## **Easterling Consultants LLC**

November 4<sup>th</sup>, 2014

Curtis Cherne, PE

City of Albuquerque

RE: I40 South and Unser Mini DMP

Engineers Stamp Date 7-14-14 (K09D026)

Dear Mr. Cherne, we are responding to your comments from September 11<sup>th</sup>, 2014. Your comments are listed in red and our responses are in black.

Dear Mr. Easterling,

Based upon the information provided in your submittal received 6-12-14, the above referenced report cannot be approved for Drainage Masterplan until the following comments are addressed:

- 1. The report claims that the recent migration in computer software to 64 bit Windows 7 operating systems made it impossible to model the hydrology using the traditional AHYMO '97 model. This must be a self-imposed limitation as a drainage report for FedEx was submitted and approved using AHYMO '97 and numerous other firms submit drainage reports using AHYMO '97 every day.
- 2. AHYMO is still the approved model in the DPM and is on the approved hydrologic models list for the NFIP. HEC-HMS 3.0 and higher is not listed as an approved model by the NFIP without local calibration, however it seems they accept LOMR's using the program.

Based on our telephone conversation, I have amended the report to soften the language. As I mentioned we are in the process of getting two LOMR's approved by FEMA using HEC-HMS as the primary hydrologic software in the Sanchez Farm area in the valley. So there is no cause for concern as far as FEMA approvals for LOMR's using HEC-HMS.

The basin north of 1-40, as mentioned in previous letters, was not included in this analysis. This basin includes the area; north of 140, west of 98th street, south of the diversion channel with the eastern extent across 140 from the northwest corner of Bruckner's Truck stop.

Based on my field investigations and pictures that I submitted to you, we have now agreed that the limits of the watershed shown in this drainage master plan are correct.

4. On the top of page 4 add the 140 basins as contributors to Pond 6.

Change incorporated in the report

## **Easterling Consultants LLC**

5. The freeboard for Pond 6 is shown as 0.4 feet. Proposed runoff should be reduced to increase the freeboard to 1.0 feet.

Based on our conversation, we agreed that imposing discharge restrictions on subbasin A-1D would be unfair as the other subbasins that have already developed have already taken more than their fair share of discharge capacity into Pond 6.

Secondly, the model simulates subbasin A-1D at a curve number of 90 with 90% imperviousness. The basin will unlikely develop as such, which makes the runoff results very conservative. From a hydrological stand point, Subbasin A-1D can't become impervious enough to generate enough runoff in order to overwhelm Pond 6 therefore, no modeling changes were made.