



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

December 18, 1991

Victor Chavez
Chavez-Grieves Engineering
4600-C Montgomery NE
Albuquerque, New Mexico 87109

RE: ENGINEER CERTIFICATION FOR WYOMING PRESBYTERIAN FAMILY HEALTH CARE
(F-20/D16A) CERTIFICATION STATEMENT DATED DECEMBER 13, 1991

Dear Mr. Chavez:

Based on the information provided on your December 13, 1991 submittal, Engineer Certification for the above referenced site is approved for Certificate of Occupancy release.

If I can be of further assistance, please feel free to contact me at 768-2650.

Sincerely,

Bernie J. Montoya, CE
Engineering Assistant

BJM:jc
WP+2640

PUBLIC WORKS DEPARTMENT

Walter H. Nickerson, Jr., P.E.
Assistant Director Public Works

ENGINEERING GROUP

Telephone (505) 768-2500

AN EQUAL OPPORTUNITY EMPLOYER



D. Mark Goodwin & Associates, P.A.
Consulting Engineers and Surveyors

PROJECT PresCare Parking Expansion
SUBJECT Drainage
BY gmn DATE 6/22/93
CHECKED _____ DATE _____
SHEET _____ OF _____

This project involves the expansion of the PresCare Facility parking by 0.316 Acres.

Historical flow from this area's vacant character is presently 1.09 cfs at the 100 year - 6 hour storm's peak. With the change to pavement and some irrigated landscaping, peak flow will increase by 0.42 cfs to 1.51 cfs (all from AH4MO output). The supplemental runoff will be conveyed through the existing parking area, and then into the adjacent private street before reaching Wyoming Blvd. On Wyoming, runoff is conveyed to the south and into the main branch of the Bear Canyon Arroyo via Spain Ave. NE. It is extremely unlikely the additional 0.42 cfs will have any impact on the storm water condition in Wyoming Blvd. between the site and the Bear Canyon Arroyo.

DRAINAGE INFORMATION SHEET

PROJECT TITLE: PresCare Facility Parking Expansion ZONE ATLAS/DRNG, FILE#: F-20-Z/F20/

DRB #: n/a EPC #: n/a WORK ORDER #: n/a D-16A)

LEGAL DESCRIPTION: Tract 1A2, Lands of William O. and Mary L. Edward

CITY ADDRESS: 5530 WYOMING BL. NE

ENGINEERING FIRM: D. Mark Goodwin & Associates, PA CONTACT: John M. MacKenzie, PE

ADDRESS: P.O. Box 90606 87199 PHONE: 828-2200

OWNER: Presbyterian Health Care Services CONTACT: Richard Barr

ADDRESS: 4775 Indian School NE PHONE: 260-6300

ARCHITECT: Stevens, Mallory, Pearl & Campbell CONTACT: _____

ADDRESS: 115 Amherst SE PHONE: 255-8668

SURVEYOR: Aldrich Land Surveying CONTACT: Tim Aldrich

ADDRESS: 3916 Carlisle NE PHONE: 884-1990

CONTRACTOR: n/a CONTACT: _____

ADDRESS: _____ PHONE: _____

TYPE OF SUBMITTAL:

CHECK TYPE OF APPROVAL SOUGHT:

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

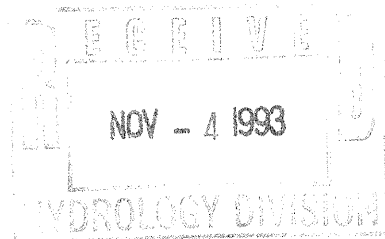
☐ SKETCH PLAT APPROVAL
☒ PRELIMINARY PLAT APPROVAL
☐ S. DEV. PLAN FOR SUB'D APPROVAL
☐ S. DEV. PLAN FOR BLDG PERMIT APPROVAL
☐ SECTOR PLAN APPROVAL
☒ FINAL PLAT APPROVAL
☐ FOUNDATION PERMIT APPROVAL
☐ BUILDING PERMIT APPROVAL
☐ CERTIFICATION OF OCCUPANCY APPROVAL
☐ GRADING PERMIT APPROVAL
☒ PAVING PERMIT APPROVAL
☐ S.A.D. DRAINAGE REPORT
☐ DRAINAGE REQUIREMENTS
☐ OTHER _____ (Specify)

PRE-DESIGN MEETING:

☐ YES
☒ NO
☐ COPY PROVIDED

DATE SUBMITTED: 6/22/93

BY: John M. MacKenzie
John M. MacKenzie, PE



RUN DATE (MON/DAY/YR) = 06/18/1993
START TIME (HR:MIN:SEC) = 13:17:26 USER NO.= Z_GOODWN.S92
INPUT FILE = PRES.DAT

START TIME=0.0
***** HYDROGRAPH FOR THE PRESCARE FACILITY PARKING EXPANSION ON WYOMING
RAINFALL TYPE=1 RAIN QUARTER=0.0 IN
RAIN ONE=2.12 IN RAIN SIX=2.56 IN
RAIN DAY=2.96 IN DT=0.03333 HR

COMPUTED 6-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2 - PEAK AT 1.40 H

R.

DT =	.033330 HOURS	END TIME =	5.999400 HOURS
.0000	.0025	.0051	.0078
.0189	.0219	.0249	.0280
.0412	.0448	.0484	.0522
.0686	.0731	.0777	.0826
.1044	.1105	.1170	.1229
.1824	.2319	.3030	.4000
1.1399	1.3693	1.4651	1.5460
1.7996	1.8519	1.9009	1.9470
2.1074	2.1423	2.1755	2.2070
2.2578	2.2641	2.2702	2.2760
2.2972	2.3021	2.3068	2.3114
2.3287	2.3327	2.3367	2.3406
2.3553	2.3588	2.3622	2.3656
2.3786	2.3817	2.3847	2.3878
2.3994	2.4022	2.4050	2.4077
2.4183	2.4209	2.4234	2.4259
2.4357	2.4381	2.4404	2.4427
2.4518	2.4540	2.4562	2.4584
2.4669	2.4690	2.4710	2.4731
2.4811	2.4830	2.4850	2.4869
2.4944	2.4963	2.4981	2.5000
2.5072	2.5089	2.5107	2.5124
2.5193	2.5210	2.5226	2.5243
2.5308	2.5325	2.5341	2.5357
2.5419	2.5435	2.5450	2.5466
2.5526	2.5541	2.5556	2.5570

COMPUTE NM HYD ID=1 HYD NO=101.1 AREA=0.000494 SQ MI
PER A=0.0 PER B=0.0 PER C=100.0 PER D=0.0
TP=0.1333 HR MASS RAINFALL=-1

K = .108687HR TP = .133300HR K/TP RATIO = .815354 SHAPE CONSTANT, N =
4.384033 UNIT PEAK = 1.4083 CFS UNIT VOLUME = .9908 B = 380.01 P60 = 2.12
00 AREA = .000494 SQ MI IA = .35000 INCHES INF = .83000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

PRINT HYD ID=1 CODE=1

PARTIAL HYDROGRAPH 101.10

RUNOFF VOLUME =	1.26403 INCHES	=	.0333 ACRE-FEET
PEAK DISCHARGE RATE =	1.09 CFS	AT	1.500 HOURS

BASIN AREA = .0005 SQ. MI.

***** EXISTING CONDITIONS

COMPUTE NM HYD ID=2 HYD NO=101.2 AREA=0.000494 SQ MI
PER A=0.0 PER B=10.0 PER C=0.0 PER D=90.0
TP=0.1333 HR MASS RAINFALL=-1

K = .072649HR TP = .133300HR K/TP RATIO = .545000 SHAPE CONSTANT, N =
7.106420 UNIT PEAK = 1.7553 CFS UNIT VOLUME = .9933 B = 526.28 P60 = 2.12
00 AREA = .000445 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

K = .133415HR TP = .133300HR K/TP RATIO = 1.000860 SHAPE CONSTANT, N =
3.527235 UNIT PEAK = .11945 CFS UNIT VOLUME = .8895 B = 322.31 P60 = 2.12
00 AREA = .000049 SQ MI IA = .50000 INCHES INF = 1.25000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

PRINT HYD ID=2 CODE=1

PARTIAL HYDROGRAPH 101.20

RUNOFF VOLUME =	2.17514 INCHES	=	.0573 ACRE-FEET
PEAK DISCHARGE RATE =	1.51 CFS	AT	1.500 HOURS

BASIN AREA = .0005 SQ. MI.

PROPOSED CONDITIONS

FINISH

NORMAL PROGRAM FINISH

END TIME (HR:MIN:SEC) = 13:17:29



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

November 12, 1993

Mark Goodwin
D. Mark Goodwin & Associates
P.O. Box 90606
Albuquerque, NM 87199

RE: GRADING/PAVING PLAN FOR PRESCARE FACILITY PARKING LOT EXPANSION
(F20-D16A) ENGINEER'S STAMP DATED 11/11/93.

Dear Mr. Goodwin:

Based on the information provided on your November 12, 1993 submittal, the above referenced site is approved for Site Development.

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

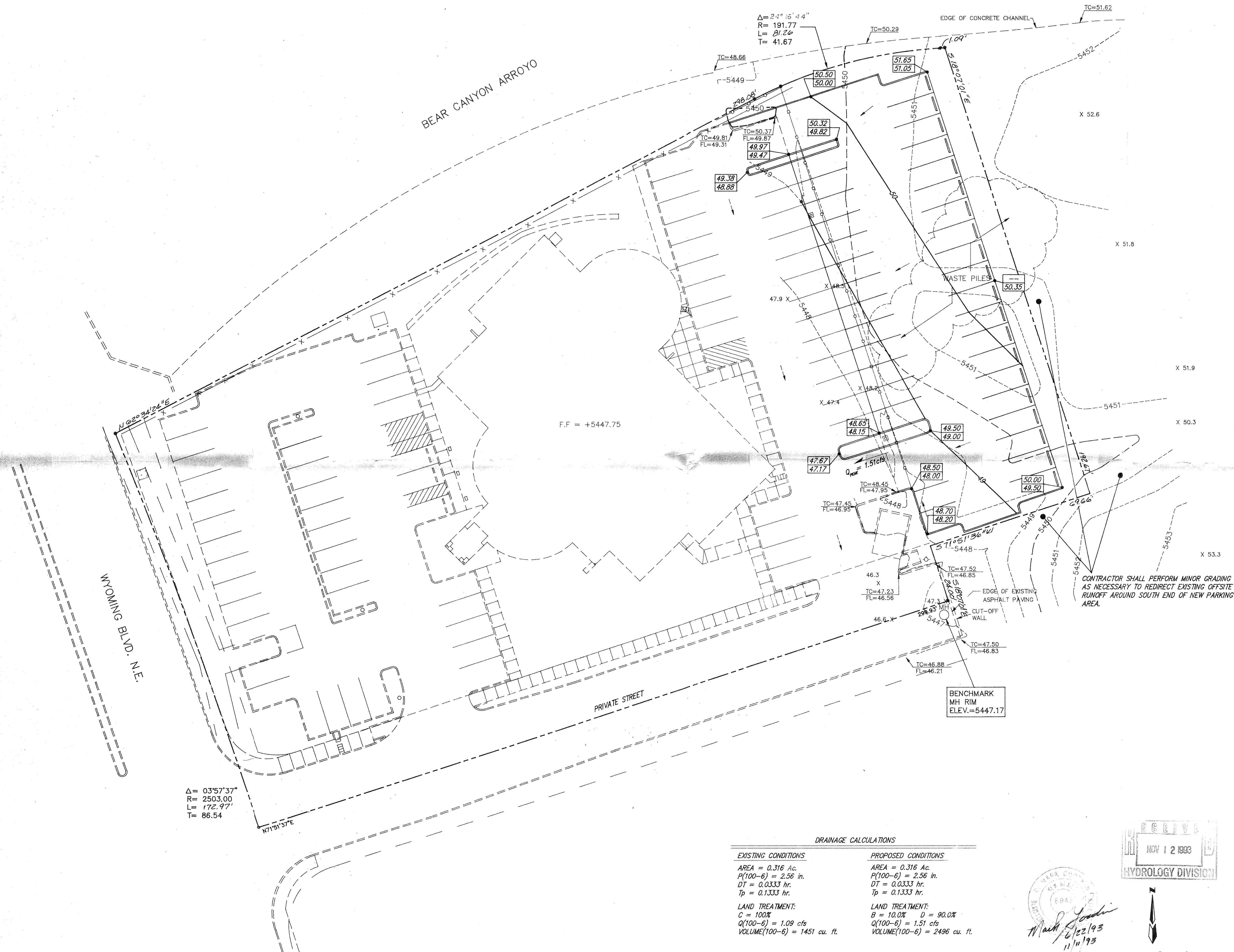
Sincerely,

Bernie J. Montoya, CE
Engineer Associate

BJM/d1/WPHYD/7810

xc: Alan Martinez
File

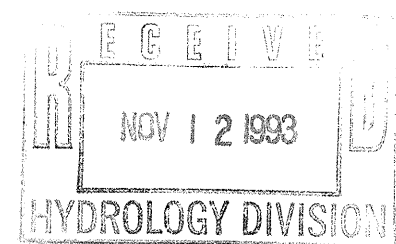
PUBLIC WORKS DEPARTMENT



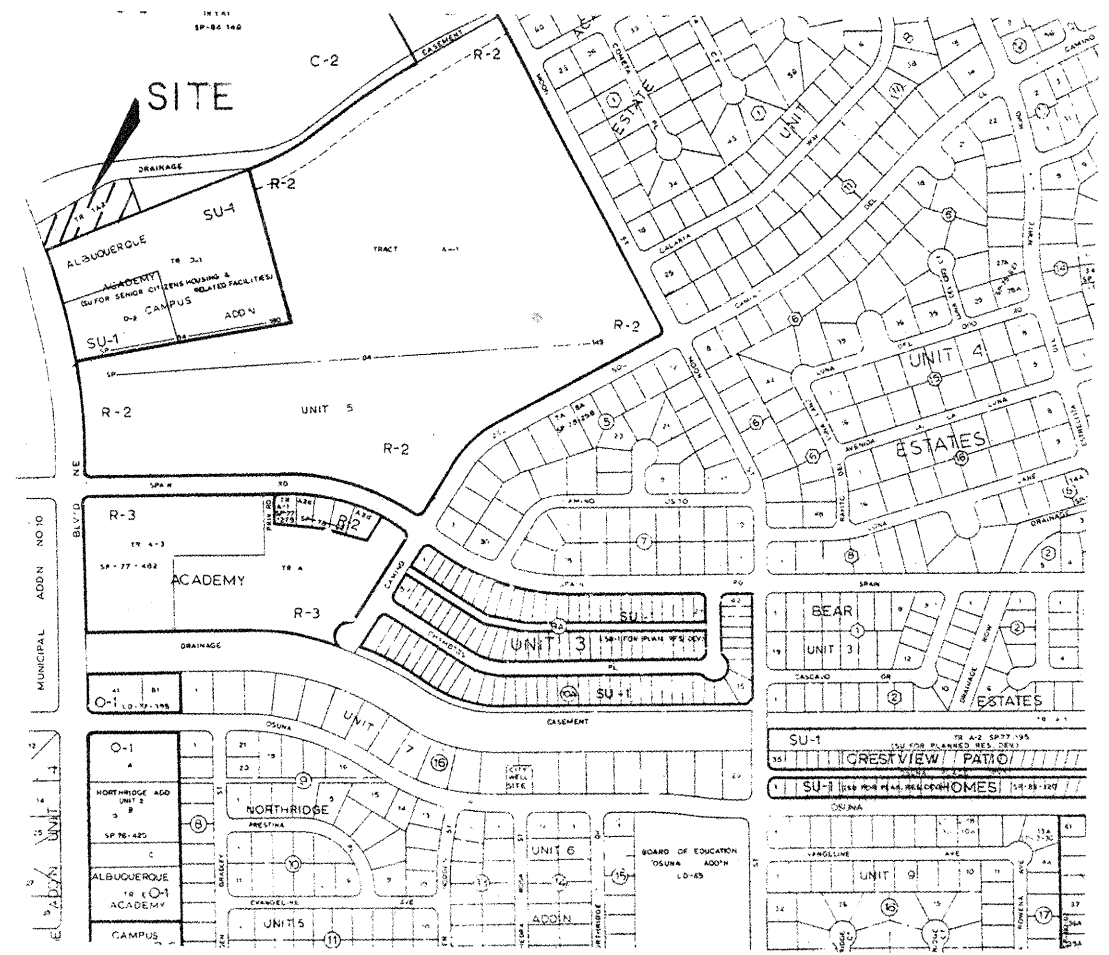
$\Delta = 03^{\circ}57'37''$
 $R = 2503.00$
 $L = 172.97'$
 $T = 86.54$

DRAINAGE CALCULATIONS	
EXISTING CONDITIONS	PROPOSED CONDITIONS
AREA = 0.316 Ac.	AREA = 0.316 Ac.
$P(100-6) = 2.56$ in.	$P(100-6) = 2.56$ in.
$DT = 0.0333$ hr.	$DT = 0.0333$ hr.
$Tp = 0.1333$ hr.	$Tp = 0.1333$ hr.
LAND TREATMENT: $C = 100\%$ $Q(100-6) = 1.09$ cfs $VOLUME(100-6) = 1451$ cu. ft.	LAND TREATMENT: $B = 10.0\%$ $D = 90.0\%$ $Q(100-6) = 1.51$ cfs $VOLUME(100-6) = 2496$ cu. ft.

11/14/93
6/22/93
11/14/93



SCALE: 1" = 20'



VICINITY MAP ZONE MAP: F-20-Z

- NOTES
1. SITE PRESENTLY DOES NOT LIE WITHIN A FLOOD ZONE.
 2. THE PRELIMINARY SITE INVESTIGATION WAS PERFORMED BY JOHN M. MACKINZIE, P.E., ON JUNE 18, 1993.
 3. TOPOGRAPHIC SURVEY PERFORMED BY ALDRICH LAND SURVEYING, INC. 6/93.

TBM (TEMPORARY BENCHMARK)
TOP OF MANHOLE RIM AT EAST END OF PRIVATE ACCESS STREET.

ACS BENCHMARK
ACS SURVEY MONUMENT "1-E20" (HAVING NEW MEXICO STATE PLANE GRID COORDINATE FOR CENTRAL ZONE X=410,175.30, Y=1,508,231.68) BEARS N08°06'24"E, A DISTANCE OF 925.26 FEET.

LEGAL DESCRIPTION
TRACT 1A2, LANDS OF WILLIAM O. AND MARY L. EDWARD.

- LEGEND
- 5450 — CONTOUR (MAJOR)
 - 5449 — CONTOUR (MINOR)
 - — — EXIST. CURB & GUTTER
 - — — PROPOSED HEADER CURB
 - MH ○ SANITARY SEWER MANHOLE
 - TC= SPOT ELEVATION
 - FL=
 - 50.00 TC PROPOSED SPOT ELEV.
 - 48.00 FL
 - — — CHAIN LINK FENCE
 - — — WOOD FENCE
 - LIGHT POLE
 - FLOW DIRECTION ARROW

PRESHARE FACILITY PARKING LOT EXPANSION
GRADING & DRAINAGE PLAN

dmg D. MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS & SURVEYORS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200

Designed: JMM Drawn: DBC Checked: DMG Sheet 1 of 1
Scale: 1"=20' Date: 6/93 Job: 9359

LEGAL DESCRIPTION:

CONTAINING 1.3798 ACRES OF THE PLATTED LAND
ENTITLED "JEWISH FEDERATION OF GREATER
ALBUQUERQUE, LOT 1".

LEGEND

NEW BUILDING

EXISTING CONTOUR

NEW CONTOUR

PROPERTY LINE

EXISTING CURB & GUTTER

NEW CURB & GUTTER

EXISTING SPOT ELEVATION

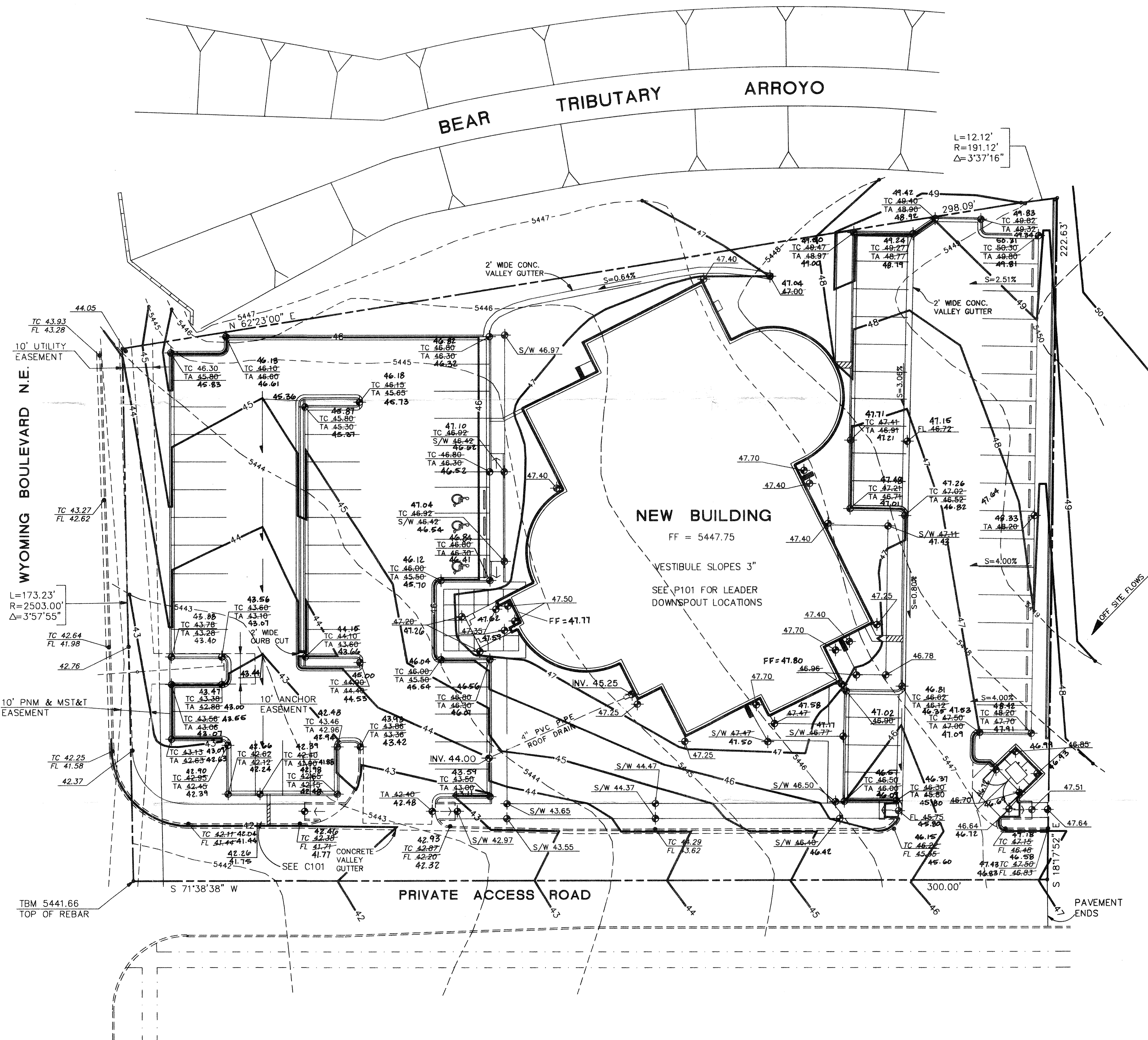
NEW SPOT ELEVATION

FUTURE CONSTRUCTION

AS-BUILT ELEVATION

NOTES

- CONTRACTOR IS RESPONSIBLE FOR OBTAINING
A TOP SOIL PERMIT PRIOR TO ANY SITE
GRADING.
- APPROVED FOR GRADING WITHIN THE BEAR
TRIBUTARY ARROYO R.O.W. BY GLENN JURGENSEN
OF ARROYO MAINTENANCE. PHONE: 291-6214.

APPR: *Glenn Jurgensen*

LOCATION AND DESCRIPTION

PRESENT: The site is presently undeveloped and is located off Wyoming Blvd. NE adjacent to the south bank of the Bear Trib. Channel. Existing slopes are moderate, 2-4 percent, and slopes predominantly to the west. The site is not located within a flood plain.

PROPOSED: The project site will be developed as Presbyterian Wyoming Family Healthcare Center. The site will be accessed through a private drive which is not yet constructed. Plans to construct this private drive are currently being reviewed by the City of Albuquerque DRC. The Hydrology and Transportation Departments have signed off on these plans. The private and the project site are part of a master drainage plan being done by Bohannon-Huston, Inc. which is called Jewish Federation of Greater Albuquerque. Storm runoff will be conveyed via asphalt and concrete swales to the private drive where free discharge will be allowed. This is in agreement with the master drainage plan.

FLOOD HAZARD ZONE: Zone C

SOIL TYPE: Ty B (Tijeras gravelly fine sandy loam)

OFFSITE DRAINAGE: Offsite drainage approaches the site from the north, from an undeveloped parcel of land. A runoff rate of 2 cfs has been computed. A drainage swale adjacent to the north property line of the study area has been incorporated into the plan to intercept these flows and convey them to the new access road to the east. The drainage swale has a capacity of 4.6 cfs. Future development of the parcel to the north will divert flows away from the site.

CALCULATIONS: Precipitation Zone = 3
6-Hour, 100-Year Rainfall = 2.60 inches
6-Hour, 10-Year Rainfall = 1.73 inches
Area = 1.3798 Ac.

EXISTING CONDITIONS

Land Treatment	Area (Ac)	Excess Precip (in)	A x E	E=Ax/E/A
A	1.3798	0.60	0.828	
B				
C				
D				
Total	1.3798		0.828	0.60

6-Hour, 100-Year Volume = (0.60 in. x 1.3798 Ac x 43,560)/12 = 3,005 c.f.
6-Hour, 10-Year Volume = 3,005 c.f. x 0.667 = 2,004 c.f.
Runoff Coefficient "C" = 0.40
Peak Discharge (Q100) = 0.40 x 5.78 in/hr x 1.3798 Ac = 3.2 cfs
(Q 10) = 3.2 x 0.667 = 2.1 cfs

PROPOSED CONDITIONS:

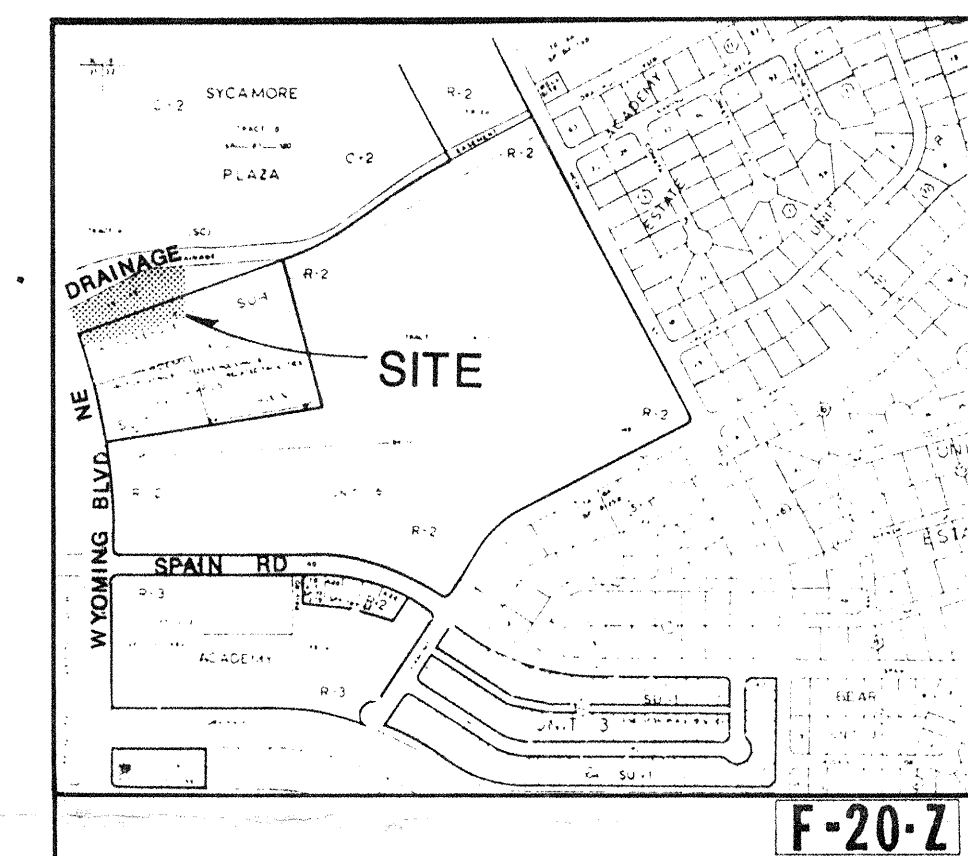
Land Treatment	Area (Ac)	Excess Precip (in)	A x E	E=Ax/E/A
A	0.3341	0.78	0.261	
B				
C	1.0457	2.27	2.374	
D				
Total	1.3798		2.635	1.91

6-Hour, 100-Year Volume = (1.91 in x 1.3798 Ac x 43,560)/12 = 9,567 c.f.
6-Hour, 10-Year Volume = 9,567 c.f. x 0.667 = 6,381 c.f.
Runoff Coefficient "C" = Treatment B = 0.49

Peak Discharge (Q100) = (49 x 5.78 in/hr x 0.3341) + (0.95 x 5.78 in/hr x 1.0457) = 6.7 cfs
(Q 10) = 6.7 x 0.667 = 4.5 cfs

Runoff for developed conditions is in agreement with the master drainage plan. Allowable
Allowable Runoff = 6.7 cfs
Calculated Runoff = 6.7 cfs

Hydrology is based on the Master Drainage Plan for the Jewish Federation of Greater Albuquerque.

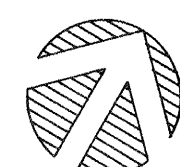


LEGAL DESCRIPTION

A CERTAIN TRACT OF LAND SITUATE WITHIN
THE ELENA GALLEGOS GRANT AND ALSO WITH
THE (N/E 1/4) OF PROJECT SECTION 31 AND
THE (NW 1/4) OF PROJECT SECTION 32, T.11
N., R.4E.

PER DCR #1

I HEREBY CERTIFY THIS DRAINAGE
PLAN IS IN SUBSTANTIAL COMPLIANCE
WITH THE APPROVED DRAINAGE PLAN.

Glenn Jurgensen 12/14/97

GRADING AND DRAINAGE PLAN

SCALE 1" = 20'-0"

STEVEN MALLORY PEARL & CAMPBELL, P.A.
ARCHITECTS 115 AMHERST S.E. ALBUQUERQUE, NEW MEXICO 87108DATE 4/91 DRAWN 1C CHECKED
PRESBYTERIAN FAMILY HEALTHCARE - WYOMING
WYOMING BOULEVARD N.E.
ALBUQUERQUE, NEW MEXICO

90147

C102