CITY OF ALBUQUERQUE



December 27, 2012

Bruce Stidworthy, P.E. Bohannan Huston Inc 7500 Jefferson St NE Albuquerque, NM 87109

Re: Bosque School Drainage Study Final Drainage Plan
Engineer's Stamp dated 12-4-12 (E12/D015)

Dear Mr. Stidworthy,

Based upon the information provided in your submittal received 12-4-12, the above referenced study cannot be approved as the Drainage Master Plan (DMP) until the following comments are addressed:

- This comment letter will only address the DMP as comments on the grading plan may be premature at this time.
- Show storm drains, inlet locations and provide a pipe table that shows the capacity and the proposed flow in each storm drain.
- This DMP should take the approach of sharing volume for all sites that drain to it based on the Zoning of the site. For example, Hydrology took the total volume of proposed Ponds A and B, 28.04 ac-ft and divided it by the total acreage, 182 acres. This produced 0.15 ac-ft/ac. This method should be adjusted for Zoning; a commercial or PRD site should have more impervious area than an Open Space and School Recreational Uses site. This method has been used successfully all over the City for many years.
- Basins A-5, A-3 A-1 and half of A-2 are all zoned SU-1 C-2, O-1, PRD 20 DU/acre, therefore should all have the same allowable discharge volume per acre.
- Hydrology agrees with the land treatment types assigned to Basin B-2 as they were based on Zoning.
- This may be a good time to address the amount of runoff from landscape areas. Historically, they have been a Land Treatment "C" since they are gravel and per the DPM "gravel or rock on plastic" is a Land Treatment type C. Hydrology has noticed the change from plastic to landscape fabric in recent years, which would make a case for using a Land Treatment "B" for these areas rather than a "C". Of course, one would have to be sure plastic was not used. This would make a difference in required volumes.
- Would the note "Upon development all land covered by this DMP shall pond the first 0.44 (0.33/0.28 etc..) inches of developed flows onsite" be applicable?

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- Since the "flume" is not to be built across the MRGCD ditch, and grades appear favorable, Basin B-2 should drain to Pond B through Pond A, provided there is street and storm drain capacity. If there is inadequate street or storm drain capacity, a note should be added concerning the discharge limitation from this site. It is not clear, from the plan submitted, how well this basin will drain through the culvert and where it goes once it enters Basin B-3.
- All basins should have a discharge point(s) labeled with a flow value.
- A table of existing flows and volumes was not provided. Some capacity should be reserved in Basin C-1, in case the Bosque School wishes to build a small building or pave an area.
- The public drainage easement and agreement and covenant are required to be recorded prior to approving this DMP.
- Hydrology has solicited input from the ABCWUA and is aware that the Bosque School's engineer is also reviewing this plan.
- Please add Basin A-5 to the "Spillway" paragraph.

Grading portion of DMP:

• The plan proposes the spillway underneath the modular classroom building, which is not acceptable. Provide a section halfway between sections B-B and C-C.

- Should the retaining wall proposed in Section B-B, wrap around the building beginning at the 78 contour on the north side to a 77 contour on the south side? Access to the east door of the building has to be maintained.
- What do the "hatched" bands symbolize in Detail D? A build note would be appropriate.

If you have any questions, you can contact me at 924-3986.

Sincerely,

Curtis A. Cherne, P.E.

Principal Engineer, Planning Dept.
Development and Building Services

Copy: file e-mail

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