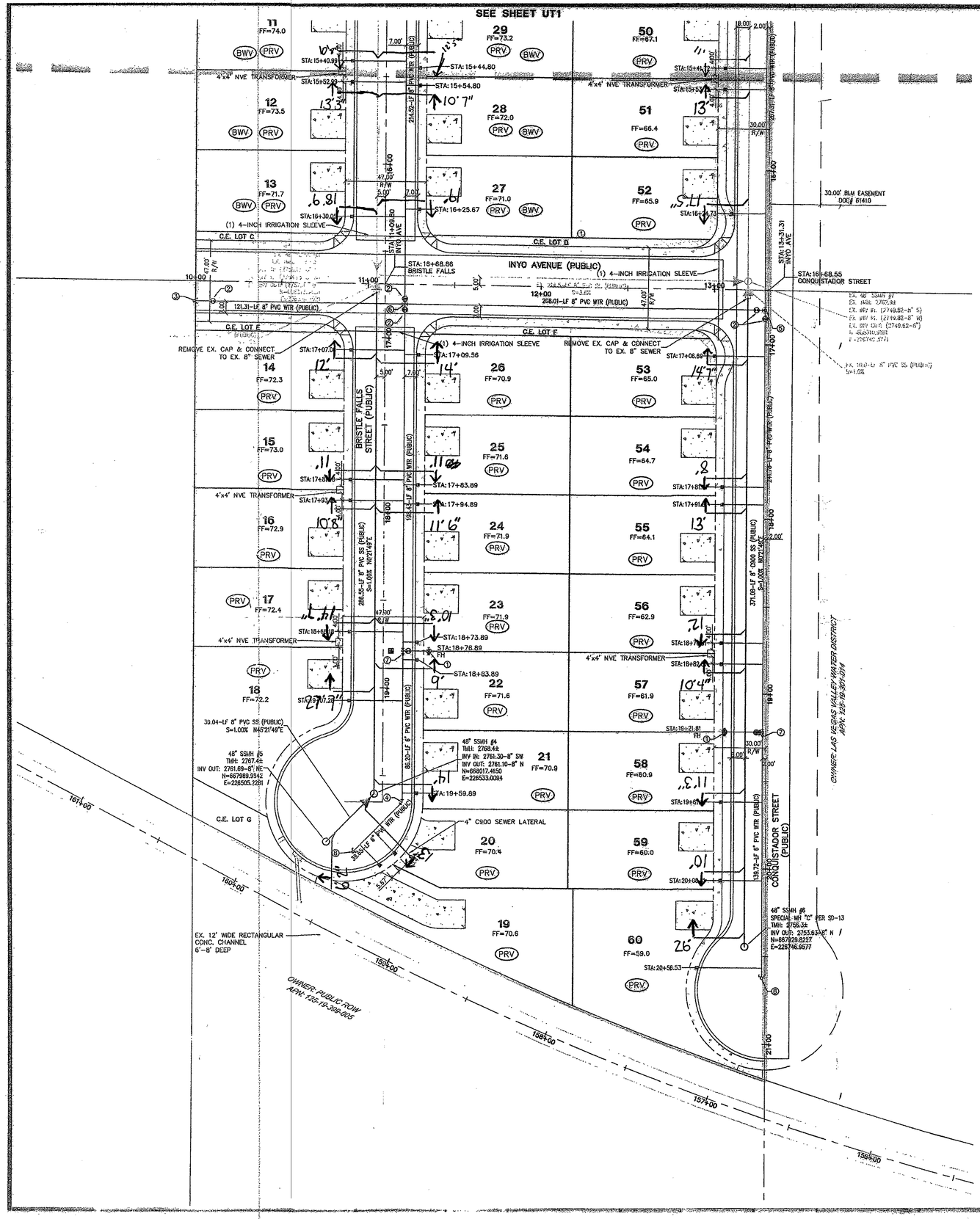


SEWER CONNECTION NOTE:

ONE OR MORE SEGMENTS OF THE DOWNSTREAM SEWER SYSTEM THAT WILL SERVE THIS PROJECT HAS NOT BEEN COMPLETED AND/OR ACCEPTED FOR MAINTENANCE BY THE CITY OF LAS VEGAS. ANY WORK DONE ON THIS PROJECT PRIOR TO THE COMPLETION AND/OR ACCEPTANCE OF THE DOWNSTREAM SEWER SYSTEM(S) SHALL BE DONE AT THE DEVELOPER'S OWN RISK. THE CITY OF LAS VEGAS RESERVES THE RIGHT TO PREVENT THE PHYSICAL CONNECTION OF THIS PROJECT INTO THE DOWNSTREAM SEWER SYSTEM UNTIL ALL SEGMENTS HAVE BEEN COMPLETED AND ACCEPTED FOR MAINTENANCE, OR UNTIL SUCH TIME AS THEY ARE DEEMED AVAILABLE FOR SERVICE.

WATER

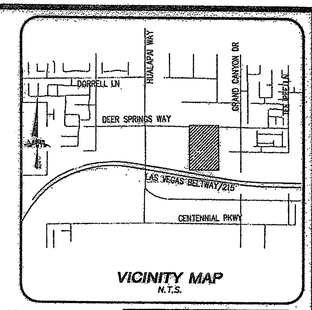
1. FIRE HYDRANT ASSEMBLY (INCLUDES 8"x6" TEE & 6"GV) PER UDACS PLT. 40
2. 8" GATE VALVE PER UDACS PLTS. 30 & 39
3. 6" CAP W/ 2" B.O PER UDACS PLT. 36
4. 8" 45° BEND PER UDACS PLT. 31
5. 8"x8" TEE PER UDACS PLT. 31
6. 8" CROSS PER UDACS PLT. 31
7. 8"x6" REDUCER PER UDACS PLT. 30
8. 6" CAP W/ 2" B.O PER UDACS PLT. 35
9. 10"x8" TAPPING SLEEVE W/ 8" TAPPING VALVE PER UDACS PLT. 34 & UDACS SEC 2.24.01.A

- 3/4" RESIDENTIAL METER PER UDACS PLT. 2
- PRV — PRESSURE REDUCING VALVE (PRIVATE)
- DRIVEWAY LOCATION (SCHEMATIC ONLY)

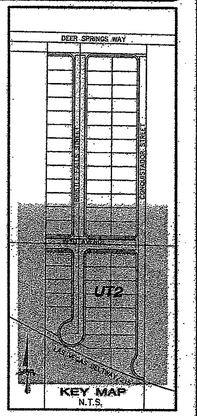
SEWER

- STANDARD MANHOLE PER SD-1A & SD-1B
- 4" SEWER LATERALS PER SD-22
- 4" C900 SEWER LATERALS PER SD-22
- 8" SEWER MAIN PER SD-16
- BWV — BACKWATER VALVES PER SD-29

GRAPHIC SCALE
30 0 15 30 60
1" = 30'



VICINITY MAP
N.T.S.



Call before you Underground 1-702-486-7610 CLARK COUNTY SANITATION DISTRICT 1-702-452-5300 LAS VEGAS AREA GOVERNMENT TRAFFIC SYSTEMS

Call before you Dig Avoid cutting underground utility lines. It's easy. CALL 811 OR CLARK COUNTY TRAFFIC OPERATIONS 1-800-227-2600

Avoid overhead power line contact. It's easy. Call before you Overhead 1-702-227-2929

ALL NEW WATER MAIN TO HAVE MINIMUM 42" DEPTH OF COVER PER UDACS SECTION 2.08

NOTE:
VERIFY AND LOCATE ALL EXISTING UTILITIES WITHIN THE PROJECT WORK AREA.

UTILITY CROSSING NOTE:
ALL SEWER/STORM DRAINS CROSSING WATER LINES MUST CONFORM TO SECTION 2.22 OF UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR PORTABLE WATER SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSINGS AND CLEARANCES.

ALL SEWER/STORM DRAINS CROSSING WATER LINES MUST CONFORM TO SECTION 2.22 OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSINGS AND CLEARANCES.

EXISTING SERVICES
IF ANY OF THE EXISTING SERVICES ARE INCORRECTLY LOCATED OR NOT USED FOR ANY REASON, THE DEVELOPER SHALL ABANDON THE LATERALS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH THE UDACS STANDARDS, AND AT THE DEVELOPERS EXPENSE.

FIRE DEPARTMENT APPROVAL
APPROVAL BY THE FIRE DEPARTMENT HAVING JURISDICTION IS REQUIRED PRIOR TO OBTAINING FINAL APPROVAL FROM THE LVVWD.

NOTE TO ENGINEER
A MAXIMUM OF 30 WATER SERVICES CAN BE FED OFF OF A SINGLE FEED WITH MAXIMUM OF THREE FIRE HYDRANTS.

ENGINEER DISCLAIMER NOTE:
UTILITY LOCATIONS SHOWN HERON 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 AND NOTIFY THE DESIGN ENGINEER IMMEDIATELY OF ANY DISCREPANCIES PRIOR TO COMMENCING CONSTRUCTION.
NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HERON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.

WATER MAIN JOINT DEFLECTION (PVC, 4"-24")
PVC PIPE SHALL BE DEFLECTED AT THE JOINT ONLY. THE MAXIMUM ALLOWABLE DEFLECTION SHALL BE ONE (1) DEGREE PER JOINT WITH A MINIMUM RADIUS OF CURVATURE OF 1,150 FEET, PER UDACS 2.07.01 AND 2.07.02.
FOR CHANGES IN DIRECTION EXCEEDING THE MAXIMUM ALLOWABLE JOINT DEFLECTION, FITTINGS SHALL BE USED.

NOTE
INSTALL PIPELINE MARKER BALLS IN TRENCH ABOVE EACH HORIZONTAL ELBOW FITTING, PER UDACS PLATE No. 15

NOTE:
LOTS 10-30 & 40-60
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 80PSI. PRVS ARE THE DEVELOPERS RESPONSIBILITY AND WILL NOT BE INSPECTED OR INCLUDED IN THE ACCEPTANCE OF LVVWD FACILITIES.

NOTE
CONSTRUCTION
LVVWD ACCEPTANCE CONTINGENT ON THE FOLLOWING:
LVVWD PROJECT #121812 (GRAND CANYON/DEER SPRINGS)

NOTE
A MIN. 3' OF HORIZONTAL CLEARANCE IS REQUIRED BETWEEN WATER MAINS AND DRY UTILITIES PER UDACS 2.04.02

NOTE
A MIN. OF 12" OF VERTICAL CLEARANCE BETWEEN WATER MAINS AND DRY UTILITIES, AND 6" OF VERTICAL CLEARANCE REQUIRED BETWEEN WATER LATERALS AND DRY UTILITIES PER UDACS SECTION 2.04.06

BLM GRANT NOTE
THIS PROJECT INCLUDES WATER FACILITIES TO BE INSTALLED ON BLM PROPERTY UNDER BLM GRANT N-61410.
DEVELOPER AND CONTRACTOR MUST MEET WITH LVVWD RIGHT-OF-WAY AND ENVIRONMENTAL RESOURCES REPRESENTATIVES PRIOR TO START OF CONSTRUCTION TO REVIEW REQUIREMENTS FOR COMPLIANCE WITH BLM GRANT STIPULATIONS.
CALL MELODY YURASEK AT (702) 862-3447 TO SCHEDULE THE REQUIRED FIELD MEETING.

PROJECT BENCHMARK
PROJECT DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
CITY OF LAS VEGAS BENCHMARK: SLV90:19W4 2008 ADJUSTMENT (UPDATED 5/24/10) NAVD88 ELEVATION: 857.697 METERS (2813.96 FEET)
RIVET AND PLATE CONCRETE PAD (LVVWD) 100'SE HUALAPAI WAY AND DEER SPRINGS.

TRAFFIC DELINEATION
(1) INSTALL BLUE RAISED REFLECTIVE PAVEMENT MARKERS PER NOTE ON SHEET TR1

FIRE FLOW CALCULATIONS

FIRE FLOW REQUIREMENT IS 1,500 GALLONS PER MINUTE AT 20 psi RESIDUAL PRESSURE,

BASED ON:

SQUARE FOOTAGE:	<3600 SQ. FT.
LARGEST AREA BETWEEN 4-HOUR AREA SEPARATION WALLS:	N/A SQ. FT.
BUILDING HEIGHT:	27'
NUMBER OF STORIES:	2
TYPE OF CONSTRUCTION:	V
OCCUPANCY:	SFR
FULL AUTOMATIC FIRE SPRINKLER SYSTEM:	NO
REVIEWED BY:	
DATE:	9/15/14

BASIS OF BEARINGS
GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.
LINEAR UNIT: US SURVEY FOOT (FTUS)
DATUM (REFERENCE FRAME): NAD 1983 (CORS 2011) EPOCH 2010
SYSTEM: NEVADA COORDINATE REFERENCE SYSTEM (NCRS)
ZONE: LAS VEGAS
PROJECTION: TRANSVERSE MERCATOR
STANDARD PARALLEL (AND LATITUDE OF GRID ORGIN): 36°15'00"N
LONGITUDE OF CENTRAL MERIDIAN: 114°58'00"W
NORTHING AT GRID ORIGIN: 200,000.000 M (656,166.6667 FTUS)
EASTING AT CENTRAL MERIDIAN: 100,000.000 M (328,083.3333 FTUS)
SCALE FACTOR ON CENTRAL MERIDIAN: 1.0001 (EXACT)
NOTES:
1. ALL DISTANCES AND BEARINGS SHOWN HERON ARE PROJECTED (GRID) VALUES BASED ON THE PRECEDING PROJECTION DEFINITION. THE PROJECTION WAS DEFINED SUCH THAT PROJECTED (GRID) DISTANCES ARE EQUIVALENT TO "GROUND" DISTANCES IN THE PROJECT AREA.
2. GRID BEARINGS SHOWN HEREON (OR IMPLIED BY GRID COORDINATES) DO NOT EQUAL GEODETIC BEARINGS DUE TO MERIDIAN CONVERGENCE.

APPROVALS:
APPROVED FOR CONSTRUCTION
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE 9/18/14 PROJECT 122759
LVVWD APPROVED FIRE FLOW 1500 GPM AT 20 PSI RESIDUAL

HTE 14-17769
~~H#53328~~

NO.	DATE	REVISION
1		
2		
3		
4		
5		
6		
7		

CITY OF LAS VEGAS

RYLAND HOMES
8925 W. RUSSELL ROAD, SUITE 200
LAS VEGAS, NV. 89148
(702) 360-7500

2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89146-5148
PH. (702) 873-7500 FAX (702) 362-2597 WEB WWW.KTWNV.COM
CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS

As Built Sewer
UTILITY PLAN 2

BRISTLE FALLS
UNIT 2

DRAWN BY: LMH
DESIGNED BY: DJD
CHECKED BY: AY
PROJECT NO: 7519
DEC 2013
SCALE: 1"=30' HORIZ. NA VERT.

EXPIRES 06-30-16
PROFESSIONAL ENGINEER - STATE OF NEVADA
AARON M. YAMACHIKA
CIVIL
No. 15019
9/16/14

SHEET
UT2
9 OF 19 SHEETS
DRAWING NO:
1074 4994-2