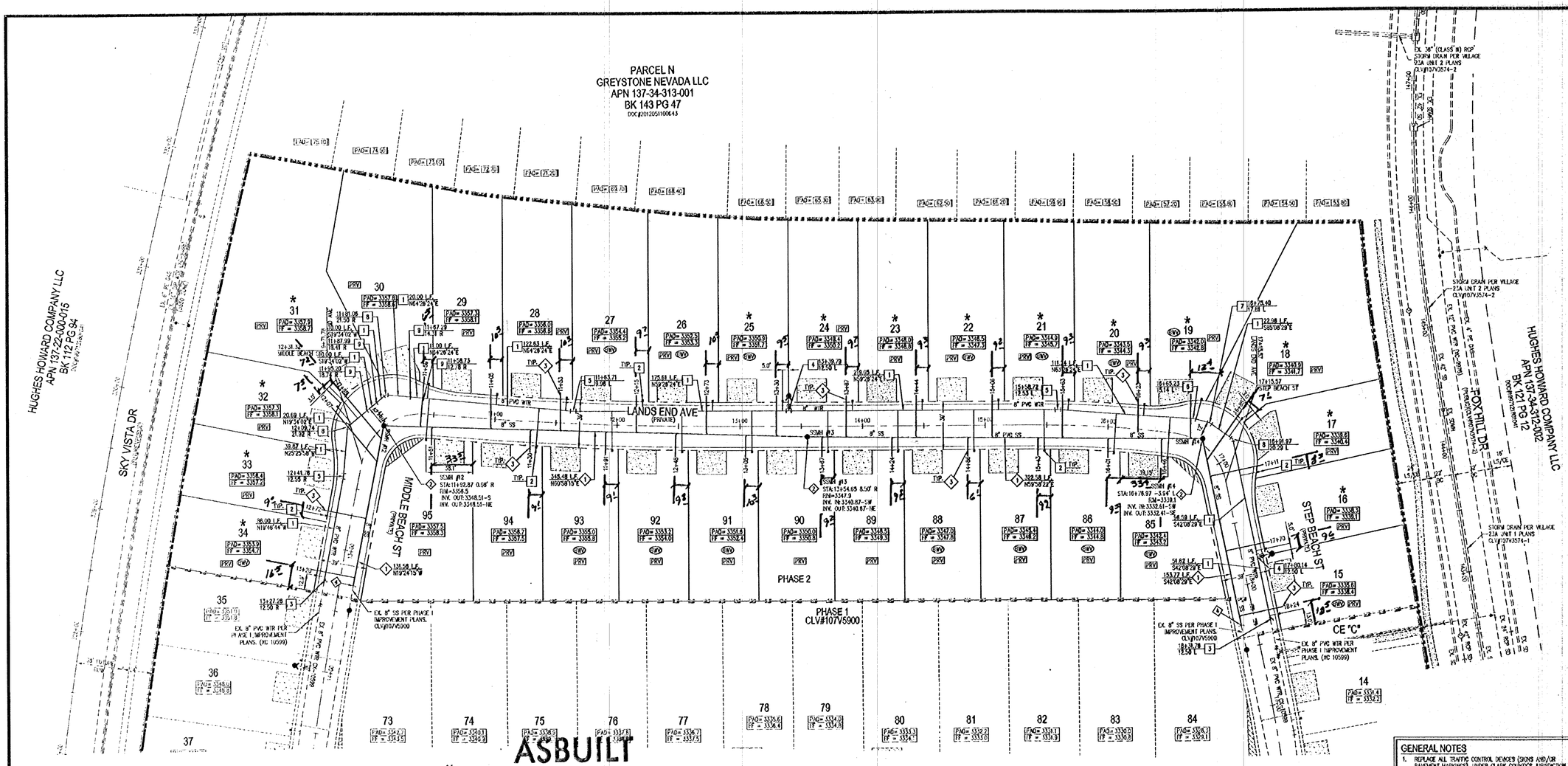


AVOID HITTING OVERHEAD POWER LINES. "CALL BEFORE YOU DIG - OVERHEAD"
1-702-227-2929

Call before you Dig
Avoid cutting underground utility lines. It's safe.
Call 811
1-800-227-2600
OR
CLARK COUNTY (NEVADA) ONLY
1-702-455-6000

AVOID HITTING UNDERGROUND TRAFFIC SIGNAL SYSTEMS AND STREET LIGHT SYSTEM CONDUITS. IT'S COSTLY.
Call before you do Underground
1-702-455-6000
CLARK COUNT TRAFFIC SYSTEMS
AND
1-702-432-5300
SOUTHWEST GAS

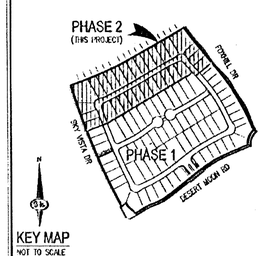
ESTIMATED AVERAGE DAILY SEWER CONTRIBUTIONS

(TOTAL FOR PHASES 1 AND 2)
55 UNITS@250 GPD/UNITS=13,750 GPD
TOTAL AVERAGE CONTRIBUTION=0.0237S MGD
TOTAL PEAK FLOW=0.0237S MGD X3.74 (PEAK FACTOR) = 0.0889 MGD

FIRE FLOW CALCULATIONS

FIRE FLOW 2,000 GPM AT 20 P.S.I. RESIDUAL

USE/OCCUPANCY	SINGLE FAMILY
TYPE OF CONSTRUCTION (IBC)	TYPE V B
AUTOMATIC FIRE SPRINKLERS	NO
SQUARE FOOTAGE	3,939
LARGEST AREA DETWEEN 4-HR WALLS	N/A
BUILDING HEIGHT	<35'
NO OF STORIES INCLUDING BASEMENT	2
HIGH PILED COMBUSTIBLE STORAGE	NO
NO OF HYDRANTS INSTALLED	6



KEY MAP
NOT TO SCALE

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.

INSTALL PIPELINE MARKER BALLS IN TRENCH ABOVE EACH HORIZONTAL 11.3DEW FITTING PER UDACS PLATE NO. 15

BENCHMARK

ISWET IN PLATE IN TOP OF CURB IN THE SOUTHEAST CORNER OF DESERT MOON ROAD & DESERT SUNRISE ROAD, 7LV0934CWSA

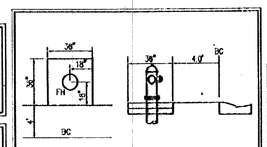
NAVD 88 ELEVATION = 1008.289 METERS = 3301.47 FEET

BASIS OF BEARING

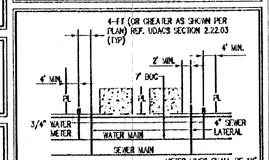
NORTH 00°59'55" WEST, BEING THE BEARING OF THE WEST LINE OF SECTION 34, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA, AS SHOWN BY MAP THEREOF ON FILE IN BOOK 143, PAGE 47 OF PLATS IN THE CLARK COUNTY RECORDER'S OFFICE, NEVADA.

ABOVE GROUND UTILITY NOTE

ALL ABOVE GROUND UTILITY SHALL COMPLY WITH TITLE 19.08 UTILITY SCREENING REQUIREMENTS. ALL ABOVE GROUND UTILITIES GREATER THAN 27 CUBIC FEET SHALL BE SETBACK A MINIMUM OF 3 FEET FROM THE BACK OF SIDEWALK AND SHALL INCLUDE VEGETATION THAT UPON MATURITY WILL ADEQUATELY SCREEN SUCH EQUIPMENT FROM PUBLIC VIEWS



TYPICAL FIRE HYDRANT LOCATION DETAIL



TYPICAL UTILITY LOCATION
UNLESS OTHERWISE NOTED (SIZES AS NOTED ON PLANS)

METER LINES SHALL BE 18" MIN FROM WATER MAIN TEE INTERSECTIONS, CROSSINGS, AND VALVES

ALL ABOVE GROUND UTILITY APPURTENANCES SHALL CONFORM TO THE REQUIREMENTS OF TITLE 19.12.04

* SEWER LATERAL CROSSING

SEWER LATERAL CROSSES WATER MAIN WITH LESS THAN EIGHTEEN (18) INCHES CLEARANCE, (6) INCHES MIN. THE PROVISIONS OF UDACS SECTION 2.22.03.B SHALL APPLY.

WATER NOTES

1. INSTALL 8" PVC (CLASS 150) WATER PIPE
2. INSTALL 3/4" WATER METER PER UDACS PLATE # 2 (TYP)
3. REMOVE CAP AND BLOW-OFF PER UDACS PLATE NO. 38, AND CONNECT TO EXISTING MAIN
4. INSTALL 6" X 6" TEE PER UDACS PLATE # 31 AND FIRE HYDRANT ASSEMBLY PER UDACS PLATE # 10
5. INSTALL 5" BEND (RESTRAIN BOTH ENDS)
6. INSTALL 11.25° HORIZONTAL BEND PER UDACS PLATE #31
7. INSTALL 22.5° HORIZONTAL BEND PER UDACS PLATE #31
8. INSTALL 45° HORIZONTAL BEND PER UDACS PLATE #31
9. 12" MAX. VERTICAL DEFLECTION PER UDACS SECTION 2.07. SEE SHEETS P-1 AND P-2 FOR PROFILES

SEWER NOTES

1. INSTALL 8" PVC SANITARY SEWER PIPE
2. INSTALL 48" DIA. PRECAST SANITARY SEWER MANHOLE PER UDACS SD-4, SD-5 & SD-6
3. INSTALL 4" SEWER LATERAL PER SD-22, SD-23, & SD-25 W/ 6" X 4" WYE (TYPICAL)
4. REMOVE EXISTING CAP AND TURNSTILE BRACE AND CONNECT TO MAINLINE. CONTRACTOR TO VERIFY LOCATION PRIOR TO CONSTRUCTION.

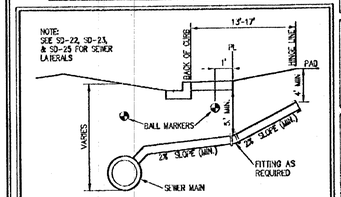
SEE SHEET C-2 FOR QUANTITIES AND ABBREVIATIONS

DISCLAIMER NOTE

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 IN THEIR PROPER LOCATION.

THIS PROPERTY MAY HAVE STATIC 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 80 PSI. PRV'S ARE THE DEVELOPER'S RESPONSIBILITY, AND WILL NOT BE INSPECTED OR INCLUDED IN THE ACCEPTANCE OF LVVWD FACILITIES.

ADJUST ALL EXISTING WATER VALVE BOXES TO FINISHED GRADE PER UDACS PLATE NO. 39. VALVES SHALL BE ACCESSIBLE AT ALL TIMES.



TYPICAL SEWER LATERAL
NOT TO SCALE

GENERAL NOTES

1. REPLACE ALL TRAFFIC CONTROL DEVICES (SIGNS AND/OR PAVEMENT MARKINGS), UNDER CLARK COUNTY'S JURISDICTION, THAT ARE DISTURBED, DESTROYED, MOVED OR MODIFIED BY TRENCHING ACTIVITIES TO CLARK COUNTY'S SATISFACTION. ALL MATERIAL USED SHALL MEET CLARK COUNTY'S SPECIFICATIONS OR WILL WILL BE AN APPROVED EQUIVALENT.
2. IN THE EVENT THAT THE TRAFFIC SIGNAL CONDUITS, LOOP DETECTORS OR ASSOCIATED EQUIPMENT ARE DAMAGED BY CONTRACTOR, THE CONTRACTOR WILL HIRE AN NSA LEVEL II ELECTRICAL CONTRACTOR TO MAKE REPAIRS PER UNIFORM SPECIFICATION NO. 0231.00.02
3. 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.
4. THE CONTRACTOR IS TO VERIFY THE ACTUAL FIELD CONDITIONS OF ALL LOTS AND INSTALL SEWER CHECK VALVES WHERE REQUIRED PER THE LATEST EDITION OF THE UNIFORM PLUMBING CODE.
5. FITTINGS SHALL NOT FALL UNDER CURBS, GUTTERS OR SIDEWALK.

APPROVAL
LAS VEGAS FIRE AND RESCUE — DATE 7/31/13

APPROVAL FOR CONSTRUCTION (1ST APPROVAL 12/10/12)
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE 8/8/13 PROJECT NO. 121965
LVVWD APPROVED FIRE FLOW 2,000 GPM AT 20 PSI RESIDUAL

SUMMERLIN
SEE COVER
SUMMERLIN RESIDENTIAL DESIGN REVIEW COMMITTEE — DATE

THIS SIGNATURE IS LIMITED TO APPROVAL OF THESE DOCUMENTS FOR CONFORMANCE TO THE DESIGN INTENT OF THE APPLICABLE DESIGN GUIDELINES. NEITHER SUMMERLIN NOR THE SUMMERLIN RESIDENTIAL DESIGN REVIEW COMMITTEE ASSUMES RESPONSIBILITY FOR PLAN CONFORMANCE WITH APPLICABLE LAWS, ORDINANCES AND CODES.

SLATER HANIFAN GROUP
CONSULTING ENGINEERS & PLANNERS
5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118
PHONE (702) 284-5300 FAX (702) 284-5399

NO.	DESCRIPTION	DATE	BY	ACC DATE	APP

LENNAR
LAS VEGAS, NEVADA
ESPERANZA PHASE 2
UTILITY PLAN

DATE: 07/18/2013
DRAFTER: MH
DESIGNER: BCC
CHECKED: STS
PROJECT NO. LEN1201.000

PROFESSIONAL ENGINEER - STATE OF NEVADA
JERRY A. SLATER
No. 14187
CIVIL
7-31-13

U-1
SHEET 7 OF 8

HH 49392
107V3900-2

ASBUILT