

Salem, Oregon
May 8, 2009

How Professional Construction Management Services Reduces Owner Risk with regards to Schedule Performance



—— Daniel R. Williams, P.E.



MWH

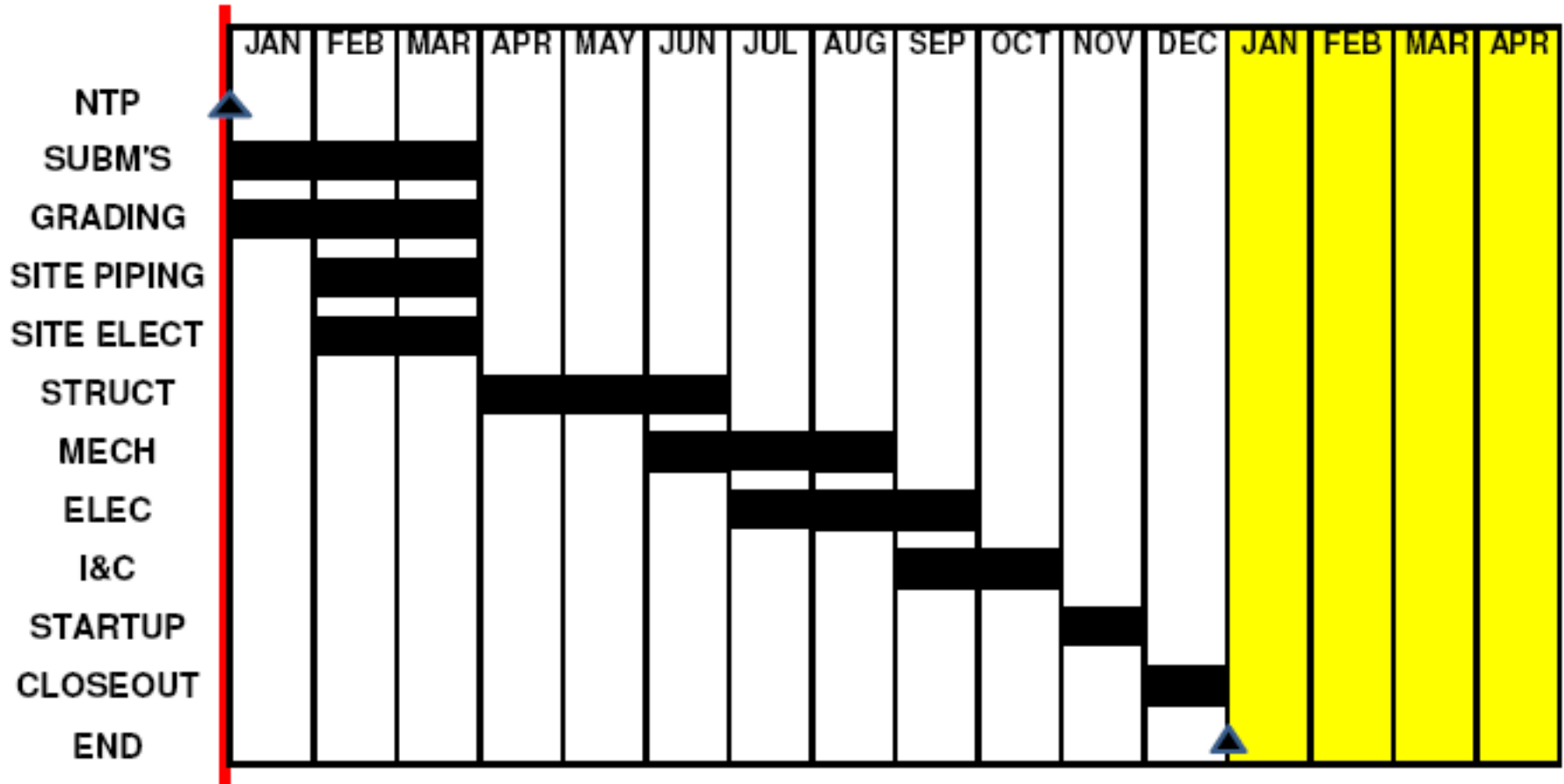
BUILDING A BETTER WORLD

Public Works Waterworks-type Projects almost never Finish on Time

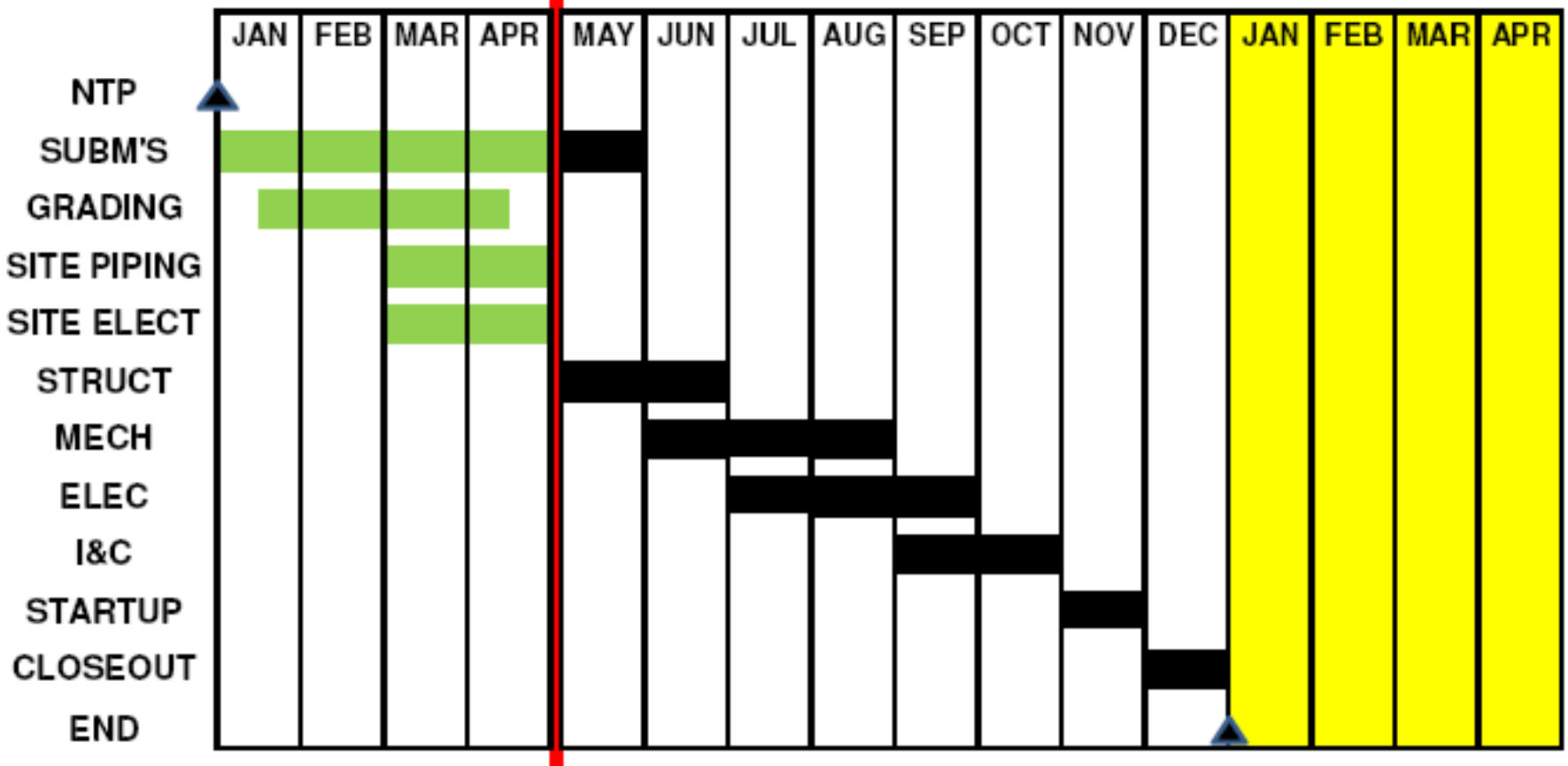
- ❑ Insufficient Schedule Oversight
- ❑ Insufficient Startup Planning
- ❑ Submittals / Critical Path
- ❑ Inherently Understood that Projects will finish Late



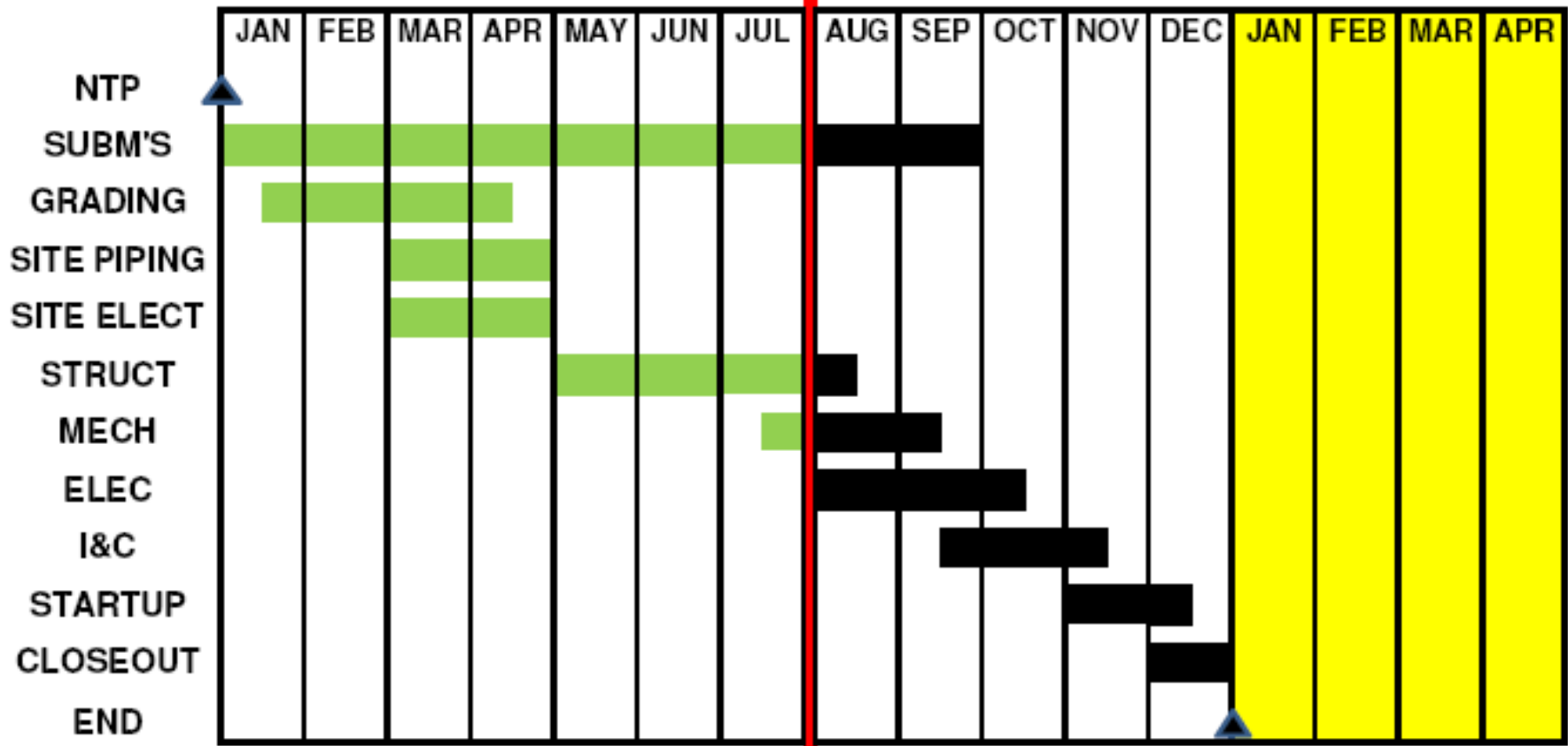
WATERWORKS PROJECT -- BASELINE SCHEDULE



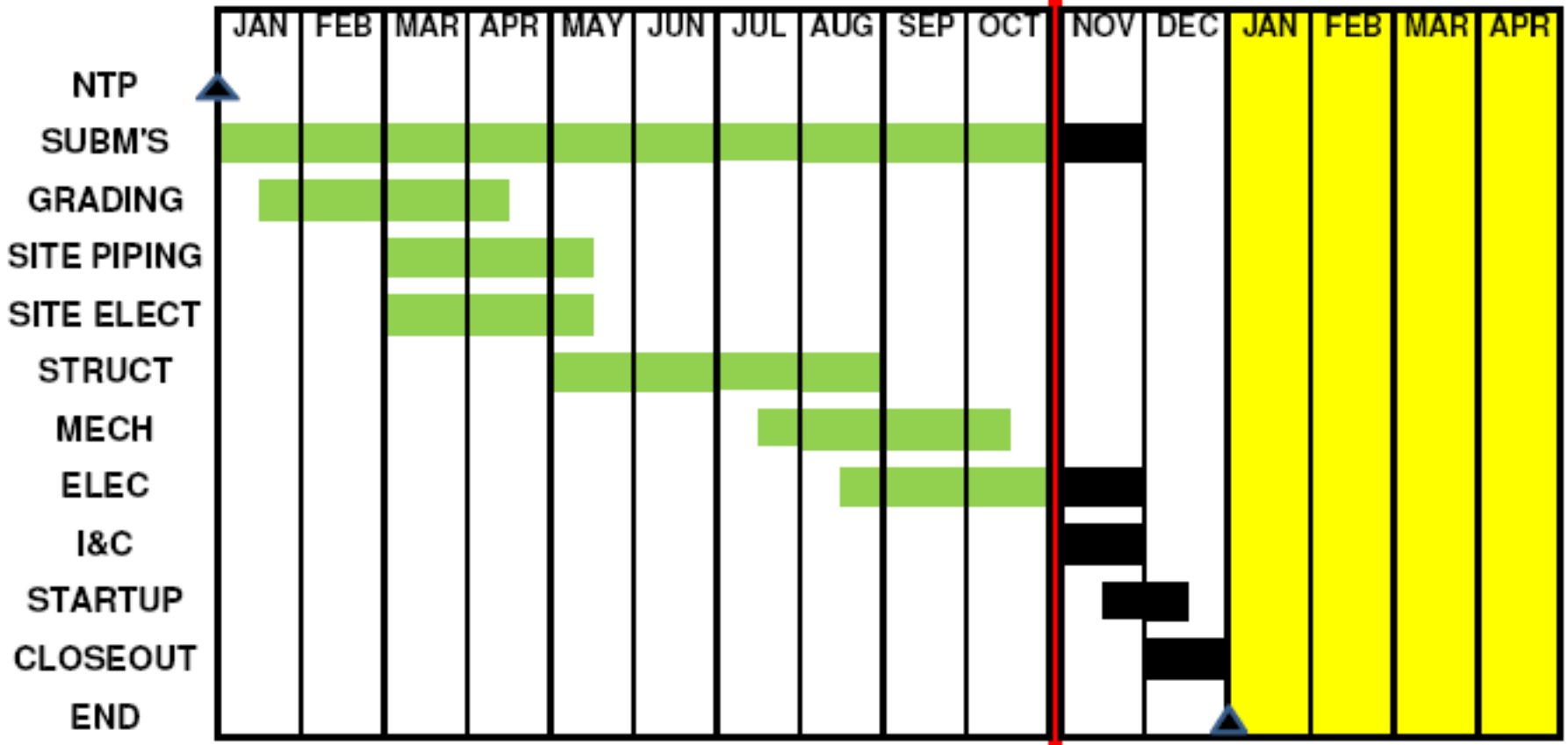
WATERWORKS PROJECT -- APRIL PROGRESS SCHEDULE



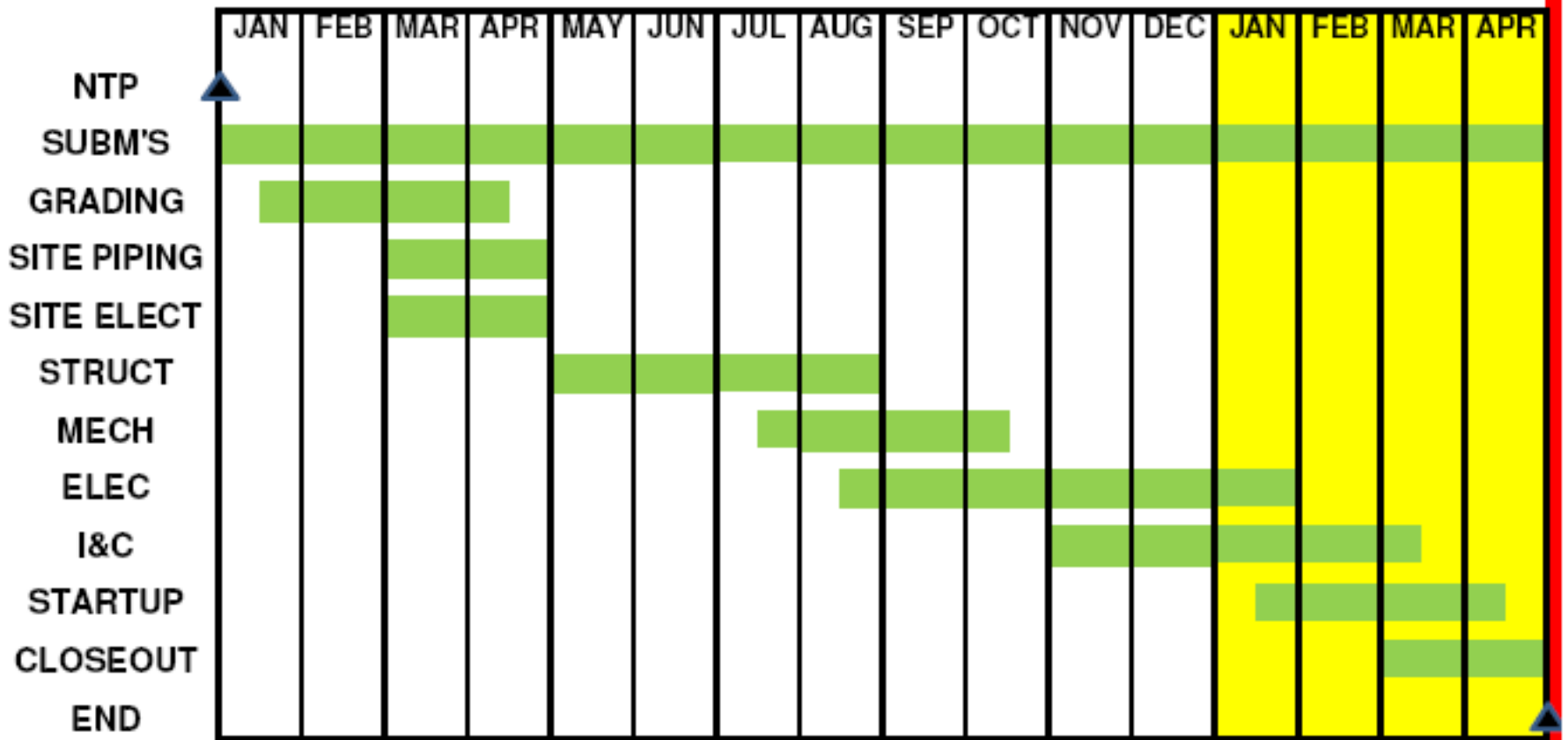
WATERWORKS PROJECT -- JULY PROGRESS SCHEDULE



WATERWORKS PROJECT -- OCTOBER PROGRESS SCHEDULE



WATERWORKS PROJECT -- AS-BUILT SCHEDULE



Strengthen the Contract Requirements

- ❑ Baseline Schedule
- ❑ Progress Schedules
- ❑ Baseline Plotted on Progress Schedules
- ❑ Submittals / Critical Path



Example Contract Language

Baseline Schedule Submittal / Monthly Schedule Update Submittals:

Failure to submit a baseline schedule or monthly schedule update to the ENGINEER by the 25th of each month, as applicable, will result in the rejection of the CONTRACTOR's application for progress payment.



Baseline Schedule Plotted on Progress Schedule:

Monthly Schedule Update shall reflect actual progress to date and all forthcoming changes to complete the work, plotted relative to the baseline schedule.

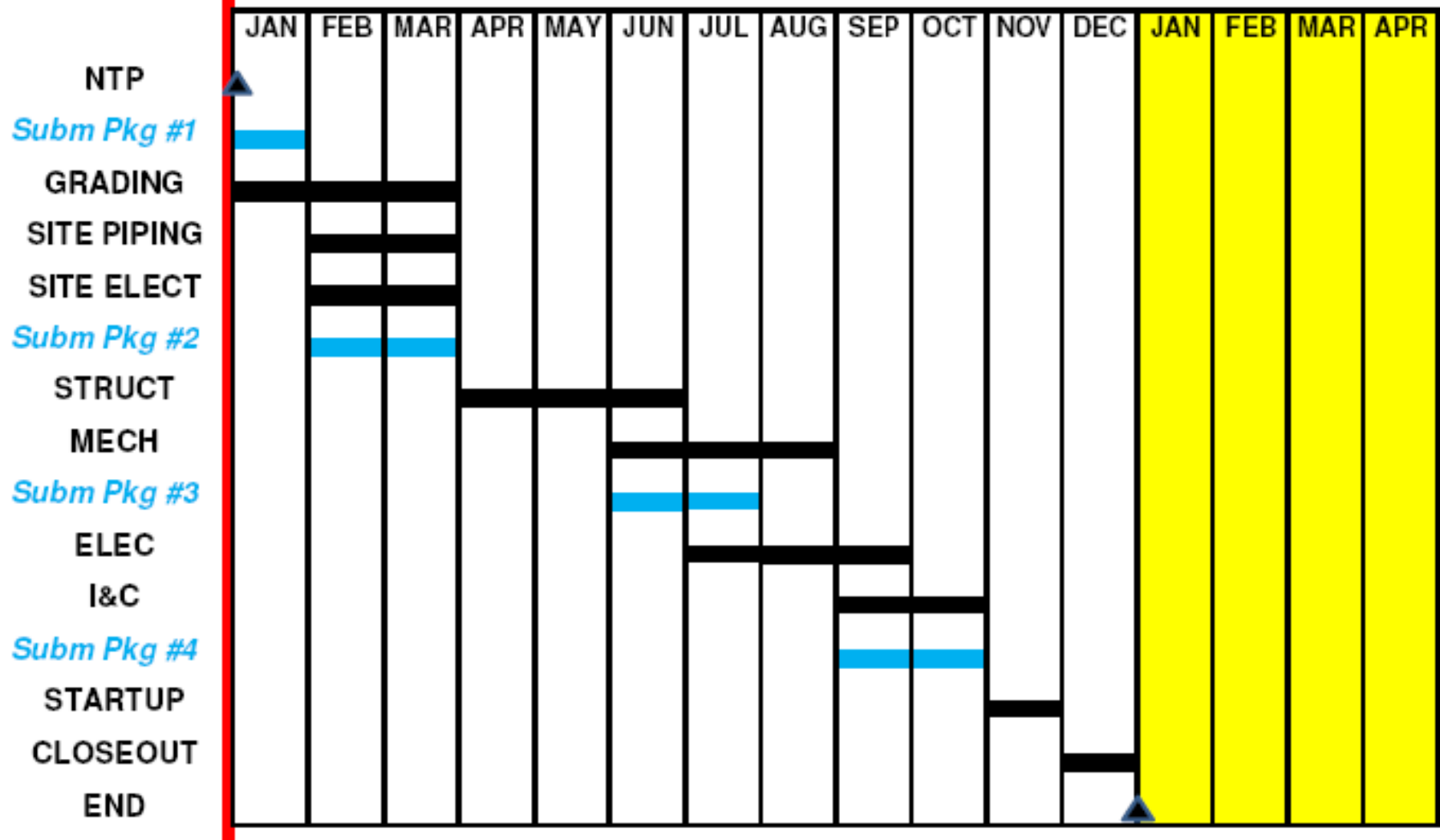


Submittals / Critical Path:

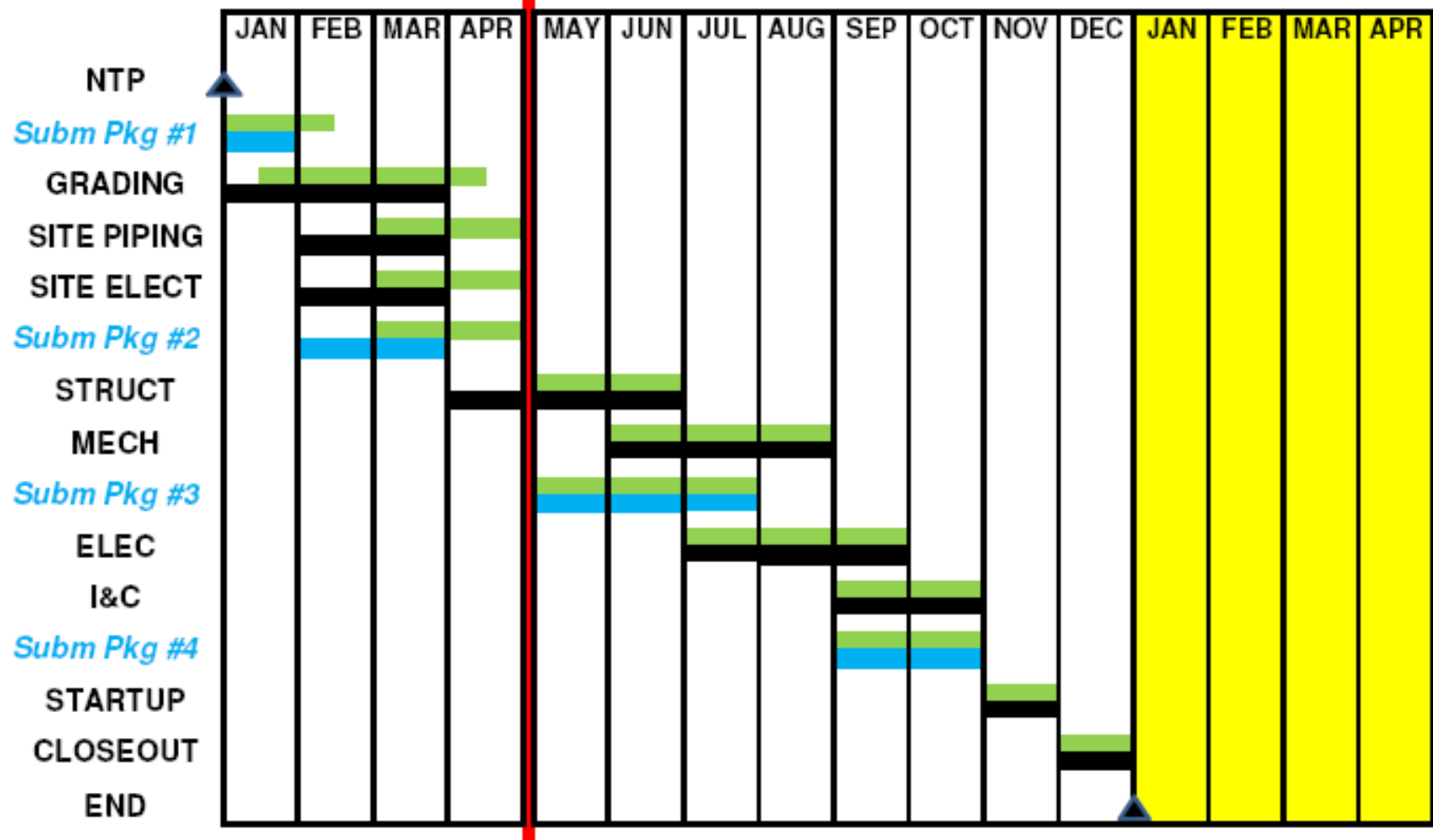
Schedules shall include the following submittals as activities to be accomplished and their logical relationships with other activities:

- TESC Plan – 02268*
- Earthwork – 02200*
- Steel Pipe – 02571*
- Etc., Etc.,.....*

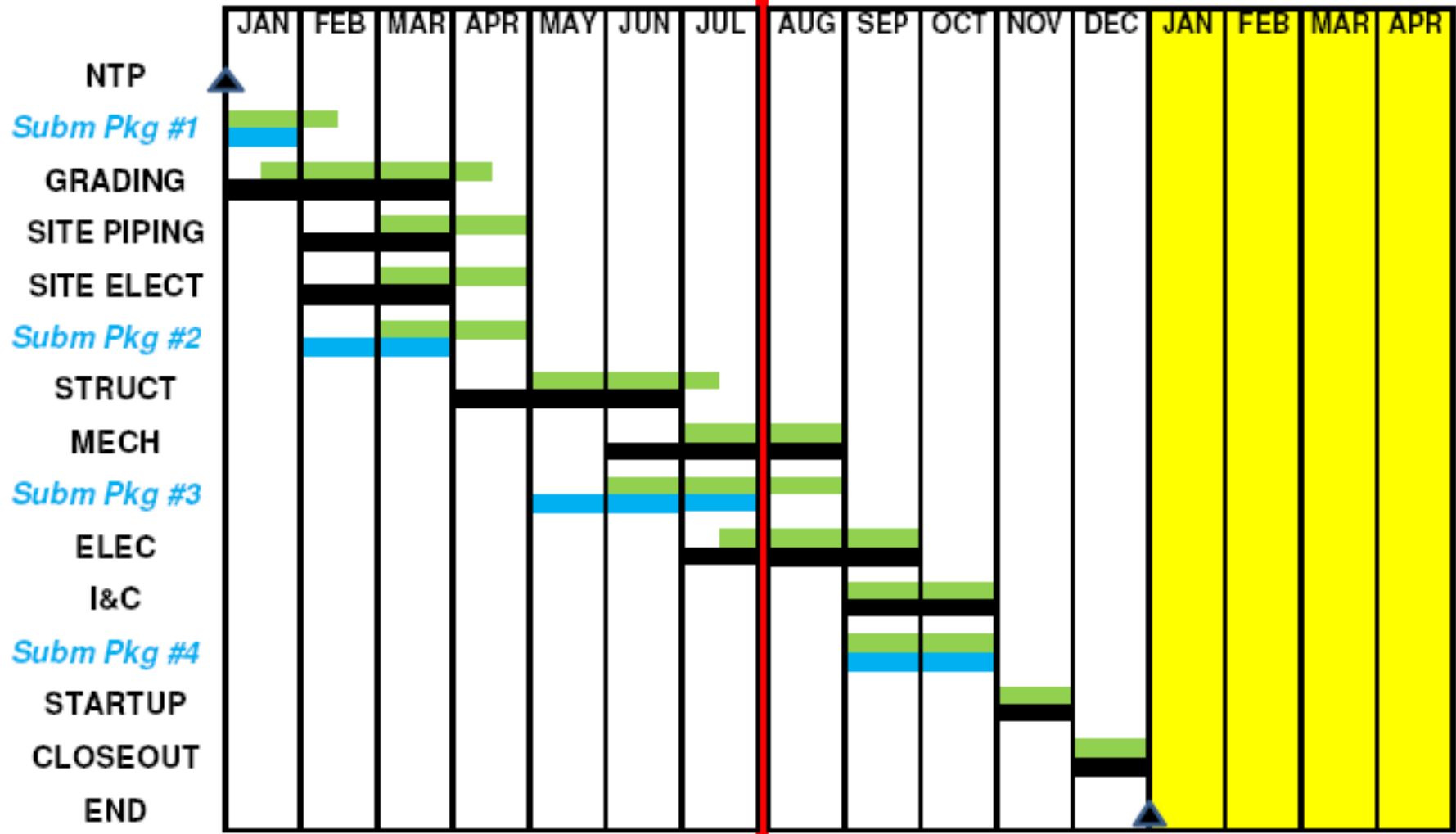
WATERWORKS PROJECT -- BASELINE SCHEDULE (REVISED)



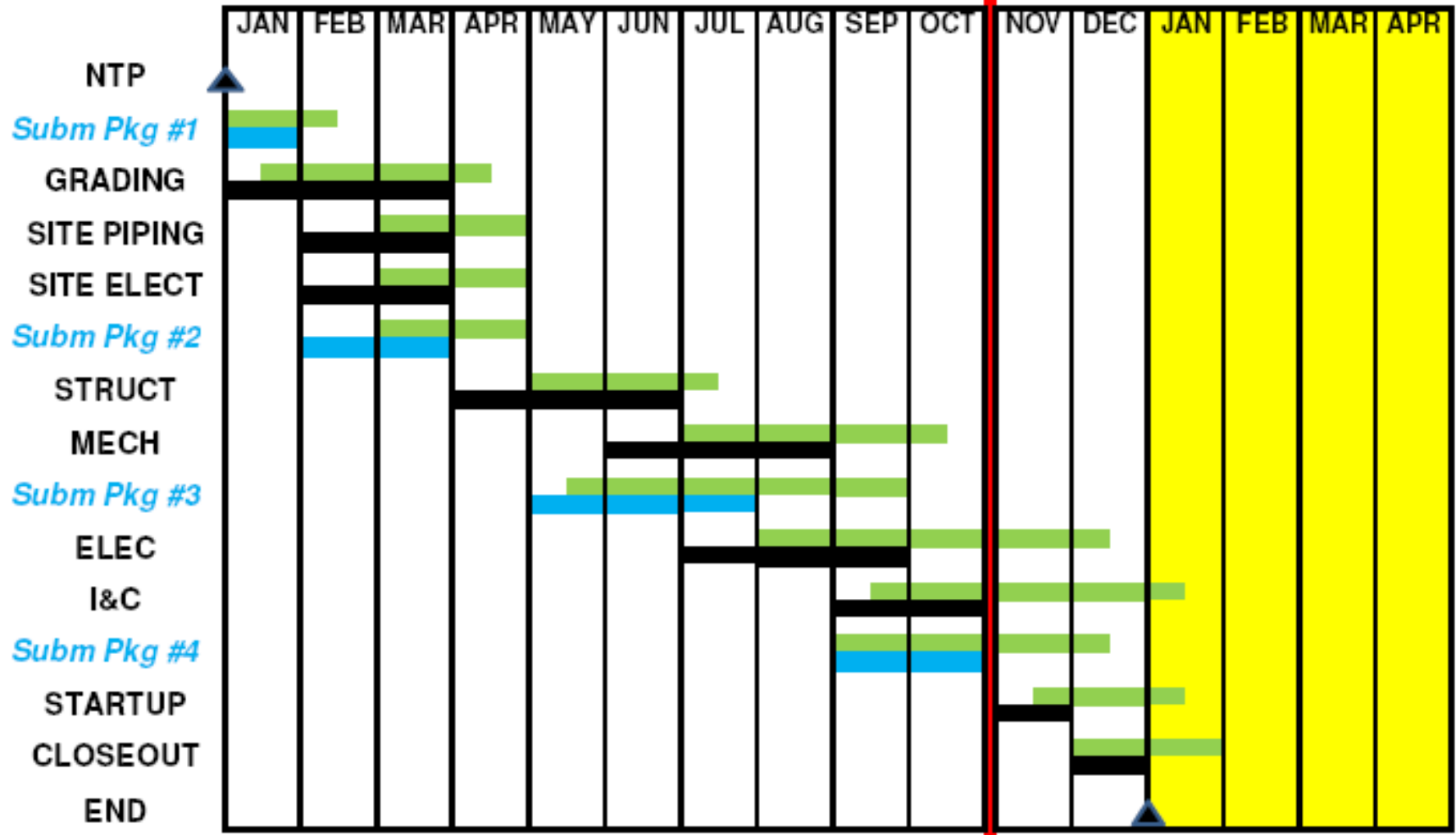
WATERWORKS PROJECT -- APRIL PROGRESS SCHEDULE (REVISED)



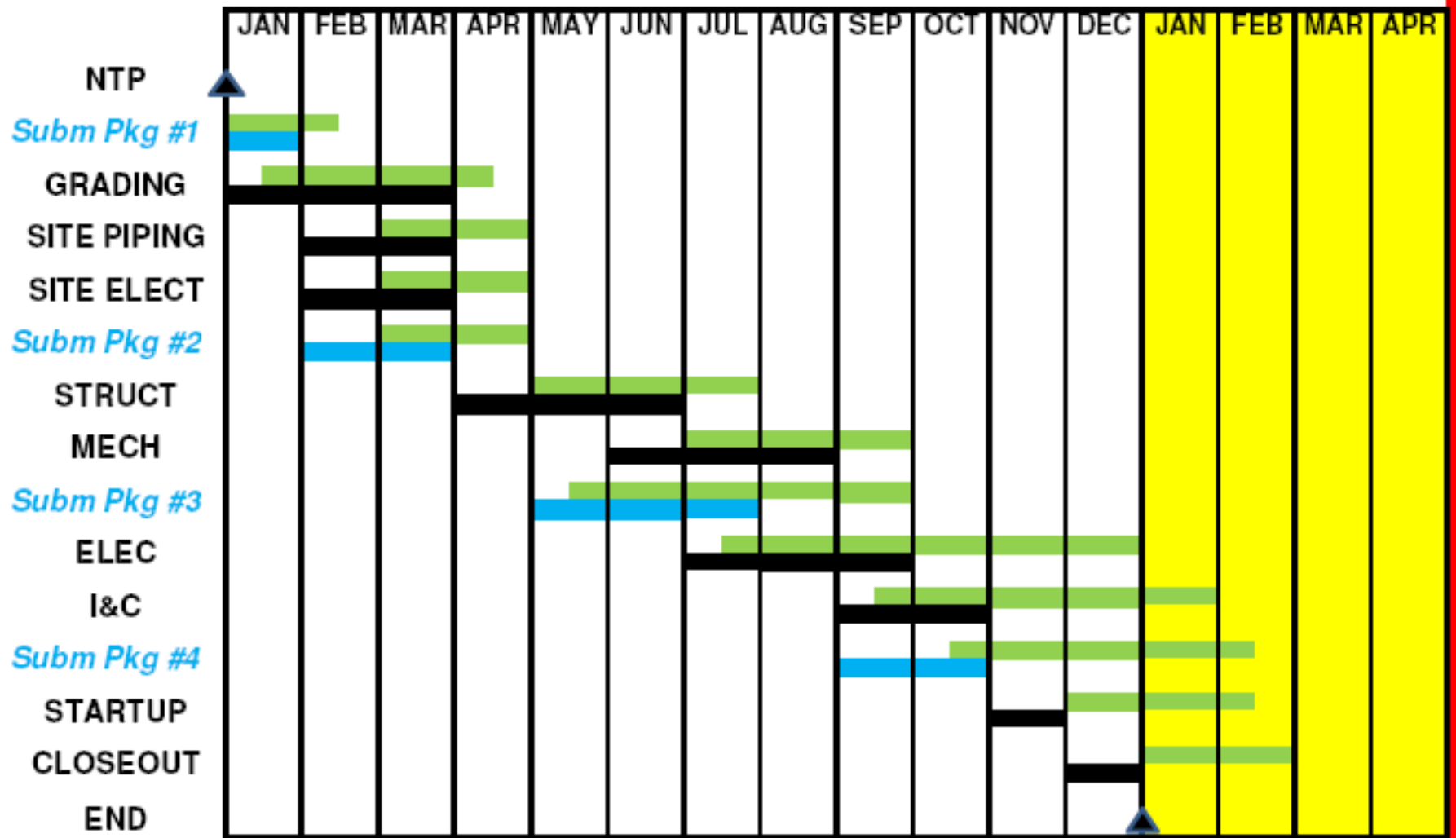
WATERWORKS PROJECT -- JULY PROGRESS SCHEDULE (REVISED)



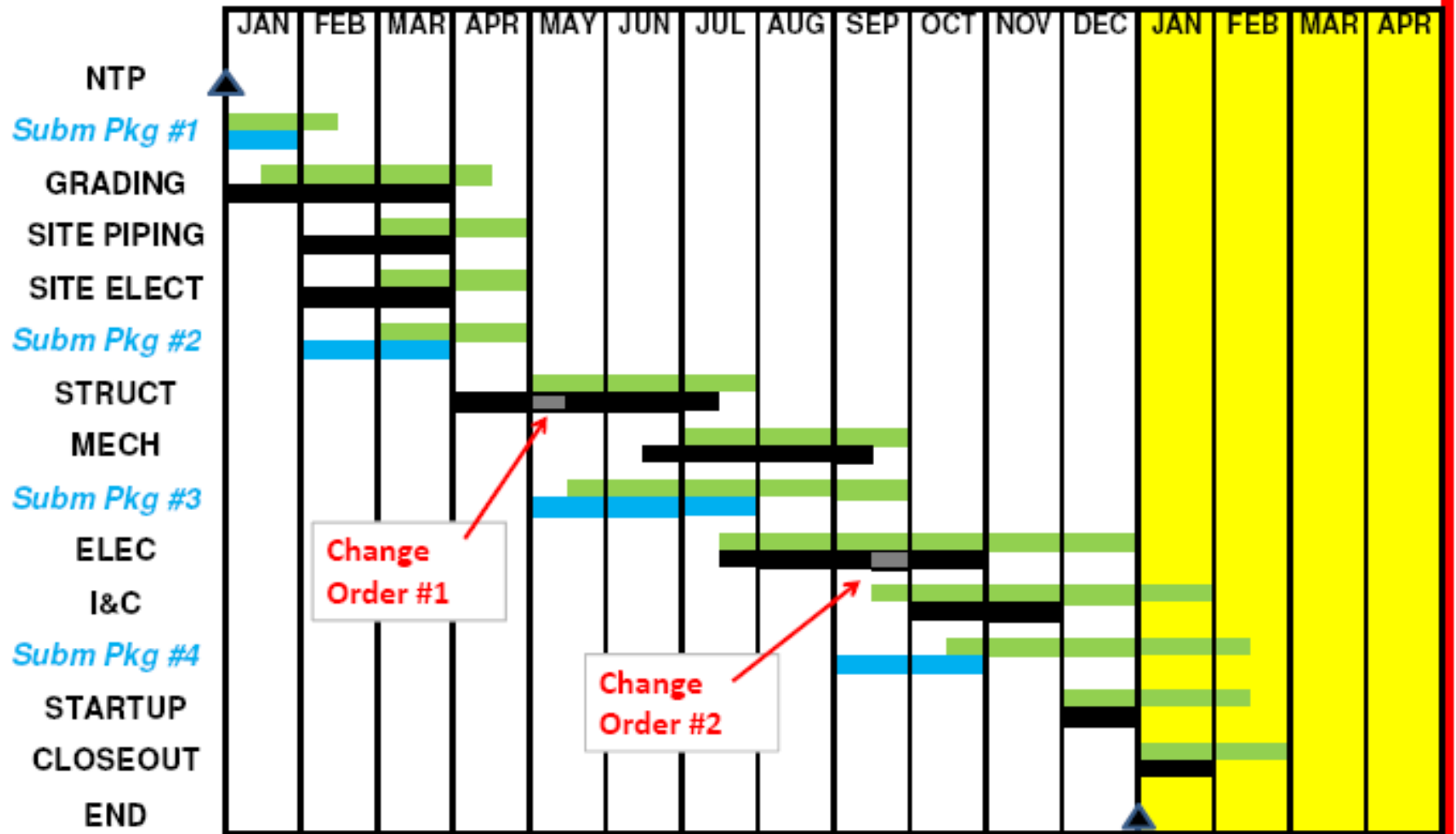
WATERWORKS PROJECT -- OCTOBER PROGRESS SCHEDULE (REVISED)



WATERWORKS PROJECT -- AS-BUILT SCHEDULE (REVISED)



WATERWORKS PROJECT -- AS-BUILT SCHEDULE (REVISED)



Summary

- ❑ Strengthen the Contract:
 - No Schedule No Payment
 - Plot Baseline on Update Schedules
 - Submittals / Critical Path
- ❑ Improve Schedule Oversight
- ❑ Think Ahead

