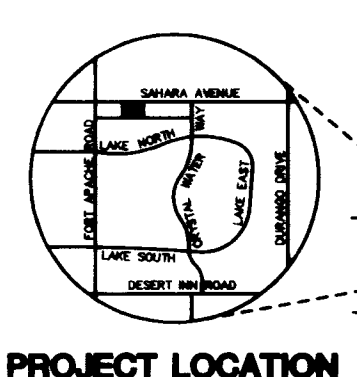
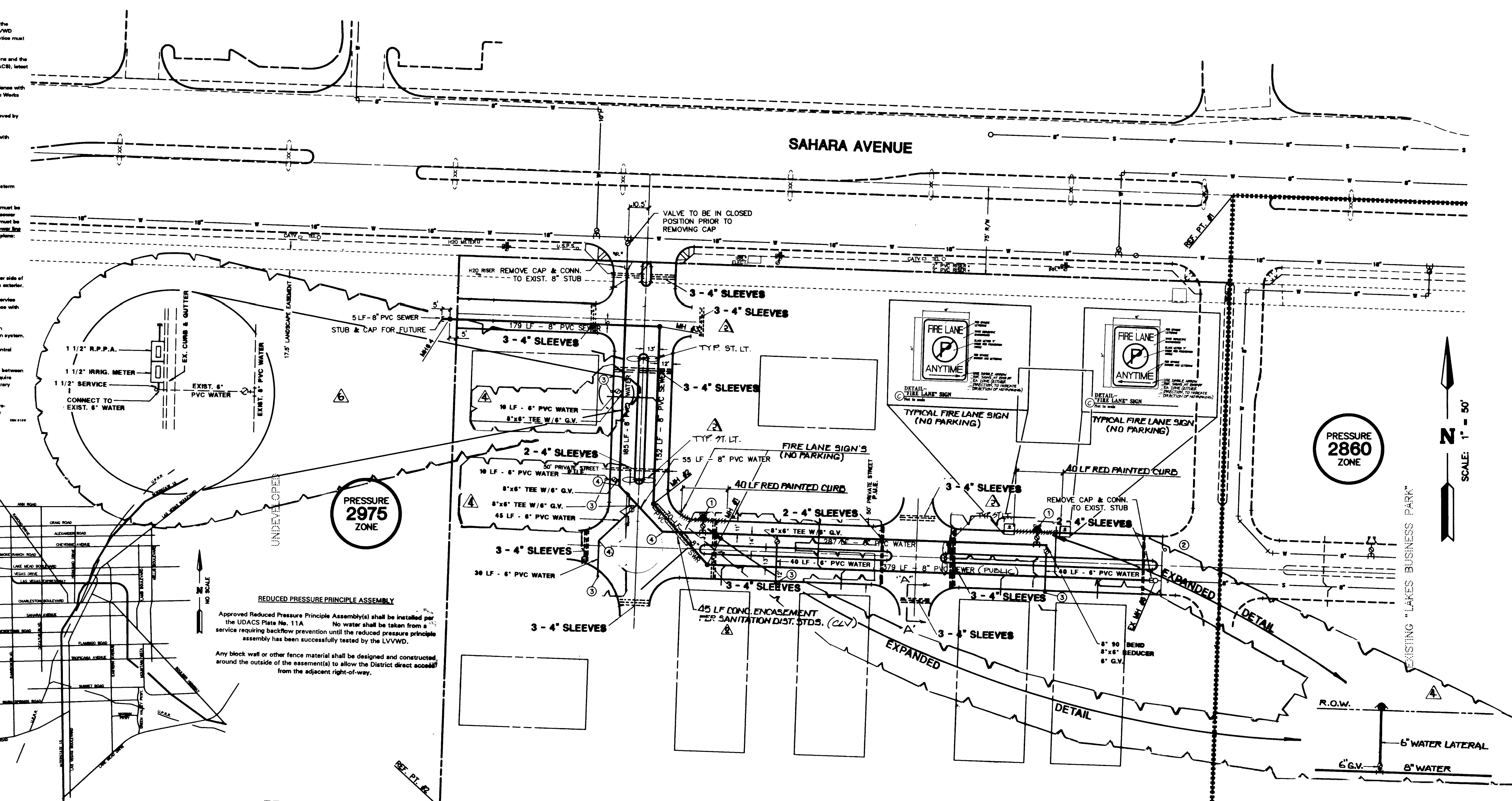


LAS VEGAS VALLEY WATER DISTRICT STANDARD NOTE

- No work shall begin until the water plans have been released for construction by the LVVWD. Following water plan approval, 48-hour notice shall be given to the LVVWD Communication Support Center (258-7171) prior to the start of construction. Notice must be given by 2:00 p.m. the business day prior to a LVVWD inspection.
- All work shall conform to the LVVWD's Standard Plans, Drawings, and Specifications and the Uniform Design and Construction Standards for Water Distribution Systems (UDACS), latest edition.
- All work, except as modified by these plans or by Note 2, shall be done in accordance with the most current draft or edition of the Uniform Standard Specifications for Public Works Construction Official Improvement, Clark County Area.
- A single pipe material shall be used throughout the project unless otherwise approved by the LVVWD.
- All service laterals (2" inches in diameter and smaller) shall be copper tubing with LVVWD approved service saddles.
- All water meter boxes shall be located outside of driveway areas.
- All valves shall be located outside of driveway and curb gutters.
- The following requirements must be met in the event a water line and sanitary or storm sewer line cross:

- A minimum eighteen (18) inch vertical separation (outside to outside) must be maintained when the water line is installed over the sanitary or storm sewer line. If the vertical separation cannot be maintained or the water line must be placed under the sanitary or storm sewer line, the SEWER AT STORM SEWER rule must be constructed with one of the following or, as shown on these plans:
 - Portable water supply quality material.
 - Encasement, with four (4) inch concrete minimum.
 - Blanketing with portable water supply quality pipe.
- Each provision must extend along the sanitary or storm sewer, on either side of the main, a minimum 10 foot distance perpendicular to the water main exterior.

- Warning tape shall be required over all mains, all six (6) inch diameter and larger service laterals, and any service lateral not installed perpendicular to the water main exterior. Standard Plate No. 27.
- All water facilities shall be filled, disinfected, pressure tested, flushed, and filled and an acceptable water sample obtained, prior to connection to the LVVWD's distribution system.
- The contractor must obtain all meters two (2) inches and smaller from LVVWD Central Stores. Telephone 258-3152 forty-eight (48) hours prior to pickup.
- Construction may interrupt service, with LVVWD approval and proper notification, between the hours of 10 PM and 6 AM. Service through Thursday. Circumstances may require temporary service leads be installed, without LVVWD reimbursement. Any temporary service lead must have prior LVVWD approval.
- All water facility construction materials used must be as listed on the LVVWD's Pre-Approved Materials and Manufacturers Listing for New Facilities, latest revision, or specifically approved on these plans.



VICINITY MAP

QUANTITY ESTIMATES WATER

① FIRE HYDRANT w/ASSEMBLY (INCL. 8\"/>	2 EA
③ 6\"/>	5 EA
④ 45\"/>	3 EA
⑤ 6\"/>	5 EA
⑥ 8\"/>	9 EA
6\"/>	175 LF
8\"/>	1 EA
8\"/>	527 LF
8\"/>	1 EA
8\"/>	4 EA

SEWER

4\"/>	4 EA
8\"/>	785 LF
6\"/>	265 LF

NOTE: THESE QUANTITIES ARE ONLY ESTIMATES, CONTRACTOR TO VERIFY.

CONDITIONAL APPROVAL OF VALVED OUTLET (6\"/>

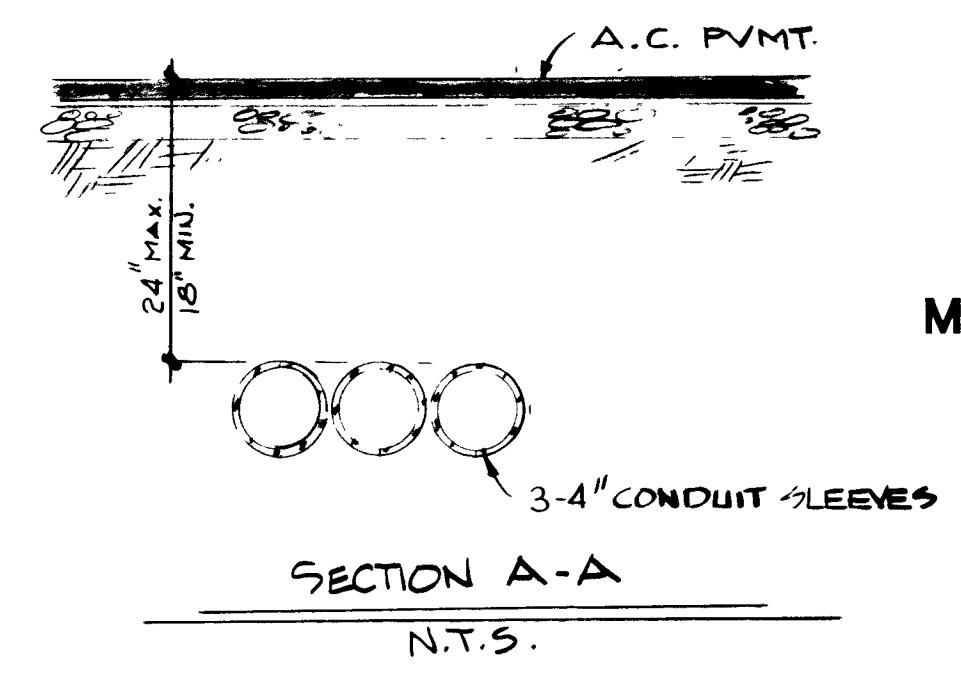
The water plans show one or more valved outlets extending out of paved areas. Installation of these outlets is acceptable, however, if the outlets are incorrectly located or not used for any reason when the property is actually developed, the developer shall abandon the outlets at the connection to the active main in accordance with the District's standards and at the Developer's expense.

This property may have static water pressure in excess of 80 psi. The Uniform Plumbing Code requires that individual, on-site (private), pressure reducing valves be installed whenever the pressure exceeds 80 psi. PRV's are the Developer's responsibility and will not be inspected or included in the acceptance of LVVWD facilities.

EXISTING "STYLE AT THE LAKES UNIT 2"

EXISTING "STYLE AT THE LAKES UNIT 1"

EXISTING "PARK OASIS"



MANHOLE CONTROL TABLE

MH #	NORTHING	EASTING
1	4632.91	5950.79
2	4685.13	5904.67
3	4837.18	5910.22
EXISTING MANHOLE		
(6)	4618.88	6334.97
REFERENCE POINTS		
1	4948.81	6402.05
2	4425.15	5721.06

NOTE

EXISTING UTILITY LOCATIONS SHOWN HEREIN ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.

BENCHMARK

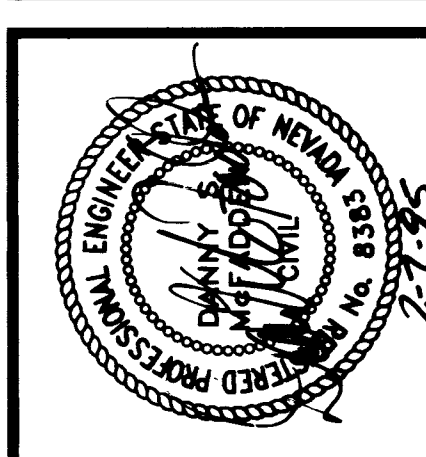
CLV BM #24/ILV105SW
RIVET & PLATE IN CURB, NE QUAD. OF FORT APACHE & SAHARA.
ELEVATION = 2786.505'

APPROVAL

[Signature] 8/22/95
LAS VEGAS VALLEY WATER DISTRICT
[Signature] 6-1-95
CLV FIRE DEPARTMENT
(Approval is for watermain only as shown on these plans, subsequent building additions and plan revisions will require further approvals.)

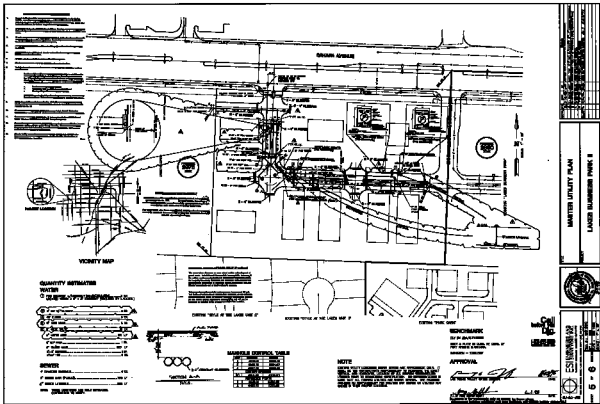
APPROVAL	DATE	BY	REVISION
APPROVED AS-PLUMBED CONSTRUCTION			
2.19.95		OF	ADDED 2\"/>
2.19.95		OF	ADDED 2\"/>
6-29-95		DWG	REMOVED 1755 LF 8\"/>
6-29-95		DWG	ADDED 6\"/>
7-27-95		DWG	REV PER LVVWD OK PRINTS
8-16-95		DWG	ADD 15\"/>
8-16-95		DWG	ADD 15\"/>

MASTER UTILITY PLAN
LAKES BUSINESS PARK II
PROJECT



ESI ENGINEERS AND SURVEYORS INC.
PLANNERS • CONSULTING ENGINEERS • SURVEYORS
7548 WEST SAHARA AVENUE • LAS VEGAS, NEVADA 89117 • (702) 246-5415
W.O. # : 090-8610
BY : DSK
DATE : FEB 1995
SHEETS 5 OF 6
SCALE : 1\"/>

307Y-4375



MANAGER UTILITY PLAN

■ JOURNAL OF MANAGEMENT INQUIRY



RESEARCH



5

DOI: 10.1002/eqe