# General

## Summary

* + 1. This Section specifies Contractor’s responsibilities for preparation and submission of schedules and other documentation related to tracking construction progress.
    2. The purpose of submitting progress schedules is to:
       1. Inform Owner and Consultant of actual progress versus planned progress, and;
       2. Provide assurance that scheduling issues are being proactively identified and addressed in a timely manner, and that planned progress is being maintained as closely as possible.

## Construction progress schedule

* + 1. Format and content:
       1. Prepare schedule in the form of a Critical Path Method (CPM) Gantt chart using appropriate scheduling software, as approved by the Consultant.
       2. Provide a work breakdown structure identifying key activities, work packages, and major milestones, including long delivery Products, inspection and testing activities, preparation and review of mock-ups, Owner decisions for cash allowances, shutdown or closure activities, demonstration and training activities, and similar items, at a sufficient level of detail to effectively manage construction progress.
       3. Provide a separate line for each required submittal, organized by Specifications section names and numbers, and further broken down by individual Products and systems as required.
          1. For each required submittal, show planned earliest date for initial submittal and latest date for return of reviewed submittal without causing delay.
          2. Allow time in schedule for resubmission of submittals, should resubmission be necessary.
       4. Submit updated cash flow diagram quarterly.
          1. Cash flow diagram shall be in format acceptable to the Owner.
          2. Cash flow diagram shall represent Contractor’s anticipated invoicing.
    2. Submission:
       1. Submit a preliminary schedule to Owner and Consultant within fifteen (15) Working Days after Contract award.
       2. Submit schedule via e‑mail as a pdf. File, unless otherwise noted.
       3. Consultant will review format and content of initial schedule and request necessary changes, if any, within five (5) Working Days after receipt.
       4. If changes are required, resubmit finalized initial schedule within five (5) Working Days after return of review copy.
       5. Submit updated construction schedule with each application for payment and whenever requested by the Consultant, identifying changes since the previous version.
       6. At each regular progress meeting, review and discuss current construction progress and submittals schedules with Consultant and Owner, including activities that are behind schedule and planned measures to regain schedule slippage in key areas on or near the critical path.
          1. Construction schedule updates include, but are not limited to the following:

Indicate projected percentage of completion of each item as of first day of month;

Indicate progress of each activity to date of submission schedule;

Indicate changes occurring since previous submission of schedule, such as:

Major changes in scope;

Activities modified since previous submission;

Revised projections of progress and completion;

Other identifiable changes.

Provide a narrative report to define:

Problem areas, anticipated delays, and impact on schedule;

Corrective action recommended and its effect;

Effect of changes on schedules of Other Contractors.

* + 1. Submission of the schedules referred to in this Section shall constitute the Contractor’s representation that:
       1. Contractor and its Subcontractors intend to execute the Work in the sequence indicated on the proposed schedule;
       2. Contractor has distributed the proposed schedule to its Subcontractors for their review and comment, and has obtained their agreement;
       3. All elements of the Work required for the performance of the Contract are included. Failure to include any such element shall not excuse the Contractor from completing the Work within the Contract Time and within any other constraints specified in the Contract;
       4. Seasonal weather conditions have been considered and included in the planning and scheduling of the Work influenced by high and low ambient temperatures and/or precipitation;
       5. Contractor has thoroughly inspected the Site and has incorporated any other special conditions in planning the Work such as specified or required non-work periods, etc.

## Extension of Contract Time

* + 1. Submit to the Consultant, justification, project schedule data and supporting evidence for approval of extension to the Contract Time or interim milestone date when required. Include as part of supporting evidence:
       1. Written submission of proof of delay based on revised activity logic, duration and costs, showing time impact analysis illustrating influence of each change or delay relative to approved Contract Schedule.
       2. Prepared schedule indicating how change will be incorporated into the overall logic diagram. Demonstrate perceived impact based on date of occurrence of change and include status of construction at that time.
       3. Other supporting evidence requested by the Consultant.

## Progress reporting

* + 1. Monthly progress reports shall be prepared by the Contractor and submitted to the Consultant in the form an electronic copy of the relevant schedule files, to demonstrate how the Work is actually progressing and the planned and detailed sequencing of the Work at the time of the report. The cut-off date for the monthly progress report shall be as instructed by the Consultant and the report shall be submitted no later than ten (10) Working Days after the cut-off date and accompanying the monthly progress draw.
    2. Each monthly progress report shall be in a format acceptable to the Owner, and shall be arranged according to the following headings and sub-headings:
       1. Executive Summary.
          1. Activity to (date).
          2. Forecast activity to (date).
       2. Project Cost Information:
          1. Budget Summary.
          2. Cash Allowance Log.
          3. Change Order Log.
       3. Project Data:
          1. Project Schedule.
          2. Shop Drawing Log.
          3. Site Inspection Log.
          4. Site Testing Log.
       4. Critical Issues Log.
       5. Site Photos.
    3. Each monthly progress report shall include:
       1. An updated progress schedule, comparing actual and target progress for all milestones and activities. Sort activities by activity identification number and accompany with descriptions. List early and late start and finish dates together with durations, codes and float.
       2. Criticality report listing activities and milestones with up to five (5) days of total float used as first sort for ready identification of near critical paths through entire project. List early and late starts and finishes dates, together with durations, codes and float for critical activities.
       3. Progress report in early start sequence, listing for each trade, activities due to start, to be underway, or finished within two months from monthly update date. List activity identification number, description and duration. Provide columns for entry of actual start and finish dates, duration remaining and remarks concerning action required.
       4. A schedule narrative, including:
          1. Detailed descriptions of progress, including each stage of procurement, fabrication, delivery to site, construction, installation, and testing;
          2. Discussion of the basis for any work sequencing, logic, interdependencies or original activity duration revisions incorporated into an updated progress schedule; and
          3. Comparisons of actual and planned progress, with a brief commentary on any actual or forecast delays or problems that might have an impact on the completion. date of the Work, and a discussion of the measures being (or to be) adopted to overcome these.
       5. Charts showing the status of submittals, permits and approvals, utility relocations, purchase orders, manufacturing/fabrication and construction.
       6. For each fabricated item, the name and location of the fabricator, percentage progress, and the actual or expected dates of commencement of fabrication, Contractor's inspections, tests and delivery.
       7. Progress photographs taken, prepared, and submitted in formats specified, all in accordance with Section 01 32 33.
       8. RFI log.
    4. 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 and the Consultant. Therefore, if the Contractor fails to submit any progress schedule or required revision to a progress schedule within the prescribed time period, the Owner, in its sole discretion, may hold back subsequent progress payments until the updated schedule is submitted or the revision is accepted.
    5. The monthly progress reports and progress schedules will be used by the Owner and the Consultant to monitor the Contractor’s performance against the current Contract Schedule.

## Recording actual site conditions on as-built drawings

* + 1. Obtain from Consultant an electronic copy of the construction Drawings for the purpose of creating as-built drawings. Record information in electronic form, clearly identifying as-built deviations from the originally obtained construction Drawings.
    2. Clearly label each drawing as “AS-BUILT DRAWING”. Record information concurrently with construction progress. Do not conceal Work until required information is recorded.
    3. Record actual construction including:
       1. Measured depths of elements of foundation in relation to finish first floor datum;
       2. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements;
       3. Measured locations of pipes, ducts, conduits, outlets, fixtures, access panels, and appurtenances, referenced to visible and accessible features of construction;
       4. Field changes of dimension and detail;
       5. Changes made by Change Orders and Supplemental Instructions;
       6. References to Shop Drawings, where Shop Drawings show more detail.
    4. Do not use as-built drawings for construction purposes.

# Products – not used

# Execution – not used

End of section