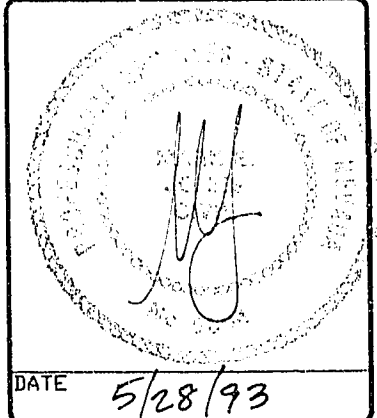


NO.	DATE	BY	APPROV.	REVISION DESCRIPTION

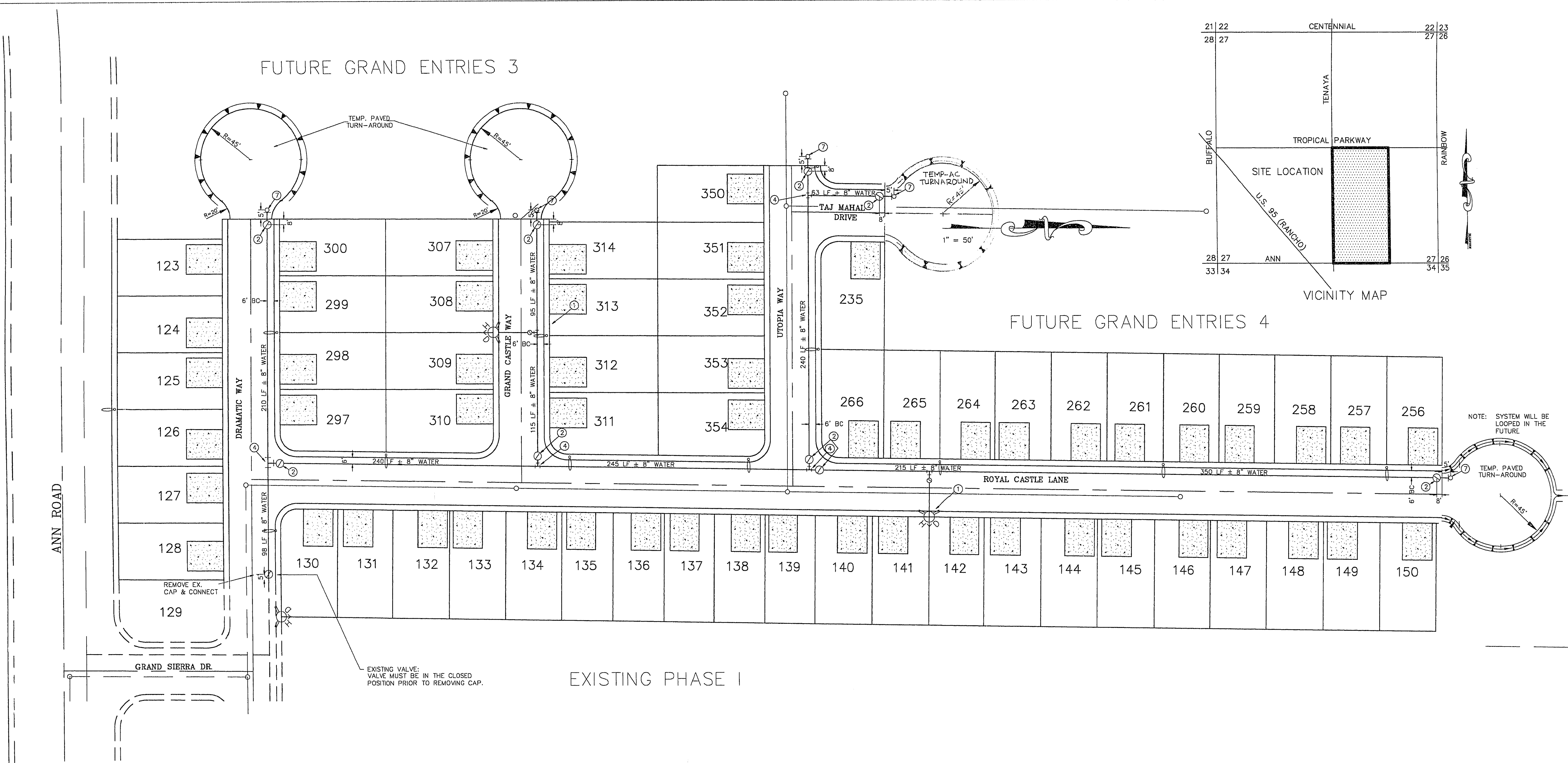


SOUTHWEST ENGINEERING
 LAND PLANNING-MAPPING-DEVELOPMENT
 5426 W. VEGAS DRIVE
 LAS VEGAS, NEVADA 89108
 (702) 648-9700

MASTER WATER PLAN
GRAND ENTRIES PHASE 2

WORK ORDER NO.	920219
DESIGN BY	D. PETERS
DATE	3/93
SCALE	1" = 50'
CAD FILE	GRND2WAT.DWG
SHEET	7 OF 8 SHEETS

567Y-H258-2



C.L.V. FIRE DEPT. NOTES

- All work shall be done in strict accordance with the City of Las Vegas Fire Department "Hydrant Specifications", "Hydrant Installation Specifications" and Ordinance #3545.
- Authorized hydrants for this project are:
 - Kennedy Guardian
 - Mueller A-423 Centurion
 - Clow Model 2546 Medallion
- On any new home or building installation, accessible fire hydrants shall be installed before construction commences and sold fire hydrants shall be in good working order with adequate water supply.
- Contractor shall place a blue reflective marker as required in Ordinance #3545 to identify fire hydrant locations.
- Call the Las Vegas Building Department at 799-2071 for underground inspection, pressure and flush verification of all fire hydrants and fire mains before covering.
- Painting of the curbs and hydrant and any work necessary for protection of hydrants from physical damage per Ordinance #3545 shall be completed before approval by the City of Las Vegas Fire Department.
- A permit is required from the Fire Department for water line and fire hydrant installations on the private side of the meter. The permit shall be obtained from the Fire Protection Engineer prior to contractors material and test certificate for underground piping being issued.
- A flow must be witnessed by the Fire Department prior to occupancy, for verification of required on-site water supply.
- All on-site fire main material must be U.L. listed and F.M. approved.
- Fire hydrant spacing:

Residential	- 500 feet for unsprinklered buildings
	600 feet for sprinklered buildings
Commercial/	- 300 feet for unsprinklered buildings
Multi-family	

LVVWD GENERAL NOTES

- No work shall begin on the water plans until they have been released for construction by the LVVWD. Following approval of the plans, notice shall be given to the LVVWD Customer Service Department (870-4194) 48 hours prior to actual construction, and 24 hours prior to an inspection.
- Call Before You Dig 1-800-227-2800.
- All work shall conform to LVVWD latest standard plates, drawings, and specifications.
- All work, except as modified hereon or by Note 3, shall be done in accordance with the most current draft or addition of the Uniform Standard Specifications for Public Works Construction Offsite Improvements, Clark County Area.
- District approved service saddles or tapped collars shall be required on all 3/4" and 1" service laterals. Service saddles only shall be permitted on 1-1/2" and 2" service laterals. Double tapped collars are not permitted.
- COPPER SERVICE LATERALS: All 3/4" to 2" service laterals shall be of copper tubing in accordance with the District's specifications and standard plates.
- The maximum allowable joint deflection for ACP and Ductile iron pipe shall be as follows:

Pipe Sizes	ACP	Ductile Iron slip joint	Ductile Iron mechanical joint
6 inch	2.5 degrees	2.5 degrees	3.5 degrees
8 - 12 inch	-	-	2.5 degrees
14 - 16 inch	2 degrees	1.5 degrees	1.5 degrees
18 - 24 inch	N/A	1.5 degrees	1.5 degrees

On PVC pipe, the maximum offset for a 20' length of factory belled pipe shall be 16 inches for 6" pipe, 12 inches for 8" pipe, and 9 inches for 10" and 12" pipe.

If these offsets conflict with the pipe manufacturers recommendation, the more stringent requirement shall apply.
- All water meter boxes shall be located outside of driveway areas.
- All valves shall be located outside of driveway and valley gutters.
- Detector tape shall be required in accordance with Standard Plate No. 27 where indicated, and as follows:
 - over all mains not installed 6 feet from back of curb.
 - over all service laterals not installed at right angles to main.
- All water mains shall be pressure tested at 200 psi for a continuous two hour period, in accordance with District Standards.
- All water mains shall be disinfected, flushed, and an acceptable Health Sample obtained, prior to the connection of the water main(s) and/or lateral(s) to the District's System.
- Contractor to obtain all meters 2" and smaller from LVVWD Central Stores. Telephone 258-3152 forty-eight (48) hours prior to pickup.

LEGEND AND QUANTITY EST.

①	DRIVEWAY LOCATION
②	8" WATER MAIN 1944 LF
④	3/4" SERVICE 5/8" METER 56 EA
⑦	STD. FIRE HYDRANT AND ASSMBLY 2 EA
⑦	8" GATE VALVE 9 EA
⑦	8" X 8" TEE 4 EA
⑦	2" BLOW OFF 4 EA

LAS VEGAS FIRE DEPARTMENT

FIRE FLOW REQUIREMENT IS 1500 GPM AT 20 POUNDS PER SQUARE INCH RESIDUAL

BASED ON:

SQUARE FOOTAGE 1500 TO 2800 SQUARE FEET

LARGEST AREA BETWEEN AREA SEPARATION WALLS N/A

HEIGHT 2 STORY, 25'±

TYPE OF CONSTRUCTION FRAME STUCCO (TYPE V)

EXPOSURE 10' MINIMUM

SPRINKLER SYSTEM N/A

OCCUPANCY SINGLE FAMILY (R-3)

ROOF CONSTRUCTION CONCRETE TILE

PROJECT NAME: Grand Entries Phase 2
 This project water plan complies with the Las Vegas Valley Water District's technical requirements. However, this water plan is NOT APPROVED FOR CONSTRUCTION at this time and this signature does not provide or imply a water commitment.

David B. Peterson 7/14/93
 LVVWD Date

David B. Peterson 8/18/93
 C.L.V. FIRE DEPARTMENT DATE

[Signature] 8/24/93
 L.V.V.W.D. DATE

10-24-121