

MODULE 02 – SCHEDULE

Part A - Schedule

1. Schedule Format Criteria:

- a. With one of the three programs listed below you will create a schedule, complete with a continuous logical flow of critical path activities from Notice to Proceed, Permit Releases, Subcontractor Buyout, Procurement, Submittals, Fabrication and Delivery lead times, Construction, Punchlist and Completion Microsoft Project, SmartSheet, P6.
- b. At a minimum, show the following column headers: Activity Description/Task Name, Duration, Start, Finish, Total Float.
 - i. In addition, clearly show predecessors and successors in Gantt form.
- c. Activity Count: No less than 200 activities.
- d. Organize your activities so they are easy to read, activities are grouped intuitively, and the schedule "flows" well.

2. Contractual Criteria:

- a. Notice to Proceed Construction (NTP): To be determined by you
 - i. NTP authorizes contractor mobilization.
- b. Substantial Completion: March 6, 2023
 - i. Substantial Completion is defined as "the building can be used for its intended purpose." In order to satisfy this requirement, all construction activities shall be substantially complete, the building systems must be operational, all code required inspections must be complete, and a Temporary Certificate of Occupancy must be received from the State Fire Marshal to allow occupancy of the building for its intended purpose.

c. Final Completion

- Final Completion designates the date that all testing and commissioning activities, punch list items, closeout documents and State Fire Marshal inspections for Certificate of Occupancy have been completed and submitted to the Owner.
- d. The schedule should account for all major US holidays.

3. Work Breakdown Structure:

- a. Most projects need to be phased to balance crew sizes and workflow. You may need to break out your schedule based on the area phasing plan created by your site logistics team.
- b. At a minimum, the below milestones and activities need to be included in your schedule add any activities you deem necessary.
- c. Overall Milestones:
 - i. Notice to Proceed Construction (TBD)
 - ii. Substantial Completion (March 6, 2023)
 - iii. Final Completion
- d. Preconstruction:
 - i. General
 - 1. Permitting
 - 2. Buyout/Contract Issuance





- ii. Submittal Preparation and Review
 - 1. Millwork
 - 2. Lighting
 - 3. Structural Steel
 - 4. Concrete
 - 5. Stairs
 - 6. Fire Alarm
 - 7. Fire Sprinkler
 - 8. Glazing
- iii. Procurement of Material
 - 1. Millwork
 - 2. Lighting
 - 3. Structural Steel
 - 4. Glazing
 - 5. Mechanical Equipment
 - 6. Stairs
- e. Construction:
 - i. Mobilization/Make Ready
 - ii. Site/Earthwork
 - iii. Building Construction
 - 1. Substructure
 - 2. Superstructure
 - 3. Interior Build Out
 - 4. Commissioning
 - iv. Elevators





Part B - Schedule Questionnaire

<u>Objective:</u> The intent of the questions below are to test your knowledge and spark ideas for creating your schedule.

- 1. What 'make ready' work is shown on your schedule in order to not impact the campus during construction?
- 2. Building Information Modeling (BIM) has a big impact on planning the work before you build it. List the subcontractors that could help make the project benefit from modeling their work and why.
- 3. What scopes of work can be overlapped or staggered in the construction schedule and why? (List 3)
- 4. Based upon your previous answer, which subcontractors would you pay overtime to save time out of your schedule and how is this reflected in your budget?
- 5. Your team has just been informed that your structural steel sub had an explosion at their plant and can no longer meet your schedule. The soonest they can get their production back on track is a month out. Please layout how your team plans to handle this delay? What're some ways the project can remain productive?
- 6. In order to bring the end date of the project in our owner's typically ask for ways to save time out of our schedule. Name two good ways to decrease the overall length of the construction schedule.

Required Deliverables:

- 1. Complete schedule in PDF format
 - a. Including a list of your assumptions you made throughout the schedule creation process.
- 2. Questionnaire

