Project Charter

Project Title: American Parks & Trails.

Start Date: 01/29/2020 **End Date:** 05/06/2020

Budget: \$110,000

Project Manager: Yash M Bajaj

Responsibilities:

 Motivating the Project management team to produce efficient work which produces deliverables as required.

- Organizing the project management team, coordinating the work of each sub-team and individual ensuring that a standardized pattern of work is maintained to avoid ambiguity.
- Monitoring progress on each topic assigned to the team members, taking constant updates on the tasks performed and the time spent on each topic.
- Managing reports from each team member on each task performed, challenges met during execution, changes if any and the time required for each task.

Authorities:

- Schedule and conduct meetings to take updates on tasks performed, update documents when required and assign future tasks to be assigned to each team member.
- Resolve team conflicts on each occasion, rising up to the occasion and ensuring that the project is not affected due to personal interests.
- Organize parties on project milestones to appreciate the effort put in by the team members and celebrate each achievement.

Project Objectives:

- Devise a project plan to create a non profit organization from inception to operation for the repair & improving the Palisade trail supporting recreation, enhancing public health and connecting neighborhoods, to be presented before the panel on May 6th 2020.
- Create the required 13 documents, namely Project charter, business case, stakeholder list, stakeholder analysis matrix, requirement list, scope statement, work breakdown structure, WBS dictionary, schedule, cost estimate, communication plan, risk probability/impact matrix, issue

log, change request and lessons learned, to support the completion of the project and submit it on or before May 6th 2020.

• Prepare a 30-40min presentation to make a proposal for raising funds, including a project description speech and a power-point presentation to be delivered on May 6th 2020.

Deliverables:

- 13 documents to be created as required, namely Project charter, business case, stakeholder list, stakeholder analysis matrix, requirement list, scope statement, work breakdown structure, WBS dictionary, schedule, cost estimate, communication plan, risk probability/impact matrix, issue log, change request and lessons learned, to support the completion of the project and submit it on or before May 6th 2020.
- Submit the project plan, required documents & powerpoint presentation by 5pm on May 6th 2020 to Professor Leon Herszon.

Success Criteria:

The current project will be considered to be partly successful if the deliverables are delivered on time and in the required format. The project will be considered to be fully successful if the fund is approved by the panelists and the project is selected to be the best project in the class.

Risks:

- Performance risk, the risk that a project team member is not completing the tasks given on time,
 making the project milestones not getting completed on time.
- Project member(s) falling ill due to flu or the current Covid-19 pandemic will be a risk with a
 very major impact, risking the health of the team member and making him/her incapable of
 working on the project.

Sponsor's name & signature:

John Smith.

Business Case/Justification

The American Trails Project Plan presents a contemporary vision, goals and strategic actions intended to benefit New Jersey citizens and visitors of all ages and abilities, for whom trails can provide access to nature and to community destinations, serving both recreation and transportation needs.

This Trails Plan is intended to inspire those who care about trails and see their value to New Jersey. The Plan serves as a common ground for all to achieve these two conditions for success – funding and cooperation.

The plan is comprehensive in scope and assesses a broad range of needs, desires, topics, and issues from the standpoint of both trail users and trail providers.

The scope of the project is to provide high quality and timely maintenance for Palisades State Park. The purpose of this plan is to preserve and expand the trails and trails system of Palisades State Park.

Palisades is a well established trail but would require little capital development to enhance its current trail system by repairing treadway damage along the trail, clearing encroaching vegetation, creation of bike lanes, signage, and providing regular maintenance etc.

Currently the trail is being maintained by volunteers. We as a non-profit organization would like to support Palisades State Park and work on improving existing Trails.

Based on the needs, desires, topics and issues that were raised during the planning process, this plan establishes a vision for Palisades Trail, proposes goals for fulfilling the vision, recommends actions and activities to achieve the goals, and assigns roles and responsibilities for implementing those actions. The actual priority and order of improvements and maintenance activities that would be undertaken by our organization will ultimately depend on available funding to advance and implement these recommendations.

Project Stakeholders

- A. Client (Professor Leon Herszon) Our client, Leon Herszon is Professor of Project Management at Rutgers Newark. Ultimately, our dedicated project team is here to serve and satisfy our client. After all, the client is the spark that set the project in motion, and our goal is to guarantee client satisfaction. We will achieve the aforementioned goal through an understanding of what the client is asking for, responding to queries and delivering on those needs. Additionally, we set out to establish a communication plan that is tailored to our clients needs. Further, we hope to identify the needs of the client even before the client recognizes such needs.
- B. **Project Manager** (Yash Bajaj) Our project manager, Yash Bajaj is a Masters of Information Technology & Analytics student at Rutgers Newark. The project manager has responsibility for the successful initiation, planning, execution, monitoring and controlling, and closure of our project.
- C. **Project Team Members (Aakash, Chand, Ehren, Parth, and Priyanshi)** Project team members, Aakesh, Chand, Ehren, Parth, and Priyanshi are Masters students at Rutgers Newark. The project team members are responsible for assisting the project manager in achieving successful initiation, planning, execution, monitoring and controlling, and closure of our project.
- D. New Jersey Recreation and Park Association (NJRPA) The NJRPA is a leading non-for-profit organization dedicated to promoting parks and recreation and advocates for sound policy and stewardship as it pertains to parks and recreation in New Jersey. Our dedicated project team seeks to persuade the association of our business case. Ultimately, we strive to partner with the association and prepare a map of the trail and make it available to the general public at park entrances, by mail, and on the park website. Each trail should be described and allowed uses identified so that visitors can identify trails suited to their needs.
- E. **NJ Department Environmental Protection (NJDEP)**The NJDEP priorities are to protect NJ water, revitalize communities and protect public health, and manage and promote thriving

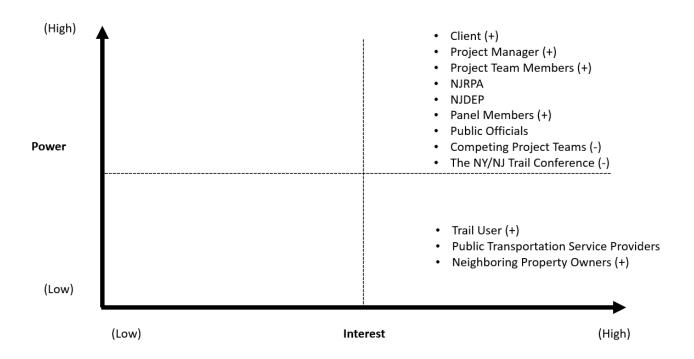
natural and historic resources. Our project team strives to coordinate trail system planning and development with the efforts of other local trail providers, to maximize opportunities for an integrated regional trail network.

- F. **Trail User** Our project team will involve trail user groups by soliciting their input on decisions regarding trail improvements and planning. Additionally, our project team will compile and maintain trail user data that will assist in planning, management, and improvement of the trail.
- G. **Public Transportation Service Providers** Our project team will involve Public transportation service providers early in our trail planning process so that local communities can access the trail via public transportation service providers.
- H. Panel Members Our three panel members consist of the Client (Professor Leon Herszon) and two invited panelists. On May 6, 2020, our team will present our final slide deck to the panel members. Our intent is to persuade the panel members of our project business case. Additionally, we strive to convince them to partner with our competent project team and financially sponsor our project throughout the life of the project.
- I. Neighboring Property Owners Our project team will involve private property owners in planning and management efforts related to trails in urban areas of the trail or where trail alignments are in close proximity to the unit boundary. We plan to work with private landowners to explore opportunities for improving access to the trail system by creating new links and filling gaps in the existing trail system. Additionally, we strive to encourage and support an open and ongoing dialogue among private property owners, trail user groups, and unit managers regarding appropriate use of the public trail system and protection of private property rights.
- J. Public Officials Our project team strives to persuade public officials of our business case to ensure that designated trail projects are identified as part of annual capital and operations and maintenance budgets for the park. Our project team will work with local government jurisdictions during their development review processes to ensure that proposed development

adjacent to the unit provides appropriate connections to unit and regional trails, will not prevent the development of planned trail system facilities, and will not adversely impact or constrain the public's use of the trail system.

- K. Competing Project Teams Competing project teams will present their final non-profit submission to the panel members. All project teams are competing for resources and funding from the panel members.
- L. **The New York- New Jersey Trail Conference** is a non-profit group that strives to maintain 358 miles of the Long Path Long Distance Trail. The trail connects many of New York and New Jersey parks, preserves, and state forest land. The trail conference consists of 250 volunteers and member groups that strive to maintain The Long Path Trail.

Stakeholders Analysis Matrix:



Legend:

- + indicates positive stakeholder
- Indicates negative stakeholder
 A blank space (no sign) indicates neutral stakeholder

List of requirements

A. Client (Professor Leon Herszon)

- A1. Project charter: Prepare a project charter explaining the project business case throughout the life of the project. The project charter will be prepared using the format template provided in class and submitted via email before the deadline on May 6, 2020.
- A2. Project stakeholder list: Brainstorm to identify, list, and map comprehensive project stakeholders list. The project stakeholders list will be prepared using the format template provided in class and submitted via email before the deadline on May 6, 2020.
- A3. Stakeholder requirements list: Brainstorm to identify, prepare, and map comprehensive project stakeholder requirements. The stakeholders requirements list will be prepared using the format template provided in class and submitted via email before the deadline on May 6, 2020.
- A4. Scope statement: Develop a comprehensive scope statement, including but not limited to all details about the scope of the product, scope of the project, and what is out of scope of the project. The scope statement will be prepared using the format template provided in class and submitted via email before the deadline on May 6, 2020.
- A5. Work breakdown structure (WBS): Using the open source tools provided in class, develop a visual description of the project phases and the work package deliverables associated with the project. The WBS will be prepared using the format template provided in class and submitted via email before the deadline on May 6, 2020.
- A6. WBS dictionary: Prepare a WBS dictionary explaining every work package deliverable for the project. The WBS dictionary will be prepared using the format template provided in class and submitted via email before the deadline on May 6, 2020.
- A7. Work schedule (Gantt Chart): Using the open source tools provided in class, create a Gantt chart schedule that breaks every work package deliverable into at least two activities. The project schedule will be prepared using the format template provided in class and submitted via email before the deadline on May 6, 2020.
- A8. Cost estimate: Develop a cost estimate for each of the work package deliverables in the WBS. The cost estimate will be prepared using the format template provided in class and submitted via email before the deadline on May 6, 2020.

- A9. Stakeholders communications plan: Develop a communication plan for every project stakeholder throughout the life of the project. The stakeholder communication plan will be prepared using the format template provided in class and submitted via email before the deadline on May 6, 2020.
- A10. Risk probability / impact matrix: Create a risk probability/impact matrix and quantify the risks to prioritize and mitigate those risks throughout the life of the project. The risk probability / impact matrix will be prepared using the format template provided in class and submitted via email before the deadline on May 6, 2020.
- A11. Issue log: Create and update an issue log, documenting all issues and resolutions occurring throughout the life of the project. The issue log will be prepared using the format template provided in class and submitted via email before the deadline on May 6, 2020.
- A12. Stakeholder change requests summary: Prepare a summary of any change requests from any stakeholder and describe how the changes impact the final result of the project. The stakeholder change requests summary will be prepared using the format template provided in class and submitted via email before the deadline on May 6, 2020.
- A13. Lessons learned summary: Prepare a summary of any lessons learned during the life of the project. The lessons learned summary will be prepared using the format template provided in class and submitted via email before the deadline on May 6, 2020.
- A14. Submit final proposal: All team members will have approved of the final proposal before the final submission date. The final proposal will be submitted according to the Updated Group Assignment v2.0 via email before the deadline on May 6, 2020.
- A15. Presentation of final proposal: All team members must be present at 6PM on May 6, 2020 to present via WebEx.

B. Project Manager

- B1. Require the team members to be present on time for each meeting and make relevant contributions as required: before or during the hours of the meeting conducted throughout the duration of the project, beginning on January 29th 2020 and concluding on May 6th 2020.
- B2. The project manager requires the project team to be working on creating the project charter to be completed by ____,2020 following the PMBOK guidelines.

- B3. Requires the project team to coordinate and complete the Project scope, WBS, project plan and schedule as per the given guidelines and templates.
- B4. Requires the team members to report the issues that are faced and follow guidelines for resolving conflicts which might arise through the course of the project ending on May 6th 2020.
- B5. Require each of the team members to complete the work assigned in an efficient manner within the time frame as required. The milestones are required to be met as per the project schedule leading to a timely submission of the entire project on May 6^{th} , 2020.
- B6. Requires each team member to follow the project plan and schedule unless required otherwise, and produce deliverables in the given time frame as mentioned in the project plan.

C. Project Team

- C1. Team members should be given roles and responsibilities by the Project Managers- Yash B. at the beginning of the project, along with scope of work that is approved by the Client (Professor Leon Herszon).
- C2. Laptops and software licenses should be given to each team member to use throughout the project from January 29, 2020 to May 6, 2020.
- C3. Weekly video conference call meetings should be available every Wednesday from January 29, 2020 to May 6, 2020 for all team members to attend.
- C4. Team members will receive support from the project manager to create the project charter and business case using methods from PMBOK outlined in class throughout the entire project. Along with creating a list of risk and probability impact at the beginning of project by the date mentioned on the WBS schedule, which will be documented by the project team on Google docs.
- C5. Project Manager should help understand all the stakeholders and their requirements by the date mentioned on the WBS schedule, which will be documented by the project team on Google docs.
- C6. Project Manager should help understand the WBS schedule and dictionary by the date mentioned on the WBS schedule, which will be documented by the project team on Google docs.
- C7. Team Members will receive assistance from the Project Manager to create a requirement list for each stakeholder by the date mentioned on the WBS schedule, which will be documented by the project team on Google docs.

- C8. With the help of the Project Manager, the team will compile the scope statement, which will be at least 20 pages by the date mentioned on the WBS schedule, which will be documented by the project team on Google docs.
- C9. Project Manager will help project team in creating a cost estimate for the entire project by the date mentioned on the WBS schedule, which will be documented by the project team on Google docs.
- C10. Any change requests by the stakeholder should be immediately reported to the project team via email. All the team members will create a list of lessons learned at the end of the project, which will be emailed to the Project Manager.
- C11. Project Manager will work with the project team to submit/email a final proposal and PowerPoint to the client on May 6, 2020.

D. New Jersey Recreation and Park Association (NJRPA)

- D1. Check whether New Jersey owned land is posted with "Entry by Permit" signs. If owned land that is immediately adjacent to reserved areas will require an Access Permit within 30days before the execution of the project.
- D2. Make sure that there is enough parkland for different types of leisure choices like sport field for kids, fun games and drills to teach the basics of baseball, flag football, soccer and track & field.
- D3. Project Work Plan shall be reviewed and approved by the Recreation Department which includes a schedule of meetings, a list of tasks, the timeline for deliverables, and any other required actions for the completion of the Master Plan before presenting the final project in the class.
- D4. Create a plan consisting of Community Engagement Framework and Spectrum of Engagement which includes planning, design, construction, maintenance and activation of park projects and park plans.
- D5. Develop a community advisory council which enables in building relationships with community members and institutionalizes engagement plans.
- D6. There can be people working in the trail post-development which have different primary language and hence create a Multi Language translation material which enables conducting meetings which have the most preferred languages by the workers.
- D7. There should be an online system that collects information and engages members such as surveys and that notifies sport events if organized in the future.

- D8. Create a communication schedule plan to properly address problems and concerns quickly in the lifespan of the project.
- D9. Any change requests by the stakeholder should be immediately reported to the project team via email. All the team members will create a list of lessons learned at the end of the project- May 2020, which will be emailed to the Project Manager.
- D10. Submit the final report which includes lessons learned and describes whether the project met scope, time, and cost goals on May 2020 as per format presented in the class.

E. New Jersey Department of Environmental Protection (NJDEP)

- E1. Determine the needs and priorities for NJ residents and visitors such as a senior center or golden age club, a sheltered workshop for people with mental retardation, or a treatment center for physical rehabilitation before project implementation.
- E2. Determine facility and program needs based on user surveys, public input sessions, and meetings with community organizations, municipalities, staff and Parks, Recreation and Trails Advisory Board.
- E3. Identify the Trail Type, Trail Class, Managed Use, Designed Use, Design Parameters based on the land of the trail park while initiating the project.
- E4. Project Work Plan shall be reviewed and approved by the Department which includes a schedule of meetings, a list of tasks, the timeline for deliverables, and any other required actions for the completion of the Master Plan before presenting the final project in the class.
- E5. Conduct a project kickoff with key members of the NJDEP staff to review the PWP and discuss the approach to the project. This meeting shall include a discussion of previous planning efforts, data collection, and project goals and objectives.
- E6. Make sure that the project plan aligns with the policies of the Technical Advisory group during the planning process.
- E7. Identify and track endangered and rare plant populations and rare and unique ecological communities along with the management of public open space acquired in the project initiation process.
- E8. Involve NJ Trails council to provide assistance to the project in formulation, review, and implementation in the trail plan.

- E9. Develop Natural Diversity Protection plan which includes an opportunity for activities like scientific research, education, hiking, hunting, fishing, and boating, etc. without damaging the environment.
- E10. Develop a needs assessment to determine long term capital improvements and a standard method for calculating maintenance cost to recover a portion of the cost for maintenance of the facilities.
- E11. Plan a strategy to increase the role of volunteers and partners in trail maintenance which will increase maintenance by 100 percent in 2 years.
- E12. Document the management intention for the trail, and provide basic reference information for subsequent trial planning, management, condition surveys, and reporting until the project is completed successfully.
- E13. Create Travel Management Strategies which guide the project manager on operational tradeoffs and assists maintenance crews to efficiently target maintenance efforts.
- E14. Design and build the trails that appear on the Trails Plan when they prepare Site Plans for development and gain their site development permits.
- E15. Create a Database allowing the Park Authority to accurately locate trails within the framework of the trail before the project is completed.
- E16. Any change requests by the stakeholder should be immediately reported to the project team via email. All the team members will create a list of lessons learned at the end of the project- May 2020, which will be emailed to the Project Manager.
- E17. Submit the final report which includes lessons learned and describes whether the project met scope, time, and cost goals in May 2020 as per format presented in the class.

F. Trail Users

- F1. Pedestrians include walkers, hikers, joggers, runners, bird watchers. These users require resting points with benches to sit, and drinking fountains to quench thirst along the trail.
- F2. Trail users require an emergency beacon to call for help in case of some accident or emergency.
- F3. They also require route maps of the trail at a few node points of the trail to let them know where they are and where they would like to continue on the trail.
- F4. Need to clear the trail from encroaching vegetation, repair the Treadway damages to keep the trail accessible to pedestrians.
- F5. Need to repair the stone stairs that connect the long path with Shore Trail.

- F6. Require hard pavement with a width of 8 feet to perform safe cycling where bicycles are allowed in the trail.
- F7. Need trash bins near resting points, camping areas, and restrooms to encourage people to maintain the cleanliness of the park. And to encourage the dog walkers to pick up after their dog.
- F8. Clearing scenic trail vistas near campsites and recreational points to provide people with viewing opportunities.
- F9. Recreational areas must be provided with a water pond, children play area for the families who come for a picnic.
- F10. Signs boards indicating hiker crossings, bridges, restrooms, medical posts and emergency posts and exits need to be placed in a few places of the trail to guide the trial users.
- F11. Camping sites need to be provided with tent spaces, camping shelters, or tent pads and platforms, camping spaces, picnic tables, grills, fire rings, utilities to encourage and facilitate people to perform outdoor activities.

G. Transportation service provider

- G1. A designated point of access must contain information kiosks, restrooms, emergency posts, and parking areas that allow parking for vehicles of different sizes.
- G2. People who like to travel to the park using the public transportation service must board the vehicle on time to avoid delays in the vehicle schedule.
- G3. Transportation service providers require the holiday calendar of the park/trail to disable the transportation service to park on those park holidays or maintenance days.
- G4. Park hours are required to provide transportation to and from the trail during those hours from different points.
- G5. The waiting station/bus stop near the trail or which is a part of the trail/park must be kept clean and should be renovated if damaged.
- G6. Trash bins need to be placed in the waiting stations which are near the trail or stops which comes under the trail management.

H. Project Sponsors

- H1. A business case document highlighting the selling point of the project should be presented to the sponsors and client on May 6^{th} 2020.
- H2. A Project charter document justifying the business need for the existence of this project and a summary of the projects objectives and management should be prepared as per template provided by Client in the class and presented on May 6th 2020 to the sponsors.
- H3. A Scope Statement document should be created and presented on May 6th 2020 as per template provided in the class that includes but not limited to product and project scope description, product user acceptance criteria, what is out of the scope of the project and detailed information on all project deliverables.
- H4. A Work Breakdown Structure (WBS) document comprehensively defining the scope of the project and a WBS Dictionary explaining every work package deliverable noted in the WBS should be presented on May 6th, 2020.
- H5. A Gantt Chart giving the overview of estimated timeline for all the project activities should be presented to sponsors on May 6^{th} , 2020.
- H6. Develop a cost estimate plan prepared in accordance with the WBS as per the template presented in class and present it to sponsors on May 6^{th} , 2020.
- H7. A Risk Management Plan that documents the procedures for managing risk throughout the life of a project should be presented with the risk anticipated and encountered so far should be presented on May 6th, 2020.
- H8. The Project Plan should be completed and a deck giving a high level overview of the project should be presented to sponsors on May 6^{th} , 2020.

I. Property owners & neighbors

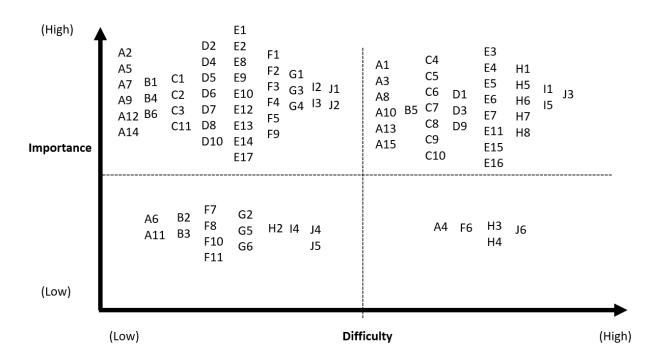
- I1. Privacy of landowners and adjacent neighbors from trespassing by trail users
- I2. A well designed Management Plan that ensures proper management and operation of trail and an effective grievance redressal system.
- I3.Posting signs at trail entry points to prohibit unauthorized access to the neighboring properties and some of the trail areas
- I4. Creation of bike lanes to ensure bicycles are parked at designated parking areas.

I5. Trail Managers should develop and implement an emergency plan to respond to any emergency situation that may arise at trails.

J. Public Officials

- J1. Require the scope statement & plan to be sent to New Jersey Department of environmental protection, Division of parks & forestry and Office of Natural Lands Management for approval.
- J.2 Require the permissions to be requested to the governor and government offices for the repair of the trail, clearly outlining the duration and cost of repairing the trail, the materials to be used and the plan to be followed.
- J3. Requires 2 security cameras each to be placed at the entry and exit points of the trail ensuring security of people using the trail.
- J4. Requires the list of project management team members to be sent to the New Jersey Department of environmental protection & Governor's office.
- J5. Required to ensure that the process of construction, if any, should be environmentally friendly and the materials used should not negatively affect the environment and are approved for construction.
- J6. The trail which is to be worked on is required to be designated to the New Jersey State Trails System, selecting the classes and following the rules of designation in the system.

Requirement Matrix



Scope Statement

Project Objectives:

- Raise Funds to repair & improve the Palisade trail supporting recreation, enhancing public health and connecting neighborhoods by May 6th 2020.
- Create the required 13 documents, namely Project charter, business case, stakeholder list, stakeholder analysis matrix, requirement list, scope statement, work breakdown structure, WBS dictionary, schedule, cost estimate, communication plan, risk probability/impact matrix, issue log, change request and lessons learned, to support the completion of the project and submit it on or before May 6th 2020.
- Prepare a 40min presentation to make a proposal for raising funds, including a project description speech and a power-point presentation to be delivered on May 6th 2020.

Timeframe of the project:

The project begins on January 21st, 2020 and ends on May 6th, 2020. This is a project time frame of 77 days.

Budget:

To create the American Parks & Trails Organization, the estimated cost is \$110,000. The cost for construction for the proposed plan is estimated to be \$1,755,000.

Scope of the Product:

A. Client (Professor Leon Herszon)

A1. Project charter: Prepare a project charter explaining the business case throughout the life of the project. The business case should provide at least one hook to sell the idea to the guest panel; such as financial benefit, regulatory benefit pertaining to a new law, or alignment of the project objective with the mission of the community. The project feasibility will be outlined using the methods from PMBOK outlined in class. The project charter will be prepared using the format template provided in class and submitted via email before the deadline on May 6, 2020.

- A2. Project stakeholders list: Brainstorm to identify, list, and understand the project stakeholders. Furthermore, map stakeholder power, and interest, and classify stakeholders as positive, negative, or neutral. The project stakeholders list will be prepared using the format template provided in class and submitted via email before the deadline on May 6, 2020.
- A3. Stakeholders requirements list: Brainstorm and collect stakeholder requirements to develop a comprehensive list of requirements and document in enough detail so they can be measured during project execution. Map stakeholder requirements according to Difficulty x Importance. Understand how hard it is to achieve the requirement as well as the origin of the requirement. By definition, stakeholder requirements that link to important stakeholders will be important. The stakeholders requirements list will be prepared using the format template provided in class and submitted via email before the deadline on May 6, 2020.
- A4. Scope statement: Develop a scope statement that is as complete as possible, including but not limited to all the details about the scope of the product (requirements), scope of the project (deliverables), and what is out of scope. The scope statement is the only granular detailed document and every requirement should have a paragraph describing what the requirement is. It should have at least 20 pages (font size 12, Times New Roman, space between lines = 1.5). Great scope definition is critical to success of the project as it should seek to improve accuracy of estimates (time, resource, and cost), define baseline performance management and project control, and aid in communicating clear work responsibilities. Use the template provided in class. Ask the client (professor) if you have questions. The scope statement will be prepared using the format template provided in class and submitted via email before the deadline on May 6, 2020.
- A5. Work Breakdown Structure (WBS): Develop a WBS for the project with required graphical representation. The WBS is a deliverable oriented tool that groups the work involved in the project and comprehensively defines the scope of the project. It breaks all of the required work of the project into smaller parts and groups them into a logical hierarchy. Use the open source tools presented in class (boxes or mind mapping). The WBS will be prepared using the format template provided in class and submitted via email before the deadline on May 6, 2020.
- A6. WBS dictionary: Prepare a WBS Dictionary that explains every work package deliverable noted in the WBS. Every work package deliverable mentioned in the WBS will be used to describe the scope of the project. The approved Project Scope Statement, and its associated WBS, and WBS dictionary form

the scope baseline. To elaborate further, the scope baseline consists of three documents including Project Scope Statement, WBS, and WBS Dictionary. The WBS dictionary will be prepared using the format template provided in class and submitted via email before the deadline on May 6, 2020.

A7. Project schedule (Gantt Chart): Use the WBS that you developed to create a schedule breaking down each work package into at least 2 activities, using any scheduling tool available to the team (i.e., Microsoft Project). Initially break the work packages into activities (activities are verbs), and then define the activities. Typically work packages break down into two to three activities; max of five activities. Put the activities into sequence and make sure that the critical path is clearly identified. Use the open source tools presented in class. The project schedule will be prepared using the format template provided in class and submitted via email before the deadline on May 6, 2020.

A8. Cost estimate: Develop a cost estimate for the project, based on the WBS created. Using each box of the WBS (including those already completed), identify if there is labor cost or not, determine the rate of labor, and estimate hours needed to complete the work. Additionally, determine the costs of any items you would like to purchase for the project. Define the unit cost of every single activity and item and then you have a budget. Project cost management includes processes required to ensure a project team completes a project within an approved budget. The cost estimate will be prepared using the format template provided in class and submitted via email before the deadline on May 6, 2020.

A9. Stakeholder communication plan: Develop a communications plan for the project covering all stakeholders. The plan should outline communications with every stakeholder and describe the strategy including what, when, how, who, and where. There are three types of stakeholders (positive, negative, or neutral). Create a strategy to engage with stakeholders. Furthermore, ensure positive stakeholders remain positive, try to convert negative stakeholders to neutral or positive stakeholders. The stakeholder communication plan will be prepared using the format template provided in class and submitted via email before the deadline on May 6, 2020.

A10. Risk probability / impact matrix: Create a risk probability/impact matrix and list of prioritized risks for the project. A risk management plan documents the procedures for managing risk throughout the life of the project. Analysis will include identification of the risks, mapping the risks (probability x impact x severity), and prioritizing risks. Include at least ten risks. For each risk, define an action plan, and a contingency plan. Responses to risks include accept or ignore, mitigate or reduce, eliminate, and transfer. The risk probability / impact matrix will be prepared using the format template provided in class and submitted via email before the deadline on May 6, 2020.

A11. Issue log: Create and update an issue log, registering all the issues that occurred during the project and how they were solved. In monitoring and controlling, a common way to summarize work performance information is by using a milestone report to compare planned to actual activity duration in the executing phase. A milestone is a significant project event, such as completing a major deliverable. Every milestone should be described including the date, status, responsible stakeholders, and issues or comments that are driving performance. The issue log will be prepared using the format template provided in class and submitted via email before the deadline on May 6, 2020.

A12. Stakeholder change requests summary: Describe any change requests by any stakeholder (instructor, team members, etc.) and how they impacted the final result of the project. Requests for changes typically emerge during project execution, thus we will define a project management plan to manage such changes when they arise. It is important that there is a process in place to request appropriate changes. The stakeholder change requests summary will be prepared using the format template provided in class and submitted via email before the deadline on May 6, 2020.

A13. Lessons learned summary: Describe the lessons learned during the project including project name, sponsor, manager, dates, and the final budget. Many organizations are working hard to improve the transfer of knowledge as employee knowledge is a key asset. Further, the lessons learned report should describe whether the project met scope, time, and cost goals. The lessons learned summary will be prepared using the format template provided in class and submitted via email before the deadline on May 6, 2020.

A14. Submit final proposal: All team members will have approved of the final proposal before the final submission date. Individual team members are responsible for the project work throughout the life of the project, including the submission of the final proposal. The final proposal will be submitted according to the Updated Group Assignment v2.0 via email before the deadline on May 6, 2020.

A15. Presentation of final proposal: All team members must be present at 6PM on the date of the May 6, 2020 presentation to present via WebEx. Individual team members are responsible for the project work throughout the life of the project, including the final presentation to the client (Professor Leon Herszon), guest panel, and the competing project teams.

B. Project Manager

- B1. Requires all members to be present and make relevant contributions to the kick off meeting on February 05, 2020 at 8:45pm to initiate the project and discuss the important rules pertaining to project management. This meeting will require the details of the project to be discussed & rules to be followed throughout the duration of the project.
- B2. Requires the team members to prepare the project charter following the PMBOK guidelines. The charter will include the project title start date, end date, budget, project manager(name, responsibilities, requirements), project objectives, deliverables, success criteria, risks & sponsor's name & signature. The charter is to be completed in the initiation phase on or before February 15th,2020.
- B3. Requires the project team to coordinate and complete the Project scope, WBS, project plan and schedule as per the given guidelines and templates. Project team is required to stick to the given plan and WBS as much as possible and complete the assigned tasks in a timely manner.
- B4. Requires the stakeholders to coordinate and clarify their requirements before March 1st, 2020. The 'requirements' are required to be smart, reliable, attainable, relevant.
- B5. Require the team members to be present on time for each meeting and make relevant contributions as required: before or during the hours of the meeting. Each meeting will last an hour and requires each member to contribute and agree on final documents.
- B6. Requires the completion of all documents required for the project in the planning phase, namely Stakeholder requirements, Scope statement, Work Breakdown Structure (WBS), Work Breakdown Structure Dictionary, Gantt Chart, Cost estimate, Communications plan, Risk probability/impact matrix as per the decided schedule and following the PMBOK guidelines for each document.
- B7. Requires the team members to report the issues, follow guidelines for resolving conflicts and create an issue log including the issues occurred during the project and how they were solved. The initial issue log is expected to be completed by April 15th, 2020.
- B8. Requires the stakeholders to clearly mention the required changes encompassing all required details. Requires the team to make note of when these changes were requested and what impact they created and produce the change log document by April 30th, 2020.

B9. Requires all members to follow the decided schedule and project plan, and complete all assigned work and produce required deliverables by May 6th 2020. Requires the team members to be prepared for managing any changes and covering backlogs to ensure that the deadline for the project is met.

C. Project Team

- C1. All Project Team members should be given a list of team members roles and responsibilities.

 Understand project deadlines, deliverables, and scope of work to be mentioned by the Project Manager, which will be clarified and approved by the Client (Professor Leon Herszon).
- C2. Project Team members should have sufficient resources to be made available from January 29, 2020 to May 6, 2020, for working on the project. These resources include but are not limited to laptops, internet connectivity, software license and templates.
- C3.Create weekly video or conference call meetings with all the team members, including the project manager, to give updates on each member's tasks. One team member will be responsible to take meeting minutes and distribute to the rest of the team via email or in Whatsapp group messages within 24 hours of the meeting.
- C4.Responsible for preparing a project charter according to the template provided in class and a business case explaining why this project is feasible. The business case should provide at least one hook to sell the idea to the guest panel; such as financial benefit, regulatory benefit pertaining to a new law, or alignment of the project objective with the mission of the community. The project feasibility will be outlined using the methods from PMBOK outlined by the client in class. Create a risk probability/impact matrix and list of prioritized risks for the project. Include at least ten risks, using the format presented in class. The final deliverables will be submitted by the Project Team to the Project Manager for submission to Professor Leon Herszon on May 6, 2020 unless otherwise specified.
- C5. Brainstorm to identify, list, and understand the project stakeholders. Furthermore, map stakeholder power, and interest, and classify stakeholders as positive, negative, or neutral. Use the format templates presented in class. The final deliverables will be submitted by the Project Team to the Project Manager for submission to Professor Leon Herszon on May 6, 2020 unless otherwise specified.
- C6. Each project team member will be responsible to have each task completed according to the project schedule. Any delay should immediately be informed to the Project Manager. Project schedule will be created once all stakeholder requirements and deliverables are finalized for this project. Develop a Work Breakdown Structure (WBS) for the project with the required graphical representation. The WBS is a

deliverable oriented tool that groups the work involved in the project and comprehensively defines the scope of the project. It breaks all of the required work of the project into smaller parts and groups them into a logical hierarchy. Use the format presented in class (boxes or mind mapping). Use the WBS that you developed to create a schedule (Gantt chart) breaking down each work package into at least 2 activities, using any scheduling tool available to the team (i.e., Microsoft Project). Initially break the work packages into activities (activities are verbs), and then define the activities. Typically work packages break down into two to three activities; max of five activities. If there are too many activities it indicates the work packages should be broken down further. Put the activities into a sequence and make sure that the critical path is clearly identified.

C7. Project Team members will brainstorm and collect stakeholder requirements to develop a comprehensive list of requirements and document in enough detail so they can be measured during project execution. Map stakeholder requirements according to Difficulty x Importance. Understand how hard it is to achieve the requirement as well as the origin of the requirement. By definition, stakeholder requirements that link to important stakeholders will be important. Use the format presented in class.

C8. Develop a scope statement that is as complete as possible, including but not limited to all the details about the scope of the product (requirements), scope of the project (deliverables), and what is out of scope. The scope statement is the only granular detailed document and every requirement should have a paragraph describing what the requirement is. It should have at least 20 pages (font size 12, Times New Roman, space between lines = 1.5). Great scope definition is critical to success of the project as it should seek to improve accuracy of estimates (time, resource, and cost), define baseline performance management and project control, and aid to communicate clear work responsibilities. Use the template provided in class. Ask the client (professor) if you have questions. The final deliverable will be submitted by the Project Team to the Project Manager for submission to Professor Leon Herszon on May 6, 2020 unless otherwise specified.

C9. Develop a cost estimate for the project, based on the WBS created. Using each box of the WBS (including those already completed), identify if there is labor cost or not, determine the rate of labor, and estimate hours needed to complete the work. Additionally, determine the costs of any items you would like to purchase for the project. Define the unit cost of every single activity and item and then you have a budget. Project cost management includes processes required to ensure a project team completes a project within an approved budget. Use the format template presented in class. The final deliverable will

be submitted by the Project Team to the Project Manager for submission to Professor Leon Herszon on May 6, 2020 unless otherwise specified.

C10. Project Team members will work with Project Manager to create a communications plan for the project covering all stakeholders. Project Team members will describe any change requests by any stakeholder (instructor, team members, etc.) and how they impacted the final result of the project. Project Team members will continuously update an issue log, registering all the issues that occurred during the project and how they were solved. Use the format presented in class. Project Team members will create a final list of all lessons learned during the project to be submitted along with the final project on May 6, 2020.

C11. Project Team members will work with the Project Manager to review the final submission paper and PowerPoint for any grammatical errors. The final proposal will be in font size 12, Times New Roman, space between lines = 1.5. All items will be professionally submitted to the Client (Professor Leon Herszon) on May 6, 2020. The team will email a copy of the final proposal and PowerPoint by May 6, 2020.

D. New Jersey Recreation and Park Association (NJRPA)

- D1. Check whether New Jersey owned recreational land is posted with "Entry by Permit" signs. Cityowned land that is immediately adjacent to reservoirs and open for recreation requires a DEP Access Permit.
- D2. Identify that there is enough parkland, located in the right places, at the time people are there to use it. Park facilities can be cycled as needs, tastes and types of equipment and leisure choices change. But, if there's a shortage of land, this may be a difficult and expensive deficiency to overcome.
- D3. Prepare a Project Work Plan (PWP), which shall be subject to review and approval by the Parks and Recreation Department (PARD) project manager. This document shall include the project team's organization, schedule of meetings, list of tasks, the timeline for deliverables, and any other required actions for the completion of the Master Plan. Assigning project manager who shall manage overall communication and coordination that shall be undertaken by members of the team and City of New Jersey during this project.
- D4.Planning an integrated system of public general use outdoor recreation sites and related open space areas which will allow residents of the City adequate opportunity to participate in a wide range of outdoor recreation activities.

D5. Conduct a project kickoff with key members of the PARD staff to review the PWP and discuss the approach to the project. This meeting shall include a discussion of previous planning efforts, data collection, and project goals and objectives. Provide Recreation agencies with a roadmap highlighting the essential steps to performing meaningful engagement around neighborhood-level and park-system planning projects.

D6. Assess staff capacity, secure funding, build leadership support, and create a plan with clear goals, including a Community Engagement Framework and Spectrum of Engagement. Develop a resource guide to provide park and recreation professionals with a roadmap to implement equitable and inclusive community engagement strategies around the planning, design, construction, maintenance, and activation of park projects and park plans. Having one or two staff who reflect the community and are dedicated to community engagement will increase your agency's accountability and unify your approach with one central message, helping to enhance the community's trust in the team to follow through with projects.

D7. Creating a community advisory council to increase your team's capacity to build relationships with community members, lead meetings and solicit feedback. The structure of your advisory council helps sustain and institutionalize engagement efforts far beyond a single project or administration. And identify the level of participation of community members in the project and the purpose of engagement with the help of feedback. For example, the project team needs feedback on what sports amenity the community would utilize. Collaborate with the community to design and develop the project and support community members to make the space their own.

D8. Outline the demographics, key leaders and cultural influences of the workers. Include race/ethnicity, primary language spoken, age, sex/gender, homeowner/renter, etc. to reveal the character, key players, behavior, assets, and challenges of the workers. For Example, the primary language spoken by 70 percent of adults surrounding the park is Spanish with a secondary language of Chinese. The project team should conduct the meeting and create materials in Spanish with Chinese translation offered.

D9. Outline the desired information to collect community engagement events, meetings, one-on-one conversations, etc. such as name, address, comments, needs. Create a plan for collecting and reporting out about community engagement efforts. For example, Data at the pop-up sports event will be collected via registration, tablet sign in and a concluding survey. Notes will be taken from organic one-on-one conversations.

- D10. Create a communication schedule and plan to keep members engaged throughout the entire life of the project. Making sure the plan addresses how to deal with problems and concerns quickly.
- D11. Describe any change requests by any stakeholder and how they impacted the final result of the project. Requests for changes typically emerge during project execution, thus we will define a project management plan to manage such changes when they arise. It is important that there is a process in place to request appropriate changes. Use the sample format presented in class.
- D12. Describe the lessons learned during the project including project name, land management, environment protection, dates, and the final budget. Further, the lessons learned report should describe whether the project met scope, time, and cost goals. Use the sample format presented in class.

E. New Jersey Department of Environmental Protection (NJDEP)

- E1. Determine the needs and priorities for NJ residents and visitors and identify and inventory all existing County Parks & Trails facilities, amenities and programs including other public and private providers.
- E2. Determine facility and program needs based on user surveys, public input sessions, and meetings with community organizations, municipalities, staff and Parks, Recreation and Trails Advisory Board and foresee potential problems related to development in specific areas before commitments are made by planners, developers, and government.
- E3. Identify the five Trail Fundamentals for Forest System trail or trail segment based on applicable land management plan direction, travel management decisions, trail-specific decisions, and other related directions. These Trail Fundamentals are five concepts that are the cornerstones of Forest Service and trail management: Trail Type, Trail Class, Managed Use, Designed Use, Design Parameters.
- E4. Prepare a Project Work Plan (PWP), which shall be subject to review and approval by the Department project manager. This document shall include the project team's organization, schedule of meetings, list of tasks, the timeline for deliverables, and any other required actions for the completion of the Master Plan. Assigning project manager who shall manage overall communication and coordination that shall be undertaken by members of the team and City of New Jersey during this project.
- E5. Conduct a project kickoff with key members of the NJDEP staff to review the PWP and discuss the approach to the project. This meeting shall include a discussion of previous planning efforts, data collection, and project goals and objectives.

- E6. Technical Advisory Group (TAG) Engage, inform, and rely upon a TAG identified by the City whose members will assure their respective department goals, policies, plans, and constraints are understood and considered during the planning process.
- E7. Identification and tracking of endangered and rare plant populations and rare and unique ecological communities along with the management of public open space acquired by the Trust or found within designated Natural Areas. Tracking the status of more than 1000 species of plant and animals and more than 50 ecological communities that are exemplary, rare, or imperiled at the trail campus. Enabling detailed, centralized information to help make land-use decisions and Identifying the highest quality areas for natural diversity and those areas in most need of protection.
- E8. Engaging The New Jersey Trails Council which provides assistance to the Trails Program and acts as an advisory body to the Department. This Council is instrumental in the formulation, review, and implementation of the Trails Plan, as well as making funding recommendations to the Commissioner regarding RTP applications. The Trails Council consists of citizens with interests in different types of trail use, representatives from conservation or recreation organizations and other state agencies. Also, Update recommendations on future active, passive and linear park facilities and programs including cooperative development, operation, and maintenance of facilities and programs with municipal, state, federal, and private agencies.
- E9. Developing Natural Diversity Protection plan which is combined with the opportunity for a broad range of public activities including scientific research, education, hiking, hunting, fishing, and boating. The scientific community is encouraged to perform research, particularly that which will contribute to DEP's understanding and management of these lands and the species they support without damaging the environment.
- E10. Develop a needs assessment to determine long term capital improvements and a standard method for calculating maintenance cost. Fee assessment study updates the parks, water supply, sanitary sewer and recycling facilities, fire protection facilities, law enforcement facilities, emergency medical facilities, fire stations facilities needs and capital costs to serve the Trail park through the year and to determine appropriate and fair impact fees to recover a portion of the costs for those facilities.
- E11. Evaluation of maintenance staff levels. In establishing this maintenance plan, industry standards are used to guide us as we strive to provide world class park facilities. To achieve and maintain these standards we look to hire the right people for the right job and provide necessary training and professional development.

- E12. Plan a strategy to significantly increase the role of volunteers and partners in trail maintenance. The strategy will identify methods for increasing the role of partners and volunteers in trail maintenance; aim to increase trail maintenance by 100 percent within 2 years. Creating study opportunities for fire crew assistance with trail maintenance; reflect improved regulations related to volunteer liability; and engage Forest Service units to develop associated strategy implementation plans.
- E13. Synthesize and document the management intention for the trail, and provide basic reference information for subsequent trail planning, management, condition surveys, and reporting. This enables good management sense and is a prerequisite for completing an effective trail condition assessment survey and documenting the prescription of the work needed to meet the standard.
- E14. Travel Management Strategies are very important for effective and efficient trail management. Establishing Travel Management Strategies helps the manager balance the needs of conflicting uses, guides the manager on operational tradeoffs, and assists maintenance crews to efficiently target maintenance efforts to only necessary tasks.

F. Trail Users

- F1. Pedestrians include walkers, hikers, joggers, runners, bird watchers. These users have requirements such as softer surfaces to lessen the impact on their knees, benches and shaded areas to rest, restrooms and drinking fountains to quench thirst every few miles.
- F2. Trail users require an emergency beacon to call for help in-case of some accident or emergency. A beacon with a button, when pressed should signal the police department about the emergency. It should be placed near the waiting station/bus stop which is near to the trial.
- F3. They also require route maps at few node points of the trail to let them know where they are and where they would like to continue on the trail. The map shows all the routes that trail has, and all the entry and exit points and other amenities.
- F4. Need to clear the trail from encroaching vegetation, repair the treadway damages to keep the trail accessible to pedestrians. The trail which is covered with bushes and grass must be cleared for access and the part of the trail where pavement is required and need repairs must be done. Plan the trail according to the guidelines given in the American Association of State Highway and Transportation Officials(AASHTO).

- F5. Stone stairs that connect the long path with Shore Trail need to be repaired from its damages. AASHTO recommends a minimum of 10 feet for multi-use trails, however in some parts where heavy use is anticipated a 12 14 feet width will be recommended.
- F6. Bicyclists fall into the category of recreational and touring. These users have a requirement of hard surfaces and require a vertical clearance of at least 8 feet, with 10 feet needed for overpasses and tunnels. In addition to the amenities required by pedestrians, bicycle racks and bicycle lockers located at the transit nodes or places of employment are required.
- F7. Need trash bins near resting points, camping areas and restrooms to encourage people to maintain cleanliness of the park. Where dogs are permitted, consider providing dog-friendly friendly drinking fountains, bag dispensers and trash bins to encourage people to pick up after their dogs.
- F8. Clearing scenic trail vistas near camp sites and recreational points to provide people with viewing opportunities. Viewing areas are to be provided on designated overlooks such as campsites and recreational points and shall have at least one manoeuvring space and surface of clear space required shall be stable and firm. Each location providing viewing opportunities for distinct points of interest shall provide at least one unrestricted viewing opportunity for each distinct point of interest. Viewing opportunities shall accommodate eye levels between 32 inches (815 mm) minimum to 51 inches (1295 mm) maximum.
- F9. Recreational areas for the likes of people who come for picnic or camping or some outdoor activities. Provided with but not only restricted to benches, trash bins, children play area, water ponds, and viewpoints required for group activities and family picnics.
- F10. Signs boards indicating hiker crossings, bridges, restrooms, medical posts and emergency posts and exits need to be placed in a few places of the trail to guide the trial users. Signs identifying accessible trail segments shall include the total distance of the accessible segment and the location of the first point of departure from the technical provisions.
- F11. Camping sites need to be provided with but not only restricted to tent spaces, camping shelters, or tent pads and platforms, camping spaces, picnic tables, grills, fire rings, utilities to encourage and facilitate people to perform outdoor activities.

G. Transportation Service Provider

- G1. A designated point of access such as an entry point or exit point must contain information kiosks, restrooms, emergency posts, and parking areas that allow parking for vehicles of different sizes. The parking area must have different parking sizes to allow different types of vehicles such as Cars, Trucks and also Tourist buses to park. Emergency post which has access but not restricted to first aid kit, stretcher, wheelchair. Restrooms for both men and women with facilities including urinals, hand wash sinks, hand dryer, and baby changing station.
- G2. There should not be any wait time for the bus to get the passengers on board. People who like to travel to the park using the public transportation service must board the vehicle on time to avoid delays in the vehicle schedule.
- G3. Transportation service providers require the holiday calendar of the park/trail to disable the transportation service to park on those park holidays or maintenance days. Depending on the calendar and the park timings, Transportation service providers can create vehicle schedules and also the shifts for drivers. Passenger pick up/drop off points, and its timings can also be defined to avail the people with the nearest point of reach to the trail/park on their requirement.
- G4. Park hours are required to provide transportation to and from the trail during those hours from different points. The transportation service provider will require the park hours so that the buses can be availed to the park only during the park hours.
- G5. The waiting station/bus stop near the trail or which is a part of the trail/park must be kept clean and should be renovated if damaged. The waiting station's signboard must be painted and kept rust-free. If the station has benches or place where people could sit and wait, it must be kept clean and regular maintenance is required
- G6. Trash bins need to be placed in the waiting stations which are near the trail or stops which comes under the trail management. Standard trash bins such as metal trash bins or plastic bins which are more durable must be placed near waiting stops to avoid people littering at the stops. This can help to keep the park/trail surroundings clean.

H. Project Sponsors

Project Sponsors is a person or a group that provides the financial resources—in cash or in kind—for the project. In a nutshell, Project Sponsors want to know what they're getting, by when, and for how much. Below are the comprehensive requirements of the Project Sponsors:

- H1. A business case document highlighting the selling point of the project. The project could provide financial benefit, regulatory benefit pertaining to a new law, or alignment of the project objective with the mission of the community. The project feasibility analysis should be in accordance with PMBOK methods outlined by the client in the class.
- H2. A Project charter document highlighting the business needs, and it should contain the project purpose or justification, the measurable objectives and success criteria, deliverables, high-level risks, budget summary, project approval requirements (what is project success, who decides it and who signs off), assigned project manager (responsibility, authority level), and name and authority of the project sponsor or other individual(s) authorizing the project. Project charter is the key deliverable in making the decision to invest in this or other projects.
- H3. A Scope Statement document that includes product scope description, product user acceptance criteria, and detailed information on all project deliverables
- H4. Work Breakdown Structure (WBS) document comprehensively defining the scope of the project. It is graphical representation that breaks all of the required work of the project into smaller parts and groups them into a logical hierarchy. Also Prepare a WBS Dictionary that explains every work package deliverable noted in the WBS.
- H5. A Gantt Chart giving the overview of estimated timeline for all the project activities. The activities should be arranged sequentially and critical path should be clearly identified.
- H6. A cost estimate plan prepared in accordance with the WBS. This plan should include all details like the labor cost, rate of labor, and estimate hours needed to complete the work. Additionally, the plan should also incorporate procurement cost of any items that would need to be purchased for the project. Define the unit cost of every single activity and item and present a budget for this project. Use the format template presented in class. This is one of the crucial document for the Sponsor to make a go-no decision
- H7. A Risk Management Plan document that includes risk identification, mapping and prioritization. This document should also incorporate an action plan, a contingency plan and responses to risks (accept or ignore, mitigate or reduce, eliminate, and transfer) for each identified risk. This is also one the crucial document for Sponsors in their decision making.
- H8. The Project Plan should be completed and a deck giving a high level overview of the project should be presented to sponsors on May 6th. Earlier the project deck was supposed to be presented in person but now it has to be presented virtually to Sponsors via WebEx Platform.

I. Property Owners and Neighbors Requirement

Property Owners and Neighbors are the people affected by the proposed trail and its potential users. The main requirements of property owners and neighbors revolve around privacy, cost, land use.

- I1. Privacy of adjacent landowners to trails and trail access facilities is of special concern. So, one of the main requirements is to address the concern regarding Trespassing. Privacy can be maintained or improved by modifying the trail alignment, planting landscape buffers, installing walls/fencing, installing security cameras, or using a combination of these methods. Locate trails along property lines where feasible in conjunction with other land uses, to avoid unnecessarily crossing private property.
- I2. A well designed Management Plan that ensures proper management and operation of trail and an effective grievance redressal system. The Management Plan may include a monitoring schedule for the trail, regular maintenance and trail-specific management responsibilities. This Plan may also include guidelines that address various issues, such as whether smoking is allowed on the trail, hours of trail operation, seasonal closure due to sensitive species, or underlying land use.
- I3. Posting Signage can minimize exposure to risk from dangerous trail uses by posting information and hazard signs on the trail. Clear signs are the best mechanisms for preventing dangerous trail uses. Information signs let users know what users are prohibited, while hazard signs help minimize risk for all trail users. Trail information signs should be posted at trail entrances to make clear the status of the trail and note what types of use are permitted or prohibited. A combination of words and graphics may be used to explain permitted and non-permitted uses and behaviors and to identify known hazards. Proper signs at trail entry points will help in prohibiting unauthorized access to the neighbouring properties. Signs prohibiting littering should be conspicuously posted.
- I4. Creation of bike lanes should also be considered so that bicycles are parked at designated places and not on the neighbouring private owner's property areas.
- I5. Trail managers should keep in close contact with landowners and municipal officials to share information about activities or developments that may affect trail use. To reduce the severity of any mishaps that may occur, trail managers should develop and implement an emergency plan that includes making sure local emergency responders are familiar with trail maps, know how to locate and access users on the trail system, and have access to locked gates.

J. Public officials

- J1. Require the scope statement & plan to be sent to New Jersey Department of environmental protection, Division of parks & forestry and Office of Natural Lands Management for approval. The scope statement should clearly mention what is in-scope and out-of-scope & the plan to repair the trail. The duration and cost should be mentioned in the plan sent to the departments.
- J.2 Require the permissions to be requested to the governor and government offices for the repair of the trail, clearly outlining the duration and cost of repairing the trail, the materials to be used and the plan to be followed.
- J3. Requires 2 security cameras each to be placed at the entry and exit points of the trail ensuring security of people using the trail. These cameras should be recording at all times and monitored at least once a day.
- J4. Requires the list of project management team members to be sent to the New Jersey Department of environmental protection & Governor's office with an official government identity card and other essential details like address and phone number. These members are required to be officially registered along with the company.
- J5. Required to ensure that the process of construction, if any, should be environmental friendly and the materials used should not negatively affect the environment and are approved for construction.
- J6. The trail which is to be worked on is required to be designated to the New Jersey State Trails System, selecting the classes and following the rules of designation in the system.

Scope of the Project

1.1 Initiating: It is the first phase of the project management life cycle, it refers to initiating each task of the project. i.e., Defining its objectives, scope, purpose and deliverables to be produced. This includes but not limited to - Assigning the team with roles and responsibilities, Availing project team with sufficient resources, Brainstorming to identify, list and understand stakeholders.

- **1.2 Planning:** It is a phase of project management life cycle where project plans are documented, project deliverables are defined, and the project schedule is created. It involves creating a set of plans to help guide the team through other phases of the project. It includes but not limited to Details about the scope of the product (requirements), the scope of the project (deliverables), and what is out of scope, Develop a Work Breakdown Structure (WBS) for the project with required graphical representation, Develop a cost estimate for the project, based on the WBS created.
- **1.3 Executing:** It is a third phase of the project management life cycle, it refers to executing each task of the project. During the execution phase, the project team develops the product or service and presents the final product to the customer.
- **1.4 Monitoring & Controlling:** It is a fourth phase of the project management life cycle, it oversees all the tasks and metrics necessary to ensure that the approved and authorized project is within scope, on time, and on budget so that the project proceeds with minimal risk. It includes but not limited to project team members updating issue log and registering all the issues that have occurred, and also describe any changes requested by the stakeholder and how it impacts the project.
- **1.5 Closing:** It involves handing over the deliverables to our customer, passing the documentations, releasing staff and equipment, and informing stakeholders of the closure of the project. It includes but not limited to Creating a final list of all lessons learned by the project team, and reviewing the final submission paper and PowerPoint for any errors.
- **2.1.1 Long List Parks and Trails:** Create a list of parks and trails in NJ. The list includes all the parks and trails that are present in New Jersey and which comes under government jurisdiction. A team of two will go on a survey listing all the parks and trails in New Jersey. And will update the list in database software or Excel sheet.
- **2.1.2 Infrastructure Requirements:** Create a list of Parks/Trails infrastructure improvements. The list includes all the requirements that a park/trail needs or lack. A team of two will create the list of improvements that needs to be done to the parks that are surveyed and listed. The list also includes the infrastructure required to do the improvements.
- **2.1.3 Maintenance Requirements:** Create a list of Parks/Trails maintenance improvements. The list includes all the listed parks and trials that need maintenance of any sort for it to be fully functional. A team of two will create the list of improvements that needs to be done to the parks that are surveyed and listed. The list also includes the infrastructure required to do the maintenance.

- **2.1.4 Budgeting Requirements:** Create a budget plan for each park/trail for its improvements and maintenance improvements. The plan allows the team to determine in advance whether they will have enough money to do the things that need to be done. A team member with construction budgeting experience will create a budget plan for all the park/trail that are listed, whose Infrastructure and maintenance requirements are already defined.
- **2.1.5 Final Park & Trail Selection:** Finalize on one park/trail for proposal plan. Select a park or trail from the list created for the improvement of its infrastructure and maintenance and work on the park/trail details to develop a proposal plan. All the team members including the manager will sit and decide on which park or trail to be selected among the list created. Brainstorming is done and the final park/trail is selected.
- **2.2.1 Competition List:** Create a list of NFP organisations that do similar work. The list consists of all the NFP organisations who are into infrastructuring and maintaining parks/trails in New Jersey. A team of two is assigned to search and list out the NFP who are into the same mission as our organisation. The team does the research on who, what, and how these organisations work.
- **2.2.2 Core Competencies:** Create a list of NFP organisation's past projects and work background. This gives us details on the main competencies for our Non Profit Organization. From the list of NFPs that were gathered. The team will do research on the past projects and work background of those NFPs which gives the main competencies for our Non Profit Organization.
- **2.2.3 Competition Summary:** One of the members from the team will create a comparison chart with all similar NFP organisations, highlighting the main attractions/pros and the failures/cons of each organization. This summary allows our organization to learn from existing organizations.
- **3.1.1 Outline Skills Requirements:** The team including manager will sit and decide on skills and requirements needed from the new recruits. These skills & requirements are listed before deciding final candidates along with the importance of each skill.
- **3.1.2 Team Member Size Requirements:** Decide on number of team members required for this organization. This includes the core members of the project management team and any volunteers/staff members that are needed to create the organization & its operation thereafter.
- **3.1.3 Personnel Recruitment**: This is a round of interviews conducted for the selection of final team members from the pool of potential candidates. The candidates will be interviewed in the project management domain.

- **3.2.1 Square Footage Requirements:** Define required square footage of the office space. The hardware requirements, work space and devices to be set up are taken into consideration along with other equipment like discussion boards.
- **3.2.2 Geographical Location:** List potential office locations in the state of New Jersey. An office which is within the budget decided & is accessible to all team members is required.
- **3.2.3 Hardware/Software Licenses:** List required hardware and software license needed for the organization. These include the devices required & software like Microsoft Project Manager among others.
- **4.1.1 Personnel Start-Up Cost Estimates:** Listing the cost required to obtain the hardware devices & software licenses to be used for the purpose of creating the Non Profit Organization.
- **4.1.2 Office Start-Up Cost Estimates:** Listing the cost required to run the office, including the lease cost for using the office & payments of utilities like electricity & water which will incur during the use of the office space.
- **4.2.1 Construction Cost Estimates:** Soft costs & constructional costs are estimated based on the proposal plan to create a non profit organization called 'American Parks & Trails'.
- **4.2.2 Operational Costs / Donors:** An estimate of the operational cost for the organization is created.
- **5.1 Internal Review:** Review on all elements of the proposal plan internally with the team. The review is performed by team members & project manager and modifications are suggested.
- **5.2 Final Review:** Final review of all the elements of the proposal plan. This is done after the changes required by the internal review are implemented and the final approval by the project team and project manager are obtained.
- **6.1 Final Project Proposal:** Create a document with 13 documents to be submitted to the client. The document includes Project charter, WBS, WBS dictionary, Project schedule, Cost Estimate, Risk Plan, Issue Log, Change Request log, Scope statement, Business Case, Stakeholder Requirement List, Communication Plan and Lessons Learned. The team members will create all the above mentioned documents as per the work each of them chose to do.
- **6.2 Final Project Presentation:** Create powerpoint slides including all the required information for the presentation of the project proposal. The presentation will be presented over the WebEx platform on May 6th, 2020 during the time slot assigned to the group. The team members will create the powerpoint slides for the topics that they have been assigned to present in front of the panel & client.

Deliverables that are Out of Scope of the project:

- A1. There will not be a presentation in the classroom, rather the project will be presented remotely (due to COVID-19 Pandemic). Hard copies will not be provided. Only PDF files will be emailed.
- A2. Submission of construction drawings to any project stakeholders is out of scope of the project.
- A3. Submission of necessary permits or township approvals to any project stakeholders is out of scope of the project.
- A4. Backup information on project total cost will not be provided.
- A5. No post construction schedule will be issued.

Project Assumptions

The following project assumptions have been made for our project:

- 1. There is no cost constraint, however the cost quoted to the sponsors must be justified.
- 2. The project plan to create a non profit organization on New Jersey Parks & Trails is devised on the assumption that the panel of investors does not require any prior legal permissions to sponsor our project.
- 3. The costs listed in the document created are assumed to be the closest estimate to the actual costs to be incurred.
- 4. With the COVID-19 pandemic disrupting in person meetings, the team meetings are conducted online on the assumption that every team member has a device & connectivity to support the meetings.
- 5. The project plan is followed and an organization is created on the assumption that the main scope of the project will not change during the course of the project.
- 6. It is assumed that Internal discussions and training provided in class will be sufficient for the project at hand & no additional training will be required.

Project Constraints

 Time: The project must be completed on or before May 6th 2020. The deliverables should be delivered before 5pm & the presentation must be delivered as per the time slot assigned on May 6th 2020.

- 2. Scope: Devise a project plan to start a non profit organization in New Jersey, from inception to operation. The project plan must follow the best practices for project management as learned in class.
- 3. Quality: The project plan for creating a non profit organization on American Parks & Trails should be made following the best practices. The deliverables should include all necessary details in the required format.
- 4. Customer Satisfaction (Client & Panel): The project plan devised to create the non profit organization and the final presentation on the project should be developed using the guidelines and should be of the highest standard to ensure satisfaction of the client (Professor) and the panel of investors.
- 5. Resources: The resources to be used during the project, including but not limited to Laptops, connectivity, project management softwares etc., should be available for use as and when required.
- 6. Cost Constraint: The project of devising a non profit organization from inception to operation should be completed within the decided cost budget of \$1,10,000, which is the amount to be requested from the panel of investors on May 6th, 2020.

Work Breakdown Structure					
	ne Work Breakdown Structure (WBS) document has been sent separately as a PDF, named as				
	American Parks & Trails WBS'.				
Th	ne WBS Dictionary, however is included in the current document on the next page.				

WBS Dictionary:

WBS Dictionary						
WBS ID WBS Element		Description				
1	Project Management					
1.1	Initiating	Refers to initiating each tasks of the project				
1.2	Planning	Refers to planning each tasks of the project				
1.3	Executing	Refers to executing each tasks of the project				
1.4 Monitoring & Controlling		Refers to monitoring and controlling each tasks of the project				
1.5	Closing	Refers to closing each tasks of the project				
2	Research Phase					
2.1	Non- Profit Organization (NPO) Plan					
2.1.1	Long List Parks & Trails	Create a list of Parks & Trails in New Jersey				
2.1.2	Infrastructure Requirements	Create a list of Parks/Trail infrastructure improvements				
2.1.3	Maintenance Requirements	Create a list of Parks/Trail Maintenance improvements				
2.1.4	Budgeting Requirements	Create a budget for each Park/Trail improvement work				
2.1.5	Final Park & Trail Selection	Finalize on one Park/Trail in NJ for the proposal plan				

2.2	Competing Organizations	
2.2.1	Competition List	Create a list of NFP Organization that do similar work
2.2.2	Core Competencies	Create a list of each NFP Organization's past projects and work background
2.2.3	Competition Summary	Create a comparison chart with all similar NFP Organization
3	Resource Phase	
3.1	Personnel Resources	
3.1.1	Outline Skills & Requirements	Decide on the skills and requirements needed from team members
3.1.2	Team Member Size Requirements	Decide on the number of team members for this organization
3.1.3	Personnel Recruitment	Interview & selection of multiple candidates for the position
3.2	Office Resources	
3.2.1	Square Footage Requirements	Define required square footage of office space
3.2.2	Geographical Location	List potential office locations in NJ
3.2.3	Hardware/Software License Agreements	List required hardware and software license needed for the organization
4	Estimate Phase	
4.1	Organizational Costs	

4.1.1	Personnel Start-Up Cost Estimates	List personnel and hardware/software license cost for the organization			
4.1.2	Office Start-Up Cost Estimates	List office lease and utilities cost breakdown for the organization			
4.2	Proposal Estimates				
4.2.1	Construction Cost Estimates	Create a list of soft costs and construction cost for the proposal plan			
4.2.2	Operational Costs/Donors	Create a list of operation cost for the organization and it's donors			
5	Review Phase				
5.1	Internal Review	First & Second round of review on all elements of the proposal plan internally with the team			
5.2	Final Review	Final decision on all elements of the proposal plan			
6	Submission Phase				
6.1	Final Project Proposal	Finalize all project deliverables and send PDF via e-mail			
6.2	Final Project Presentation	Create powerpoint slides with project proposal and present			

American Parks & Trails Schedule					
The 'schedule' document has been sent separately as a PDF, named as 'American Parks & Trails Schedule'.					
The attac	ched pdf has a screenshot of the overall schedule created followed by the 'zoomed in'				
	ots, part by part, of the entire schedule.				

Cost Estimate:

The 'WBS' cost is the cost required for devising the non profit organization, from inception to operation. This is the cost to be requested from the panel of investors on May 6^{th} , 2020.

The construction cost, provided for reference, is an estimate of the cost required for construction purposes AFTER the organization has been created.

WBS Cost- 77 Days						
Title	Rate/hr	hr/day	days	Total		
Project Manager	\$20	8	77	\$12,320		
Team Member 1	\$15	8	77	\$9,240		
Team Member 2	\$15	8	77	\$9,240		
Team Member 3	\$15	8	77	\$9,240		
Team Member 4	\$15	8	77	\$9,240		
Team Member 5	\$15	8	77	\$9,240		
Non- Labor (Hardware/Software, Food, Supplies, etc.)				\$50,000		
				\$108,520		

Construction Cost				
Description	Lump Cost			

Soft Cost	\$175,000
Contractor	\$500,000
Designer	\$60,000
Permits	\$20,000
Infrastructure/Civil- Site Work	\$1,000,000
Total	\$1,755,000

Communications Plan:

Stakeholder	What	When	How	Who	Where
Client (Prof. Leon Herszon)	Responding to queries	In-lecture	E-mail	Project Manager & team	Online
Panel Members	Convince to Sponsor the project	Final presentation	Webex	Project Manager & team	Online
NJ Department Environmental Protection	Coordinate trail system planning	Monthly during the planning process	Meeting	Project Manager	NJDEP office
Public Officials	Review planned process for appropriate development	Monthly until project completion	Meeting	Project Manager	Officials office
New Jersey Recreation and Park Association	Advocate sound policy and stewardship	Weekly	Webex	Project team members	Online
Neighboring Property Owners	Explore opportunities for improving access to the trail system	Monthly	In-person meeting, video call	Project team member	Neighbors place or on- line

Project Manager	Coordinate entire	Weekly until the	Video	Team	Online
(Yash Bajaj)	project	final presentation	conference	members	
Public Transportation Service Providers	Plan public transportation	Monthly	E-mails	Team member	Online
Trail User	Collect input for improvement	Bi-weekly	E-mail	Team member	Online
Competing project teams	Compare progress with other teams	After completing every milestone	SWOT analysis	Team members	Online
The New-York New Jersey Trail Conference	Build, maintain, and protect trails	Once a month	Video conference	Project Manager	Online

Risks for American Parks & Trails Project:

The risks are listed below with a nomenclature like 001, 002..010. This is done for clear representation on the risk probability/impact matrix which is shown on the next page.

- 001. Performance risk, the risk that a project team member is not completing the tasks given on time, making the project milestones not getting completed on time.
- 002. Project member(s) falling ill due to flu or the current Covid-19 pandemic will be a risk with a very major impact, risking the health of the team member and making him/her incapable of working on the project.
- 003. Losing important documents is a risk which might arise due to irresponsibility or poor management and will result in waste of time and effort.
- 004. Project cancelled due to unforeseen circumstances.
- 005. Schedule risk, the risk that activities will take longer than expected.
- 006. Risk of conflicts: The risk of project members having disagreements and/or conflicts which will affect the performance of the project.
- 007. Risk of requirements getting changed.
- 008. Project assumptions, the potential of project assumptions getting invalidated.
- 009. Instrastructural risk, Risk of power shut down during project presentation.
- 010. Dependency risk, a task that is precondition to a large number of activities might be considered a risk.

Risk Probability/Impact Matrix.

Risk ID	Probability (1-5)	Impact (1-5)	Severity (P*I)	Action Plan	Contingency Plan
001	3	4	12	Reduce the risk by motivating and monitoring the team members	Start multitasking to complete the milestones missed.
002	4	3	12	Reduce the risk by social distancing	Assign the work to other project team members
003	2	4	8	Reduce the risk by keeping an extra copy of all the documents	Redo all the Documents that are lost
004	1	5	5	Accept risk	
005	3	4	12	Reduce the risk by discussing the schedule with project team members	Start multitasking to finish the tasks on time.
006	4	3	12	Reduce risk by taking a consensus on each phase.	Authorizing Project Manager to resolve conflicts & disagreements
007	4	3	12	Reduce risk by reviewing the requirements with stakeholders	Redo the work according to the new requirements
008	3	2	6	Reduce risk by having few or no assumptions	

009	3	2	6	Reduce the risk by having an infrastructural backup	Ask permission to do the presentation again
010	3	2	6	Accept Risk	

Issue log:

Issue	How it could have been prevented?	How to address this issue?
Conflicts within team or stakeholders	Formulating robust communication plan	Identify needs of client accurately
Missing milestone deadlines	Set prioritized goals	Restructure the project plan
Wrong estimation of time and budget.	Arrive at reasonable estimates	Bottom-up budgeting approach
Pandemic (COVID-19)	Remote Work Must Happen	Virtual teams in place
False interpretation of project requirements	Studying and discussing the requirements with team members	Get clarification from the client

Change Requests:

Title of Change Request	Addition of WBS dictionary	
Project Name	American Parks and Trails	
Date of Request Submitted	3/4/2020	
Change Order Number	CR#001	
Change submitted by	Client (Professor Leon Herszon)	
Change category	Scope	
Description of change requested	Request was submitted to change the scope of the product to include a WBS dictionary. The WBS dictionary will define every WBS element	
Events that made this change necessary or desirable	Defining the WBS elements will aid the client (Professor Leon Herszon) with interpreting the WBS	
Justification for the change	In accordance with revised client requirements	
Impact of the proposed change on	Scope	
Staffing	One team member will work on creating the WBS Dictionary from WBS	
Risk	Low risk of this change complicating the project	
Required Approvals	Project Manager(Yash Bajaj)	
Title of Change Request	Submission date of deliverables moved to May 6, 2020	
Project Name	American Parks and Trails	
Date of Request Submitted	3/21/2020	
Change Order Number	CR#002	
Change submitted by	Client (Professor Leon Herszon)	

Change category	Schedule	
Description of change requested	Request was submitted to change the submission date of deliverables to May 6, 2020. This is an extension of the submission date based on the environmental changes and the needs of the client (Professor Leon Herszon)	
Events that made this change necessary or desirable	The change is a result of the COVID-19 pandemic	
Justification for the change	To respond to the changing project requirements and satisfy the client	
Impact of the proposed change on	Schedule	
Staffing	All team members will submit the final deliverables before the deadline on May 6, 2020. Additionally, all team members will be at the final presentation on May 6, 2020 via WebEx	
Risk	Medium/High risk of this change complicating the final presentation via WebEx. The risk is increased due to the unforeseen technical glitches	
Required Approvals	Project Manager(Yash Bajaj)	
Title of Change Request	Method by which project deliverables are submitted is now via email	
Project Name	American Parks and Trails	
Date of Request Submitted	3/21/2020	
Change Order Number	CR#003	
Change submitted by	Client (Professor Leon Herszon)	
Change category	Scope	
Description of change requested	Request was submitted to change the method by which project deliverables would be submitted. All project deliverables will be saved in PDF format and submitted via e-mail as outlined in the	

	updated Group Assignment v2.0. These changes are necessary based on the environmental changes and the needs of the client (Professor Leon Herszon)	
Events that made this change necessary or desirable	The change is the result of COVID-19 pandemic	
Justification for the change	To respond to the changing project requirements and satisfy the client	
Impact of the proposed change on	Schedule/Submission of Project Deliverables	
Staffing	All team members will submit the final deliverables in accordance with the changes outlined in the updated Group Assignment v2.0	
Risk	Low risk of this change complicating the project	
Required Approvals	Project Manager(Yash Bajaj)	

Lessons Learned

Area	Start Doing	Stop Doing	Continue Doing
Initiating			A) Appoint Team Member's responsibilities B) Clarify & Define scope of work C) Involve stakeholders early in the process
Planning	A) Schedule set conference calls to check up on work status B) Clearly understand the client's requirements	A) Don't be late to scheduled conference calls B) Incorrect assumptions that lead to redo of some activities	A) Create reachable deadlines B) Allocate responsibilities to team members C) Touchbase with client periodically share the progress and get the feedback so that the project is on track and as per clients requirement
Executing	A) Create checkpoint for tasks	A) Do not create unachievable deadlines	A) Monitor schedule B) Communication with stakeholders (client) for any change in scope of work or deliverables
Monitoring & Controlling	A) Continuously review budget throughout project	A) Do not forget to document all communications and changes	

	B) Ensure tasks are within schedule		
Closing	A) Review strengths/weaknesses of the project B) Create a lesson learned document	A) Do not have verbal agreements or change orders; document everything	A) Compile all information and communication documents into one package to distribute

Created & Submitted By:

PACE+ONE