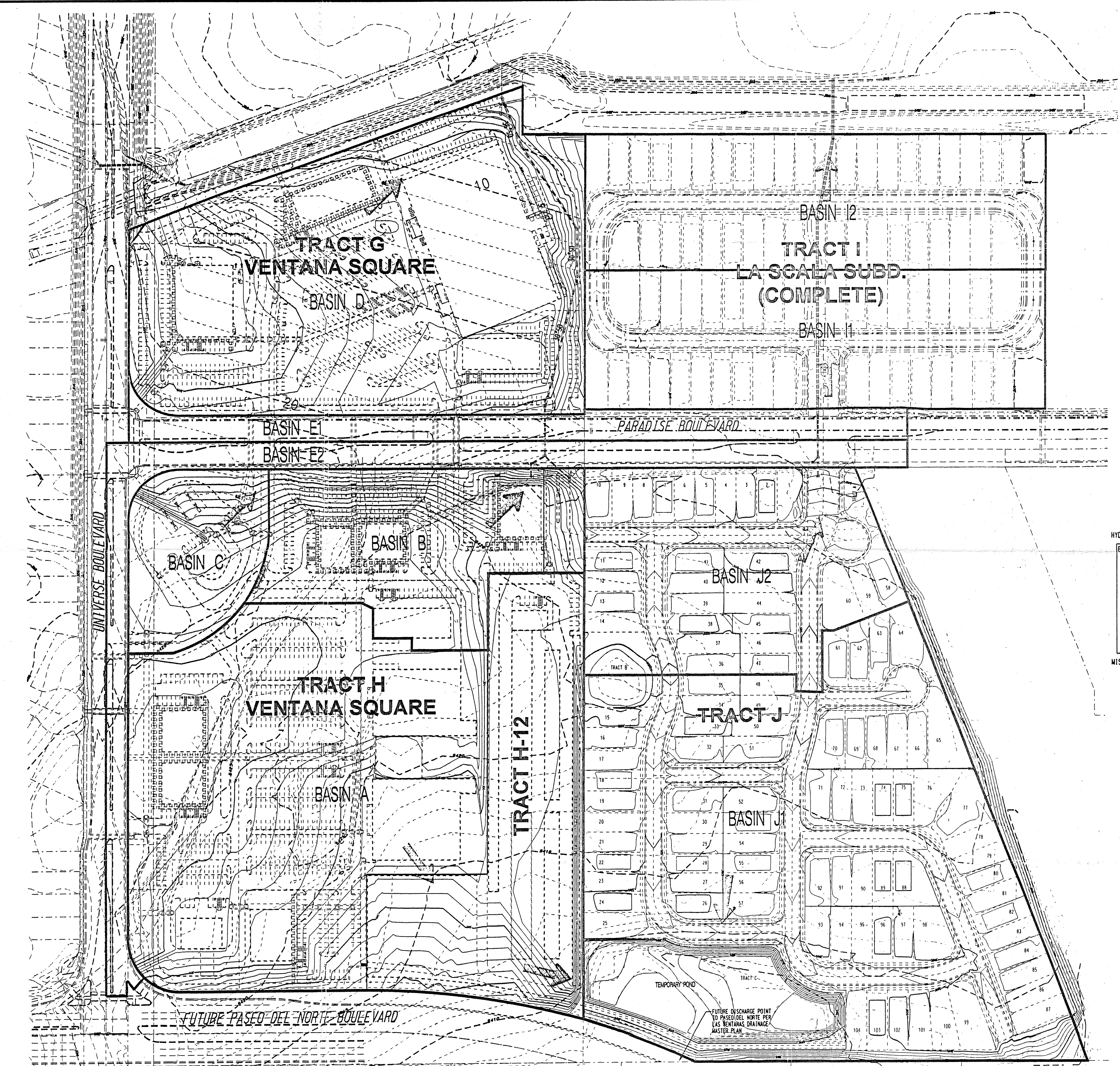
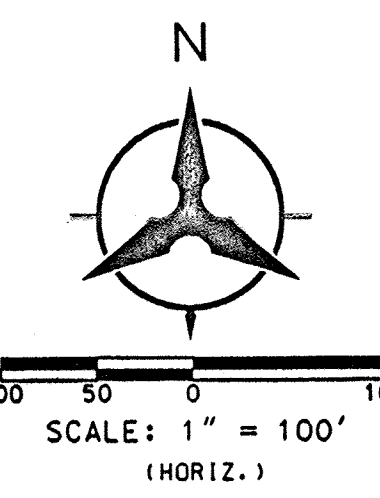




CONCEPTUAL GRADING AND DRAINAGE PLAN

THE PURPOSE OF THIS PLAN IS TO PROVIDE AN OVERVIEW OF THE DRAINAGE CONCEPTS WITHIN THAT PORTION OF VENTANA RANCH THAT INCLUDES TRACTS G, H, I AND J. VENTANA RANCH, THESE TRACTS LIE SOUTH OF THE LAS VENTANAS DAM AND THE NORTH BRANCH OF THE PIEDRAS MARCADAS CHANNEL AND EAST OF UNIVERSE BOULEVARD.

DEVELOPMENT OF LA SCALA SUBDIVISION WITHIN TRACT I HAS BEEN COMPLETED, INCLUDING THE STORM SEWER FROM PARADISE BOULEVARD TO THE LAS VENTANAS DAM. THIS STORM SEWER WAS EXTENDED ACROSS PARADISE BOULEVARD AND WILL ALSO CONVEY RUNOFF FROM THE PARADISE BOULEVARD RIGHT-OF-WAY AND THE NORTHERLY PORTION OF TRACT J (BASIN J2) TO THE DAM. A SIMILAR NEW STORM SEWER WITHIN TRACT G WILL LIKEWISE CONVEY RUNOFF FROM TRACT G (BASIN D), A PORTION OF THE PARADISE BOULEVARD RIGHT-OF-WAY, AND THE NORTHERLY PORTION OF TRACT H (BASINS B AND C) TO THE DAM.

THE SOUTHERLY PORTION OF TRACT H (BASIN A) AND THE SOUTHERLY PORTION OF TRACT J (BASIN J1) WILL DISCHARGE RUNOFF INTO A TEMPORARY RETENTION POND WITHIN TRACT J. THIS POND HAS BEEN SIZED TO CONTAIN THE 100-YEAR, 24-HOUR RUNOFF VOLUME WITH 2' OF FREEBOARD. THE MAXIMUM VOLUME OF THE POND EXCEEDS THE 100-YEAR, 10-DAY RUNOFF VOLUME. FUTURE DETAILED GRADING AND DRAINAGE SUBMITTALS WILL IDENTIFY THE ACTUAL CONVEYANCE STRUCTURES, SUCH AS SURFACE RUNOFFS OR STORM SEWERS, WITHIN TRACTS H AND J, WHICH WILL DELIVER RUNOFF TO THE POND.

THE ULTIMATE, PERMANENT DRAINAGE CONDITION WILL INCLUDE A FUTURE STORM SEWER WITHIN PASEO DEL NORTE, WHICH WILL CONVEY RUNOFF FROM THE POND TO THE DOWNSTREAM PIEDRAS MARCADAS DRAINAGE SYSTEM.

HYDROLOGIC COMPUTATIONS

BASIN I.D.	DESCRIPTION	AREA (acres)	A	% LAND TREATMENT	D	TOTAL	VOLUME (cu-ft)	DISCHARGE (cfs)
B	Northeast Portion of Ventana Square Draining to Paradise Boulevard	1.3778	0%	20%	20%	60%	0.29	0.50
C	Northwest Portion of Ventana Square Draining to Paradise Boulevard	1.9323	0%	20%	20%	60%	0.14	0.24
D	Tract G Draining to Paradise Boulevard	10.1781	0%	20%	20%	60%	0.74	1.28
E1	North Half of Paradise Boulevard	2.0437	0%	20%	20%	60%	0.15	0.26
E2	South Half of Paradise Boulevard	2.9678	0%	20%	20%	60%	0.22	0.37
J1	Northerly Portion of Tract J Draining to Paradise Boulevard	5.4292	0%	20%	20%	60%	0.40	0.68
J2	Southerly Portion of Tract J Draining to Las Ventanas Dam	5.4356	0%	20%	20%	60%	0.40	0.69
J2	Northerly Portion of Tract I Draining to Las Ventanas Dam	5.2125	0%	20%	20%	60%	0.38	0.66
J1	Southerly Portion of Tract J Draining to Pond	14.4272	0%	20%	20%	60%	1.05	1.82
A	Southerly Portion of Ventana Square	14.7521	0%	12%	0%	88%	1.37	2.23
	Total Site Area Draining to Pond in Tract J	29.1793					2.43	4.05

MISCELLANEOUS COMPUTATIONS

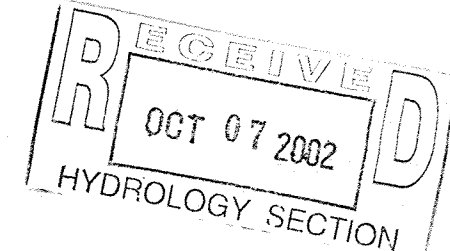
Required Pond Volume = 4.05 Ac-Ft x 43560 Sq.Ft./Ac. = 176429 Cu. Ft.

Actual Pond Volume Provided:

Elevation	Area	Avg Vol	Total Outlet Vol	Discharge
5403	6846	14682.5	14682.5	0
5404	22519	26022	40704.5	0
5405	29525	32897	73601.5	0
5406	36269	55141.5	128743	0
5407	48262	61138	189881	0
5408	66548	70281	260162	0
5409	70305	72159.5	332322	0
5410	74014			

5407.78 = 100-yr Water Surface Elevation for Required Pond Volume of 176429 Cu. Ft.

= 7.63Ac-Ft



CONCEPTUAL GRADING AND DRAINAGE PLAN FOR TRACTS G, H, I & J



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