convention No. 138.
- Minimum Wages - Compensation paid to workers shall comply with all applicable wage laws, including those relating to minimum wages, overtime hours and legally mandated benefits. Any disciplinary wage deductions are to conform to local law. The basis on which workers are being paid is to be clearly conveyed to them in a timely manner.
- Working Hours - Studies of good manufacturing practices clearly link worker strain to reduced productivity, increased turnover and increased injury and illness. Work weeks are not to exceed the maximum set by local law. Further, a work week should not be more than 60 hours per week, including overtime, except in emergency or unusual situations. Workers should be allowed at least one day off per seven-day week.
- Freedom of Association - Open communication and direct engagement between workers and management are the most effective ways to resolve workplace and compensation issues. Vendors are to respect the rights of workers to associate freely and to communicate openly with management regarding working conditions without fear of reprisal, intimidation or harassment. Workers' rights to join labour unions, seek representation and or join worker's councils in accordance with local laws should be acknowledged.

II. Health and Safety Vendors must recognize that in addition to minimizing the incidence of work-related injury and illness, a safe and healthy work environment enhances the quality of products and services, consistency of production and worker retention and morale. Vendors must also recognize that ongoing worker input and education is essential to identifying and solving health and safety issues in the workplace.

The health and safety standards are:

- Occupational Injury and Illness - Procedures and systems are to be in place to prevent, manage, track and report occupational injury and illness, including provisions to: a) encourage worker reporting; b) classify and record injury and illness cases; c) provide necessary medical treatment; d) investigate cases and implement corrective actions to eliminate their causes; and e) facilitate return of workers to work.
- Emergency Preparedness - Emergency situations and events are to be identified and assessed, and their impact minimized by implementing emergency plans and response procedures, including: emergency reporting, employee notification and evacuation procedures, worker training and drills, appropriate fire detection and suppression equipment, adequate exit facilities and recovery plans.
- Occupational Safety - Worker exposure to potential safety hazards (e.g., electrical and other energy sources, fire, vehicles, and fall hazards) are to be controlled through proper design, engineering and administrative controls, preventative maintenance and safe work procedures (including lockout/tagout), and ongoing safety training. Where hazards cannot be adequately controlled by these means, workers are to be

provided with appropriate, well-maintained, personal protective equipment. Workers shall not be disciplined for raising safety concerns.

- Machine Safeguarding - Production and other machinery is to be evaluated for safety hazards. Physical guards, interlocks and barriers are to be provided and properly maintained where machinery presents an injury hazard to workers.
- Industrial Hygiene - Worker exposure to chemical, biological and physical agents is to be identified, evaluated, and controlled. Engineering or administrative controls must be used to control overexposures. When hazards cannot be adequately controlled by such means, worker health is to be protected by appropriate personal protective equipment programs.
- Sanitation, Food, and Housing - Workers are to be provided with ready access to clean toilet facilities, potable water and sanitary food preparation, storage, and eating facilities. Worker dormitories provided by the Participant or a labour agent are to be maintained clean and safe, and provided with appropriate emergency egress, hot water for bathing and showering, and adequate heat and ventilation and reasonable personal space along with reasonable entry and exit privileges.
- Physically Demanding Work - Worker exposure to the hazards of physically demanding tasks, including manual material handling and heavy or repetitive lifting, prolonged standing and highly repetitive or forceful assembly tasks is to be identified, evaluated and controlled.

III. Environmental

Vendors should recognize that environmental responsibility is integral to producing world class products. In manufacturing operations, adverse effects on the environment and natural resources are to be minimized while safeguarding the health and safety of the public.

The environmental standards are:

- Product Content Restrictions - Vendors are to adhere to applicable laws and regulations regarding prohibition or restriction of specific substances including labeling laws and regulations for recycling and disposal. In addition, Vendors are to adhere to all environmental requirements specified by Purchaser.
- Chemical and Hazardous Materials - Chemical and other materials posing a hazard if released to the environment are to be identified and managed to ensure their safe handling, movement, storage, recycling or reuse and disposal.
- Air Emissions - Air emissions of volatile organic chemicals, aerosols, corrosives, particulates, ozone depleting chemicals and combustion by-products generated from operations are to be characterized, monitored, controlled and treated as required prior to discharge.
- Pollution Prevention and Resource Reduction - Waste of all types, including water and energy, are to be reduced or eliminated at the source or by practices such as modifying production, maintenance and facility processes, materials substitution, conservation, recycling and re-using materials.

- Wastewater and Solid Waste - Wastewater and solid waste generated from operations, industrial processes and sanitation facilities are to be monitored, controlled and treated as required prior to discharge or disposal.
- Environmental Permits and Reporting - All required environmental permits (e.g. discharge monitoring) and registrations are to be obtained, maintained and kept current and their operational and reporting requirements are to be followed.

IV. Ethics

Vendors must be committed to the highest standards of ethical conduct when dealing with workers, Vendors, and customers.

- Corruption, Extortion, or Embezzlement - Corruption, extortion, and embezzlement, in any form, are strictly prohibited. Vendors shall not engage in corruption, extortion or embezzlement in any form and violations of this prohibition may result in immediate termination as a Vendor and in legal action.
- Disclosure of Information - Vendors must disclose information regarding its business activities, structure, financial situation, and performance in accordance with applicable laws and regulations and prevailing industry practices.
- No Improper Advantage - Vendors shall not offer or accept bribes or other means of obtaining undue or improper advantage.
- Fair Business, Advertising, and Competition - Vendors must uphold fair business standards in advertising, sales, and competition.
- Business Integrity - The highest standards of integrity are to be expected in all business interactions. Participants shall prohibit any and all forms of corruption, extortion and embezzlement. Monitoring and enforcement procedures shall be implemented to ensure conformance.
- Community Engagement - Vendors are encouraged to engage the community to help foster social and economic development and to contribute to the sustainability of the communities in which they operate.
- Protection of Intellectual Property - Vendors must respect intellectual property rights; safeguard customer information; and transfer of technology and know-how must be done in a manner that protects intellectual property rights.

V. Management System

Vendors shall adopt or establish a management system whose scope is related to the content of this Code. The management system shall be designed to ensure (a) compliance with applicable laws, regulations and customer requirements related to the Vendors' operations and products; (b) conformance with this Code; and (c) identification and mitigation of operational risks related to this Code. It should also facilitate continual improvement.

The management system should contain the following elements:

- Company Commitment - Corporate social and environmental responsibility statements affirming Vendor's commitment to compliance and continual improvement.
- Management Accountability and Responsibility - Clearly identified company representative[s] responsible for ensuring implementation and periodic review of the status of the management systems.
- Legal and Customer Requirements - Identification, monitoring and understanding of applicable laws, regulations and customer requirements.
- Risk Assessment and Risk Management - Process to identify the environmental, health and safety and labour practice risks associated with Vendor's operations. Determination of the relative significance for each risk and implementation of appropriate procedural and physical controls to ensure regulatory compliance to control the identified risks.
- Performance Objectives with Implementation Plan and Measures - Areas to be included in a risk assessment for health and safety are warehouse and storage facilities, plant/facilities support equipment, laboratories and test areas, sanitation facilities (bathrooms), kitchen/cafeteria and worker housing /dormitories. Written standards, performance objectives, targets and implementation plans including a periodic assessment of Vendor's performance against those objectives.
- Training - Programs for training managers and workers to implement Vendor's policies, procedures and improvement objectives.
- Communication - Process for communicating clear and accurate information about Vendor's performance, practices and expectations to workers, Vendors and customers.
- Worker Feedback and Participation - Ongoing processes to assess employees' understanding of• and obtain feedback on practices and conditions covered by this Code and to foster continuous improvement.
- Audits and Assessments - Periodic self-evaluations to ensure conformity to legal and regulatory• requirements, the content of the Code and customer contractual requirements related to social and environmental responsibility.
- Corrective Action Process - Process for timely correction of deficiencies identified by internal or• external assessments, inspections, investigations and reviews.
- Documentation and Records - Creation of documents and records to ensure regulatory compliance• and conformity to company requirements along with appropriate confidentiality to protect privacy.

The Code is modelled on and contains language from the Recognized standards such as International Labour Organization Standards (ILO), Universal Declaration of Human Rights (UDHR), United Nations Convention against Corruption, and the Ethical Trading Initiative (ETI) were used as references in preparing this Code and may be useful sources of additional information.

SECTION IX
ANNEXURE II



Solar Rooftop Assessment
Of
33KV CR Park Grid

Site Name:- 33KV CR Park Grid

❖ Some Details about Site:-

1.	No. of Floor	2 nd
2.	Division	-----
3.	Concern Person	Mr. Satish Kumar (Civil)
4.	Solar Plant Capacity	34 Kw
5.	Local Transformer Rating	-----
6.	Local Meter no.	-----
7.	MCB/MCCB Rating	-----
8.	LT Cable Size	-----
9.	Distance from Solar to Transformer	70-80 Meter
10.	Distance from Solar to LT Panel	-----
11.	Rooftop Coordinate	Lat:- 28.53387 Long:- 77.281408
12.	Ground Coordinate	Lat:- 28.533903 Long:- 77.251352
13.	Major Obstruction	Trees shadow

Bus stop
बस स्टॉप

ROOM

Cuemath Offline Tuition
Center | Jyoti Jain
क्वेमठ ऑफलाइन
तुइतिओ केंद्र |...

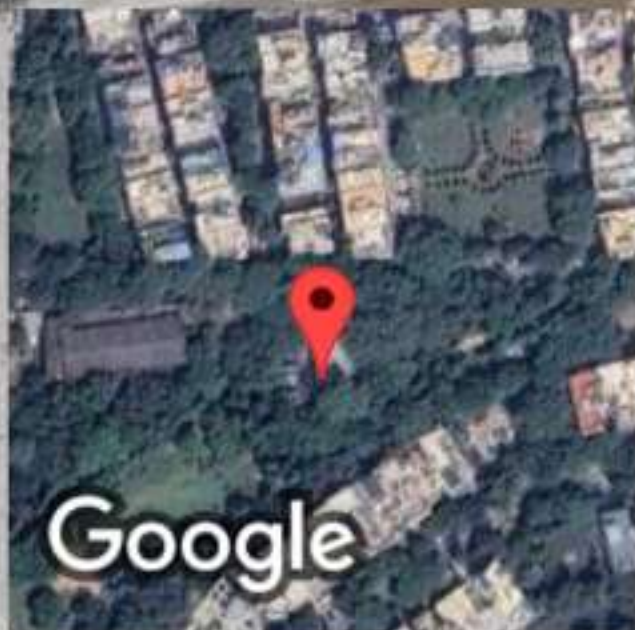
InfoCRAFT Solutions
इन्फोक्राफ्ट
सॉल्यूटिओंस







GPS Map Camera



New Delhi, Delhi, India

33 KV Grid Substation, Alaknanda, Chittaranjan Park(C.R.Park), NRI Colony, Mandakini Enclave Colony, Alaknanda, New Delhi, Delhi 110019, India

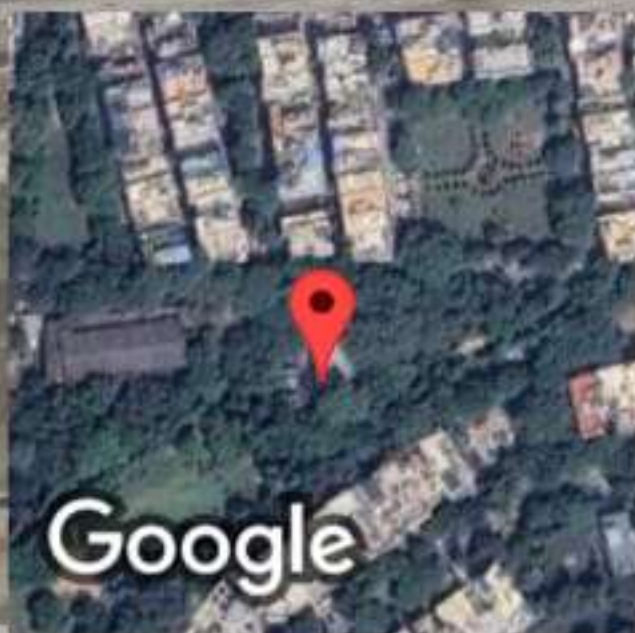
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GPS Map Camera



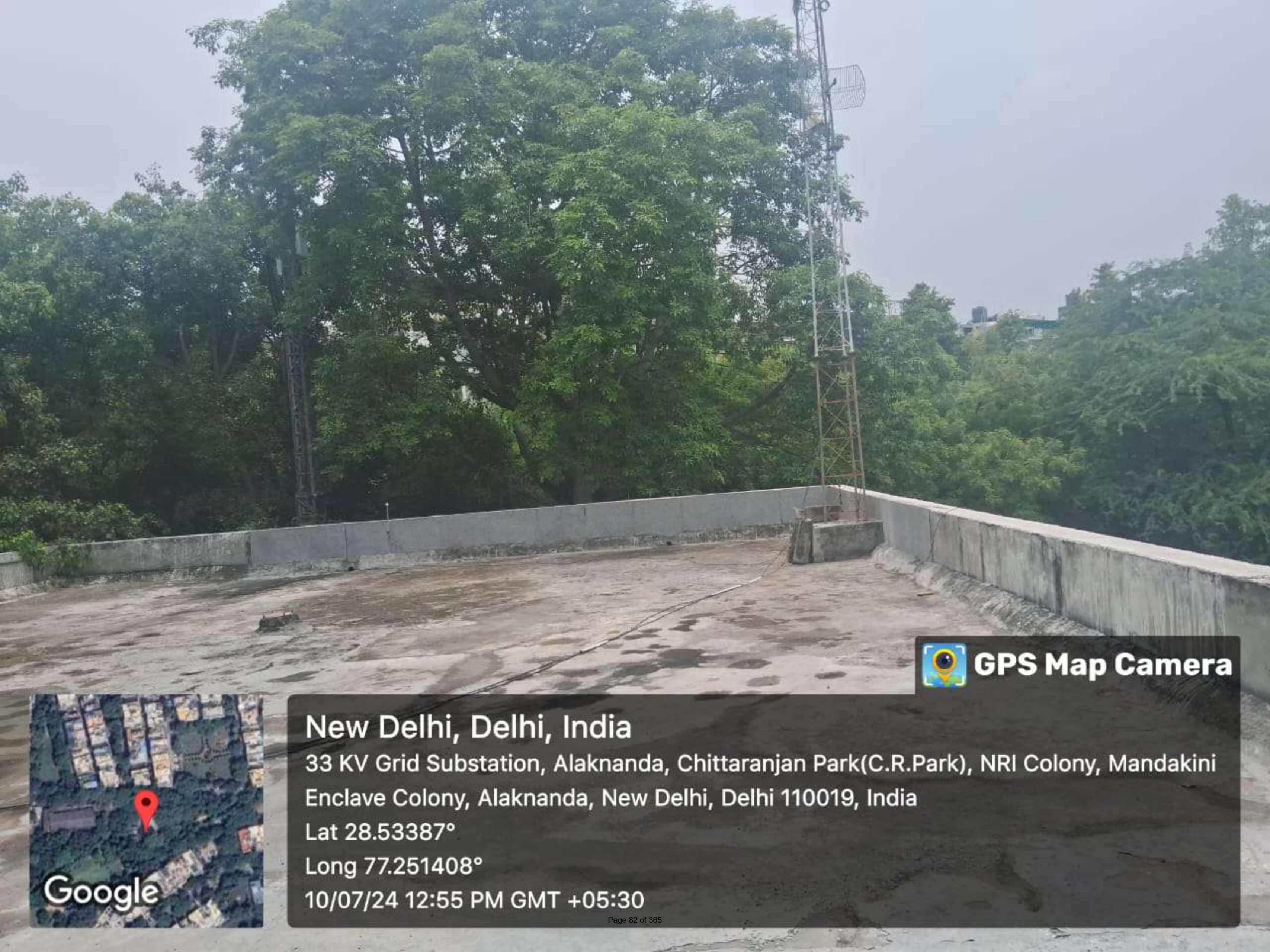
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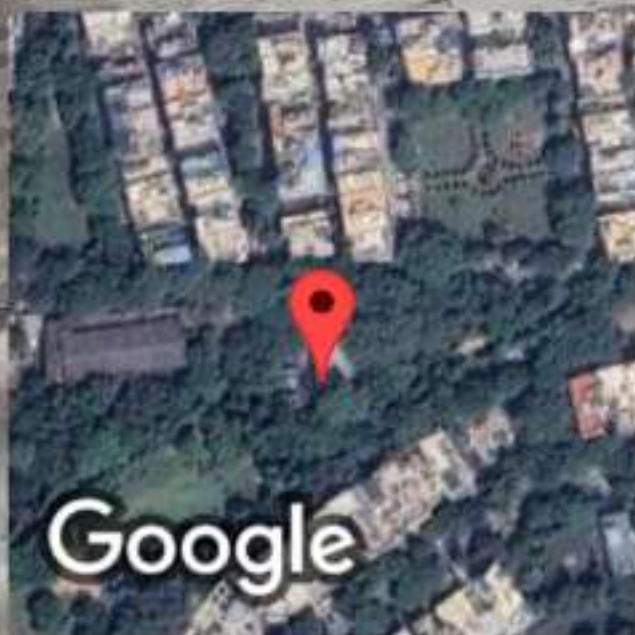
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Long 77.251408°

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GPS Map Camera



New Delhi, Delhi, India

33 KV Grid Substation, Alaknanda, Chittaranjan Park(C.R.Park), NRI Colony, Mandakini Enclave Colony, Alaknanda, New Delhi, Delhi 110019, India

Lat 28.53387°

Long 77.251408°

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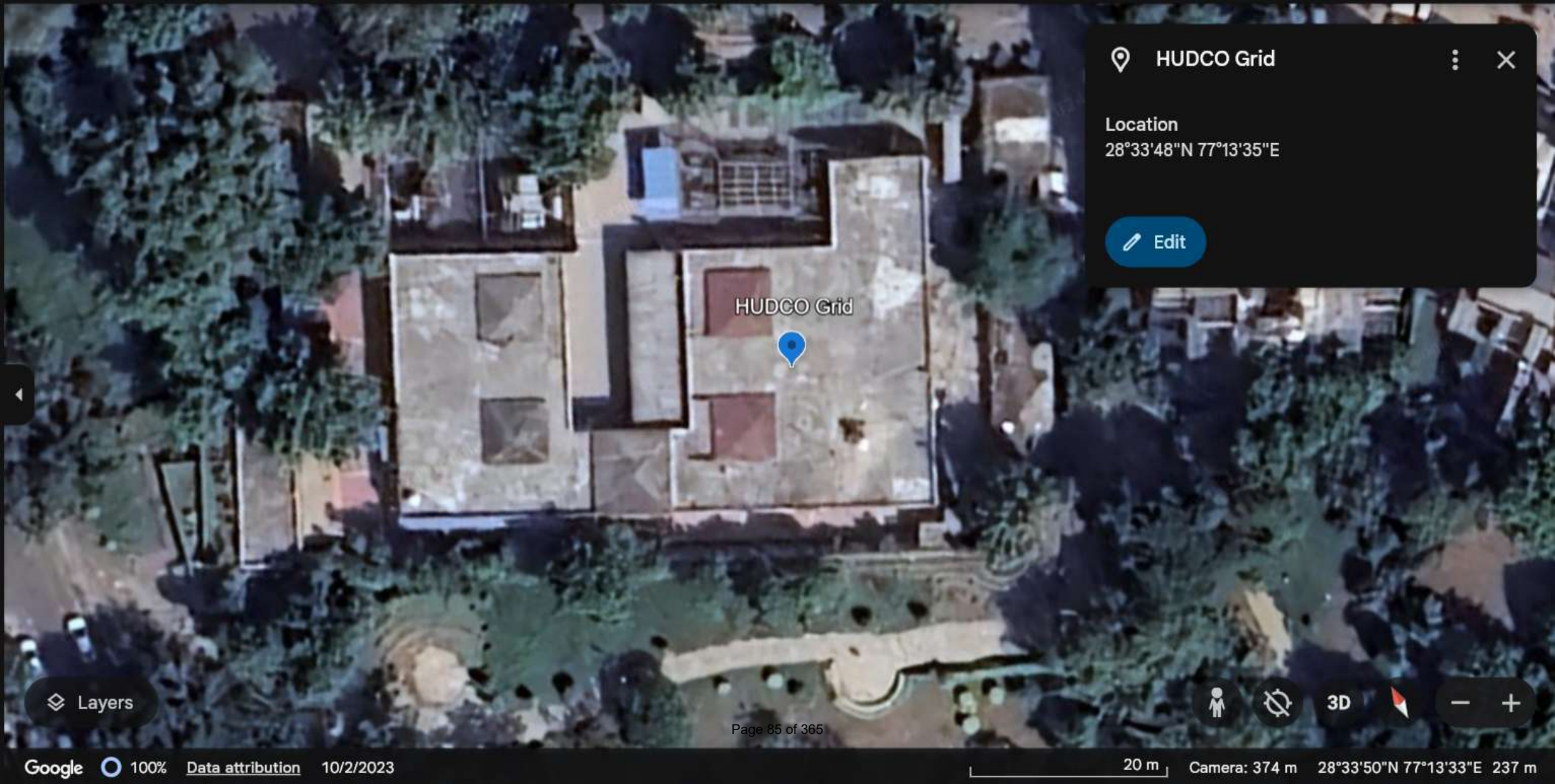


Solar Rooftop Assessment Of HUDCO Grid

Site Name:- HUDCO Grid

❖ Some Details about Site:-

1.	No. of Floor	1 st
2.	Division	Hauz Khas
3.	Concern Person	Mr. Anand Singh
4.	Solar Plant Capacity	100Kw
5.	Local Transformer Ratingx2	100KVA
6.	Local Meter no.	29553309
7.	MCB/MCCB Rating	400Amp
8.	LT Cable Size	4core/150sqmm
9.	Distance from Solar to Transformer	70-80 Meter
10.	Distance from Solar to LT Panel	70-80 Meter
11.	Rooftop Coordinate	Lat:- 28.563579 Long:- 77.226825
12.	Ground Coordinate	Lat:- 28.563784 Long:- 77.226468
13.	Major Obstruction	Most of the rooftop area is under shadow due to trees
14.	Ground area for Solar	Not Available



HUDCO Grid



Location

28°33'48"N 77°13'35"E



Edit

HUDCO Grid



Layers



3D



Page 85 of 365

Google



100%

[Data attribution](#)

10/2/2023

20 m

Camera: 374 m

28°33'50"N 77°13'33"E 237 m







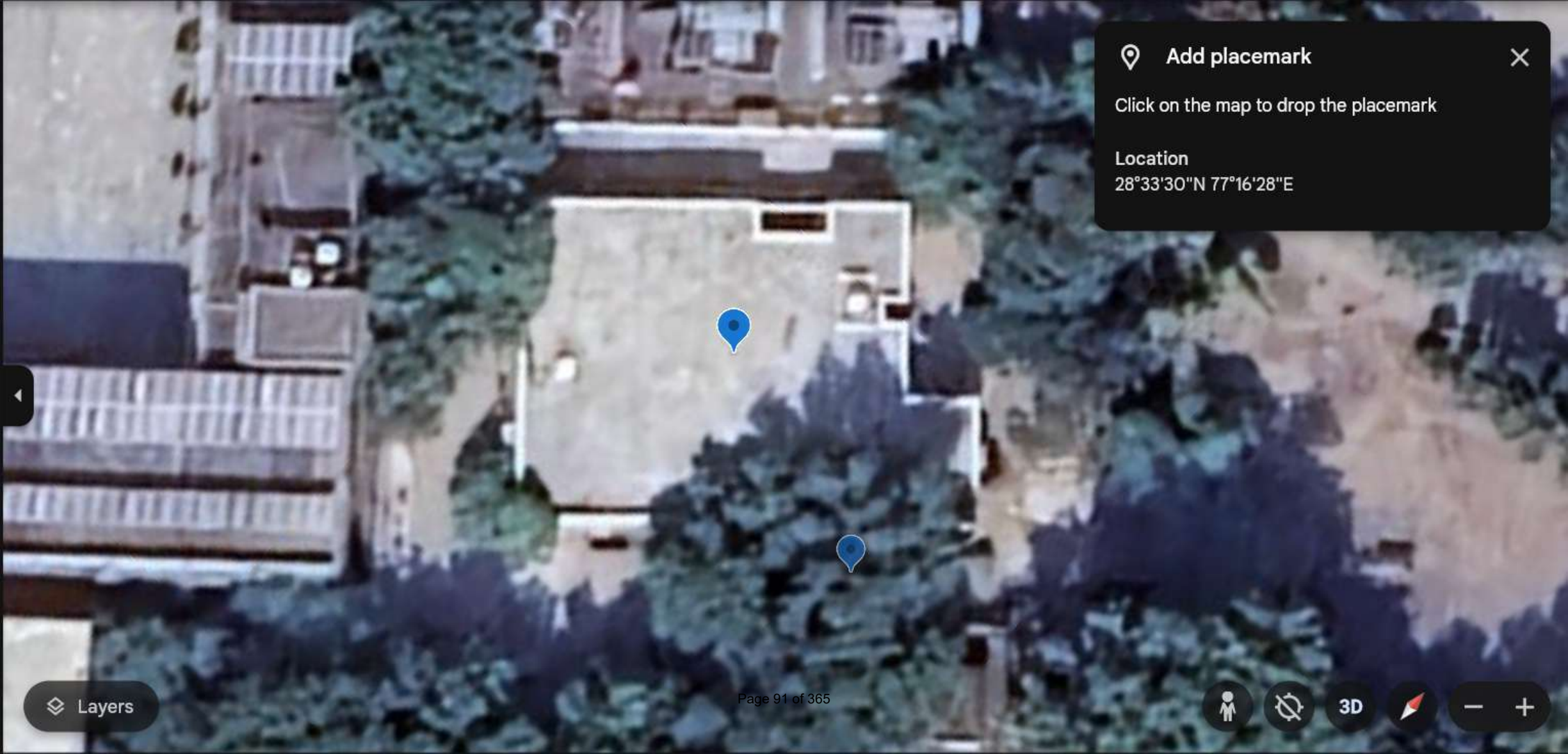


Solar Rooftop Assessment
Of
33KV Grid SSTN Sarai Jullena

Site Name:- 33KV Grid SSTN Sarai jullena

❖ Some Details about Site:-

1.	No. of Floor	1 st
2.	Division	-----
3.	Concern Person	-----
4.	Solar Plant Capacity	34Kw
5.	Local Transformer Rating	-----
6.	Local Meter no.	-----
7.	MCB/MCCB Rating	-----
8.	LT Cable Size	-----
9.	Distance from Solar to Transformer	60-70 Meter
10.	Distance from Solar to LT Panel	50-60 Meter
11.	Rooftop Coordinate	Lat:- 28.558546 Long:- 77.274526
12.	Ground Coordinate	Lat:- 28.558692 Long:- 77.274716
13.	Major Obstruction	Trees shadow



Add placemark



Click on the map to drop the placemark

Location

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Layers

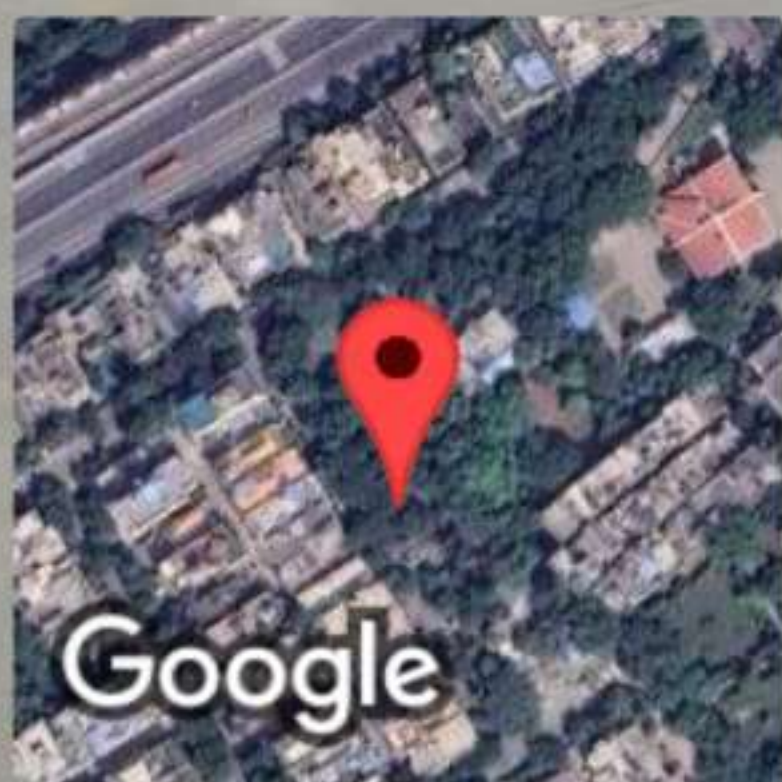








GPS Map Camera



New Delhi, Delhi, India

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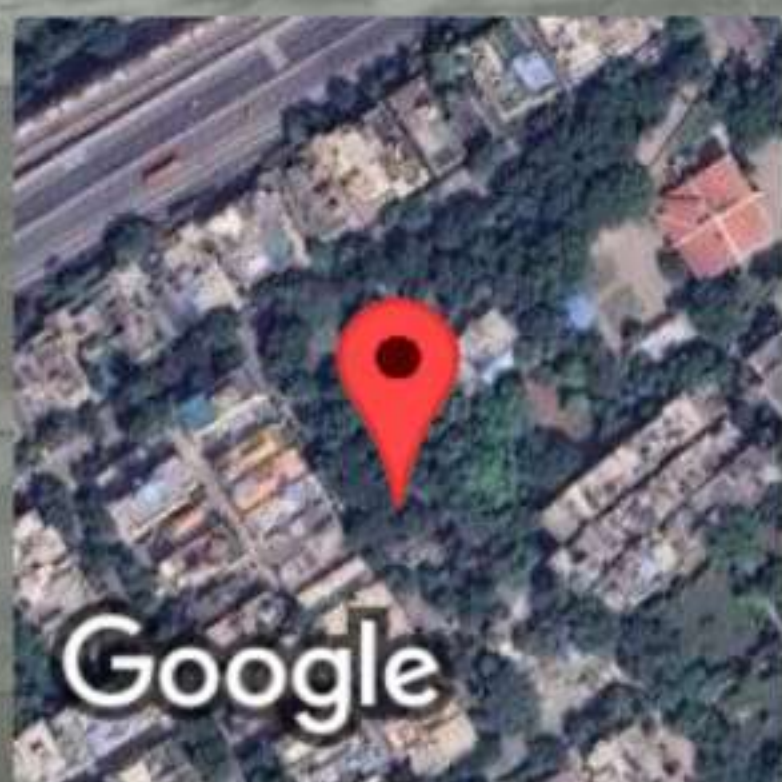
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GPS Map Camera



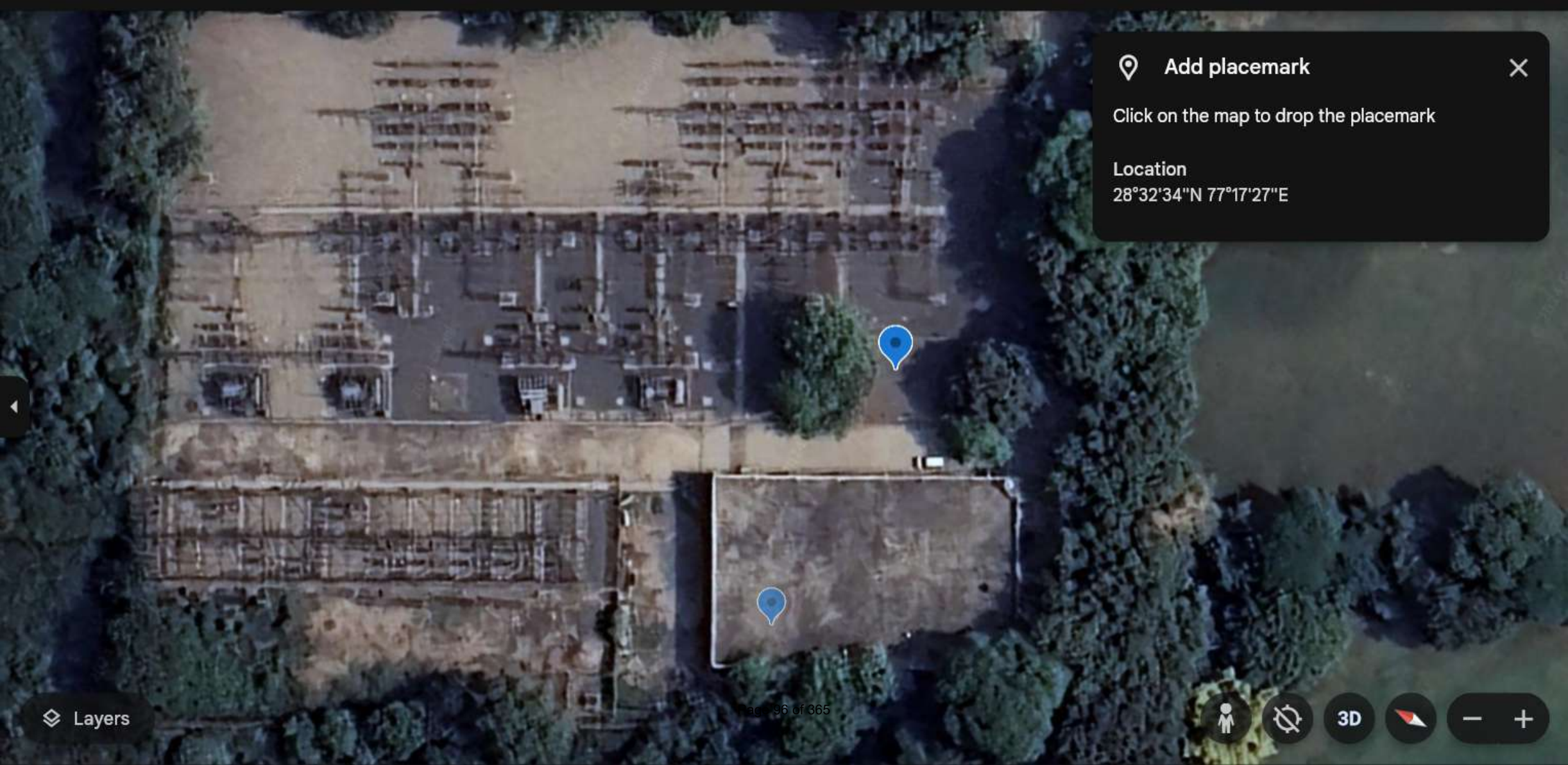
New Delhi, Delhi, India

78, Sukhdev Vihar, Okhla, New Delhi, Delhi 110025, India

Lat 28.557461°

Long 77.272662°

10/07/24 03:15 PM GMT +05:30



Add placemark



Click on the map to drop the placemark

Location

28°32'34"N 77°17'27"E



Layers

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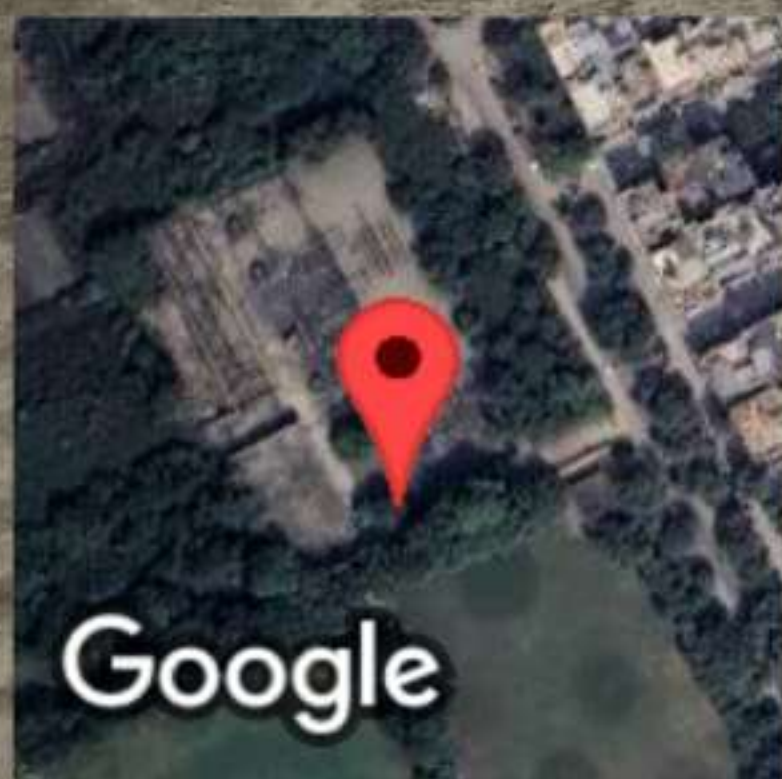
3D







GPS Map Camera



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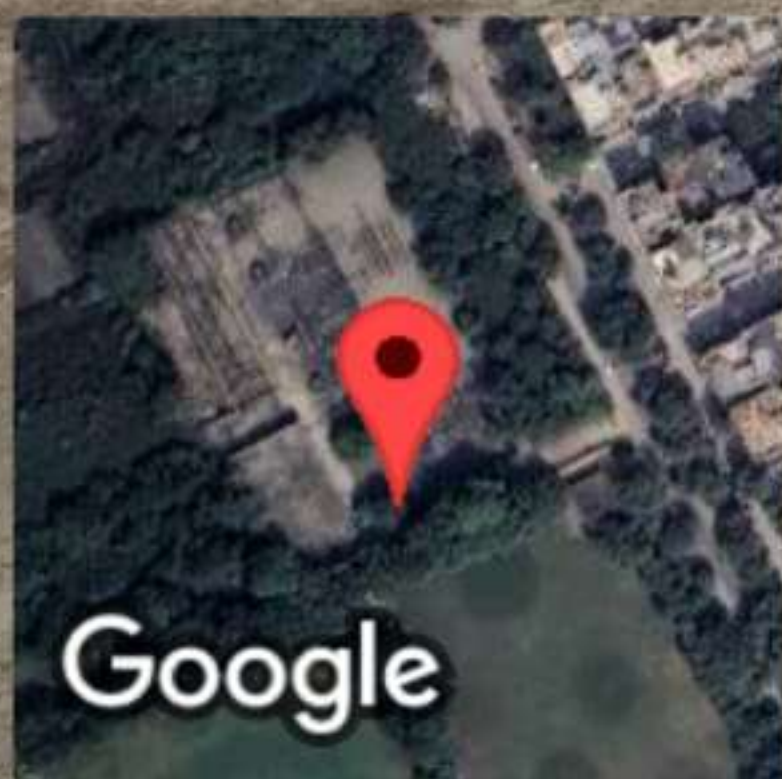
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GPS Map Camera



New Delhi, Delhi, India

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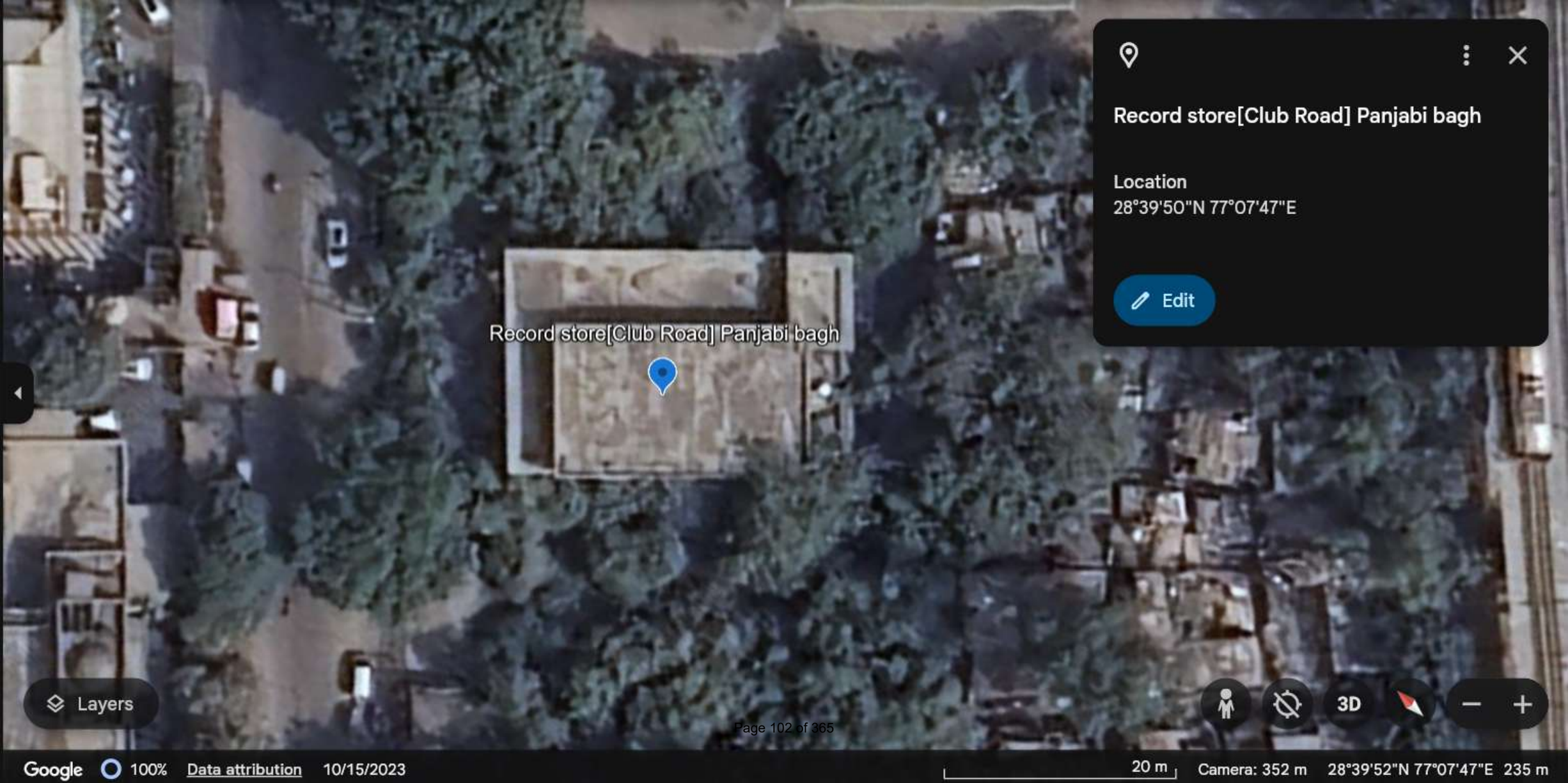


Solar Rooftop Assessment
Of
Record Store[Club Road] Panjabi Bagh

Site Name:- Record Store[Club Road] Panjabi Bagh

❖ Some Details about Site:-

1.	No. of Floor	3 rd
2.	Division	Panjabi Bagh
3.	Concern Person	-----
4.	Solar Plant Capacity	32Kw
5.	Local Transformer Rating	Not Available
6.	Local Meter no.	17037665
7.	MCB/MCCB Rating	100Amp
8.	LT Cable Size	4core/25sqmm
9.	Distance from Solar to Transformer	-----
10.	Distance from Solar to LT Panel	60-70 Meter
11.	Rooftop Coordinate	Lat:- 28.664511 Long:- 77.129727
12.	Ground Coordinate	Lat:- 28.663941 Long:- 77.129692
13.	Major Obstruction	Nothing
14.	Ground Space for Solar Plant	Not Available



Record store[Club Road] Panjabi bagh



Record store[Club Road] Panjabi bagh

Location

28°39'50"N 77°07'47"E



Edit



Layers



3D



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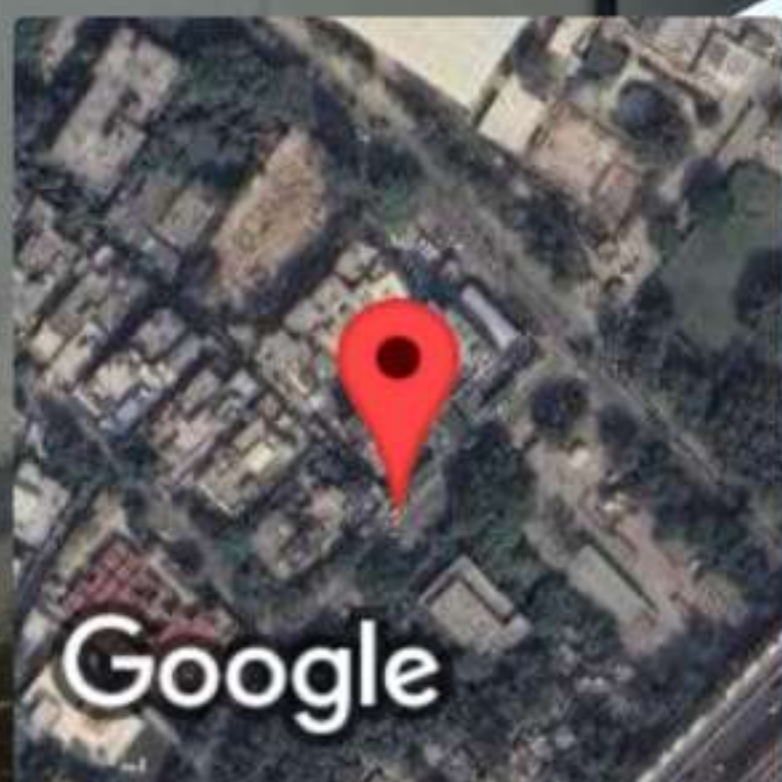








GPS Map Camera



Delhi, Delhi, India

17A, N W Ave Rd, Punjabi Bagh, Delhi, 110026, India

Lat 28.664511°

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16/08/24 12:55 PM GMT +05:30



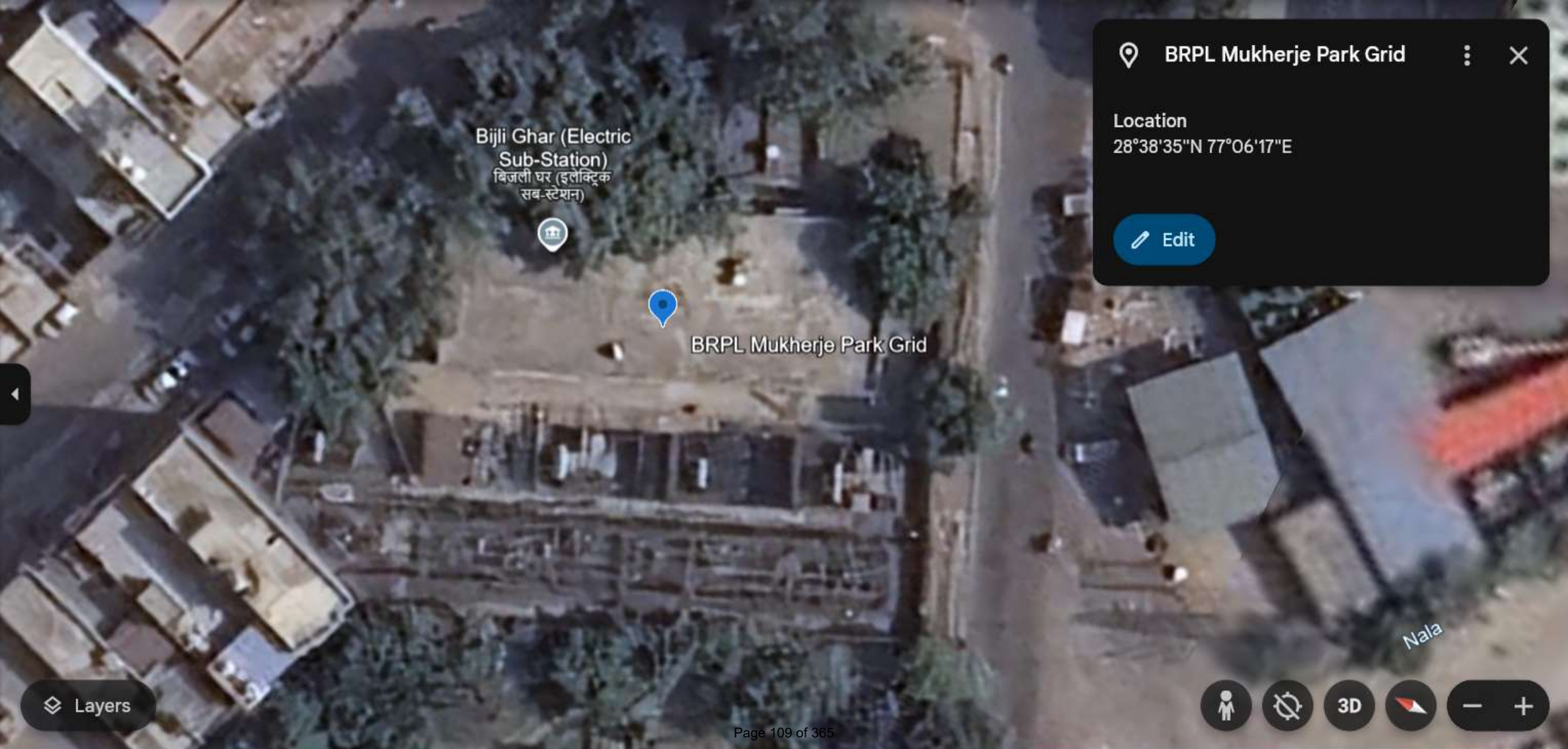


Solar Rooftop Assessment Of Mukherjee Park Grid

Site Name:- Mukherjee Park Grid

❖ Some Details about Site:-

1.	No. of Floor	1 st
2.	Division	Tagore Garden
3.	Concern Person	Devendra
4.	Solar Plant Capacity	27Kw
5.	Local Transformer Rating	100KVA
6.	Local Meter no.	Locked
7.	MCB/MCCB Rating	200Amp
8.	LT Cable Size	4core/95sqmm
9.	Distance from Solar to Transformer	70-80 Meter
10.	Distance from Solar to LT Panel	60-70 Meter
11.	Rooftop Coordinate	Lat:- 28.643162 Long:- 77.104109
12.	Ground Coordinate	Lat:- 28.6431627 Long:- 77.1048778
13.	Major Obstruction	Most of area of rooftop is shadow area because of trees



 **BRPL Mukherje Park Grid**  

Location
28°38'35"N 77°06'17"E

 Edit

 Layers







Solar Rooftop Assessment
Of
Hari Nagar Distt. Building [CHD]

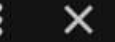
Site Name:- Hari Nagar Distt. Building [CHD]

❖ Some Details about Site:-

1.	No. of Floor	2nd
2.	Division	Maya enclave Janakpuri
3.	Concern Person	Mr. Jasdeep Singh
4.	Solar Plant Capacity	38Kw
5.	Local Transformer Rating	400KVA
6.	Local Meter no.	29552053
7.	MCB/MCCB Rating	Not Found
8.	LT Cable Size	4core/50sqmm
9.	Distance from Solar to Transformer	60-70 Meter
10.	Distance from Solar to LT Panel	60-70 Meter
11.	Rooftop Coordinate	Lat:- 28.620790 Long:- 77.110546
12.	Ground Coordinate	Lat:- 28.620642 Long:- 77.110330
13.	Major Obstruction	Nothing
14.	Ground area for Solar	Not Available

Maya Enclave BSES Office

Hari nagar distt. building[CHD]



Hari nagar distt. building[CHD]

Location

28°37'14"N 77°06'37"E

Edit

Layers

Clear search results







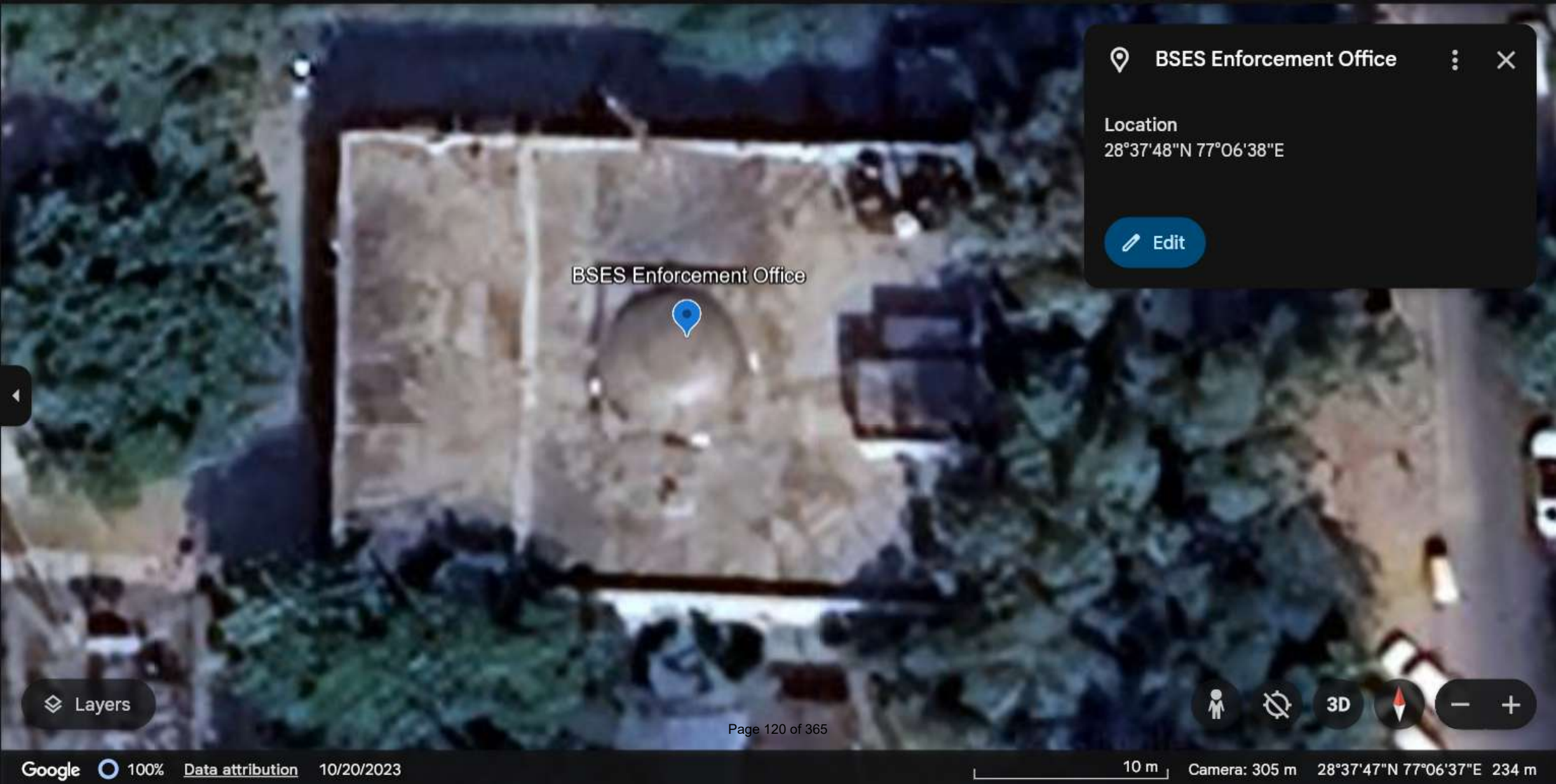


Solar Rooftop Assessment
Of
66/11KV Hari Nagar Grid

Site Name:- 66/11KV Hari Nagar Grid

❖ Some Details about Site:-

1.	No. of Floor	2 nd
2.	Division	Janakpuri
3.	Concern Person	Mr. Jashapal
4.	Solar Plant Capacity	60 Kw
5.	Local Transformer Rating	400 KVA
6.	Local Meter no.	29551772
7.	MCB/MCCB Rating	Not Found
8.	LT Cable Size	Not Found
9.	Distance from Solar to Transformer	70-80 Meter
10.	Distance from Solar to LT Panel	60-70 Meter
11.	Rooftop Coordinate	Lat:- 28.630318 Long:- 77.111161
12.	Ground Coordinate	Lat:- 28.629857 Long:- 77.110156
13.	Major Obstruction	Nothing
14.	Ground area for Solar	Parking Area



📍 BSES Enforcement Office ⋮ ✕

Location
28°37'48"N 77°06'38"E

 Edit

BSES Enforcement Office



Layers

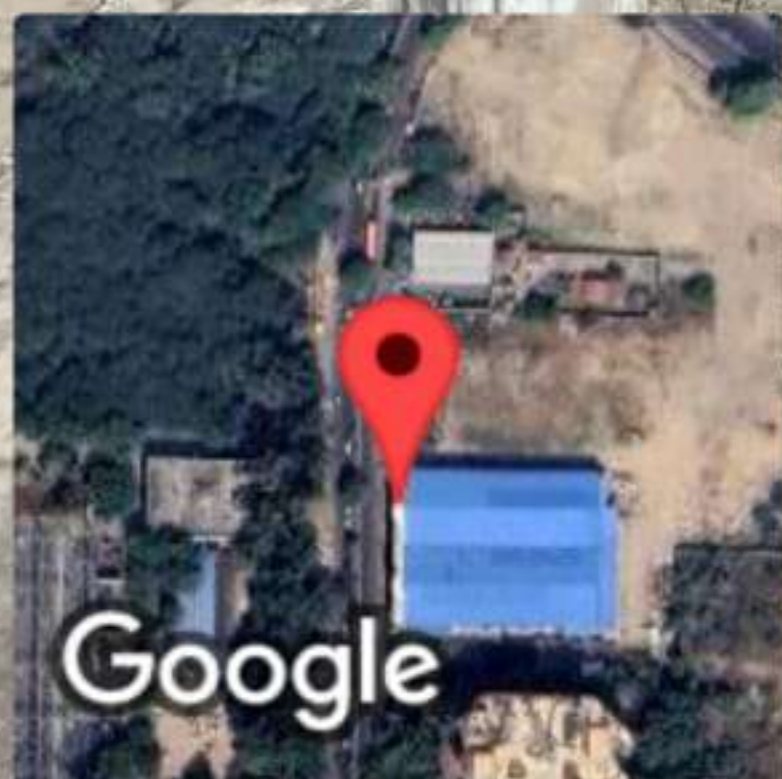
  3D  - +

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GPS Map Camera



Delhi, Delhi, India

D.D.U. (Petrol Pump), Hari Enclave, Hari Nagar, Delhi, 110064, India

Lat 28.630318°

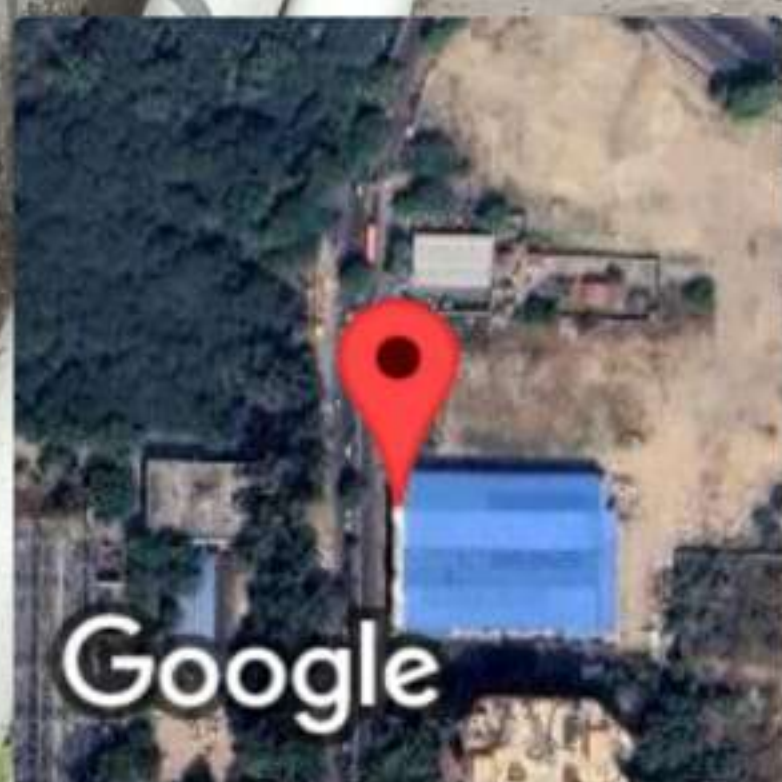
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GPS Map Camera



Delhi, Delhi, India

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Long 77.111161°

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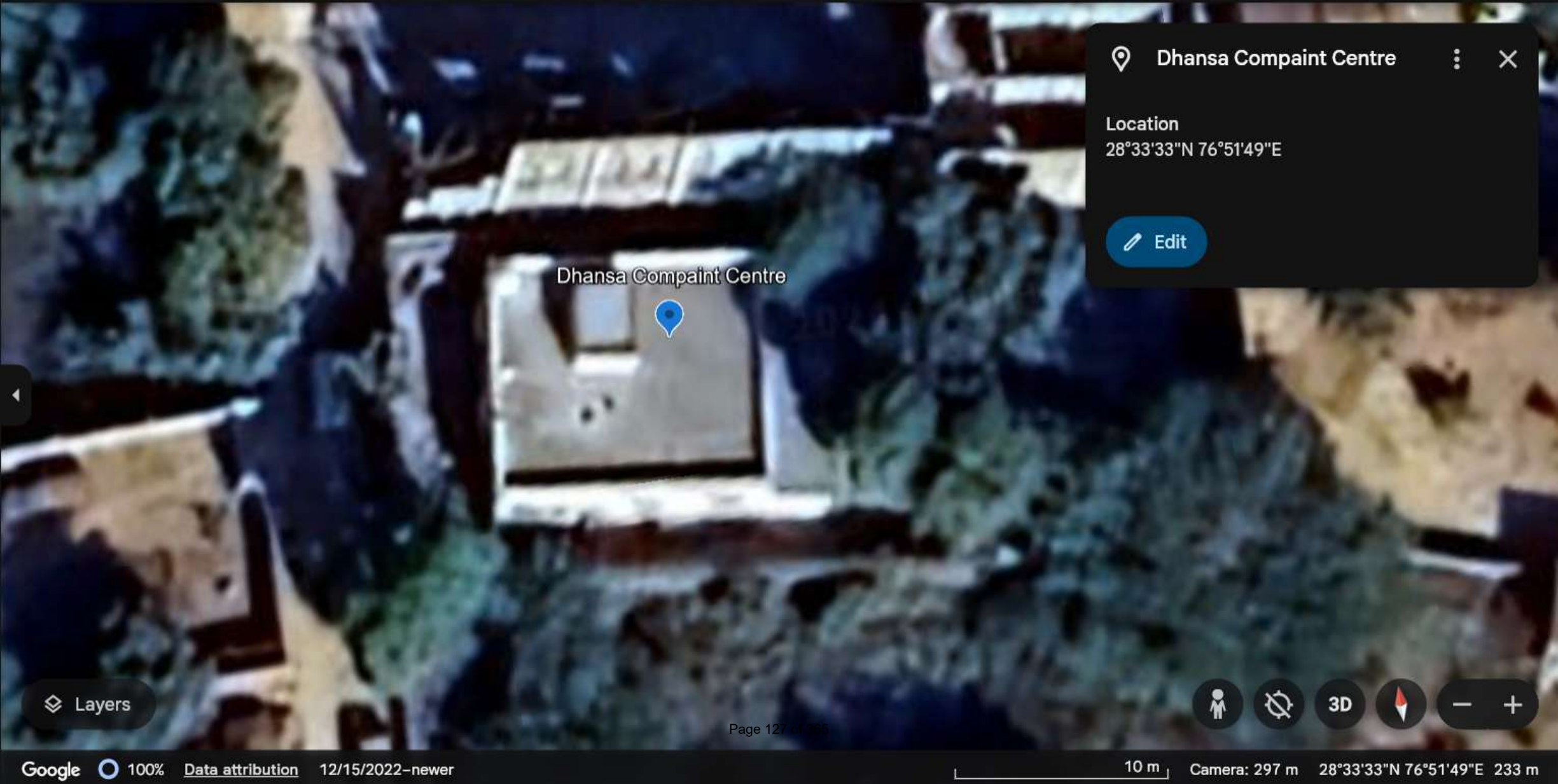


Solar Rooftop Assessment
Of
Dhansa Complaint centre

Site Name:- Dhansa Complaint Centre

❖ Some Details about Site:-

1.	No. of Floor	1 st
2.	Division	Jafarpur
3.	Concern Person	Mr. Deepak Baghel
4.	Solar Plant Capacity	14Kw
5.	Local Transformer Rating	No local transformer
6.	Local Meter no.	27227526
7.	MCB/MCCB Rating	100Amp
8.	LT Cable Size	4core/50sqmm
9.	Distance from Solar to Transformer	-----
10.	Distance from Solar to LT Panel	30-40 Meter
11.	Rooftop Coordinate	Lat:- 28.559340 Long:- 77.863865
12.	Ground Coordinate	Lat:- 28.559364 Long:- 77.863773
13.	Major Obstruction	Nothing
14.	Ground area for Solar	Not Available



 Dhansa Complaint Centre  

Location
28°33'33"N 76°51'49"E

 Edit

Dhansa Complaint Centre



 Layers



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GPS Map Camera



Delhi, Delhi, India
HV57+XR6, Issapur, Delhi, 110073, India
Lat 28.559267°
Long 76.863788°
09/08/24 04:55 PM GMT +05:30



GPS Map Camera



Delhi, Delhi, India
HV57+XR6, Issapur, Delhi, 110073, India
Lat 28.559267°
Long 76.863788°
09/08/24 04:55 PM GMT +05:30

BSES
BSES RAJASTHAN POWER LIMITED

BIJLI VITARAN SEVA KENDRA
BIJLI VITARAN SEVA KENDRA

DS&M SUB-DIVISION OFFICE - DHANSA
DS&M DIVISION - JAFFARPUR

18123 (Toll-free Call Centre)
88889 18123

Emergency (Fire & Shock)
911-49516707
88889 18123

Contact Point for 24 x 7 Support



BIJLI VITARAN SEVA KENDRA
BIJLI VITARAN SEVA KENDRA

DS&M SUB-DIVISION OFFICE - DHANSA
DS&M DIVISION - JAFFARPUR

18123 (Toll-free Call Centre)
88889 18123

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Contact Point for 24 x 7 Support

WELCOME
24x7 AT YOUR SERVICE

BIJLI VITARAN SEVA KENDRA
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DS&M SUB-DIVISION OFFICE - DHANSA
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DS&M SUB-DIVISION OFFICE - DHANSA
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18123 (Toll-free Call Centre)
88889 18123

Emergency (Fire & Shock)
911-49516707
88889 18123

Contact Point for 24 x 7 Support

LETTER BOX

3

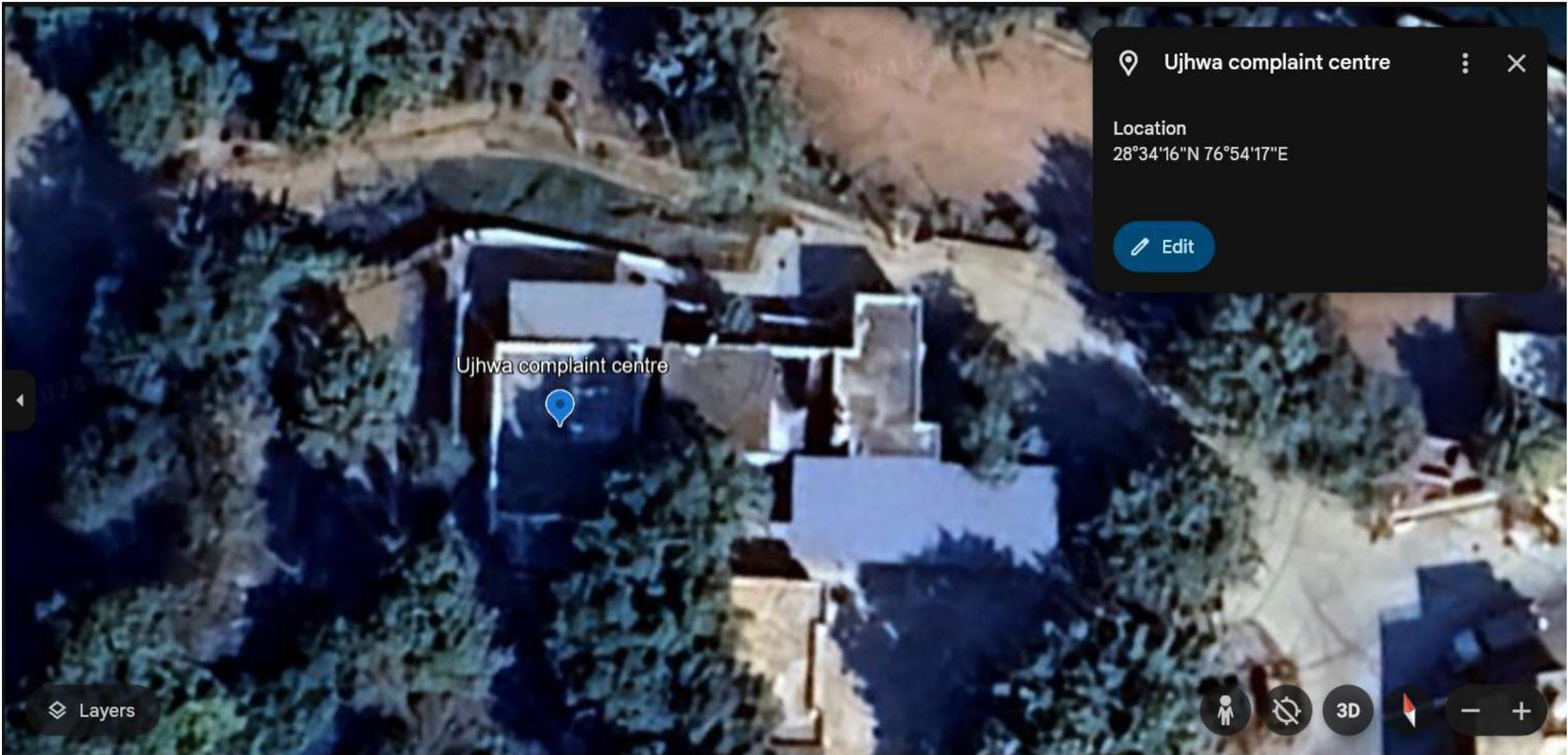


Solar Rooftop Assessment
Of
Ujhwa Complaint centre

Site Name:- Ujhwa Complaint Centre

❖ Some Details about Site:-

1.	No. of Floor	1 st
2.	Division	Jaffarpur
3.	Concern Person	Mr. Prakash Vishwakarma
4.	Solar Plant Capacity	7Kw
5.	Local Transformer Rating	No local transformer
6.	Local Meter no.	-----
7.	MCB/MCCB Rating	100Amp
8.	LT Cable Size	4core/25sqmm
9.	Distance from Solar to Transformer	-----
10.	Distance from Solar to LT Panel	30-35 Meter
11.	Rooftop Coordinate	Lat:- 28.57128 Long:- 77.90486
12.	Ground Coordinate	Lat:- 28.57140 Long:- 77.90491
13.	Major Obstruction	Trees shadow
14.	Ground area for Solar	Not Available



 Ujhwa complaint centre  

Location
28°34'16"N 76°54'17"E

 Edit







GPS Map Camera



Gurugram, Haryana, India

M3m Woodshire 2 Tower-B7, M3M WOODSHIRE-2, Gurugram, Haryana 122505, India

Lat 28.514811°

Long 76.973847°

09/08/24 03:09 PM GMT +05:30



GPS Map Camera



Delhi, Delhi, India

HV57+XR6, Issapur, Delhi, 110073, India

Lat 28.559267°

Long 76.863788°

09/08/24 04:55 PM GMT +05:30



BSES
Bijli Vitaran Seva Kendra
Dhansa Sub-Division Office - DHANSA
D&M Division - JAFFARPUR
24x7 (Toll-free Call Centre)
Emergency (Fire & Shock)
Contact Point for 24 x 7 Support

ऊर्जा बचाओ,
भविष्य बचाओ

WELCOME
24x7 AT YOUR SERVICE

LETTER BOX

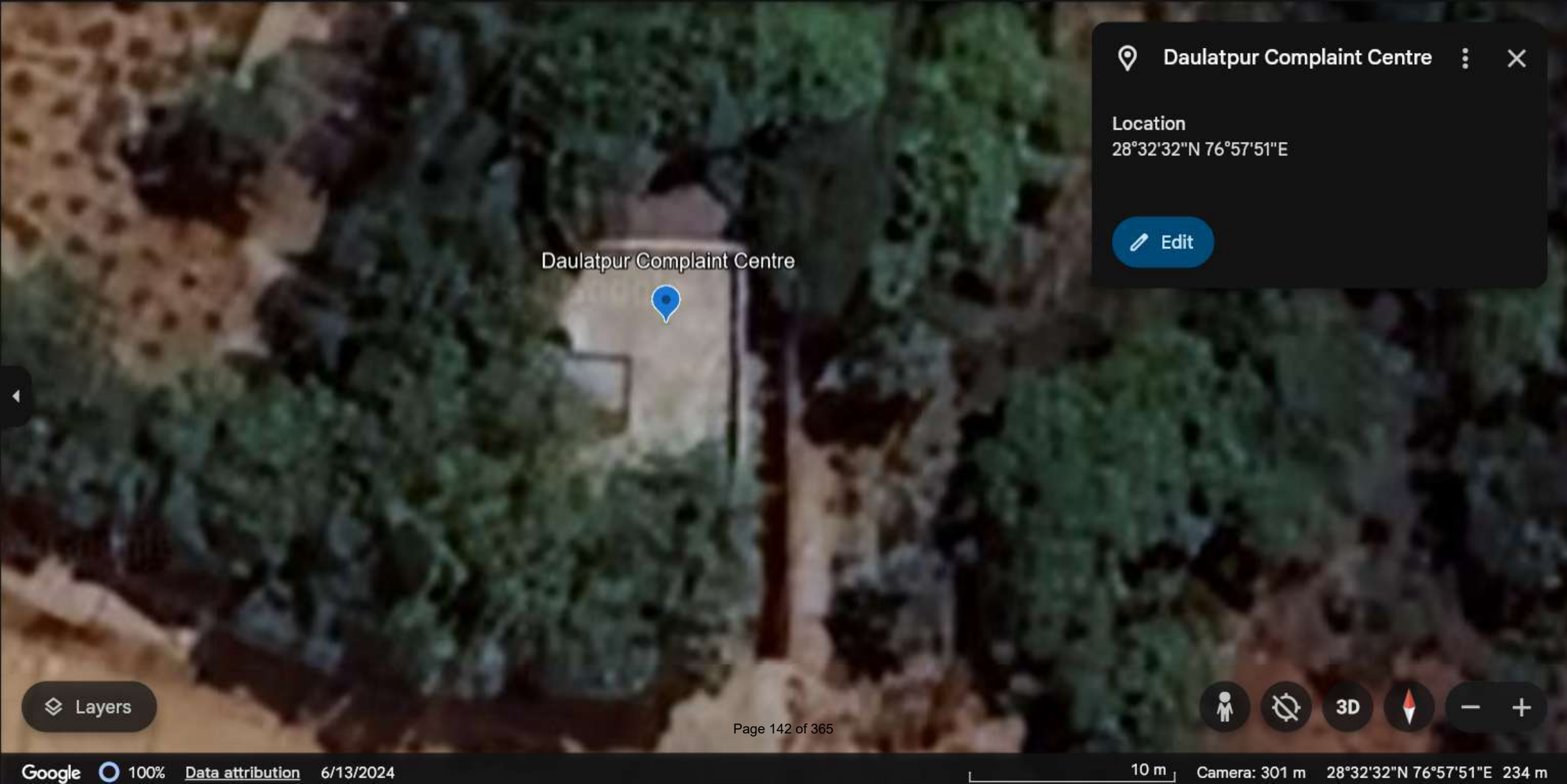


Solar Rooftop Assessment
Of
Daulatpur Complaint centre

Site Name:- Daulatpur Complaint Centre

❖ Some Details about Site:-

1.	No. of Floor	1 st
2.	Division	Najafgarh
3.	Concern Person	Mr. Charan Singh
4.	Solar Plant Capacity	6Kw
5.	Local Transformer Rating	100KVA
6.	Local Meter no.	41205858
7.	MCB/MCCB Rating	63Amp
8.	LT Cable Size	2core/25sqmm
9.	Distance from Solar to Transformer	50-60 Meter
10.	Distance from Solar to LT Panel	30-35 Meter
11.	Rooftop Coordinate	Lat:- 28.514811 Long:- 77.973847
12.	Ground Coordinate	Lat:- 28.54212 Long:- 77.96422
13.	Major Obstruction	Shadow is on the almost entire area of the roof: because of the trees.
14.	Ground area for Solar	Not Available



Daulatpur Complaint Centre



Daulatpur Complaint Centre



Location

28°32'32"N 76°57'51"E



Edit



Layers



3D









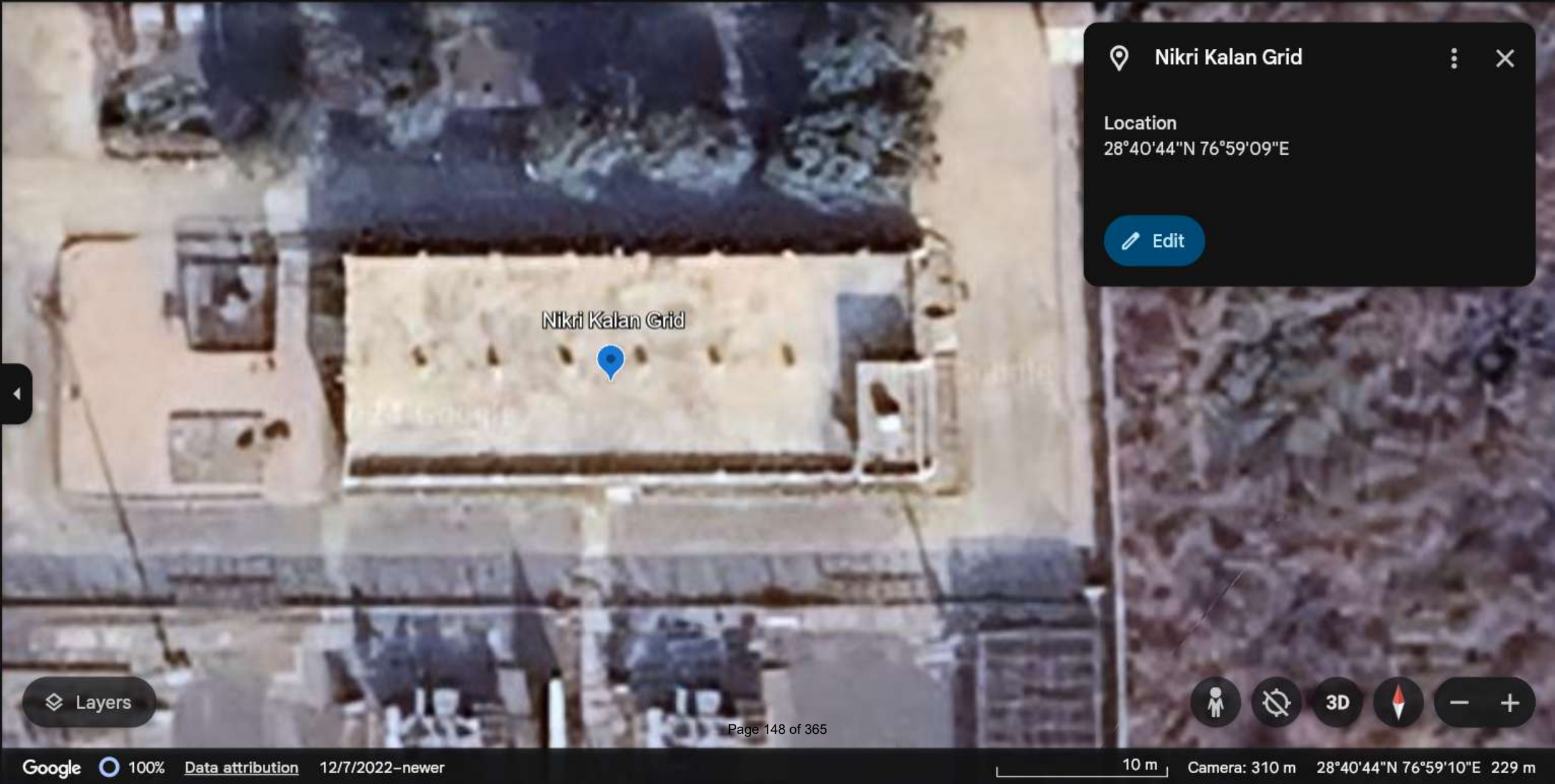


Solar Rooftop Assessment
Of
Nikri Kalan Grid

Site Name:- Nikri Kalan Grid

❖ Some Details about Site:-

1.	No. of Floor	1 st
2.	Division	Mundika
3.	Concern Person	Mr. Om Prakash
4.	Solar Plant Capacity	50 Kw
5.	Local Transformer Rating	400 KVA
6.	Local Meter no.	Unsafe
7.	MCB/MCCB Rating	630 Amp
8.	LT Cable Size	4core/150sqmm
9.	Distance from Solar to Transformer	60-70 Meter
10.	Distance from Solar to LT Panel	60-70 Meter
11.	Rooftop Coordinate	Lat:- 28.679032 Long:- 76.769859
12.	Ground Coordinate	Lat:- 28.6787801 Long:- 76.9860117
13.	Major Obstruction	Nothing



Nikri Kalan Grid



Location

28°40'44"N 76°59'09"E



Edit

Nikri Kalan Grid



Layers



3D



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100%

[Data attribution](#)

12/7/2022—newer

10 m

Camera: 310 m

28°40'44"N 76°59'10"E 229 m





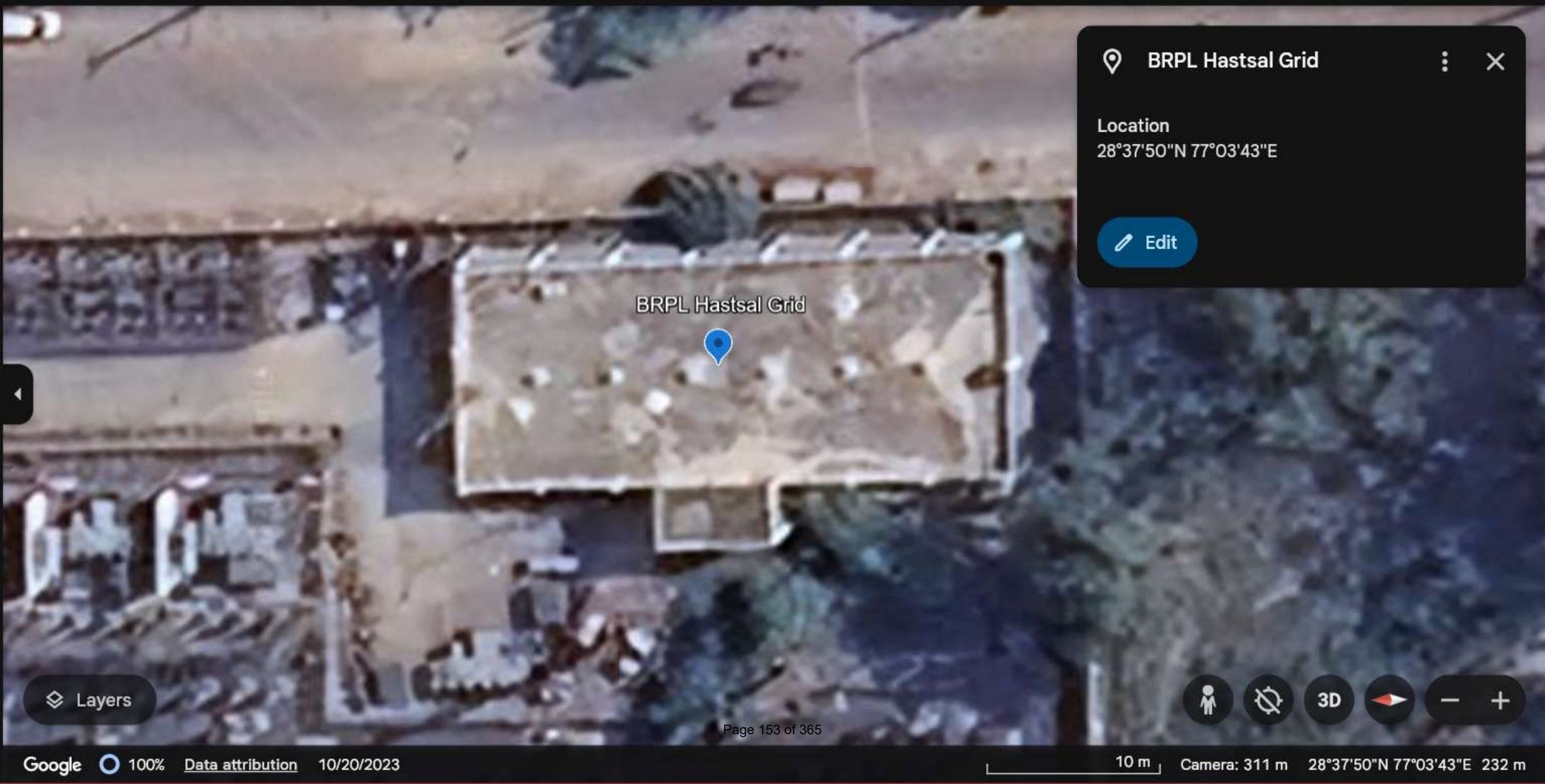


Solar Rooftop Assessment Of Hastsal Grid

Site Name:- Hastal Grid

❖ Some Details about Site:-

1.	No. of Floor	1 st
2.	Division	Hastal Grid
3.	Concern Person	Mr. Sandeep
4.	Solar Plant Capacity	25 Kw
5.	Local Transformer Rating	400 KVA
6.	Local Meter no.	29553036
7.	MCB/MCCB Rating	630 Amp
8.	LT Cable Size	4core/150sqmm
9.	Distance from Solar to Transformer	50-60 Meter
10.	Distance from Solar to LT Panel	60-70 Meter
11.	Rooftop Coordinate	Lat:- 28.630892 Long:- 77.062255
12.	Ground Coordinate	Lat:- 28.6307701 Long:- 77.0619571
13.	Major Obstruction	Nothing
	S	



BRPL Hastal Grid



Location

28°37'50"N 77°03'43"E



Edit

BRPL Hastal Grid



Layers



3D



Page 153 of 365

10 m

Camera: 311 m

28°37'50"N 77°03'43"E 232 m

Google



100%

[Data attribution](#)

10/20/2023











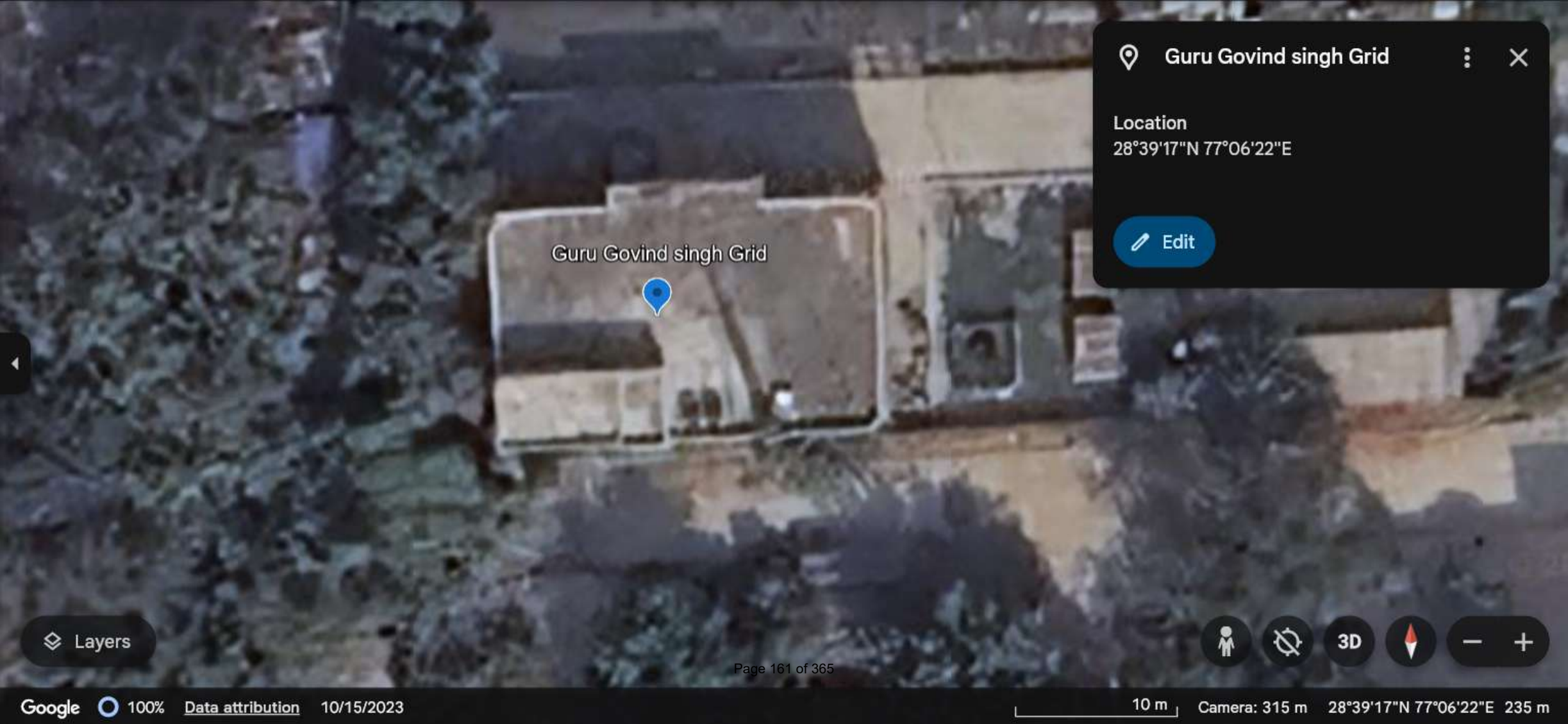


Solar Rooftop Assessment
Of
Guru Govind Singh grid

Site Name:- Guru Govind Singh Grid

❖ Some Details about Site:-

1.	No. of Floor	2 nd
2.	Division	Tagore Garden
3.	Concern Person	Mr. Sandeep Kumar
4.	Solar Plant Capacity	31 Kw
5.	Local Transformer Rating	400 KVA
6.	Local Meter no.	29553007
7.	MCB/MCCB Rating	200 Amp
8.	LT Cable Size	4core/95sqmm
9.	Distance from Solar to Transformer	60-70 Meter
10.	Distance from Solar to LT Panel	60-70 Meter
11.	Rooftop Coordinate	Lat:- 28.654923 Long:- 77.105907
12.	Ground Coordinate	Lat:- 28.6548763 Long:- 77.1065981
13.	Major Obstruction	Nothing



Guru Govind singh Grid



Guru Govind singh Grid



Location

28°39'17"N 77°06'22"E



Edit



Layers



Page 161 of 365

Google



100%

[Data attribution](#)

10/15/2023

10 m

Camera: 315 m

28°39'17"N 77°06'22"E 235 m





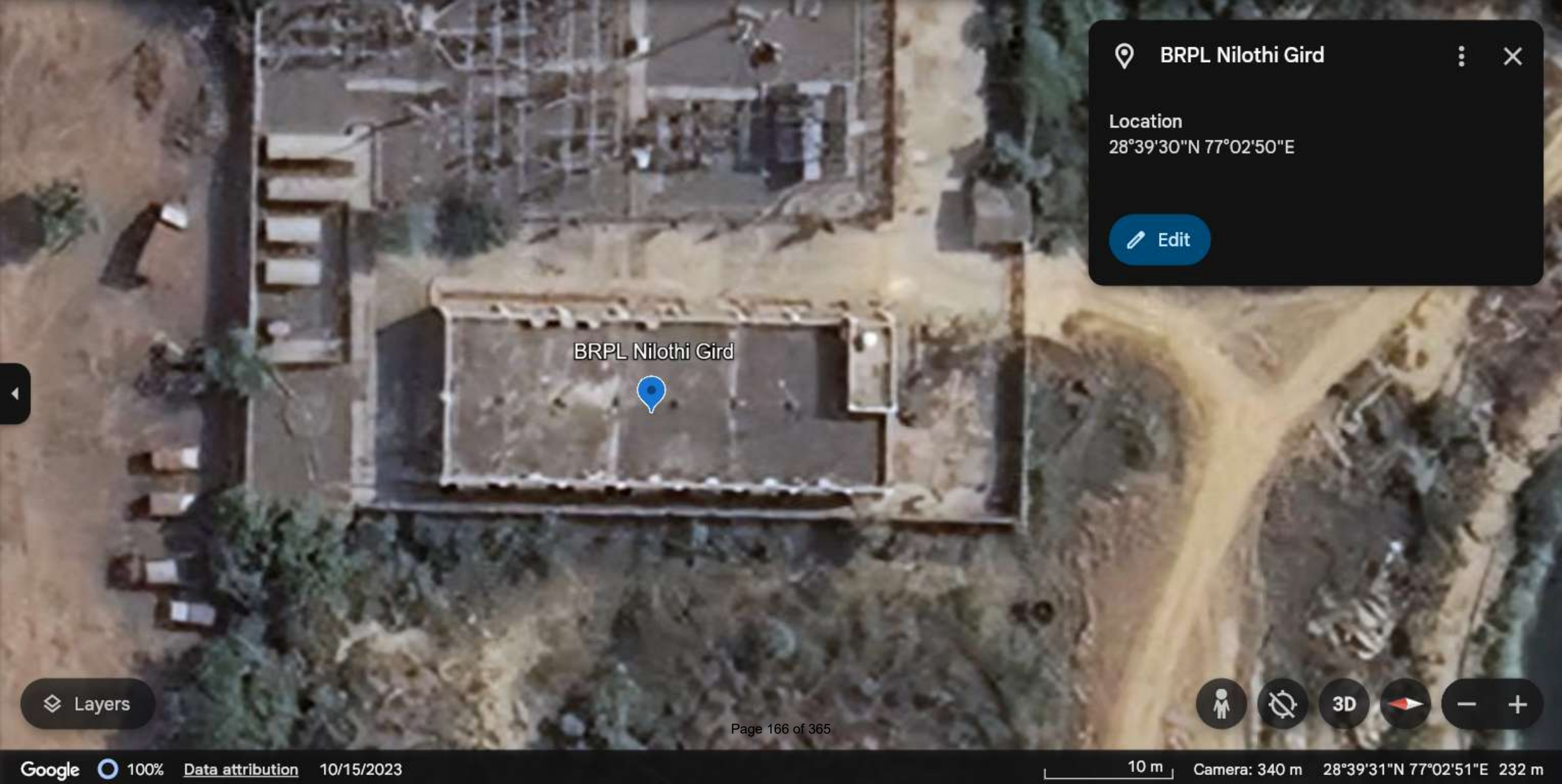


Solar Rooftop Assessment Of Nilothi Grid

Site Name:- Nilothi Grid

❖ Some Details about Site:-

1.	No. of Floor	1 st
2.	Division	-----
3.	Concern Person	Mr. Sardar ji
4.	Solar Plant Capacity	46 Kw
5.	Local Transformer Rating	400 KVA
6.	Local Meter no.	27511425
7.	MCB/MCCB Rating	630 Amp
8.	LT Cable Size	Unsafe
9.	Distance from Solar to Transformer	65-75 Meter
10.	Distance from Solar to LT Panel	50-60 Meter
11.	Rooftop Coordinate	Lat:- 28.5114811 Long:- 76.973847
12.	Ground Coordinate	Lat:- 28.658582 Long:- 77.047789
13.	Major Obstruction	Nothing



BRPL Nilothe Gird



Location

28°39'30"N 77°02'50"E



Edit

BRPL Nilothe Gird



Layers



3D



Page 166 of 365

10 m

Camera: 340 m

28°39'31"N 77°02'51"E 232 m

Google



100%

[Data attribution](#)

10/15/2023









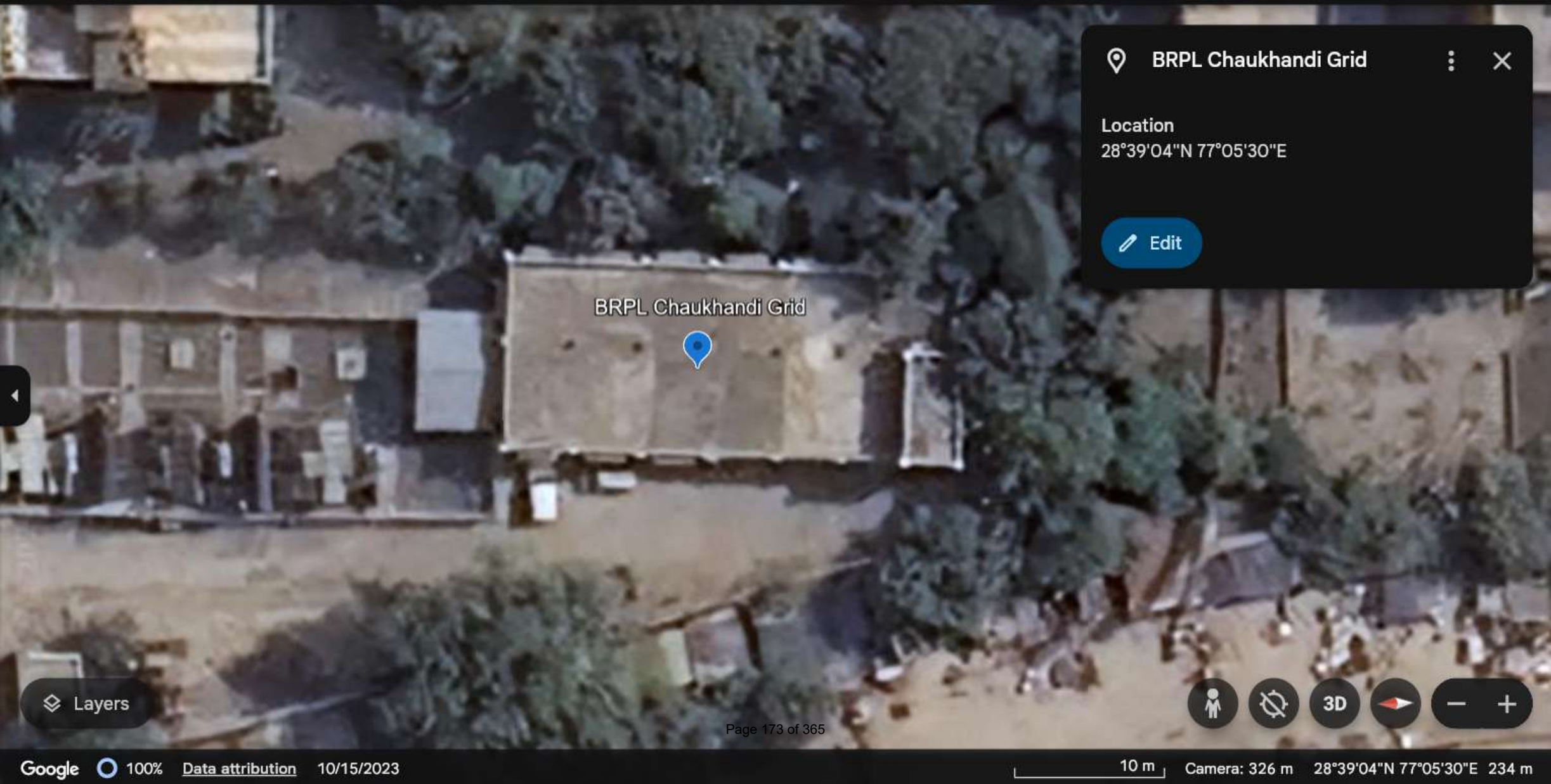


Solar Rooftop Assessment
of
33kv Station Chaukhandi
Grid

Site Name – 33kv Station Chaukhandi Grid

❖ **Some Details about Site**

1.	No. of Floor	1
2.	Division	Tagore Garden
3.	Concern Person	Mr. Devender
4.	Solar Plant Capacity	36 Kw
5.	Transformer Rating	Unsafe (Because of Rain)
6.	MCB/MCCB Rating	MCCB – 630 Amp
7.	Local Meter No.	Locked
8.	LT Cabel Size	4core/95sqmm
9.	Distance from Solar to Transformer	140-150 Meter
10.	Distance from Solar to LT Panel	50-60 Meter
11.	Rooftop Coordinates	Latitude :- 28.651604 Longitude :- 77.09152
12.	Ground Coordinates	Latitude :- 28.6515290 Longitude :- 77.0917018
13.	Major Obstruction	Nothing



BRPL Chaukhandi Grid



Location

28°39'04"N 77°05'30"E



Edit

BRPL Chaukhandi Grid



Layers



Page 173 of 365

Google



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[Data attribution](#)

10/15/2023

10 m

Camera: 326 m

28°39'04"N 77°05'30"E

234 m







Solar Rooftop Assessment
Of
G-1 66KVA Dwarka Grid

Site Name:- G-1 66KVA Dwarka Grid

❖ Some Details about Site:-

1.	No. of Floor	2 nd /3 rd
2.	Division	Dwarka
3.	Concern Person	Mr. Devraj
4.	Solar Plant Capacity	70 Kw
5.	Local Transformer Rating	400 KVA
6.	Local Meter no.	Locked
7.	MCB/MCCB Rating	Locked
8.	LT Cable Size	4core/150sqmm
9.	Distance from Solar to Transformer	70-80 Meter
10.	Distance from Solar to LT Panel	50-60 Meter
11.	Rooftop Coordinate	Lat:- 28.603342 Long:- 77.033238
12.	Ground Coordinate	Lat:- 28.604702 Long:- 77.033574
13.	Major Obstruction	Nothing



Add placemark



Click on the map to drop the placemark

Location

28°36'15"N 77°01'59"E

BRPL Dwarka-14
66kV Grid
बीआरपीएल द्वारका-14
66केवी ग्रीड

BSES Substation
बीएसईएस सबस्टेशन



Layers

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3D















Solar Rooftop Assessment
Of
G-4 Dwarka Grid

Site Name:- G-4 Dwarka Grid

❖ Some Details about Site:-

1.	No. of Floor	1 st
2.	Division	Dwarka
3.	Concern Person	Mr. Narendra Kumar
4.	Solar Plant Capacity	100 Kw
5.	Local Transformer Rating	400 KVA
6.	Local Meter no.	29551951
7.	MCB/MCCB Rating	MCCB – 630Amp
8.	LT Cable Size	4core/150sqmm
9.	Distance from Solar to Transformer	70-75 Meter
10.	Distance from Solar to LT Panel	50-60 Meter
11.	Rooftop Coordinate	Lat:- 28.583556 Long:- 77.036117
12.	Ground Coordinate	Lat:- 28.582688 Long:- 77.035610
13.	Major Obstruction	Nothing

Search

DDA Park sector
16D dwarka
DDA पार्क सेक्टर
16D द्वारका



G4 PAPANKALAN
GRID
ग4 पपंकलन ग्रीड



Street View

R-10

Sector 16D Dwarka, Dw...

28.582446, 77.035764

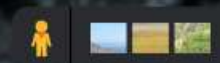


Transit

Click on stations for more information

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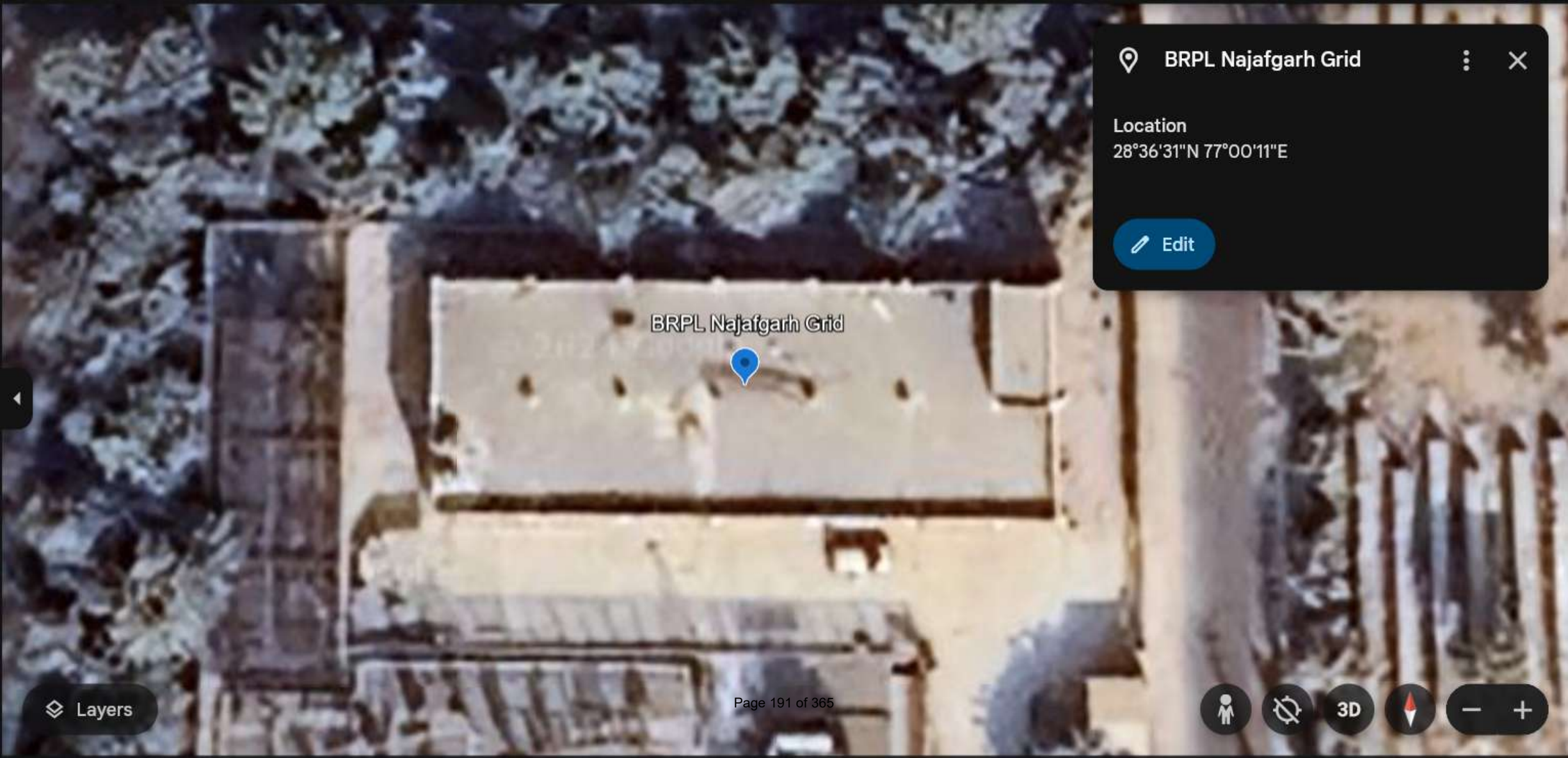


Solar Rooftop Assessment
of
Delhi Jal Board Nazafgarh
Grid

Site Name – Delhi Jal Board Nazafgarh

❖ **Some Details about Site**

1.	No. of Floor	1
2.	Division	Nazafgarh
3.	Concern Person	Mr. Narender
4.	Solar Plant Capacity	48 Kw
5.	Transformer Rating	400 Kva
6.	MCB/MCCB Rating	MCCB – 630 Amp
7.	Local Meter No.	Locked
8.	LT Cabel Size	4core/150sqmm
9.	Distance from Solar to Transformer	80-90 Meter
10.	Distance from Solar to LT Panel	60-70 Meter
11.	Rooftop Coordinates	Latitude :- 28.609782 Longitude :- 77.005585
12.	Ground Coordinates	Latitude :- 28.608610 Longitude :- 77.003294
13.	Major Obstruction	Nothing



BRPL Najafgarh Grid



Location

28°36'31"N 77°00'11"E



Edit

BRPL Najafgarh Grid



Layers

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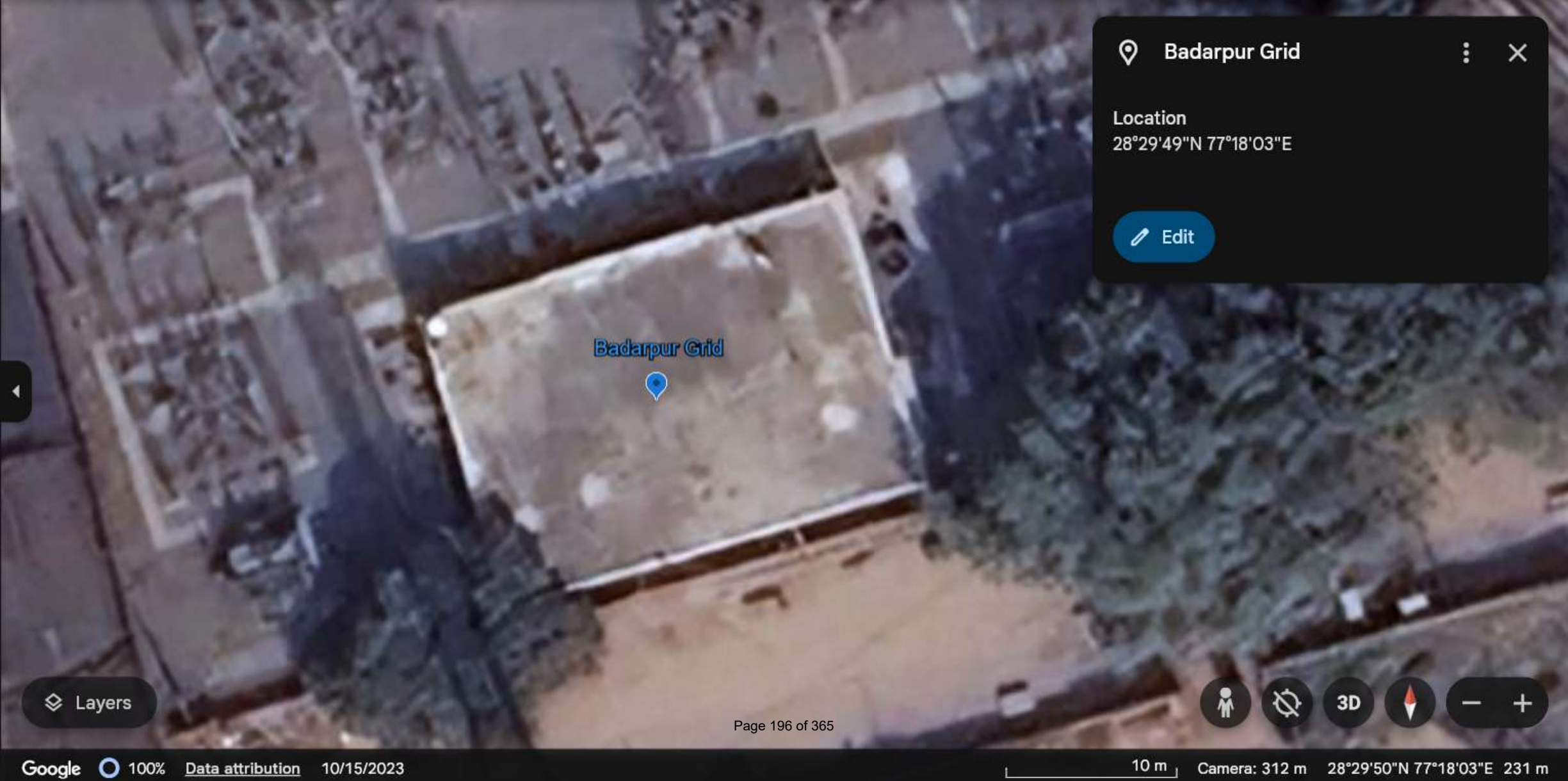


Solar Rooftop Assessment Of Badarpur Grid

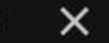
Site Name:- Badarpur Grid

❖ Some Details about Site:-

1.	No. of Floor	1 st
2.	Division	-----
3.	Concern Person	Mr. Fazle Imam
4.	Solar Plant Capacity	45 Kw
5.	Local Transformer Rating	Not Safe to Check
6.	Local Meter no.	Locked
7.	MCB/MCCB Rating	Locked
8.	LT Cable Size	Not Found
9.	Distance from Solar to Transformer	70-78 Meter
10.	Distance from Solar to LT Panel	50-60 Meter
11.	Rooftop Coordinate	Lat:- 28.498129 Long:- 77.301389
12.	Ground Coordinate	Lat:- 28.497288 Long:- 77.300911
13.	Major Obstruction	Nothing



📍 Badarpur Grid



Location

28°29'49"N 77°18'03"E

Edit

Layers

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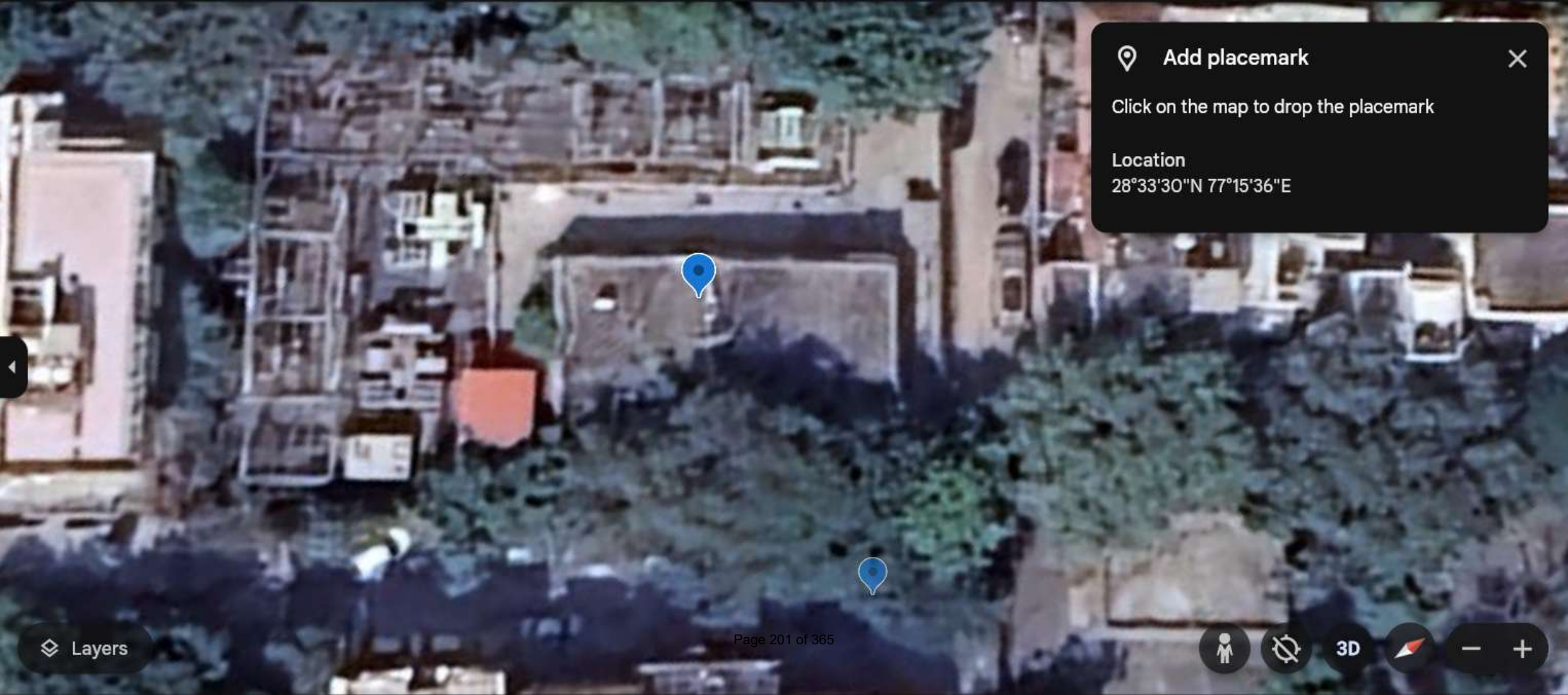


Solar Rooftop Assessment
Of
33KV East Kailash

Site Name:- 33KV East Kailash

❖ Some Details about Site:-

1.	No. of Floor	1 st
2.	Division	-----
3.	Concern Person	Mr. Satish Kumar (Civil)
4.	Solar Plant Capacity	22 Kw
5.	Local Transformer Rating	-----
6.	Local Meter no.	-----
7.	MCB/MCCB Rating	-----
8.	LT Cable Size	-----
9.	Distance from Solar to Transformer	70-80 Meter
10.	Distance from Solar to LT Panel	50-60 Meter
11.	Rooftop Coordinate	Lat:- 28.558479 Long:- 77.259834
12.	Ground Coordinate	Lat:- 28.558549 Long:- 77.259804
13.	Major Obstruction	Trees shadow, Unutilized Towers



Add placemark



Click on the map to drop the placemark

Location

28°33'30"N 77°15'36"E



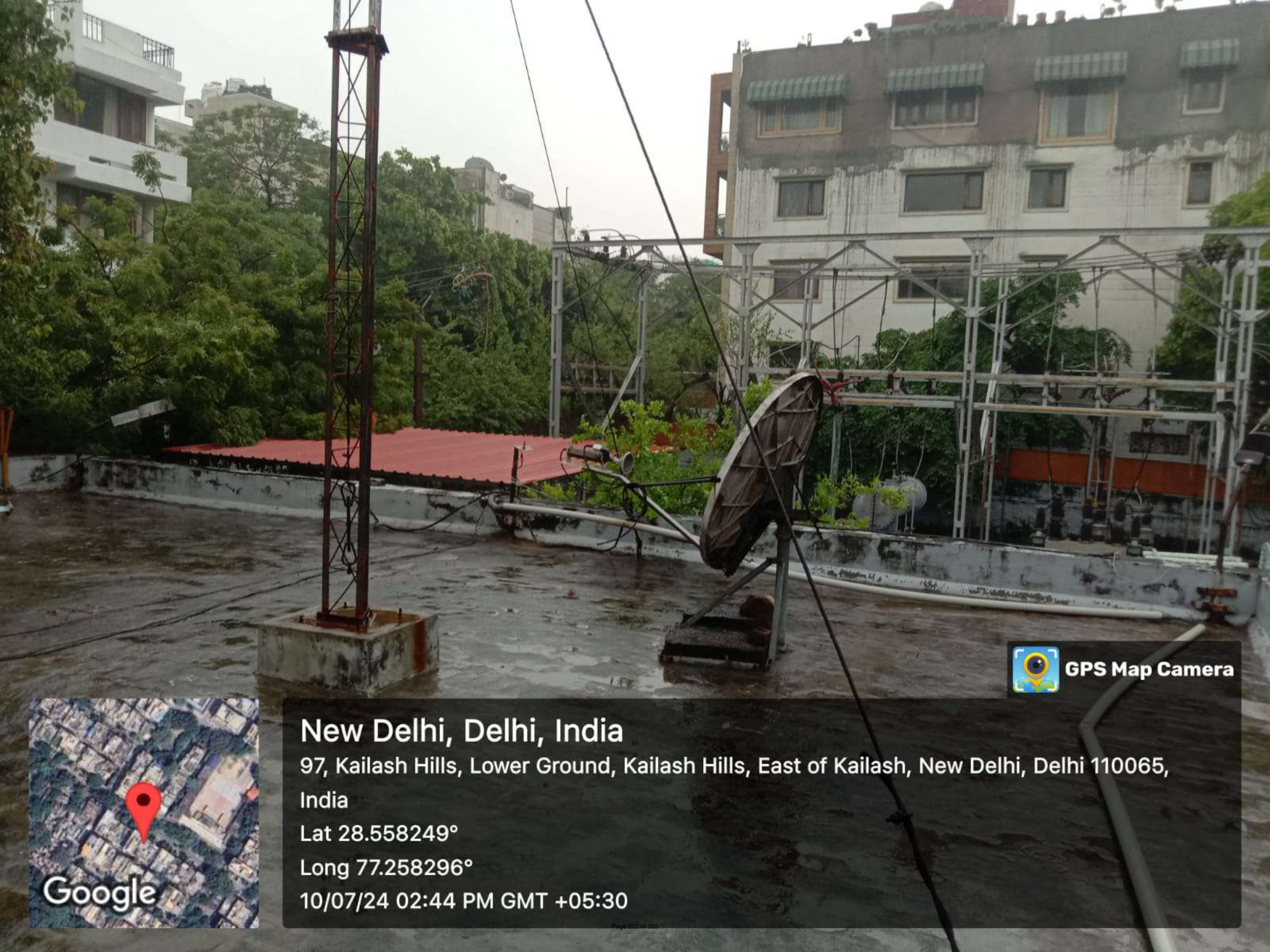
Layers

Page 201 of 365

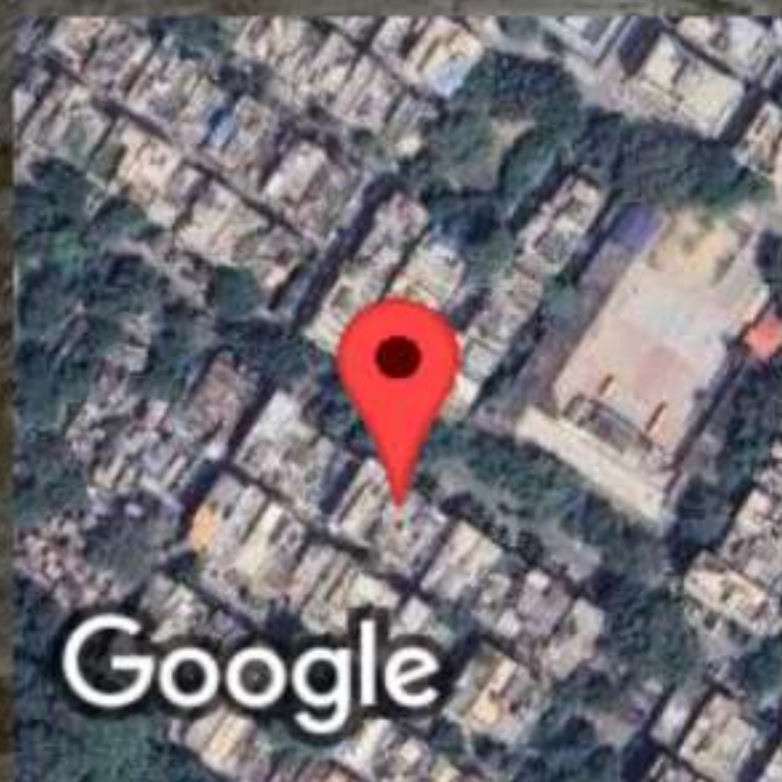


3D





GPS Map Camera



New Delhi, Delhi, India

97, Kailash Hills, Lower Ground, Kailash Hills, East of Kailash, New Delhi, Delhi 110065, India

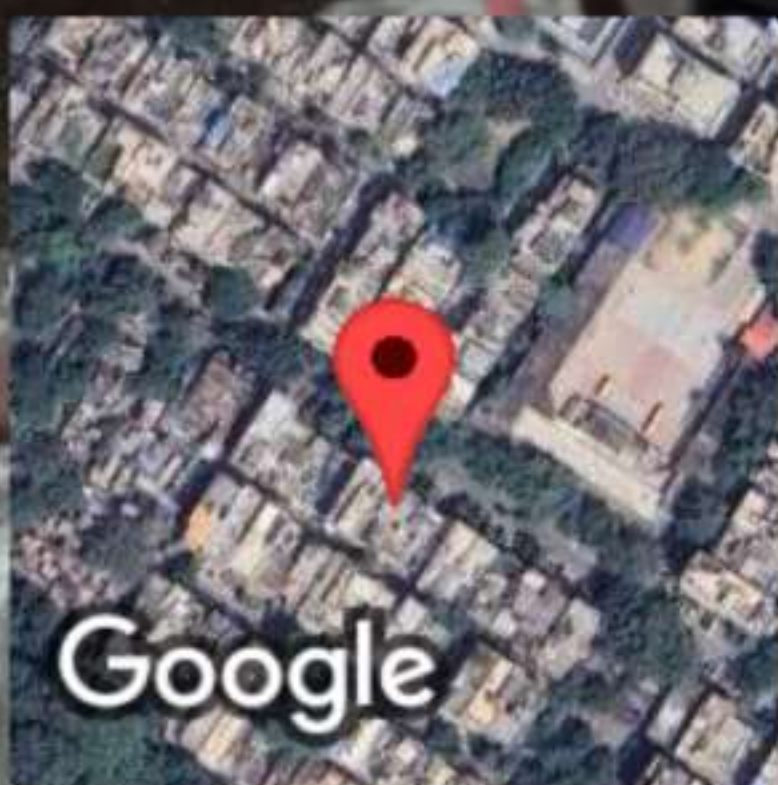
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Long 77.258296°

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GPS Map Camera



New Delhi, Delhi, India

97, Kailash Hills, Lower Ground, Kailash Hills, East of Kailash, New Delhi, Delhi 110065, India

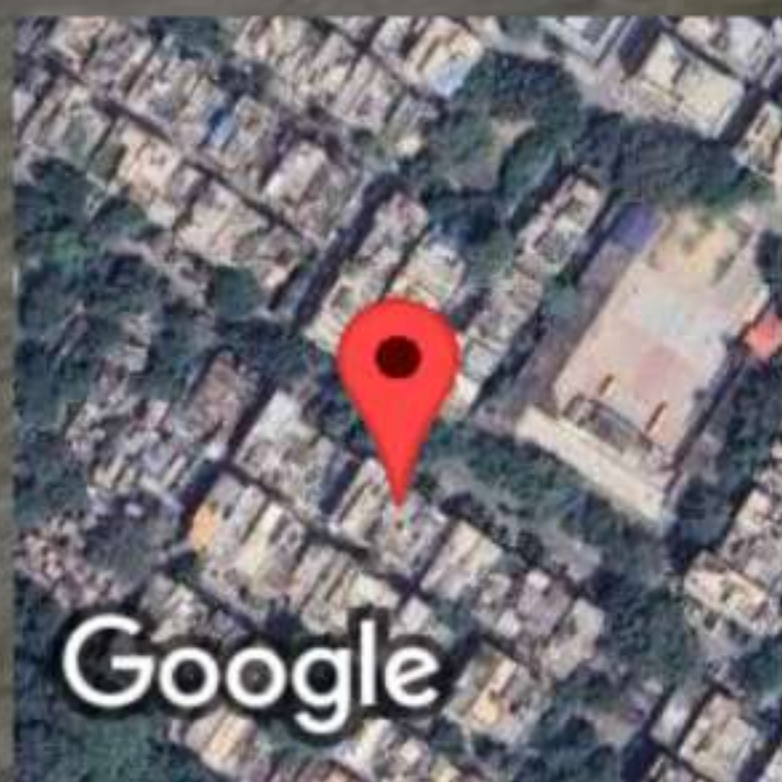
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GPS Map Camera



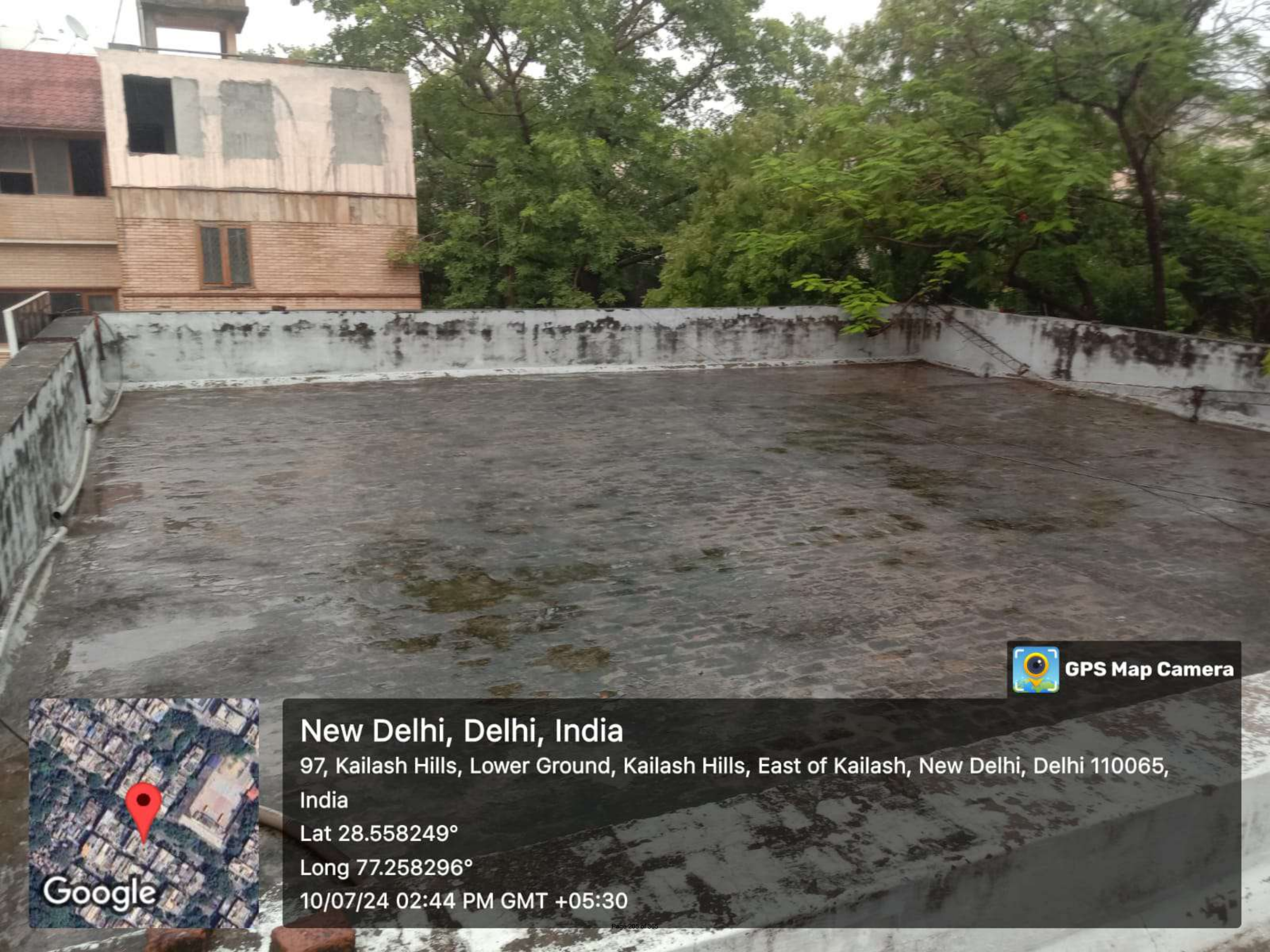
New Delhi, Delhi, India

97, Kailash Hills, Lower Ground, Kailash Hills, East of Kailash, New Delhi, Delhi 110065, India

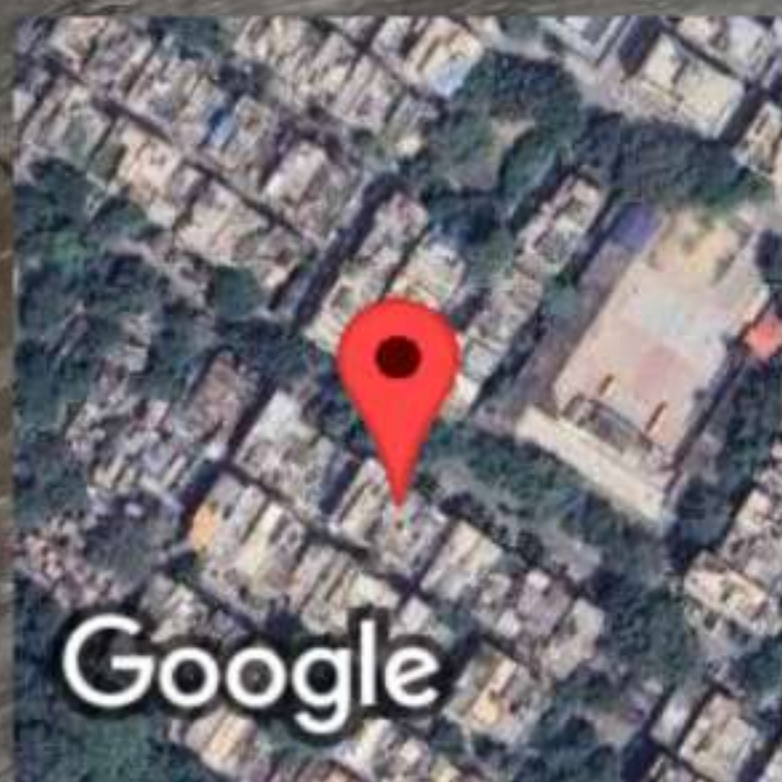
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GPS Map Camera



New Delhi, Delhi, India

97, Kailash Hills, Lower Ground, Kailash Hills, East of Kailash, New Delhi, Delhi 110065, India

Lat 28.558249°

Long 77.258296°

10/07/24 02:44 PM GMT +05:30

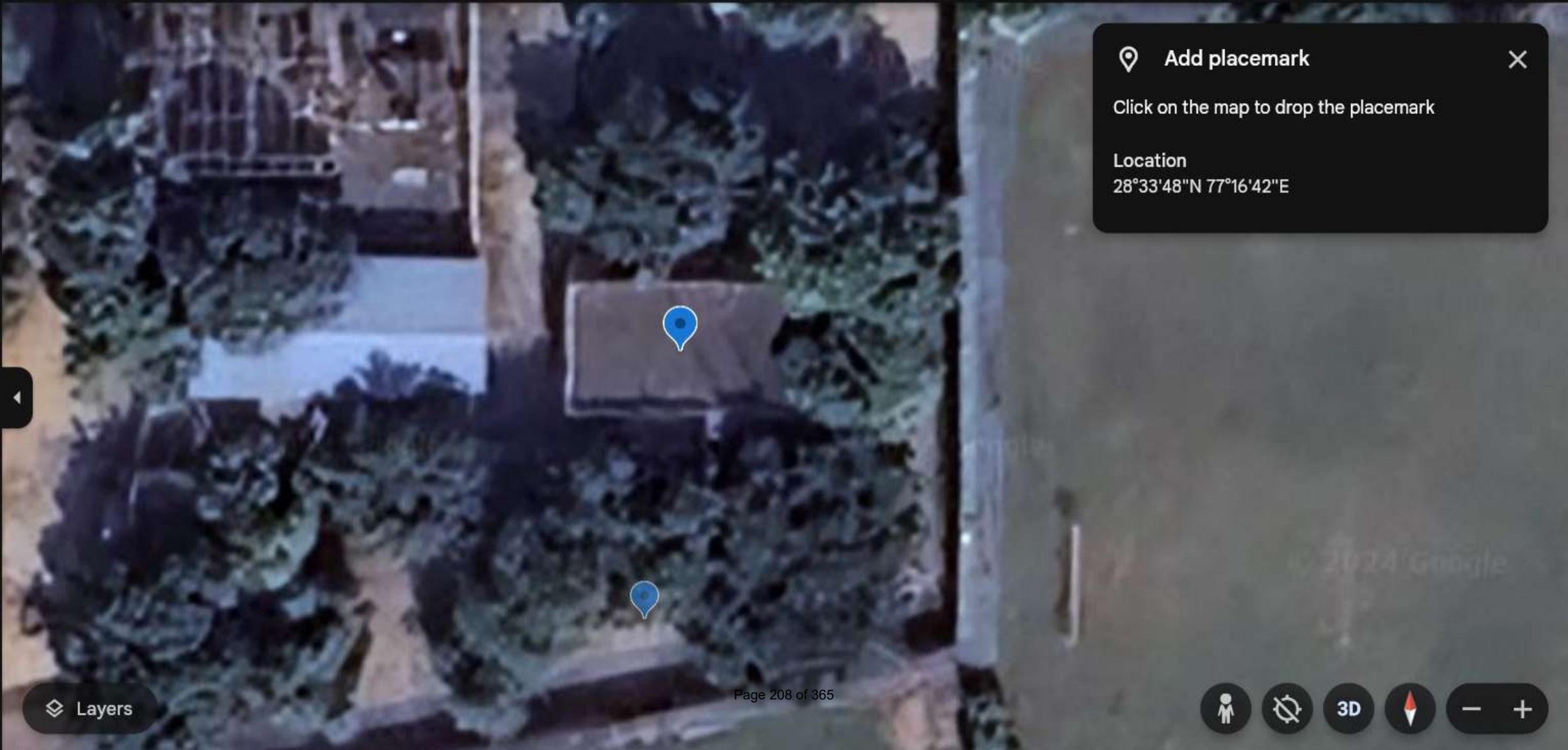


Solar Rooftop Assessment
Of
33Kv Grid Station Jamia

Site Name:- 33Kv Grid Station Jamia

❖ Some Details about Site:-

1.	No. of Floor	1
2.	Division	New Friends Colony
3.	Concern Person	Mr. Satish Kumar
4.	Solar Plant Capacity	16 Kw
5.	Local Transformer Rating	100 KVA
6.	Local Meter no.	Locked
7.	MCB/MCCB Rating	Locked
8.	LT Cable Size	Unsafe
9.	Distance from Solar to Transformer	20-30 Meter
10.	Distance from Solar to LT Panel	40-50 Meter
11.	Rooftop Coordinate	Lat:- 28.56371 Long:- 77.27841
12.	Ground Coordinate	Lat:- 28.56377 Long:- 77.27841
13.	Major Obstruction	Trees in South-East Direction



Add placemark



Click on the map to drop the placemark

Location

28°33'48"N 77°16'42"E



Layers









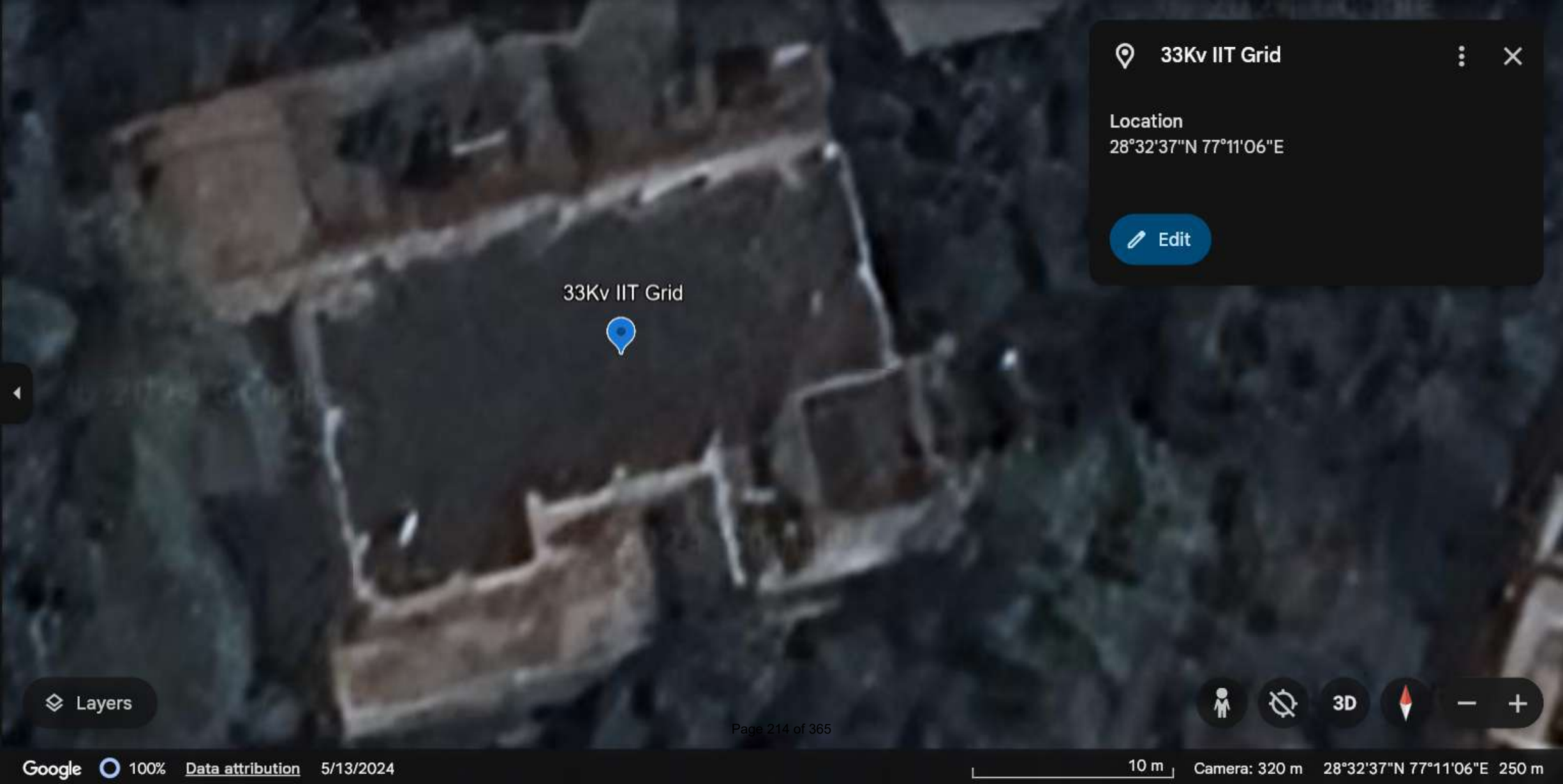


Solar Rooftop Assessment
Of
33KV IIT Grid

Site Name:- 33KV IIT Grid

❖ Some Details about Site:-

1.	No. of Floor	2 nd
2.	Division	Hauz Khas
3.	Concern Person	-----
4.	Solar Plant Capacity	40 Kw
5.	Local Transformer Rating	100 KVA
6.	Local Meter no.	29553349
7.	MCB/MCCB Rating	LT Panel not found
8.	LT Cable Size	LT Panel not found
9.	Distance from Solar to Transformer	70-80 Meter
10.	Distance from Solar to LT Panel	LT Panel not found
11.	Rooftop Coordinate	Lat:- 28.54391 Long:- 77.185224
12.	Ground Coordinate	Lat:- 28.543958 Long:- 77.185249
13.	Major Obstruction	Nothing
14.	Ground area for Solar	Not Available



33Kv IIT Grid



Location

28°32'37"N 77°11'06"E



Edit

33Kv IIT Grid



Layers



3D



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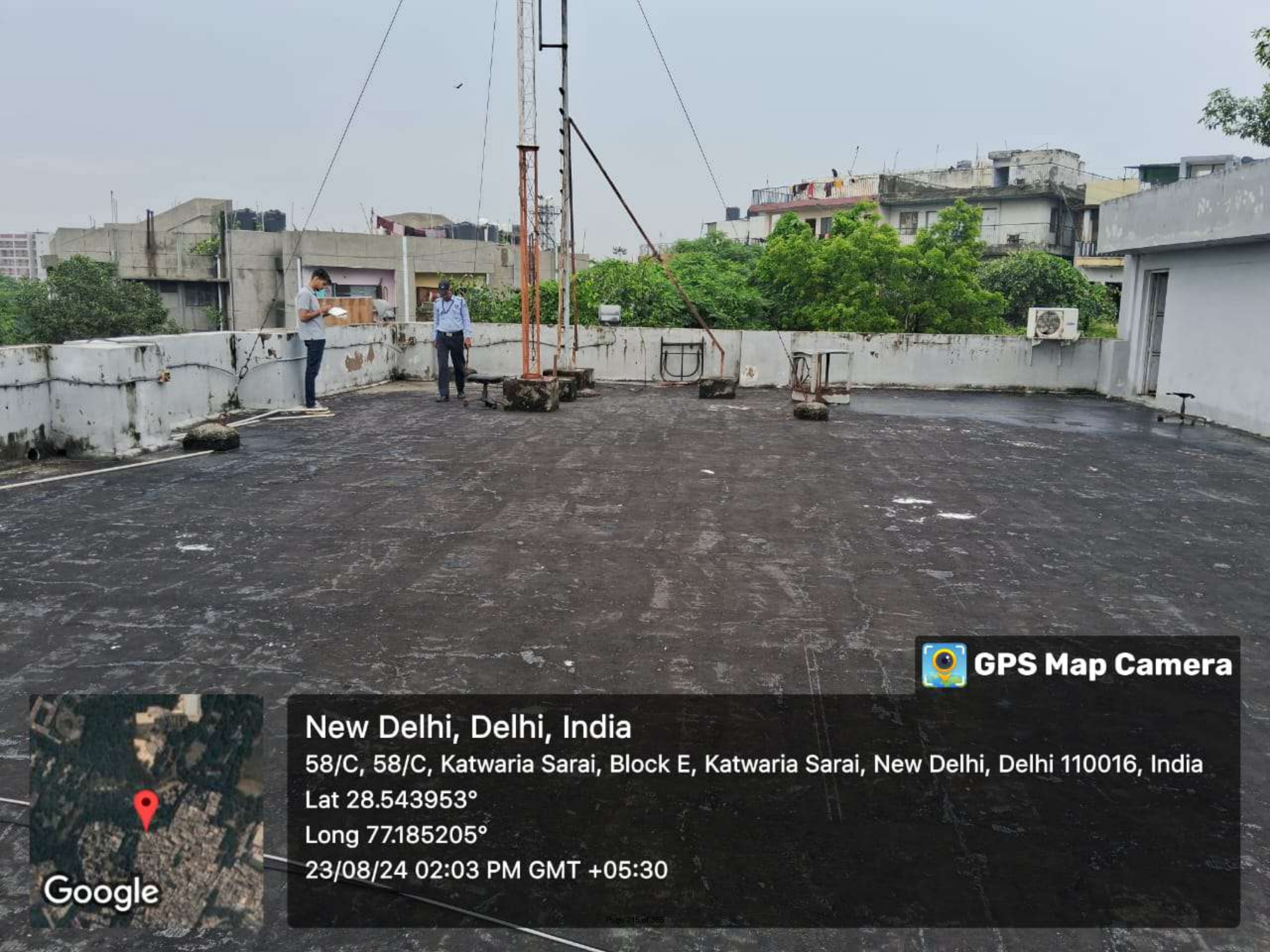
[Data attribution](#)

5/13/2024

10 m

Camera: 320 m

28°32'37"N 77°11'06"E 250 m



GPS Map Camera

New Delhi, Delhi, India

58/C, 58/C, Katwaria Sarai, Block E, Katwaria Sarai, New Delhi, Delhi 110016, India

Lat 28.543953°

Long 77.185205°

23/08/24 02:03 PM GMT +05:30





GPS Map Camera

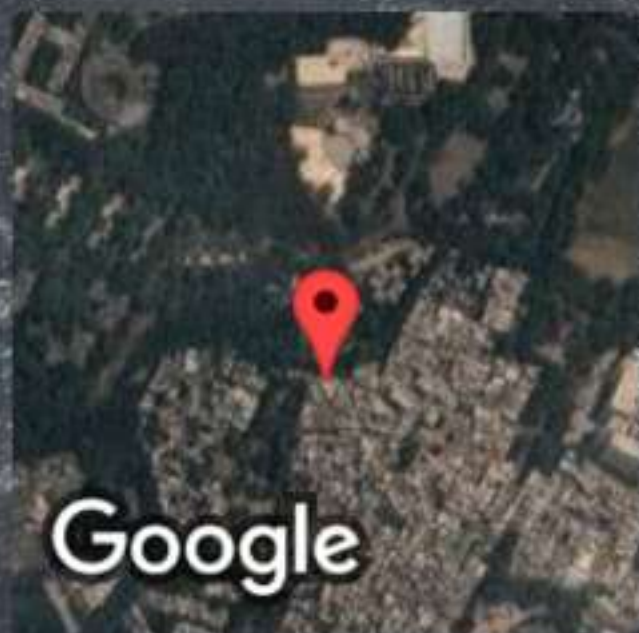
New Delhi, Delhi, India

58/C, 58/C, Katwaria Sarai, Block E, Katwaria Sarai, New Delhi, Delhi 110016, India

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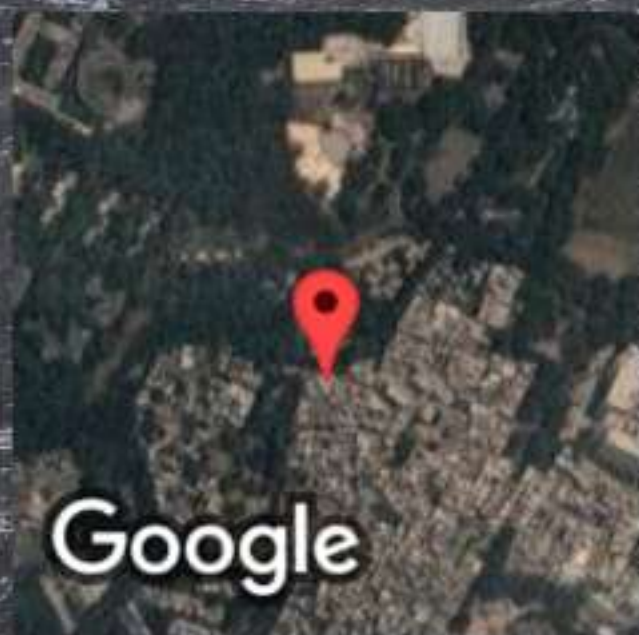
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GPS Map Camera



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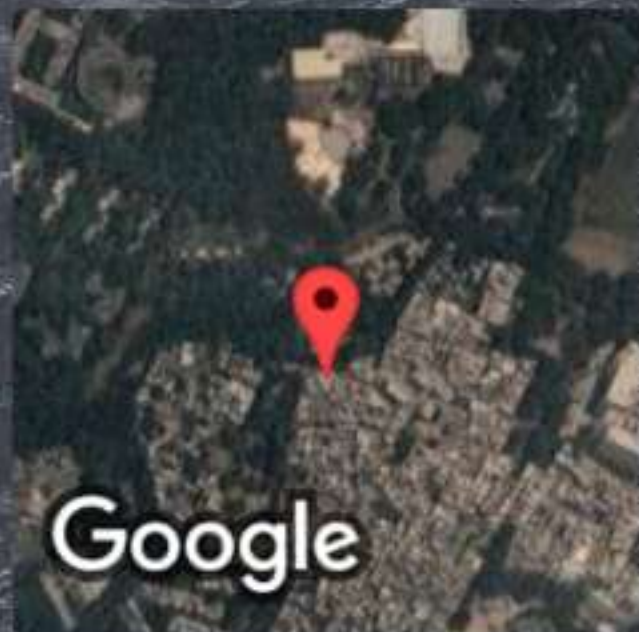
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GPS Map Camera



New Delhi, Delhi, India

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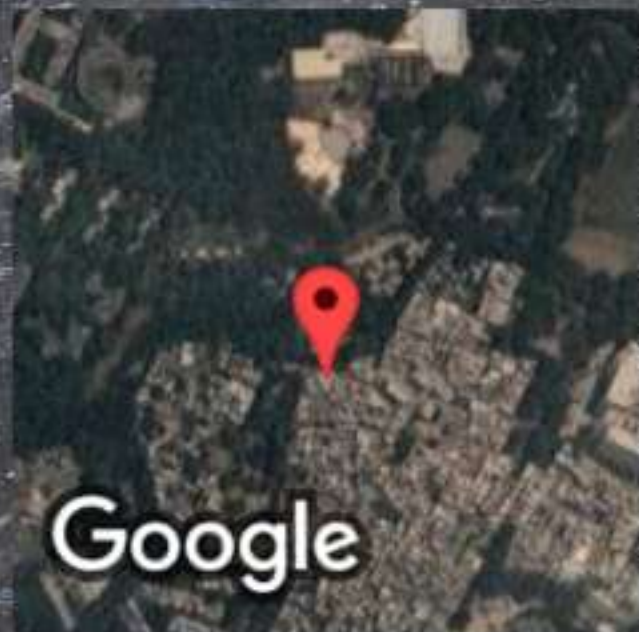
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New Delhi, Delhi, India

58/C, 58/C, Katwaria Sarai, Block E, Katwaria Sarai, New Delhi, Delhi 110016, India

Lat 28.543887°

Long 77.185253°

23/08/24 02:03 PM GMT +05:30



Solar Rooftop Assessment
Of
R.K Puram-II

Site Name:- R.K Puram-II

❖ Some Details about Site:-

1.	No. of Floor	1 st
2.	Division	Hauz Khas
3.	Concern Person	Mr. Arun
4.	Solar Plant Capacity	60Kw
5.	Local Transformer Rating	100KVA
6.	Local Meter no.	Locked
7.	MCB/MCCB Rating	250Amp
8.	LT Cable Size	4core/150sqmm
9.	Distance from Solar to Transformer	50-60 Meter
10.	Distance from Solar to LT Panel	60-70 Meter
11.	Rooftop Coordinate	Lat:- 28.567969 Long:- 77.181309
12.	Ground Coordinate	Lat:- 28.567959 Long:- 77.181432
13.	Major Obstruction	Trees shadow
14.	Ground area for Solar	Not Available

Office of Registrar
General India
ऑफिस ऑफ़ रजिस्ट्रार
जनरल इंडिया

R K Puram-II

R K Puram-II

Location
28°34'04"N 77°10'53"E

Edit

Layers





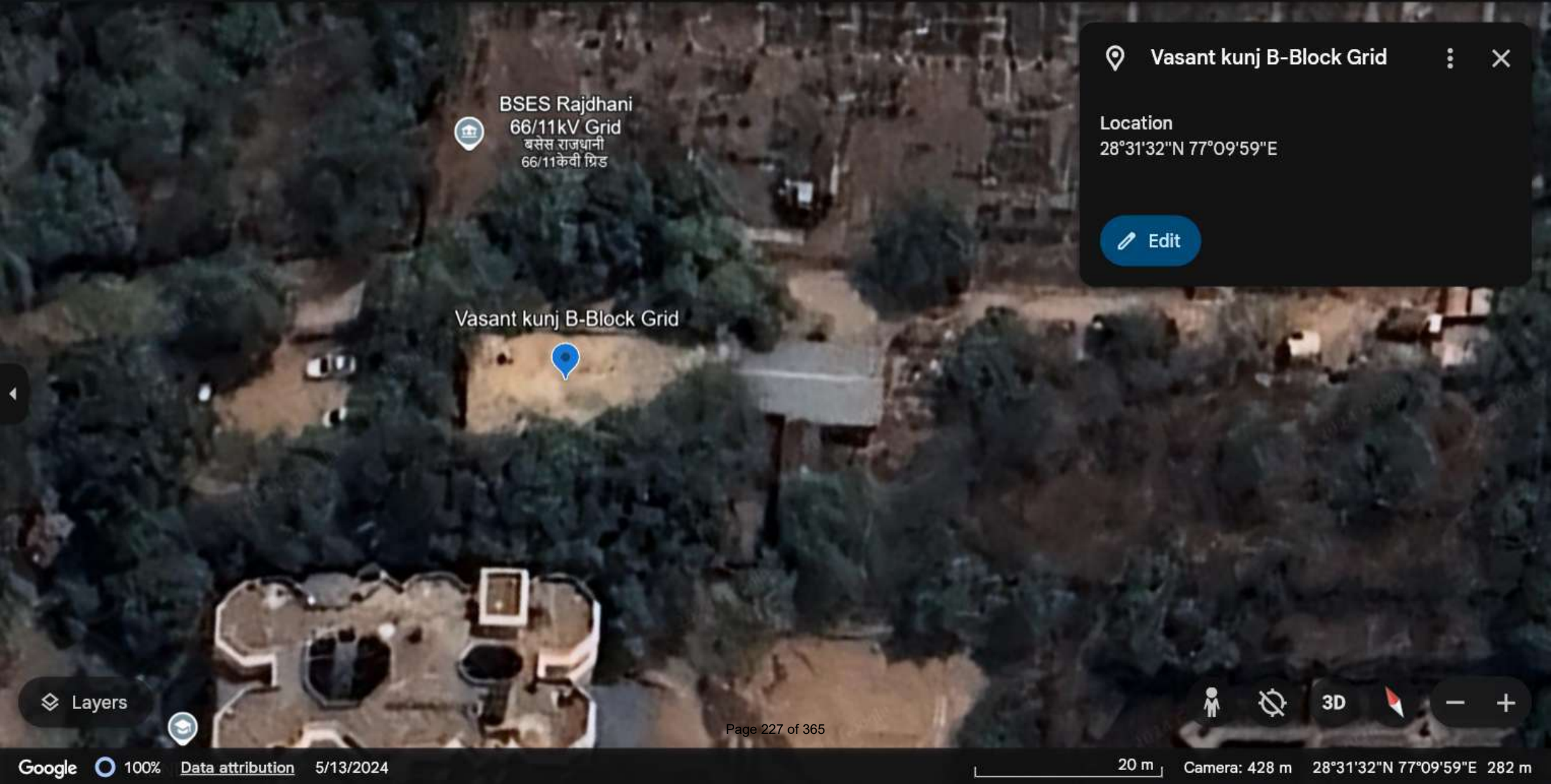


Solar Rooftop Assessment
Of
Vasant Kunj B-Block Grid

Site Name:- Vasant Kunj B-Block Grid

❖ Some Details about Site:-

1.	No. of Floor	1 st
2.	Division	-----
3.	Concern Person	Mr. Manas
4.	Solar Plant Capacity	According to Grid incharge Mr. Manas and Civil Department [Mr. Satish Kumar] the rooftop is weak and cannot bear the load of solar.
5.	Local Transformer Ratingx2	400KVA
6.	Local Meter no.	29553295
7.	MCB/MCCB Rating	630Amp
8.	LT Cable Size	4core/150sqmm
9.	Distance from Solar to Transformer	60-70 Meter
10.	Distance from Solar to LT Panel	70-75 Meter
11.	Rooftop Coordinate	Lat:- 28.525505 Long:- 77.166054
12.	Ground Coordinate	Lat:- 28.525640 Long:- 77.166794
13.	Major Obstruction	Most of the rooftop area is under shadow due to trees
14.	Ground area for Solar	Not Available



BSES Rajdhani
66/11kV Grid
बसेस राजधानी
66/11केवी ग्रीड

Vasant kunj B-Block Grid

Vasant kunj B-Block Grid

Location
28°31'32"N 77°09'59"E

Edit

Layers



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3D



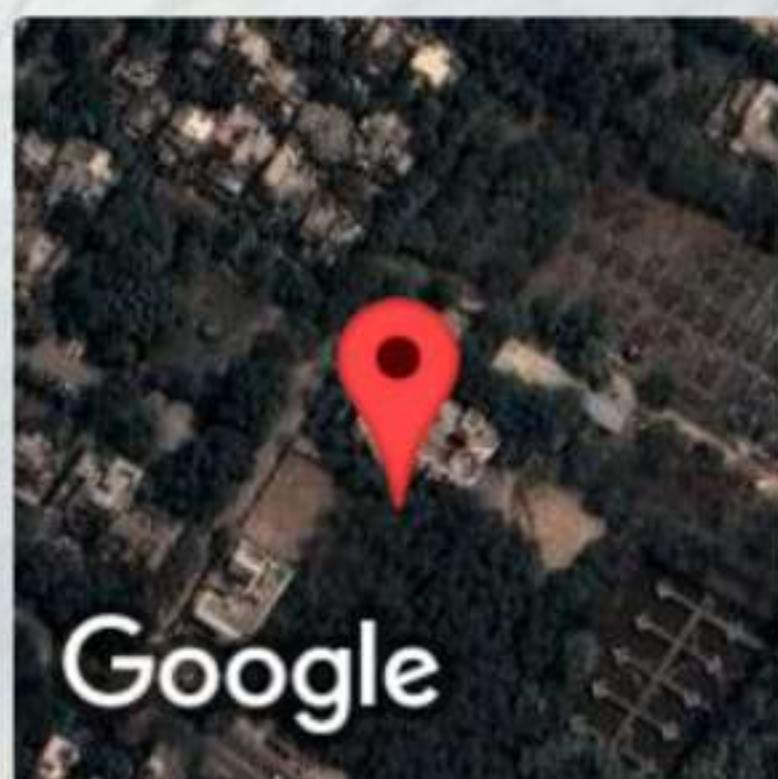








GPS Map Camera



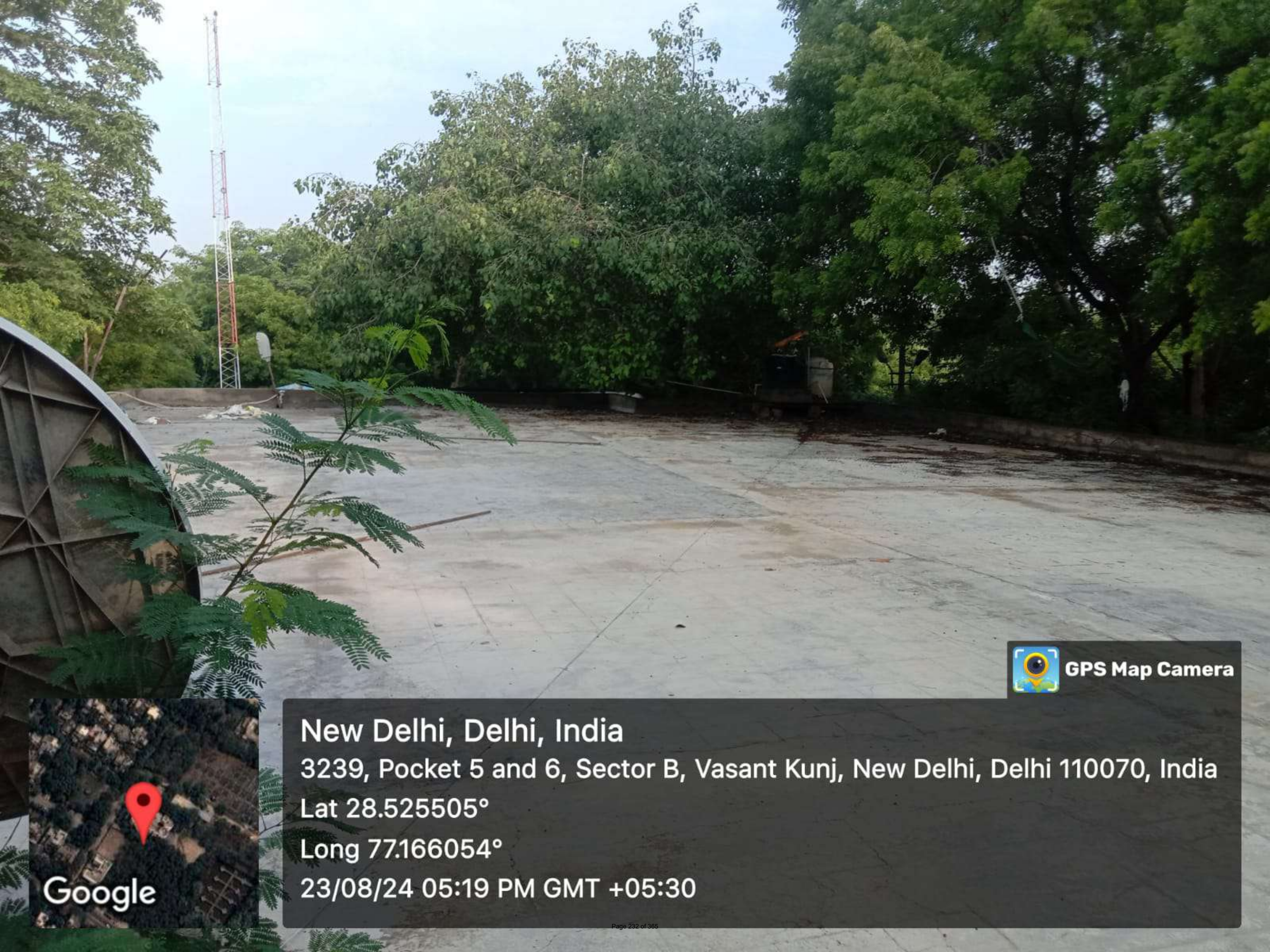
New Delhi, Delhi, India

3239, Pocket 5 and 6, Sector B, Vasant Kunj, New Delhi, Delhi 110070, India

Lat 28.525505°

Long 77.166054°

23/08/24 05:19 PM GMT +05:30



GPS Map Camera

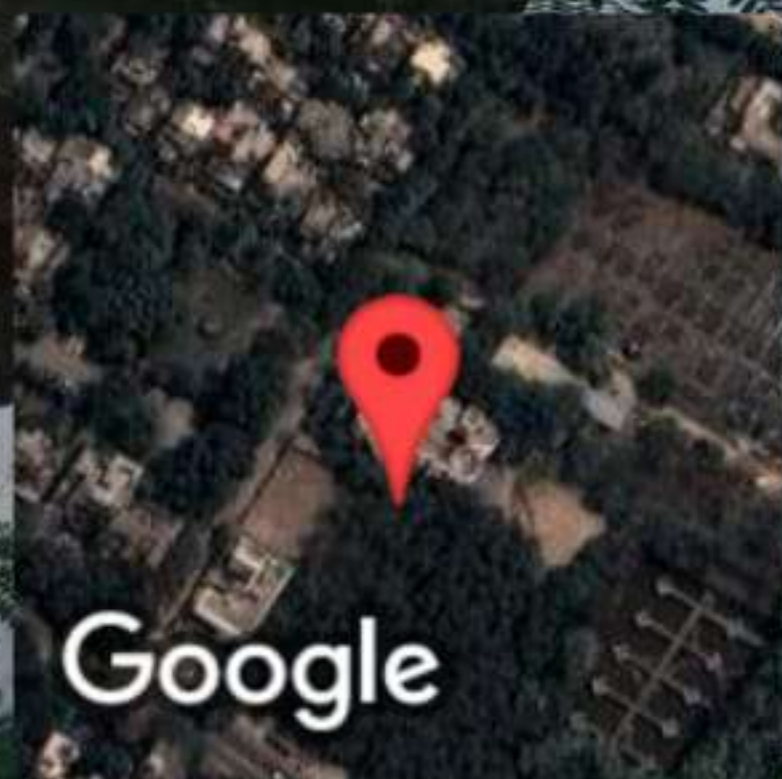
New Delhi, Delhi, India

3239, Pocket 5 and 6, Sector B, Vasant Kunj, New Delhi, Delhi 110070, India

Lat 28.525505°

Long 77.166054°

23/08/24 05:19 PM GMT +05:30





Solar Rooftop Assessment
Of
Vasant Kunj D-Block

Site Name:- Vasant Kunj D-Block

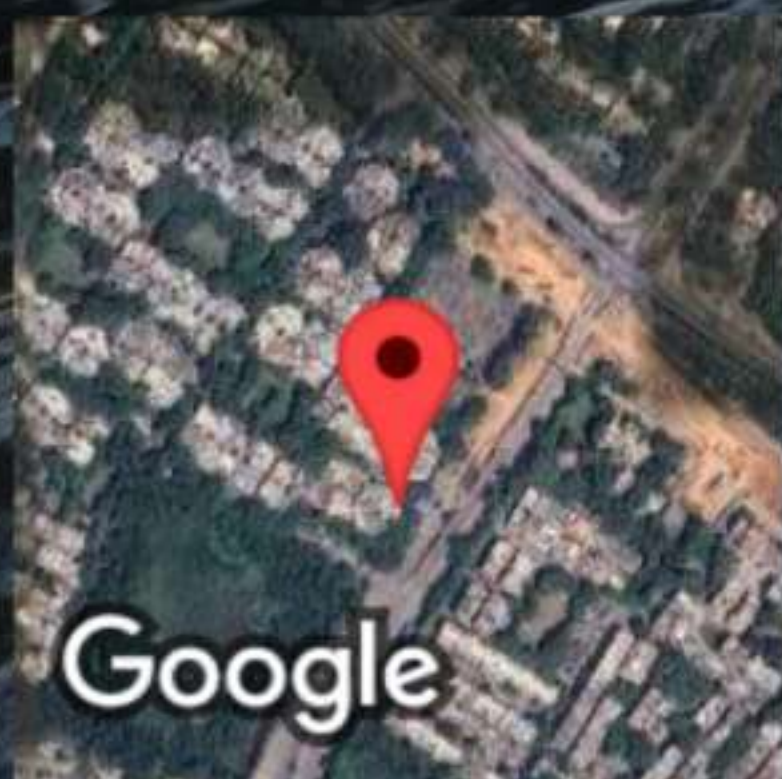
❖ Some Details about Site:-

1.	No. of Floor	1 st
2.	Division	Vasant Kunj
3.	Concern Person	Mr. Manas
4.	Solar Plant Capacity	According to Grid incharge Mr. Manas and Civil Department [Mr. Satish Kumar] the rooftop is too old and weak and cannot bear the load of solar
5.	Local Transformer Ratingx2	400KVA
6.	Local Meter no.	29553296
7.	MCB/MCCB Rating	630Amp
8.	LT Cable Size	3.5core/300sqmm
9.	Distance from Solar to Transformer	50-60 Meter
10.	Distance from Solar to LT Panel	50-60 Meter
11.	Rooftop Coordinate	Lat:- 28.52858 Long:- 77.147018
12.	Ground Coordinate	Lat:- 28.52904 Long:- 77.14739
13.	Major Obstruction	Shadow on Rooftop Because of trees around the building
14.	Ground area for Solar	Not Available





GPS Map Camera



New Delhi, Delhi, India

Shop No. 6, D-7, Pocket 8, Sector D, Vasant Kunj, New Delhi, Delhi 110070, India

Lat 28.52858°

Long 77.147018°

02/09/24 04:04 PM GMT +05:30



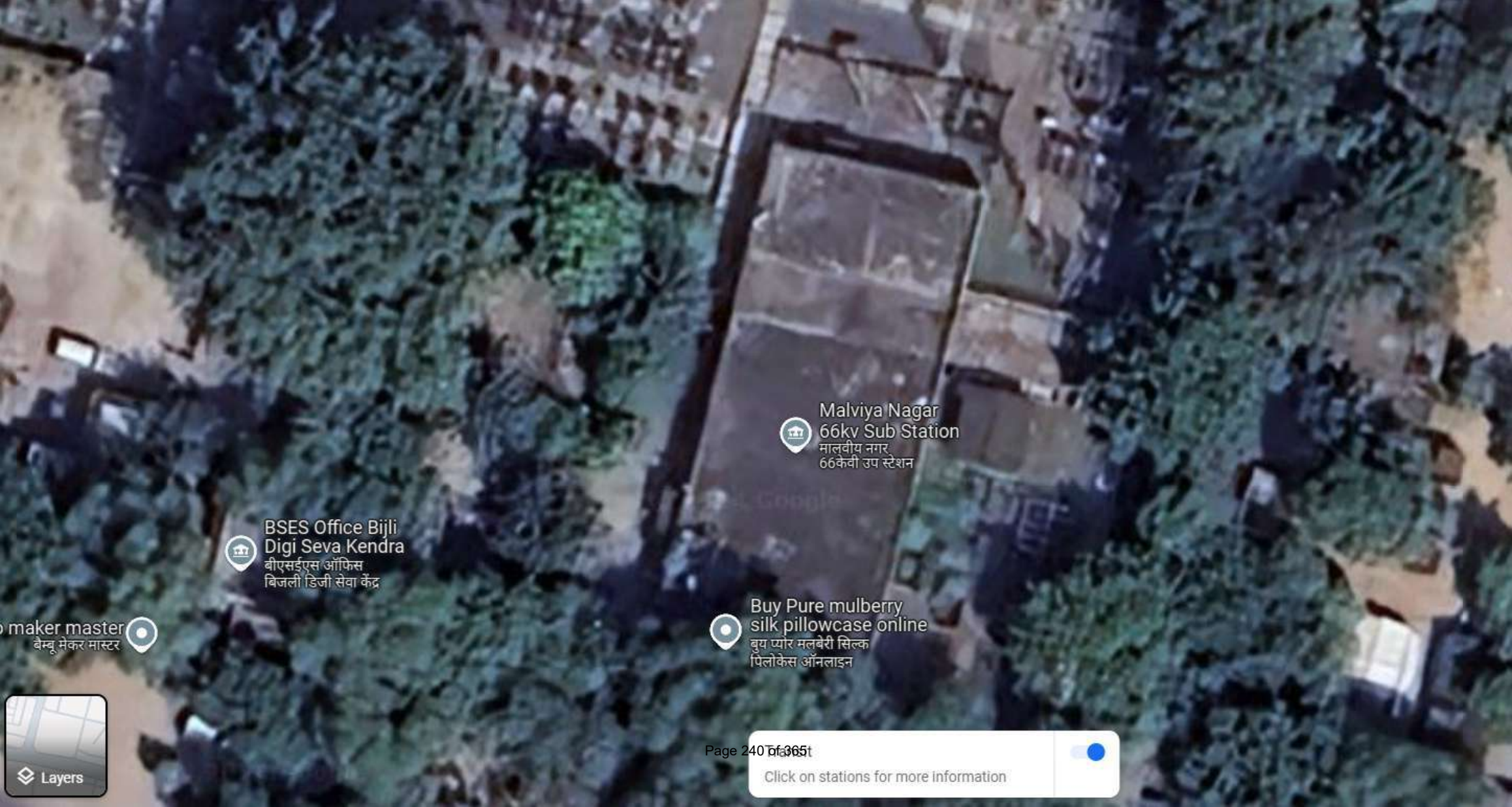


Solar Rooftop Assessment
Of
Malviya Nagar grid

Site Name:- Malviya Nagar Grid

❖ Some Details about Site:-

1.	No. of Floor	1 st
2.	Division	Saket
3.	Concern Person	Ravinder
4.	Solar Plant Capacity	50Kw
5.	Local Transformer Rating	100KVA
6.	Local Meter no.	29553306
7.	MCB/MCCB Rating	200Amp
8.	LT Cable Size	4core/150sqmm
9.	Distance from Solar to Transformer	40-50 Meter
10.	Distance from Solar to LT Panel	30-40 Meter
11.	Rooftop Coordinate	Lat:- 28.518229 Long:- 77.216263
12.	Ground Coordinate	Lat:- 28.518551 Long:- 77.216194
13.	Major Obstruction	Nothing



Malviya Nagar
66kv Sub Station
मालवीय नगर
66केवी उप स्टेशन



BSES Office Bijli
Digi Seva Kendra
बीएसईएस ऑफिस
बिजली डिजी सेवा केंद्र



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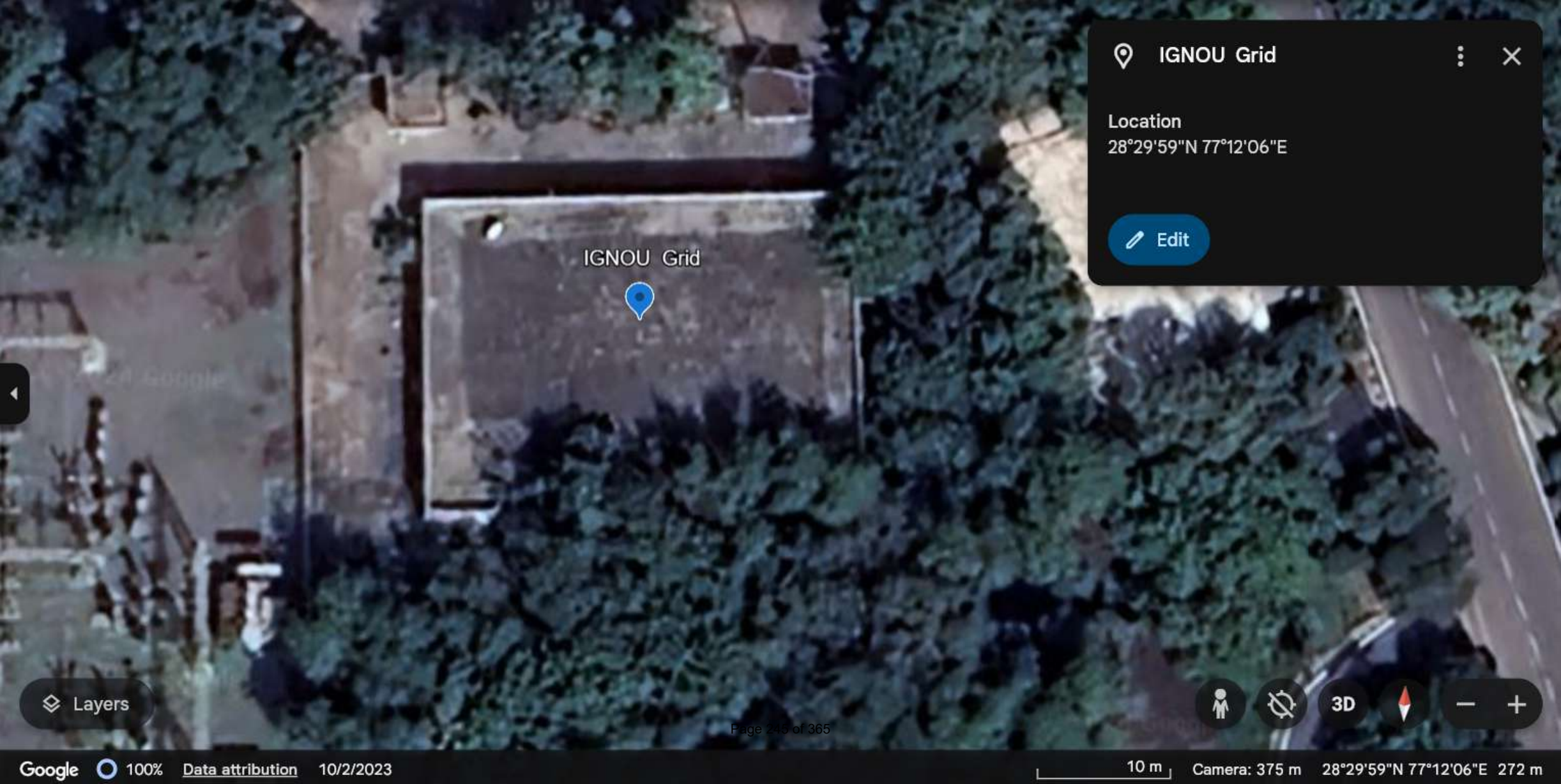


Solar Rooftop Assessment Of IGNOU Grid

Site Name:- IGNOU Grid

❖ Some Details about Site:-

1.	No. of Floor	1 st
2.	Division	Saket
3.	Concern Person	Mr. Ravinder Kumar
4.	Solar Plant Capacity	90Kw
5.	Local Transformer Ratingx2	400KVA
6.	Local Meter no.	Locked
7.	MCB/MCCB Rating	Locked
8.	LT Cable Size	4core/50sqmm
9.	Distance from Solar to Transformer	60-70 Meter
10.	Distance from Solar to LT Panel	40-50 Meter
11.	Rooftop Coordinate	Lat:- 28.499873 Long:- 77.201678
12.	Ground Coordinate	Lat:- 28.499667 Long:- 77.201400
13.	Major Obstruction	Nothing
14.	Ground area for Solar	Not Available



IGNOU Grid



Location

28°29'59"N 77°12'06"E

Edit

Layers

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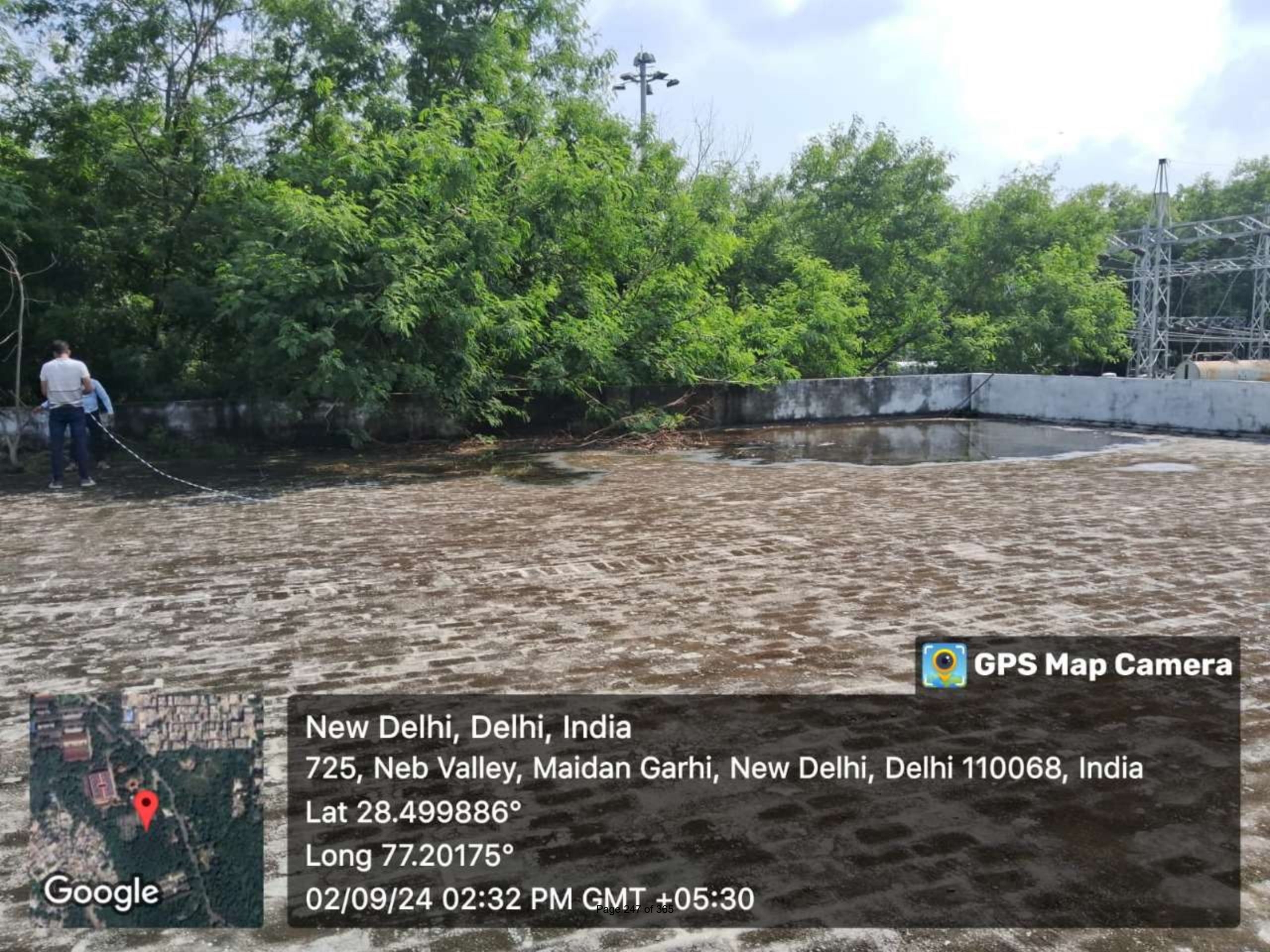
New Delhi, Delhi, India

725, Neb Valley, Maidan Garhi, New Delhi, Delhi 110068, India

Lat 28.499886°

Long 77.20175°

02/09/24 02:32 PM GMT +05:30



GPS Map Camera

New Delhi, Delhi, India

725, Neb Valley, Maidan Garhi, New Delhi, Delhi 110068, India

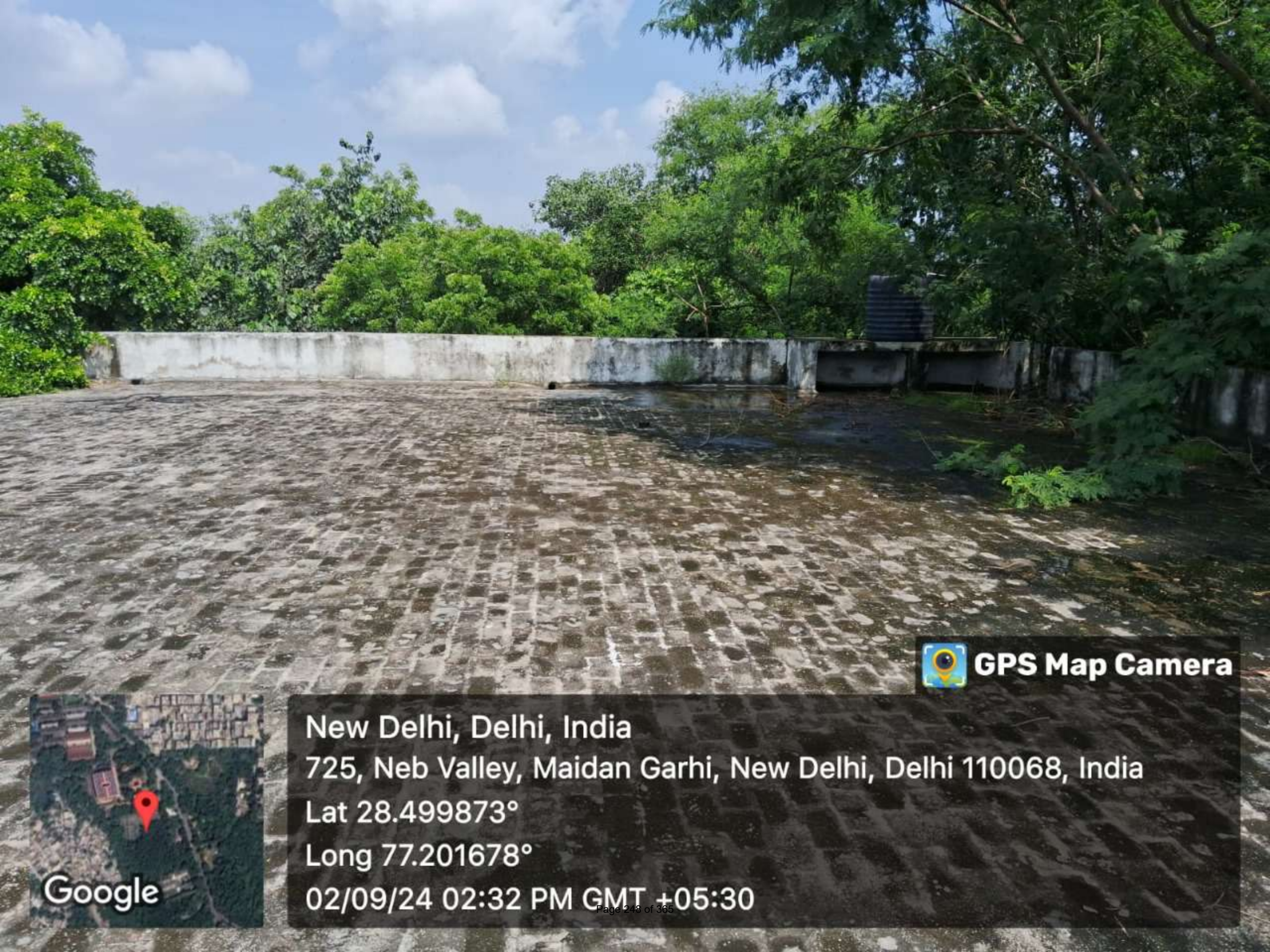
Lat 28.499886°

Long 77.20175°

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New Delhi, Delhi, India

725, Neb Valley, Maidan Garhi, New Delhi, Delhi 110068, India

Lat 28.499873°

Long 77.201678°

02/09/24 02:32 PM GMT +05:30



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New Delhi, Delhi, India

725, Neb Valley, Maidan Garhi, New Delhi, Delhi 110068, India

Lat 28.499873°

Long 77.201678°

02/09/24 02:32 PM GMT +05:30



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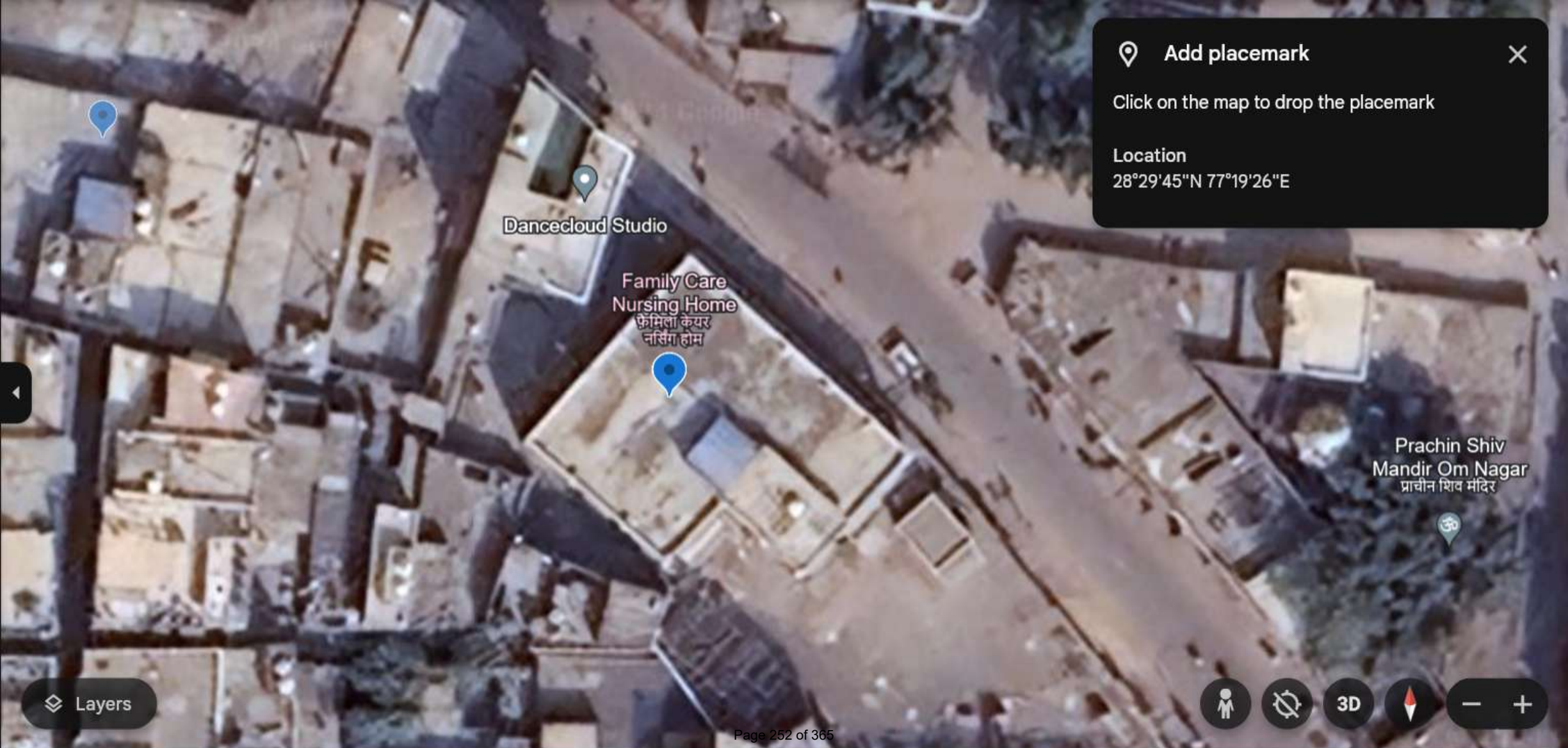


Solar Rooftop Assessment
Of
Methapur Grid

Site Name:- Methapur Grid

❖ Some Details about Site:-

1.	No. of Floor	3 rd
2.	Division	Sarita Vihar
3.	Concern Person	Mr. Fazle Imam
4.	Solar Plant Capacity	24 Kw
5.	Local Transformer Rating	400 KVA
6.	Local Meter no.	Locked
7.	MCB/MCCB Rating	MCCB – 630Amp
8.	LT Cable Size	4core/100sqmm
9.	Distance from Solar to Transformer	70-75 Meter
10.	Distance from Solar to LT Panel	80-85 Meter
11.	Rooftop Coordinate	Lat:- 28.495837 Long:- 77.324241
12.	Ground Coordinate	Lat:- 28.495638 Long:- 77.324466
13.	Major Obstruction	Nothing



 **Add placemark** 

Click on the map to drop the placemark

Location
28°29'45"N 77°19'26"E

Dancecloud Studio

Family Care
Nursing Home
फैमिली केयर
नर्सिंग होम

Prachin Shiv
Mandir Om Nagar
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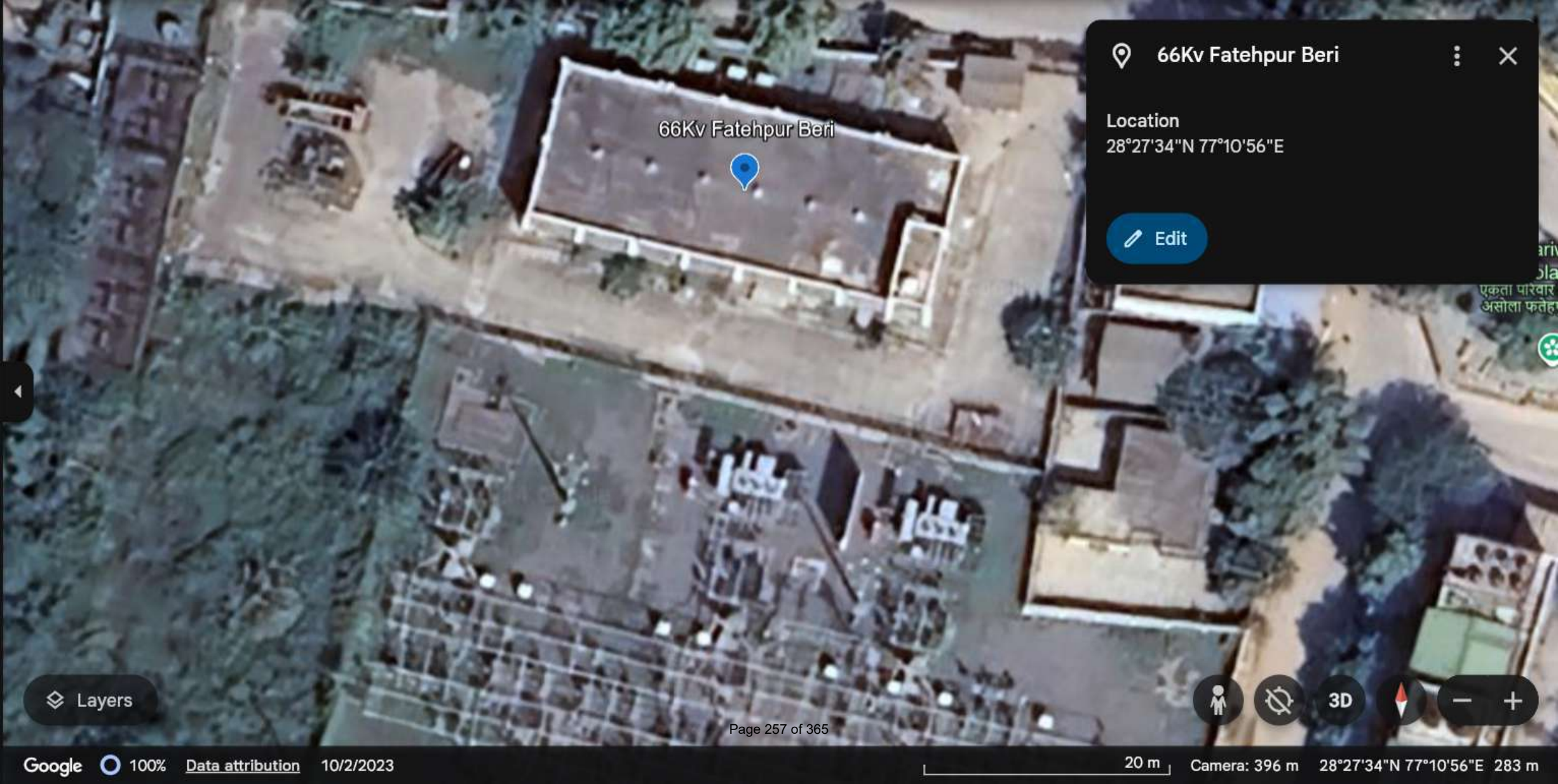


Solar Rooftop Assessment
Of
66KV Fatehpur Beri

Site Name:- 66KV Fatehpur Beri

❖ Some Details about Site:-

1.	No. of Floor	1 st
2.	Division	Vasant Kunj
3.	Concern Person	Mr. Manas
4.	Solar Plant Capacity	52 Kw
5.	Local Transformer Rating	400 KVA
6.	Local Meter no.	29553357
7.	MCB/MCCB Rating	630Amp
8.	LT Cable Size	4core/150sqmm
9.	Distance from Solar to Transformer	70-80 Meter
10.	Distance from Solar to LT Panel	50-60 Meter
11.	Rooftop Coordinate	Lat:- 28.459680 Long:- 77.182449
12.	Ground Coordinate	Lat:- 28.459492 Long:- 77.182075
13.	Major Obstruction	Nothing
14.	Ground area for Solar	Not Available



66Kv Fatehpur Beri



66Kv Fatehpur Beri



Location

28°27'34"N 77°10'56"E



Edit



Layers



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100%

[Data attribution](#)

10/2/2023

20 m

Camera: 396 m

28°27'34"N 77°10'56"E 283 m



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New Delhi, Delhi, India

46, opposite CANARA BANK - DELHI FATEHPUR BERI, Fatehpur Beri, New Delhi, Delhi
110074, India

Lat 28.461937°

Long 77.185139°

23/08/24 03:22 PM GMT +05:30



GPS Map Camera



New Delhi, Delhi, India

CN35, Fatehpur Beri, New Delhi, Delhi 110074, India

Lat 28.458804°

Long 77.180754°

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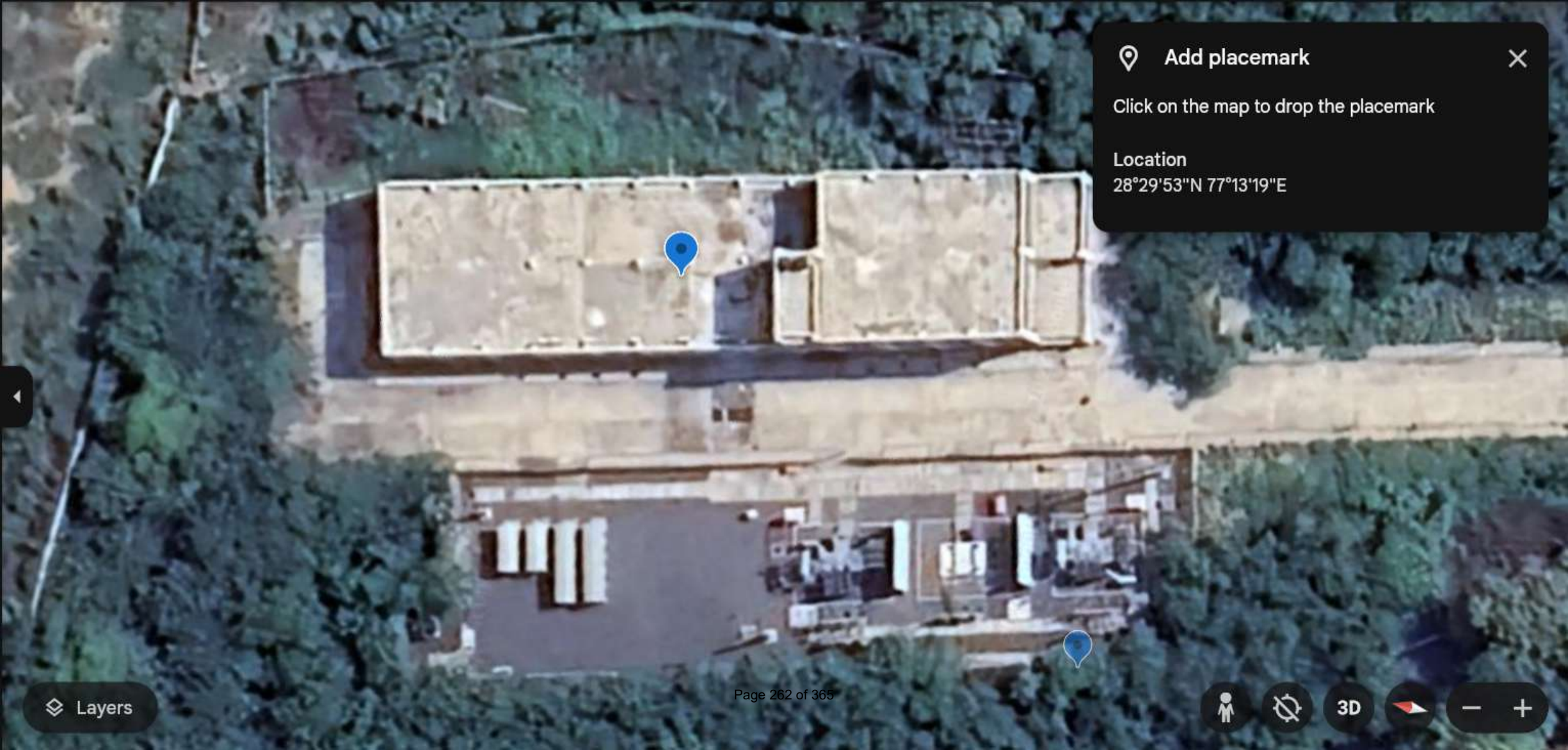


Solar Rooftop Assessment
Of
Sangam Vihar Grid

Site Name:- Sangam Vihar Grid

❖ Some Details about Site:-

1.	No. of Floor	2 nd /3 rd
2.	Division	Khanpur
3.	Concern Person	Mr. Ravinder
4.	Solar Plant Capacity	69 Kw
5.	Local Transformer Rating	400 KVA
6.	Local Meter no.	Locked
7.	MCB/MCCB Rating	MCCB – 630Amp
8.	LT Cable Size	Not Confirm by Grid in-charge
9.	Distance from Solar to Transformer	80-85 Meter
10.	Distance from Solar to LT Panel	50-60 Meter
11.	Rooftop Coordinate	Lat:- 28.498787 Long:- 77.223758
12.	Ground Coordinate	Lat:- 28.498453 Long:- 77.222180
13.	Major Obstruction	Nothing



Add placemark



Click on the map to drop the placemark

Location

28°29'53"N 77°13'19"E



Layers

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3D







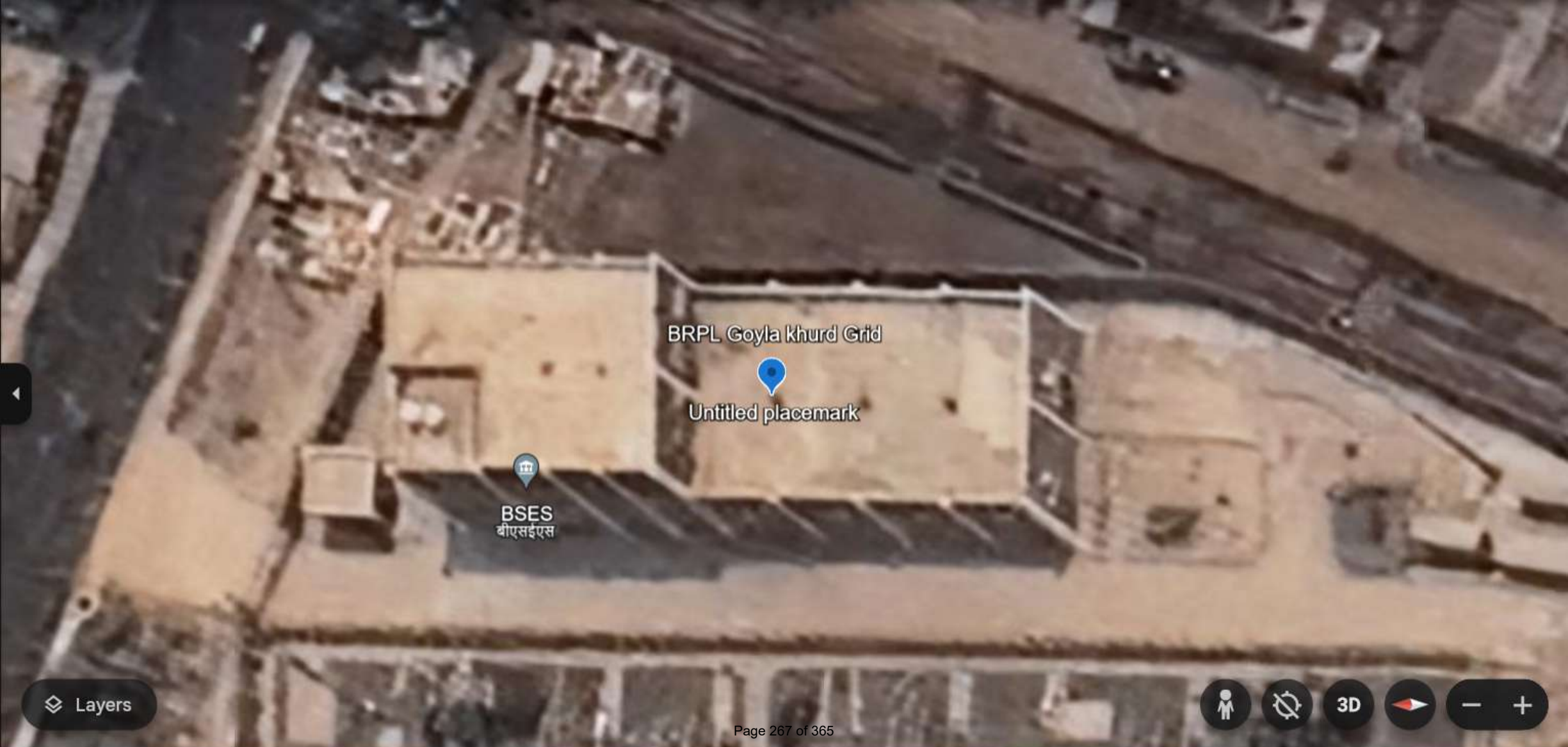


Solar Rooftop Assessment
of
66/11KV Goyla khurd Grid

Site Name – 66/11KV Goyla Khurd Grid

❖ **Some Details about Site**

1.	No. of Floor	1 st and 2 nd
2.	Division	Chhawla
3.	Concern Person	Mr. Ravinder
4.	Solar Plant Capacity	66 Kw
5.	Transformer Rating	400 Kva
6.	MCB/MCCB Rating	MCCB – 630 Amp
7.	Local Meter No.	29559032
8.	LT Cabel Size	4core/300sqmm
9.	Distance from Solar to Transformer	100-110 Meter
10.	Distance from Solar to LT Panel	70-75 Meter
11.	Rooftop Coordinates	Latitude :- 28.58065 Longitude :- 77.01736
12.	Ground Coordinates	Latitude :- 28.58475 Longitude :- 77.017161
13.	Major Obstruction	Nothing



BRPL Goyla khurd Grid

Untitled placemark

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Layers





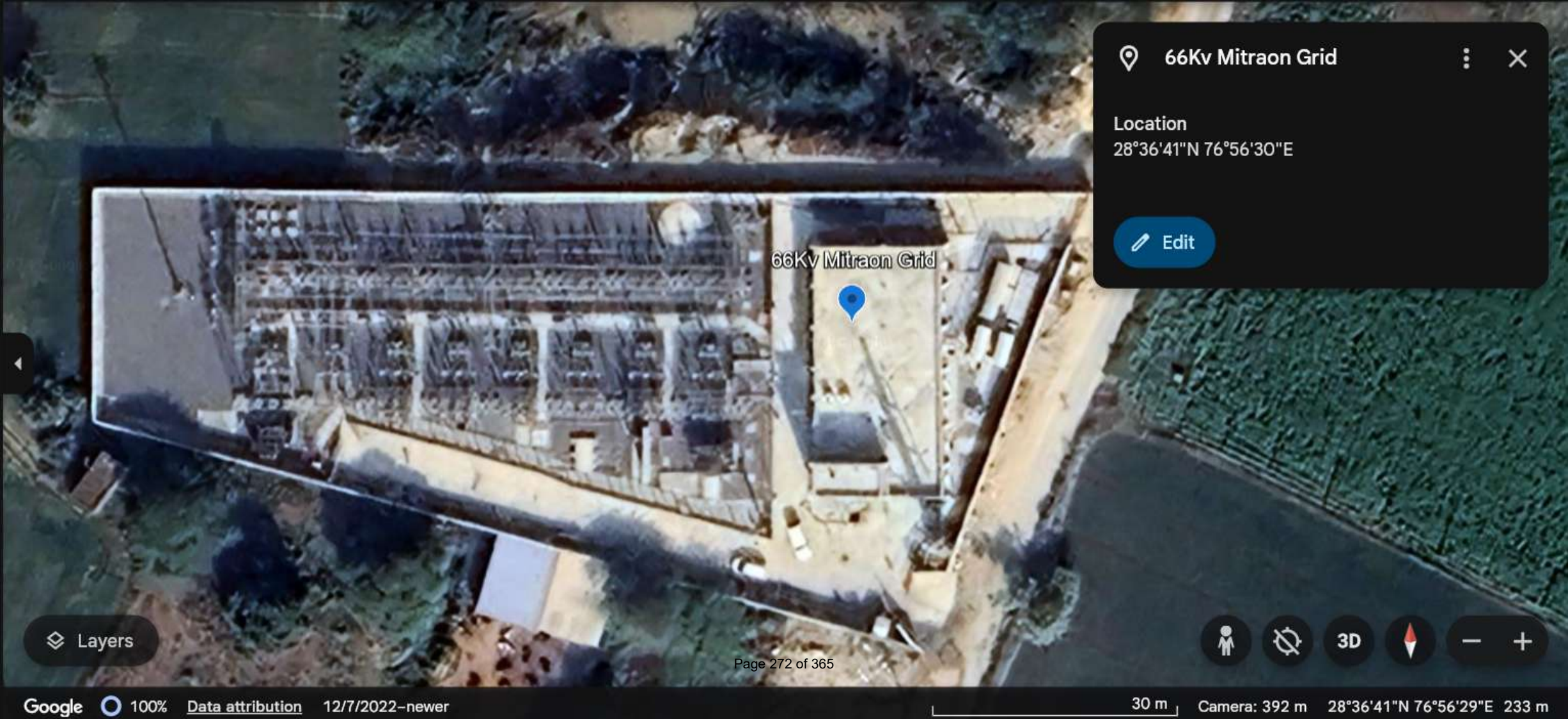


Solar Rooftop Assessment Of Mitraon Grid

Site Name:- Mitraon Grid

❖ Some Details about Site:-

1.	No. of Floor	2 nd
2.	Division	Mitraon
3.	Concern Person	Mr. Devendra
4.	Solar Plant Capacity	30 Kw
5.	Local Transformer Rating	400 KVA
6.	Local Meter no.	Locked
7.	MCB/MCCB Rating	630 Amp
8.	LT Cable Size	4core/150sqmm
9.	Distance from Solar to Transformer	50-60 Meter
10.	Distance from Solar to LT Panel	60-70 Meter
11.	Rooftop Coordinate	Lat:- 28.6116299 Long:- 76.9415434
12.	Ground Coordinate	Lat:- 28.608074 Long:- 77.951566
13.	Major Obstruction	Nothing



66Kv Mitraon Grid



Location

28°36'41"N 76°56'30"E



Edit



Layers

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[Data attribution](#)

12/7/2022-newer

30 m

Camera: 392 m

28°36'41"N 76°56'29"E 233 m







GPS Map Camera



Delhi, Delhi, India

JX52+7HH, Mitraon, Najafgarh, Delhi, 110043, India

Lat 28.608074°

Long 76.951566°

30/07/24 04:39 PM GMT +05:30

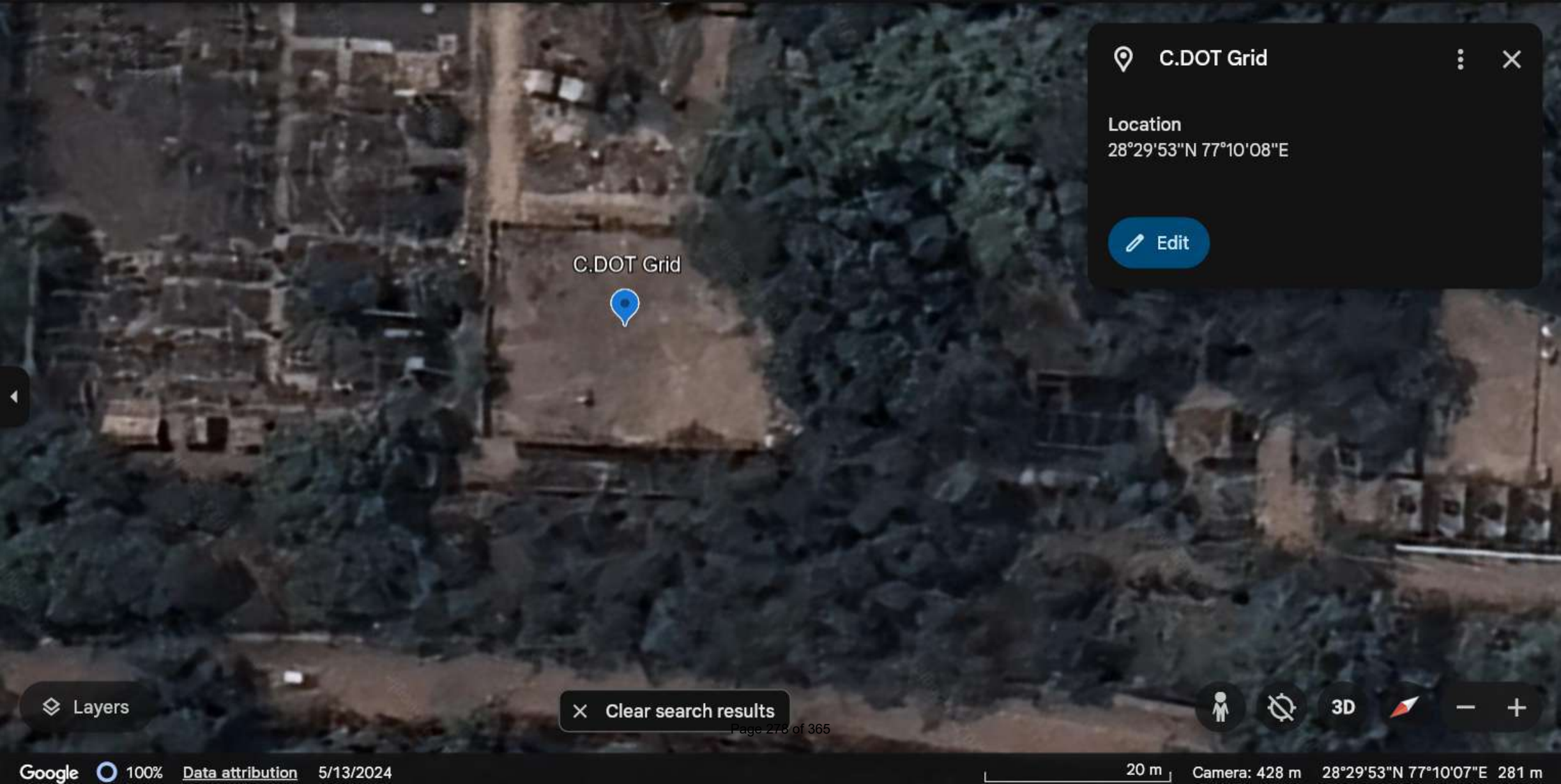


Solar Rooftop Assessment
Of
C.DOT Grid

Site Name:- C.DOT Grid

❖ Some Details about Site:-

1.	No. of Floor	1 st
2.	Division	-----
3.	Concern Person	Mr. Manas
4.	Solar Plant Capacity	58Kw
5.	Local Transformer Ratingx2	100KVA/100KVA
6.	Local Meter no.	29553310/29553308
7.	MCB/MCCB Rating	Unsafe
8.	LT Cable Size	Unsafe
9.	Distance from Solar to Transformer	50-60 Meter
10.	Distance from Solar to LT Panel	50-60 Meter
11.	Rooftop Coordinate	Lat:- 28.4992 Long:- 77.169186
12.	Ground Coordinate	Lat:- 28.497915 Long:- 77.169233
13.	Major Obstruction	Half of the rooftop area is under shadow due to trees
14.	Ground area for Solar	Available



C.DOT Grid



Location

28°29'53"N 77°10'08"E



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C.DOT Grid



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Clear search results



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5/13/2024

20 m

Camera: 428 m

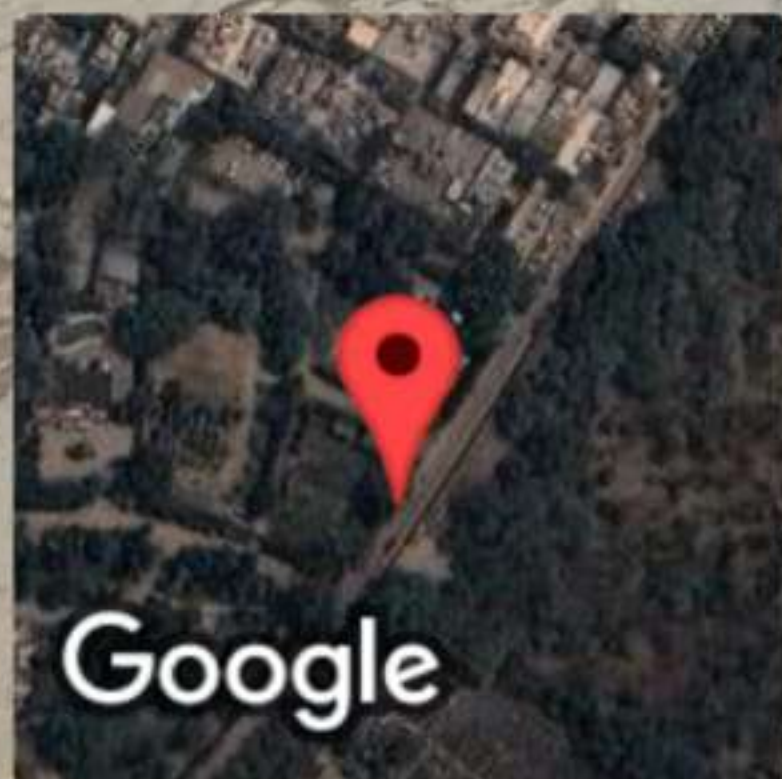
28°29'53"N 77°10'07"E 281 m







GPS Map Camera



New Delhi, Delhi, India

127, New Manglapuri, Manglapuri Village, Sultanpur, New Delhi, Delhi 110030, India

Lat 28.4992°

Long 77.169186°

23/08/24 04:03 PM GMT +05:30



GPS Map Camera

New Delhi, Delhi, India

127, New Manglapuri, Manglapuri Village, Sultanpur, New Delhi, Delhi 110030, India

Lat 28.4992°

Long 77.169186°

23/08/24 04:03 PM GMT +05:30



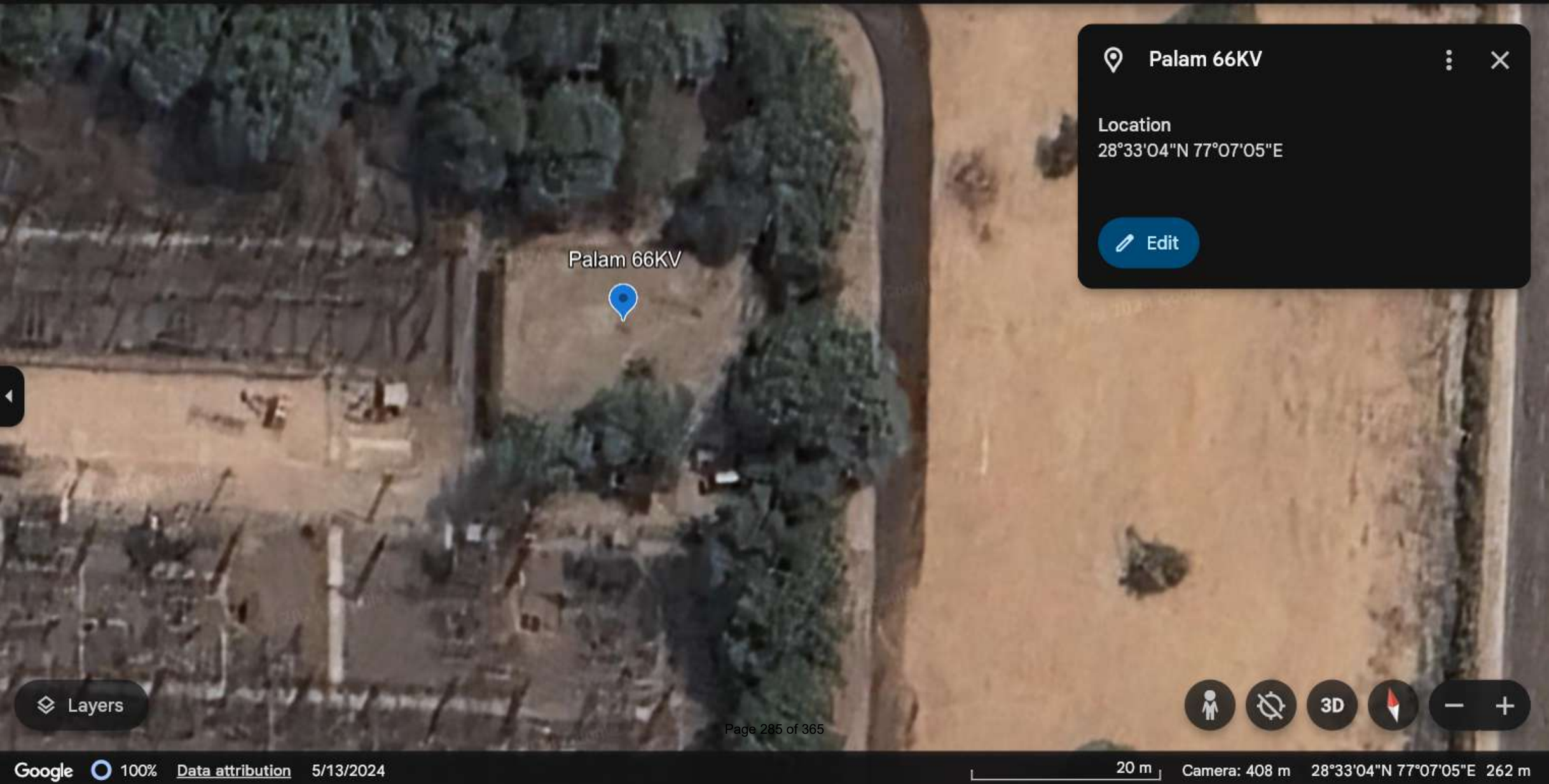


Solar Rooftop Assessment Of Palam 66KV

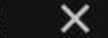
Site Name:- Palam 66KV

❖ Some Details about Site:-

1.	No. of Floor	1 st
2.	Division	Vasant Kunj
3.	Concern Person	Mr. Amardeep
4.	Solar Plant Capacity	40Kw
5.	Local Transformer Ratingx2	100KVA
6.	Local Meter no.	29553343
7.	MCB/MCCB Rating	Not found
8.	LT Cable Size	Not found
9.	Distance from Solar to Transformer	40-50 Meter
10.	Distance from Solar to LT Panel	30-40 Meter
11.	Rooftop Coordinate	Lat:- 28.55117 Long:- 77.11814
12.	Ground Coordinate	Lat:- 28.550892 Long:- 77.117665
13.	Major Obstruction	Unutilised tower, shadow created by trees in south direction
14.	Ground area for Solar	Not Available



 Palam 66KV



Location

28°33'04"N 77°07'05"E

 Edit

Palam 66KV



 Layers



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New Delhi, Delhi, India

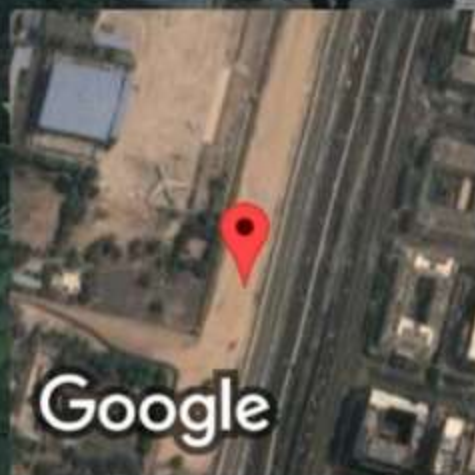
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110037, India

Lat 28.552499°

Long 77.119213°

02/09/24 05:13 PM GMT +05:30

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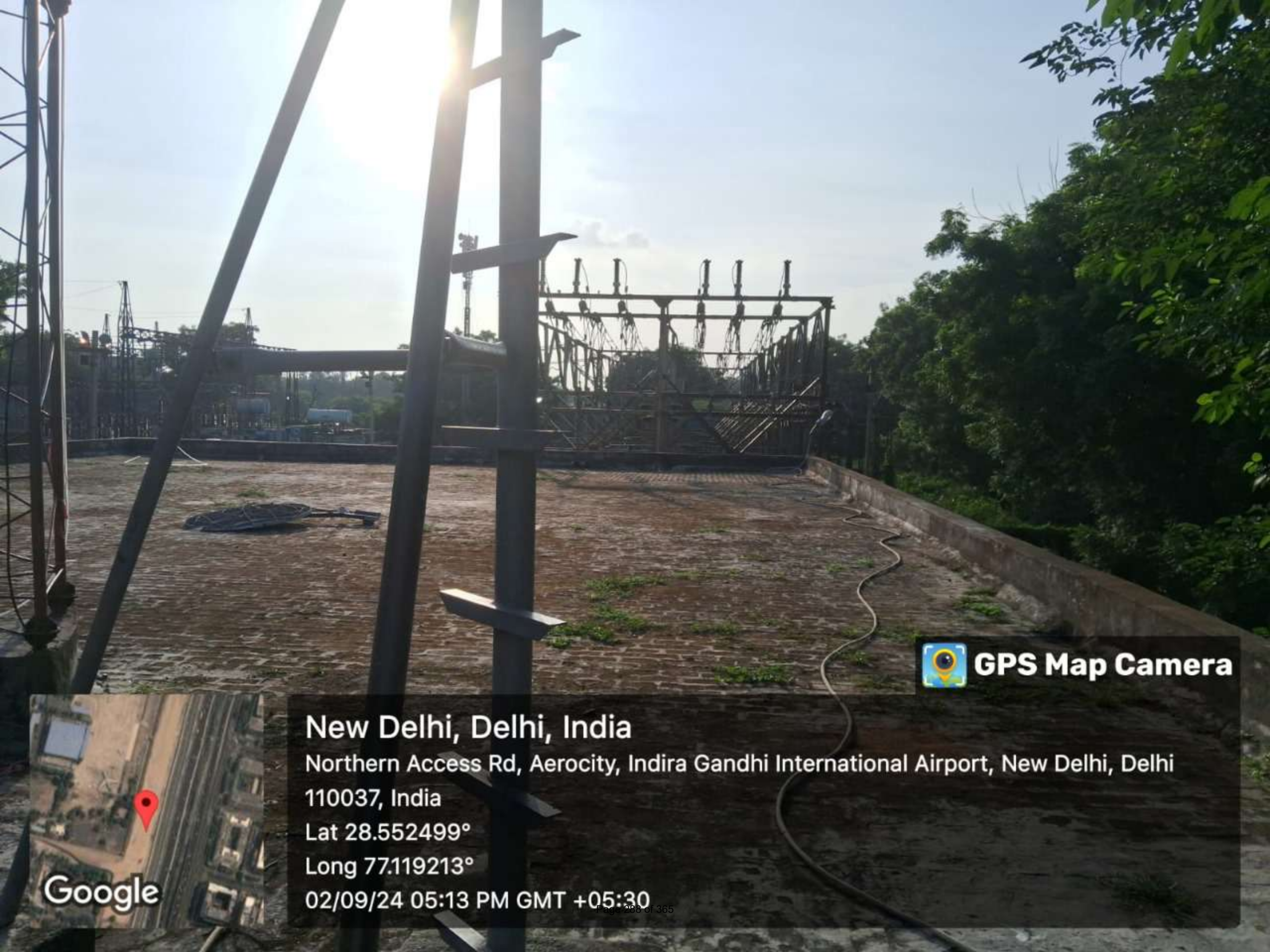
Northern Access Rd, Aerocity, Indira Gandhi International Airport, New Delhi, Delhi
110037, India

Lat 28.552499°

Long 77.119213°

02/09/24 05:13 PM GMT +05:30





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Northern Access Rd, Aerocity, Indira Gandhi International Airport, New Delhi, Delhi
110037, India

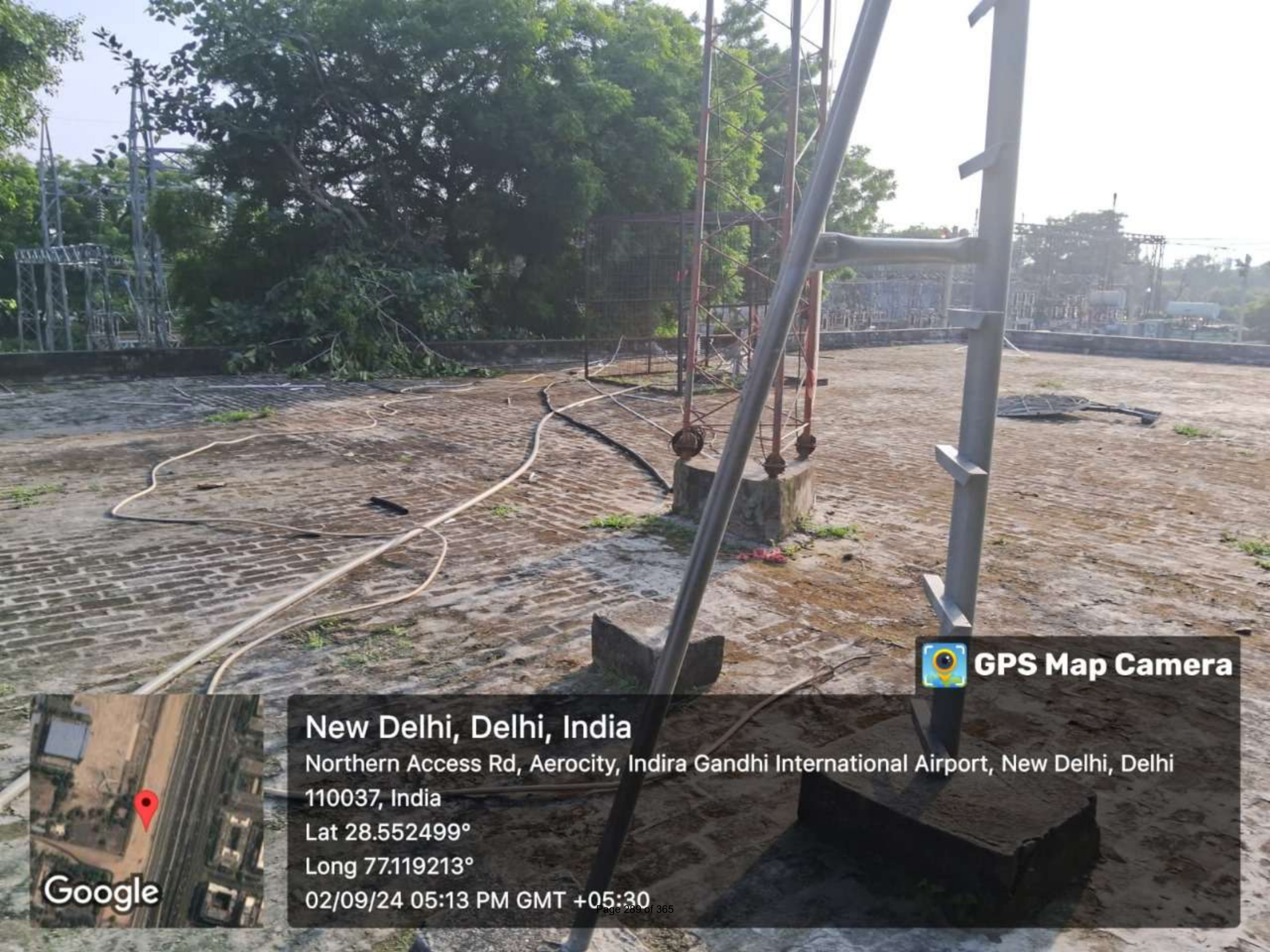
Lat 28.552499°

Long 77.119213°

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Northern Access Rd, Aerocity, Indira Gandhi International Airport, New Delhi, Delhi
110037, India

Lat 28.552499°

Long 77.119213°

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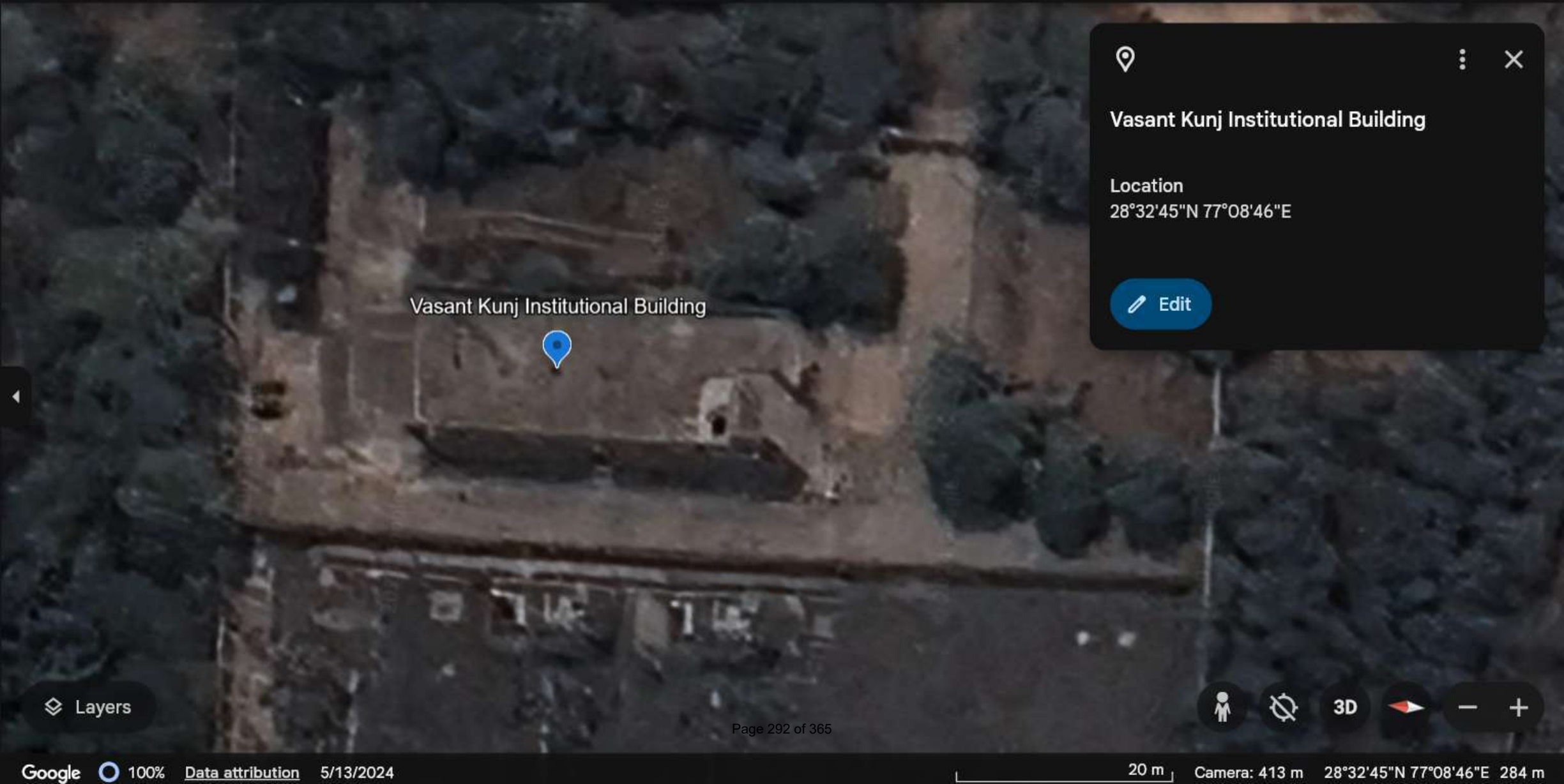


Solar Rooftop Assessment
Of
Vasant Kunj Institutional Building

Site Name:- Vasant Kunj Institutional building

❖ Some Details about Site:-

1.	No. of Floor	1 st
2.	Division	Vasant Kunj
3.	Concern Person	Mr. Uma Rao
4.	Solar Plant Capacity	41Kw
5.	Local Transformer Ratingx2	400KVA
6.	Local Meter no.	Locked
7.	MCB/MCCB Rating	630Amp
8.	LT Cable Size	4core/150sqmm
9.	Distance from Solar to Transformer	70-80 Meter
10.	Distance from Solar to LT Panel	50-60 Meter
11.	Rooftop Coordinate	Lat:- 28.546003 Long:- 77.146337
12.	Ground Coordinate	Lat:- 28.545907 Long:- 77.146066
13.	Major Obstruction	Nothing
14.	Ground area for Solar	Not Available



Vasant Kunj Institutional Building



Vasant Kunj Institutional Building

Location

28°32'45"N 77°08'46"E

 Edit

 Layers



3D



Page 292 of 365

20 m

Camera: 413 m 28°32'45"N 77°08'46"E 284 m



GPS Map Camera

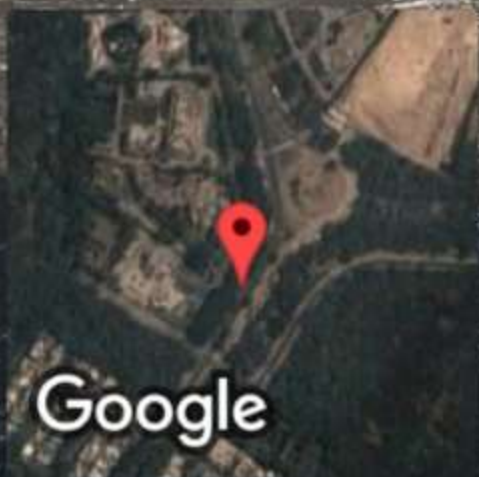
New Delhi, Delhi, India

Nehru Bhawan, 5, 3, Vasant Kunj Institutional Area, Vasant Kunj II, Vasant Kunj, New Delhi, Delhi 110070, India

Lat 28.541566°

Long 77.147258°

02/09/24 04:35 PM GMT +05:30



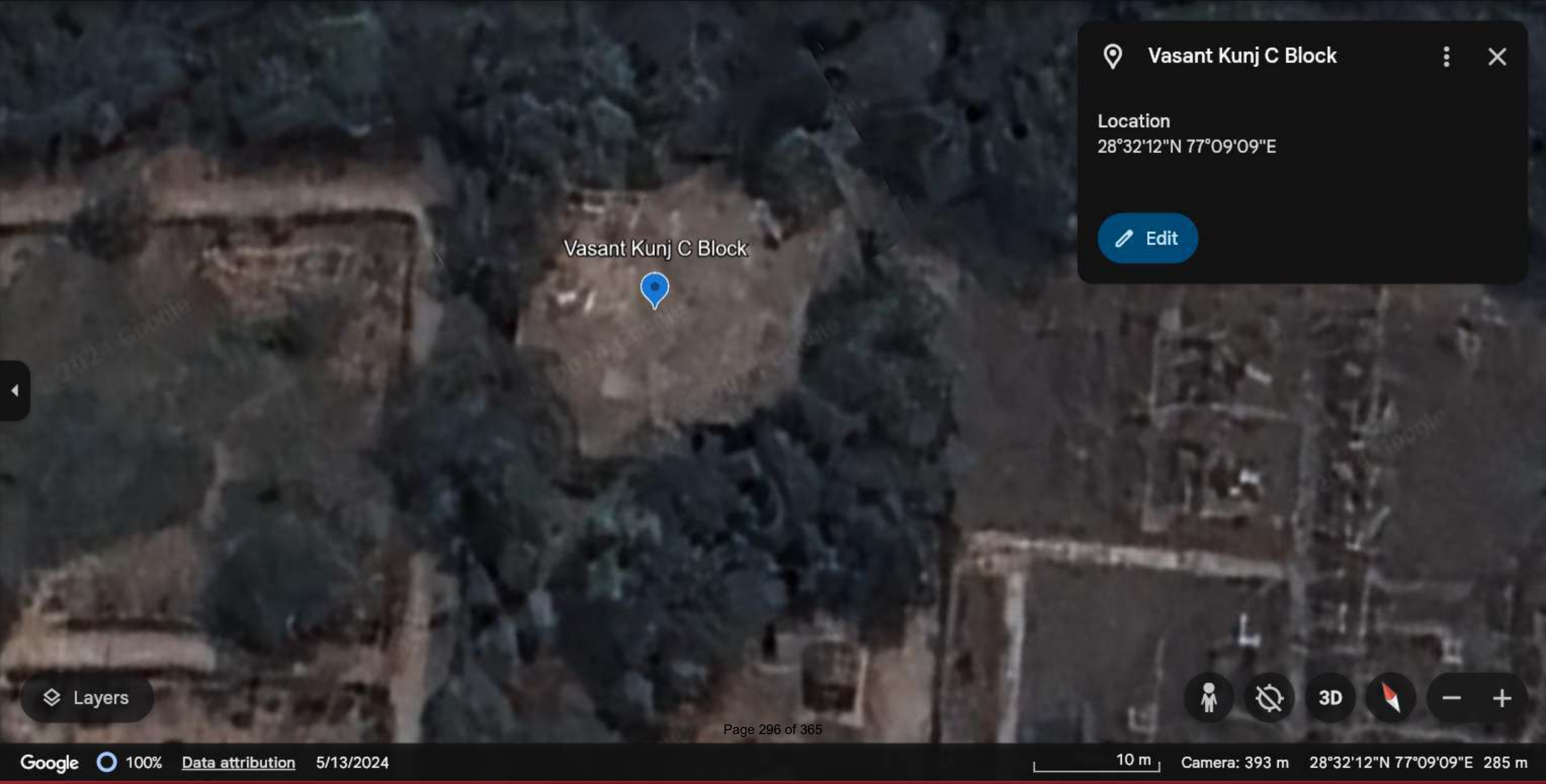


Solar Rooftop Assessment
Of
Vasant Kunj C-Block

Site Name:- Vasant Kunj C-Block

❖ Some Details about Site:-

1.	No. of Floor	1 st
2.	Division	Vasant Kunj
3.	Concern Person	Mr. Uma Rao
4.	Solar Plant Capacity	40Kw
5.	Local Transformer Ratingx2	400KVA
6.	Local Meter no.	Locked
7.	MCB/MCCB Rating	Locked
8.	LT Cable Size	4core/150sqmm
9.	Distance from Solar to Transformer	50-60 Meter
10.	Distance from Solar to LT Panel	60-65 Meter
11.	Rooftop Coordinate	Lat:- 28.536842 Long:- 77.154089
12.	Ground Coordinate	Lat:- 28.536314 Long:- 77.152910
13.	Major Obstruction	Most of the rooftop area is under shadow due to trees
14.	Ground area for Solar	Not Available



Vasant Kunj C Block



Vasant Kunj C Block



Location

28°32'12"N 77°09'09"E



Edit



Layers



3D











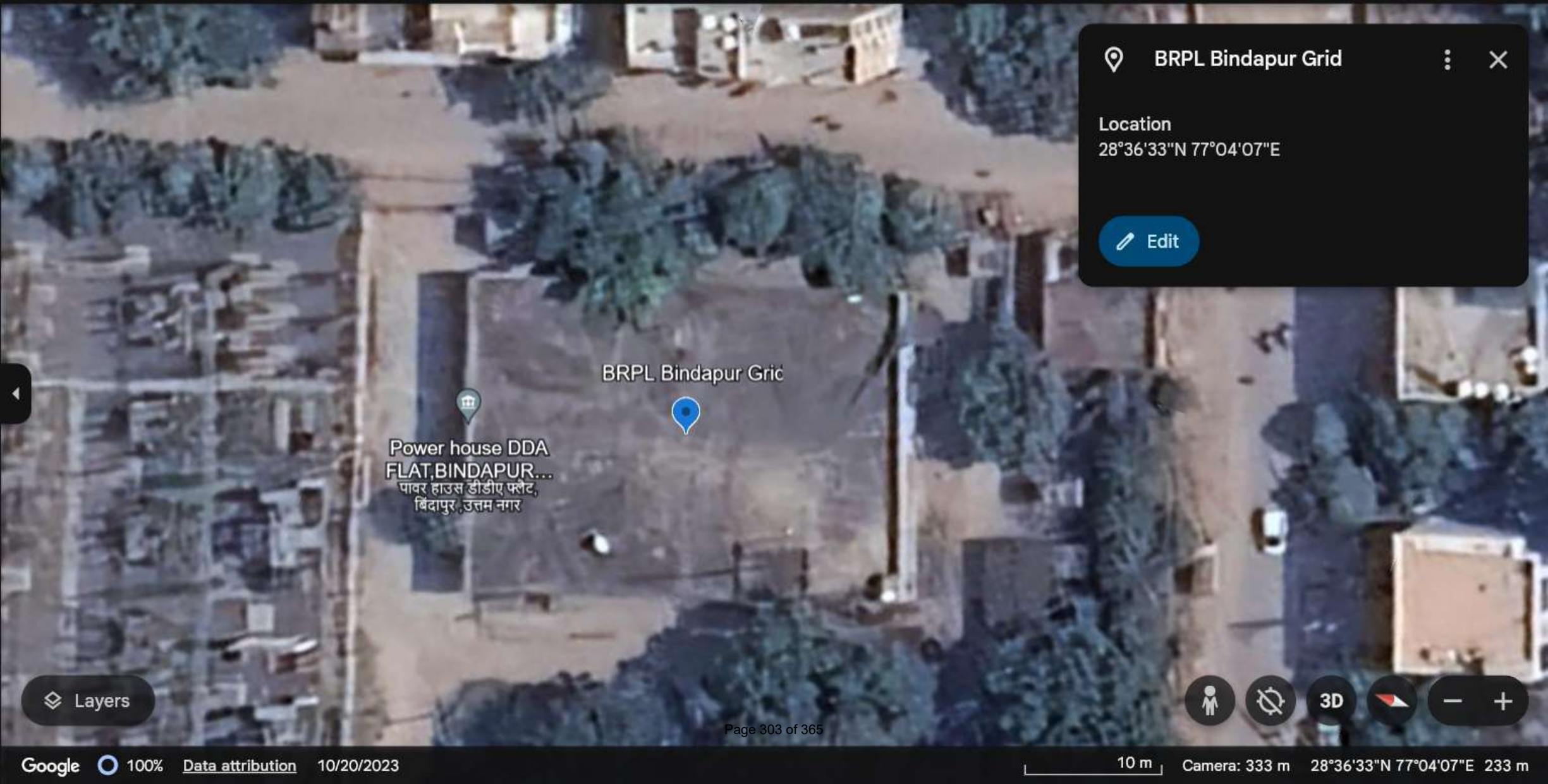


Solar Rooftop Assessment
Of
Bindapur grid

Site Name:- Bindapur Grid

❖ Some Details about Site:-

1.	No. of Floor	1 st
2.	Division	Bindapur
3.	Concern Person	Mr. Ravinder Singh
4.	Solar Plant Capacity	80 Kw
5.	Local Transformer Rating	400 KVA
6.	Local Meter no.	29551830
7.	MCB/MCCB Rating	Unsafe
8.	LT Cable Size	Unsafe
9.	Distance from Solar to Transformer	60-70 Meter
10.	Distance from Solar to LT Panel	60-70 Meter
11.	Rooftop Coordinate	Lat:- 28.60861 Long:- 77.06868
12.	Ground Coordinate	Lat:- 28.609299 Long:- 76.068517
13.	Major Obstruction	Unutilized Tower



BRPL Bindapur Grid



Location

28°36'33"N 77°04'07"E



Edit



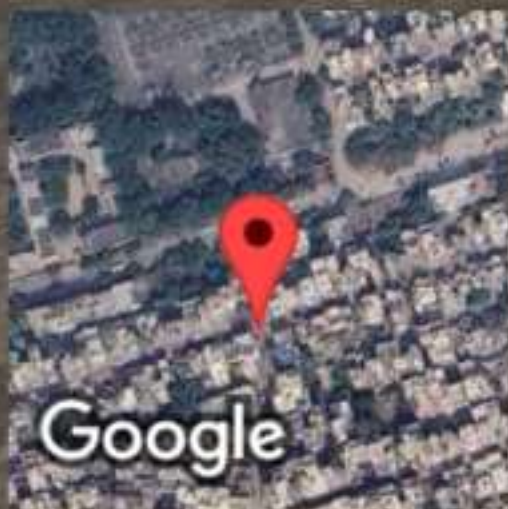
Layers







GPS Map Camera



New Delhi, Delhi, India

E678, Uttam Vihar, Block F, Mahavir Enclave Part 3, Bindapur, New Delhi, Delhi, 110059, India

Lat 28.60861°

Long 77.06868°

06/08/24 04:34 PM GMT +05:30



Solar Rooftop Assessment
Of
G-5 Papankalan Grid (Matiala)

Site Name:- G-5 Papankalan Grid

❖ Some Details about Site:-

1.	No. of Floor	1
2.	Division	Dwarka
3.	Concern Person	Mr. Devraj
4.	Solar Plant Capacity	70 Kw
5.	Local Transformer Rating	400 KVA
6.	Local Meter no.	29552989
7.	MCB/MCCB Rating	MCCB – 200Amp
8.	LT Cable Size	(1core/95sqmm)x4
9.	Distance from Solar to Transformer	60-70 Meter
10.	Distance from Solar to LT Panel	40-50 Meter
11.	Rooftop Coordinate	Lat:- 28.608814 Long:- 77.04907
12.	Ground Coordinate	Lat:- 28.582805 Long:- 77.035617
13.	Major Obstruction	Trees



Add placemark



Click on the map to drop the placemark

Location

28°36'30"N 77°02'57"E



Khushi Hospital
खुशी अस्पताल

FR FITNESS
REVOLUTION
एफ आर फिटनेस
रिवॉल्यूशन



Layers

Page 308 of 365



3D





GPS Map Camera



Delhi, Delhi, India

Plot No 2, Ground Floor, next to Big Basket, Pocket 1, Matiala Extension, Matiala, Delhi,
110059, India

Lat 28.608814°

Long 77.04907°

18/07/24 04:27 PM GMT +05:30



GPS Map Camera



Delhi, Delhi, India

Plot No 2, Ground Floor, next to Big Basket, Pocket 1, Matiala Extension, Matiala, Delhi,
110059, India

Lat 28.608814°

Long 77.04907°

18/07/24 04:27 PM GMT +05:30



GPS Map Camera



Delhi, Delhi, India

Plot No 2, Ground Floor, next to Big Basket, Pocket 1, Matiala Extension, Matiala, Delhi,
110059, India

Lat 28.608814°

Long 77.04907°

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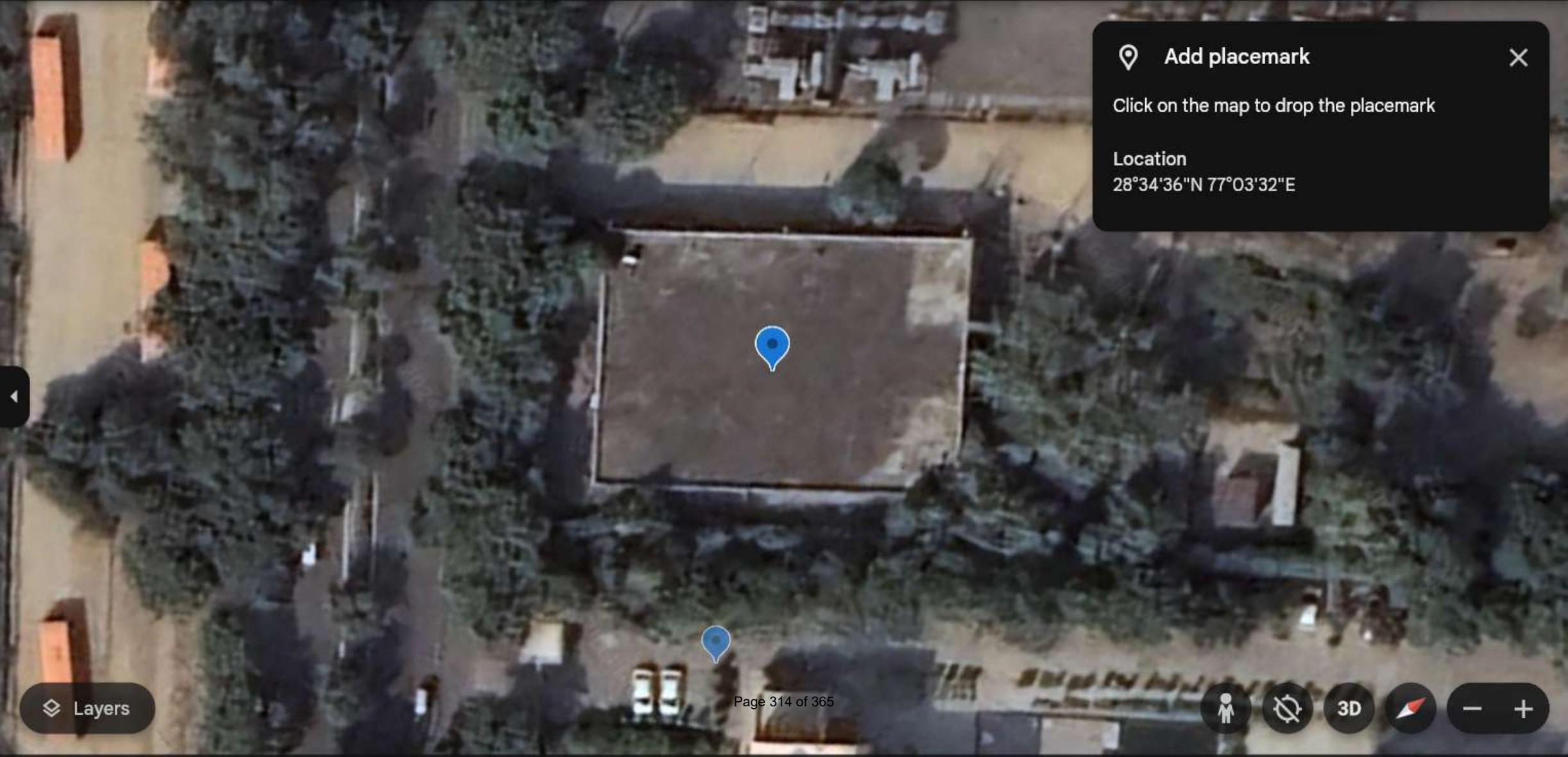


Solar Rooftop Assessment
Of
G-6 Dwarka Grid

Site Name:- G-6 Dwarka Grid

❖ Some Details about Site:-

1.	No. of Floor	1 st
2.	Division	Dwarka
3.	Concern Person	Mr. Devraj
4.	Solar Plant Capacity	70 Kw
5.	Local Transformer Rating	400 KVA
6.	Local Meter no.	Locked
7.	MCB/MCCB Rating	MCCB – 630Amp
8.	LT Cable Size	630/1
9.	Distance from Solar to Transformer	70-80 Meter
10.	Distance from Solar to LT Panel	50-60 Meter
11.	Rooftop Coordinate	Lat:- 28.577662 Long:- 77.057604
12.	Ground Coordinate	Lat:- 28.577176 Long:- 77.058708
13.	Major Obstruction	Trees in South Direction



Add placemark



Click on the map to drop the placemark

Location

28°34'36"N 77°03'32"E



Layers

Page 314 of 365









GPS Map Camera



Delhi, Delhi, India

Aitd Asian Institute Of Transport Development, Dwarka Sector 9, Dwarka, Delhi, 110075,
India

Lat 28.577662°

Long 77.057604°

18/07/24 06:12 PM GMT +05:30



Solar Rooftop Assessment
Of
66KV Grid Mathura Road

Site Name:- 66KV Grid Mathura Road

❖ Some Details about Site:-

1.	No. of Floor	1 st
2.	Division	New Friends Colony
3.	Concern Person	Fezale Imam
4.	Solar Plant Capacity	35Kw
5.	Local Transformer Rating	Locked
6.	Local Meter no.	Locked
7.	MCB/MCCB Rating	Locked
8.	LT Cable Size	Locked
9.	Distance from Solar to Transformer	60-70 Meter
10.	Distance from Solar to LT Panel	50-60 Meter
11.	Rooftop Coordinate	Lat:- 28.533238 Long:- 77.288312
12.	Ground Coordinate	Lat:- 28.53279 Long:- 77.28840
13.	Major Obstruction	Tree's shadow



GPS Map Camera



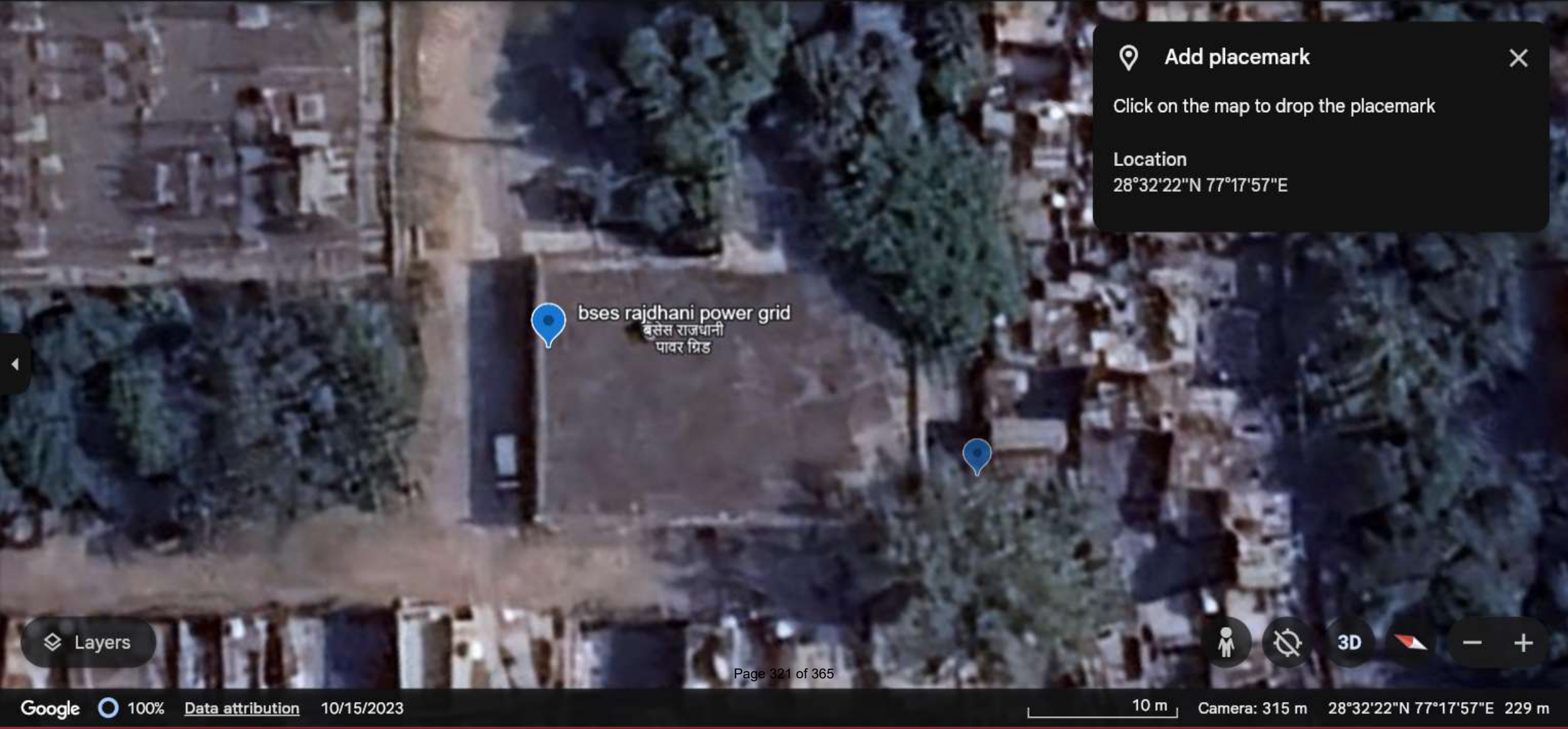
New Delhi, Delhi, India

G7QX+VF9, Pocket M, Sarita Vihar, New Delhi, Delhi 110044, India

Lat 28.539676°

Long 77.298814°

11/07/24 05:27 PM GMT +05:30



Add placemark



Click on the map to drop the placemark

Location

28°32'22"N 77°17'57"E



bses rajdhani power grid
बुसेस राजधानी
पावर ग्रीड



Layers



3D



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100%

[Data attribution](#)

10/15/2023

10 m

Camera: 315 m

28°32'22"N 77°17'57"E 229 m



GPS Map Camera



New Delhi, Delhi, India

G7QX+VF9, Pocket M, Sarita Vihar, New Delhi, Delhi 110044, India

Lat 28.539676°

Long 77.298814°

11/07/24 05:27 PM GMT +05:30



GPS Map Camera



New Delhi, Delhi, India

G7QX+VF9, Pocket M, Sarita Vihar, New Delhi, Delhi 110044, India

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Long 77.298814°

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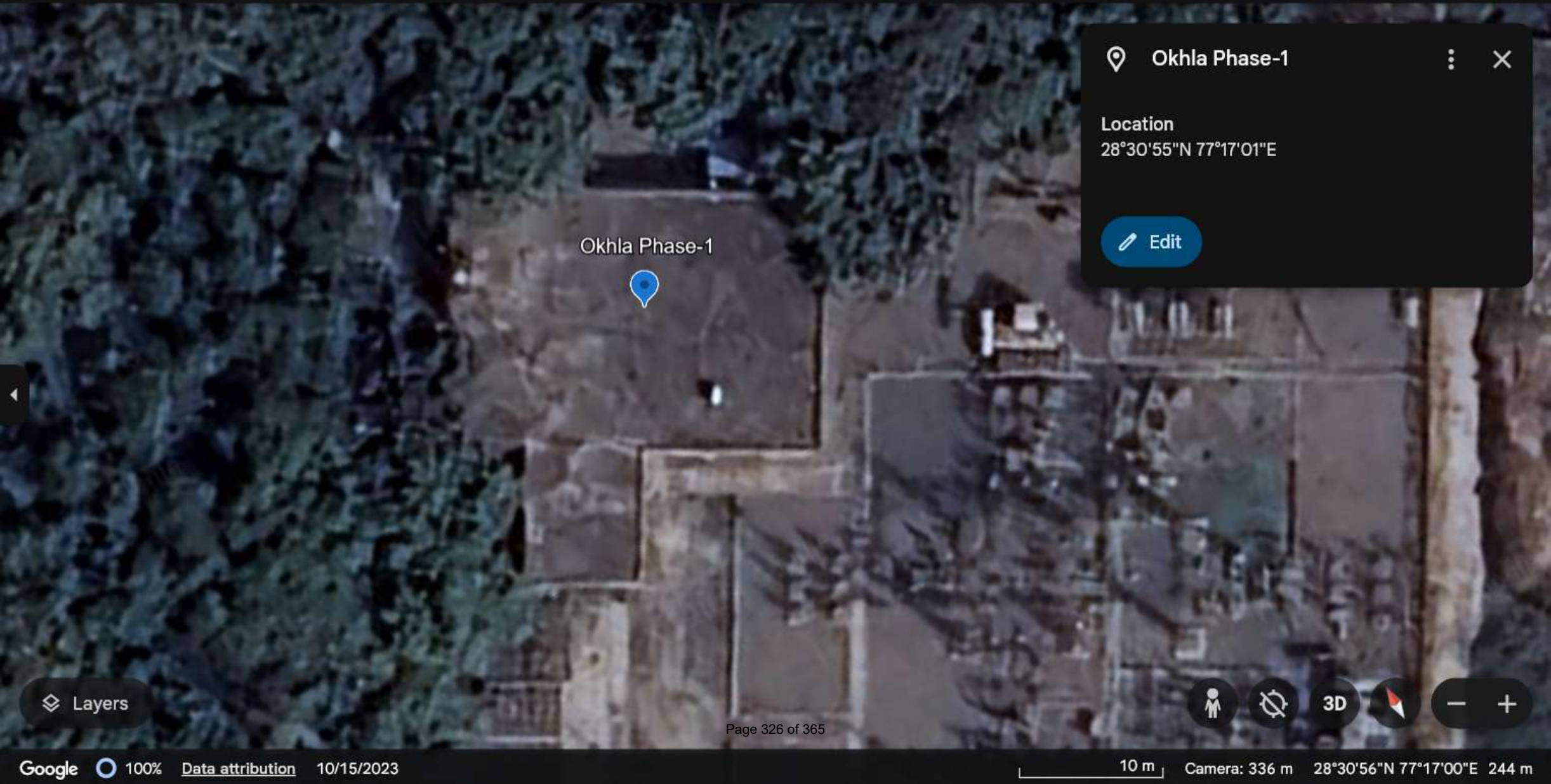


Solar Rooftop Assessment
Of
Okhla Phase-1

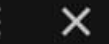
Site Name:- Okhla Phase-1

❖ Some Details about Site:-

1.	No. of Floor	1 st
2.	Division	Sarita Vihar
3.	Concern Person	Mr. Vivek Sahu
4.	Solar Plant Capacity	58Kw
5.	Local Transformer Ratingx2	400KVA
6.	Local Meter no.	29553164
7.	MCB/MCCB Rating	200Amp
8.	LT Cable Size	4core/50sqmm
9.	Distance from Solar to Transformer	60-70 Meter
10.	Distance from Solar to LT Panel	60-70 Meter
11.	Rooftop Coordinate	Lat:- 28.514046 Long:- 77.282684
12.	Ground Coordinate	Lat:- 28.515236 Long:- 77.283956
13.	Major Obstruction	Nothing
14.	Ground area for Solar	Not Available



Okhla Phase-1



Location

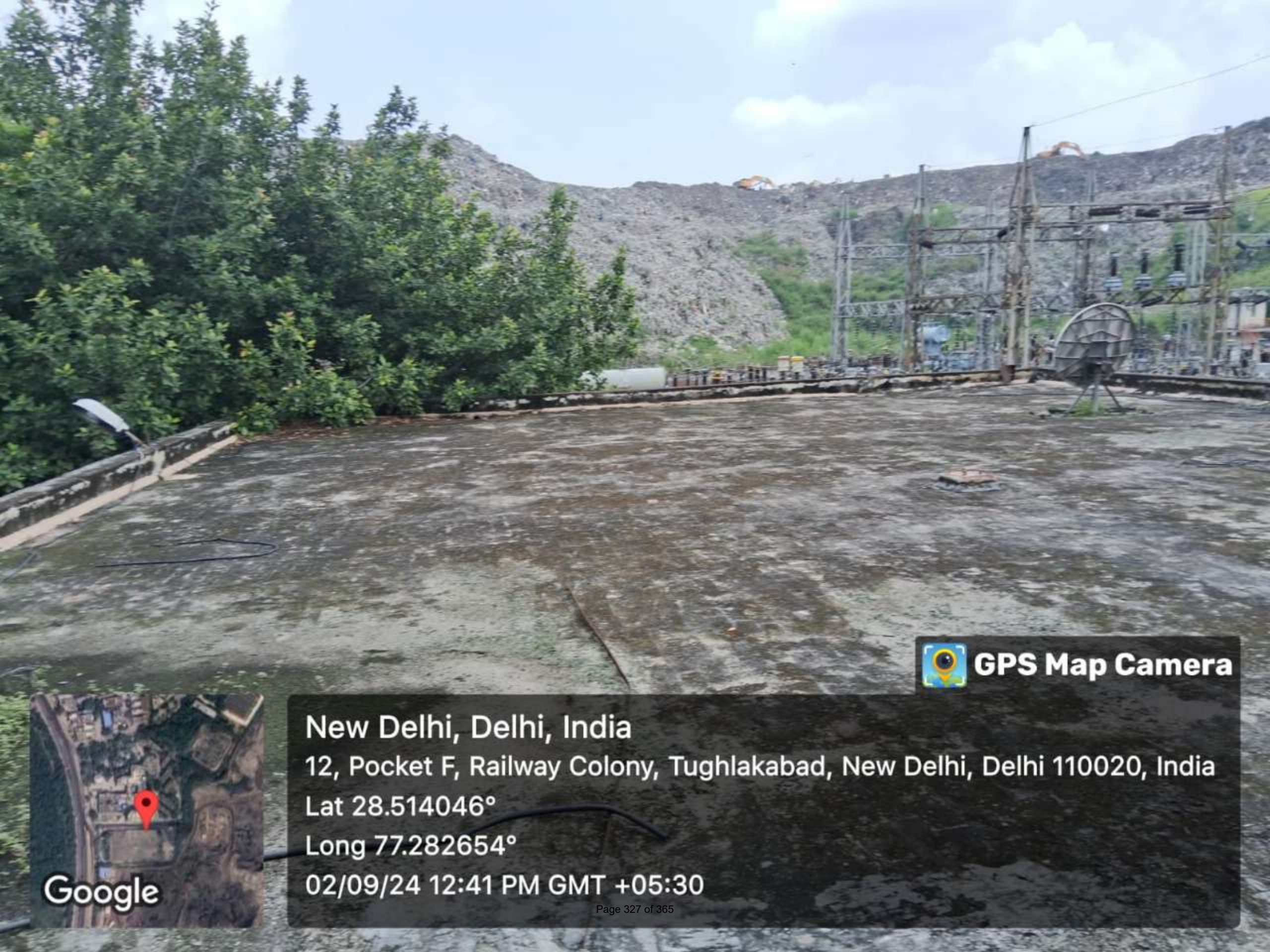
28°30'55"N 77°17'01"E

Edit

Layers



Page 326 of 365



GPS Map Camera

New Delhi, Delhi, India

12, Pocket F, Railway Colony, Tughlakabad, New Delhi, Delhi 110020, India

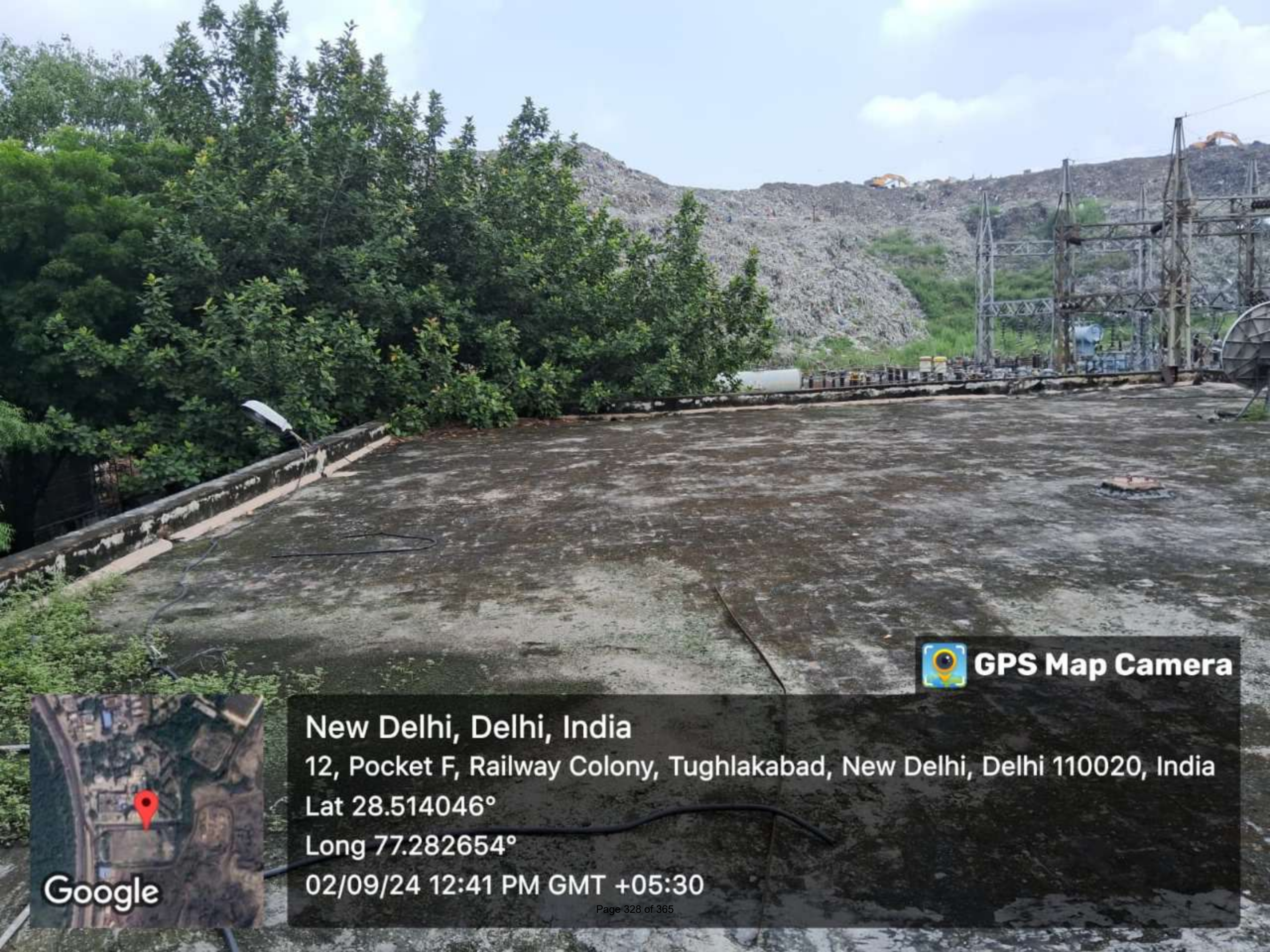
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Long 77.282654°

02/09/24 12:41 PM GMT +05:30



Google



GPS Map Camera

New Delhi, Delhi, India

12, Pocket F, Railway Colony, Tughlakabad, New Delhi, Delhi 110020, India

Lat 28.514046°

Long 77.282654°

02/09/24 12:41 PM GMT +05:30



Google



GPS Map Camera



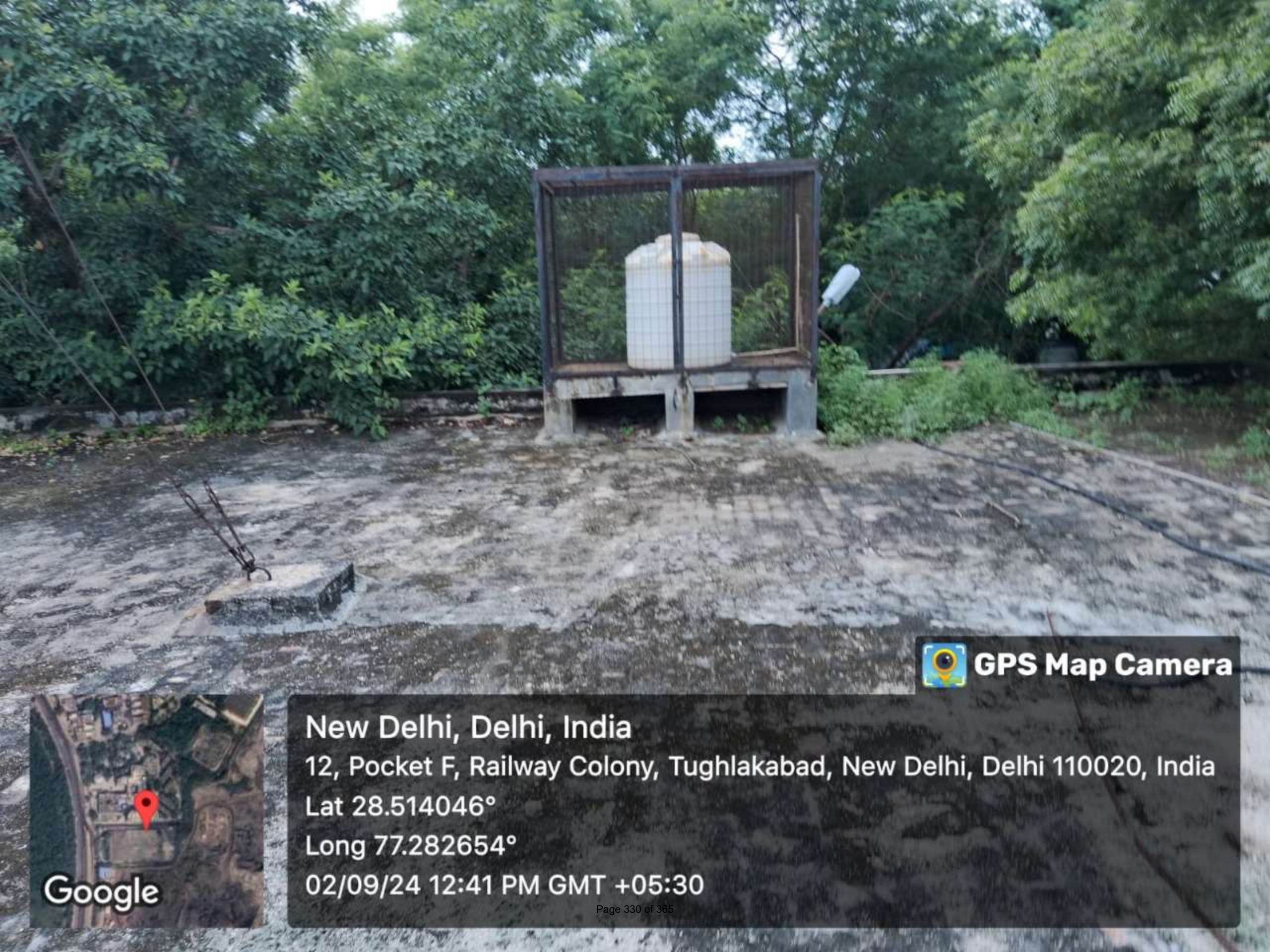
New Delhi, Delhi, India

12, Pocket F, Railway Colony, Tughlakabad, New Delhi, Delhi 110020, India

Lat 28.514046°

Long 77.282654°

02/09/24 12:41 PM GMT +05:30



GPS Map Camera

New Delhi, Delhi, India

12, Pocket F, Railway Colony, Tughlakabad, New Delhi, Delhi 110020, India

Lat 28.514046°

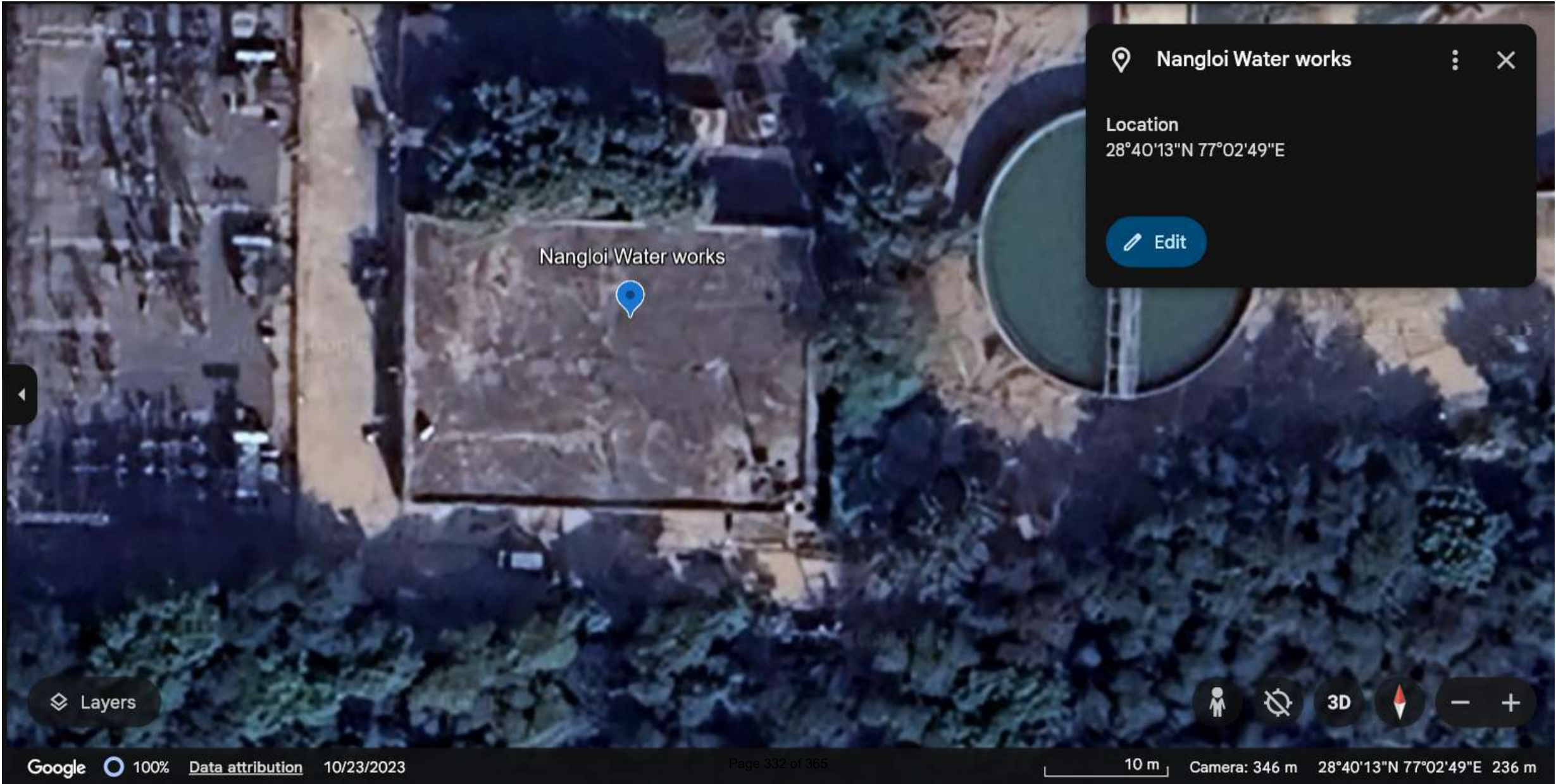
Long 77.282654°

02/09/24 12:41 PM GMT +05:30



Google





Nangloi Water works



Nangloi Water works



Location

28°40'13"N 77°02'49"E



Edit



Layers



3D



Google



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[Data attribution](#)

10/23/2023

Page 332 of 365

10 m

Camera: 346 m

28°40'13"N 77°02'49"E 236 m





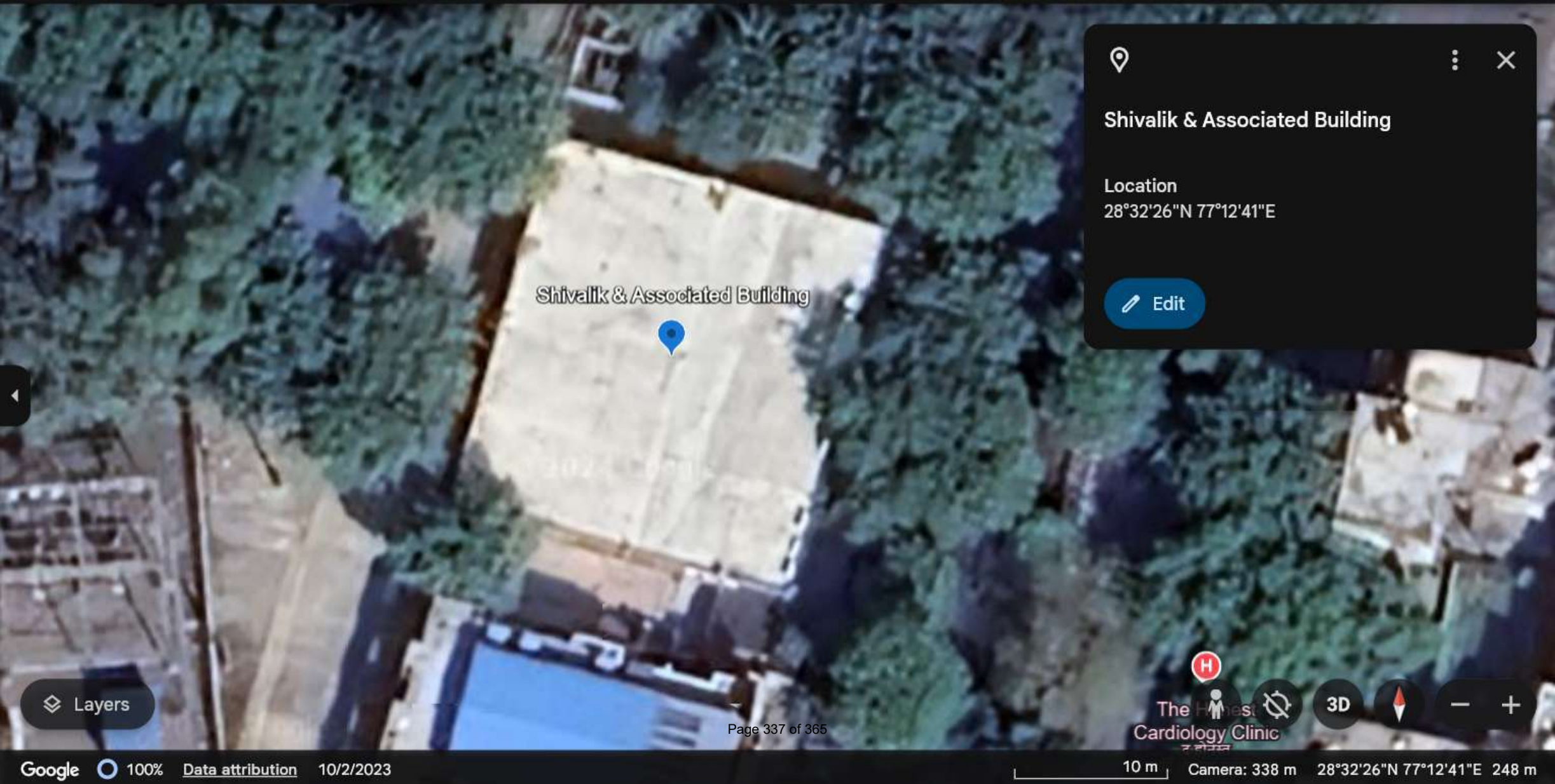


Solar Rooftop Assessment
Of
Shivalik & Associated Building

Site Name:- Shivalik & Associated Building

❖ Some Details about Site:-

1.	No. of Floor	1 st
2.	Division	-----
3.	Concern Person	Mr. Ramsoch
4.	Solar Plant Capacity	60 Kw
5.	Local Transformer Rating	400 KVA
6.	Local Meter no.	29510428
7.	MCB/MCCB Rating	630 Amp
8.	LT Cable Size	4core/150sqmm
9.	Distance from Solar to Transformer	50-60 Meter
10.	Distance from Solar to LT Panel	30-40 Meter
11.	Rooftop Coordinate	Lat:- 28.540817 Long:- 77.21146
12.	Ground Coordinate	Lat:- 28.540645 Long:- 77.211080
13.	Major Obstruction	Nothing
14.	Ground area for Solar	Already Installed



Shivalik & Associated Building



Shivalik & Associated Building

Location

28°32'26"N 77°12'41"E



Edit



Layers



The Heart
Cardiology Clinic
हृदय



3D



Page 337 of 365

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10/2/2023

10 m

Camera: 338 m

28°32'26"N 77°12'41"E 248 m



GPS Map Camera



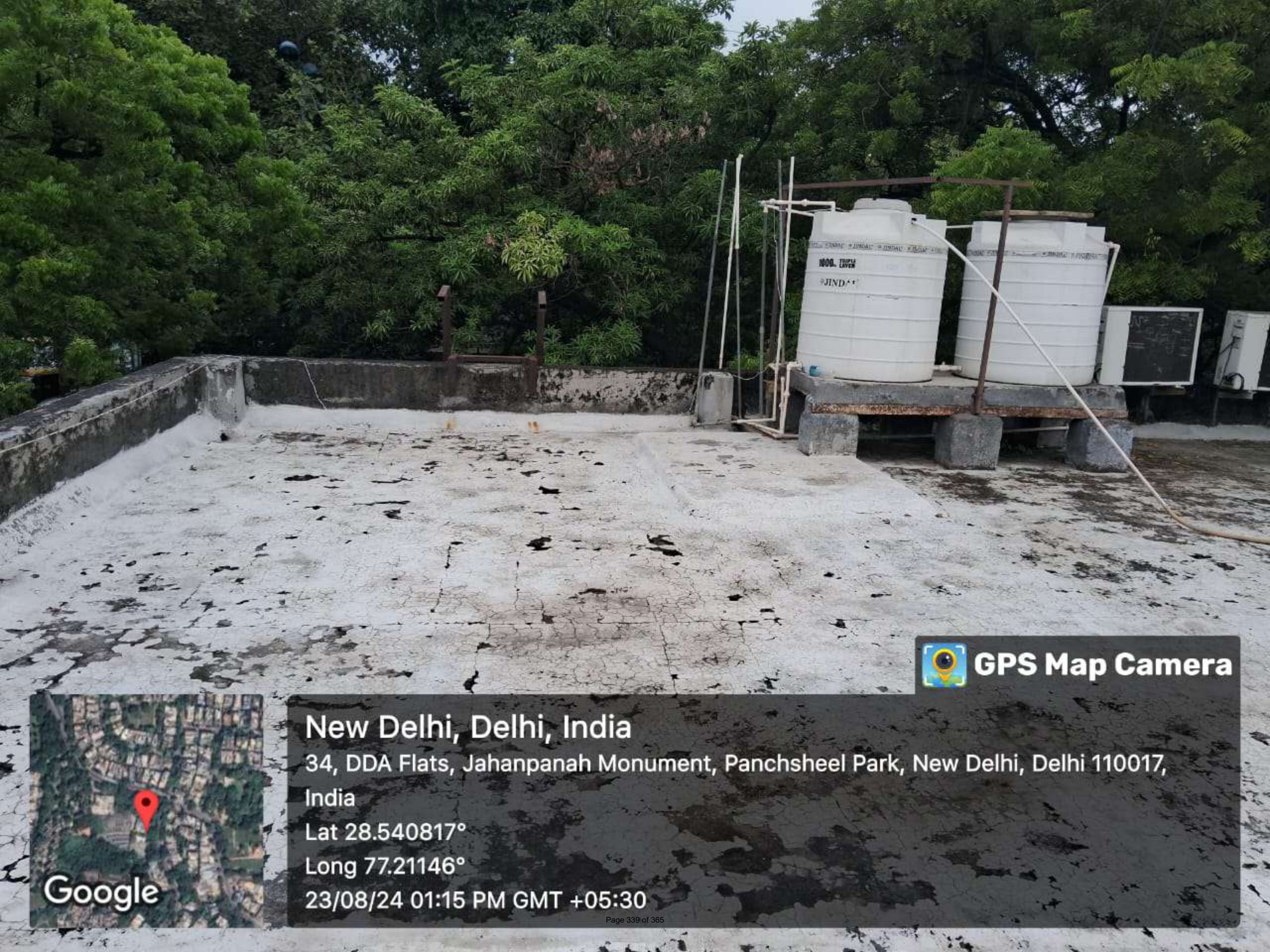
New Delhi, Delhi, India

34, DDA Flats, Jahanpanah Monument, Panchsheel Park, New Delhi, Delhi 110017,
India

Lat 28.540817°

Long 77.21146°

23/08/24 01:14 PM GMT +05:30



GPS Map Camera



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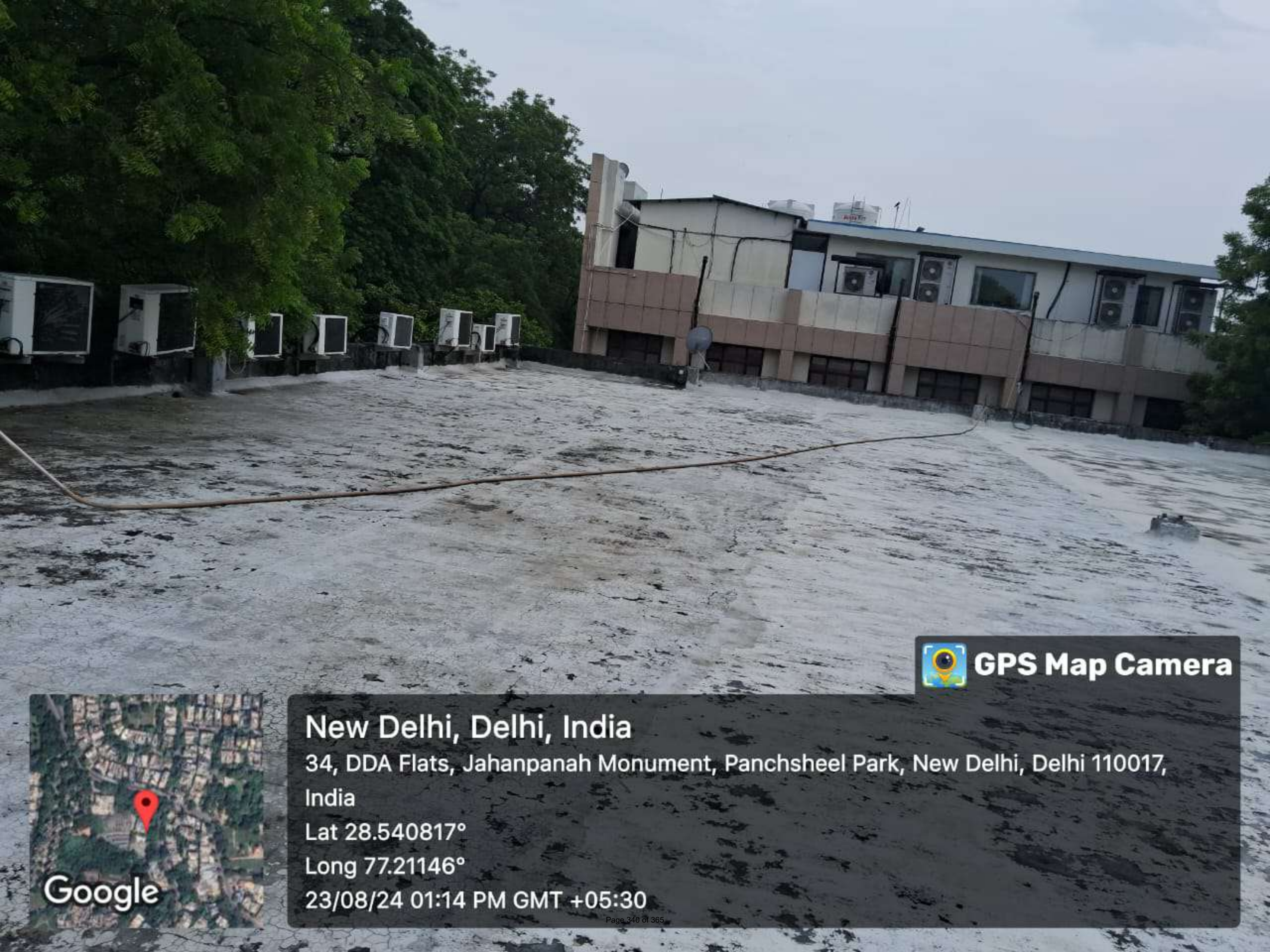
New Delhi, Delhi, India

34, DDA Flats, Jahanpanah Monument, Panchsheel Park, New Delhi, Delhi 110017,
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GPS Map Camera



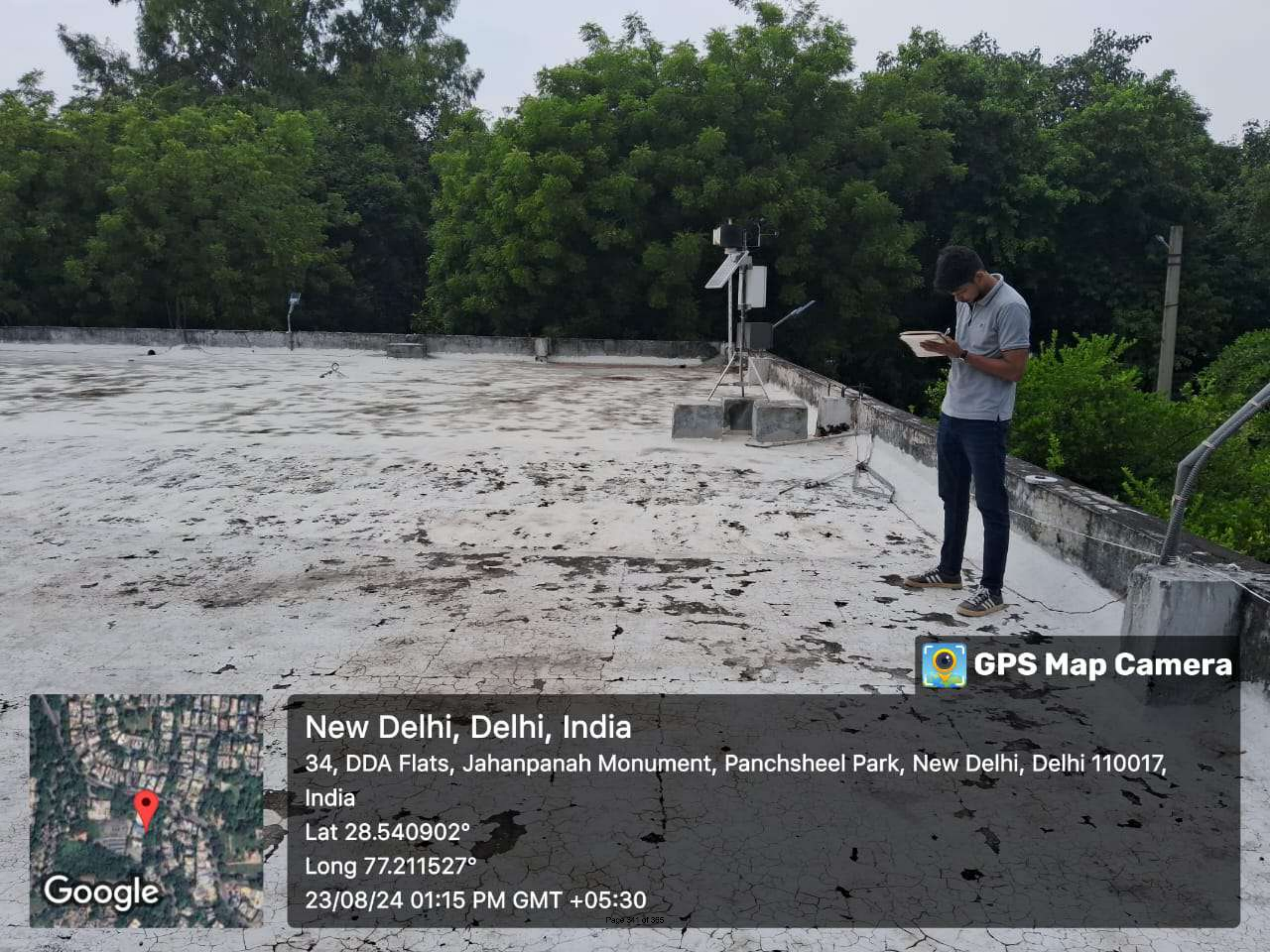
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India

Lat 28.540817°

Long 77.21146°

23/08/24 01:14 PM GMT +05:30



GPS Map Camera



New Delhi, Delhi, India

34, DDA Flats, Jahanpanah Monument, Panchsheel Park, New Delhi, Delhi 110017,
India

Lat 28.540902°

Long 77.211527°

23/08/24 01:15 PM GMT +05:30

SECTION X
DERC NET-METERING GUIDELINES

FOR PUBLICATION IN DELHI GAZETTE EXTRAORDINARY PART -III

Delhi Electricity Regulatory Commission Notification

Delhi Electricity Regulatory Commission (Net Metering for Renewable Energy) Regulations, 2014

No. F. 9(116)/DERC/Tariff/DS/2013-14/C.F 4110/ - In exercise of powers conferred under Section 181 read with Sections 61 and 86(1) (e) of the Electricity Act, 2003 (Act 36 of 2003) and all other powers enabling it in this behalf, the Delhi Electricity Regulatory Commission hereby makes the following regulations for Net Metering and grid connectivity for Renewable Energy Generator.

1. Short title and commencement

- (1) These regulations may be called the Delhi Electricity Regulatory Commission (Net Metering for Renewable Energy) Regulations, 2014.
- (2) These Regulations shall come into force from the date of their publication in the Official Gazette.

2. Definitions

In these regulations, unless the context otherwise requires,

- (1) “accuracy class index” shall mean the index as specified in Central Electricity Authority (Installation & operation of meters) Regulations 2006 and subsequent amendments thereof;
- (2) “Act” means the Electricity Act, 2003 (36 of 2003) and subsequent amendments thereof;
- (3) “connection agreement” means the agreement entered into for connecting Renewable Energy Source to the Distribution system;
- (4) “banking” means the process under which a Renewable Energy Source injects power into the grid in a time block with the facility to draw back the power from the grid at a different time block under the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations,

2014 and subsequent amendments thereof;

- (5) “billing cycle” means the period for which bill is raised;
- (6) “Commission” means Delhi Electricity Regulatory Commission;
- (7) “connected load” or “contract demand” or “sanctioned load” shall have the same meaning as defined in clause (n), (o) and (zn) of Regulation 2 respectively under Delhi Electricity Supply Code and Performance Standards Regulations 2007;
- (8) “financial year” or “year” means the period beginning from first day of April in an English calendar year and ending with the thirty first day of March of the next year;
- (9) “interconnection point” means the interface of Renewable Energy source with the network of distribution licensee;
- (10) “invoice” means either a periodic bill / supplementary bill or a periodic Invoice/ supplementary invoice raised by the Distribution Licensee;
- (11) “kVAh” means kilo volt ampere hour ;
- (12) “kWp” means kilo watt peak;
- (13) “net meter” means an appropriate energy meter capable of recording both import & export of electricity or a pair of meters one each for recording the net import and net export of electricity as the case may be;
- (14) “Obligated Entity” means the entity mandated under clause (e) of subsection (1) of section 86 of the Act to fulfill the renewable purchase obligation and identified under DERC (Renewable Purchase Obligation and Renewable Energy Certificate Framework Implementation) Regulations 2012;
- (15) “premises” includes any land, building, structure or rooftop or part or combination thereof;
- (16) “Renewable Energy Certificate (REC)” means the certificate issued in accordance with the Central Electricity Regulatory Commission (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 and subsequent amendments thereof;
- (17) “renewable energy generator” means the person, which may either be the consumer of the premises or any third party, who is responsible for generating electricity from Renewable Energy sources installed at the consumer’s premises;

- (18) “renewable energy meter” refers to a unidirectional energy meter, installed and used solely to record the renewable energy generation from the Renewable Energy System installed at the consumer’s premises;
- (19) “renewable energy system” means the system to generate electricity from such source(s) which are recognized as renewable energy source(s) by Ministry of New and Renewable Energy (MNRE) or any other agency as may be notified by Government of India/Commission;
- (20) “State Agency” means the agency as designated by the Commission under sub regulation (6) of DERC (Renewable Purchase Obligation & Renewable Energy Certificate Framework Implementation) Regulations, 2012.

3. Interpretation

- (1) All other words and expressions used in these Regulations although not specifically defined herein, but defined in the Act, shall have the meaning assigned to them in the Act.
- (2) The other words and expressions used herein but not specifically defined in these Regulations or in the Act but defined under any law passed by the Parliament or any regulation issued by the Commission, applicable to the electricity industry in the State, shall have the meaning assigned to them in such law/regulation.

4. Scope and application

- (1) These Regulations shall apply to such consumers who are a buyer of energy/electricity from the distribution licensee in its area of supply and the distribution licensee.
- (2) The Renewable Energy System shall comply with the standards and technical specifications as may be prescribed from time to time under the applicable law.

5. General conditions

- (1) The Distribution Licensee shall allow connectivity to the Renewable Energy System, on first come first serve basis, subject to operational constraints

Provided that the available capacity at a particular distribution transformer, to be allowed for connectivity under these Regulations, shall not be less than the limits as specified by the Commission from time to time

- (2) The Distribution Licensee shall provide information regarding distribution

transformer level capacity available for connecting Renewable Energy System under net metering arrangement within 1 (one) month from the date of notification of these regulations on its website and shall update the same within 7 working days of the subsequent financial year under intimation to the Commission.

- (3) The capacity of Renewable Energy System to be installed at any premises shall be subject to;
 - (i) the feasibility of interconnection with the grid;
 - (ii) the available capacity of the service line connection of the consumers of the premises; and
 - (iii) the sanctioned load of the Consumer of the premises;
- (4) Subject to Regulation 5(3)(i) & 5(3)(ii), if a Renewable Energy Generator has already installed or intends to install a Renewable Energy System of capacity higher than the sanctioned load of the consumer of the premises, and requires to connect it with the distribution licensee's system, then such Consumer of premises shall pay Service Line cum Development (SLD) charges at the time of registration of Renewable Energy System, equal to the differential amount of SLD charges between the capacity of the Renewable Energy System and the existing sanctioned load on the lines of enhancement of sanctioned load, as prescribed in the DERC Supply Code & Performance Standards, Regulations 2007 as amended from time to time and relevant orders issued thereof by the Commission from time to time.
- (5) The capacity of Renewable Energy system to be installed at the Premises of any consumer shall not be less than one kilo watt peak.

6. Procedure for Application and Registration

- (1) The Commission may issue guidelines and directions from time to time in respect of submission and processing of the application and applicable fee there-off for connectivity of Renewable Energy System with the distribution system under these Regulations which the Distribution Licensee, consumer of the premises and the Renewable Energy Generator shall abide by.
- (2) The consumer of the premises and/ or the Renewable Energy Generator, as the case may be, shall submit the application to the concerned Distribution Licensee to connect the Renewable Energy system to the distribution system of the Distribution. The Distribution Licensee shall make available all the forms on their website and at their local offices.

- (3) The Distribution Licensee shall acknowledge the application and take all necessary actions including sending appropriate communications to the applicant as per the guidelines issued under these Regulations.

7 Interconnectivity, Standards and Safety

- (1) The distribution licensee shall ensure that:-
 - (i) the interconnection of the Renewable Energy System with the distribution system of the licensee conforms to the specifications, standards and provisions as provided in the Central Electricity Authority (Technical Standards for connectivity of the Distributed Generation Resources) Regulations, 2013, as amended from time to time;
 - (ii) the interconnection of the Renewable Energy System with the distribution system of the licensee conforms to the relevant provisions of the Central Electricity Authority (Measures relating to Safety and Electric Supply), Regulations, 2010, as amended from time to time
- (2) The Renewable Energy Generator may install grid interactive Renewable Energy system with or without battery backup.

Provided that if the Renewable Energy Generator, prefers connectivity with battery backup (full load backup/partial load backup), in all such cases the inverter shall have separate backup wiring to prevent the battery/ Decentralized generation(DG) power to flow into the grid in the absence of grid supply and manual isolation switch shall also be provided.

- (3) The Renewable Energy Generator shall be responsible for safe operation, maintenance and rectification of any defect of the Renewable Energy System upto the point of Net Meter beyond which the responsibility of safe operation, maintenance and rectification of any defect in the system, including the Net Meter, shall rest with the Distribution Licensee.
- (4) The Distribution Licensee shall have the right to disconnect the Renewable Energy System at any time in the event of possible threat/damage, from such Renewable Energy System to its distribution system, to prevent an accident or damage. Subject to Regulation 7 (3) above, the Distribution Licensee may call upon the Renewable Energy Generator to rectify the defect within a reasonable time.

8. Metering arrangement

- (1) All the meters shall adhere to the standards as specified in CEA (Installation and Operation of meters) Regulations 2006 and (Installation and Operation of meters) Regulations, 2010 as amended from time to time.
- (2) The Net Meter shall be, as per single phase or three phase requirement. All the meters to be installed for net metering shall be of the same or better Accuracy Class Index than the existing meter installed at its Premises.
- (3) The Renewable Energy Meter and the Net Meter at the premises of the consumer shall be procured and installed by the Distribution Licensee as per the provisions of DERC (Supply Code and Performance Standards) Regulations 2007. However, if the consumer of the premises wishes to procure the Net Meter, he may procure such meter and present the same to the distribution licensee for testing and installation.
- (4) All meters, including the Renewable Energy Meter shall be installed at an accessible location of the Premises to facilitate easy access for meter reading to the Distribution Licensee.
- (5) The cost of Renewable Energy Meter shall be borne by the distribution licensee and the cost of Net Meter shall be borne by the consumer of the premises. The consumer of the premises or the distribution licensee, who so ever if desires, may install check meter at their own cost.
- (6) The charges for the testing and installation of the Net Meters shall be borne by the consumer of the premises and for the Renewable Energy Meter shall be borne by the Distribution Licensee
- (7) The Net Meters to be installed for the consumers of the premises under the ambit of time of day tariff shall be time of day (ToD) compliant.

9. Billing and Energy Accounting

- (1) The accounting of electricity generated, consumed and injected by the Renewable Energy Generator under these regulations shall become effective from the date of connectivity of Renewable Energy System with the distribution system under these Regulations.
- (2) The procedure for billing and energy accounting shall be applicable as directed by the Commission from time to time.

- (3) The Distribution Licensee shall show, separately, the energy units exported, the energy units imported, the net energy units billed and/or the energy units carried forward, if any, to the consumer in their bill for the respective billing period.
- (4) If during any billing period, the export of units exceeds the import of units consumed, such surplus units injected by the consumer shall be carried forward to the next billing period as energy credit and shown as energy exported by the consumer for adjustment against the energy consumed in subsequent billing periods within the settlement period.
- (5) During any billing cycle, the distribution licensee shall raise invoice for the net electricity consumption, as per applicable tariff, only after adjusting / netting off of the unadjusted energy credits of the previous billing cycle(s).
- (6) The surplus energy measured in kilo-watt hour shall be utilized to offset the consumption measured in kilo-watt hour only unless otherwise allowed by the Commission from time to time. In case the Consumer is billed on kVAh, during injection of surplus energy to the grid, the Power Factor shall be assumed equal to unity.
- (7) At the end of the each Financial Year, any net energy credits, which remain unadjusted, shall be paid for by the distribution licensee to the consumers as per the rates notified by the Commission from time to time.
- (8) There shall be no deemed generation charges payable to the Renewable Energy Generator or consumer of the premises.

10. Applicability of other charges

The Renewable Energy system under net metering arrangement shall be exempted from wheeling, banking, cross subsidy and other charges for a period of Five years, unless extended thereafter.

11. Eligibility to Participate under Renewable Energy Certificate Mechanism

The eligibility for Renewable Energy Certificate and issue of such certificate Renewable Energy under these Regulations shall be as per the eligibility criteria specified under Central Electricity Regulatory Commission (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 and subsequent amendments thereof;

12. Renewable Purchase Obligation

The quantum of electricity generated under these Regulations shall qualify towards compliance of Renewable Purchase Obligation (RPO) for the distribution licensee if Renewable Energy Generator is not an obligated entity.

13. Violation of regulations:

- (1) In case of violation of these regulations by a party viz. consumer, distribution licensee and Renewable Energy Generator shall be liable to pay penalty as decided by the Commission.
- (2) The Commission may grant compensation to the affected party.

14. Powers to give directions

The Commission may from time to time issue such directions/guidelines/ orders as it may consider deemed fit/appropriate for the implementation of these Regulations

15. Powers to relax

The Commission may by general or special order, for reasons to be recorded in writing may relax any of the provisions of these Regulations on its own motion or on an application made before it by an interested person.

16. Powers to amend

The Commission may from time to time add, vary, alter, suspend, modify, amend or repeal any provisions of these Regulations

Jayshree Raghuraman
Secretary

Delhi,
Dated : 2nd September, 2014.

Guidelines under DERC (Net Metering for Renewable Energy) Regulations, 2014

Introduction:

To promote use of Renewable Energy Generation for self consumption of the consumer, Delhi Electricity Regulatory Commission has issued DERC (Net Metering for Renewable Energy) Regulations 2014, herein after referred to as Net Metering Regulations, 2014.

For effective and proper implementation of the Net Metering Regulations, 2014, the Delhi Electricity Regulatory Commission, in exercise of powers conferred under the Electricity Act, 2003 and under Regulation 14 of the Net Metering Regulations, 2014 hereby formulate the following guidelines:

1. Available Capacity at Distribution Transformer level for Net Metering

- (1) Distribution Transformer level capacity to be offered for Connecting Renewable EnergySystem for Net Metering by the Distribution Licensee shall not be less than 20% (Twenty percent) of the rated capacity of respective distribution transformer.
- (2) Save as 1(1) above and the capacity specified by the Distribution Licensee under Regulation 5(1) of Net Metering Regulations, 2014, the Commission at its sole discretion may appoint an independent agency to assess capacity that may be made available for offering connectivity from any/all of the distribution transformer(s) for Renewable EnergySystem by the Distribution Licensee.

2. General Conditions

Subject to the Regulation 30 of DERC (Supply code and Performance Standards Regulations), 2007 and subsequent clarification issued/amended by the Commission from time to time , enhancement of line capacity in terms of Regulation 5(4) of the Net Metering Regulations,2014 for already installed or intention for installation of a Renewable EnergySystem of Capacity higher than the sanctioned load of the consumer of the premises, the enhancement of such line capacity shall be used only for calculation of Service Line cum Development (SLD) charges and not for levying corresponding additional fixed charges.

3. Procedure for Application and Registration

The procedure for connectivity of Renewable EnergySystem under Regulation 6 of Net Metering Regulations, 2014 is a three tier process, which is as follows;

- i) Feasiblity Analysis,
- ii) Registration
- iii) Connection Agreement.

The procedure adopted for these processes shall be as under:

Feasibility Analysis:

- (1) The consumer shall submit an application, seeking connectivity under the Net Metering Regulations, 2014 in the specified format as per Annexure – I along with an application fee of Rs. 500/- (Rupees Five Hundred) only to the concerned Distribution Licensee for feasibility analysis.
- (2) The Distribution Licensee shall acknowledge the receipt of the application form and shall record time, date & serial number of the receipt which shall form the basis for drawing the priority list, for further processing of applications on first cum first serve basis. Such a priority list having validity of one hundred and eighty (180) days from the date of receipt of application shall be displayed at prominent locations in the offices of the Distribution Licensee and to be uploaded on its website.
- (3) In order of priority, the Distribution Licensee shall complete the feasibility analysis for connecting the Renewable Energy System to the distribution system within thirty (30) days from the date of receipt of the application..
- (4) On feasibility analysis, if it is found that due to certain reasons including operational constraints it is not feasible for the Distribution Licensee to provide connectivity at all or upto the applied capacity i.e. connectivity is feasible for a reduced capacity, the Distribution Licensee shall specifically record the reasons thereof and subject to clause 5 of these guidelines, intimate in writing the same to the applicant(s) specifically mentioning that:
 - (a) the applicant has the option, to be exercised in writing, to either
 - (i) accept the connectivity for the reduced capacity and approach the Distribution Licensee to process the case; or
 - (ii) seek refund of its application fee either within seven (7) days of the receipt of the intimation; or
 - (iii) to stay in the priority list till its validity i.e. upto 180 (one hundred and eighty) days under clause 3(2) of these guidelines, for re-consideration and approval in case of future availability of applied capacity at the distribution transformer level etc. within such period.
 - (b) If the applicant seeks refund, the Distribution Licensee shall refund the application fee within seven (7) days from the date of receipt of intimation from the applicant in this regard. Thereafter, the Distribution Licensee shall notify the updated position of the remnant applicants in the priority list.

- (c) In case the consumer opts to stay in the priority list and even in the validity period of priority list of one hundred and eighty (180) days the required capacity does not get available, the Distribution Licensee shall refund the application fee on its own within seven (7) days of expiry of such 180 (one hundred and eighty) days period;
- (5) The Distribution Licensee shall seek prior approval of the Commission for not providing connectivity or offering connectivity for a reduced capacity.
- (6) On feasibility analysis, if it is found feasible for the Distribution Licensee to provide connectivity for the applied capacity or a reduced capacity under clause 3(4)(a)(i), the Distribution Licensee within seven (7) days from the feasibility analysis shall inform all such applicants, to apply for registration and further processing. A Registration form as per Annexure – II shall also be furnished with the Intimation Letter containing the following information:
- (a) Details of documents to be submitted by the applicant;
 - (b) Technical specifications including the essential safety features;
 - (c) Allowable capacity and technical specifications of the Renewable Energy Meter and Net Meter;
 - (d) Relevant abstract of the applicable Rules & Regulations;
 - (e) List of approvals / clearances required from respective authorities / agencies for installation of Renewable EnergySystem;
 - (f) Model Renewable EnergySystem line diagram for grid connectivity;
 - (g) Model Connection Agreement;
 - (h) SLD charges, if applicable as per Regulation 3(4);
 - (i) Applicable charges as specified by the Commission from time to time;
 - (j) Any other information/details as may be required to ensure safe and reliable operation of the distribution system with prior approval of the Commission;
 - (k) Important clauses related to the technical and interconnection requirements as stipulated in Annexure –III.

Registration:

- (7) The applicant, within thirty (30) days from the date of receipt of the intimation regarding feasibility and capacity under clause 3(6) of these guidelines, shall apply for registration of his scheme for installation of the Renewable EnergySystem in the format specified in Annexure-II (Registration Form) along with requisite documents and the Registration Charges as stipulated below and other applicable charges:-

Sl. No.	Capacity (kW)	Charges (Rs)
1	1 to $\leq$ 10	1000/-
2	> 10 to $\leq$ 50	3000/-
3	> 50 to $\leq$ 100	6000/-
4	> 100 to $\leq$ 300	9000/-
5	> 300 to $\leq$ 500	12000/-
6	> 500	15000/-

- (8) At the time of submission of Registration Form, the Distribution Licensee shall perform preliminary checks of all the documents submitted along with the Registration Form in the presence of applicant or his representative, and if found complete, shall receive the form and acknowledge its receipt.
- (9) The Distribution Licensee shall scrutinize the Registration Form within forty five (45) days from the date of its receipt, and shall either
- (a) allot a Registration Number to the applicant, if Registration Form is found complete and in order, or
 - (b) intimate the applicant about the deficiencies observed in the submitted Registration Form, if any, along with the instructions to cure such deficiencies.
- (10) The consumer shall re-submit the Registration Form, along with the requisite documents, after curing the deficiencies contained therein within fifteen (15) days of the receipt of intimation.
- (11) Within fifteen (15) days from the date of receipt of the re-submitted Registration Form, the Distribution Licensee shall scrutinize it and shall
- (a) register the scheme and assign a registration number if Registration Form is found complete and in order;
 - (b) give a personal hearing to the applicant and also intimate in writing the deficiencies, found if any, in the Registration Form and/or the documents submitted by the applicant giving him a final opportunity to cure the deficiencies and its re-submission.

- (12) The applicant within fifteen (15) days from such intimation shall cure the deficiencies and re-submit the Registration Form along with documents to the Distribution Licensee. If the Registration Form is found complete and in order, the Distribution Licensee shall register the scheme and assign a Registration Number to it. However, if it is observed that certain deficiencies still persist, the application for registration may be rejected under intimation to the Commission.

Connection Agreement:

- (13) Within thirty (30) days from the date of registration, the Distribution Licensee and the Consumer shall execute a Connection Agreement. The Connection Agreement shall include clauses relating to interconnectivity, billing and settlement, dispute resolution and Standards as per Net Metering Regulations, 2014, relevant Guidelines, Orders thereof, as amended from time to time.

In case the applicant fails to execute the Connection Agreement for reasons assigned to him, the registration shall be treated as cancelled.

- (14) The applicant shall avail the connectivity of the Renewable Energy System within one (1) year from the date of registration, failing which the registration may be cancelled under intimation to the Commission and the Distribution Licensee can proceed for allotment of such capacity to other applicants, strictly on the basis of first come first serve basis as per the available priority list.
- (15) The applicant shall obtain requisite approvals, in accordance with the provisions of the Central Electricity Authority (Technical Standards for Connectivity of Distributed Generation Resources) Regulations, 2013 for commissioning of the Renewable Energy System, and furnish copies of approvals to the Distribution Licensee.
- (16) The Distribution Licensee, within fifteen (15) days from the date of installation of the Renewable Energy System shall procure, test and install the Net Meter. In case the Net Meter is procured by the applicant, the Distribution Licensee, within fifteen (15) days from the intimation from the applicant regarding procurement of the Net Meter, shall test and install the Net Meter so procured.
- (17) The Distribution Licensee shall, within fifteen (15) days of receipt of the intimation under Regulation 8(2) of the Net Metering Regulations, 2014 test the Renewable Energy System in the presence of the applicant as per the provisions of the Central Electricity Authority (Technical Standards for Connectivity of Distributed Generation Resources) Regulations, 2013 and shall provide the connectivity with the distribution system.
- (18) Distribution Licensee may keep the entire information regarding application and registration of the Renewable Energy System on the website or web portal for transparency and convenience.

4. Interconnectivity, Standards and Safety

The right of the Distribution Licensee to disconnect the Renewable Energy System under Regulation 7(4) of the Net Metering Regulations, 2014 shall be governed by the Central Electricity Authority (Measures relating to Safety and Electric Supply), Regulations, 2010, as amended from time to time.

5. Metering Arrangement and Standards

- (1) Cost of the Net Meter, which is capable of recording both import and export of electricity, shall mean the differential cost between existing consumer meter, if removed and such a new Net Meter is installed to be borne by the consumer.
In case net metering is done with the help of two unidirectional meters, the cost of additional meter, other than the existing consumer meter shall be borne by the consumer.
- (2) Meters shall be Meter Reading instrument (MRI) compliant or AMR (Automatic Meter Reading) or AMI (Advanced Metering Infrastructure) compliant for recording meter readings.

6. Procedure of billing & accounting

Procedure of billing & accounting for a Consumer as determined by the Commission from time to time, in terms of Regulation 9.2 of Net Metering Regulations, 2014 shall be as follows:

(1) Non Time of Day Tariff Consumers:

If during any billing period, the export of units exceeds the import of units consumed, such surplus units injected by the consumer shall be carried forward to the next billing period as energy credit and shown as energy exported by the consumer for adjustment against the energy consumed in subsequent billing periods within the settlement period.

(2) Time of Day Tariff Consumers

- a) The electricity consumption in any time block (e.g., peak hours, off-peak hours, etc.) shall be first compensated with the electricity generation in the similar time blocks in the same billing cycle. For the purpose of carry forward of surplus or set off of energy credits, the energy units shall be moderated as per the relevant rebate/surcharge percentage of ToD tariff applicable for the relevant year. Any surplus generation over consumption in any time block in a billing cycle shall be accounted as if the surplus generation/ Energy Credits occurred during the off-peak time block. For the purpose of clarity, a sample calculation of moderation of units is at Annexure IV.
- b) If the consumer is injecting energy into the distribution system in the peak hours or in a time block when Distribution Licensee is having more demand than the available energy, Distribution Licensee with the approval of the Commission may propose

incentives to such consumers to increase such generation to reduce costly short term power purchase of that time block.

7. Tariff at the end of financial year for surplus energy

The Consumer shall be paid for net energy credits which remain unadjusted at the end of the financial year at the rate of Average Power Purchase Cost (APPC) of the Distribution Licensee for the respective year on provisional basis. Subsequently after true up of the power purchase cost of the Distribution Licensee, by the Commission, adjustment amount between provisional rate and trued up rate of average power purchase cost shall be credited/debited to the account of consumer in the next billing cycle after issuance of the true up order of the relevant year by the Commission.

8. Theft and Tempering of Meter(s)

Theft of electricity and tampering of meter(s) shall be settled as per the relevant provisions of the Electricity Act 2003 and the DERC Supply Code and Performance Standards Regulations, 2007 ,as amended from time to time.

9. Dispute Resolution

Any dispute in billing shall be settled as per the DERC (Guidelines for Establishment of Forum for Redressal of Grievances of the Consumers and Ombudsman) Regulations, 2003.

10. Violation of guidelines

- (1) In case of violation of these guidelines by any party viz. Consumer, Distribution Licensee and/or Renewable Energy Generator, the errant party shall be liable to pay penalty as decided by the Commission.
- (2) The Commission may grant compensation to the affected party.

11. Powers to amend

The Commission has powers to amend, add vary, alter, suspend, modify or repeal provision(s) of these guidelines as and when it deems fit.

Jayshree Raghuraman
Secretary

Annexure-I

Application Form Number

APPLICATION FOR INTENT TO SEEK CONNECTIVITY OF RENEWABLE ENERGY SYSTEM (Regulation 5.1)

1.	Name Full Address of Consumer		
2.	Consumer No. (CA. No.)		
3.	Category (Domestic / Non Domestic/Commercial etc – SPECIFY)		
4.	Telephone No	Res:	Mob:
5.	E.mail address		
6.	Sanctioned Load		
7.	Renewable Energy Source (Solar, wind , etc.)		
8.	Capacity of Renewable Energy System proposed to be connected		
9.	Whether the Consumer is under ToD billing system	Yes/No	
10.	Type of Renewable Energy System proposed (Solar, Wind, Biomass etc – specify)		
11.	Location and address of Proposed Renewable Energy System (roof top, ground mounted, any other – specify)		
12.	Capacity of Renewable Energy System proposed to be connected		
13.	Preferred mode of Communication (Post/ By Hand/ Electronic etc – specify)		

Place:

Delhi:

Signature of Consumer

.....

ACKNOWLEDGEMENT

Application Number.....

Received the application for connectivity of Renewable Energy System

Name CA. No.

Date....., Time, Serial no.

Application Fee Paid or Not

Renewable Energy Plant Capacity..... Renewable Energy Type.....

Mode of payment (Cheque / DD/RTGS/NEFT).....

Details of Cheque/DD/RTGS/NEFT.....

Name of Officer

Seal

Signature

(Designation of Officer)

(To be Specified at the time of Signing)

Annexure-II

APPLICATION FOR REGISTRATION OF THE SCHEME FOR RENEWABLE ENERGY SYSTEM

1	Name	
2	Address for Communication	
3	Consumer No.,	
4	Telephone No.,	
5	E-mail	
6	Renewable Energy Source	
7	Application No.	
8	Serial No. of receipt of Application	
9	Contract Demand of Consumer	
10	Capacity of Renewable Energy System to be connected (Capacity not to exceed as approved by the Discom)	
11	Technical specifications and other particulars of Renewable Panel, Grid Tied Inverter and Interlocking System etc. proposed to be installed – whether attached (Yes/No)	
12	Technical specifications and other particulars of Renewable energy meter and Net Meter to be installed – whether attached (Yes/No)	
13	whether Consumer opts to purchase meter himself or from Distribution Licensee	
14	Drawings for installing the Renewable Energy System – whether attached (Yes/No)	
15	Proposed date of completion of the installation	

Place:

Delhi:

Signature of Consumer

Acknowledgement

Received the application for registration of the scheme for Renewable Energy System

Name

Date

Registration Number.....

Consumer No.

Renewable Plant Capacity

Mode of payment (Cheque / DD/NEFT/RTGS).....

Details of Cheque/DD/RTGS/NEFT).....

Name of Officer
Seal

Designation of Officer
Signature

Annexure-III

IMPORTANT CLAUSES RELATED TO THE TECHNICAL & INTERCONNECTION REQUIREMENTS:

Parameter	Reference	Requirement
Overall conditions of Service	State Distribution/Supply Code	Reference to State Distribution Code
Overall Grid Standards	Central Electricity Authority (Grid Standard) Regulations 2010	Reference to regulations
Equipment	BIS / IEC / IEEE	Reference to standards
Meters	Central Electricity authority (Installation & operation of meters) Regulation 2006	Reference to regulations and additional conditions issued by the Commission.
Safety and supply	Central Electricity Authority(measures of safety and electricity supply) Regulations,2010	Reference to regulations
Harmonic Current	IEEE 519 CEA (Technical Standards for Connectivity of the Distributed Generation Resources) Regulations 2013	Harmonic current injections from a generating station shall not exceed the limits specified in IEEE 519
Synchronization	IEEE 519 CEA (Technical Standards for Connectivity of the Distributed Generation Resources) Regulations 2013	Renewable Energy System must be equipped with a grid frequency synchronization device. Every time the generating station is synchronized to the electricity system. It shall not cause voltage fluctuation greater than +/- 5% at point of connection.
Voltage	IEEE 519 CEA (Technical Standards for Connectivity of the Distributed Generation Resources) Regulations 2013	The voltage-operating window should minimize nuisance tripping and should be under operating range of 80% to 110% of the nominal connected voltage. Beyond a clearing time of 2 second, the Renewable Energy system must isolate itself from the grid.
Flicker	IEEE 519 CEA (Technical Standards for Connectivity of the Distributed Generation Resources) Regulations 2013	Operation of Renewable Energy System should not cause voltage flicker in excess of the limits stated in IEC 61000 standards or other equivalent Indian standards, if any.

Frequency	IEEE 519 CEA (Technical Standards for Connectivity of the Distributed Generation Resources) Regulations 2013	When the Distribution system frequency deviates outside the specified conditions (50.5 Hz on upper side and 47.5 Hz on lower side), There should be over and under frequency trip functions with a clearing time of 0.2 seconds.
DC injection	IEEE 519 CEA (Technical Standards for Connectivity of the Distributed Generation Resources) Regulations 2013	Renewable Energy System should not inject DC power more than 0.5% of full rated output at the interconnection point or 1% of rated inverter output current into distribution system under any operating conditions.
Power Factor	IEEE 519 CEA (Technical Standards for Connectivity of the Distributed Generation Resources) Regulations 2013	While the output of the inverter is greater than 50%, a lagging power factor of greater than 0.9 should operate.
Islanding and Disconnection	IEEE 519 CEA (Technical Standards for Connectivity of the Distributed Generation Resources) Regulations 2013	The Renewable Energy System in the event of fault, voltage or frequency variations must island/disconnect itself within IEC standard on stipulated period.
Overload and Overheat	IEEE 519 CEA (Technical Standards for Connectivity of the Distributed Generation Resources) Regulations 2013	The inverter should have the facility to automatically switch off in case of overload or overheating and should restart when normal conditions are restored.
Paralleling Device	IEEE 519 CEA (Technical Standards for Connectivity of the Distributed Generation Resources) Regulations 2013	Paralleling device of Renewable Energy System shall be capable of withstanding 220% of the normal voltage at the interconnection point.

Annexure - IV

Sample bill calculation and carry forward procedure as per guidelines for ToD consumers

Billing period	Brought forward unit (kwh)	injection (A)			drawl (B)			net (C)			carried forward unit (C) if B<A or billed unit if B>A
		peak	normal	offpeak	peak	normal	offpeak	peak	normal	offpeak	
1	0	200	300	500	300	200	100	-100	100	400	255
2	255	300	300	500	200	200	300	100	100	200	555
3	555	100	200	300	300	300	100	-200	-100	200	390
4#	390	100	200	300	500	300	200	-400	-100	100	-90
12*	250	200	300	600	300	200	100	-100	100	500	580

•*last billing period no energy credit carried forward and Rs.2320/- shall be paid to the consumer assuming the tariff notified by the commission is Rs.4/- per unit

•# Carried forward unit is negative in 4th. Billing period means distribution licensee shall bill for 90 unit in that period

- Balance energy credit carried forward has been calculated after considering the rebate and surcharge on
- Net surplus generation in any billing cycle for the purpose of set off and carry forward has been moderated with rebate as generation in off peak time block

भारत सरकार
GOVERNMENT OF INDIAएस.जी.-डी.एल.-अ.-05082024-256058
SG-DL-E-05082024-256058असाधारण
EXTRAORDINARY
प्राधिकार से प्रकाशित
PUBLISHED BY AUTHORITY

सं. 06]	दिल्ली, शुक्रवार, अगस्त 2, 2024/ श्रावण 11, 1946	[रा.रा.रा.क्षे.दि. सं. 147
No. 06]	DELHI, FRIDAY, AUGUST 2, 2024/ SHRAVANA 11, 1946	[N. C. T. D. No. 147

भाग III
PART IIIराष्ट्रीय राजधानी राज्य क्षेत्र दिल्ली सरकार
GOVERNMENT OF THE NATIONAL CAPITAL TERRITORY OF DELHI

दिल्ली विद्युत विनियामक आयोग

अधिसूचना

दिल्ली, 2 अगस्त, 2024

दिल्ली विद्युत विनियामक आयोग (नवीकरणीय ऊर्जा के लिए नेट मीटरिंग) (प्रथम संशोधन) विनियम 2024

सं. फा. एफ3(629)/टैरिफ-इंजी/डीईआरसी/ 2020-21/6910/808.—दिल्ली विद्युत विनियामक आयोगए विद्युत अधिनियम, 2003 (2003 का अधिनियम 36) की धारा 61(च) और धारा 86 (1) (ई) के साथ पठित धारा 181, दिल्ली विद्युत विनियामक आयोग (डीईआरसी) ने डीईआरसी (नवीकरणीय ऊर्जा के लिए नेट मीटरिंग) विनियम 2014 के विनियम 16 के अंतर्गत प्रदत्त शक्तियां और इस निमित्त सामर्थ्यकारी सभी अन्य सभी शक्तियों का प्रयोग करते हुए एतद्वारा दिल्ली विद्युत विनियामक आयोग (नवीकरणीय ऊर्जा के लिए नेट मीटरिंग) विनियम 2014 (इसके बाद "मूल विनियमों के रूप में संदर्भित") को संशोधित करने हेतु निम्नलिखित विनियमन बनाता है, अर्थात्:-

1.0 संक्षिप्त शीर्षक और प्रारंभ

- (1) इन विनियमों का संक्षिप्त नाम दिल्ली विद्युत विनियामक आयोग (नवीकरणीय ऊर्जा के लिए नेट मीटरिंग) (प्रथम संशोधन) विनियम 2024 है ।

(2) ये विनियम राजपत्र में प्रकाशन की तारीख से प्रवृत्त होंगे।

2.0 मूल विनियमों के विनियम 5 (3) में जोड़ना

2.1 मूल विनियमों के विनियम 5 के उप-विनियम (3) में निम्नानुसार नए प्रावधान में जोड़ा जाएगा :

“बशर्ते कि 10 किलोवाट तक की नवीकरणीय ऊर्जा प्रणाली की तकनीकी संभाव्यता को समान आपूर्ति प्रकार (वोल्टेज स्तर— 1 पीएच, 3 पीएच,, आदि) पर तकनीकी संभाव्यता अध्ययन से छूट दी गई है और उपभोक्ता के स्वीकृत भार में कोई भी आनुपातिक वृद्धि, जैसा कि आवश्यक हो, वितरण लाइसेंसधारी द्वारा किया जाएगा।

बशर्ते कि 10 किलोवाट तक की नवीकरणीय ऊर्जा प्रणाली की संस्थापन की सुविधा प्रदान करने के लिए डीटी क्षमता सहित वितरण अवसंरचना में कोई उन्नयन, वितरण लाइसेंसधारी द्वारा किया जाएगा और आयोग द्वारा विवेकपूर्ण जांच के अधीन कुल राजस्व आवश्यकता (एआरआर) में पास थ्रू के रूप में अनुमति दी जाएगी।

बशर्ते कि 10 किलोवाट से ऊपर की नवीकरणीय ऊर्जा प्रणाली की तकनीकी संभाव्यता को वितरण लाइसेंसधारी द्वारा आवेदन प्राप्त होने की तारीख से पंद्रह (15) दिनों के भीतर सभी पहलुओं में पूरा किया जाएगा।

राष्ट्रीय राजधानी क्षेत्र दिल्ली के उपराज्यपाल
के आदेश से तथा उनके नाम पर,

राजेश दाँगी, सचिव

DELHI ELECTRICITY REGULATORY COMMISSION

NOTIFICATION

Delhi, the 2nd August, 2024

Delhi Electricity Regulatory Commission (Net Metering for Renewable Energy) (First Amendment) Regulations, 2024

No. F. F3(629)/Tariff-Engg./DERC/2020-21/6910/808.—The Delhi Electricity Regulatory Commission, in exercise of the powers conferred under Section 181 read with Section 61(h), Section 86 (1) (e) of the *Electricity Act, 2003*, Regulation 16 of *DERC (Net Metering for Renewable Energy) Regulations, 2014* and all other powers enabling it in this behalf, hereby amends the following Regulation in *DERC (Net Metering for Renewable Energy) Regulations, 2014* (hereinafter referred to as “the Principal Regulations”):

1.0 Short Title and Commencement:

- (1) These Regulations may be called the *Delhi Electricity Regulatory Commission (Net Metering for Renewable Energy) (First Amendment) Regulations, 2024*.
- (2) These Regulations shall come into force from the date of their publication in the official Gazette.

2.0 Addition in Regulation 5 (3) of Principal Regulations:

2.1 New provisos added to Sub-regulation (3) of Regulation 5 of the Principal Regulations as under:

“Provided that the Technical feasibility of Renewable Energy System upto 10 kW is exempted from technical feasibility studies on the same supply type (Voltage level- 1ph,3ph, etc.) and any commensurate enhancement of Sanctioned Load of the consumer, as may be required, shall be carried out by Distribution Licensee.

Provided further that any upgradation in Distribution Infrastructure including DT capacity to facilitate the installation of Renewable Energy System upto 10 kW shall be carried out by Distribution

Licensee and shall be allowed as pass through in Aggregate Revenue Requirement (ARR) subject to prudence check by the Commission.

Provided also that Technical feasibility of Renewable Energy System above 10 kW shall be completed by Distribution Licensee within fifteen (15) days from the date of receipt of application complete in all aspects."

By Order and in The Name of Lt. Governor
National Capital Territory of Delhi

RAJESH DANGI, Secretary