

CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



Mayor Timothy M. Keller

September 20, 2018

Mike Provine, P.E.
Molzen-Corbin & Associates
2701 Miles Road SE
Albuquerque, NM 87106

RE: **Spirit Dr. & GA Parking Reconstruction
Grading Plan and Drainage Report
Engineer's Stamp Date: none
Hydrology File: N15D015**

Dear Mr. Provine:

Based on the submittal received on 9/7/18, the Grading Plan and Drainage Report are accepted for information only. We have reviewed the submittal and recommend that the following items of concern be addressed:

1. All drainage structures (pipes, inlets spillways, ponds, outfalls, etc...) need to be sized and detailed in a drainage report including:
 - a. Delineation of on-site and off-site contributing watersheds and/or drainage basins. Include the relevant excerpts from the 1995 Sunport Master Plan.
 - b. Hydrology Calculations per DPM 22.2. The information presented is insufficient to determine if the methods used are acceptable.
 - i. Provide the HEC-HMS model used and document all user inputs and model results.
 - ii. If using the SCS method (defined in TR-55), the City accepted curve numbers are: 77 – Treatment A, 79 – Treatment B, 86 – Treatment C, 98 – land treatment D, with NOAA Atlas 14 100-yr precipitation depths and a 24-hr hydrograph for a frequency storm with the intensity position at 50%. Time of concentration and Lag time need to be determined using the Tc and lag equations in DPM Ch.22.2
 - iii. Hydrology should be provided for Spirit Drive and the GA parking lot as well the drainage to each of the ponds.
 - iv. Provide a pipe network exhibit, including dimensional data.
 - c. Hydraulic Calculations per DPM 22.3 documenting:

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



Mayor Timothy M. Keller

- i. Inlet capacity and pipe capacity, including profiles and HGL calculations.
 - ii. Channel capacity, channel details, and typical sections for overland flowpaths.
 - iii. Culvert capacity and emergency spillway capacity calculations for the flow between ponds 1-3, and Spirit Pond.
 - iv. Details of each pond including typical sections, dimensions, and spot elevations. Volume calculations must be included for each pond based on the area of each contour using the conic method of volume calculations. Label the ponds.
 - v. Pond routing calculations with hydraulic modeling and rating curves should be provided. The 100-yr WSEL should be shown.
 - vi. Details of all pond outfall structures, including typical sections, dimensions, and spot elevations.
2. First flush retention is required for all new impervious and redeveloped impervious areas, unless located in the public ROW or public access easement. The GA Parking Lot reconstruction should retain the redevelopment first flush volume (0.26" x rebuilt impervious area). If surface ponding is undesirable, underground storage is acceptable option.
 3. Grading of 1 acre or more requires an ESC Plan, submitted to the Stormwater Quality Engineer (Curtis Cherne PE, ccherne@cabq.gov or 924-3420).
 4. The report should be stamped, signed, and dated by the Engineer and an electronic copy provided (email to PLNDRS@cabq.gov or on a CD).

If you have any questions, please contact me at 924-3695 or dpeterson@cabq.gov.

Sincerely,

Dana Peterson, P.E.
Senior Engineer, Planning Dept.
Development Review Services

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov