



جامعة الجميع الذكية
EVERYONE'S SMART UNIVERSITY

Everyone's Smart University

Project (Spring 2021)

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Section

Master

Course Code

(PMG506)

Date

Thursday
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Advanced project Management

Instructions:

- اخر موعد للتسليم هو يوم الخميس 2021-05-20 في تمام الساعة ٩ مساءً.
- الإجابة متاحة باللغة الإنجليزية أو اللغة العربية مع مراعاة أن تكون المصطلحات العلمية باللغة الإنجليزية.
- يتم تسليم المشروع في صيغة ملف . pdf مع الالتزام نموذج الجامعة ولن تقبل أي مستندات أخرى.
- يجب مراعاة أقسام البحث الرئيسية (مقدمة Introduction، دراسات علمية سابقة Literature Review، طريقة البحث Methodology، النتائج والمناقشة Results and Discussion، وأخيراً المراجع References. وان كان هناك ملحقات Appendices يتم إضافتها)
- يجب الالتزام بـ Theme موحد كما يلي:
- حجم الخط 12.
- نوع الخط Arial.
- لون الخط أسود.
- المسافة بين الأسطر 1.5 line spacing
- عدد صفحات البحث (لا يقل عن ثلاث صفحات ولا يزيد عن ست صفحات).

Instructor's Name: ~~Eng. Amaal Aburumman~~ **Eng. Dr. Akram M. S. Ali**

Project:

You are required to document your role in administering a project. The project may be set in a business, social, sporting, or family environment but must be of a significant size and scale. If you do not have an actual project to write about you may complete the project hypothetically. **This report will be between three to six pages in length.** This is a significant research project.

Your report must address ~~each~~ **ONE** of the following issues:

1. Identify and describe the purpose, scope, and objectives of the project. **Display this information using an appropriate tool.**
2. Describe how the team is given an outline of the project.
3. Describe the strategies that are going to be set up to maintain communication with the team members.
4. Describe the tools that are going to be used to monitor the goals, time frames or milestones.
5. Identify project milestones and activities. **Display this information using an appropriate tool.**
6. Create a budget and link the costs to the key milestones for a project.
7. Describe how you are going to divide tasks and resources amongst a project team. **Display this information using an appropriate tool.**
8. Briefly describe how the progress will be monitored.
9. How are current project records maintained? Who has responsibility for this? provide some recommendations on how this process could be improved.
10. Describe the current procedure for finalizing projects. Create your own procedure and identify how you will evaluate the success of the project.
11. Legislation that may affect the project including health and safety, and anti-discrimination legislation.

Best of luck...

المشروع:

مطلوب منك توثيق دورك في إدارة مشروع. قد يتم تعيين المشروع في بيئة تجارية أو اجتماعية أو رياضية أو عائلية ولكن يجب أن يكون بحجم مناسب. إذا لم يكن لديك مشروع فعلي لتكتب عنه ، فيمكنك إكمال المشروع افتراضياً. ستكون هذا التقرير من ثلاث إلى ست صفحات.

يجب أن يعالج تقريرك ~~كل~~ **احد** القضايا التالية:

1. تحديد ووصف الغرض والنطاق والأهداف من المشروع. اعرض هذه المعلومات باستخدام أداة مناسبة.
2. صف كيف يتم إعطاء الفريق مخططاً تفصيلياً للمشروع.
3. وصف الاستراتيجيات التي سيتم وضعها للحفاظ على التواصل مع أعضاء الفريق.
4. صف الأدوات التي سيتم استخدامها لرصد الأهداف أو الأطر الزمنية أو المعالم.
5. تحديد معالم المشروع والأنشطة. اعرض هذه المعلومات باستخدام أداة مناسبة.
6. إنشاء موازنة وربط التكاليف بالمعالم الرئيسية للمشروع.
7. صف كيف ستقوم بتقسيم المهام والموارد بين فريق المشروع. اعرض هذه المعلومات باستخدام أداة مناسبة.
8. صف بإيجاز كيف سيتم رصد التقدم.
9. كيف يتم الاحتفاظ بسجلات المشروع الحالية؟ من المسؤول عن هذا؟ تقديم بعض التوصيات حول كيفية تحسين هذه العملية.
10. وصف الإجراء الحالي لإنهاء المشاريع. قم بإنشاء الإجراء الخاص بك وحدد كيفية تقييم نجاح المشروع.
11. التشريعات التي قد تؤثر على المشروع بما في ذلك الصحة والسلامة ، وتشريعات مكافحة التمييز.

مع تمنياتي بالتوفيق..

JEDDAH ECO PARK

Introduction:

I will provide description and explanation of project scope and execution steps to provide Conceptual design of Eco-Park at Jeddah city near to Red Sea Coast, west of Saudi Arabia additional to project communication strategy help to successes the project.

Project is sole source and contract type will be unit rate as per approved schedule of rate between the company and Government under General Engineering service contract.

Literature Review:

Project communication management ensures timely and appropriate generation, collection, dissemination, storage, and disposition of project information. Open and clear communications are required among planners, implementers, and all levels of the organization for project success. It includes having a communication plan, information distribution path, progress reporting, and information sharing system for management and customers (Kwak & Ibbs, 2002).

The last aspect of communication management strategies is mentioned also by Remidez and Jones, who claim that task-oriented communications that lack relationship building aspects are insufficient to support successful projects (Remidez & Jones, 2012).

Methodology:

I will use actual project to include all study done during this course additional to best practice using in project management to evaluate the project scope and communication.

Results and Discussion:

As I consider the project as life project all result and discussion will be part of below items explanation the project scope and communication below.

Project Purpose:

As part of the Green Energy Program (GEP) and in collaboration with King Abdulaziz University, Community Services, and Governmental Affairs, Environmental Protection (EP) developed a preliminary scope of work to provide required consultation and support for the Government Program to reduce the environmental footprint of the CO2 in west coast Area.

Objective:

The objective of the project is to prepare and deliver Engineering Conceptual Design package for the development of Eco-Park at west coast area near to Jeddah city Saudi Arabia.

This transformative project is undertaken as part of the Government De-Carbonization & Biodiversity Strategy by planting trees.

The initiative will:

- Align with Government De-Carbonization & Biodiversity Strategy by planting trees.
- Plant a total of approximately 200,000 native trees
- Remove 1.5 tons of CO2 capture per year
- Encourage health & fitness for community within different themes of landscapes
- Raise public awareness of the importance of native trees and exercises

Project Scope of Work:

The preliminary scope of work presented herein calls for the development of Eco-Park at Jeddah, west coast area of Saudi Arabia.

The Eco-Park master plan along with other support buildings and accessories shall be designed to meet all applicable International standards requirements such as environment, safety, usability, accessibility and reliability

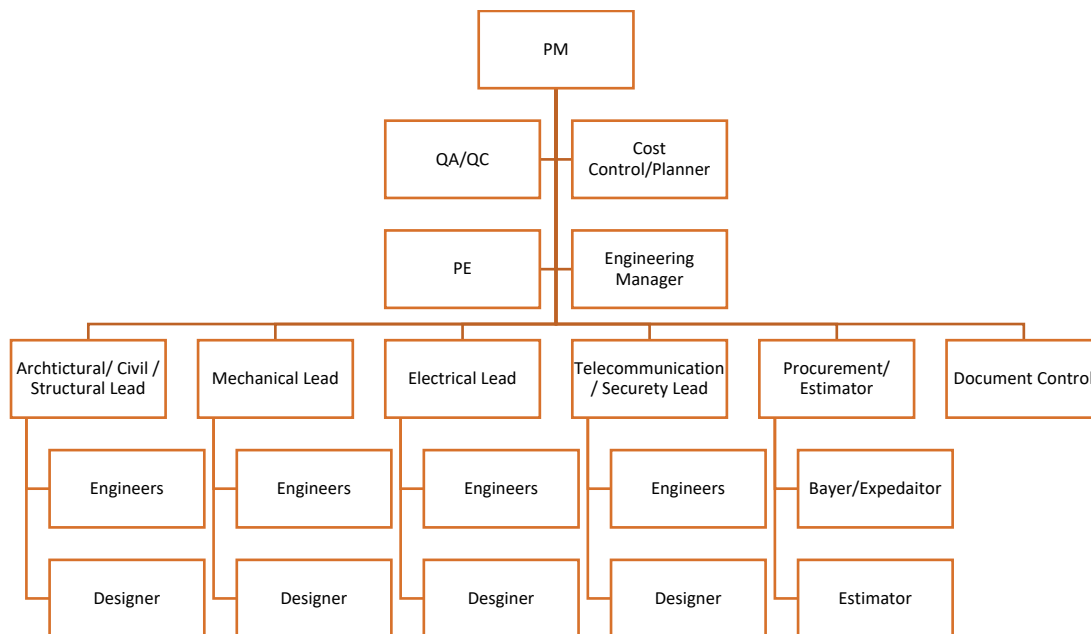
This design package will provide a project Conceptual design complying with the requirements of applicable international Standards. The work will include, but not

limited to, the collection and analysis of all data, preparation of Conceptual design, development of the required various engineering disciplines calculations, design and drawings (Architectural/ Civil/ Structural, Mechanical/ HVAC, Fire Protection, Electrical and Telecommunication), 3D Model, MTO's and Cost Estimate (+/- 40%).

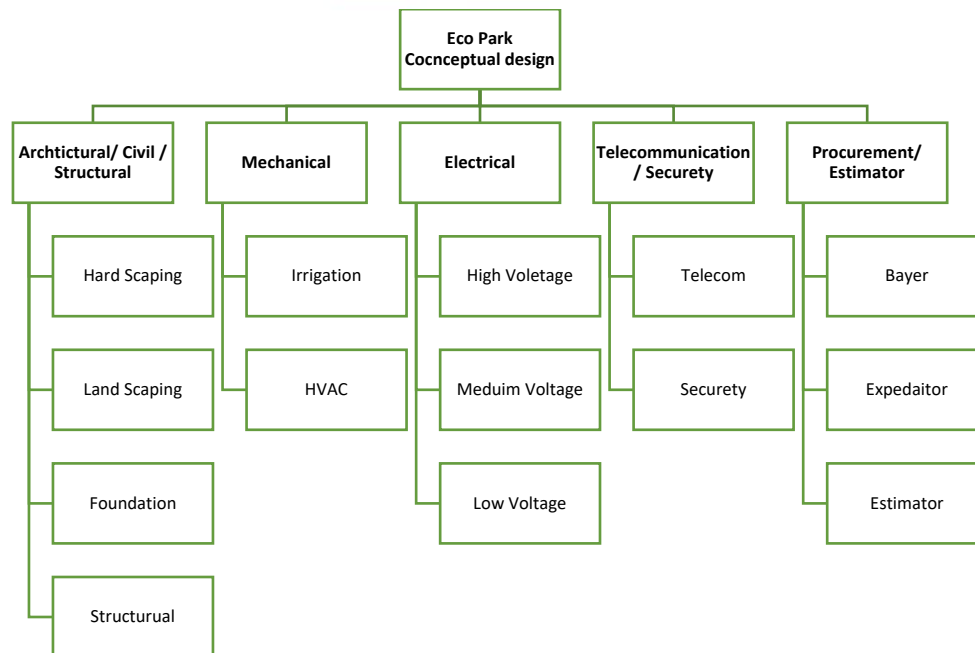
Project Execution strategy:

After Project approved and authorize by Project Sponsor and project charter was approved and signed as part of project initiation process.

Project Manager starting his planning stage and complete collect the requirement by using different tools and techniques (SME, Brain Storming,..etc.) and defined the scope of work. He presents his organization chart as per below.



And to plan the project and man hours estimate, resources and schedule, we will be decomposition the project to small task to prepare the WBS as per department, refer to below chart.



Project Manager working with team to define the activity, sequences to prepare the project schedule by using down top techniques to provide most accurate estimate.

However, the main project schedule already communicated by client as constrain to not exceed 6 months.

Now we have clear schedule including the submission date for each project stage as we follow below agreed milestone for project:

Milestone	Start	Finish
Project Awarded	01/Jan/2021	01/Jan/2021
Kick of Meeting	10/Jan/2021	10/Jan/2021
30% design submission	10/Jan/2021	15/Feb/2021
Client Review Cycle	15/Feb/2021	25/Feb/2021
60% design submission	25/Feb/2021	20/Mar/2021
Client Review Cycle	20/Mar/2021	30/Mar/2021
90% design submission	30/March/2021	30/April/2021
Client Review Cycle	30/April/2021	10/May/2021
Issued for Approval submission (IFA)	10/May/2021	30/May/2021
Client Review Cycle	30/May/2021	10/Jun/2021
Final Submission	10/Jun/2021	30/Jun/2021

Project Manager working with his team to estimate the man hours required as per resources and agreed list of deliverables prepared by project team and approved by clients. Refer to appendix 1.

PM and team using analogues estimate techniques additional to expert judgment as company familiar with this type of project and already have the norms to estimate required man hours for each deliverable based on complexity and effort.

As PM i will have a meeting with lead engineers from each department within project to prepare responsibility matrix to identify each member responsibility to assign the task by using Responsibility accounting matrix (RACI).

PM involving with team to prepare the communication plan after gathering all requirement from stakeholder external and internal additional to senior management and he fully aware with requirement and What, how, when and who to communicate.

PM requested to build share file as dashboard within company server to keep the team inform, and align additional to initiate group for this project including all team member in Microsoft team program to keep easy communication and interactive with core team and other team in kingdom and virtual team out of kingdom.

PM assign focal point of contact with stakeholder to control the communication way and component.

We using letter, Memo, Email and meeting to contact the stakeholder and dashboard, email meeting to communicate within project team.

As we complete the plan we are ready to kick of meeting to gain stakeholder support and commitment to project additional to present execution strategy to all attendance including project objective and goals.

Project execution stage start, and we are kept monitoring and control the cost, progress, schedule and deliverables quality by different tools and techniques.

We evaluate the variation and variance on cost and schedule Baseline using CPI & SPI and Measure & compare schedule performance vs schedule baseline.

And evaluate cost variance by calculate CV using EV equation.

Weekly report showing percentage on deliverables achieved to provide to PM to review and reporting to stakeholder and senior management upon request.

To monitor the quality multiple method was using including inter disciplines squad check, inspection of deliverables by quality team additional to scheduled auditing to review the process and optimize the process.

Final deliverables cannot release before PM, PEM and leads assign release document to client after confirming the quality.

Weekly meeting with project team held to review the risk register and communicate the challenge and record the lesson learning items.

Monthly meeting was scheduled with client to review the progress and agree to recovery plan if and schedule slippage.

Part of documentation management, we assign document control to project to manage all document releasing and official transmittal prepare submit and receiving confirmation stamp for record.

Document control role to save and record all project document and archive the project data including reports, lesson learned and deliverables.

Now project reach the closing date and deliverables was submitted to client and approved. certificate of completion was signed by client and final invoice was issued to client.

PM will collect to information and data to prepare the final report and archive the lesson learning items for future review and improvement.

Final report will present to project sponsor and senior management.

References:

- PMBOOK 6th Edition.
- Project scope management process, Derenskaya, YM 2018
- Project Scope Management: A Practical Guide to Requirements for Engineering,
By Jamal Moustafaev
- COMMUNICATION MANAGEMENT IN PROJECT TEAMS –PRACTICES AND
PATTERNS by Karolina Muszynska

Appendix 1- List Of Deliverables

No.	Index	Drawing Title
		GENERAL - INDEX-A
	A	DRAWING CONTROL LIST
	A	DETAILED DESIGN SCOPE OF WORK
	A	COST ESTIMATE IN 56D FORM (+/- 40%)
	A	KEY/ LOCATION PLAN
	A	3D MODEL
		INDEX R/Q/M (ARCHITECTURAL/ CIVIL/ STRUCTURAL)
	R	ARCHITECTURAL SYMBOL AND LEGEND
	R	SITE DEVELOPMENT PLAN
	R	SITE COORDINATE PLAN
	R	ENLARGED ENTRANCE AND GUARD HOUSE PLAN
	R	ENLARGED WALKWAY-1 PLAN
	R	ENLARGED WALKWAY-2 PLAN
	R	ENLARGED PARKING-1 PLAN
	R	ENLARGED PARKING-2 PLAN
	R	ENLARGED PLAYGROUND-1 PLAN
	R	ENLARGED TYPICAL PLAYGROUND PLAN
	R	ENLARGED SPORTS AREA PLAN
	R	ENLARGED AMPHITHEATRE PLAN
	R	ENLARGED PRAYER AREA PLAN
	R	ENLARGED FOOD STALL AND COFFEE SHOP PLAN
	R	ENLARGED CENTER ISLAND PLAN
	R	ENLARGED GLASS BRIDGE PLAN
	R	ENLARGED TYPICAL WALKWAY AND BICYCLE LANE PLAN
	R	ENLARGED TOILET-1 PLAN
	R	ENLARGED ELECTRICAL ROOM PLAN
	R	ENLARGED PUMP HOUSE PLAN
	R	ENLARGED MAN-MADE LAKE PLAN
	R	ENLARGED ELEVATED WALKWAY PLAN
	R	ENLARGED PICNIC PARK AREA-1 PLAN
	R	SECURITY FENCE LAYOUT PLAN
	R	MTO
	Q	FOUNDATIONS
		INDEX S (UTILITY)
	S	OVERALL IRRIGATION LAYOUT

	S	SPRINKLER LAYOUT
	S	BUBBLER LAYOUT
	S	MATERIAL TAKE-OFF
		FIRE PROTECTION - INDEX-B
	B	OVERALL FIRE PROTECTION LAYOUT
	B	FIRE EXTINGUISHER INSTALLATION LAYOUT & DETAILS
	B	FIRE PROTECTION LAYOUT FOR ELECTRICAL ROOM & MAINTENANCE ROOM
	B	FIRE PROTECTION LAYOUT FOR VISITOR CENTER
	B	FIRE PROTECTION LAYOUT FOR GUARD ROOM
	B	FIRE ASSEMBLY POINT LAYOUT
	B	FIRE PROECTION BOD
	B	PRELMINARY FIREWATER STEADY STATE HYDRAULIC CALCULATION
	B	FIREWATER NETWORK P&ID
	B	FIREWATER NETWORK LAYOUT FOR PARKING
	B	FIREWATER HYDRANT COVERAGE LAYOUT FOR PARKING
	B	FAS Detector Layout
	B	FIRE ASSEMBLY POINT LAYOUT
	B	MTO
	B	PE SOW/TBE
	B	Input to Plot Plan (Building)
	B	Input to Building floor plan drg (Building Code Analysis)
	B	Input to Tie-in List
		INDEX G (PUMPS/ MECHANICAL)
	L	PUMP DATA SHEET - STP
	L	RFQ/ DCPR
	L	PUMP DATA SHEET - IRRIGATION PUMP
	L	RFQ / DCPR
		INDEX L (PIPING/ UTILITIES)
	L	OVERALL PIPING LAYOUT STP WATER
	L	PIPING LAYOUT STP WATER
	L	HYDROTEST DIAGRAM
	L	MTO
	L	PIPING LAYOUT POTABLE WATER TOILET
	L	MTO
	L	PIPING LAYOUT IRRIGATION WATER
	L	MTO

		MECHANICAL/ HVAC - INDEX-K
	K	VENTIATION LAYOUT FOR TOILET
	K	HVAC LAYOUT FOR ELECTRICAL ROOM
	K	HVAC LAYOUT FOR MAINTENANCE ROOM
	K	HVAC LAYOUT FOR GUARD ROOM
	K	HVAC LAYOUT FOR VISITOR CENTER
	L	VENTILATION CALCULATION - TOILET
	L	HVAC CALCULATION FOR ELECTRICAL & GUARD ROOM
	L	MTO
		INDEX J (INSTRUMENTATION & CONTROL)
	J	CABLE BLOCK DIAGRAM
	J	TYPICAL INSTALLATION DETAIL FOR LT
	J	INSTRUMENT SPACIFICATION SHEET
	J	INSTRUMENT POINTS AND LOCATION
	J	CABLE AND CONDUIT SCHEDULE
	J	IO LIST
	J	MATERIAL TAKE-OFF LIST
	J	RFQ / DCPR
		INDEX P (ELECTRICAL)
		COMMON DELIVERABLES
	P	LOAD STUDY
	P	BASIC POWER SYSTEM STUDY : LOAD FLOW
	P	BASIC POWER SYSTEM STUDY : SHORT CIRCUIT
	P	BASIC POWER SYSTEM STUDY : STATIC MOTOR STARTING
	P	OVERALL ELECTRICAL ONE LINE DIAGRAM - EXISTING
	P	OVERALL ELECTRICAL ONE LINE DIAGRAM - NEW
	P	OVERALL LIGHTING LAYOUT
	P	OVERALL SMALL POWER LAYOUT
	P	OVERALL CABLE ROUTING LAYOUT
	P	OVERALL GROUNDING LAYOUT
	P	OVERALL CABLE TRENCH & DUCT BANK LAYOUT
	P	CABLE & CONDUIT SCHEDULE
	P	DATA SHEET : POWER TRANSFORMER
	P	DATA SHEET : MAIN DISTRIBUTION BOARD
	P	DATA SHEET : 480V MCC
	P	DATA SHEET : PANELBOARD
	P	DATA SHEET : SOLAR LIGHTING
	P	CALCULATION : LIGHTING CALCULATION(8 LOCATIONS)
	P	CALCULATION : POWER CABLE SIZING
	P	CALCULATION : HV BREAKER SIZING

	P	INPUTS TO COMCEPTUAL STUDY REPORT
	P	MTO (LONG LEAD ITEMS)
	P	ELECTRICAL-ROOM
	P	EQUIPMENT LAYOUT
	P	CABLE ROUTING LAYOUT
	P	GROUNDING LAYOUT
	P	CABLE TRAY LAYOUT
	P	LIGHTING LAYOUT
	P	SMALL POWER LAYOUT
	P	ELECTRICAL ONE LINE DIAGRAM
		INDEX T (TELECOMMUNICATION)
	T	SURVEILLANCE CCTV BLOCK DIAGRAM
	T	CCTV EQUIPMENT LAYOUT
	T	FOC SCHEMATIC LAYOUT
	T	CCTV WIRING DIAGRAM
	T	SECURITY EQUIPMENT LAYOUT - GUARDHOUSE
	T	SECURITY EQUIPMENT WIRING DETAILS
	T	ELECTRICAL SINGLE LINE DIAGRAM
	T	CAMERA POLE MOUNTING & INSTALLATION DETAILS
	T	CAMERA POLE FOUNDATION DETAILS
	T	FUNCTIONAL SPECIFICATION DOCUMENT
	T	MATERIAL TAKE-OFF LIST