

**Part 1 General**

**1.1 RELATED REQUIREMENTS**

- .1 Section 01 33 00 – Submittals
- .2 Section 01 14 23- Sequence of works

**1.2 DEFINITIONS**

- .1 *Activity*: element of Work performed during course of Project. Activity normally has expected duration, and expected cost and expected resource requirements. Activities can be subdivided into tasks.
- .2 *Bar Chart (GANTT Chart)*: graphic display of schedule-related information. In typical bar chart, activities or other Project elements are listed down left side of chart, dates are shown across top, and activity durations are shown as date-placed horizontal bars. Generally Bar Chart should be derived from commercially available computerized project management system. (PRIMAVERA or MS Project).
- .3 *Baseline*: original approved plan (for project, work package, or activity), plus or minus approved scope changes.
- .4 *Construction Work Week*: Monday to Friday, inclusive, will provide five day work week and define schedule calendar working days as part of Bar (GANTT) Chart submission.
- .5 *Duration*: number of work periods (not including holidays or other nonworking periods) required to complete activity or other project element. Usually expressed as workdays or workweeks.
- .6 *Master Plan*: summary-level schedule that identifies major activities and key milestones.
- .7 *Milestone*: significant event in project, usually completion of major deliverable.
- .8 *Project Schedule*: planned dates for performing activities and the planned dates for meeting milestones. Dynamic, detailed record of tasks or activities that must be accomplished to satisfy Project objectives. Monitoring and control process involves using Project Schedule in executing and controlling activities and is used as basis for decision making throughout project life cycle.
- .9 *Project Planning, Monitoring and Control System*: overall system operated by Departmental Representative to enable monitoring of project work in relation to established milestones.

**1.3 REQUIREMENTS**

- .1 Ensure Master Plan and Detail Schedules are practical and remain within specified Contract duration.
- .2 Plan to complete Work in accordance with prescribed milestones and time frame.
- .3 Limit activity durations to maximum of approximately 10 working days, to allow for progress reporting.

- .4 Ensure that it is understood that Award of Contract or time of beginning, rate of progress, Interim Certificate and Final Certificate as defined times of completion are of essence of this contract.

#### **1.4 ACTION AND INFORMATIONAL SUBMITTALS**

- .1 Provide submittals in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Submit to Departmental Representative within ten (10) working days of Award of Contract Bar (GANTT) Chart as Master Plan for planning, monitoring and reporting of project progress.
- .3 Submit Project Schedule to Departmental Representative within 5 working days of receipt of acceptance of Master Plan.
- .4 Submit modified Project Schedule to Departmental Representative within twenty (20) working days following receipt of acceptance of Master Plan and include a column for the costs. This column must contain a cost associated with each task of the project schedule. The final cost must be equal to the total value of the awarded contract. On a monthly base, another column, called earned income will be calculated. The column of earned income will be the percentage of completed work for each task multiplied by the amount indicated at the cost column. This will not be necessarily be equal to the bill for progress of the works submitted for the same month. This method is only used to evaluate the completion of works from a perspective of regular planified costs. If change orders are emitted, these will be added to the progress schedule as a task (or multiple tasks) with an associated cost for each task of the change order. The Project Schedule must also include a column called Resources. To each task must be assigned a resource, such as workers trade associated to this task, general requirements, PWGSC, security contractor, the architectural consultant, the mechanical consultant, the electrical consultant, etc....

#### **1.5 MASTER PLAN**

- .1 Structure schedule to allow orderly planning, organizing and execution of Work as Bar Chart (GANTT).
- .2 Departmental Representative will review and return revised schedules within ten 10 working days.
- .3 Revise impractical schedule and resubmit within 5 working days.
- .4 Accepted revised schedule will become Master Plan and be used as baseline for updates.

#### **1.6 PROJECT SCHEDULE**

- .1 The milestone of the project stated in the project execution schedule will include the phases prescribed in section 01 14 23, Sequence of works and all related tasks (contract award, shop drawings and samples, permits, testings and commissioning, etc...)
- .2 Develop detailed Project Schedule derived from Master Plan and milestones.

- .3 Ensure detailed Project Schedule includes as minimum milestone and activity types as follows:
  - .1 Award.
  - .2 **All tasks described in the sequence of works ( section 01 14 23)**
  - .3 Shop Drawings, Samples, patrimonial protection plan.
  - .4 Sampling of works ( including period of revision and acceptance of the Departmental representative.
  - .5 Permits.
  - .6 Mobilization and patrimonial protection.
  - .7 Decontamination works
  - .8 Selective demolition works.
  - .9 Excavation and waterproofing.
  - .10 Backfill.
  - .11 Building footings.
  - .12 Canvas covered enclosure.
  - .13 Mechanical and electrical services for the canvas covered enclosure.
  - .14 Superstructure
  - .15 Steel Construction.
  - .16 Interior and exterior masonry works (by groups of works: preparation works, repointing works, dismantling and reassembly , stone and brick repair works, masonry cleaning works, etc...)
  - .17 Historical doors and windows and new wood windows works.
  - .18 Interior Patrimonial architectural woodworks ( door frames, wall paneling, patrimonial staircase, etc...)
  - .19 Historical plaster worksRoofing.
  - .20 Roofing
  - .21 Ornamental metal works (main crest ridge, secondary ridges, pinnacles and beginnings of turrets )
  - .22 New Interior Architectural components.
  - .23 Interior finishes.
  - .24 Cabinetry
  - .25 Plumbing.
  - .26 Lighting.
  - .27 Electrical.
  - .28 Piping.
  - .29 Controls.
  - .30 Heating, Ventilating, and Air Conditioning.
  - .31 Fire Systems.
  - .32 Enclosure dismantling

- .33 Final civil engineering works
- .34 Final landscaping works
- .35 Testing and Commissioning
- .36 Supplied equipment long delivery items.

## **1.7 PROJECT SCHEDULE REPORTING**

- .1 Update Project Schedule on weekly basis and submit it to Departmental Representative so that it reflects activity changes and completions, as well as activities in progress.
- .2 Include as part of Project Schedule, narrative report identifying Work status to date, comparing current progress to baseline, presenting current forecasts, defining problem areas, anticipated delays and impact with possible mitigation.
- .3 Submit project schedule with projections for 3 weeks to come at each project meeting for revision and acceptance by all concerned parties. The projections schedule must be a detailed bar Gantt chart diagram, describing activities which must be performed hour by hour during the work period. Include an insight of all works which will have repercussions on occupants (for example noisy works' etc.)

## **1.8 PROJECT MEETINGS**

- .1 Discuss Project Schedule at regular site meetings, identify activities that are behind schedule and provide measures to regain slippage. Activities considered behind schedule are those with projected start or completion dates later than current approved dates shown on baseline schedule.
- .2 Weather related delays with their remedial measures will be discussed and negotiated.
- .3 Contractor must include a time range buffer of 6 weeks in schedule for conditions out of his control (Weather, etc...)

## **Part 2 Products**

### **2.1 NOT USED**

- .1 Not used.

## **Part 3 Execution**

### **3.1 NOT USED**

- .1 Not used.

**END OF SECTION**