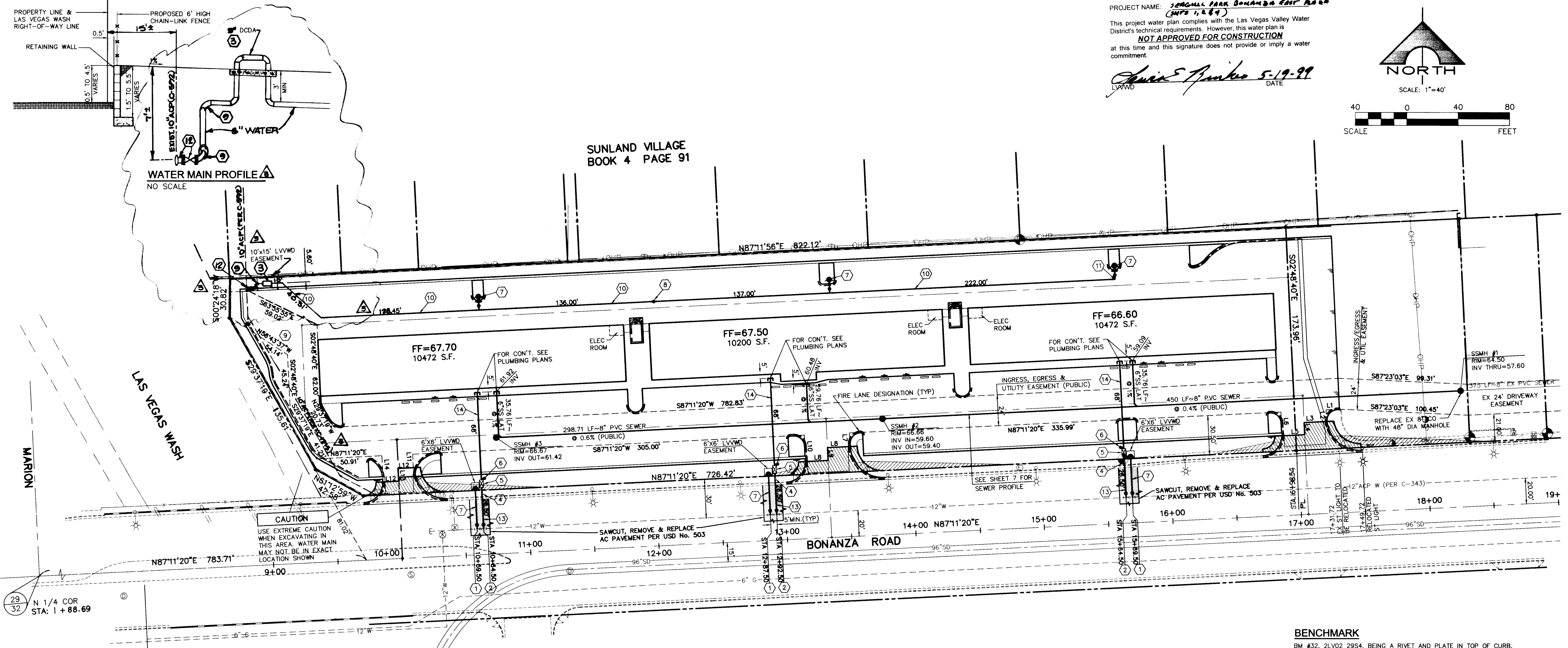
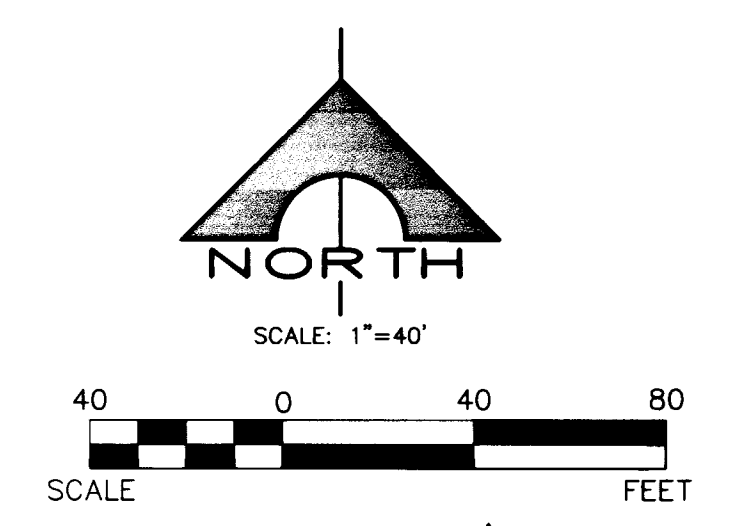


PROJECT NAME: SEAGULL PARK BONANZA EAST PLAZA (SHEETS 1, 2, 3, 4)
 This project water plan complies with the Las Vegas Valley Water District's technical requirements. However, this water plan is **NOT APPROVED FOR CONSTRUCTION** at this time and this signature does not provide or imply a water commitment.
James E. Pinker 5-19-99 DATE
 LVWWD



LAS VEGAS WASH

SUNLAND VILLAGE BOOK 4 PAGE 91

CONSTRUCTION NOTES AND ESTIMATE OF QUANTITIES

WATER

1	INSTALL 12"x6" TAPPING SLEEVE AND 6" TAPPING VALVE	3 EA
2	INSTALL 12"x 1-1/2" SERVICE SADDLE WITH CORP. STOP PER UDACS PLATE 1-D	3 EA
3	INSTALL 8" DCPA (FEBCO "N" PATTERN, MODEL No. 876) PER UDACS PLATE NO. 20B	1 EA
4	INSTALL 1-1/2" WATER METER PER UDACS PLATE NO 1-D	3 EA
5	INSTALL 1-1/2" RPPA PER UDACS PLATE NO 11-A	3 EA
6	INSTALL IRRIGATION AUTO SUPPORT VALVE	3 EA
7	INSTALL FIRE HYDRANT ASSEMBLY PER UDACS PLATE NO 7	6 EA
8	INSTALL 8" GATE VALVE	1 EA
9	INSTALL 8" 45° BEND	2 EA
10	INSTALL 8" WATER MAIN (FIRE)	688 LF
11	INSTALL 8" 90° BEND	3 EA
12	INSTALL 10"x8" MECH. JT. TAPPING SLEEVE & 8" TAPPING VALVE	1 EA
13	INSTALL 1-1/2" WATER LINE	80 LF
14	INSTALL 2" WATER LINE	204 LF
15	INSTALL 2"x1-1/2" REDUCER	3 EA

SEWER

48"	STANDARD MANHOLE (PUBLIC)	3 EA
8"	PVC SEWER (PUBLIC)	749 LF
6"	PVC SEWER	101 LF

INSTALLATION OF DOUBLE CHECK DETECTOR ASSEMBLY (1) - 8"

THE DOUBLE CHECK DETECTOR ASSEMBLIES SHALL BE INSTALLED IN ACCORDANCE WITH THE UDACS PLATE 20B. ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENT(S), SO AS TO ALLOW THE DISTRICT DIRECT ACCESS FROM THE ADJACENT RIGHT-OF-WAY.

REDUCED PRESSURE PRINCIPLE ASSEMBLY - (3) (1-1/2")

APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY(S) SHALL BE INSTALLED PER THE UDACS STANDARD PLATE NO. 11A. NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW PREVENTION UNTIL THE REQUIRED PRESSURE PRINCIPLE ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY THE LVWWD. ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENT(S), TO ALLOW THE DISTRICT ACCESS FROM THE ADJACENT RIGHT-OF-WAY.

SEWER CONTRIBUTION

AVERAGE FLOW = 0.0112 MGD
 PEAK FLOW = 0.0390 MGD

BENCHMARK

BM #32, 2LV02 29S4, BEING A RIVET AND PLATE IN TOP OF CURB, NE RETURN MARION DRIVE AND BONANZA ROAD. ELEV: 1766.98' NAVD88

BASIS OF BEARINGS

N 87°11'20" E BEING THE SOUTH LINE OF THE SOUTHEAST QUARTER (SE 1/4) OF SECTION 29, TOWNSHIP 20 SOUTH, RANGE 62 EAST, M.D.M., CITY OF LAS VEGAS, NEVADA, AS PER PARCEL MAP 48, PAGE 97 OF CLARK COUNTY OFFICIAL RECORDS, SAID LINE ALSO BEING THE CENTERLINE OF BONANZA ROAD.

LAS VEGAS FIRE DEPARTMENT

FIRE FLOW IS 2000 GPM AT 20PSI RESIDUAL PRESSURE
 BASED ON: 11,499 S.F.
 SQUARE FOOTAGE: 11,499 S.F.
 AREA BETWEEN 4 HOUR AREA SEPARATION WALLS:
 BUILDING HEIGHT:
 NUMBER OF STORIES: 1
 OCCUPANCY: B&M
 FULL AUTOMATIC FIRE SYSTEM: NO
 TYPE CONSTRUCTION: V-IHR
 CITY FIRE MARSHAL: *[Signature]* DATE: 5/19/99

APPROVAL

APPROVED FOR CONSTRUCTION
[Signature] 8-3-99 DATE
 LAS VEGAS VALLEY WATER DISTRICT

DISCLAIMER NOTE

UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UNDERGROUND AND OVERHEAD 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
 1-800-227-2600
 UNDERGROUND SERVICE (USA)

CALL BEFORE YOU DO OVERHEAD
 1-702-593-6111

LEGEND

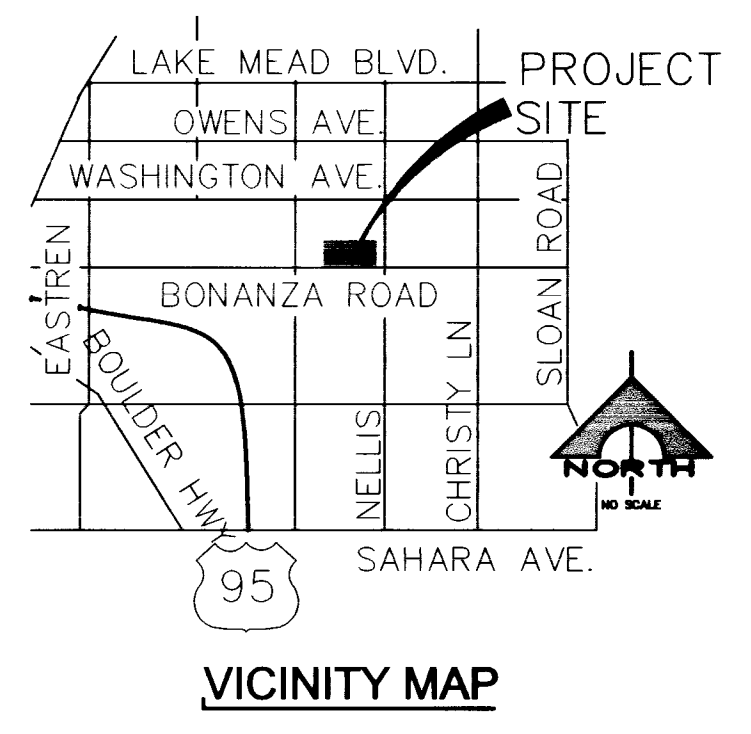
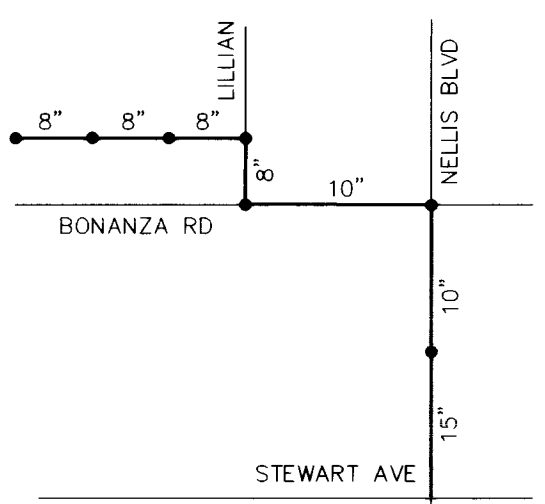
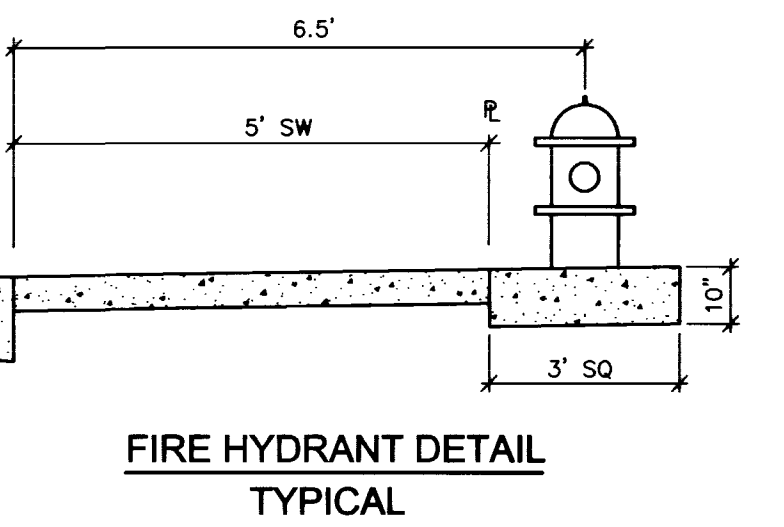
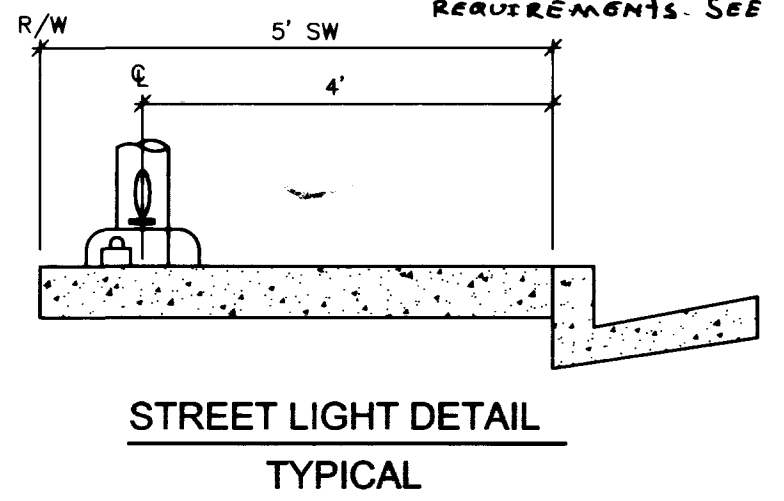
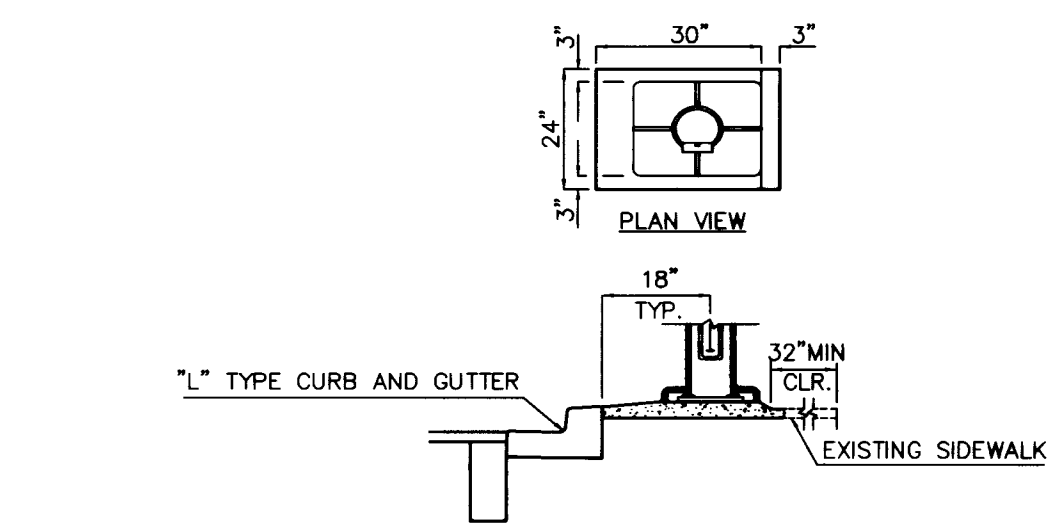
- 12" W — EXISTING WATER LINE
- 8" SS — EXISTING SEWER LINE
- G — EXISTING GAS LINE
- 12" SD — EXISTING STORM DRAIN
- OH — EXISTING OVERHEAD POWER
- ⊙ EXISTING FIRE HYDRANT
- ⊙ EXISTING WATER VALVE
- ⊙ EXISTING MANHOLE
- — PROPOSED WATER LINE
- — PROPOSED SEWER LINE
- PROPOSED FIRE HYDRANT
- PROPOSED WATER VALVE
- PROPOSED MANHOLE
- PROPOSED CLEANOUT
- — FIRE LANE — PAINT CURBS RED

Line Table

No.	Bearing	Distance
L1	N87°11'20" E	0.40
L2	N02°48'40" W	9.08
L3	N87°11'20" E	17.50
L4	N02°48'40" W	8.40
L5	N87°11'20" E	17.51
L6	N02°48'40" W	18.50
L7	N02°48'40" W	10.51
L8	N87°11'20" E	17.50
L9	N02°48'40" W	9.99
L10	N02°48'40" W	20.53
L11	N02°48'40" W	10.50
L12	N87°11'20" E	12.00
L13	N02°48'40" W	9.89
L14	N02°48'40" W	20.39

MODIFIED STREET LIGHT CRASH CAP CROSS SECTION

NOTE: MODIFY ALL EXISTING CRASH CAPS AS NEEDED TO COMPLY WITH A.D.A. REQUIREMENTS. SEE DETAILS ABOVE.



LOCATION MAP

VICINITY MAP

8" SEWER IN LULLIAN RUNS SOUTH AND DISCHARGES INTO A 10" IN BONANZA ROAD. THIS 10" RUNS EAST AND DISCHARGES INTO A 10" IN NELLIS BLVD WHICH RUNS SOUTH AND DISCHARGES INTO A 15" APPROX 700' NORTH OF STEWART AVE.

TETRA Southwest
 3081 South Valley View - Las Vegas, Nevada 89012
 Phone: (702) 889-6010 • Fax: (702) 889-6020

REV. #	DATE	DESCRIPTION	BY	PA
1	8/14/99	RELOCATED EXISTING 10" WATER MAIN PROFILE TO NEW WATER MAIN PROFILE	PK	
2	7/14/99	ADD 10" WATER MAIN PROFILE	H8	
3	7/18/99	REVISIONS TO WATER MAIN PROFILE	PK	

SCALE (H) 1"=40'
 SCALE (V) NONE
 DESIGN BY PK
 DRAWN BY PA

SEAGULL PARK BONANZA EAST PLAZA

UTILITY PLAN

REGISTERED PROFESSIONAL ENGINEER
 DANIEL W. MURHEAD
 5/19/99
 CIVIL
 NO. 10609
 ENGINEER'S SEAL

SHEET C4

4 OF 7 SHEETS

JOB# 99007
 107-V3097

6:139007.dwg (improv) 007-c4.dwg Mod May 19 08:36:36 1999 JOSE

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