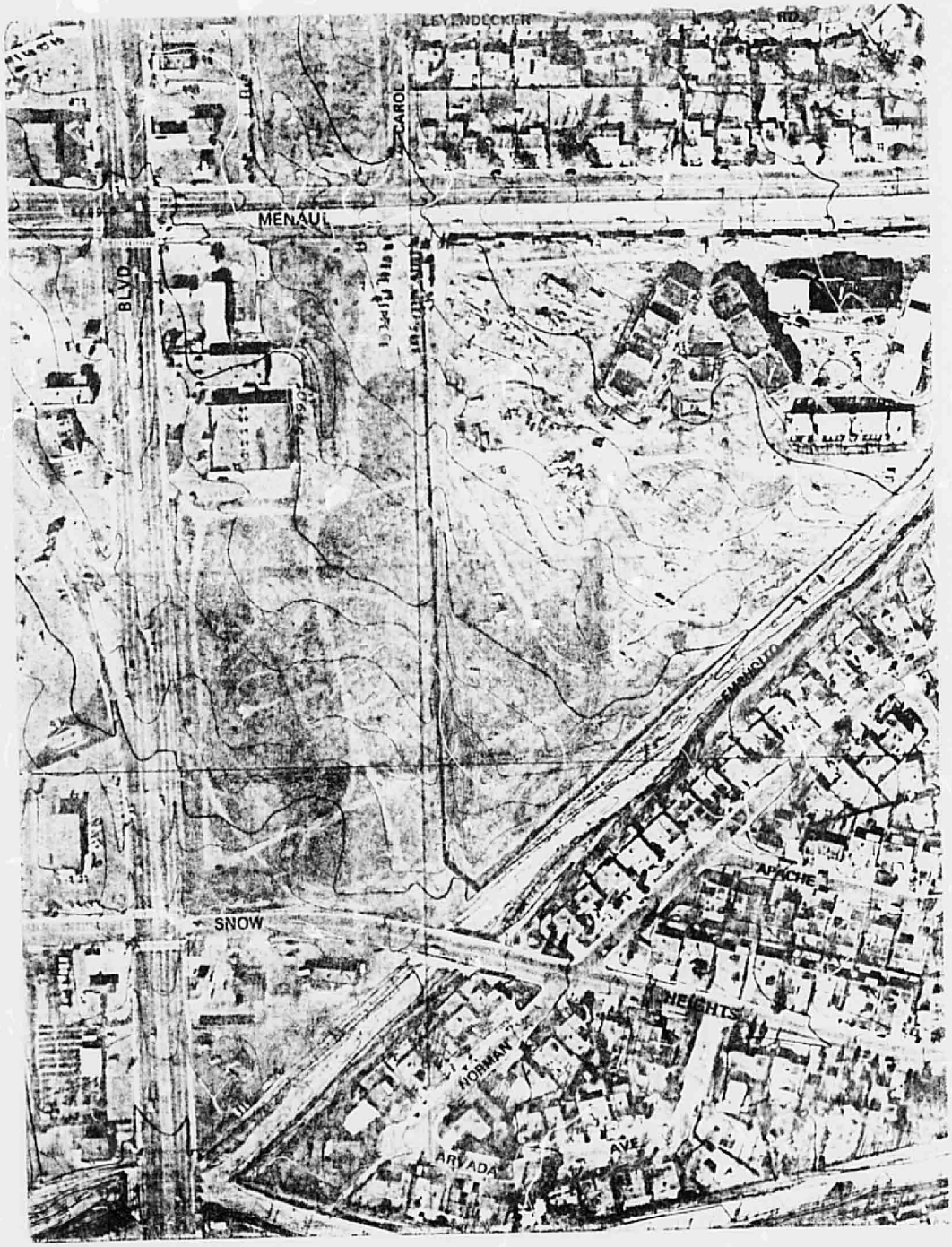

LEVANDECKER
RD
CAROL
MENAUL
BLVD
SNOW
ARVADA
AVE
NORMAN
HEIGHTS
APACHE
EMBUDITO

PLEASE RETURN WITH PLANS

2100 EUBANK N.E. (SNOWHEIGHTS LOT 2A-3 BLK 129)

STANDARD REQUIREMENTS FOR DRAINAGE PLANS

PURPOSE: The increasing volume of drainage plans submitted to this office makes it mandatory that such plans be standardized as much as possible in order to expedite reviews. This standardization is as much to the advantage of the developer and engineer as it is to the Hydrology Section which enforces the AMAFCA RES. 72-2. For parcels of land less than 20,000 sq. ft. in surface area no formal drainage report is required; the construction plans need only to include the standard form attached herein and the site drainage plan. Developers for larger parcels of land will have to submit a formal drainage report as specified in the Resolution.

RUNOFF PONDING: In most instances on site ponding is mandatory, with dispersal in the ground of the excess runoff arising from newly created impervious surfaces. The only exception allowed, is for those properties adjacent to a diversion channel which was designed for higher standard than 100 years frequency storm (existing conditions). For detailed computations of the runoff before and after development the assumed runoff coefficient recommended are C = 0.4 for undeveloped, landscaped or similar open areas and C = 0.9 for all other impervious surfaces, including areas in southwestern type landscaping with underlying polyethylene film and gravel covered parking areas where vehicular traffic will compact the soil and render it impervious. Due to the inadequacy of the existing drainage facilities in the valley area and to the limited capabilities of the City for providing relief, ponding requirements in the valley are higher than elsewhere.

COMPUTATION OF VOLUME OF RETENTION:

Valley Area = $1.0 \times \frac{2.2"}{12"} \times \text{Area (ft.)} = 0.18 \times A$

East and West Mesa = $(0.9 - 0.4) \times \frac{2.4"}{12"} \times \text{Area (ft.)} = 0.1 \times A$

In order to facilitate the design of drainage facilities, a checklist that will be followed in the review process is listed below:

CHECK LIST

1 - Flooding potential - adjacent water courses N-21-Z

NO Is property located in the flood plain? FNBM 17

If so, is the finished floor above the 100 yrs. flood level?

Is property adjacent to a natural or artificial water course?

If so, what are the specific AMAFCA or City requirements?

2 COPIES OF SITE GRADING PLAN REQUIRED FOR MY RECORDS.

Are drainage R.O.W or easements shown on, or in the proximity of property? If so, are there drainage problems?

2 - Relation of property to surroundings

Per topo map, does property intercept other drainage upstream?

If so, how is runoff conveyed across property?

May there be erosion associated with offsite runoff conveyance?

May erosion or siltation result from proposed construction activities?

Does development block drainage from adjacent property?

3 - Site grading

Does site plan show contours before development (extending a minimum of 25 ft. beyond property lines)?

Does site plan show proposed grading with adequate swale definition to convey water to ponds?

Is all runoff conveyed to ponding areas before it overflows to public facilities?

Does the proposed grading plan indicate that under cutting or back-filling adjacent to property lines may require retention walls?

Is there continuity between proposed new contours and old contours offsite?

Is elevation of property line at least 0.3 ft. above top of curb?

4 - Storm water retention

Is ponding volume adequate (supply detailed computation)?

Are ponds balanced with areas they drain (can area draining to each pond be easily identified and will actually water flow there)? The plot plan must outline each drainage area.

Can pond volume be computed and verified? *(3:1 POND SLOPE REQUIRED)*

Are ponds practical, can they be built as shown?

5 - Safety

Do the drainage provisions constitute an attractive nuisance, or safety hazard?

If the pond depth is greater than 18",are safety provisions supplied? (Minimum 3.0 ft. high chain link fence or similar physical barrier of ponding areas are adjacent to public R.O.W.?)

In general, ponds of depth greater than 18" will not be accepted for both safety consideration and for long term effectiveness of the facilities. In those cases where limited space is available for ponding, the use of gravel pits under the parking areas is suggested. It must be pointed out that mainstream and effectiveness of these facilities is necessary and is the responsibility of the owner. Existing or planned City facilities (streets, channels, storm sewers) can accommodate the natural runoff volumes. Greater discharges would cause flooding downstream and need to be limited at the source.

RECEIVED
DEC 1 4 1978

Goldberg · Mann & Associates
Engineers·Planners
911 Pennsylvania St. Albuquerque, New Mexico 87110 (505) 265-3521

December 13, 1978 8-114

Bruno Conegliano
Assi. City Engineer/Hydrology
Department of Public Works
P.O. Box 1293
Albuquerque, NM 87103

RE: Drainage Plan for Broyles-Dyche Office Building

Dear Bruno:

Attached are the following items concerning the Drainage Plan for the Broyles-Dyche Office Building:

1. Vicinity Map
2. Flood Plan Map
3. Grading Plan
4. Calculations

The proposed office building is located on the east side of Eubank Blvd. N.E. just north of Snow Heights. The land to the north is currently being developed as an Applegates Landing restaurant, the land to the east will be a self storage facility and the land to the south is vacant. The natural slope of the land is from north to south at approximately three percent.

The project does not 1) lie in a flood plain, or 2) lie adjacent to a natural or artificial water course and 3) there are no drainage easements on the property.

The property does not receive any significant flows from upland properties. Erosion will not result from upland runoff or from the proposed construction activities. This development will not block any drainage from adjacent properties.

The grading plan shows 1) existing contours at 1'0" intervals, 2) proposed contours, 3) swales, 4)continuity between existing and proposed contours, 5) that the elevation at the property line will match the existing sidewalk, 6) that all runoff will be conveyed into subsurface ponding areas before leaving the site and 7) all areas where retaining walls are required.

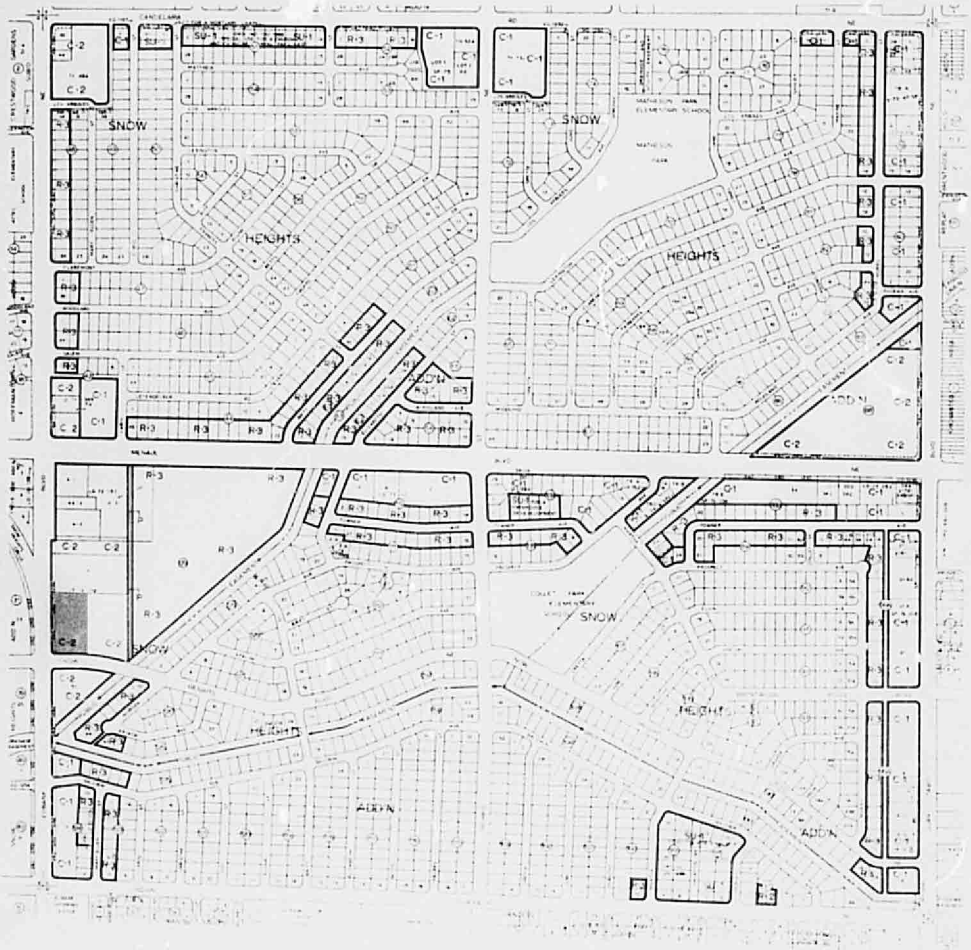
The runoff will be conveyed by a drop inlet into a buried 48-inch pipe encased in gravel. The volume of the pipe is adequate to retain 50 percent of the runoff from a 100 year frequency storm. Calculations are attached.

The drainage facilities do not constitute a safety hazard.

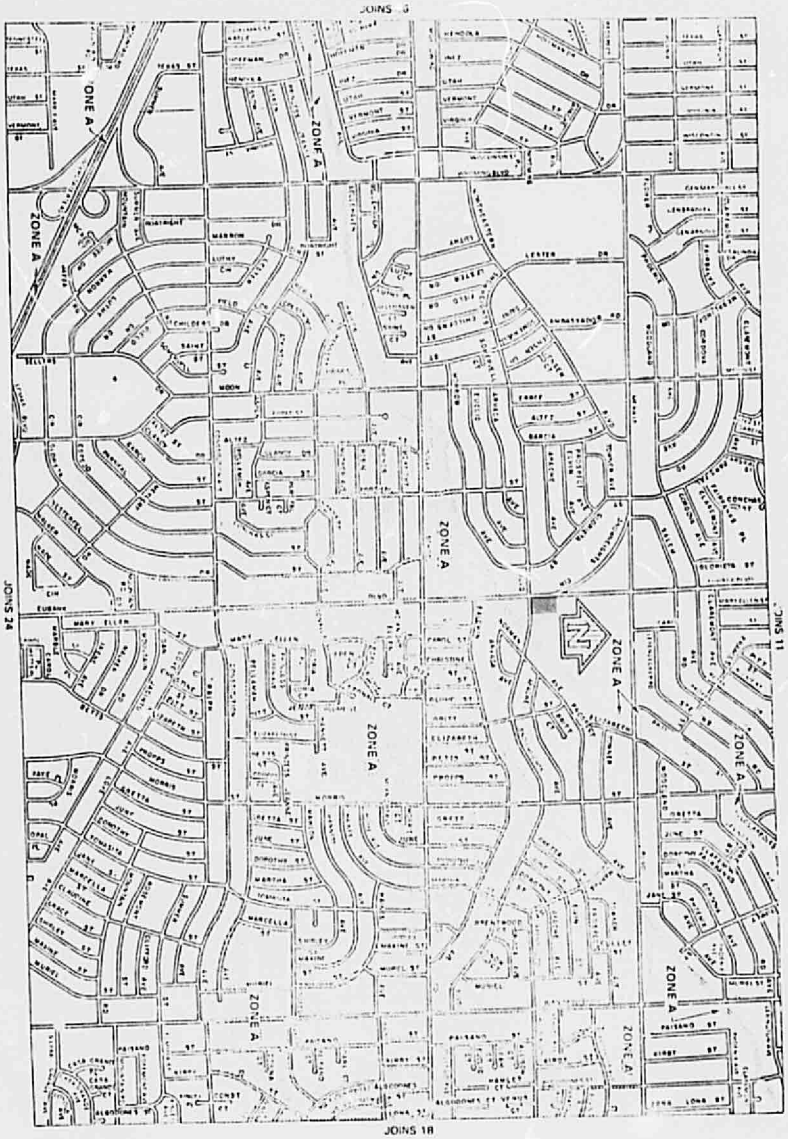
If you have any questions, do not hesitate to call. Thank you.

Thomas T. Mann, Jr., P.E./L.S.
President

Att.



H-21-Z



17	DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT Federal Insurance Administration CITY OF ALBUQUERQUE, NM (BERNALILLO CO)	APPROXIMATE SCALE 0 1000 2000 3000 FEET FLOOD HAZARD BOUNDARY MAP	MAP REVISED 2/14/78

Attachment

Calculations

Area of Parcel,

118 x 215 = 25,370 s.f.

Impervious Area = 20,640 s.f.

Required Pond Volume = 20,640 xo.1 = 2,064

Use 48" pipe for storage

A= $(2)^2$ = 12.57 s.f./ft.

L= 2,064/12.57 = 165 ft.