# **Schedule 6 – Programming Requirements**

# 1. Interpretation of this Schedule

# 1.1 Primavera

The following capitalised terms used in this Schedule 6 have the meanings given to them in the proprietary computer software known as "Primavera P6 or higher Primavera Project Management software", produced by Primavera Systems, Inc:

•	Activity;
•	Activity ID;
•	Actual Dates;
•	Calendar;
•	Constraint;
•	Critical;
•	Critical Path;
•	Critical Path Network;
•	Early;
•	Float;
•	Free;
•	Lag;
•	Late;
•	Lead;
•	Logic;
•	Logic Link;
•	Milestone;
•	Network;
•	Percent Complete;
•	Planning Unit;
•	Predecessor;
•	Remaining Duration;
•	Successor; and
•	Total Float.

# 2. Works Program

#### 2.1 Form of the Works Program

The Works Program must be prepared in accordance with the detailed requirements set out in this Schedule 6 and otherwise in accordance with any other requirements reasonably requested by the State or the Independent Certifier.

## 2.2 Content of the Works Program

The Works Program must:

- (a) contain the information specified in and otherwise satisfy the requirements of Sections 2.3 to 2.5;
- (b) identify all Project activities from the date of the Agreement to 12 Months after the Date of Stage 2 Commercial Acceptance including:
  - (i) all Project milestones;
  - (ii) all activities that form part of the Design Development Process;
  - (iii) all construction activities;
  - (iv) the Transition Period;
  - (v) activities in respect of FF&E including selection, procurement, manufacture, installation, commissioning and testing;
  - (vi) commissioning and testing generally;
  - (vii) Project Co mobilisation in preparation for the provision of the Services upon the Operational Commencement Date; and
  - (viii) activities in respect of the financing of the Project and all other material commercial arrangements, such as the provision of all parent company guarantees, timing for various tranches of financing and dates for Insurance Policy renewals; and
- (c) provide any other information reasonably requested by the State and the Independent Certifier.

#### 2.3 Construction activities

The Works Program must identify and be a single point of reference for all construction activities that comprise the Works including:

- (a) (construction activities): all construction activities (which must be grouped into activities and show a commencement and completion milestone for each of those activities);
- (b) (Authorisation): any Authorisations which must be obtained prior to Stage 2 Commercial Acceptance or during the construction of the Works;
- (c) (Construction Sites): all Construction Sites establishment activities;
- (d) (Remediation works): all Remediation works that are the responsibility of Project Co;

- (e) (adjacent projects and Adjacent Site): works that interface with adjacent projects and the Adjacent Sites; and
- (f) (other information): all other information reasonably requested by the State.

## 2.4 Design Development Sub-Program

The Works Program must contain a separately identifiable Design Development Sub-Program that is consistent with the current Design Development Plan and will be a single point of reference for all activities associated with the Design Development Process including:

- (a) all activities that form part of the Design Development Process;
- (b) the timing for:
  - (i) conducting the Design Development Process;
  - (ii) all meetings with the Facility User Group;
  - (iii) all Design Development Presentations; and
  - (iv) the review of Design Packages by the State; and
- (c) all other information concerning the Design Development Process reasonably requested by the State.

# 2.5 Completion activities

The Works Program must relate to the Completion Plans and identify:

- (a) commissioning and testing generally;
- (b) the timing for the conduct of the Completion Tests;
- (c) the timing for the conduct of the Outstanding Items;
- (d) the timing for the conduct of all other activities which must be carried out as a precondition to Completion; and
- (e) all other information concerning Completion reasonably requested by the State.

# 3. General requirements for the preparation of the Works Program

#### 3.1 Software system

- (a) Project Co must prepare the Works Program by using a recognised specialist proprietary programming computer software system which has been approved in advance by the State.
- (b) Any references to the provision of an electronic copy of a document produced by computer software means an electronic copy of that document in the format of the software in which the document was originally created that has been configured to allow the person to whom the electronic copy is provided to access and amend the information contained therein in the same manner as could the original creator(s) of that document.

#### 3.2 Bid Project Management Plan

The Works Program must reflect the requirements of the bid Project Management Plan set out in Attachment 3 to the Agreement (Bid D&C Documents) and all subsequent revisions of the Project Management Plan.

# 3.3 Primavera and Microsoft software systems

Without limiting the general nature of Section 3.1, the State approves the use of the proprietary computer software known as:

- (a) "Primavera P6" or higher Project Management software, produced by Primavera Systems, Inc; and
- (b) "Microsoft Project" (2007), produced by Microsoft Corporation.

#### 3.4 Form of Works Programs generally

The Works Program must:

- (a) (actual progress): at all times reflects the actual progress of the Works being undertaken:
- (b) (clear and sufficient detail): be clear and sufficiently detailed for the State to easily identify:
  - (i) the Critical Path for the execution of the Works;
  - (ii) the responsible party for each Activity and Milestone in connection with the delivery of the Works or pertaining to the Services;
  - (iii) all Activities that involve the State, the State Associates or the Independent Certifier, including the date by which Project Co requests any review by the State (which must be consistent with the terms of the Agreement);
  - (iv) all Activities or Milestones that are dependent on external third party events including the obtaining of approvals (**Precursor Events**); and
  - (v) the nature, time for completion of, and the identity of any third party responsible for completing each Precursor Event;
- (c) (Milestone): contain a single overall start Milestone and a single overall finish Milestone;
- (d) (Critical Path Network): be in the form of a Critical Path Network that enables the Critical Path to be calculated automatically by the computer software;
- (e) (days as Planning Unit): use days as its Planning Unit (or such other period of time approved in writing by the State);
- (f) (Calenders): contain Calendars which enable planned working and non-working periods in the future to be identified;
- (g) (Activities Logically Linked): demonstrate that all the Activities in the programs, apart from the start and finish Milestones, are Logically Linked;

- (h) (labour resource histogram): provide a labour resource histogram that is consistent with the work depicted in the program. The labour histogram should be able to categorise the various trade resources and Project Co's own resources;
- (i) (develop planned and actual resource s-curves): develop planned versus actual resource s-curves by phase;
- (j) (Activities): clearly identify:
  - (i) Activities, their order, duration and interrelationship;
  - (ii) the durations and Total Float of all Activities;
  - (iii) if known, the impact, and the estimated potential impact of any delaying events or circumstances:
  - (iv) all phases and sub-phases of each D&C Phase;
  - (v) the contingency allowed within the Works Program for potential delays;and
  - (vi) any other matters which may have a material effect on the time required to complete the Works;
- (k) (staging and/or construction methodology): show the proposed staging and/or construction methodology of the Works;
- (I) (other information): contain all other information reasonably requested by the State or Independent Certifier; and
- (m) (prior State approval): not contain, without prior approval by the State:
  - (i) any Activities of durations of longer than 30 Business Days;
  - (ii) any Constraints that fix the Early or Late start or finish dates of Activities or override the dates that would otherwise be calculated in accordance with Critical Path Network Logic (except for the overall start Milestone);
  - (iii) any Lags that extend beyond more than 50% of the duration of the Predecessor Activity of the Lag;
  - (iv) any Free Float Constraints or Total Float Constraints;
  - (v) any other programming Activities or methodologies which have the effect of creating false Criticality or constraining the program from reacting dynamically to changes;
  - (vi) any Logic Links containing negative Lags (except where a negative Lag is used to indicate the time for an action by the State);
  - (vii) more than 1200 Activities;
  - (viii) Activities without finish Successors (except for the overall finish Milestone); or
  - (ix) Activities without start Predecessors (except for the overall start Milestone).

# 4. Updating the Works Program

#### 4.1 Timing for submission of updated Works Program

Project Co must update and submit to the State and the Independent Certifier the Works Program:

- (a) within 5 Business Days of Project Co being:
  - (i) granted an extension to any Date for Completion in accordance with Clause 16 of the Agreement or instructed to accelerate the Works in accordance with Clause 16.11 of the Agreement; or
  - (ii) directed to carry out a Modification in accordance with Clause 34 of the Agreement;
- (b) within 2 Business Days of Project Co deciding to make any material changes to the information contained in a Works Program; or
- (c) no later than 5 Business Days prior to each meeting of the Management Team to reflect the changes to the progress of the Works being undertaken or any other changes to the activities, times, durations or other information contained in the Works Program to accurately reflect actual progress of the Works,

provided that such updates must comply with this Schedule 6 and the other requirements of the Agreement and must not adjust any Date for Completion (unless an extension of time has been granted in accordance with the Agreement).

# 4.2 Submission of Works Program on request

If requested by the State at any time, Project Co must within 5 Business Days submit to the State and the Independent Certifier the updated Works Program showing the actual status and progress of the Works as against the original baseline of the Works Program.

#### 4.3 Content and format of updated Works Program

- (a) Project Co must submit to the State and the Independent Certifier the updated Works Program in the following forms:
  - (i) 2 paper copies (which must be submitted on an A1 size sheet reduced to A3 and appropriately time scaled across the sheet so as to detail the sequence, duration and interaction of design, procurement, construction and commissioning);
  - (ii) 1 electronic versions in .pdf format; and
  - (iii) 3 electronic versions in original "primavera xer file" format.
- (b) The updated Works Program must:
  - (i) clearly identify the Percent Complete and the Remaining Duration of each Activity;
  - (ii) clearly identify the Activities that had started and which Activities had finished during the reporting period and the dates on which those Activities started and finished;
  - (iii) be updated to the end of the previous reporting period using the software to record Actual Dates and the Percent Complete of Activities;

- (iv) identify if Project Co will not achieve Completion until after any Date for Completion; and
- (v) incorporate and display the version of the Works Program produced at the end of the previous reporting period as a baseline reflecting the actual status and progress of the Works.

#### 4.4 Submission of report with any updated Works Program

- (a) With each update of any Works Program, Project Co must submit to the State and the Independent Certifier a written report reconciling the updated Works Program with the version of the Works Program produced for the previous reporting period.
- (b) The report referred to in paragraph (a) must as a minimum:
  - (i) identify and explain for Activities that are on the Critical Path, the reason for any changes to:
    - A. the duration of Activities since the previous reporting period;
    - B. the presence or absence of Logic Links or their Leads or Lags;
    - C. the presence or absence of program Activities or their Activity IDs; and
    - D. the timing of Activities;
  - (ii) summarise the material changes to any Activities that are not on the Critical Path:
  - (iii) identify the estimated timing for the achievement of key Project stages including the completion of each of the design and construction stages and any Date for Completion; and
  - (iv) contain any other information reasonably requested by the State or the Independent Certifier.