



# GUIDELINE FOR BUILDING DRAWING APPROVAL PROCESS 2021

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Ministry of Works & Human Settlement  
Department of Engineering Services

*“Construction Industry: Solutions through innovation  
and improved technology”*



## FOREWORD

The Department of Engineering Services (DES) is pleased to bring out the “Guideline for Building Drawing Approval Process”. This guideline aims to provide quick technical requirements to the designers and individuals besides the process for technical clearance and approval.

With the surge in construction activities, the applicants face difficulties in getting information about the drawing approval processes. Without the guideline in place, individuals are often misled experiencing impalpable harassment. The main intent of this guideline is to provide information on the documents required and technical submission during scrutiny of the drawings. Besides, it also provides information on the levels of approval by the approving authority. Therefore, it will serve as a guide for both the approving authority and applicants to execute their respective roles and responsibilities within their jurisdiction, thus ensuring that the buildings are designed, reviewed and built-in compliance with standard code of practice for safe and comfortable habitation and also conserve Traditional Bhutanese Architecture.

The guideline is drawn from the provisions of “Bhutan Building Regulations 2018” and is very much in line with the clauses stipulated for building drawing approval. Additionally, to further streamline the processes involved and for ease of doing business, the Government to Citizen (G2C) system for building drawing approval will be operationalized to set out the roles and responsibilities to meet the expectations of service providers and the end users. The system will keep the applicants informed of the status of their application and ensure transparency during the approval process and accountability to the stakeholders

I am fully optimistic that the objectives will be achieved professionally with an integrated approach between the service provider and the users/applicants.



**(Karma Dupchuk)**  
**Director**

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## **OBJECTIVES**

- To educate on the process of building drawing approval at different stages.
- To realize the responsibility and accountability of stakeholders involved in the building drawing approval process.
- To promote awareness on the basic minimum design requirements.

## **PRE-REQUISITE DOCUMENTS**

### **1. PLANNING PERMIT/SITE PLAN**

Drawings with a copy of approved planning permit/ site plan is mandatory during the submission of drawings for scrutiny (drawings will not be accepted without approved planning permit/ site plan). The site plan may be submitted in the areas which do not fall under LAP development. The following documents shall be required to obtain the planning permit:

- Duly filled application form (BBR-2018).
- Official site plan.
- Land ownership certificate/Lagthram.
- Environmental Impact Assessment (EIA) report if applicable.
- CID copy of the owner.

### **2. BUILDING DRAWINGS - TECHNICAL REQUIREMENTS**

Drawings with complete design information and details, but not limited to the following shall be submitted to the competent Authority for scrutiny and approval.

- a) **General**
  - A copy of approved planning permit/site plan.
  - Drawings designed by competent designers (Certified Professionals).
  - Drawing title indicating name of owner, type and number of storeys, location, date, and revision number as mentioned in BBR 2018.
  - Standard documents as reflected in BBR. (Refer Annexure)
  - BPC and environmental clearance certificate (where applicable) for construction. A copy of each shall be submitted mandatorily along with sets of drawings.

**b) Specific:**

Drawings with complete design information and details, but not limited to the following shall be submitted to the competent authority for scrutiny and approval.

**Architectural drawings:**

- i. Site plan (F.A.R, Ground Coverage, Setbacks).
- ii. Standard views to Scale;
  - Floor Plans
  - Roof Layout
  - Elevations
  - Sections/ Cross Section
- iii. Details and Nomenclatures.

**Structural drawings:**

- i. Design codes, calculations notes, loads, materials properties, etc.
- ii. Structural layout, sections and connection details of all the members.
- iii. Concrete and reinforcement details of all members including lapping and anchorage details.
- iv. Truss layout and connection details.
- v. Load bearing structures: sections, materials, layout, connection details, bond details, concrete and reinforcement details, etc.

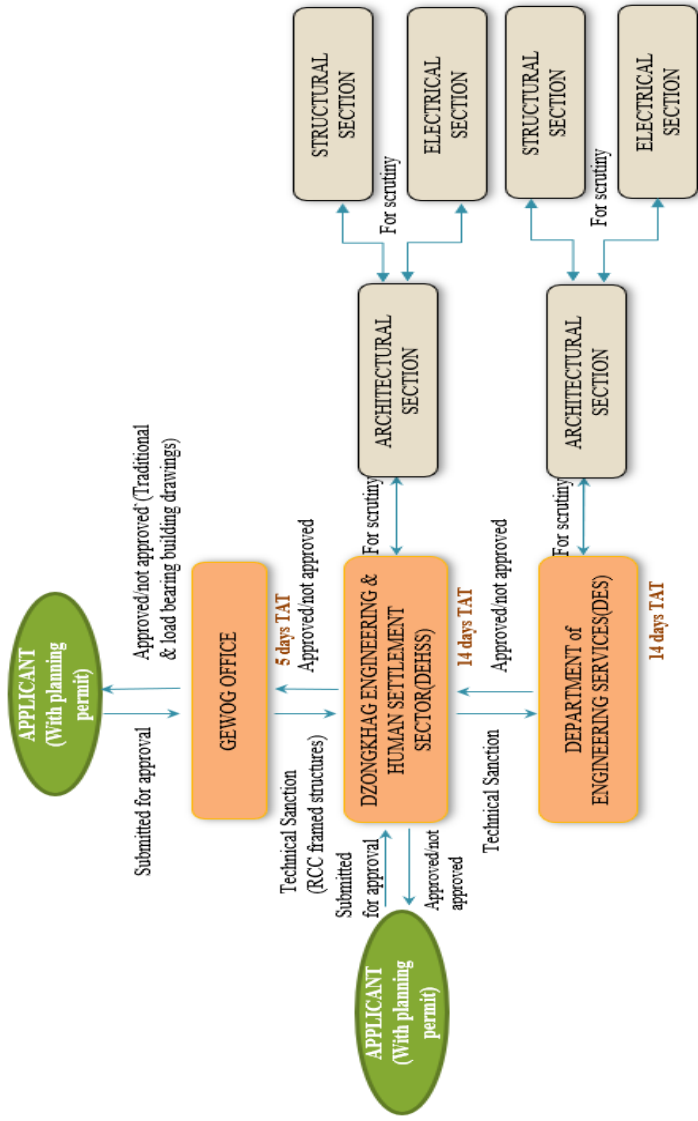
**Electrical drawings:**

- i. Type and wattage of fixtures including symbols & make and type of MCBs.
- ii. Light point wiring layout plan.
- iii. Light point circuit and conduit layout plan.
- iv. Power point wiring and conduit layout plan.
- v. TV & Telephone point conduit layout plan.
- vi. Sub Distribution Board (SDB) details - single line diagram with load calculation for individual SDB.
- vii. Main Distribution Board (MDB) details - single line diagram with overall load calculation for all the SDB combined.
- viii. Electrical earthing details.

## **Drainage and Sanitation drawings**

- i. Water Supply System Drawings
- ii. Drainage System Layout
- iii. Storm water System Drawings
- iv. Plan showing Kitchen, bathroom, and WC outlets.
- v. Plan showing location of septic tank and soak-pit or sanitary pipe.
- vi. Sewer design shall be in accordance with the plumbing code of practice.
- vii. Materials and sizes of pipeline.
- viii. (Drawing should include Details, Legends and notes where required.)

# OVERALL BUILDING DRAWING APPROVAL PROCESS

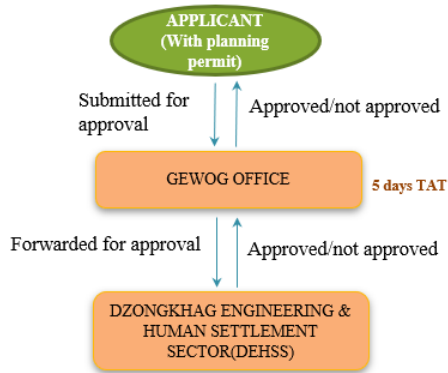




## **IMPORTANT NOTES:**

- The application will be registered in the G2C System and registration number will be sent via SMS (Dzongkhags and Department of Engineering Services) through which the applicant can track the status of the application.
- The applicants shall be notified of any action required via SMS and e-mail.
- TAT(Turnaround time) of 14 working days (Dzongkhags and Department of Engineering Services only) is applicable until the Engineering Council is functional (refer table in annexure)

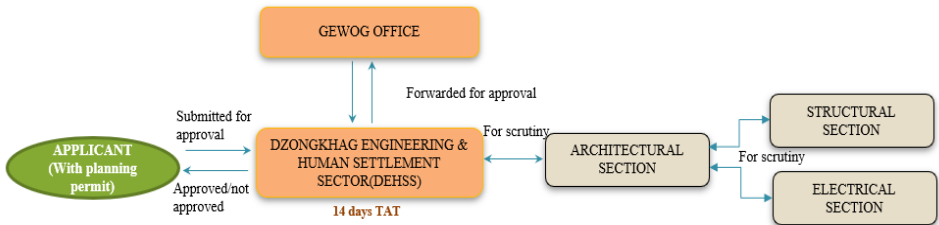
## GEWOG LEVEL



Vide circular 3/DUDES/UPDD/2004/619, the Gewog level approval shall be limited to:

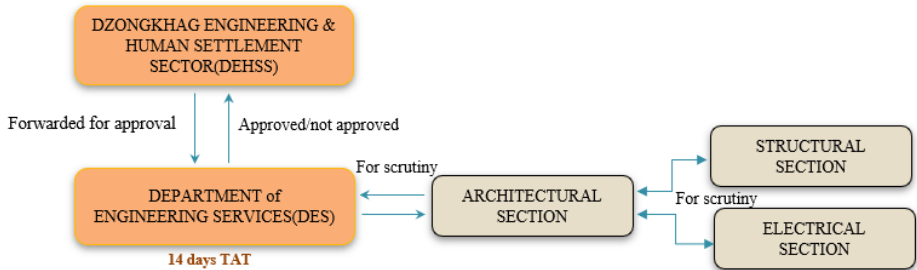
- Traditional load bearing structures of maximum up to G+1 storey for residential purpose accordance to Bhutan Building Regulations 2018.
- Traditional load bearing structures shall mean rammed earth/ Random Rubble Masonry/Coursed Rubble Masonry/ekra/Timber frame.
- Reinforced Cement Concrete/ Steel/ Composite or any other complex structures shall be referred to the Dzongkhag for approval.
- Site plan shall be verified by the land sector at gewog level.
- The TAT of 5 days applies to the GUP, and in case of complex structures, the Gup shall forward the drawings to the Dzongkhag where 14 days TAT is applicable.

## DZONGKHAG LEVEL



- With the proposed establishment of Infrastructure Design Cell, the scrutiny and approval of building drawings shall be carried out by the Building Section, Dzongkhag Engineering & Human Settlement Sector.
- In the event the DEHSS do not have capacity to accord approval, the Dzongkhag shall forward the drawings to DES for technical sanction.
- Site plan shall be verified by the land sector at Dzongkhag level.
- However, the verification of details, compliance to the DCR and BBR, and the construction approval shall be accorded by the respective Dzongkhags.

## DEPARTMENT LEVEL



- Forward the drawings to the Architectural Section:
  - i. After approval from the Architectural section, the drawings will be forwarded to the Structural and Electrical section.
  - ii. Drawings that need to be revised will be sent back to the Dzongkhag/applicant for revision
- The Department will issue the technical sanction and forward it to the Dzongkhag for construction approval.

## ANNEXURE

### i. Turn Around Time (TAT)

SI.no	Agencies/Section	TAT (Working days)
1	Gewog	5 Days
2	Dzongkhag	Total 14 Days
	Architectural Section	7 Days
	Electrical Section Structural Section	7 Days
3	Department	Total 14 Days
	Architectural Section	7 Days
	Electrical Section Structural Section	7 Days

### ii. References:

- Bhutan Building Regulation 2018
- Bhutanese Architecture Guidelines
- Executive Orders & Circulars

### iii. Standard Documents Required as mentioned in BBR

- 2 sets (A3/A4) of architectural, structural, electrical, water supply and sanitation drawings duly signed by the designers.
- Copy of the latest Lagthram/ Land Ownership Certificate
- Copy of planning permit/ Copy of latest site plan
- Certificate of the designers



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