



April 12, 2019

Mr. Gilbert C. LaForce, PE
El Paso County
Planning and Community Development
2880 International Circle, Suite 110
Colorado Springs, Colorado 80910
719-520-7945

Re: McCune Ranch Subdivision, City of Colorado Springs, Preliminary Drainage Report Review

Dear Mr. Gilbert C. LaForce:

On behalf of Winsome Subdivision and its design team, The Vertex Companies, Inc. (VERTEX) is pleased to present the second submittal of the above referenced documents for the proposed residential development at the property located at 17480 Meridian Road North to El Paso County for review. The accompanying documents have been revised to address the County's comments from the recent review of this project. A summary of the actions taken in response to the County's concerns is listed below:

Drainage Report

- 1) Divider sheets have been added to the appendix for clarity and follow the attachments list.
- 2) The letter from the State Dam Safety Engineer was in the last version but the dividers noted above will help draw attention to it. An exhibit of the impacted area associated with a dam failure is also now included as well. Easements are in place (and have been) to address these 2 impacted areas.
- 3) The conveyances on the historic and proposed hydrology model schematics have been labeled for clarity as requested.
- 4) Initial abstraction values have been updated for all the basins per DCM Ch 6 Section 4.5. A table for the new Ia values is also included in the appendix. This update has caused a significant drop in the peak Q values and is shown in the model results. Hydraulic modeling and pond sizing done thus far has been updated accordingly.
- 5) Channelized flow profiles have been updated with 2 different cross sections for basins over 100 acres and basins under 100 acres. This more accurately calculated TOC. A section has been added to the drainage report describing this.

- 6) Drainage conveyance cross sections have been updated. The standard 20' wide bottom cross section in the main channel has been supplemented with additional cross sections for lower flow areas. A section has been added to the drainage report describing this and the hydrology model has been updated accordingly. This change did not have a major impact on the model but does more accurately represent water flowing across the site.
- 7) With the hydrology changes noted above, the peak Q100 flow for the main drainage way is now below 1500 CFS at the 2 bridge crossings. This impacts the requirements associated with the box culverts per DCM 6.4.2. A section has been added to the drainage report discussing this and the associated Hw/D requirements.
- 8) The boundary between existing basins Dc and Eb has been updated per county comments. The flow path through basin Eb has been adjusted accordingly and the drainage model updated as well.
- 9) Described flows have been updated and checked for consistency between the hydrology model, drainage report, noted design points, basin tables, and basin icons.
- 10) Basins J and K with offsite flows have been updated. The developed (proposed) curve number is lower than the historic curve number. To be conservative however, the historic curve number is being used in the proposed condition for these basins. This had been the case in the last submittal, but the basin icons had not been updated on the drainage plan.
- 11) A basin label has been added to basin G1 on the proposed drainage plan per county comments.
- 12) There was a comment regarding the flow exiting the site (proposed condition) at basin H9 (design point 5). There are multiple basins being routed to this location so the implication is that the flows would be above historic levels. However, all the flows are being routed through Pond 4 and the outfall is regulated to a Q100 of 30.6CFS, lower than the 62.0CFS historic.

Thank you for working through the updates of this report with us, I believe all of your comments have been addressed.

Regards,



Jason Priddy