FOR CONTINUATION SEE SHEET UP-1

FOR CONTINUATION SEE SHEET UP-4

FOR CONTINUATION SEE SHEET UP-3

INSTALLATION OF METER AND VAULT

(2) 4" TURBINE METER W/BYPASS3

THE METER(S) AND VAULT(S) WITH NON-TRAFFIC BEARING COVER(S) SHALL BE INSTALLED IN ACCORDANCE WITH THE UDACS PLATE No. 18A, AND WITH UDACS STANDARD VAULT DRAWING C-475, LATEST REVISION. 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 TO THE VAULT(S) FROM THE ADJACENT RIGHT-OF-WAY. EASEMENTS SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.

REGENA AVENUE (PUBLIC)

RILEY STREET (PUBLIC) 30/40' R/W 2-3/4" COPPER BENCHMARK LINE

7189 sf PROPOSED BLDG 13 FF=2507.00

7189 sf PROPOSED BLDG 14 FF=2503.00 BWV REQ'D

PROPOSED BLDG 12 BWV REQ'D FF=2504.80 9688 sf

CLINT J. ALVERSON Exp: 12-31-14 CIVIL 4-7-14 For Revision #3 ONLY

FIRE WATER AT DOMESTIC WATER CROSSINGS

ALL NON-POTABLE FIRE WATER LINES CROSSING POTABLE DOMESTIC WATER LINES ARE TO BE INSTALLED WITH "A VERTICAL SEPARATION OF NO LESS THAN SIX INCHES..." AND IN ACCORDANCE WITH UDACS 2.20.01, 2.04.05, 2.19.02.B1, AND 2.10.02.B2."

HORIZONTAL SEPARATION NOTE:

CONSTRUCT SD WITH ELASTOMERIC JOINT PER UDACS PLT. NO. 2.19.01, A, C, III.

VERTICAL SEPARATION NOTE:

CONSTRUCT SD WITH ELASTOMERIC JOINT PER UDACS PLT. NO. 2.19.02.B, 3, b.

SEE DETAIL 1 (THIS SHEET)

DETAIL 1 SCALE 1"=10'

NORTH (IN FEET) 1 inch = 20ft.

Avoid cutting underground utility lines. It's costly. Call before you Dig. 1-800-227-2600 UNDERGROUND SERVICE

Avoid overhead power line contact Call before you OVERHEAD 1-702-227-2929 NEVADA POWER ENVIRONMENT AND SAFETY SERVICES DEPARTMENT

Call before you UnderGround 1-702-455-7511 CLARK COUNTY TRAFFIC OPERATIONS and 1-702-229-6611

EXISTING UTILITY NOTE:

EXISTING UTILITY LOCATIONS SHOWN HEREIN 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 OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION. ALL DISCREPANCIES MUST BE IMMEDIATELY REPORTED TO THE ENGINEER. CALL BEFORE YOU DIG: 1-800-227-2600.

MASTER LEGEND

	EXISTING	PROPOSED
RIGHT OF WAY/PROPERTY LINE		
CENTERLINE		
EASEMENT LINE		
WATER LINE		
SEWER LINE		
GAS LINE		
STORM DRAIN LINE		
POWER LINE(OVERHEAD)		
CABLE TELEVISION		
TELEPHONE LINE		
POWER/TELEPHONE POLE		
FIRE HYDRANT		
WATER VALVES		
METERS/PULLBOXES		
REDUCER		
SEWER MANHOLE		
STORM DRAIN MANHOLE		
CLEANOUT		
STREETLIGHTS		
SCREEN WALL		
RETAINING WALL		
FENCE		
TRASH ENCLOSURE		
FINISHED FLOOR ELEVATION	PAD = 28.47 FF = 28.65	PAD = 28.47 FF = 28.65
HANDICAP RAMP		
HANDICAP PARKING		
SIGHT VISIBILITY ZONE		
FIRE LANE		

BASIS OF BEARINGS:

...TH 89°29'41" EAST, BEING THE NORTH LINE OF THE ...RTHEAST QUARTER (NE 1/4) OF THE NORTHEAST QUARTER ...1/4) OF SECTION 28, TOWNSHIP 19 SOUTH, RANGE 60 EAST, ...M. AS DEFINED BY THE NEVADA COORDINATE SYSTEM OF ...(NCS83), EAST ZONE, AS DETERMINED BY PUBLISHED ...IES BY THE NATIONAL GEODETIC SURVEY FOR THE LAS ...AS VALLEY WATER DISTRICT CONTINUOUSLY OPERATING ...ERENCE STATIONS: NVCS (CARLTON SQUARE), LVWD (MAIN) ...R (TROPICANA).

BENCHMARK

...00 20C4: RIVET & PLATE IN CONCRETE PAD (TELEPHONE ...IPMENT) AT THE NORTHEAST CORNER OF TROPICAL ...KWAY AND EL CAPITAN WAY = 770.5491m = 2528.04ft. ...JECT DATUM ADJUSTMENT ...5.04 + 0.40 = 2528.44 PROJECT DATUM

LEGAL DESCRIPTION

...ORTION OF THE E 1/2 OF THE NE 1/4 OF SECTION 28, ...NSHIP 19 SOUTH, RANGE 60 EAST, M.D.M.

NOTE:

...E HORIZONTAL CONTROL SHEET HC-1 THRU HC-7 FOR ...E ACCESS LANES.

NOTE:

...FALL VEHICULAR PROTECTION BOLLARDS AS ...IED PER UDACS PLATE 23.

...03.04 M

REDUCED PRESSURE DETECTOR ASSEMBLY (RPDA) (4) - 8"

THE REDUCED PRESSURE DETECTOR ASSEMBLIES SHALL BE INSTALLED IN ACCORDANCE WITH THE UDACS PLATE NO. 58. NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW PREVENTION UNTIL THE ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY LVVWD. ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASTMENT(S) SO AS TO ALLOW LVVWD DIRECT ACCESS FROM THE ADJACENT RIGHT-OF-WAY. EASEMENTS SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE STAR OF CONSTRUCTION

DUAL REDUCED PRESSURE PRINCIPAL ASSEMBLY (RPPA) (2) - 4" (2)1-½" (TYP.)

APPROVED DUAL REDUCED PRESSURE PRINCIPLE ASSEMBLY(S) SHALL BE INSTALLED PER UDACS PLATE No. 11 D. NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW PREVENTION UNTIL THE DUAL 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. EASEMENT SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.

NOTE:

DCQA AND RPPA ARE TO CONFORM WITH TITLE 19.12.040

NOTE:

INSTALL PIPELINE MARKER BALLS IN TRENCH ABOVE EACH HORIZONTAL ELBOW FITTING, PER UDACS PLT. No. 27

FIRE FLOW CALCULATIONS

FIRE FLOW CALCULATIONS ARE BASE UPON THE LARGEST BUILDING TYPE WHICH IS TYPE "A".

Fire Flow Requirement is 2,125 gallons per minute at 20 psi residual pressure.

Based on:	BLDG
Square Footage (S.F.)	87,000
Largest area between 4-Hour area separation walls (S.F.)	N/A
Building Height: (FT)	40
Number of Stories: (FLOORS)	3
Number of Units:	N/A
Type of Construction:	III-A
Full Automatic Fire Sprinkler System:	A

☒ Yes ☐ No

Reviewed By _____ Fire Department Date: 1/11/08

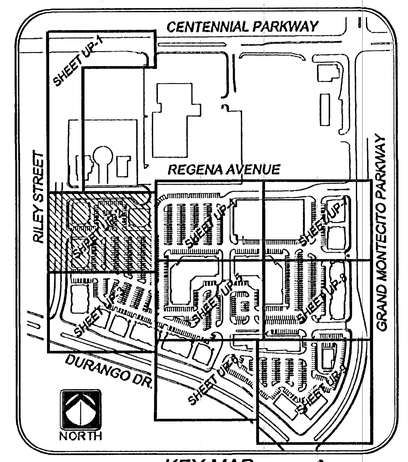
* BASED ON THE 2003 NFPA-1 UNIFORM FIRE CODE.

SEWER NOTES

No.	ITEM	UNIT	QUANTITY
1	INSTALL 8" PVC SDR35 SEWER LINE (PRIVATE)	LF	1933
2	INSTALL 8" PVC SEWER CLEANOUT 5' FROM BUILDING (PRIVATE)	EA	15
3	INSTALL 6" PVC SDR 35 SEWER LATERAL PER SD-17 (PRIVATE)	LF	343
4	INSTALL SEWER MANHOLE PER SD-1 (PRIVATE)	EA	7
5	NOT USED	EA	-
6	INSTALL 8" PVC SEWER CLEANOUT (PRIVATE) SEE DETAIL 8 SHT DE-3	EA	5
7	INSTALL SEWER MANHOLE PER SD-1 (PUBLIC)	EA	2

KEY MAP

NTS



WATER NOTES

No.	ITEM	UNIT	PUBLIC QUANTITY
1	INSTALL 8" PVC WATER LINE (FPW), PER UDACS PLATE No. 6A & 6B & 6C (PVC, C-900, CL-150)	LF	383
2	INSTALL 8" WATER LINE (FPW), PER UDACS PLATE No. 6A & 6B & 6C (PVC, C-900, CL-150)	LF	142
3	INSTALL 8"x6"x6" TEE & 8"x6" REDUCER PER UDACS PLT. No. 1D & 8A	EA	2
4	INSTALL 6" WATER LINE (DOM), PER UDACS PLATE No. 6 (PVC, C-900, CL-150)	LF	34
5	INSTALL 12"X8" TAPPING SLEEVE AND 8" TAPPING VALVE PER UDACS PLATE No. 22 & 8	EA	6
6	INSTALL 4" TURBINE METER PER UDACS PLT. No. 18A (WITH BYPASS) IN A VAULT PER UDACS DRWG. No. C-475	EA	2
7	~~INSTALL 8" DCDA PER UDACS PLATE No. 11C~~ INSTALL 8" RPDA PER UDACS PLATE No. 58	EA	4
8	INSTALL 8"x6" REDUCER	EA	-
9	INSTALL 8"X6" TEE PER UDACS PLATE No. 5	EA	5
10	INSTALL 4" 90° BEND PER UDACS PLATE No. 5	EA	2
11	INSTALL 8" WATER LINE (DOM), PER UDACS PLATE No. 6B & 6C (PVC, C-900, CL-150)	LF	-
12	INSTALL FIRE HYDRANT ASSEMBLY, INCLUDING GATE VALVE, PER UDACS PLATE No. 7	EA	5
13	INSTALL 4" DUAL RPPA PER DETAIL & UDACS PLATE No. 11D	EA	2
14	INSTALL 8"x8" TEE PER UDACS PLATE No. 5	EA	2
15	INSTALL CAP AND BLOW OFF PER UDACS PLATE 4A, FIRE SPRINKLER RISER CONNECTION, SEE FIRE PROTECTION PLANS FOR CONTINUATION	EA	15
16	INSTALL 12" WATER LINE, PER UDACS PLATE No. 6A & 6B & 6C (PVC, C-900, CL-150)	LF	3,073
17	INSTALL 8" - 22.5° BEND WITH THRUST BLOCK PER UDACS PLT. NO. 5	EA	-
18	STUB AND CAP 2" WATER LINE	EA	-
19	INSTALL 4"x4"x4" TEE PER UDACS PLATE No. 5	EA	-
20	INSTALL 12" 90° BEND PER UDACS PLATE No. 5	EA	-
21	STUB AND CAP 12" WATER LINE W/ 2" BLOW-OFF PER UDACS PLT. NO 4A	EA	4
22	INSTALL 8" - 90° BEND WITH THRUST BLOCK PER UDACS PLT. NO. 5	EA	-
23	INSTALL8" - 90° BEND WITH THRUST BLOCK PER UDACS PLT. NO. 5	EA	3
24	INSTALL 8" - 45° BEND WITH THRUST BLOCK PER UDACS PLT. NO. 5	EA	2
25	INSTALL 4" - 45° BEND WITH THRUST BLOCK PER UDACS PLT. NO. 5	EA	-
26	INSTALL 8" - 22.5° BEND WITH THRUST BLOCK PER UDACS PLT. NO. 5	EA	-
27	INSTALL 4" - 22.5° BEND WITH THRUST BLOCK PER UDACS PLT. NO. 5	EA	-
28	INSTALL 2" - 22.5° BEND WITH THRUST BLOCK PER UDACS PLT. NO. 5	EA	-
29	INSTALL 12" GATE VALVE PER UDACS PLATE No. 8 & 3	EA	9
30	INSTALL 8"x4" REDUCER PER UDACS PLATE No. 5	EA	3
31	INSTALL 2" WATER LINE (DOM), PER UDACS PLATE No.6	LF	270
32	INSTALL 2" 90° BEND PER UDACS PLATE No. 5	EA	-
33	INSTALL 4"x4"x2" TEE PER UDACS PLATE No. 5	EA	-
34	INSTALL 2"x4" REDUCER PER UDACS PLATE No. 5	EA	-
35	INSTALL 2"x2"x2" TEE PER UDACS PLATE No. 5	EA	-
36	INSTALL 12" - 11.25° BEND WITH THRUST BLOCK PER UDACS PLT. NO. 5	EA	5
37	INSTALL 12" - 45° BEND WITH THRUST BLOCK PER UDACS PLT. NO. 5	EA	10
38	INSTALL 12" - 5° BEND RESTRAINED ON EACH END	EA	1
39	INSTALL 8" GATE VALVE PER UDACS PLATE NO. 8 & 3	EA	6
40	INSTALL FIRE DEPARTMENT CONNECTION	EA	-
41	INSTALL 6"x6" TEE PER UDACS PLATE No. 5	EA	-
42	INSTALL 12"x8" TEE PER UDACS PLATE No. 5	EA	4
43	INSTALL 12" WATER LINE, PER UDACS PLATE No.6 (DIP, C-900)	EA	81
44	INSTALL 12"x12" CROSS PER UDACS PLATE No. 5	EA	2
45	STUB AND CAP 8" WATER LINE W/ 2" BLOW-OFF PER UDACS PLT. NO 4A	EA	2
46	INSTALL 12"X8" TAPPING SLEEVE AND 8" TAPPING VALVE PER UDACS PLATE No. 22 & 8	EA	1
47	INSTALL 6"x4" REDUCER PER UDACS PLATE No. 5	EA	6

SANITARY SEWER MANHOLE TABLE

SSMH #	NORTHING	EASTING	RIM	INV IN	INV OUT	TYPE
SSMH #1 (PUBLIC)	N81413.0307	E45174.7234	2494.95	2485.29	2485.09	INSTALL STANDARD 48" DIA. ECCENTRIC MANHOLE NO. SD-1 PER DCSWCS
SSMH #2 (PRIVATE)	N81480.2372	E44983.2187	2496.14	2487.30	2487.10	
SSMH #3 (PRIVATE)	N81553.8777	E44778.1828	2498.89	2488.83	2488.63	
SSMH #4 (PRIVATE)	N81584.4748	E44745.3557	2500.34	2490.59	2490.09	
SSMH #5 (PRIVATE)	N81948.0971	E44745.0844	2505.54	——	2497.80	
SSMH #6 (PUBLIC)	N82064.3534	E45731.5502	2484.11	2472.04	71.84	
SSMH #7 (PRIVATE)	N81831.1050	E45733.1140	2482.28	——	2478.70	
SSMH #8 (PUBLIC)	N81502.5716	E45157.1011	2498.19	2487.38	2487.08	
SSMH #9 (PUBLIC)	N81502.5716	E45087.0165	2498.82	——	2488.59	

(FIRST APPROVED 10-30-07)

LAS VEGAS VALLEY WATER DISTRICT — DATE 1-14-08

LVVWD PROJECT NUMBER: # 112352

No.	DATE	DESCRIPTION
3	3-11-14	LVVWD MODIFICATIONS
2	7-10-08	REVISED WATER NOTES AND ADDED INTERSECTION LINE
1	6-16-08	REVISED SEWER NOTES & TABLE
0	4-23-08	REVISED UTILITY ELEVATIONS & ADJUST PROJECT BENCHMARK AND DATUM
	11-10-07	ADD TRANSFORMER PADS
	12-24-07	REVISED DOMESTIC WATER FOR BLDG. 5 TO 2-1/2"

APPROVAL

ALI A. SHAHBAZI Exp. 6-30-09 CIVIL STATE OF NEVADA PROFESSIONAL ENGINEER No. 16239 11/16/07

Stantec

7251 West Charleston Boulevard, Las Vegas, Nevada 89117 Phone (702) 258-3115 Fax (702) 258-4666 Water Resources Land Planning Civil Engineering Land Surveying Environmental Services

VENTURE CORPORATION

CENTENNIAL HILLS PROFESSIONAL CENTER

UTILITY PLAN

January 03, 2008

JOB # 052058.01

SHEET NO.: UP-2

54 OF 87 SHEETS

CLV # 107V4939

HP# 13769

PLOT