Update of Design-Phase Schedule Template

This Engineering Bulletin modifies the minimum requirements for schedules identified in Engineering Directive Design Phase Scheduling (2015-8-E) and supersedes Engineering Bulletin Update of Design-Phase Schedule Template (EB-2016-6). These changes are being made to improve project schedule reliability and increase the utility of schedule information for program management purposes. The template provided in EB-2016-6 (Minimum Requirement Schedule v2.1.mpp) is available in ProjectWise (must have Microsoft Project installed to view) and included the following updates:

Added Tasks:
1. Task 2.3, Preliminary Right-of-Way Tasks
2. Task 2.4, Permits Needs Determination Form
3. Task 3.2, Plan-In-Hand Review

Revised Tasks:
1. Task 3.4, ROW Coordination
2. Task 3.5, Permit Acquisition Process (includes all potential permits with established interdependencies and typical durations)

In addition, a supplemental template for Task 2.2 NEPA/CEPA is available in ProjectWise. This supplement provides guidance for scheduling common tasks of archaeological surveys, SHPO coordination, Tribal consultant and 4f/106 determinations / documentation that fall under the NEPA/CEPA task.

Supplemental Template for Revised Task:
- Task 2.2, NEPA/CEPA (NEPA-CEPA Process v.1.0.mpp) (must have Microsoft Project installed to view)

NEPA/CEPA Task Notes:
- Predecessors are adjusted to reflect the most common relationship between tasks.
- Duration place markers for less common tasks (sub-tasks 5-6 and 9-19) provide an initial duration of zero. This will be adequate for the majority of projects – probably
not needing any future adjustments. When it is determined the task is not needed it can be marked as inactive with MS Project Professional.

- When the Environmental Review Form (ER) is returned, designers may be directed to contact Historical / Archeological or other staff for which additional tasks may apply. These less frequent additional tasks (if required) typically have durations as follows:

<table>
<thead>
<tr>
<th>Sub-Task ID</th>
<th>Task Name</th>
<th>ER Section</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Phase 1 Cultural Resource Field Study</td>
<td>3</td>
<td>5 mos</td>
</tr>
<tr>
<td>6</td>
<td>Phase 2 Archeo Study</td>
<td>3</td>
<td>3 mos*</td>
</tr>
<tr>
<td>9</td>
<td>Memorandum of Agreement</td>
<td>3</td>
<td>6 mos</td>
</tr>
<tr>
<td>10</td>
<td>Section 4(f) Exception</td>
<td>2/3</td>
<td>1.5 mos</td>
</tr>
<tr>
<td>11</td>
<td>Section 4(f) (de minimis Historical)</td>
<td>3</td>
<td>1.5 mos</td>
</tr>
<tr>
<td>12</td>
<td>Section 4(f) Programmatic</td>
<td>2/3</td>
<td>4 mos</td>
</tr>
<tr>
<td>13</td>
<td>Section 4(f) Individual</td>
<td>2/3</td>
<td>12 mos</td>
</tr>
<tr>
<td>14</td>
<td>Section 4(f) Parks (de minimis)</td>
<td>2</td>
<td>2 mos</td>
</tr>
<tr>
<td>15</td>
<td>Section 4(f) Wildlife (de minimis)</td>
<td>2</td>
<td>2 mos</td>
</tr>
<tr>
<td>16</td>
<td>Natural Resources</td>
<td>5</td>
<td>1 day</td>
</tr>
<tr>
<td>17</td>
<td>Air Quality: CO Analysis</td>
<td>6</td>
<td>2.6 mos</td>
</tr>
<tr>
<td>18</td>
<td>Air Quality: MSAT</td>
<td>6</td>
<td>2.6 mos</td>
</tr>
<tr>
<td>19</td>
<td>Noise Analysis</td>
<td>7</td>
<td>2.6 mos</td>
</tr>
</tbody>
</table>

*Seasonally dependent

The durations provided above are for the understanding of the designer. However, when contacted, Cultural Resources staff will provide more representative durations based on project specifics, time of year and work load. Continued coordination with Cultural Resources staff regarding further findings/determinations will allow schedules to be accurately updated with the best available information.

Any questions regarding specific archaeological and historical tasks or associated durations should be directed to OEP Cultural Resources staff.

Task durations in the template reflect typical projects criteria. Project Managers are responsible for estimating the task durations based on project specific details and should override the template values when appropriate. However, Project Managers may not reduce task durations requiring support resources without concurrence from the unit responsible for the support resources. Project Managers may reduce the durations of tasks they perform and control.

Project Managers shall update existing schedules to include the new and revised tasks, unless no further rights of way, permit acquisition or NEPA/CEPA activity is required. Discipline subject matter experts are responsible for incorporating all changes into their division’s discipline-specific MS Project templates. Each engineering division is further charged with developing guidance, supportive of this bulletin.
AEC Applications has developed a tutorial video (Video 11. Minimum Requirement Schedule Template Update.mp4) explaining how to update existing schedules and discipline templates to conform to this bulletin.

**MS Project Notes:**
- For the links to function properly, Bluebeam must be configured in accordance with the Digital Project Development Manual, Appendix A (p. 258).
- To open the template, MS Project must be installed on your desktop computer.
- To access the video, use the link referenced above or navigate to ProjectWise under Training Resources (pw:\ctdot.projectwiseonline.com\CTDOT\Documents\04.00 - Engineering Libraries\Scheduling Directive\Training Resources\)
- To insert the supplemental NEPA/CEPA task into an existing schedule, mirror the process described for the Permit Acquisition Process in the above-linked video (insertion instructions begin at approximately 4:20):
  a. Paste the new task below the existing NEPA/CEPA task.
  b. Delete the old NEPA/CEPA task.
  c. Link the new NEPA/CEPA tasks with the rest of the schedule. Typically predecessors and successors are listed below:
    i. NEPA/CEPA Process
       • Predecessor: Secure Funding / Authorization
       • Successor: Design Approval
    ii. Perform Initial ER – OEP
       • Predecessor: Secure Funding / Authorization
    iii. Complete Categorical Exclusion (CATEX)
       • Predecessors: Task 100 (Lead / Haz. Mat. Investigation); Public Information-related tasks
       • Successor: Design Approval