



Defining the Future

Template for Preparation of Detailed Project Report (DPR) in r/o Buildings for KIIFB Assistance

Guidelines for preparing Detailed project Report

A detailed Project Report is an essential component of the project. It should be prepared carefully. Before finalizing the DPR, importance should be given to carry out proper surveys, investigations and designs. Sufficient details should be included to ensure proper appraisal, approval and implementation of the project in time. Considering the importance of DPR preparation, a document intended for reference is detailed along with. The guidelines provided in this document shall be adhered to strictly. In addition, SPV can incorporate specific additional relevant details to supplement the base data.

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1. SALIENT FEATURES

(Buildings)

1.	Title of the project	
2.	Department	
3.	District	
	Thaluk	
	Corporation/Municipality/Panchayath	
	Legislative Assembly Constituency	
4.	Implementing agency/SPV	
5.	DPR prepared by	
6.	Project outlay	
7.	Budget provision	
8.	Budget speech reference	
9.	Administrative sanction	
10.	Nature of the project (New building/Renovation of existing building)	
11.	Present status of existing building	
12.	Need for the project	
13.	Details of investigations/surveys conducted	
	i. Topographical	
	ii. Geotechnical	
	iii. Hydrological	
	iv. Others	
14.	Whether Land Acquisition involved?	
	If yes, furnish details	
15.	Total estimated cost and item wise cost break up and details of Schedule of Rates	
	Whether detailed estimate attached?	
16.	Details of revenue streams, if any	
17.	Details of Cost Benefit Analysis (CBR value)	
18.	Details of project risks	
19.	Details of project management organisation strategy	
20.	Details of contract management strategy	
21.	Details of Project Implementation Schedule (PIS) & Work Breakdown	

	Schedule(WBS) - Proposed duration to complete the project	
22.	Details of statutory clearances	
23.	Quality Control infrastructure and Mechanism	
24.	Operations & Maintenance(O&M) arrangements of the project after Completion	
25.	Details of attached drawings	
26.	Other attachments	

2. EXECUTIVE SUMMARY

This section should contain brief of all the relevant details discussed in the following chapters as a brief info about the need , salient features of the Project proposal , Project components , estimated cost , mile stones/Timelines and final objectives/benefits of the Project .

3. PROJECT BACKGROUND

3.1 Introduction

- This section should provide a general introduction of the project being submitted.
- General introduction shall include write up on: type of the building project, location of the project area, general description of topography, physiography and geology of the project area, historical background of the project, need for the project, etc.
- Aims and objectives of the project shall also be briefed in the section.

3.2 Project Objective

Desired outcome of the Project to be described in this section.

3.3 Methodology

Brief description of the methodology adopted by the consultant to prepare the DPR. This section can include a flow diagram to describe the methodology with the input, output and the process.

3.4 Overview of the Project Area

Overview should cover aspects as location of the site and connectivity with other regions, accessibility to the site by various modes of transport, identification of the population under the direct and indirect impact of the DPR, existing ecological and environmental conditions, soil and terrain condition etc.

4. PROJECT FEASIBILITY STUDIES

4.1 Requirement/ Demand Analysis

In this section, the project proposed should be described in terms of the rationale behind the project, clearly focusing on the existing condition (how it will help in improving the situation and bring benefits to the stakeholders as citizens, businesses or Government).

4.2 Existing Situation Assessment

Assessment report of the existing condition of infrastructure/facilities of the study area with respect to the prevailing norms, standards or regulations.

4.3 Stakeholders Consultation

Identification and focused discussion with the Target Beneficiaries / Stake-holders. The outcomes of the stakeholder consultation should be formally documented in the DPR. An assessment in respect of the Infrastructure gaps within the Project area shall also be made.

4.4 Environmental & Sustainability Aspects

- An Environmental Management Plan (EMP) is to be developed explaining the possible environmental issues which may arise during the construction and operation of the infrastructure and associated facilities depending upon the size of the project.
- Environmental impact assessment study if mandatory and measures identified to mitigate the adverse impact, if any shall be conducted and documented in detail.
- Issues relating to land acquisition, diversion of forest land, wildlife clearances, rehabilitation and resettlement, if any, should be addressed in this section.
- Inclusion of international best practices in sustainable infrastructure management including potential low carbon emission, low energy, zero pollution etc. is desirable.

4.5 Description of any feasibility study conducted earlier and their outcome shall be discussed in this section.

5 SITE SURVEYS AND INVESTIGATIONS

5.1 Ocular/Reconnaissance Survey

The consultant shall carry out an ocular/reconnaissance survey of the project site and the surrounding to understand the presence of various physical features, external and internal infrastructure facilities available at site and off site, and all shall be documented in this section.

5.2 Topographical Survey

Analysis of the topographical survey of the entire site area. Level of detailing for the survey work will depend on the type of the project and site condition.

5.3 Soil Investigation

Analysis of soil investigation/soil test report for all architectural and detailed engineering works

5.4 Hydro-Geological Study

Analysis of hydro geological survey report of the project area, as required for engineering design calculations

5.5 Primary Surveys

Analysis of the data from primary survey(s) depending upon the need of the project.

6. FUNCTIONAL DESIGN

- This section should present an analysis of different options available to achieve the objective and the reasons for selecting the proposed option should be substantiated.

- The functional design of the project is mainly achieved through field study and documentation using existing information and specifications from various standards
- The building shall be designed with a view to achieve maximum utility. The building shall preferably be one which demands minimum land acquisition.
- The field study shall also include demand surveys and it should be prepared based on the relevant guidelines of The National Building Code of India (NBC) 2016.

7. ENGINEERING DESIGN

This section should elaborate the technology choices, structural aspects, substructure options and evaluation of the technology option.

- This section should elaborate the technology choices, structural aspects, foundation options and evaluation of the technology option, as well as the basis for the technology for the proposed project.
- Detailed description of site including topographical and geotechnical investigations adequate to choose the suitable foundation shall be furnished.
- The structural layout shall be so planned that the viability of adopting state of the art large span arrangements like flat slab, grid floor slab, ribbed slab, pre-stressed panels etc. shall be explored with a view to bring in maximum utility, aesthetics, economy etc.
- The preliminary design for a typical building project shall consist of architectural drawings of the proposed buildings, including floor plans, elevations, sections, site plans etc. conforming to the guidelines laid down in the relevant building bye laws and manuals.
- New innovations like green building concept may be incorporated in the design of the buildings.

8. FINANCIAL ESTIMATES & COST PROJECTIONS

- This section should focus on the cost estimates, budget for the project, means of financing and phasing of expenditure.

- Cost estimates have to be worked out on the basis of detailed bill of quantities (with detailed measurements of length, breadth, and depth / height for each item), using the current Schedule of Rates of the State Government (PRICE) or relevant SOR as applicable.
- Applicable taxes, contingencies, investigation charges including any O&M cost for a specific period shall be clearly specified.
- Lump sum provisions for land acquisition , if any, shall be explained in detail.

9. REVENUE STREAMS

- Options for cost recovery, if any, should be explored
- Innovative ideas for additional revenue generation may be indicated.

10. COST BENEFIT ANALYSIS& INVESTMENT CRITERIA

- Cost Benefit Analysis (CBA) is a technique whereby the costs of and benefits from a scheme are quantified over a selected time horizon and evaluated by a common yardstick.
- Cost Benefit Ratio (CBR - benefit to cost ratio), EIRR (Economic Internal Rate of Return) etc. shall be worked out in detail with all supporting data
- The project cash flow projections for the life cycle along with underlying assumptions have to be presented.

11. RISK ASSESSMENT AND MITIGATION MEASURES

- For those projects which involve large capital outlay and various issues relating to land acquisition, environmental aspects, a detailed and systematic risk analysis may be resorted.
- Identification and assessment of implementation risks which can lead to time overrun, cost escalation, scope reduction etc. is the primary stage in risk assessment.
- Risk analysis could include legal/contractual risks, environmental risks, revenue risks, project management risks, regulatory risks etc.
- The mitigation plans including risk avoidance, risk transfer, and risk elimination are to be well analysed and documented.

- For complex projects with multiple risk profiles, numerical modeling and simulation may be adopted.

12. PROJECT MANAGEMENT ORGANISATION

- Responsibilities of different agencies for project management of the said project should be elaborated. The organization structure at various levels, human resource requirements, as well as monitoring arrangements should be clearly spelt out.
- Management arrangements refer to the institutional structures and mechanisms that would be set up for ensuring effective project management.
- The involvement of external consultant if any shall be documented.

13. CONTRACT MANAGEMENT STRATEGY

- Contracting methodology for the execution of the project should be specified in detail. (item rate, lump sum, design and execute , EPC etc.)
- The system followed in the bidding document and manuals of reference etc. shall be explained (PWD/CPWD/ FIDIC) etc.
- Any variation proposed from the current practices acceptable under govt of Kerala (Arbitration, escalation etc.) in the system due to any specific technical aspects associated with the project need to be explained with justification.
- Any contract clause which may likely to lead to additional financial liability shall be identified and reported with suggestions to overcome such issues.

14. IMPLEMENTATION SCHEDULE & WBS

- The time bound work schedule is an important part of every project because it helps in better handling of projects in planning, implementation etc.
- This section should indicate the proposed zero date of commencement and also provide a Bar chart / Project Schedule, wherever relevant.

- Phasing of project activities, proposed contract packages and schedule of implementation for each phase.
- Identify critical dependencies in the project and expected timelines for completion of key milestones and associated process indicators for the same.
- The DPR should provide a time-bound action plan including tendering, appointment of contractors, construction schedule,, quality assurance & quality control and post-construction activities, including project delivery.

15. STATUTORY CLEARANCES

- This section should elaborate the statutory clearances to be obtained from the various authorities.
- Statutory approvals as per bye laws, master plan, fire safety norms, environmental clearance etc. as applicable for the project are to be taken.

16. QUALITY MANAGEMENT PLAN

- The DPR shall include information relating to the institution to be engaged in the quality assurance & quality control of the project execution.
- Methodology to be adopted to ensure the quality of construction should be clearly mentioned in the report.
- Quality management plan including the internal inspection and testing procedure shall be documented.
- Third party quality control mechanism , if adopted , its structure and plan shall be specified in detail.

17. OPERATIONS & MAINTENANCE PLAN

- The DPR shall incorporate/include information relating to the institution to be engaged in the O&M of the created infrastructure assets/enhanced infrastructure assets.

- Brief description/analysis of the key issues and obstacles in regard to O&M (including billing/collection issues) and proposed counter measures to overcome them for the project should be contained.
- Periodical requirement of funds for operation and maintenance of assets should also be included in the report.

18. ANNEXURES

- I. KEY MAP OF THE PROJECT LOCATION
- II. APPROVED ARCHITECTURAL DRAWING
- III. DETAILED ESTIMATE
- IV. GEO-TECHNICAL INVESTIGATION REPORT
- V. HYDROLOGICAL INVESTIGATION REPORT
- VI. TOPOGRAPHICAL INVESTIGATION REPORT
- VII. COPIES OF STATUTORY APPROVALS