# MEGHALAYA ONLINE BUILDING PERMISSION SYSTEM

USER MANUAL FOR STAKEHOLDERS (Draft)

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#### Introduction to Online Building Permission System (OBPS)

The Online Building Permission System (OBPS) Portal for Meghalaya was launched on 11<sup>th</sup> August 2025 by the Honourable Chief Minister. OBPS is a single window clearance system, initiated under the AMRUT 2.0 mission reform. It is a Mission Mode Project under the Ease of Doing Business initiative of the Government of India, spearheaded by MoHUA. The system's development is led by NIC Meghalaya for all North Eastern States, as well as Jammu & Kashmir and Ladakh, in collaboration with NIC, MoUHA, the Town & Country Planning Organisation, eGov Foundation, and respective State Departments of Urban Affairs.

OBPS aims at proving an end to end solution to citizens, from online scrutiny of Building Plans, submission of applications for Building Permit, to online delivery of the Building Permission Certificate.

The system's core module, eDCR (Electronic Development Control Regulations), reads AutoCAD files and automatically scrutinizes building plans as per the Bye Laws. Hence, citizens can verify if their Building Plan drawings are prepared as per the notified Building Bye Laws of the State from the comfort of their homes and the process can be completed in a matter of seconds. Correctionsrequired in the Building Plan Drawing, if any, will be mentioned in the Scrutiny Report which is generated after the citizens upload the Plan Drawing.

Once the building plan drawing has been accepted/ cleared, citizens can apply for Building Permit online itself. Once submitted, citizens can track the status of the application through the application portal. SMS notifications are being sent to the applicant regarding the status of their application.

The online application will also calculate the fees required to be paid by the applicant, and he/she may pay the same online in the Portal.

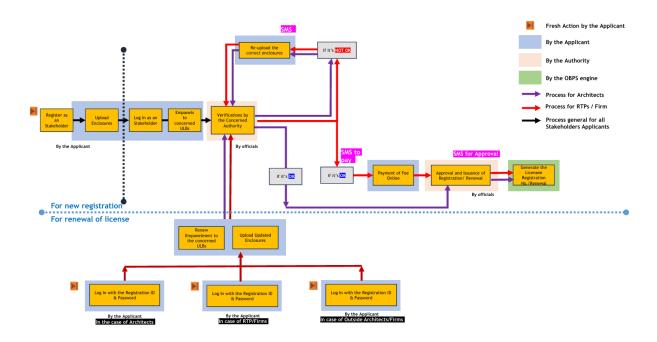
There are two types of Users –

- a) Department Officials: The users under Meghalaya Urban Development Authority (MUDA) and the District Councils who are authorised to do the verification and approval of the submitted building plans.
- b) Stakeholders: The Architects/ Registered Technical Personals (RTPs) Firms/ Architectural draftsman who can submit the building plan for approval

This User Manual has been designed for new and existing Stakeholders to on-board into the system i.e. to register and empanel themselves with Meghalaya Urban Development Authority (MUDA) to enable them to Apply for Building Permission Online.

#### Registrations

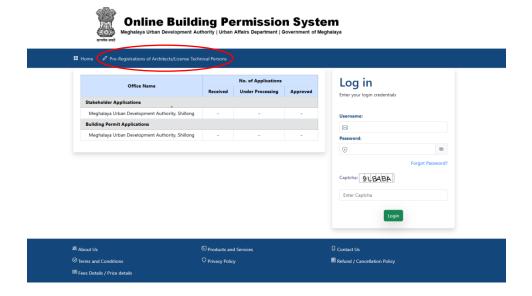
The following figure shows the working mechanism of the registrations for the Stakeholders (Architects/ RTPs/ Firms/ Architectural Draftsman) -



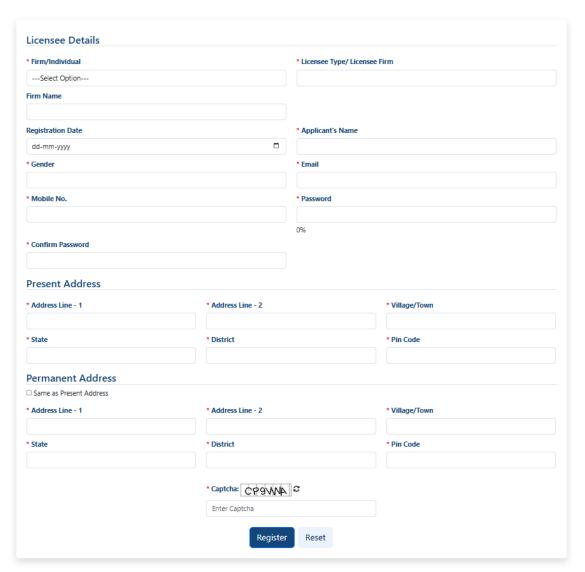
#### **Registration Process**

The following are steps to register as a Stakeholder

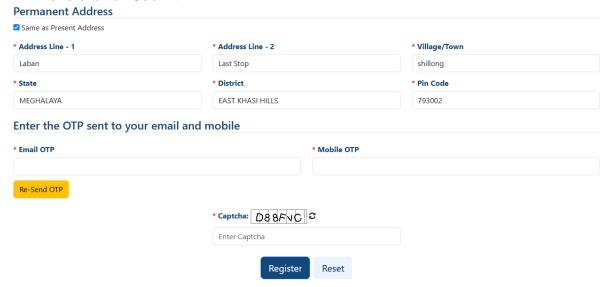
- 1. To Register as a stakeholder go to this URL <a href="https://obps.meghalaya.gov.in">https://obps.meghalaya.gov.in</a>
- 2. Click on **Pre-Registrations of Architects/License Technical Persons** from the menu bar.

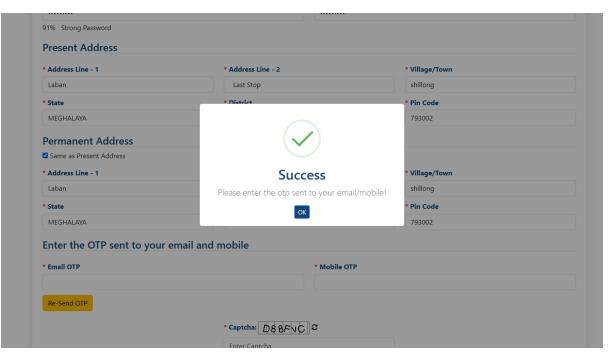


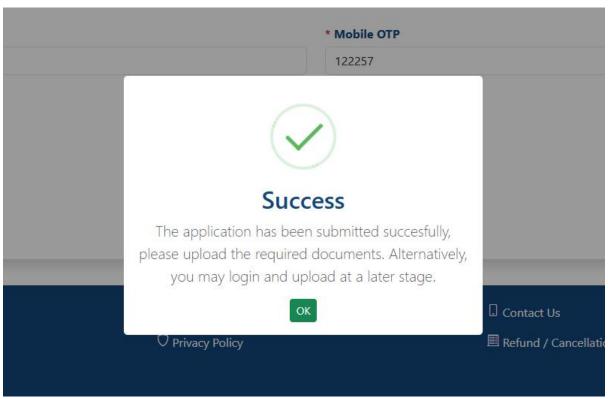
3. Fill all the mandatory fields and click on Submit



4. An OTP will be sent to your registered mobile number and EmailID. Enter the OTP and click on Submit

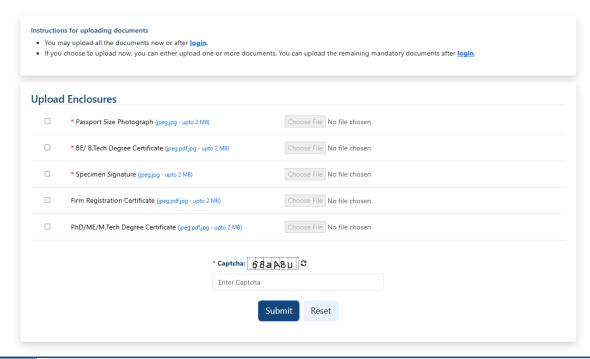


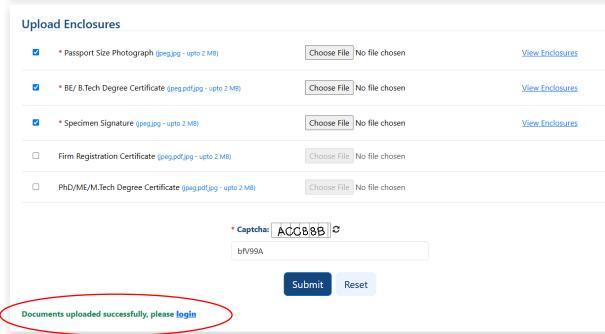




#### 5. Upload the enclosures and click on Submit.

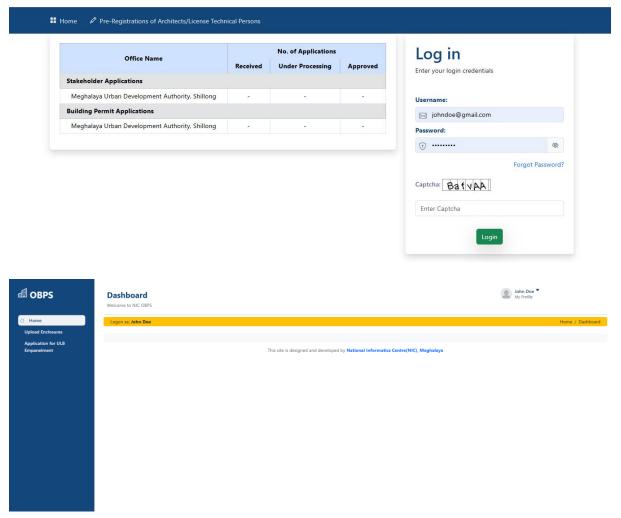
Home / Upload Enclosures



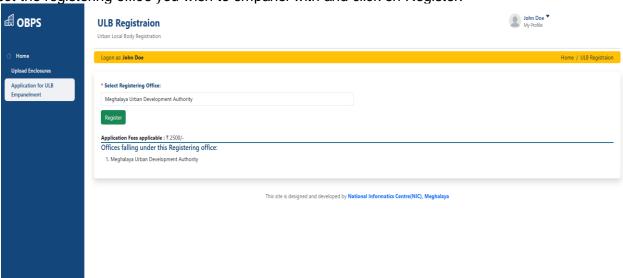


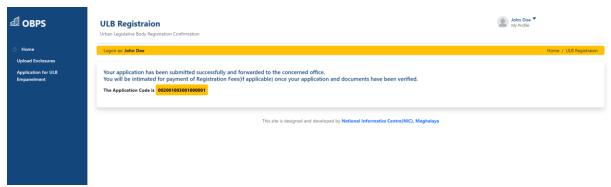
6. On Successful upload go back to login page and login with your **registered email address** and **password** to empanel as a stakeholder.



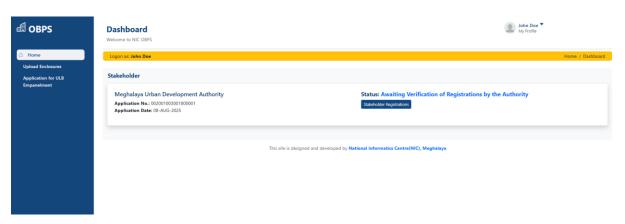


7. Select the registering office you wish to empanel with and click on Register.





8. On successful registration wait for verification process by the concerned official.

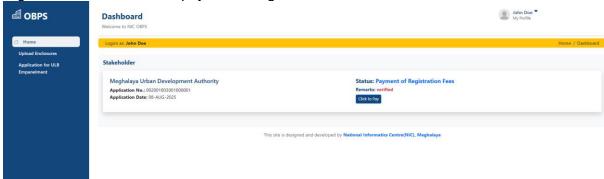


## **Processing by Concerned Authority**

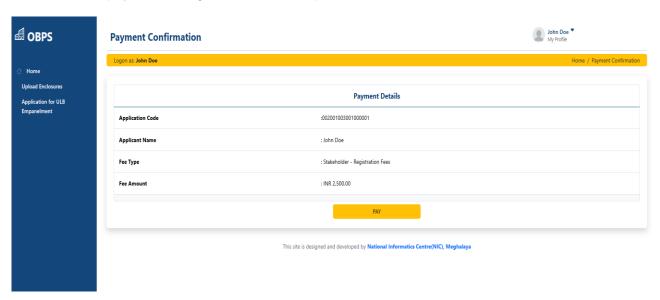
\*\*\*Wait for Stakeholder Verification/Approval by the Concerned Authority\*\*\*

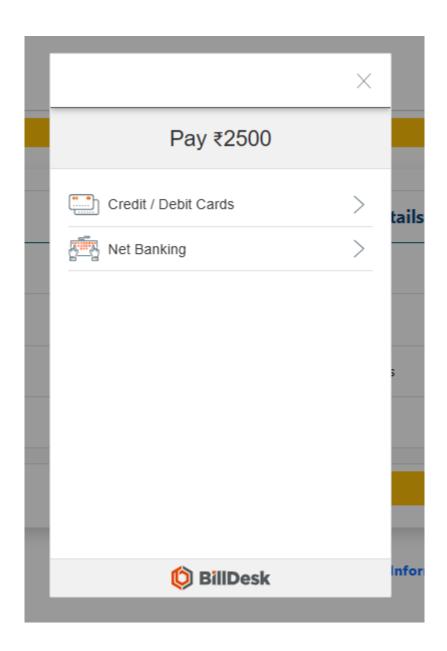
## Payment by Stakeholder

1. Login as a stakeholder and pay for the registration

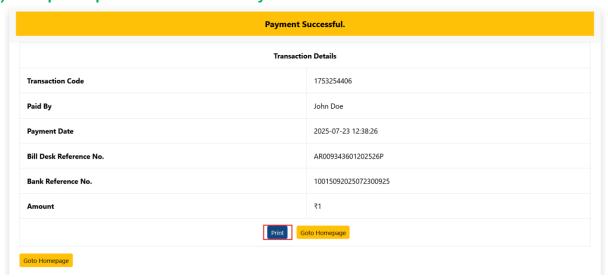


2. Make the payment and generate the receipt





a) Sample output after Successful Payment.



#### MEGHALAYA URBAN DEVELOPMENT AUTHORITY SHILLONG

#### PAYMENT RECEIPT

PAN NO: AAALM0411B

GSTIN: 17AAALM0411B1ZV

Receipt No: MEG/MUDA/1754650437

Application Code: 002001003001000001

Received from Mr/Miss/Mrs/M/s John Doe a sum of Rs. 2500/- (Rupees. Two Thousand Five Hundred) only by Online Payment dated 08-08-2025 towards Stakeholder - Registration Fees.



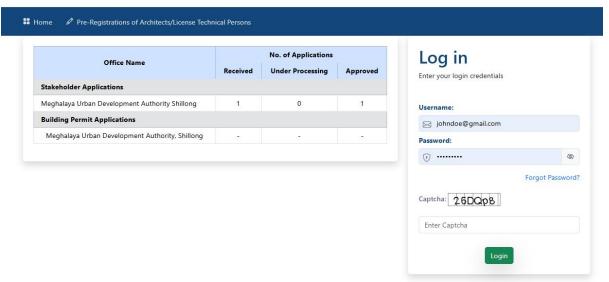
This is a computer generated receipt, no signature is require

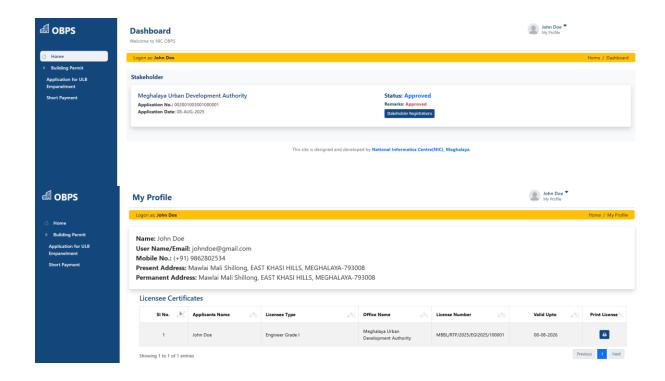
## **Processing by Concerned Authority**

\*\*\*Wait for Stakeholder Verification/Approval by the Concerned Authority\*\*\*



## Online Building Permission System Meghalaya Urban Development Authority | Urban Affairs Department | Government of Meghalaya





#### MEGHALAYA URBAN DEVELOPMENT AUTHORITY **SHILLONG**

#### Certificate of Registration

Issue Date .: 08-08-2025

This is to certify that SHRI. JOHN DOE has been enrolled as a Registered RTP with Meghalaya Urban Development Authority and the name has been entered in the Register.

The Registration No. is

#### MBBL/RTP/2025/EGI2025/100001

Validity is from 08-08-2025 to 08-08-2026 inclusive.



Secretary Meghalaya UrbanDevelopment Authority, Shillong.

This is an electronically generated certificate with a digital signature (equivalent to affixing of handwritten signature with a seal)

QR Code can be scanned by any QR code scanning application. The URL on the QR Code will allow to access the digital version of this certificate

#### SCOPE OF WORK

- 1) The Engineer Grade I should be well informed about the contents of "Meghalaya Building Byelaws" and the subsequent amendments.
- 2) All drawings prepared are to be in accordance to this regulation within the respective jurisdiction.
- 3) Details of all structural drawings to be provided in all the revised, existing or proposed drawings of the structure as applicable.
- 4) The seal to be used on submission of drawings should mention the following: Engineer Grade I under the concerned authority. The registered number as written above to make correction in the Site plan or building permission plan as and when directed.

  5) The drawing submitted must be factual as per the site condition and the relevant documents submitted are to ensure that the structure is built
- as per the approved drawings.

#### TERMS AND CONDITIONS

- 1)That the registration is valid for one year and is to be renewed annually.
- 2) The registration is subjected to review of performance every year by the concern authority.
- 3) Should it be found that the performance of the Engineer Grade I is not to the true spirit of the duties to be discharged/undertaken as a professional, action will be taken/penalty will be levied as decided by the authority.

  4) That the responsibility along with all the liabilities of the Registered Engineer Grade I is till the completion of the building/structure.



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Meghalaya UrbanDevelopment Authority, Shillong.

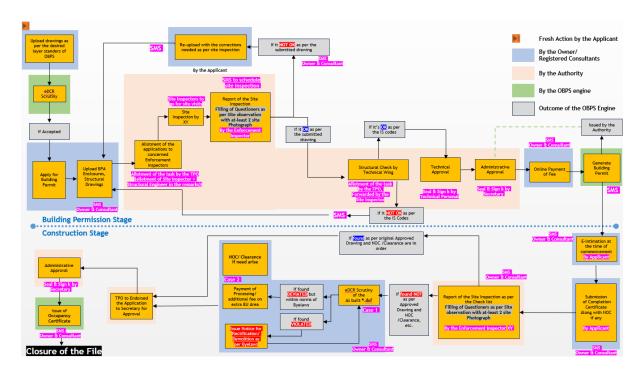
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QR Code can be scanned by any QR code scanning application. The URL on the QR Code will allow to access the digital version of this certificate

#### **Application for Building Permits**

#### Working Mechanism for Building Permit Process

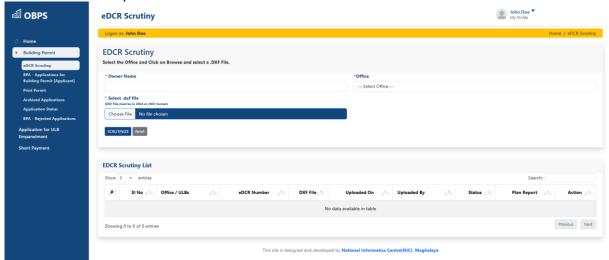
The following figure discusses the working mechanism of the Building Permit process -



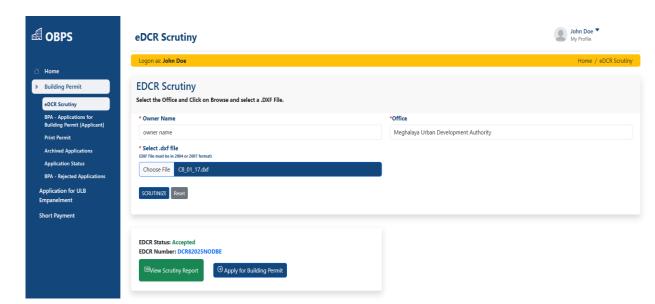
#### Application Process for Building Permit

#### I. EDCR Scrutiny by Stakeholder(Architect/RTP)

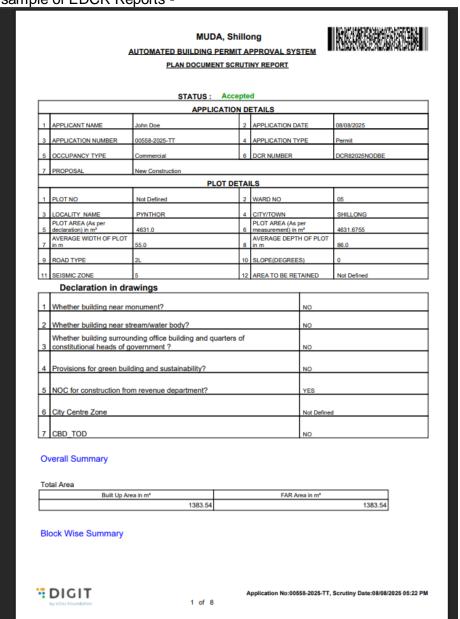
- 1. Login with your architect/engineer username and password
- 2. Select Building Permit →EDCR Scrutiny from the side menu
- 3. Select office and upload the dxf file to be scrutinized and click on scrutinize.



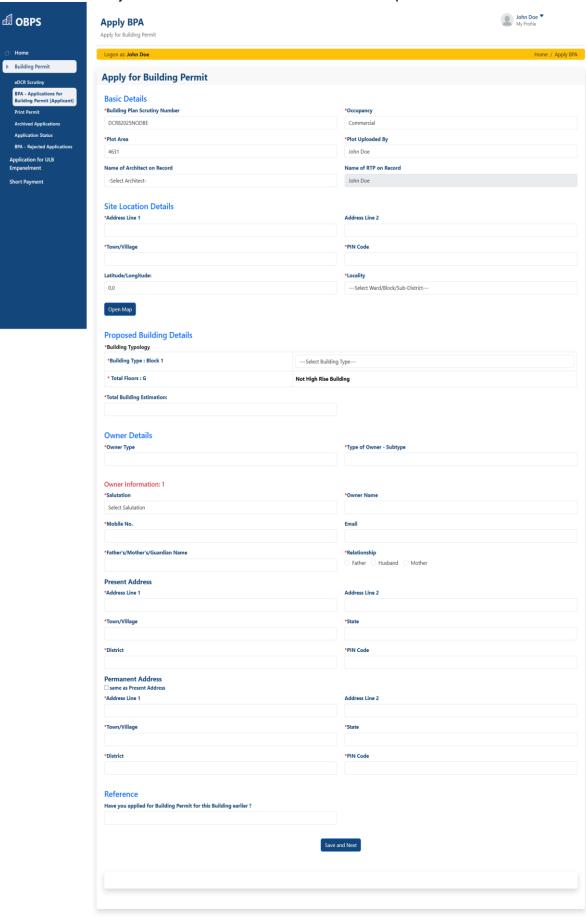
 Once the file is accepted, you can generate the scrutiny report and apply for Building Permit by clicking on the link below or select apply for building permit from the side menu.



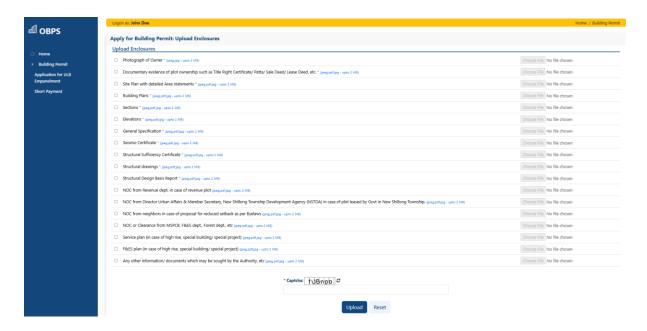
5. The sample of EDCR Reports -



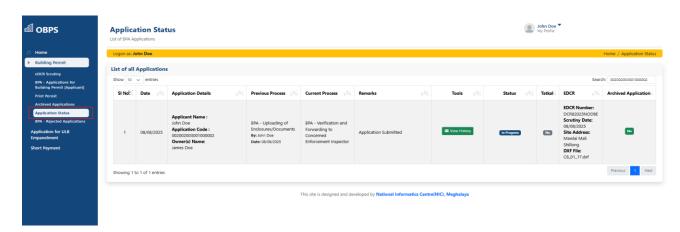
6. Fill all the mandatory fields of the form and click on save and upload enclosures.



This site is designed and developed by National Informatics Centre(NIC), Meghalaya



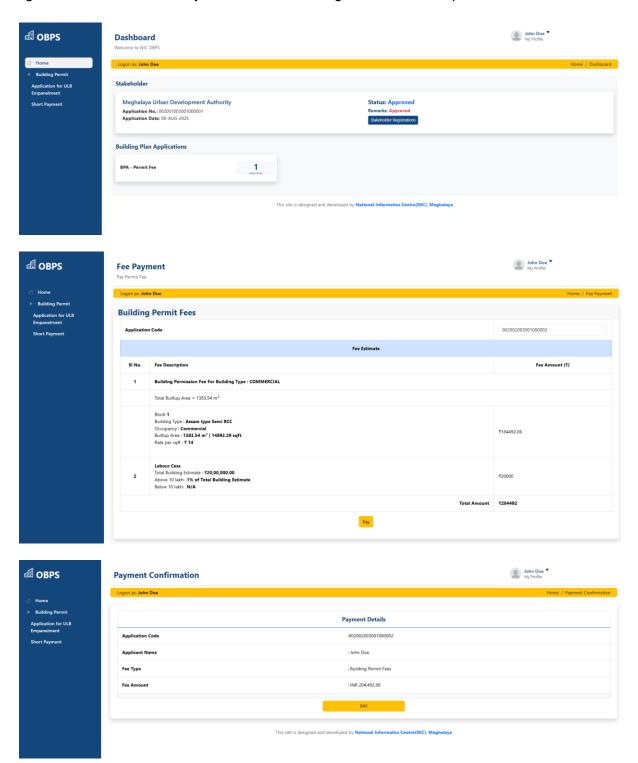
7. After successful upload check application status as shown below.

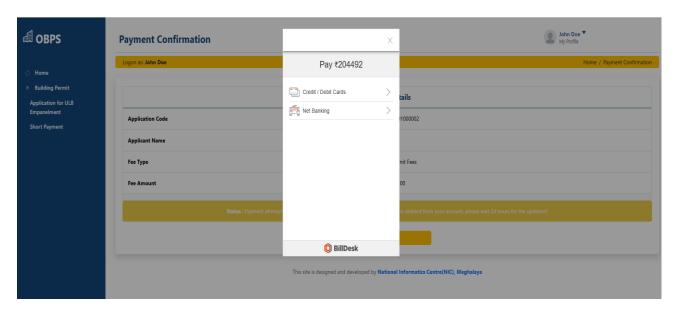


## **Processing by Concerned Authority**

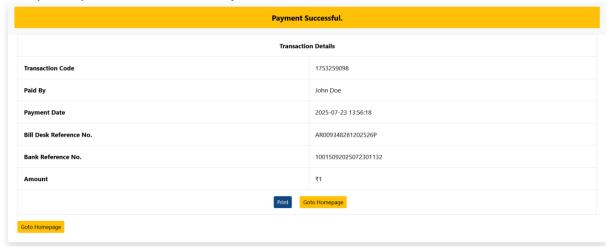
\*\*\*Wait for BPA Processing by the Concerned Authority\*\*\*

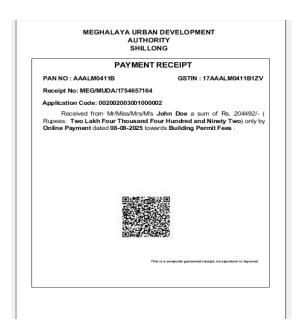
a. Login as Stakeholder, Pay the Permit Fee and generate the receipt.





b) Sample output after Successful Payment.

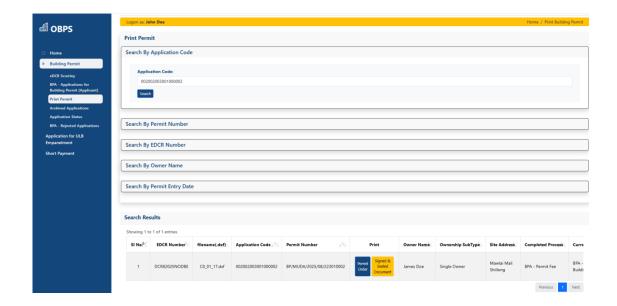




#### Printing of the Building Permit.

a. **Login as Stakeholder** and print the **Building Permit** and Signed and Sealed Document.





#### Sample of Building Permit Certificate

## MEGHALAYA URBAN DEVELOPMENT AUTHORITY SHILLONG

#### Building Permission Sanction Order

Serial No.: BP/MUDA/2025/08/223010002

Issue Date: 08-08-2025

To,

Shri. James Doe

Mawlai, Mali, Shillong - 793008

Barik

Subject: Building Permission Sanction under Byelaw A8 of the Meghalaya Building Bye Laws 2021.

Sir/ Madam,

With reference to your application No. 002002003001000002 Dated 08-08-2025, I am to inform you that sanction has been granted for erection/ re-erection of the building at Mawlai,Mali,Shillong -793008 as per provisions of Meghalaya Town and Country Planning Act, 1973 and MeghalayaBuilding Bye-Laws, 2021 or as amended and as per the OBPS Scrutiny report.

The proposed Building is approved for Commercial – 1 STOREY BUILDING, Locality – Barik, Plot measuring 4631.0 sq.m. (49847.6692 sq.ft.) having a Height of 4.57 metres, subject to the following conditions ;

Enclosed: <EDCR Building Scrutiny Report and approved drawing>

Name of Architect and/or RTP on Record: John Doe

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Secretary

Meghalaya UrbanDevelopment
Authority, Shillong.

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QR Code can be scanned by any QR code scanning application. The URL on the QR Code will allow to access the digital version of this certificate

Application No : 002002003001000002

The conditions of the building permission sanction are as follows: -

- 1 Commencement Notice & Certificate of Undertaking Form II shall be sent to the Authority 14 days before commencement of the construction of the building as per bye-laws.
- 2 The owner will not proceed with the construction without having the supervision of Architect/ RTP/ Firm as the case may be. If he/she changes his Architect /RTP / Firm, he/she shall inform the Authority about the appointment of a new Consultant within 48 hours, with a proper certificate from him.
- The construction will be undertaken as per sanctioned plans only and no deviation from the Bye-laws will be permitted without prior sanction. Any deviation done against the bye-laws or Sanctioned plans is liable to be demolished and the supervising Consultant engaged on the job will run the risk of being black listed.
- 4 (a) The Consultant Architect/RTP/ Firm shall ensure that the alignment & setbacks of the building shall be as per the approved building plans.\n \n(b) The Consultant Architect/RTP/ Firm along with the owner will be held responsible for any kind of structural failure of the building.
- 5 This permission shall remain valid for a period of 3 years from the date of issue.
- 6 The building shall not be constructed within minimum distance as specified in Indian Electricity Rules from voltage lines running on the side of the plot.
- 7 Green and Sustainability Provisions shall be provided as per Section G of the MBBL 2021 or as amended.
- 8 Construction & Demolition Waste Management should be adopted & taken up with the Urban Local body concerned in accordance with the provisions of Rule 5 of the Construction & Demolition Waste Management Rules. 2016.
- 9 No deviation or change of use is permissible from approved drawings.
- 10 Completion & Certificate Form III shall be sent to the undersigned to issue Occupancy Certificate

Yours faithfully,

Secretary

Meghalaya UrbanDevelopment
Authority, Shillong.

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This is an electronically generated certificate with a digital signature (equivalent to affixing of handwritten signature with a seal)

QR Code can be scanned by any QR code scanning application. The URL on the QR Code will allow to access the digital version of this certificate

Application No : 002002003001000002

#### Preparations of drawings for EDCR engine

The drawings to be submitted for scrutiny are to be drawn in a particular format. Please refer the following guidelines to understand -

#### General guidelines

- a) All drawings shall be drawn in 1:1 scale, in meter, in model space.
- b) All required details as per this guideline shall be submitted in a single drawing, drawn in model space.
- c) Detailed drawings (Floor plan, elevations, sections, site plan etc.) incorporating all specifics as per guidelines mentioned on Bye-laws and documents listed in the OBPS portal, set to scale and paper size specified in the guidelines in pdf format. These pdf files are to be separately uploaded after .dxf file scrutiny. The drawings shall be prepared by matching the various entries in the drawings with the properties of layers of the supplied layer matrix.
- d) The layer template file, which can be downloaded along with these guidelines, contains all the layers which are used by the system and can be made use while creating .dxf. Drawings required for rule validation.
- e) Wherever details are to be furnished as dimensions, these are to be incorporated using dimension tools, and shall not be exploded/edited.
- f) Wherever one or more polygons/ dimensions/ lines/ depicting different parameters are required to overlap, it shall be ensured that, no gaps/ spaces are left in between.
- g) The use of layers/ Texts/ colour conventions specified by these guidelines to designate a parameter shall be restricted to that entity only and shall not be used elsewhere in the drawing.
- h) The drawing may get aborted if it does not adhere to the guidelines mentioned in the document.

#### Drawing Preparation Format to be followed

All details shall be furnished using closed polygon with polylines, lines, texts, dimensions etc. to be incorporated in layers, index colours as specified in this guideline. It is instructed to the architects to keep all the layers and details in the drawing as per MBBL Bye Laws standards. Over and above this, prepare drawing for features scrutiny in .dxf format as per this drawing manual. The layers drawn for Auto Scrutiny should be drawn overlaid/Superimposed on top of the base drawing. It is recommended to freeze the layers that may not be relevant while preparation of drawing.

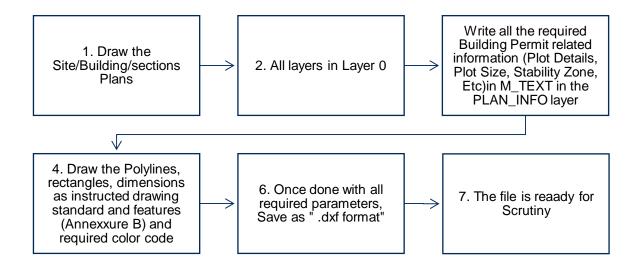
The following file naming conventions are used in the OBPS toolkit:

dxf. - AutoCAD file (2004 or 2007 version)

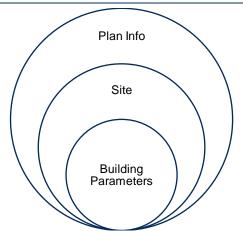
jpg/.pdf - photograph upload, Cadastral Map, COI, NOC, etc.

#### Unit Settings in Drawing System

- a) Meter Put drawing unit length type Decimal Put drawing unit angle type -
- b) Decimal Degrees Put dimension style unit format
- c) Decimal Use precision 0.00 Deviation from above mentioned settings will get the drawing rejected by the scrutiny system.



#### **Parameters**



There are OBPS scrutiny is build up with three parameters – Plan info, Site features, Building Features. The detailed parameters are listed in Annexure 10 (Plan Information), 11 (Site Parameters), 12 (Building Parameters).

#### Data scrutiny reports

The Table in Annexure C shows the different data sets scrutinised in the soft wares along with the expected errors. The most common errors found are related to the building and site parameters matching in AutoCAD. If there is mismatch between the plan information data and the site/building parameters, the software detects it as an error. The software also scrutinises on the basis on the Layer nomenclature defined in Annexure B (i), (ii), and (iii). After successful scrutiny report accepted by the software the GMC official still have the right to reject any files if the BPP file does not follow the building byelaws guidelines not covered in the software scrutiny, mistake in applications, COI, NOC, etc.

## A. Occupancy Colour Code

S.No.	Occupancy	Occupancy Code	Colour Code	Sub-Occupancy	Code	Colour Code
1				Bungalow	R1	50
2	Residential	R	2	Apartment	R2	51
3	Residential	, n	2	Affordable Housing	R3	52
4				Homestay	R4	53
5				Guest House	<b>C1</b>	130
6				Parking Plaza/ Multilevel Car Facility Retail Shops like Grocery	C2	131
7				/Barber/etc.	<b>C3</b>	132
8	Commercial	С	4	Multibrand Store/ Showrooms/ Shopping Complexes/Malls/Multiplex Wholesale Markets	C4 C5	133 134
9	-				C5	154
10				Restaurants ,Food Courts and Eateries	C6	135
11	-			Fuel Stations	С7	136
12				Private Business Houses/professional Establishment	C8	137
13				Hotels	С9	138
				Residential +		
14	-			Commercial	M1	
15				Residential + Institutional Commercial +	M2	
16				Institutional	М3	
	Mixed - Use	M	5	Commercial +		
17		.**	•	Recreational	M4	
18				Commercial + Storage	M5	
19				Residential + Storage	M6	
				Residential + Industrial		
20				(Cottage / Light)	M7	
21				Commercial + Assembly	M8	
				Public Utility Buildings		
				like Water Treatment		
				Plants/Electric		
22	-			Substations/Pump Houses	P1	240
22	Public & Semi-	Р	1	Bank/ Financial	DO	2.44
23	Public		_	Institutions/ Post Office Govt. Offices/ Estate	P2	241
24				Offices/ Pvt Office	Р3	242
25	-			Slaughter House	P4	242
	-					
26				Jail/Prison	P5	244

				Crematoriums/		
27				Graveyards/ Burial Grounds	Р6	245
				School/College/Universit		
28				ies	ln1	11
				kinder garden/Nursery		
29				School	In2	12
30				Hostel	In3	13
				Orphanage/Old-age		
31	Institutional	In	12	Home	In4	14
				Mental Hospital /		
32				Therapy Centres	In5	15
				Hospitals /Health		
33	_			Centres/ Nursing Home	In6	16
				Research		4=
34				Institutes/Training Centres	In7	17
35		_		Industrial Standalone	I1	200
	Industrial	In	6	Industrial Standalone &		
36				Flatted Factories	12	201
37	-			Warehouses	S1	30
38	Storage	Storage S 20	Godowns/ Cold Storages	S2	31	
39			20	Freight Station	S3	32
				Logistics Hubs/		
40				Distribution Centres	S4	33
41				Auditorium	A1	90
42				Assembly hall	A2	91
				Community Halls (Social		
43				gatherings,)	A3	92
				Sports Complexes		
44				(Indoor/Outdoor)	A4	93
45				Exhibition Hall	A5	94
46				Art Galleries	A6	95
47	Assembly	Α	22	Museum	Α7	96
48				Libraries	A8	97
				Multipurpose Hall (Halls		
				for hiring -marriage, party,		
49				etc.)	A9	98
50				Dramatics	A10	99
				Theatre	A11	100
51				Cinema Hall	A12	101
52	1			Place of Worship	A13	102
53	Hazardous	н	45	Hazardous	H1	45
		1				

## B. Layers

## i) Plan Info

Sl. No.	Feature	Drawing Guidelines	Drawing Requirement
1.	PLOT_NO	Integer	MANDATORY
2.	LOCALITY_NAME	Name of the	MANDATORY
		locality	

3.	WARD_NO	Integer	
4.	CITY_TOWN	Shillong/Tur a/Jowai/Etc	MANDATORY
5.	LONGITUDE	Coordinates (e.g. 70.5656)	MANDATORY
6.	LATITUDE		MANDATORY
7.	PLOT_AREA_M2	Area of the plot	MANDATORY
8.	AVG_PLOT_DEPTH	Integer	MANDATORY
9.	AVG_PLOT_WIDTH	integer	MANDATORY
10.	SLOPE	Specify the slope gradient (only Number)	
11.	ROAD_TYPE	NMP/1L/2L/ 4L	MANDATORY
12.	BUILDING_NEAR_MONU MENT	YES/NO	
13.	BUILDING_NEAR_TO_STR EAM/WATERBODY	YES/NO	
14.	BUILDING_SURROUNDIN G_OFFICE_BUILDINGS_AND_ QUARTERS_OF_CONSTITUTIO NAL_HEADS_OF_GOVERNME NT	YES/NO	MANDATORY
15.	PROVISION_FOR_GREEN _BUILDINGS_AND_SUSTAINA BILITY	YES/NO	MANDATORY
16.	NOC_FOR_CONSTRUCTIO N_FROM_REVENUE_DEPART MENT	YES/NO	MANDATORY
17.	CITY_CENTRE_ZONE	YES/NO	Only if The plot lies in the city centre zone
18.	CBD_TOD	YES/NO	Only if The plot lies in the CBD/TOD
19.	SEISMIC_ZONE	5	MANDATORY
20.	REDUCED_SETBACK	YES/NO	Only when reduced setback is applied

## ii) Site Parameters

Sl.no.	Feature		Layer Name	Drawing Guidelines	colour code (ACI)
1.	Plot Area		<del>-</del>	Draw as Polygon around the plot boundary	
I	Ground Coverage Area			Draw as Polygon around the coverage area	
	Building Footprint	NT		Polyline showing building foot print. The i value should start with 0.	
	Built Up Area of proposed block			Polyline showing built up area of floor	Color code of the Occupancy to be added
	Height of the Building			Dimension showing the height of building	

6.	Front Setback	BLK_n_LVL_i_FRONT_SETBACK		
7.	Rear Setback	BLK_n_LVL_i_REAR_SETBACK	respective setback. Here i value	
8.	Side Setback1	BLK_n_LVL_i_SIDE_SETBACK1	should start with 0.	
9.	Side Setback2	BLK_n_LVL_i_SIDE_SETBACK2		
10.	RWH tank	RWH	Polyline showing rain water harvesting	
11.	Septic Tank	SEPTIC_TANK	Draw as polygon with Dimalign perpendicular to Plot Boundary	
12.	North	NORTH_DIRECTION	Define the North in the plan	
13.	Utility Supply line - Drain line, Sewerage line, eletrical line, Water supply line	UTILITY_SUPPLY_LINE	lines, each supply line can be identified by color code. ex: Water	
14.	Solid Liquid Water	SOLID_LIQUID_WASTE_TREAT MENT	Polyline	
15.	Management Recycling	RECYCLING_WASTE_WATER	Polyline	
16.	Waste Water Construction near protected monuments	DISTANCE_FROM_MONUMENT	PLAN INFO	
17.	Construction near important buildings	DISTANCE_FROM_GOVT_BLDG	PLAN INFO	
18.	Distance from electric line	OHEL_i	Polyline showing electrical line	
		VOLTAGE_i	Mtext of VOLTAGE _KV=xyz ,to show voltage in voltage layer	
		HORIZ_CLEAR_OHEL_i	Shortest dimension between electrical line and building	

		VERT_CLEAR_OHEL_i	Shortest dimension between electrical line and highest point of building	
19.	Distance between blocks	DIST_BETWEEN_BLK_n_BLK_m	Dimension to show distances between the blocks	
20.	Parking for Differently Abled	DA_PARKING	Polyline to show Parking area for the physically challenged persons	Color code of the Occupancy to be added
21.	Open Parking	OPEN_PARKING	Polyline showing open parking	Colour code of the Occupancy to be added
22.	Solar Panel	SOALR_PANEL	Polyline showing solar panel	
23.	Solar Water Heater	SOLAR_WATER_HEATER	Polyline showing solar water heater	
24.	Waste Management	WASTE_MANAGEMENT	Polyline showing waste management	
25.	Distance from Canopy	DIST_CANOPY	Dimension to show distance from plot boundary to canopy	
26.	Waste Disposal	WASTE_DISPOSAL	Polyline to show waste disposal and using colour codes existing or new is identified	

27.	Basement Footprint	BLK_n_LVL_i_BSMNT_FOOT_P RINT	1) Polyline to show building basement footprint. The i should be negative value like -1,-2, etc. 2) Dimension with colour code 1 is to show height from the floor to the soffit of the roof slab(Clear height of basement) or ceiling in the BLK_n_LVL 1_BSMNT_FOOT_PRINT layer only 3) Dimension with colour code 2 is to show minimum	
			ground level in the BLK_n_LVL 1_BSMNT_FOOT_PRINT layer only 4) Dimension with colour code 3 is to show the level of basement under the ground in the BLK_n_LVL 1_BSMNT_FOOT_PRINT layer only	

## iii) Building Parameters

S.N o.	Feature	Layer Name	Drawing Guidelines	Layer Code
1	Staircase	BLK_n_FLR_i_STAIR_k	Polyline showing stair	Colour code 1 to show height
2	Staircase Flight	BLK_n_FLR_i_STAIR_k_FLIGHT_m	Polyline showing flight	Colour code 2
3	Stair case landing	BLK_n_FLR_i_STAIR_k_LANDING_m	Polyline showing Landing	to snow width
4	Fire Stair case	BLK_n_FLR_i_FIRESTAIR_k	Polyline showing fire stair	
5	Fire Stair case Flight	BLK_n_FLR_i_FIRESTAIR_k_FLIGHT_ m	Polyline showing flight of fire stair	
6	Fire Stair	BLK_n_FLR_i_FIRESTAIR_k_LAND	Polyline showing	

	case landing	ING_m	Landing of stair	
7	Spiral Stair Case	BLK_n_FLR_i_SPIRAL_FIRE_STAIR k	Circle showing the spiral stair	Circle showing the spiral stair
8	Open	BLK_n_FLR_i_OPEN_PROJECTIO	Polyline showing Open	Colour code 1
	Projection	N	Projection	to show front
				Colour code 3
				to show side1
				Colour code 5
				to show side2
				Colour code 7
				to show rear
9	Closed	BLK_n_FLR_i_CLOSED_PROJECTI	Polyline showing Closed	Colour code 2
	Projection	ON	Projection	to show front
				Colour code 4
				to show side1
				Colour code 6
				to show side2
				Colour code 8 to show rear
10	Covered		Dolyling showing	
10	Covered Parking	BLK_n_FLR_i_COVERED_PARKING	Polyline showing covered parking in	Colour code of Polyline to be
	Faiking	BLK_II_FLK_I_COVERED_FARKING	corresponding floor	added as per
			corresponding noor	occupancy
		BLK_n_FLR_i_STILT		colour code
		BEK_II_I EK_I_STIET		colour code
			Polyline showing stilt	
			parking in	
			corresponding	
			floor	
11	Open		Polyline showing	Colour code of
	Parking	MECHANICAL_LIFT	mechanical lift parking	Polyline to be
	8		in corresponding floor	added as per
			. 5	occupancy
		DA_PARKING		colour code
			Polyline showing da	
			parking in	
			corresponding	
			floor	

12	Regular	BLK_n_FLR_i_REGULAR_ROOM_k	1. Polyline showing Regular Room. Here k means room number like 1, 2.etc 2. Dimension with colour code 1 showing Height of Room 3. Dimension with colour code 2 showing Width of Room	Colour Code To Specify Type of Rooms 1 - Flat slab , 2 - sloping room, 3 - Puja Room 4, Store Room, 5 - Stair cabin 6- Guest Room 7 - Guest room with sloping Room 8- Shop
13	Kitchen	BLK_n_FLR_i_KITCHEN	Polyline to show area of kitchen	Colour code 1 to show height Colour code 2 to show width
14	Sanitation	BLK_n_FLR_i_BATH BLK_n_FLR_i_BATH_HT  BLK_n_FLR_i_WC_BATH BLK_n_FLR_i_WC_BATH_HT  BLK_n_FLR_i_WC BLK_n_FLR_i_WC	Polyline to show Bathroom Dimension to show height of bathroom  Polyline to show Bathroom With Water Closets Dimension to show height of Bathroom With Water Closets  Polyline to show Water Closets Dimension to show height of Water Closets	Colour code 2 to show width
15	Provision of Lift	BLK_n_FLR_i_LIFT_k	Polyline showing lift in corresponding floor	Normal Lift - 1, Service lift - 2, All Dimension of Width are colour code 2
16	Ramp	BLK_n_FLR_m_RAMP_k	1) Polyline to show Ramp 2) MTEXT "FLR_HT_M=" to show slope of DA Ramp	

17	DA Ramp	BLK_n_DA_RAMP_k	1) Polyline to show DA Ramp 2) MTEXT "FLR_HT_M=" to show slope of DA	
18	Vehicle ramp	BLK_n_FLR_m_VEHICLE_RAMP_k	Ramp Polyline to show Vehicle Ramp MTEXT FLR_HT_M= to show floor height of Vehicle	
		BLK_n_FLR_i_VEHICLE_RAMP_k_FLI GHT_m	1) Define ramp with multiple flights inside single ramp	
		BLK_n_FLR_i_VEHICLE_RAMP_k_WIDTH	layer. 2) MTEXT "RAMP_HT_M =" to show the ramp height in same layer 3) Define a polyline to show length of vehicle ramp. Use colour code 1 to show straight ramp and colour code 2 for circular ramp ————————————————————————————————————	
19	Roof Area	BLK_n_FLR_m_ROOF_AREA	Width of vehicle ramp Polyline to show roof area	
20	Floor Units	BLK_n_FLR_i_UNITFA	Polyline with colour code showing a unit area	Colour code of the Occupancy to be added
21	Soft roofing	BLK_n_SOFT_ROOF	Polyline with colour code showing soft roofing	Dimension with colour code 1 to show height
22	Residual Floor	BLK_n_RESIDUAL	Polyline with colour code showing Residual Floor	Dimension with colour code 1 to show height
23	Miscellan eous	BLK_n_FLR_i_MICELLENIOUS	Polyline with colour code showing Miscellaneous	

## A. Samples of Errors

S. No.	Occupancy	Errors	Summary

	Туре		
1.	Residential Bungalow	BLK_1_LVL_0_BLDG_FOOT_PRINT layer, more than one polyline defined in the plan. Expected one polyline in this layer. 2.  BLK_1_LVL_0_SIDE_SETBACK1 layer, more than one polyline defined in the plan. Expected one polyline in this layer. 3. Room height is not defined in layer  BLK_1_FLR_1_REGULAR ROOM 4. Room height is not defined in layer  BLK_1_FLR_3_REGULAR ROOM 5. Room height is not defined in layer  BLK_1_FLR_4_REGULAR ROOM Room height is not defined in layer  BLK_1_FLR_5_REGULAR ROOM 6. Rainwater Harvesting is Not defined in the plan. Required for all buildings having roof area of 185sqm or more	Error 1, 2 -The software is unable to detect any polygon, thus unable to calculate the area. Error 3, 4, 5 - The minimum height of the habitable room is not provided. Error 6 - According to the Sikkim Building Byelaws, Rain water harvesting must be provided for roof area more than 185 sq.m. In the following file, rain water harvesting is not provided.
2.	Residential Apartment	<ol> <li>Rear Setback for Block 1 not defined in the plan.</li> <li>Side Setback 1 for Block 1 not defined in the plan.</li> <li>Side Setback 2 for Block 1 not defined in the plan.</li> </ol>	Error 1, 2,3 – The minimum setback in the given BPP is either not provided or the polygon is not closed, thus software is unable to calculate the area.
3.	Residential Homestay	Block 1 roof area Not defined in the plan.	The roof area in the BPP is not defined properly. The software is unable to detect the area.
4.	Commercial		
5.	Mixed Use (Residential + Commercial	2. Septic Tank not defined	The expected error is that the polygon made for the road reserve setback is not closed.