EXHIBIT A.4
SCHEDULE REQUIREMENTS

1.0 GENERAL

1.1 Without limiting the information summarized herein, the purpose of this attachment is to summarize the minimum contents and requirements for the Contractor-prepared Project Schedule.

2.0 DEFINITIONS

2.1 Unless defined in this exhibit, terms that begin with an upper case shall have the meaning defined in Exhibit A.1 (*Scope of Work*).

2.2 For purposes of only this attachment, the following words shall have the respective meanings set forth below.

(1) "**Activity**" means a discrete part of a contract that can be identified for planning, scheduling, monitoring, and controlling the construction Work. Activities included in a construction schedule consume time and resources but shall not include planned work stoppages. Activities shall not normally reflect the Work of more than one trade.

(2) "**Baseline**" schedule means the initial Project Schedule, as approved by Owner.

(3) "**Critical path**" means the longest sequence of activities in a project plan which must be completed on time for that project to complete by the stated due date.

(4) "**Critical path method**" or "**CPM**" means a method of planning and scheduling a construction contract where activities are arranged based on activity relationships. Network calculations determine when activities can be performed and the critical path of Agreement.

(5) "**Float**" means the measure of leeway in starting and completing an activity. Float time (including total float) is not for the exclusive use or benefit of either Owner or Contractor, but is a jointly-owned, expiring Project resource available to both parties as needed to meet schedule milestones and Agreement completion date.

(6) "**Predecessor activity**" means an activity that precedes another activity in the network.

(7) "**Resource loading**" means the allocation of manpower, equipment, or material necessary for the completion of an activity as scheduled.

(8) "**Successor activity**" means an activity that follows another activity in the network.

(9) "**Total float**" is the measure of leeway in starting or completing an activity without adversely affecting an intermediate deadline or the planned Agreement completion date.

(10) "**Milestone**" means the Guaranteed Milestone as defined in the Agreement.

3.0 GENERAL REQUIREMENTS

3.1 Contractor's accepted Baseline schedule will be set forth in Exhibit G.3 (*Project Schedule*).

3.2 The Project Schedule shall take into consideration any limitations on certain work activities' start

and/or stop time per any of the Applicable Permits or other requirements from any AHJ. Such limitations shall be explicitly called out and communicated to Project teams as necessary.

3.3 Contractor shall utilize Primavera Professional Project Management Software from Oracle for preparation of the Project Schedule. At a minimum, this shall be a version compatible with version 19.12.

3.4 Activities in the Project Schedule shall be defined so that no single construction activity is longer than 20 calendar days and no single other activity is longer than 30 calendar days, respectively, unless specifically allowed by Owner.

3.5 The Project Schedule shall include a clear and logical work breakdown structure, wherein all items are assigned a sensible activity number based upon the type of work being performed. Such work breakdown structure shall be subject to approval by Owner. Activity numbering shall be such that predecessor activity numbers are smaller numerically than successor activity numbers in the Baseline Project Schedule. Contractor shall use even-numbered activities for base Agreement Work, and odd-numbered activities for change order work. No activity number shall change after approval of the Baseline Project Schedule.

3.6 Procurement process activities shall be included for all long-lead and major items (as defined by Owner) as separate activities in the Project Schedule. Procurement cycle activities shall include, but not be limited to, submittals, approvals, purchasing, fabrication, and delivery.

3.7 The Project Schedule shall indicate important stages of construction for each major portion of the Work, including, but not limited to, the following: (a) preparation and processing of submittals; (b) mobilization and demobilization; (c) acquisition of key permits; (d) purchase, fabrication, and delivery of major equipment; (e) installation; (f) utility interruptions; (g) tests and inspections; (h) startup and initial operations; (i) work by Owner that may affect or be affected by Contractor's activities; and (j) training.

3.8 The Project Schedule shall include Milestones indicated in the Agreement. All major milestones shall be presented at the top of the Project Schedule.

3.9 The Project Schedule shall show the Work in Gantt chart format, on a sheet size of 11-inch by 17-inch, the scale and spacing shall allow room for notation and revisions, and the font shall be sized such that it is easily legible when printed.

3.10 Each revised or updated Project Schedule shall show actual progress compared to the originally-accepted Baseline schedule and any proposed changes in the schedule of remaining Work.

3.11 The Project Schedule shall clearly identify all critical path activities. Scheduled start and completion dates shall be consistent with Agreement milestone dates.

3.12 Contractor shall not use artificial activity durations, preferential logic, or other devices for sequestering Float. Owner retains the right to reject any schedule submittal in which Contractor has sequestered Float. Any activity with lag greater than two (2) days shall be identified in the activity description.

3.13 Constraint dates shall be kept to a minimum, and all constraints shall be identified with descriptive text in the activity description.

3.14 All activities shall have a predecessor activity and successor activity except for the first and last activities in the Project Schedule.

3.15 Each Project Schedule shall meet the minimum requirements for submittals set forth in Exhibit A.5 (Submittal Requirements) to this exhibit.

3.16 The Project Schedule shall include and identify allowances for delays that may be encountered for reasonably-expected weather conditions, non-working holidays, scheduled non-working days (e.g., Sundays), and other similar items.

3.17 The Project Schedule shall indicate the assumed working days, hours, and shifts per week.

4.0 REPORTING

4.1 Concurrent with each Project Schedule submittal, Contractor shall submit the following reports. Each such report shall contain, at a minimum, activity number, activity description, resource loading, original duration, remaining duration, early finish date, late start date, late finish date (or actual start date and/or actual finish date, as applicable), and total float in calendar days.

(1) General: electronic copies of the complete Project Schedule file in P6 executable (*.xer) format (including the Project-specific *.plf layout filters) and Adobe (*.pdf) format, respectively.

(2) Critical path report: list of all activities on critical path, sorted in ascending order by activity number.

(3) Activity report: list of all activities sorted by activity number and then start date, or actual start date if known. Within each activity, Contractor shall indicate estimated completion percentage in no greater than 10 percent (10%) increments.

(4) Logic report: list of preceding and succeeding activities for all activities, sorted in ascending order by activity number.

(5) Total float report: list of all activities sorted in ascending order by activity number and showing total float by activity.

(6) Three-week look ahead: list of all planned Work activities during the current week and the subsequent two-week interval, sorted in ascending order by activity number.

(7) Tabulated reports and/or schedule layouts showing the following: (a) identification of activities that have been added, deleted, or changed; (b) changes in activity durations in workdays; (c) changes in total float; (d) detailed schedule layout showing start and finish date variances; (e) critical path and near critical path (1 to 15 days float) layout with variances; (f) major milestone report with variances; and (g) activity constraints, including type.