

Drainage Calculations

Hydrology Calculations
 DPM - Section 22.2
 Volume 2, January 1993

Precipitation Zone: 1
 100 Year Storm Depth, P (360): 2.2

Treatment Area	A	B	C	D
Excess Precipitation Factors	0.44	0.67	0.99	1.97
Peak Discharge Factors	1.29	2.03	2.87	4.37

Land Treatment Area	Acres	Existing	Proposed
Type "D" (Roof)	0	0.70	0.70
Type "C" (Unpaved Roadway)	0	0.80	0.80
Type "B" (Impervious Lawn)	0	0.18	0.18
Type "A" (Undeveloped)	0.87	0.00	0.00
Total (Acres)	0.87	0.87	0.87

Excess Precipitation(in)
 Volume (100) of
 Volume (10) of
 Q (100) cfs
 Q (10) cfs

1389.56 3272.26
 931.01 2192.41
 1.12 2.50
 0.75 1.67

Drainage Narrative

THE SITE FOR THE PROPOSED BANK OF ALBUQUERQUE VENTANA RANCH IS LOCATED NEAR THE INTERSECTION OF PARADISE BOULEVARD AND UNIVERSITY BLVD IN THE NORTHWEST AREA OF ALBUQUERQUE. THE SITE IS LOCATED IMMEDIATELY EAST OF THE EXISTING LOTJA BRIGER SITE AND IS ADJACENT TO PARADISE BOULEVARD. THE SITE HAS BEEN MASS GRADED AND CURRENTLY SLOPES FROM SOUTHWEST TO NORTHEAST. THE MASTER DRAINAGE PLAN FOR THE DEVELOPMENT PROVIDED FOR THE INSTALLATION OF AN AREA DRAIN AT THE NORTHWEST CORNER OF THE PARCEL, WHICH WOULD DO TWO THINGS. FIRST CREATE A WATER HARVESTING AREA FOR LANDSCAPING ADJACENT TO PARADISE. AND SECOND ALLOW A CONTROLLED RELEASE OF THE STORM DRAINAGE RUNOFF FROM THE SITE. THE STORM DRAIN THAT THE AREA INLET WAS INTENDED TO CONNECT INTO WAS NOT CONSTRUCTED. THIS IS BEING PROPOSED TO PROVIDE SOME MINOR DEPRESSIONS IN THE LANDSCAPED AREAS BUT THE DEVELOPED FLOWS WILL FREE DISCHARGE ONTO THE ACCESS EASEMENT TO THE EAST, THEN ONTO PARADISE BOULEVARD WHERE THEY WILL FLOW INTO THE CITY OF ALBUQUERQUE STORM DRAIN SYSTEM. THE PROPERTY IS NOT WITHIN A 100 YEAR FLOOD PLAIN AND DOES NOT ACCEPT OFF-SITE FLOWS.

Legend

- 5030 EXISTING CONTOUR
- 5030 NEW CONTOUR
- 30.11 NEW SPOT ELEVATION
- 30.11 EXISTING SPOT ELEVATION
- TW TOP OF WALL
- BW BOTTOM OF WALL
- TC TOP OF CURB
- FL FLOW LINE
- FP FINISH PAD ELEVATION
- Direction of Flow

Benchmark

PROJECT BENCHMARK
 ALBUQUERQUE SURVEY CONTROL 3 1/4"
 ALUMINUM DISC STAMPED "S-BP 2003"
 NORTHING 1524476.923
 EASTING 1497669.370
 ELEV = 5432.303 NAVD 1988

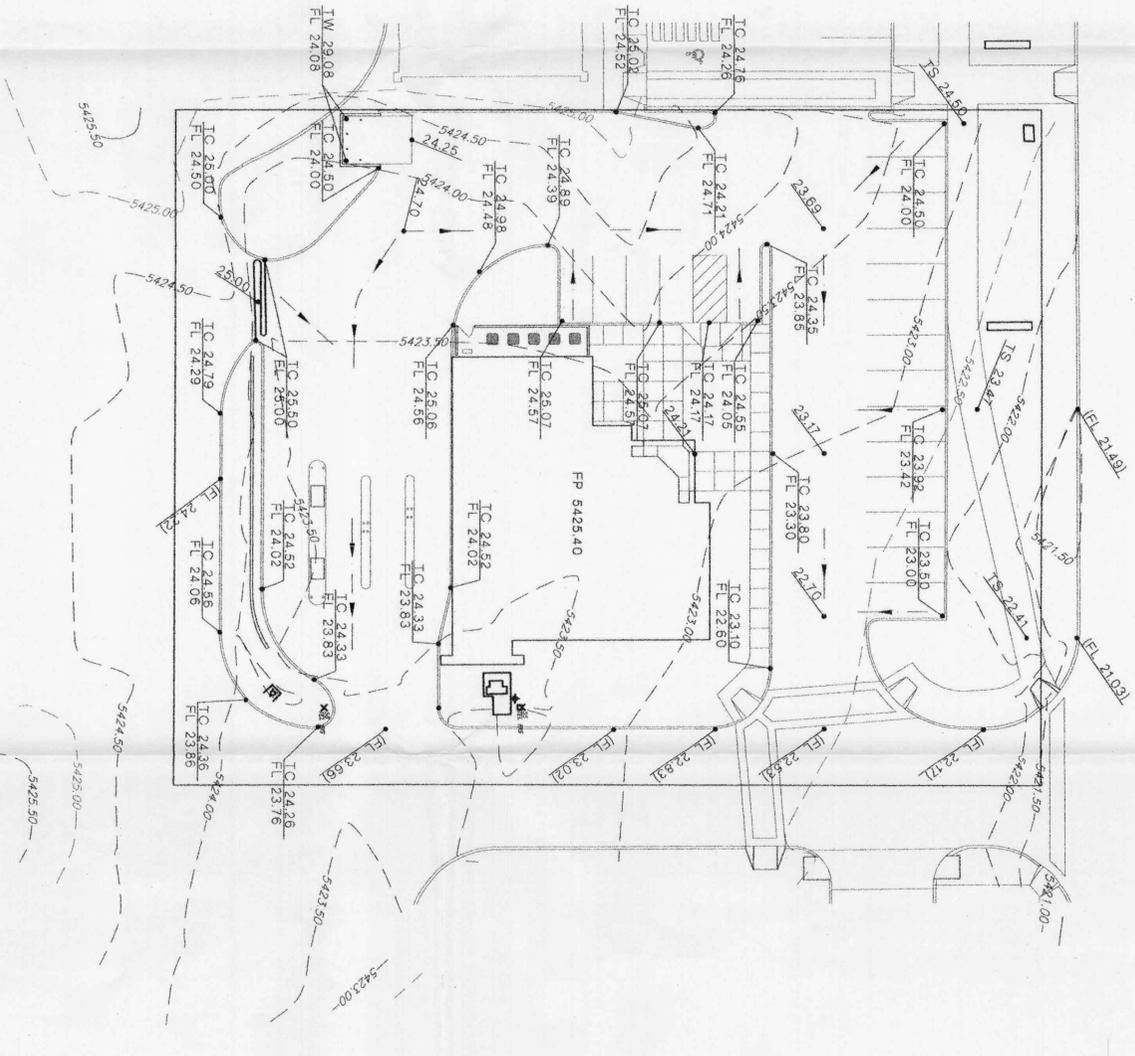
LOCAL BENCHMARK
 SOUTHWEST CORNER OF PROPERTY
 AN EXISTING MANHOLE RIM.
 ELEV = 5425.06

Legal Description

TRACT H-3 PLAT OF TRACTS H-1 THRU H-11
 VENTANA SQUARE AT VENTANA RANCH A
 REPLAT OF TRACT H-A VENTANA RANCH CONT
 8791 AC

GRADING AND DRAINAGE PLAN

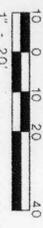
SCALE: 1" = 20'



Engineer's Statement

I, THE ENGINEER OF RECORD CERTIFY THAT I HAVE PERSONALLY VISITED THE SITE AND THE EXISTING GRADES AND CONTOURS DEPICTED ON THIS PLAN MATCH WHAT PRESENTLY EXISTS AT THIS LOCATION

MARTIN J. GARCIA, NMPE #1767



BANK OF ALBUQUERQUE
 ALBUQUERQUE, NM VENTANA RANCH

ALBUQUERQUE HERB

ISSUE BLOCK

PROJECT NO.	00-00-0000
CHECKED BY	W.G.
DRAWN BY	W.G.
STIPULATION FOR REUSE	

PROFESSIONAL ENGINEER
 MARTIN J. GARCIA
 11767

ABO
 Engineering

Engineers, Planners
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 AEG Project Number 27122

SHEET TITLE:
GRADING AND DRAINAGE PLAN
 2-20-08
C-101



PLANT LEGEND

- TREES, SHADE/EVERGREEN AND ORNAMENTAL**
- 1 EASTERN REDBUD (N) 1
Fraxinus canadensis
2" Cal., 30" H x 30" M
 - 2 AUSTRIAN PINE (N) 2
Pinus nigra
6'-8", 35" H x 25" W
 - 3 PURPLE-LEAF PLUM (N) 3
Prunus spp.
1 1/2" Cal., 20" H x 20" W
 - 4 BANKS ROSE (N) 4
Rosa banksiae
Climbing to 20'
 - 5 GREENTEE COTONWOOD (N) 4
Cottonaster buckleyi
5' Gal., 8 1/2" H x 4" W
Symbol indicates 3 plants
 - 6 AUTUMN PURPLE ASH (N) 6
Fraxinus americana
2" Cal., 60" H x 60" M
 - 7 HONKBUCKLE (N) 36
Lonicera japonica 'Halleri'
1 Gal., 14 1/2" H x 12" W
Unshaded-groundcover
 - 8 RUSSIAN SAGE (N) 9
Perovskia atriplicifolia
5 Gal., 56" H x 6" M
 - 9 TURPENTINE BUSH (L-1) 11
Eriogonum fasciculatum
1 Gal., 16" H x 4" W
 - 10 RED YUCCA (L) 6
Hesperaloe parviflora
5 Gal., 48" H x 4" W
 - 11 POTENTILLA (N) 5
Potentilla fruticosa
1 Gal., 48" H x 3" W
 - 12 APACHE PLUME (L) 3
Fallugia paradoxa
5 Gal., 48" H x 7" M
 - 13 MANDENGRASS (N) 6
Mandevilla sphenoloba
5 Gal., 25" H x 5" W
 - 14 BLUE WIST SPINNA (N) 12
Spergularia canadensis
1 Gal., 48" H x 3" W
 - 15 MULDOVER 30
1 Gal., 48" size varies
- SHRUBS/ORNAMENTAL GRASSES**
- FIVE GAL.**
- ONE GAL.**
- GRASSCOVERS**
- YINES**
- HANDSCAPES**
- OVERSIZED GRAVEL**
4 BOULDERS
- SANTA FE BROWN GRAVEL**
WITH FILTER FABRIC
TO A MINIMUM 3" DEPTH
- * DENOTES EVERGREEN PLANT MATERIAL

LANDSCAPE NOTES:
Landscape maintenance shall be the responsibility of the Property Owner. The Property Owner shall maintain street trees in a living, healthy, and attractive condition.

It is the intent of this plan to comply with the City of Albuquerque Water Conservation Landscaping and Water Waste Ordinance planting restriction approach. Approval of this plan does not constitute or imply exemption from water waste provisions of the Water Conservation Landscaping and Water Waste Ordinance.

Water management is the sole responsibility of the Property Owner. All landscaping will be in conformance with the City of Albuquerque zoning Code, Street Tree Ordinance, Foliage Ordinance, and Water Conservation Landscaping and Water Waste Ordinance. In general, water conservation, environmentally sound landscape principles will be followed in design and installation.

Plant beds shall achieve 75% live ground cover at maturity.

SANTA FE BROWN gravel over Filter Fabric to a minimum depth of 3" shall be placed in all landscape areas which are not designated to receive native seed.

STREET TREE REQUIREMENTS
Street trees required under the City of Albuquerque Street Tree Ordinance are as follows:
PARADISE BLVD
Required 6 Provided 6

PARKING LOT TREE REQUIREMENTS
Shade trees required under the City of Albuquerque Parking Lot Tree Ordinance are as follows:
1 Shade tree per 10 spaces
Required 2 Provided 4

NOTE TO CLIENT:
Should the Hilltop not receive a grading and drainage plan during the design process or the on-site grades differ from the grading and drainage plan received, the Hilltop reserves the right to apply slope stabilization materials where the specified gravel will not be suitable. Gravel smaller than 2-4" cobblestone will not stay on a slope greater than 3:1. If the grades are greater than what was originally designed, we will request an infield change-order to lay cobblestone or rip-rap, in lieu of the specified gravel, to stabilize the slope. All vegetative material shall remain per plan.

IRIGATION NOTES:
Irrigation shall be a complete underground system with trees to receive 1 Netafim spiral (50' length) with 3 loops at a final radius of 4-5' from tree trunk, placed in place. Netafim shall have emitters 12" o.c. with a flow of 6 gph. Shrubbs to receive (2) 1/2" 6PH Drip Emitters. Dip and bubbler systems to be tied to 1/2" poly pipe with flush caps at each end. Trees and shrubs shall be on separate valves.

Run time per each shrub drip valve will be approximately 15 minutes per day. Tree drip valve shall run 1.5 hours, 3 times per week. Run time will be adjusted according to the season.

Point of connection for irrigation system is unknown at current time and will be coordinated in the field. Irrigation will be operated by automatic controller.

Location of controller to be field determined and power source for controller to be provided by others.

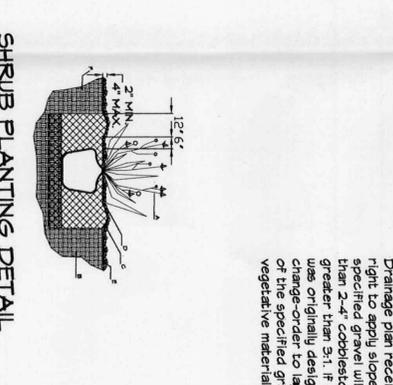
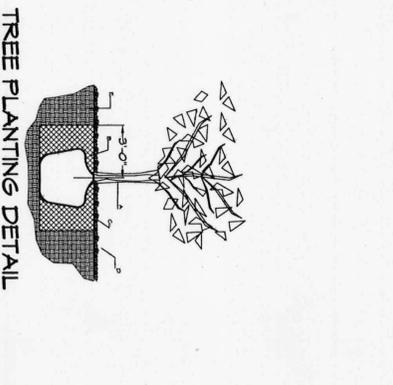
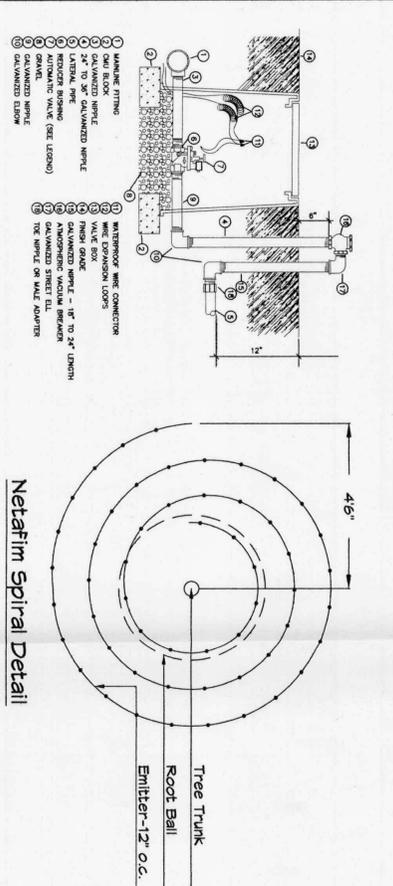
Irrigation maintenance shall be the responsibility of the Property Owner.

Water and Power source shall be the responsibility of the Developer/Builder.

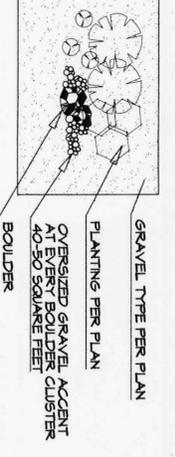
LANDSCAPE CALCULATIONS

TOTAL LOT AREA	39427	square feet
TOTAL BUILDDINGS AREA	4094	square feet
NET LOT AREA	34333	square feet
LANDSCAPE REQUIREMENT	15%	
TOTAL LANDSCAPE REQUIREMENT	5144	square feet
TOTAL BED PROVIDED	9021	square feet
GROUNDCOVER REQ.	75%	square feet
TOTAL GROUNDCOVER REQUIREMENT	6770	square feet
TOTAL GROUNDCOVER PROVIDED	6627(75.6%)	square feet
TOTAL PONDING AREA	0	square feet
TOTAL SOD AREA	0	square feet
(max. 20% of landscape required)		
TOTAL NATIVE SEED AREA	0	square feet
TOTAL LANDSCAPE PROVIDED	9021 (26%)	square feet

NOTE:
THIS LANDSCAPE PLAN HAS BEEN BASED ON THE APPROVED OVERALL MASTER PLAN PREPARED BY THE HILLTOP FOR VENTANA SQUARE WITH MODIFICATIONS TO PLANT PALETTE AND DENSITY BASED ON CURRENT CITY OF ALBUQUERQUE GUIDELINES.



GRAVEL ACCENT DETAIL



GRAVEL TYPE PER PLAN
GRAVEL TYPE PER PLAN
OVERSIZED GRAVEL ACCENT AT EVERY BOULDER CLUSTER 40-50 SQUARE FEET
BOULDER

TREE PLANTING DETAIL

GENERAL NOTES:

1. ROOTBALL SHALL BE PLACED ON UNDISTURBED SOIL TO PREVENT TREE FROM SETTLING.
2. TOP OF ROOTBALL INDICATED LEVEL AT WHICH TREE WAS GROWN AND DIG; THIS REPRESENTS THE LEVEL AT WHICH THE TREE SHOULD BE INSTALLED. THAT LEVEL MAY BE EXCEEDED BY ONLY A ONE INCH LAYER OF SOIL.
3. PRIOR TO BACKFILLING TREE, ALL WIRE ROPE AND SYNTHETIC MATERIALS SHALL BE REMOVED FROM THE TREE AND THE PLANTING PIT.
4. PRIOR TO BACKFILLING, ALL BURLAP SHALL BE CUT AWAY EXCEPT FROM BOTTOM OF THE ROOTBALL.

CONSTRUCTION NOTES:

- A. TREE
- B. BACKFILL WITH EXISTING SOIL.
- C. 3" DEPTH OF GRAVEL MULCH.
- D. UNDISTURBED SOIL.

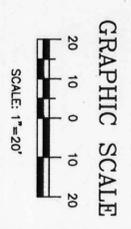
SHRUB PLANTING DETAIL

GENERAL NOTES:

1. THE OUTSIDE DIAMETER OF THE WATER RETENTION BASIN SHALL BE TWICE THE DIAMETER OF THE SHRUB PLANTING PIT.

CONSTRUCTION NOTES:

- A. SHRUB
- B. BACKFILL WITH EXISTING SOIL.
- C. EARTH BERRY AROUND WATER RETENTION BASIN.
- D. 3" DEPTH OF GRAVEL MULCH.
- E. FINISH GRADE
- F. UNDISTURBED SOIL.



<p>DRAWN BY CMJ</p> <p>REVISION # 1</p> <p>DATE 2-18-08</p>	<p>The Hilltop LANDSCAPE ARCHITECTS & CONTRACTORS</p>	<p>All creative ideas contained herein remains the property of The Hilltop Landscape Architects and Contractors and are protected by copyright laws. This is an original design and must not be released or copied unless applicable fees have been paid or job order placed.</p>	<p>BANK OF ALBUQUERQUE AT VENTANA SQUARE</p> <p>LANDSCAPE PLAN</p>	<p>Cont. Lic. #26458 7909 Edith N.E. Albuquerque, NM 87184 Ph. (505) 896-9690 Fax (505) 898-7737 cmj@hilltoplandscaping.com</p>	<p>SEAL JAMES DE FLOM ARCHITECT 2-14-08 #007</p>
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