SEE SHEET #2

RIO MARIA DR

RIO MARIA DRIVE SW

WEST MEADOW DR SW

RIVERBEND AVE. SW

RIO CLARA AVE. SW

LAZY DAY (71.94)

DR. SW (71.36)

GRASSHOPPER DR. SW

PUBLIC PARK

UNIT 3A

UNIT 1

MIDDLE MEADOW PL SW

RIVERBEND 66.10 64.50 66.00 66.50 64.04 61.55 59.14 69.00 AVE. SW

LOWER MEADOW AVE SW

TRAIL SWALE

TRACT P

TRACT A

50' BNSF EASEMENT

EXISTING CONCRETE LINED CHANNEL

LIG MARKER

15' WATERLINE ESMT

RIO BRAVO BOULEVARD SW

RIO BRAVO PAVEMENT

DENNIS CHAVEZ BOULEVARD (255' R/W)

(FUTURE EAST BOUND LANES)

SEE SHEET #3

SEE SHEET #5 REVISED

BLOCK 8 — BLOCK 9 — BLOCK 10 — BLOCK 11 — BLOCK 12

7-P1 6-P1 5-P1 4-P1 3-P1 2-P1 1-P1 8-P1 9-P1 10-P1 11-P1 12-P1 13-P1 14-P1 15-P1 16-P1 17-P1 18-P1 19-P1 20-P1 21-P1 22-P1 23-P1 24-P1 25-P1 26-P1 27-P1 28-P1 29-P1 30-P1 31-P1 32-P1 33-P1 34-P1 35-P1 36-P1 37-P1 38-P1 39-P1 40-P1 41-P1 42-P1 43-P1 44-P1 45-P1 46-P1 47-P1 48-P1 49-P1 50-P1 51-P1 52-P1 53-P1

9 FP = 73.6 (73.46)
10 FP = 74.6 (74.36)
11 FP = 74.9 (74.77)
12 FP = 76.1 (75.00)
13 FP = 76.1 (75.00)
14 FP = 74.9 (74.80)
5 FP = 74.2 (74.10)
16 FP = 72.1 (73.06)
1-P1 FP = 81.6 (81.40)

1-P1 FP = 90.4 (90.31)
2-P1 FP = 90.7 (90.61)
3-P1 FP = 91.5 (91.04)
4-P1 FP = 91.5 (91.41)
5-P1 FP = 91.6 (91.71)
6-P1 FP = 92.1 (92.54)

1-P1 FP = 91.04
2-P1 FP = 91.34
3-P1 FP = 91.94
4-P1 FP = 91.94
5-P1 FP = 92.24
6-P1 FP = 92.01

1-P1 FP = 85.11
2-P1 FP = 88.11
3-P1 FP = 87.11
4-P1 FP = 87.96
5-P1 FP = 88.48
6-P1 FP = 89.50
7-P1 FP = 88.77
8-P1 FP = 88.07
9-P1 FP = 86.87
10-P1 FP = 85.87
11-P1 FP = 84.87
12-P1 FP = 84.2

13-P1 FP = 84.10 (83.08) 84.3
14-P1 FP = 83.68 (83.08)
15-P1 FP = 84.00 (81.96)
16-P1 FP = 80.2 (80.11)
17-P1 FP = 83.38 (78.11)
18-P1 FP = 83.68 (76.11)
19-P1 FP = 83.40 (74.11)

1-P1 FP = 82.17
2-P1 FP = 82.17
3-P1 FP = 82.6 (82.47)
4-P1 FP = 82.77
5-P1 FP = 82.85
6-P1 FP = 82.85
7-P1 FP = 82.56

1-P1 FP = 83.71
2-P1 FP = 83.71
13-P1 FP = 83.71
14-P1 FP = 84.01
15-P1 FP = 84.00
16-P1 FP = 83.68
17-P1 FP = 83.38
18-P1 FP = 83.40

1-P1 FP = 85.85
2-P1 FP = 85.85
3-P1 FP = 85.85
4-P1 FP = 85.85
5-P1 FP = 85.85
6-P1 FP = 85.85
7-P1 FP = 85.85
8-P1 FP = 85.85
9-P1 FP = 85.85
10-P1 FP = 85.85
11-P1 FP = 85.85
12-P1 FP = 85.85
13-P1 FP = 85.85
14-P1 FP = 85.85
15-P1 FP = 85.85
16-P1 FP = 85.85
17-P1 FP = 85.85
18-P1 FP = 85.85
19-P1 FP = 85.85
20-P1 FP = 85.85
21-P1 FP = 85.85
22-P1 FP = 85.85
23-P1 FP = 66.11
24-P1 FP = 63.9 (64.11)
25-P1 FP = 62.0 (62.24)
26-P1 FP = 60.1 (60.36)
27-P1 FP = 58.3 (58.49)
28-P1 FP = 57.0 (57.28)
29-P1 FP = 55.9 (56.00)
30-P1 FP = 54.5 (54.78)
31-P1 FP = 53.4 (53.66)
32-P1 FP = 52.4 (52.79)
33-P1 FP = 52.8 (53.92)
34-P1 FP = 54.2 (55.20)
35-P1 FP = 56.3 (56.83)
36-P1 FP = 56.8 (57.19)
37-P1 FP = 57.1 (57.12)
38-P1 FP = 57.4 (57.91)
39-P1 FP = 57.7 (57.91)
40-P1 FP = 57.9 (58.04)
41-P1 FP = 58.2 (58.36)
42-P1 FP = 58.4 (58.52)
43-P1 FP = 58.6 (58.72)
44-P1 FP = 58.8 (58.92)
45-P1 FP = 59.1 (59.32)
46-P1 FP = 59.3 (59.52)
47-P1 FP = 59.5 (59.72)
48-P1 FP = 59.7 (59.92)
49-P1 FP = 59.9 (60.12)
50-P1 FP = 60.1 (60.32)
51-P1 FP = 60.3 (60.52)
52-P1 FP = 60.5 (60.72)
53-P1 FP = 60.7 (60.92)

63.3 (63.55) 60.8 (61.20) 59.6 (59.99) 59.2 (59.46) 60.7 (61.90) 57.5 (58.17) 58.6 (59.55)

75.4 (75.48) 73.1 (73.82) 70.8 (70.67) 68.3 (68.17) 65.3 (65.72) 63.3 (63.20) 60.7 (60.80)

73.5 (73.59) 71.6 (71.59) 69.7 (69.59) 67.5 (67.39) 65.6 (65.66) 63.7 (63.66) 61.5 (61.79) 59.7 (59.91)

57.1 (57.12) 56.3 (56.03) 56.8 (57.19) 57.4 (57.91) 57.7 (57.91) 57.9 (58.04) 58.2 (58.36) 58.4 (58.52) 58.6 (58.72) 58.8 (58.92) 59.1 (59.32) 59.3 (59.52) 59.5 (59.72) 59.7 (59.92) 59.9 (60.12) 60.1 (60.32) 60.3 (60.52) 60.5 (60.72) 60.7 (60.92)

52.4 (52.79) 52.8 (53.92) 54.2 (55.20) 54.5 (54.78) 55.9 (56.00) 57.0 (57.28) 58.3 (58.49) 59.5 (59.72) 60.1 (60.36) 62.0 (62.24) 63.9 (64.11) 66.11 (65.31) 67.31 69.31 71.31 73.31 75.31 77.31 79.31 81.31 83.31 85.31

53.4 (53.66) 54.5 (54.78) 55.9 (56.00) 57.0 (57.28) 58.3 (58.49) 59.5 (59.72) 60.1 (60.36) 62.0 (62.24) 63.9 (64.11) 65.94 67.94 69.94 71.94 73.94 75.94 77.94 79.94 81.78 83.94

51.4 (51.95) 52.8 (53.07) 54.2 (54.35) 55.6 (55.83) 56.9 (57.09) 58.2 (58.40) 59.4 (59.58) 60.6 (60.80) 61.9 (62.08) 63.2 (63.41) 64.5 (64.74) 65.8 (66.07) 67.0 (67.31) 68.3 (68.57) 69.6 (69.87) 70.9 (71.18) 72.2 (72.49) 73.5 (73.80) 74.8 (75.12) 76.1 (76.43) 77.4 (77.75) 78.7 (79.06) 80.0 (80.38) 81.3 (81.70) 82.6 (83.03) 83.9 (84.36) 85.2 (85.69) 86.5 (87.02) 87.8 (88.36) 89.1 (89.69) 90.4 (91.03) 91.7 (92.36) 93.0 (93.70) 94.3 (95.03) 95.6 (96.36) 96.9 (97.69) 98.2 (99.02) 99.5 (100.35) 100.8 (101.68) 102.1 (103.01) 103.4 (104.34) 104.7 (105.67) 106.0 (107.00) 107.3 (108.33) 108.6 (109.66) 109.9 (110.99) 111.2 (112.32) 112.5 (113.65) 113.8 (114.98) 115.1 (116.31) 116.4 (117.64) 117.7 (118.97)

NOTES

1. SEE SIDE YARD GRADING DETAIL SHEET 3.
2. SEE DOUBLE RETAINING WALL DETAIL SHEET 3.

DRAINAGE CERTIFICATION

I, Mark Goodwin, NMPE 8948, of the firm Mark Goodwin & Associates, PA., hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intent of the approved plan dated 1/8/2004. The record information edited onto the original design document has been obtained by Timothy Aldrich, of the firm ALS, Inc., I further certify that I have personally visited the project site on 10/18/05, and have determined by visual inspection that the survey data provided is representative of actual site conditions and is true and correct to the best of my knowledge and belief. This certification is submitted in support of a request for Grading Certification approval.

The record information presented hereon is not necessarily complete and intended only to verify substantial compliance of the grading and drainage aspects of this project. Those relying on the record document are advised to obtain independent verification of its accuracy before using it for any other purpose.

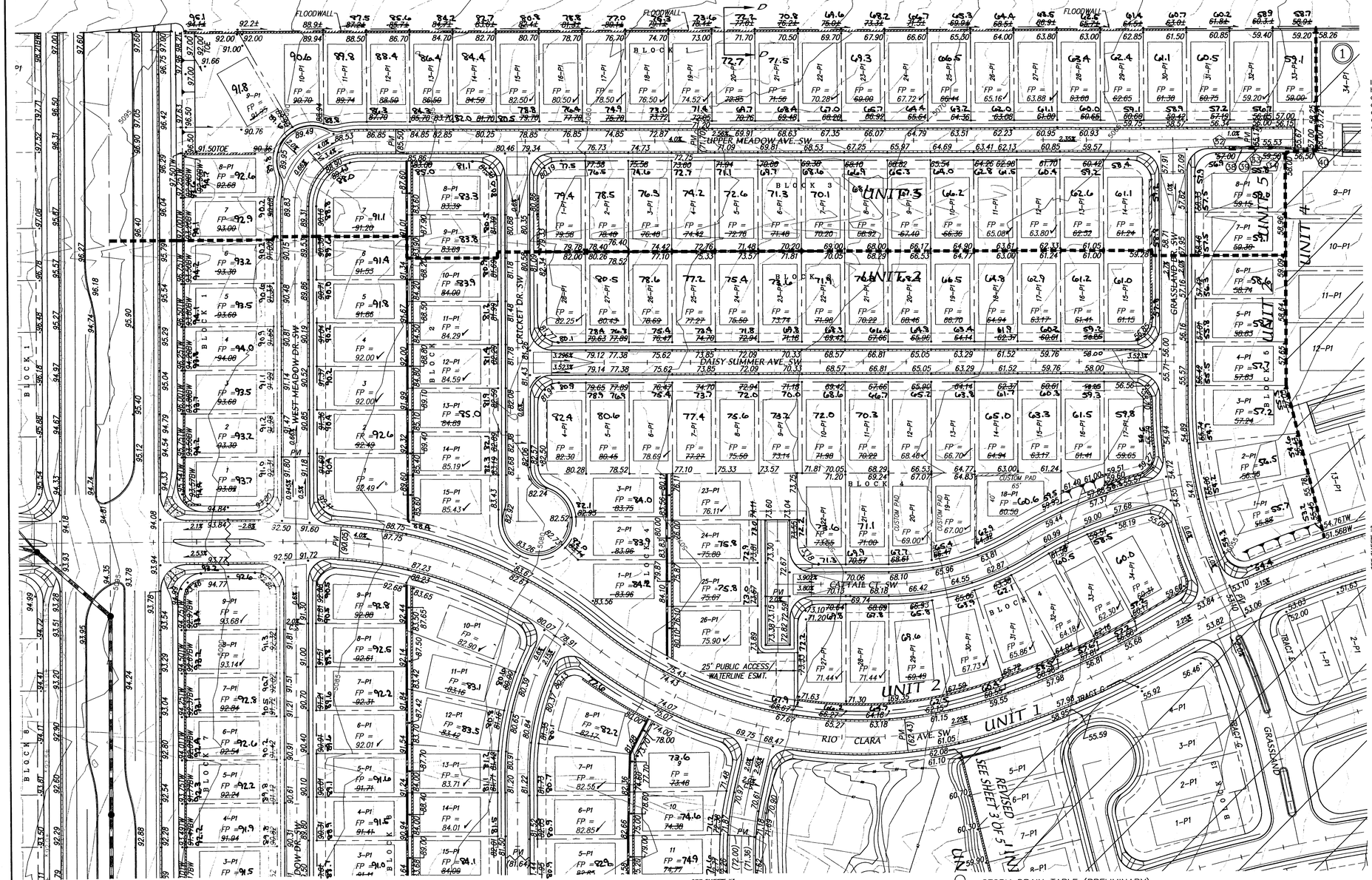
MARK GOODWINNMPE 8948

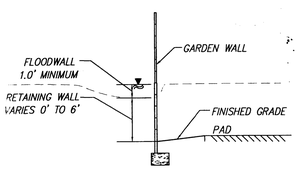
12/15/05

NEW MEXICO 8948 REGISTERED PROFESSIONAL ENGINEER

STORM DRAIN INLET TABLE (PRELIMINARY)

INLET #	TYPE
32	A
33	DBL C
34	C
35	DBL A (ST)
36	DBL C
37	DBL A (ST)
38	DBL A (ST)
39	DBL C
40	DBL C
41	DBL C
42	DBL A (ST)
43	A
44	C
45	A
46	C
47	C
48	C
49	A
50	C
52	A
53	C
54	A
55	A
56	C
57	A
58	A
59	C
60	C
61	A
62	A
63	C
64	C
65	DBL C
72	CATTLE GUARD





SECTION D-D
N.T.S.

STORM DRAIN TABLE (PRELIMINARY)

RCP #	SIZE	SLOPE	Q_{100}	V_{100}	RCP #	SIZE	SLOPE	Q_{100}	V_{100}
38	18"RCP	%	11.27 cfs	6.4 fps	60	18"RCP	%	cfs	fps
39	24"RCP	%	22.54 cfs	7.2 fps	61	48"RCP	0.72%	121.5 cfs	9.7 fps
40	24"RCP	2.3%	33.8 cfs	10.8 fps	62	18"RCP	1.0%	9.2 cfs	5.22 fps
41	18"RCP	1.0%	11.27 cfs	6.4 fps	63	18"RCP	1.0%	5.5 cfs	3.1 fps
42	24"RCP	1.0%	22.54 cfs	7.2 fps	64	60"RCP	0.88%	245.5 cfs (from AHYMO)	12.5 fps
43	30"RCP	2.6%	65.85 cfs	13.41 fps	65	18"RCP	1.0%	3.64 cfs	2.1 fps
44	48"RCP	0.72%	121.54 cfs	9.7 fps	66	18"RCP	1.0%	4.3 cfs	2.4 fps
45	18"RCP	1.0%	11.13 cfs	6.3 fps	67	18"RCP	1.0%	2.84 cfs	2.8 fps
45.5	24"RCP	1.0%	22.26 cfs	6.3 fps	68	18"RCP	1.0%	2.6 cfs	1.6 fps
46	36"RCP	0.8%	55.65 cfs	7.87 fps	69	18"RCP	0.6%	5.8 cfs	3.3 fps
47	18"RCP	1.0%	6.8 cfs	3.9 fps	70	18"RCP	1.0%	11.0 cfs	6.3 fps
48	24"RCP	1.0%	12.8 cfs	4.0 fps	71	18"RCP	1.0%	5.72 cfs	3.25 fps
49	18"RCP	%	8.3 cfs	4.7 fps	72	18"RCP	1.0%	11.44 cfs	6.5 fps
50	24"RCP	1.0%	15.8 cfs	5.0 fps	73	24"RCP	1.0%	22.44 cfs	7.1 fps
51	30"RCP	0.5%	28.6 cfs	5.8 fps	74	18"RCP	1.0%	8.96 cfs	5.1 fps
52	18"RCP	1.0%	7.3 cfs	4.1 fps	75	24"RCP	1.0%	17.92 cfs	5.7 fps
53	24"RCP	1.0%	13.9 cfs	7.9 fps	76	30"RCP	1.0%	40.36 cfs	8.2 fps
54	30"RCP	1.0%	42.9 cfs	8.66 fps	77	30"RCP	2.1%	58.28 cfs	11.9 fps
55	18"RCP	1.0%	8.3 cfs	4.7 fps					
56	30"RCP	1.54%	50.8 cfs	10.35 fps					
57	18"RCP	1.0%	8.0 cfs	4.5 fps					
58	36"RCP	0.78%	58.8 cfs	8.3 fps					
59	54"RCP	0.5%	135.98 cfs	8.6 fps					

City Appr. 2-27-04

A2106ANH/DWG/MEADOWS/2106-GD60-MID-R2 1-08-04 MJR NHE

N

60' 30' 0 60' 120'

SCALE: 1" = 60'

AS BUILT INFORMATION

BENCH MARKS

STATION "2-P10" IS LOCATED 4.9 MI. SW OF DOWNTOWN ALBUQUERQUE (FORMERLY RIO BRAVO), GO N. ON COORS 0.1 MI. TO FLORA VISTA AND GO WEST ON FLORA VISTA 0.5 MI. TO CONDERSHIRE, THEN GO S. ON CONDERSHIRE 0.4 MI. TO A POINT APPROX. 50 FT. W. OF THE STATION. STATION MARK IS AN AGS 3 1/4" ALUM. CAP STAMPED "2-P10, 1987" RIVETTED TO A PIPE PROJECTING 0.25 FT. ABOVE THE GROUND. X=1563441.13, Y=1463439.24 (NAD 27) Z=4991 (NGVD 29).

CONTRACTOR

WORK	DATE
STAKED BY	
FIELD CHECKED BY	
ACCEPTANCE BY	
FIELD VERIFICATION BY	
DRAWINGS CORRECTED BY	

MICRO-FILM INFORMATION

RECORDED BY DATE

NO.

SURVEY INFORMATION

NO.	BY	DATE	FIELD NOTES

ENGINEER'S SEAL

10-8-1

NO.	DATE	REMARKS	BY
		REVISIONS	

DESIGN	DATE
DESIGNED BY DLH	1/03
DRAWN BY NHE	1/03
CHECKED BY DMG	1/03

MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

TITLE: MEADOWS @ ANDERSON HILLS GRADING & DRAINAGE PLAN

RECEIVED DEC 15 2005 HYDROLOGY SECTION

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.

CITY PROJECT NO.

ZONE MAP NO. P-9

SHEET 2 OF 5

F:\A02JOBS\A2106ANH\dwg\MEADOWS\A2106-GD60-MID-R2.dwg, 01/08/04 01:52:48 PM, Mark Goodwin & Associates, Plotted By: RDQ

SEE SHEET #2

RIO MARIA DR.

RIO CLARA AVE. SW

RIVERBEND AVE. SW

LAZY DAY DR. SW

GRASSHOPPER DR. SW

WEST MEADOW DR. SW

MIDDLE MEADOW PL. SW

LOWER MEADOW AVE. SW

94TH STREET SW

RIO MARIA DRIVE SW

PUBLIC PARK

TRACT A

TRACT P

TRAIL SWALE

RIO BRAVO PAVEMENT

DENNIS CHAVEZ BOULEVARD (255' R/W)

(FUTURE EAST BOUND LANES)

220' TRANSITION

180'

EDGE OF 6" SHOULDER

223+04.80 END CHANNEL CONSTRUCTION MATCH EXISTING — BEGIN 8" HIGH WALL

225+00.00 END 8" HIGH WALL

250' TRANSITION

15' WATERLINE ESMT

50' R/W EASEMENT

TRACT "A" SHALL BE ROUGH GRADED TO SLOPE NORTH TO SOUTH. FINE DETAIL GRADING AND TRAIL CONSTRUCTION TO BE DONE AT WORKORDER.

SEE SHEET #3

REVISED SHEET 3 OF 5

APPROVED ROUGH GRADING ±18" App. 2-27-04
CITY HYDROLOGY DATE

A2106ANH/DWG/MEADOWS/2106-GD60-MID-R2 01-08-04 MJR NHE

DRAINAGE CERTIFICATION

I, Mark Goodwin, NMPE 8948, of the firm Mark Goodwin & Associates, PA, hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intent of the approved plan dated 1/6/2004. The record information edited onto the original design document has been obtained by Timothy Aldrich of the firm ALS, Inc. I further certify that I have personally visited the project site on 10/19/05, and have determined by visual inspection that the survey data provided is representative of actual site conditions and is true and correct to the best of my knowledge and belief. This certification is submitted in support of a request for Grading Certification approval.

The record information presented hereon is not necessarily complete and intended only to verify substantial compliance of the grading and drainage aspects of this project. Those relying on the record document are advised to obtain independent verification as to its accuracy before using it for any other purpose.

Mark Goodwin 12/16/05
MARK GOODWIN, NMPE 8948 DATE

VICINITY MAP

ZONE ATLAS NEW MEXICO 80448

N.T.S.

HIGHLANDS

DENNIS CHAVEZ BLVD.

PROJECT SITE
MEADOWS AT
ANDERSON HILLS

NOTES

1. A PERIMETER CMU WALL WILL BE CONSTRUCTED AROUND THE ENTIRE SITE.
2. BACK YARDS TO DRAIN TO FRONT YARD EXCEPT AT SLOPES IN BACK YARDS FOR LOTS 5 THRU 9 AND LOT 31 ADJACENT TO 20' WIDE PARK TRAIL. THE SLOPED AREA SHOULD DRAIN TO THE SOUTHEAST CORNER OF LOT AND THRU A TURNED BLOCK IN THE GARDEN WALL OPENING.

LEGEND

- PROPOSED STANDARD CURB & GUTTER
- PROPOSED MOUNTABLE CURB & GUTTER
- PROPOSED SIDEWALK
- .45.50 PROPOSED SPOT ELEVATION
- FP = 50.0 PROPOSED FINISHED PAD ELEVATION
- PROPOSED DIRECTION OF FLOW
- PROPOSED SLOPE
- PROPOSED RETAINING WALL
- EXISTING PAVEMENT
- PROPOSED STORM DRAIN INLET
- PROPOSED STORM DRAIN
- EXISTING CHANNEL

N

60' 30' 0 60' 120'

SCALE: 1" = 60'

SURVEY INFORMATION

FIELD NOTES BY: — DATE: — NO.: —

BENCH MARKS

STATION "2-P10" IS LOCATED 4.9 MI. SW OF DOWNTOWN ALBUQUERQUE TO REACH STATION FROM INT. OF COORS AND DENNIS CHAVEZ BLVD. (FORMERLY RIO BRAVO), GO N. ON COORS 0.1 MI. TO FLORA VISTA AND GO WEST ON FLORA VISTA 0.5 MI. TO CONDERSHIRE, THEN GO S. ON CONDERSHIRE 0.4 MI. TO A POINT APPROX. 50 FT. W. OF THE STATION. STATION MARK IS AN ACS 3 1/4" ALUM CAP STAMPED "2-P10, 1987" RIVETTED TO A PIPE PROJECTING 0.25 FT ABOVE THE GROUND. N=368411.13, Y=1464349.24 (NAD 27) Z=4991 (NGVD 29).

AS BUILT INFORMATION

CONTRACTOR —
WORK STAKED BY —
INSPECTION BY —
FIELD VERIFICATION BY —
DRAWINGS CORRECTED BY —

MICRO-FILM INFORMATION

RECORDED BY —
NO. —
DATE —

BY CITY HYDROLOGY DEC 16 2005

HYDROLOGY SECTION

ENGINEER'S SEAL

NEW MEXICO REGISTERED PROFESSIONAL ENGINEER — MARK D. GOODWIN — 8948

10-9-1

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	DLH 1/03
		DRAWN BY	NHE 1/03
		CHECKED BY	DMG 1/03

dmg MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

TITLE:

MEADOWS @ ANDERSON HILLS GRADING & DRAINAGE PLAN

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.

CITY PROJECT NO. | ZONE MAP NO. P-9 | SHEET 1 OF 5

I:\...\DWG\S A2106ANH\dwg\MEADOWS\V2106-GD60-MID-R2.dwg, Sheet1, 01/19/04 11:03:51 AM, Mark Goodwin & Associates Plotted by NHE

NOTES

1. SEE SIDE YARD GRADING DETAIL SHEET 3.
2. SEE DOUBLE RETAINING WALL DETAIL SHEET 3.

DRAINAGE CERTIFICATION

I, Mark Goodwin , NMPE 8948 , of the firm Mark Goodwin & Associates, PA , hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intent of the approved plan dated 1/8/2004 . The record information edited onto the original design document has been obtained by Timothy Aldrich of the firm ALS, Inc. . I further certify that I have personally visited the project site on 10/18/05 and have determined by visual inspection that the survey data provided is representative of actual site conditions and is true and correct to the best of my knowledge and belief. This certification is submitted in support of a request for Grading Certification approval .

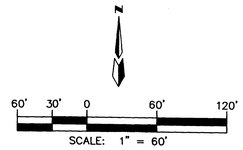
The record information presented hereon is not necessarily complete and intended only to verify substantial compliance of the grading and drainage aspects of this project. Those relying on the record document are advised to obtain independent verification of its accuracy before using it for any other purpose.

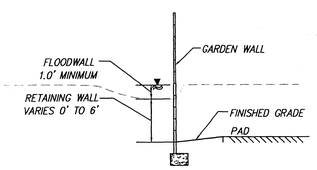
MARK GOODWINNMPE 8948

D. MARK GOODWIN NEW MEXICO 8948 REGISTERED PROFESSIONAL ENGINEER 12/15/05

STORM DRAIN INLET TABLE (PRELIMINARY)

INLET #	TYPE
32	A
33	DBL C
34	C
35	DBL A (ST)
36	DBL C
37	DBL A (ST)
38	DBL A (ST)
39	DBL C
40	DBL C
41	DBL C
42	DBL A (ST)
43	A
44	C
45	A
46	C
47	C
48	C
49	A
50	C
51	A
52	A
53	C
54	A
55	A
56	C
57	A
58	A
59	C
60	C
61	A
62	A
63	C
64	C
65	DBL C
72	CATTLE GUARD





SECTION D-D
N.T.S.

STORM DRAIN TABLE (PRELIMINARY)

RCP#	SIZE	SLOPE	Q_{100}	V_{100}	RCP#	SIZE	SLOPE	Q_{100}	V_{100}
		%	cfs	fps			%	cfs	fps
38	18"RCP		11.27 cfs	6.4 fps	60	18"RCP			
39	24"RCP	%	22.54 cfs	7.2 fps	61	48"RCP	0.72%	121.5 cfs	9.7 fps
40	24"RCP	2.3%	33.8 cfs	10.8 fps	62	18"RCP	1.0%	9.2 cfs	5.22 fps
41	18"RCP	1.0%	11.27 cfs	6.4 fps	63	18"RCP	1.0%	5.5 cfs	3.1 fps
42	24"RCP	1.0%	22.54 cfs	7.2 fps	64	60"RCP	0.88%	245.5 cfs (from AHYMO)	12.5 fps
43	30"RCP	2.6%	65.85 cfs	13.41 fps	65	18"RCP	1.0%	3.64 cfs	2.1 fps
44	48"RCP	0.72%	121.54 cfs	9.7 fps	66	18"RCP	1.0%	4.3 cfs	2.4 fps
45	18"RCP	1.0%	11.13 cfs	6.3 fps	67	18"RCP	1.0%	2.84 cfs	2.8 fps
45.5	24"RCP	1.0%	22.26 cfs	6.3 fps	68	18"RCP	1.0%	2.6 cfs	1.6 fps
46	36"RCP	0.8%	55.65 cfs	7.87 fps	69	18"RCP	0.6%	5.8 cfs	3.3 fps
47	18"RCP	1.0%	6.8 cfs	3.9 fps	70	18"RCP	1.0%	11.0 cfs	6.3 fps
48	24"RCP	1.0%	12.8 cfs	4.0 fps	71	18"RCP	1.0%	5.72 cfs	3.25 fps
49	18"RCP	%	8.3 cfs	4.7 fps	72	18"RCP	1.0%	11.44 cfs	6.5 fps
50	24"RCP	1.0%	15.8 cfs	5.0 fps	73	24"RCP	1.0%	22.44 cfs	7.1 fps
51	30"RCP	0.5%	28.6 cfs	5.8 fps	74	18"RCP	1.0%	8.96 cfs	5.1 fps
52	18"RCP	1.0%	7.3 cfs	4.1 fps	75	24"RCP	1.0%	17.92 cfs	5.7 fps
53	24"RCP	1.0%	13.9 cfs	7.9 fps	76	30"RCP	1.0%	40.36 cfs	8.2 fps
54	30"RCP	1.0%	42.5 cfs	8.66 fps	77	30"RCP	2.1%	58.28 cfs	11.9 fps
55	18"RCP	1.0%	8.3 cfs	4.7 fps					
56	30"RCP	1.54%	50.8 cfs	10.35 fps					
57	18"RCP	1.0%	8.0 cfs	4.5 fps					
58	36"RCP	0.78%	58.8 cfs	8.3 fps					
59	54"RCP	0.5%	135.98 cfs	8.6 fps					

City Appr. 2-27-04

A2106ANH/DWG/MEADOWS/2106-GD60-MID-R2 1-08-04 MJR NHE

dmg MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

TITLE:

MEADOWS @ ANDERSON HILLS GRADING & DRAINAGE PLAN

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.

CITY PROJECT NO.

ZONE MAP NO. P-9

SHEET 2 OF 5

SURVEY INFORMATION
FIELD NOTES BY
NO. DATE

BENCH MARKS
STATION "2-P10" IS LOCATED 4.9 MI. SW OF DOWNTOWN ALBUQUERQUE TO REACH STATION FROM INT. OF COORS AND DENIS CHAVEZ BLVD. (FORMERLY RIO BRAVO), GO N. ON COORS 0.1 MI. TO FLORA VISTA, AND GO WEST ON FLORA VISTA 0.5 MI. TO CONDERSHIRE, THEN GO S. ON CONDERSHIRE 0.4 MI. TO A POINT APPROX. 50 FT. W. OF THE STATION. STATION MARK IS AN ACS 3 1/4" ALUM CAP STAMPED "2-P10, 1987" RIVETTED TO A PIPE PROJECTING 0.25 FT ABOVE THE GROUND. X=358413.3, Y=1461349.24 (NAD 27) Z=4991 (NGVD 29)

AS BUILT INFORMATION
CONTRACTOR
WORK
RUBBERIZED
ACCEPTANCE BY:
CERTIFICATION BY:
DRAWINGS
CORRECTED BY:
MICRO-FILM INFORMATION
RECORDED
NO.

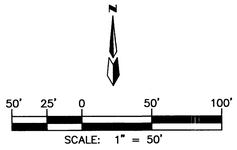
HYDROLOGY SECTION
DEC 16 2005

ENGINEER'S SEAL
D. MARK GOODWIN NEW MEXICO 8948 REGISTERED PROFESSIONAL ENGINEER 12-8-05

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	
		DESIGNED BY	DLH
		DRAWN BY	NHE
		CHECKED BY	DMG
		DATE	1-03
		DATE	1-03
		DATE	1-03

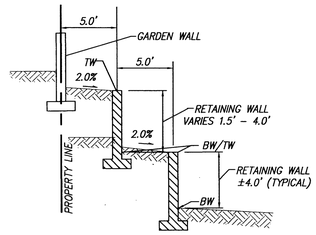
F:\AUTO\GD\A2106ANH\dwg\MEADOWS\A2106-GD60-MID-R2.dwg, 01/08/04 01:52:48 PM, Mark Goodwin & Associates, Plotted By: NSQ





NOTES

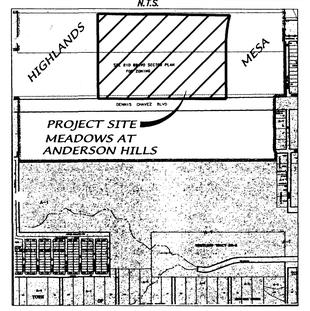
1. A PERIMETER CMU WALL WILL BE CONSTRUCTED AROUND THE ENTIRE SITE.

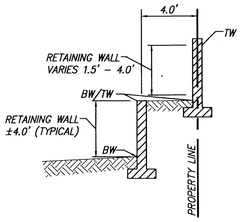


SECTION A–A
N.T.S.

VICINITY MAP

ZONE ATLAS MAP P-9-Z





DOUBLE RETAINING WALL DETAIL
N.T.S.

DRAINAGE CERTIFICATION

I, Mark Goodwin , NMPE 8948 , of the firm Mark Goodwin & Associates, PA , hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intent of the approved plan dated 1/8/2004 . The record information edited onto the original design document has been obtained by Timothy Aldrich of the firm ALS, Inc. . I further certify that I have personally visited the project site on 10/18/05 , and have determined by visual inspection that the survey data provided is representative of actual site conditions and is true and correct to the best of my knowledge and belief. This certification is submitted in support of a request for Grading Certification approval .

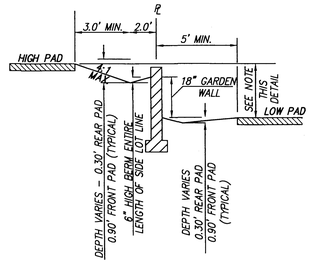
The record information presented hereon is not necessarily complete and intended only to verify substantial compliance of the grading and drainage aspects of this project. Those relying on the record document are advised to obtain independent verification of its accuracy before using it for any other purpose.

MARK GOODWIN NMPE 8948

D. MARK GOODWIN NEW MEXICO 8948 REGISTERED PROFESSIONAL ENGINEER

LEGEND

- PROPOSED STANDARD CURB & GUTTER
- PROPOSED MOUNTABLE CURB & GUTTER
- PROPOSED SIDEWALK
- .45.50 PROPOSED SPOT ELEVATION/FLOWLINE ELEVATION
- x45.83 PROPOSED TOP OF CURB ELEVATION
- FP = 50.0 PROPOSED FINISHED PAD ELEVATION
- PROPOSED DIRECTION OF FLOW
- PROPOSED SLOPE
- PROPOSED RETAINING WALL
- EXISTING PAVEMENT
- PROPOSED STORM DRAIN INLET
- PROPOSED STORM DRAIN
- EXISTING CHANNEL



*PAD TO PAD < 1.5', SECTION B–B CONSTRUCT GARDEN WALL
NTS

*PAD TO PAD > 1.5', SECTION B–B CONSTRUCT RETAINING WALL
NTS

SIDEYARD DETAIL
N.T.S.

APPROVED ROUGH GRADING ±18" _____
CITY HYDROLOGY DATE

A2106ANH/dwg/MEADOWS/A2106-GD50-3A-3B-5REV2 9-22-04 RDQ NHE TAS

AS BUILT INFORMATION

BENCH MARKS
STATION "2–P10" IS LOCATED 4.9 MI. SW OF DOWNTOWN ALBUQUERQUE TO REACH STATION FROM INT. OF COORS AND DENIS CHAVEZ BLVD. (FORMERLY RIO BRAVO), GO N. ON COORS 0.1 MI. TO FLORA VISTA AND GO WEST ON FLORA VISTA 0.5 MI. TO CONDERSHIRE, THEN GO S. ON CONDERSHIRE 0.4 MI. TO A POINT. APPROX. 50 FT. W. OF THE STATION. STATION MARK IS AN ACS 3 1/4" ALUM CAP STAMPED "2–P10, 1982" RIVETED TO A PIPE PROJECTING 0.25 FT ABOVE THE GROUND. X=358411.13, Y=1464349.24 (NAD 27) Z=4991 (NGVD 29).

CONTRACTOR
WORK STARTED BY DATE
INSPECTOR'S SIGNATURE & DATE
FIELD INFORMATION BY
DRAWINGS CORRECTED BY DATE

MICRO-FILM INFORMATION
RECORDED BY DATE
NO. D 4911 W
D DEC 16 2005
HYDROLOGY SECTION

SURVEY INFORMATION
FIELD NOTES
NO. BY DATE

ENGINEER'S SEAL
DUANE HOELZER NEW MEXICO 12207 REGISTERED PROFESSIONAL ENGINEER
4-29-04

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	
		DESIGNED BY DLH	DATE 1/03
		DRAWN BY NHE	DATE 1/03
		CHECKED BY DMG	DATE 1/03

dmg MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

TITLE: MEADOWS AT ANDERSON HILLS
UNITS 3A, 3B & 4
GRADING & DRAINAGE PLAN

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.

CITY PROJECT NO.	ZONE MAP NO.	SHEET OF
	P-9	3 5

I:\AOJOBS\A2106ANH\dwg\MEADOWS\A2106-GD50-3A-3B-5REV2.DWG, Sheet1, 9/30/2004 2:17:32 PM, tim

INDIGO SKY TRAIL

VIOLET ORCHID TRAIL

BLUE MEADOW TRAIL

LOWER MEADOW TRAIL

TIMBER LEAF LANE

CRIMSON ROSE LANE

UNSER BOULEVARD (156' R/W)

BLOCK 16

BLOCK 17

BLOCK 13

BLOCK 1

BLOCK 2

TRACT I

TRACT HH

TRACT "A"

EXISTING CONCRETE LINED DITCH

TRACT "A" SHALL BE ROUGH GRADED TO SLOPE NORTH TO SOUTH. FINE DETAIL GRADING AND TRAIL CONSTRUCTION TO BE DONE AT WORKORDER.

SDMH 24A

SDMH 25A

SDMH 26A

SDMH 27A

SDMH 18A

SDMH 19A

SDMH 20A

SDMH 21A

SDMH 22A

SDMH 23A

UG MARKER

NOTES

1. SEE SIDE YARD GRADING DETAIL SHEET 3.
2. SEE DOUBLE RETAINING WALL DETAIL SHEET 3.

DRAINAGE CERTIFICATION

I, Mark Goodwin, NMPE 8948, of the firm Mark Goodwin & Associates, PA, hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intent of the approved plan dated 1/8/2004. The record information edited onto the original design document has been obtained by Timothy Aldrich of the firm ALS, Inc. I further certify that I have personally visited the project site on 10/18/05 and have determined by visual inspection that the survey data provided is representative of actual site conditions and is true and correct to the best of my knowledge and belief. This cerification is submitted in support of a request for Grading Certification approval.

The record information presented hereon is not necessarily complete and intended only to verify substantial compliance of the grading and drainage aspects of this project. Those relying on the record document are advised to obtain independent verification of its accuracy before using it for any other purpose.

12/15/05
MARK GOODWINNMPE 8948

D. MARK GOODWIN NEW MEXICO 8948 REGISTERED PROFESSIONAL ENGINEER

SCALE: 1" = 50'

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

BENCH MARKS

STATION "2-P10" IS LOCATED 4.9 MI. SW OF DOWNTOWN ALBUQUERQUE TO REACH STATION FROM INT. OF COORS AND DENS CHAVEZ BLVD. (FORMERLY RIO BRAVO), GO N. ON COORS 0.1 MI., TO FLORA VISTA AND GO WEST ON FLORA VISTA 0.5 MI. TO CONDERSHIRE, THEN GO S. ON CONDERSHIRE 0.4 MI. TO A POINT APPROX. 50 FT. W. OF THE STATION. STATION MARK IS AN ACS 3 1/4" ALUM CAP STAMPED "2-P10, 1987" RIVETTED TO A PIPE PROJECTING 0.25 FT. ABOVE THE GROUND. X=358411.13, Y=1464349.24 (NAD 27) Z=4991 (NGVD 29).

AS BUILT INFORMATION

	CONTRACTOR	DATE
WORK PERFORMED BY		
INSPECTION'S		DATE
CHANGES BY		
FIELD VERIFICATION BY		DATE
NEW INFORMATION CORRECTED BY		DATE

MICRO-FILM INFORMATION

	DATE
RECORDED BY	
DIGITIZED BY	
NO.	DATE
	DEC 16 2005

HYDROLOGY SECTION

ENGINEER'S SEAL

DAVID HOELZER NEW MEXICO 15967 REGISTERED PROFESSIONAL ENGINEER

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	
		DATE	1/03
		DRAWN BY	NHE
		DATE	1/03
		CHECKED BY	DMG
		DATE	

dmg MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

DESIGNED BY DLH

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

TITLE: MEADOWS AT ANDERSON HILLS
UNITS 3A, 3B & 4
GRADING & DRAINAGE PLAN

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.

CITY PROJECT NO.

ZONE MAP NO. P-9

SHEET 4 OF 5

A2106ANH/dwg/MEADOWS/A2106-GD50-3A-3B-5REV2 9-22-04 RDQ NHE TAS

I:\AGOBS\A2106ANH\dwg\MEADOWS\A2106-GD50-3A-3B-5REV2.DWG, Sheet2, 9/30/2004 2:19:10 PM, tim

DRAINAGE CERTIFICATION

I, Mark Goodwin, NMPE 8948, of the firm Mark Goodwin & Associates, PA., hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intent of the approved plan dated 1/6/2004. The record information edited onto the original design document has been obtained by Timothy Aldrich, of the firm ALS, Inc. I further certify that I have personally visited the project site on 10/18/05, and have determined by visual inspection that the survey data provided is representative of actual site conditions and is true and correct to the best of my knowledge and belief. This certification is submitted in support of a request for Grading Certification approval.

The record information presented hereon is not necessarily complete and intended only to verify substantial compliance of the grading and drainage aspects of this project. Those relying on the record document are advised to obtain independent verification of its accuracy before relying it for any other purposes.

Mark Goodwin 12/14/05
MARK GOODWIN NMPE 8948

D. MARK GOODWIN — NEW MEXICO — 8948 — REGISTERED PROFESSIONAL ENGINEER

SCALE: 1" = 50'

NOTES

1. FOR SECTION A-A SEE SHEET 3.

18" RCP – TEMP. PIPE FOR UNDEVELOPED FLOW ONLY. FUTURE OFFSITE DEVELOPMENT WILL REDIRECT DRAINAGE NORTH TO THE AMOLE AND THIS POPE WILL BE ABANDONED

HIDDEN SPRING AVE.
SHADY SPRING DR.
SANDY SPRING DR.
LOST SPRING DR.
RIO CLARA AVE.
INDIGO SKY TRAIL
VIOLET ORCHID TRAIL
ANDERSON HILL AVE.
PEAR BLOSSOM LANE
CRIMSON ROSE LANE
UNSER BOULEVARD (156' R/W)
FUTURE CONSTRUCTION
FLOODWALL
TRACT A, TRACT B, TRACT C, TRACT D, TRACT E, TRACT F, TRACT G, TRACT H, TRACT I, TRACT J
BLOCK 1, BLOCK 5, BLOCK 6, BLOCK 13, BLOCK 15

SURVEY INFORMATION
FIELD NOTES
NO. | BY | DATE

BENCH MARKS
STATION "2–P10" IS LOCATED 4.9 MI. SW. OF DOWNTOWN ALBUQUERQUE (FORMERLY RIO BRAVO). GO N. ON GOORS 0.1 MI. TO FLORA VISTA AND GO WEST ON FLORA VISTA 0.5 MI. TO CONDERSMIRE. THEN GO S. ON CONDERSHIRE 0.4 MI. TO A POINT APPROX. 50 FT. W. OF THE STATION. STATION MARK IS AN ACS 3 1/4" ALUM CAP STAMPED "2–P10, 1997" RIVETED TO A PIPE PROJECTING 0.25 FT ABOVE THE GROUND. X=358411.13, Y=1484349.24 (NAD 27) Z=4997 (NGVD 29)

AS BUILT INFORMATION
CONTRACTOR
WORK STARTED BY
WORK ACCEPTANCE BY
FIELD NOTATION BY
DRAWINGS CORRECTED BY
MICRO-FILM INFORMATION
RECORDED BY
NO.
DATE

HYDROLOGY SECTION

ENGINEER'S SEAL
DUANE HOELLER — NEW MEXICO — 10967 — REGISTERED PROFESSIONAL ENGINEER

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	DLH
		DRAWN	NHE
		CHECKED	DMG

DESIGNED BY DLH DATE 1/03
DRAWN BY NHE DATE 1/03
CHECKED BY DMG DATE 1/03

dmg
MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828–2200, FAX (505) 797–9539

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

TITLE: MEADOWS AT ANDERSON HILLS
UNITS 3A, 3B & 4
GRADING & DRAINAGE PLAN

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.

CITY PROJECT NO.

ZONE MAP NO. P-9

SHEET 5 OF 5

SEE SHEET 2 OF 3

A2106ANH/dwg/MEADOWS/A2106-GD50-3A-3B-5REV2 9-22-04 ACH RDQ NHE TAS

I:\A2106\GB\...\A106ANH\dwg\MEADOWS\A2106-GD50-3A-3B-5REV2.DWG, Sheet3, 9/30/2004 2:12:18 PM, ...

SEE SHEET #2

SEE SHEET #3

SEE SHEET 5 OF 5

DRAINAGE CERTIFICATION

I, Mark Goodwin , NMPE 8948 , of the firm Mark Goodwin & Associates, P.A. , hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intent of the approved plan dated 1/6/2004 . The record information edited onto the original design document has been obtained by Timothy Aldrich, of the firm ALS, Inc. , surveying party that I have personally visited the project site on 10/18/05 and have determined by visual inspection that the survey data provided is representative of actual site conditions and is true and correct to the best of my knowledge and belief. This certification is submitted in support of a request for Grading Certification approval.

The record information presented hereon is not necessarily complete and intended only to verify substantial compliance of the grading and drainage aspects of this project. Those relying on the record document are advised to obtain independent verification as to its accuracy before using it for any other purpose.

Mark Goodwin 12/15/05
MARK GOODWIN, P.E. DATE

VICINITY MAP

ZONE ATLAS MAP NO. P-9

N.T.S.

HIGHLANDS

MEADOWS AT ANDERSON HILLS

PROJECT SITE

NOTES

1. A PERIMETER CMU WALL WILL BE CONSTRUCTED AROUND THE ENTIRE SITE.
2. BACK YARDS TO DRAIN TO FRONT YARD EXCEPT AT SLOPES IN BACK YARDS FOR LOTS 5 THRU 9 AND LOT 31 ADJACENT TO 20' WIDE PARK TRAIL. THE SLOPED AREA SHOULD DRAIN TO THE SOUTHEAST CORNER OF LOT AND THRU A TURNED BLOCK IN THE GARDEN WALL OPENING.

LEGEND

- PROPOSED STANDARD CURB & GUTTER
- PROPOSED MOUNTABLE CURB & GUTTER
- PROPOSED SIDEWALK
- 45.50 PROPOSED SPOT ELEVATION
- FP = 50.0 PROPOSED FINISHED PAD ELEVATION
- PROPOSED DIRECTION OF FLOW
- PROPOSED SLOPE
- PROPOSED RETAINING WALL
- EXISTING PAVEMENT
- PROPOSED STORM DRAIN INLET
- PROPOSED STORM DRAIN
- EXISTING CHANNEL

SCALE: 1" = 60'

TRACT "A" SHALL BE ROUGH GRADED TO SLOPE NORTH TO SOUTH. FINE DETAIL GRADING AND TRAIL CONSTRUCTION TO BE DONE AT WORKORDER.

APPROVED ROUGH GRADING ±18" App. 2-27-04
CITY HYDROLOGY DATE

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	
		DESIGNED BY DLH	DATE 1/03
		DRAWN BY NHE	DATE 1/03
		CHECKED BY DMG	DATE 1/03

NO.	BY	DATE	FIELD NOTES
			SURVEY INFORMATION
			STATION "2-P10" IS LOCATED 4.9 MI. SW OF DOWNTOWN ALBUQUERQUE (FORMERLY RIO BRAVO), GO N. ON GOORS 0.1 MI. TO FLORA VISTA AND GO WEST ON FLORA VISTA 0.5 MI. TO CONDERSHIRE, THEN GO S. ON CONDERSHIRE 0.4 MI. TO A POINT APPROX. 50 FT. W. OF THE STATION. STATION MARK IS AN ACS 3 1/4" ALUM CAP STAMPED "2-P10, 1987" RIVETTED TO A PIPE PROJECTING 0.25 FT ABOVE THE GROUND. X=.35841.13, Y=1464349.24 (NAD 27) Z=4991 (NGVD 29).

BENCH MARKS

AS BUILT INFORMATION

CONTRACTOR
WORK STARTED
STAKED BY
INSPECTOR'S
FIELD CHANGE BY
FIELD
OBSERVATION BY
FINAL
CORRECTED BY

MICRO-FILM INFORMATION

RECORDED BY
DATE
NO.

ENGINEER'S SEAL

HYDROLOGY SECTION

dmg MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

TITLE: MEADOWS @ ANDERSON HILLS GRADING & DRAINAGE PLAN

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.
				DEC 19 2005

CITY PROJECT NO. | ZONE MAP NO. P-9 | SHEET 1 OF 5

A2106ANH/DWG/MEADOWS/2106-GD60-MID-R2 01-08-04 MJR NHE

H:\A2106\GS\A2106ANH\dwg\MEADOWS\A2106-GD60-MID-R2.dwg, Sheet1, 01/19/04 11:02:51 AM, Mark Goodwin & Associates Plotted by NHE

NOTES

1. SEE SIDE YARD GRADING DETAIL SHEET 3.
2. SEE DOUBLE RETAINING WALL DETAIL SHEET 3.

DRAINAGE CERTIFICATION

I, Mark Goodwin, NMPE 8948, of the firm Mark Goodwin & Associates, PA, hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intent of the approved plan dated 1/8/2004. The record information edited onto the original design document has been obtained by Timothy Aldrich of the firm ALS, Inc.. I further certify that I have personally visited the project site on 10/18/05 and have determined by visual inspection that the survey data provided is representative of actual site conditions and is true and correct to the best of my knowledge and belief. This certification is submitted in support of a request for Grading Certification approval.

The record information presented hereon is not necessarily complete and intended only to verify substantial compliance of the grading and drainage aspects of this project. Those relying on the record document are advised to obtain independent verification of its accuracy before using it for any other purpose.

MARK GOODWIN NMPE 8948

D. MARK GOODWIN NEW MEXICO 8948 REGISTERED PROFESSIONAL ENGINEER 11/15/05

STORM DRAIN INLET TABLE (PRELIMINARY)

INLET #	TYPE
32	A
33	DBL C
34	C
35	DBL A (ST)
36	DBL C
37	DBL A (ST)
38	DBL A (ST)
39	DBL C
40	DBL C
41	DBL C
42	DBL A (ST)
43	A
44	C
45	A
46	C
47	C
48	C
49	A
50	C
52	A
53	C
54	A
55	A
56	C
57	A
58	A
59	C
60	C
61	A
62	A
63	C
64	C
65	DBL C
72	CATTLE GUARD

SEE SHEET #3

SEE SHEET #1

SEE SHEET 3 OF 5 REVISED

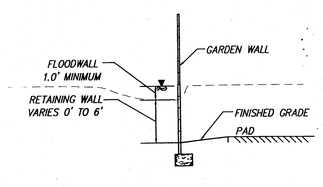
SCALE: 1" = 60'

STORM DRAIN TABLE (PRELIMINARY)

RCP#	SIZE	SLOPE	Q_{100}	V_{100}	RCP#	SIZE	SLOPE	Q_{100}	V_{100}
38	18"RCP	%	11.27 cfs	6.4 fps	60	18"RCP	%	cfs	fps
39	24"RCP	%	22.54 cfs	7.2 fps	61	48"RCP	0.72%	121.5 cfs	9.7 fps
40	24"RCP	2.3%	33.8 cfs	10.8 fps	62	18"RCP	1.0%	9.2 cfs	5.22 fps
41	18"RCP	1.0%	11.27 cfs	6.4 fps	63	18"RCP	1.0%	5.5 cfs	3.1 fps
42	24"RCP	1.0%	22.54 cfs	7.2 fps	64	60"RCP	0.88%	245.5 cfs (from AHYMO)	12.5 fps
43	30"RCP	2.6%	65.85 cfs	13.41 fps	65	18"RCP	1.0%	3.64 cfs	2.1 fps
44	48"RCP	0.72%	121.54 cfs	9.7 fps	66	18"RCP	1.0%	4.3 cfs	2.4 fps
45	18"RCP	1.0%	11.13 cfs	6.3 fps	67	18"RCP	1.0%	2.84 cfs	2.8 fps
45.5	24"RCP	1.0%	22.26 cfs	6.3 fps	68	18"RCP	1.0%	2.6 cfs	1.6 fps
46	36"RCP	0.8%	55.65 cfs	7.87 fps	69	18"RCP	0.6%	5.8 cfs	3.3 fps
47	18"RCP	1.0%	6.8 cfs	3.9 fps	70	18"RCP	1.0%	11.0 cfs	6.3 fps
48	24"RCP	1.0%	12.8 cfs	4.0 fps	71	18"RCP	1.0%	5.72 cfs	3.25 fps
49	18"RCP	%	8.3 cfs	4.7 fps	72	18"RCP	1.0%	11.44 cfs	6.5 fps
50	24"RCP	1.0%	15.8 cfs	5.0 fps	73	24"RCP	1.0%	22.44 cfs	7.1 fps
51	30"RCP	0.5%	28.6 cfs	5.8 fps	74	18"RCP	1.0%	8.96 cfs	5.1 fps
52	18"RCP	1.0%	7.3 cfs	4.1 fps	75	24"RCP	1.0%	17.92 cfs	5.7 fps
53	24"RCP	1.0%	13.9 cfs	7.9 fps	76	30"RCP	1.0%	40.36 cfs	8.2 fps
54	30"RCP	1.0%	42.5 cfs	8.66 fps	77	30"RCP	2.1%	58.28 cfs	11.9 fps
55	18"RCP	1.0%	8.3 cfs	4.7 fps					
56	30"RCP	1.54%	50.8 cfs	10.35 fps					
57	18"RCP	1.0%	8.0 cfs	4.5 fps					
58	36"RCP	0.78%	58.8 cfs	8.3 fps					
59	54"RCP	0.5%	135.98 cfs	8.6 fps					

City Appr. 2-27-04

A2106ANH/DWG/MEADOWS/2106-GD60-MID-R2 1-08-04 MJR NHE



SECTION D-D
N.T.S.

AS BUILT INFORMATION

BENCH MARKS

STATION "2-P10" IS LOCATED 4.9 MI. SW OF DOWNTOWN ALBUQUERQUE (FORMERLY RIO BRAVO), GO N. ON COORS 0.1 MI. TO FLORA VISTA AND GO WEST ON FLORA VISTA 0.5 MI. TO CONDERSHIRE, THEN GO S. ON CONDERSHIRE 0.4 MI. TO A POINT APPROX. 50 FT. W. OF THE STATION. STATION MARK IS AN ACS 3 1/4" ALUM CAP STAMPED "2-P10, 1987" RIVETTED TO A PIPE PROJECTING 0.25 FT ABOVE THE GROUND. X=359411.3, Y=1464349.24 (NAD 27) Z=4991 (NGVD 29).

CONTRACTOR

	BY	DATE
WORK ORDERED BY		
INSPECTORS		
ACCEPTANCE BY		
AS BUILT VERIFICATION BY		
DRAWING BY		

MICRO-FILM INFORMATION

RECORDED BY DATE

NO.

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

D. MARK GOODWIN NEW MEXICO 8948 REGISTERED PROFESSIONAL ENGINEER 10-8-05

NO.	BY	DATE	REMARKS
			REVISIONS
			DESIGN
			DESIGNED BY DLH 1/03
			DRAWN BY NHE 1/03
			CHECKED BY DMG 1/03

MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

TITLE:

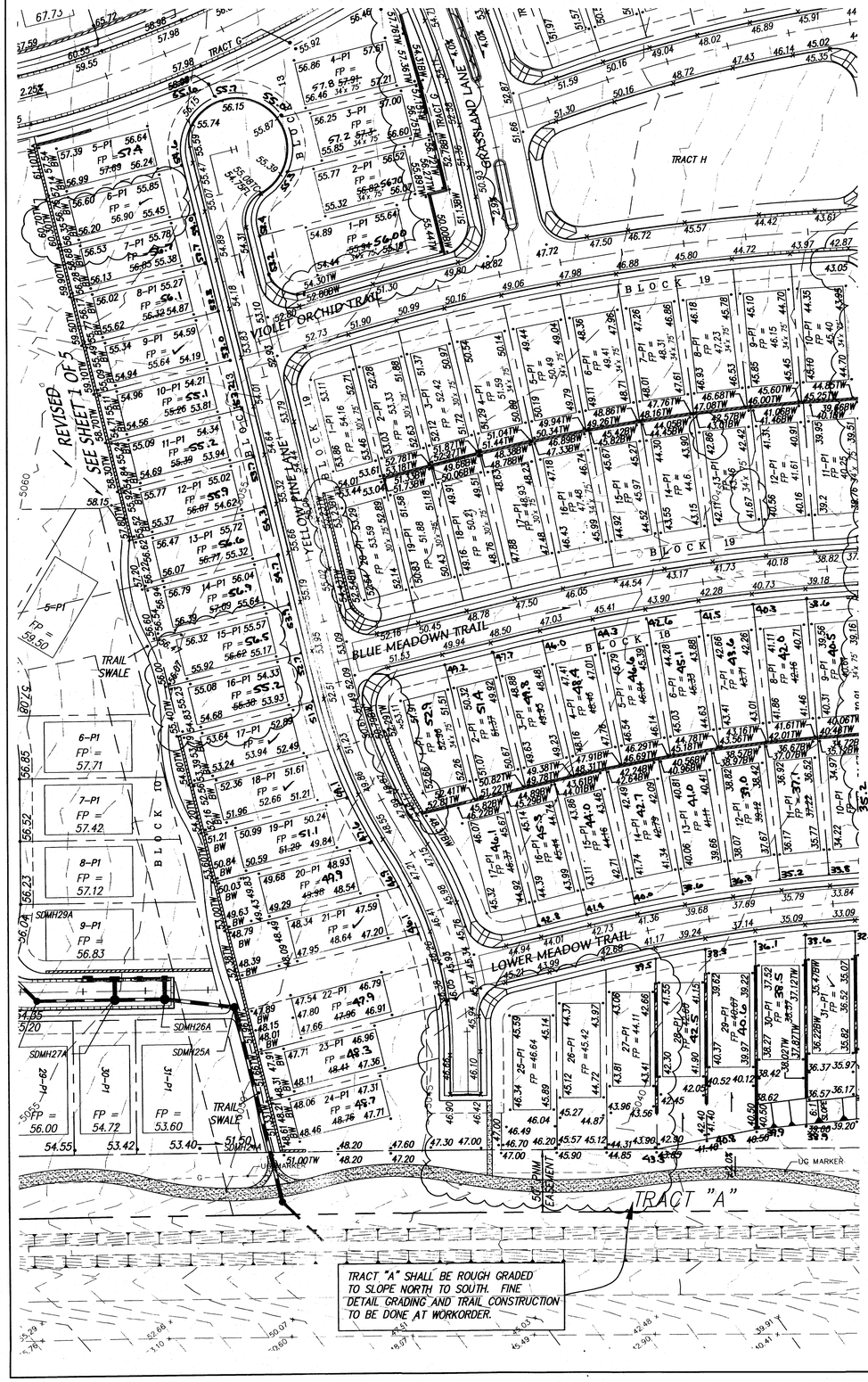
MEADOWS @ ANDERSON HILLS GRADING & DRAINAGE PLAN

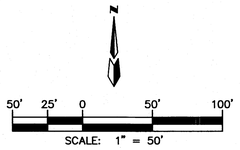
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.

RECEIVED DEC 16 2005 HYDROLOGY SECTION

CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
	P-9	2	5

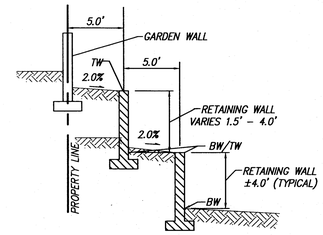
F:\A02JOBS\A2106ANH\dwg\MEADOWS\A2106-GD60-MID-R2.dwg, 01/06/04 01:52:48 PM, Mark Goodwin & Associates, Plotted By RDQ



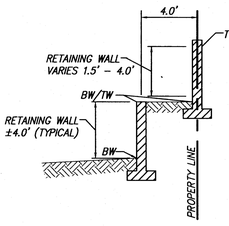


NOTES

1. A PERIMETER CMU WALL WILL BE CONSTRUCTED AROUND THE ENTIRE SITE.



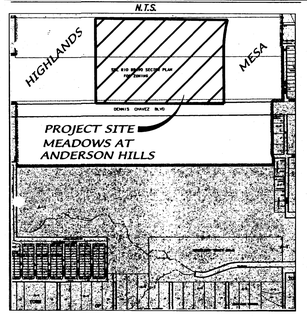
SECTION A–A
N.T.S.



DOUBLE RETAINING WALL DETAIL
N.T.S.

VICINITY MAP

ZONE ATLAS MAP P-9-Z



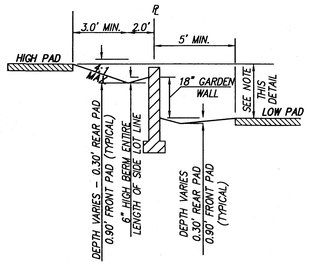
DRAINAGE CERTIFICATION

I, Mark Goodwin, NMPE 8948, of the firm Mark Goodwin & Associates, PA, hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intent of the approved plan dated 1/6/2004. The record information edited onto the original design document has been obtained by Timothy Aldrich of the firm ALS, Inc. I further certify that I have personally visited the project site on 10/18/05 and have determined by visual inspection that the survey data provided is representative of actual site conditions and is true and correct to the best of my knowledge and belief. This certification is submitted in support of a request for Grading Certification approval.

The record information presented hereon is not necessarily complete and intended only to verify substantial compliance of the grading and drainage aspects of this project. Those relying on the record document are advised to obtain independent verification of its accuracy before using it for any other purpose.

12/15/05
MARK GOODWINNMPE 8948





*PAD TO PAD < 1.5', SECTION B–B
CONSTRUCT GARDEN WALL
NTS

*PAD TO PAD > 1.5', SECTION B–B
CONSTRUCT RETAINING WALL
NTS

SIDEYARD DETAIL
N.T.S.

LEGEND

- PROPOSED STANDARD CURB & GUTTER
- PROPOSED MOUNTABLE CURB & GUTTER
- PROPOSED SIDEWALK
- .45.50 PROPOSED SPOT ELEVATION/FLOWLINE ELEVATION
- x45.83 PROPOSED TOP OF CURB ELEVATION
- FP = 50.0 PROPOSED FINISHED PAD ELEVATION
- PROPOSED DIRECTION OF FLOW
- PROPOSED SLOPE
- PROPOSED RETAINING WALL
- EXISTING PAVEMENT
- PROPOSED STORM DRAIN INLET
- PROPOSED STORM DRAIN
- EXISTING CHANNEL

APPROVED ROUGH GRADING ±18" _____ CITY HYDROLOGY DATE

A2106ANH/dwg/MEADOWS/A2106-GD50-3A-3B-5REV2 9-22-04 RDQ NHE TAS

AS BUILT INFORMATION

BENCH MARKS
CONTRACTOR
STATION "2-P10" IS LOCATED 4.9 MI. SW OF DOWNTOWN ALBUQUERQUE
TO REACH STATION FROM INT. OF COORS AND DENIS CHAVEZ BLVD.
(FORMERLY RIO BRAVO), GO N. ON COORS 0.1 MI. TO FLORA VISTA
AND GO WEST ON FLORA VISTA 0.5 MI. TO CONDERSHIRE, THEN GO
S. ON CONDERSHIRE 0.4 MI. TO A POINT APPROX. 50 FT. W. OF THE
STATION. STATION MARK IS AN ACS 3 1/4" ALUM CAP STAMPED
"2-P10, 1987" RIVETED TO A PIPE PROJECTING 0.25 FT ABOVE THE
GROUND. X=3584113. Y=1464348.24 (NAD 27) Z=4991 (NGVD 29).

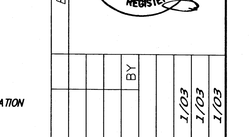
SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

WORK STAKED BY DATE
AS-BUILTS DATE
ACCEPTANCE BY DATE
FIELD BOOK
FIELDCHECK BY DATE
DRAWINGS
CORNER RECORD BY

MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

ENGINEER'S SEAL



NO.	DATE	REVISIONS	BY
		DESIGN	
		DESIGNED BY DLH	DATE 1/03
		DRAWN BY NHE	DATE 1/03
		CHECKED BY DMG	DATE 1/03

dmg MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

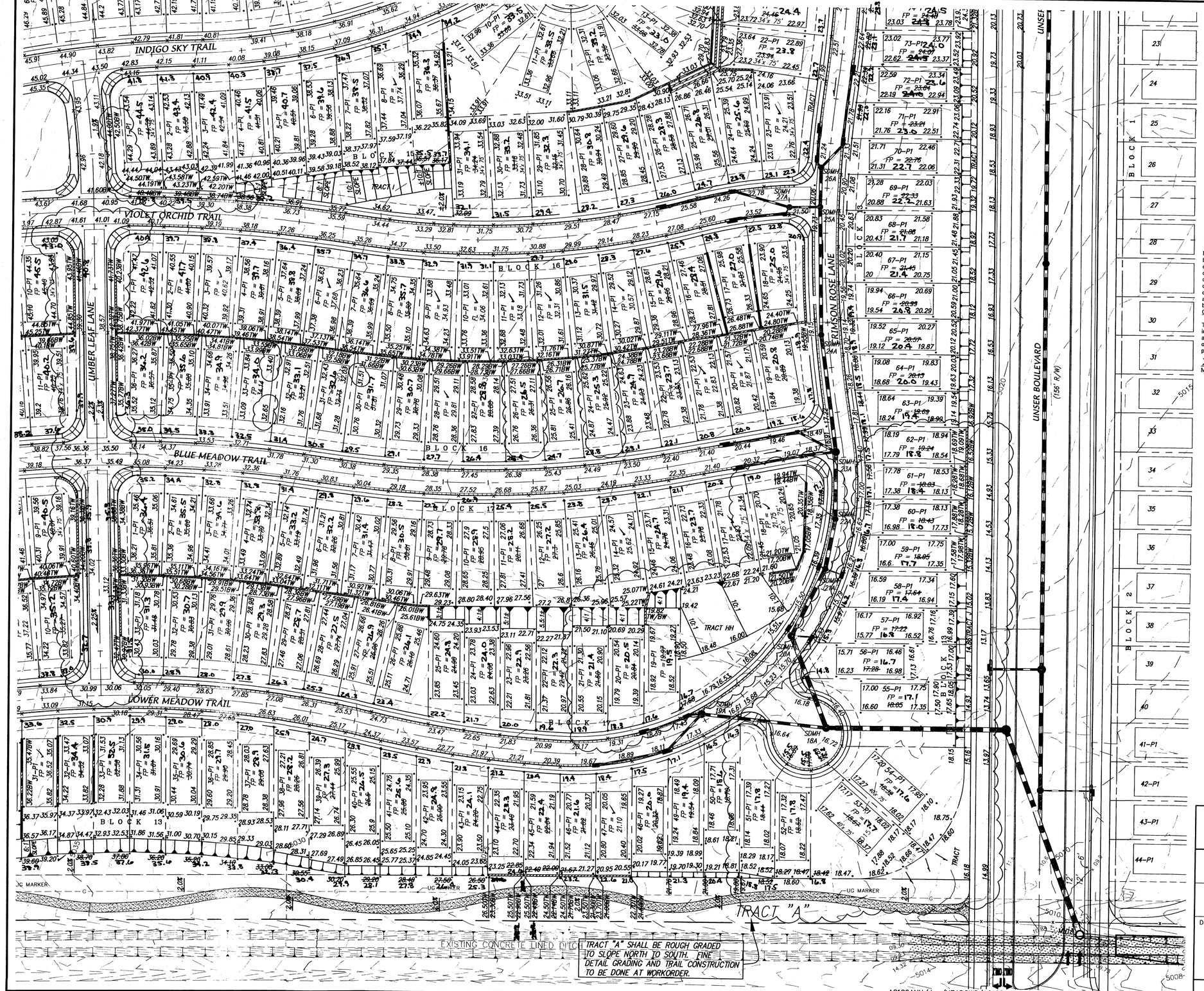
TITLE: MEADOWS AT ANDERSON HILLS
UNITS 3A, 3B & 4
GRADING & DRAINAGE PLAN

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.

RECEIVED DEC 16 2005 HYDROLOGY SECTION

CITY PROJECT NO. | ZONE MAP NO. P-9 | SHEET 3 OF 5

I:\A02JOBS\A2106ANH\dwg\MEADOWS\A2106-GD50-3A-3B-5REV2.DWG, Sheet1, 9/30/2004 2:17:32 PM, Tim



NOTES

1. SEE SIDE YARD GRADING DETAIL SHEET 3.
2. SEE DOUBLE RETAINING WALL DETAIL SHEET 3.

DRAINAGE CERTIFICATION

I, Mark Goodwin, NMPE 8948, of the firm Mark Goodwin & Associates, PA, hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intent of the approved plan dated 1/8/2004. The record information edited onto the original design document has been obtained by Timothy Aldrich, of the firm ALS, Inc., I further certify that I have personally visited the project site on 10/18/05, and have determined by visual inspection that the survey data provided is representative of actual site conditions and is true and correct to the best of my knowledge and belief. This certification is submitted in support of a request for Grading Certification approval.

The record information presented hereon is not necessarily complete and intended only to verify substantial compliance of the grading and drainage aspects of this project. Those relying on the record document are advised to obtain independent verification of its accuracy before using it for any other purpose.

12/15/05
MARK GOODWINNMPE 8948

D. MARK GOODWIN NEW MEXICO 8948 REGISTERED PROFESSIONAL ENGINEER

NO.	BY	DATE	FIELD NOTES

SURVEY INFORMATION

BENCH MARKS

STATION "2–P10" IS LOCATED 4.9 MI. SW OF DOWNTOWN ALBUQUERQUE AT THE INTERSECTION OF COORS AND DENIS CHAVEZ BLVD.
TO REACH STATION FROM INT. OF COORS AND DENIS CHAVEZ BLVD. (FORMERLY RIO BRAVO), GO N. ON COORS 0.1 MI. TO FLORA VISTA AND GO WEST ON FLORA VISTA 0.5 MI. TO CONDERSHIRE, THEN GO S. ON CONDERSHIRE 0.4 MI. TO A POINT APPROX. 50 FT. W. OF THE
STATION. STATION MARK IS AN AGS 3 1/4" ALUM. CAP STAMPED "2–P10, 1987" RIVETTED TO A PIPE PROJECTING 0.25 FT. ABOVE THE GROUND. X=1464148.24 (NAD 27) Z=4991 (NGVD 29)

AS BUILT INFORMATION

CONTRACTOR

	DATE
WORK ORDERED BY:	
INSPECTOR'S ACCEPTANCE BY:	
FIELD VERIFICATION BY	
DRAWING CORRECTED BY:	

MICRO–FILM INFORMATION

	DATE
RECORDED BY:	
NO.	

ENGINEER'S SEAL

JANE HOELZER NEW MEXICO 7867 REGISTERED PROFESSIONAL ENGINEER

NO.	BY	DATE	REMARKS
			REVISIONS

		DATE
DESIGN		1/03
DESIGNED BY	DLH	1/03
DRAWN BY	NHE	1/03
CHECKED BY	DMG	1/03

dmg MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828–2200, FAX (505) 797–9539

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

TITLE: MEADOWS AT ANDERSON HILLS
UNITS 3A, 3B & 4
GRADING & DRAINAGE PLAN

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.

RECEIVED DEC 16 2005 HYDROLOGY SECTION

CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
	P-9	4	5

A2106ANH/dwg/MEADOWS/A2106–GD50–3A–3B–5REV2 9–22–04 RDQ NHE TAS

I:\A02JOBS\A2106ANH\dwg\MEADOWS\A2106-GD50-3A-3B-5REV2.DWG, Sheet2, 9/30/2004 2:19:10 PM, Tim

DRAINAGE CERTIFICATION

I, Mark Goodwin , NMPE 8948 , of the firm Mark Goodwin & Associates, P.A., hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intent of the approved plan dated 1/8/2004. The record information edited onto the original design document has been obtained by Timothy Aldrich of the firm ALS, Inc.. I further certify that I have personally visited the project site on 10/18/05 and have determined by visual inspection that the survey data provided is representative of actual site conditions and is true and correct to the best of my knowledge and belief. This certification is submitted in support of a request for Grading Certification approval.

The record information presented hereon is not necessarily complete and intended only to verify substantial compliance of the grading and drainage aspects of this project. Those relying on the record document are advised to obtain independent verification of its accuracy before using it for any other purpose.

Mark Goodwin 12/15/05
MARK GOODWIN NMPE 8948

SCALE: 1" = 50'

NEW MEXICO 8948 REGISTERED PROFESSIONAL ENGINEER D. MARK GOODWIN

NOTES

1. FOR SECTION A-A SEE SHEET 3.

18" RCP - TEMP' PIPE FOR UNDEVELOPED FLOW ONLY. FUTURE OFFSITE DEVELOPMENT WILL REDIRECT DRAINAGE NORTH TO THE AMOLE AND THIS POPE WILL BE ABANDONED

HIDDEN SPRING AVE.
SANDY SPRING DR.
SHADY SPRING DR.
LOST SPRING DR.
RIO CLARA AVE.
INDIGO SKY TRAIL
VIOLET ORCHID TRAIL
ANDERSON HILL AVE.
PEAR BLOSSOM LANE
CRIMSON ROSE LANE
UNSER BOULEVARD (156' R/W)
FUTURE CONSTRUCTION
FLOODWALL
TRACT A
TRACT B
TRACT C
TRACT D
TRACT E
TRACT F
TRACT H
TRACT I
TRACT J
BLOCK 1
BLOCK 5
BLOCK 13
BLOCK 15
BLOCK 16
SDMH11A
SDMH15A
SDMH14A
SDMH13A
SDMH10A
SDMH8A
SDMH7A
SDMH6A
SDMH5A
SDMH4A
SDMH3A
SDMH2A
SDMH1A

AS BUILT INFORMATION

CONTRACTOR
WORK STARTED BY
WORK ACCEPTANCE BY
FIELD CADD BY
DRAWINGS CORRECTED BY

DATE
DATE
DATE
DATE
DATE

BENCH MARKS

STATION "2-P10" IS LOCATED 4.9 MI. SW OF DOWNTOWN ALBUQUERQUE (FORMERLY RIO BRAVO), GO N. ON GOORS 0.1 MI. TO FLORA VISTA AND GO WEST ON FLORA VISTA 0.5 MI. TO CONDERSHIRE, THEN GO S. ON CONDERSHIRE 0.4 MI. TO A POINT APPROX. 50 FT. W. OF THE STATION. STATION MARK IS AN ACS 3 1/4" ALUM CAP STAMPED "2-P10, 1987" RIVETTED TO A PIPE PROJECTING 0.25 FT ABOVE THE GROUND. X=.55841.13, Y=1464349.24 (NAD 27) Z=4891 (NGVD 29).

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

NEW MEXICO 10807 REGISTERED PROFESSIONAL ENGINEER JANE HOELZER

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	
DESIGNED BY		DLH	1/03
DRAWN BY		NHE	1/03
CHECKED BY		DMG	1/03

dmg
MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

TITLE: MEADOWS AT ANDERSON HILLS
UNITS 3A, 3B & 4
GRADING & DRAINAGE PLAN

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.

RECEIVED DEC 16 2005 HYDROLOGY SECTION

CITY PROJECT NO. | ZONE MAP NO. P-9 | SHEET 5 OF 5

SEE SHEET 2 OF 3

A2106ANH/dwg/MEADOWS/A2106-GD50-3A-3B-5REV2 9-22-04 ACH RDQ NHE TAS

I:\A02Jobs\A2106ANH\dwg\MEADOWS\A2106-GD50-3A-3B-5REV2.DWG, Sheet3, 9/30/2004 2:12:48 PM, Tim

SEE SHEET #2

SEE SHEET #3

SEE SHEET #3 REVISED

A2106ANH/DWG/MEADOWS/2106-GD60-MID-R2 01-08-04 MJR NHE

I:\ACJOBS\A2106ANH\dwg\MEADOWS\A2106-GD60-MID-P2.dwg, Sheet1, 01/19/04 11:03:51 AM, Mark Goodwin & Associates Plotted by NHE

DRAINAGE CERTIFICATION

I, Mark Goodwin, NMPE 8948, of the firm Mark Goodwin & Associates, PA, hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intent of the approved plan/dated 10/2005. The record information edited onto the original design document has been obtained by Timothy Aldrich of the firm A.L.S. Inc., further certify that I have personally visited the project site on 10/18/05, and have determined by visual inspection that the survey data provided is representative of actual site conditions and is true and correct to the best of my knowledge and belief. This certification is furnished in support of a request for Grading Certification approval.

The record information presented hereon is not necessarily complete and intended only to verify substantial compliance of the grading and drainage aspects of this project. Those relying on the record document are advised to obtain independent verification as to its accuracy before using it for any other purpose.

Mark Goodwin 12/15/05

MARK GOODWIN — NEW MEXICO — 8948 — REGISTERED PROFESSIONAL ENGINEER

VICINITY MAP

ZONE ATLAS P-9

N.T.S.

HIGHLANDS

PROJECT SITE
MEADOWS AT
ANDERSON HILLS

MESA DEL SOL

NOTES

1. A PERIMETER CMU WALL WILL BE CONSTRUCTED AROUND THE ENTIRE SITE.
2. BACK YARDS TO DRAIN TO FRONT YARD EXCEPT AT SLOPES IN BACK YARDS FOR LOTS 5 THRU 9 AND LOT 31 ADJACENT TO 20' WIDE PARK TRAIL. THE SLOPED AREA SHOULD DRAIN TO THE SOUTHEAST CORNER OF LOT AND THRU A TURNED BLOCK IN THE GARDEN WALL OPENING.

LEGEND

- PROPOSED STANDARD CURB & GUTTER
- PROPOSED MOUNTABLE CURB & GUTTER
- PROPOSED SIDEWALK
- .45.50 PROPOSED SPOT ELEVATION
- FP = 50.0 PROPOSED FINISHED PAD ELEVATION
- PROPOSED DIRECTION OF FLOW
- PROPOSED SLOPE
- PROPOSED RETAINING WALL
- EXISTING PAVEMENT
- PROPOSED STORM DRAIN INLET
- PROPOSED STORM DRAIN
- EXISTING CHANNEL

60' 30' 0 60' 120'

SCALE: 1" = 60'

TRACT "A" SHALL BE ROUGH GRADED TO SLOPE NORTH TO SOUTH. FINE DETAIL GRADING AND TRAIL CONSTRUCTION TO BE DONE AT WORKORDER.

APPROVED ROUGH GRADING ±18" App. 2-27-04
CITY HYDROLOGY DATE

SURVEY INFORMATION

FIELD NOTES

NO.	DATE	BY

BENCH MARKS

STATION "2-P10" IS LOCATED 4.9 MI. SW OF DOWNTOWN ALBUQUERQUE TO REACH STATION FROM INT. OF COORS AND DENS CHAVEZ BLVD. (FORMERLY RIO BRAVO), GO N. ON COORS 0.1 MI. TO FLORA VISTA AND GO WEST ON FLORA VISTA 0.5 MI. TO CONDERSHIRE, THEN GO S. ON CONDERSHIRE 0.4 MI. TO A POINT APPROX. 50 FT. W. OF THE STATION. STATION MARK IS AN ACS 3 1/4" ALUM CAP STAMPED "2-P10, 1997" RIVETED TO A PIPE PROJECTING 0.25 FT. ABOVE THE GROUND. X=356411.13, Y=1464349.24 (NAD 27) Z=4991 (NGVD 29).

AS BUILT INFORMATION

CONTRACTOR	
WORK STAKED BY	
ACCEPTANCE BY	
FIELD LOCATION BY	
DRAWINGS CORRECTED BY	
RECORDED BY	
DATE	
NO.	

MICRO-FILM INFORMATION

ENGINEER'S SEAL

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	
	DATE	1/03	
	DESIGNED BY	DLH	
	DRAWN BY	NHE	
	CHECKED BY	DMG	
	DATE	1/03	

RECEIVED
JAN 16 2005
HYDROLOGY SECTION

dmg
MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

TITLE:

MEADOWS @ ANDERSON HILLS GRADING & DRAINAGE PLAN

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.

CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
	P-9	1	5

NOTES

1. SEE SIDE YARD GRADING DETAIL SHEET 3.
2. SEE DOUBLE RETAINING WALL DETAIL SHEET 3.

DRAINAGE CERTIFICATION

I, Mark Goodwin , NMPE 8948 , of the firm Mark Goodwin & Associates, P.A. , hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intent of the approved plan dated 1/8/2004 . The record information edited onto the original design document has been obtained by Timothy Aldrich, of the firm ALS, Inc. . I further certify that I have personally visited the project site on 10/18/05 and have determined by visual inspection that the survey data provided is representative of actual site conditions and is true and correct to the best of my knowledge and belief. This certification is submitted in support of a request for Grading Certification approval.

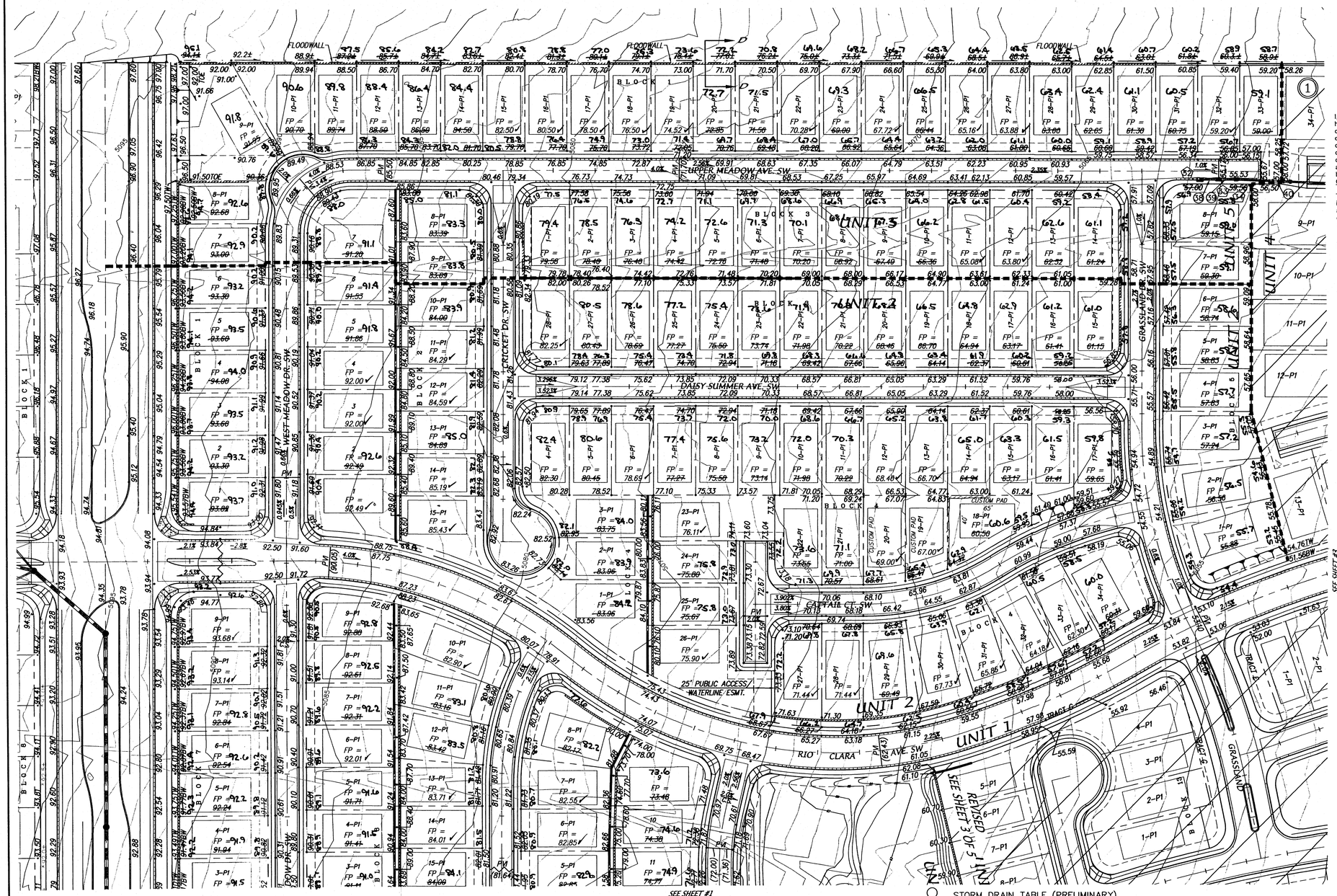
The record information presented hereon is not necessarily complete and intended only to verify substantial compliance of the grading and drainage aspects of this project. Those relying on the record document are advised to obtain independent verification of its accuracy before using it for any other purpose.

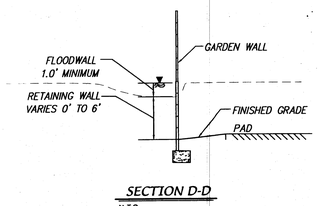
MARK GOODWINNMPE 8948

D. MARK GOODWIN NEW MEXICO 8948 REGISTERED PROFESSIONAL ENGINEER 12/15/05

STORM DRAIN INLET TABLE (PRELIMINARY)

INLET #	TYPE
32	A
33	DBL C
34	C
35	DBL A (ST)
36	DBL C
37	DBL A (ST)
38	DBL A (ST)
39	DBL C
40	DBL C
41	DBL C
42	DBL A (ST)
43	A
44	C
45	A
46	C
47	C
48	C
49	A
50	C
52	A
53	C
54	A
55	A
56	C
57	A
58	A
59	C
60	C
61	A
62	A
63	C
64	C
65	DBL C
72	CATTLE GUARD





SECTION D-D
N.T.S.

STORM DRAIN TABLE (PRELIMINARY)

RCP#	SIZE	SLOPE	Q_{100}	V_{100}	RCP#	SIZE	SLOPE	Q_{100}	V_{100}
		%	cfs	fps			%	cfs	fps
38	18"RCP	%	11.27 cfs	6.4 fps	60	18"RCP	%		
39	24"RCP	%	22.54 cfs	7.2 fps	61	48"RCP	0.72%	121.5 cfs	9.7 fps
40	24"RCP	2.3%	33.8 cfs	10.8 fps	62	18"RCP	1.0%	9.2 cfs	5.22 fps
41	18"RCP	1.0%	11.27 cfs	6.4 fps	63	18"RCP	1.0%	5.5 cfs	3.1 fps
42	24"RCP	1.0%	22.54 cfs	7.2 fps	64	60"RCP	0.88%	245.5 cfs (from AHYMO)	12.5 fps
43	30"RCP	2.6%	65.85 cfs	13.41 fps	65	18"RCP	1.0%	3.64 cfs	2.1 fps
44	48"RCP	0.72%	121.54 cfs	9.7 fps	66	18"RCP	1.0%	4.3 cfs	2.4 fps
45	18"RCP	1.0%	11.13 cfs	6.3 fps	67	18"RCP	1.0%	2.84 cfs	2.8 fps
45.5	24"RCP	1.0%	22.26 cfs	6.3 fps	68	18"RCP	1.0%	2.6 cfs	1.6 fps
46	36"RCP	0.8%	55.65 cfs	7.87 fps	69	18"RCP	0.6%	5.8 cfs	3.3 fps
47	18"RCP	1.0%	6.8 cfs	3.9 fps	70	18"RCP	1.0%	11.0 cfs	6.1 fps
48	24"RCP	1.0%	12.8 cfs	4.0 fps	71	18"RCP	1.0%	5.72 cfs	3.25 fps
49	18"RCP	%	8.3 cfs	4.7 fps	72	18"RCP	1.0%	11.44 cfs	6.5 fps
50	24"RCP	1.0%	15.8 cfs	5.0 fps	73	24"RCP	1.0%	22.44 cfs	7.1 fps
51	30"RCP	0.5%	28.6 cfs	5.8 fps	74	18"RCP	1.0%	8.96 cfs	5.1 fps
52	18"RCP	1.0%	7.3 cfs	4.1 fps	75	24"RCP	1.0%	17.92 cfs	5.7 fps
53	24"RCP	1.0%	13.9 cfs	7.9 fps	76	30"RCP	1.0%	40.36 cfs	8.2 fps
54	30"RCP	1.0%	42.5 cfs	8.66 fps	77	30"RCP	2.1%	58.28 cfs	11.9 fps
55	18"RCP	1.0%	8.3 cfs	4.7 fps					
56	30"RCP	1.54%	50.8 cfs	10.35 fps					
57	18"RCP	1.0%	8.0 cfs	4.5 fps					
58	36"RCP	0.76%	56.8 cfs	8.3 fps					
59	54"RCP	0.3%	135.98 cfs	8.6 fps					

City Appr. 2-27-04

A2106ANH/DWG/MEADOWS/2106-GD60-MID-R2 1-08-04 MJR NHE

AS BUILT INFORMATION

CONTRACTOR

WORK STAKED BY: DATE
FIELD VERIFICATIONS: DATE
ACCEPTANCE BY: DATE
FIELD VERIFICATION BY: DATE
DRAWINGS CORRECTED BY: DATE
MICRO-FILM INFORMATION
RECORDED BY: DATE
NO.

BENCH MARKS

STATION "2-P10" IS LOCATED 4.9 MI. SW OF DOWNTOWN ALBUQUERQUE
TO REACH STATION FROM INT. OF COORS AND DENIS CHAVEZ BLVD.
(FORMERLY RIO BRAVO), GO N. ON GOOPS 0.1 MI. TO FLORA VISTA
AND GO WEST ON FLORA VISTA 0.5 MI. TO CONDERSHIRE, THEN GO
S. ON CONDERSHIRE 0.4 MI. TO A POINT APPROX. 50 FT. W. OF THE
STATION. STATION MARK IS AN A/S 3 1/4" ALUM CAP STAMPED
"2-P10, 1987" RIVETTED TO A PIPE PROJECTING 0.25 FT. ABOVE THE
GROUND. X=35841.13, Y=1464349.24 (NAD 27) Z=4991 (NGVD 29).

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

NEW MEXICO 8948 REGISTERED PROFESSIONAL ENGINEER 1-8-04

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	
DESIGNED BY		DLH	1/03
DRAWN BY		NHE	1/03
CHECKED BY		DMG	1/03

DEC 16 2005
HYDROLOGY SECTION

MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

TITLE:

MEADOWS @ ANDERSON HILLS GRADING & DRAINAGE PLAN

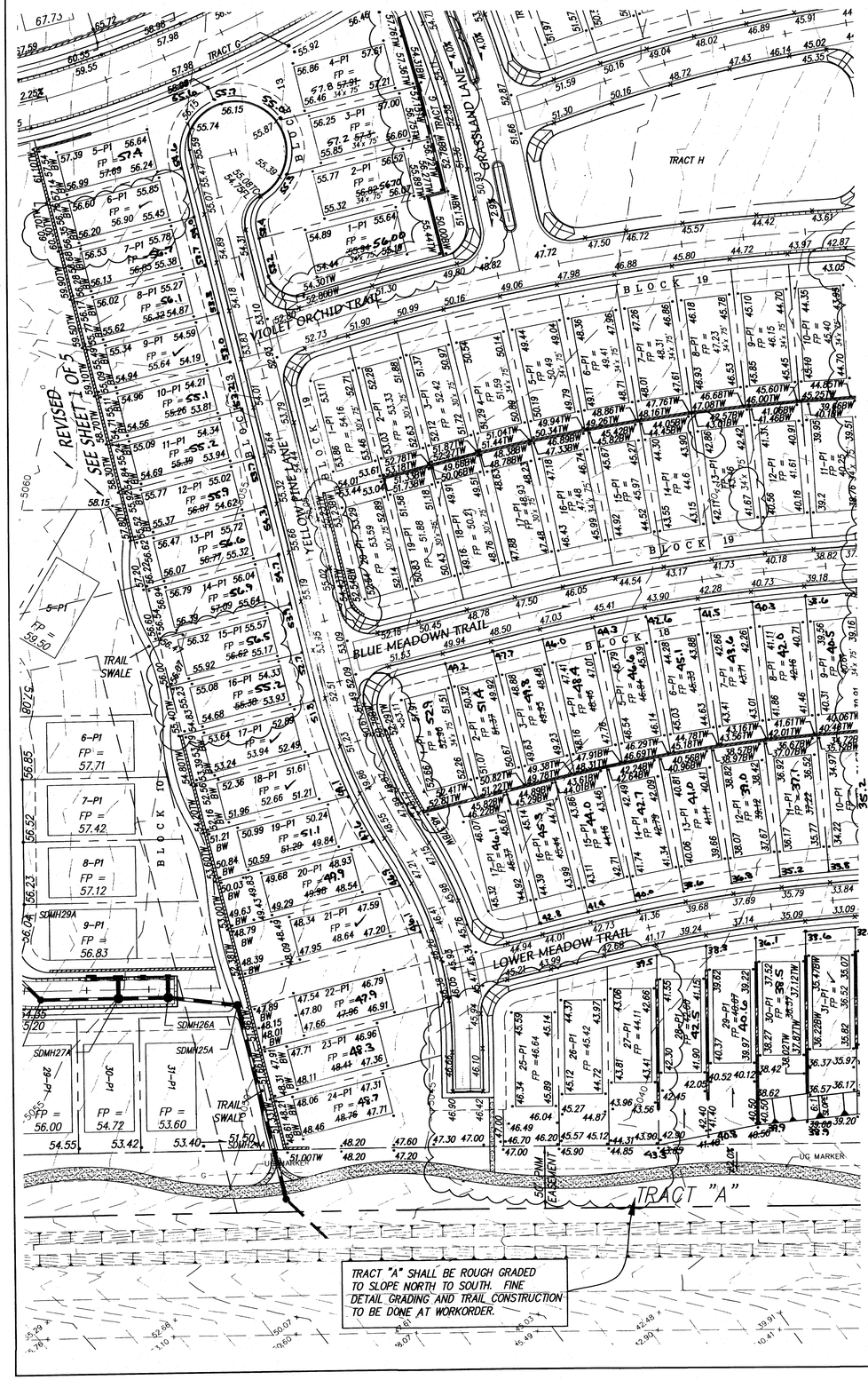
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.

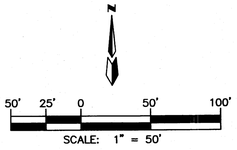
CITY PROJECT NO.

ZONE MAP NO. P-9

SHEET 2 OF 5

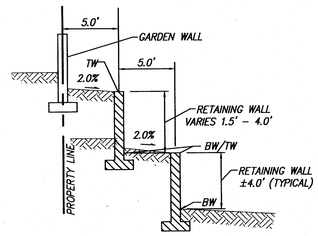
F:\A02JOBS\A2106ANH\dwg\MEADOWS\A2106-GD60-MID-R2.dwg, 01/08/04 01:52:48 PM, Mark Goodwin & Associates, Plotted By RDQ



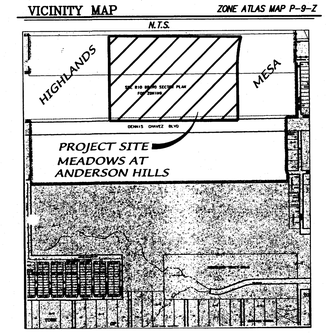


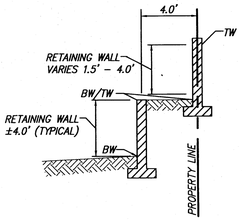
NOTES

1. A PERIMETER CMU WALL WILL BE CONSTRUCTED AROUND THE ENTIRE SITE.



SECTION A–A
N.T.S.





DOUBLE RETAINING WALL DETAIL
N.T.S.

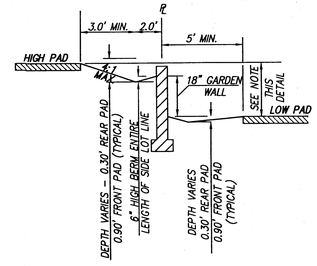
DRAINAGE CERTIFICATION

I, Mark Goodwin , NMPE 8948 , of the firm Mark Goodwin & Associates, PA , hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intent of the approved plan dated 1/8/2004 . The record information edited onto the original design document has been obtained by Timothy Aldrich of the firm ALS, Inc. . I further certify that I have personally visited the project site on 10/19/05 , and have determined by visual inspection that the survey data provided is representative of actual site conditions and is true and correct to the best of my knowledge and belief. This certification is submitted in support of a request for Grading Certification approval .

The record information presented hereon is not necessarily complete and intended only to verify substantial compliances of the grading and drainage aspects of this project. Those relying on the record document are advised to obtain independent verification of its accuracy before using it for any other purpose.

12/5/05
MARK GOODWINNMPE 8948

D. MARK GOODWIN NEW MEXICO 8948 LICENSED PROFESSIONAL ENGINEER



*PAD TO PAD < 1.5', SECTION B–B CONSTRUCT GARDEN WALL
NTS

*PAD TO PAD > 1.5', SECTION B–B CONSTRUCT RETAINING WALL
NTS

SIDEYARD DETAIL
N.T.S.

APPROVED ROUGH GRADING ±18" _____
CITY HYDROLOGY DATE

LEGEND

- PROPOSED STANDARD CURB & GUTTER
- PROPOSED MOUNTABLE CURB & GUTTER
- PROPOSED SIDEWALK
- .45.50 PROPOSED SPOT ELEVATION/FLOWLINE ELEVATION
- x45.83 PROPOSED TOP OF CURB ELEVATION
- FP = 50.0 PROPOSED FINISHED PAD ELEVATION
- PROPOSED DIRECTION OF FLOW
- PROPOSED SLOPE
- PROPOSED RETAINING WALL
- EXISTING PAVEMENT
- PROPOSED STORM DRAIN INLET
- PROPOSED STORM DRAIN
- EXISTING CHANNEL

SURVEY INFORMATION
FIELD NOTES BY: DATE:

BENCH MARKS
STATION "2–P10" IS LOCATED 4.9 MI. SW OF DOWNTOWN ALBUQUERQUE TO REACH STATION FROM INT. OF COORS AND DENIS CHAVEZ BLVD. (FORMERLY RIO BRAVO), GO N. ON GOORS 0.1 MI. TO FLORA VISTA AND GO WEST ON FLORA VISTA 0.5 MI. TO CONDERSHIRE, THEN GO S. ON CONDERSHIRE 0.4 MI. TO A POINT APPROX. 50 FT. W. OF THE STATION. STATION MARK IS AN ACS 3 1/4" ALUM CAP STAMPED "2–P10, 1987" RIVETED TO A PIPE PROJECTING 0.25 FT. ABOVE THE GROUND. X=358413.13, Y=1464349.24 (NAD 27) Z=4991 (NGVD 29).

AS BUILT INFORMATION
CONTRACTOR
WORK STAKED BY: DATE
ACCEPTANCE BY: DATE
FIELD CALCULATIONAL BY: DATE
DRAWINGS CORRECTED BY: DATE
MICRO–FILM INFORMATION
RECORDED BY: DATE
NO.

RECEIVED
DEC 16 2005
HYDROLOGY SECTION

ENGINEER'S SEAL
DUANE HOELZER 12207 NEW MEXICO REGISTERED PROFESSIONAL ENGINEER
6-23-06

NO.	DATE	REMARKS	BY
		DESIGN	
DESIGNED BY	DLH	DATE	1/03
DRAWN BY	NHE	DATE	1/03
CHECKED BY	DMG	DATE	1/03

dmg MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828–2200, FAX (505) 797–9539

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

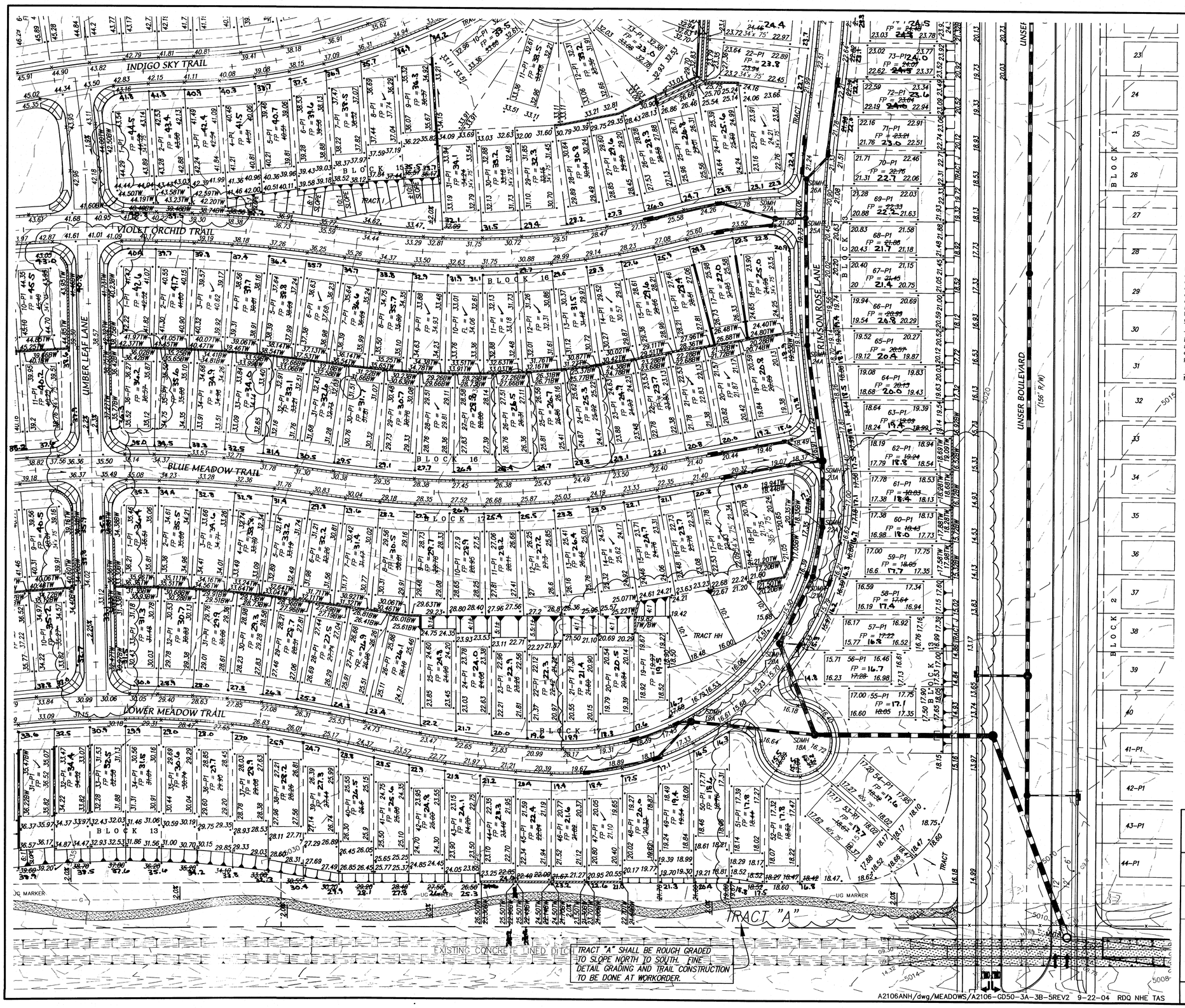
TITLE: MEADOWS AT ANDERSON HILLS
UNITS 3A, 3B & 4
GRADING & DRAINAGE PLAN

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.

CITY PROJECT NO.	ZONE MAP NO.	SHEET OF
	P-9	3 5

A2106ANH/dwg/MEADOWS/A2106-GD50-3A-3B-5REV2 9-22-04 RDQ NHE TAS

I:\2006\A2106\ANH\dwg\MEADOWS\A2106-GD50-3A-3B-5REV2.DWG, Sheet1, 9/30/2004 2:17:32 PM, Tim



TRACT "A" SHALL BE ROUGH GRADED TO SLOPE NORTH TO SOUTH. FINE DETAIL GRADING AND TRAIL CONSTRUCTION TO BE DONE AT WORKORDER.

NOTES

1. SEE SIDE YARD GRADING DETAIL SHEET 3.
2. SEE DOUBLE RETAINING WALL DETAIL SHEET 3.

DRAINAGE CERTIFICATION

I, Mark Goodwin , NMPE 8948 , of the firm Mark Goodwin & Associates, P.A. , hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intent of the approved plan dated 1/6/2004 . The record information edited onto the original design document has been obtained by Timothy Aldrich of the firm ALS, Inc. . I further certify that I have personally visited the project site on 10/18/05 and have determined by visual inspection that the survey data provided is representative of actual site conditions and is true and correct to the best of my knowledge and belief. This certification is submitted in support of a request for Grading Certification approval .

The record information presented hereon is not necessarily complete and intended only to verify substantial compliance of the grading and drainage aspects of this project. Those relying on the record document are advised to obtain independent verification of its accuracy before using it for any other purpose.

12/15/05
MARK GOODWINNMPE 8948

D. MARK GOODWIN — NEW MEXICO — 8948 — REGISTERED PROFESSIONAL ENGINEER

RECEIVED DEC 14 2005 HYDROLOGY SECTION

SURVEY INFORMATION — BENCH MARKS — AS BUILT INFORMATION

STATION "2-P10" IS LOCATED 4.9 MI. SW OF DOWNTOWN ALBUQUERQUE AND TO REACH STATION FROM INT. OF COORS AND DENS CHAVEZ BLVD. (FORMERLY RIO BRAVO), GO N. ON COORS 0.1 MI. TO FLORA VISTA AND GO WEST ON FLORA VISTA 0.5 MI. TO CONDERSHIRE, THEN GO S. ON CONDERSHIRE 0.4 MI. TO A POINT APPROX. 50 FT. W. OF THE STATION. STATION MARK IS AN ACS 3 1/4" ALUM. CAP STAMPED "2-P10, 1987" RIVETED TO A PIPE PROJECTING 0.25 FT. ABOVE THE GROUND. X=359411.13, Y=1464349.24 (NAD 27) Z=4991 (NGVD 29).

CONTRACTOR
WORK STARTED BY
INSPECTOR'S INITIAL DISTANCE BY
FIELD VERIFICATION BY
AS BUILT CHANGES CORRECTED BY
RECORDED BY
DATE
NO.

MICRO-FILM INFORMATION

ENGINEER'S SEAL

DANE HOELZER — NEW MEXICO — 10867 — REGISTERED PROFESSIONAL ENGINEER — 12/14/05

NO.	DATE	REMARKS	BY
		REVISIONS	
	DATE	DESIGN	
DESIGNED BY	DLH		1/03
DRAWN BY	NHE		1/03
CHECKED BY	DMG		1/03

dmg — MARK GOODWIN & ASSOCIATES, P.A. CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

TITLE: MEADOWS AT ANDERSON HILLS UNITS 3A, 3B & 4 GRADING & DRAINAGE PLAN

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.

CITY PROJECT NO. | ZONE MAP NO. P-9 | SHEET 4 OF 5

A2106ANH/dwg/MEADOWS/A2106-GD50-3A-3B-5REV2 9-22-04 RDQ NHE TAS

I:\2-JOBS\A2106ANH\dwg\MEADOWS\A2106-GD50-3A-3B-5REV2.DWG, Sheet2, 9/30/2004 2:19:10 PM, Tim

DRAINAGE CERTIFICATION

I, Mark Goodwin , NMPE 8948 , of the firm Mark Goodwin & Associates, PA , hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intent of the approved plan dated 1/6/2004 . The record information edited onto the original design document has been obtained by Timothy Aldrich of the firm ALS, Inc. . I further certify that I have personally visited the project site on 10/18/05 and have determined by visual inspection that the survey data provided is representative of actual site conditions and is true and correct to the best of my knowledge and belief. This certification is submitted in support of a request for Grading Certification approval .

The record information presented hereon is not necessarily complete and intended only to verify substantial compliance of the grading and drainage aspects of this project. Those relying on the record document are advised to obtain independent verification of its accuracy before using it for any other purpose.

MARK GOODWIN NMPE 8948 12/15/05

SCALE: 1" = 50'

NOTES

1. FOR SECTION A-A SEE SHEET 3.

18" RCP – TEMP. PIPE FOR UNDEVELOPED FLOW ONLY. FUTURE OFFSITE DEVELOPMENT WILL REDIRECT DRAINAGE NORTH TO THE AMOLE AND THIS POPE WILL BE ABANDONED

HIDDEN SPRING AVE.
SHADY SPRING DR.
SANDY SPRING DR.
LOST SPRING DR.
RIO CLARA AVE.
INDIGO SKY TRAIL
VIOLET ORCHID TRAIL
ANDERSON HILL AVE.
PEAR BLOSSOM LANE
CRIMSON ROSE LANE
UNSER BOULEVARD (156' R/W)
GROSSLANE
FUTURE CONSTRUCTION
FLOODWALL
TRACT A
TRACT B
TRACT C
TRACT D
TRACT E
TRACT F
TRACT G
TRACT H
TRACT I
TRACT J
TRACT K
TRACT L
BLOCK 1
BLOCK 5
BLOCK 6
BLOCK 14
BLOCK 15
BLOCK 16
BLOCK 17
BLOCK 18
BLOCK 19

SURVEY INFORMATION
FIELD NOTES
NO. BY DATE

BENCH MARKS
STATION "2–P10" IS LOCATED 4.9 MI. SW. OF DOWNTOWN ALBUQUERQUE, TO REACH STATION FROM INT. OF COORS AND DENIS CHAVEZ BLVD. (FORMERLY RIO BRAVO), GO N. ON COORS 0.1 MI. TO FLORA VISTA, AND GO WEST ON FLORA VISTA 0.5 MI. TO CONDERSHIRE, THEN GO S. ON CONDERSHIRE 0.4 MI. TO A POINT APPROX. 50 FT. W. OF THE STATION. STATION MARK IS AN ACS 3 1/4" ALUM CAP STAMPED "2–P10, 1982" RIVETTED TO A PIPE PROJECTING 0.25 FT. ABOVE THE GROUND. X=558411.13, Y=1464348.24 (NAD 27) Z=4991 (NGVD 29).

AS BUILT INFORMATION
CONTRACTOR
STAKED BY DATE
INSPECTOR'S COMPLIANCE BY DATE
FIELD VERIFICATION BY
OVERALL DIMENSIONS CORRECTED BY DATE
MICRO–FILM INFORMATION
RECORDED BY
NO.

D RECEIVED DEC 16 2005
HYDROLOGY SECTION

ENGINEER'S SEAL
DANE HOELZER NEW MEXICO 7887 REGISTERED PROFESSIONAL ENGINEER 12-22-04

NO.	BY	DATE	REMARKS
			REVISIONS
			DESIGN
		DATE	1/03
		DATE	1/03
		DATE	1/03

DESIGNED BY DLH
DRAWN BY NHE
CHECKED BY DMG

dmg
MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828–2200, FAX (505) 797–9539

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

TITLE: MEADOWS AT ANDERSON HILLS
UNITS 3A, 3B & 4
GRADING & DRAINAGE PLAN

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.

CITY PROJECT NO. | ZONE MAP NO. P-9 | SHEET 5 OF 5

A2106ANH/dwg/MEADOWS/A2106–GD50–3A–3B–5REV2 9–22–04 ACH RDQ NHE TAS

I:\AQ2JOBS\A2106ANH\dwg\MEADOWS\A2106–GD50–3A–3B–5REV2.DWG, Sheet3, 9/30/2004 2:12:48 PM, Tim

DRAINAGE CERTIFICATION

I, Mark Goodwin , NMPE 8948 , of the firm Mark Goodwin & Associates, PA. hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intent of the approved plan dated 1/6/2004 . The record information edited onto the original design document has been obtained by Timothy Aldrich , of the firm ALS, Inc. I further certify that I have personally visited the project site on 10/18/05 and have determined by visual inspection that the survey data presented is representative of actual site conditions and is true and correct to the best of my knowledge and belief. This certification is submitted in support of a request for Grading Certification approval .

The record information presented hereon is not necessarily complete and intended only to verify substantial compliance of the grading and drainage aspects of this project. Those relying on the record document are advised to obtain independent verification of its accuracy before using it for any other purpose.

Mark Goodwin 12/15/05
MARK GOODWIN, NMPE 8948 — DATE

SEE SHEET #2

SEE SHEET #3

SEE SHEET #5 FOR REVISED GRADING

VICINITY MAP
N.T.S.
ZONE MAP P-9
HIGHLANDS
MEADOWS
DENNIS CHAVEZ BLVD.
PROJECT SITE
MEADOWS AT
ANDERSON HILLS

NOTES

1. A PERIMETER CMU WALL WILL BE CONSTRUCTED AROUND THE ENTIRE SITE.
2. BACK YARDS TO DRAIN TO FRONT YARD EXCEPT AT SLOPES IN BACK YARDS FOR LOTS 5 THRU 9 AND LOT 31 ADJACENT TO 20' WIDE PARK TRAIL. THE SLOPED AREA SHOULD DRAIN TO THE SOUTHEAST CORNER OF LOT AND THRU A TURNED BLOCK IN THE GARDEN WALL OPENING.

LEGEND

- PROPOSED STANDARD CURB & GUTTER
- PROPOSED MOUNTABLE CURB & GUTTER
- PROPOSED SIDEWALK
- .45.50 PROPOSED SPOT ELEVATION
- FP = 50.0 PROPOSED FINISHED PAD ELEVATION
- PROPOSED DIRECTION OF FLOW
- PROPOSED SLOPE
- PROPOSED RETAINING WALL
- EXISTING PAVEMENT
- PROPOSED STORM DRAIN INLET
- PROPOSED STORM DRAIN
- EXISTING CHANNEL

60' 30' 0 60' 120'
SCALE: 1" = 60'

TRACT "A" SHALL BE ROUGH GRADED TO SLOPE NORTH TO SOUTH. FINE DETAIL GRADING AND TRAIL CONSTRUCTION TO BE DONE AT WORKORDER.

APPROVED ROUGH GRADING ±18" App. 2-27-04
CITY HYDROLOGY DATE

A2106ANH/DWG/MEADOWS/2106-GD60-MID-R2 01-08-04 MJR NHE

SURVEY INFORMATION
FIELD NOTES
NO. | DATE | BY

ENGINEER'S SEAL
CRAIG HOELSCHER NEW MEXICO 9887 REGISTERED PROFESSIONAL ENGINEER

BENCH MARKS
STATION "2-P10" IS LOCATED ±4.9 MI. SW OF DOWNTOWN ALBUQUERQUE TO REACH STATION FROM INT. OF COORS AND DENNIS CHAVEZ BLVD. (FORMERLY RIO BRAVO), GO N. ON COORS 0.1 MI. TO FLORA VISTA AND GO WEST ON FLORA VISTA 0.5 MI. TO CONDERSHIRE, THEN GO S. ON CONDERSHIRE 0.4 MI. TO A POINT APPROX. 50 FT. W. OF THE STATION. STATION MARK IS AN ACS 3 1/4" ALUM CAP STAMPED "2-P10, 1987" RIVETED TO A PIPE PROJECTING 0.25 FT ABOVE THE GROUND. X=356411.13, Y=1464349.24 (NAD 27) Z=4991 (NGVD 29).

AS BUILT INFORMATION
CONTRACTOR
WORK STAKED BY
INSPECTIONS BY
FIELD VERIFICATIONS BY
DRAWINGS BY
CORRECTED BY
MICRO-FILM INFORMATION
RECORDED BY
DATE
NO.

REVISIONS
NO. | DATE | BY | REMARKS

DESIGN
DESIGNED BY DLH 1/03
DRAWN BY NHE 1/03
CHECKED BY DMG 1/03

dmg MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

RECEIVED
DEC 15 2005
HYDROLOGY SECTION

TITLE:
MEADOWS @ ANDERSON HILLS
GRADING & DRAINAGE PLAN

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.

CITY PROJECT NO. | ZONE MAP NO. P-9 | SHEET 1 OF 5

F:\A\2106ANH\dwg\MEADOWS\2106-GD60-MID-R2.dwg, Sheet1, 01/19/04 11:03:51 AM, Mark Goodwin & Associates Plotted by NHE

NOTES

1. SEE SIDE YARD GRADING DETAIL SHEET 3.
2. SEE DOUBLE RETAINING WALL DETAIL SHEET 3.

DRAINAGE CERTIFICATION

I, Mark Goodwin, NMPE 8948, of the firm Mark Goodwin & Associates, PA., hereby certify that this project has been graded and will drain in substantial accordance with and in accordance with the design intent of the approved plan compliance with and in accordance with the design intent of the approved plan dated 1/8/2004. The record information edited onto the original design document has been obtained by Timothy Aldrich of the firm ALS, Inc.. I further certify that I have personally visited the project site on 10/18/05 and have certify that I have personally visited the project site on 10/18/05 and have determined by visual inspection that the survey data provided is representative of actual site conditions and is true and correct to the best of my knowledge and belief. This certification is submitted in support of a request for Grading Certification approval.

The record information presented hereon is not necessarily complete and intended only to verify substantial compliance of the grading and drainage aspects of this project. Those relying on the record document are advised to obtain independent verification of its accuracy before using it for any other purpose.

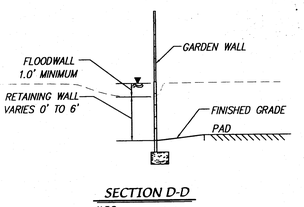
MARK GOODWIN NMPE 8948

12/15/05

D. MARK GOODWIN — NEW MEXICO — 8948 — REGISTERED PROFESSIONAL ENGINEER

STORM DRAIN INLET TABLE (PRELIMINARY)

INLET #	TYPE
32	A
33	DBL C
34	C
35	DBL A (ST)
36	DBL C
37	DBL A (ST)
38	DBL A (ST)
39	DBL C
40	DBL C
41	DBL C
42	DBL A (ST)
43	A
44	C
45	A
46	C
47	C
48	C
49	A
50	C
52	A
53	A
54	A
55	A
56	C
57	A
58	A
59	C
60	C
61	A
62	A
63	C
64	C
65	DBL C
72	CATTLE GUARD



SECTION D-D
N.T.S.

STORM DRAIN TABLE (PRELIMINARY)

RCP#	SIZE	SLOPE	Q_{100}	V_{100}	RCP#	SIZE	SLOPE	Q_{100}	V_{100}
38	18"RCP	%	11.27 cfs	6.4 fps	60	18"RCP	%	cfs	fps
39	24"RCP	%	22.54 cfs	7.2 fps	61	48"RCP	0.72%	121.5 cfs	9.7 fps
40	24"RCP	2.3%	33.8 cfs	10.8 fps	62	18"RCP	1.0%	9.2 cfs	5.22 fps
41	18"RCP	1.0%	11.27 cfs	6.4 fps	63	18"RCP	1.0%	5.5 cfs	3.1 fps
42	24"RCP	1.0%	22.54 cfs	7.2 fps	64	60"RCP	0.88%	245.5 cfs (from AHYMO)	12.5 fps
43	30"RCP	2.6%	65.85 cfs	13.41 fps	65	18"RCP	1.0%	3.64 cfs	2.1 fps
44	48"RCP	0.72%	121.54 cfs	9.7 fps	66	18"RCP	1.0%	4.3 cfs	2.4 fps
45	18"RCP	1.0%	11.13 cfs	6.3 fps	67	18"RCP	1.0%	2.84 cfs	2.8 fps
45.5	24"RCP	1.0%	22.26 cfs	6.3 fps	68	18"RCP	1.0%	2.6 cfs	1.6 fps
46	36"RCP	0.8%	55.65 cfs	7.87 fps	69	18"RCP	0.6%	5.8 cfs	3.3 fps
47	18"RCP	1.0%	6.8 cfs	3.9 fps	70	18"RCP	1.0%	11.0 cfs	6.3 fps
48	24"RCP	1.0%	12.8 cfs	4.0 fps	71	18"RCP	1.0%	5.72 cfs	3.25 fps
49	18"RCP	%	8.3 cfs	4.7 fps	72	18"RCP	1.0%	11.44 cfs	6.5 fps
50	24"RCP	1.0%	15.8 cfs	5.0 fps	73	24"RCP	1.0%	22.44 cfs	7.1 fps
51	30"RCP	0.5%	28.6 cfs	5.8 fps	74	18"RCP	1.0%	8.96 cfs	5.1 fps
52	18"RCP	1.0%	7.3 cfs	4.1 fps	75	24"RCP	1.0%	17.92 cfs	5.7 fps
53	24"RCP	1.0%	13.9 cfs	7.9 fps	76	30"RCP	1.0%	40.36 cfs	8.2 fps
54	30"RCP	1.0%	42.5 cfs	8.66 fps	77	30"RCP	2.1%	58.28 cfs	11.9 fps
55	18"RCP	1.0%	8.3 cfs	4.7 fps					
56	30"RCP	1.54%	50.8 cfs	10.35 fps					
57	18"RCP	1.0%	8.0 cfs	4.5 fps					
58	36"RCP	0.78%	58.8 cfs	8.3 fps					
59	54"RCP	0.6%	135.98 cfs	8.6 fps					

City Appr. 2-27-04

A2106ANH/DWG/MEADOWS/2106-GD60-MID-R2 1-08-04 MJR NHE

SEE SHEET #1

SEE SHEET #3

SEE SHEET 3 OF 5 FOR REVISED LAYOUT

SCALE: 1" = 60'

AS BUILT INFORMATION

BENCH MARKS

STATION "2-P10" IS LOCATED 4.9 MI. SW OF DOWNTOWN ALBUQUERQUE, TO REACH STATION FROM INT. OF COORS AND DENIS CHAVEZ BLVD. (FORMERLY RIO BRAVO), GO N. ON COORS 0.1 MI. TO FLORA VISTA AND GO WEST ON FLORA VISTA 0.5 MI. TO A POINT APPROX. 50 FT. W. OF THE S. ON CONDERSHIRE 0.4 MI. TO A POINT APPROX. 50 FT. W. OF THE STATION. STATION MARK IS AN ACS 3 1/4" ALUM CAP STAMPED "2-P10, 1982" RIVETTED TO A PIPE. PROJECTING 0.25 FT ABOVE THE GROUND. X=1464349.24 (NAD 27) Z=4981.2 (NGVD 29).

DRAINAGE CERTIFICATION

I, Mark Goodwin, NMPE 8948, of the firm Mark Goodwin & Associates, PA, hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intent of the approved plan dated 10/2004. The record information edited onto the original design document has been obtained by Timothy Aldrich, of the firm CALS Ltd. I further certify that I have personally visited the project site on 10/18/05, and have determined by visual inspection that the survey data presented is representative of actual site conditions and is true and correct to the best of my knowledge and belief. This certification is submitted in support of a request for Grading Certification approval.

The record information presented hereon is not necessarily complete and intended only to verify substantial compliance of the building and drainage aspects of this project. Those relying on the record document are advised to obtain independent verification of its accuracy before using it for any other purpose.

Mark Goodwin 12/15/05

MARK GOODWIN, NMPE 8948

GRADING & DRAINAGE CERTIFICATION

D. MARK GOODWIN — NEW MEXICO — 8948 — REGISTERED PROFESSIONAL ENGINEER

SEE SHEET #2

SEE SHEET #3

RIO CLARA PL. NW

RIO MARIA DR.

RIVERBEND AVE. SW

LAZY DAY DR. SW

GRASSHOPPER DR. SW

MEADOW DR. SW

RIO MARIA DRIVE SW

RIO BRAVO BOULEVARD SW

LOWER MEADOW AVE. SW

MIDDLEMEADOW PL. SW

15' WATERLINE ESMT

PUBLIC PARK

TRACT A

TRACT P

EXISTING TO REMAIN LINED DITCH

RIO BRAVO PAVEMENT

DENNIS CHAVEZ BOULEVARD (255' R/W)

(FUTURE EAST BOUND LANES)

TRAIL SWALE

TRACT "A" SHALL BE ROUGH GRADED TO SLOPE NORTH TO SOUTH. FINE DETAIL GRADING AND TRAIL CONSTRUCTION TO BE DONE AT WORKORDER.

231+01.80 END CHANNEL CONSTRUCTION MATCH EXISTING BEGIN 8' HIGH WALL

225+00.00 END 8' HIGH WALL

EDGE OF 6' SHOULDER

220' TRANSITION

250' TRANSITION

180'

150'

12' LANE

12' DECEL LANE

10' SHOULDER

SHOULDER

DIRT

APPROVED ROUGH GRADING ±18" App. 2-27-04
CITY HYDROLOGY DATE

A2106ANH/DWG/MEADOWS/2106-GD60-MID-R2 01-08-04 MJR NHE

VICINITY MAP

N.T.S.

HIGHLANDS

MEADOWS

UNIVERSITY BLVD.

PROJECT SITE
MEADOWS AT
ANDERSON HILLS

ZONE MAP P-9

NOTES

1. A PERIMETER CMU WALL WILL BE CONSTRUCTED AROUND THE ENTIRE SITE.
2. BACK YARDS TO DRAIN TO FRONT YARD EXCEPT AT SLOPES IN BACK YARDS FOR LOTS 5 THRU 9 AND LOT 31 ADJACENT TO 20' WIDE PARK TRAIL. THE SLOPED AREA SHOULD DRAIN TO THE SOUTHEAST CORNER OF LOT AND THRU A TURNED BLOCK IN THE GARDEN WALL OPENING.

LEGEND

- PROPOSED STANDARD CURB & GUTTER
- PROPOSED MOUNTABLE CURB & GUTTER
- PROPOSED SIDEWALK
- .45.50 PROPOSED SPOT ELEVATION
- FP = 50.0 PROPOSED FINISHED PAD ELEVATION
- PROPOSED DIRECTION OF FLOW
- PROPOSED SLOPE
- PROPOSED RETAINING WALL
- EXISTING PAVEMENT
- PROPOSED STORM DRAIN INLET
- PROPOSED STORM DRAIN
- EXISTING CHANNEL

N

60' 30' 0 60' 120'

SCALE: 1" = 60'

SURVEY INFORMATION
FIELD NOTES BY
DATE
NO.

BENCH MARKS
STATION "2-P10" IS LOCATED 4.9 MI. SW OF DOWNTOWN ALBUQUERQUE TO REACH STATION FROM INT. OF COORS AND DENIS CHAVEZ BLVD. (FORMERLY RIO BRAVO), GO N. ON COORS 0.1 MI. TO FLORA VISTA AND GO WEST ON FLORA VISTA 0.5 MI. TO CONDERSHIRE, THEN GO S. ON CONDERSHIRE 0.4 MI. TO A POINT APPROX. 50 FT. W. OF THE STATION. STATION MARK IS AN ACS 3 1/4" ALUM CAP STAMPED "2-P10, 1987" RIVETED TO A PIPE PROJECTING 0.25 FT ABOVE THE GROUND. X=359811.13, Y=1461349.24 (NAD 27) Z=4991 (NGVD 29).

A.S. BUILT INFORMATION
CONTRACTOR
STAMED BY
INSPECTOR'S
FIELD
DRAWING BY
CORRECTED BY

MICRO-FILM INFORMATION
RECORDED BY
DATE
NO.

ENGINEER'S SEAL
CHRISTOPHER MICHAEL LINNELL — NEW MEXICO — 9887 — REGISTERED PROFESSIONAL ENGINEER
10-8-1

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	
DESIGNED BY	DLH	DATE	1/03
DRAWN BY	NHE	DATE	1/03
CHECKED BY	DMG	DATE	1/03

dmg MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

RECEIVED
DEC 15 2005
HYDROLOGY SECTION

TITLE: MEADOWS @ ANDERSON HILLS
GRADING & DRAINAGE PLAN

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.

CITY PROJECT NO.

ZONE MAP NO. P-9

SHEET 1 OF 5

F:\AUTOJOBS\A2106ANH.dwg\MEADOWS\2106-GD60-MID-R2.dwg, Sheet1, 01/15/04 11:52:51 AM, Mark Goodwin & Associates Plotted by NHE

NOTES

1. SEE SIDE YARD GRADING DETAIL SHEET 3.
2. SEE DOUBLE RETAINING WALL DETAIL SHEET 3.

DRAINAGE CERTIFICATION

I, Mark Goodwin, NMPE 8948, of the firm Mark Goodwin & Associates, PA, hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intent of the approved plan dated 1/8/2004. The record information edited onto the original design document has been obtained by Timothy Aldrich of the firm ALS, Inc.. I further certify that I have personally visited the project site on 10/18/05 and have determined by visual inspection that the survey data provided is representative of actual site conditions and is true and correct to the best of my knowledge and belief. This certification is submitted in support of a request for Grading Certification approval.

The record information presented hereon is not necessarily complete and intended only to verify substantial compliance of the grading and drainage aspects of this project. Those relying on the record document are advised to obtain independent verification of its accuracy before using it for any other purpose.

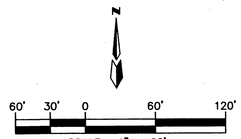
MARK GOODWINNMPE 8948

12/15/05

D. MARK GOODWIN — NEW MEXICO — 8948 — REGISTERED PROFESSIONAL ENGINEER

STORM DRAIN INLET TABLE (PRELIMINARY)

INLET #	TYPE
32	A
33	DBL C
34	C
35	DBL A (ST)
36	DBL C
37	DBL A (ST)
38	DBL A (ST)
39	DBL C
40	DBL C
41	DBL C
42	DBL A (ST)
43	A
44	C
45	A
46	C
47	C
48	C
49	A
50	C
52	A
53	C
54	A
55	A
56	C
57	A
58	A
59	C
60	C
61	A
62	A
63	C
64	C
65	DBL C
72	CATTLE GUARD

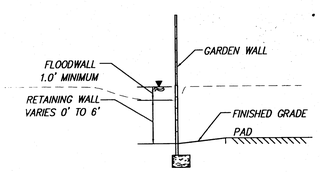


STORM DRAIN TABLE (PRELIMINARY)

RCP#	SIZE	SLOPE	Q_{100}	V_{100}	RCP#	SIZE	SLOPE	Q_{100}	V_{100}
38	18"RCP	%	11.27 cfs	6.4 fps	60	18"RCP	%	cfs	fps
39	24"RCP	%	22.54 cfs	7.2 fps	61	48"RCP	0.72%	121.5 cfs	9.7 fps
40	24"RCP	2.3%	33.8 cfs	10.8 fps	62	18"RCP	1.0%	9.2 cfs	5.22 fps
41	18"RCP	1.0%	11.27 cfs	6.4 fps	63	18"RCP	1.0%	5.5 cfs	3.1 fps
42	24"RCP	1.0%	22.54 cfs	7.2 fps	64	60"RCP	0.88%	245.5 cfs (from AHYMO)	12.5 fps
43	30"RCP	2.6%	65.85 cfs	13.41 fps	65	18"RCP	1.0%	3.64 cfs	2.1 fps
44	48"RCP	0.72%	121.54 cfs	9.7 fps	66	18"RCP	1.0%	4.3 cfs	2.4 fps
45	18"RCP	1.0%	11.13 cfs	6.3 fps	67	18"RCP	1.0%	2.84 cfs	2.8 fps
45.5	24"RCP	1.0%	22.26 cfs	6.3 fps	68	18"RCP	1.0%	2.6 cfs	1.6 fps
46	36"RCP	0.8%	55.65 cfs	7.87 fps	69	18"RCP	0.6%	5.8 cfs	3.3 fps
47	18"RCP	1.0%	6.8 cfs	3.9 fps	70	18"RCP	1.0%	11.0 cfs	6.3 fps
48	24"RCP	1.0%	12.8 cfs	4.0 fps	71	18"RCP	1.0%	5.72 cfs	3.25 fps
49	18"RCP	%	8.3 cfs	4.7 fps	72	18"RCP	1.0%	11.44 cfs	6.5 fps
50	24"RCP	1.0%	15.8 cfs	5.0 fps	73	24"RCP	1.0%	22.44 cfs	7.1 fps
51	30"RCP	0.5%	28.6 cfs	5.8 fps	74	18"RCP	1.0%	8.96 cfs	5.1 fps
52	18"RCP	1.0%	7.3 cfs	4.1 fps	75	24"RCP	1.0%	17.92 cfs	5.7 fps
53	24"RCP	1.0%	13.9 cfs	7.9 fps	76	30"RCP	1.0%	40.36 cfs	8.2 fps
54	30"RCP	1.0%	42.5 cfs	8.66 fps	77	30"RCP	2.1%	58.28 cfs	11.9 fps
55	18"RCP	1.0%	8.3 cfs	4.7 fps					
56	30"RCP	1.54%	50.8 cfs	10.35 fps					
57	18"RCP	1.0%	8.0 cfs	4.5 fps					
58	36"RCP	0.78%	58.8 cfs	8.3 fps					
59	54"RCP	0.5%	135.98 cfs	8.6 fps					

City Appr. 2-27-04

A2106ANH/DWG/MEADOWS/2106-GD60-MID-R2 1-08-04 MJR NHE



SECTION D-D
N.T.S.

SEE SHEET #1

SEE SHEET #3

SEE SHEET 3 OF 5 REVISED

AS BUILT INFORMATION

BENCH MARKS

STATION "2-P10" IS LOCATED 4.9 MI. SW OF DOWNTOWN ALBUQUERQUE, TO REACH STATION FROM INT. OF COORS AND DENS CHAVEZ BLVD. (FORMERLY RIO BRAVO), GO N. ON COORS 0.1 MI. TO FLORA VISTA, AND GO WEST ON FLORA VISTA 0.5 MI. TO CONDERSHIRE, THEN GO S. ON CONDERSHIRE 0.4 MI. TO A POINT APPROX. 50 FT. W. OF THE STATION. STATION MARK IS AN ACS 3 1/4" ALUM. CAP STAMPED "2-P10, 1987" RIVETTED TO A PIPE PROJECTING 0.25 FT. ABOVE THE GROUND. X=1464349.24 (NAD 27) Z=4991 (NGVD 29).

CONTRACTOR
STAMED BY
INSPECTOR'S
CHANGE BY
FIELD
VERIFICATION BY
DRAWING
CORRECTED BY

DATE
DATE
DATE
DATE

MICRO-FILM INFORMATION

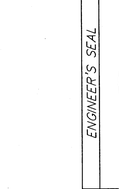
RECORDED BY
NO.
DATE

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL



NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	
		DESIGNED BY DLH	DATE 1/03
		DRAWN BY NHE	DATE 1/03
		CHECKED BY DMG	DATE 1/03

MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

TITLE: MEADOWS @ ANDERSON HILLS
GRADING & DRAINAGE PLAN

RECEIVED
DEC 06 2005
HYDROLOGY SECTION

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.

CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
	P-9	2	5

F:\A02\DRGS\A2106A\, "J:\dg\MEADOWS\A2106-GD60-MID-R2.dwg, 01/08/04 01:52:48 PM, Mark Goodwin & Associates,
Plotted By RDQ