

ABBREVIATIONS (SEE C.V.R. SHT. FOR COMPLETE LIST)		
AC	ADJUST	ADJUST
AGG	AGGREGATE	AGGREGATE
BC	BACK OF CURB	BACK OF CURB
BEG	BEGINNING OF CURB RETURN	BEGINNING OF CURB RETURN
BEG	BEGIN	BEGIN
BSW	BACK OF SIDEWALK	BACK OF SIDEWALK
BVC	BEGINNING OF VERTICAL CURVE	BEGINNING OF VERTICAL CURVE
CATV	CABLE TV	CABLE TV
CAUSA	CLARK COUNTY AREA	CLARK COUNTY AREA
CCRFCD	CLARK COUNTY REGIONAL FLOOD CONTROL DISTRICT	CLARK COUNTY REGIONAL FLOOD CONTROL DISTRICT
CL	CENTERLINE	CENTERLINE
CLV	CITY OF LAS VEGAS	CITY OF LAS VEGAS
CMU	CONCRETE MASONRY UNIT	CONCRETE MASONRY UNIT
CO	CLEAN OUT	CLEAN OUT
COMM	COMMUNICATIONS	COMMUNICATIONS
COND	CONDUIT	CONDUIT
CULV	CULVERT	CULVERT
DC	DECOMPOSED CURB	DECOMPOSED CURB
DG	DECOMPOSED GRANITE	DECOMPOSED GRANITE
DIP	DUCTILE IRON PIPE	DUCTILE IRON PIPE
DOM	DOMESTIC	DOMESTIC
ELEC	ELECTRIC	ELECTRIC
EAC	EDGE OF AC	EDGE OF AC
ECR	END OF CURVE	END OF CURVE
ECR	END OF CURB RETURN	END OF CURB RETURN
ELEV	ELEVATION	ELEVATION
EP	EDGE OF PAVEMENT	EDGE OF PAVEMENT
EV	END OF VERTICAL CURVE	END OF VERTICAL CURVE
EX	EXISTING	EXISTING
FAST	FREEMONT & ARTERIAL	FREEMONT & ARTERIAL
FF	FINISH FLOOR	FINISH FLOOR
FG	FINISH GRADE	FINISH GRADE
FL	FIRE HYDRANT	FIRE HYDRANT
FL	FLOW LINE	FLOW LINE
FO	FIBER OPTICS	FIBER OPTICS
FS	FINISHED SURFACE	FINISHED SURFACE
GB	GRADE BREAK	GRADE BREAK
HDPE	HIGH DENSITY POLYETHYLENE	HIGH DENSITY POLYETHYLENE
HDL	HEADWALL	HEADWALL
HGL	HYDRAULIC GRADE LINE	HYDRAULIC GRADE LINE
HP	HIGH POINT	HIGH POINT
INV	INVERT	INVERT
IRR	IRRIGATION	IRRIGATION
LAT	LATERAL	LATERAL
LF	LINEAL FEET	LINEAL FEET
LS	LANDSCAPE	LANDSCAPE
LT	LEFT	LEFT
LWVD	LAS VEGAS VALLEY WATER DISTRICT	LAS VEGAS VALLEY WATER DISTRICT
MAX	MAXIMUM	MAXIMUM
MIN	MINIMUM	MINIMUM
MTR	METER	METER
RB	RULL BOX	RULL BOX
PL	PROPERTY LINE	PROPERTY LINE
PP	POWER POLE	POWER POLE
PROP	PROPOSED	PROPOSED
PVC	POLY VINYL CHLORIDE PIPE	POLY VINYL CHLORIDE PIPE
PMT	PAVEMENT	PAVEMENT
RIM	TOP OF MANHOLE OR CLEANOUT	TOP OF MANHOLE OR CLEANOUT
RT	RIGHT-OF-WAY	RIGHT-OF-WAY
SS	SANITARY SEWER	SANITARY SEWER
SD	STOF A DRAIN	STOF A DRAIN
SNWA	SO. N. HERN. NEVADA WATER AUTHORITY	SO. N. HERN. NEVADA WATER AUTHORITY
STA	STATION	STATION
ST-T	STREET LIGHT	STREET LIGHT
SVZ	SIGHT VISIBILITY ZONE	SIGHT VISIBILITY ZONE
SW	SIDEWALK	SIDEWALK
TEL	TELEPHONE	TELEPHONE
TC	TOP OF CURB	TOP OF CURB
TF	TOP OF FOOTING	TOP OF FOOTING
TW	TOP OF WALL	TOP OF WALL
TYP	TYPICAL	TYPICAL
UDACS	UNIFORM DESIGN AND CONSTRUCTION STANDARDS	UNIFORM DESIGN AND CONSTRUCTION STANDARDS
VG	VALLEY GUTTER	VALLEY GUTTER
WL	WATER LINE	WATER LINE

LEGEND		
DESCRIPTION	EXISTING	PROPOSED
UTILITIES		
B.O. VALVE	↑	↑
FIRE HYDRANTS	⊙	⊙
CLEAN OUT	⊙	⊙
GATE VALVE	⊙	⊙
METER	⊙	⊙
REDUCER	⊙	⊙
CAP	⊙	⊙
11.25" ELBOW	⊙	⊙
22.5" ELBOW	⊙	⊙
45" ELBOW	⊙	⊙
90" ELBOW	⊙	⊙
GROSS	⊙	⊙
TEE	⊙	⊙
MANHOLES		
ELECTRICAL	⊙	⊙
SANITARY SEWER	⊙	⊙
STORM DRAIN	⊙	⊙
TELEPHONE	⊙	⊙
STREET LIGHTS		
100W HPS STL.	⊙	⊙
150W HPS STL.	⊙	⊙
200W HPS STL.	⊙	⊙
250W HPS STL.	⊙	⊙
400W HPS STL.	⊙	⊙
GRADING		
SPOT ELEV.	(12.35)	12.34
SLOPE	(1:25)	1:25
5' CONT.	(2005)	(2005)
1" CONT.	(2007)	(2007)
SITE		
1" SIGN	⊙	⊙
1" CURB	⊙	⊙
1" A" CURB	⊙	⊙
EDGE OF PAVT.	⊙	⊙
WALL	⊙	⊙
LINE TYPES		
CL OR SECTION LINE	⊙	⊙
RIGHT OF WAY LINE	⊙	⊙
EASEMENT LINE	⊙	⊙
SAWTOOTH LINE	⊙	⊙
FLOW LINE	⊙	⊙
SHADES		
HEAVY AC PAVEMENT	⊙	⊙
LIGHT AC PAVEMENT	⊙	⊙
CONCRETE PAVEMENT	⊙	⊙

ABANDONMENT OF EXISTING SERVICE(S)- 2" AND SMALLER: (1)-2" METER (ACCT. #4191)

THE CONTRACTOR SHALL NOTIFY THE INSPECTION DIVISION AT THE LWVD (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 BEING 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 CORPORATION STOP. IF THE CORPORATION STOP IS DAMAGED BEYOND REPAIR OR PULLED FROM THE EXISTING WATER MAIN, THE MAIN SHALL BE REPAIRED AT THE DISTRICT'S EXPENSE. IN A MANNER APPROVED BY THE DISTRICT. IF THE CORPORATION STOP IS NOT WATER TIGHT, THE CONTRACTOR SHALL NOTIFY LWVD COMMUNICATION SUPPORT CENTER AT (702-258-3227) FOR FURTHER DIRECTION. THE EXISTING METERS 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 HOLES, 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.

REDUCED PRESSURE PRINCIPLE ASSEMBLY (RPDA) (2) 2"

APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY(S) SHALL BE INSTALLED IN ACCORDANCE WITH THE UDACS PLATE #6, NO. 6, AND NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW PREVENTION UNTIL THE REDUCED PRESSURE PRINCIPLE ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY LWVD. ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENT(S) SO AS 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.

REDUCED PRESSURE DETECTOR ASSEMBLY (RPDA) (1) 6"

THE REDUCED PRESSURE DETECTOR ASSEMBLY(S) SHALL BE INSTALLED IN ACCORDANCE WITH THE UDACS PLATE #6, NO. 6.

NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW PREVENTION UNTIL THE ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY LWVD. ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENT(S) SO AS 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.

EASEMENT NOTE:

TREES, SHRUBS, OR DECORATIVE ROCKS, AND ANY BLOCK WALL OR OTHER FENCE MATERIAL 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:

EXISTING UTILITIES SHOWN ON THIS SHEET ARE SHOWN PER INFORMATION PROVIDED BY THE OWNER AND THE ENTITIES. CIVILWORKS IS NOT RESPONSIBLE FOR EXISTING UTILITY LOCATIONS SHOWN ON THESE PLANS. CONTRACTOR IS TO POT-HOLE AND VERIFY EXISTING UTILITY LOCATIONS, DEPTHS AND INVERTS AND NOTIFY ENGINEER/ARCHITECT OF ANY CONFLICTS PRIOR TO CONSTRUCTION.

NOTE:

CONTRACTOR TO INCLUDE COST OF UNDERGROUND UTILITY DETECTION COMPANY TO LOCATE AND MARK ALL EXISTING UTILITIES PRIOR TO ANY DEMOLITION OR EXCAVATION. ENGINEER TO BE PROVIDED WITH AS-BUILT SKETCH OF EXISTING UTILITIES, AND IS TO BE NOTIFIED IMMEDIATELY OF ANY POTENTIAL CONFLICTS WITH PROPOSED UTILITIES AND/OR FINISHED GRADES.

NOTE:

ALL ABOVE GROUND UTILITY APPURTENANCES SHALL CONFORM TO THE REQUIREMENTS OF TITLE 19.08.010.

NOTE:

CONTRACTOR TO VERIFY UTILITY STUB LOCATIONS AND SIZE WITH PLUMBING PLANS PRIOR TO INSTALLATION OF NEW UTILITIES. CONTRACTOR SHALL LOCATE EXISTING UTILITIES AND VERIFY UTILITY CONNECTION LOCATIONS, AND ANY DISCREPANCIES SHALL BE COORDINATED WITH THE OWNER, ARCHITECT AND ENGINEER PRIOR TO CONSTRUCTION.

NOTICE: POINT OF CONNECTION

CONTRACTOR SHALL NOTIFY ENGINEER PRIOR TO CONSTRUCTION ACTIVITIES AND CONSTRUCTION OF SANITARY SEWER AND SEWER LATERALS OF ALL INVERT ELEVATIONS. ONCE INVERT INFORMATION IS RECEIVED, THE SLOPE AND INVERTS WILL BE REVISED ACCORDINGLY. IF THE CONTRACTOR DOES NOT PROVIDE THE INFORMATION, THE ENGINEER WILL NOT BE RESPONSIBLE FOR THE SANITARY SEWER DESIGN.

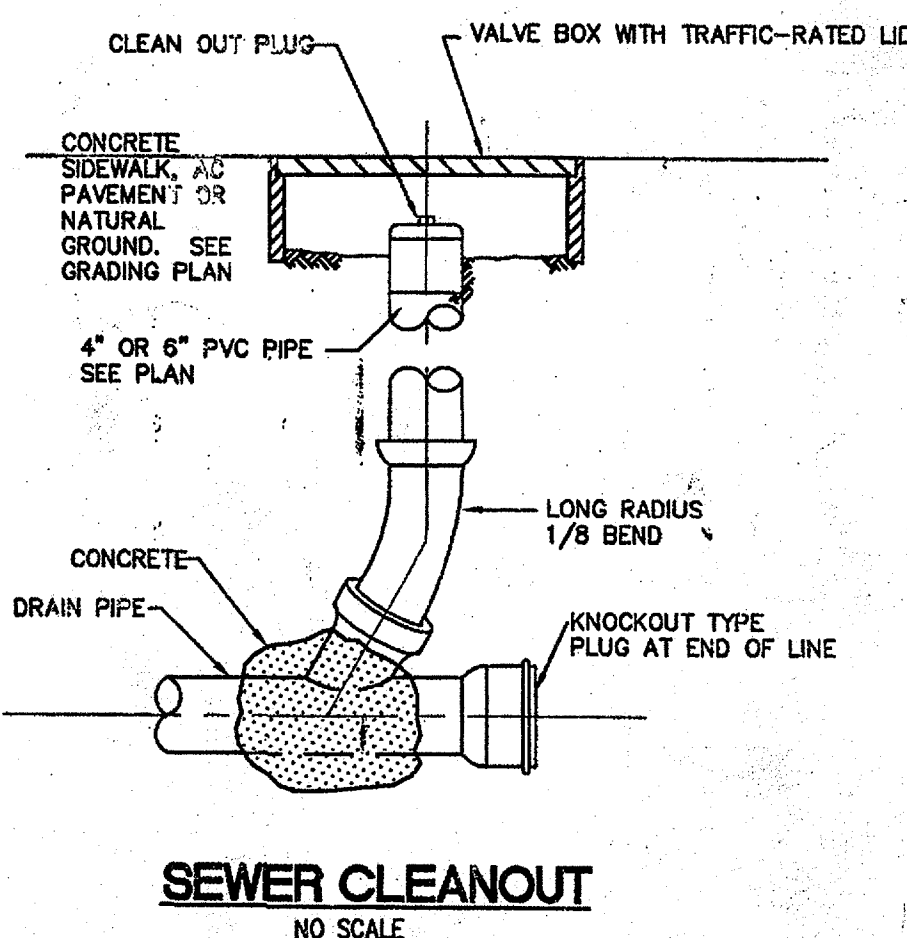
NOTE:

THE DISTRICT CANNOT GUARANTEE A WATERTIGHT SHUTDOWN WHERE CONNECTIONS OR REPAIRS TO EXISTING FACILITIES ARE REQUIRED. THE CONTRACTOR SHALL ENSURE ALL LABOR AND EQUIPMENT IS AVAILABLE TO REMOVE THE FUGITIVE WATER THAT MAY IMPEDE CONSTRUCTION AT ALL TIMES. COORDINATION WITH INSPECTION DIVISION MUST TAKE PLACE PRIOR TO ANY TRIAL SHUTDOWN.

CONTRACTOR TO INSTALL TEMPORARY SERVICE TO ENSURE PROPER SHUTDOWN IN THE EVENT NO OTHER APPURTENANCES ARE AVAILABLE.

NOTE:

PER 19.06 & 19.08 ALL ABOVE-GROUND UTILITY BOXES SHALL BE FULLY SCREENED FROM ALL RIGHTS-OF-WAY.



SEWER CONSTRUCTION NOTES

1. INSTALL 6" PVC SS LATERAL @ 1.0% (PRIVATE)
2. INSTALL SS CLEANOUT PER DETAIL ON THIS SHEET (SAME SIZE AS SEWER PIPE)
3. STUB AND CAP PROPOSED SEWER LATERAL. SEE PLUMBING PLANS FOR CONTINUATION
4. INSTALL 4" PVC SS LATERAL @ 1.0% MIN (PRIVATE)
5. SAWCUT, TRENCH, BACKFILL & PAVEMENT RESTORATION PER CCAUSD 500.3 AND 500.5 AND PER DCSWCS NO. SD-17 AND SD-18.
6. INSTALL 6" PVC SEWER (SLOPE PER PLAN) PER CCAUSD #503.
7. CONSTRUCT 48" SS/SH PER DCSWCS STD. DWG SD-1A AND SD-1B AND PER DCSWCS SECTION 2.2.10.1 (PRIVATE)
8. CONSTRUCT 60" SS/SH PER DCSWCS STD. DWG SD-1A AND SD-1B AND PER DCSWCS SECTION 2.2.10.1. CORROSION PROTECT MANHOLE WITH FIELD-APPLIED COATING PER DCSWCS SECTION 3.16.8.B.

ENGINEER'S ESTIMATE OF QUANTITIES

NOTE: THIS QUANTITY ESTIMATE IS FOR BONDING PURPOSES ONLY. CONTRACTOR TO DETERMINE INDEPENDENT ESTIMATIONS.

WATER QUANTITIES	
2" COPPER WL	64 LF
2" PVC WATER MAIN	160 LF
2" - 45° BEND W/THRUST BLOCKS	3 EA
6" PVC WL	141 LF
6" - 45° BEND W/THRUST BLOCKS	4 EA

SEWER QUANTITIES	
4" SEWER LINE	15 LF
6" SEWER LINE	12 LF
6" SEWER CLEANOUTS	1 EA
9" SEWER LINE	75 LF
60" SS/SH	1EA

FIRE FLOW CALCULATIONS

BASED ON:

SQUARE FOOTAGE:	6,000 SF
LARGEST AREA BETWEEN 4 HR. AREA SEPARATION WALL:	-
BUILDING HEIGHT:	30'-6"
NUMBER OF STORIES:	2
TYPE OF CONSTRUCTION:	IV-B
EXPOSURES:	-
SPRINKLER SYSTEM:	YES
OCCUPANCY:	A-2
ROOF CONSTRUCTION:	-
FLOW REQUIRED @ 20 PSI RESIDUAL (50% DISCOUNT):	1,500 GPM
MAX. STORAGE HEIGHT:	-

APPROVED FOR CONSTRUCTION

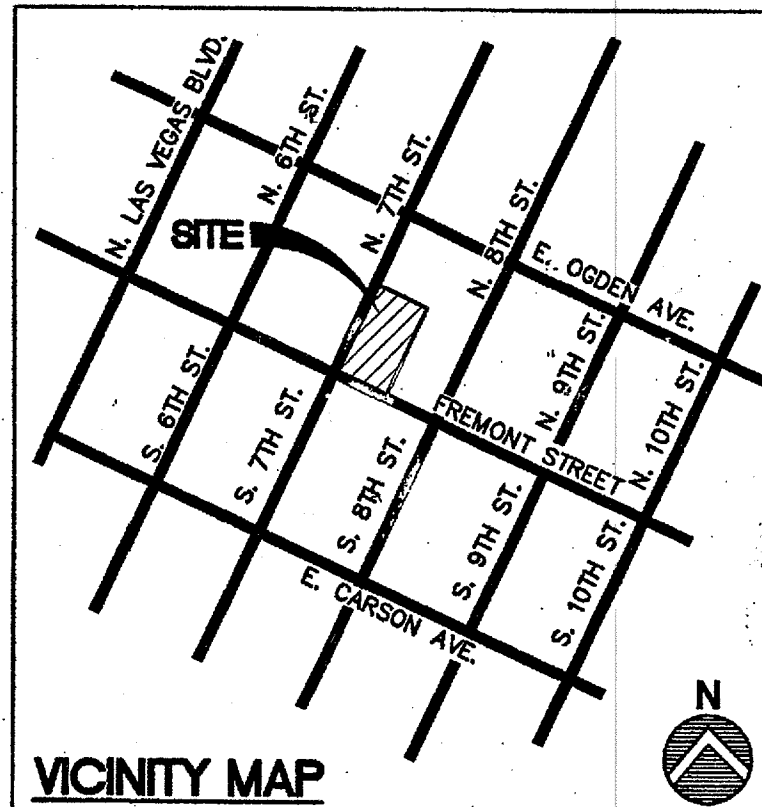
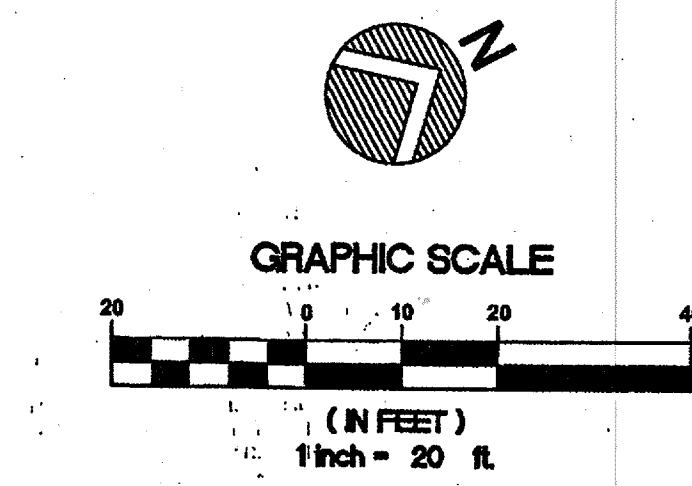
Y. J. SHAD, F.R. 2, 6/11/15
LAS VEGAS VALLEY WATER DISTRICT
ENGINEERING SERVICES MANAGER
DATE: 6/11/15
LWVD PROJECT # 123333
LWVD APPROVED FIRE FLOW 1,500 GPM AT 20 PSI RESIDUAL

FIRE DEPARTMENT APPROVAL:

APPROVAL BY THE FIRE DEPARTMENTS HAVING JURISDICTION IS REQUIRED PRIOR TO OBTAINING FINAL APPROVAL FROM THE LWVD.

CITY OF LAS VEGAS FIRE DEPARTMENT APPROVAL

BY: K. G. 6/3/15
DATE: 6/3/15
APPROVAL OF THESE PLANS SHALL NOT BE CONSTRUED TO BE A PERMIT FOR, OR AN APPROVAL OF, ANY VIOLATION OF ANY OF THE PROVISIONS OF THE STATE OR COUNTY LAWS, FIRE FLOW 1,500 GPM AT 20 P.S.I. RESIDUAL



BENCHMARK

CITY OF LAS VEGAS BENCHMARK: 13LV0134NE6A
RIVET AND PLATE IN TOP OF CURB SE. CORNER OF FREMONT AND 7TH. T205 R61E S34
ELEV. = 2001.32 (US SURVEY FEET) 610.00 (METERS)

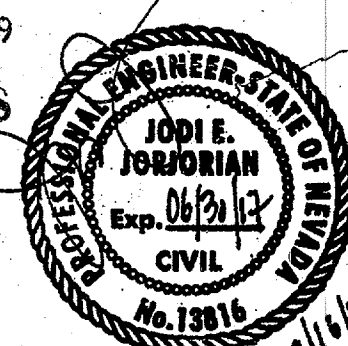
BASIS OF BEARING

NORTH 27°45'00" EAST, BEING THE CENTERLINE OF 7TH STREET, BETWEEN FREMONT STREET AND OGDEN AVENUE OF BUCK'S SUBDIVISION OF LAS VEGAS, AS SHOWN BY MAP THERE ON FILE IN BOOK 1 OF PLATS, PAGE 15, IN THE OFFICE OF THE COUNTY RECORDER OF CLARK COUNTY, NEVADA.

UTILITY NOTES

1. INSTALL 2" COPPER WATER (PUBLIC)
2. INSTALL 6" C900 FIRE (PUBLIC)
3. INSTALL 2" SCH 40 PVC DOMESTIC WATER (PRIVATE)
4. INSTALL 6" C900 FIRE (PRIVATE)
5. INSTALL 6" RPDA PER UDACS PLATE #56.
6. INSTALL 2" RPDA PER UDACS PLATE #8.
7. INSTALL 2" WATER METER PER UDACS PLATE #4.
8. EXISTING 2" WATER METER TO BE RELOCATED (SEE ABANDONMENT NOTE)
9. INSTALL RELOCATED 2" WATER METER (MTR. #405888) PER UDACS PLATE #4
10. INSTALL 2" SERVICE SADDLE
11. INSTALL 8"x8" TAPPING SLEEVE WITH 6" TAPPING VALVE PER UDACS PLATE #34 AND SEC. 2.24.01.B.
12. INSTALL 45° BEND (MATCH SIZE)
13. INSTALL 90° ELBOW (MATCH SIZE)
14. TRENCH, BACKFILL & PAVEMENT RESTORATION PER UDACS PLATE #17 & CCAUSD #503 & 500.5.
15. STUB AND CAP. SEE PLUMBING PLANS FOR CONNECTION.
16. STUB AND CAP. CONTRACTOR TO VERIFY LOCATION AND CONNECT TO HOTEL WATER LINES.
17. INSTALL FIRE HYDRANT PER UDACS PL. #40.

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CITY OF LAS VEGAS



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AND W. PATRICK LANE
OFFICE # 702-593-6111
FAX # 702-593-1825

SAFFRON RESTAURANT
AT NO. 7TH AND FREMONT
OWNER/DEVELOPER
RAJESH PATEL / WALLIN CONSTRUCTION
700 E. FREMONT ST.
LAS VEGAS, NEVADA 89101
CONTACT:
PHONE 702-350-8228 / 702-587-8004

UTILITY PLAN

PRINTS REQUIRE ENGINEER'S SEAL AND SIGN FOR PROOF OF VALIDITY

PROJ. NO. 100000
SHEET NO. 100000
DATE: 6/11/15
REVISIONS:

NO. 15468

C6

6 OF 7

CLV # H# 6754
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