



S U R U H A N J A Y A
P E N G A N G K U T A N A W A M D A R A T

L A N D P U B L I C T R A N S P O R T
C O M M I S S I O N

SPAD GUIDELINE

DESIGN AUDIT APPROVAL PROCESS

Document Type	Guideline
Document Owner	Rail
Document Reference Number	SPAD/GL/RD/RAIL/018/Rev0
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1.0 INTRODUCTION

This document is to provide guidelines on the design audit approval process.

2.0 DESIGN AUDIT APPROVAL PROCESS

The process and requirements for Design Audit Approval Process is stipulated under APPENDIX A, APPENDIX B, FORM A AND FORM B.

3.0 FORMS & OTHER RELATED DOCUMENTS

This guideline must be read together with the following documents:

- i. **APPENDIX A - Design Audit Approval Process**
- ii. **APPENDIX B - Content of Submission Design Drawing & Document**
- iii. **FORM A - Submission for an Application of Railway Infrastructure & Systems Design Approval**
- iv. **FORM B - Application for Railway Infrastructure and Systems Design Approval**

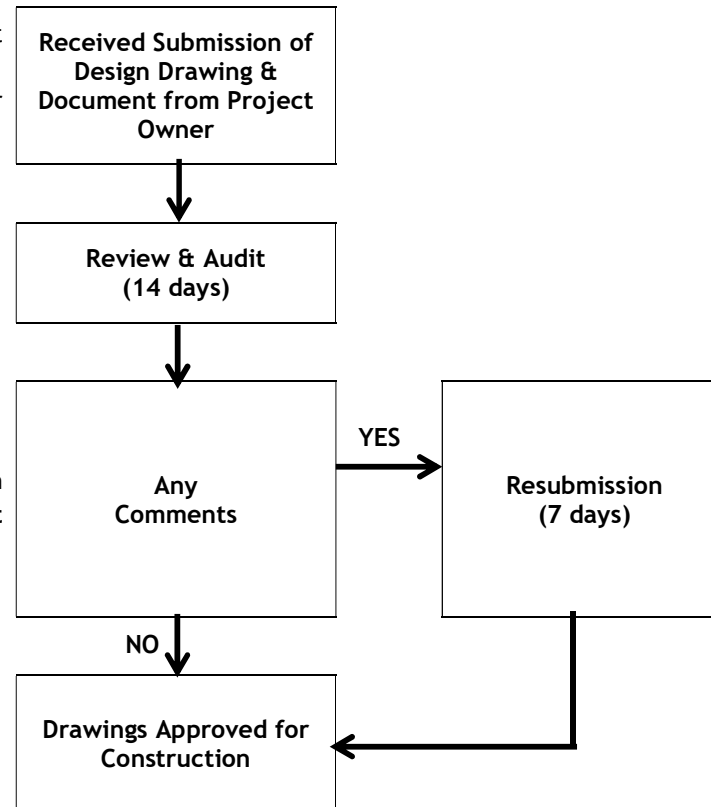
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APPENDIX A - DESIGN AUDIT APPROVAL PROCESS

Rail Division's Role:

- RD to provide guideline for Design Audit Approval Process
- RD to issue an acknowledgement receipt for drawing & document.

Process Flow



- RD to prepare and provide comments.
- If SPAD does not provide comments within 14 days the drawing & document submitted

- SPAD to approve the drawing & document.
- SPAD to issue an approval letter.

Project Owner's Role:

To submit final design drawing & document to SPAD.

- To fill up and sign **FORMS A & B**.

Note: Refer **APPENDIX B** for content of submission for the required design drawing & document.

- To make correction/clarification based on SPAD comments.
- To resubmit drawing & document based on SPAD comments.
- If SPAD does not provide comments within 7 days the drawing & document submitted is deemed approved.

Note: SPAD's approval does not absolve the project owner on ensuring that the design drawing and construction works comply with the standard, right practices, codes in ensuring safe railway construction and operation.



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APPENDIX B - CONTENT FOR SUBMISSION OF DESIGN DRAWING & DOCUMENT

1. The following shall be the required drawings and documents for submission.
2. All the submitted drawings & documents must be signed and endorsed by the project owner and professional engineer/architect.
3. The submitted drawings & documents must be submitted together with Form A (to be filled up and signed by the project owner and professional engineer/architect).
4. The submitted drawings & documents for signalling must be signed and endorsed by certified IRSE professional engineer.
5. Project owner to justify if there are sections not applicable to the project scope.
6. Submission of drawings (2 sets hardcopy: A3 size plus a softcopy) & document (2 sets hardcopy: A4 size plus a softcopy).

DRAWING & DOCUMENTS REQUIRED	
1. GENERAL DOCUMENT	
1.1	Employer's Requirements
1.2	Design Criteria for each system
2. STANDARDS AND REGULATIONS, CODES OF PRACTICE	
2.1	List of standards applicable for each system
3. STRUCTURE	
3.1	Alignment & Station Location Layout Plan
3.2	Track Alignment Plan & Profile
3.3	General Arrangement Plan: <ul style="list-style-type: none"> • Viaduct • Special Span • Tunnel • Bridges, ROB & RUB
3.4	Structural Plan: <ul style="list-style-type: none"> • Viaduct • Special Span • Tunnel • Foundation • Piers • Portal • Shaft • Depot • Station • MSPR & Ancillary Buildings
4. CIVIL & INFRASTRUCTURE	
4.1	Overall Site Plan: <ul style="list-style-type: none"> • Station • Depot • Underground Portal • MSPR & Ancillary Buildings



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DRAWING & DOCUMENT REQUIRED	
4.2	Infrastructure Layout Plan: <ul style="list-style-type: none">• Station• Depot• Underground Portal• Viaduct• Track Corridor & Drainage System
5. ARCHITECTURE	
5.1	Overall Architecture Concept Report
5.2	Station Site Plan
5.3	Building Plan
6. SYSTEMS (TRACKWORK, SIGNALLING, COMMUNICATION & POWER SUPPLY)	
6.1	Track Layout Drawing (Alignment & Typical Cross Section for Trackwork)
6.2	Schematic/Line Diagram (Signalling, Communication & Power Supply)
6.3	Signalling Plan
6.4	Power Supply & Communication System Layout
6.5	Technical specifications for each system
7. ROLLING STOCK	
7.1	Technical Specifications



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FORM A - SUBMISSION FOR AN APPLICATION OF RAILWAY INFRASTRUCTURE AND SYSTEMS DESIGN APPROVAL

To: Head of Rail
Suruhanjaya Pengangkutan Awam Darat

From:	
Date:	
Title of Railway Project:	
Drawing/Document Details: (Reference No.)	

Notes/Remarks:	
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Submitted By:

Received By:

Signature : _____ Name : _____ Company : _____ Address : _____ _____ _____ Tel/Fax : _____ Date : _____	<i>For Internal Use Only:</i> Signature : _____ (Rail Division) Date : _____
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SURUHANJAYA PENGANGKUTAN AWAM DARAT
BAHAGIAN REL, IBU PEJABAT, BLOK D, PLATINUM SENTRAL, JALAN STESEN SENTRAL 2, KUALA LUMPUR SENTRAL,
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Tel: 603 - 2726 7000 Faks: 603 - 2726 7100



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FORM B - APPLICATION FOR RAILWAY INFRASTRUCTURE AND SYSTEMS DESIGN APPROVAL

Date: _____

To: Head of Rail
Suruhanjaya Pengangkutan Awam Darat

Railway Project : _____

Drawing/Document No. : _____

Drawing/Document Details : _____

I/We, as the Consultant Engineer/Architect appointed by the Project Owner hereby declare and confirm that the abovementioned details in this form and all the drawings and documents attached herewith are complete, true and accurate.

I/We hereby further declare that the drawings and documents which has/have been designed by me/us is/are in accordance with sound engineering practice, approved design and standards and that I take full responsibility for the said drawings and documents.

I/We take full responsibility to supervise the works and implementation of this project.

Signature : _____
(Professional Engineer/Architect)

Name : _____

Registration No. : _____

Address : _____



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DECLARATION BY THE PROJECT OWNER

I/We, as the Project Owner hereby declare and confirm that the abovementioned details in this form and all the drawings and documents attached herewith are complete, true and accurate.

I/We hereby further declare to supervise and take full responsibility on the works and implementation of this Railway Project and agree to indemnify the Government of Malaysia and Suruhanjaya Pengangkutan Awam Darat from any court action or any claim made by any other party with regards to any incident, accident, weakness or failure during the implementation of this Railway Project.

Signature : _____
(Project Owner)

Name : _____

Address : _____

