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DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS  
**OFFICE OF THE SECRETARY**  
Manila

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Series of 2023 )  
# 4/13/2023

**SUBJECT: Guidelines and Criteria for the Design Audit of DPWH Regional and District Engineering Offices, 2023 Edition**

In order to attain efficiency in the preparation of architectural and engineering plans, and to enhance the capability and further improve the performance of Regional and District Engineering Offices in the delivery of infrastructure projects in terms of cost, time, function, and design life, by incorporating consistency and accuracy in addition to completeness of plan, the revised Guidelines hereto attached is hereby issued for the regular design audit of DPWH Implementing Offices.

Revisions comprise checking of road widening projects, introduction of timeliness in the processing of as-staked plans, upgrading of limits of authority to approve design plans, and accreditation process. This shall serve as basis for the design auditors in undertaking Design Audit and the preparation of reports and overall rating.

This order shall take effect immediately and supersedes Department Order No. 82, series of 2022 and any other relevant issuance inconsistent herewith.

  
**MANUEL M. BONOAN**  
Secretary

Department of Public Works and Highways  
Office of the Secretary



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# DESIGN AUDIT

**Guidelines and Criteria for the Design  
Audit of DPWH Regional and District  
Engineering Offices**

2023 Edition



BUREAU OF **DESIGN**

DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS  
**BUREAU OF DESIGN**  
MANILA

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## Glossary

**Auditor** – BOD personnel (Civil Engineer) authorized to assess the design capability of Implementing Offices to prepare architectural and engineering design plans.

**AOA** – Areas of Assessment

**Corrective Action Plan** – Set of actions to correct the errors incur by the Implementing Offices.

**Design Audit (DA)** – A yearly activity conducted by the Bureau of Design (BOD), which aims to assess the competency of implementing offices in designing various infrastructure projects.

**Design Audit Committee (DAC)** – Overall coordinator in the conduct of Design Audit.

**Design Audit Team (DAT)** – composed of one (1) team leader and one (1) member that will facilitate the Design Audit in the Implementing Offices.

**Errors** – Deficiencies incur by the Implementing Offices in the approved Detailed Engineering Design plans and other supporting documents as noted by the Design Assessment Team.

**ESGG** – Engineering Surveys, Geotechnical, and Geological

**Final Rating** – cumulative rating obtained by a design auditor from the accreditation process

**Implementing Office (IO)** – A Regional or District Engineering Office of DPWH that is responsible for the design or delivery of a project.

**Member** – holds at least Engineer II (Civil Engineer) plantilla position in Bureau of Design. Assists the Team Leader in the overall progress of the Design Audit Activities.

**OvR** – Overall Rating, cumulative rating under areas of assessment

**Project Category** – Buildings, Bridge, Highways, and Water Engineering Projects

**Ranking** – basis of the level of delegated authority of the Implementing Offices

**Rating** – result of Design Assessment conducted by the auditors based on the presented DED plans and other supporting documents.

**Sanctions** – Penalties imposed to the Implementing Offices based on their accomplishment in the Corrective Action Plan

**Team Leader** – holds at least Engineer III (Civil Engineer) plantilla position in Bureau of Design. In charge of the overall planning and execution of Design Audit Activities.



## **GUIDELINES AND CRITERIA FOR THE DESIGN AUDIT OF DPWH REGIONAL AND DISTRICT ENGINEERING OFFICES**

### **1. Rationale**

The DPWH as the engineering arm of the government is tasked to continuously develop its technology for the purpose of ensuring the safety of all infrastructure facilities and securing all public works and highways with the highest efficiency and quality of construction.

The Bureau of Design (BOD), as the leading support group in providing quality infrastructure through sound engineering design, developed the Design Audit (DA) that covers the evaluation of detailed architectural and engineering design works and processes undertaken in the said offices.

The Design Audit which aims to enhance the capability and improve the performance of the ROs and DEOs – Planning and Design Division/Section will ultimately improve the delivery of infrastructure projects in terms of functionality, economy, safety/stability and resiliency.

While the previous DA checks on the completeness of design data and documents, the newly updated guidelines will include the evaluation of design data accuracy that coincides with the Department's Design Guidelines Criteria and Standards, 2015 Edition, referral codes, and specifications including compliance to applicable laws and department issuances relative to design.

### **2. Objectives**

The main objectives of the design audit are as follows:

1. To ensure compliance of the design plans prepared by the Planning and Design Division/Section with the standards set by the Department;
2. To identify areas where the design process could be strengthened and improved;  
and
3. To establish a comparative design performance rating of ROs and DEOs.

### **3. Areas of Assessment (AOA)**

#### **3.1 Design Management**

##### **3.1.1 Preparation of Design Plans**

Checks on the compliance of design plans to the latest policies and standard drawings of the Department.

##### **3.1.2 Availability of Design Tools and Software**

Checks on number, appropriateness and ideal ratio of engineering tools (computer hardware/software, references, survey equipment, etc.) to the number of design personnel involved in the actual execution of particular design works.

##### **3.1.3 Personnel Trainings and Seminars**

Checks on continuous/programmed trainings and seminars are attended by the personnel of the Planning and Design Division/Section of ROs/DEOs updating them on current design methodologies, technologies, and procedures in particular expertise/field, therefore, improving their capability and skills as designers.

#### **3.2 Design Plans of Infrastructure Projects**

##### **3.2.1 Completeness and Correctness of Drawings/Details**

All Detailed Architectural and Engineering Design Plans, and other related plans (in standard format) of proposed structures for a specific calendar year should be complete and correct as indicated in the checklist of requirements for highway, bridge, water engineering, and building projects. This also includes compliance to road safety requirements for highways and bridge projects, engineering survey, geotechnical, and geological, and compliance to current department issuances and laws.

##### **3.2.2 Consistency of Design Parameters with Supporting Documents**

Parameters and data used in the design calculations shall be checked if consistent with the supporting design reports (geotechnical, geologic, seismic, traffic, survey, hydrologic, and other reports) to ensure that actual field data are used.

### 3.2.3 Accuracy of Design Analysis and Calculations

All Detailed Architectural and Engineering plans and other related plans of proposed structures should be adequately and accurately designed based on the design parameters as stipulated in the Department's guidelines (DCGS latest edition), referral codes, and specifications and other applicable department issuances. Actual field conditions shall be gathered using standard procedures in surveying, field testing and other specialized procedures as required in the particular project. Supporting documents such as design analyses, reports, and computations shall show accurate data and calculations for the specific project under consideration.

### 3.3 As-Staked Plans of Infrastructure Projects

As-Staked plans shall be checked as to deviation from the original scope of works as approved in the detailed engineering design plan due to design changes. Provision of necessary supporting documents for processing of As-Staked plan including Revised plan (if any) shall also be included in the design audit. In the absence of As-Staked plan due to no changes, the corresponding DED plan and As-built plan shall be the basis for ongoing and completed projects, respectively.

## 4. Re-constitution of the BOD Technical Working Group (TWG)

Per BOD Office Order No. 6, series of 2023, the TWG shown below constitutes the Team to undertake the revision of the guidelines and establishment of the criteria for the conduct of Design Audit:

**Team Adviser: ROMEO C. RAAGAS**  
Chief, Highways Division

**Team Leader: SAMUEL A. BERTILLO**  
Engineer III, Highways Division

#### Team Members:

**MELANIE B. PAGCALIWANGAN** – Engineer III, Buildings Division

**RENATO RAINIER M. VITORIO** – Engineer II, Bridges Division

**DJON MAR ELLYZ M. SANTIAGO** –

Engineer II, Surveys & Investigation Division

**DARYL PAUL B. DE LA ROSA** – Engineer II, Water Projects Division

**JING ANDREW M. DELA CRUZ** – Engineer II, Design Management Division

#### Secretariat:

**PETER JAMES T. ESQUIBIL** – Engineer III, Highways Division

**KIMBERLY R. DE OCAMPO** – Engineer III, Highways Division

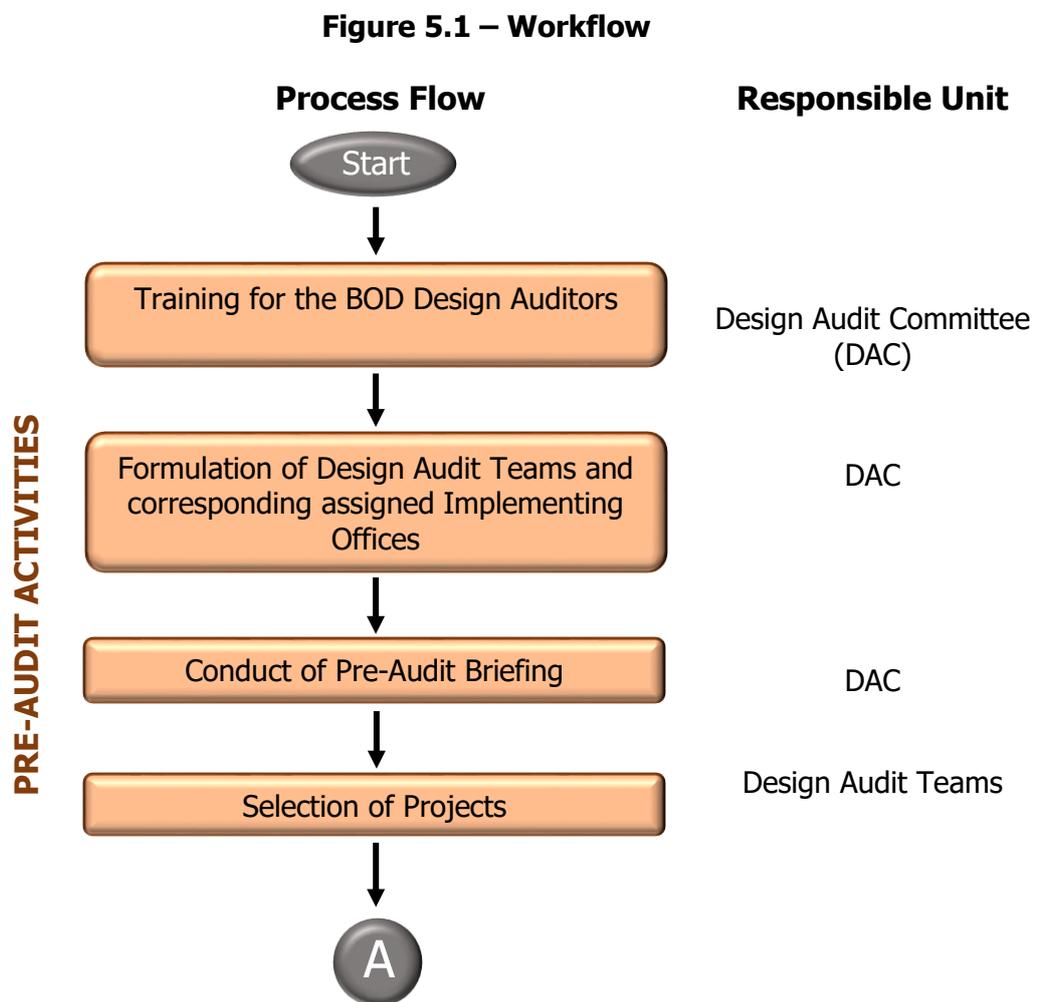
**ABBY P. LASAM** – Engineer II, Highways Division

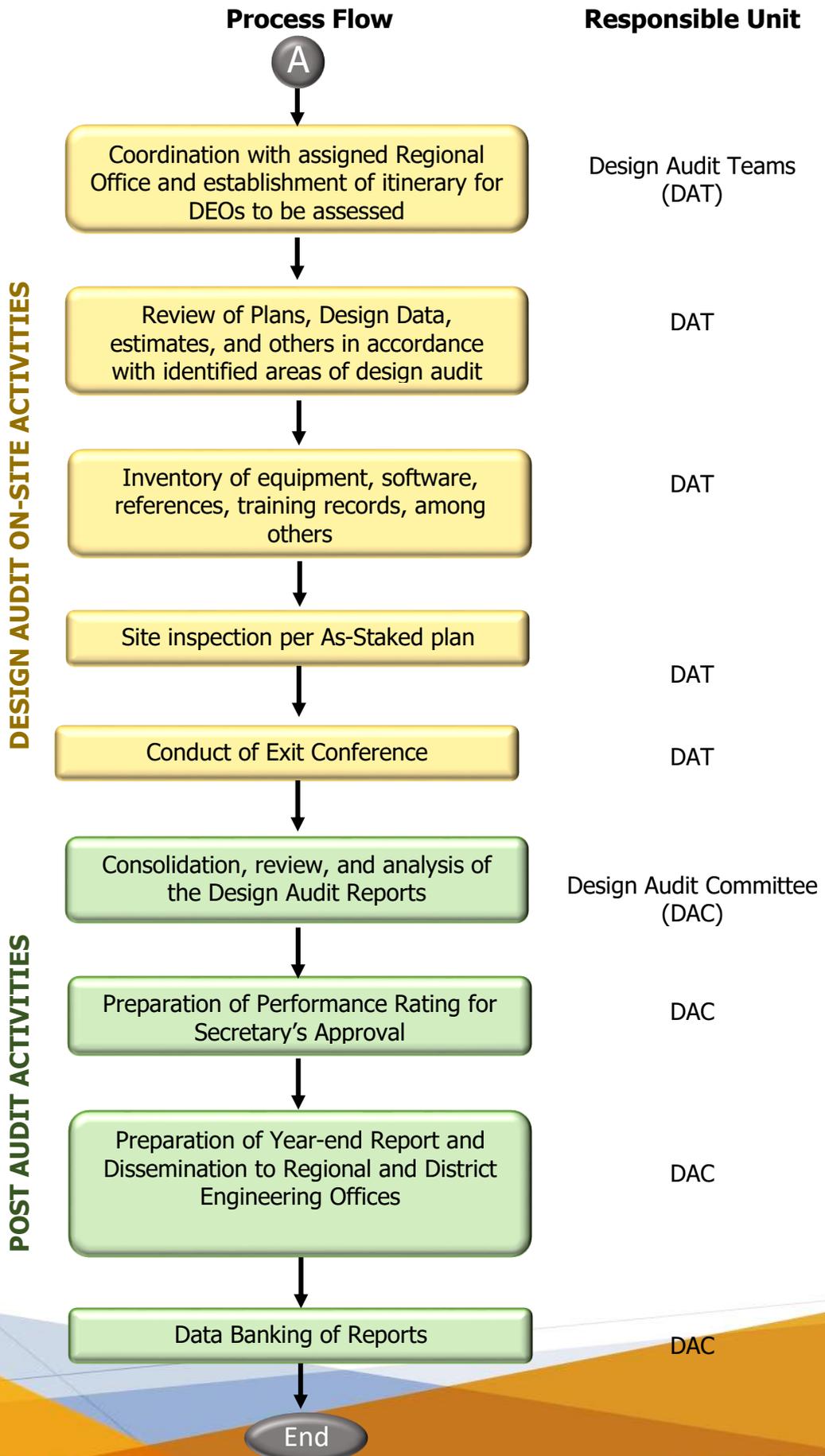
By virtue of BOD Office Order No. 1, series of 2020, the Highways Division (Design Audit Committee) shall be the overall coordinator in the conduct of Design Audit. Said Committee shall organize, schedule, dispatch Design Audit Teams, and facilitate Pre-Audit and Post-Audit Activities as specified in Section 5 of this guideline.

## 5. Activities in the Design Audit

### 5.1 Workflow of Activities in Design Audit of DPWH IOs

In the conduct of Design Audit, the following activities shall be undertaken as shown in Figure 5.1.





## **5.2 Pre-Audit Activities**

### **5.2.1 Training for the BOD Design Auditors**

BOD Design Auditors shall gain expertise in the design audit by undergoing Design Auditor's Training Course annually and taking an examination for accreditation every 2 years.

### **5.2.2 Formulation of Design Audit Teams**

Each Design Audit Team shall be composed of one (1) Team Leader and one (1) Member that satisfies the minimum qualifications and criteria set in Annex "A".

### **5.2.3 Conduct of Pre-Audit Briefing**

Before departure, all issues and concerns shall be thoroughly discussed and clarified in the said briefing.

### **5.2.4 Selection of Projects by the Design Audit Team**

Projects to be evaluated shall be selected from the General Appropriations Act (GAA) of the current Fiscal Year and/or from updated project lists in the Project and Contract Management Application (PCMA) consolidated by the Design Audit Committee. Each project shall meet the corresponding criteria set in Section 6.1 of this guideline.

## **5.3 Design Audit On-site Activities**

During the conduct of design audit, the Design Audit Team shall at all times observe neutrality and will be an instrument to the impartial evaluation of the actual design capability of the Regional and District Engineering Offices. The following activities shall guide the said team.

### **5.3.1 Coordination with assigned Regional Office and establishment of itinerary for DEOs to be assessed**

The Design Audit Team shall meet the concerned officials/personnel (Regional Director/Asst. Regional Director/District Engineer/Asst. District Engineer) and request their full cooperation for the conduct of design audit.

### **5.3.2 Review of Plans, Design Calculations, Design Data, Estimates, and others in accordance with the identified areas of assessment**

DAT shall require the copies (hard and electronic copies) of approved plans of on-going projects being implemented by the ROs/DEOs, design reports, quantity calculations, design analyses, laboratory test result/s and related studies which may be considered as supporting documents in the preparation and subsequent approval of plans. In addition, As-Staked plans shall be evaluated to check design changes and completeness and

timeliness of supporting documents in accordance with D.O. No. 15, series of 2016.

### **5.3.3 Inventory of Equipment, Software, References, and Training records, among others**

This involves assessment of their document management system and methodology including the use of engineering design tools in the actual execution of design works.

### **5.3.4 Site Inspection per As-Staked Plan**

Only major design changes as reflected in the As-Staked or Revised plan are subject to verification on site. Other changes shall be recorded for data gathering purposes only as basis in formulation of future design-related policies. Said major design changes as deviation from the corresponding approved Detailed Engineering Design Plan shall be evaluated with site inspection whether it is due to faulty and/or inadequate design and specifications. Said site inspection for RO and DEO must cover at least two (2) projects and one (1) project, respectively.

### **5.3.5 Conduct of Exit Conference**

After checking all of the necessary documents and site inspection, an exit conference between Head of Implementing Office (IO) together with the Chief of Planning and Design Division/Section and Design Audit Team shall be conducted to discuss preliminary findings and provide initial recommendations on identified areas for improvement. Likewise, the said team shall also discuss the IO's compliance with the previously submitted Corrective Action Plan, subject to sanctions set in Section 8.

### **5.3.6 Preparation and Submission of Design Audit Report**

Only the prescribed design audit report preparation tools shall be used in the preparation and submission of the said report. Duly signed design audit report shall be submitted by each design audit team to the BOD Director thru the Design Audit Committee, not later than five (5) working days and ten (10) working days for RO DA Team and DEO DA Team, respectively, after the assigned design audit period.

## **5.4 Post-Audit Activities**

Upon submission of the design audit report, appropriate action is required to determine the rating of each IO being evaluated.

### **5.4.1 Consolidation and Data Analysis of the Design Audit Report**

Based on the submitted design audit reports, performance of IOs shall be rated and ranked accordingly based on Section 7. Mechanics of Rating and Ranking.

#### 5.4.2 Preparation of Performance Rating for the Secretary’s Approval

Summary of all the design audit reports for the same calendar year shall be submitted by the DA Committee to the Secretary for approval not later than 15<sup>th</sup> of October of the same year.

#### 5.4.3 Preparation of Year-end Report and Dissemination to Regional and District Engineering Offices

The Design Audit Team shall provide the rating (numerical and adjective) together with the findings and recommendations to each IOs through a memorandum signed by the Undersecretary for Technical Services. Said findings and recommendations shall be the basis of Corrective Action Plan to be prepared and submitted by the Chief of Planning and Design Division/Section, conformed by the Regional Director/District Engineer, within ten (10) working days upon receipt of the said memorandum. Further, BOD will provide Certificates for the TOP Performers in the Design Audit; top five (5) Regional Offices and top twenty (20) DEOs provided that the IO maintained at least Very Satisfactory (VS) rating.

#### 5.4.4 Data Banking of Reports

The Design Audit Committee shall keep and consolidate the reports and all pertinent documents for data banking.

### 6. Number of Design Plans to be Assessed

The number of design plans to be evaluated for ROs and DEOs shall be as presented in the table below:

<sup>1</sup> Category	Number of Design Plans			
	Regional Office		District Engineering Office	
	DED Plans	<sup>2</sup> As-Staked Plans	DED Plans	<sup>2</sup> As-Staked Plans
Highways	2	2	1	2
Bridges	2	1	1	1
Water Projects	2	1	1	1
Buildings	2	-	1	-
<b>Total</b>	<b>8</b>	<b>4</b>	<b>4</b>	<b>4</b>

## 6.1 Project Selection Criteria for DED and As-Staked/As-Built plans

Below are the following criteria for each project category:

1. <sup>1</sup>Highways (limited to portland cement concrete pavement projects only)
  - a. New Construction / Road Opening
  - b. Road Upgrading
  - c. Roads Leading to Declared Tourism Destinations
  - d. Road Projects under other Convergence Program
  - e. Road Widening
2. Bridges
  - a. Construction of New Bridge
  - b. Total Replacement of Bridge
  - c. Widening of Existing Bridge
3. Water Engineering Projects (river improvement structures only)
  - a. New Construction of Revetment
  - b. New Construction of Dike
  - c. New Construction of Spur Dike
4. Buildings (limited to reinforced concrete structures projects only)
  - a. New Construction
  - b. Two (2) Storey and above
  - c. Not a standard plan prepared by the Bureau of Design or other government agencies

<sup>1</sup>Plans must include Geometric, Pavement, and Drainage with or without Slope Protection components.

## 6.2 Availability of DED Plans

In case of unavailability of DED plan for a certain project category, a DED plan of other categories and of same calendar year may serve as a replacement to meet the required number of DED Plans to be assessed. Provided, however, that the Head of IO shall issue a Certificate of Replacement. Additionally, As-Staked plans shall be based on the DED plans audited in the preceding design audit period. In this case, no replacement is allowed for As-Staked plans except for Building plans subjected to DED design audit in the preceding year.

## 7. Rating System

### 7.1 AOA Rating

The ROs and DEOs shall be rated based on their respective performances on the key areas to be evaluated. The weighted percentage shall be as follows:

Areas of Assessment	Percent Weight (%)
<b>I.</b> Design Management	10
<b>II.</b> Design Plans of Infrastructure Projects	80
<b>III.</b> As-Staked Plans of Infrastructure Projects	10
<b>Total</b>	<b>100</b>

Moreover, the key areas of assessment shall be sub-categorized as shown:

Breakdown of Areas of Assessment	Percent Weight (%)
<b>I. Design Management</b>	<b>10</b>
I.1 Compliance to Policies/Referral Code relative to Preparation of Design Plans	30
I.2 Availability of Design Tools and Software	30
I.3 Personnel Trainings and Seminars	40
<b>II. Design Plans of Infrastructure Projects</b>	<b>80</b>
II.1 Completeness and Correctness of Drawings/Details	40
II.2 Consistency of Design Parameters with Supporting Documents	40
II.3 Accuracy of Design Analysis and Calculations	20
<b>III. As-Staked Plans of Infrastructure Projects</b>	<b>10</b>
III.1 Design Changes	60
III.2 Completeness and Timeliness of Supporting Documents	40
<b>TOTAL</b>	<b>100</b>

## 7.2 Rating Mechanics

The rating/evaluation shall be done per category (i.e., highways, bridges, buildings, and water engineering projects) except Design Management (10%), based on the checklists provided percentage weight assigned to AOA as shown in the table above

**YES** – if the requirement in the checklist is indicated, provided or complied

**NO** – if neither provided nor complied

**N/A** – if the pertinent document being audited did not require the presence or compliance to that certain requirement/measure in the checklist; or simply not applicable for the project.

### 7.2.1 Design Management

For rating areas mentioned in Section 7.1 under Design Management of this guideline, put a check mark (✓) corresponding to the cell of requirement if complied by IO.

Equivalent Compliance points:

$$\text{Score per AOA} = \frac{\text{Total no. of YES}}{\text{Total no. of Items} - \text{Total no. N/A}}$$

$$\text{Rating per AOA} = \text{Percentage Weight} \times \text{Score}$$

### 7.2.2 Design Plans of Infrastructure Projects

For rating areas mentioned in Section 7.1 under Completeness and Correctness of Drawings/Details, Consistency of Design Parameters with Supporting Documents, and Accuracy of Design Analysis and Calculations, using the checklist per project category including Engineering Survey, Geotechnical, and Geological (ESGG) requirements set in section 6 of this guideline, put a check mark (✓) corresponding to the cell of requirement if complied by IO.

Equivalent Compliance points:

$$\text{Score per AOA} = \frac{\text{Total no. of YES}}{\text{Total no. of Items} - \text{Total no. N/A}}$$

$$\text{Rating per AOA} = \text{Percentage Weight} \times \text{Score}$$

*Total rating per Project Category =  
 Selected Project Category rating (50%)  
 and corresponding ESGG rating (50%)*

*Total rating of DED Plans = Average rating of all selected DED plans*

### **7.2.3 As-Staked Plans of Infrastructure Projects**

For rating areas mentioned in Section 7.1 under Major Design Changes and Completeness and Timeliness of Supporting Documents, using the checklist per project category set in section 6 of this guideline, put a check mark (✓) corresponding to the cell of requirement if complied by IO.

Equivalent Compliance points:

*Rating per As Staked Plan = Design Changes (maximum 6%)  
 + Completeness and Timeliness of Supporting  
 Documents (maximum 4%)*

*Total rating of As Staked Plans =  
 Average rating of all selected As Staked Plans*

## **7.3 Performance Rating**

### **7.3.1 Overall Rating (OvR)**

Performance of the IO to be audited will have its Overall Rating (OvR). Said rating is the average of the computed total rating per project category (total rating of design plans) including Design Management and As-Staked Plan ratings.

The Performance of Regional and District Engineering Offices shall be rated in accordance with the scale as shown:

<b>Adjective Rating</b>	<b>Numerical Rating (%)</b>
<b>Outstanding</b>	above 95 to 100
<b>Very Satisfactory</b>	above 85 to 95
<b>Satisfactory</b>	above 75 to 85
<b>Fair</b>	above 65 to 75
<b>Unsatisfactory</b>	below 65

The same ruling for limits of authority to approve design plans shall be used as shown:

Ranking	Limits of Authority to Approve Design Plans	
	Regional Office	District Engineering Office
<b>VS and above</b>	up to Php 400 million	up to Php 150 million
<b>Below VS</b>	up to Php 200 million	up to Php 75 million

For infrastructure projects amounting more than Php 400 million in cost, the Design Plans such as Conceptual Design, Detailed Engineering Design, Revised, As-Staked, and As-Built shall be subject to review/evaluation of the Bureau of Design, and approval of the Undersecretary for Technical Services.

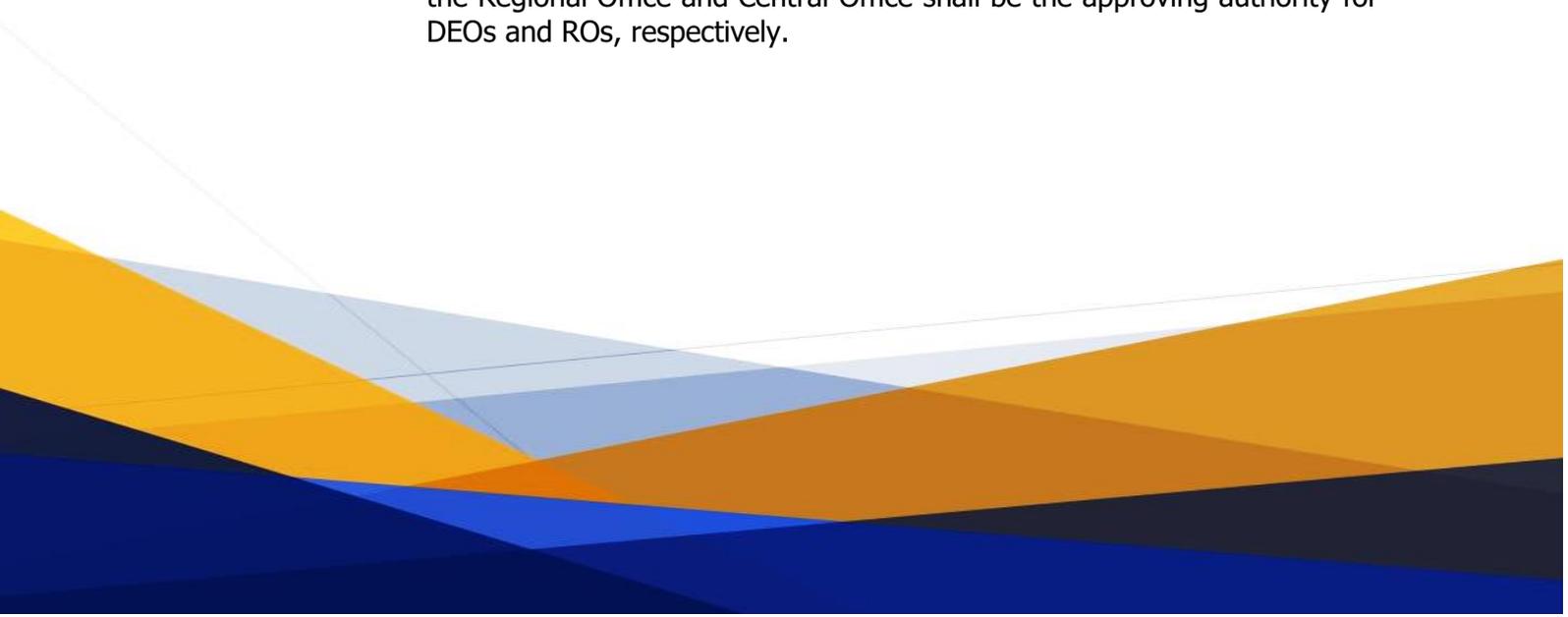
### 7.3.2 Significance of the Rating

An Implementing Office must obtain above 85% overall rating (at least Very Satisfactory, VS) to achieve the maximum limits of authority to approve design plans as indicated in the above table.

IOs with Fair or Unsatisfactory rating shall be subjected to all project categories (i.e., Building, Bridge, Highway, Water Engineering) design trainings and seminars, including Engineering Surveys, Geotechnical, and Geological aspects, a month after the issuance of Department Order, re: Revised Limits of Authority to Approve Design Plans.

Satisfactory rated IOs shall be on a probationary status and be subjected to training/seminar for areas of assessment (as stated in Section 7.1) with sub-rating below 85% only, a month after the issuance of Department Order, re: Revised Limits of Authority to Approve Design Plans. In this regard, two (2) consecutive on a probationary status shall be subjected to trainings and seminars same as IOs with Fair and Unsatisfactory ratings.

Lastly, IOs with two (2) consecutive Unsatisfactory (U) ratings shall not be allowed to approve design plans, regardless of the project cost. In this case, the Regional Office and Central Office shall be the approving authority for DEOs and ROs, respectively.



## 8. Sanctions

As discussed by the Design Audit Team of the IO's compliance in the previously submitted Corrective Action Plan, the following penalties shall be implemented:

Action Taken by IOs	Penalty Points
Non-compliance of <sup>2</sup> Technical errors	0.2 point (%) deduction in OvR for each error but not greater than 2% deduction in total
Non-compliance of <sup>2</sup> Design-related errors	0.5 point (%) deduction in OvR for each error but not greater than 5% deduction in total
Non-compliance of Corrective Action Plan	additional 3 points (%) deduction in OvR, cumulative with the applicable deductions as aforementioned

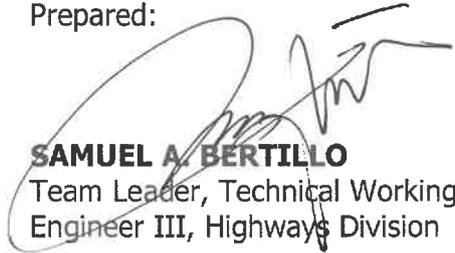
<sup>2</sup>Errors as specified in Annex B, re: Classification of Errors

## 9. Effectivity

This updated guideline supersedes all previous guidelines for the conduct of Design Audit and is proposed to be implemented for CY 2023 and succeeding years, except Section 8 which shall be implemented by 2024, unless otherwise superseded by a new set of guidelines as approved by the Secretary.

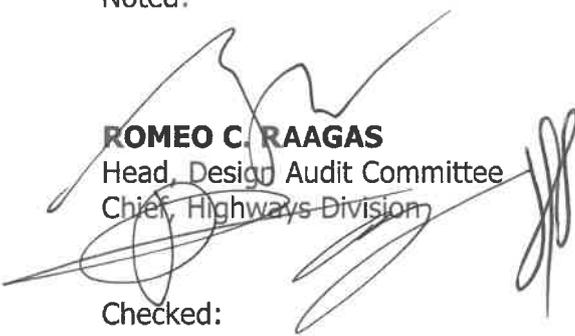


Prepared:



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Head, Design Audit Committee  
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Recommending Approval

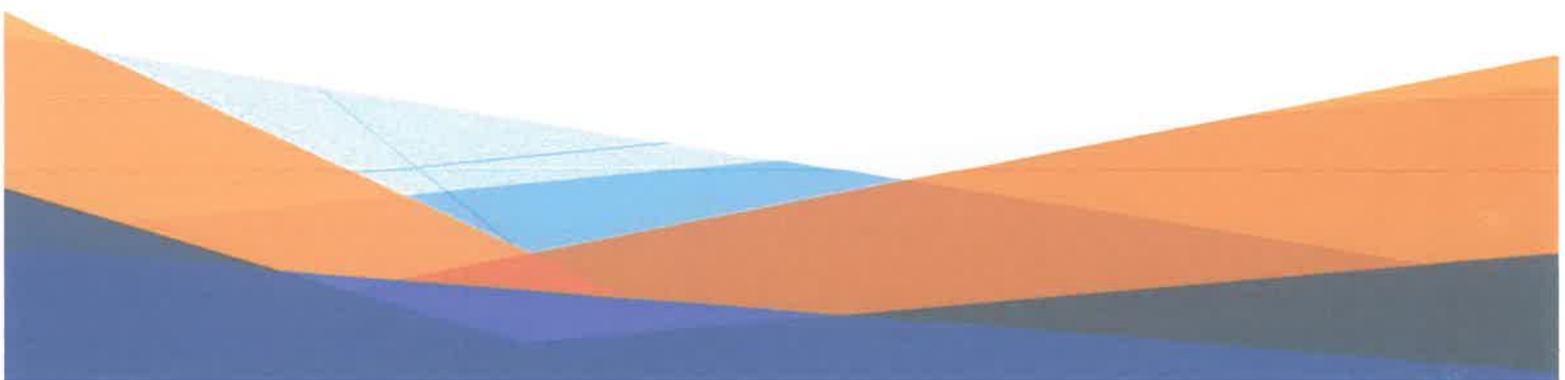


**EDWIN C. MATANGUIHAN**  
OIC-Director  
Bureau of Design

Approved:



**MAXIMO L. CARVAJAL**  
Undersecretary for Information Management and Technical Services



## Qualifications of Bureau of Design – Design Auditors

### 1. Criteria

The following criteria shall be applied in the evaluation for the Design Audit Team composition:

	<b>Member</b>	<b>Team Leader</b>
<b>Eligibility</b>	Civil Engineer, BOD Personnel, and at least Engineer II	Civil Engineer, BOD Personnel, and at least Engineer III
<b>Experience, Educational Background and Trainings (40%)</b>	See section 1.2	See section 1.2
<b>Performance (30%)</b>	See section 1.3	See section 1.3
<b>Examination (30%)</b>	See section 1.4	See section 1.4
<b>Final Rating</b>	<b>70% min.</b>	<b>85% min.</b>

#### 1.1. Eligibility

The Auditor must be a Registered Civil Engineer from the Bureau of Design holding a plantilla position (permanent status).

#### 1.2. Experience, Educational Background and Trainings (40%)

Experience and Trainings shall be evaluated as follows:

##### 1.2.1. Experience (25%)

The rating for this criterion shall be based on:

- a. The number of years (1.0 point per year, maximum of 5 points) that a prospective auditor has been a Section/Division Chief (5%).
- b. The number of years (2.0 points per year, maximum of 10 points) that a prospective auditor has been conducting the Design Audit activities (10%).

- c. The number of years (2.0 point per year, maximum of 10 points) that a prospective auditor has been preparing and/or evaluating plans and supporting documents (10%).

#### 1.2.2. Educational Background (5%)

The rating for this criterion shall be based on the relevant graduate and/or post-graduate studies of prospective auditor. Maximum points shall be given to those who have completed graduate studies. Otherwise, one (1) point for every six (6) units earned, maximum of five (5) points but not exceeding 3%.

#### 1.2.3. Trainings (10%)

The rating for this criterion shall be based on the relevant trainings attended by the prospective auditor (1.0 point for every 8 hours of relevant training, maximum of 10 points).

### 1.3 Performance (30%)

The criterion rating shall be based on the performance evaluation using the Department's Strategic Performance Management System (SPMS) as indicated in the Individual Performance Commitment and Review (IPCR) form.

Performance rating shall be based on the average of equivalent points of SPMS numerical rating (multiplied by weight factor of 30%) for the last two (2) semesters immediately preceding the time of evaluation or promotion of role.

For each rating period, the equivalent points of the SPMS numerical rating are calculated as shown:

$$\text{Equivalent points, \%} = 100 - 20 (5 - \text{SPMS Numerical Rating})$$

Example:

SPMS Numerical Rating = 4.56

$$\text{Equivalent points, \%} = 100 - 20 (5 - 4.56) = 91.2 \%$$

### 1.4 Examination (30%)

The rating for this criterion shall be based on the results of the examination administered at the end of the Training for Design Auditors Course held annually. The raw score obtained in the examination shall be multiplied by the weight factor of 30% to obtain the earned points for this criterion. However, examinee shall obtain a raw score of at least 50% in each examination category, i.e., Buildings, Bridges, Highways, and Water Engineering. Said training shall be organized by the Design Audit Committee.

All Auditors shall be required to attend the Annual Training for Design Auditors as a refresher course but may opt not to take the examination. Further, all Division Chiefs and OIC-Division Chiefs in BOD are exempted in the examination, however, they must participate in Training of Design Auditors.

## **2. Roles of Design Auditors**

Auditors shall be classified according to their final rating. The latter shall be the sum of the ratings obtained as stated in Section 1.

The classification of Auditors shall be as follows:

- 2.1 Team Leader – Garnered a final rating of at least 85%. In charge of the overall planning and execution of Design Audit Activities.
- 2.2 Member – Garnered a final rating of at least 70%. Assists the Team Leader in the overall progress of the Design Audit Activities.
- 2.3 Design Audit Team shall fully cooperate/participate with the Design Audit Committee's test runs of prospective tools/systems for the improvement of DA process flow and data gathering.
- 2.4 Classification may be upgraded by participating in the Annual Training for Design Auditors to re-evaluate his/her qualifications, provided, however that the auditor shall re-take the examination as the new basis in the re-evaluation.

## **3. Procedure for Evaluation**

Evaluation for the qualification of BOD – Design Auditors shall be facilitated by the Design Audit Committee and monitored by the BOD TWG.

### **3.1 Applicants**

All BOD registered Civil Engineers holding a plantilla (permanent) position may apply for evaluation.

### **3.2 Requirements**

- 3.2.1 Recommendation from the applicant's Division Chief.
- 3.2.2 Duly accomplish application form
- 3.2.2 Certified true copy of SPMS Individual Performance Commitment and Review (IPCR) rating for the last two (2) semesters
- 3.2.3 Certified true copy of Certificate of Completion in the Training for Design Auditors
- 3.2.4 Attachments as required under Section 1.2.2 of this guideline.

### **3.3 Evaluation**

- 3.3.1 Only valid and complete set of documents shall be considered by the Design Audit Committee
- 3.3.2 Applicants shall be evaluated strictly in accordance with the criteria set forth in this guideline.

### 3.4 Issuance of Certificate

3.4.1 Certificate of Accreditation indicating the classification of auditor will be issued to those who will meet the requirements for accreditation.

## 4. **Validity**

Certificate of Accreditation is only valid for two (2) years upon issuance. Auditors who have expired certificate shall be subject to re-evaluation of classification set forth by this guideline.





**DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS  
BUREAU OF DESIGN**



BUREAU OF DESIGN

**CLASSIFICATION OF ERRORS**

Plans and Supporting Documents	<b>TECHNICAL ERROR</b> (would not affect the design / structural integrity and stability of the structure)	<b>DESIGN-RELATED ERROR</b> (would affect the design / structural integrity and stability of the structure)
<b>I. Detailed Engineering Design Plans</b>	<ol style="list-style-type: none"> <li>1. Incorrect/incomplete drawing details, but not limited to the following:               <ol style="list-style-type: none"> <li>a. Cover/Title sheet, Index of Drawings, Vicinity Map</li> <li>b. General Notes</li> <li>c. Summary of Quantities</li> <li>d. Typical Details</li> <li>e. Plan</li> <li>f. Profile</li> <li>g. Detailed Cross sections</li> </ol> </li> <li>2. Inconsistencies between Detailed Quantity Calculations and reflected Summary of Quantities in the plan.</li> <li>3. Non-compliance to items indicated in Completeness and Correctness of Drawings/Details Checklist</li> </ol>	
<b>II. Reports and other Technical Documents</b>	<ol style="list-style-type: none"> <li>1. Presented reports are not applicable to the project</li> <li>2. Non-compliance to items indicated in Consistency of Design Parameters with Supporting Documents Checklist</li> <li>3. Incomplete Supporting Documents</li> <li>4. No presented Supporting Documents</li> </ol>	<ol style="list-style-type: none"> <li>1. Inappropriate (Structure/Design) Recommendation</li> <li>2. Inaccurate Design Analysis and Calculations</li> <li>3. Non-compliance to items indicated in Accuracy of Design Analysis and Calculations Checklist</li> <li>4. No presented Design Analysis and Calculations</li> </ol>
<b>III. As-Staked Plans</b>	<ol style="list-style-type: none"> <li>1. Approved with inconsistencies between As-staked/As-Built quantities (reflected in the plan) and Itemized Cost of Revisions</li> <li>2. Incomplete supporting documents</li> </ol>	