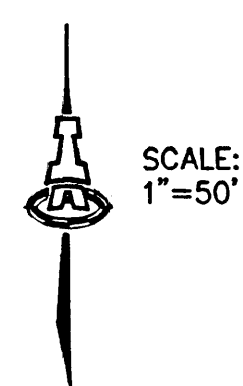
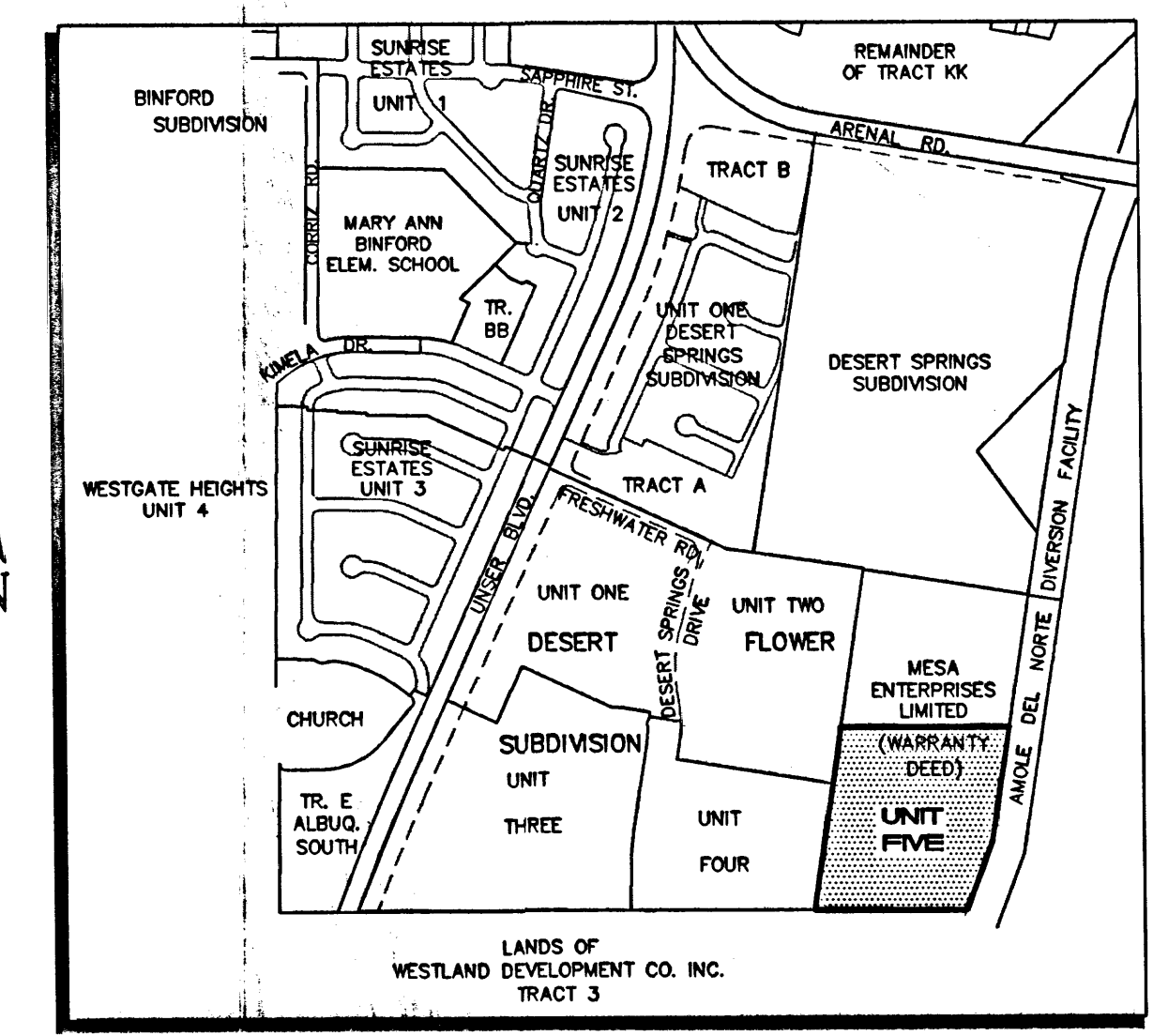


BOUNDARY DATA TABLES

LINE	BEARING	LENGTH
L1	N 08°56'44" E	19.95'
L2	S 89°44'05" E	94.07'



TEMPORARY DESILTATION POND TO BE CONSTRUCTED WITH THIS PHASE. SEE SHEET #6 FOR DETAILS.



VICINITY MAP (M-10)

NOTES

- LEGAL DESCRIPTION: Lands known as MESA ENTERPRISES, LIMITED, WARRANTY DEED, 4-23-80, Bk. D118A, Pg. 945, LOT 12, BLOCK M, of proposed DESERT FLOWER SUBDIVISION, UNIT FOUR.
- BENCHMARK: ACS MONUMENT "1-M10" LOCATED AT THE SOUTHEAST CORNER OF SAGE RD. & UNSER BLVD. ELEV. = 5079.88
- ENGINEER: ISAACSON & ARFMAN, P.A. 128 Monroe Street NE, Albuquerque, NM Attn: Fred Arfman
- SURVEYOR: ALS, Inc. P.O. Box 30701, Albuquerque, NM Attn: Tim Aldrich
- FLOOD HAZARD STATEMENT: No part of this development is affected nor contributes to a flood hazard area as determined by Panel No. (35001C03350-3371) of the September 20, 1996 Edition of the F.E.M.A. Maps.
- SOILS: From the SCS Soil Survey of Bernalillo County site soils are identified as Bluepoint Lomay Fine Sands which are classified as hydrologic group "A" soils.

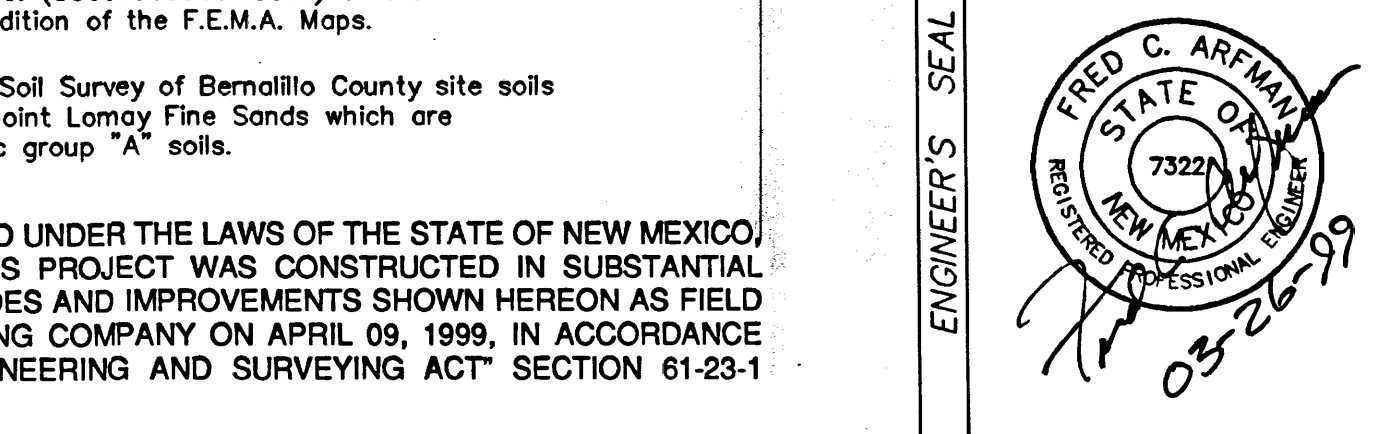
ENGINEER'S CERTIFICATION

I, FRED C. ARFMAN, PE, LICENSED UNDER THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THIS PROJECT WAS CONSTRUCTED IN SUBSTANTIAL COMPLIANCE WITH THOSE GRADES AND IMPROVEMENTS SHOWN HEREON AS FIELD VERIFIED BY WALKER SURVEYING COMPANY ON APRIL 09, 1999, IN ACCORDANCE WITH THE "NEW MEXICO ENGINEERING AND SURVEYING ACT" SECTION 61-23-1 THROUGH 61-23-32 NMCD (1979).

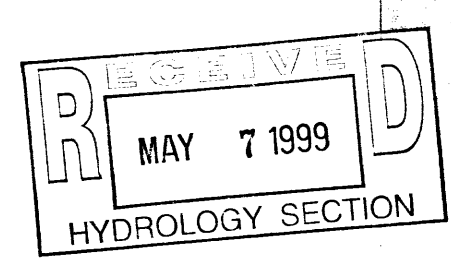
NO RETAINING WALLS WERE REQUIRED ON THE APPROVED FINAL GRADING PLAN, DATED 03/26/99 AND NONE WERE CONSTRUCTED AS PART OF THE DESERT FLOWER SUBDIVISION, UNIT FIVE (M10/D12E).

LEGEND

- EXISTING CONTOUR
- EXISTING SPOT ELEVATION
- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION
- TOP OF CURB ELEVATION
- FLOWLINE ELEVATION
- FLOW ARROW
- PAD GRADE ELEVATION
- PROPOSED STORM DRAIN
- STORM DRAIN INLET
- BASIN BOUNDARY
- BASIN ID NUMBER
- EROSION CONTROL BERM
- CONCRETE RUNDOWN

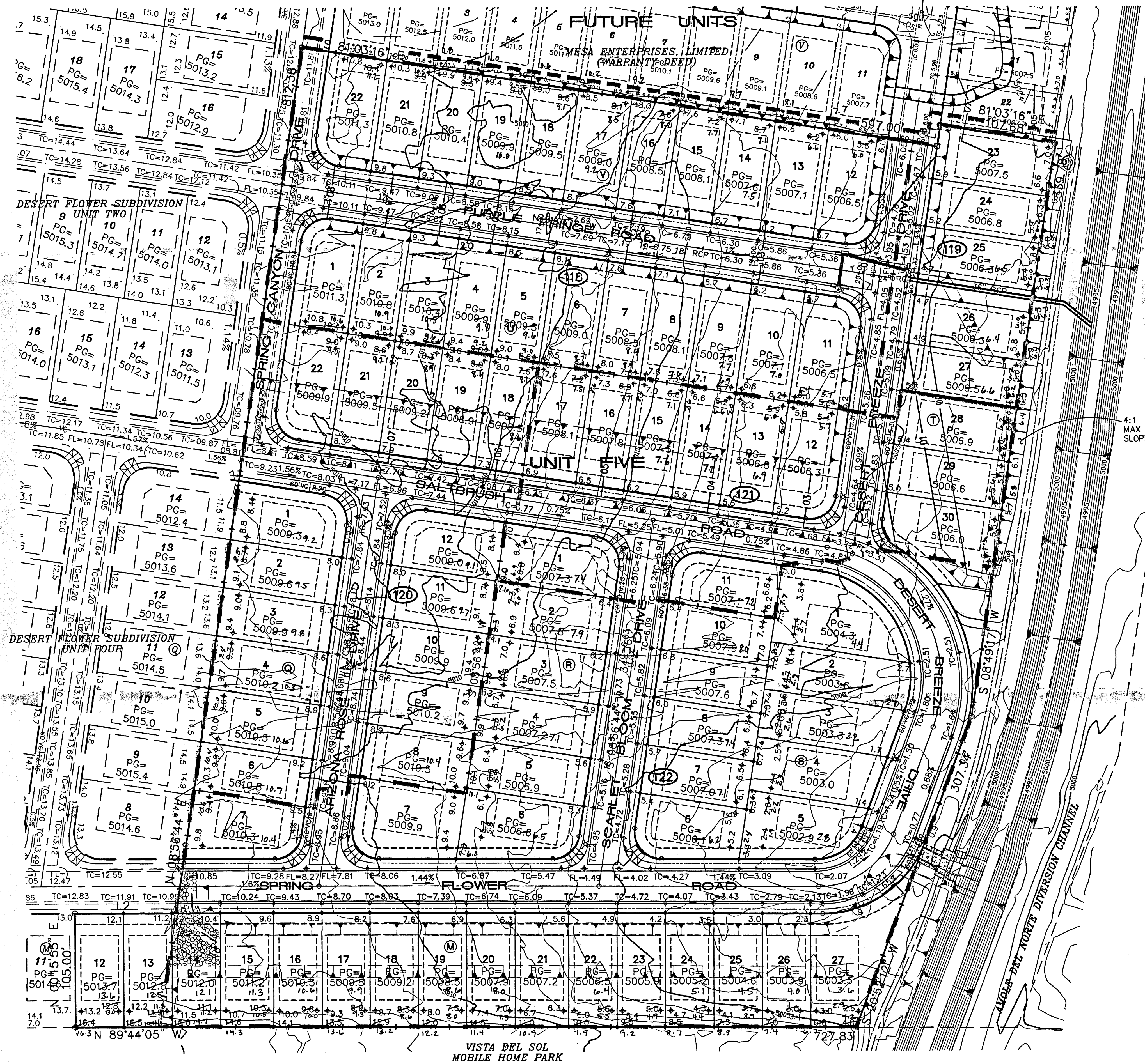


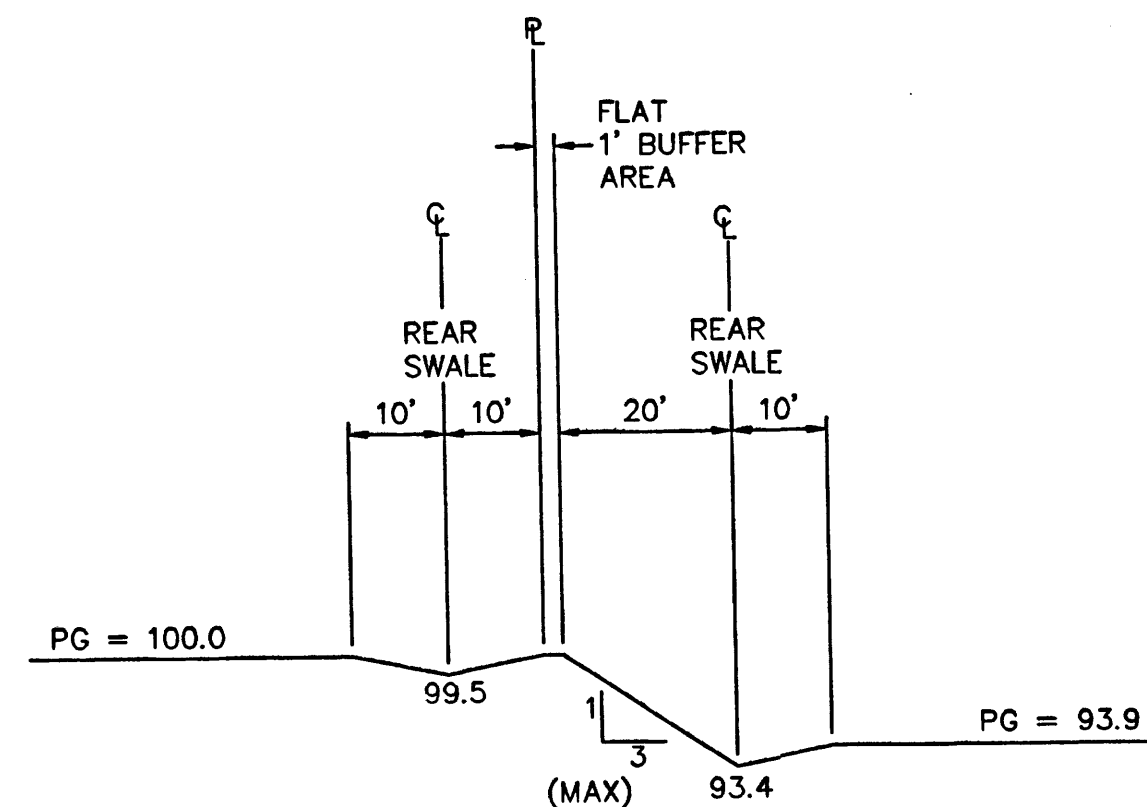
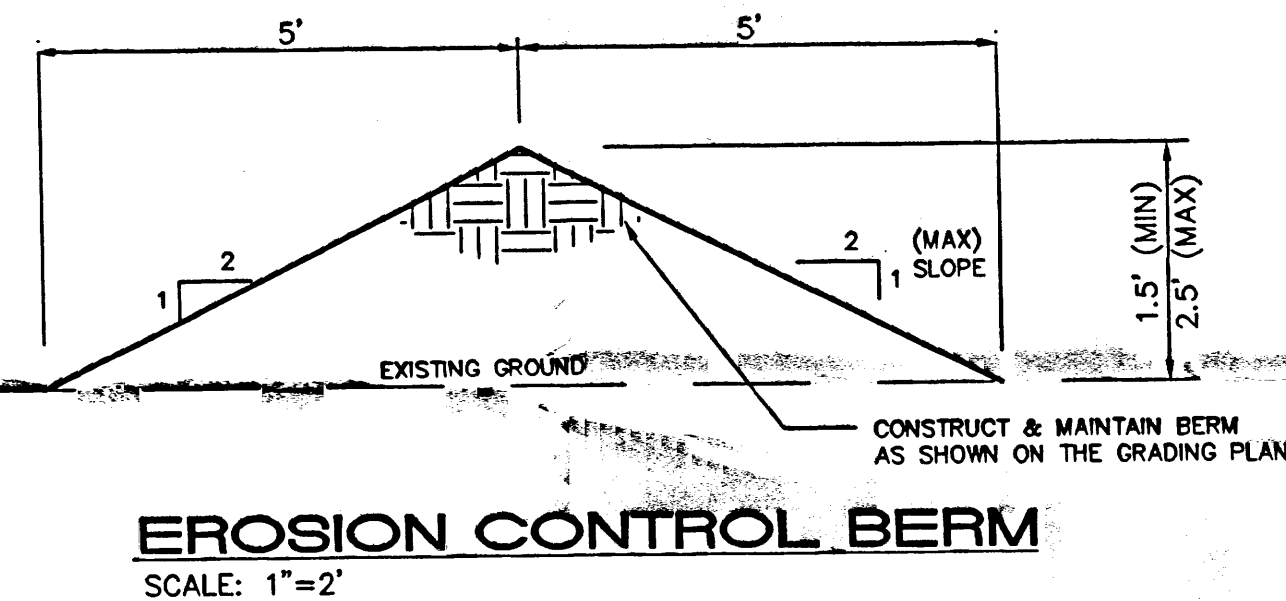
FRED C. ARFMAN, NMPE NO. 7322
DATE 05-03-99



ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque New Mexico 08106
024GRD1.DWG

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP			
TITLE: DESERT FLOWER SUBDIVISION--UNIT FIVE GRADING & DRAINAGE PLAN			
Design Review Committee	City Engineer Approval	Last Design Update	
City Project No.	Zone Map No. M-10	Sheet 1	Of 2





TYPICAL REAR YARD CROSS-SECTION

SCALE:
1" = 20' HORIZONTAL
1" = 10' VERTICAL

**TYPICAL LOT GRADING SHOWING
COMPACTION ZONE**

EROSION CONTROL

1. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO THE PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY CONSTRUCTING EROSION CONTROL BERMS (AS DETAILED BELOW) AS SHOWN ON THE PLAN AND WETTING THE SOIL TO KEEP IT FROM BLOWING.
2. THE CONTRACTOR SHALL SECURE "TOPSOIL DISTURBANCE PERMIT" FROM THE CITY ENVIRONMENTAL HEALTH DEPARTMENT PRIOR TO BEGINNING CONSTRUCTION. AN EXCAVATION PERMIT IS REQUIRED FOR ALL WORK WITHIN PUBLIC RIGHT-OF-WAY.
3. SEE GRADING NOTES.

ESTIMATED EARTHWORK QUANTITIES

EXCAVATION = 21135 CY*
FILL = 10873 CY*
* INCLUDES SUBSIDENCE AND SHRINK

NOTE:

NOTE:
THE ENGINEER ASSUMES NO LIABILITY AS TO THE CORRECTNESS OF THE ABOVE ESTIMATED QUANTITIES. THE CONTRACTOR SHALL MAKE HIS OWN TAKE-OFF FOR BIDDING PURPOSES. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE PROVIDING OF ANY ADDITIONAL FILL MATERIAL OR THE REMOVAL OF EXCESS EXCAVATED MATERIAL IN ORDER TO ACHIEVE A BALANCED JOB.

PNM GRADING:

PNM GRADING:
THE GRADING CONTRACTOR SHALL PROVIDE FOR THE PROPER GRADING OF ALL PNM EASEMENTS WHERE INDICATED ON THE GRADING PLAN. THE EASEMENTS SHALL BE GRADED AS FOLLOWS:

1. TO PROVIDE A 10' WIDE TRENCHING PATH ON THE CORRESPONDING LOT LINE
2. $\pm 6"$ (5% MAX. CROSS SLOPE) ACROSS THE PATH'S WIDTH
3. NO GRADE BREAKS (BENCHES) AT LOT LINES OR AT EASEMENT INTERSECTIONS.
4. IN AREAS WHERE THE 10' TRENCHING PATH ENCLOSES UPON PONDING AREAS, THOSE PONDS ARE NOT TO BE EXCAVATED OR FORMED UNTIL SUCH TIME THAT ALL UTILITIES HAVE BEEN INSTALLED AND THE TRENCHES PROPERLY BACKFILLED.
5. WHERE THE 10' TRENCHING PATH ENCLOSES UPON A DWELLING UNIT'S PAD, THE PATH SHALL BE AT THE SAME ELEVATION AS THE PAD TO INSURE THE PAD'S CERTIFICATION.

ENGINEER'S CERTIFICATION

I, FRED C. ARFMAN, PE, LICENSED UNDER THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THIS PROJECT WAS CONSTRUCTED IN SUBSTANTIAL COMPLIANCE WITH THOSE GRADES AND IMPROVEMENTS SHOWN HEREON AS FIELD VERIFIED BY WALKER SURVEYING COMPANY ON APRIL 09, 1999, IN ACCORDANCE WITH THE "NEW MEXICO ENGINEERING AND SURVEYING ACT" SECTION 61-23-1 THROUGH 61-23-32 NMSD (1979).

NO RETAINING WALLS WERE REQUIRED ON THE APPROVED FINAL GRADING PLAN, DATED 03/26/99 AND NONE WERE CONSTRUCTED AS PART OF THE DESERT FLOWER SUBDIVISION, UNIT FIVE (M10/D12E).

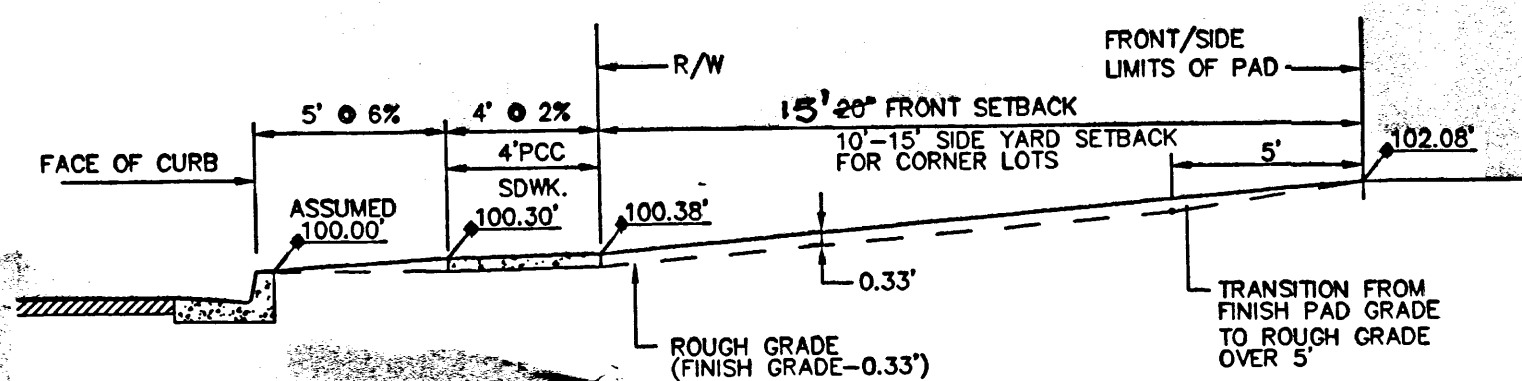
Fred C. Arfman
FRED C. ARFMAN, NMPE NO. 7322

APPROVAL FOR ROUGH GRADING ($\pm 0.1'$)

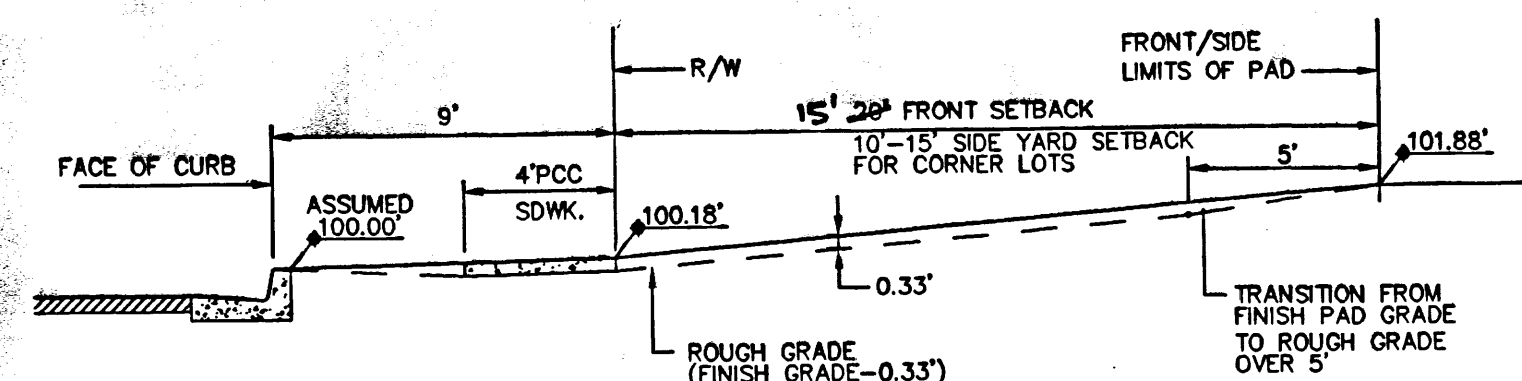
CONDITION: TOP SOIL DISTURBANCE PERMIT
REQUIRED PRIOR TO COMMENCING
EARTHWORK OPERATIONS

HYDROLOGY DIVISION
PUBLIC WORKS DEPARTMENT
CITY OF ALBUQUERQUE

DATE _____



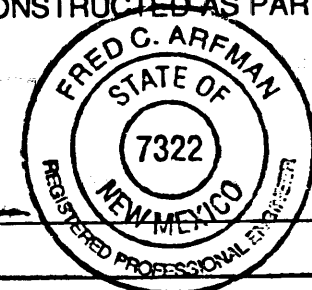
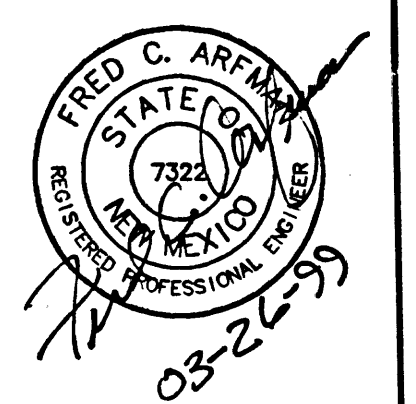
PURPLE FRINGE ROAD ONLY
FRONT/SIDE YARD GRADING
1"=5'-0"



FRONT/SIDE YARD GRADING
1"=5'-0"

GRADING NOTES:

1. ALL TRASH, DEBRIS, & SURFACE VEGETATION SHALL BE CLEARED AND LEGALLY DISPOSED OFFSITE.
2. ALL SUBGRADE AND FILL SHALL BE COMPACTED TO A MINIMUM OF 90% ASTM D-1557.
3. EXCAVATION IS UNCLASSIFIED AND INCLUDES EXCAVATION TO SUBGRADE ELEVATIONS INDICATED, REGARDLESS OF CHARACTER OF MATERIALS ENCOUNTERED.
4. CONFORM TO ELEVATIONS AND DIMENSIONS SHOWN ON PLANS WITHIN A TOLERANCE OF 0.3± FEET.
5. SCARIFY AND COMPACT SUBGRADE FOR FILLS. PLACE FILL MATERIALS IN LAYERS NOT MORE THAN 8" IN LOOSE DEPTH. MOISTEN AS NECESSARY TO PROVIDE OPTIMUM MOISTURE (±2%) CONTENT.
6. UNIFORMLY GRADE AREAS WITHIN LIMITS OF GRADING AS SHOWN ON PLAN. SMOOTH FINISHED SURFACE WITHIN SPECIFIED TOLERANCE, COMPACT WITH UNIFORM SLOPES BETWEEN POINTS WHERE ELEVATIONS ARE INDICATED.
7. MAXIMUM SLOPES SHALL BE 3:1; MINIMUM SLOPES SHALL BE 1%.
8. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM, 260-1990, FOR LOCATION OF EXISTING UTILITIES.
9. IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE OWNER OF SAID UTILITY, AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES. THE ENGINEER HAS CONDUCTED ONLY PRELIMINARY INVESTIGATION OF THE LOCATION, DEPTH, SIZE OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES. THIS INVESTIGATION IS NOT CONCLUSIVE, AND MAY NOT BE COMPLETE, THEREFORE, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFORE. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES. IN PLANNING AND CONDUCTING EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.
10. THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY SO THAT THE EXCAVATED MATERIAL IS NOT ERODED AND WASHED DOWN THE STREET.
11. OWNER WILL PROVIDE SOIL TESTING AND INSPECTION SERVICES DURING EARTHWORK OPERATIONS. ALLOW TESTING SERVICE TO INSPECT AND APPROVE COMPACTED SUBGRADES AND FILL LAYERS BEFORE FURTHER CONSTRUCTION WORK IS DONE. SHALL COMPACTION TESTS INDICATE INADEQUATE DENSITY, CONTRACTOR SHALL PROVIDE ADDITIONAL COMPACTION AND TESTING AT NO ADDITIONAL EXPENSE.
12. OWNER HAS ESTABLISHED SUBDIVISION BOUNDARY CORNERS. CONTRACTOR SHALL PROVIDE ALL OTHER CONSTRUCTION STAKING INCLUDING TRACT CORNERS. CONTRACTOR SHALL LOCATE AND PRESERVE ALL BOUNDARY CORNERS AND REPLACE ANY LOST OR DISTURBED CORNERS.
13. ISAACSON & ARFMAN, P.A. (THE ENGINEER) HAS PREPARED THIS GRADING PLAN TO ESTABLISH FINAL SURFACE GRADES FOR BOTH THE PROPOSED INDIVIDUAL RESIDENTIAL LOTS AND THE PUBLIC RIGHTS-OF-WAY.
14. THE EARTHWORK CONTRACTOR (CONTRACTOR) IS REQUIRED TO REVIEW THE FOLLOWING: GEOTECHNICAL INVESTIGATION FOR UNSER BOULEVARD ADJACENT TO HAEGLIN TRACT F, PREPARED FOR BOKAY CONSTRUCTION, INC., MAY 1, 1997, AND GEOTECHNICAL INVESTIGATION FOR HAEGLIN TRACT F, PREPARED FOR CURB, INC., MARCH 17, 1997. COPIES OF THIS DOCUMENT MAY BE REVIEWED AT THE OFFICE OF ISAACSON & ARFMAN, P.A., 128 MONROE STREET NE, ALBUQUERQUE, NEW MEXICO, (505) 268-8828. THE EARTHWORK CONTRACTOR'S BID SHALL INCLUDE ALL COSTS ASSOCIATED WITH THE IMPLEMENTATION OF ALL RECOMMENDATIONS CONTAINED IN THESE STUDIES.



ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque New Mexico
024GRDLDWGems 12/03/98

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE:	DESERT FLOWER SUBDIVISION--UNIT FIVE GRADING & DRAINAGE DETAILS
--------	--

Design Review Committee	City Engineer Approval	Last Design Update 	Mo./Day/Yr.	Mo./Day/Yr.
City Project No.	Zone Map No.	Sheet	Of	
6074.81	M-10	2	2	

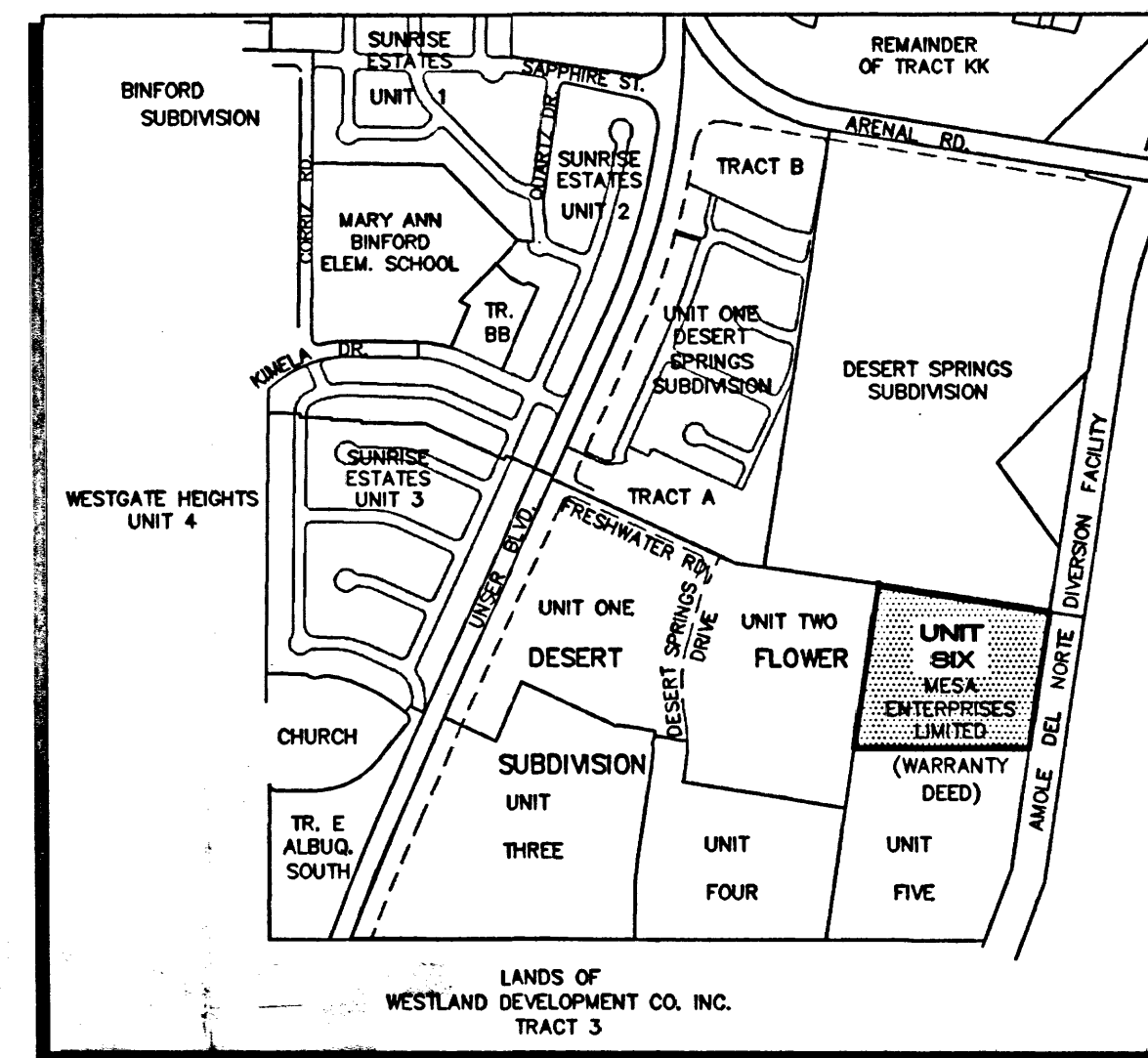
BOUNDARY DATA TABLES

LINE	BEARING	LENGTH
L1	S 08°56'44" W	19.95'

SCALE:
1"=40'

NOTES

- LEGAL DESCRIPTION: TRACT A, proposed DESERT FLOWER SUBDIVISION UNIT FIVE
- BENCHMARK: ACS MONUMENT "1-M10" ELEV = 5079.88
- ENGINEER: ISAACSON & ARFMAN, P.A.
128 Monroe Street NE, Albuquerque, NM
Attn: Fred Arfman
- SURVEYOR: ALS, Inc.
P.O. Box 30701, Albuquerque, NM
Attn: Tim Aldrich
- FLOOD HAZARD STATEMENT: No part of this development is affected nor contributes to a flood hazard area as determined by Panel No. (35001C03360-3371) of the September 20, 1996 Edition of the F.E.M.A. Maps.
- SOILS: From the SCS Soil Survey of Bernalillo County site soils are identified as Bluepoint Lomay Fine Sands which are classified as hydrologic group "A" soils.



VICINITY MAP

ENGINEER'S CERTIFICATION

I, Fred C. Arfman, licensed under the laws of the State of New Mexico, do hereby certify that this project was constructed in substantial compliance with those grades and improvements shown hereon as field verified by Walker Surveying on July 19, 1999, in accordance with the "New Mexico Engineering and Surveying Act", Section 61-23-1 through 61-23-32 NMSD (1978).

Retaining walls were not required on the proposed Final Grading Plan, dated February 16, 1999 for Desert Flower Subdivision, Unit Six (M-10).

Fred C. Arfman
Fred C. Arfman, NMPE No. 7322

LEGEND

- EXISTING CONTOUR
- EXISTING SPOT ELEVATION
- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION
- TOP OF CURB ELEVATION
- FLOWLINE ELEVATION
- 0.5% FLOW ARROW
- PAD GRADE ELEVATION
- FUTURE CONTOUR
- FUTURE SPOT ELEVATION
- FUTURE PAD GRADE ELEVATION
- PROPOSED STORM DRAIN
- STORM DRAIN INLET
- BASIN BOUNDARY
- BASIN ID NUMBER

FUTURE 10' ASPHALT TRAIL

3:1 SLOPE (TYP.)

EMERGENCY OVERFLOW & 6' PEDESTRIAN ACCESS

REMOVE TEMPORARY DESILTATION POND, RUNDOWN AND RIPRAP.

ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque, New Mexico
046GRD1.DWG Date: 02/16/99

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: DESERT FLOWER SUBDIVISION--UNIT SIX
GRADING & DRAINAGE PLAN

Design Review Committee City Engineer Approval

RECEIVED
JUL 20 1999
HYDROLOGY SECTION

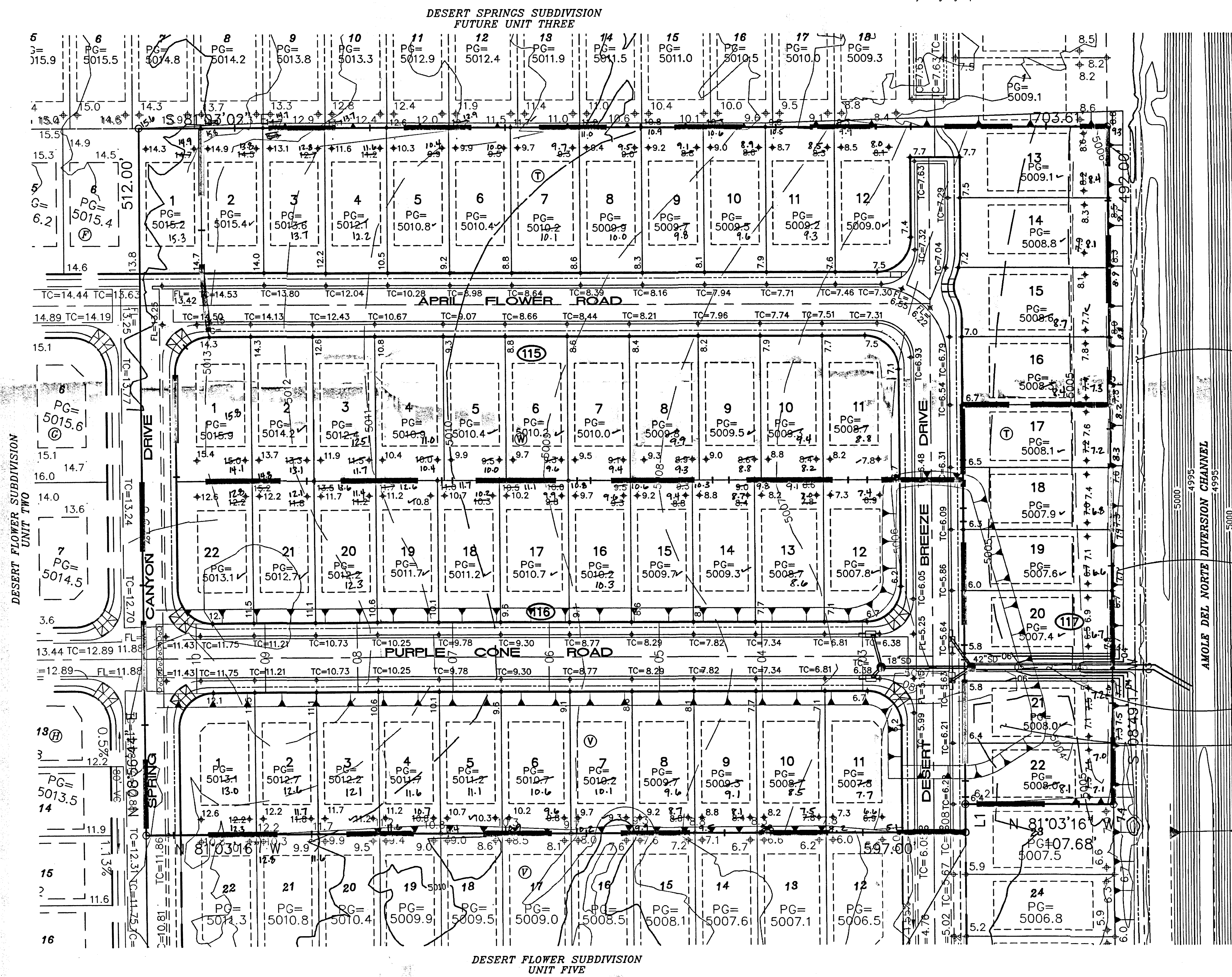
City Project No.

Zone Map No.

M-10

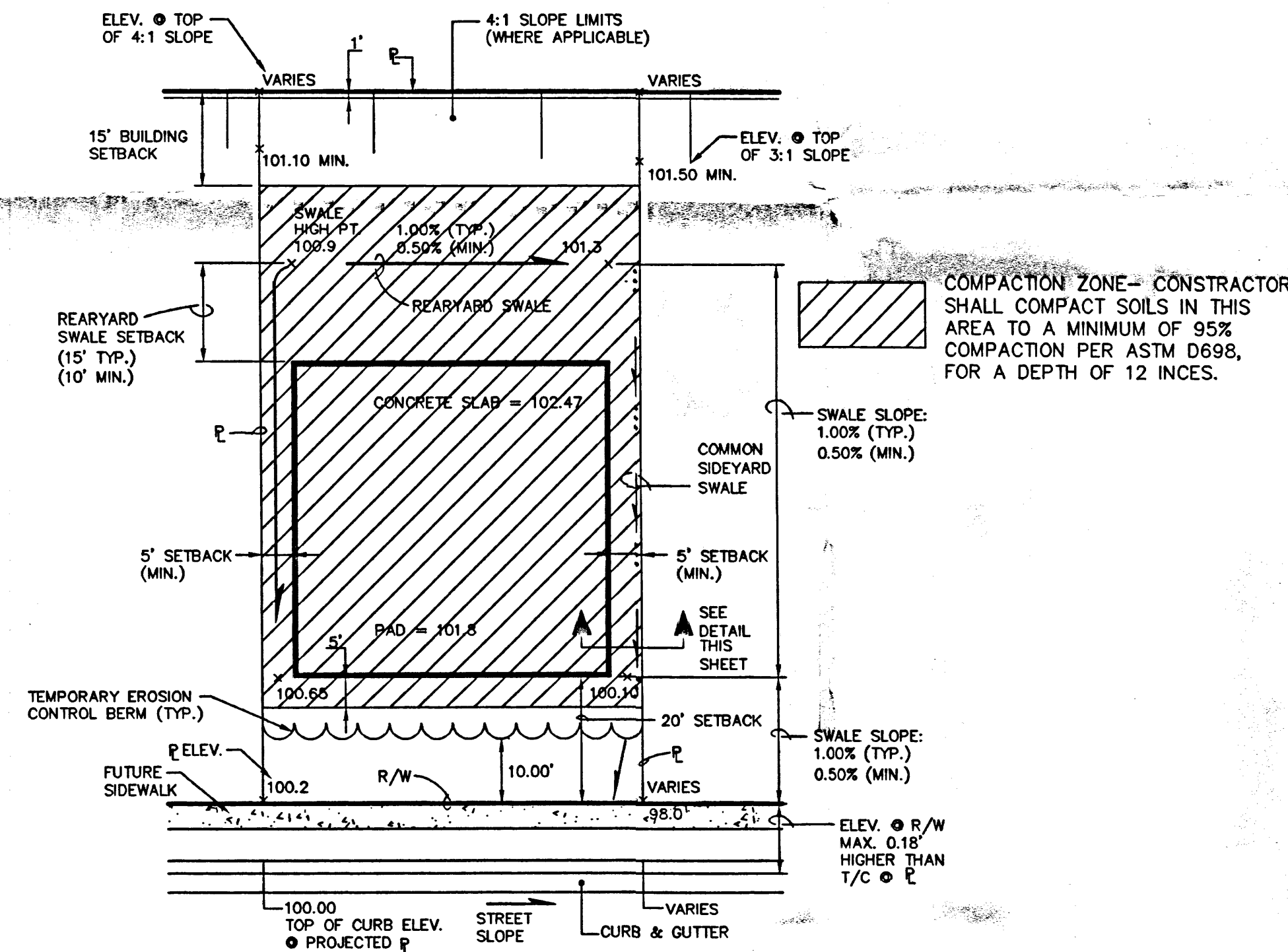
Sheet 1 of 2

DESIGNED BY MJC DATE 12/98
DRAWN BY EMS DATE 12/98
CHECKED BY FCA DATE 12/98

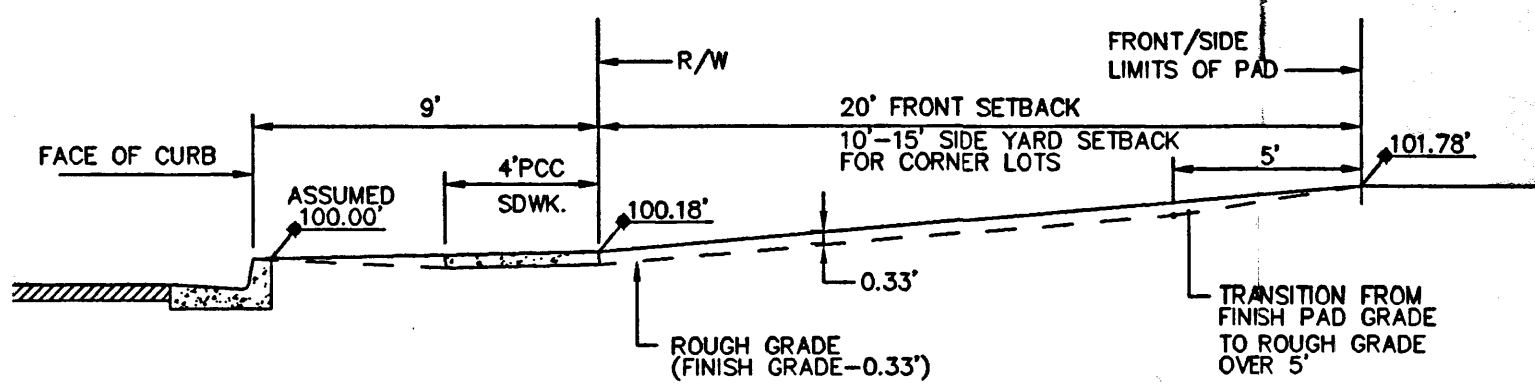


GRADING NOTES:

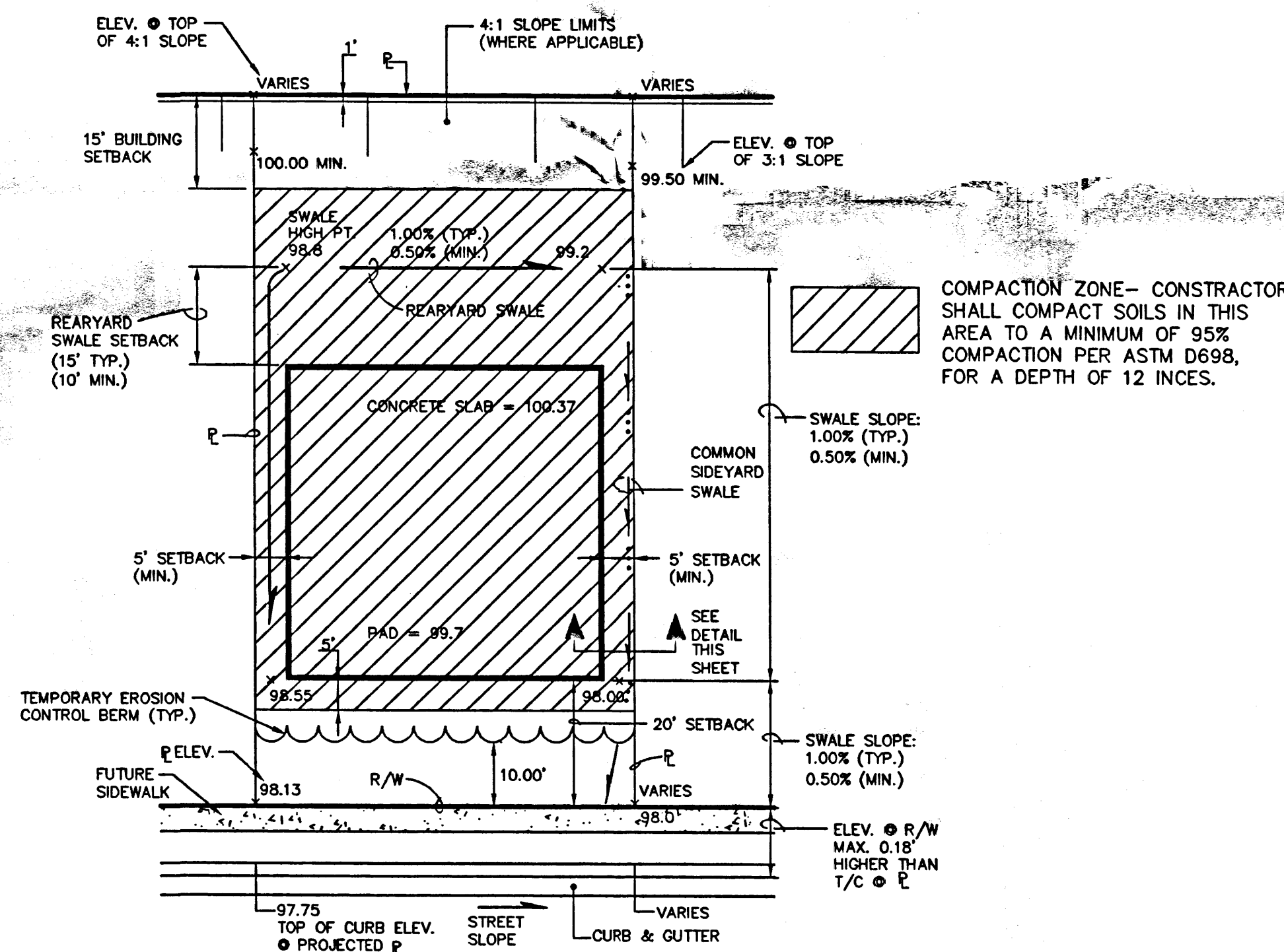
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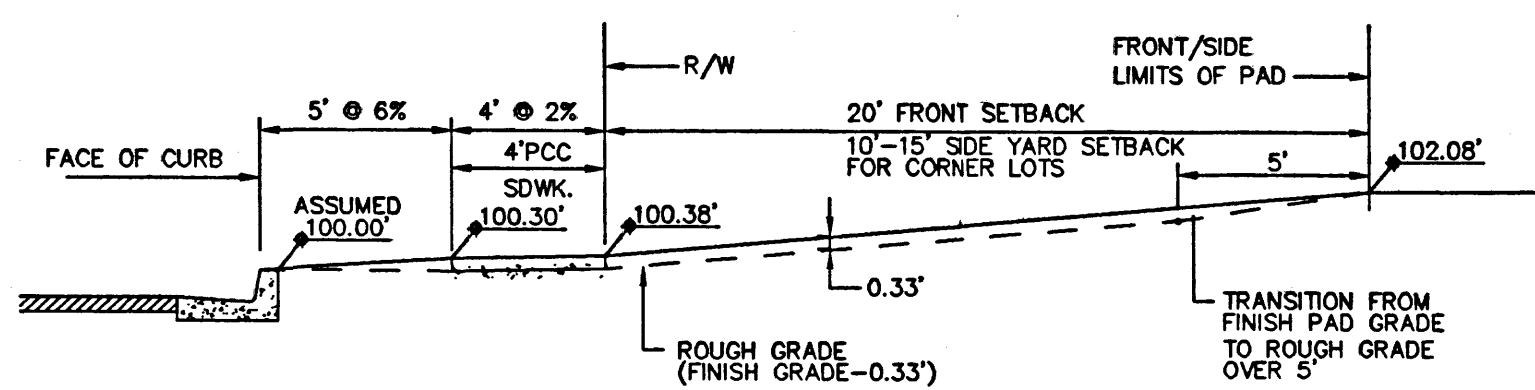
TYPICAL LOT GRADING SHOWING
COMPACTION ZONE
1"=20'



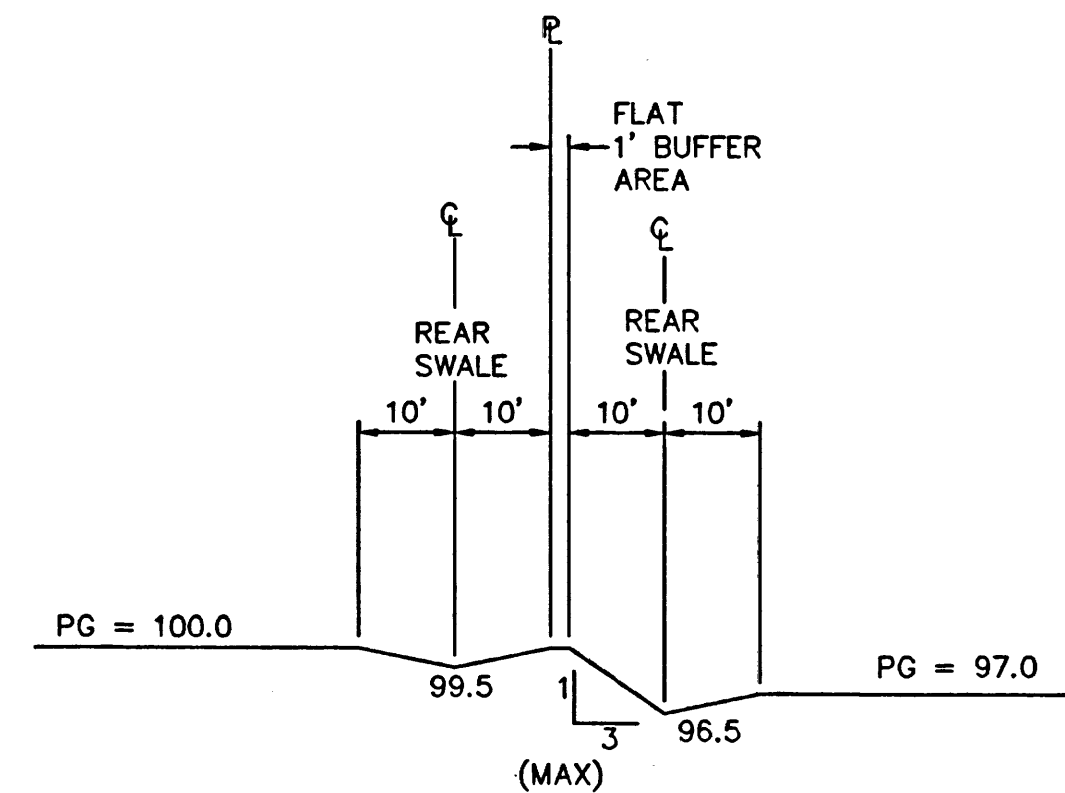
FRONT/SIDE YARD GRADING
1"=5'-0"



PURPLE CONE ROAD
TYPICAL LOT GRADING SHOWING
COMPACTION ZONE
1"=20'



PURPLE CONE ROAD
FRONT/SIDE YARD GRADING
1"=5'-0"



TYPICAL REAR YARD CROSS-SECTION

SCALE:
1" = 20' HORIZONTAL
1" = 10' VERTICAL

ESTIMATED EARTHWORK QUANTITIES

EXCAVATION =
FILL =
* INCLUDES SUBSIDENCE AND SHRINK

NOTE:
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- WHERE THE 10' TRENCHING PATH ENCLOSES UPON A DWELLING UNIT'S PAD, THE PATH SHALL BE AT THE SAME ELEVATION AS THE PAD TO INSURE THE PAD'S CERTIFICATION.

ENGINEER'S CERTIFICATION

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Retaining walls were not required on the approved Final Grading Plan, dated February 16, 1999 for Desert Flower Subdivision, Unit Six (12E).

Fred C. Arfman, NMPE No. 7322
DATE: 02.16.99

APPROVAL FOR ROUGH GRADING (±0.1')

CONDITION: TOP SOIL DISTURBANCE PERMIT REQUIRED PRIOR TO COMMENCING EARTHWORK OPERATIONS

HYDROLOGY DIVISION
PUBLIC WORKS DEPARTMENT
CITY OF ALBUQUERQUE

DATE

ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque, New Mexico 87102
046GRD1.DWG MEW: 2 02/16/99

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: DESERT FLOWER SUBDIVISION--UNIT SIX
GRADING DETAILS & SECTIONS

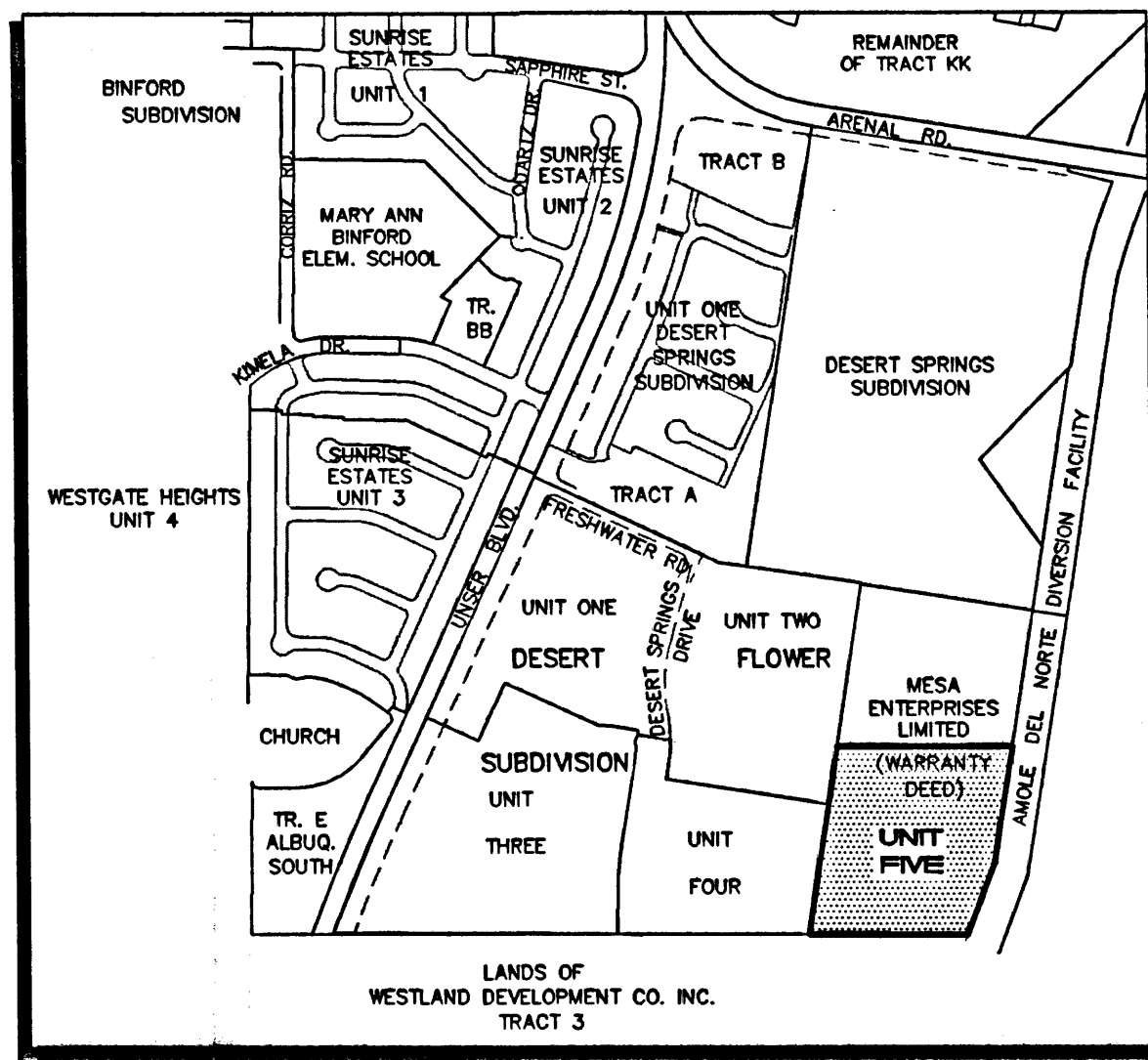
Design Review Committee	City Engineer Approval	Ms./Day/Yr.	Ms./Day/Yr.
City Project No.	Zone Map No. M-10	Sheet 2	Of 2

BOUNDARY DATA TABLES

LINE	BEARING	LENGTH
L1	N 08°56'44" E	19.95'
L2	S 89°44'05" E	94.07'

SCALE:
1"=50'

TEMPORARY DESILTATION POND
TO BE CONSTRUCTED WITH
THIS PHASE. SEE SHEET #6
FOR DETAILS.

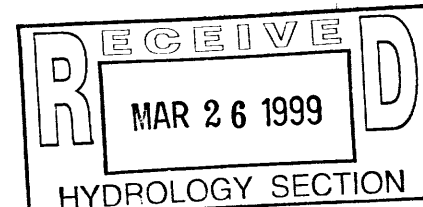


NOTES

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- BENCHMARK: ACS MONUMENT "1-M10" ELEV = 5079.88
- ENGINEER: ISAACSON & ARFMAN, P.A. 128 Monroe Street NE, Albuquerque, NM Attn: Fred Arfman
- SURVEYOR: ALS, Inc. P.O. Box 30701, Albuquerque, NM Attn: Tim Aldrich
- FLOOD HAZARD STATEMENT: No part of this development is affected nor contributes to a flood hazard area as determined by Panel No. (35001003360-3371) of the September 20, 1996 Edition of the F.E.M.A. Maps.
- SOILS: From the SCS Soil Survey of Bernalillo County site soils are identified as Bluepoint Lomay Fine Sands which are classified as hydrologic group "A" soils.

LEGEND

- EXISTING CONTOUR
- EXISTING SPOT ELEVATION
- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION
- TOP OF CURB ELEVATION
- FLOWLINE ELEVATION
- FLOW ARROW
- PAD GRADE ELEVATION
- PROPOSED STORM DRAIN
- STORM DRAIN INLET
- BASIN BOUNDARY
- BASIN ID NUMBER
- EROSION CONTROL BERM
- CONCRETE RUNDOWN



ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque, New Mexico
0246RD1.DWGems 03/26/99

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: DESERT FLOWER SUBDIVISION--UNIT FIVE
GRADING & DRAINAGE PLAN

Design Review Committee City Engineer Approval

City Project No. Zone Map No. M-10

Sheet 1 Of 2

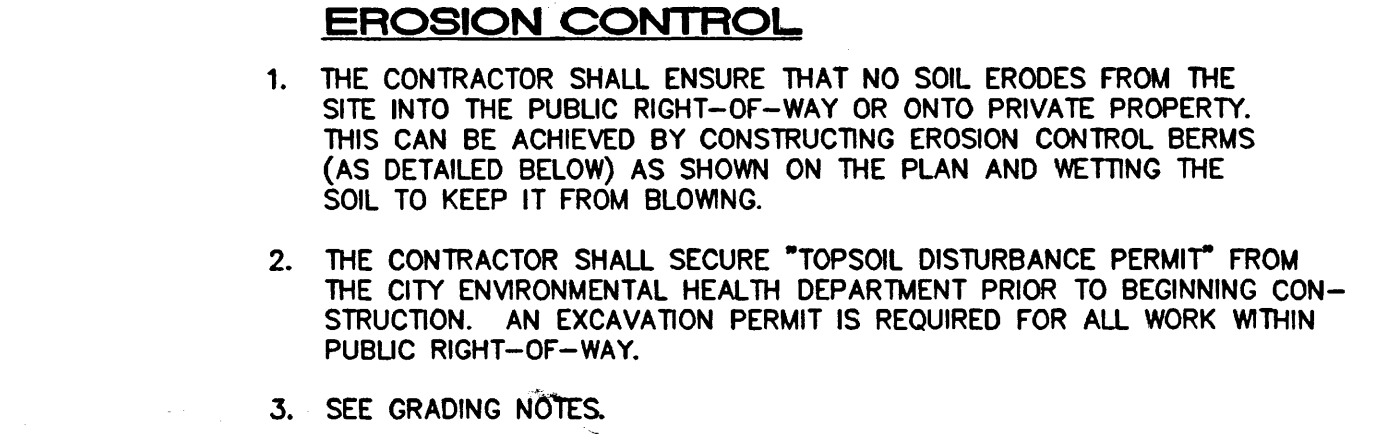
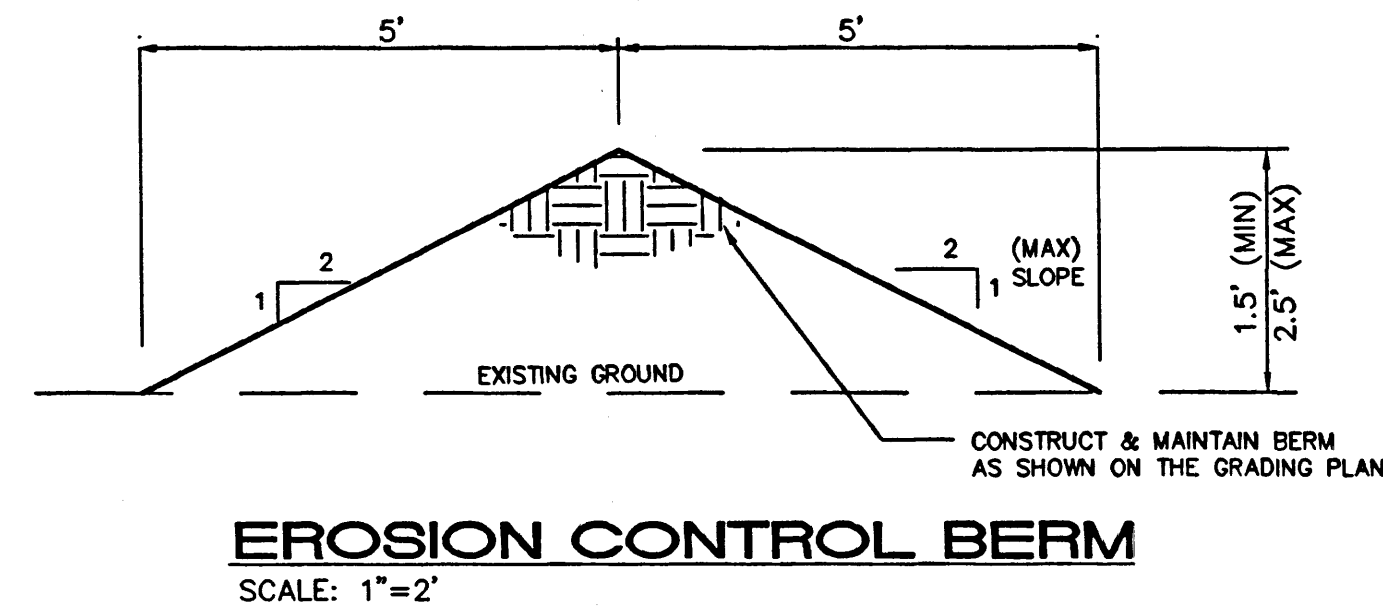
AS-BUILT INFORMATION

CONTRACTOR	DATE
ACS MONUMENT "1-M10" LOCATED AT THE SOUTHEAST CORNER OF SAGE RD. & UNISER BLVD.	5/96
ELEV. = 5079.88	

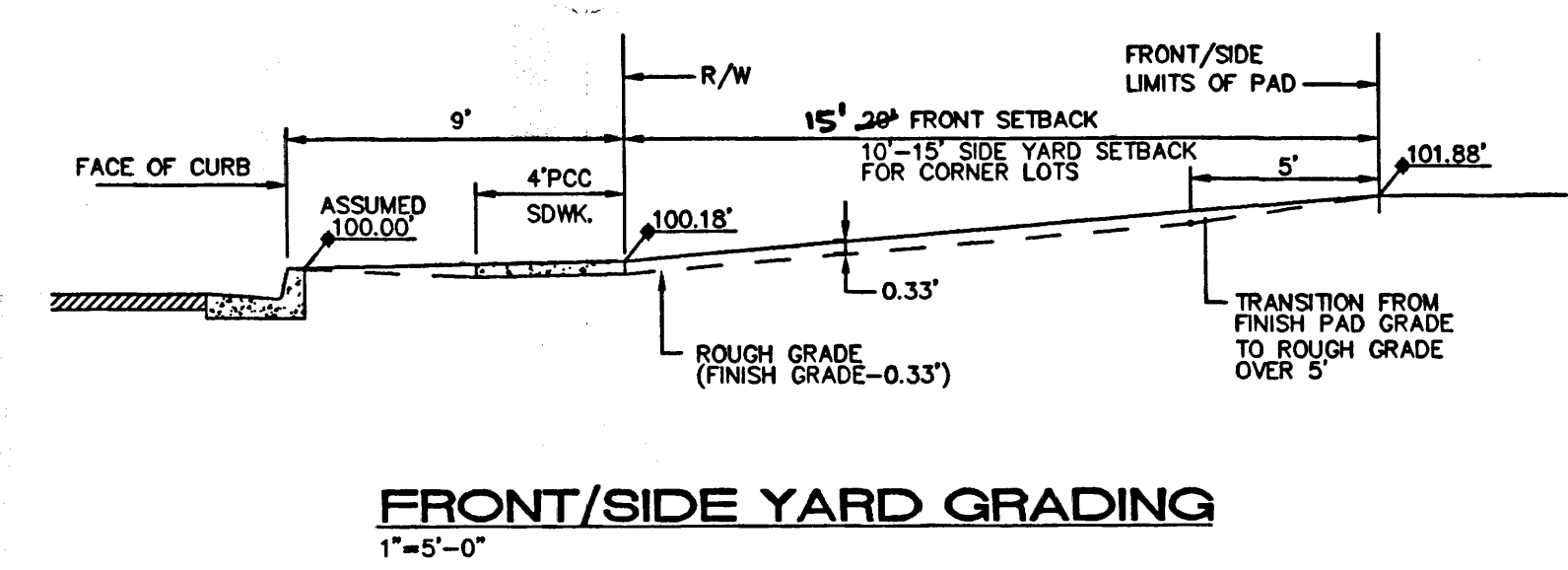
ENGINEER'S SEAL
FRED C. ARFMAN
STATE OF NEW MEXICO
73221
03-26-99

REVISIONS

NO.	DATE	REMARKS	BY
DESIGNED BY MJC	DATE 12/98		
DRAWN BY EMS	DATE 12/98		
CHECKED BY FCA	DATE 12/98		



-
- Grading plan for Purple Fringe Road. The plan shows a cross-section of the road with the following details:
- FACE OF CURB** on the left.
 - 5' @ 6%** slope from curb to the start of the rough grade.
 - 4" @ 2%** slope for the **4" PCC** section.
 - SDWK. 100.30'** (Side Walk) section.
 - 100.38'** distance from the curb to the start of the rough grade.
 - ROUGH GRADE (FINISH GRADE = 0.33')** section.
 - 0.33'** vertical offset from rough grade to finish grade.
 - 15' 20" FRONT SETBACK** from the curb to the front of the lot.
 - 10' 15" SIDE YARD SETBACK FOR CORNER LOTS** from the curb to the side of the lot.
 - 5'** distance from the side of the lot to the rough grade.
 - 102.08'** total distance from the curb to the rough grade.
 - TRANSITION FROM FINISH PAD GRADE TO ROUGH GRADE OVER 5'** at the end of the rough grade.
 - FRONT/SIDE LIMITS OF PAD** indicated by a bracket at the top.
 - R/W** (Right of Way) line at the top.
- PURPLE FRINGE ROAD ONLY**
FRONT/SIDE YARD GRADING



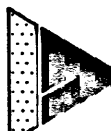
ENGINEER'S CERTIFICATION

APPROVAL FOR ROUGH GRADING ($\pm 0.1'$)

CONDITION: TOP SOIL DISTURBANCE PERMIT
REQUIRED PRIOR TO COMMENCING
EARTHWORK OPERATIONS

HYDROLOGY DIVISION
PUBLIC WORKS DEPARTMENT
CITY OF ALBUQUERQUE

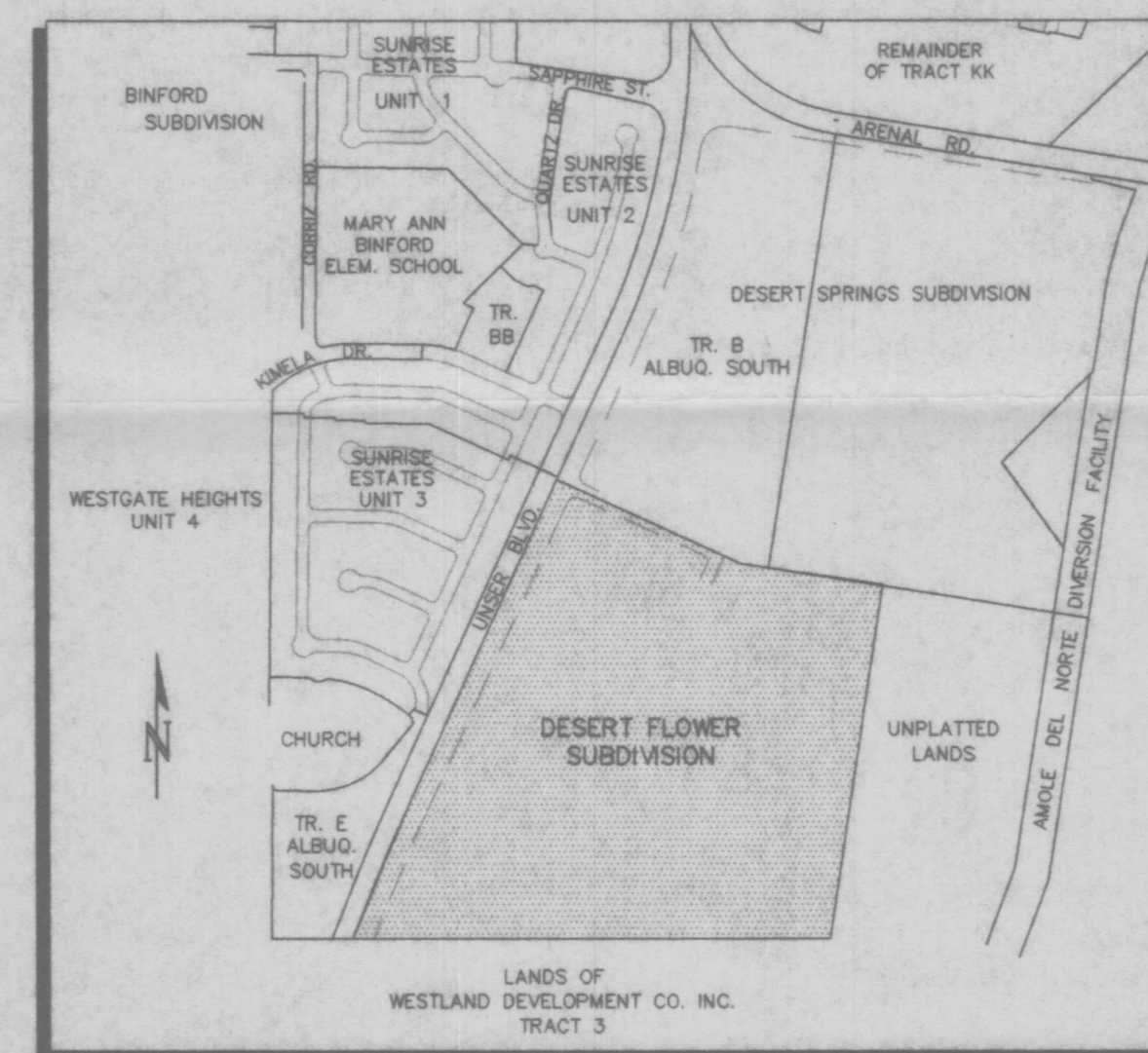
DATE

 ISAACSON & ARFMAN, P.A. <i>Consulting Engineering Associates</i> 128 Monroe Street N.E. Albuquerque 024GRD1L.DWGems	New Mexico 12/03/98		NO.	DATE	DESIGNED BY	DRAWN BY	CHECKED BY	
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP								
TITLE: DESERT FLOWER SUBDIVISION--UNIT FIVE GRADING & DRAINAGE DETAILS								
Design Review Committee		City Engineer Approval		Last Design Update	Mo./Day/Yr.		Mo./Day/Yr.	
City Project No.		Zone Map No.		Sheet		Of		
6074.81		M-10		2		2		

MASTER DRAINAGE PLAN FOR DESERT FLOWER SUBDIVISION UNITS ONE THROUGH FIVE

CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO

APRIL 1997



1"=750'±

VICINITY MAP

(M-10)

LEGEND

- UNIT BOUNDARY
- PROPERTY LINE
- EXISTING CONTOUR
- PROPOSED DRAINAGE BASIN
- DRAINAGE BASIN BOUNDARY
- FLOW ARROW
- WATER BLOCK
- PROPOSED INLET
- PROPOSED STORM DRAIN MH
- PROPOSED STORM DRAIN
- FUTURE STORM DRAIN

ONSITE MASTER DRAINAGE PLAN



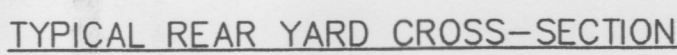
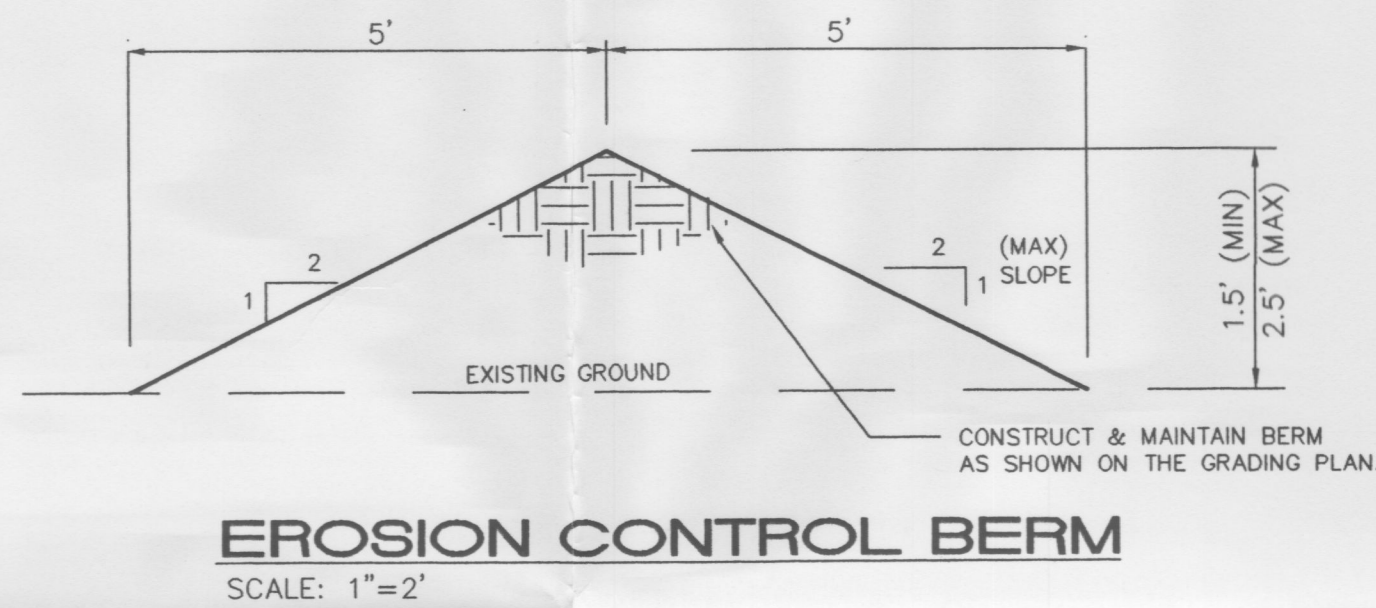
ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque New Mexico

930MSDP3.DWG

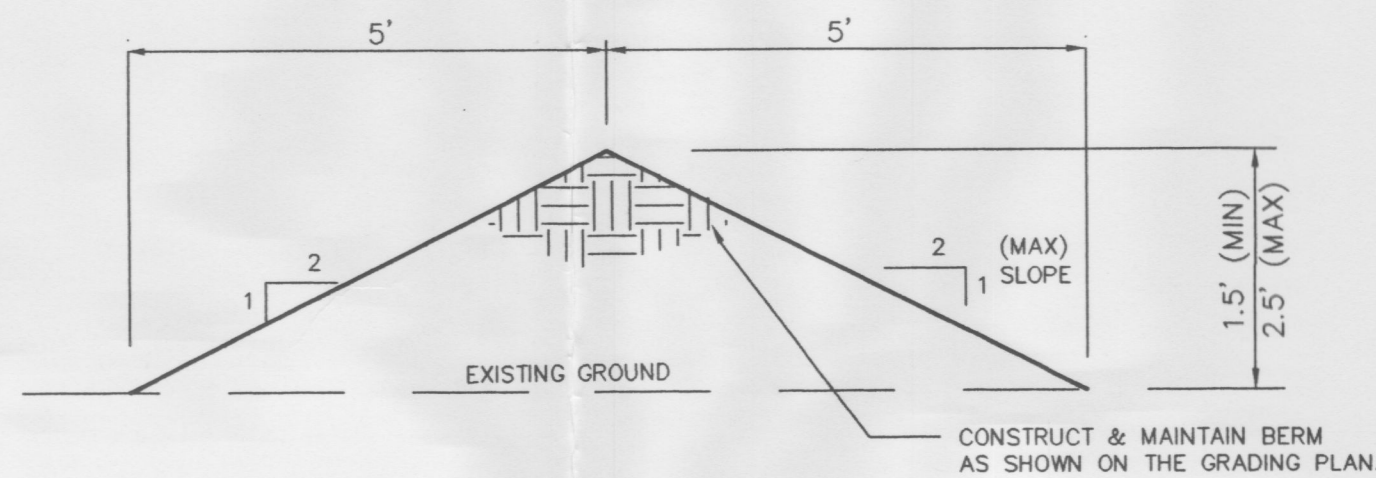
6/4/98

FIGURE 1





SCALE:
1" = 20' HORIZONTAL
1" = 10' VERTICAL



EROSION CONTROL BERM

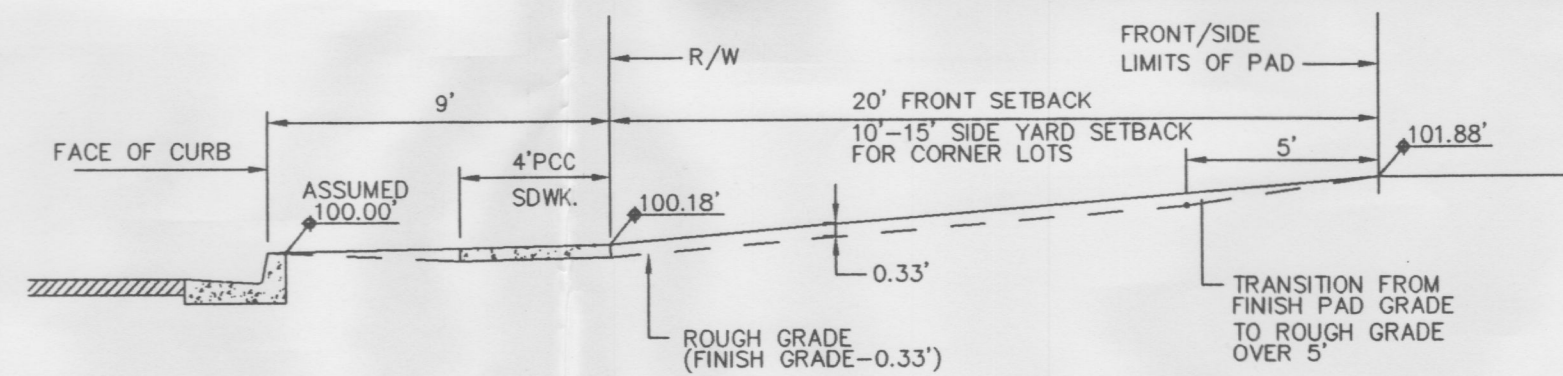
SCALE: 1"=2'

GRADING NOTES:

1. ALL TRASH, DEBRIS, & SURFACE VEGETATION SHALL BE CLEARED AND LEGALLY DISPOSED OFFSITE.
2. ALL SUBGRADE AND FILL SHALL BE COMPACTED TO A MINIMUM OF 90% ASTM D-1557.
3. EXCAVATION IS UNCLASSIFIED AND INCLUDES EXCAVATION TO SUBGRADE ELEVATIONS INDICATED, REGARDLESS OF CHARACTER OF MATERIALS ENCOUNTERED.
4. CONFORM TO ELEVATIONS AND DIMENSIONS SHOWN ON PLANS WITHIN A TOLERANCE OF 0.3± FEET.
5. SCARIFY AND COMPACT SUBGRADE FOR FILLS. PLACE FILL MATERIALS IN LAYERS NOT MORE THAN 8" IN LOOSE DEPTH. MOISTEN AS NECESSARY TO PROVIDE OPTIMUM MOISTURE (±2%) CONTENT.
6. UNIFORMLY GRADE AREAS WITHIN LIMITS OF GRADING AS SHOWN ON PLAN. SMOOTH FINISHED SURFACE WITHIN SPECIFIED TOLERANCE, COMPACT WITH UNIFORM SLOPES BETWEEN POINTS WHERE ELEVATIONS ARE INDICATED.
7. MAXIMUM SLOPES SHALL BE 3:1; MINIMUM SLOPES SHALL BE 1%.
8. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM, 260-1990, FOR LOCATION OF EXISTING UTILITIES.
9. IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE OWNER OF SAID UTILITY, AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES. THE ENGINEER HAS CONDUCTED ONLY PRELIMINARY INVESTIGATION OF THE LOCATION, DEPTH, SIZE OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES. THIS INVESTIGATION IS NOT CONCLUSIVE, AND MAY NOT BE COMPLETE, THEREFORE, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFORE. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES. IN PLANNING AND CONDUCTING EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.
10. THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY SO THAT THE EXCAVATED MATERIAL IS NOT ERODED AND WASHED DOWN THE STREET.
11. OWNER WILL PROVIDE SOIL TESTING AND INSPECTION SERVICES DURING EARTHWORK OPERATIONS. ALLOW TESTING SERVICE TO INSPECT AND APPROVE COMPACTED SUBGRADES AND FILL LAYERS BEFORE FURTHER CONSTRUCTION WORK IS DONE. SHALL COMPACTION TESTS INDICATE INADEQUATE DENSITY, CONTRACTOR SHALL PROVIDE ADDITIONAL COMPACTION AND TESTING AT NO ADDITIONAL EXPENSE.
12. OWNER HAS ESTABLISHED SUBDIVISION BOUNDARY CORNERS. CONTRACTOR SHALL PROVIDE ALL OTHER CONSTRUCTION STAKING INCLUDING TRACT CORNERS. CONTRACTOR SHALL LOCATE AND PRESERVE ALL BOUNDARY CORNERS AND REPLACE ANY LOST OR DISTURBED CORNERS.
13. ISAACSON & ARFMAN, P.A. (THE ENGINEER) HAS PREPARED THIS GRADING PLAN TO ESTABLISH FINAL SURFACE GRADES FOR BOTH THE PROPOSED INDIVIDUAL RESIDENTIAL LOTS AND THE PUBLIC RIGHTS-OF-WAY.
14. THE EARTHWORK CONTRACTOR (CONTRACTOR) IS REQUIRED TO REVIEW THE FOLLOWING: GEOTECHNICAL INVESTIGATION FOR UNSER BOULEVARD, ADJACENT TO HAEGELIN TRACT F, PREPARED FOR BOKAY CONSTRUCTION, INC., MAY 1, 1997, AND GEOTECHNICAL INVESTIGATION FOR HAEGELIN TRACT F, PREPARED FOR CURB, INC., MARCH 17, 1997. COPIES OF THIS DOCUMENT MAY BE REVIEWED AT THE OFFICE OF ISAACSON & ARFMAN, P.A., 128 MONROE STREET NE, ALBUQUERQUE, NEW MEXICO, (505) 268-8828. THE EARTHWORK CONTRACTOR'S BID SHALL INCLUDE ALL COSTS ASSOCIATED WITH THE IMPLEMENTATION OF ALL RECOMMENDATIONS CONTAINED IN THESE STUDIES.

EROSION CONTROL

1. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO THE PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY CONSTRUCTING EROSION CONTROL BERMS (AS DETAILED BELOW) AS SHOWN ON THE PLAN AND WETTING THE SOIL TO KEEP IT FROM BLOWING.
2. THE CONTRACTOR SHALL SECURE "TOPSOIL DISTURBANCE PERMIT" FROM THE CITY ENVIRONMENTAL HEALTH DEPARTMENT PRIOR TO BEGINNING CONSTRUCTION. AN EXCAVATION PERMIT IS REQUIRED FOR ALL WORK WITHIN PUBLIC RIGHT-OF-WAY.
3. SEE GRADING NOTES.



FRONT/SIDE YARD GRADING

1"=5'-0"

ESTIMATED EARTHWORK QUANTITIES

EXCAVATION = 21135 CY*
FILL = 10873 CY*
* INCLUDES SUBSIDENCE AND SHRINK

NOTE:

THE ENGINEER ASSUMES NO LIABILITY AS TO THE CORRECTNESS OF THE ABOVE ESTIMATED QUANTITIES. THE CONTRACTOR SHALL MAKE HIS OWN TAKE-OFF FOR BIDDING PURPOSES. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE PROVIDING OF ANY ADDITIONAL FILL MATERIAL OR THE REMOVAL OF EXCESS EXCAVATED MATERIAL IN ORDER TO ACHIEVE A BALANCED JOB.

PNM GRADING:

THE GRADING CONTRACTOR SHALL PROVIDE FOR THE PROPER GRADING OF ALL PNM EASEMENTS WHERE INDICATED ON THE GRADING PLAN. THE EASEMENTS SHALL BE GRADED AS FOLLOWS:

1. TO PROVIDE A 10' WIDE TRENCHING PATH ON THE CORRESPONDING LOT LINE
2. 6" (5% MAX. CROSS SLOPE) ACROSS THE PATH'S WIDTH.
3. NO GRADE BREAKS (BENCHES) AT LOT LINES OR AT EASEMENT INTERSECTIONS.
4. IN AREAS WHERE THE 10' TRENCHING PATH ENCLOSES UPON PONDING AREAS, THOSE PONDS ARE NOT TO BE EXCAVATED OR FORMED UNTIL SUCH TIME THAT ALL TRENCHES HAVE BEEN INSTALLED AND THE TRENCHES PROPERLY BACKFILLED.
5. WHERE THE 10' TRENCHING PATH ENCLOSES UPON A DWELLING UNIT'S PAD, THE PATH SHALL BE AT THE SAME ELEVATION AS THE PAD TO INSURE THE PAD'S CERTIFICATION.

ENGINEER'S CERTIFICATION

APPROVAL FOR ROUGH GRADING ($\pm 0.1'$)

CONDITION: TOP SOIL DISTURBANCE PERMIT
REQUIRED PRIOR TO COMMENCING
EARTHWORK OPERATIONS

HYDROLOGY DIVISION
PUBLIC WORKS DEPARTMENT
CITY OF ALBUQUERQUE

DATE _____

 **ISAACSON & ARFMAN, P.A.**
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque New Mexico
024GRD.TL.DWGems 12/03/98

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

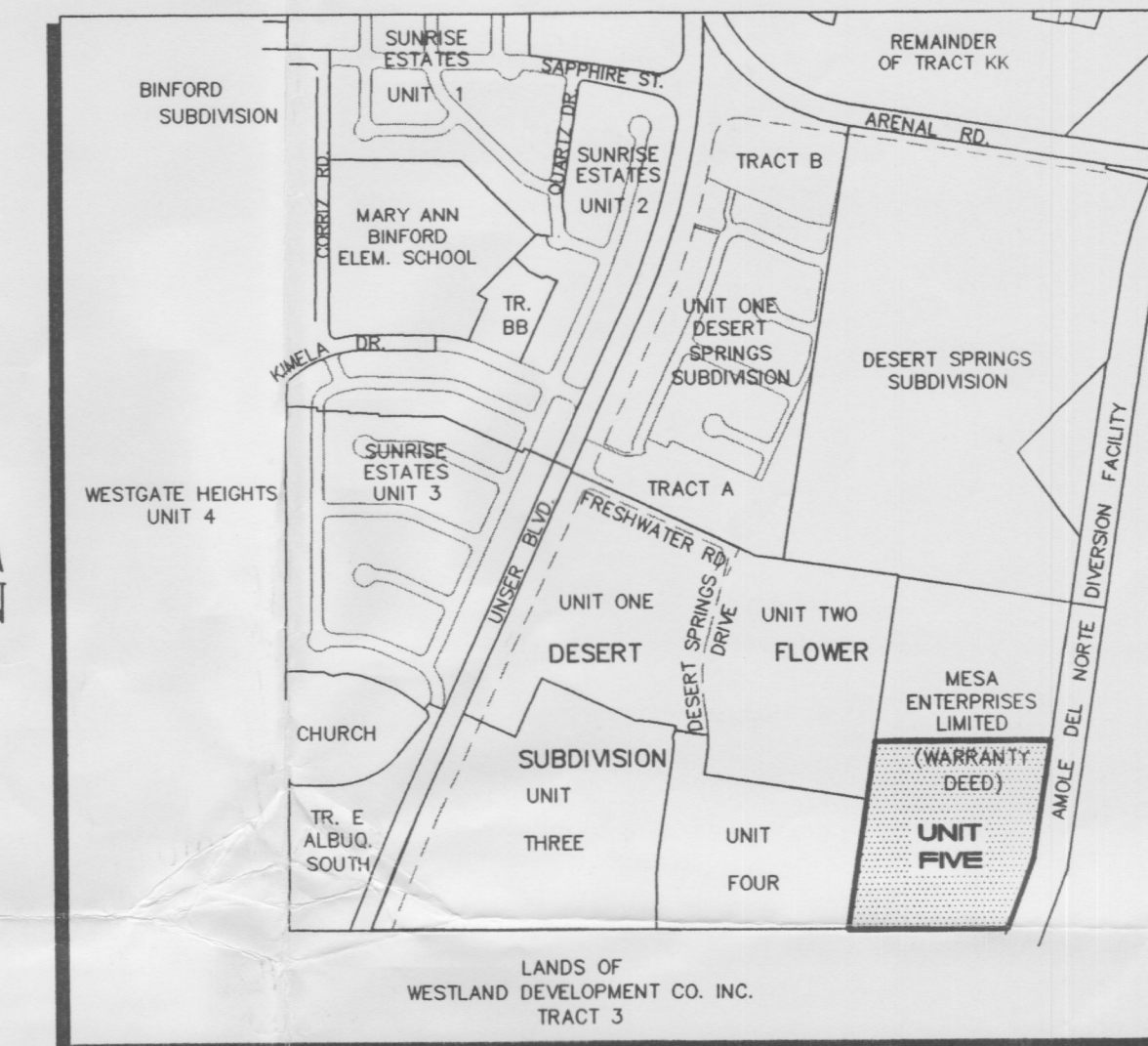
TITLE:	DESERT FLOWER SUBDIVISION--UNIT FIVE GRADING & DRAINAGE DETAILS
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Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.
City Project No.	Zone Map No. M-10	Sheet 2 Of 2		

BOUNDARY DATA TABLES

LINE	BEARING	LENGTH
L1	N 08°56'44" E	19.95'
L2	S 89°44'05" E	94.07'

SCALE:
1"=50'



1"=750'±

VICINITY MAP

(M-10)

NOTES

- LEGAL DESCRIPTION: Lands known as MESA ENTERPRISES, LIMITED, WARRANTY DEED, 4-23-80, Bk. D118A, Pg. 945, and LOT 12, BLOCK M, of proposed DESERT FLOWER SUBDIVISION, UNIT FOUR.
- BENCHMARK: ACS MONUMENT "1-M10" ELEV = 5079.88
- ENGINEER: ISAACSON & ARFMAN, P.A. 128 Monroe Street NE, Albuquerque, NM Attn: Fred Arfman
- SURVEYOR: ALS, Inc. P.O. Box 30701, Albuquerque, NM Attn: Tim Aldrich
- FLOOD HAZARD STATEMENT: No part of this development is affected nor contributes to a flood hazard area as determined by Panel No. (35001C03360-3371) of the September 20, 1996 Edition of the F.E.M.A. Maps.
- SOILS: From the SCS Soil Survey of Bernalillo County site soils are identified as Bluepoint Lomay Fine Sands which are classified as hydrologic group "A" soils.

LEGEND

- EXISTING CONTOUR
- EXISTING SPOT ELEVATION
- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION
- TOP OF CURB ELEVATION
- FLOWLINE ELEVATION
- FLOW ARROW
- PAD GRADE ELEVATION
- PROPOSED STORM DRAIN
- STORM DRAIN INLET
- BASIN BOUNDARY
- BASIN ID NUMBER
- EROSION CONTROL BERM
- CONCRETE RUNDOWN

ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque, New Mexico 87102
024GRD1.DWGms 12/02/98

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

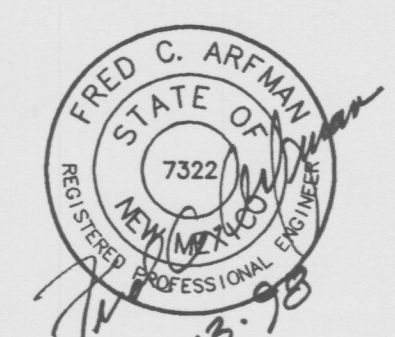
TITLE: DESERT FLOWER SUBDIVISION--UNIT FIVE
GRADING & DRAINAGE PLAN

Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
City Project No.	Zone Map No. M-10	Sheet 1	Of 2

SURVEY INFORMATION

FIELD	NOTES
1	ALS

ENGINEER'S SEAL



NO.	DATE	REMARKS	BY
1	12/98	DESIGN	MJC
2	12/98	REVISIONS	EMS
3	12/98	DESIGN	FCA

BENCH MARKS

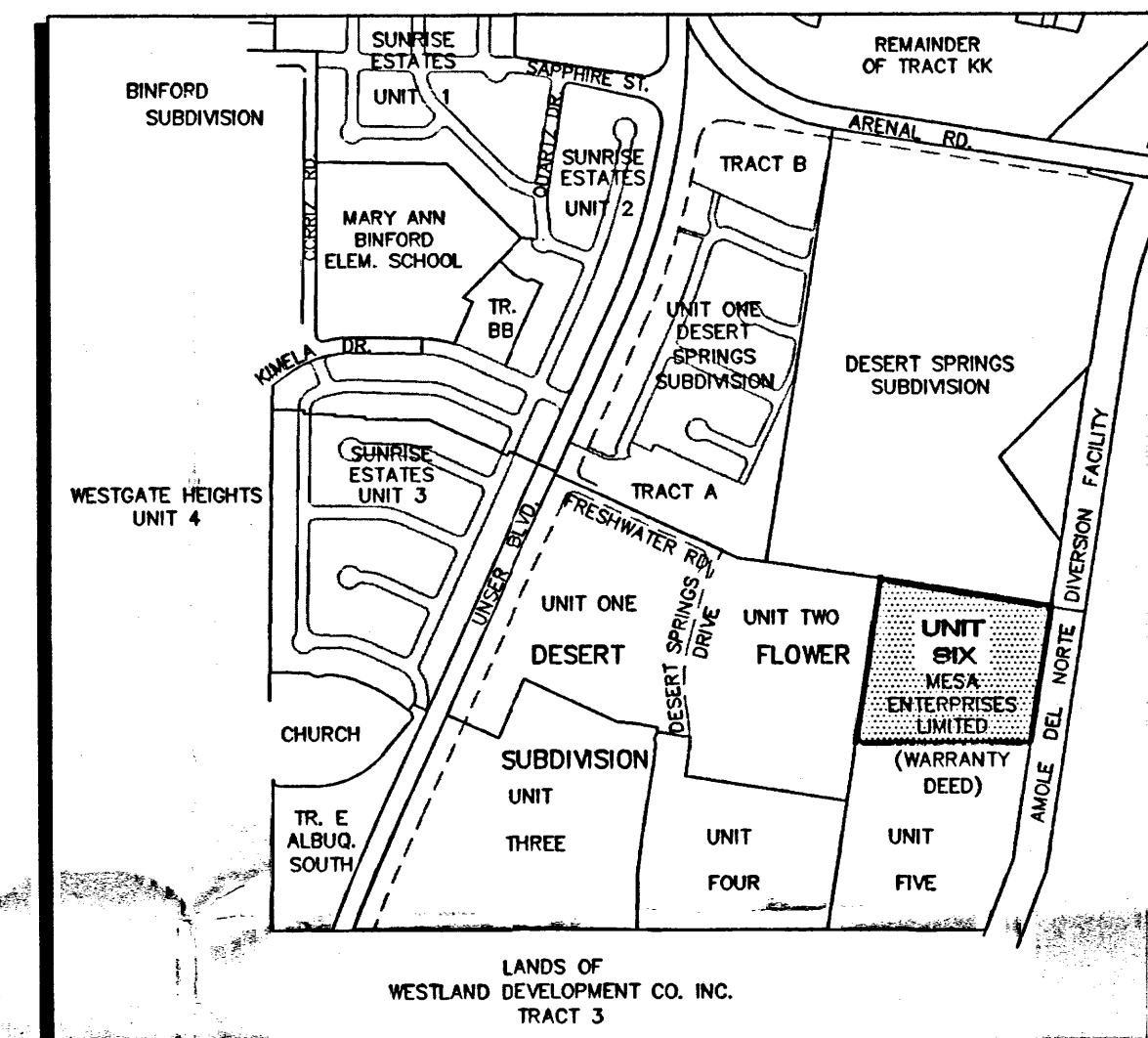
CONTRACTOR	INSPECTOR	DATE
AS-BUILT INFORMATION	DATE	DATE

AS-BUILT INFORMATION	CONTRACTOR	INSPECTOR	DATE
DATE	DATE	DATE	DATE

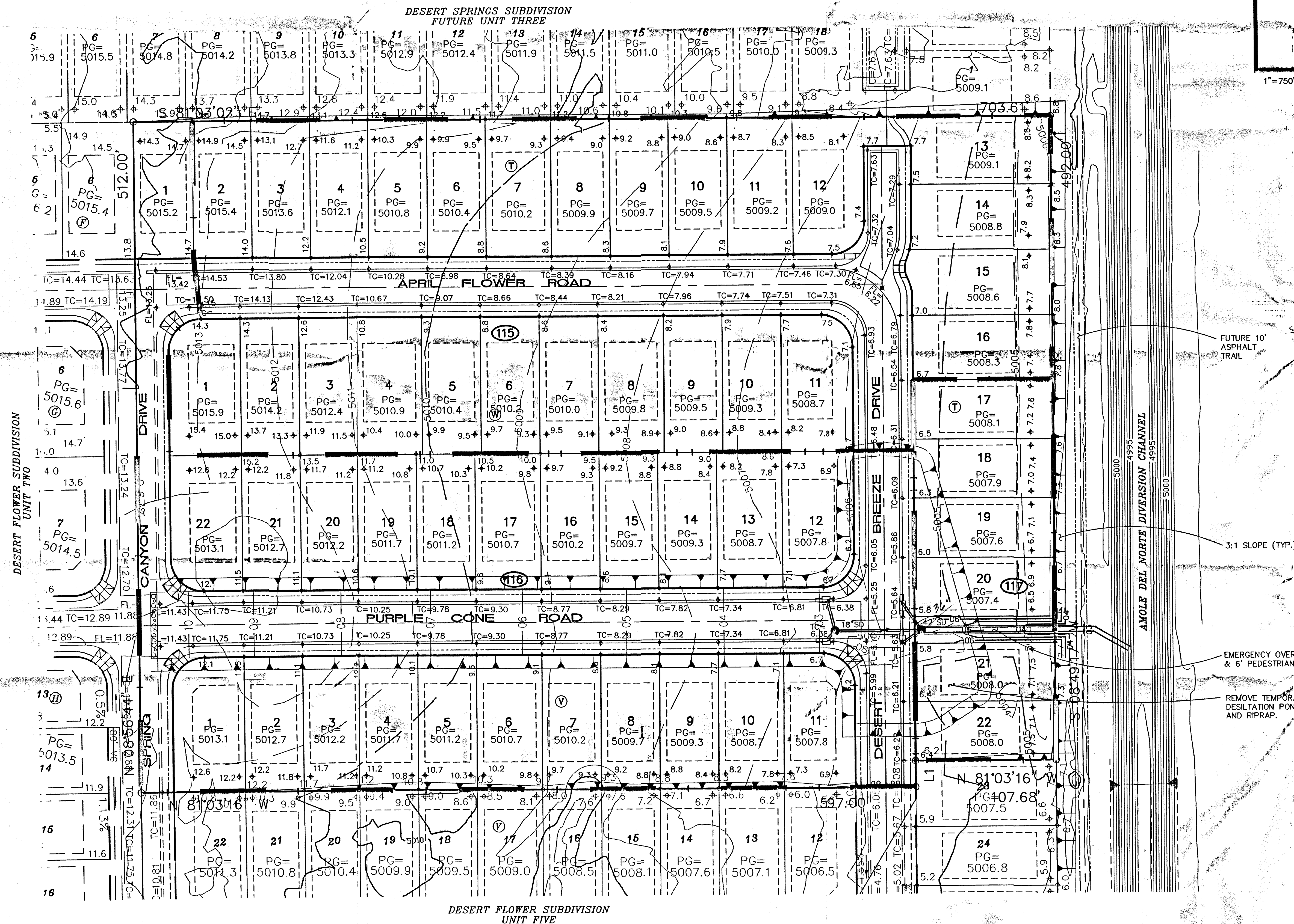
LINE	BEARING	LENGTH
L1	S 08°56'44" W	19.95'

NOTES

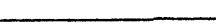











1. LEGAL DESCRIPTION: TRACT A, proposed DESERT FLOWER SUBDIVISION
UNIT FIVE
2. BENCHMARK: ACS MONUMENT "1-M10"
ELEV = 5079.88
3. ENGINEER: ISAACSON & ARFMAN, P.A.
128 Monroe Street NE, Albuquerque, NM
Attn: Fred Arfman
4. SURVEYOR ALS, Inc.
P.O. Box 30701, Albuquerque, NM
Attn: Tim Aldrich
5. FLOOD HAZARD STATEMENT: No part of this development
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6. SOLS: From the SCS Soil Survey of Bernalillo County site soils
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VICINITY MAP
$$1'' = 750' \pm$$

(M-10)



LEGEND


-  EXISTING CONTOUR
 78.3 EXISTING SPOT ELEVATION
 PROPOSED CONTOUR
 78.3 PROPOSED SPOT ELEVATION
 TC=8.10 TOP OF CURB ELEVATION
 FL=7.43 FLOWLINE ELEVATION
0.5% FLOW ARROW
PG=5002.0 PAD GRADE ELEVATION
 FUTURE CONTOUR
 78.3 FUTURE SPOT ELEVATION
PG=5002.0 FUTURE PAD GRADE ELEVATION
 PROPOSED STORM DRAIN
 STORM DRAIN INLET
 BASIN BOUNDARY
 (117) BASIN ID NUMBER

3:1 SLOPE (TYP.)

EMERGENCY OVERFLOW
& 6' PEDESTRIAN ACCESS

REMOVE TEMPORARY
DESILTATION POND, RUNDON
AND RIPRAP.

6' BOTTOM
31 SS

 **ISAACSON & ARFMAN, P.A.**
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque New Mexico
046GRD1.DWGems VIEW: 1 02/16/99

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: DESERT FLOWER SUBDIVISION--UNIT SIX
GRADING & DRAINAGE PLAN

Design Review Committee	City Engineer Approval
-------------------------	------------------------

RECEIVED
FEB 19 1999
HYDROLOGY SECTION

City Project No.

Zone Map No
M-10

Sheet **1** Of **2**

KEY INFORMATION
FIELD NOTES

ENGINEER'S SEAL

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FILED NOTED

ALS

FRANCIS & TAYLOR
REGISTERED

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UNIT
PL 4

heet

ED C. A.
STATE
7322
NEW ME
ED PROFESS

BY	
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REVISION	
REMARKS	
DATE	

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AN

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Professional Engineer Seal

DATE 12/98

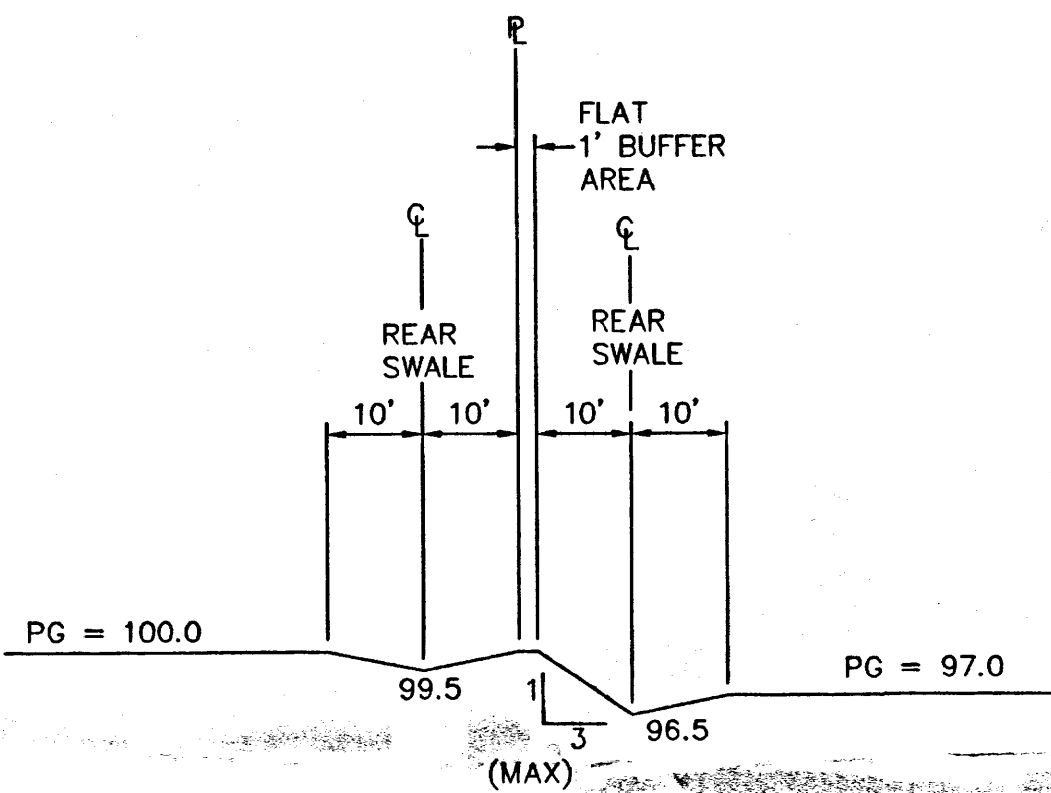
DESIGN	MJC
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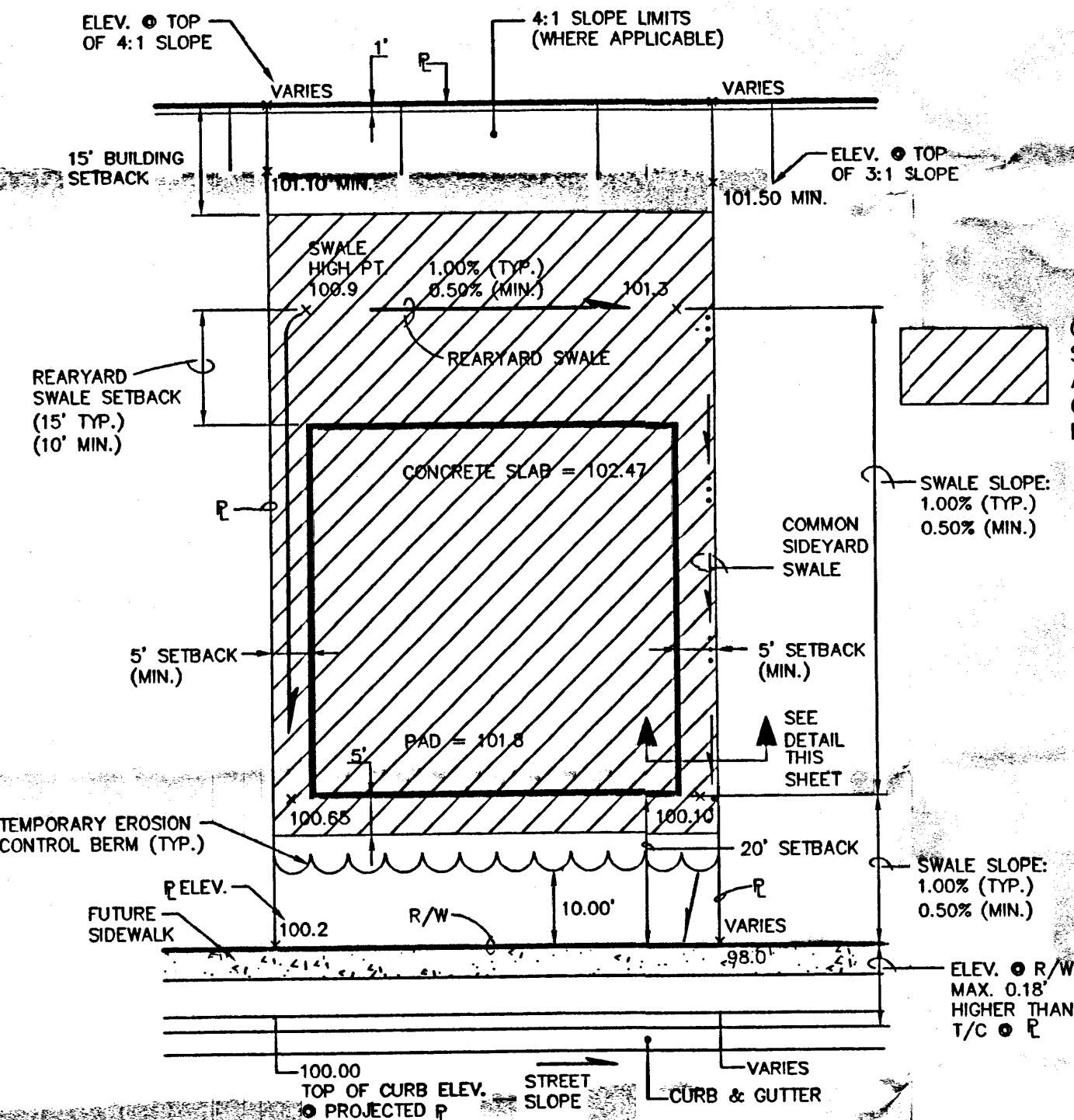
Of 2

GRADING NOTES:

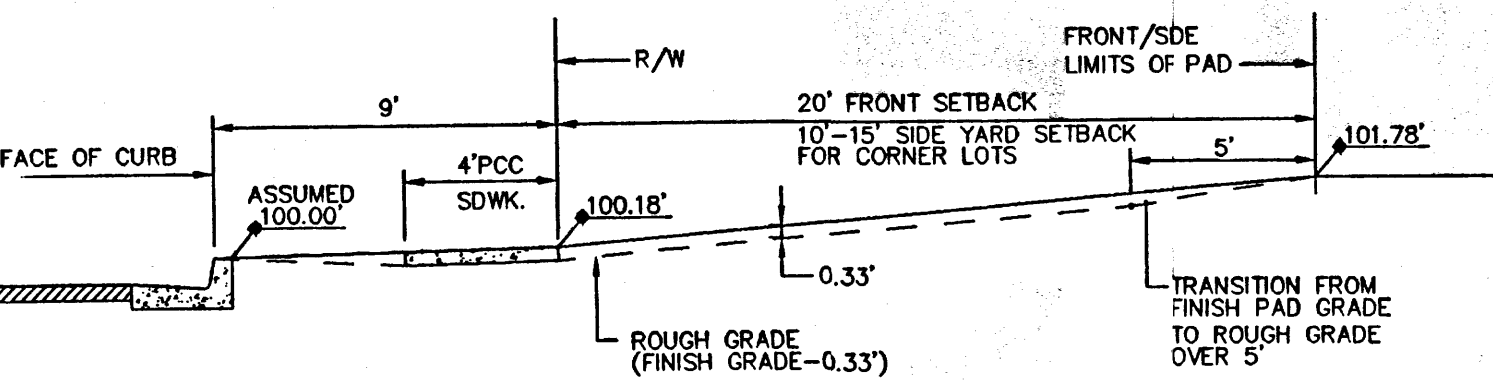
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11. OWNER WILL PROVIDE SOIL TESTING AND INSPECTION SERVICES DURING EARTHWORK OPERATIONS. ALLOW TESTING SERVICE TO INSPECT AND APPROVE COMPACTED SUBGRADES AND FILL LAYERS BEFORE FURTHER CONSTRUCTION WORK IS DONE. SHALL COMPACTION TESTS INDICATE INADEQUATE DENSITY, CONTRACTOR SHALL PROVIDE ADDITIONAL COMPACTION AND TESTING AT NO ADDITIONAL EXPENSE.
12. OWNER HAS ESTABLISHED SUBDIVISION BOUNDARY CORNERS. CONTRACTOR SHALL PROVIDE ALL OTHER CONSTRUCTION STAKING INCLUDING TRACT CORNERS. CONTRACTOR SHALL LOCATE AND PRESERVE ALL BOUNDARY CORNERS AND REPLACE ANY LOST OR DISTURBED CORNERS.



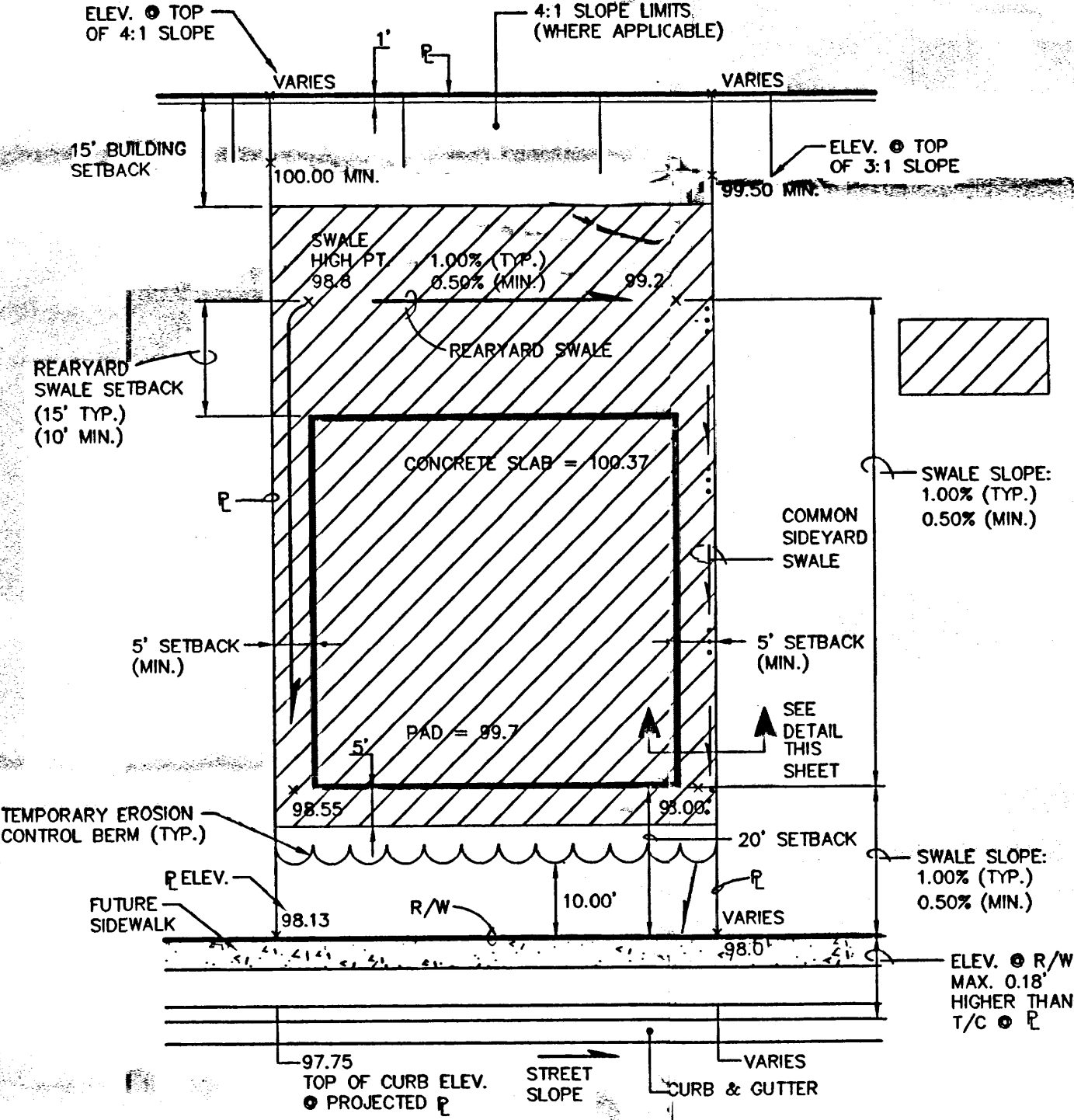
TYPICAL REAR YARD CROSS-SECTION
SCALE:
1" = 20' HORIZONTAL
1" = 10' VERTICAL



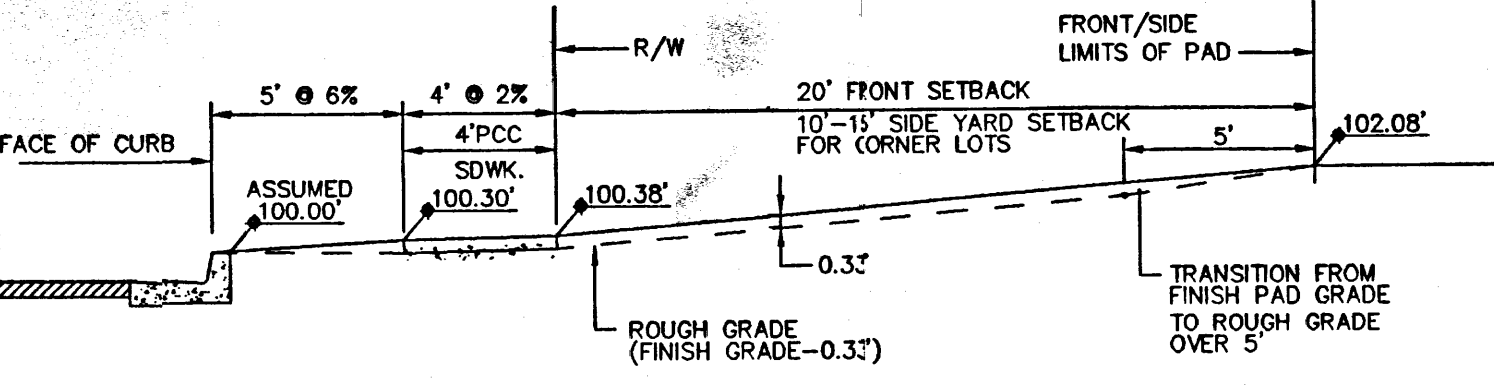
TYPICAL LOT GRADING SHOWING
COMPACTION ZONE
1"=20'



FRONT/SIDE YARD GRADING
1"=5'-0"



PURPLE CONE ROAD
TYPICAL LOT GRADING SHOWING
COMPACTION ZONE
1"=20'



PURPLE CONE ROAD
FRONT/SIDE YARD GRADING
1"=5'-0"

ESTIMATED EARTHWORK QUANTITIES

EXCAVATION =
FILL =
* INCLUDES SUBSIDENCE AND SHRINK

NOTE:
THE ENGINEER ASSUMES NO LIABILITY AS TO THE CORRECTNESS OF THE ABOVE ESTIMATED QUANTITIES. THE CONTRACTOR SHALL MAKE HIS OWN TAKE-OFF FOR BIDDING PURPOSES. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE PROVIDING OF ANY ADDITIONAL FILL MATERIAL OR THE REMOVAL OF EXCESS EXCAVATED MATERIAL IN ORDER TO ACHIEVE A BALANCED JOB.

PNM GRADING:

THE GRADING CONTRACTOR SHALL PROVIDE FOR THE PROPER GRADING OF ALL PNM EASEMENTS WHERE INDICATED ON THE GRADING PLAN. THE EASEMENTS SHALL BE GRADED AS FOLLOWS:

1. TO PROVIDE A 10' WIDE TRENCHING PATH ON THE CORRESPONDING LOT LINE
2. ±6" (5% MAX. CROSS SLOPE) ACROSS THE PATH'S WIDTH.
3. NO GRADE BREAKS (BENCHES) AT LOT LINES OR AT EASEMENT INTERSECTIONS.
4. IN AREAS WHERE THE 10' TRENCHING PATH ENCLOSES UPON PONDING AREAS, THOSE PONDS ARE NOT TO BE EXCAVATED OR FORMED UNTIL SUCH TIME THAT ALL UTILITIES HAVE BEEN INSTALLED AND THE TRENCHES PROPERLY BACKFILLED.
5. WHERE THE 10' TRENCHING PATH ENCLOSES UPON A DWELLING UNIT'S PAD, THE PATH SHALL BE AT THE SAME ELEVATION AS THE PAD TO INSURE THE PAD'S CERTIFICATION.

ENGINEER'S CERTIFICATION

APPROVAL FOR ROUGH GRADING (±0.1')

CONDITION: TOP SOIL DISTURBANCE PERMIT REQUIRED PRIOR TO COMMENCING EARTHWORK OPERATIONS

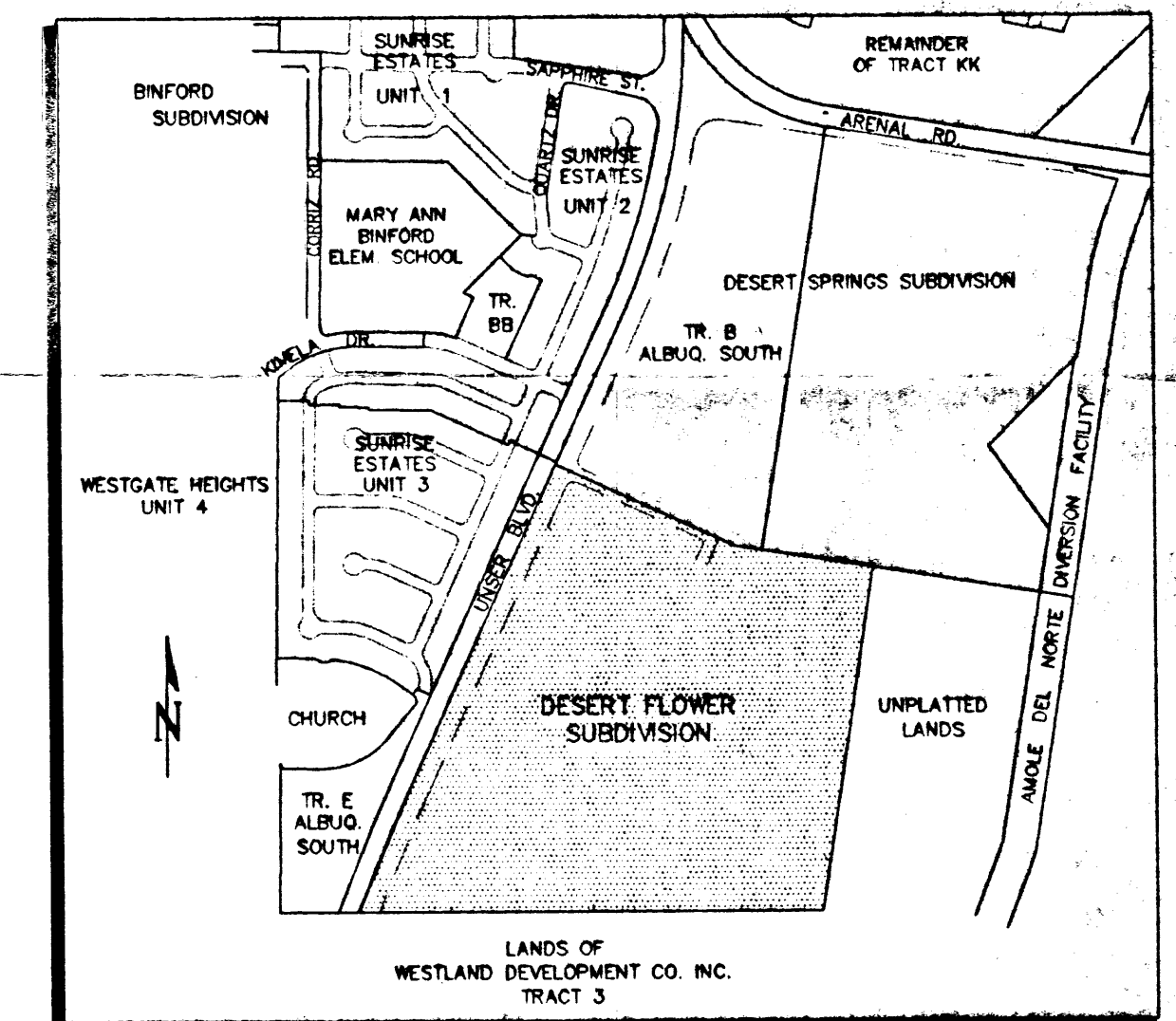
HYDROLOGY DIVISION
PUBLIC WORKS DEPARTMENT
CITY OF ALBUQUERQUE

ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque, New Mexico
046GRD1.DWG Date: 02/16/99

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP	
TITLE: DESERT FLOWER SUBDIVISION--UNIT SIX GRADING DETAILS & SECTIONS	
Design Review Committee	City Engineer Approval
City Project No.	Zone Map No. M-10
Sheet 2	Of 2

MASTER DRAINAGE PLAN FOR DESERT FLOWER SUBDIVISION UNITS ONE THROUGH FIVE

CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO
APRIL 1997

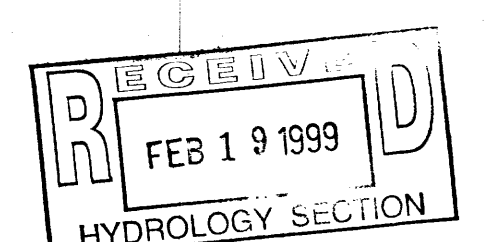


1"=750'± (M-10)

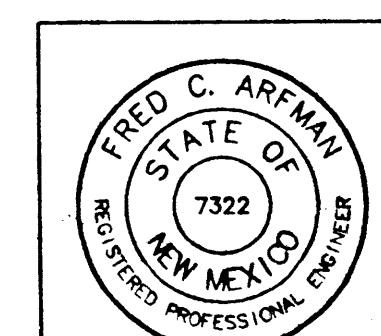
VICINITY MAP

LEGEND

- UNIT BOUNDARY
- PROPERTY LINE
- EXISTING CONTOUR
- PROPOSED DRAINAGE BASIN
- DRAINAGE BASIN BOUNDARY
- FLOW ARROW
- WATER BLOCK
- PROPOSED INLET
- PROPOSED STORM DRAIN MH
- PROPOSED STORM DRAIN
- FUTURE STORM DRAIN



ONSITE MASTER DRAINAGE PLAN



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

930NSDP3.DWG 6/4/98

FIGURE 1

