

PROJECT MANAGEMENT PLAN: RECREATIONAL FACILITY

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Executive Summary

This document is a construction project management plan that lays out the plan by the project team to construct a recreational center in Kent, England. The plan highlights different aspects of the project, including the budget and resources available, limitations in terms of the project team's authority and capacity, the objectives and goals of the project, and the timeline for the completion of various tasks within the project. The project should be completed within six months and cost less than or up to \$50,000 from start to finish. Communication management and quality management plans have been detailed in this plan, as well as the roles of different stakeholders in the success of the project. Safety has been highlighted as the primary principle of the project, followed by quality. Every member of the team is expected to follow all safety guidelines and make it an individual and a collective role to uphold safety. In cases where issues or emergencies arise, this plan has documented the necessary steps to deal with the issue at hand effectively.

Introduction

This document is a project management plan for the construction of a recreational center in Kent, England. As with any other project management plan, this document entails information about the construction project, which include the scope of the project, the project communication plan, quality management, risk management plan, budgeting, and project responsibility matrix (Kerzner, 2017). This document also entails other aspects of the construction project such as project tasks scheduling and the cost management of the entire project from its inception to completion. The purpose of this document is to present a clear plan of how the construction should take place and how the contractors should approach specific aspects of the project such as change control, communication management, budgeting and resource allocation, and time management among others (Kerzner, 2017). The construction plan in this document is aimed at achieving a complete recreational center with various elements such as a swimming pool, a miniature theme park, children's fun generating things like bouncing castles, merry go rounds, and an open air arena.

An artistic impression of the completed construction of the recreational center has been developed and used to guide the development of this construction management plan. Essentially, the project is expected to be completed within a period of six months from start to finish, and its cost must also fall below \$50,000. To achieve success in this project, the project team must follow the set objectives and goals of the project. This will be vital for the project team to meet the standards set in terms of quality, and also achieve the financial goals of the construction by avoiding running over budget. This also means that the project team must complete the project within the set period because that is part of the agreement between the client and the project

manager. In addition, the funds provided for this project cannot be revised upwards under any given circumstances, hence the need for this project management plan.

Project goals and objectives

The primary goal of this project is to build a high-class recreation facility in Kent, within the budget and time limits provided. The budget provided for this project is \$50,000 and the completed project is expected to be handed over to the client, a hotel in the town of Kent, within a period of six months. According to market research, the average amount needed to construct a similar project, albeit on a much larger scale, exceeds the \$50,000 limit by far. However, the goal of this project is to deliver a high-class recreational facility for adults and children while limiting the cost to below \$50,000. This goal is achievable because there are various elements of the project that make it easier than those represented by existing market conditions.

First of all, the project does not involve land acquisition as the client already owns the land. Also, the other resources such as electricity, water, and storage facilities are available and these enable the project to be cheaper than if the contractor had to acquire or lease these resources. This project management plan entails estimations of resources available and those being budgeted, and these are subject to change and revisions according to existing conditions within the construction project (Kerzner, 2017). It is the objective of the project management team to ensure that the project remains within the time and budgetary limits even after revisions, hence the reason for contingency and change management planning as detailed in subsequent paragraphs of this document.

Scope and Deliverables

In this project, the specifications on the specific attributes of the final outcome are open to imagination and creativity. With the aim being to construct a recreational center that attracts and has facilities for both adults and children, the specific elements of the project have been designed and incorporated to meet this specific goal. The project entails five major parts which include a swimming pool 90 feet long and 45 feet wide, a children's fun center which contains such things as a bouncing castle, merry go round, cycling and skating tracks, and shopping stalls for toys and other things for children. The third major element of the project is an open air arena for creative art and plays, which are expected to be an attraction for adults, especially couples. The fourth major component of this project is the construction of pathways throughout the park. Lastly, this project involves the installation of electric cables water and sewerage pipes, lighting, and safety facilities.

The deliverables of the project include:

- i. A completed 45x90 feet swimming pool
- ii. Single-lane pathways throughout the park, which need to be at least 1.5 meters wide with flower hedges on both sides.
- iii. A children's fun center with all the necessary components for children to have fun
- iv. A complete open air theatre or arena
- v. Full electricity connectivity to all parts of the park
- vi. Fully functional water and sewerage systems
- vii. A public address system
- viii. Fully functional standby first aid and safety systems

Project milestones and schedule

No.	Milestone	Due Date
1	Signing of the contract	January 3, 2021
2	Commencing the architectural design	January 15, 2021
3	30% design review	February 1, 2021
4	60% design review	February 15, 2021
5	90% design review	February 28, 2021
6	Design review complete	March 10, 2021
7	Approval of permits and commencing construction	March 15, 2021
8	Excavating the swimming pool completed	March 20, 2021
9	Excavation of the pathways and the other constructions	March 30, 2021
10	Construction of the swimming pool starts	April 2, 2021
11	Installation of water and sewerage pipes completed	April 15, 2021
12	Installation of electric cables completed	April 20, 2021
13	Inspection of electric and plumbing installations	April 25, 2021
14	Construction of the swimming pool completed	May 5, 2021
15	Inspection of the swimming pool and other fun centers	May 15, 2021
16	Landscaping and beautification completed	May 20, 2021
17	Connection of the park to water, sewerage, and electricity lines	May 25, 2021
18	Final inspection	May 30, 2021
19	Project closure and handing over to the client	June 2, 2021

Technical Requirements

The design selected for this project aims at limiting the consumption of energy for various activities to the minimum possible level. For this reason, the design locates the swimming pool and other aspects of the project where water flow is necessary on levels where gravity will do most of the work and the energy needed for pumping is minimized. Essentially, the recreational park is located on a land parcel with a slight slope that is sufficient enough to sustain the flow of water and sewerage without the need for pumping. The other technical requirements include the installation of electricity and lighting in all the parts of the park. The client also needs to have the customers of the park to have easy access to clean water for sanitation and multiple points where phones, cameras, and other devices can be recharged. The open air theatre will be equipped with a public address system to enhance the voices of the people on stage and reach all the people in the audience.

Limitations and exclusions

These refer to the elements of the project over which the project team has no authority or control. They include the standardization and certification that are done by government agencies, inspections and approvals. The construction design is also deliberated by the client and a separate architectural organization, which means that the project team does not have any authority to alter the design unless the client approves the alterations. Utility and drainage systems are part of the contract by the construction team, but the provision of water and electricity as well as sewerage mains lies beyond the project team's authority.

Project Budget and Resources

As earlier stated, the project must not exceed the \$50,000 limit. This limit is fixed with no allowances for revision upwards. To ensure that the project fits within the allocated budget, two steps have been taken by the project management team; using a top-down planning method to allocate funds and resources to the project, and incorporating contingency planning and change management in the entire process of budgeting. The following budget, which also doubles up as a work breakdown structure (WBS), provides an estimation of what the elements of the project will require in terms of funding.

Task No.	Task name	Duration (Days)	Cost (\$)
1	Completed Recreational Center	180	35,000
2	Planning and preparation	15	500
3	Design and approval	30	500
4	Excavation	15	3,500
5	Electricity and Utility lines installation	30	1,000
6	Plumbing	15	1,000
	Open air theatre and sound system	30	2,500
7	Landscaping	10	2,500
	Safety Systems installation	5	2,000
8	Finishing	5	250
9	Final inspection, certification, and handing over to the client	1	250
10	Contingency Fund	-	1,000
	Total		50,000

Quality Management

Quality is only second to safety in this project on the part of both the client and the project management team. The team will approach this project with this principle in mind and to do this, various rules will be adopted. The first of these rules is that every department of the

project will have an individual tasked with quality management (Klojcnik, Sagadin and Kralj, 2018). These individuals will be answerable to the project manager, who will also perform oversight roles in quality management across all sections of the project. In addition to that, the contractor will subcontract a quality assurance organization as a third party to provide advisory and oversight role on quality management. The second rule will be that every member of the team will be expected to provide quality inputs wherever they are stationed and that the project's quality assurance is the responsibility of every member of the team. As such, the different department heads within the project team will brief their workers on the need to maintain the highest levels of quality on the project at the start of every shift (Klojcnik, Sagadin and Kralj, 2018).

Where the quality of the project is found to be compromised, the responsibility will be both individual and collective on the part of the worker involved and the department where the quality has been breached. The team needs to minimize such cases, even though some cases are not predictable, avoidable, or controllable, because the team does not have lots of time to reschedule some of its tasks. However, when an unavoidable circumstance occurs and the quality of the product has been breached, the team will reschedule some of the directly affected tasks and apply corrective measures to the breached part (Di Castri, 2018).

There will be quality checks on three occasions during the project. The first of these will be carried out with the project at 30-33% completion stage, the second one at 65-67% completion stage, and the last one at the project closure stage. In addition to these, the departmental quality assurance leaders will perform quality checks on their departments every fortnight and provide bi-monthly reports to the project manager, who will also share them with

the client (Di Castri, 2018). These reports will also serve as progress bulletins for the client and other stakeholders.

Risk and Issue Management

This project involves all the risks that are encountered in a construction project. Risk identification during project planning identifies the following as the main risks during the project life span:

- i. Health and safety hazards such as poisoning and toxic materials
- ii. Electrocution
- iii. Cuts and bruises
- iv. Falls and breakages
- v. General project risks like missed deadlines
- vi. Financial risks such as the project running over budget
- vii. Legal risks involving approvals and agreements

These, among other risks and issues, have to be addressed in the most amicable and quickest ways possible to prevent them from delaying the project. The first way the project team handles these risks is through education and communication of these risks to all the members involved. Secondly, protective equipment has been provided and made mandatory where needed, such as hard hats, safety boots and safety gloves, and eye protection goggles depending on the department and task at hand (Pellerin and Perrier, 2019). Through proper planning, legal and financial risks will be avoided by following the project plan without deviations, unless a situation comes up which will be deliberated upon by the project management team and, if need be, the client will be involved. Safety is the first principle of this project and all signage necessary will

be provided in respective positions (Pellerin and Perrier, 2019). In case of a fire or a medical emergency, the Kent Fire Brigade, which is located around one mile from the project site and 2 miles from the nearest hospital will be contacted immediately.

Communication management plan

Communication is vital for the progress and success of any team, and since this project will be the work of a team, it is paramount that a communication plan is drawn early on. This plan identifies the stakeholders, information needs, sources of information, and modes of communication (Habibi, Barzinpour and Sadjadi, 2018). To begin with, every member of the team is a primary stakeholder to the project, alongside the client, financiers, and government authorities tasked with oversight and certification of the project. Communication between stakeholder will be different depending on the relationship between them. Between government agencies, subcontractors, the financiers and the client, and the project manager, the communication will be strictly formal through the use of emails (Habibi, Barzinpour and Sadjadi, 2018). These emails will require to be replied to within less than 48 hours. In cases where urgent communication is necessary, telephone communication will be used and an email memo will be provided afterwards within 48 hours of the phone call.

Communication will, however, be less formal between the project team members. Daily briefings will be the primary mode of communication for all the members of the construction team. Interdepartmental communication may be verbal, but a written record of the significant pieces of information, such as request for changes, resource allocation, among other events that affect the project should be provided within the day or before commencement of the following work day (Pellerin and Perrier, 2019). All external communication with the project team will be done through the project manager. In cases where a reply from an external source is required

urgently, a phone call will be made and an email sent, which will require feedback within 48 hours of reception.

Responsibility Matrix

The following table indicates the responsibilities of different stakeholders within the project.

<i>Project Responsibility Matrix</i>				
<i>Deliverable</i>	<i>Project team / Contractor</i>	<i>Client / Financier</i>	<i>Subcontractor</i>	<i>Government Agencies</i>
<i>Contracting</i>	1	5	2	4
<i>Design</i>	3	3,1	1	5
<i>Permitting</i>	3	5	1	5
<i>Staffing</i>	1	5	2,3	4
<i>Procurement</i>	2	5	1	4
<i>Construction</i>	2	5	1	4
<i>Inspection</i>	2	5	1	1
<i>Approval</i>	2	5	1	4

Where the numbers 1-5 represent: Responsible, Support, Consult, Notification, and Approval respectively.

As the responsibility matrix shows, there are various tasks that will be the responsibility of multiple stakeholders at the same time while others will be the responsibility of a single stakeholder (Habibi, Barzinpour and Sadjadi, 2018). The project communication plan detailed above will be necessary for the responsibility matrix to materialize as planned by enhancing sharing of information between stakeholders and making it easier for all stakeholders to perform their roles effectively.

Bibliography

- Di Castri, G., 2018. Planning, scheduling and controlling long term projects. *IN BO-RICERCHE E PROGETTI PER IL TERRITORIO LA CITTA EL ARCHITETTURA*, 9(13), pp.64-69.
- Habibi, F., Barzinpour, F. and Sadjadi, S., 2018. Resource-constrained project scheduling problem: review of past and recent developments. *Journal of project management*, 3(2), pp.55-88.
- Kerzner, H., 2017. *Project management: a systems approach to planning, scheduling, and controlling*. John Wiley & Sons.
- Klojcnik, T., Sagadin, T.A. and Kralj, D., 2018. Project Management: A Systematic Approach to Planning, Scheduling, and Controlling Sustainable Transformation. *International Journal of Economics and Management Systems*, 3.
- Pellerin, R. and Perrier, N., 2019. A review of methods, techniques and tools for project planning and control. *International Journal of Production Research*, 57(7), pp.2160-2178.