

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section specifies administrative and procedural requirements, in addition to those defined in the General Conditions, for Baseline Progress Schedule preparation, monthly Progress Schedule updates, change in Contract Time analysis, submittal schedules, and short interval schedules.
- B. Related Sections:
 - 1. 01 26 00, "Contract Modification Procedures"
 - 2. 01 29 76, "Progress Payment Procedures"
 - 3. 01 50 00, "Temporary Facilities and Controls"
 - 4. 01 77 00, "Closeout Procedures"
- C. Owner's forms included by reference for this Section include (see Appendix A):
 - 1. Short Interval Schedule
- D. Total Float is defined as the amount of time between the earliest start date and the latest start date, or between the earliest finish date and the latest finish date of an activity on the Progress Schedule. Float is not for the exclusive use of either the Contractor or the Owner unless otherwise identified in the Contract Documents.
 - 1. Extensions of time for Contract performance will be granted only to the extent that equitable time adjustments to the affected activity or activities exceed the total float time along the affected paths of the current Progress Schedule at the time a Field Order, or Change Order, was issued for the change.
- E. All Progress Schedule submittals, including monthly Progress Schedule updates, will be reviewed jointly by the Owner's Representative and the Contractor. Such review of the Contractor's schedules shall not constitute an approval or acceptance of the Contractor's construction means, methods, or sequencing, or its ability to complete the Work in a timely manner.
- F. As used in this Section, "Progress Schedule" refers collectively to "Baseline Progress Schedule" and "monthly Progress Schedule updates."

1.2 PROGRESS SCHEDULE

- A. When pricing is submitted for each Work Order submit a "duration" baseline schedule.
- B. Prepare and submit a final construction schedule within two (2) calendar days, unless otherwise mutually agreed to by Owner and Contractor after receipt of review comments on the "duration" baseline schedule. This Start and Completion dates will be incorporated into the Work Order Notice to Proceed (NTP) document.

- C. Within seven (7) calendar days after NTP, the Contractor shall prepare and submit to the Owner, for review and comment, one (1) copy of a preliminary Progress Schedule utilizing a Critical Path Method (CPM) logic based on the Contract Documents. The Owner will review the preliminary schedule for conformance with the Contract Documents and provide comments within seven (7) calendar days of receipt from the Contractor. The Contractor shall respond to all comments and provide the Owner a Baseline Progress Schedule within seven (7) calendar days of receipt of the Owner's comments.
- D. Once the Baseline Progress Schedule is submitted to the Owner, the Progress Schedule shall be formally established as the baseline file within the Contractor's scheduling software. This baseline file shall not be modified without the Owner's written approval.
 - 1. The amount specified in Section 01 29 76 shall be withheld from the Contractor's monthly Application for Payment if the Baseline Progress Schedule and Submittal Schedule, referenced in 1.5 of this Section, are past due and such amount may, at the Owner's sole judgment and discretion, be reduced from the Contract Sum by unilateral Change Order (see Section 01 29 76, "Progress Payment Procedures").
- E. The Baseline Progress Schedule shall be the basis that the Contractor shall use to: plan, organize, and execute the Work; record and report actual performance and progress through updates, and; show how the Contractor plans to complete all remaining Work. The Baseline Progress Schedule and monthly Progress Schedule updates shall be the basis for consideration and analysis of requests for time extensions as specified below. The schedule shall be in the form of an activity based precedence diagram.
- F. The Baseline Progress Schedule and monthly Progress Schedule updates shall be constructed to show the order in which the Contractor proposes to carry out the Work, and to indicate the restrictions of access to and availability of the work area, and availability and use of manpower, materials, equipment, and all activities of trade contractors, equipment vendors, and suppliers. The Progress Schedule shall incorporate contractually specified limitations and restrictions, and contractually specified milestones. Construction activities shall match or be correlated with the pay items in the approved Schedule of Values. The Progress Schedule shall be prepared in sufficient detail with the assignment and coding of all activities by the Contractor and Subcontractors in consideration of, but not limited to, the following Work activities:
 - 1. Access and availability to the Project Site, including road closures;
 - 2. Identification of interfaces and dependencies with preceding, concurrent, and succeeding contractors, if applicable;
 - 3. The type of work to be performed and labor trades involved;
 - 4. All procurement, manufacturing, fabrication (both on-site and off-site), and delivery activities for all major materials and equipment;
 - 5. Shutdowns of existing Owner's equipment and utility services;
 - 6. Required delivery dates of OFCI equipment and materials;
 - 7. Testing, air balancing, and commissioning activities, including submission and approval of test results;
 - 8. Approvals by regulatory agencies or other third parties, including obtaining an Occupancy Permit;

9. Coordination for Owner's occupancy including Owner's cleaning, OFOI equipment and furnishings installations;
 10. Planning for phased occupancy by the Owner, with intermediate completion dates;
 11. Contractor's preliminary cleaning and final cleaning operations;
 12. Contractor's Final Punch List Report, Owner's Final Inspection (Punch List), Contractor's corrections, and Owner's re-inspection;
 13. Substantial Completion and Final Completion activities and milestones, and Final Acceptance.
- G. The activities defined in the Progress Schedule shall represent the planned durations in anticipation of normal man-power and equipment utilization in durations of whole working days. No activity durations shall exceed ten (10) working days. If approved by the Owner, longer durations may be allowed for non-construction activities such as procurement, delivery, or submittal activities. All durations shall be determined based upon resource planning under contractually defined on-site work conditions. In calculating activity durations, normal inclement weather shall be considered. The Contractor shall schedule the Work to minimize the effect of adverse weather. The Contractor shall also protect the work site from the effects of adverse weather or take other necessary measures such that the Work can be completed within the time established in the Contract Documents and include these provisions in the schedule as appropriate.
- H. Schedule activity identification codes shall not be alphanumeric unless approved by Owner.
14. Activity Description: Provide adequate information to readily identify each activity up to 48 characters in the general descriptive format: action, item, location (such as Install Steel Studs 3rd Floor).
 15. The Critical Path shall be clearly indicated on all diagrams submitted. An activity is critical when it is part of the longest duration pathway(s) through the CPM network or when total float is less than or equal to zero.
 16. Clearly identify activities that are planned to use overtime, double shifts, work on weekdays or holidays.
 17. Include a listing of activities with open ends and out-of-sequence progress.
- I. Certification: When requested by Owner, submit certification that each Subcontractor and major equipment supplier has participated in, reviewed, and concurs with the Progress Schedule as it relates to their Work.

1.3 MONTHLY PROGRESS SCHEDULE UPDATES

- A. The Contractor is required to prepare and submit monthly Progress Schedule updates and to participate in monthly schedule update meetings with the Owner as described below.
1. Timely submission of updates is of significant and crucial importance to the management of this Project. Lack of, or late receipt of, updates diminishes their value to the Owner. If a monthly Progress Schedule update is not submitted to and reviewed with the Owner prior to the Contractor submitting its monthly Application for

Payment, the monthly Schedule of Values amount for Progress Schedule updates may, at the Owner's sole judgment and discretion, be reduced from the Contract Sum by unilateral Change Order (see Section 01 29 76, "Progress Payment Procedures").

- B. The Contractor shall prepare a monthly Progress Schedule update to reflect work progress achieved since the previous update. Historical performance data and/or records shall not be changed without the approval of the Owner.
- C. The Contractor shall use and maintain a fixed end date when generating the required reports and diagrams for the Owner as specified by this Section. The fixed end date shall be the Substantial Completion date. The fixed end date will be adjusted in subsequent updates only to reflect approved time extensions incorporated by Change Order.
- D. The Project shall be rescheduled each reporting period with:
 - 1. An updated data date.
 - 2. Actual start/finish dates.
 - 3. Percent complete.
 - 4. Remaining durations (for each activity) in the "status" or "current" file.
- E. Show changes occurring since the previous schedule submission, such as:
 - 1. Any major changes in scope.
 - 2. Activities modified since previous submission including, but not limited to, logic changes.
 - 3. Revised projections for progress and completion, as applicable.
 - 4. Any other identifiable changes.
- F. The Contractor shall account for all rain days, for major events, and similar excusable non-compensable delays, during which little or no work is progressed and that are acknowledged by the Owner, in the period within which the events occur.
- G. The Construction Progress Meeting shall be held prior to Owner's review and comment of the Contractors draft Application for Payment, unless otherwise approved by Owner.
 - 1. The Contractor shall provide copies of two tabular reports:
 - a. A total float report clearly indicating the current critical path through Substantial Completion.
 - b. A report of activities sorted by early start dates commencing with the previous monthly progress update and including all updated activities during the previous

month. Actual progress of the previous month will be recorded and incorporated into the update.

2. The Contractor shall provide copies of a narrative report to include:
 - a. A description of the Work that has progressed.
 - b. An explanation of the Work that had been scheduled to be performed in the previous period but was not performed, and why it was not performed.
 - c. Anticipated delay and impact on the schedule.
 - d. Corrective action recommended and its effect.
 - e. A discussion of the Work scheduled for the upcoming period noting any issues or events that could impact this Work.
 - f. If the Contractor intends to make a logic or original activity duration change(s), the report shall include such changes.
3. The Contractor and Owner shall review these reports and discuss any differences or issues raised.

1.4 CHANGE IN CONTRACT TIME ANALYSIS

- A. It is the Owner's desire and intent to resolve all issues affecting the Substantial Completion date in a timely, efficient, and effective manner. To achieve this goal, the Owner and Contractor shall participate in an analysis of all delays and advances of the schedule.
- B. Assessment of impacts due to changes or other events must be performed on the most recent update of the Progress Schedule. Further impacts due to changes or other events shall be assessed utilizing the Progress Schedule update that represents the data date closest to, and just prior to, the date of the impacting event.
- C. The logic and planning elements of the Progress Schedule are the Contractor's responsibility.
 1. No Contract Time shall be modified unless directed by an approved Change Order.
- D. Submission of a valid monthly Progress Schedule update and the completion of a delay analysis impacting the critical path are conditions precedent to the review and approval of any request for an extension in the Contract Time. Failure to complete monthly Progress Schedule updates and to participate in the analysis will defer consideration of any time extensions by the Owner until the Work is completed and all as-built progress can be analyzed by the Owner. Further, the Owner will assess liquidated damages, if any, regardless of the status of any requests for time extensions pending, until any such requests are resolved.

1.5 SUBMITTAL SCHEDULE

- A. General: Within ten (10) calendar days following Owner's receipt of the Baseline Progress Schedule, the Contractor shall prepare and submit to the Owner a complete schedule of work-related submittals based on the Progress Schedule, as required by the Contract Documents ("Submittal Schedule"). Correlate Submittal Schedule with the listing of principal Subcontractors.
- B. Form: Prepare Submittal Schedule in chronological sequence of submittals. Show category of submittal, name of Subcontractor, generic description of work covered, related Specification Section numbers, activity or event code on the Progress Schedule baseline file, scheduled date for first submission, and blank columns for actual date of submittal, re-submittal, and final release or acceptance by the A/E. The Submittal Schedule shall be prepared in sufficient detail and in consideration of, but not limited to, the following:
 - 1. Preparation and submission of shop drawings, layout drawings, product data, material samples, and mock-ups.
- C. Update the Submittal Schedule monthly and submit to Owner.

1.6 SHORT INTERVAL SCHEDULE

- A. Short Interval Schedule: Prepare and update weekly a four (4) week Short Interval Schedule. Show previous week of actual progress (planned vs. actual performance). Forecast three (3) weeks of start and completion dates for each activity, task, or event in comparison to the Contractor's Construction Progress Schedule.
 - 1. Activities in the Short Interval Schedule shall relate directly to activities in the Progress Schedule.
- B. Format for the Short Interval Schedule should be similar to the Owner's form. The Contractor may submit an alternative format that must first be approved by the Owner. The format shall include comment annotation as necessary.
- C. Copies of the Short Interval Schedule shall be provided at the Construction Progress Meetings and will be used as the basis for discussion of progress and planned work at the meetings.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION