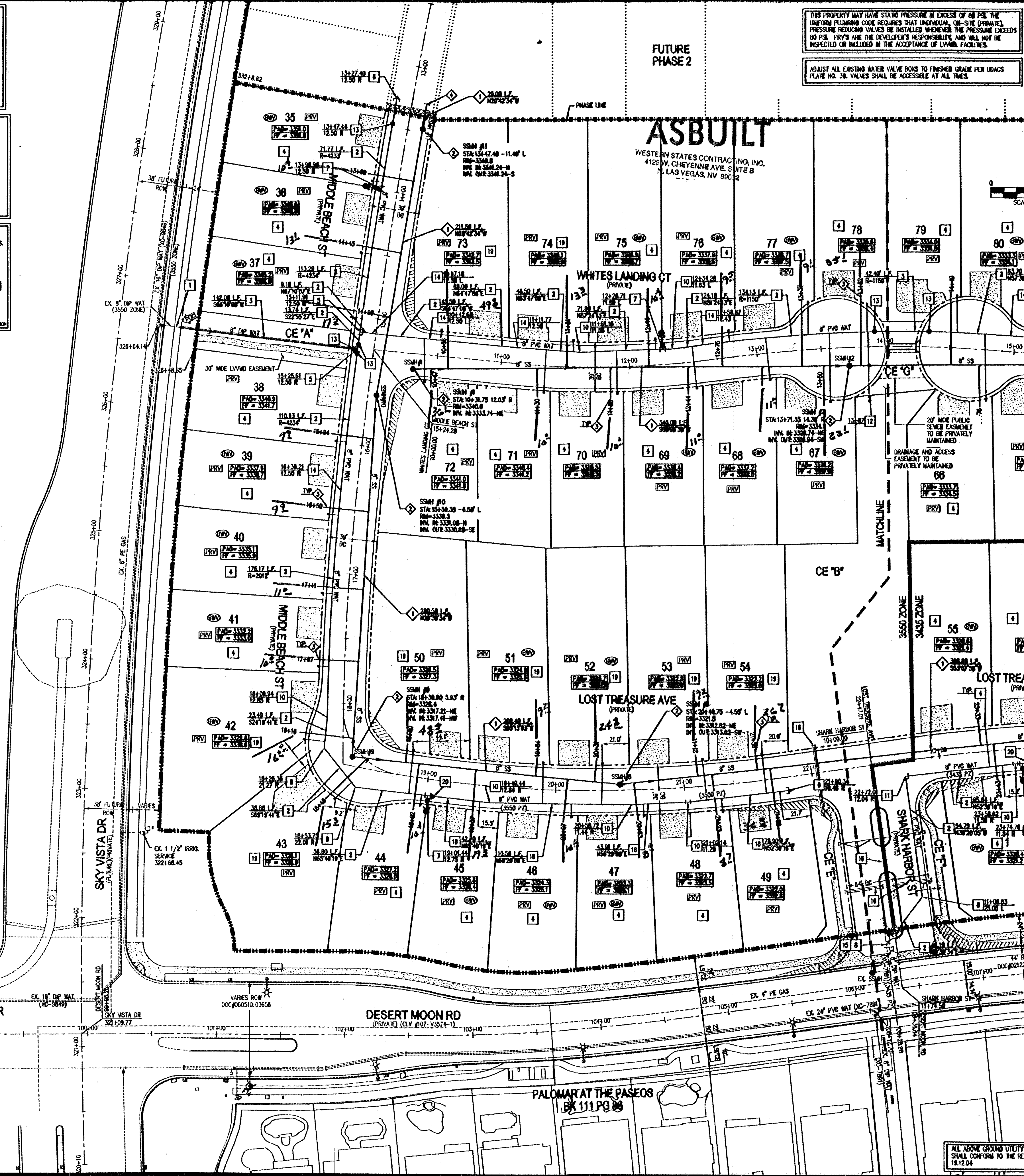


AVOID HITTING UNDERGROUND
TRAFFIC SIGNAL SYSTEMS AND
STREET LIGHT SYSTEM CONDUITS
IT'S COSTLY.



**Call before you
do UnderGround**
1-702-455-6000
CLARK COUNTY TRAFFIC OPERATIONS
OR
1-702-432-5300
(FREEWAY AND ARTERIAL SYSTEM OF TRANSPORTATION)

HUGHES HOWARD COMPANY LLC
APN 137-22-000-015
BK 112 PG 94
DOC#197218104;



THIS PROPERTY MAY HAVE STATING 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. PFR'S ARE THE DEVELOPER'S RESPONSIBILITY, AND WILL NOT BE INSPECTED OR INCLUDED IN THE ACCEPTANCE OF LYMAN FACILITIES.

ABOVE GROUND UTILITY NOTE

ALL ABOVE GROUND UTILITY SHALL COMPLY WITH TITLE 18.08 UTILITY CODES. ALL ABOVE GROUND UTILITY DEPTHS SHALL BE DEPTHS GREATER THAN 27" (3'0" MIN) SHALL BE STRUCK WITH A MINIMUM OF 3" FROM THE BACK OF SHOULDER AND SHALL INCLUDE VEGETATION THAT UPON MATURITY WILL IMMEDIATELY SORCEO SUCH EQUIPMENT FROM PUBLIC VIEW

REDUCED PRESSURE PRESSURE ASSEMBLY (RP)

1. APPROVED REDUCED PRESSURE PRESSURE ASSEMBLY (S) SHALL BE INSTALLED PER THE UNCS PLANS NO. 10 AND NO WATER SHALL BE TAKEN FROM A SOURCE INCLUDING BACKFLOW PREVENTION UNLESS THE REDUCED PRESSURE PRESSURE ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY THE LVMSD, ANIT BLOCK WALL AND THE FLOW MATERIAL SHALL BE CLEARLY MARKED AND CONSTRUCTED OUTSIDE OF THE EXEMPTIONS TO ALLOW THE DISTRICT DIRECT ACCESS FROM THE ADJACENT RIGHT-OF-WAY. EXEMPTIONS SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.

**ESTIMATED AVERAGE DAILY
SEWER CONTRIBUTIONS**

(TOTAL FOR PHASES 1 AND 2)
98 UNITS/250 GPD UNITS=23,750 GPD
TOTAL AVERAGE CONTRIBUTION=0.02375 MGD
TOTAL PEAK FLOW=0.02375 MGDx1.74 (PEAK FACTOR)

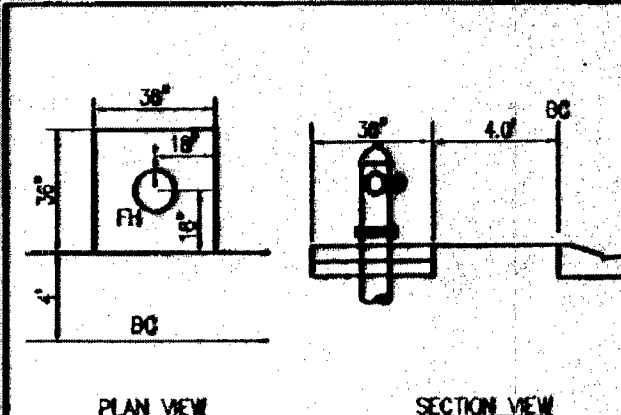
FIRE FLOW CALCULATIONS	
FIRE FLOW 2,000 GPM AT 20 P.S.I. RESIDUAL	
USE/OCCUPANCY	SINGLE FAMILY
TYPE OF CONSTRUCTION (IBC)	TYPE V-B
AUTOMATIC FIRE SPRINKLERS	NO
SQUARE FOOTAGE	<4,999
LARGEST AREA BETWEEN 4-HR WALLS	N/A
BUILDING HEIGHT	<35
NO OF STORES INCLUDING BASEMENT	2
HIGH PILED COMBUSTIBLE STORAGE	NO
NO OF HYDRANTS INSTALLED	5

BENCHMARK
RIVET & PLATE IN TOP OF CURB IN THE SOUTHEAST CORNER OF
DESERT MOON ROAD & DESERT SUNRISE ROAD, 7LV084S4M6A
NAVD 83 ELEVATION = 1008.289 METERS = 3304.47 FEET

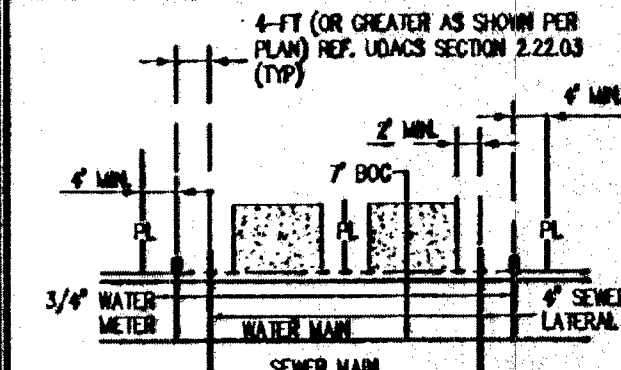
BASIS OF BEARING
NORTH 05°59'55" WEST, BEING THE BEARING OF THE WEST LINE OF
SECTION 34, TOWNSHIP 20 SOUTH, RANGE 50 EAST, M.D.M., CITY
LAS VEGAS, CLARK COUNTY, NEVADA, AS SHOWN BY MAP THEREON
ON FILE IN BOOK 143, PAGE 47 OF PLATS IN THE CLARK COUNTY
RECORDER'S OFFICE, NEVADA.

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

FOR CHANGES IN DIRECTION EXCEEDING THE MAXIMUM ALLOWABLE JOINT DEFLECTION, FITTINGS SHALL BE USED.



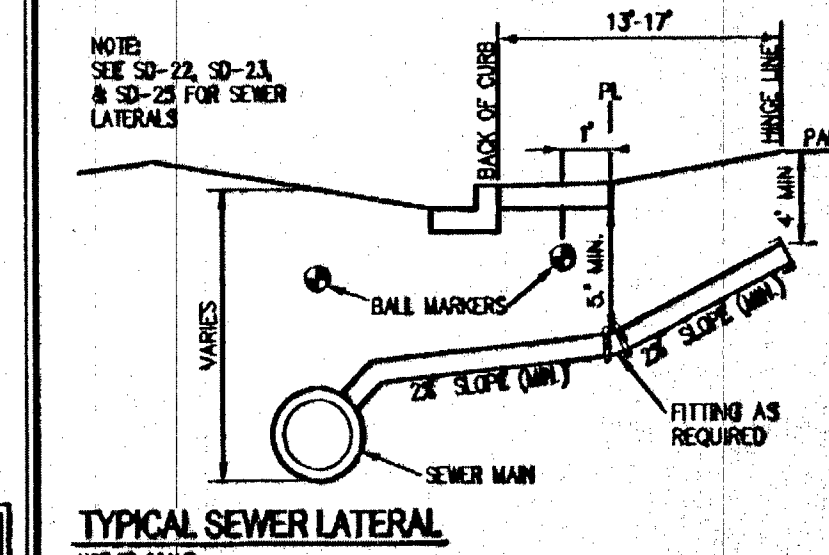
TYPICAL FIRE HYDRANT LOCATION DETAIL



TYPICAL UTILITY LOCATION
UNLESS OTHERWISE NOTED

DISCLAIMER NOTICE

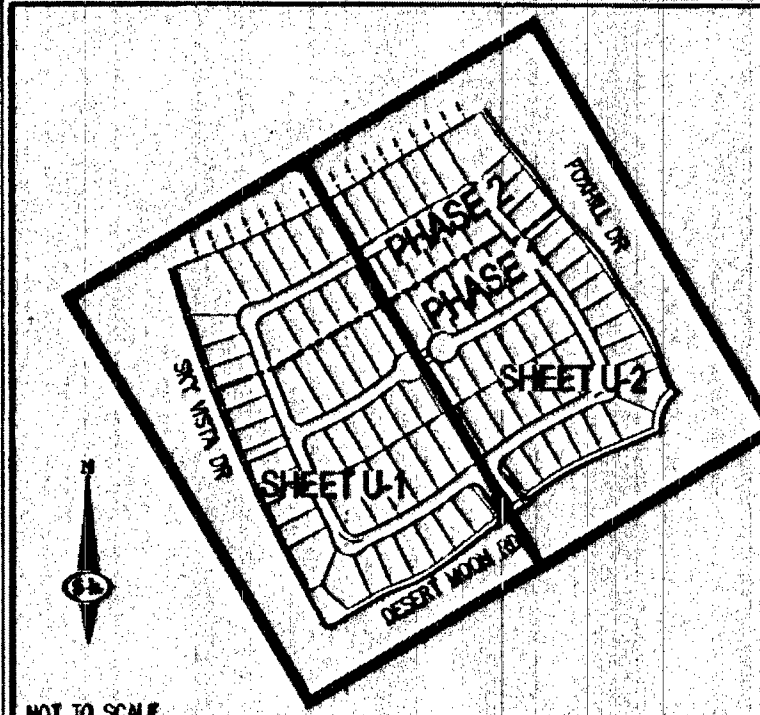
EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF EXISTING UNDERGROUND UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.



TYPICAL SEWER LATERAL

ABANDONED VALVES CUT AND CAP

ALL VALVES TO BE ABANDONED SHALL BE REMOVED IN THE CLOSED POSITION UNLESS SHOWN OTHERWISE BY ABANDONING A MINIMUM OF THE TOP TWENTY-FOUR (24) INCHES OF THE VALVE BODY, AND THEN FILLING THE BOTTOM OF THE BODY WITH AN MINIMUM OF EIGHT (8) INCHES OF SAND OR TOP SOIL. IN ADDITION, EACH THE BOTTOM OF THE VALVE BODY SHALL BE FILL WITH CONCRETE, HAVING A COMPRESSIVE STRENGTH OF AT LEAST TWO THOUSAND (2000) PSI. THE LATERAL MUST BE CUT WITHIN ONE (1) FOOT OF THE ABANDONED VALVE, OR AS SHOWN ON PLANS, AND CAPPED. THE CONTRACTOR SHALL PROVIDE THE EXISTING PIPES SHOWN ON THE DRAWINGS AND INSTALL A CAP CONFORMING TO THE REQUIREMENTS OF THE SPECIFICATIONS. COUPLING IN THE EXISTING PIPE IS UNDESIRABLE AT THE CUT AND CAP LOCATIONS. THE INSTALL OF A FLOW MAY BE PERMITTED WITH DESTRUCTIVE A COMBUSTIBLE THROUGH FLOOR JOIST OR RESTRICTION OF FLOW ON FLOW LOCATIONS IN ACCORDANCE WITH THE PROVISIONS OF JOINTS PLATE JO.



WATER NOTES

- 2 INSTALL 0" PVC (CLASS 150) WATER PIPE
 - 3 INSTALL 0" DIP (CLASS 53) WATER PIPE / MECHANICAL JOINTS IN SLEEVE PER UDCS PLATE #2. PIPE TO DOUBLE BRASS BACKSPLASH BRANCH WITH CLASS 150A COUPLER OR BRASS MARKERS TO BE LOCATED ALONG WATERLINES (JOINTS ARE TO BE BONDED AND TEST STATIONS PLACED EACH END OF COUPLER)
 - 4 INSTALL 3/4" WATER METER PER UDCS PLATE # 3 (TYP)
 - 5 INSTALL 0" OF 1" TEE WITH THRUST BLOCKS PER UDCS PLATE # 3B
 - 6 INSTALL GATE AND 2" BLOWOFF VALVE PER UDCS PLATE # 3B
 - 7 INSTALL 0" OF 1" TEE PER UDCS PLATE # 3B AND FIVE HYDRANT ASSEMBLY WITH GATE VALVE PER UDCS PLATE # 4B
 - 8 INSTALL 4" BEND PER UDCS PLATE # 3B
 - 9 INSTALL 22.5 BEND PER UDCS PLATE # 3B
 - 10 INSTALL 90° HORIZONTAL BEND (WESTMAN BOTH ENDS)
 - 11 INSTALL 90° HORIZONTAL BEND PER UDCS PLATE # 3B
 - 12 INSTALL 1" IRRIGATION METER PER UDCS PLATE NO. 4
13 ADD PRELIMINARY ASSEMBLY FOR UDCS PLATE NO. 4
14 GATE VALVE WITH VALVE BOX PER UDCS PLATE NO. 4
15 1" X 30' PVC NO. 30 & 3B
 - 16 1" MAX. DEFLECTION
 - 17 CUT AND CONNECT TO EXISTING 0" PVC WATER MAIN
18 ADD 10' TO 12' TO MAIN
 - 19 2-CA. (SCH 40) PVC AND 1-CA. (SCH 40) PVC SLEEVES
 - 20 INSTALL CUSH BOSSWELL / PIPE SUPPORT PER DETAIL ON SHEET U-2
 - 21 INSTALL 0" PVC (CLASS 150) WATER PIPE
 - 22 INSTALL 1" WATER METER PER UDCS PLATE NO. 4
 - 23 INSTALL 90° REDUCER
- SEWER NOTES**
- 1 INSTALL 6" PVC SANITARY SEWER PIPE
 - 2 INSTALL 48" DIAMETER SANITARY SEWER MANHOLE PER DETAIL S-2A
 - 3 INSTALL 48" SEWER LATERAL PER S-22, S-23, S-24, & S-6 / 1" X 4" W/ TYPICAL
 - 4 STUD AND CAP OF S3 (WITH THRUST BLOCK PER DETAIL S-2A U-1)
 - 5 INSTALL SEWER PROTECTION PER S-20 & 21
- SEE SHEET C-2 FOR QUANTITIES AND APPROPRIATE DIMENSIONS

GENERAL NOTES

1. REPLACE ALL TRAFFIC CONTROL DEVICES (SIGNS AND/OR PAVEMENT MARKINGS) UNDER CLARK COUNTY'S JURISDICTION THAT ARE DAMAGED, DESTROYED, LOST, OR MODIFIED BY TRAFFIC WORK ACTIVITIES TO CLARK COUNTY'S SATISFACTION. MATERIAL USED SHALL MEET CLARK COUNTY'S SPECIFICATION OR WILL BE AN APPROVED EQUIVALENT.
2. IN THE EVENT THAT THE TRAFFIC SIGNAL CONDUITS, LOOP COILS, OR ASSOCIATED EQUIPMENT ARE DAMAGED BY CONTRACTOR, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ELECTRICAL CONNECTION TO MAKE REPAIRS PER UNIFORM SPECIFICATION NO. 822.6.0.02
3. ALL SEWER STORM DRAINS CROSSING WATER LINES MUST BE INSTALLED TO SECTION 822.6.0.02 AND MEET ALL CITY OF CLARK CONSTRUCTION STANDARDS FOR POTABLE WATER LINES SYSTEMS (UNLESS FOR WATER AND STORM MAIN CROSSINGS AND CULVERMAKS).
4. THE CONTRACTOR IS TO VERIFY THE ACTUAL FIELD LOCATION OF ALL WATER AND POTABLE SEWER LINES. THE CONTRACTOR IS REQUIRED PER THE LATEST EDITION OF THE UNIFORM PLUMBING CODE.
5. FITTINGS SHALL NOT FALL UNDER CURBS, SUTTERS OR

APPROVAL *K. Smith* 12/10/11
LAS VEGAS FIRE AND RESCUE

APPROVED FOR CONSTRUCTION

Donna

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANA
DATE *12/10/10* PROJECT NO. *120993*
LYING APPROVED FIRE FLOW 2,000 GPM AT 20 PSI RESIDUAL

THIS SIGNATURE IS LIMITED TO APPROVAL OF THESE DOCUMENTS
CONFORMANCE TO THE DESIGN INTENT OF THE APPLICABLE DESIGN
CRITERIA. NEITHER SUMNERLIN NOR THE SUMNERLIN RESIDENTIAL
DESIGN REVIEW COMMITTEE ASSUMES RESPONSIBILITY FOR PLANS

S-I
SLATER
HANIFAN
GROUP
CONSULTING ENGINEERS & PLANNERS
3240 S. ARVILLE STREET #616, LAS VEGAS, NV 89416
PHONE (702) 394-4300 FAX (702) 394-4306

[illegible]

ENNAR®
ESPERANZA PHASE 1
UTILITY PLAN I

DATE	11/29/12
DRAFTER:	BOC
DESIGNER:	BOC
CHECKED:	STS
PROJECT NO.	

U-1
SHEET 15 OF 18
107V5900

ASBUILT