

SP 5202-58 (TH 14) Constructability Review Questions

1. Tell us the pros/cons of constructing the typical section provided for Hwy 14. What are the risks to constructing this on the schedule expected? How do you propose to mitigate those risks? (Note the mainline typical section does not have a select granular layer).
2. Given the staging concept identified on the attachment, what are the risks to having the project open to traffic by the fall of 2023? How do you propose to mitigate those risks?
3. During construction, MnDOT is planning to require a 'hard surface' at all times from the quarries (NUQQ/M&R) to Courtland (Hwy 14 STA 212 to STA 385) – With the staging narrative provided, what are the current risks to the durations provided during the stages? Notably, how would you stage the box culvert work at the Kohn Ravine near STA 335 on the mainline understanding that trucks hauling from the quarries will be using this route?
4. STA 151 to STA 282 on Hwy 14 is an urban section (no depressed grass median) with curb and gutter and jersey barrier. What are the challenges to constructing this section while keeping local traffic within the existing R/W on a hard surface? How would you mitigate those challenges?
5. What work would you propose to do during the first winter and second winter and how does the current staging plan help or limit that?
6. Any aggregate base sitting exposed to the elements over winter will be required to be recompact, tolerated, and passing compaction requirements the following spring prior to paving. What are the risks to delivering on the schedule with this requirement? Would you approach staging differently than the current sequencing?
7. MnDOT's soil borings were provided as part of this constructability review. In reviewing the underlying soils and proposed construction work, what do you see as risks to constructing this on-time? How would you propose to mitigate those risks?
8. In the large fills near the CSAH 37 interchange (STA 509-525 on CSAH 37, STA 65-70 on ramp C, STA 80-85 on ramp D) MnDOT is planning 10'-15' of surcharging over grading grade (roughly 60,000 to 110,000 CY of material), and a 6-9 month settlement period to mitigate primary and secondary consolidation. MnDOT is also considering an alternate method of excavating out existing softer materials roughly 10'-15' deep in this area without requiring surcharging or a settlement period (roughly 140,000 to 200,000 CY of material). Which method do you prefer and why? What other methods of effectively reducing settlement have you been involved with that you'd recommend here and why?
9. Overall, with the information provided, what are the 3-4 biggest risks to delivering this project in 'two years'? – Understanding the detour is starting Spring of 2022 and being open to traffic by the Fall of 2023.