



PROJECT INFORMATION & SITE-SPECIFIC
DATA FOR FLOATING SYSTEM FOR 234
MW(AC) GRID TIED FLOATING SOLAR PV
(FSPV) PLANT ON DVC'S MAITHON DAM
RESERVOIR AT MAITHON IN THE STATE OF
JHARKHAND

PISSD-MAITHON

Rev No: 00

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**PROJECT INFORMATION & SITE-
SPECIFIC DATA
FOR
FLOATING SYSTEM
FOR
234 MW(AC) GRID TIED FLOATING
SOLAR PV (FSPV) PLANT
ON DVC'S MAITHON DAM RESERVOIR
AT MAITHON
IN THE STATE OF JHARKHAND**

Revision
details:
00

Prepared by: VKC

Checked & Approved by: PM

Date:
06.01.2025



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1.0 INTRODUCTION

This project information & Site-Specific data for the project is supplementary information to the technical specification PS-439-1386. The details given in this section will supersede over any information written elsewhere in the aforesaid specification, if contradicts otherwise read in conjugation.

2.0 PROJECT INFORMATION:

Name of the Project	234 MW(AC) Grid Tied Floating Solar PV (FSPV) Plant on DVC's Maithon Dam Reservoir at Maithon in the state of Jharkhand
Location of Site	Maithon, District – Dhanbad, Jharkhand
Nearest Town	Asansol (25 KM) & Dhanbad (50 KM)
Nearest Highway/Major Road	NH-19
Nearest Railways Station	Asansol (25 KM) & Dhanbad (50 KM)
Nearest Commercial Airport	Durgapur Airport (50 KM)
Indicative Coordinate	23°47'33.6"N 86°48'31.2"E
Minimum Plant Size	58.5 MW (4 Blocks of equal size)
Minimum DC Capacity of the Project	333 MWp

3.0 AREA AVAILABILITY:

Land/Water body availability: As per Vicinity Map.

Encumbrance free Land & Water body will be provided by DVC on “as is where is basis” to the Bidder for setting up of Solar Project. It shall be the sole responsibility of Bidder, to carry out the reconnaissance to ascertain the Land availability, accessibility, material sources, etc. of the Site before bidding. Bidder is requested to make detailed site visit and access the requirement of work. The details are given for preliminary information only.



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4.0 SITE SPECIFIC TECHNICAL DATA:

PV Module Wattage	Min. 580 Wp. Glass to Glass
No. of Module/String	26 Nos.
Temperature	The summer are generally hot and dry with maximum temperature crossing 40 Deg. C and, in the winter, temperature goes below 10 Deg. C
Corrosive Category	C4
RAINFALL	Max. hourly rainfall intensity of 72.5 mm or as per Nearest city / town (as mentioned in Appendix-A of IRC: SP:13-2004.)
Seismic data & design criteria	All structures and equipment shall be designed for seismic forces adopting the information provided in this document and in accordance with the provisions of IS:1893 (Part 1):2002 and IS:1893 (Part 4):2005. Vertical acceleration spectral values shall be taken as 2/3rd of the corresponding horizontal values.
Damping in Structures	The damping factor (as a percentage of critical damping) to be adopted shall not be more than as indicated below for: a) Steel Structures: 2% b) Reinforced Concrete Structures: 5%
Wind Speed to be considered for Designing	to be considered.
Comprehensive O&M including AMC	10 Years from date of commissioning of Full capacity
MDDL & FRL	As per Enclosed Maithon Reservoir Submergence Map

Bidder to submit tentative array layout of the project in line technical specification & details given in this document. Electrical Equipment like PCUs, Transformers, HT Panel are to be placed in water between arrays. Bidder to prepare array layout considering the same.



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5.0 DELIVERY SCHEDULE:

Sr. No.	Item Description	Delivery Schedule in Months for all Bidders
A. Design Submission		From date of firm PO
A	Design of complete PV Module Floatation platforms and other associated floating systems and its Anchoring & Mooring, Wave attenuation system/Floating Barriers and its anchoring & Mooring after wave study.	1
B. Supply (Progressively)		From Design Approval/ Manufacturing Clearance
1	Supply of complete PV Module Floatation platforms and other associated floating systems	Minimum 30 MWp per Month starting after 1 Month from Manufacturing Clearance & all supplies to be complete within 11 Months of Manufacturing Clearance#
2	Supply of Wave attenuation system/Floating Barriers and its anchoring & Mooring all along arrays as per design requirement based on wave study, as applicable.	
3	Supply of Anchoring & Mooring of complete PV Module Floatation platforms and other associated floating system	
4	Supply of Mandatory Spares	Within 11 Months of Manufacturing Clearance#
B. Works and services (Progressively)		From Supply of PV Modules*
1	Assembly and Launching of PV Module Floatation platforms and other associated floating systems	Minimum 30 MWp per Month starting after 1 Month from supply of PV Module & all assembly & Launching to be completed within 12 Months from start of supply of PV Module
		From Design Approval/ Manufacturing Clearance



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2	I & C of Anchoring & Mooring of complete PV Module Floatation platforms and other associated floating systems	10
3	Anchoring & Mooring of wave Attenuation system/Floating Barriers	10

Floating System supplies to be made in complete sets of per MWp as per final BOQ of approved design.

*** PV Modules to be supplied at site from 3rd months from firm PO date.**

6.0MANDATORY SPARES REQUIREMENT OF PROJECT:

Following mandatory spares are required for this project:

Sr. No.	Item Description	Quantity of Spares w.r.to final BOQ of approved design.
1	Floating Units	0.5% of total supply (each type)
2	Mooring Rope & Accessories	0.5% of total supply (each type)

The BOQ of Mandatory spares shall also be submitted for approval to BHEL/End Customer with design documents.

ENCLOSURES:




1. Maithon Reservoir Submergence Map
2. Vicinity Map
3. Tentative General Layout Plan of 234MW FSPV Project.
4. Detailed Bathymetry Drawing (Contour Plan)

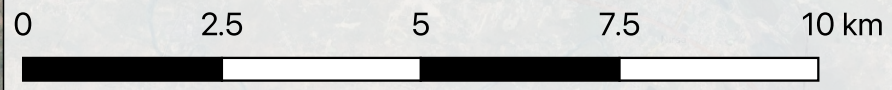
MAITHON RESERVOIR

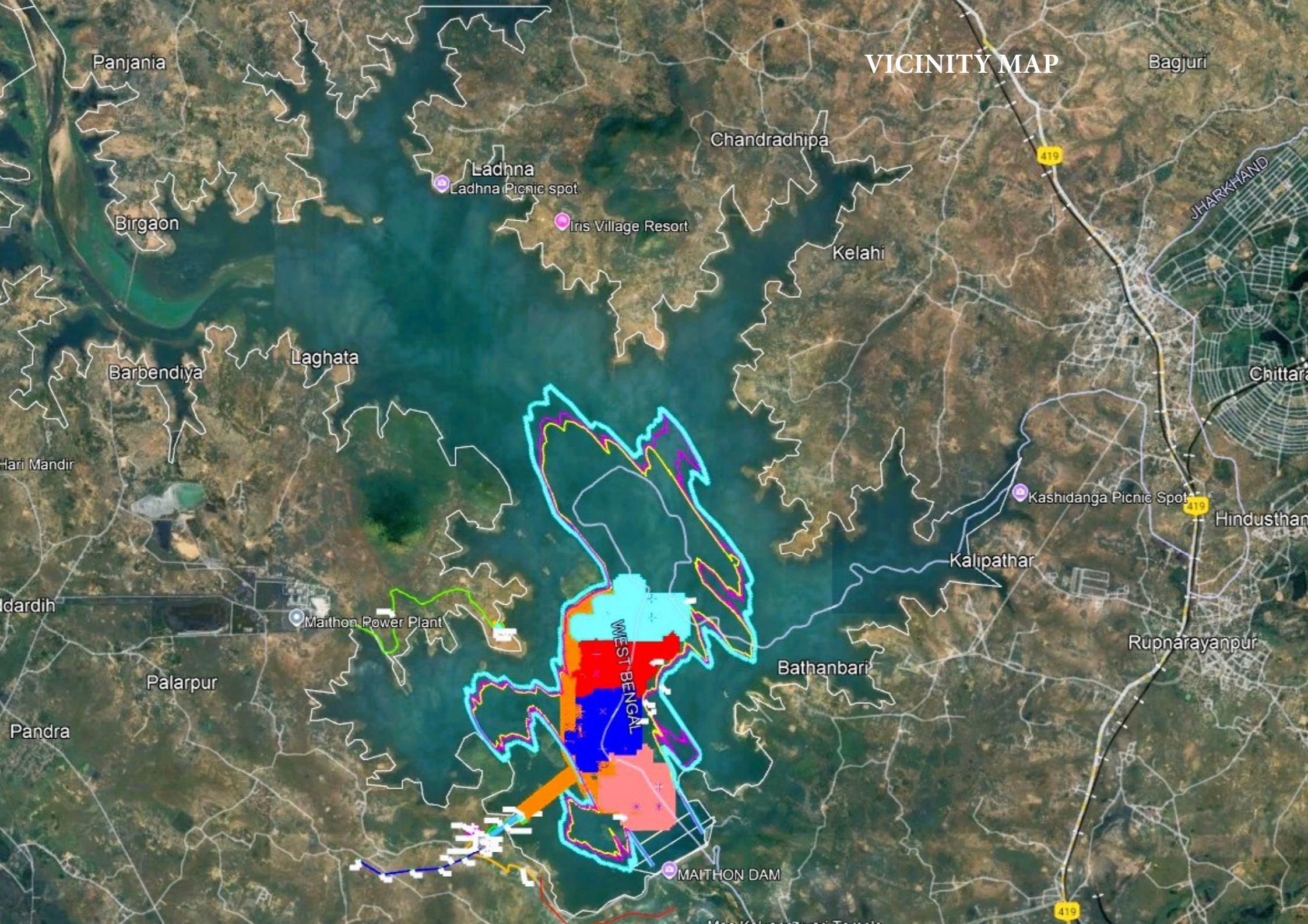
SUBMERGENCE MAP



LEGEND

-  CONTOUR LINE @ EL 131 m
-  CONTOUR MDDL @ EL 132.6 m
-  FLOOD STORAGE ZONE
(Preferable Area for Desiltation)





VICINITY MAP

Bagjuri

Panjanina

Chandradhipa

Ladhna

Ladhna Picnic spot

Iris Village Resort

Kelahi

Birgaon

Laghata

Barbendiya

Hari Mandir

Idardih

Maithon Power Plant

Kashidanga Picnic Spot

Kalipathar

Hindusthan

Rupnarayanpur

Bathanbari

Palarpur

Pandra

WEST-BENGAL

MAITHON DAM

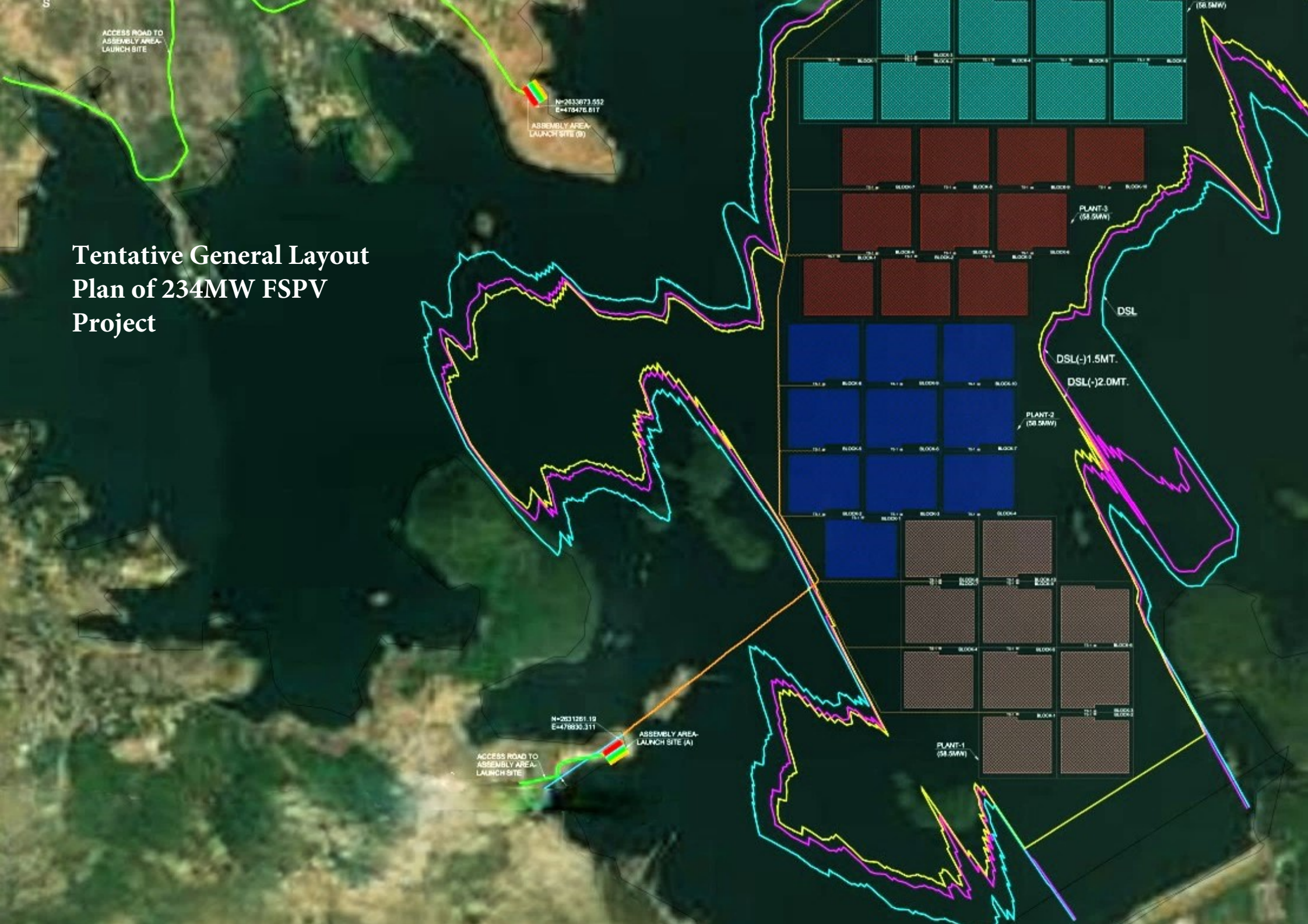
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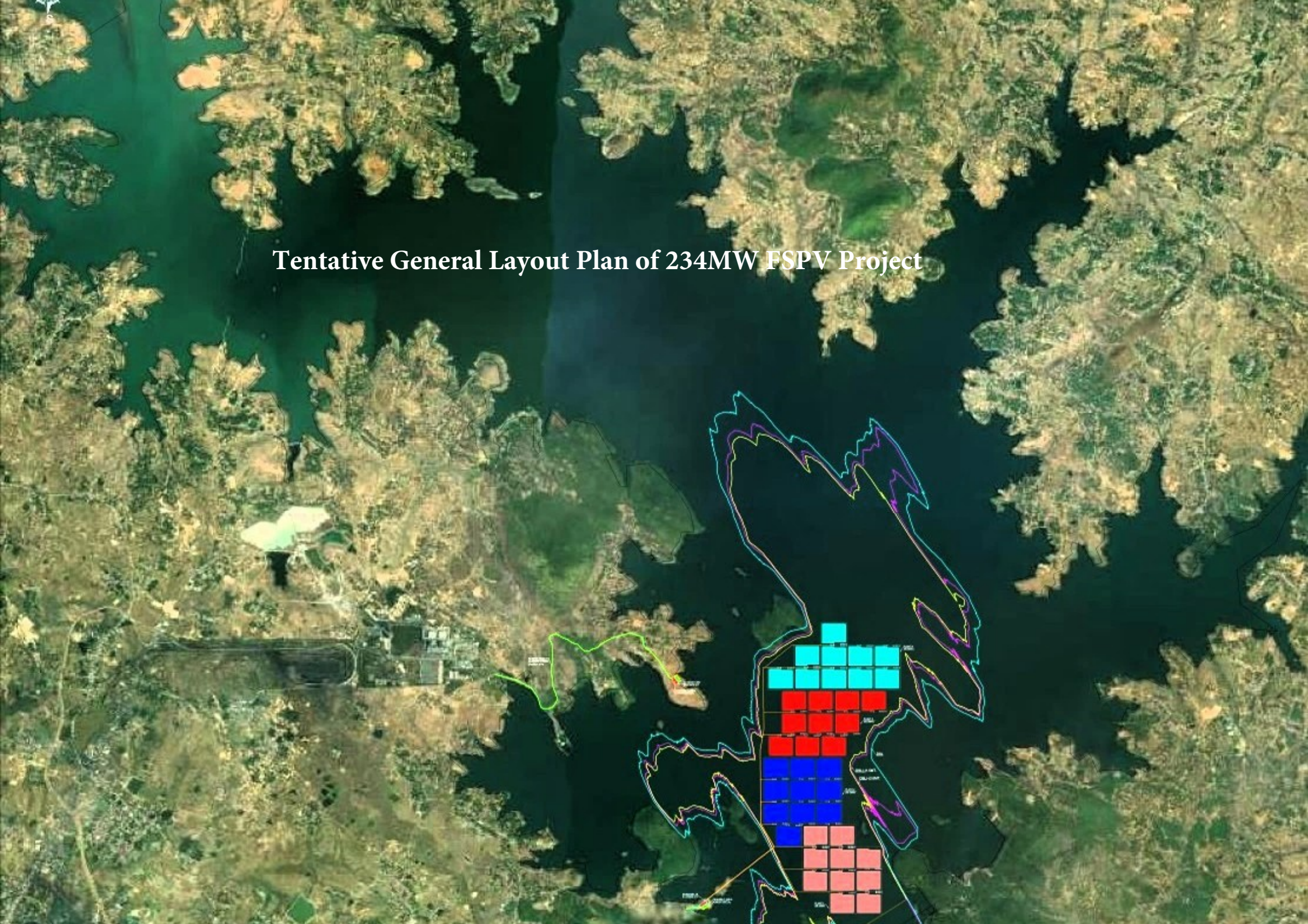
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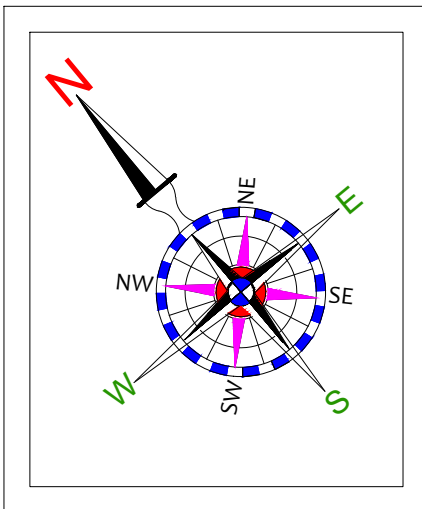
Tentative General Layout Plan of 234MW FSPV Project



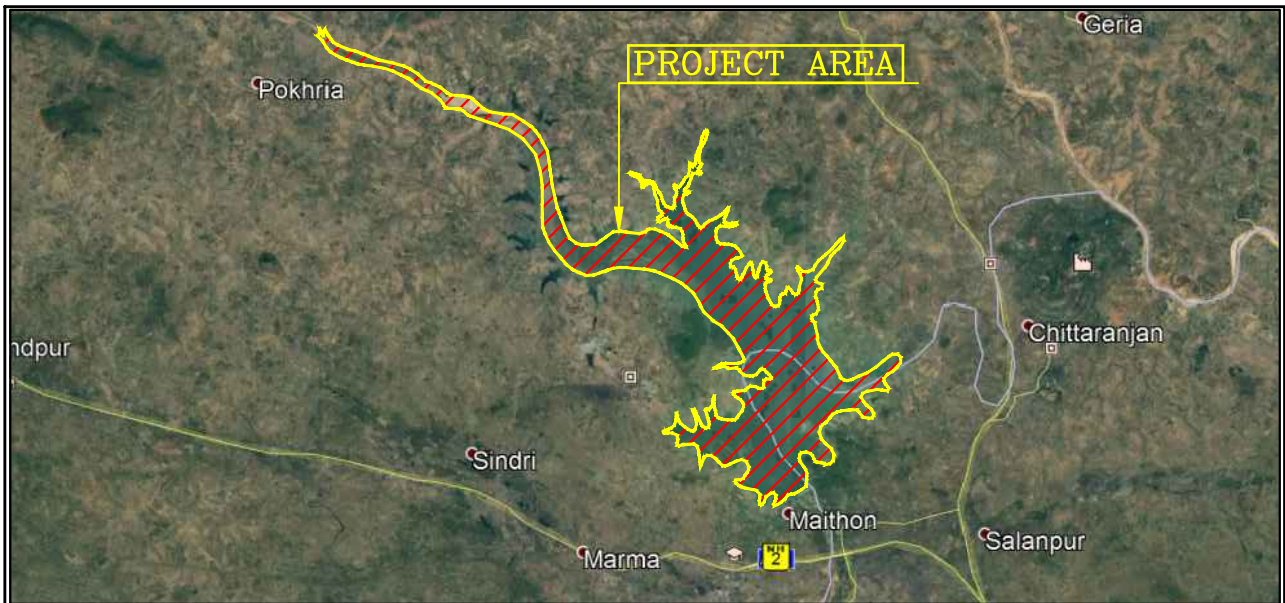
Tentative General Layout Plan of 234MW FSPV Project



CONTOUR PLAN OF MAITHON RESERVOIR



KEY MAP



NOTE :-
TOTAL AREA (CONTOUR RL 152.4 M.) = 105.45 SQ.KM.

NOTE :
1) ALL DIMENSIONS ARE IN METRE.
2) 45N UTM PROJECTION IS USED
3) THE LEVEL HAS BEEN CARRIED FROM THE BM
OF MAITHON RESERVOIR SITE R.L = 156.905 METRE.
(E-480948.747,N-2630529.152)
WHICH IS LOCATED NEAR THE MAITHON RESERVOIR SITE

CONTROL POINT		DETAILS		LEGEND	
CP-2	X= 480947.568 Y= 263052.120 Z= 114.784	1	BLACK TOP ROAD		
CP-4	X= 480955.430 Y= 2610559.688 Z= 147.572	2	CONCRETE ROAD		
MD 23	X= 476632.317 Y= 2633866.285 Z= 153.347	3	KACHA ROAD		
MD-24	X= 477818.525 Y= 2633586.223 Z= 144.872	4	TEMPLE		
MD 25	X= 482986.604 Y= 2634953.324 Z= 146.276	5	BUILDING		
MD 26	X= 481930.525 Y= 2637062.131 Z= 146.300	6	BRIDGE		
MD 27	X= 483775.536 Y= 2639984.357 Z= 153.907	7	LOW LAND		
MD 29	X= 481896.849 Y= 263816.547 Z= 148.811	8	HILL AREA		
MD 30	X= 479691.322 Y= 2638964.011 Z= 150.817	9	FOREST AREA		
MD 41	X= 476632.375 Y= 2640943.867 Z= 153.462	10	GUARD WALL		
MD 45	X= 47307.575 Y= 2639400.190 Z= 155.304	11	VILLAGE AREA		
		12	POOTPATH		
		13	ROAD		
		14	PAVE		
		15	PAVED LAND		
		16	CHAD LAND		
		17	BOULDER PITCHING		
		18	WATER INTAKE		
		19	BOUNDARY WALL		
		20	WATER LINE		
		21	FENCE LINE		
		22	STATE BOUNDARY		
		23	RAILWAY TRACK		
		24	CONTROL POINT		
		25	BENCH MARK		



PRECISION SURVEY CONSULTANCY
Vichitra, 8F-45, Kolkata west International city
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Phone No.:-07044064584
www.precisionsurvey.co.in

SURVEYED BY: Mr. Biswajit Samanta
DRAWN BY: Ms. Khaya Mahato
CHECKED BY: Mr. Sourav Paul

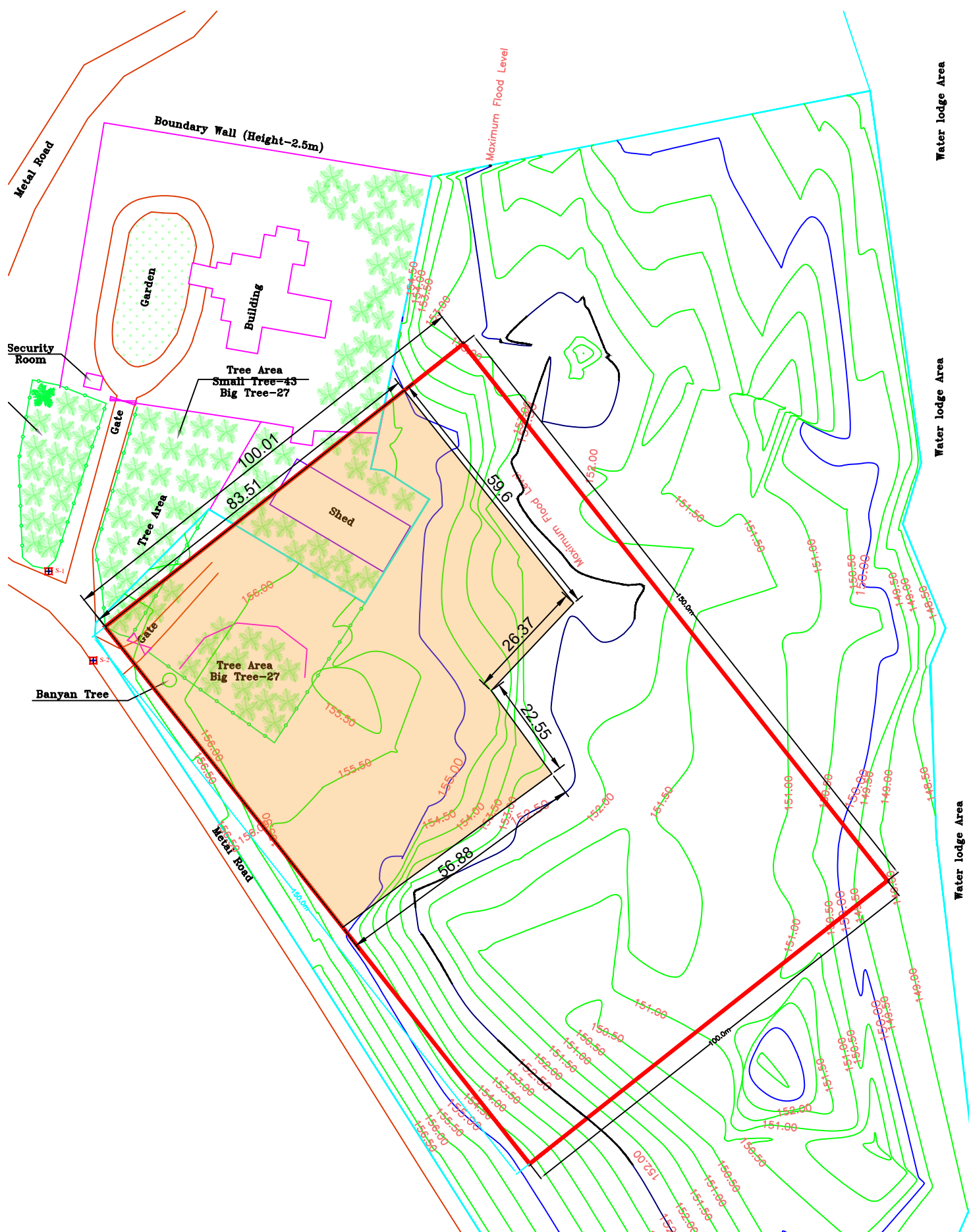
DAMODAR VALLEY CORPORATION
HYDRAULIC DATA DIVISION
P.O. - MAITHON DAM, DIST- DHANBAD, JHARKHAND
PIN - 828207, PH : 06540-279324

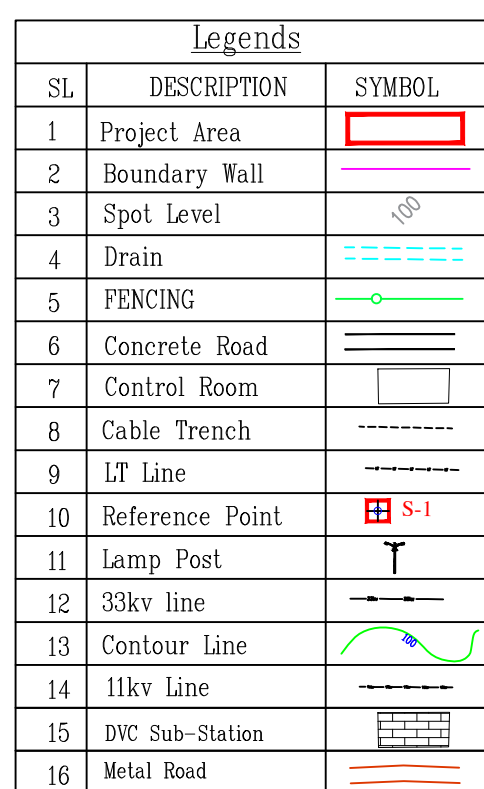
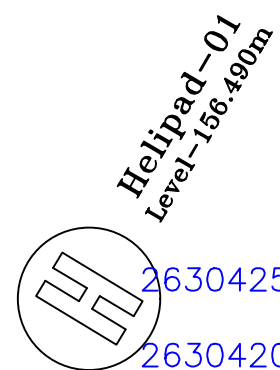
PROJECT: "SEDIMENTATION SURVEY OF MAITHON RESERVOIR UNDER NHP"

TITLE:- CONTOUR PLAN OF MAITHON RESERVOIR


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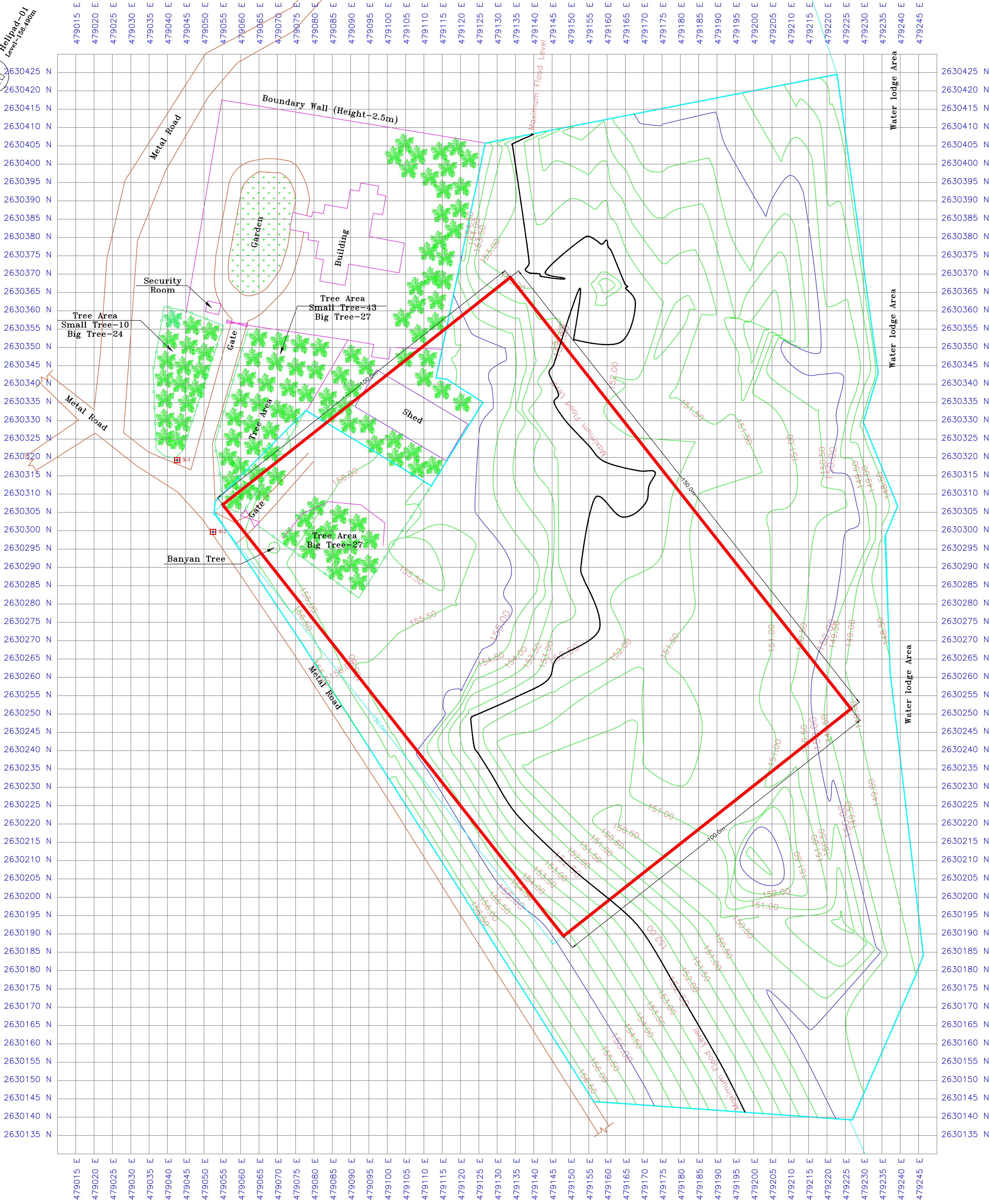
APPROVED BY: EXE. ENGINEER (C) HYDRAULIC DATA DIVISION D.V.C. MAITHON Sd. DIVN. ENGINEER (C) HYDRAULIC DATA DIVISION D.V.C. MAITHON Dn. CHIEF ENGINEER (C) WATER RESOURCES D.V.C. MAITHON





Notes

CLIENT:	DAMODAR VALLEY CORPORATION				
Surveyed By:-	Dynamic Engineering Services Address:- House of Pankaj Ghosh, VIII:-Gohallidanga, P.O-Kaigram, Dist:-Purba Bardhaman, W.B.-713145				
PROJECT TITLE:	Contour survey work for proposed 132 KV Solar Sub-Station at Maithon.				
DRAWING TITLE:	Contour drawing				
DRAWN BY	SUBMITTED BY	CHECKED BY	SCALE:- 1:500		
			SUBMISSION DATE:- 25.09.2024		
CHECKED BY	RECOMMENDED BY	APPROVED BY	DRAWING NO. DS/DVC/ Maithon/Con/No-1		
			Sheet No 1/1		
			REV 0		



Legends		
SL	DESCRIPTION	SYMBOL
1	Project Area	
2	Boundary Wall	
3	Spot Level	
4	Drain	
5	PENCING	
6	Concrete Road	
7	Control Room	
8	Cable Trench	
9	LT Line	
10	Reference Point	S-1
11	Lamp Post	
12	33kv line	
13	Contour Line	
14	11kv Line	
15	DVC Sub-Station	
16	Metal Road	

LIST OF REFERENCE POINTS			
STN.	NORTHING	EASTING	ELEVATION
S-1	2630319.254	479042.666	156.807
S-2	2630299.694	479052.439	156.936

Notes

- All dimensions are in Meter unless otherwise mentioned
- The Point marked beside metal road as S-1 as N=2630319.254, E=479042.666 and RL=156.807
- Project Area in 150000 Sq Meter (Approx) 3.706 Acre
- Survey Area in 44632.014 Sq Meter (Approx) 11.03 Acre
- Contour interval 0.50m.

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			DRAWING NO. DES/DVC/ Maithon/Con/No-1
			Sheet No 1/1 REV 0