

October 26, 2017

Ms. Stacey Nerger
Town of Parker
20120 E Mainstreet
Parker CO 80138

Re: Trails at Crowfoot Filing #11 Project #SUB17-051
Final Plat 1st Referral
PWSD Project #2017-082

Dear Ms. Nerger:

Thank you for forwarding the referral request for the above mentioned project. After a review of the documents submitted, the Parker Water & Sanitation District has the following comments:

- Submit an executed Standard Improvement Agreement with all required exhibits.
- A wet stamped and signed Engineers Estimate with a 20% contingency must be submitted for verification and District approval. The approved document will be an Exhibit for the Standard Improvement Agreement and Letter of Credit.
- A letter of credit or Cash in Lieu based on the approved Engineers Estimate must be submitted before final approval is granted.
- A copy of the signed/recorded Final Plat must be provided to the District prior to construction plan approval.
- List all fittings on overall utility and plan and profile sheets with numbers (man holes, blow offs, gate valves, butterfly valves, fire hydrants, air release valves, tie in locations, etc. i.e. TC-GV1 or TC-MH1).
- On the legend the symbol for gate valves does not match the one shown in the plans, please ensure all legend symbols match what is called out in the plans.
- Please call out water and sanitary sewer service stationing or add a stationing table to the plans for the service lines.
- Please call out fire hydrant and Air Vac numbering in the profile.
- The high point in the water main will require air-vac valves to be called out in the plan and profile sheets and installed to PWSD standards. Please see PWSD water specification section 4.2.6. 2008 specification manual or 3.2.6 2017 specification manual.
 - On sheet 10 please callout an Air Vac at the high point approximately at STA 10+60 on the WL.
- No more than one fire hydrant and/or 15 lots may be out of service with the closing of two or more valves.
 - On sheets 3 and 13 on Scarlet Sage Ave an additional gate valve will be required at approximately STA 34+50.

- On sheets 3 and 13 on Scarlet Sage Ave an additional gate valve will be required at approximately STA 37+50.
- On sheets 3 and 13 on Black Sage Ave an additional gate valve will be required at approximately STA 13+50.
- On sheets 3 and 10 on Field Mint Ave an additional gate valve will be required at approximately STA 10+20.
- On sheets 3 and 11 on Field Mint Pt an additional gate valve will be required at approximately STA 13+00.
- PWSD does not permit bends on sanitary sewer service lines under pavement in ROW. Please note up to three bends are permitted outside of ROW.
 - On sheet 6 and 8, there are multiple lots with bends under the street on the sanitary sewer service lines, please revise.
- Please note Sewer services may not enter into inline manholes. They must be a minimum of 7-feet from the center of manholes. On sheet 8 Lot 14 the wye appears closer than 7 feet to the manhole.
- On sheet 8 and 13 lot 12 does not have a sanitary sewer service or water service line called out, please call out the service lines and note PWSD allows up to two service lines to tie into a dead-end manhole.
- On sheet 4 the storm sewer line has less than 10-feet of separation from the proposed sanitary sewer main. Please show and callout the parallel storm line in the profile to ensure there will be no issues with the reduced separation between the lines.
- On sheet 6 TC-SSMH-201 only has 3-feet of separation from the storm sewer manhole. Please note during installation it will be extremely hard to get compaction between the manholes. Please consider staggering the manholes to allow for ideal compaction.
- Please note all fire hydrants deeper than 6' will require a vertical shoe or a deep bury hydrant, please call out accordingly.
- Please add all necessary PWSD details sheets to the plans. For example PWSD sanitary sewer detail sheet S3.5 Cast in Place Manhole Base Detail is missing.
- Please note PWSD will not grant probationary acceptance or approve a building permit on filing 11 until probationary acceptance is granted on filings 1, 9 and 10.
- On the irrigation plan please callout what filing is **Supplying** filing # 11 irrigation water.
- Please note that PWSD has listed multiple comments based on our specification for this review. Please note that it is the engineering firm's responsibility to ensure that all water and sanitary sewer plans conform to PWSD specifications. All comments must be addressed with a response letter during the next submittal.

Please let us know if you have any question on the above comments. We look forward to the final submittal on this project.

Sincerely,
Parker Water & Sanitation District



Drayton Sanderson
Engineering Technician

