CITY OF ALBUQUERQUE

April 24, 2018

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

RE: **Explore Academy**
5100 Masthead NE
Grading and Drainage Plan
Engineer's Stamp Date 4/5/18
Hydrology File: D17D003N

Dear Mr. McGee,

Based on the information provided in your submittal received 4/12/18, the above referenced plan is approved for Building Permit.

Prior to Certificate of Occupancy:

1. The Private Facility Drainage Covenant must be recorded with Bernalillo County and a copy included with the drainage certification.

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

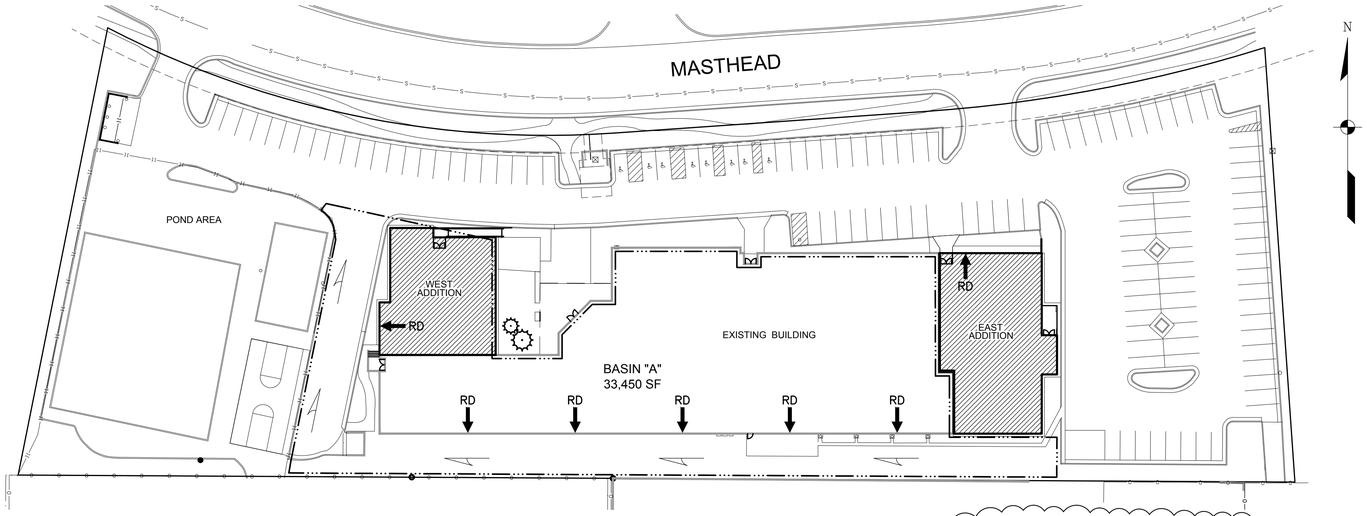
PO Box 1293

Albuquerque

NM 87103

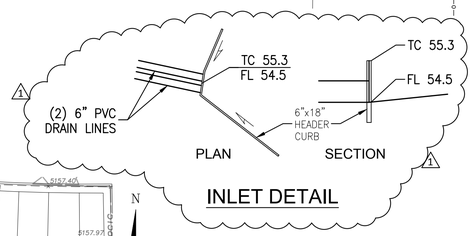
www.cabq.gov

Orig: Drainage file

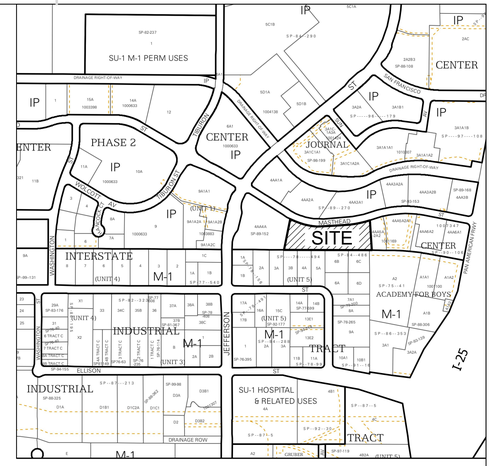


SITE LOCATION PLAN

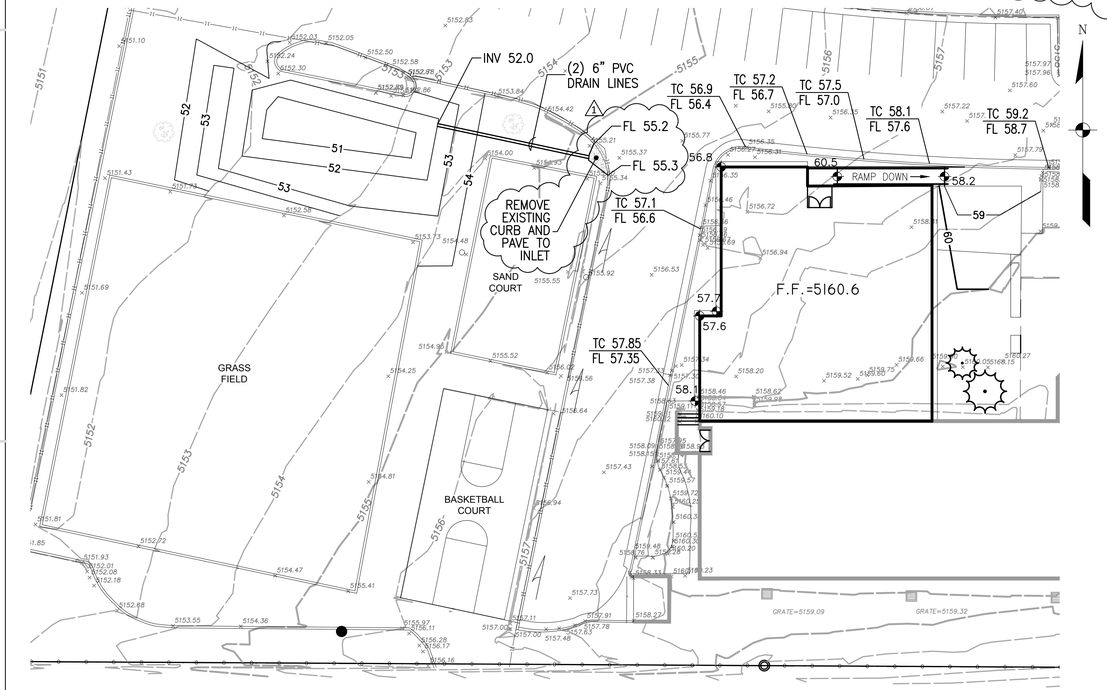
1" = 40-0' 0 40' 80'



INLET DETAIL

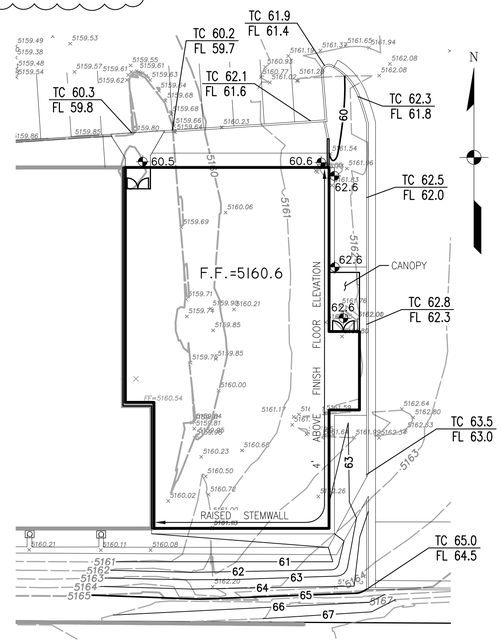


VICINITY MAP D-17 N.T.S.



GRADING AND DRAINAGE PLAN
WEST ADDITION

1" = 20-0' 0 20' 40'



GRADING AND DRAINAGE PLAN
EAST ADDITION

1" = 20-0' 0 20' 40'

Legend

- EXISTING CONTOUR – MAJOR
- EXISTING CONTOUR – MINOR
- 60 — NEW CONTOUR
- BASIN BOUNDARY
- 25.1 — SPOT ELEVATION
- F.F.=5160.6 — FINISH FLOOR ELEVATION
- TC 14.5 / FL 14.0 — TOP OF CONCRETE FLOWLINE
- FLOW DIRECTION
- RD — ROOF DRAIN

DRAINAGE

LEGAL DESCRIPTION: Tract 4AA5A1 JOURNAL CENTER

AREA: 3.3001 acres (Project Area: 0.831 Acre = 36,200 SF)

SURVEYOR: Topographic survey by Precision Surveys, Inc. January, 2018

BENCHMARK: AGRS Monument "ZAB_B" ELEVATION = 5195.09 (NAVD 1988)

FLOOD HAZARD: From FEMA Map Panel 35001C0137H (effective 8/16/12), this site is within Zone 'X'; areas determined to be subject to the 0.2% annual chance flood.

EXISTING CONDITIONS: The site is developed with a single-story school building, paved parking, walkways, and landscaping. A recent playground and grass field area have been constructed at the west end of the site which replaced asphalt paving. Site runoff surface flows to the west on both the north and south sides of the building and then discharges north to Masthead NE.

OFFSITE FLOW: No offsite flows enter the project site.

PROPOSED IMPROVEMENTS: The project includes two proposed single-story additions. A 4,180 SF addition is proposed at the NW corner and a 5,770 SF addition is proposed east of the building. The additions replace both paved and landscaped areas.

DRAINAGE APPROACH: The drainage concept will honor historic flow patterns. The west addition roof runoff will be directed to the west where it will discharge to grade and flow toward the new onsite retention area shown north of the grass field area. Runoff from the east addition will be carried north and then flow west on the paved surface.

RUNOFF: Precipitation Zone 2
Existing Q = ((.23)(2.28)+(.12)(3.14)+(.65)(4.70))(3.3 acre) = 13.0 CFS
Proposed Q = ((.22)(2.28)+(.11)(3.14)+(.67)(4.70))(3.3 acre) = 13.2 CFS

There is only a minor increase in site runoff which is mitigated to some extent by the onsite retention 1st flush volume.
For the proposed redevelopment area:
FIRST FLUSH V = (9,950 SF) (0.26"/12) = 216 CF
VOLUME PROVIDED = 240 CF (@ 6" DEPTH)

ARCHITECTURE / DESIGN / INSPIRATION

DEKKER
PERICH
SABATINI

7601 JEFFERSON NE, SUITE 100
ALBUQUERQUE, NM 87109

505.761.9700 / DPSDESIGN.ORG

ARCHITECT

SCOTT M. McGEE
NEW MEXICO
10519
REGISTERED PROFESSIONAL ENGINEER
4/5/18

ENGINEER

PROJECT

EXPLORE ACADEMY
RENOVATION/ADDITION
5100 MASTHEAD ST. NE
ALBUQUERQUE, NM 87109

REVISIONS

1	04.04.18	COA REV COMMENTS

DRAWN BY	EJS
REVIEWED BY	
DATE	02/16/2018
PROJECT NO.	16-0150.006
DRAWING NAME	

GRADING PLAN

SHEET NO.
C100
OF