

CITY OF ALBUQUERQUE



Richard J. Berry, Mayor

June 7, 2017

Scott M. McGee, P.E.
SMMPE, LLC
9700 Tanoan Dr. NE
Albuquerque, NM, 87111

RE: **Jackson Middle School
Grading and Drainage Plan
Engineer's Stamp Date 5/23/17 (File: J21D029)**

Dear Mr. McGee:

Based upon the information provided in your submittal received 6/1/17, the above referenced plan is re-approved for Building Permit. It is recommended that erosion along the existing concrete rundown to the detention pond is corrected as part of this work.

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

Orig: Drainage file



J-21

LEGEND

- | EXISTING CONTOURS AND CONSTRUCTION | |
|--|--|
| <p>TC 12.9
FL 12.4
◆ 12.0
FF=5113.65</p> | <p>NEW CONTOURS AND CONSTRUCTION</p> <p>TOP OF CURB ELEV
FLOW ELEV
SPOT ELEV
FINISH FLOOR ELEV</p> |
| <p>12" STORM DRAIN
(PVC SDR 35)</p> | <p>PROPOSED STORM DRAIN</p> |

DRAINAGE

LEGAL: UNPLATTED LANDS OF BOARD OF EDUCATION, (aka Jackson Middle School)

AREA: Total site=18.41acres. This phase is the proposed Cafeteria Building 'A'-- 0.871 acres (37,950 SF)

BENCHMARK: ACS aluminum disk "15-H20 1989" set in Eubank Blvd median curb at the south edge of Snow Heights Blvd NE intersection.
ELEV= 5477.43 (NAVD 1988)

TBM: a #5 rebar with cap stamped HMCg Control NMPS #11184 as shown south of the western parking lot.
ELEV= 5500.93 (NAVD 1988)

SURVEYOR: High Mesa Consulting Group dated May, 2014

FLOOD HAZARD: From FEMA Panel 357 (8/16/2012), the majority of this site is identified as being within Zone 'X' which is outside the 0.2% annual chance floodplain. A small portion in the SW corner of the site (<5% of the site), is shaded Zone 'X' which is noted as within the 0.2% annual chance flood or an area with 1% annual chance flood with average depths of less than 1 foot.

EXISTING CONDITIONS: The site is developed as a public middle school. A northern portion of the site discharges north to Indian School Road through multiple existing driveways. Most of the site drains to an onsite detention pond which outfalls to the southwest corner of the site to Blume Street NE.

OFFSITE FLOWS: There is an existing block wall along the eastern side of the site. No offsite flow enters this site.

PROPOSED IMPROVEMENTS: The proposed improvements include a 17,500 sf (2-story) 7th grade classroom building located near the southwest corner of the site. The hardscape courtyard increases the impervious percentage of this area.

FIRST FLUSH: $Q = (0.44 - 0.10) (20,495) / 12 = 581 \text{ CF}$
This volume will be provided in the detention pond located at the SW corner of the site with the increased storage volume proposed.

DRAINAGE APPROACH: The proposed drainage plan will follow historic flow paths and the approved Grading Plan. Building roof runoff will primarily discharge to the west side of the building. Site runoff will discharge to the south and west. The courtyard area will surface flow to a proposed trench drain and drain line that carries runoff southwest to an existing detention pond. Runoff will also sheet flow west over existing asphalt to the same onsite pond. Flow will then be directed south by an existing storm drain which discharges to Blume Street NE.

HYDROLOGY: For precipitation Zone 4 with 62% C & 38% D land treatment
Existing $Q = (0.54) (3.73) + (0.33) (5.25) = 3.7 \text{ CFS}$

The proposed improvements include the building, impervious courtyard area, walks, and the shallow depressed area northwest of the proposed building.

Proposed Q= (0.06) (2.92) + (0.27) (3.73) + (0.54) (5.25) = 4.0 CFS

This minor runoff increase (0.3 CFS) will not have an adverse impact on downstream drainage facilities as runoff will be detained onsite in the enlarged detention pond.