

## **THE INTERIM REPORT - A progress report**

- gives client an overview of design progress
- allows client to see where design is going
- may coincide with release of payment for work
- may cast new light on problem as a result of information gathering, idea development
- last opportunity to change or refine objectives and products (either party may initiate change, with approvals)

### **1. FRONT MATTER**

Letter of Transmittal

Title Page

\*Executive Summary

\*Nomenclature

Table of Contents

List of Tables

List of Figures

\* Optional, may be at end of report

### **2. INTRODUCTION**

#### **Problem Statement**

- more detail than proposal
- summarize info from search
- purpose, scope, importance
- easy to understand (non-technical)

#### **Objectives**

- concise statement of each objective
- will define "final product" of design
- will be used to evaluate success of work

### **3. BACKGROUND**

Put problem into context of design

Summarize relevant literature (what has been done before, successes and failures, synopsis of important studies published, etc...)

**Constraints** - research and knowledge should be drawn upon to determine specific constraints which define limitations for design parameters such as size, weight, cost, etc..

**Assumptions** - when it is necessary to make assumptions, state them with

supporting arguments ( e.g., interest rate, availability of features like electrical power, potable water supply, etc..)

**Criteria for evaluation** - determine which performance variables are important for success of design, and list them with a short description of how each will be evaluated (e.g., speed, durability, aesthetic value, functionality...)

#### 4. METHOD

**Design Ideas** - give a short description of each design alternative, emphasizing main differences

**Alternative evaluation procedures**

- give rationale for system chosen
- present logic of evaluation (e.g., weighting factors, scoring, final selection)
- do **sensitivity test** on outcome by varying weighting factors

**Present selected alternative** - state, with justification, which idea is recommended

**Detail design methodology** - describe approach to take selected alternative to final design stage

- plan of attack, milestones
- analysis techniques
- modelling
- idea refinement iterations

#### 5. CONCLUSIONS AND RECOMMENDATIONS

- briefly state preliminary conclusions (i.e., why some ideas were eliminated, significant new information, deviations necessary from original proposal)
- clearly state recommended course of action, revised plan (if necessary)
- allow opportunity for feedback from client at this stage

#### 6. REFERENCES

- list sources cited in Background

#### 7. APPENDICES

- calculations for alternative development and selection
- copy of original letter of request (if available)