

April 24, 2008

J. Graeme Means, P.E. High Mesa Consulting Group 6010-B Midway Park Blvd. NE Albuquerque, NM 87109

Re: Dennis Chavez Elementary School Additions & Renovation, 7500 Heritage Hills NE, (D-20/D002A)

Approval of Permanent Certificate of Occupancy,

Engineer's Stamp Date 9/15/2006

Certification dated: 4-22-08

Mr. Means:

PO Box 1293

Based upon the information provided in your submittal received 4/23/08, the above referenced certification is approved for release of Permanent Certificate of Occupancy by Hydrology.

Albuquerque

If you have any questions, you can contact me at 924-3982.

NM 87103

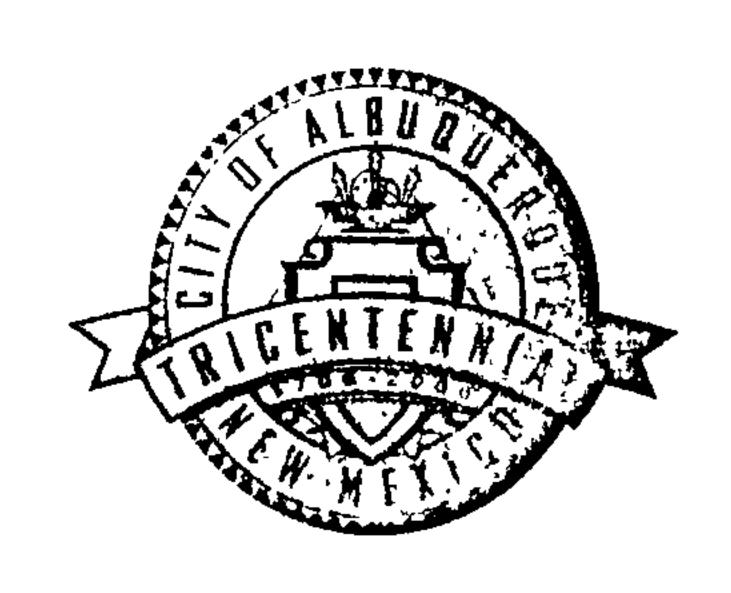
Timothy E. Sims

Sincerely,

www.cabq.gov

Plan Checker-- Hydrology, Planning Dept Development and Building Services

C: CO Clerk—Katrina Sigala file



September 20, 2006

J. Graeme Means, P.E.
Jeff Mortensen & Associates, Inc
6010-B Midway Park Blvd. NE
Albuquerque, NM 87109

Re: Dennis Chavez Elementary School, Additions and Renovation Grading and Drainage Plan, Engineer's Stamp dated 9-15-06 (D20/D2A)

Dear Mr. Means,

Based upon the information provided in your submittal dated 9-18-06, the above referenced plan is approved for Building Permit. Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

P.O. Box 1293

This project requires a National Pollutant Discharge Elimination System (NPDES) permit. If you have any questions feel free to call the Municipal Development Department Hydrology Section at 768-3654 (Charles Caruso)

Albuquerque

Also, prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required.

New Mexico 87103

If you have any questions, I can be reached at 924-3695.

www.cabq.gov

Sincerely,

Curtis A. Cherne, E.I.

Engineering Associate, Planning Dept. Development and Building Services

307

C: file

Charles Caruso, DMD



September 6, 2006

Jeffrey G. Mortensen, P.E. Jeff Mortensen & Assoc., Inc. 6010-B Midway Park Blvd. NE Albuquerque, NM 87109

Re: Dennis Chavez Elementary School Master Drainage Plan Engineer's Stamp dated 8-27-06 (D20/D2A)

Dear Mr. Mortensen,

file

Based upon the information provided in your submittal dated 8-28-06, the above referenced plan is approved to be the Master Drainage Plan.

P.O. Box 1293

If you have any questions, you can contact me at 924-3695.

Albuquerque

New Mexico 87103

www.cabq.gov

Curtis A. Cherne, E.I.

Sincerely,

Engineering Associate, Planning Dept.
Development and Building Services

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THE RIVERS OF THE PARTY OF THE

August 9, 2006

J. Graeme Means, P.E.
Jeff Mortensen & Associates, Inc.
6010-B Midway Park Blvd. NE
Albuquerque, NM 87109

Re: Dennis Chavez Elementary School, Engineer's Stamp dated 7-27-06

Request for Grading and Paving Permit Approval, (D20/D2A)

Playground Improvements Only

Dear Mr. Means,

Based on the information contained in your submittal received on July 31, 2006, the above referenced plan is approved for both Grading and Paving Permit Approval.

Please be advised that this approval applies only to the playground improvements. As the proposed site layout differs from the Master Plan approved in September of 2005, a revision and update to that Master Plan will be required prior to the approval of any additional site improvements and / or Building Permits.

If you have any questions or need additional information, feel free to contact me at 924-3990.

Albuquerque

P.O. Box 1293

Sincerely,

New Mexico 87103

Jeremy Hoover P.E.

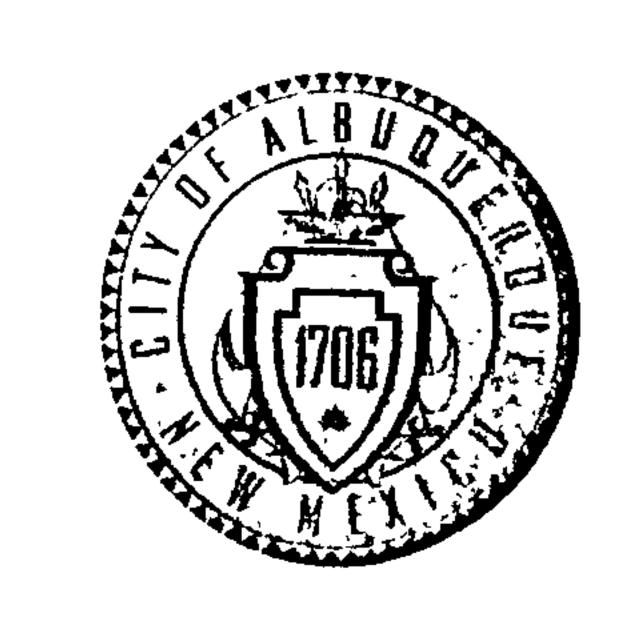
mmm

Senior Engineer

Hydrology Section

www.cabq.gov Development and Building Services

cc: file (D20/D2A)



### Planning Department Transportation Development Services Section

April 7, 2008

John L. Greer, Registered Architect 1717 Louisiana NE, Ste. 205 Albuquerque, NM 87110-7027

Certification Submittal for Final Building Certificate of Occupancy for Re:

Dennis Chavez Elementary School, [D-20 / D002A]

7500 Barstow NE

Architect's Stamp Dated 04/03/08

Dear Mr. Greer:

Sincerely,

PO Box 1293

The TCL / Letter of Certification submitted on April 4, 2008 is sufficient for acceptance by this office for final Certificate of Occupancy (C.O.). Notification has been made to the Building and Safety Section.

Albuquerque

NM 87103

www.cabq.gov

Nilo E. Salgado-Ferhandez, P.E.

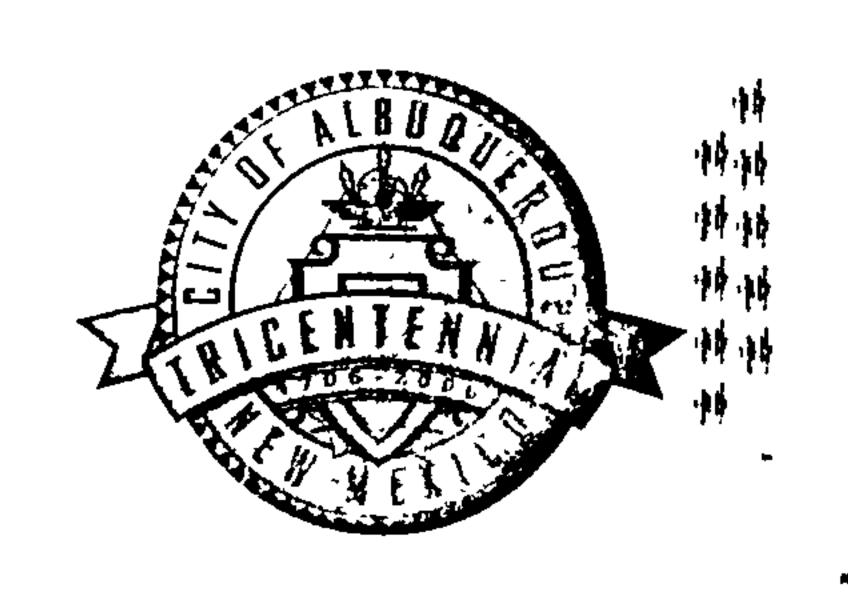
Senior Traffic Engineer

Development and Building Services

Planning Department

Engineer

Hydrology file CO Clerk



December 28, 2006

John Greer, R.A. Greer Stafford SJCF 1717 Louisiana NE, Suite 205 Albuquerque, NM 87110

Re:

Dennis Chavez Elementary Additions and Renovations, 7500 Barstow NE,

Traffic Circulation Layout

Architect's Stamp dated 12-19-06 (D20-D2A)

Dear Mr. Greer,

The TCL submittal received 12-19-06 is approved for Building Permit. The plan is stamped and signed as approved. A copy of this plan will be needed for each of the building permit plans. Please keep the original to be used for certification of the site for final C.O. for Transportation. Public infrastructure or work done within City Right-of-Way shown on these plans is for information only and is not part of approval. A separate DRC and/or other appropriate permits are required to construct these items.

P.O. Box 1293

If a temporary CO is needed, a copy of the original TCL that was stamped as approved by the City will be needed. This plan must include a statement that identifies the outstanding items that need to be constructed or the items that have not been built in "substantial compliance," as well as the signed and dated stamp of a NM registered architect or engineer. Submit this TCL with a completed <u>Drainage and Transportation Information Sheet</u> to Hydrology at the Development Services Center of Plaza Del Sol Building.

Albuquerque

New Mexico 87103

www.cabq.gov

When the site is completed and a final C.O. is requested, use the original City stamped approved TCL for certification. A NM registered architect or engineer must stamp, sign, and date the certification TCL along with indicating that the development was built in "substantial compliance" with the TCL. Submit this certification TCL with a completed <u>Drainage and Transportation Information Sheet</u> to Hydrology at the Development Services Center of Plaza Del Sol Building.

Once verification of certification is completed and approved, notification will be made to Building Safety to issue Final C.O. To confirm that a final C.O. has been issued, call Building Safety at 924-3306.

Sincerely,

Kristal D. Metro, P.E.

Senior Engineer, Planning Dept.
Development and Building Services

C: File



## City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

February 4, 1999

Jud Lee, P.E. Wilson & Company 4775 Indian School Road, NE - Suite 200 Albuquerque, NM 87110

Attn: Steve Salazar

DENNIS CHAVEZS ELEMENTARY SCHOOL - PARKING LOT IMPROVEMENTS RE: (D20-D2A). GRADING & DRAINAGE PLAN FOR PAVING PERMIT APPROVAL. ENGINEER'S STAMP DATED JANUARY 21, 1999.

Dear Mr. Lee:

Based on the information provided on your January 22, 1999 submittal, the above referenced project is approved for Paving Permit.

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

Prior to Certificate of Occupancy approval, an Engineer's Certification per the DPM will be

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



Janually Warks Persetment

Martin J. Chávez, Mayor

Robert E. Gurulé, Director

Jeff Mortensen Jeff Mortensen & Assoc. 6010-B Midway Park Blvd. NE Albuquerque, NM 87109

RE: DENNIS CHAVEZ ELEMENTARY SCHOOL (D20-D2A). ENGINEER'S CERTIFICATION FOR CERTIFICATE OF OCCUPANCY. ENGINEER'S CERTIFICATION DATED JANUARY 3, 1997.

Dear Mr. Mortensen:

Based on the information provided on your January 6, 1997 submittal, the above referenced project is approved for Certificate of Occupancy.

If I can be of further assistance, please feel free to contact me at 768-3622.

Sincerely

Lisa Ann Manwill

Engineering Assoc./Hyd.

c: Andrew Garcia



### City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

November 9, 1993

David Thompson
Wilson & Company
6611 Gulton Ct.
Albuquerque, NM 87109

RE: ENGINEER CERTIFICATION FOR DENNIS CHAVEZ ELEMENTARY SCHOOL (D20-D2A) ENGINEER'S CERTIFICATION STATEMENT DATED 11/1/93.

Dear Mr. Thompson:

Based on the information provided on your November 2, 1993 submittal, Engineer Certification for the above referenced site is acceptable.

If I can be of further assistance, please feel free to contact me at 768-2667.

Sincerely,

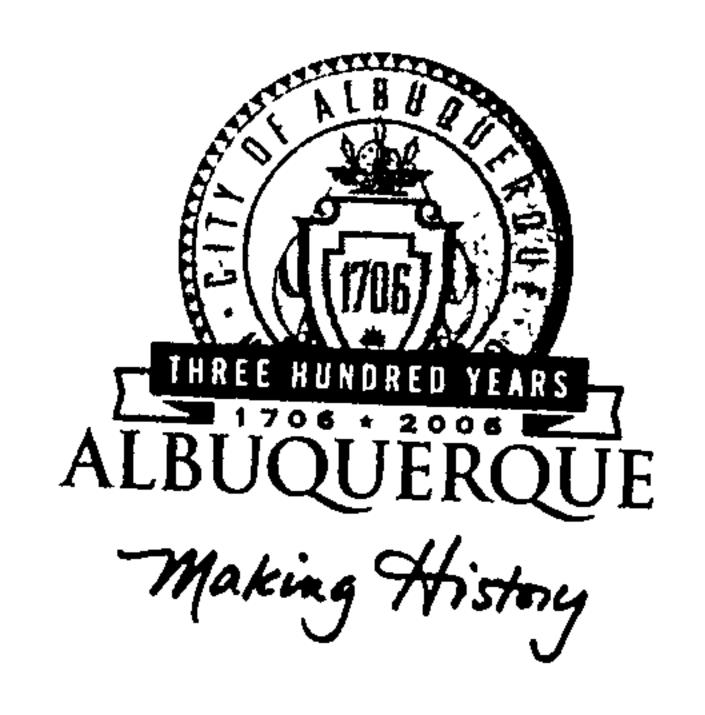
Bernie J. Montoya, CE Engineer Associate

BJM/d1/WPHYD/7587

xc: Alan Martinez

File

PUBLIC WORKS DEPARTMENT



September 27, 2005

Jeffrey G. Mortensen, P.E. Jeff Mortensen & Assoc., Inc. 6010-B Midway Park Blvd. NE Albuquerque, NM 87109

Re: Dennis Chavez School, 7500 Barstow NE, Grading and Drainage Plan Engineer's Stamp dated 9-22-05 (D20-D2A)

Dear Mr. Mortensen,

File

Based upon the information provided in your submittal received 9-22-05, the above referenced plan is approved for Master Drainage Plan requirements. Please note that a site-specific grading and drainage plan will need to be submitted for each phase of this project.

If you have any questions, you can contact me at 924-3695.

Albuquerque

P.O. Box 1293

New Mexico 87103

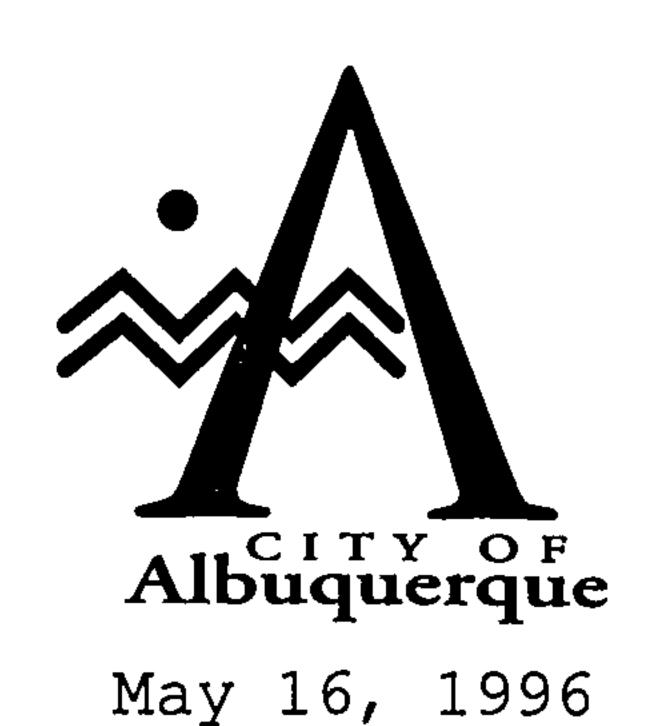
www.cabq.gov

Sincerely,

Rudy E. Rael Associate Engineer

Planning Department.

Development and Building Services



Martin J. Chávez, Mayor

Jeff Mortensen Jeff Mortensen & Assoc. 6010-B Midway Park Blvd. NE Albuquerque, NM 87109

RE: DENNIS CHAVEZ ELEMENTARY SCHOOL (D20-D2A) GRADING AND DRAINAGE PLAN FOR BUILDING PERMIT APPROVAL. ENGINEER'S STAMP DATED 4-22-96.

Dear Mr. Mortensen:

Based on the information provided on your April 23, 1996 submittal, the above referenced project is approved for Building Permit.

Prior to Certificate of Occupancy approval, an Engineer's Certification will be required.

If I can be of further assistance, please feel free to contact me at 768-3622.

Sincerely

Lisa Ann Manwill

Engineering Assoc./Hyd.

c: Andrew Garcia File





## City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

April 8, 1993

Daniel Aguirre Wilson & Company 6611 Gulton Ct. NE Albuquerque, NM 87109

RE: REVISED DRAINAGE PLAN FOR DENNIS CHAVEZ ELEMENTARY SCHOOL SITE IMPROVEMENTS (D20-D2A) REVISION DATED 3/25/93.

Dear Mr. Aguirre:

Based on the information provided on your April 1, 1993 resubmittal, the above referenced site is approved for Building Permit.

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

Also, please be advised that prior to Certificate of Occupancy release, Engineer Certification per the D.P.M. checklist will be required.

If I can be of further assistance, please feel free to contact me at 768-2667.

Sincerely,

Bernie J. Montoya, CE

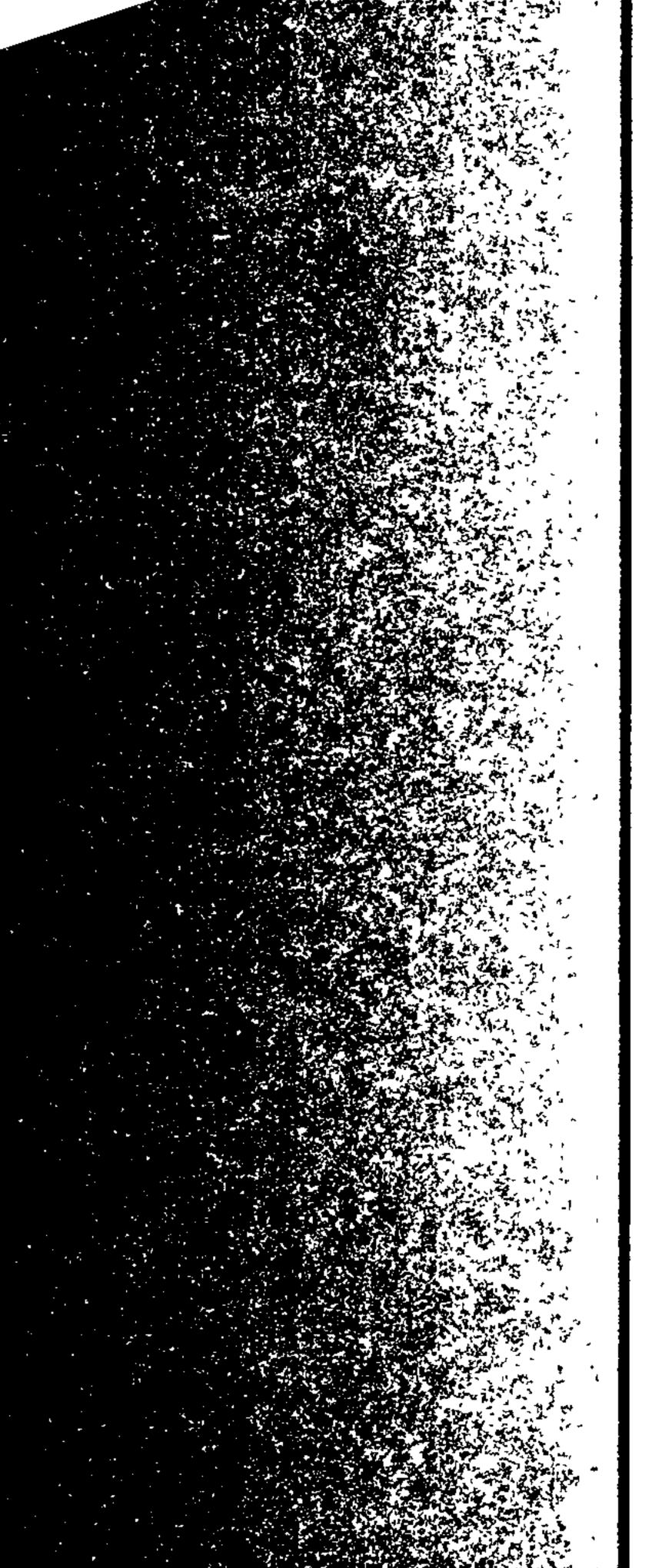
Engineering Assistant

BJM/d1/WPHYD/7587

xc: File

Alan Martinez

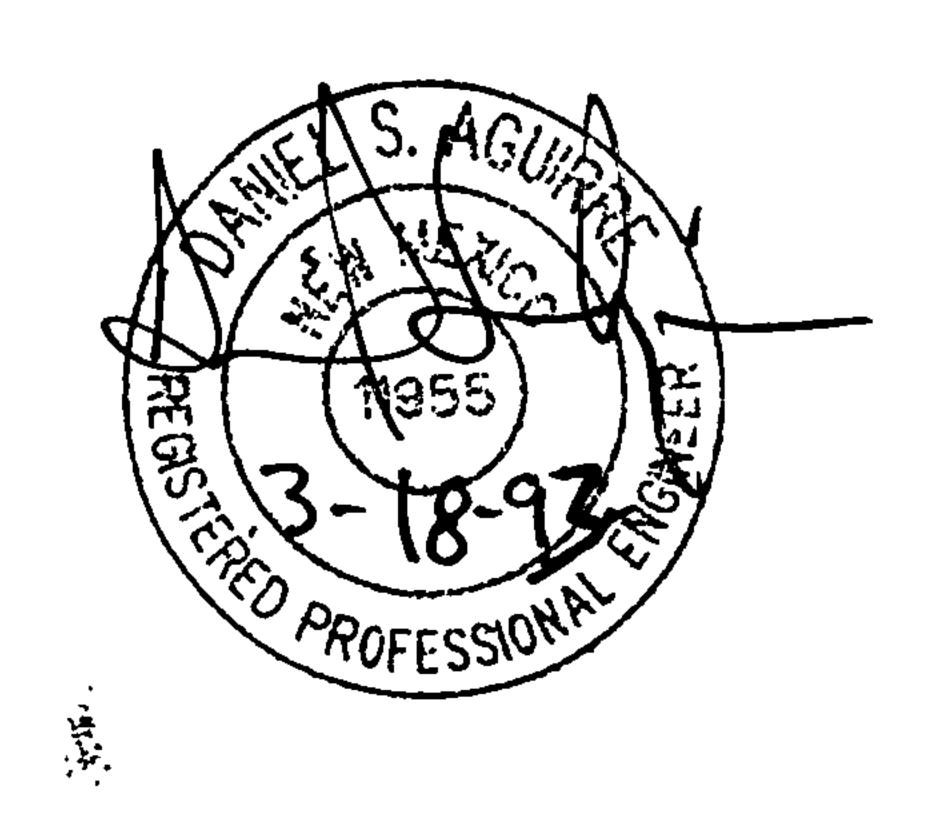
PUBLIC WORKS DEPARTMENT



Drainage Report

for

### Dennis Chavez Elementary Site Improvements

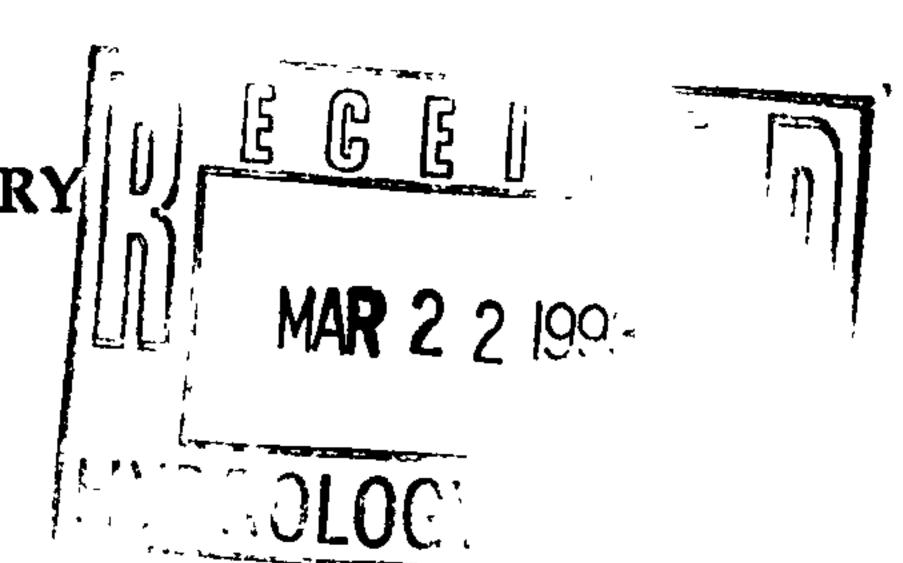


Prepared By: Wilson & Company, Engineers & Architects 6611 Gulton Court, N.E. Albuquerque, New Mexico 87109

18 March 1993



# DRAINAGE REPORT FOR DENNIS CHAVEZ ELEMENTARY SITE IMPROVEMENTS ALBUQUERQUE, NEW MEXICO



#### SITE LOCATION

The site is located in the northeast corner of the intersection of Barstow Street and San Francisco Drive. The site is developed at the present time. Improvements to the site will include regrading to improve drainage, new asphalt surfacing, and a canopy covering the walkway between existing portable buildings. Also, the main building is being reroofed with new roof drains.

#### **METHODOLOGY**

For this site the <u>Development Process Manual</u>, <u>Volume 2</u>, <u>Design Criteria for the City of Albuquerque</u> was followed. The method designated Part A in the revised section 22.2 was followed to determine the peak runoff for each basin. The charts and formulas in Part A were followed using the 100-year frequency 6-hour rainfall volume as the design storm event. The site is located in Zone 3 as determined from Figure A.

### **ANALYSIS**

### **Existing Conditions**

It was determined that the site currently has three drainage basins. Basin 201, the majority of the property, includes the portable park and playground area. This basin currently drains to Barstow Street through an existing sidewalk culvert with a capacity of approximately 3.9 CFS. The ponding area available is approximately .025 ac-ft. A major storm event would overtop the culvert and ponding area and flow over the existing sidewalk onto Barstow Avenue. Basin 202 includes a portion of the school roof and the parking area along Barstow Avenue. This basin is drained to Barstow Street through the existing driveways. Basin 203 consists of the remaining portions of the roof and the lawn area adjacent to San Francisco Drive. This flow discharges to San Francisco Drive.

Summary of existing discharge calculations:

BASIN	ZONE	AREA	LAND TREATMENT TYPE	PEAK DISCHARGE CFS/ACRE	CFS
201 TOTAL	3	1.1 8.42 .53 10.05	B C D	2.6 3.45 5.02	2.86 29.05 2.66 34.6
202 TOTAL	3	.84	D	5.02	4.2 4.2
203 TOTAL	3	.73 .33 1.06	B D	2.6 5.02	1.90 1.70 3.6

### PROPOSED CONDITIONS

The proposed site improvements include the installation of a new roof on the school with a new drainage system. The flows will be directed to three outlets. The majority of the flows will be discharged to the front of the building facing Barstow Street and discharge through two new bubbler structures located in the paved parking area. A covered walkway will be constructed from the Main Building to the existing portable buildings and extend through the portables. Regrading in the portable park to improve access for the handicap and drainage will be completed. Also included with the site improvements is the construction of a paved bus drop-off and loading area adjacent to Barstow Avenue.

The proposed conditions involve minor modifications of the site drainage basins. The site has been divided into four (4) basins. Basin 101 is a small basin located in the northwest corner of the site, the flows will discharge to Barstow Street. Basin 102 includes the playground area, the portable buildings, and the new bus drive-through. This basin will drain to a swale and then be conveyed to Barstow through the south driveway of the new bus drive-through and the existing sidewalk culvert. Low flows and nuisance flows will be conveyed to the existing sidewalk culvert via a valley gutter crossing the bus drive-through. Flows from larger storms will exceed the capacity of the valley gutter and be directed to Barstow Avenue through the paved driveway. Basin 103 includes the main building and the parking area adjacent to Barstow. These flows will continue to drain to Barstow through the existing driveways. Basin 104 is the same as the existing Basin 203 with a smaller portion of the roof draining to this basin. The basin will continue to discharge to San Francisco Drive.

Summary of proposed conditions calculations:

BASIN	ZONE	AREA (ACRE)	LAND TREATMENT TYPE	PEAK DISCHARGE CFS/ACRE	CFS
101 TOTAL	3	.4	C	3.45	1.4 1.4
102 TOTAL	3	1.1 7.4 .28 9.12	B C D	2.6 3.45 5.02	2.86 25.53 1.4 29.8
103 TOTAL	3	1.55 1.55	D	5.02	7.8 7.8
104 TOTAL	3	.73 .15 .88	B D	2.6 5.02	1.9 .75 2.65

The total discharge to Barstow during the 100-year, 6-hour event is calculated to be 39 CFS. Whereas, the total discharge to San Francisco will be reduced from 3.6 to 2.7.

Downstream capacity for storm flows is provided by the South Domingo Baca Arroyo located north of the site. Barstow Avenue drains to the arroyo from San Francisco Street. The "North and South Domingo Baca Arroyos and Paseo del Norte Corridor Drainage Management Plan" prepared by Resource Technology, Inc. shows an available capacity in the South Domingo Baca Arroyo of 111 CFS for this area. An additional 13 acres is included within the same basin resulting in an additional 57 CFS discharge. The total proposed discharge to the South Domingo Baca Arroyo is 96 CFS which is less than the allowable 111 CFS.

According to the charts in the DPM on Page 72 Plate 22.3 D-3, the capacity of Barstow Street at a depth of .87 and a slope of .45% is approximately 94 CFS. With the routing which occurs, there should be sufficient capacity to convey the flows from this drainage area to the South Domingo Baca Arroyo.

The proposed drive pads will have water blocks of .6 ft. for the southern location and 1 ft. for the northern location. The flow in Barstow is approximately 10 CFS at the southern drivepad which will flow at a depth of .5 ft. The flow at the northern drivepad will be approximately 40 CFS with a depth of flow just over .8 ft. The depth of flow was obtained from the chart on page 72 of the DPM plat 22.3, D-3. The proposed water blocks will prevent flows from entering the site during a 100-year, 6-hour event.

LOC. ALBQ, NM COMP. DSA FILE 93502 WILSON &COMPANY PROJ. DENNIS CHAYEZ SHEET DATE 2.23-93 SUBJ. HYDROLOGY SITE CONDITIONS: AREA TOTAL = 11.96AC ZONE = 3 IMPERVIOUS AREA = ExistiNG - 2.37AC PROPOSED - 2.60AL LAWN AREA = 1.78 AC TYPE C SOIL = EXISTING - 7.81AC PROPOSED - 7.58AC EXISTING CONDITIONS Basin 201 ABEL SOIL CONDITION 10,05AC TYPE A 1,10  $V = (\frac{1.31}{12} \times 10.05) + .53(\frac{.5}{12}) = 1.2 \text{ AC-Fr}$ C
8.42

.53 Q=1,1ACX 2.60=5/AC + 8,40AC X 3,450=5/AC +:53Ac X 5.02 Q = 34.6 CFS Basin 202 SOIL CONSITION AREA TYPE A .84 AL E= 2,36  $V = \frac{2.36}{17}(.84) + .84(.0417) = .2 AL-FT$ .84AC Q= ,84AC X 5.02 CF3/AC Q = 4,2. CF5 BASIN 203 SOIL CONDITION ARED 1.06 TYPE A .73 E-1.37 V= 1.45/2 + .33(,0417) = .14 AC-FT

Q= .73AL X2.6 CES/ALX.33ALX5,02 CES/AC

Q = 3.6 CFS

COMP.	D5A_	WILSON	LOC. ALBQ, NM	FILE 93-502
CK.	DBT	&COMPANY	PROJ. DENNIS CHAVEZ	SHEET Z
DATE	2-23-93	•	SUBJ. HYDIZOLOGY	OF 4

EXISTING CONDITIONS CONTINUED

TOTAL CFS DISCHARGED TO SAN FRANCISCO = 3.6 CFS, 14AC-FT
TOTAL CFS DISCHARGED TO BARSTOW = 38.8CFS, 1, 4AC-FT

THE SITE HAS VARIOUS LOW SPOTS WHICH CURRENTLY RETAIN
FLOWS ON SITE INUDATING MUCH OF THE PLAYGROUND. THE
DISCHARGE IS THROUGH AN EXISTING SIDEWALK CULVERT WITH AN
Approximate Capacity of

J.SFT USING THE WEIR EQUATION

3.5 FT Q=3.9 CFS

COMP. DSA	WILSON	LOC. ALB	a.N	M	FILE C	3-502
CK. DBT	O COA ADAA IN	PROJ. DENNIS CHAVEZ SHEET 3				
DATE 2-23-93				067		4
PROPOSED CONDITIONS	•					
BASIN 101	•					
AREA .40 AL		Soil		Dirions		
E=1.29			<u>د</u>	.40AC	•	
V= .04 AC-FT Q= .4AC × 3.45 CF5/A	<u>د</u>		D			
Q= 1,4CF3			•			
Basin 102		بادی		Dirions		
AREA		•				
9.12 AC		TYPE	E A B	1,1AC	; ; ;	• • • • • • • • • • • • • • • • • • •
Q=1.1ACX 2.6 CF5/AC+7.74A	CX 3.45 CF5/AC +, 28	BA X 5,02	D	- · 28AC	•	
Q= 29.8 C=5						
E = 1.28						
V= .98 AC-=r						
BASIN 103 AREA		Sail	CONF	SITION		
1.55AC		TYPE	A 13			
E = 2,36			<u></u>			
V= .37 AL-F.			D	1.55AC		
Q = 1.55 ACX 5.02 CFS/AC Q = 7.8 CFS		-	**	·		•
Basin 104				•		
AREA						
.88AC		Soil	CONE	SITION		
ヒ= 1.17		TYPE	Д	<b>\</b>	•	
V= .1 AC-FT			3	.73AC	* **	•
Q= 173ALX 2.6 CF6/AL +	,1546 X 5.02 CES/	4 6	D,	.15AC	,	
Q: 2.7 CFS	· · · · · · · · · · · · · · · · · · ·					3 y \$ 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4

COMP.	DSA	WILSON	LOC. ALBQ, NM	FILE 93-50
CK.	DBT	&COMPANY	PROJ. DENNIS (HAVEZ	SHEET 4
DATE	2-23-93		SUBJ. HYDROLOGY	of <u>4</u>

TOTAL DISCHARGE TO BARSTOW BASIN 101 102 103

> = 40,2 CFS V=1.39 AC-FT

TOTAL DISCHARGE TO SAN FRANCISCO BASIN 104

> = 2,65 CFS Y= :1 AL-FT

DISCHARGE FROM BASIN 102 = 31.0 CFS

OPEN CHANNEL TO CARRY 31.0 CFS 5=.5% EARTH B=9FT 7=.3:1 QCAP = 42.8 CFS

FROM. THE DPM: PG 72 PLATE 22.3 Ti-3

Y= 1

THE CAPACITY OF BARSTOUS AT A DEPTH 2/10 ABOVE THE TOP OF CURB OR D= .87 SLOPE = ,45 is & 94 CFS

THE COPACITY AVAILABLE FROM THIS AREA IN THE NORTH DOMINGO BACH AIRIZOTOIS 111 CFS. (REPORT: DEC. 1991) THE AREA CONTAINS 13. ACRES IN ADDITION TO THE 11.96 ALRES OF THIS SITE. ASSUMING THE FOLLOWING FOR SOIL CONDITIONS OF THIS AREA 'B. C. D TO BE CONSISTANT 20% 10% 70% NITH THE REPORT THE PEAK RUNOFF IS 57. CFS. FOR A TOTAL

COMP. DSA	WILSON	LOC. ALBQ
CK. DBT	&COMPANY	PROJ. DENNÍ
		٠

LOC. ALBQ, NM FILE 93-502A

PROJ. DENNIS CHAYEZ SHEET 1

SUBJ. FLOW IN BARSTOW OF 1

FLO SOUTH DRIVE = 65,38

FLQ P2 = 66.0

WATER STOP = . 62

FLOW IN BARBTOWN & BCFS IS APPROXIMATELY. 48 FT FROM CHART ON PG 73 OF DPM - PLATE ZZ,3 D3

FE & HORTH DRIVE = 64,70

FL@ PL = 65.70

WATER STOP = 1.0. FT

FLOW IN BARSTOW @ 40CFS is Approximately .82 FT