

SECTION 01 32 17

NETWORK ANALYSIS SCHEDULES (MICROSOFT PROJECT GANTT CHART)

PART 1 - GENERAL

1.1 DESCRIPTION

- A. The Contractor shall develop a Microsoft Project 2003 (or later) Gantt Chart (bar chart) schedule demonstrating fulfillment of the Contract requirements. The Contractor shall keep the network up-to-date in accordance with the requirements of this Section. The Contractor shall utilize the plan for scheduling, coordinating and monitoring Work under this Contract (including all activities of subcontractors, equipment vendors and suppliers). The Gantt Chart will be utilized to satisfy time and payment applications.

1.2 CONTRACTOR'S REPRESENTATIVE

- A. The Contractor shall designate an in-house representative who will be responsible to prepare the schedule, review the schedule and report progress of the Project to the COR.
- B. The Contractor's in-house representative shall be given authority to act on behalf of the Contractor in fulfilling the requirements of this Specification Section. Such authority shall not be interrupted throughout the duration of the Project.

1.3 COMPUTER PRODUCED SCHEDULES

- A. The Contractor shall provide to VA monthly computer processing of all computer-produced schedules generated from monthly Project updates. The Contractor shall provide to VA two (2) copies of the updated Microsoft Project Gantt Chart and an electronic copy of this data. This must be submitted with and substantively support the Contractor's monthly payment request.
- B. The Contractor is responsible for the correctness and timeliness of the computer-produced reports. The Contractor is also responsible for the accurate and timely submittal of the updated Project schedule.
- C. VA shall report errors in computer-produced reports to the Contractor's representative within ten (10) calendar days from receipt of reports. The Contractor shall reprocess the Gantt Chart and associated CDs, when requested by the COR, to correct errors that affect the schedule for the Project.

1.4 THE COMPLETE PROJECT GANTT CHART SUBMITTAL

- A. The complete Project Microsoft Project Gantt Chart will contain sufficient Work activities/events as necessary to fully detail the Project schedule.

- B. Within ten (10) calendar days after receipt of the Notice to Proceed, the Contractor shall submit for the CO's review a Microsoft Project Gantt Chart and a CD. Each activity/event on the Gantt Chart schedule shall contain as a minimum, but not limited to, activity/event description, duration, start dates and finish dates. Activity constraints not required by the Contract will not be accepted. Logic events (non-Work) will be permitted where necessary to reflect proper sequence among Work events, but must have zero duration.
- C. The complete working Gantt Chart shall reflect the Contractor's approach to scheduling the complete Project. The final Gantt Chart in its original form shall contain no Contract changes or delays that may have been incurred during the final Gantt Chart development period. It shall reflect the Contractor's "AS BID" or "DAY 1" schedule. Changes and/or delays shall be entered at the first monthly update after the final Gantt Chart has been approved. The Contractor shall provide their requests for time and supporting time extension analysis for Contract time as a result of Contract changes/delays after this update and in accordance with Article ADJUSTMENT OF CONTRACT COMPLETION.
- D. Within ten (10) calendar days after receipt of the complete Project Gantt Chart, the CO or his representative will do one or both of the following:
 - 1. Notify the Contractor concerning CO's actions, opinions, and objections.
 - 2. Schedule a meeting with the Contractor at or near the job site for joint review, correction, or adjustment of the proposed plan. Within ten (10) calendar days after the joint review, the Contractor shall revise and shall submit two (2) copies of the revised Gantt Chart and a revised CD as specified to the CO. The revised submission will be reviewed by the CO and, if found to be as previously agreed upon, will be approved.

1.5 WORK ACTIVITY/EVENT AND COST DATA INFORMATION

- A. The Contractor shall not be required to "cost load" the computerized Microsoft Project Gantt Chart. As part of this submission, the Contractor shall provide a separate Schedule of Costs on AIA Document G703. This Schedule of Costs shall reflect and contain all the same activities/events identified on the Gantt Chart.
- B. The Contractor and the CO shall use this Schedule of Costs for monthly payment purposes as referenced in the GENERAL CONDITIONS of the Project Contract.
- C. The Contractor and CO shall agree on percentages for monthly Work accomplished. The cumulative total amount of all cost loaded activities/events (including alternates) shall equal the total Contract price.
- D. Prorate Overhead, Profit, and General Conditions on all Work activities/events for the entire Project. Negative Work activity/event cost data will not be acceptable, except on VA issued Contract changes.

1.6 GANTT CHART REQUIREMENTS

- A. Show on the Gantt Chart the sequence and interdependence of Work activities/events required for complete performance of all items of Work. In preparing the Gantt Chart, the Contractor shall:
1. Show the following on each Work activity/event:
 - a. Concise description of the Work represented by the activity/event.
 - b. Duration (in work days).
 2. Show activities/events as:
 - a. Contractor's time required for submittal of shop Drawings, templates, fabrication, delivery and similar pre construction Work.
 - b. COR's and A/E's review and approval of shop Drawings, equipment schedules, samples, template, or similar items. The duration for VA approval of any required submittal, shop drawing, or other submittals shall not be less than ten (10) workdays.
 - c. Interruption of VA Cemetery utilities, delivery of Government furnished equipment, Project phasing, and any other specification requirements.
 - d. Test, balance and adjust various systems and pieces of equipment.
 3. Break up the Work into activities/events of durations no longer than thirty (30) work days each, except non-construction activities/events (i.e., procurement of materials, delivery of equipment, concrete and asphalt curing) and any other activities/events for which the CO may approve the showing of a longer duration. The construction time as determined by the Gantt Chart schedule from start to finish for any sub-phase, phase, or the entire Project shall not exceed the total Contract duration. Describe Work activities/events clearly, so the Work is readily identifiable for assessment of completion. Activities/events labeled "Start," "Continue," or "Completion," are not specific and will not be allowed. Lead and lag time activities will not be acceptable.
 4. Exterior Label Information: Provide the following information on an external label attached to each diskette(s):
 - a. VA Project number and Project location.
 - b. Name and telephone number of a point of contact, preferably the person who created the CD.
 - c. The CD number and total number of CDs in the set.
 - d. The Project data status date.

1.7 PAYMENT TO THE CONTRACTOR

- A. Monthly, the Contractor shall submit the Gantt Chart updated for remaining activity durations and a Schedule of Costs updated for costs. AIA application and certification for payment Documents G702 and G703 shall be used. The payment request shall reflect and be in accordance with the provisions of the following Article, PAYMENT AND PROGRESS REPORTING, as the basis upon which progress payments will be made pursuant to Article, PAYMENT UNDER FIXED PRICE CONSTRUCTION CONTRACTS of Section GENERAL CONDITIONS. The Contractor is entitled to a monthly progress payment upon approval of estimates as determined from the currently approved updated Schedule of Costs unless, in special situations, the CO permits an exception to

this requirement. Monthly payment requests shall include: two (2) copies of the updated Microsoft Project Gantt Chart, and a listing of all Project schedule changes and associated data, made at the update. These must be submitted with and substantively support the Contractor's monthly application and certificate for payment request documents.

- B. When the Contractor fails or refuses to furnish to the CO the information and the associated updated Gantt Chart data, which, in the sole judgment of the CO, are necessary for validating the monthly progress payment, the Contractor shall not be deemed to have provided supporting schedule data upon which progress payment may be reasonably determined.

1.8 PAYMENT AND PROGRESS REPORTING

- A. Monthly job site progress meetings shall be held on dates mutually agreed to by the CO (or COR) and the Contractor. Presence of subcontractors during the progress meeting is optional unless required by the CO (or COR). Job progress will be reviewed to verify:
 - 1. Actual start and/or finish dates for updated/completed activities/events.
 - 2. Remaining duration, required to complete each activity/event started, or scheduled to start, but not completed.
 - 3. Time and cost data for change orders, and supplemental agreements that are to be incorporated into the Gantt Chart.
 - 4. Percentage for completed and partially completed activities/events.
 - 5. Logic and duration revisions required by this section of the Specifications.
 - 6. Activity/event duration and percent complete shall be updated independently.
 - 7. This is in addition to any other Project meetings required by the Contract.
- B. The Contractor shall submit a narrative report as a part of his monthly review and update, in a form agreed upon by the CO. The narrative report shall include a description of problem areas; current and anticipated delaying factors and their estimated impact on performance of other activities/events and completion dates; and an explanation of corrective action taken or proposed. This report is in addition to the daily reports pursuant to the provisions of Article, DAILY REPORT OF WORKERS AND MATERIALS in the GENERAL CONDITIONS.
- C. As part of the monthly jobsite progress meeting, the General Contractor, specifically requested subcontractors, and the COR shall meet to discuss the monthly updated schedule. The main emphasis shall be to address Work activities to avoid slippage of Project schedule and to identify any necessary actions required to maintain Project schedule during the reporting period.

1.9 RESPONSIBILITY FOR COMPLETION

- A. Whenever it becomes apparent from the monthly progress review meeting or the monthly computer produced Gantt Chart schedule that phasing or Contract completion dates will not be met, the Contractor shall execute some or all of the following remedial actions:
 - 1. Increase construction manpower in such quantities and crafts as necessary to eliminate the backlog of Work.

2. Increase the number of working hours per shift, shifts per working day, working days per week, the amount of construction equipment, or any combination of the foregoing to eliminate the backlog of Work.
 3. Reschedule the Work in conformance with the Specification requirements.
- B. Prior to proceeding with any of the above actions, the Contractor shall notify and obtain approval from the CO for the proposed schedule changes. If such actions are approved, the revisions shall be incorporated by the Contractor into the Gantt Chart before the next update, at no additional cost to the Government. The actions implemented shall also be implemented at no additional cost to the Government.

1.10 CHANGES TO GANTT CHART SCHEDULE

- A. Within ten (10) calendar days after VA acceptance and approval of any updated computer-produced schedule, the Contractor shall submit a revised Gantt Chart, the associated CDs, and a list of any activity/event changes including predecessors and successors for any of the following reasons:
1. Delay in completion of any activity/event or group of activities/events, which indicate an extension of the project completion by twenty (20) working days or 10 percent of the remaining Project duration, whichever is less. Such delays which may be involved with Contract changes, strikes, unusual weather, and other delays will not relieve the Contractor from the requirements specified unless the conditions are shown on the Gantt Chart as the direct cause for delaying the Project beyond the acceptable limits.
 2. Delays in submittals or deliveries or Work stoppage are encountered which make rescheduling of the Work necessary.
 3. The schedule does not represent the actual prosecution and progress of the Project.
 4. When there is, or has been, a substantial revision to the activity/event costs of the network diagram regardless of the cause for these revisions.
- B. Revisions made under this paragraph, which affect the previously approved computer-produced schedules for Government-furnished equipment, Contract phase(s) and sub phase(s), utilities furnished by the Government to the Contractor, or any other previously Contracted item, must be furnished in writing to the CO for approval.
- C. CO's approval for the revised Gantt Chart and all relevant data is contingent upon compliance with all other paragraphs of this section and any other previous agreements by the CO or the COR.
- D. The cost of revisions to the Gantt Chart resulting from Contract changes will be included in the cost of the change.
- E. Any requested Contract changes shall include applicable revisions to the Gantt Chart submitted as part of the Contract change request. The Gantt Chart revision shall show revised start and finish dates, baseline start and finish dates

previously shown on the original Gantt Chart, and change from the baseline schedule dates.

1. The cost of revisions to the Gantt Chart not resulting from Contract changes is the responsibility of the Contractor.

1.11 ADJUSTMENT OF CONTRACT COMPLETION

- A. The Contract completion time will be adjusted only for causes specified in this Contract. Request for an extension of the Contract completion date by the Contractor shall be supported with a justification, Gantt Chart data, and supporting evidence as the CO may deem necessary for determination as to whether or not the Contractor is entitled to an extension of time under the provisions of the Contract. Submission of proof based on revised activity/event logic, durations (in work days) and costs is obligatory to any approvals.
- B. The Contracting Officer's determination as to the total number of days of Contract extension will be based upon the current computer-produced Gantt Chart schedule for the time period when the change took place and all other relevant information. The CO will, within thirty (30) calendar days after receipt of such justification and supporting evidence, advise the Contractor in writing of his decision on the matter.
- C. The Contractor shall submit each request for a change in the Contract completion date to the CO in accordance with the provisions specified under Article CHANGES in the Section GENERAL CONDITIONS. The Contractor shall include, as a part of each change order proposal, a sketch showing all revisions, duration (in work days) changes, and cost changes for Work in question and its relationship to other activities on the approved network diagram.
- D. All delays due to non-Work activities/events such as RFI's, weather, strikes, and similar non-Work activities/events shall be analyzed on a month by month basis.

END OF SECTION