

L11/D20



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

November 18, 1999

James E. Millington, P.E.
Chavez-Grievés
5639 Jefferson NE
Albuquerque, NM 87109

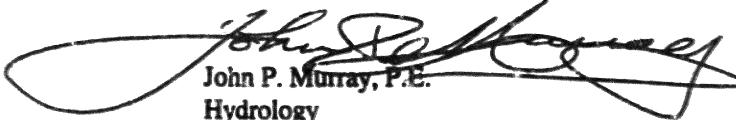
**RE: ATRISCO ELEMENTARY SCHOOL (L11-D20). ENGINEER'S CERTIFICATION
FOR CERTIFICATE OF OCCUPANCY APPROVAL. ENGINEER'S STAMP
DATED MAY 6, 1998 FOR G&D PLAN. CERTIFICATION DATED NOVEMBER 9,
1999.**


Dear Mr. Millington:

Based on the information provided on your November 10, 1999 submittal, the above referenced project is approved for Certificate of Occupancy. Thank you for recovering the approved G&D Plan of record.

If I can be of further assistance, please feel free to contact me at 924-3984.

Sincerely,


John P. Murray, P.E.
Hydrology

c:  WR
File

L-11/DOU



CHAVEZ · GRIEVES

CONSULTING ENGINEERS, INC.

3639 JEFFERSON STREET, SUITE 100, ALBUQUERQUE, NEW MEXICO 87102-1000 • PHONE (505) 262-1000 • FAX (505) 262-0700

LETTER OF TRANSMITTAL

TO: City of Albuquerque DATE: 11/9/99
Development Services Agency JOB # _____
Plaza del Sol RE: Alvico Elementary
ATTN: John Murry School

WE ARE SENDING YOU ☐ ATTACHED ☐ UNDER SEPARATE COVER, THE FOLLOWING ITEMS:

☐ SHOP DRAWINGS ☒ PLANS ☐ SPECIFICATIONS ☐ DISKETTE
☐ CHANGE ORDER ☐ PRINTS ☐ CALCULATIONS ☐ PROPOSAL INFO
☐ COPY OF LETTER ☐ SAMPLES ☐ REPORT

COPIES	DATE	NO.	DESCRIPTION
1			Grading & Drainage Plan

THESE ARE TRANSMITTED AS CHECKED BELOW:

☐ FOR YOUR USE ☐ FOR REVIEW & COMMENT
☒ AS REQUESTED ☐ RETURNED AFTER LOAN TO US
☐ PLEASE CORRECT AND RESUBMIT ☐ SUBMIT ☐ COPIES FOR DISTRIBUTION
☐ RESUBMITTAL IS NOT REQUIRED ☐ RETURN ☐ CORRECTED PRINTS
CORRECTIONS, IF ANY, ARE NOTED ☐ BIDS/PROPOSALS DUE _____ 199_

REMARKS: Attached per your request is the as-built data
plotted on the original G&D plan

COPIES TO: _____ SIGNED: [Signature]

IF ENCLOSURES ARE NOT AS NOTED, KINDLY NOTIFY US AT ONCE.

REV. 9/95

DRAINAGE INFORMATION

PROJECT TITLE: ATRISCO ELEMENTARY SCHOOL

ZONE ATLAS/DRNG. FILE #: L-11-2/10020

DRB#: _____ EPC #: _____

WORK ORDER #: _____

LEGAL DESCRIPTION: ATRISCO ELEMENTARY SCHOOL

CITY ADDRESS: 1201 Atrisco Drive SW, Albuquerque, NM

ENGINEERING FIRM: Chavez-Grieves

CONTACT: James E. Millington P.E.

ADDRESS: 5639 Jefferson NE

PHONE: 344-4080

OWNER: Albuquerque Public Schools

CONTACT: Pat McMurray

ADDRESS: 915 Oak SE

PHONE: [505] 242 5865

ARCHITECT: Wright & Hammer

CONTACT: Denise Hammer

ADDRESS: 1735 Aliso Drive NE,
Albuquerque, NM

PHONE: [505] 266 6764

SURVEYOR: _____

CONTACT: _____

ADDRESS: _____

PHONE: _____

CONTRACTOR: _____

CONTACT: _____

ADDRESS: _____

PHONE: _____

TYPE OF SUBMITTAL:

- ☐ DRAINAGE REPORT
- ☐ DRAINAGE PLAN
- ☐ CONCEPTUAL GRADING & DRAINAGE PLAN
- ☐ GRADING PLAN
- ☐ EROSION CONTROL PLAN
- ☒ ENGINEER'S CERTIFICATION
- ☐ OTHER

CHECK TYPE OF APPROVAL SOUGHT:

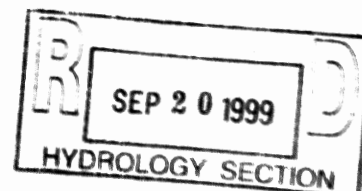
- ☐ SKETCH PLAT APPROVAL
- ☐ PRELIMINARY PLAT APPROVAL
- ☐ S. DEV. PLAN FOR SUB'D. APPROVAL
- ☐ S. DEV. PLAN FOR BLDG. PRMT. APPROVAL
- ☐ SECTOR PLAN APPROVAL
- ☐ FINAL PLAT APPROVAL
- ☐ FOUNDATION PERMIT APPROVAL
- ☐ BUILDING PERMIT APPROVAL
- ☒ CERTIFICATE OF OCCUPANCY APPROVAL
- ☐ GRADING PERMIT APPROVAL
- ☐ PAVING PERMIT APPROVAL
- ☐ S.A.D. DRAINAGE REPORT
- ☐ DRAINAGE REQUIREMENTS
- ☐ OTHER

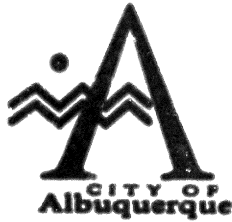
PRE-DESIGN MEETING:

- ☐ YES
- ☐ NO
- ☐ COPY PROVIDED

DATE SUBMITTED: September 20, 1999

BY: James E. Millington P.E.





June 11, 1998

James E. Millington, P.E.
Chavez-Grieves
5639 Jefferson NE
Albuquerque, NM 87109

**RE: ATRISCO ELEMENTARY SCHOOL (L11-D20). DRAINAGE REPORT, GRADING
AND DRAINAGE PLAN FOR BUILDING PERMIT APPROVAL. ENGINEER'S
STAMP DATED MAY 6, 1998.**

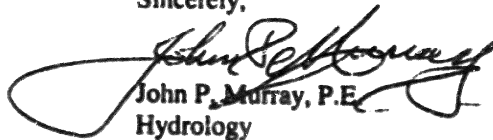
Dear Mr. Millington:

Based on the information provided on your May 6, 1998 submittal, the above referenced project is approved for Building Permit.

Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

If I can be of further assistance, please feel free to contact me at 924-3984.

Sincerely,


John P. Murray, P.E.
Hydrology

c: Andrew Garcia
File

Good for You, Albuquerque!

DRAINAGE INFORMATION

PROJECT TITLE: Atrisco Elementary School

ZONE ATLAS/DRNG. FILE #: L-11-Z

87 20

DRB#: _____ EPC #: _____

WORK ORDER #: _____

LEGAL DESCRIPTION: Atrisco Elementary School

CITY ADDRESS: 1201 Atrisco Drive SW

ENGINEERING FIRM: Cnavez-Grieves

CONTACT: James Alarid

ADDRESS: 5639 Jefferson NE

PHONE: 344-4080

OWNER: Albuquerque Public Schools

CONTACT: Pat McMurray

ADDRESS: 915 Oak SE

PHONE: 242-5865

ARCHITECT: Wright & Hammer

CONTACT: Denise Hammer

ADDRESS: 1735 Aliso Drive NE

PHONE: 266-6764

SURVEYOR: _____

CONTACT: _____

ADDRESS: _____

PHONE: _____

CONTRACTOR: _____

CONTACT: _____

ADDRESS: _____

PHONE: _____

TYPE OF SUBMITTAL:

- ☒ DRAINAGE REPORT
- ☒ DRAINAGE PLAN
- ☐ CONCEPTUAL GRADING & DRAINAGE PLAN
- ☒ GRADING PLAN
- ☐ EROSION CONTROL PLAN
- ☐ ENGINEER'S CERTIFICATION
- ☐ OTHER

PRE-DESIGN MEETING:

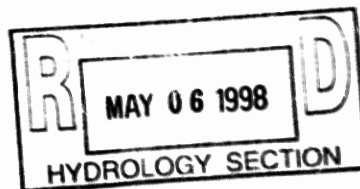
- ☐ YES
- ☒ NO
- ☐ COPY PROVIDED

DATE SUBMITTED: May 6, 1998

BY: James Alarid

CHECK TYPE OF APPROVAL SOUGHT:

- ☐ SKETCH PLAT APPROVAL
- ☐ PRELIMINARY PLAT APPROVAL
- ☐ S. DEV. PLAN FOR SUB'D. APPROVAL
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- ☐ GRADING PERMIT APPROVAL
- ☐ PAVING PERMIT APPROVAL
- ☐ S.A.D. DRAINAGE REPORT
- ☐ DRAINAGE REQUIREMENTS
- ☐ OTHER





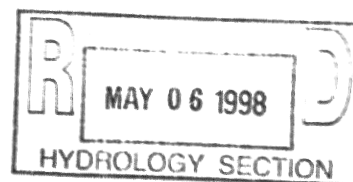
CHAVEZ · GRIEVES
CONSULTING ENGINEERS, INC.

5839 JEFFERSON STREET NE • ALBUQUERQUE, NEW MEXICO 87109 • PHONE (505) 344-4080 • FAX (505) 343-8759

GRADING AND DRAINAGE PLAN
FOR
ATRISCO ELEMENTARY SCHOOL

Albuquerque, New Mexico

May 1998





CHAVEZ · GRIEVES
CONSULTING ENGINEERS, INC.

5839 JEFFERSON STREET NE • ALBUQUERQUE, NEW MEXICO 87109 • PHONE (505) 344-4080 • FAX (505) 343-6759

GRADING AND DRAINAGE PLAN
ATRISCO ELEMENTARY SCHOOL

Albuquerque, New Mexico



May 1998

LOCATION

This site is located on the property of the existing Atrisco Elementary School south of San Ygnacio Road SW and west of Atrisco Road SW in Albuquerque, NM.

LEGAL DESCRIPTION

The legal description is Atrisco Elementary School.

SURROUNDING DEVELOPMENT

The school is located in a residential area in the south valley. The site of the new building is in the approximate center of the property. Four portable classrooms have been removed from this site in preparation for construction of the new building. There are school buildings to the east, portable classrooms to the south, a sports field to the west, and playground areas to the north.

FLOOD HAZARD ZONES

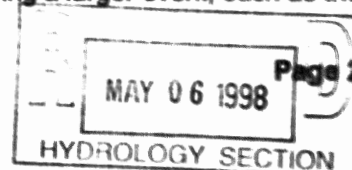
Panel 3500020329 D of the National Flood Insurance Rate Maps for the City of Albuquerque, dated September 20, 1996, indicates that the entire site is in a designated flood hazard Zone X. Zone X designates "areas of 500-year flood, areas of 100 year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile and areas protected by levees from 100-year flood."

RELATED REPORTS

No related reports were found for this site.

EXISTING SITE CONDITIONS AND DRAINAGE PATTERN

The site for the addition is currently a dirt school yard compacted by human activity and by the four portable classrooms that have recently been removed. There are also asphalt sidewalks and some vegetation. The site is fairly flat. The runoff from the area of the proposed addition flows west where it gathers at the edge of the sports field and is carried north to a small ponding area in the playground with a volume of 2304 cubic feet. In a small, frequent storm event, this pond will be adequate. During a larger event, such as the



100-year design storm, the entire site will be flooded as designated by the flood zone "X" as described previously in this report.

PROPOSED SITE CONDITIONS AND DRAINAGE PATTERN

The proposed drainage pattern is the same as the existing pattern. To ensure that the water drains from the east side of the new building, a concrete valley gutter will gather the runoff at the southeast corner of the building and carry it west to the edge of the sports field. Since the new building essentially replaces the portable classrooms that had been in the same location, the impervious area has increased by a relatively small area. The runoff rate will increase by only 0.06 cfs/acre. Because the change is so small, there is no need for any changes to the current drainage pattern. Since the entire site is in a flood zone, the finished floor elevation has been set about 1.5 feet above the existing grade in an effort to be above the flood water in a 100-year storm event.

HYDROLOGY/HYDRAULICS

The runoff calculations and design have been done in accordance with Section 22.2 of the Development Process Manual of the City of Albuquerque, January 1993.

RUNOFF COMPARISON

Basin	Undeveloped - CFS	Developed - CFS
A	13.22	13.28
TOTAL ONSITE	13.22	13.28

APPENDIX A

HYDROLOGIC COMPUTATIONS

Printed May 5, 1998 (6:24PM)

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CHAVEZ - GRIEVES / CONSULTING ENGINEERS, Inc.

5639 Jefferson Street NE, Albuquerque, New Mexico 87109

Phone (505) 344-4080 - Fax (505) 243-8759

RUNOFF CALCULATIONS - SIMPLIFIED PROCEDURE

By: Colette Hoffman
Project: Atrisco Elementary School

Date: 12-10-97
Zone Atlas: L-11-Z

This procedure is in accordance with the City of Albuquerque Development Process Manual, Volume 2, Section 22.2 "Hydrology", peak discharge rate for small watersheds less than forty acres in size.

Precipitation Zone from Figure A-1: 1

Land treatment descriptions are in Table A-4.

1. RUNOFF RATE COMPUTATION

Use Equation a-10: $Q_P = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$

Values of Q_p are from Table A-9, and are in CFS/acre. Area values are in acres.

BASIN	Q_{PA}	A_A	Q_{PB}	A_B	Q_{PC}	A_C	Q_{PD}	A_D	Q_P
EXISTING RATE OF RUNOFF (CFS)									
Basin A	1.29	0.000	2.03	0.000	2.87	2.488	4.37	1.392	13.22
Total									13.22
DEVELOPED RATE OF RUNOFF (CFS)									
Basin A	1.29	0.000	2.03	0.000	2.87	2.451	4.37	1.429	13.28
Total									13.28

2. RUNOFF VOLUME COMPUTATION

Use Equation a-5 to compute weighted excess precipitation:

$$\text{Weighted } E = "E" = (E_A A_A + E_B A_B + E_C A_C + E_D A_D) / (A_A + A_B + A_C + A_D)$$

$$(A_A + A_B + A_C + A_D) = \sum A_i$$

Use Equation a-6 to compute the volume:

$$V_{360} = "E" \times (A_A + A_B + A_C + A_D) \times 3630 \text{ feet}^3/\text{acre-inch}$$

Values of E_i are from Table A-8, and are in inches. Area values are in acres.

BASIN	E_A	A_A	E_B	A_B	E_C	A_C	E_D	A_D	$\sum A_i$	"E"	V_{360}
EXISTING VOLUME OF RUNOFF (CUBIC FEET)											
Basin A	0.44	0.000	0.67	0.000	0.99	2.488	1.97	1.392	3.880	1.34	18,895
Total											18,895
DEVELOPED VOLUME OF RUNOFF (CUBIC FEET)											
Basin A	0.44	0.000	0.67	0.000	0.99	2.451	1.97	1.429	3.880	1.35	19,027
Total											19,027

APPENDIX B

DRAWINGS

PLANS/PLATS ON FILE

FILE DESC: LI/D20

PLANS/PLATS 8

7

