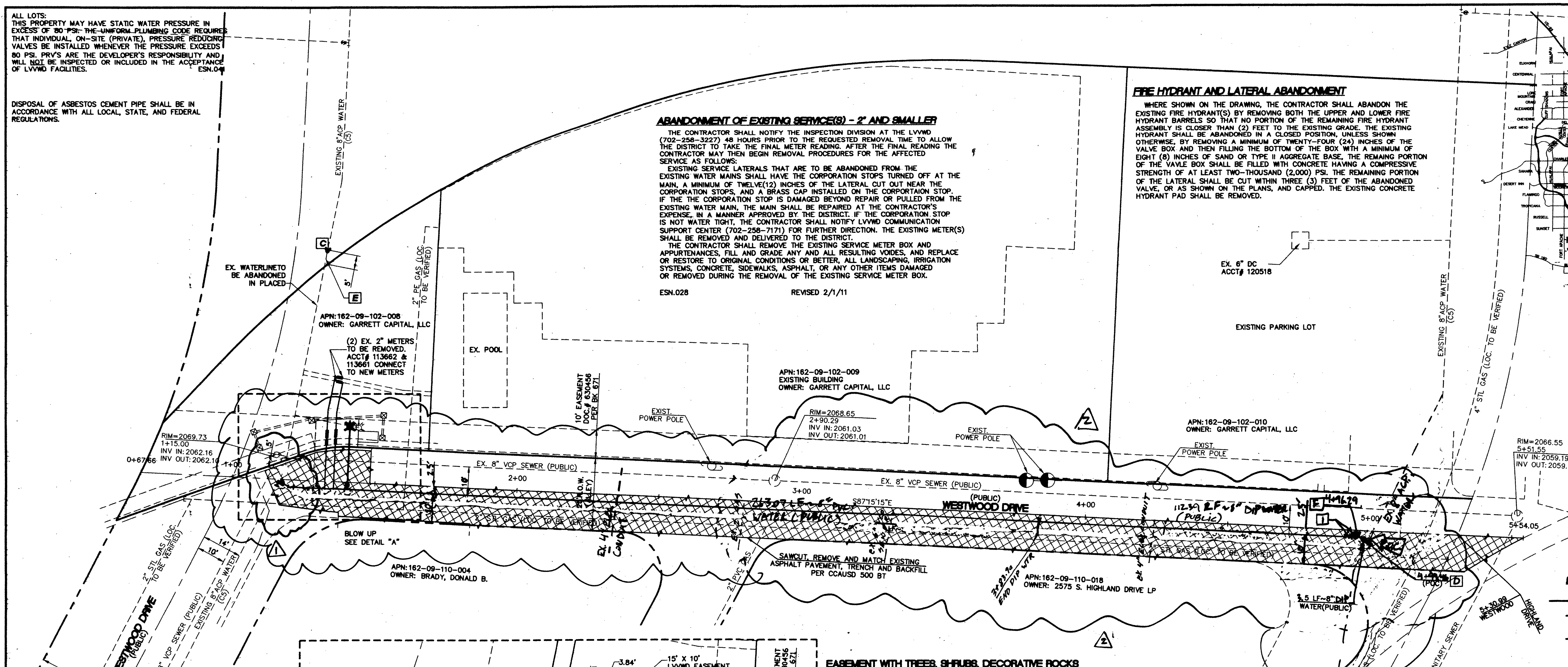
ALL LOTS:
THIS PROPERTY MAY HAVE STATIC WATER PRESSURE IN EXCESS OF 80 PSI. THE UNIFORM PLUMBING CODE REQUIRES THAT INDIVIDUAL, ON-SITE (PRIVATE), PRESSURE REDUCING VALVES BE INSTALLED WHENEVER THE PRESSURE EXCEEDS 80 PSI. PRV'S ARE THE DEVELOPER'S RESPONSIBILITY AND WILL NOT BE INSPECTED OR INCLUDED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

DISPOSAL OF ASBESTOS CEMENT PIPE SHALL BE IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.



ABANDONMENT OF EXISTING SERVICE(S) - 2" AND SMALLER

THE CONTRACTOR SHALL NOTIFY THE INSPECTION DIVISION AT THE LVVWD (702-258-3227) 48 HOURS PRIOR TO THE REQUESTED REMOVAL TIME TO ALLOW THE DISTRICT TO TAKE THE FINAL METER READING. AFTER THE FINAL READING THE CONTRACTOR MAY THEN BEGIN REMOVAL PROCEDURES FOR THE AFFECTED SERVICE AS FOLLOWS:

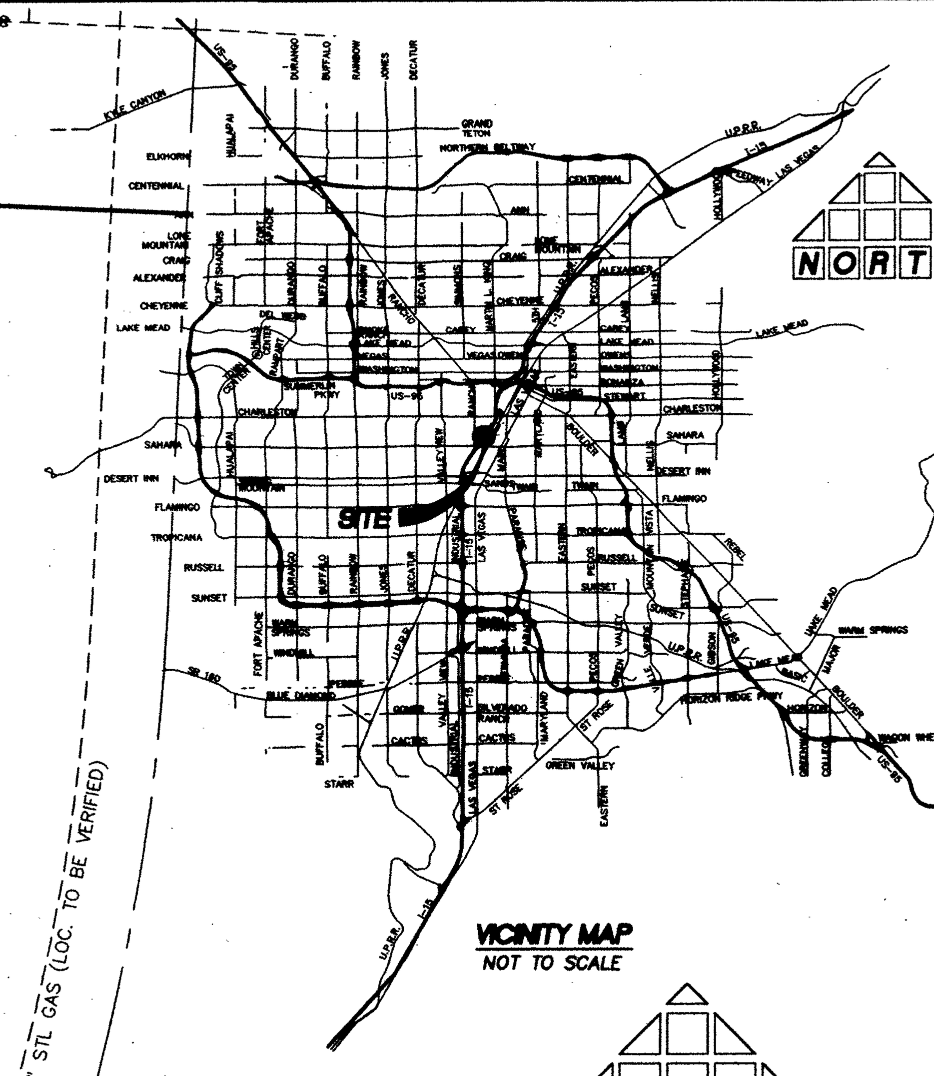
EXISTING SERVICE LATERALS THAT ARE TO BE ABANDONED FROM THE EXISTING WATER MAINS SHALL HAVE THE CORPORATION STOPS TURNED OFF AT THE MAIN, A MINIMUM OF TWELVE(12) INCHES OF THE LATERAL CUT OUT NEAR THE CORPORATION STOPS, AND A BRASS CAP INSTALLED ON THE CORPORTAION STOP. IF THE THE CORPORATION STOP IS DAMAGED BEYOND REPAIR OR PULLED FROM THE EXISTING WATER MAIN, THE MAIN SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE, IN A MANNER APPROVED BY THE DISTRICT. IF THE CORPORATION STOP IS NOT WATER TIGHT, THE CONTRACTOR SHALL NOTIFY LVVWD COMMUNICATION SUPPORT CENTER (702-258-7171) FOR FURTHER DIRECTION. THE EXISTING METER(S) SHALL BE REMOVED AND DELIVERED TO THE DISTRICT.

THE CONTRACTOR SHALL REMOVE THE EXISTING SERVICE METER BOX AND APPURTENANCES, FILL AND GRADE ANY AND ALL RESULTING VOIDES, AND REPLACE OR RESTORE TO ORIGINAL CONDITIONS OR BETTER, ALL LANDSCAPING, IRRIGATION SYSTEMS, CONCRETE, SIDEWALKS, ASPHALT, OR ANY OTHER ITEMS DAMAGED OR REMOVED DURING THE REMOVAL OF THE EXISTING SERVICE METER BOX.

ESN.028 REVISED 2/1/11

FIRE HYDRANT AND LATERAL ABANDONMENT

WHERE SHOWN ON THE DRAWING, THE CONTRACTOR SHALL ABANDON THE EXISTING FIRE HYDRANT(S) BY REMOVING BOTH THE UPPER AND LOWER FIRE HYDRANT BARRELS SO THAT NO PORTION OF THE REMAINING FIRE HYDRANT ASSEMBLY IS CLOSER THAN (2) FEET TO THE EXISTING GRADE. THE EXISTING HYDRANT SHALL BE ABANDONED IN A CLOSED POSITION, UNLESS SHOWN OTHERWISE, BY REMOVING A MINIMUM OF TWENTY-FOUR (24) INCHES OF THE VALVE BOX AND THEN FILLING THE BOTTOM OF THE BOX WITH A MINIMUM OF EIGHT (8) INCHES OF SAND OR TYPE II AGGREGATE BASE, THE REMAING PORTION OF THE VAVLE BOX SHALL BE FILLED WITH CONCRETE HAVING A COMPRESSIVE STRENGTH OF AT LEAST TWO-THOUSAND (2,000) PSI. THE REMAINING PORTION OF THE LATERAL SHALL BE CUT WITHIN THREE (3) FEET OF THE ABANDONED VALVE, OR AS SHOWN ON THE PLANS, AND CAPPED. THE EXISTING CONCRETE HYDRANT PAD SHALL BE REMOVED.



VICINITY MAP
NOT TO SCALE

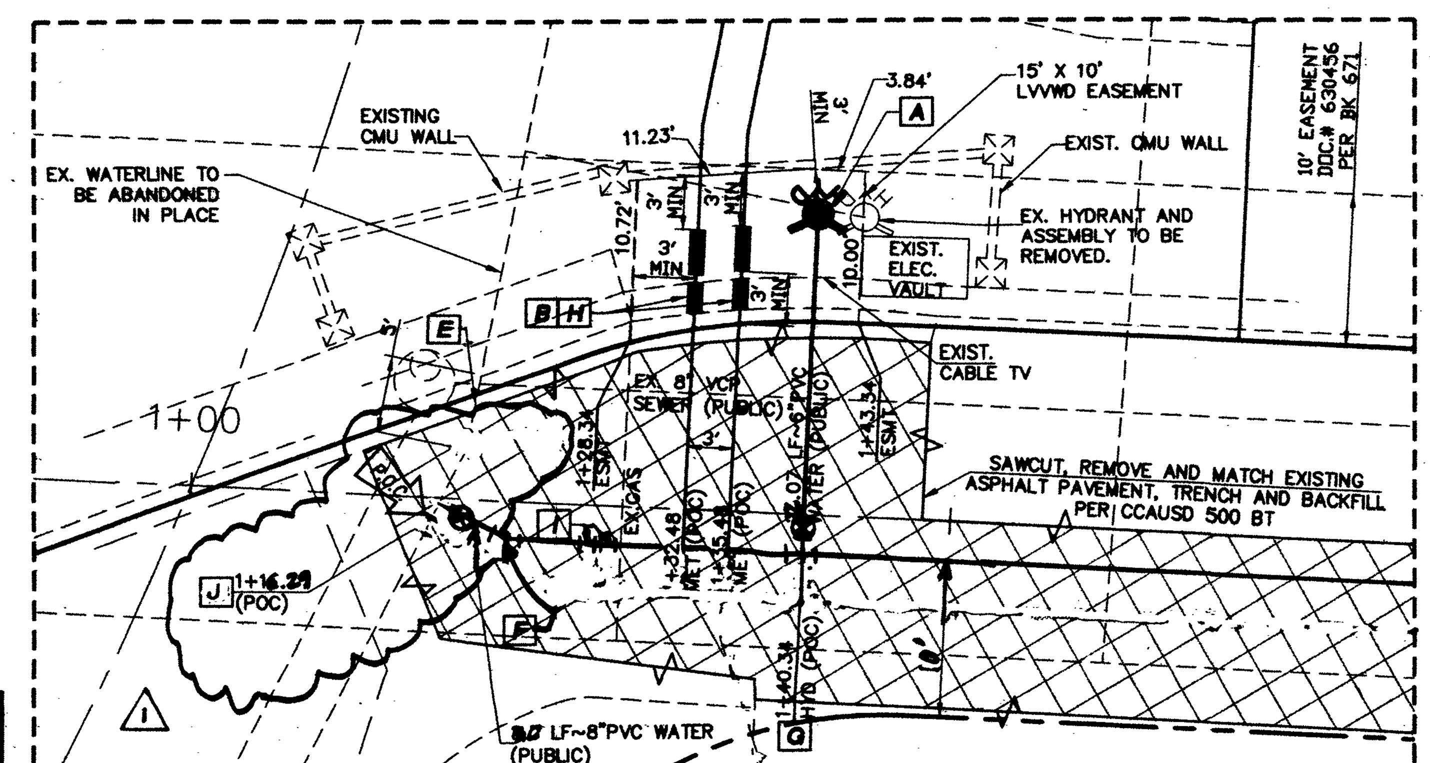
NORTH

1" = 20 FT

FOR ALL UTILITY NOTES, SEE GENERAL NOTES SHEET # C3 AND FOR UTILITY QUANTIES SEE SHEET # U1

LEGEND

- BOUNDARY LINE / RIGHT-OF-WAY
- PROPOSED PVC SEWER MAIN WITH 4' MANHOLE (SIZE AS SHOWN)
- PROPOSED PVC WATER MAIN AND GATE VALVE (SIZE AS SHOWN)
- PROPOSED FIRE HYDRANT ASSEMBLY
- EXISTING PVC SEWER MAIN WITH EXISTING MANHOLE
- EXISTING STORM DRAIN MAIN WITH EXISTING MANHOLE
- EXISTING PVC WATER MAIN AND GATE VALVE
- PROPOSED 4" SEWER LATERAL AND CLEANOUT
- PROPOSED WATER SERVICE LATERAL WITH METER
- EXISTING FIRE HYDRANT ASSEMBLY



BLOW UP DETAIL 'A'
SCALE: 1"=10'

EASEMENT WITH TREES, SHRUBS, DECORATIVE ROCKS BLOCK WALL, OR FENCE

TREES, SHRUBS OR DECORATIVE ROCKS, AND ANY BLOCK WALL OR OTHER FENCE MATERAL, SHALL BE DESIGNED AND CONSTRUCTED AROUND THE EASEMENT(S) TO ALLOW THE DISTRICT DIRECT ACCESS TO THE VAULT(S), BACKFLOW ASSEMBLIES, AND PIPING FROM THE ADJACENT RIGHT-OF WAY.

NOTE:
ALL EXISTING PLANTS, SHRUBS AND TREES ARE TO BE REMOVED FROM LVVWD EASEMENT.

CLV PLANNING NOTE:
ALL UTILITY BOXES NOT TO EXCEED 24" IN HEIGHT.

DISCLAIMER NOTE

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

NOTIFY ENGINEER IMMEDIATELY IF DESCREPENCIES ARE ENCOUNTERED.

BENCHMARK

CITY OF LAS VEGAS BENCHMARK NO. 1LV11 5SES, BEING A RIVET AND PLATE IN TOP OF CURB AT NORTHWEST CORNER OF SAHARA AVENUE AND RANCHO ROAD.

ELEVATION: 632.900 METERS
2076.44 FEET (NAVD 1988)

BASIS OF BEARING

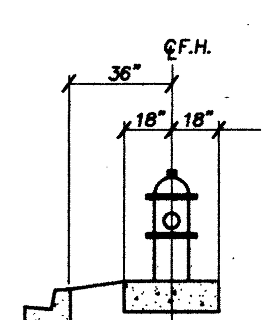
NORTH 27°56'15" EAST, BEING THE CENTERLINE LINE OF HIGHLAND DRIVE, LOCATED IN A PORTION OF THE NW4 OF SECTION 9, TOWNSHIP 21 SOUTH, RANGE 61 EAST M.D.M. AS PER GOLDEN GATE TRACT-INDUSTRIAL SUBDIVISION IN BOOK 4 PAGE 84 OF PLATS, CLARK COUNTY NEVADA RECRODS.

Call before you Dig 1-800-227-2600
Call before you Overhead 1-702-227-2929
Call UnderGround 1-702-455-7511 1-702-229-6611

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

UTILITY NOTES

1. NOTIFY THOMASON CONSULTING ENGINEERS IMMEDIATELY OF ANY DISCREPANCIES IN THE PLANS OR CONDITIONS IN THE FIELD.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL LOCATE AND VERIFY SIZE, MATERIAL, DEPTH, CONDITION, PRESSURE, AND LOCATION OF ALL EXISTING UTILITY LINES WITHIN THE CONSTRUCTION AREA. THOMASON CONSULTING ENGINEERS SHALL BE CONTACTED ONCE THE UTILITIES ARE LOCATED.
3. PLANS MAY NOT INDICATE ALL EXISTING UTILITY LINES. CONTRACTOR IS TO EXERCISE EXTREME CAUTION DURING EXCAVATION IN ORDER TO AVOID DAMAGING ANY EXISTING UTILITY LINES. IF THE UTILITY LINES ARE DAMAGED BY THE CONTRACTOR, SUCH DAMAGE SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER AT THE CONTRACTOR'S EXPENSE.
4. CONTRACTOR TO SAWCUT AND REMOVE EXISTING ASPHALT AND CONCRETE AS NECESARY FOR UTILITY TRENCHES. BACKFILL AND PATCH ALL TRENCHES ACCORDING TO CLARK COUNTY STANDARDS.
5. ALL WATER FACILITIES CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE "UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR DISTRIBUTIONS" (UDACS), LATEST EDITION.
6. CONTRACTOR TO FIELD VERIFY LOCATION AND INVERT OF MANHOLE PRIOR TO CONSTRUCTION. THOMASON CONSULTING ENGINEERS SHALL BE CONTACTED ONCE THIS INFORMATION HAS BEEN OBTAINED.



FIRE HYDRANT LOCATION NO SIDEWALK
NOT TO SCALE
PER UDACS STANDARD PLATE 40

REDUCED PRESSURE PRINCIPLE ASSEMBLY (2) 2"

APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY(S) SHALL BE INSTALLED PER THE UDACS PLATE NO. 8. NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW PREVENTION UNTIL THE REDUCED PRESSURE PRINCIPLE ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY THE LVVWD.

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.

WATERMAIN 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.

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.

NOTE:
TRENCH PIPE BEDDING AND BACKFILL PER UDACS STANDARD PLATE 16, 17, AND DCSWCS SD-16A AND SD11.

WATER NOTES AND QUANTITIES

A	INSTALL FIRE HYDRANT ASSEMBLY W/ 6" GATE VALVE PER UDACS STD. PLATE 40	1 EA
B	2" METER AND 2" TYPE K COPPER LATERAL PER UDACS STD. PLATE 4	2 EA
C	8" CAP & 2" BLOWOFF PER UDACS STD. PLATE 36	1 EA (rev. 1)
D	8"x8" MJ OR APPROVED EQUAL TAPPING SLEEVE WITH 8" TAPPING VALVE PER UDACS PLATE 34	2 EA
E	CUT AND REMOVE A MINUMUM OF 5 LF OF ABANDONED PIPE FROM NEW CAP & BLOWOFF.	2 EA
F	8" 22.5° BEND WITH THRUST BLOCK PER UDACS STD. PLATE 31	2 EA (rev. 2)
G	8"x6" TEE WITH THRUST BLOCK PER UDACS STD. PLATE 31	1 EA
H	2" RPPA PER UDACS STD. PLATE 8	2 EA
I	8" 45° BEND WITH THRUST BLOCK PER UDACS STD. PLATE 31	4 EA (rev. 2)
	6" PVC WATERLINE (C-900)	25.5 LF
	8" PVC WATERLINE (C-900)	288 LF (rev. 2)
J	8" 90° BEND WITH THRUST BLOCK PER UDACS STD. PLATE 31	1EA
	8" DIP WATER (rev. 2)	113 LF (rev. 1)

PROFESSIONAL ENGINEER - STATE OF NEVADA
JOHN B. McAVOY
Exp: 12.31.17
CIVIL
No. 22439
1.27.17

PROFESSIONAL ENGINEER - STATE OF NEVADA
JOSEPH D. THOMASON
CIVIL
No. 11907
Exp 6/30/18
11/2/16

LAS VEGAS FIRE DEPARTMENT 8/24/11 DATE

LAS VEGAS VALLEY WATER DISTRICT
ENGINEERING SERVICES MANAGER
DATE: 08/25/11 PROJECT # 116735
SHEETS C1-C3, U1, P1

H# 40911

REV.	DATE	BY	REVISION
2	1.27.17		LVVWD 2/2/17 REVISE WATER & QUANTITIES
1	11.2.16	DLG	LVVWD 11/7/16 REVISE WATER CONNECTION

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DRAWN BY: JO/DLG
DESIGNED BY:
CHECKED BY:
SCALE: 1"=20' N/A
COMMENTS ADDRESSED BY:
PROJECT NO. 088.10001

THOMASON CONSULTING ENGINEERS
3277 E. WARM SPRINGS ROAD, SUITE 400
LAS VEGAS, NEVADA 89120
702-932-6125 FAX: 702-932-6129

GARRETT CAPITAL LLC
3790 PARADISE ROAD SUITE# 250 LAS VEGAS, NEVADA 89169
PH: 702-947-8330 FAX: 702-947-8313

ARTISAN WATERLINE PLANS
UTILITY PLAN

PROFESSIONAL ENGINEER - STATE OF NEVADA
PAULO E. CHAVEZ
Exp: 12/31/12
CIVIL
No. 15798
8/2/11

SHEET U1
4 OF 5

CONTROL NUMBER

DRAWING NO. 107V5891

DRC.N-116736 AGN#: 114012 OS:162-09-NW XC 10514