

### SEWER FITTINGS LEGEND & QUANTITY ESTIMATE

1	INSTALL 4" PVC SEWER LATERAL	100 LF.
2	INSTALL 6" PVC SEWER LATERAL	33 LF.
3	INSTALL 10" PVC SEWER	33 LF.
4	INSTALL SEWER CAP	5 EA.
5	INSTALL SANITARY SEWER MANHOLE (PER STD. DWG #403)	1 EA.

### WATER FITTINGS LEGEND & QUANTITY ESTIMATE

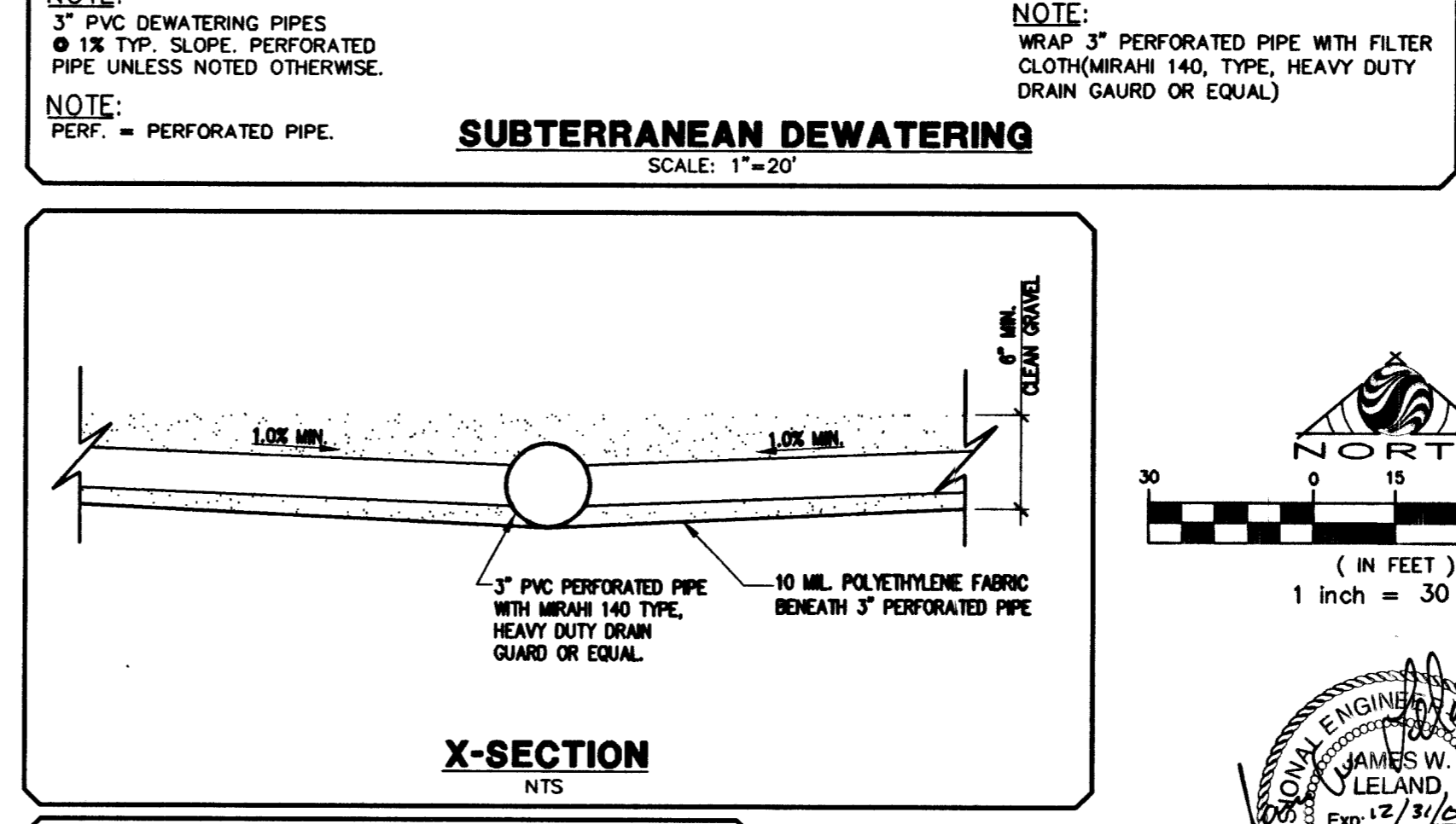
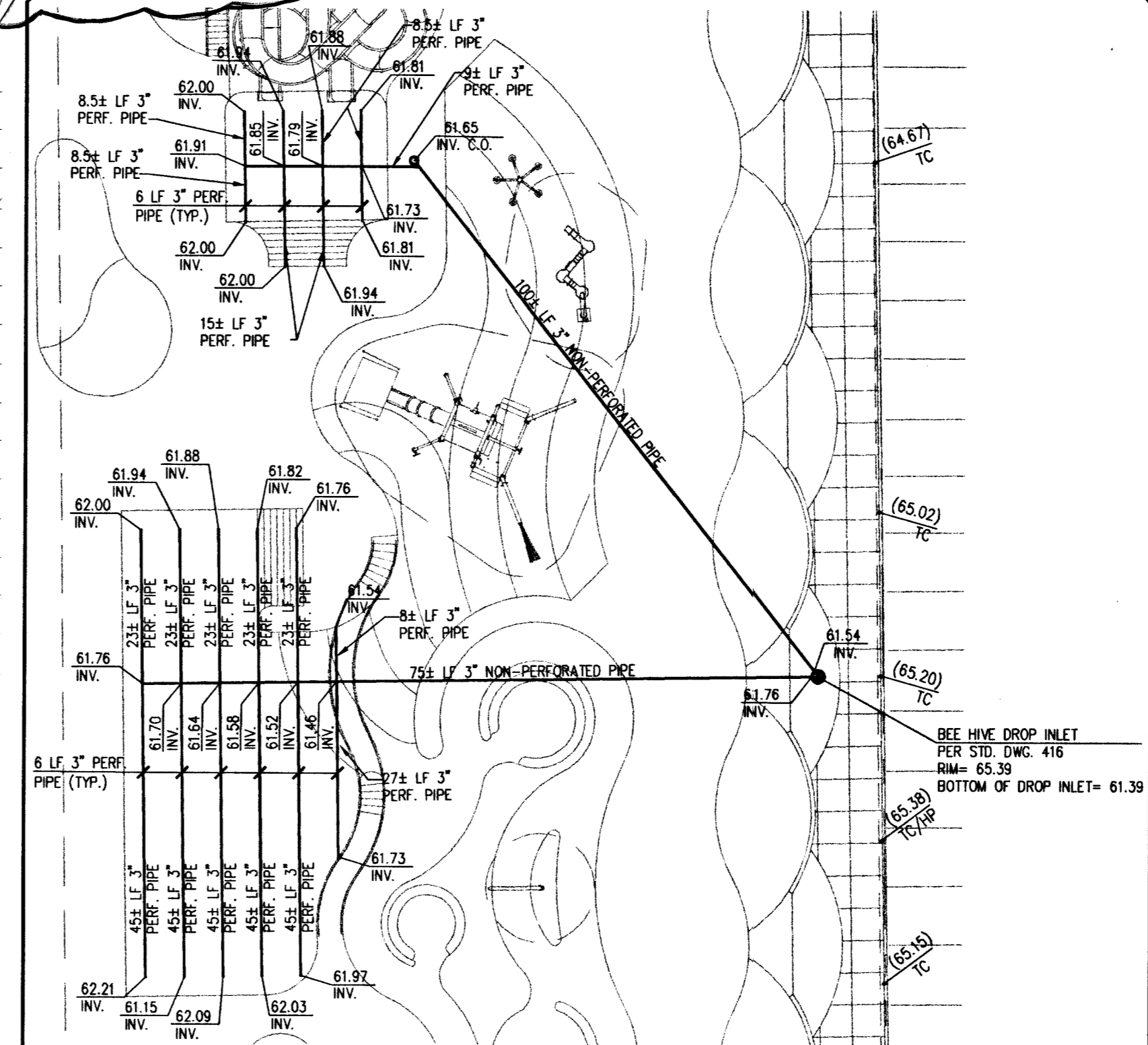
1	INSTALL 2" PVC WATER PRIVATE (DOM.)	21 LF.
2	INSTALL 3" PVC WATER PRIVATE (DOM.) (IRR.)	13 LF.
3	INSTALL 3" PVC WATER PRIVATE (IRR.) (DOM.)	50 LF.
4	INSTALL 2" RPPA (PER UDACS PLT #11A)	2 EA.
5	INSTALL 4"x2" TEE (PER UDACS PLT #5)	1 EA.
6	INSTALL 3" GATE VALVE W/A.B. (PER UDACS PLT #3)	1 EA.
7	INSTALL 2" 90° BEND (PER UDACS PLT #5)	3 EA.
8	INSTALL 4"x2" REDUCER (PER UDACS PLT #3)	2 EA.
9	INSTALL 4" 90° BEND (PER UDACS PLT #5)	1 EA.
10	INSTALL 4" CROSS (PER UDACS PLT #5)	1 EA.
11	INSTALL 2" CAP (PER UDACS PLT #5)	1 EA.
12	INSTALL 3" RPPA (PER UDACS PLT #11E)	1 EA.
13	INSTALL 4"x3" REDUCER (PER UDACS PLT #5)	1 EA.
14	INSTALL 3" 90° BEND (PER UDACS PLT #5)	1 EA.

### FIRE FLOW CALCULATIONS (EXISTING BUILDING)

FIRE FLOW REQUIREMENTS IS: 1,500 GALLONS AT 20 PSI RESIDUAL PRESSURE PER MINUTE

BASED ON:  
 SQUARE FOOTAGE: 73,400 SF  
 LARGEST AREA BETWEEN 4-HOUR AREA SEPARATION WALLS: 7,200 SF  
 BUILDING HEIGHT: 128 FT  
 NUMBER OF STORIES: TWO-STORY  
 TYPE OF CONSTRUCTION: TYPE I  
 OCCUPANCY: CHAPTER A3  
 FULL AUTOMATIC FIRE SPRINKLER SYSTEM: YES

REVIEWED BY: *[Signature]* DATE: 3/26/03

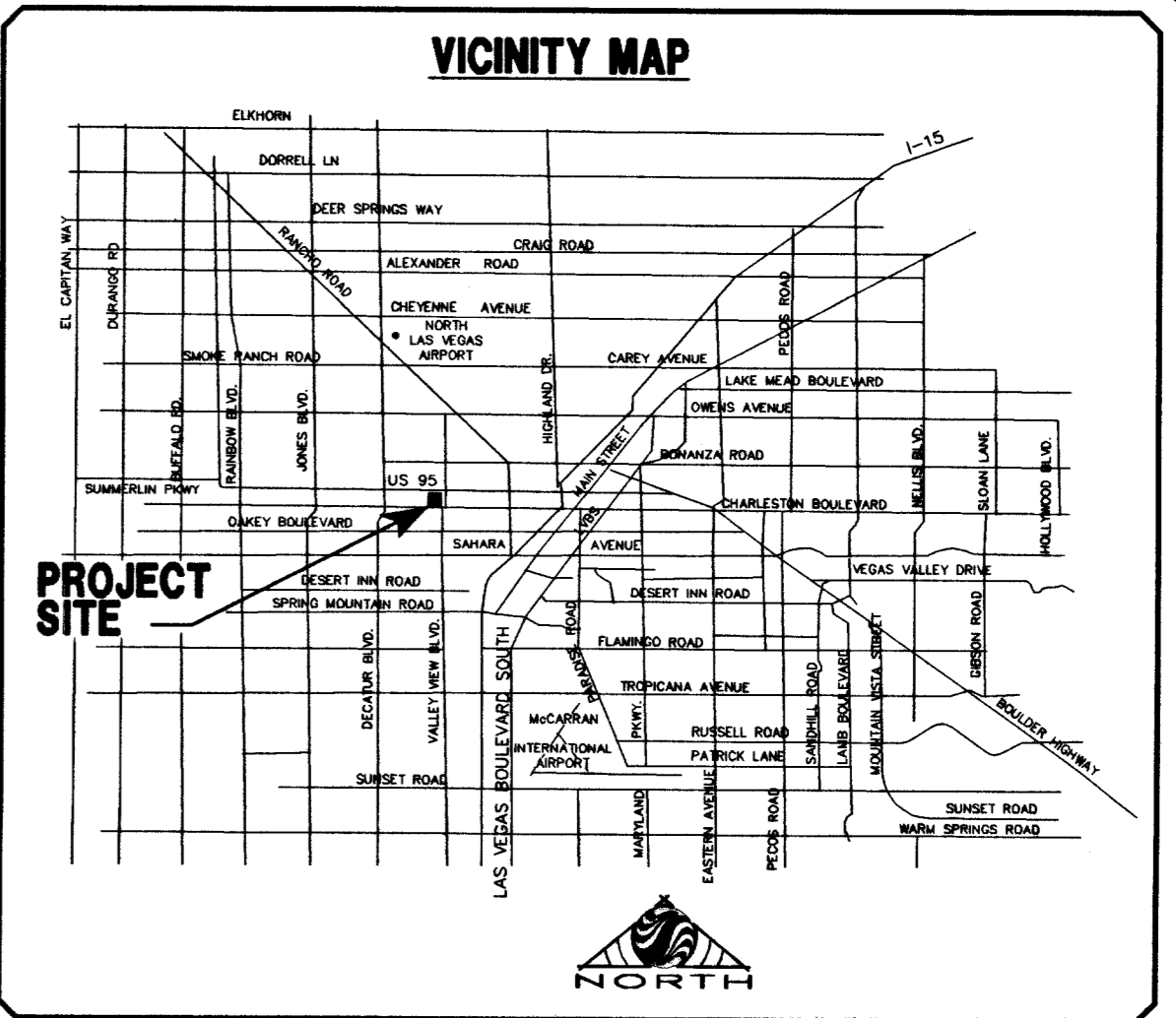


### FIRE FLOW CALCULATIONS (ADDITION ONLY)

FIRE FLOW REQUIREMENTS IS: 1,750 GALLONS AT 20 PSI RESIDUAL PRESSURE PER MINUTE

BASED ON:  
 SQUARE FOOTAGE: 4000 SF  
 LARGEST AREA BETWEEN 4-HOUR AREA SEPARATION WALLS: N/A  
 BUILDING HEIGHT: 21' ±  
 NUMBER OF STORIES: ONE-STORY  
 TYPE OF CONSTRUCTION: TYPE V-B  
 OCCUPANCY: CHAPTER 3  
 FULL AUTOMATIC FIRE SPRINKLER SYSTEM: NONE

REVIEWED BY: *[Signature]* DATE: 12/15/03



### BASIS OF BEARINGS

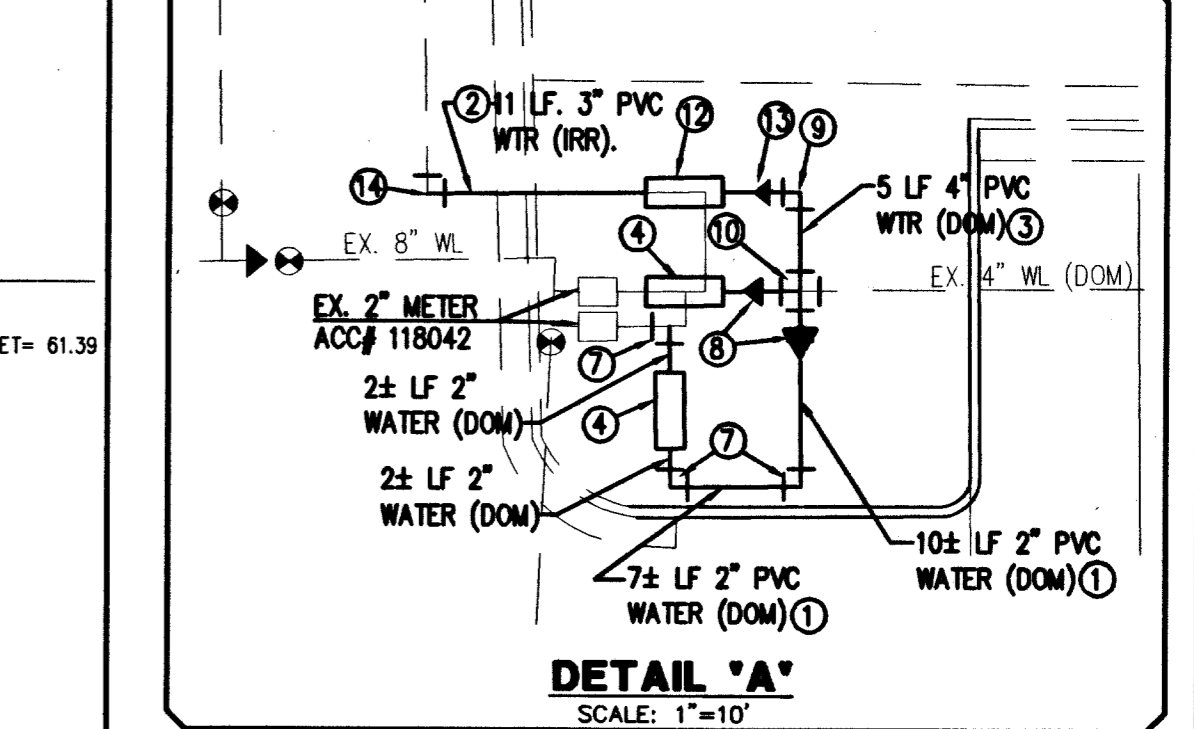
SOUTH 89°39'38" EAST, BEING THE CENTERLINE OF MEADOWS LANE, AS SHOWN ON THAT CERTAIN MAP ON FILE IN THE CLARK COUNTY RECORDER'S OFFICE IN FILE 33 OF SURVEYS AT PAGE 44, SITUATED IN THE NORTHEAST QUARTER (NE 1/4) OF SECTION 31, TOWNSHIP 20 SOUTH, RANGE 61 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA.

### BENCHMARK

CITY OF LAS VEGAS BENCHMARK 2LV01 31N6  
 RIVET AND PLATE IN TOP OF CURB AT SOUTHWEST CORNER OF VALLEY VIEW AND MEADOWS.  
 ELEVATION = 654.7607 meters (NAVD'88)  
 ELEVATION = 2148.16 U.S. Survey feet (NAVD'88)

### APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT (C1, C2, C7) DATE: \_\_\_\_\_



### REDUCED PRESSURE PRINCIPLE ASSEMBLY

APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY(S) SHALL BE INSTALLED PER THE UDACS PLATE NO. 11A. NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW PREVENTION UNTIL THE REDUCED PRESSURE PRINCIPLE ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY THE LVVWD.

ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENT(S) TO ALLOW THE DISTRICT DIRECT ACCESS FROM THE ADJACENT RIGHT-OF-WAY.

EASEMENTS SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.

### ENGINEER'S NOTES

- EXISTING UTILITY LOCATIONS SHOWN HEREON 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.
- CALL BEFORE YOU DIG: 1-800-782-5348.
- SEE MECHANICAL PLANS FOR LOCATIONS, SIZES, AND DEPTHS OF ALL ONSITE UTILITIES AT THE PROPOSED BUILDINGS.
- SEE ELECTRICAL PLAN FOR ONSITE LIGHTING AND POWER SUPPLY.
- SEE LANDSCAPE PLANS FOR ONSITE IRRIGATION.
- NOTIFY ENGINEER OF ANY DISCREPANCIES IMMEDIATELY.

### APPROVALS

CITY FIRE MARSHAL: *[Signature]* DATE: 12/15/03  
 LAS VEGAS VALLEY WATER DISTRICT: *[Signature]* DATE: 12/22/03

Avoid cutting the underground utility lines. It's costly.  
 Call before you Dig. 1-800-227-2600 (UNDERGROUND SERVICE ALERT CALL)

Avoid hitting the overhead power lines. It's costly.  
 Call before you do Overhead. 1-702-593-6111

DATE: 12/10/2003  
 DRAWN BY: EDS  
 DESIGNED BY: JML  
 CHECKED BY: JML  
 ADA CHECKED: \_\_\_\_\_  
 JOB NO.: \_\_\_\_\_  
 SCALE: 1"=30'

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.

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LODGE YMCA ASSN OF LAS VEGAS  
 YMCA AQUATICS FACILITY  
 UTILITY PLAN

RECEIVED PROFESSIONAL ENGINEER STATE OF NEVADA  
 JAMES W. LELAND  
 CIVIL  
 No. 4932  
 12/10/03

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