

# CITY OF ALBUQUERQUE



April 20, 2018

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

**RE: Montessori on the Rio Grande Charter School  
1650 Gabaldon Dr NW  
Grading and Drainage Plan  
Engineer's Stamp Date 3/14/18  
Hydrology File: H12D008B**

Dear Mr. McGee:

PO Box 1293

Based on the information provided in your submittal received 3/14/18, the above referenced plan is approved for Building Permit.

Albuquerque

Prior to Hydrology approval for C.O., the drainage covenant will need to be recorded. If you have any questions, please contact me at 924-3695 or [dpeterson@cabq.gov](mailto:dpeterson@cabq.gov).

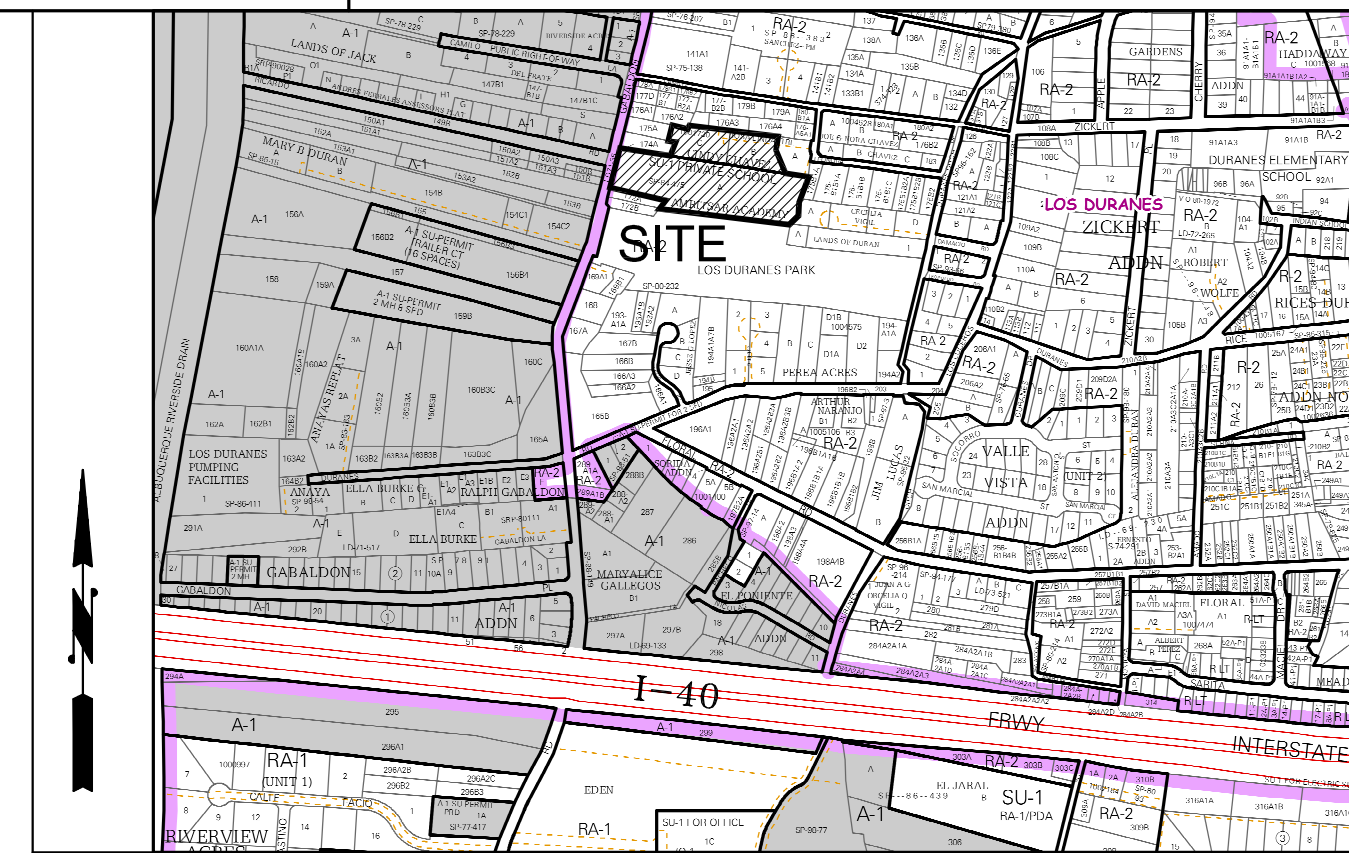
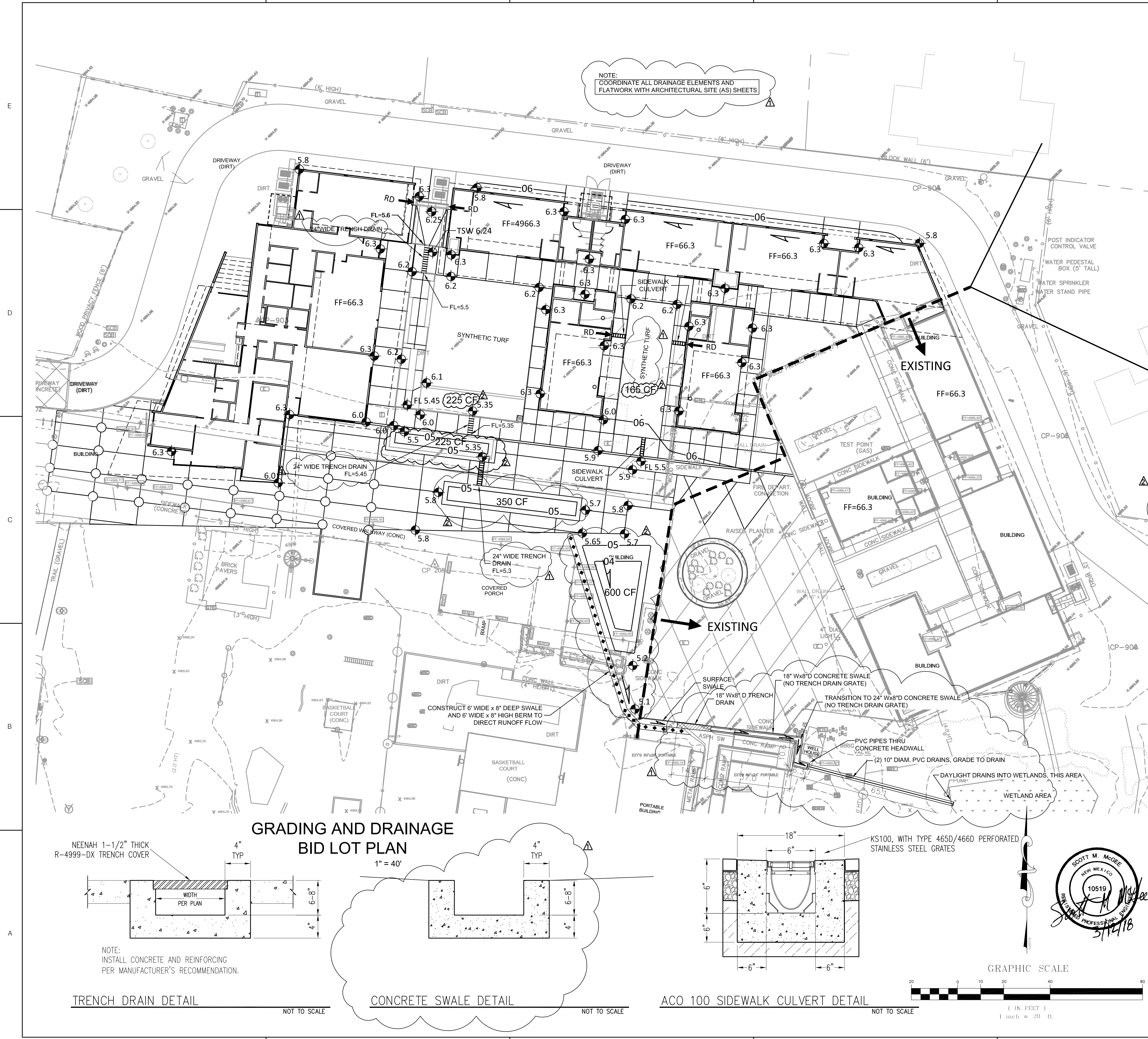
NM 87103

Sincerely,

[www.cabq.gov](http://www.cabq.gov)

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





VICINITY MAP H-12-Z NOT TO SCALE

- LEGEND**
- EXISTING CONTOUR
  - NEW CONTOUR
  - FF=4966.3 FINISH FLOOR ELEV
  - 5.9 NEW SPOT ELEVATION
  - RD ROOF DRAIN
  - FLOW DIRECTION

**DRAINAGE NARRATIVE**

**LEGAL:** Tract A Lands of Amristar Academy & Tracts B/C Lands of Cindy Chavez

**AREA:** 4.605 acres (200,586 SF)

**BM:** COA Station '7-H13' being a brass cap with ELEV= 4967.437 (NAVD 1988)  
**SURVEYOR:** Wilson & Company dated January, 2017

**FLOOD HAZARD:** From FEMA Panel 331 (09/26/2008), the site is shown to be within Zone 'X' which are areas of 0.2% annual chance flood, areas of 1% annual chance flood with average depths < 1' or with drainage areas < 1 sq. mile, and areas protected by levees from 1% annual chance flood.

**EXISTING CONDITIONS:** The site is an existing school with four existing school buildings, playground areas, an asphalt parking area, and two portable buildings. The site is very flat with an existing wetlands area in the SE corner. Two existing buildings will be demolished to make room for the new buildings. The parking area to the west, which drains to the west, remains unchanged.

**FIRST FLUSH:**  $Q=(0.44-0.10)(37,900)/12= 1,074$  CF  
This volume will be stored in the various detention ponds located throughout the site which provide 1,200 CF storage volume.

**OFFSITE FLOWS:** A residential area NE of the site discharges through the east edge of the site within an existing concrete-lined channel as shown. The historic offsite flow rate of 15.2 CFS will be unchanged.

**PROPOSED IMPROVEMENTS:** The proposed single-story buildings total 22,320 SF and are proposed to be located where the existing buildings were previously on the site. All roof runoff is collected and discharges to the south.

**DRAINAGE APPROACH:** The proposed drainage plan will follow historic flow paths and the approved Grading Plan. Site runoff is routed through drainage channels to depressed landscaped areas. Overflow will be carried on the surface to the southeast. An existing wetland pond, located in the southeast of the site, will receive the developed runoff after it flows through the courtyard area.

**MANNING CAPACITY:** 24" CULVERT  $Q=3.9$  CFS  
10" DIA. PVC PIPE:  $Q=2.2$  CFS (USE 2 - OK)

**HYDROLOGY:** For precipitation Zone 2: 30% B, 32% C & 38% D land treatment  
Existing  $Q=(1.38)(2.28)+(1.47)(3.14)+(1.75)(4.7)= 16.0$  CFS  
100-YR 6-HR  $V=(60,110)(.065)+(64,030)(.094)+(76,230)(.177)= 23,420$  CF

The proposed building, impervious areas, and walks are 43% of the area with the balance of the site considered as land treatment type 'B' and 'C'.  
Proposed  $Q=(1.33)(2.28)+(1.27)(3.14)+(2.00)(4.7)= 16.4$  CFS  
100-YR 6-HR  $V=(57,935)(.065)+(55,320)(.094)+(87,120)(.177)= 24,360$  CF  
100-YR 10-DAY  $V=(24,361-23,418)+(10,025)(.133)= 2,273$  CF  
PROVIDED POND  $V=(225)(2)+350+165+600+725= 2,290$  CF (OK)

This minor runoff increase (0.4 CFS) will be captured onsite in depressed landscape areas and the existing wetlands with a 0.5' depth increase. The proposed discharge rate will be held to the historic rate.

SIMMS TOWER STUDIO 850  
400 GOLD AVENUE SW  
ALBUQUERQUE, NEW MEXICO  
TEL 505.243.8100  
FAX 505.243.8101

**G. DONALD DUDLEY AIA**

**ARCHITECT**

ARCHITECTURE • INTERIORS • PLANNING  
AIA • NCARB • LEED AP

PROJECT NAME: new classrooms and administrative areas for

**MONTESSORI OF THE RIO GRANDE CHARTER SCHOOL**

1650 Gabaldon Drive, NW  
Albuquerque, NM 87104

ADDENDUM 1	REVISIONS	ADDENDUM 2	REVISIONS	MARK	DATE	DESCRIPTION
3/6/2018	3/14/2018					

GDDA PROJECT NO:

DATE: 3.14.2018

DRAWN BY:

CHECKED BY:

SET NO:

SHEET TITLE: GRADING AND DRAINAGE

BID LOT PLAN

**C102**

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