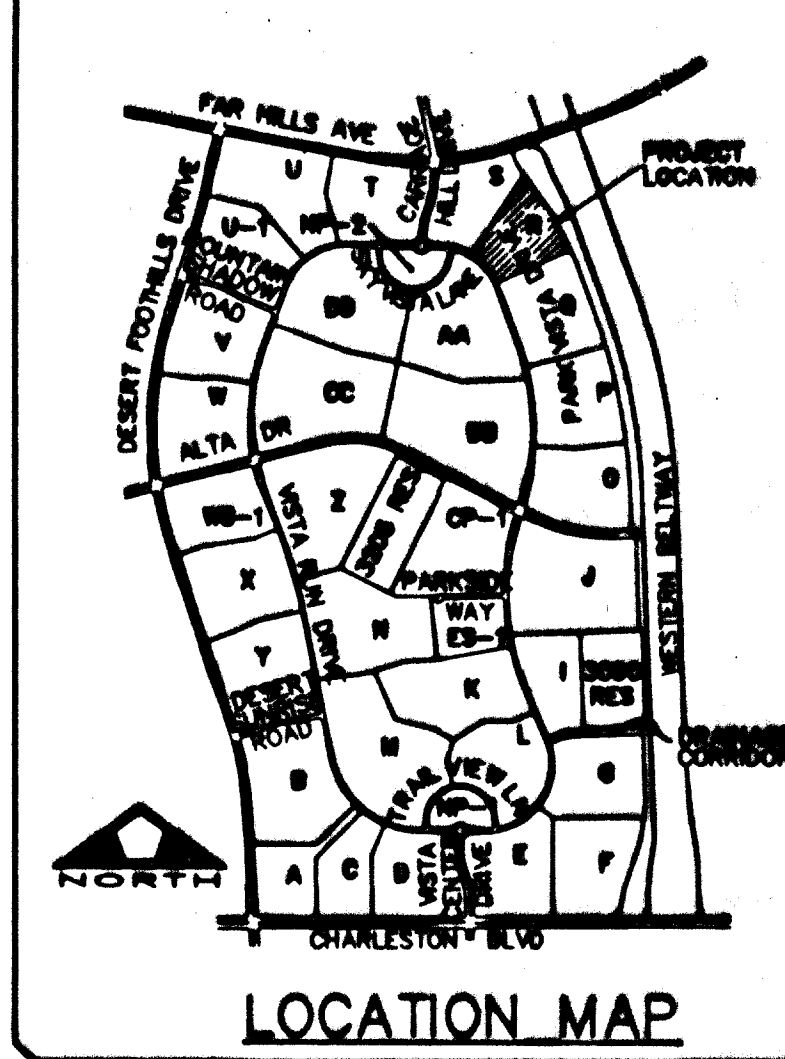
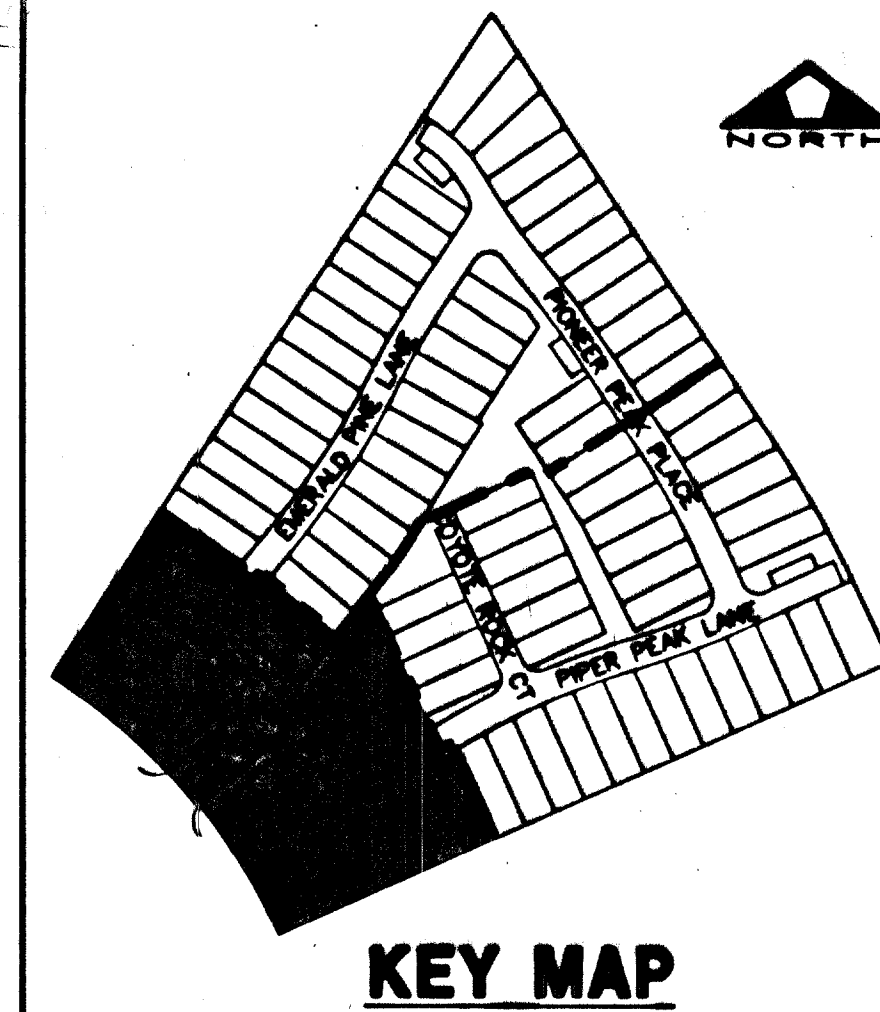
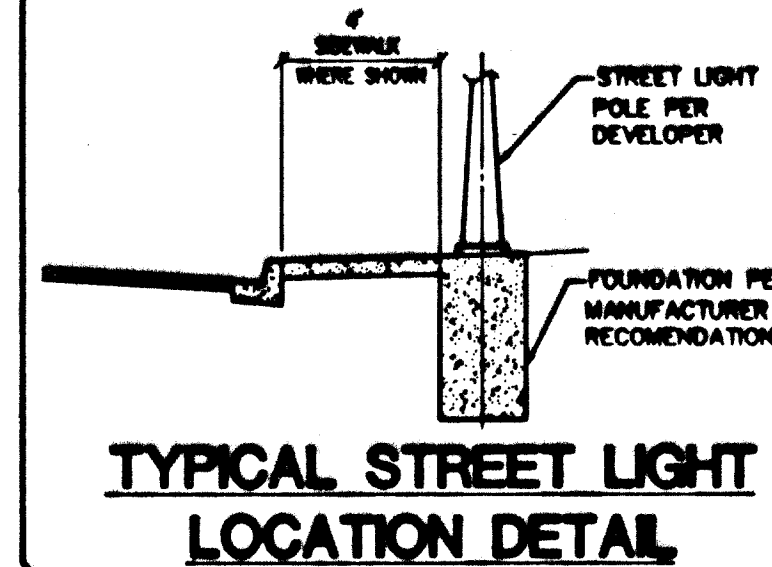


ASBUILT



SANITARY SEWER MANHOLE SCHEDULE									
MH#	TYPE	STATION	OFFSET	RIM EL.	N INV EL.	S INV EL.	E INV EL.	W INV EL.	COMMENTS
1	SD-1	8+86.83 PIPER PEAK LANE	1.50 LT	3161.0	---	---	3146.67	3146.67	1'-LOC COATED
2	SD-1	7+51.43 PIPER PEAK LANE	1.50 LT	3164.1	3156.30	---	3156.10	3156.30	---
3	SD-1	4+78.01 PIPER PEAK LANE	2.00 LT	3173.5	3166.90	---	3166.70	3166.90	---
4	SD-1	1+27.19 PIPER PEAK LANE	2.80 LT	3188.0	---	---	3180.00	---	---
5	SD-1	0+93.01 COYOTE ROCK COURT	2.00 RT	3181.9	---	3175.40	---	---	---
6	SD-1	3+51.42 PIONEER PEAK PLACE	2.00 RT	3173.2	3166.90	3166.70	---	---	---
7	SD-1	2+47.78 PIONEER PEAK PLACE	2.85 RT	3182.7	3176.10	3175.90	---	3176.10	---
8	SD-1	1+20.95 PIONEER PEAK PLACE	2.00 RT	3186.1	---	3179.80	---	---	---
9	SD-1	7+79.69 EMERALD PINE LANE	4.34 RT	3184.6	---	3179.80	3178.60	---	---
10	SD-1	4+77.21 EMERALD PINE LANE	0.74 RT	3191.7	3185.20	3185.40	---	---	---
11	SD-1	1+25.70 EMERALD PINE LANE	2.61 RT	3197.2	3190.67	---	---	---	---

SANITARY SEWER CONTRIBUTION	
AVERAGE FLOW	0.0225 MGD
PEAK FLOW	0.0708 MGD

TRAFFIC LEGEND	
L	8" D3 STREET NAME SIGN (PER STD DWG 200)
O	30" STOP SIGN (R1-1) LOCATE AT BOX
■	BLUE REFLECTIVE MARKER
+	STREET SIGN AS NOTED PER PLAN

PRIVATE STREET NOTE:
ALL PRIVATE STREETS ARE PUBLIC DRAINAGE EASEMENTS, CITY OF LAS VEGAS (CLV) SEWER EASEMENTS, & PUBLIC UTILITY EASEMENTS (PUE) TO BE PRIVATELY MAINTAINED BY HOME OWNERS ASSOCIATION (HOA).

BASIS OF BEARING:
CONTROL MONUMENTS 208, 209 AND 211 AS SHOWN ON THAT CERTAIN MAP ON FILE IN THE CLARK COUNTY RECORDER'S OFFICE, IN FILE 92, PAGE 42 OF SURVEYS.

FIRE FLOW CALCULATIONS	
FIRE FLOW REQUIREMENTS IS:	1,750 GALLONS PER MINUTE
AT 20 PSI RESIDUAL PRESSURE	
BASED ON:	
SQUARE FOOTAGE	4,800 SF
LARGEST AREA BETWEEN 4-HOUR AREA SEPARATION WALLS:	N/A
BUILDING HEIGHT	20' ±
NUMBER OF STORIES	ONE-STORY
TYPE OF CONSTRUCTION	TYPE 5 NR
OCCUPANCY	SINGLE-FAMILY
FULL AUTOMATIC FIRE SPRINKLER SYSTEM	LOTS 851-86 ONLY (SEE SHEET 14)
REVIEWED BY:	DATE: 4-2-02

REDUCED PRESSURE PRINCIPAL ASSEMBLY (8) 1"
APPROVED REDUCED PRESSURE PRINCIPAL 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 PRINCIPAL ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY THE LVWD.
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.

APPROVALS
CITY FIRE MARSHAL: [Signature] DATE: 4-2-02
LAS VEGAS VALLEY WATER DISTRICT: [Signature] DATE: 4/17/02

ESTIMATE OF WATER QUANTITIES	
1" WATER METER (UDACS PLATE 10) (LOT 85, 86)	5 EA
6" PVC WATER MAIN	270 LF
8" PVC WATER MAIN	2,118 LF
8" CPV WATER MAIN	140 LF
1" COPPER WATER SERVICE (UDACS PLATE 10)	83 EA
5/8" WATER METER (FROM LVWD) (UDACS PLATE 10)	8 EA
3/4" WATER METER (FROM LVWD) (UDACS PLATE 10)	1 EA
1" WATER METER (IRRIGATION) (UDACS PLATE 10)	8 EA
1" R.P.P.A. (IRRIGATION) (UDACS PLATE 11A)	8 EA
2" BLOW-OFF ASSEMBLY W/CAP	3 EA
8" TEE	3 EA
8" 90° BEND	6 EA
8" 22.5° BEND	1 EA
8" 4" REDUCER	3 EA
STD. FIRE HYDRANT ASSEMBLY W/ 6" LATERAL, 8" GATE VALVE	6 EA
8" GATE VALVE	8 EA
NOTE: QUANTITIES ARE APPROXIMATE ONLY- CONTRACTOR TO VERIFY.	

UTILITY LEGEND	
---	EXISTING WATER LINE W/SIZE
---	PROPOSED WATER LINE W/SIZE
---	PROPOSED WATER LATERAL
---	PROPOSED FIRE HYDRANT W/ 6" LATERAL & 6" G.N.
---	EXISTING SEWER LINE W/SIZE
---	PROPOSED SEWER LINE W/SIZE
---	PROPOSED SEWER LATERAL
---	EXISTING SEWER MANHOLE
---	PROPOSED SEWER MANHOLE
---	GATE VALVE
---	1-1/2" SL CONDUIT
---	PRIVATE STREET LIGHT AS REQUIRED BY SUBMITTER
---	EXISTING STREET LIGHT PER SUMMERLIN S/S
---	CONCRETE DRIVEWAY
---	WATER REDUCER
---	REQUIRES BACKWATER VALVE
---	REQUIRES PRESSURE REDUCER VALVE

BENCHMARK:
CITY OF LAS VEGAS BENCHMARK: 30109 30888
NOTED REFERENCE BRASS CAP, 50' RIGHT OF STATION 870+00 CHARLESTON BLVD.
ELEVATION = 916.388 METERS (NAVOD83)
ELEVATION = 3010.233 U.S. SURVEY FEET (CALCULATED NAVOD83)

PULTE HOMES
1030 VILLAGE CENTER CIRCLE, SUITE 250
LAS VEGAS, NEVADA 89134
(702) 248-7800

PENTACORE
2800 LAS VEGAS BLVD., SUITE 100
LAS VEGAS, NEVADA 89109
(702) 734-1100

UTILITY AND TRAFFIC PLAN
ASBUILT
SAGE HILLS AT THE VISTAS UNIT 2
(SUMMERLIN VILLAGE 20, PARCEL R)

DATE: 07/21/02
DESIGNED BY: [Signature]
CHECKED BY: [Signature]
DATE: 4/17/02
SCALE: 1" = 30'

PROFESSIONAL ENGINEER - SEAL & SIGNATURE
[Signature]
11728

CLV DWG#
301Y-4693

ABANDONED VALVES:
ALL ABANDONED VALVES SHALL BE ABANDONED IN THE CLOSED POSITION UNLESS SHOWN OTHERWISE, BY REMOVING A WIREMESH OF THE TOP 12 INCHES OF THE VALVE BOX AND FILLING THE REMAINING PORTION OF THE VALVE BOX WITH CONCRETE HAVING A COMPRESSIVE STRENGTH AT LEAST 2,000 PSI.

39383 41459 62949
[Signatures]