

February 12, 2026



Garrett Scott, Town Planner
Town of Fraser
153 Fraser Avenue, P.O. Box 370
Fraser, Colorado 80442

Re: **GRAND PARK WEST MOUNTAIN WATER SYSTEM CONSTRUCTION PLANS- 8th SUBMITTAL**

Dear Mr. Scott:

Merrick has reviewed the 8th Submittal of the Grand Park West Mountain Distribution Water System Construction Plans received from the Town on January 26, 2026. The Construction Plans are dated January 9, 2026 by Terracina Design. They were provided without responses to the previous comment letters dated 6/10/2025 and 8/15/2026.

General overall priority comments related to water supply planning, water storage tank and pump station sizing that are still outstanding are reiterated below due to their significance. Other minor comments on the construction plans that were not addressed but still may be warranted prior to construction permit approval are list below for the Town's consideration.

Prior General Comments (Not addressed):

1. Additional water supply sources are required to accommodate the increased water demands. Please provide design and construction timelines for the future Water Source Facilities required to supply water to the development with comparison to the timing for the anticipated new development demands coming online. Refer to 2003 Amended Annexation Agreement Article 5 Section 5.5., "Timeline should include project or water demand trigger points for initiation of infrastructure design, construction, and infrastructure commissioning/online. "
 - Note current well production safe yield is approximately 272 gpm and yellow zone treatment plant maximum production is 600 gpm.
 - Also refer to 2020 Town of Fraser Water Supply Report by HRS Water Consultants.

Applicant response stated that "continued conversations / evaluation is acknowledged." Comment remains unresolved.

2. Current water supply facilities are under capacity for the proposed Grand Park development demands. The Annexation Agreement requires the developer to design, construct, and convey to the Town all "Water Source Facilities" needed to serve the development.
 - a. Provide a timeline or plan for infrastructure development in the wellfield capacity and augmentation storage.
 - b. Any applications for building approvals shall be preceded by utility reports with calculated Average Day Demands, Maximum Day Demands, Peak Hour Demands, and Irrigation Demands based on annexation agreement gpd per household/unit/SFE.

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Prior Comments:

1. Cover Sheet: Benchmark Statement – Town standard survey benchmark is NAD 83 for horizontal and NAVD88 for vertical datum control per the Town standard, Section 14-2-110(c). **Comment not addressed.**

New Comment: Please provide an equation for conversion from NGVD 29 to NAVD88 per the Town standards.

2. Sheet 10, 13, & 20: Pump station locations are shown at not “an insignificant distance” from tanks. Pump stations should draw water directly from tanks to promote turnover of tank water. **Comment not addressed.**

New Comment: Please show water lines into and out of storage tanks and pump station sites for reference, but note that their design will be provided under separate construction plans.

3. There is approximately 2,300 linear feet of 12-inch water main outside of the existing 80-foot Grand Park Drive right-of-way from station 18+53 to Station 42+00 (Sheets 4-6). An easement will be required for the water main outside of right-of-way per Section 14-3-240. **Comment not addressed.**
4. Sheet 10 shows two future sanitary stub-outs but there is no sanitary sewer shown within the street. **Comment not addressed.**

New comment: Remove sanitary stubouts that are not connecting to sanitary sewer and appear incorrect.

New Comments:


5. Coversheet: Please update the professional engineer certification statement to the professional engineer that will be signing and stamping the construction plan set.
6. Merrick acknowledges the formerly proposed Yellow Zone storage tank is no longer shown in the West Mountain Water System Construction Plans. Merrick also understands a letter provided by the East Grand Fire Protection District No. 4 accepted reduced fire storage requirements which led to an assumption for the elimination of the western Yellow Storage Tank and relocating the associated water storage volume in the proposed west Green and Red storage tanks. Merrick will provide future review of the updated Master Water Study and provide appropriate comments to these future facilities, including acceptability of tank elimination, significant increased pumping and water delivery costs in perpetuity, loss of water supply resiliency by using mechanical pressure zone connections rather than gravity fed tank pressure, reduced fire demand storage also effecting the system capacity to maintain supply while experiencing water main break losses, overall system fire resiliency, etc.
7. Pipe joint deflections (horizontal and vertical) noted in plans/profiles exceed allowable deflection per Sheet 2 Note 5. Review and correct the multiple instances of exceeded deflection throughout plan set. Label the design joint deflection in the individual callouts.
8. Sheet 4:
 - a. An air release hydrant is shown at station 13+35.77; however, it is also labeled for a future water connection. Please explain the nature of the “future connection” noted at this location. Is this for the future blue tank connection which was mentioned in the 8/22/24 comment response letter from Terracina? Since this fire hydrant appears to be temporary and is not located at a high point, please relabel as a “Temporary blowoff fire hydrant until future connection.”
 - b. Show the connection to the future blue tank in the vicinity of STA 22+50.
 - c. Provide encasement of the 12-inch water main going under the creek from station 20+64 to 21+94 in both plan and profile views. (Chapter 14, Attachment A-24)

9. Sheet 5: STA 24+46 PRV Vault. Applicant should acknowledge the proposed PRV pressure differential will be from the Green Zone to the South Blue Zone which may require special accommodation for the greater pressure reduction.
10. Sheet 6:
 - a. Label sanitary crossing the water main at station 44+31 in plan view.
 - b. Prior recommendations for an air release valve at station 41+ 30 still valid.
11. Sheet 7: Label sanitary sewer crossings at stations 49+39 and 52+89 in plan view.
12. Sheet 8:
 - a. Prior recommendation for an air release valve at station 62+00 still valid.
 - b. Label sanitary crossing at station 59+73 in plan view.
13. Sheet 9: Label 8" Water stub, valve, and reducer at Station 74+55.
14. Sheet 10:
 - a. The formerly proposed Yellow Zone storage tank is no longer included in the Construction Plans. Acceptability of this elimination is dependent on a yet to be submitted, reviewed, and accepted Master Water Study.
 - b. Remove sanitary stub out that is not connecting to any apparent sanitary sewer system.
15. Sheet 11:
 - a. Correct the 8" water stub call out to 12". Label the intent of this future water connection at the Grand Park Drive roundabout.
 - b. Update key map to show recently added roundabout.
16. Sheet 16: Label missing sanitary crossings at stations 38+80 and 42+40.
17. Sheet 17: Move 8" water stub to be out from under the ADA sidewalk ramp.
18. Sheet 18: Fix missing finished grade profile at the roundabout.
19. Sheet 19: Fix vertical dimension callout between water main and storm crossing in profile.
20. Sheet 20: Label PRV by others.
21. Sheet 23: Fix missing finished grade line. Label degrees of horizontal deflection.
22. Sheet 24: Delete redundant valve in close proximity to adjacent valve.
23. Sheets 25-29: Label degrees of horizontal deflection.
24. Sheet 30: Fix missing finished grade in profile. Label degrees of horizontal deflection.
25. Sheets 31- 33: Label water lines terminating at the tank and pump station sites and show them extending to the tank and pump station. Label portion by others. Fire hydrants are less than 500' apart. Designer could space further apart (at exactly 500' apart) if desired.
26. Sheet 34: Fix missing finished grade in profile.
27. Sheet 36: Add missing Town standard details A-31 (ARV) and A-25 (Bored Casing).

Please let us know if you have any questions on the above comments.

Sincerely,

Merrick & Company



Greg Steed, P.E.
Project Manager

Donna Barrentine, P.E.
General Civil Utility Review

Cc:
Paul Johnson, Town of Fraser
Alan Sielaff, Town of Fraser