

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

August 21, 2025

Verlyn Miller, P.E.
Miller Engineering Consultants, Inc
3500 Comanche NE Bldg. F
Albuquerque, NM 87107

**RE: AFD Fire Station 4
301 McKnight Ave NW
Grading and Drainage Plan
Engineer's Stamp Date: 8/9/24
Hydrology File: H14D120
Case # HYDR-2025-00282**

PO Box 1293

Dear Mr. Miller:

Albuquerque

Based upon the information provided in your submittal received 08/20/2025, the Grading and Drainage Plan **is approved** for Grading Permit, Building Permit, and Work Order. Please attach a copy of this approved plan in the construction sets for Building Permit processing.

NM 87103

PRIOR TO CERTIFICATE OF OCCUPANCY:

www.cabq.gov

Engineer's Certification, per the DPM Part 6-14 (F): *Engineer's Certification Checklist For Non-Subdivision* is required.

As a reminder, if the project total area of disturbance (including the staging area and any work within the adjacent Right-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the Stormwater Quality Engineer (Doug Hughes, PE, jhughes@cabq.gov, 505-924-3420) 14 days prior to any earth disturbance.

If you have any questions, please contact me at 505-924-3314 or amontoya@cabq.gov.

Sincerely,

Anthony Montoya, Jr., P.E., C.F.M.
Senior Engineer, Hydrology
Planning Department, Development Review Services



City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (DTIS)

Project Title: _____ Hydrology File # H14D120

Legal Description: _____

City Address, UPC, OR Parcel: _____

Applicant/Agent: _____ Contact: _____

Address: _____ Phone: _____

Email: _____

Applicant/Owner: _____ Contact: _____

Address: _____ Phone: _____

Email: _____

(Please note that a DFT SITE is one that needs Site Plan Approval & ADMIN SITE is one that does not need it.)

TYPE OF DEVELOPMENT: PLAT (#of lots) _____ RESIDENCE
DFT SITE ADMIN SITE

RE-SUBMITTAL: YES NO

DEPARTMENT: TRANSPORTATION HYDROLOGY/DRAINAGE

Check all that apply under Both the Type of Submittal and the Type of Approval Sought:

TYPE OF SUBMITTAL:

- ENGINEER/ARCHITECT CERTIFICATION
- PAD CERTIFICATION
- CONCEPTUAL G&D PLAN
- GRADING & DRAINAGE PLAN
- DRAINAGE REPORT
- DRAINAGE MASTER PLAN
- CLOMR/LOMR
- TRAFFIC CIRCULATION LAYOUT (TCL)
ADMINISTRATIVE
- TRAFFIC CIRCULATION LAYOUT FOR DFT
APPROVAL
- TRAFFIC IMPACT STUDY (TIS)
- STREET LIGHT LAYOUT
- OTHER (SPECIFY) _____

TYPE OF APPROVAL SOUGHT:

- BUILDING PERMIT APPROVAL
- CERTIFICATE OF OCCUPANCY
- CONCEPTUAL TCL DFT APPROVAL
- PRELIMINARY PLAT APPROVAL
- FINAL PLAT APPROVAL
- SITE PLAN FOR BLDG PERMIT DFT
APPROVAL
- SIA/RELEASE OF FINANCIAL GUARANTEE
- FOUNDATION PERMIT APPROVAL
- GRADING PERMIT APPROVAL
- SO-19 APPROVAL
- PAVING PERMIT APPROVAL
- GRADING PAD CERTIFICATION
- WORK ORDER APPROVAL
- CLOMR/LOMR
- OTHER (SPECIFY) _____

DATE SUBMITTED: _____



DRAINAGE REPORT

SITE LOCATION

The existing site is an approximate 4.25-acre piece of land located west of 3rd street and south of I-40 and Indian School in Albuquerque, New Mexico. The site can be accessed via 3rd Street. (see vicinity map this sheet).

EXISTING CONDITIONS

The existing site is estimated at 4.25 acres and is currently developed as a city park and an existing fire station. The site is relatively flat with a very mild slope to the south and west. The site does not lie within a 100-year FEMA floodplain. However, 3rd Street and McKnight both have a FEMA designated Zone AO floodplain as indicated on the FEMA panel on this sheet. Discharge from the site must be limited to existing conditions as indicated in the Mid-Valley DMP.

PROPOSED CONDITIONS

The proposed project will consist of a new fire station building, a new driveway entrance from 3rd Street and parking lot areas on the west side of the site. The site will also have several landscape areas and a large water harvesting feature on the northwest side of the property. The site has been divided into two drainage basins, Basin A and B. Basin A is the total site area of 3.05 acres that will be developed as the new fire station site and will be routed to the new detention pond. Basin B is estimated at 1.2 acres and consists of the southern portion of the overall site that represents the existing fire station development and what will free discharge from the site.

Storm water from Basin A will be routed to the new detention pond via surface flow and underground storm sewer pipes that will collect roof drainage from the building and the south parking lot area. A 12" storm sewer outfall pipe has been added to the pond so that the pond can slowly discharge into the existing storm sewer system in McKnight at a controlled rate per the Mid-valley DMP. Based on the detention pond routing indicated on this sheet, the release rate from the pond is limited to 4.14 cfs.

CONCLUSIONS

When fully developed as indicated on the grading and drainage plan, runoff from the new fire station site will discharge to a water harvest feature on the northwest side of the site. Basin A will be routed through the proposed detention pond. Runoff from the detention pond discharge to the McKnight storm drain system at a controlled rate of 4.14 cfs, which is less than allowable per the Mid-valley DMP. Basin B will free discharge from the site as it does under existing conditions. The lower two feet of the detention pond also has adequate storage volume to retain the storm water quality volume of 3217 cubic feet.

DETENTION POND ROUTING

AHYMO PROGRAM SUMMARY TABLE (AHYMO-S4) - Ver. S4.01a, Rel: 01a RUN DATE (MONDAY)YR = 07/31/2024
INPUT FILE = C:\Users\Public\AHYMOdata\FS4100.DAT USER NO = MillerEng\MSR06413437

Table with columns: FROM TO, PEAK, RUNOFF, TIME TO CFS, PAGE = 1, HYDROGRAPH ID, AREA, DISCHARGE, VOLUME, RUNOFF, PEAK, PER, COMMAND, IDENTIFICATION NO., NO., (SQ MI), (CFS), (AC-FT), (INCHES), (HOURS), ACRE, NOTATION. Includes routing data for Basin A and Basin B.

GENERAL NOTES:

- 1. EXISTING TOPOGRAPHIC SURVEY PERFORMED AND COMPILED BY PRECISION SURVEYS, INC., ALBUQUERQUE, NEW MEXICO JANUARY, 2024. MILLER ENGINEERING CONSULTANTS HAS UNDERTAKEN NO FIELD VERIFICATION OF THIS INFORMATION.
- 2. PROJECT BENCHMARK IS A NATIONAL GEODETIC SURVEY (NGS) A STAINLESS STEEL ROD SET BENEATH A 5 1/2" ACCESS COVER, STAMPED "A-438, 1984", IN THE NORTHWEST QUADRANT OF MANUEL BOULEVARD NORTHWEST AND THE BNSF RAILROAD TRACKS. ELEVATION = 4,975.35 FEET (NAVD 88 VERTICAL DATUM).
- 3. THE CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SEDIMENT AND EROSION CONTROL DEVICES DURING THE CONSTRUCTION PHASE.
- 4. CONTRACTOR SHALL OBTAIN A GRADING PERMIT FROM THE CITY OF ALBUQUERQUE, PRIOR TO ANY GRADING OR CONSTRUCTION.
- 5. TWO WORKING DAYS PRIOR TO ANY EXCAVATION CONTRACTOR MUST CONTACT LINE LOCATING SERVICE 260-1990 FOR LOCATION OF EXISTING UTILITIES.
- 6. ALL EMBANKMENTS SHALL BE PLACED AND COMPACTED IN LIFTS OF MAXIMUM OF 8". THE EMBANKMENTS SHALL BE WETTED AND COMPACTED TO 95% OPTIMUM DENSITY PER ASTM D1557 AND 95% UNDER ALL STRUCTURES INCLUDING DRIVEWAYS AND PARKING LOTS.
- 7. THE CONTRACTOR SHALL FIELD VERIFY LOCATION AND SIZE OF ALL UTILITIES PRIOR TO CONSTRUCTION.
- 8. ALL WORK PERFORMED SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF ALBUQUERQUE STORM DRAINAGE REGULATIONS. ALL WORK PERFORMED SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF ALBUQUERQUE "GRADING AND DRAINAGE DESIGN REQUIREMENTS AND POLICIES FOR LAND DEVELOPMENT."
- 9. THE OWNER, CONTRACTOR AND/OR BUILDER SHALL COMPLY WITH ALL APPROPRIATE LOCAL, STATE AND FEDERAL REGULATIONS AND REQUIREMENTS.
- 10. THE CONTRACTOR SHALL TAKE ALL APPROPRIATE AND REASONABLE MEASURES TO PREVENT SEDIMENT OR POLLUTANT LADEN STORM WATER FROM EXITING THE SITE DURING CONSTRUCTION. STORMWATER MAY BE DISCHARGED IN A MANNER, WHICH COMPLIES WITH THE APPROVED GRADING AND DRAINAGE PLAN.
- 11. THE CONTRACTOR SHALL TAKE ALL APPROPRIATE MEASURES TO PREVENT THE MOVEMENT OF CONSTRUCTION RELATED SEDIMENT, DUST, MUD, POLLUTANTS, DEBRIS, WASTE, ETC FROM THE SITE BY WIND, STORM FLOW OR ANY OTHER METHOD EXCLUDING THE INTENTIONAL, LEGAL TRANSPORTATION OF SAME IN A MANNER ACCEPTABLE BY THE CITY.
- 12. THE CONTRACTOR SHALL NOT DISTURB AREAS OUTSIDE THE AREAS SHOWN AS "SLOPE LIMITS" ON THE GRADING AND DRAINAGE PLAN.
- 13. SEE ARCHITECTURAL DRAWINGS FOR SIDEWALK AND HANDICAPPED RAMPS, DETAILS AROUND THE BUILDING.
- 14. THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER FOR CLARIFICATION IF THERE ARE ANY SPOT ELEVATIONS ON THE GRADING AND DRAINAGE PLAN WHICH APPEAR TO BE AMBIGUOUS OR DO NOT MEET THE INTENT OF THE GRADING AND DRAINAGE PLAN.
- 15. THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER FOR CLARIFICATION IF THERE ARE SIDEWALKS OR CONCRETE FLATWORK WHICH DOES NOT MEET ADA ACCESSIBILITY REQUIREMENTS. ALL SIDEWALKS SHALL HAVE A MAXIMUM CROSS SLOPE OF 2.0%, ALL SIDEWALKS SHALL HAVE A MAXIMUM LONGITUDINAL SLOPE OF 5.0%, AND ALL RAMPS SHALL HAVE A MAXIMUM LONGITUDINAL SLOPE OF 15:1.
- 16. ALL SIDEWALKS AND CONCRETE FLATWORK SHALL HAVE A MINIMUM OF 0.5% SLOPE. CONTRACTOR SHALL CONTACT PROJECT ENGINEER IF THERE ARE SIDEWALKS OR CONCRETE FLATWORK WHICH DO NOT MEET THIS REQUIREMENT.
- 17. THE CONTRACTOR SHALL SUBMIT MATERIAL SUBMITTALS, CUT SHEETS AND SHOP DRAWINGS FOR ALL CIVIL RELATED ITEMS FOR REVIEW PRIOR TO CONSTRUCTION.
- 18. THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE 2019 EDITION OF THE NEW MEXICO STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION (GRAY BOOK). ALL UTILITY WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE AMERICAN PUBLIC WORKS ASSOCIATION, NEW MEXICO CHAPTER, STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
- 19. ALL EXISTING MANHOLES, VALVES AND METERS SHALL BE ADJUSTED TO NEW FINISH GRADE.
- 20. THE CONTRACTOR SHALL SUBMIT A SEED MIX DESIGN TO THE OWNER FOR REVIEW AND APPROVAL PRIOR TO STARTING THE SEEDING ON THE PROJECT. THE SEED MIX DESIGN SHALL BE A SEED MIX RECOMMENDED BY NRCS FIELD OFFICE REPRESENTATIVE APPROPRIATE FOR PROJECT LOCATION.

HYDROLOGY CALCULATIONS

Table with columns: Basin, Area (Ac), Land Treatment Factors (A, B, C, D), Ew (in), V(100-6) (af), V(100-24) (af), Q(100) (cfs). Includes Existing Conditions and Proposed Conditions data.

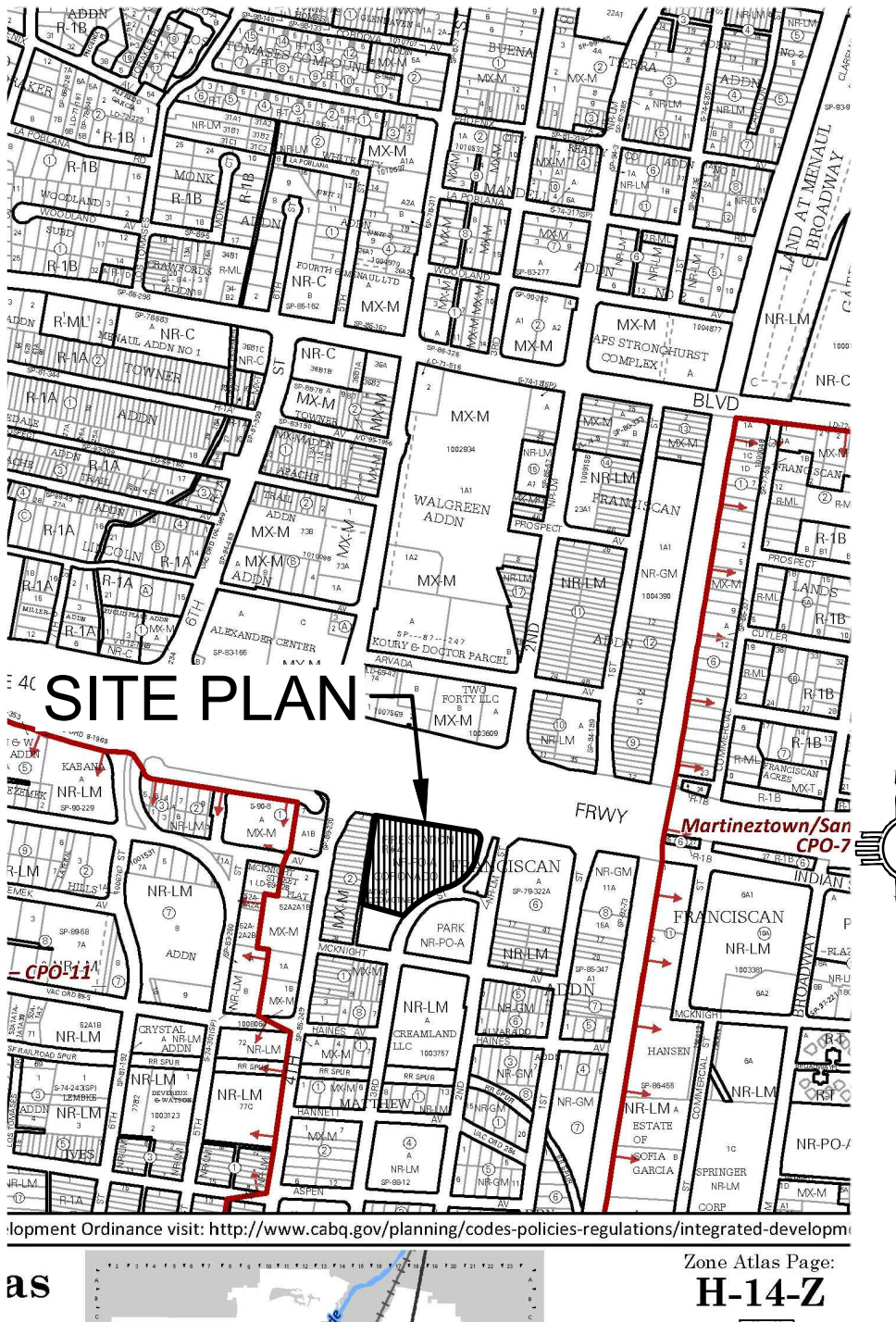
WATER HARVEST AREA

Table with columns: Side Slope, Elev. (ft), Area (sq ft), Volume (cf), Cum Volume (cf). Includes Pond Rating Table for WHA #1.

STORM WATER QUALITY CALCULATIONS

SWQV = (0.42" / 12 * 91,511 SF) = 3,217 CUBIC FEET

National Flood Hazard Layer FIRMette



A1 FLOOD ZONE MAP
FLOOD ZONE MAP: 35001C0332G

C1 VICINITY MAP
ZONE ATLAS MAP: H-14-Z

Table with columns: AS-BUILT INFORMATION, BENCH MARKS, SURVEY INFORMATION, FIELD NOTES, SEAL, REMARKS, DESIGN, DATE. Includes dates for July 2025 and signatures for VAM, MEC, and VAM.



CITY OF ALBUQUERQUE CAPITAL IMPLEMENTATION PROGRAM
AFD FIRE STATION 4
301 MCKNIGHT AVENUE N.W.
ALBUQUERQUE, NM 87123

HYDROLOGY PLAN

Table with columns: Design Review Committee, City Engineer Approval, Issue Date, City Project No., Sheet. Includes dates for July 2025 and sheet number CG-101.

