September 30, 2022

Yolanda Padilla Moyer, P.E.

Bohannan Huston

7500 Jefferson St NE

Albuquerque, NM 87109

**RE: Arroyo Vista Median Swale**

 **Grading and Drainage Plans**

 **Engineer’s Stamp Date: 06/6/19**

 **Hydrology File: J08D005, CPN 651182**

Dear Ms. Padilla Moyer:

Based upon the information provided in your submittal received 07/22/2022, the following discussion and comments are presented.

The request for a review of the drainage report was prompted as a result of damage caused by a storm; to the landscape buffer area on the north side of Arroyo Vista Blvd, erosion in the median swale and flows overtopped the median curb in Arroyo Vista Blvd.

It appears the drainage from Basins OS-1 and OS-2 contributed to the damage and overtopping of the median curb in Arroyo Vista Blvd.

Comments on Submittal:

1. Per the DPM Figure 6.9.9, the capacity of a double inlet at 0.7’ of depth at 0.2% slope is 10 cfs. The submittal states there is 29 cfs. The inlet appears to be undersized. The city does not count the ‘throat’ for its inlet capacity as is it there in case the grate plugs, which happened during the storm event referenced above.

2. From a site visit it appears that 2/3 or so of Basin OS-2 drains to Basin U2-H before entering Arroyo Vista Blvd ROW. Grades were altered during wall construction, so existing grades cannot be used. In addition, the land was driven/worked on. Please update the basin calcs to 2/3 of 1.36 acres= 0.9 acres and use 100% Type C land treatment. In addition, Basin OS-2 should be broken up into two basins as there are two outfall locations. This would also allow for an “Arrow” showing the outfall location through Basin U2-H.

3. Update the calculations for the inlet at the east end of the swale with the revised flow rate.

4. For Basin OS-1, move/point the flow arrow so that it is clear that this basin drains to the arroyo located south of the Arroyo Vista Blvd ROW.

Submit a Design Revision to DRC to include the berm at the west end of Arroyo Vista Blvd.

When submitting the Engineer’s Certification for Releasee of Financial Guaranty; include the berm discussed above as well as the solution to move the drainage away from the wall at lots 8 and 9 in Phase 1-C, as discussed in the field or have the Developer direct the Contractor to grade this area per the approved grading plan.

If you have any questions, please contact me at 924-3999 or sbiazar@cabq.gov.

Sincerely,

Shahab Biazar, P.E. CFM

City Engineer, Hydrology

Planning Department