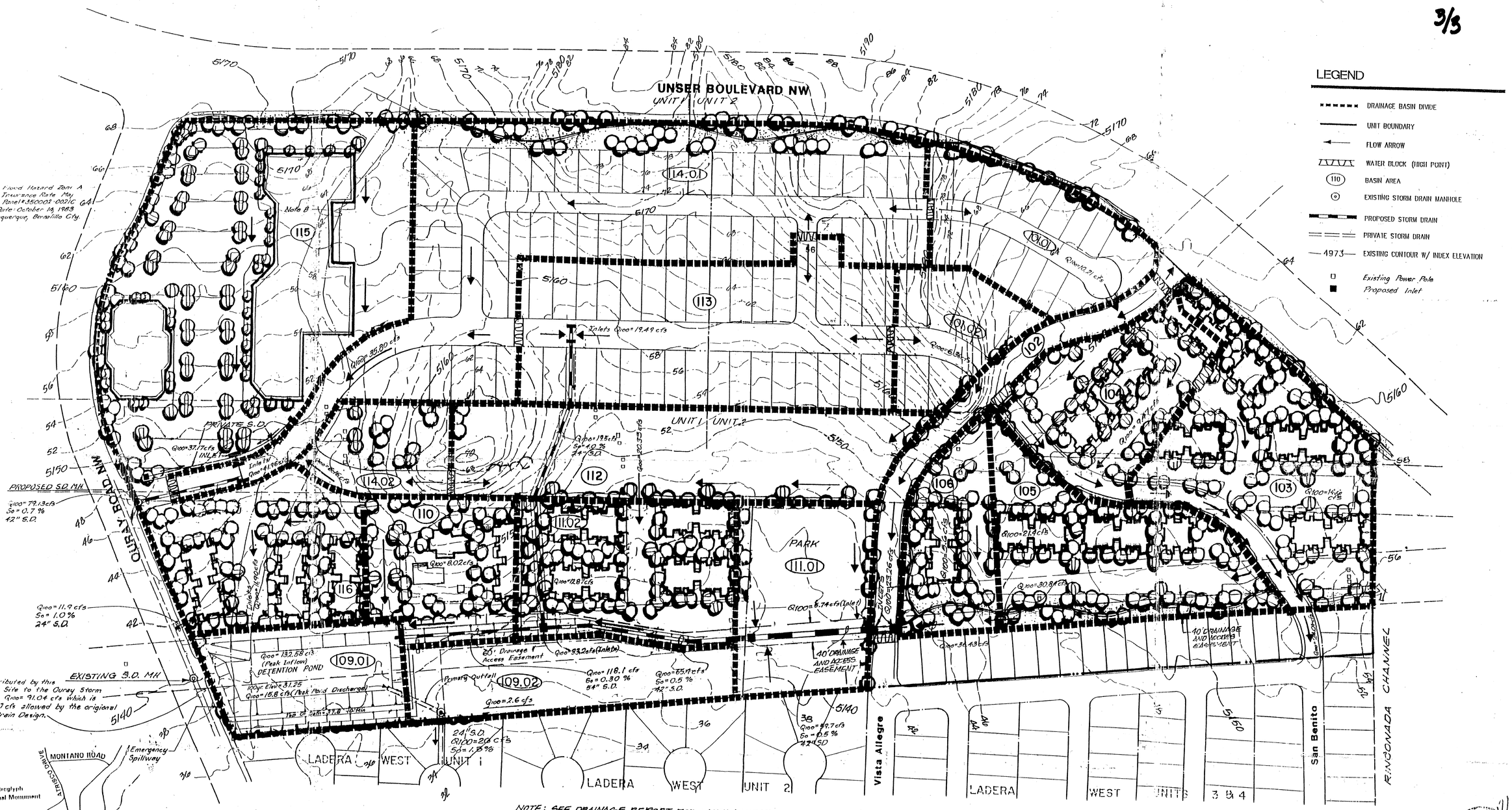
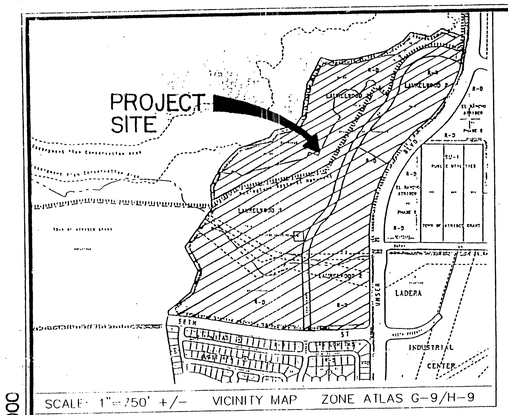
PETROGLYPH NATIONAL MONUMENT

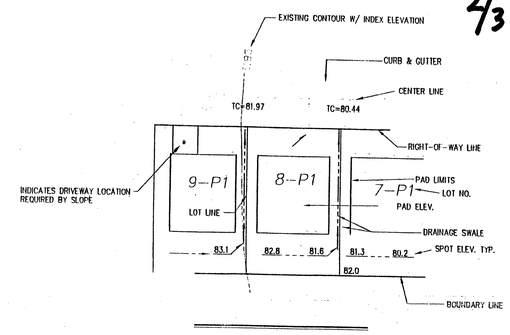
3/3


UNSER BOULEVARD NW
UNIT 1 UNIT 2
GURLEY ROAD NW
PROPOSED S.D. MH
EXISTING S.D. MH
PRIVATE S.D.
PARK
Note B: Limits of Flood Hazard Zone A Per Flood Insurance Rate Map Community Panel #350002-0021C Effective Date: October 14, 1983 City of Albuquerque, Bernalillo Cty.
Note: Total flow contributed by this Master Planned Site to the Ouray Storm Drain System is Q100= 91.04 cfs which is less than the 97 cfs allowed by the original Ouray Storm Drain Design.
Q100= 132.58 cfs (Peak Inflow) DETENTION POND
100yr Elev= 81.25
Q100= 15.8 cfs (Peak Pond Discharge)
Top of Berm= 87.8 10 Min
Q100= 35.80 cfs
Q100= 37.17 cfs INLET
Q100= 79.13 cfs So= 0.7 % 42" S.D.
Q100= 11.9 cfs So= 1.0% 24" S.D.
Q100= 8.02 cfs
Q100= 12.87 cfs
Q100= 19.49 cfs
Q100= 195.6 cfs Sp= 10.3% 24" S.D.
Q100= 20.33 cfs
Q100= 118.1 cfs So= 0.30 % 54" S.D.
Q100= 65.4 cfs So= 0.5 % 42" S.D.
Q100= 2.6 cfs
Q100= 20 cfs So= 1.8 %
Q100= 6.74 cfs (Inlet)
Q100= 223.26 cfs
Q100= 21.4 cfs
Q100= 30.84 cfs
Q100= 36.43 cfs
Q100= 89.7 cfs So= 0.5 % 42" SD
Q100= 16.66 cfs
Q100= 10.21 cfs
Q100= 6.61 cfs
Q100= 9.71 cfs
Q100= 8.5 cfs
Q100= 6.74 cfs (Inlet)
Q100= 19.9 cfs
Q100= 19.9 cfs
Q100= 19.9 cfs

COMMUNITY SCIENCES CORPORATION - CORRALES, NEW MEXICO - (505) 897-0000

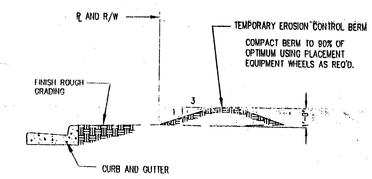
C:\14318\PREGDCO.DWG (PRELIM GRD COMPOSITE) XREF COTOPO.DWG



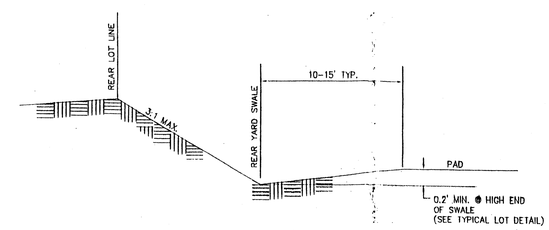


LEGEND

● TC=98.43	PROPOSED TOP OF CURB ELEVATION		DRAINAGE BASIN DIVIDE
● 99.0	PROPOSED SPOT ELEVATION		UNIT BOUNDARY
09.0 ⊗	EXISTING SPOT ELEVATION (GRND & TC)		SWALE
	EROSION CONTROL BERM		FLOW-ARROW
	PROPOSED CONCRETE VALLEY GUTTER		PROPOSED RETAINING WALL
	EXISTING CURB & GUTTER	— 30" SD —	EXISTING STORM DRAIN
	PROPOSED MOUNTABLE CURB & GUTTER	— 30" SD —	PROPOSED STORM DRAIN
	PROPOSED STANDARD CURB & GUTTER.		WATER BLOCK (HIGH POINT)
	EXISTING CONTOUR W/ INDEX ELEVATION		



EROSION CONTROL BERM
TYPICAL SECTION THROUGH BERM
NOT TO SCALE



TYPICAL REAR YARD DETAIL
NOT TO SCALE

PRELIMINARY GRADING AND DRAINAGE PLAN
PARK WEST SUBDIVISION COMPOSITE PLAN

COMPRISED OF
TRACTS I, II-A, II-B, III AND IV
LAURELWOOD II SUBDIVISION
CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

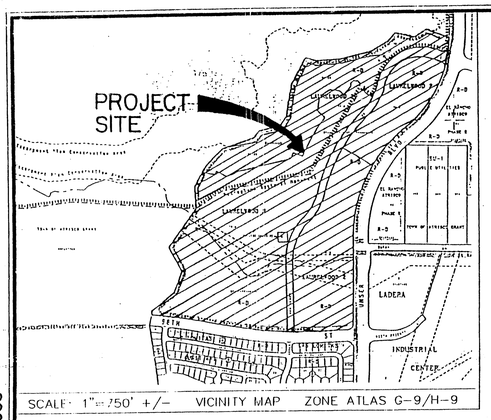
DRB-93-303

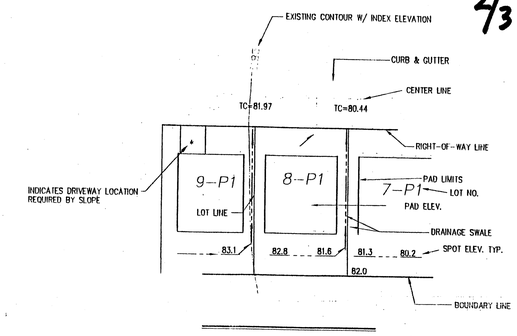
BENCHMARK: STATION IS AN ACS BRASS TABLET STAMPED "2-G9" SET IN A 2" IRON PIPE 1 FT. ABOVE GROUND LOCATED ON TOP OF A VOLCANIC OUTCROP. TO REACH THE STATION FROM THE INTERSECTION OF COORS RD. AND OURAY RD. NW GO WEST ON OURAY ABOUT 0.7 MI. TO THE END OF PAVEMENT. CONTINUE WEST ON THE DIRT ROAD TO THE TOP OF THE DETENTION DAM. ALONG THE N. BANK OF DAM 0.6 MI. TO A DIRT CROSS ROAD. TURN RIGHT, GO N. ON THE DIRT ROAD 0.5 MI. SLD 1929 ELEVATION = 5334.50

SHEET INDEX

1	COMPOSITE PLAN, VICINITY MAP, NOTES AND DETAILS
2	UNIT 1
3-4	UNIT 3
5-6	UNIT 5
7	LAVA BLUFF DRIVE AND RETENTION POND
8	DRAINAGE CHANNEL PROFILE AND DETAILS
8A	UNIT 2
8B	UNIT 4

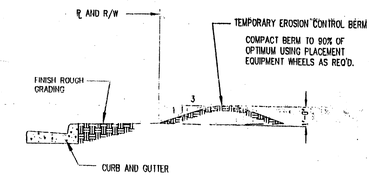
2/3



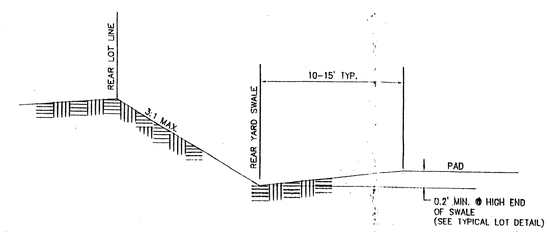


LEGEND

• TC=98.43	PROPOSED TOP OF CURB ELEVATION		DRAINAGE BASIN DIVIDE
• 99.0	PROPOSED SPOT ELEVATION		UNIT BOUNDARY
09.0 ⊗	EXISTING SPOT ELEVATION (GRND & TC)		SWALE
	EROSION CONTROL BERM		FLOW-ARROW
	PROPOSED CONCRETE VALLEY GUTTER		PROPOSED RETAINING WALL
	EXISTING CURB & GUTTER	— 30" SD —	EXISTING STORM DRAIN
	PROPOSED MOUNTABLE CURB & GUTTER	— 30" SD —	PROPOSED STORM DRAIN
	PROPOSED STANDARD CURB & GUTTER.		WATER BLOCK (HIGH POINT)
	EXISTING CONTOUR W/ INDEX ELEVATION		



EROSION CONTROL BERM
TYPICAL SECTION THROUGH BERM
NOT TO SCALE



TYPICAL REAR YARD DETAIL
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PRELIMINARY GRADING AND DRAINAGE PLAN
PARK WEST SUBDIVISION COMPOSITE PLAN

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2 UNIT 1
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5-6 UNIT 5
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8 DRAINAGE CHANNEL PROFILE AND DETAILS
8A UNIT 2
8B UNIT 4

SHEET 1 OF 8-

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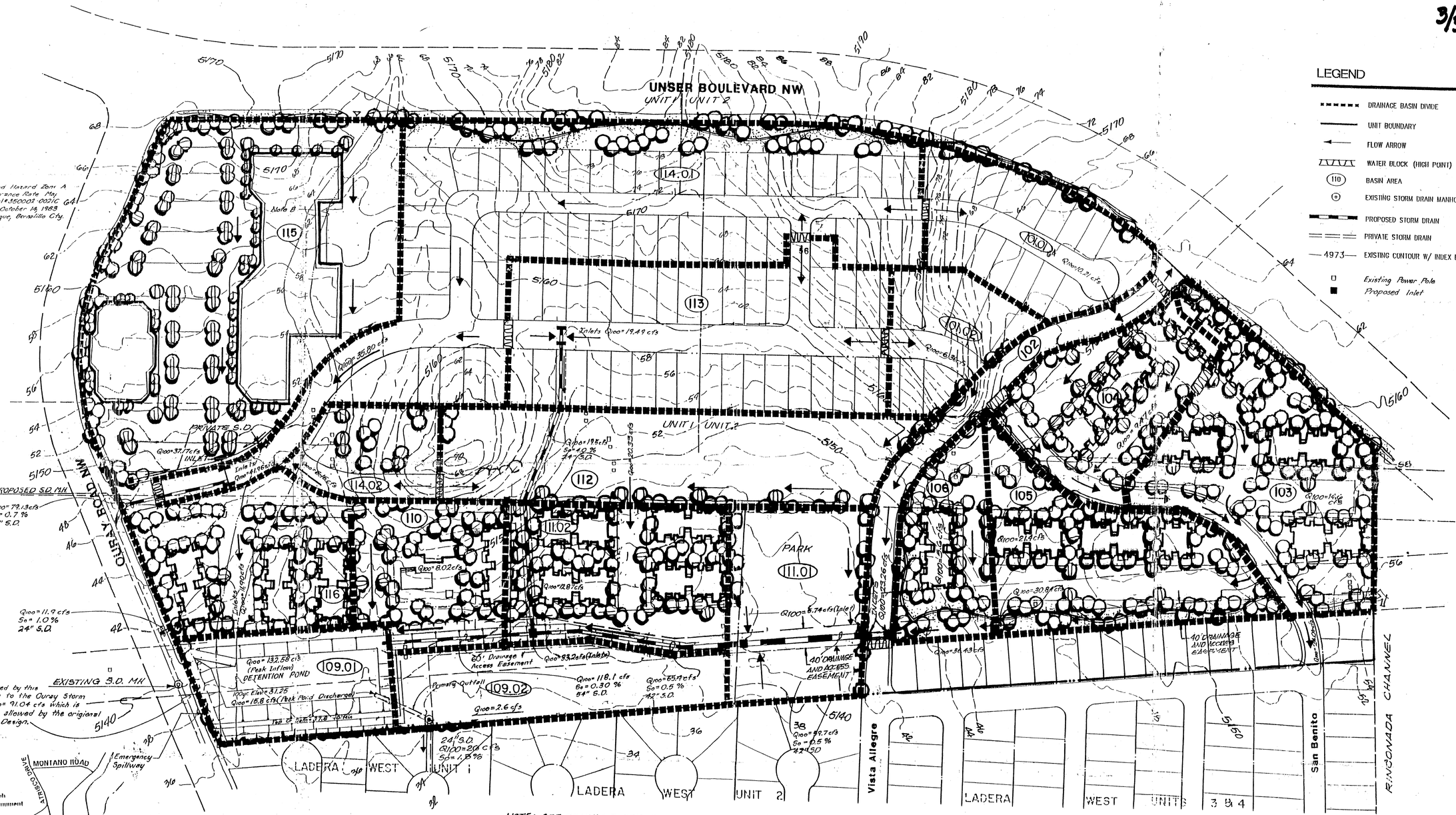
G:\14318\PRESGCO.DWG (PRELIM GAD COMPOSITE) XREF COTOPO.DWG

2/3

PETROGLYPH NATIONAL MONUMENT

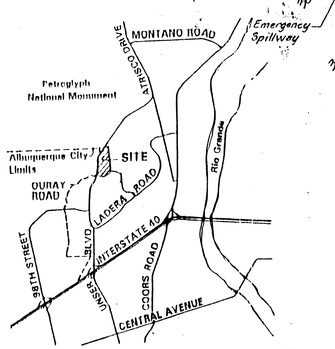
3/3



NOTE: SEE DRAINAGE REPORT FOR LADERA WEST UNITS 3 AND 4 FOR POND SIZING.

LEGEND

- DRAINAGE BASIN DIVIDE
- UNIT BOUNDARY
- FLOW ARROW
- WATER BLOCK (HIGH POINT)
- (110) BASIN AREA
- EXISTING STORM DRAIN MANHOLE
- PROPOSED STORM DRAIN
- PRIVATE STORM DRAIN
- 4973 EXISTING CONTOUR W/ INDEX ELEVATION
- Existing Power Pole
- Proposed Inlet



SITE VICINITY

0 25 50 100 200 300
GRAPHIC SCALE IN FEET

RINCONADA POINT 1 & 2 OFF-SITE DRAINAGE MASTER PLAN

A) THIS IS NOT AN APPROVED MASTER ZONING PLAN. IT IS A WORST CASE SCENARIO OF THE DEVELOPMENT DENSITIES FOR THE PURPOSE OF IDENTIFYING THE MAJOR FUTURE DRAINAGE INFRASTRUCTURE THAT IS EXPECTED TO CONTROL THE OFF-SITE DRAINAGE AS IT MIGHT IMPACT THE CURRENTLY PROPOSED DEVELOPMENT OF THE LADERA WEST SUBDIVISION.

B) THE LAYOUT OF THIS PLAN IS PRESENTED HERE AS ONE OF THE POSSIBILITIES AND IS SUBJECT TO CHANGE AS EACH OF THESE AREAS DEVELOP. THIS PLAN IS INTENDED AS A GUIDE FOR FUTURE DEVELOPMENT AND IS SUBJECT TO MINOR DEVIATIONS WHICH ARE TO BE IDENTIFIED IN SUBSEQUENT DRAINAGE PLANS FOR THE INDIVIDUAL DEVELOPMENTS.

C) THE KEY POINTS OF THIS MASTER PLAN ARE:

1. THAT THERE WILL BE ONLY ON POND.

2. THAT THERE WILL BE ONLY ONE DRAINAGE CONNECTION TO THE RINCONADA CHANNEL. IT IS TO BE CONSTRUCTED WITH UNITS 3 AND 4 OF THE LADERA WEST SUBDIVISION. PROVISIONS ARE TO BE MADE BY THAT DEVELOPMENT TO RECEIVE AND CONVEY TO THE RINCONADA THE RUN-OFF FROM SUB-BASINS 103 AND 104 AS SHOWN ON THIS PLAN OR AN EQUIVALENT AREA. NOTE THAT PROVISIONS HAVE ALSO BEEN MADE FOR AREA #104 TO ALTERNATELY DRAIN TO THE POND.

RINCONADA POINT UNITS 1 & 2
MASTER DRAINAGE PLAN

BEING AN UPDATE OF LADERA WEST SUBDIVISION
OFFSITE DRAINAGE MASTER PLAN

Prepared For:
Cmb, Inc.
6301 Indian School Road NE, Suite 680
Albuquerque, NM 87110

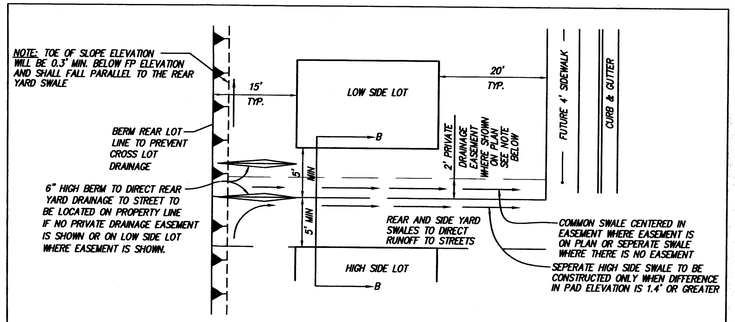
REVISED OCT. 14, 1993

DATE: 10-7-93
SCALE: 1" = 100'
DESIGNED: 10-11-93

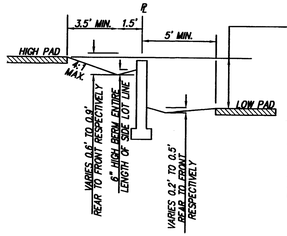
community sciences corporation

LEGEND

- 5180 — EXISTING CONTOUR (MAJOR)
- EXISTING CONTOUR (MINOR)
- EXISTING SPOT ELEVATION
- EXISTING CONCRETE CURB
- EXISTING WALL OR HEAD WALL
- EXISTING SIGN
- EXISTING WOOD FENCE
- EXISTING CHAIN LINK FENCE
- EXISTING TREE
- EXISTING SANITARY SEWER MANHOLE
- EXISTING STORM SEWER MANHOLE
- EXISTING FIRE HYDRANT
- EXISTING ELECTRIC TRANSFORMER
- EXISTING OVERHEAD ELECTRIC LINE
- EXISTING GUY WIRE
- EXISTING POWER POLE
- EXISTING TELEPHONE BOX
- EXISTING SPRINKLER CONTROL
- EXISTING WATER VALVE
- EXISTING WATER METER
- EXISTING DROP INLET
- EXISTING TRAFFIC LIGHT
- EXISTING PULLBOX
- EXISTING STREET LIGHT
- EXISTING BOLLARD
- NEW CURB & GUTTER
- NEW STANDARD CURB & GUTTER
- NEW SIDEWALK
- NEW RIGHT-OF-WAY
- NEW CENTERLINE
- NEW LOT LINES
- NEW EASEMENTS
- NEW GARDEN WALL
- NEW PERIMETER RETAINING WALL
- NEW SIDE LOT RETAINING WALL
- 20.00 NEW SPOT ELEVATIONS
- NEW FLOW
- NEW ROCK SWALE
- NEW SLOPE
- 10' ASPHALT TRAIL THIS PRJECT
- NATIVE SEED & GRAVEL MULCH WITH FERTILIZER AND SUPPLIMENTAL WATER ON 2:1 SLOPE.
- NEW 4' SIDEWALK CONSTRUCTED THIS PRJECT

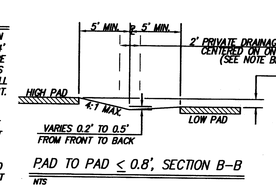


TYPICAL LOT GRADING DETAILS
NTS



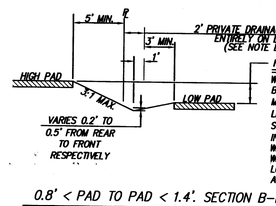
NOTE:
WHERE THE DIFFERENCE IN ELEVATION BETWEEN THE ADJACENT PADS IS 1.4' OR MORE A RETAINING WALL MUST BE CONSTRUCTED BETWEEN THE LOTS AS SHOWN ON THE PLAN AND THERE WILL BE NO PRIVATE DRAINAGE EASEMENT. EACH LOT OWNER MUST CONSTRUCT, OPERATE, AND MAINTAIN HIS OWN SEPARATE DRAINAGE SWALE ALL THE WAY TO THE STREET AND CROSS LOT DRAINAGE WILL BE PREVENTED BY SOME COMBINATION OF WALLS AND BERMS ON THE COMMON LOT LINE TO BE JOINTLY MAINTAINED BY BOTH LOT OWNERS.

PAD TO PAD ≥ 1.4', SECTION B-B
NTS



NOTE:
WHERE THE DIFFERENCE IN ELEVATION BETWEEN THE ADJACENT PADS IS 0.8' OR LESS, THE INVERT OF THE COMMON SWALE SHALL BE LOCATED ON THE PROPERTY LINE AND A 2' WIDE PRIVATE DRAINAGE EASEMENT IS TO BE CENTERED ON THE LOT LINE.

PAD TO PAD ≤ 0.8', SECTION B-B
NTS

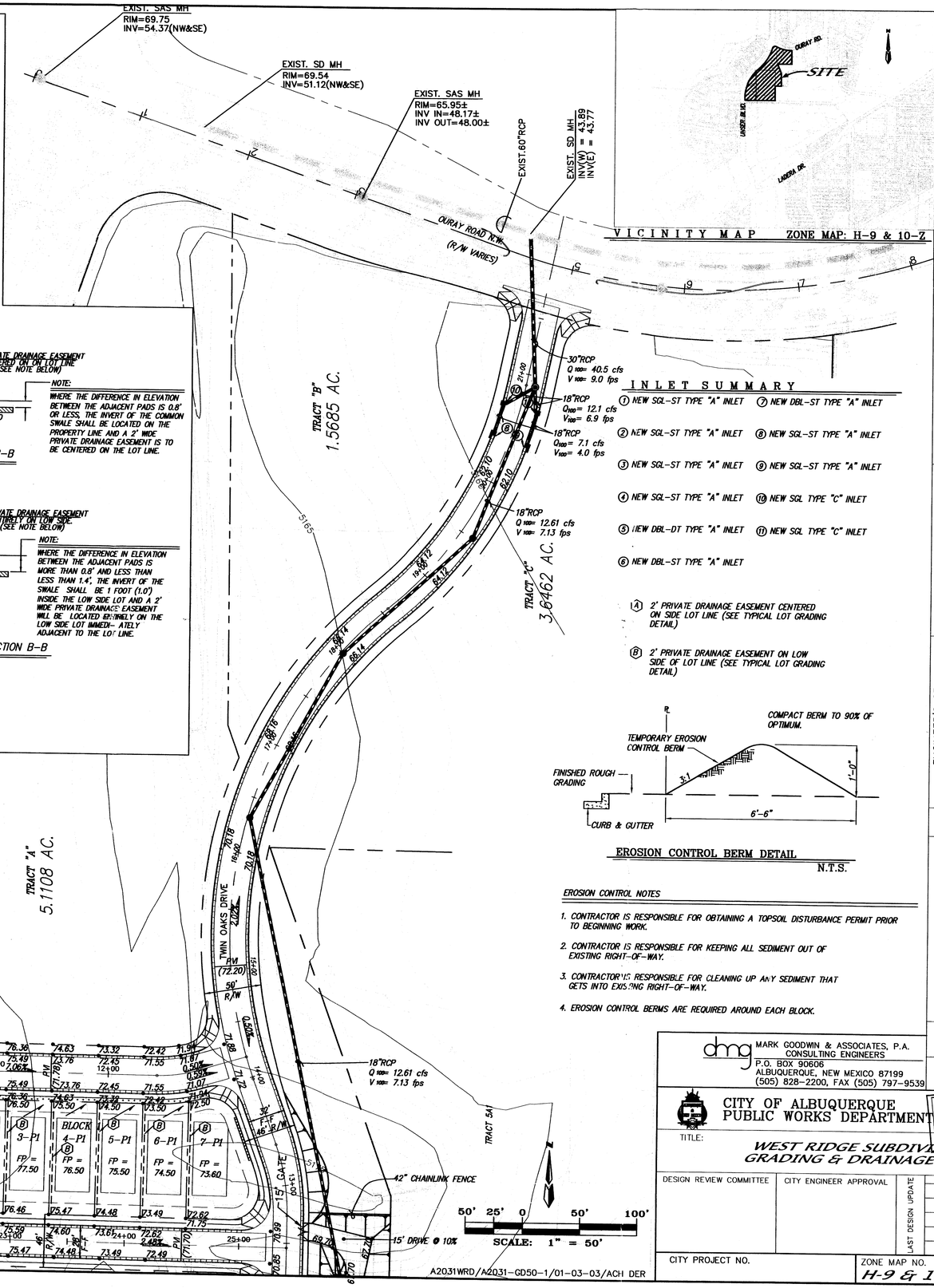


NOTE:
WHERE THE DIFFERENCE IN ELEVATION BETWEEN THE ADJACENT PADS IS MORE THAN 0.8' AND LESS THAN LESS THAN 1.4', THE INVERT OF THE SWALE SHALL BE 1 FOOT (1.0') INSIDE THE LOW SIDE LOT AND A 2' WIDE PRIVATE DRAINAGE EASEMENT WILL BE LOCATED ENTIRELY ON THE LOW SIDE LOT IMMEDI- ATELY ADJACENT TO THE LOT LINE.

0.8' < PAD TO PAD < 1.4'. SECTION B-B
NTS

PRIVATE DRAINAGE EASEMENTS

2' WIDE PRIVATE DRAINAGE EASEMENTS ARE LOCATED IN SOME SIDE YARDS AS SHOWN HEREON. WHERE THE DIFFERENCE IN ELEVATION BETWEEN THE TWO ADJACENT PADS IS 0.8' OR LESS THE EASEMENT IS CENTERED ON THE LOT LINE. WHERE THE DIFFERENCE IS MORE THAN 0.8' BUT LESS THAN 1.4' THE EASEMENT IS ENTIRELY ON THE LOW SIDE OF THE LOT LINE AND IMMEDIATELY ADJACENT TO THAT LOT LINE. WHERE THE EASEMENT IS CENTERED ON THE LOT LINE IT IS FOR THE MUTUAL BENEFIT OF BOTH LOT OWNERS AND IS TO BE JOINTLY MAINTAINED. WHERE THE EASEMENT IS ENTIRELY ON THE LOW SIDE OF THE LOT LINE THE EASEMENT IS FOR THE BENEFIT OF THE ADJACENT "HIGH SIDE" LOT OWNER AND SHALL BE MAINTAINED BY THE UNDERLYING "LOW SIDE" LOT OWNER. NEITHER LOT OWNER IS ALLOWED TO CHANGE THE PLANNED GRADE WITHIN THE 2' WIDE PRIVATE DRAINAGE EASEMENT, NOR SHALL EITHER LOT OWNER PLACE ANY LOOSE MATERIAL ADJACENT TO THE EASEMENT THAT HAS THE POTENTIAL TO BE MOVED INTO THE DRAINAGE EASEMENT OR IN ANY OTHER WAY BLOCK DRAINAGE IN ANY PORTION OF THE EASEMENT, EXCEPT THAT A FENCE OR BLOCK WALL MAY BE CENTERED ON THE LOT LINE. UNDER NO CIRCUMSTANCES SHALL THE GRADE ADJACENT TO THE EASEMENT ON EITHER SIDE OF THE EASEMENT BE CHANGED EXCEPT BY A STRUCTURALLY SOUND RETAINING WALL, AS DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER OR ARCHITECT. WHERE NO EASEMENT IS SHOWN ON THE PLAT EACH LOT OWNER MUST CONSTRUCT, OPERATE AND MAINTAIN HIS OWN SEPARATE SWALE ALL THE WAY TO THE STREET AND CROSS LOT DRAINAGE WILL BE PREVENTED BY SOME COMBINATION OF THE WALLS AND BERMS ON THE COMMON LOT LINE TO BE JOINTLY MAINTAINED BY BOTH LOT OWNERS.



VICINITY MAP ZONE MAP: H-9 & 10-Z

INLET SUMMARY

1. NEW SGL-ST TYPE "A" INLET
2. NEW SGL-ST TYPE "A" INLET
3. NEW SGL-ST TYPE "A" INLET
4. NEW SGL-ST TYPE "A" INLET
5. NEW DBL-DT TYPE "A" INLET
6. NEW DBL-ST TYPE "A" INLET
7. NEW DBL-ST TYPE "A" INLET
8. NEW SGL-ST TYPE "A" INLET
9. NEW SGL-ST TYPE "A" INLET
10. NEW SGL TYPE "C" INLET
11. NEW SGL TYPE "C" INLET

(A) 2' PRIVATE DRAINAGE EASEMENT CENTERED ON SIDE LOT LINE (SEE TYPICAL LOT GRADING DETAIL)

(B) 2' PRIVATE DRAINAGE EASEMENT ON LOW SIDE OF LOT LINE (SEE TYPICAL LOT GRADING DETAIL)

EROSION CONTROL BERM DETAIL
N.T.S.

EROSION CONTROL NOTES

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
2. CONTRACTOR IS RESPONSIBLE FOR KEEPING ALL SEDIMENT OUT OF EXISTING RIGHT-OF-WAY.
3. CONTRACTOR IS RESPONSIBLE FOR CLEANING UP ANY SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.
4. EROSION CONTROL BERMS ARE REQUIRED AROUND EACH BLOCK.

A2031WRD/A2031-GD50-1/01-03-03/ACH DER

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 JAN 06 2003 HYDROLOGY SECTION

TITLE: WEST RIDGE SUBDIVISION 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
	H-9 & 10	1	2

AS BUILT INFORMATION

		DATE
CONTRACTOR		
WORK STAKED	BY	
STAKED	BY	
INSPECTOR'S CHANGE	BY	
FIELD VERIFICATION	BY	
DRAWINGS CORRECTED	BY	

MICRO-FILM INFORMATION

		DATE
RECORDED	BY	
NO.		

BENCH MARKS

ACS BRASS CAP STAMPED "9H-39" FROM THE INTERSECTION OF COORS RD. N.W. AND I-40, 0.4 MILES NORTH ON OURAY RD. THEN LEFT 0.7 MILES TO END OF PAVEMENT. CONTINUING ON DIRT ROAD 0.9 MILES PASSED A POWER SUBSTATION TO A CROSSROAD. TURN LEFT 0.4 MILES TO A CROSSROAD. THEN LEFT 0.1 MILES TO THE STATION ON THE RIGHT.
GEOGRAPHIC POSITION (NAD 1927), IN FT.
N.M. STATE PLANE COORDINATES (CENTRAL ZONE)
X=356,780.08, Y=1,494,777.28 ELEVATION=5195.46, NGVD29, IN FT.

SURVEY INFORMATION

FIELD NOTES

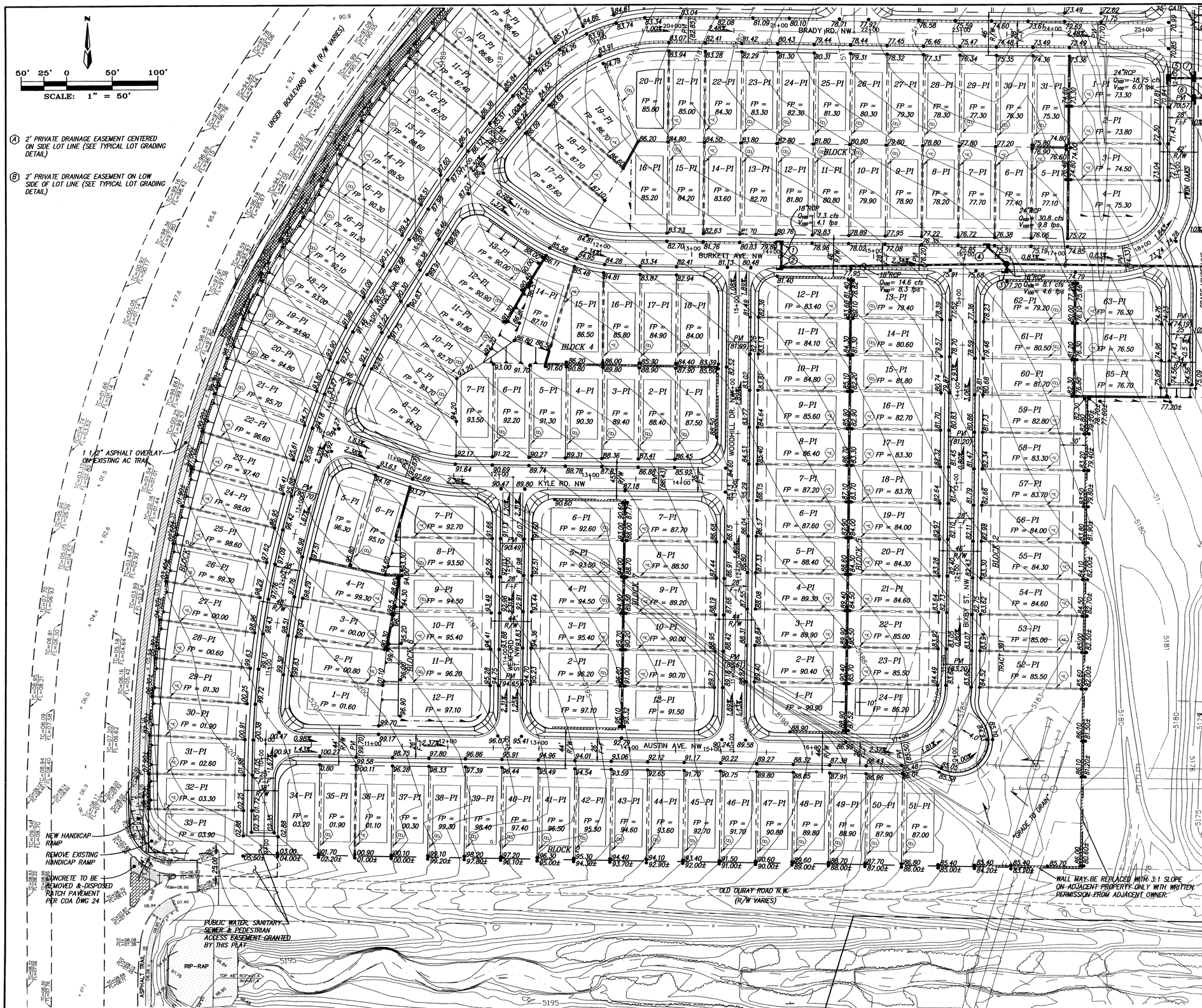
NO.	BY	DATE

ENGINEER'S SEAL

JAMES D. HUGHES NEW MEXICO REGISTERED PROFESSIONAL ENGINEER 11967 1-2-03

NO.	DATE	REMARKS	BY
		REVISIONS	

		DATE
DESIGN		
DESIGNED BY	JDH	08/02
DRAWN BY	ACH	08/02
CHECKED BY	DMG	08/02



F:\A02JOBS\A2031WRD\A2031-GD50-2.dwg Mon Jan 06 08:35:02 2003 D. MARK GOODWIN & ASSOCIATES PLOTTED BY: DER

AS BUILT INFORMATION

CONTRACTOR		DATE
REDLINE MARKUP STAMPED BY		DATE
INSPECTOR'S ACCEPTANCE BY		DATE
FIELD VERIFICATION BY		DATE
AS-BUILT DRAWINGS CORRECTED BY		DATE

MICRO-FILM INFORMATION

RECORDED BY		DATE
NO.		

SURVEY INFORMATION

BENCH MARKS

ACS BRASS CAP STAMPED "BH-39" FROM THE INTERSECTION OF COORS RD. N.W. AND I-40, 0.4 MILES NORTH ON OURAY RD. THEN LEFT 0.7 MILES TO END OF PAVEMENT. CONTINUING ON DIRT ROAD 0.9 MILES PASSED A POWER SUBSTATION TO A CROSSROAD. TURN LEFT 0.4 MILES TO A CROSSROAD. THEN LEFT 0.1 MILES TO THE STATION ON THE RIGHT.

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FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

JAMES A. HUNT 16674 NEW MEXICO REGISTERED PROFESSIONAL ENGINEER 1-2-03

NO.	DATE	REMARKS	BY
		REVISIONS	

			DATE
DESIGNED BY	JDH	DESIGN	08/02
DRAWN BY	ACH		08/02
CHECKED BY	DMG		08/02

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

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

TITLE:

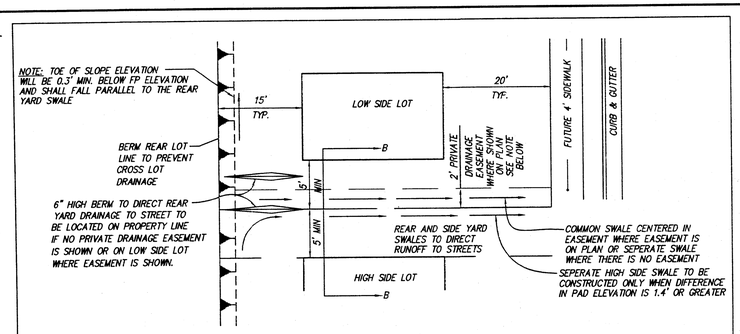
WEST RIDGE SUBDIVISION GRADING & DRAINAGE PLAN

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

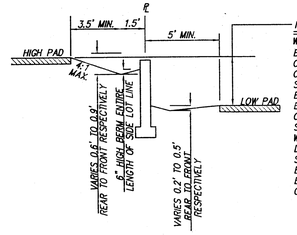
CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
	H-9 & 10	2	2

LEGEND

- 5180 — EXISTING CONTOUR (MAJOR)
- 5179 — EXISTING CONTOUR (MINOR)
- EXISTING SPOT ELEVATION
- EXISTING CONCRETE CURB
- EXISTING WALL OR HEAD WALL
- EXISTING SIGN
- EXISTING WOOD FENCE
- EXISTING CHAIN LINK FENCE
- EXISTING TREE
- EXISTING SANITARY SEWER MANHOLE
- EXISTING STORM SEWER MANHOLE
- EXISTING FIRE HYDRANT
- EXISTING ELECTRIC TRANSFORMER
- EXISTING OVERHEAD ELECTRIC LINE
- EXISTING GUY WIRE
- EXISTING POWER POLE
- EXISTING TELEPHONE BOX
- EXISTING SPRINKLER CONTROL
- EXISTING WATER VALVE
- EXISTING WATER METER
- EXISTING DROP INLET
- EXISTING TRAFFIC LIGHT
- EXISTING PULLBOX
- EXISTING STREET LIGHT
- EXISTING BOLLARD
- NEW CURB & GUTTER
- NEW STANDARD CURB & GUTTER
- NEW SIDEWALK
- NEW RIGHT-OF-WAY
- NEW CENTERLINE
- NEW LOT LINES
- NEW EASEMENTS
- NEW GARDEN WALL
- NEW PERIMETER RETAINING WALL
- NEW SIDE LOT RETAINING WALL
- 20.00 — NEW SPOT ELEVATIONS
- NEW FLOW
- NEW ROCK SWALE
- NEW SLOPE
- 10' ASPHALT TRAIL THIS PRJECT
- NATIVE SEED & GRAVEL MULCH WITH FERTILIZER AND SUPPLIMENTAL WATER ON 2:1 SLOPE.
- NEW 4' SIDEWALK CONSTRUCTED THIS PRJECT

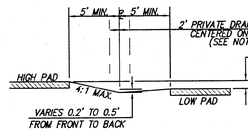


TYPICAL LOT GRADING DETAILS
NTS



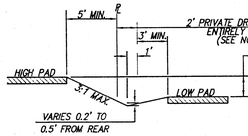
NOTE:
WHERE THE DIFFERENCE IN ELEVATION BETWEEN THE ADJACENT PADS IS 1.4' OR MORE A RETAINING WALL MUST BE CONSTRUCTED BETWEEN THE LOTS AS SHOWN ON THE PLAN AND THERE WILL BE NO PRIVATE DRAINAGE EASEMENT. EACH LOT OWNER MUST CONSTRUCT, OPERATE, AND MAINTAIN HIS OWN SEPARATE DRAINAGE SWALE ALL THE WAY TO THE STREET AND CROSS LOT DRAINAGE WILL BE PREVENTED BY SOME COMBINATION OF WALLS AND BERMS ON THE COMMON LOT LINE TO BE JOINTLY MAINTAINED BY BOTH LOT OWNERS.

PAD TO PAD ≥ 1.4', SECTION B-B
NTS



NOTE:
WHERE THE DIFFERENCE IN ELEVATION BETWEEN THE ADJACENT PADS IS 0.8' OR LESS, THE INVERT OF THE COMMON SWALE SHALL BE LOCATED ON THE PROPERTY LINE AND A 2' WIDE PRIVATE DRAINAGE EASEMENT IS TO BE CENTERED ON THE LOT LINE.

PAD TO PAD ≤ 0.8', SECTION B-B
NTS

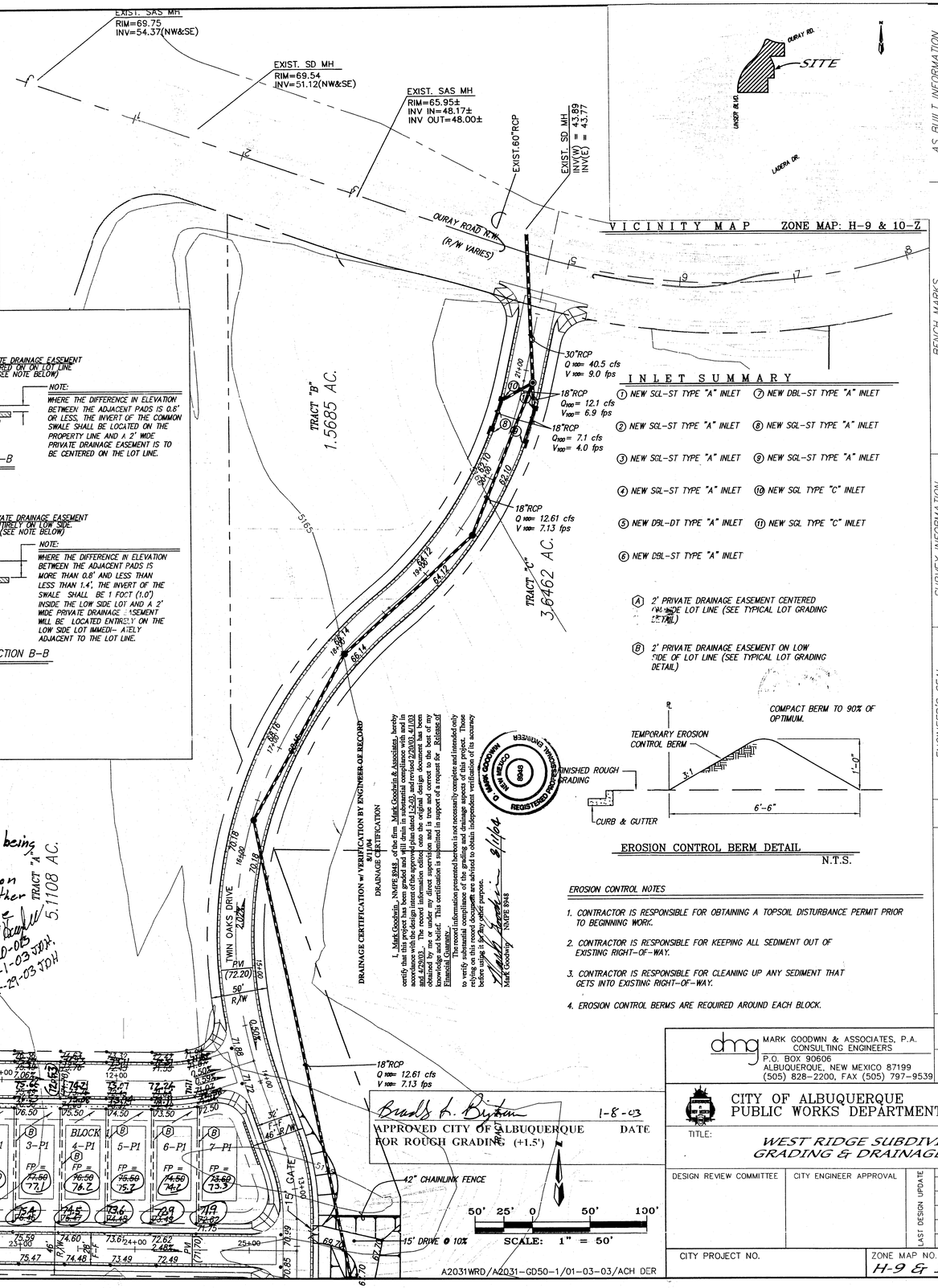


NOTE:
WHERE THE DIFFERENCE IN ELEVATION BETWEEN THE ADJACENT PADS IS MORE THAN 0.8' AND LESS THAN LESS THAN 1.4', THE INVERT OF THE SWALE SHALL BE 1 FOOT (1.0') INSIDE THE LOW SIDE LOT AND A 2' WIDE PRIVATE DRAINAGE EASEMENT WILL BE LOCATED ENTIRELY ON THE LOW SIDE LOT IMMEDIATELY ADJACENT TO THE LOT LINE.

0.8' < PAD TO PAD < 1.4', SECTION B-B
NTS

PRIVATE DRAINAGE EASEMENTS

2' WIDE PRIVATE DRAINAGE EASEMENTS ARE LOCATED IN SOME SIDE YARDS AS SHOWN HEREON. WHERE THE DIFFERENCE IN ELEVATION BETWEEN THE TWO ADJACENT PADS IS 0.8' OR LESS THE EASEMENT IS CENTERED ON THE LOT LINE. WHERE THE DIFFERENCE IS MORE THAN 0.8' BUT LESS THAN 1.4' THE EASEMENT IS ENTIRELY ON THE LOW SIDE OF THE LOT LINE AND IMMEDIATELY ADJACENT TO THAT LOT LINE. WHERE THE EASEMENT IS CENTERED ON THE LOT LINE IT IS FOR THE MUTUAL BENEFIT OF BOTH LOT OWNERS AND IS TO BE JOINTLY MAINTAINED. WHERE THE EASEMENT IS ENTIRELY ON THE LOW SIDE OF THE LOT LINE THE EASEMENT IS FOR THE BENEFIT OF THE ADJACENT "HIGH SIDE" LOT OWNER AND SHALL BE MAINTAINED BY THE UNDERLYING "LOW SIDE" LOT OWNER. NEITHER LOT OWNER IS ALLOWED TO CHANGE THE PLANNED GRADE WITHIN THE 2' WIDE PRIVATE DRAINAGE EASEMENT, NOR SHALL EITHER LOT OWNER PLACE ANY LOOSE MATERIAL ADJACENT TO THE EASEMENT THAT HAS THE POTENTIAL TO BE MOVED INTO THE DRAINAGE EASEMENT OR IN ANY OTHER WAY BLOCK DRAINAGE IN ANY PORTION OF THE EASEMENT, EXCEPT THAT A FENCE OR BLOCK WALL MAY BE CENTERED ON THE LOT LINE. UNDER NO CIRCUMSTANCES SHALL THE GRADE ADJACENT TO THE EASEMENT ON EITHER SIDE OF THE EASEMENT BE CHANGED EXCEPT BY A STRUCTURALLY SOUND RETAINING WALL AS DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER OR ARCHITECT. WHERE NO EASEMENT IS SHOWN ON THE PLAT EACH LOT OWNER MUST CONSTRUCT, OPERATE AND MAINTAIN HIS OWN SEPARATE SWALE ALL THE WAY TO THE STREET AND CROSS LOT DRAINAGE WILL BE PREVENTED BY SOME COMBINATION OF WALLS AND BERMS ON THE COMMON LOT LINE TO BE JOINTLY MAINTAINED BY BOTH LOT OWNERS.



Note: All onsite elevations are being Constructed 0.3' Lower than shown here on, but the corrected elevations on Brawley Rd. are true and need no further adjustment. The Infrastructure Plans are also true and do not need Lowered.

James B. Lewis 02-20-03
02-21-03 JDH.
Rev. 4-1-03 JDH
Rev. 4-29-03 JDH

INLET SUMMARY

1. NEW SGL-ST TYPE "A" INLET
2. NEW SGL-ST TYPE "A" INLET
3. NEW SGL-ST TYPE "A" INLET
4. NEW SGL-ST TYPE "A" INLET
5. NEW DBL-DT TYPE "A" INLET
6. NEW DBL-ST TYPE "A" INLET
7. NEW DBL-ST TYPE "A" INLET
8. NEW SGL-ST TYPE "A" INLET
9. NEW SGL-ST TYPE "A" INLET
10. NEW SGL TYPE "C" INLET
11. NEW SGL TYPE "C" INLET

(A) 2' PRIVATE DRAINAGE EASEMENT CENTERED ON LOT LINE (SEE TYPICAL LOT GRADING DETAIL)

(B) 2' PRIVATE DRAINAGE EASEMENT ON LOW SIDE OF LOT LINE (SEE TYPICAL LOT GRADING DETAIL)

EROSION CONTROL BERM DETAIL
N.T.S.

EROSION CONTROL NOTES

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
2. CONTRACTOR IS RESPONSIBLE FOR KEEPING ALL SEDIMENT OUT OF EXISTING RIGHT-OF-WAY.
3. CONTRACTOR IS RESPONSIBLE FOR CLEANING UP ANY SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.
4. EROSION CONTROL BERMS ARE REQUIRED AROUND EACH BLOCK.

DRAINAGE CERTIFICATION w/ VERIFICATION BY ENGINEER OF RECORD
8/11/04
DRAINAGE CERTIFICATION

I, Mark Goodwin, NMPE 8948, of the firm Mark Goodwin & Associates, 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 1-2-03, and revised 2/20/03, 4/1/03 and 4/29/03. The record information edited onto the original design document has been obtained by a field survey performed by me or under my supervision and is true to the best of my knowledge and belief. This certification is submitted in support of a request for Release of Financial Guaranty.

The record information presented hereon is not necessarily complete and intended only to certify substantial compliance with the approved design intent. Any parties intending to rely on this record document are advised to obtain independent verification of its accuracy before using it for any other purpose.

Mark Goodwin NMPE 8948

Brad S. Bytum 1-8-03
APPROVED CITY OF ALBUQUERQUE FOR ROUGH GRADING (+1.5') DATE

AS BUILT INFORMATION
CONTRACTOR — DATE
WORK STAKED BY
INSPECTOR'S ACCEPTANCE BY — DATE
FIELD VERIFICATION BY — DATE
AS BUILT BY
CORRECTED BY
MICRO-FILM INFORMATION
RECORDED BY — DATE
NO.

BENCH MARKS
ACS BRASS CAP STAMPED "BH-39" FROM THE INTERSECTION OF COORS RD. N.W. AND I-40, 0.4 MILES NORTH ON OURAY RD. THEN LEFT 0.7 MILES TO END OF PAVEMENT. CONTINUING ON DIRT ROAD 0.9 MILES PASSED A POWER SUBSTATION TO A CROSSROAD. TURN LEFT 0.4 MILES TO A CROSSROAD. THEN LEFT 0.1 MILES TO THE STATION ON THE RIGHT.
GEOGRAPHIC POSITION (NAD 1927), IN FT.
N.M. STATE PLANE COORDINATES (CENTRAL ZONE)
X=356,760.08, Y=1,194,717.28 ELEVATION=5195.46, NGVD29, IN FT.

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL
JAMES D. LEWIS NEW MEXICO 11574 REGISTERED PROFESSIONAL ENGINEER
1-2-03

NO.	DATE	REMARKS	BY	DATE
		REVISIONS		
		DESIGN		08/02

DESIGNED BY JDH — DATE 08/02
DRAWN BY ACH — DATE 08/02
CHECKED BY DMG — DATE 08/02

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 AUG 13 2004 HYDROLOGY SECTION

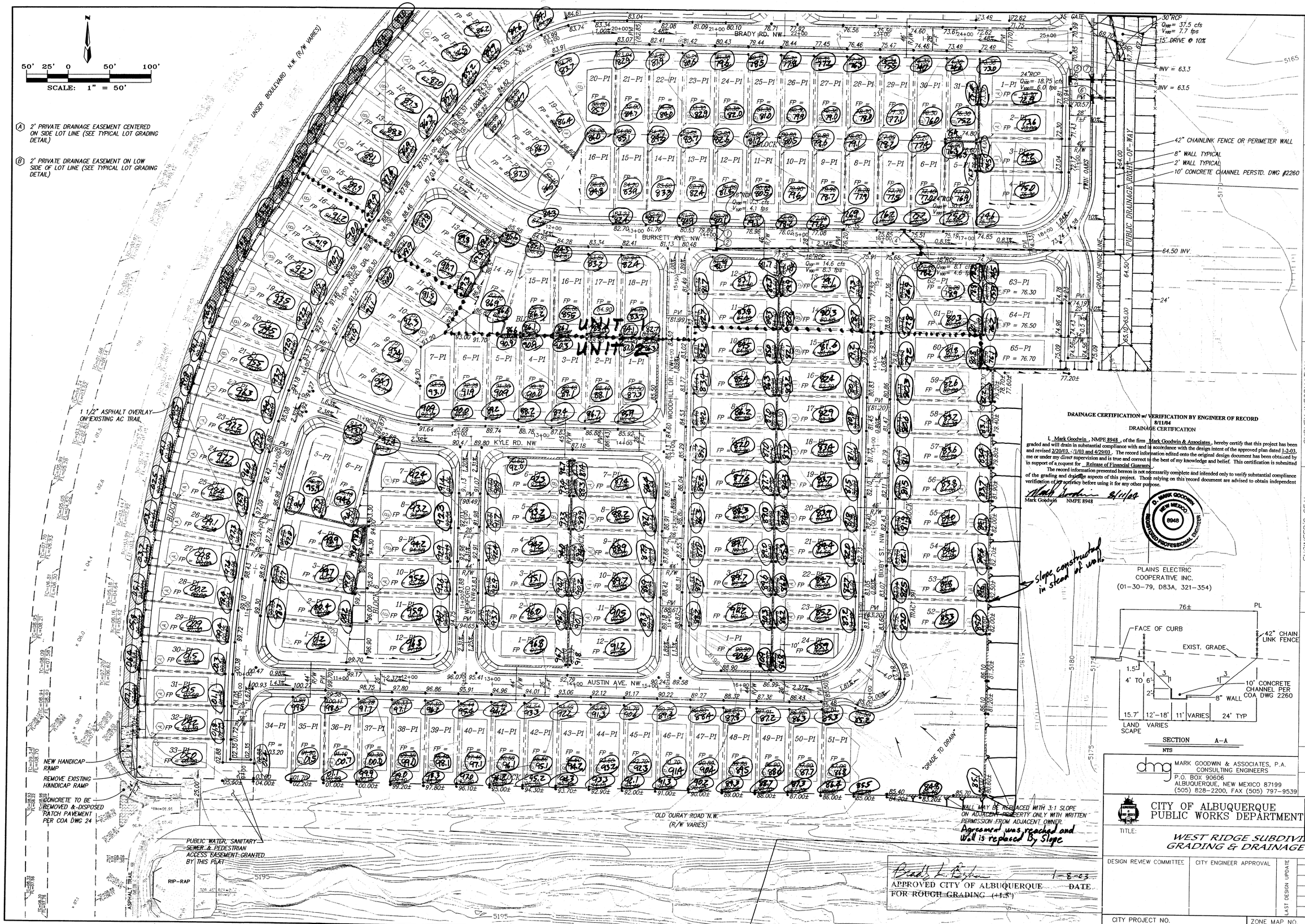
TITLE: WEST RIDGE SUBDIVISION GRADING & DRAINAGE PLAN

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

CITY PROJECT NO. | ZONE MAP NO. H-9 & 10 | SHEET 1 OF 2

A2031WRD/A2031-GD50-1/01-03-03/ACH DER

A:\12JOBS\A2031WRD\A2031-GD50-1.dwg, 01/06/03 09:14:15 AM, DER



DRAINAGE CERTIFICATION w/ VERIFICATION BY ENGINEER OF RECORD
8/11/04
DRAINAGE CERTIFICATION

I, Mark Goodwin, NMPE 8948, of the firm Mark Goodwin & Associates, 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 1-2-03, and revised 2/20/03, 7/1/03 and 4/29/03. The record information edited onto the original design document has been obtained by me or under my direct supervision and is true and correct to the best of my knowledge and belief. This certification is submitted in support of a request for Release of Financial Guarantee.

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 this record document are advised to obtain independent verification of its accuracy before using it for any other purpose.

Mark Goodwin 8/11/04
Mark Goodwin NMPE 8948

D. MARK GOODWIN NEW MEXICO 8948 REGISTERED PROFESSIONAL ENGINEER

APPROVED CITY OF ALBUQUERQUE DATE
FOR ROUGH GRADING (+1.5') 1-8-03

A2031WRD/A2031-GD50-2/01-03-03/ACH DER

AS BUILT INFORMATION

CONTRACTOR		
WORK STAKED BY		DATE
INSPECTOR'S ACCEPTANCE BY		DATE
FIELD VERIFICATION BY		DATE
DRAWINGS CORRECTED BY		DATE
MILAR-FILM INFORMATION		
RECORDED BY		DATE
NO.		

BENCH MARKS

ACS BRASS CAP STAMPED "BH-39" FROM THE INTERSECTION OF COORS RD. N.W. AND I-40, 0.4 MILES NORTH ON OURAY RD. THEN LEFT 0.7 MILES TO END OF PAVEMENT, CONTINUING ON DIRT ROAD 0.9 MILES PASSED A POWER SUBSTATION TO A CROSSROAD, TURN LEFT 0.4 MILES TO A CROSSROAD, THEN LEFT 0.1 MILES TO THE STATION ON THE RIGHT.
GEOMAPHIC POSITION (NAD 1927), IN FT
N.M. STATE PLANE COORDINATES (CENTRAL ZONE)
X=356,760.08, Y=1,494,777.28 ELEVATION=5195.46, NGVD29, IN FT.

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

JAMES D. HUGHES NEW MEXICO 11574 REGISTERED PROFESSIONAL ENGINEER 1-2-03

NO.	DATE	REMARKS	BY
		REVISIONS	

DESIGN		DATE
DESIGNED BY	JDH	08/02
DRAWN BY	ACH	08/02
CHECKED BY	DMG	08/02

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

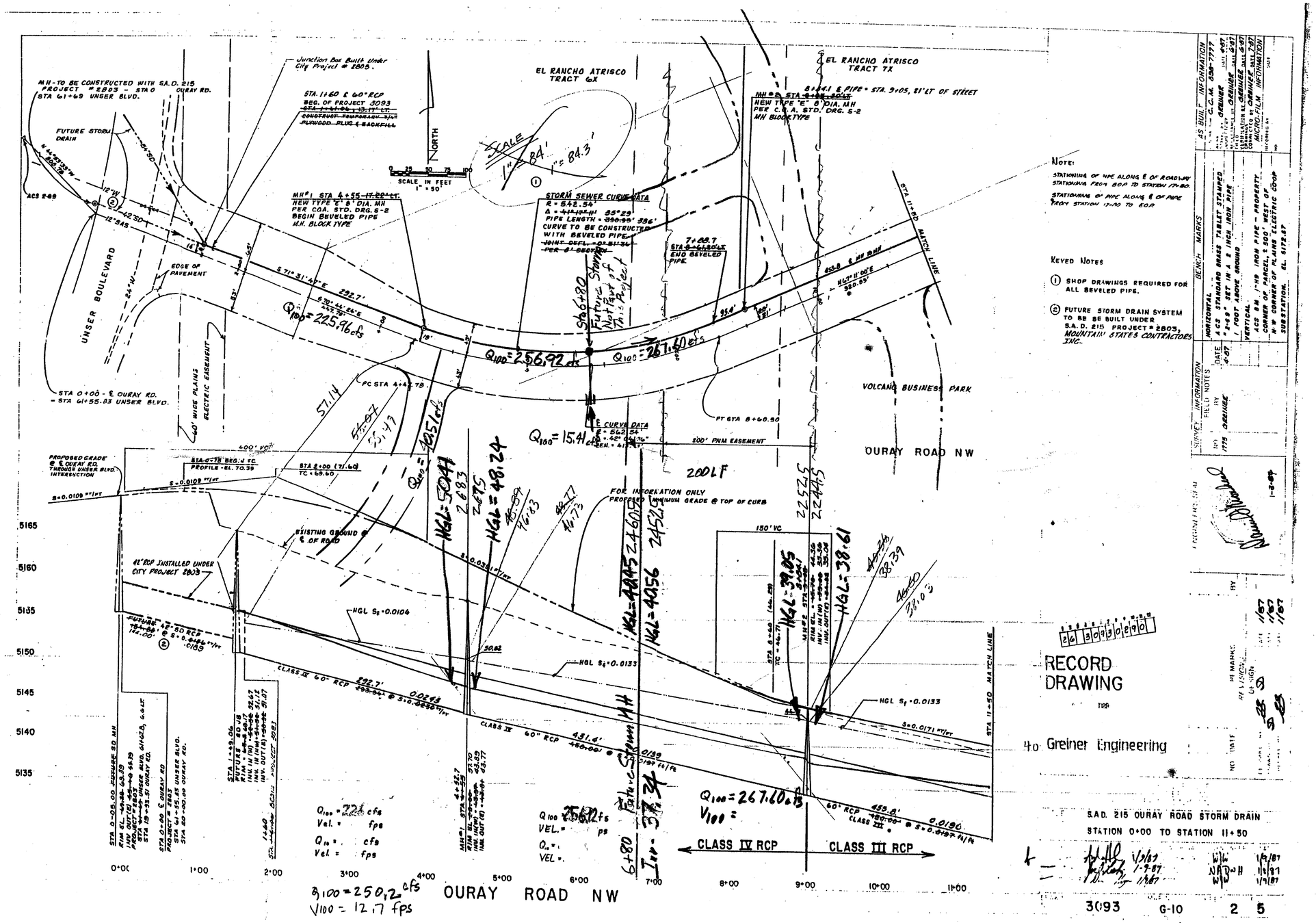
RECEIVED AUG 1 3 2004 HYDROLOGY SECTION

TITLE: WEST RIDGE SUBDIVISION
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
	H-9 & 10	2	2

B-06-30
AS BUILT OF OURAY



Note:

STATIONING OF PIPE ALONG ℄ OF ROADWAY STATIONING FROM BOP TO STATION 17+80

STATIONING OF PIPE ALONG ℄ OF PIPE FROM STATION 17+80 TO EOP

Keyed Notes

1. SHOP DRAWINGS REQUIRED FOR ALL BEVELED PIPE.
2. FUTURE STORM DRAIN SYSTEM TO BE BE BUILT UNDER S.A.D. 215 PROJECT # 2803, MOUNTAIN STATES CONTRACTORS INC.

AS BUILT INFORMATION
C.L.M. 530-7777
GREINER DATE 6-87
GREINER DATE 6-87
GREINER DATE 7-87
MICRO-FILM INFORMATION

BENCH MARKS
HORIZONTAL
A C.S. STANDARD BRASS TABLET STAMPED
1 FOOT ABOVE GROUND
VERTICAL
ACS #8, 1" HB IRON PIPE - PROPERTY CORNER OF PARCEL 1, 500' WEST OF
SUBSTATION. EL. 5172.47

SURVEY INFORMATION
FIELD NOTES
NO. 1773 GREINER DATE 6-87

RECORD DRAWING

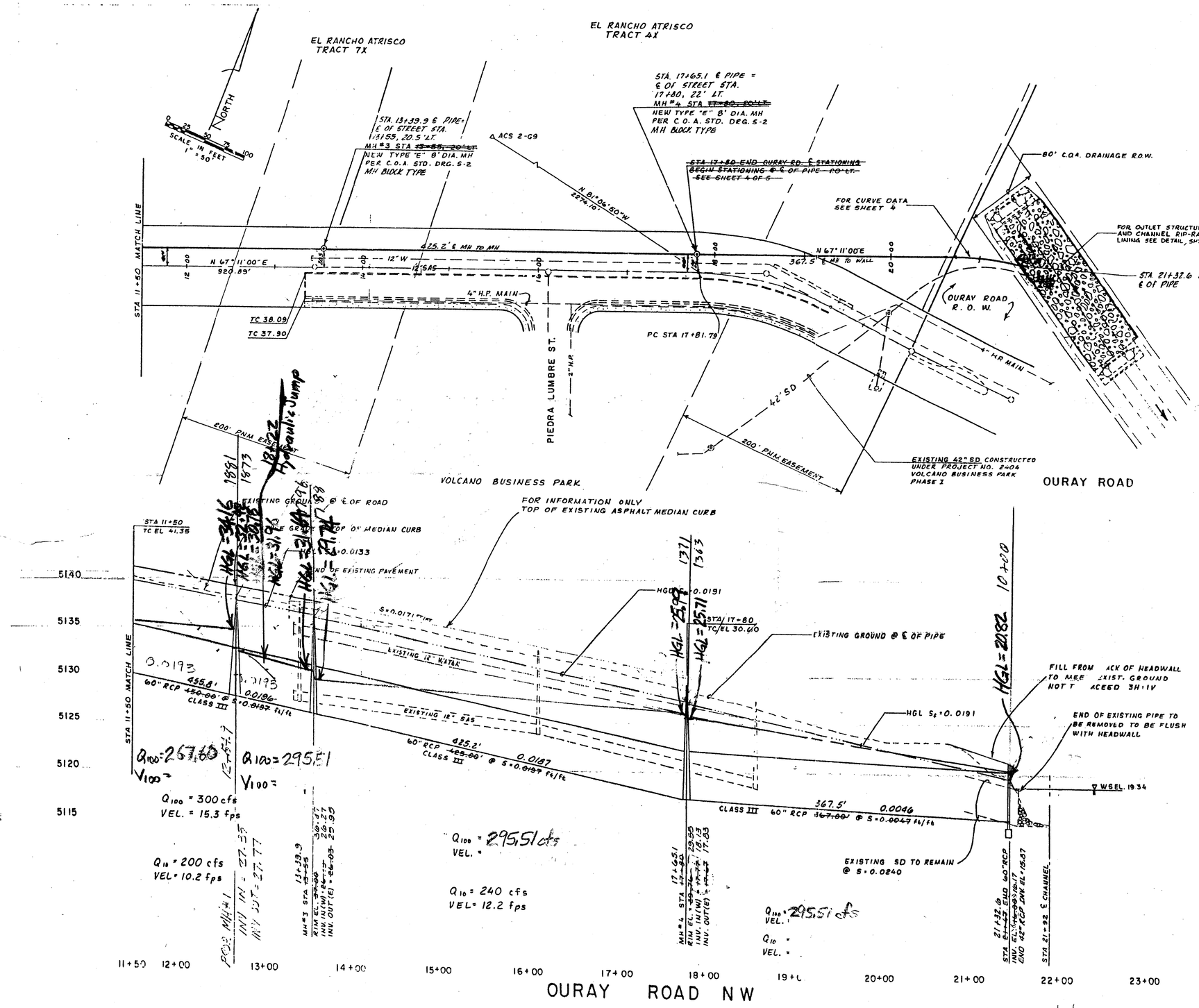
to Greiner Engineering

S.A.D. 215 OURAY ROAD STORM DRAIN
STATION 0+00 TO STATION 11+50

1/9/87
1-9-87
1/9/87

3093 G-10 2 5

CITY OF ALBUQUERQUE



NOTE:

STATIONING OF PIPE ALONG ℄ OF ROADWAY STATIONING FROM BOP TO STATION 17+80.

STATIONING OF PIPE ALONG ℄ OF PIPE FROM STATION 17+80 TO EOP.

RECORD DRAWING STATIONING AT CENTERLINE OF PIPE.

HORIZONTAL
ACS STANDARD BRASS TABLET STAMPED "2-G9" SET IN A 2 INCH IRON PIPE 1 FOOT ABOVE GROUND

VERTICAL
ACS BM 1-H9 IRON PIPE – PROPERTY CORNER OF PARCEL, 500' WEST OF N.W. CORNER OF PLAINS ELECTRIC COOP SUBSTATION. EL. 5172.67

	C.C.H.	838-7777	
	GREINER	4-87	
4-87	GREINER	6-87	
	GREINER	6-87	
1773 GREINER	GREINER	7-87	

1-8-87

RECORD DRAWING

S.A.D. 215 OURAY ROAD STORM DRAIN
STATION 11+50 TO END

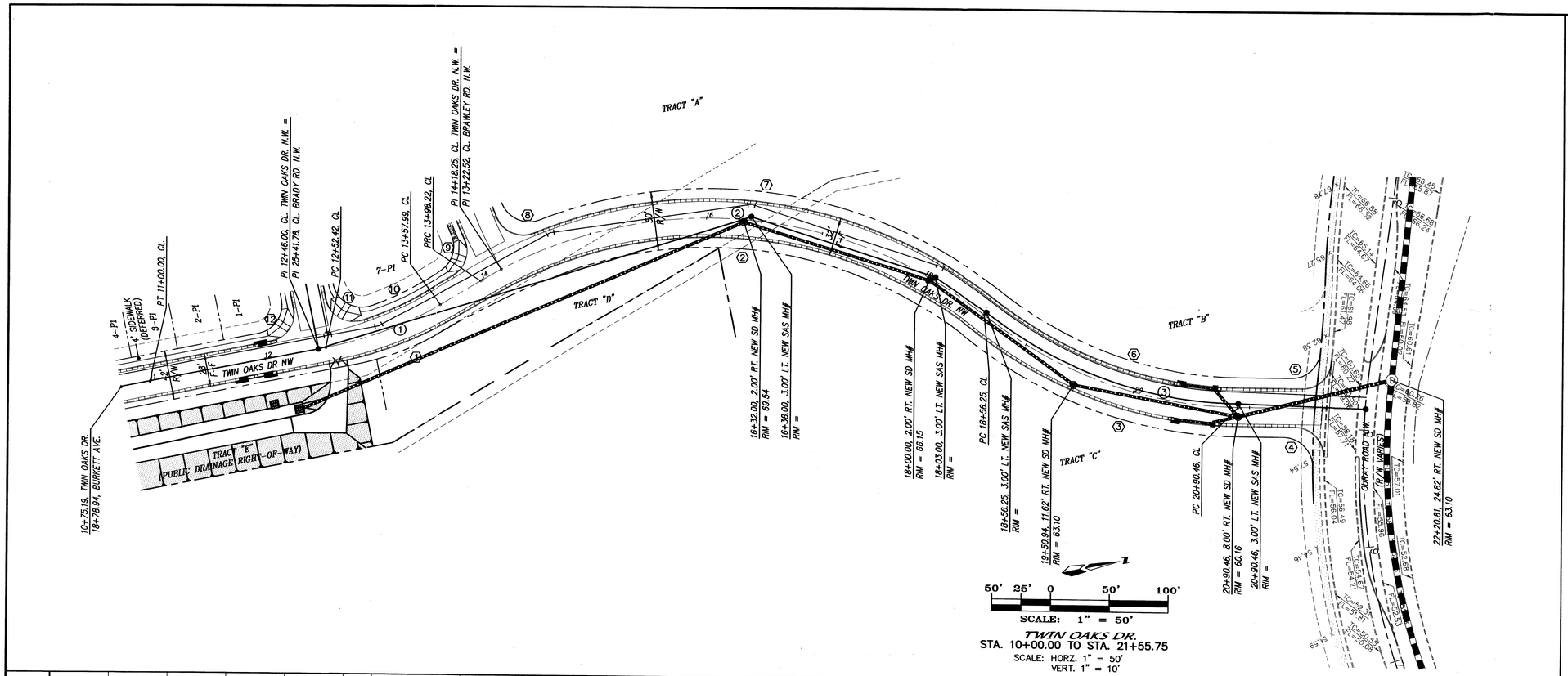
	1/9/87	W/W	1/9/87
	1-9-87	WA Dwn	1/9/87
	1/9/87	W/W	1/9/87

3093 G-10 3 5

C 20 B 16 A 12

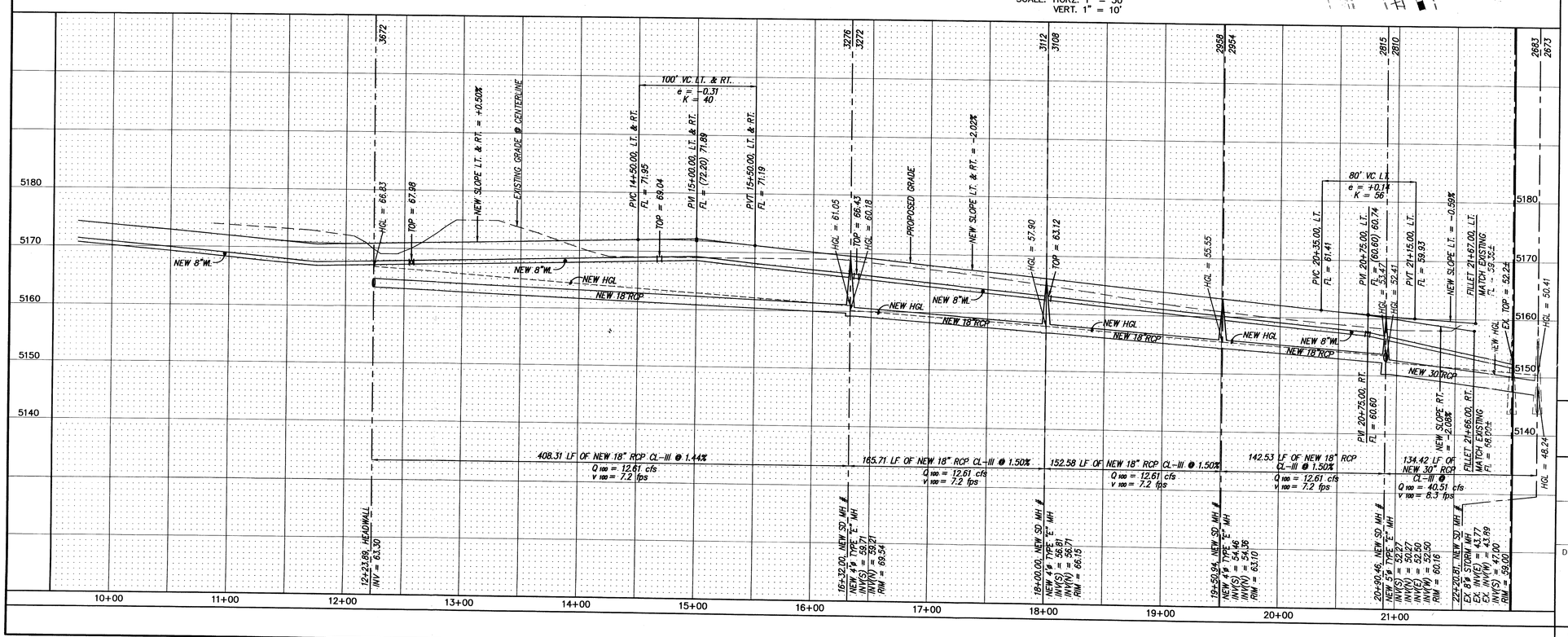
CITY OF ALBUQUERQUE

C



TWIN OAKS DR.
STA. 10+00.00 TO STA. 21+55.75

SCALE: HORZ. 1" = 50'
VERT. 1" = 10'



A2031WRD/PLANS/A2031PP-6/12-10-02/ACH

NOTES

1. ALL STATIONING IS CENTERLINE STATIONING.

CURVE DATA – DESCRIBES FACE OF CURB

① Δ = 20°09'46" R = 316.00' L = 111.20' T = 55.99'	② Δ = 69°58'55" R = 359.00' L = 438.49' T = 249.44'
③ Δ = 38°20'26" R = 336.00' L = 244.92' T = 116.36'	④ Δ = 90°00'58" R = 25.00' L = 39.28' T = 25.00'
⑤ Δ = 88°06'35" R = 25.00' L = 38.45' T = 24.17'	⑥ Δ = 38°20'26" R = 334.00' L = 223.50' T = 115.67'
⑦ Δ = 61°08'70" R = 391.00' L = 417.20' T = 230.72'	⑧ Δ = 89°06'23" R = 25.00' L = 38.88' T = 24.59'
⑨ Δ = 83°07'50" R = 25.00' L = 36.27' T = 22.15'	⑩ Δ = 11°41'41" R = 284.00' L = 57.97' T = 28.38'
⑪ Δ = 98°36'39" R = 25.00' L = 43.03' T = 28.94'	⑫ Δ = 89°51'25" R = 25.00' L = 39.21' T = 24.79'

CURVE DATA – DESCRIBES CENTERLINE

① Δ = 20°09'46" R = 300.00' L = 105.57' T = 53.15'	② Δ = 69°58'55" R = 375.00' L = 458.03' T = 260.56'
③ Δ = 38°20'26" R = 350.00' L = 234.21' T = 121.21'	

AS BUILT INFORMATION

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

BENCH MARKS

ACS BRASS CAP STAMPED "BH-39" FROM THE INTERSECTION OF COORS RD. N.W. AND I-40, 0.4 MILES NORTH ON OURAY RD. THEN LEFT 0.7 MILES TO END OF PAVEMENT, CONTINUING ON DIRT ROAD 0.9 MILES PASSED A POWER SUBSTATION TO A CROSSROAD. TURN LEFT 0.4 MILES TO A CROSSROAD. THEN LEFT 0.1 MILES TO THE STATION ON THE RIGHT.

GEOGRAPHIC POSITION (NAD 1927), IN FT

N.M. STATE PLANE COORDINATES (CENTRAL ZONE)

X=356,760.08, Y=1,494,777.28 ELEVATION=5195.46, NGVD29, IN FT.

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

NO.	DATE	REMARKS	BY
		REVISIONS	

		DATE
DESIGNED BY	JDH	12/02
DRAWN BY	ACH	12/02
CHECKED BY	DMG	12/02

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

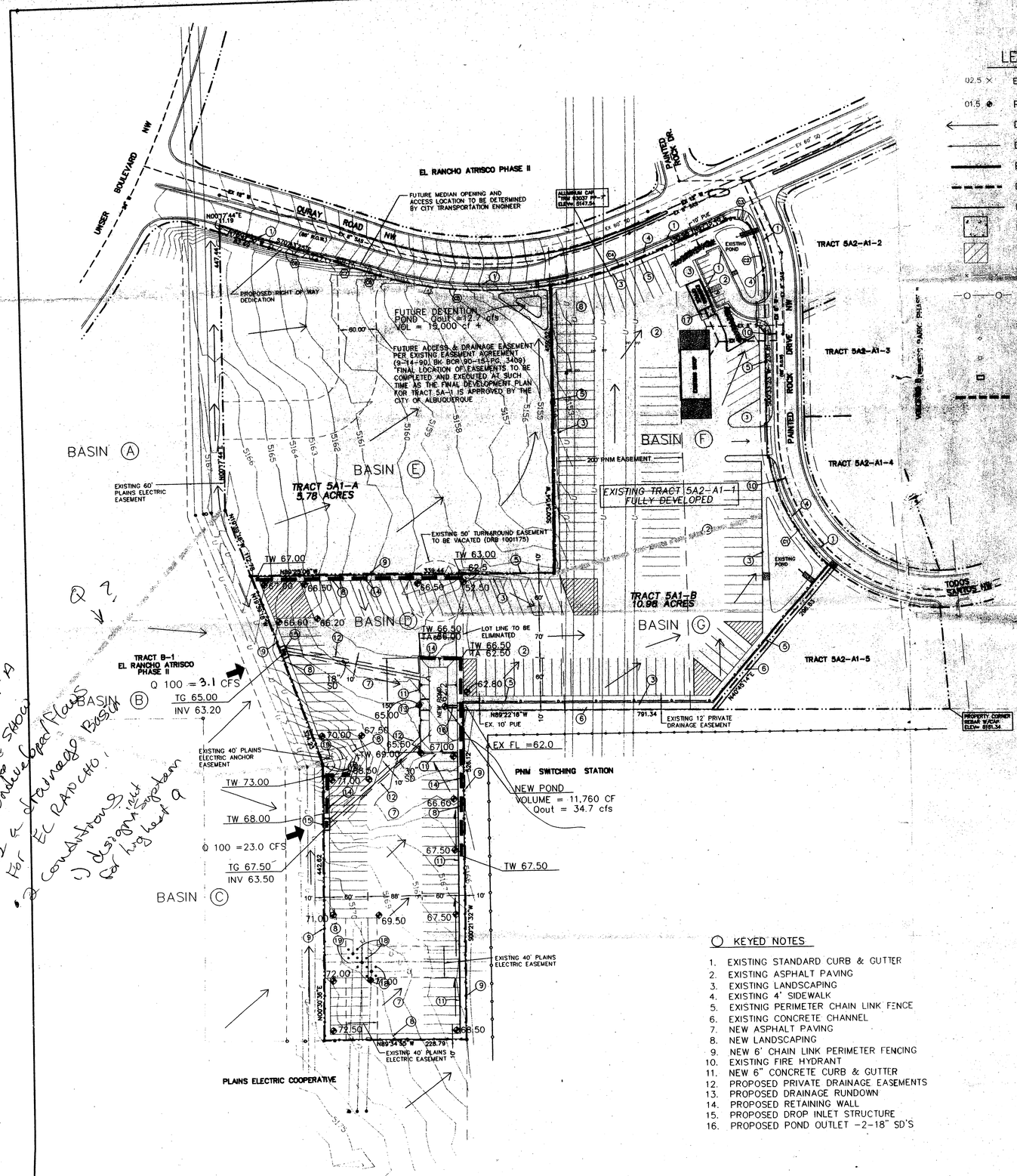
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

TITLE: WEST RIDGE SUBDIVISION
TWIN OAKS DR. N.W.
PRELIMINARY STORM IMPROVEMENTS

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

CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
#	H-9 & 10	1	1

F:\A02JOBS\A2031WRD\PLANS\A2031PP-6.dwg Sat Jan 04 15:17:17 2003 D. MARK GOODWIN & ASSOCIATES, PLTTED BY: ACH



Q 2, V

PLEASE SHOW AND DESIGN UNDEVELOPED PLANS AS A STORMWATER BASIN FOR EL RANCHO. 2) CONDITIONS INCLUDE DESIGN SYSTEM FOR LONG LOT A

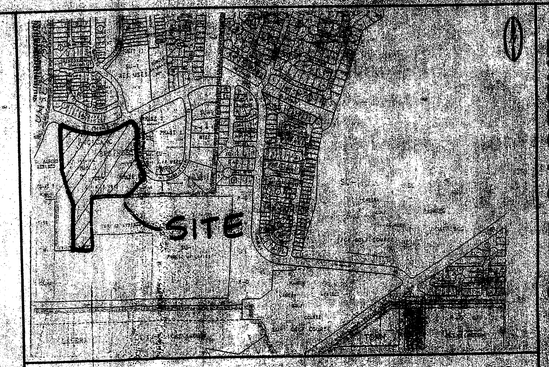
TRACT A

LEGEND

- 02.5 × EXISTING SPOT ELEVATION
- 01.5 ● PROPOSED SPOT ELEVATION
- DIRECTION OF FLOW
- DRAINAGE SWALE
- EXISTING STRUCTURE
- DRAINAGE BASIN DIVIDE
- PROPOSED STRUCTURE
- PROPOSED CONCRETE
- EXISTING ASPHALT TO BE REMOVED AND REPLACED
- EXISTING CHAIN LINK FENCE
- PROPOSED POST AND CABLE FENCE
- EXISTING BOLLARD
- EXISTING STREET LIGHT
- EXISTING COLUMN
- TRAFFIC SIGNAL BOX
- NEW RETAINING WALL

N

1 inch = 80 ft.



G/H-10 LOCATION MAP NTS

RECEIVED SEP 18 2002 PWD/DESIGN REVIEW

KEYED NOTES

1. EXISTING STANDARD CURB & GUTTER
2. EXISTING ASPHALT PAVING
3. EXISTING LANDSCAPING
4. EXISTING 4' SIDEWALK
5. EXISTNIG PERIMETER CHAIN LINK FENCE
6. EXISTING CONCRETE CHANNEL
7. NEW ASPHALT PAVING
8. NEW LANDSCAPING
9. NEW 6' CHAIN LINK PERIMETER FENCING
10. EXISTING FIRE HYDRANT
11. NEW 6" CONCRETE CURB & GUTTER
12. PROPOSED PRIVATE DRAINAGE EASEMENTS
13. PROPOSED DRAINAGE RUNDOWN
14. PROPOSED RETAINING WALL
15. PROPOSED DROP INLET STRUCTURE
16. PROPOSED POND OUTLET -2-18" SD'S

PROPERTY ADDRESS

OURAY ROAD NW

LEGAL DESCRIPTION

TRACT 5A1, VOLCANO BUSINESS PARK PHASE 1
TRACT 5A2-A1-1, VOLCANO BUSINESS PARK PHASE 2

SURVEY

BOUNDARY & TOPOGRAPHY PROVIDED BY PRECISION SURVEYS DATED OCTOBER 22, 2001

PROJECT BENCHMARK

ALUMINUM CAP "TRM 93037-PP-7"
ELEV. = 5147.54

GRADING AND DRAINAGE PLAN EXECUTIVE SUMMARY

PURPOSE AND SCOPE

Pursuant to the established Drainage Ordinance for the City of Albuquerque and the Development Process Manual, this Drainage Report outlines the drainage management criteria for controlling developed runoff from the project site. The project consists of the development of the property for GE Capital Modular Space. Paving, landscaping, utility, grading, and drainage improvements will be provided to support the project. The scope of this plan is to provide drainage criteria for the safe management of excess runoff. The report is presented to obtain Site Plan for Subdivision approval, Amended Site Plan approval, and Building Permit approval.

SITE DESCRIPTION

The project site is approximately 16.8 acres in size and is located on Painted Rock Drive NW, at Ouray Road NW (See Figure 1). Site terrain slopes west to east at approximately 2 percent. The site is presently described as a Tract 5A1, Volcano Business Park, Phase I and Tract 5A2-A1-1, Volcano Business Park, Phase II. The site is bounded on the north by Ouray Road, Painted Rock Drive, and on the south by a PNM switching Station, and on the west by undeveloped properties.

The project site consists of the existing GE Capital Modular Space facility, described as Tract 5A2-A1-1, Volcano Business Park, Phase II, and Tract 5A1, Volcano Business Park, Phase I, which is presently undeveloped. Tract 5A1 is to be subdivided into 2 tracts. The southerly 4.29-acre tract will be combined with Tract 5A2-A1-1, the GE Capital Modular Space site, to form a new 10.98-acre parcel, allowing GE Capital to expand its facility.

PROPOSED CONDITIONS

As shown by the Plan, the project consists of the development of the site for GE Capital Modular Space, a facility for lease and maintenance of portable buildings. Tract 5A1 is to be subdivided into 2 tracts. The southerly Tract 5A1-B, a 4.29-acre tract, will be combined with Tract 5A2-A1-1, the GE Capital Modular Space site, to form a new 10.98-acre parcel, allowing GE Capital to expand its facility. Development will include paving, utility landscaping and drainage improvements. Tract 5A1-A, a 5.78-acre tract, will not be developed at this time.

In accordance with the approved Masterplans, the site will drain to on-site detention ponds. The ponds will rout all excess runoff to Painted Rock Drive and Ouray Road at controlled rates established by the Drainage Masterplan.

For complete text, details and calculations please refer to the Drainage Report for GE Capital Modular Space, prepared by Brasher & Lorenz, Dated October 23, 2001.

RECEIVED APR 11 2002 HYDROLOGY SECTION

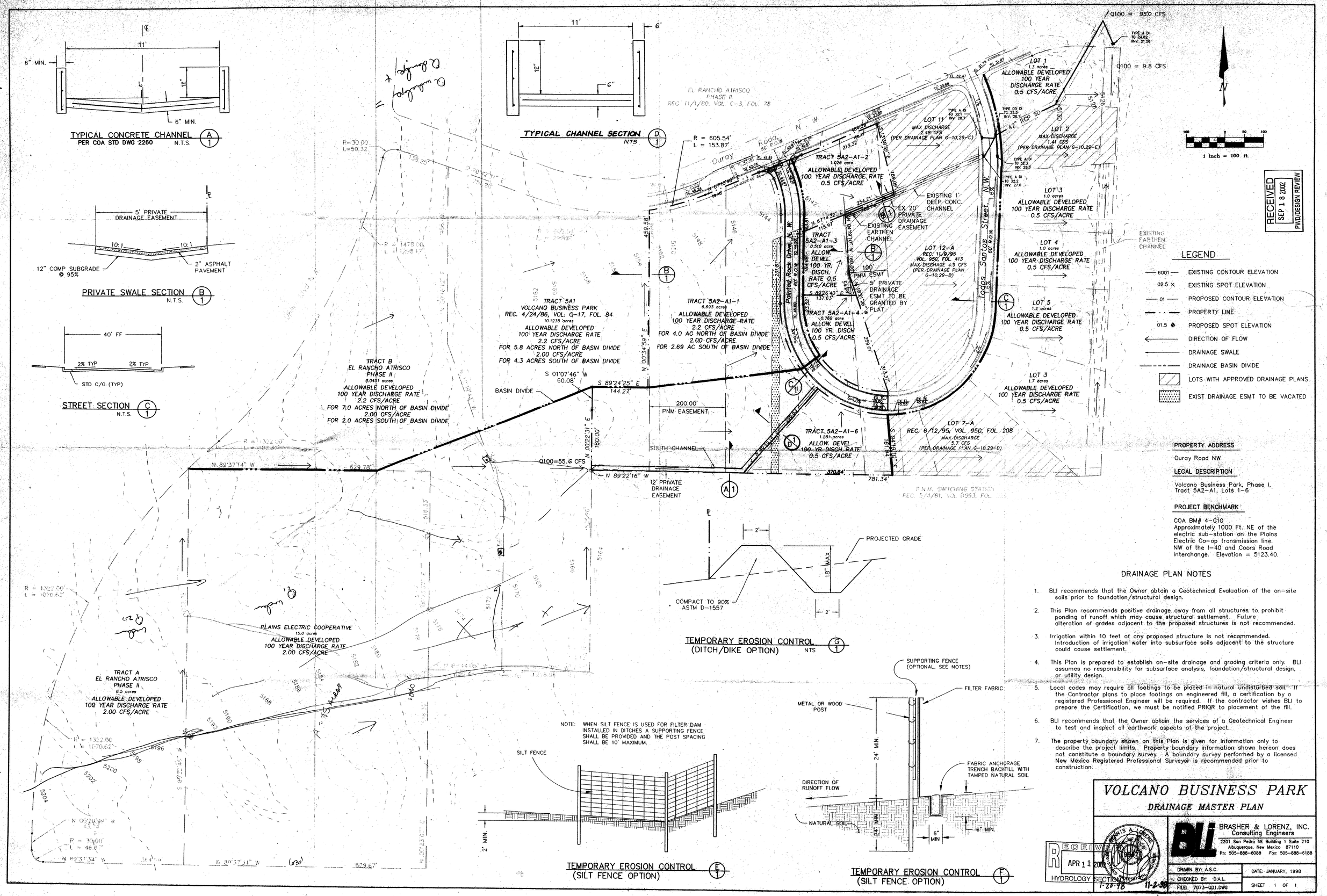
BRASHER & LORENZ
CONSULTING ENGINEERS
2201 San Pedro NE Building 1 Suite 220
Albuquerque, New Mexico 87110
Ph: 505-888-6088 Fax: 505-888-6188

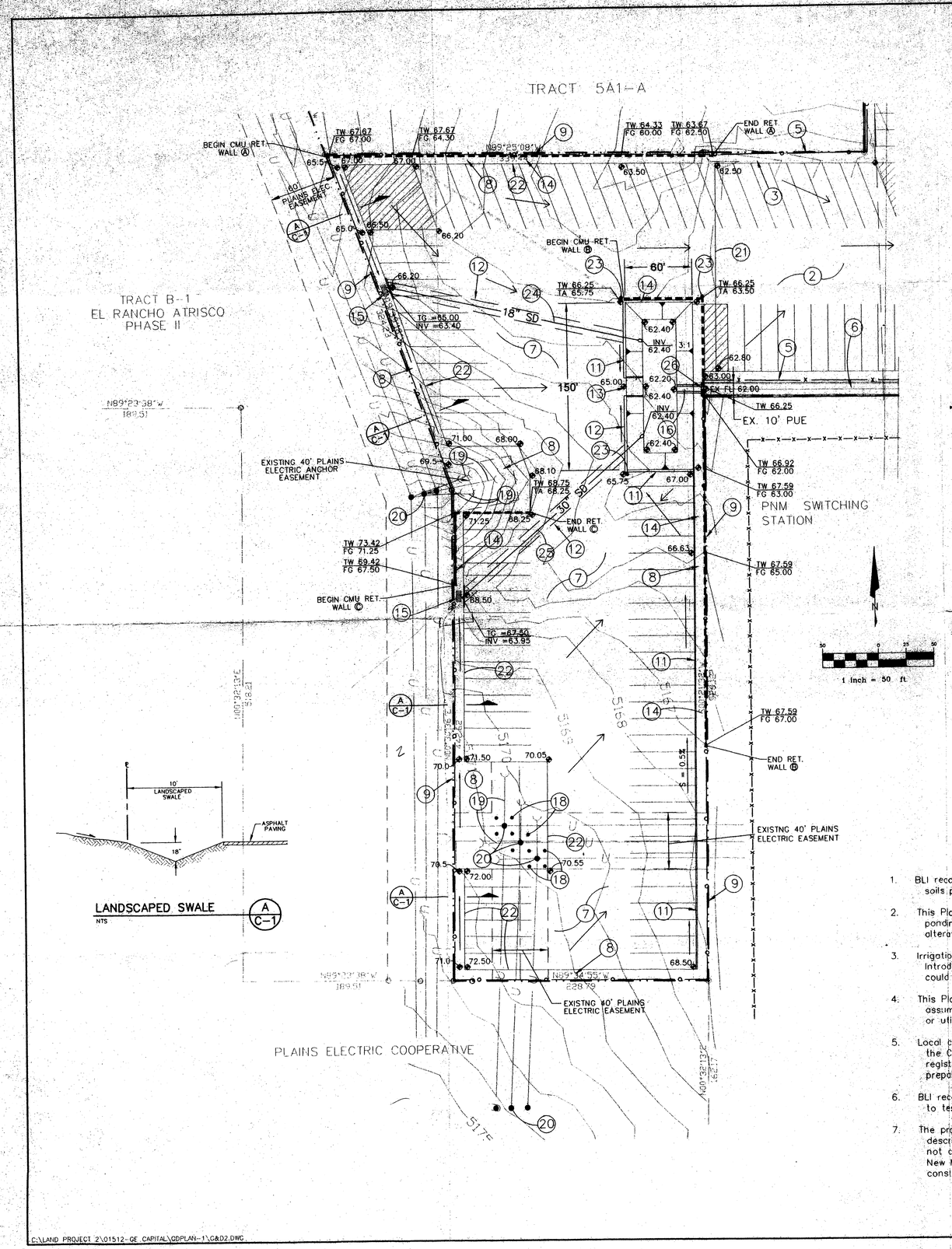
GE CAPITAL MODULAR SPACE

GRADING & DRAINAGE PLAN

REVISIONS:
1-28-02 PER EPC.

CHECKED BY: D.A.L.
DRAWN BY: R.M.
JOB NO: 01512
FILE NO: GD PLAN
SHEET NO: S-3


TYPICAL CONCRETE CHANNEL
PER COA STD DWG 2260
N.T.S.
A 1
TYPICAL CHANNEL SECTION
NTS
D 1
PRIVATE SWALE SECTION
N.T.S.
B 1
STREET SECTION
N.T.S.
C 1
TEMPORARY EROSION CONTROL
(DITCH/DIKE OPTION)
NTS
G 1
TEMPORARY EROSION CONTROL
(SILT FENCE OPTION)
E 1
TEMPORARY EROSION CONTROL
(SILT FENCE OPTION)
F 1
NOTE: WHEN SILT FENCE IS USED FOR FILTER DAM INSTALLED IN DITCHES A SUPPORTING FENCE SHALL BE PROVIDED AND THE POST SPACING SHALL BE 10' MAXIMUM.
Q100 = 95.0 CFS
Q100 = 9.8 CFS
Q100=55.6 CFS
1 inch = 100 ft.
RECEIVED
SEP 1 8 2002
PWD/DESIGN REVIEW
LEGEND
EXISTING CONTOUR ELEVATION
EXISTING SPOT ELEVATION
PROPOSED CONTOUR ELEVATION
PROPERTY LINE
PROPOSED SPOT ELEVATION
DIRECTION OF FLOW
DRAINAGE SWALE
DRAINAGE BASIN DIVIDE
LOTS WITH APPROVED DRAINAGE PLANS
EXIST DRAINAGE ESMT TO BE VACATED
PROPERTY ADDRESS
Ouray Road NW
LEGAL DESCRIPTION
Volcano Business Park, Phase I, Tract 5A2-A1, Lots 1-6
PROJECT BENCHMARK
COA BM# 4-G10
Approximately 1000 Ft. NE of the electric sub-station on the Plains Electric Co-op transmission line. NW of the I-40 and Coors Road Interchange. Elevation = 5123.40.
DRAINAGE PLAN NOTES
1. BLI recommends that the Owner obtain a Geotechnical Evaluation of the on-site soils prior to foundation/structural design.
2. This Plan recommends positive drainage away from all structures to prohibit ponding of runoff which may cause structural settlement. Future alteration of grades adjacent to the proposed structures is not recommended.
3. Irrigation within 10 feet of any proposed structure is not recommended. Introduction of irrigation water into subsurface soils adjacent to the structure could cause settlement.
4. This Plan is prepared to establish on-site drainage and grading criteria only. BLI assumes no responsibility for subsurface analysis, foundation/structural design, or utility design.
5. Local codes may require all footings to be placed in natural undisturbed soil. If the Contractor plans to place footings on engineered fill, a certification by a registered Professional Engineer will be required. If the contractor wishes BLI to prepare the Certification, we must be notified PRIOR to placement of the fill.
6. BLI recommends that the Owner obtain the services of a Geotechnical Engineer to test and inspect all earthwork aspects of the project.
7. The property boundary shown on this Plan is given for information only to describe the project limits. Property boundary information shown hereon does not constitute a boundary survey. A boundary survey performed by a licensed New Mexico Registered Professional Surveyor is recommended prior to construction.
VOLCANO BUSINESS PARK
DRAINAGE MASTER PLAN
BRASHER & LORENZ, INC.
Consulting Engineers
2201 San Pedro NE Building 1 Suite 210
Albuquerque, New Mexico 87110
Ph: 505-888-6088 Fax: 505-888-6188
RECEIVED
APR 1 1 2002
HYDROLOGY SECTION
DRAWN BY: A.S.C.
CHECKED BY: D.A.L.
FILE: 7073-GD1.DWG
DATE: JANUARY, 1998
SHEET 1 OF 1
7073



KEYED NOTES

1. EXISTING STANDARD CURB & GUTTER
2. EXISTING ASPHALT PAVING
3. EXISTING LANDSCAPING
4. EXISTING 4' SIDEWALK
5. EXISTNIG PERIMETER CHAIN LINK FENCE
6. EXISTING CONCRETE CHANNEL
7. NEW ASPHALT PAVING -SEE DETAIL B SHT S-4
8. NEW LANDSCAPING
9. NEW 6' CHAIN LINK PERIMETER FENCING
10. EXISTING FIRE HYDRANT
11. NEW 6" CONCRETE CURB & GUTTER -SEE DETAIL Ⓖ SHT S-4
12. 10' PRIVATE DRAINAGE EASEMENTS
13. PROPOSED DRAINAGE RUNDOWN -SEE DETAIL Ⓐ SHT C-2
14. PROPOSED RETAINING WALL -SEE SHEET C-2
15. PROPOSED DROP INLET STRUCTURE -SEE SHEET C-2
16. PROPOSED POND OUTLET -2-18" SD'S -SEE SHEET C-2
17. EXISTING REFUSE ENCLOSURE
18. PROVIDE 4 STATIONARY BOLLARDS @ EACH POWER POLE -PER COA STD DWG 2250.
19. PROVIDE OPTIC YELLOW GUY SLEEVES @ ALL PNM GUY ANCHORS.
20. EXISTING POWER POLE
21. EXISTING EDGE OF PAVEMENT
22. EDGE OF NEW PAVEMENT
23. INSTALL STATIONARY BOLLARDS @ POND CORNERS
24. INSTALL 18" CSP STORM DRAIN W/END SECTION
25. INSTALL 30" CSP STORM DRAIN W/END SECTION
26. PROPOSED REINF. CONC. RETAINING WALL SEE SHEET C-2
27. CONSTRUCT LANDSCAPED SWALE SEE SECTION Ⓐ THIS SHEET

LEGEND

02.5 ×	EXISTING SPOT ELEVATION
01.5 ⊕	PROPOSED SPOT ELEVATION
←	DIRECTION OF FLOW
	DRAINAGE SWALE
	DRAINAGE BASIN DIVIDE
	PROPOSED CONCRETE
	EXISTING ASPHALT TO BE REMOVED AND REPLACED
	EXISTING CHAIN LINK FENCE
	PROPOSED CHAIN LINK FENCE
	PROPOSED BOLLARD
	NEW RETAINING WALL
	EXISTING OVERHEAD POWER LINE

DRAINAGE PLAN NOTES

1. BLI recommends that the Owner obtain a Geotechnical Evaluation of the on-site soils prior to foundation/structural design.
2. This Plan recommends positive drainage away from all structures to prohibit ponding of runoff which may cause structural settlement. Future alteration of grades adjacent to the proposed structures is not recommended.
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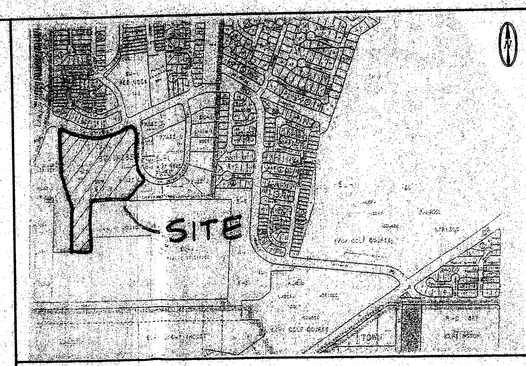


G/H-10 LOCATION MAP 1" = 800'

RECEIVED SEP 1 8 2002 PWD/DESIGN REVIEW

PROPERTY ADDRESS

3051 PAINTED ROCK DR NW

LEGAL DESCRIPTION

TRACT 5A1-B, VOLCANO BUSINESS PARK

SURVEY

BOUNDARY & TOPOGRAPHY PROVIDED BY PRECISION SURVEYS DATED OCTOBER 22, 2001

PROJECT BENCHMARK

ALUMINUM CAP "TRM 93037-PP-7"
ELEV. = 5147.54

GRADING AND DRAINAGE PLAN EXECUTIVE SUMMARY

PURPOSE AND SCOPE

Pursuant to the established Drainage Ordinance for the City of Albuquerque and the Development Process Manual, this Drainage Plan outlines the drainage management criteria for controlling developed runoff from the project site. The project consists of the development of the property for GE Capital Modular Space. Paving, landscaping, utility, grading, and drainage improvements will be provided to support the project. The scope of this plan is to provide drainage criteria for the safe management of excess runoff. The Plan is presented to obtain Building Permit approval.

SITE DESCRIPTION

The project site is approximately 16.8 acres in size and is located on Painted Rock Drive NW, at Ouray Road NW (See Figure 1). Site terrain slopes west to east at approximately 2 percent. The site is presently described as a Tract 5A1-B Volcano Business Park. The site is bounded on the north by Ouray Road, on the east by Painted Rock Drive, on the south by a PNM switching Station, and on the west by undeveloped properties.

The project site consists of the existing GE Capital Modular Space facility, located on 6.69 Acres, with a undeveloped 4.29 Acre area located to the south.

PROPOSED CONDITIONS

As shown by the Plan, the project consists of the development of the site for GE Capital Modular Space, a facility for lease and maintenance of portable buildings. The southerly 4.29-acres will be developed allowing GE Capital to expand its facility. Development will include paving, utility landscaping and drainage improvements on the expanded area.

In accordance with the approved Masterplans, the site will drain to on-site detention ponds. The ponds will rout all excess runoff to Painted Rock Drive at controlled rates established by the Drainage Masterplan.

For complete text, details and calculations please refer to the Drainage Report for GE Capital Modular Space, prepared by Brasher & Lorenz, Dated October 23, 2001.

BRASHER & LORENZ
CONSULTING ENGINEERS
2201 San Pedro Blvd. NE Bldg.1, Suite 1200
Albuquerque, New Mexico 87110
Ph: (505) 888-6088 Fax (505) 888-6188

GE CAPITAL MODULAR SPACE

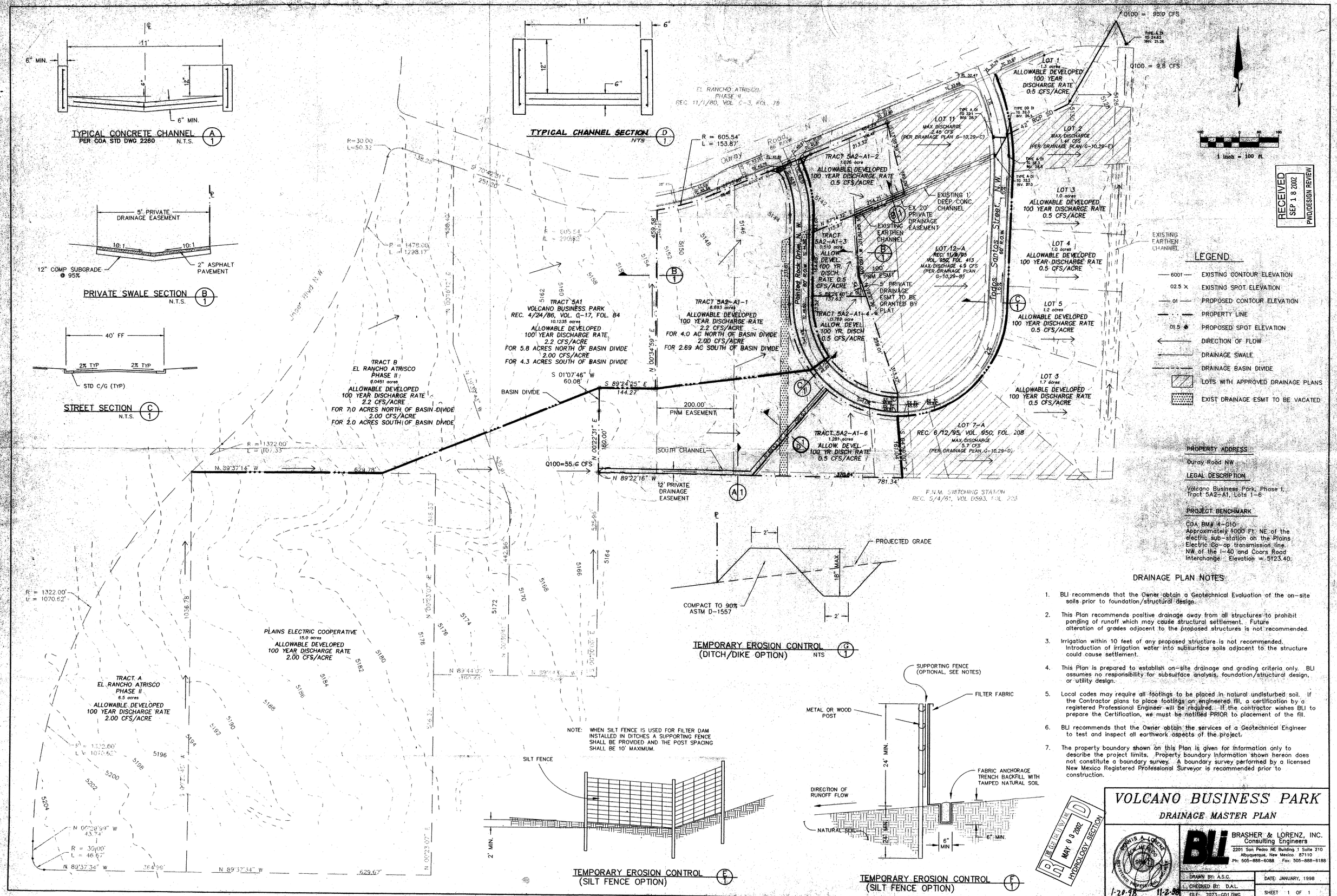
GRADING PLAN FOR EXPANDED AREA

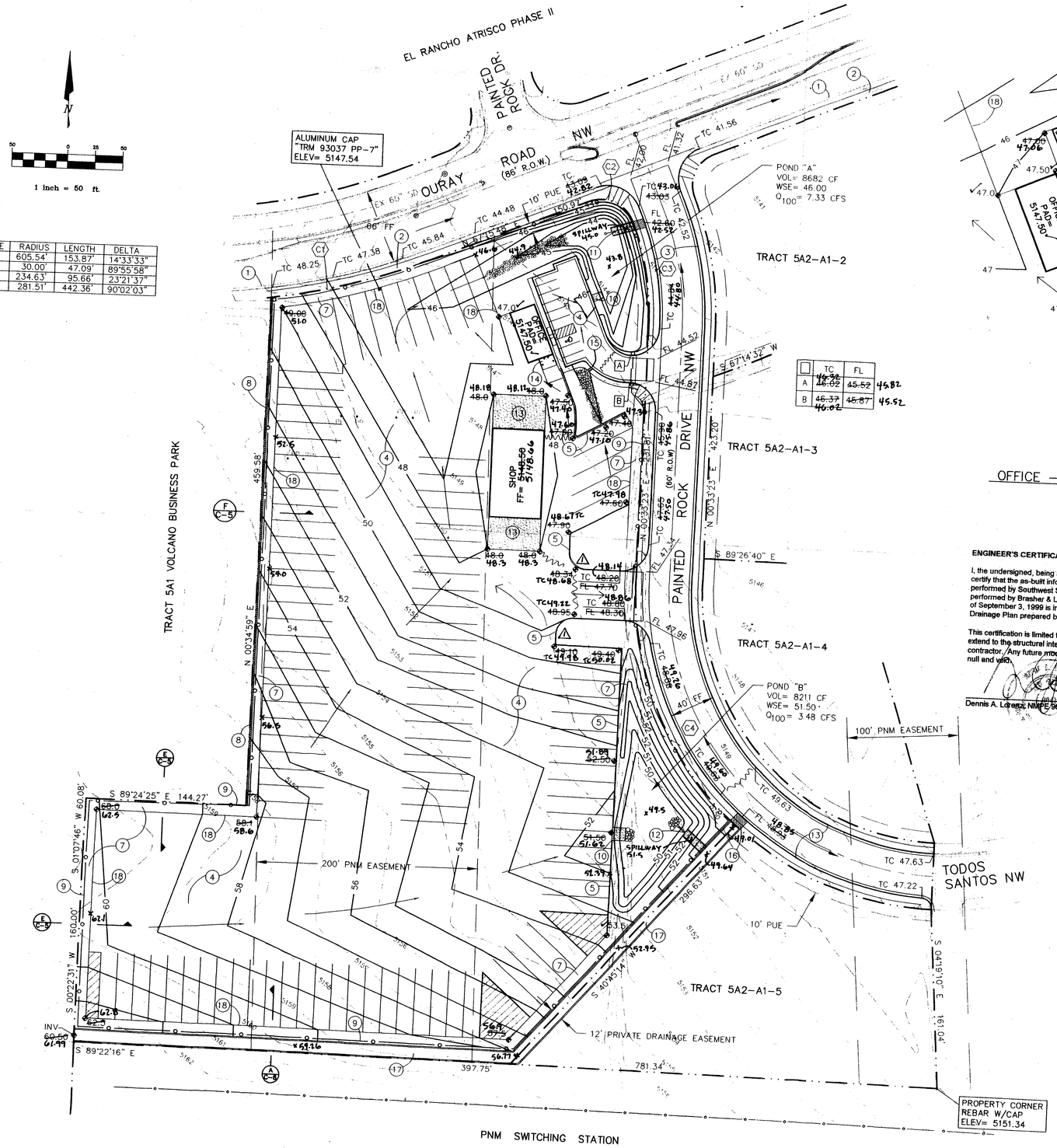
REVISIONS:

CHECKED BY:	D.A.L.
DRAWN BY:	R.M.
JOB NO:	01512
FILE NO:	GD PLAN
SHEET NO:	C-1

RECEIVED MAY 0 8 2002 HYDROLOGY SECTION

C:\LAND PROJECT 2\01512-GE CAPITAL\GDPLAN-1\G&D2.DWG


TYPICAL CONCRETE CHANNEL (A/1)
PER COA STD DWG 2260 N.T.S.
6" MIN.
11'
12"
6" MIN.
TYPICAL CHANNEL SECTION (D/1)
NTS
11'
6"
12"
6"
PRIVATE SWALE SECTION (B/1)
N.T.S.
5' PRIVATE DRAINAGE EASEMENT
10:1
10:1
12" COMP SUBGRADE @ 95%
2" ASPHALT PAVEMENT
STREET SECTION (C/1)
N.T.S.
40' FF
2% TYP
2% TYP
STD C/G (TYP)
EL RANCHO ATRISCO PHASE II
REC. 11/1/80, VOL. C-3, FOL. 75
Ouray Road
Todos Santos Street
Painted Rock Drive N.W.
Jager Blvd N.W.
TRACT 5A1
VOLCANO BUSINESS PARK
REC. 4/24/86, VOL. C-17, FOL. 84
10.1235 acres
ALLOWABLE DEVELOPED
100 YEAR DISCHARGE RATE
2.2 CFS/ACRE
FOR 5.8 ACRES NORTH OF BASIN DIVIDE
2.00 CFS/ACRE
FOR 4.3 ACRES SOUTH OF BASIN DIVIDE
TRACT B
EL RANCHO ATRISCO PHASE II
8.0451 acres
ALLOWABLE DEVELOPED
100 YEAR DISCHARGE RATE
2.2 CFS/ACRE
FOR 7.0 ACRES NORTH OF BASIN DIVIDE
2.00 CFS/ACRE
FOR 2.0 ACRES SOUTH OF BASIN DIVIDE
TRACT 5A2-A1-1
6.693 acres
ALLOWABLE DEVELOPED
100 YEAR DISCHARGE RATE
2.2 CFS/ACRE
FOR 4.0 AC NORTH OF BASIN DIVIDE
2.00 CFS/ACRE
FOR 2.69 AC SOUTH OF BASIN DIVIDE
BASIN DIVIDE
200.00'
PNM EASEMENT
SOUTH CHANNEL
Q100=55.6 CFS
12' PRIVATE DRAINAGE EASEMENT
TRACT 5A2-A1-2
1.026 acre
ALLOWABLE DEVELOPED
100 YEAR DISCHARGE RATE
0.5 CFS/ACRE
TRACT 5A2-A1-3
0.510 acre
ALLOW. DEVEL.
100 YR. DISCH.
RATE 0.5 CFS/ACRE
TRACT 5A2-A1-4
0.769 acre
ALLOW. DEVEL.
100 YR. DISCH
0.5 CFS/ACRE
TRACT 5A2-A1-6
1.281 acres
ALLOW. DEVEL.
100 YR DISCH RATE
0.5 CFS/ACRE
EXISTING 1' DEEP CONC. CHANNEL
EX 20' PRIVATE DRAINAGE EASEMENT
EXISTING EARTHEN CHANNEL
100' PNM ESMT
5' PRIVATE DRAINAGE ESMT TO BE GRANTED BY PLAT
LOT 11
MAX DISCHARGE 2.49 CFS
(PER DRAINAGE PLAN G-10,29-C)
LOT 12-A
REC. 11/9/95
VOL. 950, FOL. 413
MAX DISCHARGE 4.9 CFS
(PER DRAINAGE PLAN G-10,29-B)
LOT 7-A
REC. 6/12/95, VOL. 950, FOL. 208
MAX DISCHARGE 5.7 CFS
(PER DRAINAGE PLAN G-10,29-D)
LOT 1
1.3 acres
ALLOWABLE DEVELOPED
100 YEAR DISCHARGE RATE
0.5 CFS/ACRE
LOT 2
MAX DISCHARGE 1.41 CFS
(PER DRAINAGE PLAN G-10,29-E)
LOT 3
1.0 acres
ALLOWABLE DEVELOPED
100 YEAR DISCHARGE RATE
0.5 CFS/ACRE
LOT 4
1.0 acres
ALLOWABLE DEVELOPED
100 YEAR DISCHARGE RATE
0.5 CFS/ACRE
LOT 5
1.2 acres
ALLOWABLE DEVELOPED
100 YEAR DISCHARGE RATE
0.5 CFS/ACRE
LOT 3
1.7 acres
ALLOWABLE DEVELOPED
100 YEAR DISCHARGE RATE
0.5 CFS/ACRE
Q100 = 95.0 CFS
Q100 = 9.8 CFS
A2 RCP SD
EXISTING EARTHEN CHANNEL
1 inch = 100 ft.
N
RECEIVED
SEP 18 2002
PWD/DESIGN REVIEW
LEGEND
6001 EXISTING CONTOUR ELEVATION
02.5 × EXISTING SPOT ELEVATION
01 PROPOSED CONTOUR ELEVATION
PROPERTY LINE
01.5 PROPOSED SPOT ELEVATION
DIRECTION OF FLOW
DRAINAGE SWALE
DRAINAGE BASIN DIVIDE
LOTS WITH APPROVED DRAINAGE PLANS
EXIST DRAINAGE ESMT TO BE VACATED
PROPERTY ADDRESS
Ouray Road NW
LEGAL DESCRIPTION
Volcano Business Park, Phase I,
Tract 5A2-A1, Lots 1-6
PROJECT BENCHMARK
COA BM# 4-C10
Approximately 1000 Ft. NE of the electric sub-station on the Plains Electric Co-op transmission line, NW of the I-40 and Coors Road Interchange. Elevation = 5123.40.
PLAINS ELECTRIC COOPERATIVE
15.0 acres
ALLOWABLE DEVELOPED
100 YEAR DISCHARGE RATE
2.00 CFS/ACRE
TRACT A
EL RANCHO ATRISCO PHASE II
6.5 acres
ALLOWABLE DEVELOPED
100 YEAR DISCHARGE RATE
2.00 CFS/ACRE
P.N.M. SWITCHING STATION
REC. 5/4/67, VOL. D593, FOL. 225
PROJECTED GRADE
2'
18" MAX
2'
COMPACT TO 90% ASTM D-1557
TEMPORARY EROSION CONTROL (G/1)
(DITCH/DIKE OPTION)
NTS
NOTE: WHEN SILT FENCE IS USED FOR FILTER DAM INSTALLED IN DITCHES A SUPPORTING FENCE SHALL BE PROVIDED AND THE POST SPACING SHALL BE 10' MAXIMUM.
SILT FENCE
2' MIN.
TEMPORARY EROSION CONTROL (E/1)
(SILT FENCE OPTION)
SUPPORTING FENCE (OPTIONAL, SEE NOTES)
FILTER FABRIC
METAL OR WOOD POST
24" MIN.
FABRIC ANCHORAGE TRENCH BACKFILL WITH TAMPED NATURAL SOIL
DIRECTION OF RUNOFF FLOW
NATURAL SOIL
24" MIN.
6" MIN
6" MIN.
TEMPORARY EROSION CONTROL (F/1)
(SILT FENCE OPTION)
DRAINAGE PLAN NOTES
1. BLI recommends that the Owner obtain a Geotechnical Evaluation of the on-site soils prior to foundation/structural design.
2. This Plan recommends positive drainage away from all structures to prohibit ponding of runoff which may cause structural settlement. Future alteration of grades adjacent to the proposed structures is not recommended.
3. Irrigation within 10 feet of any proposed structure is not recommended. Introduction of irrigation water into subsurface soils adjacent to the structure could cause settlement.
4. This Plan is prepared to establish on-site drainage and grading criteria only. BLI assumes no responsibility for subsurface analysis, foundation/structural design, or utility design.
5. Local codes may require all footings to be placed in natural undisturbed soil. If the Contractor plans to place footings on engineered fill, a certification by a registered Professional Engineer will be required. If the contractor wishes BLI to prepare the Certification, we must be notified PRIOR to placement of the fill.
6. BLI recommends that the Owner obtain the services of a Geotechnical Engineer to test and inspect all earthwork aspects of the project.
7. The property boundary shown on this Plan is given for information only to describe the project limits. Property boundary information shown hereon does not constitute a boundary survey. A boundary survey performed by a licensed New Mexico Registered Professional Surveyor is recommended prior to construction.
RECEIVED
MAY 03 2002
HYDROLOGY SECTION
VOLCANO BUSINESS PARK
DRAINAGE MASTER PLAN
BRASHER & LORENZ, INC.
Consulting Engineers
2201 San Pedro NE Building 1 Suite 210
Albuquerque, New Mexico 87110
Ph: 505-888-6088 Fax: 505-888-6188
DRAWN BY: A.S.C.
CHECKED BY: D.A.L.
FILE: 7073-GD1.DWG
DATE: JANUARY, 1998
SHEET 1 OF 1
1-20-98
11-2-98
7073


N
50 0 25 50
1 inch = 50 ft.
EL RANCHO ATRISCO PHASE II
PAINTED ROCK DR. NW
OURAY ROAD (86' R.O.W.)
ALUMINUM CAP "TRM 93037 PP-7" ELEV= 5147.54
POND "A" VOL= 8682 CF WSE= 46.00 Q100= 7.33 CFS
TRACT 5A2-A1-2
TRACT 5A2-A1-3
TRACT 5A2-A1-4
TRACT 5A2-A1-5
TRACT 5A1 VOLCANO BUSINESS PARK
PAINTED ROCK DRIVE NW
(80' R.O.W.)
OFFICE PAD= 5147.50
SHOP FF= 5148.66
POND "B" VOL= 8211 CF WSE= 51.50 Q100= 3.48 CFS
100' PNM EASEMENT
200' PNM EASEMENT
10' PUE
12' PRIVATE DRAINAGE EASEMENT
TODOS SANTOS NW
PROPERTY CORNER REBAR W/CAP ELEV= 5151.34
PNM SWITCHING STATION
S 89°24'25" E 144.27'
S 89°22'16" E
397.75'
781.34'
S 89°26'40" E
N 00°34'59" E
S 01°07'46" W 60.08'
S 00°22'31" W 160.00'
S 04°19'10" E 161.04'
S 40°45'14" W
296.63'
459.58'
TC 41.56
TC 44.48
TC 45.84
TC 47.38
TC 48.25
TC 47.22
TC 47.63
TC 49.63
TC 49.22
TC 47.98
TC 48.67
TC 48.14
TC 48.08
TC 47.96
TC 47.34
TC 47.66
TC 47.50
TC 47.09
TC 43.06
TC 42.82
FL 42.80
FL 42.52
FL 44.52
FL 44.87
FL 47.34
FL 47.96
FL 48.36
FL 48.38
FL 48.35
FL 48.20
FL 47.70
FL 47.66
FL 47.50
FL 47.09
FL 42.80
FL 42.52
FL 41.32
FL 41.56

KEYED NOTES

PHASE I CONSTRUCTION

1. DROP INLET, TYPE D
2. DROP INLETS (1 TYPE A, 2 TYPE AA, 1 TYPE DD)
3. DRAINAGE CHANNEL, SECTION A-A
4. TEMPORARY DESILTING POND (40' x 40' BOTTOM, 1' DEEP, MIN.)
5. TEMPORARY DIVERSION DITCH & DIKE, SECTION C-C

FUTURE CONSTRUCTION

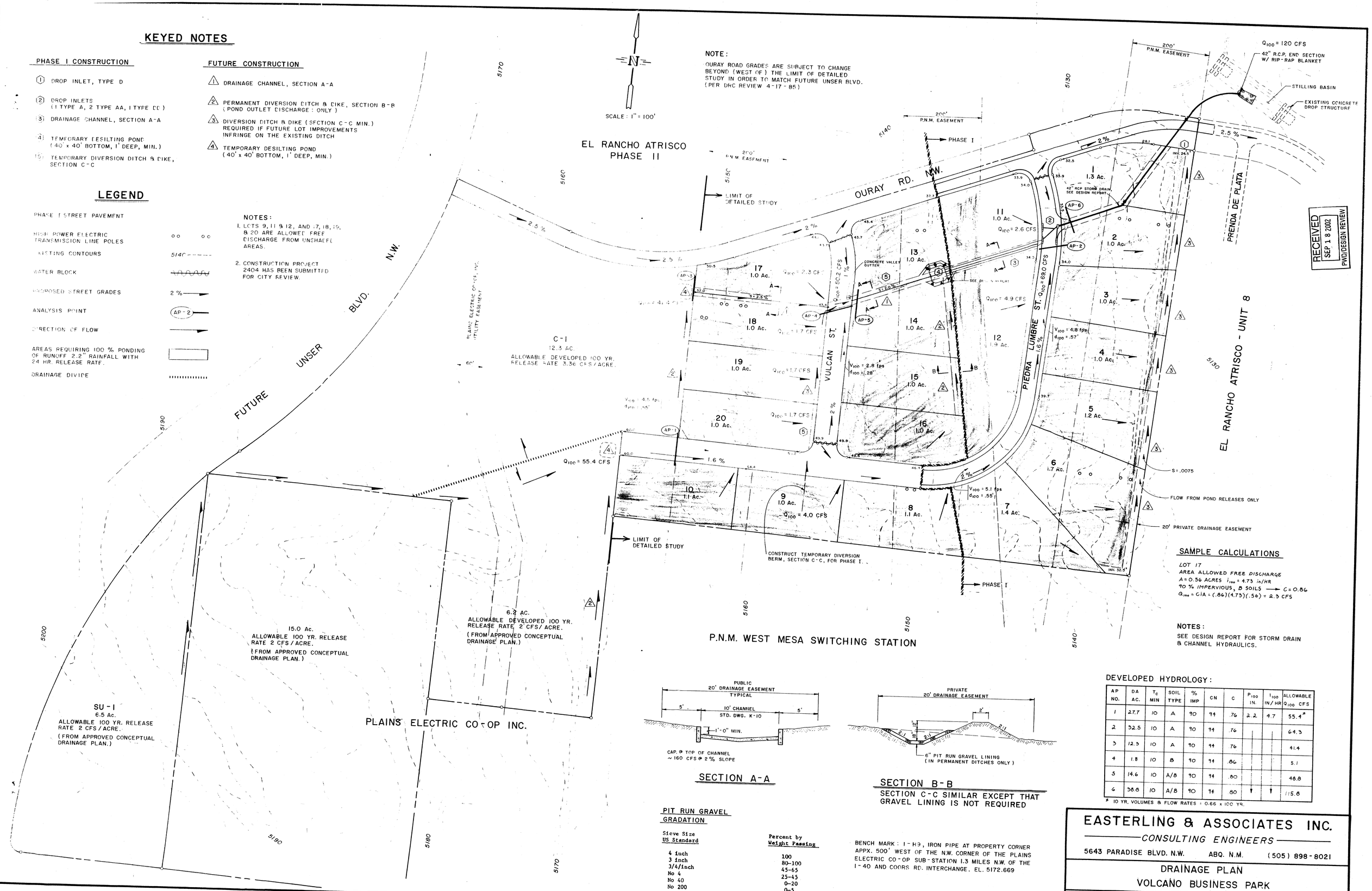
1. DRAINAGE CHANNEL, SECTION A-A
2. PERMANENT DIVERSION DITCH & DIKE, SECTION B-B (POND OUTLET DISCHARGE ONLY)
3. DIVERSION DITCH & DIKE (SECTION C-C MIN.) REQUIRED IF FUTURE LOT IMPROVEMENTS INFRINGE ON THE EXISTING DITCH
4. TEMPORARY DESILTING POND (40' x 40' BOTTOM, 1' DEEP, MIN.)

LEGEND

- PHASE I STREET PAVEMENT
- HIGH POWER ELECTRIC TRANSMISSION LINE POLES
- EXISTING CONTOURS — 5140
- WATER BLOCK
- PROPOSED STREET GRADES — 2 %
- ANALYSIS POINT — AP-2
- DIRECTION OF FLOW
- AREAS REQUIRING 100 % PONDING OF RUNOFF 2.2" RAINFALL WITH 24 HR. RELEASE RATE.
- DRAINAGE DIVIDE

NOTES:

1. LOTS 9, 11 & 12, AND 17, 18, 19, & 20 ARE ALLOWED FREE DISCHARGE FROM UNSHADED AREAS.
2. CONSTRUCTION PROJECT 2404 HAS BEEN SUBMITTED FOR CITY REVIEW.



SECTION A-A

SECTION B-B

SECTION C-C SIMILAR EXCEPT THAT GRAVEL LINING IS NOT REQUIRED

PIT RUN GRAVEL GRADATION

Sieve Size US Standard	Percent by Weight Passing
4 inch	100
3 inch	80-100
3/4 inch	45-65
No 4	25-45
No 40	0-20
No 200	0-5

BENCH MARK: I-H3, IRON PIPE AT PROPERTY CORNER APPX. 500' WEST OF THE N.W. CORNER OF THE PLAINS ELECTRIC CO-OP SUB-STATION 1.3 MILES N.W. OF THE I-40 AND COORS RD. INTERCHANGE. EL. 5172.669

SAMPLE CALCULATIONS

LOT 17
AREA ALLOWED FREE DISCHARGE
A = 0.56 ACRES i_{100} = 4.73 in/HR
90 % IMPERVIOUS, B SOILS → C = 0.86
Q_{100} = CIA = (.86)(4.73)(.56) = 2.3 CFS

NOTES:

SEE DESIGN REPORT FOR STORM DRAIN & CHANNEL HYDRAULICS.

DEVELOPED HYDROLOGY:

AP NO.	DA AC.	T_c MIN	SOIL TYPE	% IMP	CN	C	P_{100} IN.	I_{100} IN/HR	ALLOWABLE Q_{100} CFS
1	27.7	10	A	90	94	.76	2.2	4.7	55.4*
2	32.5	10	A	90	94	.76	↓	↓	64.3
3	12.3	10	A	90	94	.76	↓	↓	41.4
4	1.8	10	B	90	94	.86	↓	↓	5.1
5	14.6	10	A/B	90	94	.80	↓	↓	48.8
6	38.8	10	A/B	90	94	.80	↓	↓	115.8

* 10 YR. VOLUMES & FLOW RATES = 0.66 x 100 YR.

RECEIVED
SEP 18 2002
PWD/DESIGN REVIEW

EASTERLING & ASSOCIATES INC.
CONSULTING ENGINEERS
5643 PARADISE BLVD. N.W. ABQ. N.M. (505) 898-8021

DRAINAGE PLAN
VOLCANO BUSINESS PARK

DATE: FEB., 1985
REV. 4-18-85 REV. ____ REV. ____

SHEET 2 OF 2

DRAINAGE PLAN

OF

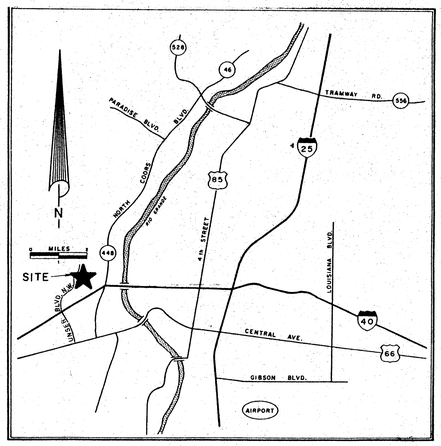
VOLCANO BUSINESS PARK

FOR

WESTLAND DEVELOPMENT CORPORATION

RECEIVED
SEP 1 8 2002
PWD/DESIGN REVIEW

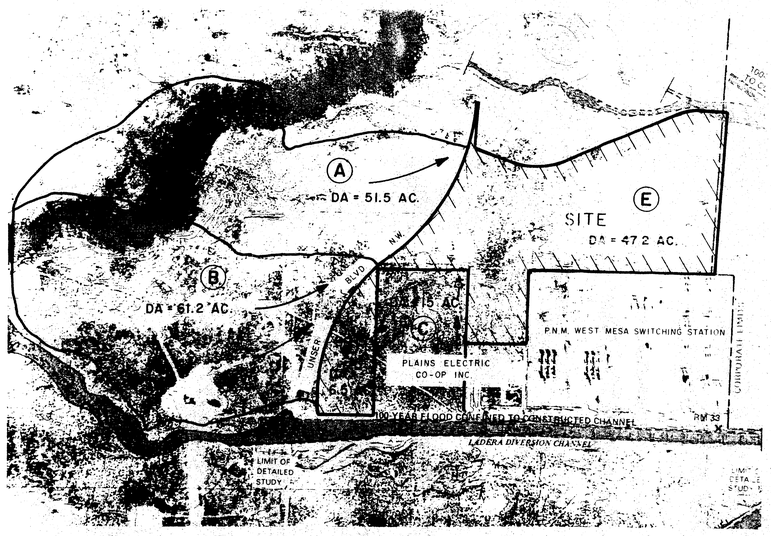
VICINITY MAP *Bernalillo County Zone Atlas Map No.* G-9, G-10, H-9, H-10



LEGAL DESCRIPTION:

PROPOSED VOLCANO BUSINESS PARK;
TOWN OF ATRISCO GRANT

FLOOD HAZARD MAP *(From F.E.M.A., Map No. 21)* & OFFSITE FLOWS



DRAINAGE REPORT

GENERAL: The 51.7 acre site is located at the south east corner of future Unser Blvd. and future Ouray Road. The zoning is SU-1 for industrial park and C-1. The land is within the Ladera Detention Facility watershed and slopes from west to east at between 2% and 3%. The soils are silty and loamy sands and support a poor grass cover when not overgrazed or heavily trafficked.

OFF-SITE FLOWS:

Existing Conditions: The site is currently impacted by off-site flows only infrequently. Two significant areas (A and B) flow eastward from across future Unser Blvd. and across the site. There is little physical evidence of runoff crossing the site visible on the ground. Table I describes the existing flow rates and volumes. The flows from off-site traverse the site and are diverted northward along the east boundary in an existing ditch/dike and into the existing improved flood channel just north of Ouray Road. The ultimate destination is the Ladera Golf Course Detention Facility.

Developed Conditions: The areas west of future Unser Blvd. (A and B) will drain to Unser Blvd. and be constrained by the discharge rates dictated by the city drainage ordinance pertaining to arterial and collector streets. Runoff will not be allowed to cross Unser under that criteria. It is very likely that a storm drain system will be required for Unser Blvd. which will effectively shelter the site from flows originating west of Unser.

Area C flows will be intercepted in proposed Piedra Lumbre Street and carried down to the proposed storm drain and into the Ladera Detention Facility. Provision has been made to accept 30 cfs in the developed condition from Area C compared to the existing condition 100-year discharge of 24 cfs.

Interim Conditions: Until such time as Unser Blvd. is constructed, the off-site flows will be diverted and detained within the 20.7 acre C-1 tract and released at or below historic rates into the channel/storm drain system.

INTRACT:

DEVELOPED CONDITIONS:

The proposed development for the site is as shown on Sheet 2 of 2. It is anticipated that the project will be phased from east to west with Lots 1-7 and 11 & 12 served by a paved street and storm drain system. Offsite flows would be directed through desilting basins into the street or channel/storm drain system. The second phase would construct the balance of the streets and storm drainage facilities. The C-1 tract and the 6.5 acre SU-1 tract would be the last to develop and would probably not be altered until the timing of the construction of Unser was firm.

The drainage plan calls for runoff from the shaded areas to be ponded 100% and the non-shaded areas to free discharge. This scheme may not be practical in every instance and therefore those lots on the west side of streets can discharge at the rates shown on the plan. It is recommended that all runoff that flows to a street be routed through landscaping to reduce the frequency of runoff.

The large tracts will require some degree of detention ponding depending on how they are developed, but in any event, will be restricted to 2 cfs per acre release in the 100-year storm except as otherwise shown on Sheet 2.

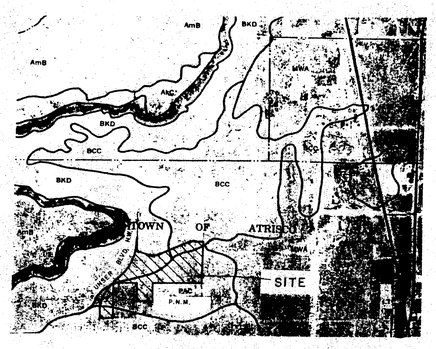
TABLE I, HYDROLOGY - EXISTING CONDITIONS

AP #	DA AC	H FT	S FT/FT	L FT	T_C MIN	SOIL TYPE	% IMP	CN	C	P_2 IN	P_{10} IN	P_{100} IN	I_2 IN/HR	I_{10} IN/HR	I_{100} IN/HR	V_2 FT^3	V_{10} FT^3	V_{100} FT^3	Q_2 CFS	Q_{10} CFS	Q_{100} CFS
A	51.5	220	.07	3150	10.7	A	20	65	.26	1.0	1.5	2.2	2.0	3.1	4.5	—	9,350	37,390	—	41.5	603
B	61.2	200	.07	2750	9.7	A	7	58	.20	1.0	1.5	2.2	1.9	3.1	4.7	—	—	8890	—	—	57.5
C	15.0	22	.02	950	6.9	B	0	70	.34	1.0	1.5	2.2	1.9	3.1	4.7	—	4,360	18,000	—	15.8	24.0
D	6.5	18	.02	1050	7.5	B	0	70	.34	1.0	1.5	2.2	1.9	3.1	4.7	—	1,890	7,790	—	6.9	10.4
E	47.2	88	.03	2700	13.2	B	0	70	.34	1.0	1.5	2.2	1.8	2.65	4.0	—	13,700	56,540	—	42.5	64.2

EROSION CONTROL:

No lot grading is anticipated prior to development of each lot. Grading should be limited to that area necessary for construction. Any additional graded areas should be reseeded with native grasses and protected from runoff through the use of low dikes and shallow ditches.

SOILS MAP *From Soil Survey, Bernalillo County - U.S.D.A., S.C.S.*



SOILS INFORMATION

Soil series and map symbols	Degree and kind of limitations for—						Suitability as source of—				Soil features affecting—		Hydrologic soil group
	Septic tank absorption fields	Sewage lagoons	Shallow excavations	Dwellings without basements	Sanitary landfill (trench type)[1]	Local road and streets	Road fill	Sand	Gravel	Topsoil	Pond reservoir areas	Dikes, levees, and other embankments	
*Bluepoint: Bb, BcA, BCC, BdD, BKD. For Wink part of BdD, see Wink series; for Kokan part of BKD, see Kokan series.	Slight if slope is 1 to 8 percent, moderate if 8 to 15.	Severe: seepage.	Severe: cutbanks cave.	Slight if slope is 1 to 8 percent, moderate if 8 to 15.	Moderate: too sandy.	Slight if slope is 1 to 8 percent, moderate if 8 to 15.	Good.	Fair: excess fines.	Unsuited.	Poor: too sandy.	Seepage.	Piping: seepage.	A
Pajarito: PAC, PbB.	Slight.	Severe: seepage.	Slight.	Slight.	Severe: seepage.	Slight.	Good.	Poor: excess fines.	Unsuited.	Good.	Seepage.	Piping.	B

DESCRIPTIONS

BCC—Bluepoint loamy fine sand, 1 to 9 percent slopes. This soil is nearly level to moderately sloping. It has the profile described as representative of the series, but on about 10 percent of the acreage the surface layer is sand. Included in mapping are areas of Madurez, Pajarito, and Wink soils, which make up about 15 percent of the unit.

Runoff is slow, and the hazard of soil blowing is severe.

This soil is used for range, watershed, wildlife habitat, recreation, and community development. Dryland capability subclass VIIe; native plant community 2.

BKD—Bluepoint-Kokan association, hilly. This mapping unit is about 50 percent a Bluepoint loamy fine sand that has 5 to 15 percent slopes and 40 percent a Kokan gravelly sand that has 15 to 40 percent slopes. The gently rolling to rolling Bluepoint soil is on fans between gravelly ridges of the hilly to steep Kokan soil.

The Kokan soil has the profile described as representative of the Kokan series. On about 10 percent of the acreage, however, it has a high lime layer in the substratum.

On both soils, runoff is slow and the hazard of water erosion is moderate or severe.

This mapping unit is used for range, watershed, wildlife habitat, recreation, and community development. In Bernalillo County it is also a major source of sand and gravel. Dryland capability subclass VIIe; native plant community 2 for Bluepoint soil and 3 for Kokan soil.

PAC—Pajarito loamy fine sand, 1 to 9 percent slopes. This nearly level to moderately sloping soil is on the East and West Mesas. It has the profile described as representative of the series.

Included with this soil in mapping are areas of Bluepoint, Madurez, and Wink soils. On about 30 percent of the acreage are areas where the surface layer is fine sandy loam.

Runoff is slow, and the hazard of soil blowing is severe.

This soil is used for range, watershed, wildlife habitat, and community development. Dryland capability subclass VIIe; native plant community 6.

11-5-84
REV 4-18-85
CAE

EASTERLING & ASSOCIATES INC.
CONSULTING ENGINEERS
5643 PARADISE BLVD. N.W. ABQ. N.M. (505) 898-8021

DRAINAGE PLAN
VOLCANO BUSINESS PARK

DATE: NOV., 1984
REV. 2-15-85 REV. 4-18-85 REV.

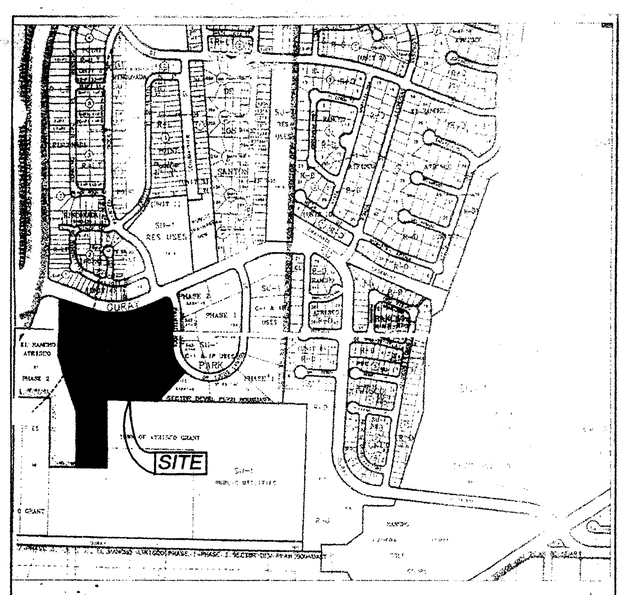
SHEET 1 OF 2

[redacted]

Tracts 5A1-A and 5A1-B

Volcano Business Park

Albuquerque, Bernalillo County, New Mexico
January 2002



Location Map
Zone Atlas Map No. G-10-Z & H10-Z

Subdivision Data:

GROSS SUBDIVISION ACREAGE: 16.8141 ACRES±
ZONE ATLAS INDEX NO: G-10-Z & H-10-Z
NO. OF TRACTS CREATED: 2
NO. OF LOTS CREATED: 0
MILES OF FULL-WIDTH STREETS CREATED: 0
DATE OF SURVEY: FEBRUARY 2001, FIELD VERIFIED DECEMBER 2001

Notes:

1. MISC. DATA: ZONING SU-1 C-1 & IP USES
2. BEARINGS SHOWN ARE GRID BEARINGS (NEW MEXICO STATE PLANE CENTRAL ZONE - NAD 1927).
3. ALL DISTANCES ARE GROUND DISTANCES-US SURVEY FOOT.
4. THIS PROPERTY LIES WITHIN PROJECTED SECTIONS 3 & 10, TOWNSHIP 10 NORTH, RANGE 2 EAST, TOWN OF ATRISCO GRANT, N.M.P.M., CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO.
5. THE PURPOSE OF THIS PLAT IS TO REPLAT THE EXISTING TWO TRACTS INTO TWO NEW TRACTS, GRANT EASEMENTS AND DEDICATE RIGHT OF WAY, AND VACATE EXISTING TEMPORARY TURNAROUND EASEMENT.
6. PLAT SHOWS ALL EASEMENTS OF RECORD.
7. SP NO. 01022613180577 .
8. VESTING DOCUMENT: WARRANTY DEED (09/14/90, BK. BCR 90-15--PG. 3408)

Easements

THIS PLAT SHOWS EXISTING RECORDED AND APPARENT EASEMENTS AS NOTED.

PUBLIC UTILITY EASEMENTS SHOWN ON THIS PLAT ARE GRANTED FOR THE COMMON AND JOINT USE OF:

1. PNM ELECTRIC SERVICES FOR INSTALLATION, MAINTENANCE, AND SERVICE OF OVERHEAD AND UNDERGROUND ELECTRICAL LINES, COMMUNICATION FACILITIES, TRANSFORMERS, POLES AND ANY OTHER EQUIPMENT, FIXTURES, STRUCTURES AND RELATED FACILITIES REASONABLY NECESSARY TO PROVIDE ELECTRICAL SERVICE.
2. PNM GAS SERVICES FOR INSTALLATION, MAINTENANCE, AND SERVICE OF NATURAL GAS LINES, VALVES AND OTHER EQUIPMENT AND FACILITIES REASONABLY NECESSARY TO PROVIDE NATURAL GAS
3. QWEST CORPORATION FOR THE INSTALLATION, MAINTENANCE AND SERVICE OF ALL BURIED AND AERIAL COMMUNICATION LINES AND OTHER RELATED EQUIPMENT AND FACILITIES REASONABLY NECESSARY TO PROVIDE COMMUNICATION SERVICES, INCLUDING BUT NOT LIMITED TO ABOVE GROUND PEDESTALS AND CLOSURES.
4. COMCAST CABLE FOR THE INSTALLATION, MAINTENANCE, AND SERVICE OF SUCH LINES, CABLE, AND OTHER RELATED EQUIPMENT AND FACILITIES REASONABLY NECESSARY TO PROVIDE CABLE TV SERVICE.

INCLUDED IS THE RIGHT TO BUILD, REBUILD, CONSTRUCT, RECONSTRUCT, LOCATE, RELOCATE, CHANGE, REMOVE, MODIFY, RENEW, OPERATE, AND MAINTAIN FACILITIES FOR THE PURPOSES DESCRIBED ABOVE, TOGETHER WITH FREE ACCESS TO, FROM, AND OVER SAID EASEMENTS, INCLUDING SUFFICIENT WORKING AREA SPACE FOR ELECTRIC TRANSFORMERS, WITH THE RIGHT AND PRIVILEGE TO TRIM AND REMOVE TREES, SHRUBS OR BUSHES WHICH INTERFERE WITH THE PURPOSES SET FORTH HEREIN. NO BUILDING, POOL (ABOVEGROUND OR SUBSURFACE), HOT TUB, CONCRETE OR WOOD POOL DECKING, OR OTHER STRUCTURE SHALL BE ERECTED OR CONSTRUCTED ON SAID EASEMENTS, NOR SHALL ANY WELL BE DRILLED OR OPERATED THEREON. PROPERTY OWNERS SHALL BE SOLELY RESPONSIBLE FOR CORRECTING ANY VIOLATIONS OF NATIONAL ELECTRICAL SAFETY CODE CAUSED BY CONSTRUCTION OR POOLS, DECKING, OR ANY STRUCTURE ADJACENT TO, WITHIN, OR NEAR EASEMENTS SHOWN ON THIS PLAT.

IN APPROVING THIS PLAT, PNM ELECTRIC SERVICES AND GAS SERVICES (PNM) DID NOT CONDUCT A TITLE SEARCH OF THE PROPERTIES HEREON. CONSEQUENTLY, PNM DOES NOT WAIVE NOR RELEASE ANY EASEMENT OR EASEMENT RIGHTS TO WHICH IT MAY BE ENTITLED.

Legal Description

A TRACT OF LAND LYING AND SITUATE WITHIN PROJECTED SECTIONS 3 AND 10, TOWNSHIP 10 NORTH, RANGE 2 EAST, TOWN OF ATRISCO GRANT, NEW MEXICO PRINCIPAL MERIDIAN, ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, COMPRISING OF TRACT NUMBERED FIVE-A-ONE (5-A-1), VOLCANO BUSINESS PARK, PHASE 1, AS THE SAME IS SHOWN AND DESIGNATED ON THE PLAT THEREOF, FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO, ON APRIL 24, 1986, IN PLAT BOOK C-17, FOLIO 84, TOGETHER WITH TRACT NUMBERED 5A2-A1-1, VOLCANO BUSINESS PARK, PHASE II, AS THE SAME IS SHOWN AND DESIGNATED ON THE PLAT THEREOF, FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO, ON APRIL 3, 1998, IN BOOK 98C, FOLIO 89, SAID TRACT BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHWEST CORNER OF DESCRIBED TRACT LYING ON THE SOUTH RIGHT OF WAY LINE OF OURAY ROAD, N.W., MARKED BY A FOUND CHISELED "X" IN CURB, FROM WHENCE A TIE TO ALBUQUERQUE CONTROL SURVEY MONUMENT "2-G9" BEARS N 47°38'18" W, A DISTANCE OF 1,007.45 FEET;

THENCE FROM SAID BEGINNING POINT, S 70°43'20" E, A DISTANCE OF 251.09 FEET TO A POINT OF CURVATURE MARKED BY A FOUND CROSS ON SIDEWALK;

THENCE ALONG A CURVE TO THE LEFT HAVING A RADIUS OF 609.60 FEET, AN ARC LENGTH OF 444.72 FEET, A DELTA ANGLE OF 41°47'55", AND A CHORD N 88°12'41" E, A DISTANCE OF 434.92 FEET TO A POINT OF TANGENCY MARKED BY A FOUND CROSS ON SIDEWALK;

THENCE N 67°15'48" E, A DISTANCE OF 150.97 FEET TO A POINT OF CURVATURE MARKED BY A SET REBAR WITH CAP "PS 11993";

THENCE ALONG A CURVE TO THE RIGHT HAVING A RADIUS OF 30.00 FEET, AN ARC LENGTH OF 47.12 FEET, A DELTA ANGLE OF 90°00'00", AND A CHORD OF S 67°44'12" E, A DISTANCE OF 42.43 FEET TO A POINT OF COMPOUND CURVATURE MARKED BY A FOUND REBAR WITH CAP "PS 11993";

THENCE ALONG CURVE TO RIGHT HAVING A RADIUS OF 234.63, AN ARC LENGTH OF 95.64 FEET, A DELTA ANGLE OF 23°21'14", AND A CHORD OF S 11°07'16" E, A DISTANCE OF 94.97 FEET TO A POINT OF TANGENCY MARKED BY A FOUND REBAR WITH CAP "PS 11993";

THENCE S 00°33'20" W, A DISTANCE OF 231.81 FEET TO A POINT OF CURVATURE MARKED BY A FOUND REBAR WITH CAP "PS 11993";

THENCE ALONG A CURVE TO THE LEFT HAVING A RADIUS OF 281.51, AN ARC LENGTH OF 244.69 FEET, A DELTA ANGLE OF 49°48'03", AND A CHORD OF S 24°20'43" E, A DISTANCE OF 237.06 FEET TO A POINT MARKED BY FOUND REBAR WITH CAP "PS 11993";

THENCE S 40°45'14" W, A DISTANCE OF 296.63 FEET TO A POINT MARKED BY A FOUND REBAR WITH CAP "PS 11993";

THENCE N 89°22'16" W, A DISTANCE OF 397.77 FEET TO A POINT MARKED BY A SET REBAR WITH CAP "PS 11993";

THENCE S 00°21'37" W, A DISTANCE OF 525.72 FEET TO A POINT MARKED BY A SET REBAR WITH CAP "PS 11993";

THENCE N 89°34'50" W, A DISTANCE OF 228.72 FEET TO A POINT MARKED BY A SET NUMBER 4 REBAR WITH CAP "PS 11993";

THENCE N 00°30'41" E, A DISTANCE OF 442.49 FEET TO A POINT MARKED BY A SET NUMBER 4 REBAR WITH CAP "PS 11993";

THENCE N 19°39'13" W, A DISTANCE OF 436.88 FEET TO A POINT MARKED BY A SET NUMBER 4 REBAR WITH CAP "PS 11993";

THENCE N 00°17'49" E, A DISTANCE OF 458.49 FEET TO THE POINT OF BEGINNING HAVING AN AREA OF 16.8141 ACRES MORE OR LESS, NOW COMPRISING OF TRACTS 5A1-A AND 5A1-B, VOLCANO BUSINESS PARK.

Free Consent and Dedication

THE REPLAT SHOWN HEREON IS WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRES OF THE UNDERSIGNED OWNER AND/OR PROPRIETOR. EXISTING PUBLIC UTILITY EASEMENTS SHOWN HEREON FOR THE COMMON AND JOINT USE OF GAS, ELECTRICAL POWER AND COMMUNICATION SERVICES FOR BURIED AND/OR OVERHEAD DISTRIBUTION LINES, CONDUITS, AND PIPES FOR UNDERGROUND UTILITIES WHERE SHOWN OR INDICATED, AND INCLUDING THE RIGHT OF INGRESS AND EGRESS FOR CONSTRUCTION AND MAINTENANCE, AND THE RIGHT TO TRIM INTERFERING TREES AND SHRUBS. SAID OWNER AND/OR PROPRIETOR DOES HEREBY CERTIFY THAT THIS SUBDIVISION IS THEIR FREE ACT AND DEED. SAID OWNER AND/OR PROPRIETOR DOES HEREBY GRANT EASEMENT FOR UTILITIES AS SHOWN HEREON WITH SAME STIPULATIONS AS LISTED ABOVE FOR EXISTING UTILITIES. SAID OWNER AND/OR PROPRIETER DOES HEREBY DEDICATE ALL STREETS AND PUBLIC RIGHTS OF WAY SHOWN HEREON TO THE CITY OF ALBUQUERQUE IN FEE SIMPLE WITH WARRANTY COVENANTS.

K Harvie — 1 Feb 02
DR. KEITH HARVIE — DATE
MANAGING PARTNER
SUNSET PLAZA GENERAL PARTNERSHIP
A NEW MEXICO GENERAL PARTNERSHIP

1/29/02
DAVID BUCKLEY — DATE
SENIOR VICE PRESIDENT
TRANSPORTATION INTERNATIONAL POOL, INC.

11/18/05

Acknowledgement

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO) ss.

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THIS 1 DAY OF Feb., 2002
BY DR. KEITH HARVIE, MANAGING PARTNER, SUNSET PLAZA GENERAL PARTNERSHIP, A NEW MEXICO GENERAL PARTNERSHIP

NOTARY PUBLIC — MY COMMISSION EXPIRES: 11-18-2005

Acknowledgement

STATE OF PENNSYLVANIA)
COUNTY OF CHESTER)

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THIS 29th DAY OF January, 2002
BY DAVID BUCKLEY, SENIOR VICE PRESIDENT, TRANSPORTATION INTERNATIONAL POOL, INC.

NOTARY PUBLIC — MY COMMISSION EXPIRES.

Notarial Seal
Janice K. Kearney, Notary Public
Tredyffrin Twp., Chester County
My Commission Expires Dec. 24, 2005
Member, Pennsylvania Association Of Notaries

Project No. 1001567
Application No. 02500-00166

Approvals

CITY PLANNER, ALBUQUERQUE PLANNING DIVISION	DATE 3/26/02
CITY ENGINEER	DATE 2-13-02
A.M.A.F.C.A.	DATE 2-13-02
TRAFFIC ENGINEER	DATE 2-13-02
CITY SURVEYOR N.A.	DATE 2-5-02
PROPERTY MANAGEMENT	DATE
WATER RESOURCES DEPARTMENT	DATE 2/12/02
PARKS AND RECREATION	DATE 2/13/02
PNM ELECTRIC SERVICES	DATE 3-19-02
PNM GAS SERVICES	DATE 3-19-02
QWEST CORPORATION	DATE 2-12-02
COMCAST CABLE	DATE 2/12/02

TREASURE'S CERTIFICATE
032002
1010060 31174
1010060761031125
GE CAPITOL MODULAR SPACE
SUNSET PLAZA GEN PTNS
Sidney Dunn 3/26/02

Surveyor's Certificate

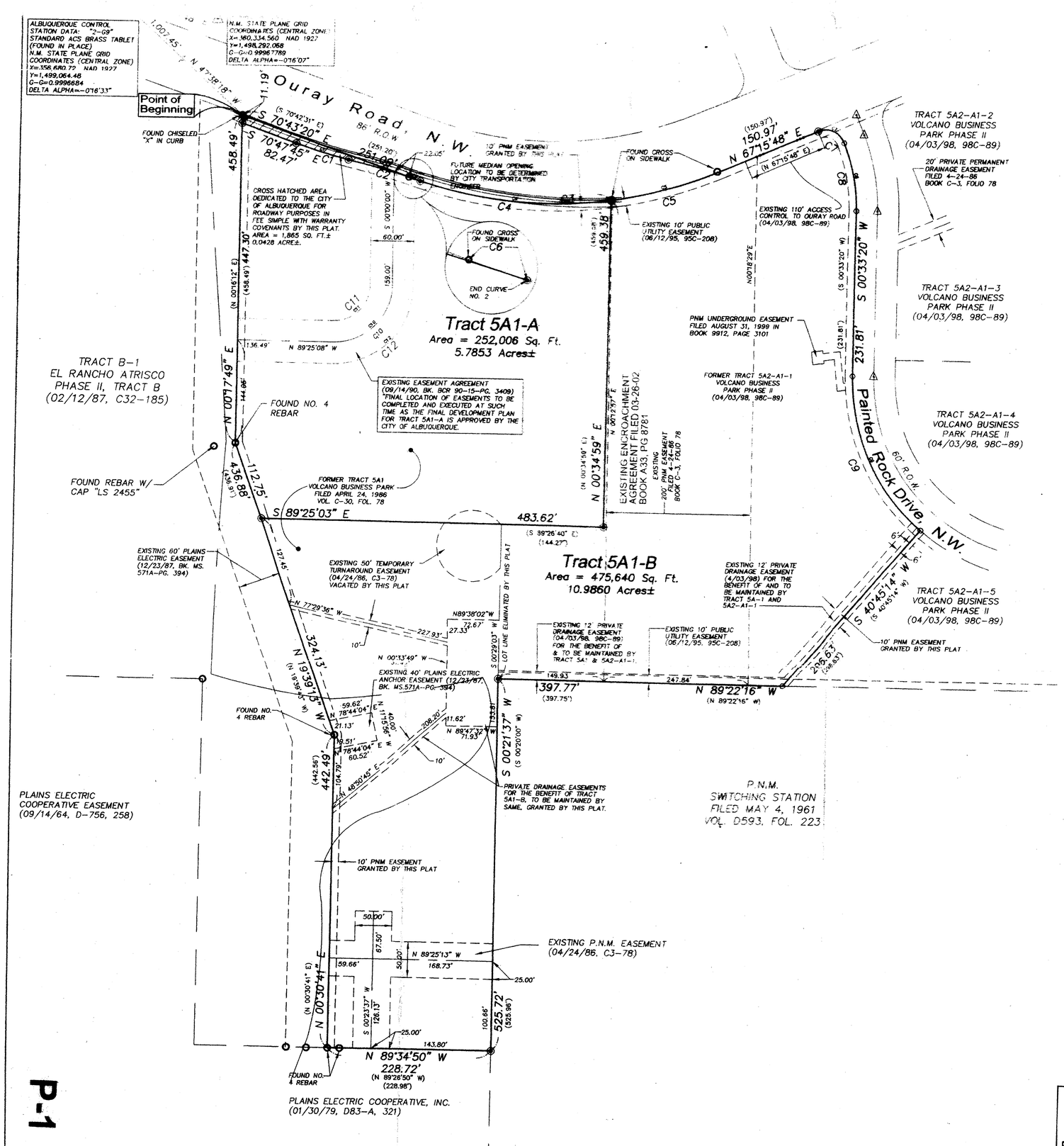
I, LARRY W. MEDRANO, A REGISTERED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF NEW MEXICO, HEREBY CERTIFY THAT THIS PLAT WAS PREPARED FROM FIELD NOTES OF AN ACTUAL SURVEY MEETING THE MINIMUM REQUIREMENTS FOR MONUMENTATION AND SURVEYS OF THE CITY OF ALBUQUERQUE SUBDIVISION ORDINANCE AND OF STANDARDS FOR LAND SURVEYS OF THE N.M. BOARD OF REGISTRATION FOR ENGINEERS AND SURVEYORS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT NO ENCROACHMENTS EXIST EXCEPT AS NOTED ABOVE AND THAT ALL IMPROVEMENTS ARE SHOWN IN THEIR CORRECT LOCATION RELATIVE TO RECORD BOUNDARIES AS LOCATED BY THIS SURVEY.

LARRY W. MEDRANO — 1/26/2002 — DATE
N.M.P.S. No. 11993

LARRY W. MEDRANO NEW MEXICO 11993 REGISTERED PROFESSIONAL SURVEYOR

PRECISION SURVEYS, INC.
8414-D JEFFERSON ST., N.E. PHONE 505 856 5700
ALBUQUERQUE, NEW MEXICO 87113 FAX 505 856 7900

Sheet 1 of 2



Tracts 5A1-A and 5A1-B

Volcano Business Park

Albuquerque, Bernalillo County, New Mexico
January 2002

Legend

(N 90°00'00" E)	RECORD BEARINGS AND DISTANCES SHOWN IN PARENTHESIS
N 90°00'00" E	MEASURED BEARINGS AND DISTANCES
○	POINT FOUND AND USED AS SHOWN
◉	POINT SET BY THIS SURVEY - REBAR WITH CAP "PS 11993"
○	FOUND REBAR WITH CAP "PS 11993"
△	FOUND ALUMINUM CENTERLINE MONUMENT "PS 11993"
-•-•-	ACCESS CONTROL LINE

Curve Data

CURVE	RADIUS	LENGTH	DELTA	TANGENT	CHORD	DISTANCE
C1	795.00	78.36	05°38'50"	39.21	S 73°37'10" E	78.33
C2	1265.00	104.51	04°44'01"	52.28	S 74°27'43" E	104.48
C3	609.60	444.72	41°47'55"	232.78	N 88°12'41" E	434.92
C4	610.17	273.36	25°40'07"	139.01	S 85°23'08" E	271.08
C5	609.60	153.87	14°27'42"	77.34	N 74°32'34" E	153.46
C6	609.60	17.50	01°38'41"	8.75	S 71°37'27" E	17.50
C7	30.00	47.12	90°00'00"	30.00	S 67°44'12" E	42.43
C8	234.63	95.64	23°21'14"	48.49	S 11°07'16" E	94.97
C9	281.51	244.69	49°48'03"	130.68	S 24°20'43" E	237.06
C10	80.00	126.48	90°34'52"	80.82	N 45°17'26" E	113.71
C11	50.00	79.05	90°34'52"	50.51	N 45°17'26" E	71.07
C12	110.00	173.90	90°34'52"	111.12	N 45°17'26" E	156.35

GRAPHIC SCALE
100 0 50 100 200 400
(IN FEET)
1 inch = 100 ft.

[redacted]

PRECISION SURVEYS, INC.
8414-D JEFFERSON ST., N.E. PHONE 505 856 5700
ALBUQUERQUE, NEW MEXICO 87113 FAX 505 856 7900

RECEIVED SEP 18 2002 PWD/DESIGN REVIEW

RECEIVED MAY 08 2002 HYDROLOGY SECTION

Project No. 1001567/02500-00166

Sheet 2 of 2

P-1

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