CITY OF
Albuquerque

May 22, 1996

Martin J. Chávez, Mayor

Scott McGee
Isaacson & Arfman
128 Monroe NE
Albuquerque, NM

RE: AG SPANOS APARTMENTS (C19-D1D) ENGINEER'S CERTIFICATION FOR CERTIFICATE OF OCCUPANCY. ENGINEER'S CERTIFICATION DATED 5-3-96.

Dear Mr. McGee:

Based on the information provided on your May 7, 1996 submittal, the above referenced project is approved for a Certificate of Occupancy (Buildings 1-17).

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

December 13, 1994

Scott M. McGee, P.E.
Isaacson & Arfman, P.A.
128 Monroe Street NE
Albuquerque, N.M. 87108

RE: DRAINAGE REPORT FOR AG SPANOS APTS PHASE 2 (C-13/D10)
RECEIVED NOVEMBER 21, 1994 FOR BUILDING PERMIT APPROVAL
ENGINEER'S STAMP DATED 11-17-94

Dear Mr. McGee:

Based on the information included in the submittal referenced above, City Hydrology approves this project for Building Permit.

Include a copy of the approved Grading Plan, dated 11-17-94, in the set of construction documents that will be submitted to the "one stop" for the Building Permit.

Engineer's Certification of grading & drainage per DPM checklist must be approved before any Certificate of Occupancy is released.

If you have any questions about this project, You may contact me at 768-2727.

Sincerely,

John P. Curtin

John P. Curtin, P.E.
Civil Engineer/Hydrology

c: Andrew Garcia

DRAINAGE REPORT

FOR

AG SPANOS APARTMENT PHASE 2

NORTHEAST CORNER OF

PARADISE BLVD. AND EAGLE RANCH ROAD NW

ALBUQUERQUE NEW MEXICO
NOVEMBER 1994

Prepared by:

ISAACSON & ARFMAN, P.A.
128 Monroe Street, NE
Albuquerque, NM 87108

Scott M McGee 11-17-94

Scott M. McGee, P.E. Date

TABLE OF CONTENTS

I. INTRODUCTION

The AG Spanos Apartment complex is a two-phase, 432 unit multi-family apartment project consisting of 33 apartment buildings and two community buildings. Phase One construction began this summer and is now underway. The land area for this second phase of the development is 434,655 SF (9.9783 acres). See Vicinity Map in Appendix.

A pre-design meeting was held with Mr. Fred Aguirre of the Hydrology Section of the Public Works Department the City of Albuquerque. The following findings were established as design criteria for this project:

1. Discharge from site is to be determined by analysis of capacity for downstream improvements constructed as part of the Market Center West development.

2. An erosion control plan for the period of construction will be required to ensure that sediment remains on-site. All sedimentation measures shall be approved by AMAFCA.

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1. Discharge from site is to be determined by analysis of capacity for downstream improvements constructed as part of the Market Center West development.

2. An erosion control plan for the period of construction will be required to ensure that sediment remains on-site. All sedimentation measures shall be approved by AMAFCA.

II. EXISTING SITE CONDITIONS

A. Flood Hazard--This site is not within an established flood hazard area as shown on Panel 8 of the FEMA flood maps.

B. Soils--Site soils are bluepoint loamy fine sand and kokan gravelly sand. This soil is classified in the SCS Soil Survey of Bernalillo County as a Hydrologic Group 'A' soil. (Refer to the September 30, 1993 Geotechnical Report by Western Technologies, Inc. - a copy of the drainage recommendations is included in the Appendix).

C. Topography--Present conditions are such that the site slopes to the south and southeast at four to five percent. No drainage courses are present, all runoff is overland sheet flow due to rough grading done as part of the first phase of this development.

III. OFF-SITE CONDITIONS

The site is bounded on the west by Eagle Ranch Road; on the north and east by phase one of this apartment development; and on the south by Paradise Blvd. NW. Minor off-site flows presently cross Eagle Ranch Road and are carried

east as surface flow within the right-of-way of Paradise Blvd. A new storm drain will be built in Paradise Blvd. as part of City Project No. 3575.92 which includes paving improvements to the north half of this street east of Eagle Ranch Road. The north-bound lanes of Eagle Ranch Road NW will also be constructed by this project where it abuts the site. The two site entrances on Eagle Ranch Road and Paradise Blvd. have been designed to match the private driveways shown in the City Project No. 3575.92.

IV. PROPOSED CONDITIONS

Phase Two includes 208 apartments in 15 buildings, a community building and pool, sports courts, and associated parking. All runoff will flow to the south and southeast where it will be intercepted by catch basins in paved parking areas. This runoff will be carried to the existing detention pond located within Phase One. Flows are then routed out of this pond and into a second existing pond located south of the existing movie theater building. This drainage concept is unchanged from that previously approved.

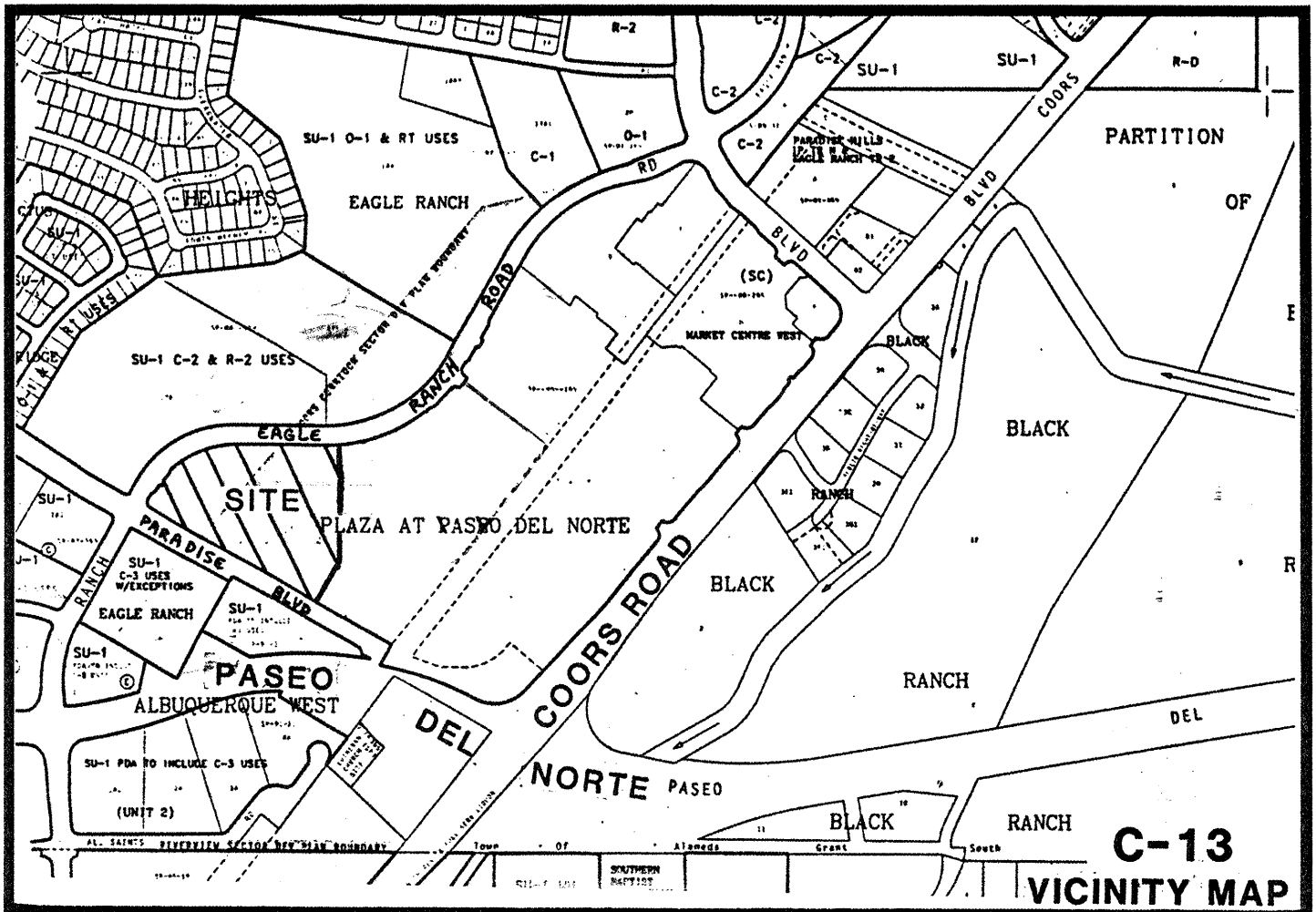
The following breakdown gives peak runoff data for both undeveloped and developed conditions for Phase Two:

Area: 9.9783 Ac. Precipitation Zone: 1

Development Condition	Land Treatment (%) A	B	C	D	Q_{100}	Q_{10}
Undeveloped	0	0	100	0	28.6	14.9
Developed	0	32	7	61	35.1	21.1

The developed runoff rate of 35.1 cfs was accounted for during phase one development and a 24-inch storm drain was extended into phase two to convey this flow to the existing detention pond. Installed at a slope of 2.46%, this storm drain has a capacity of 35.6 cfs using Manning's equation. An overland flow path is available in the event of complete inlet clogging.

APPENDIX



ISAACSON & ARFMAN, P.A.

SUBJECT AG SPANOS APTS JOB NO.

BY SMM DATE 10/94 SHEET NO.

RUNOFF CALCULATIONS

PROJECT: AG SPANOS APTS PHASE 2 **Analysis Point #** Tract A-4

DRAINAGE AREA: UNDEVELOPED

Planimeter Rdg. _____ x .015

x Map Scale _____^{2} ÷ 43,560 A = 9.9783 acres

TIME OF CONCENTRATION:

Drainage Basin Data:

L = 900 ft., fall = 35 ft., slope = .039 ft/ft

☒ Overland Flow:

v = 2.0 ft/sec ~~(P1 22.2 B-1)~~ (13)

Tc = 450 sec. = 7.5 min. Tc = (USE) 12 min.

☐ Street Flow:

v = _____ ft/sec (P1 22.2 B-2)

Tc = _____ sec. = _____ min. Tc = _____ min.

☐ Arroyo Flow:

Tc = 0.0078 $\frac{LO.77}{SO.385}$ = _____ min. Tc = _____ min.

LAND TREATMENT:

Land Use Type	Percentage	Acres
A		
B		
C	100	9.9783
D		
	100%	9.9783

Precipitation Zone: 1

PEAK DISCHARGE (Table 9):

Treatment	Area(acres)	Discharge (cfs/ac)	Q_{100} (cfs)
A			
B			
C	9.9783	2.87	28.6
D			
TOTAL			28.6

VOLUME OF RUNOFF:

Soil Group A B C D

CN (Previous) = _____ (P1 22.2 C-2)

Percent Impervious = _____%

CN (Composite) = _____ (P1 22.2 C-3)

Direct Runoff, q_{100} = _____" (P1 22.2 C-4)

$V_{100} = q A = \frac{\_\_\_\_}{12}$ x _____ ac x 43,560 = _____ cu. ft.

RUNOFF CALCULATIONS

PROJECT: AG SPANOS APTS PHASE 2 **Analysis Point #** Tract A-4

DRAINAGE AREA: DEVELOPED

Planimeter Rdg. _____ x .015

x Map Scale _____^{2} ÷ 43,560 A = 9.9783 acres

TIME OF CONCENTRATION:

Drainage Basin Data:

L = 1200 ft., fall = 32.5 ft., slope = .027 ft/ft

☐ Overland Flow:

v = _____ ft/sec (P1 22.2 B-1)

Tc = _____ sec. = _____ min. Tc = _____ min.

☒ Street Flow: (13)

v = 4.9 ft/sec ~~(P1 22.2 B-2)~~

Tc = 245 sec. = 4.1 min. Tc = (USE) 12 min.

☐ Arroyo Flow:

Tc = 0.0078 $\frac{LO.77}{SO.385}$ = _____ min. Tc = _____ min.

LAND TREATMENT:

Land Use Type	Percentage	Acres
A	0	
B	32	3.193
C	7	0.699
D	61	6.086
	100%	9.978

Precipitation Zone: 1

PEAK DISCHARGE (Table 9):

Treatment	Area(acres)	Discharge (cfs/ac)	Q_{100} (cfs)
A			
B	3.193	2.03	6.48
C	0.699	2.87	2.00
D	6.086	4.37	26.60
TOTAL			35.08

VOLUME OF RUNOFF:

Soil Group A B C D

CN (Previous) = _____ (P1 22.2 C-2)

Percent Impervious = _____%

CN (Composite) = _____ (P1 22.2 C-3)

Direct Runoff, q_{100} = _____" (P1 22.2 C-4)

$V_{100} = q A = \frac{\_\_\_\_\_}{12} \times$ _____ ac x 43,560 = _____ cu. ft.

ANALYSIS PT (A)

ONSITE

Street Hydraulics

Street: PARALLEL TO PARADISE

100-yr. Q: 21.0 1/2 Street Flow: NA

Street slope: 1.5%

Max. flow depth: 0.35 FT ~~0.21 FT (Manning Eq)~~

(41.2 − 40.85 = 0.35 FT)

Catch Basin Hydraulics

Upstream inlet(s): DBL 'D'

DPM grating capacity plate: NA

* Intercepted Q: 8.3 CFS

Remaining surface flow: 12.7 CFS

Max. flow depth: SEE ANALYSIS PT (C)

Downstream inlet(s): _____

DPM grating capacity plate: _____

Intercepted Q: _____

Total interception capacity: _____

As % of design Q: _____

INTERCEPTED Q IS LESSER OF:

ORIFICE EQ: $Q = CA\sqrt{2gH}$

AREA: DBL 'D' = 8.32 SF Use C = 0.6

ASSUME GRATE AREA 50% BLOCKED

$Q = (0.6)(8.32)(0.50)\{(2)(32.2)(0.35)\}^{1/2}$

$Q = 11.8$ CFS

* WEIR EQ: $Q = CLH^{1.5}$ C = 2.7

$L = [(35.5)(4) + (18.5)(2)] \div 12 = 14.9$ FT

$Q = (2.7)(14.9)(0.35)^{1.5}$

$Q = 8.3$ CFS ←

ANALYSIS PT (B)

Street Hydraulics

Street: PERPENDICULAR TO PARADISE

100-yr. Q: 14.0 1/2 Street Flow: NA

Street slope: 1.5%

Max. flow depth: 0.35FT ~~0.16 FT (Manning Eq)~~

(41.2 - 40.85 = 0.35 FT)

Catch Basin Hydraulics

Upstream inlet(s): DBL 'D'

DPM grating capacity plate: NA

* Intercepted Q: 8.3 CFS

Remaining surface flow: 5.7 CFS

Max. flow depth: SEE ANALYSIS PT (C)

Downstream inlet(s): _____

DPM grating capacity plate: _____

Intercepted Q: _____

Total interception capacity: _____

As % of design Q: _____

INTERCEPTED Q IS LESSER OF:

ORIFICE EQ : $Q = CA\sqrt{2gH}$

ASSUME GRATE AREA 50% BLOCKED

$Q = (0.6)(8.32)(0.50)\{(2)(32.2)(.35)\}^{1/2}$

$Q = 11.8$ CFS

* WEIR EQ: $Q = CLH^{1.5}$ $C = 2.7$

$L = [(35.5)(4) + (18.5)(2)] \div 12 = 14.9$ FT

$Q = (2.7)(14.9)(0.35)^{1.5}$

$Q = 8.3$ CFS ←

ANALYSIS PT (C)

Street Hydraulics

Street: SE CORNER OF SITE

100-yr. Q: 18.4 (12.7+5.7) 1/2 Street Flow: NA

Street slope: SUMP

Max. flow depth: 0.7 FT (41.2-40.5)

Catch Basin Hydraulics

Upstream inlet(s): TRIPLE 'D'

DPM grating capacity plate: NA

* Intercepted Q: 18.4 CFS

Remaining surface flow: _____

Max. flow depth: _____

Downstream inlet(s): _____

DPM grating capacity plate: _____

Intercepted Q: _____

Total interception capacity: _____

As % of design Q: _____

INTERCEPTED Q IS LESSER OF:

* ORIFICE EQ: $Q = cA\sqrt{2gH}$

(GRATE 50% BLOCKED) AREA = (4.16 SF)(3) = 12.48 SF

$Q = (0.6)(12.48)(0.5)(32.2)^{1/2}$

→ $Q = 21.2$ CFS ($> 18.4 \rightarrow$ OK)

WEIR EQ: $Q = CLH^{1.5}$ $C = 2.7$

$L = [(35.5)(6) + (18.5)(2)] \div 12 = 20.8$ FT

$Q = (2.7)(20.8)(0.7)^{1.5} = 32.8$ CFS

compaction, and approximate shrinkage of excavated on-site soils placed in compacted fills:

Excavated Depth Below Existing Grade (ft)	Percent Compaction in Fill (ASTM D1557)	Estimated Shrinkage (%)
0 to 3	90	5-10
0 to 3	95	10-15
3 to 6	90	2-7
3 to 6	95	7-12

The estimated shrinkages consider only material densification and do not consider other effects such as transport, wind, overcompaction, or compaction of subsoils to greater depths.

Drainage:

- Surface Drainage:

  1. Positive drainage should be provided during construction and maintained throughout the life of the proposed development. Infiltration of water into utility or foundation excavations must be prevented during construction. Planters and other surface features which could retain water in areas adjacent to all structures should be eliminated.

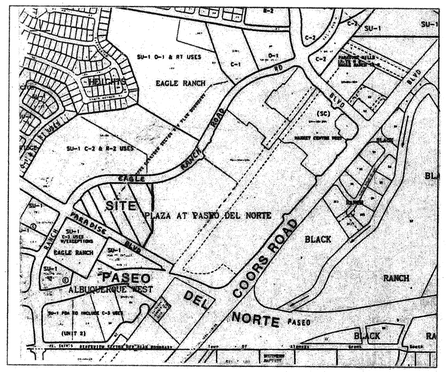
  2. In areas where sidewalks or paving do not immediately adjoin the structure, we recommend that protective slopes be provided with a minimum grade of approximately 5 percent for at least 10 feet from perimeter walls. Backfill against footings, exterior walls, and in utility and sprinkler line trenches should be well compacted and free of all construction debris to minimize the possibility of moisture infiltration.

- Drainage Behind Walls: Free-draining, granular soils containing less than five percent fines (by weight) passing a No. 200 sieve should be placed adjacent to all retaining or below grade walls. A drainage system consisting of either weep holes or perforated drain lines (placed near the base of the wall) should be used to intercept and discharge water which would tend to saturate the backfill. Where used, drain lines should be embedded in a

AG SPANOS APARTMENTS
PHASE II GRADING PLAN

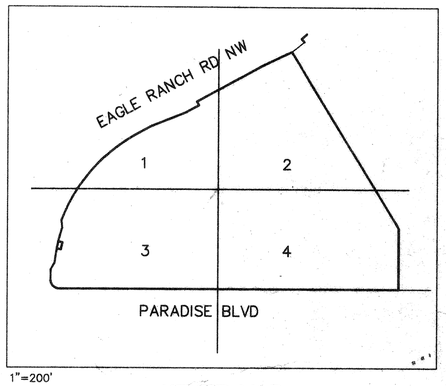
TRACT A-4, THE PLAZA AT PASEO DEL NORTE

MARCH 1995



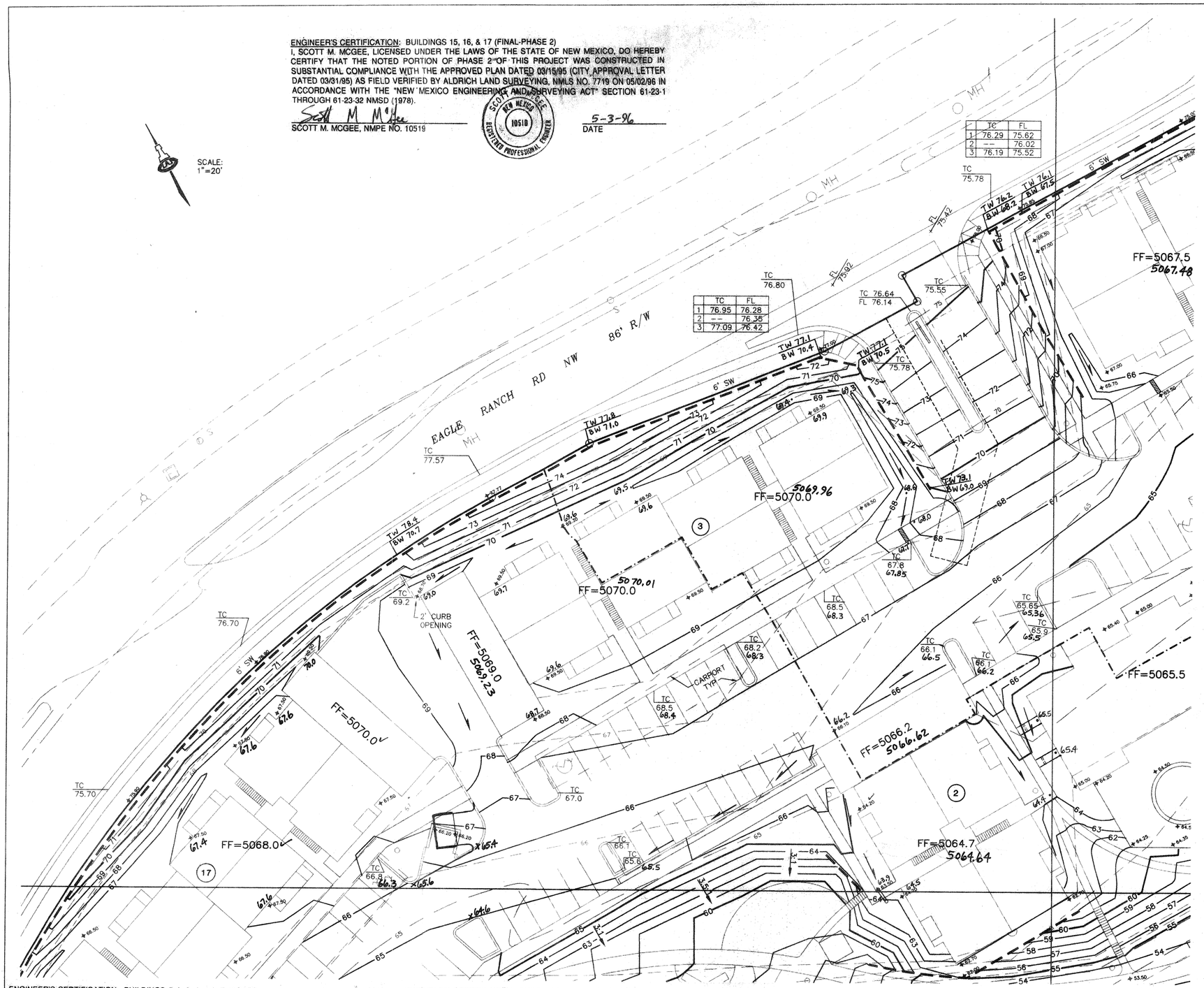
1"=750' C-13

VICINITY MAP



1"=200'

KEYED MAP



	TC	FL
1	76.95	76.28
2	—	76.35
3	77.09	76.42

	TC	FL
1	76.29	75.62
2	—	76.02
3	76.19	75.52

LEGEND

5067	EXISTING CONTOUR
50	PROPOSED CONTOUR
	RETAINING WALL
FF=5042.5	FINISH FLOOR ELEVATION
	SW CULVERT
	4" DRAIN PIPE
	DRAINAGE SUB-BASIN BOUNDARY
65.40	PROPOSED SPOT ELEVATION
68.3	AS-BUILT ELEVATION

NOTE:
SEE SHEET 3 FOR EROSION CONTROL PLAN.

RECEIVED
MAY - 7 1996

SCALE: 1"=20'

ENGINEER'S CERTIFICATION: BUILDINGS 15, 16, & 17 (FINAL-PHASE 2)
I, SCOTT M. MCGEE, LICENSED UNDER THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE NOTED PORTION OF PHASE 2 OF THIS PROJECT WAS CONSTRUCTED IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED PLAN DATED 03/15/95 (CITY APPROVAL LETTER DATED 03/31/95) AS FIELD VERIFIED BY ALDRICH LAND SURVEYING, NMLS NO. 7719 ON 05/02/96 IN ACCORDANCE WITH THE "NEW MEXICO ENGINEERING AND SURVEYING ACT" SECTION 61-23-1 THROUGH 61-23-32 NMSD (1978).

SCOTT M. MCGEE, NMPE NO. 10519 — DATE 5-3-96

ENGINEER'S CERTIFICATION: BUILDINGS 1, 2, 3, 4, & 6 (PHASE 2)
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SCOTT M. MCGEE, NMPE NO. 10519 — DATE 1-10-96

ENGINEER'S CERTIFICATION: BUILDINGS 5, 7, & 8 (PHASE 2)
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SCOTT M. MCGEE, NMPE NO. 10519 — DATE 2-9-96

ENGINEER'S CERTIFICATION: BUILDING 9 (PHASE 2)
I, SCOTT M. MCGEE, LICENSED UNDER THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE NOTED PORTION OF PHASE 2 OF THIS PROJECT WAS CONSTRUCTED IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED PLAN DATED 03/15/95 (CITY APPROVAL LETTER DATED 03/31/95) AS FIELD VERIFIED BY ALDRICH LAND SURVEYING, NMLS NO. 7719 ON 03/11/96 IN ACCORDANCE WITH THE "NEW MEXICO ENGINEERING AND SURVEYING ACT" SECTION 61-23-1 THROUGH 61-23-32 NMSD (1978).

SCOTT M. MCGEE, NMPE NO. 10519 — DATE 3-12-96

ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque New Mexico

8311GD1.DWGwde | 03/08/95

SHEET 1 OF 6

AG SPANOS APARTMENTS
PHASE II GRADING PLAN
TRACT A-4, THE PLAZA AT PASEO DEL NORTE

MARCH 1995

ENGINEER'S CERTIFICATION: BUILDING 11 (PHASE 2)
I, FRED C. ARFMAN, LICENSED UNDER THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE NOTED PORTION OF PHASE 2 OF THIS PROJECT WAS CONSTRUCTED IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED PLAN DATED 03/15/95 (CITY APPROVAL LETTER DATED 03/31/95) AS FIELD VERIFIED BY ALDRICH LAND SURVEYING, NMLS NO. 7719 ON 03/29/96 IN ACCORDANCE WITH THE "NEW MEXICO ENGINEERING AND SURVEYING ACT" SECTION 61-23-1 THROUGH 61-23-32 NMSD (1978).

Fred C. Arfman — 04-01-96
FRED C. ARFMAN, NMPE NO. 7322 — DATE

ENGINEER'S CERTIFICATION: BUILDINGS 12, 13, & 14 (PHASE 2)
I, FRED C. ARFMAN, LICENSED UNDER THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE NOTED PORTION OF PHASE 2 OF THIS PROJECT WAS CONSTRUCTED IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED PLAN DATED 03/15/95 (CITY APPROVAL LETTER DATED 03/31/95) AS FIELD VERIFIED BY ALDRICH LAND SURVEYING, NMLS NO. 7719 ON 03/29/96 IN ACCORDANCE WITH THE "NEW MEXICO ENGINEERING AND SURVEYING ACT" SECTION 61-23-1 THROUGH 61-23-32 NMSD (1978).

Fred C. Arfman — 04-02-96
FRED C. ARFMAN, NMPE NO. 7322 — DATE

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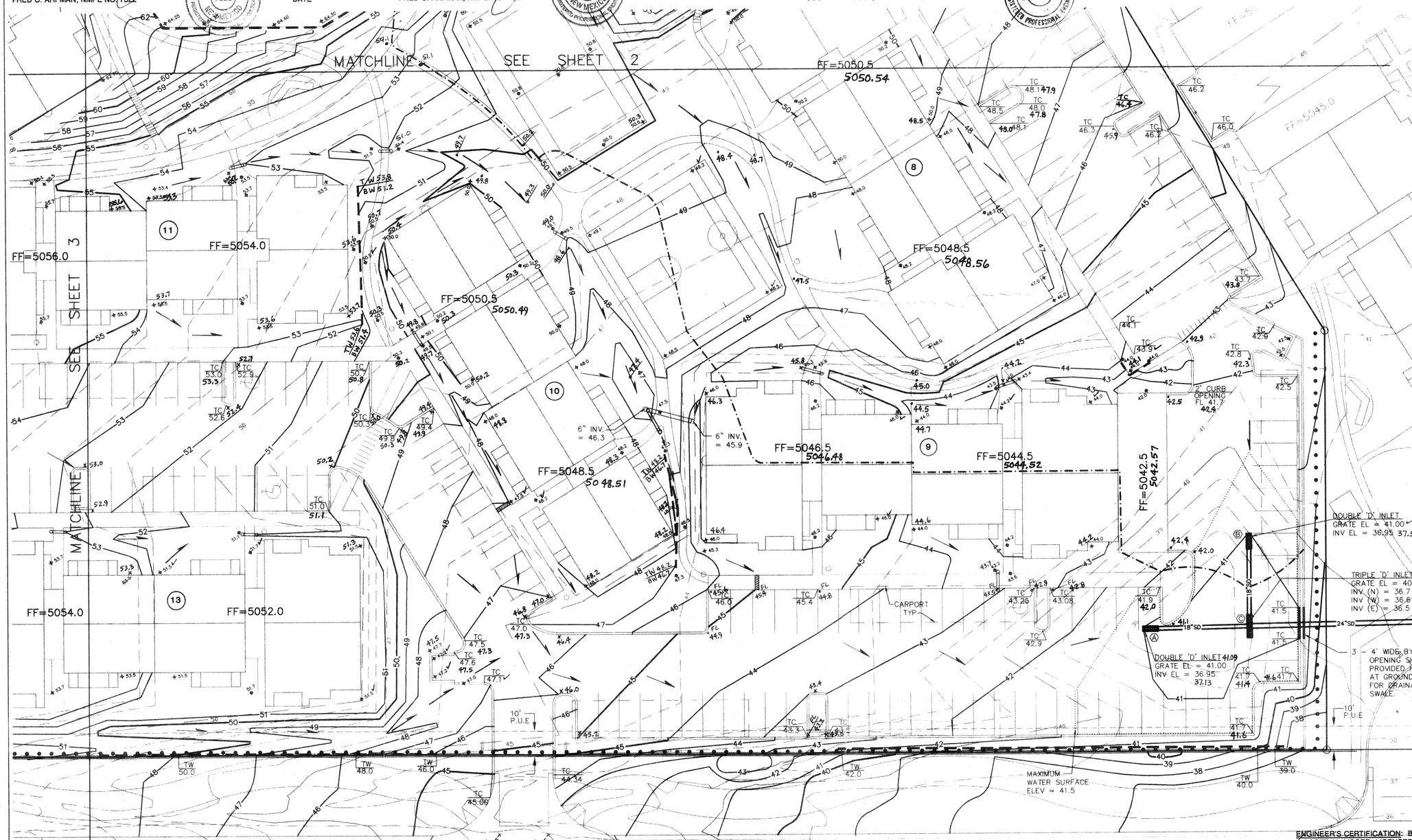
Scott M McGee — 5-3-96
SCOTT M. MCGEE, NMPE NO. 10519 — DATE



SCALE: 1"=20'

LEGEND

5035	EXISTING CONTOUR
50	PROPOSED CONTOUR
	RETAINING WALL
FF=5042.5	FINISH FLOOR ELEVATION
	EROSION CONTROL BERM
	SW CULVERT
	4" DRAIN PIPE
A	ANALYSIS POINT
	DRAINAGE SUB-BASIN BOUNDARY
65.40	PROPOSED SPOT ELEVATION
	6" DRAIN PIPE
37.51	AS-BUILT ELEVATION

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Scott M McGee — 1-10-96
SCOTT M. MCGEE, NMPE NO. 10519 — DATE

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Scott M McGee — 2-9-96
SCOTT M. MCGEE, NMPE NO. 10519 — DATE

ENGINEER'S CERTIFICATION: BUILDING 9 (PHASE 2)
I, SCOTT M. MCGEE, LICENSED UNDER THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE NOTED PORTION OF PHASE 2 OF THIS PROJECT WAS CONSTRUCTED IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED PLAN DATED 03/15/95 (CITY APPROVAL LETTER DATED 03/31/95) AS FIELD VERIFIED BY ALDRICH LAND SURVEYING, NMLS NO. 7719 ON 03/11/96 IN ACCORDANCE WITH THE "NEW MEXICO ENGINEERING AND SURVEYING ACT" SECTION 61-23-1 THROUGH 61-23-32 NMSD (1978).

Scott M McGee — 3-12-96
SCOTT M. MCGEE, NMPE NO. 10519 — DATE

ENGINEER'S CERTIFICATION: BUILDING 10 (PHASE 2)
I, SCOTT M. MCGEE, LICENSED UNDER THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE NOTED PORTION OF PHASE 2 OF THIS PROJECT WAS CONSTRUCTED IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED PLAN DATED 03/15/95 (CITY APPROVAL LETTER DATED 03/31/95) AS FIELD VERIFIED BY ALDRICH LAND SURVEYING, NMLS NO. 7719 ON 03/22/96 IN ACCORDANCE WITH THE "NEW MEXICO ENGINEERING AND SURVEYING ACT" SECTION 61-23-1 THROUGH 61-23-32 NMSD (1978).

Scott M McGee — 3/25/96
SCOTT M. MCGEE, NMPE NO. 10519 — DATE

ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque New Mexico

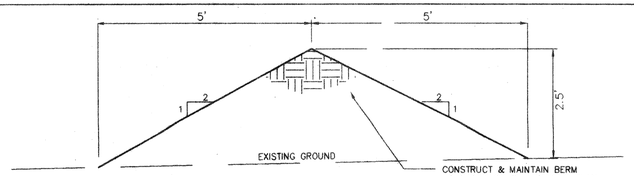
831GD4.DWGwde | 03/15/95

AG SPANOS APARTMENTS
PHASE II GRADING PLAN
TRACT A-4, THE PLAZA AT PASEO DEL NORTE

MARCH 1995

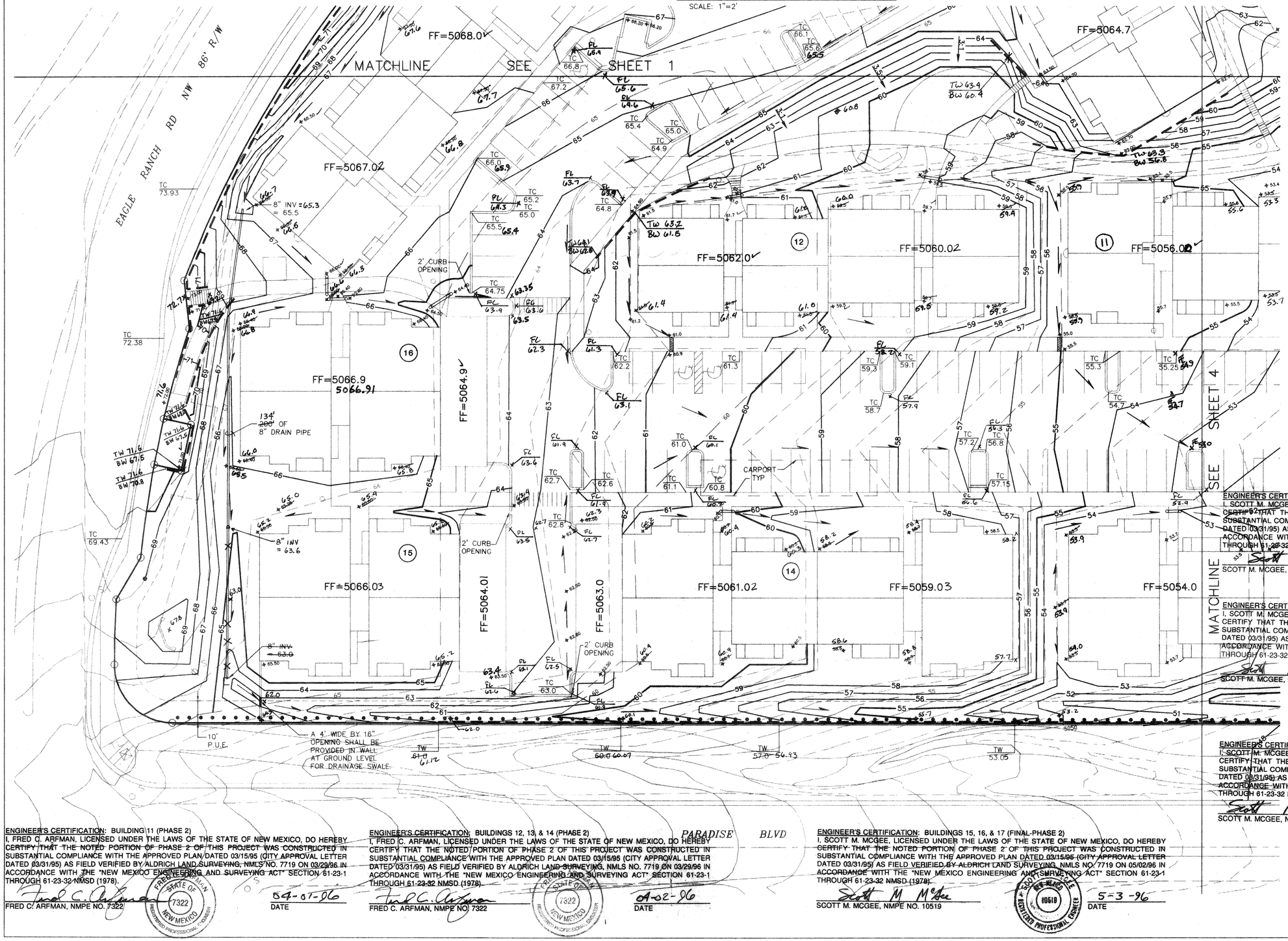
EROSION CONTROL

1. CONTRACTOR SHALL BUILD EROSION CONTROL BERM ALONG PROPERTY LINES AS SHOWN AS PART OF THE GRADING PROCESS.
2. THE CONTRACTOR SHALL SECURE "TOPSOIL DISTURBANCE PERMIT" FROM THE CITY ENVIORNMENTAL HEALTH DEPARTMENT PRIOR TO BEGINNING CONSTRUCTION. AN EXCAVATION PERMIT IS REQUIRED FOR ALL WORK WITHIN PUBLIC RIGHT-OF-WAY.



EROSION CONTROL BERM

SCALE: 1"=2'



SCALE: 1"=20'

LEGEND

- 5035 — EXISTING CONTOUR
- 50 — PROPOSED CONTOUR
- RETAINING WALL
- FF=5042.5 FINISH FLOOR ELEVATION
- EROSION CONTROL BERM
- SW CULVERT
- 4" DRAIN PIPE
- 65.40 PROPOSED SPOT ELEVATION
- 8" DRAIN PIPE
- 65.5 AS-BUILT ELEVATION

ENGINEER'S CERTIFICATION: BUILDINGS 1, 2, 3, 4, & 6 (PHASE 2)
I, SCOTT M. MCGEE, LICENSED UNDER THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE NOTED PORTION OF PHASE 2 OF THIS PROJECT WAS CONSTRUCTED IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED PLAN DATED 03/15/95 (CITY APPROVAL LETTER DATED 03/31/95) AS FIELD VERIFIED BY ALDRICH LAND SURVEYING, NMLS NO. 7719 ON 01/8/96 IN ACCORDANCE WITH THE "NEW MEXICO ENGINEERING AND SURVEYING ACT" SECTION 61-23-1 THROUGH 61-23-32 NMSD (1978).

Scott M McGee — 1-10-96
SCOTT M. MCGEE, NMPE NO. 10519 — DATE

ENGINEER'S CERTIFICATION: BUILDINGS 5, 7, & 8 (PHASE 2)
I, SCOTT M. MCGEE, LICENSED UNDER THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE NOTED PORTION OF PHASE 2 OF THIS PROJECT WAS CONSTRUCTED IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED PLAN DATED 03/15/95 (CITY APPROVAL LETTER DATED 03/31/95) AS FIELD VERIFIED BY ALDRICH LAND SURVEYING, NMLS NO. 7719 ON 02/07/96 IN ACCORDANCE WITH THE "NEW MEXICO ENGINEERING AND SURVEYING ACT" SECTION 61-23-1 THROUGH 61-23-32 NMSD (1978).

Scott M McGee — 2-9-96
SCOTT M. MCGEE, NMPE NO. 10519 — DATE

ENGINEER'S CERTIFICATION: BUILDING 9 (PHASE 2)
I, SCOTT M. MCGEE, LICENSED UNDER THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE NOTED PORTION OF PHASE 2 OF THIS PROJECT WAS CONSTRUCTED IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED PLAN DATED 03/15/95 (CITY APPROVAL LETTER DATED 08/31/95) AS FIELD VERIFIED BY ALDRICH LAND SURVEYING, NMLS NO. 7719 ON 03/11/96 IN ACCORDANCE WITH THE "NEW MEXICO ENGINEERING AND SURVEYING ACT" SECTION 61-23-1 THROUGH 61-23-32 NMSD (1978).

Scott M McGee — 3-12-96
SCOTT M. MCGEE, NMPE NO. 10519 — DATE

RECEIVED MAY - 7 1996

ENGINEER'S CERTIFICATION: BUILDING 11 (PHASE 2)
I, FRED C. ARFMAN, LICENSED UNDER THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE NOTED PORTION OF PHASE 2 OF THIS PROJECT WAS CONSTRUCTED IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED PLAN DATED 03/15/95 (CITY APPROVAL LETTER DATED 03/31/95) AS FIELD VERIFIED BY ALDRICH LAND SURVEYING, NMLS NO. 7719 ON 03/29/96 IN ACCORDANCE WITH THE "NEW MEXICO ENGINEERING AND SURVEYING ACT" SECTION 61-23-1 THROUGH 61-23-32 NMSD (1978).

Fred C Arfman — 04-01-96
FRED C. ARFMAN, NMPE NO. 7322 — DATE

ENGINEER'S CERTIFICATION: BUILDINGS 12, 13, & 14 (PHASE 2)
I, FRED C. ARFMAN, LICENSED UNDER THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE NOTED PORTION OF PHASE 2 OF THIS PROJECT WAS CONSTRUCTED IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED PLAN DATED 03/15/95 (CITY APPROVAL LETTER DATED 03/31/95) AS FIELD VERIFIED BY ALDRICH LAND SURVEYING, NMLS NO. 7719 ON 03/29/96 IN ACCORDANCE WITH THE "NEW MEXICO ENGINEERING AND SURVEYING ACT" SECTION 61-23-1 THROUGH 61-23-32 NMSD (1978).

Fred C Arfman — 04-02-96
FRED C. ARFMAN, NMPE NO. 7322 — DATE

PARADISE BLVD

ENGINEER'S CERTIFICATION: BUILDINGS 15, 16, & 17 (FINAL-PHASE 2)
I, SCOTT M. MCGEE, LICENSED UNDER THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE NOTED PORTION OF PHASE 2 OF THIS PROJECT WAS CONSTRUCTED IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED PLAN DATED 03/15/95 (CITY APPROVAL LETTER DATED 03/31/95) AS FIELD VERIFIED BY ALDRICH LAND SURVEYING, NMLS NO. 7719 ON 05/02/96 IN ACCORDANCE WITH THE "NEW MEXICO ENGINEERING AND SURVEYING ACT" SECTION 61-23-1 THROUGH 61-23-32 NMSD (1978).

Scott M McGee — 5-3-96
SCOTT M. MCGEE, NMPE NO. 10519 — DATE

5-15-96

ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque New Mexico

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SHEET 3 OF 6

AG SPANOS APARTMENTS

PHASE II GRADING PLAN

TRACT A-4, THE PLAZA AT PASEO DEL NORTE

MARCH 1995

SCALE: 1"=20'

ENGINEER'S CERTIFICATION: BUILDINGS 15, 16, & 17 (FINAL-PHASE 2)
I, SCOTT M. MCGEE, LICENSED UNDER THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE NOTED PORTION OF PHASE 2 OF THIS PROJECT WAS CONSTRUCTED IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED PLAN DATED 03/15/95 (CITY APPROVAL LETTER DATED 03/31/95) AS FIELD VERIFIED BY ALDRICH LAND SURVEYING, NMLS NO. 7719 ON 05/02/96 IN ACCORDANCE WITH THE "NEW MEXICO ENGINEERING AND SURVEYING ACT" SECTION 61-23-1 THROUGH 61-23-32 NMSD (1978).

Scott M McGee — 5-3-96

SCOTT M. MCGEE, NMPE NO. 10519 — DATE

SCOTT M. McGEE · NEW MEXICO · 10519 · REGISTERED PROFESSIONAL ENGINEER

LEGEND

5149	EXISTING CONTOUR
50	PROPOSED CONTOUR
	RETAINING WALL
FF=5042.5	FINISH FLOOR ELEVATION
	SW CULVERT
	DRAINAGE SUB-BASIN BOUNDARY
	4" DRAIN PIPE
65.40	PROPOSED SPOT ELEVATION
54.5	AS-BUILT ELEVATION

ENGINEER'S CERTIFICATION: BUILDINGS 1, 2, 3, 4, & 6 (PHASE 2)
I, SCOTT M. MCGEE, LICENSED UNDER THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE NOTED PORTION OF PHASE 2 OF THIS PROJECT WAS CONSTRUCTED IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED PLAN DATED 03/15/95 (CITY APPROVAL LETTER DATED 03/31/95) AS FIELD VERIFIED BY ALDRICH LAND SURVEYING, NMLS NO. 7719 ON 01/8/96 IN ACCORDANCE WITH THE "NEW MEXICO ENGINEERING AND SURVEYING ACT" SECTION 61-23-1 THROUGH 61-23-32 NMSD (1978).

Scott M McGee — 1-10-96

SCOTT M. MCGEE, NMPE NO. 10519 — DATE

SCOTT M. McGEE · NEW MEXICO · 10519 · REGISTERED PROFESSIONAL ENGINEER

ENGINEER'S CERTIFICATION: BUILDINGS 5, 7, & 8 (PHASE 2)
I, SCOTT M. MCGEE, LICENSED UNDER THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE NOTED PORTION OF PHASE 2 OF THIS PROJECT WAS CONSTRUCTED IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED PLAN DATED 03/15/95 (CITY APPROVAL LETTER DATED 03/31/95) AS FIELD VERIFIED BY ALDRICH LAND SURVEYING, NMLS NO. 7719 ON 02/07/96 IN ACCORDANCE WITH THE "NEW MEXICO ENGINEERING AND SURVEYING ACT" SECTION 61-23-1 THROUGH 61-23-32 NMSD (1978).

Scott M McGee — 2-9-96

SCOTT M. MCGEE, NMPE NO. 10519 — DATE

SCOTT M. McGEE · NEW MEXICO · 10519 · REGISTERED PROFESSIONAL ENGINEER

RECEIVED
MAY - 7 1996
HYDROLOGY DIVISION

ENGINEER'S CERTIFICATION: BUILDING 9 (PHASE 2)
I, SCOTT M. MCGEE, LICENSED UNDER THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE NOTED PORTION OF PHASE 2 OF THIS PROJECT WAS CONSTRUCTED IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED PLAN DATED 03/15/95 (CITY APPROVAL LETTER DATED 03/31/95) AS FIELD VERIFIED BY ALDRICH LAND SURVEYING, NMLS NO. 7719 ON 03/11/96 IN ACCORDANCE WITH THE "NEW MEXICO ENGINEERING AND SURVEYING ACT" SECTION 61-23-1 THROUGH 61-23-32 NMSD (1978).

Scott M McGee — 3-12-96

SCOTT M. MCGEE, NMPE NO. 10519 — DATE

SCOTT M. McGEE · NEW MEXICO · 10519 · REGISTERED PROFESSIONAL ENGINEER

SCOTT M. McGEE · NEW MEXICO · 10519 · REGISTERED PROFESSIONAL ENGINEER — Scott M McGee — 3-15-95

ISAACSON & ARFMAN, P.A.
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128 Monroe Street N.E.
Albuquerque New Mexico

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SHEET 2 OF 6