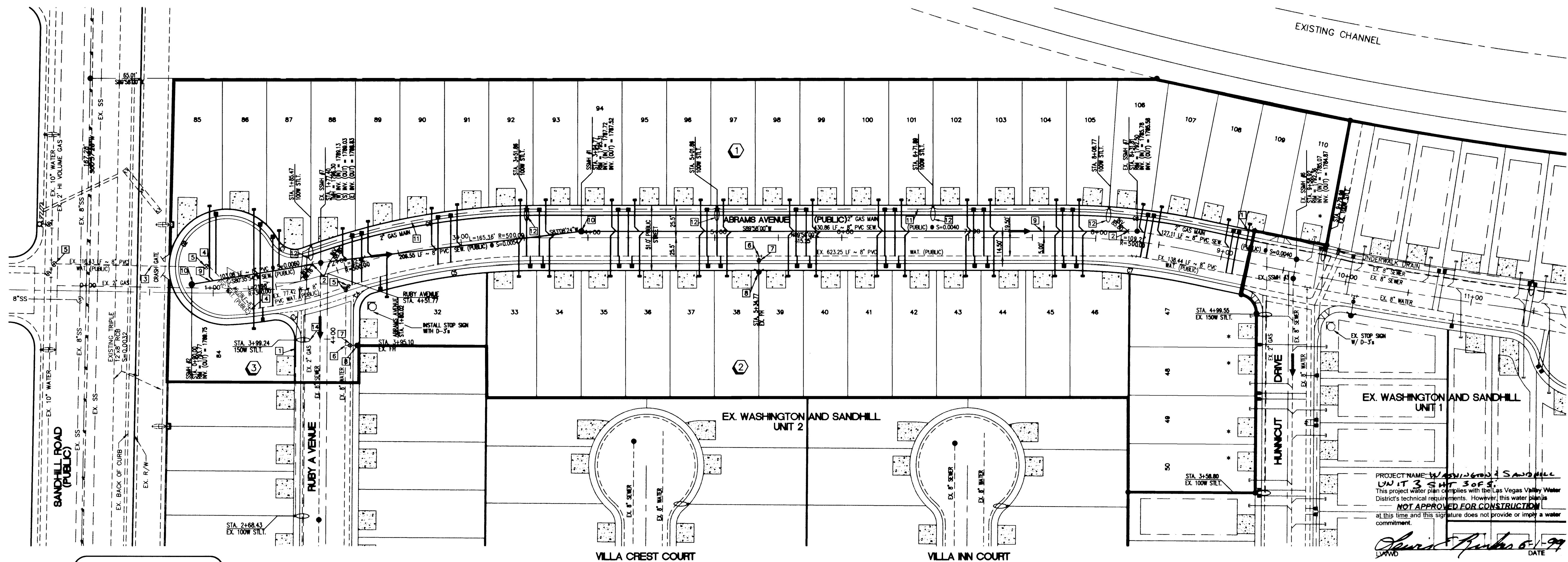




SEWER MANHOLE CONTROL TABLE		
MH #	NORTHING	EASTING
1	5559.0585	5398.4934
EX. 6 (UNIT)	5517.5139	5091.7249
EX. 7 (UNIT)	5537.1835	5961.9678
EX. 7 (UNIT)	5559.3135	5836.3485
EX. 7 (UNIT)	5534.3529	5193.4237

LAS VEGAS FIRE DEPARTMENT:

FIRE FLOW IS: 1,500 GPM AT 20 PSI RESIDUAL PRESSURE

BASED ON:

LARGEST SQUARE FOOTAGE: 2,250 S.F.

LARGEST AREA BETWEEN 4-HOUR AREA: N/A

SEPARATION WALLS: 34 FT

BUILDING HEIGHT: 2 FLOORS

TYPE OF CONSTRUCTION: RESIDENTIAL

OCCUPANCY: NONE

FULL AUTOMATIC FIRE SPRINKLER SYSTEM: NONE

BENCHMARK

NORTH AMERICAN VERTICAL DATUM 1988 (NAV88)

BEING CLARK COUNTY BENCHMARK NO. 0002 20WS, BEING AN ALUMINUM RIVET AND PLATE IN TOP OF CURB IN THE NORTHEAST CORNER OF OWENS AVE. AND LAMB BLVD. NEAR THE PC OF OWENS AVE.

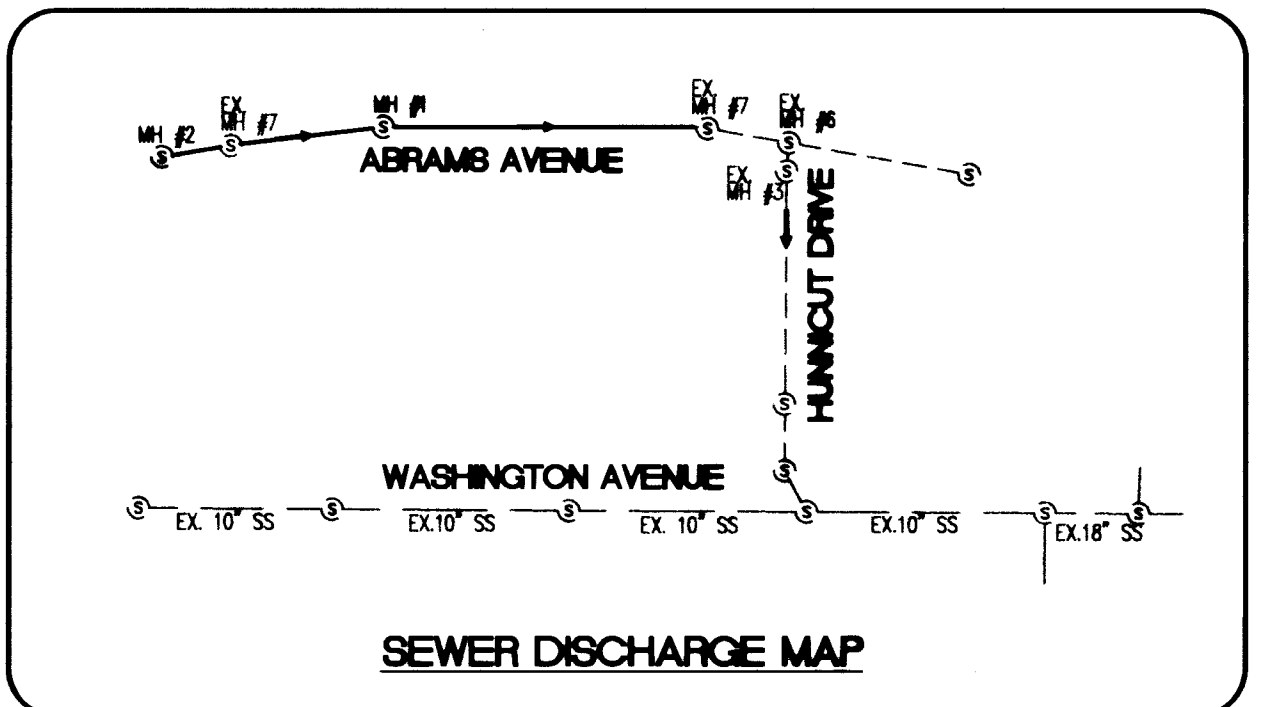
PUBLISHED ELEVATION = 546.243 METERS NAV88 DATUM

CONVERTED ELEVATION = 1792.13 FEET NAV88 DATUM

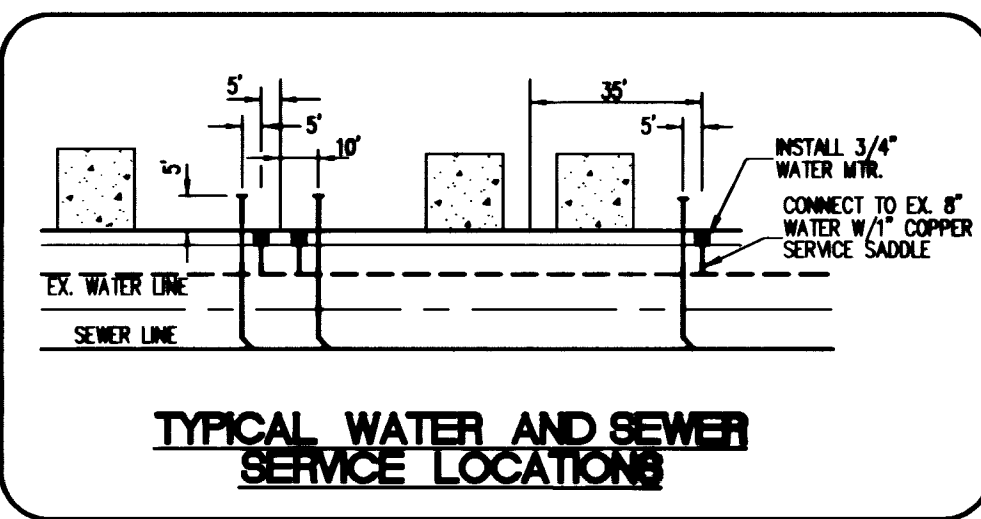
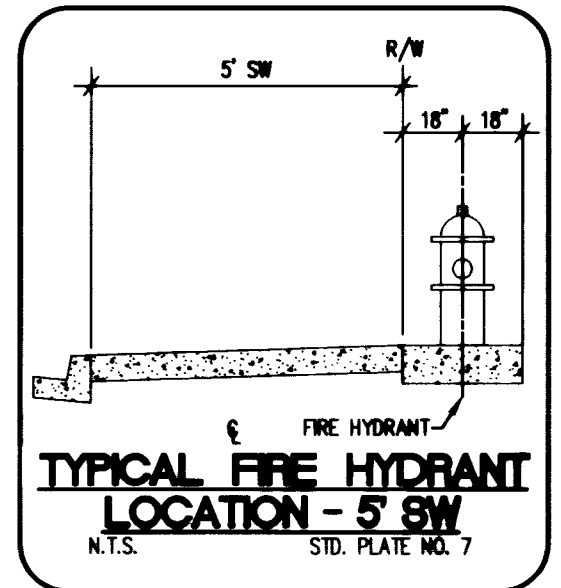
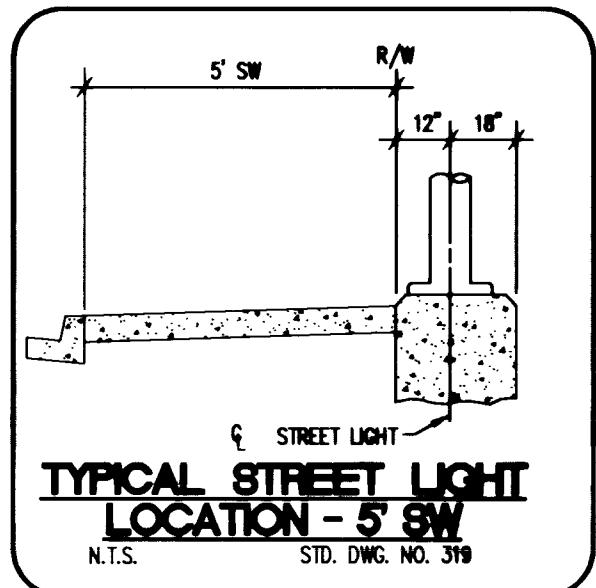
BASIS OF BEARING

BEING THE SOUTH LINE OF THE NORTHEAST QUARTER (NE1/4) OF SECTION 30, T.20S., R. 62E., M.D.M., CLARK COUNTY, NEVADA AS DEPICTED UPON A SURVEY FILED OF RECORD IN FILE 35, PAGE 15 OF SURVEY, OFFICIAL RECORDS, CLARK COUNTY, NEVADA. SAID LINE BEARS N.89°53'26"E.

- CONSTRUCTION NOTES:**
- 1 REMOVE CAP & CONNECT TO EXIST STREETLIGHT CONDUIT
 - 2 REMOVE CAP AND CONNECT TO EXIST 8" PVC SEWER
 - 3 EXISTING 8" PVC WATER LINE
 - 4 EXISTING 8" 45° BEND
 - 5 EXISTING 8" GATE VALVE
 - 6 EXISTING 8" x 8" x 6" TEE
 - 7 EXISTING 6" GATE VALVE
 - 8 EXISTING FIRE HYDRANT ASSEMBLY
 - 9 INSTALL 8" PVC SEWER LINE
 - 10 INSTALL 48" TYPE 1 SEWER MANHOLE
 - 11 INSTALL 1 1/4" STREETLIGHT CONDUIT
 - 12 INSTALL 100W STREETLIGHT
 - 13 INSTALL 3 1/2" PULLBOX
 - 14 INSTALL 150W STREETLIGHT



SEWER CONTRIBUTION
(46 LOTS)
AVERAGE FLOW = 0.0115 cgd
PEAK FLOW = 0.0391 mgd



NOTE

ALL DIMENSIONS TO UTILITIES ARE TO CENTERLINE OF PIPE UNLESS INDICATED OTHERWISE.

CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL ALIGNMENT OF EXISTING UTILITIES AND NOTIFY THE DESIGN ENGINEER IMMEDIATELY ON ANY DISCREPANCIES PRIOR TO CONSTRUCTION.

SEWER QUANTITIES:	
8" P.V.C. SEWER LINE	740 LF
48" DIA. MANHOLES	2 EA.
4" P.V.C. SEWER LATERAL	1,277 LF

WATER QUANTITIES:	
3/4" METER W/ 1" SERVICE SADDLE	41 EA.

SIGNAGE QUANTITY:	
STOP SIGN W/ D-3's	1 EA.

STREETLIGHT QUANTITIES:	
100W HPS STREET LIGHT	5 EA.
150W HPS STREET LIGHT	1 EA.
1 1/4" STREET LIGHT CONDUIT	823 LF.

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 OR OVER-HEAD 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.

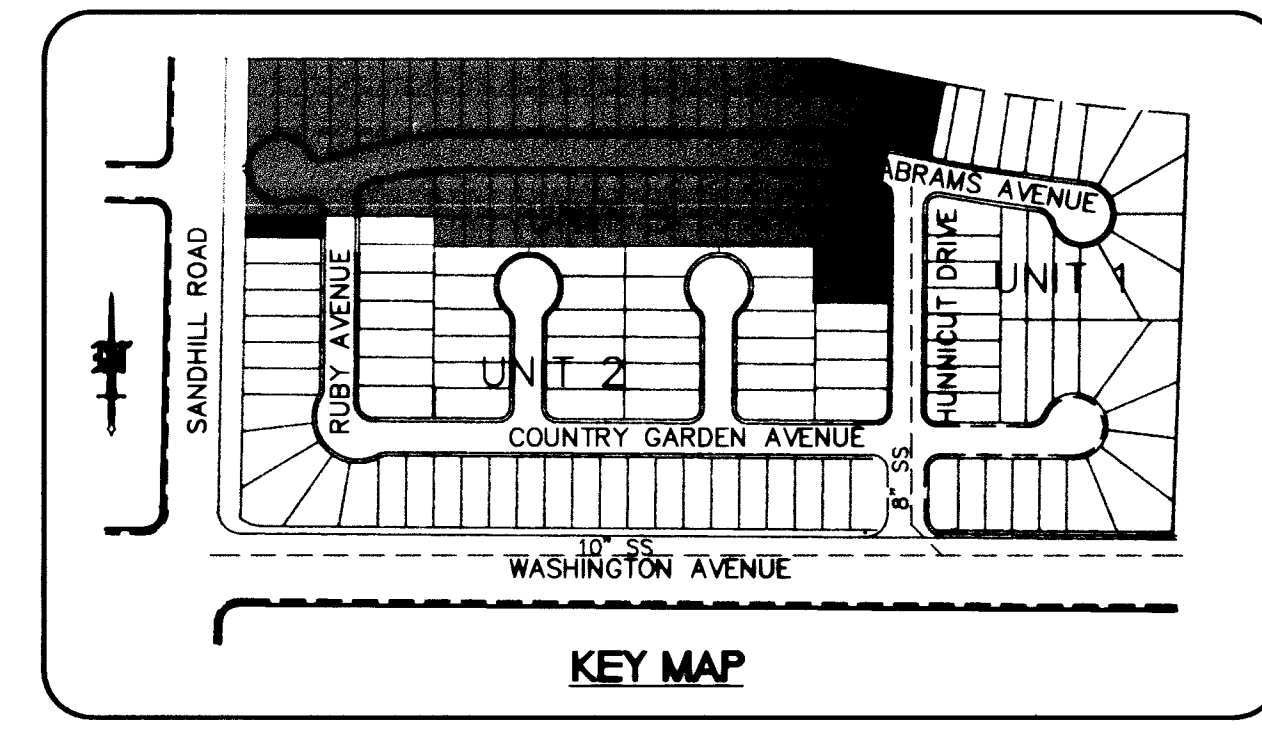
before Call you Dig
1-800-227-2600

before Call you Overhead
1-702-593-6111

SERVICE LATERAL FOR LOTS #32-#46 & #84-#109

WILL BE TAPED ON EXISTING MAIN BY OWNER'S CONTRACTOR UNDER DIRECTION OF THE LAS VEGAS VALLEY WATER DISTRICT.

* EXISTING 3/4" METER (PER UNIT 1) 5 EA.



CONSTRUCTION NOTE:

ALL EXISTING UTILITY STRUCTURES WITHIN CONSTRUCTION AREA SHALL BE ADJUSTED TO MATCH FINISH GRADE (I.E. W.V. BOX, W.M.H., ANNOODE BOX, FH, TEL. BOX, ETC.).

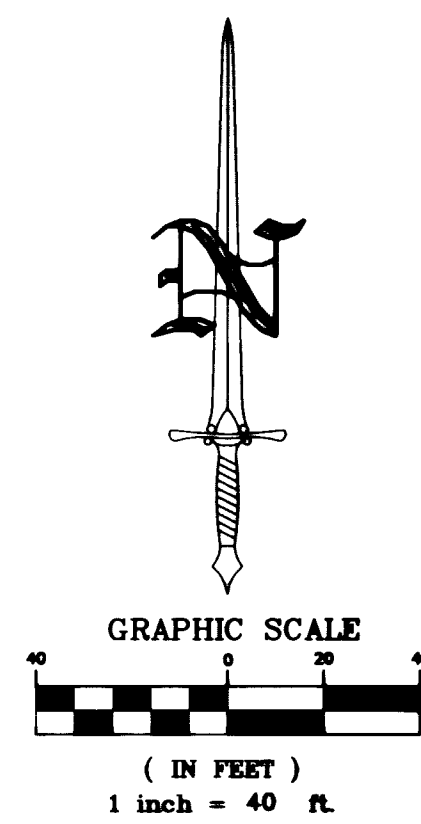
NOTE:

THIS PROPERTY MAY HAVE STATIC PRESSURE IN EXCESS OF 80 PSI. THE UNIFORM PLUMBING CODE REQUIRES THAT INDIVIDUAL ON-SITE (PRIVATE) PRESSURE REDUCING VALVE BE INSTALLED WHENEVER THE PRESSURE EXCEEDS 80 PSI. PRIVATE ARE THE DEVELOPER'S RESPONSIBILITY AND WILL NOT BE INSPECTED OR INCLUDED IN THE ACCEPTANCE OF THE LVWD FACILITIES. ESN. 041

APPROVALS

Amy Cheng 6/1/99
CITY OF LAS VEGAS FIRE DEPARTMENT DATE

James O. ... 6/11/99
LAS VEGAS VALLEY WATER DISTRICT DATE



DESIGNED BY: DATE: 6/1/99
CHECKED BY: NO. 12803
REVISION: BY DATE

UTILITY PLAN
WASHINGTON & SANDHILL UNIT 3
HELLER DEVELOPMENT COMPANIES
NEVADA
CITY OF LAS VEGAS

ORION ENGINEERING AND SURVEYING, INC.
3068 E. SUNSET ROAD, SUITE 9
LAS VEGAS, NEVADA 89120
(702) 739-5921 FAX (702) 739-5929

Orion

SHEET 3
of 5

3074-4556-3



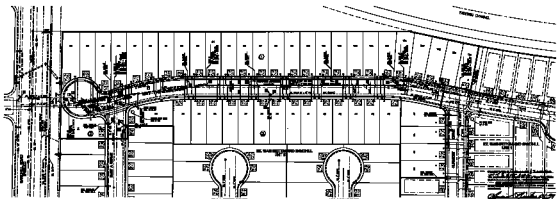
DATE	1/1/88
BY	W. J. H. H.
CHECKED BY	W. J. H. H.
APPROVED BY	W. J. H. H.

LIFE OF THE
 WASHINGTON & ANNE ARUNDEL
 HILLMAN DEVELOPMENT COMPANY

W. J. H. H.
 WASHINGTON & ANNE ARUNDEL
 HILLMAN DEVELOPMENT COMPANY

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 HILLMAN DEVELOPMENT COMPANY



LAND AREA
 THE TOTAL LAND AREA IS 10.00 ACRES.
 THE TOTAL BUILDING AREA IS 10.00 ACRES.
 THE TOTAL PARKING AREA IS 10.00 ACRES.
 THE TOTAL DRIVEWAY AREA IS 10.00 ACRES.

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 THE TOTAL CONCRETE PARKING AREA IS 10.00 ACRES.

ASPHALT
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 THE TOTAL ASPHALT DRIVEWAY AREA IS 10.00 ACRES.
 THE TOTAL ASPHALT PARKING AREA IS 10.00 ACRES.

GRAVEL
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