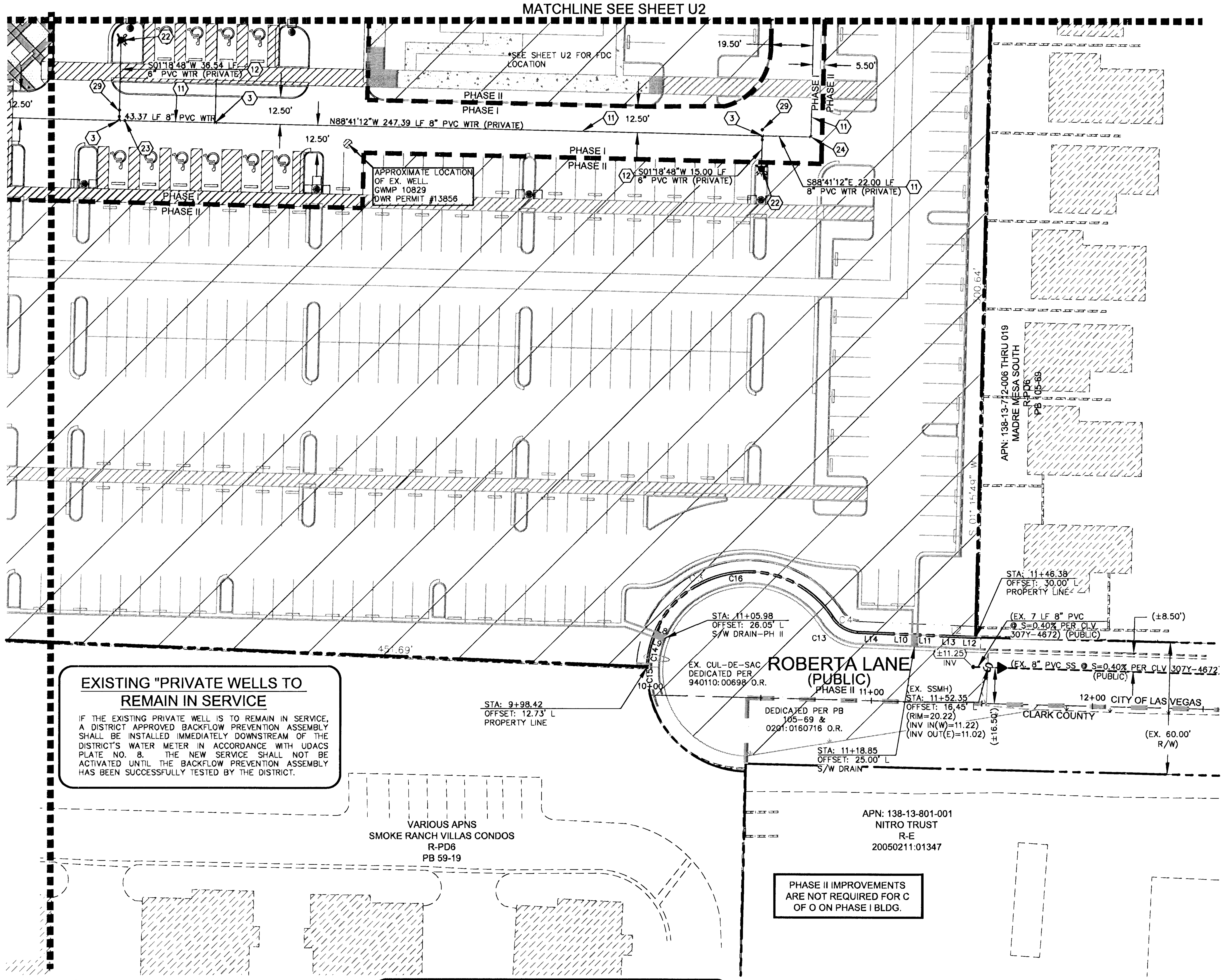


EXISTING "PRIVATE WELLS TO REMAIN IN SERVICE

IF THE EXISTING PRIVATE WELL IS TO REMAIN IN SERVICE, A DISTRICT APPROVED BACKFLOW PREVENTION ASSEMBLY SHALL BE INSTALLED IMMEDIATELY DOWNSTREAM OF THE DISTRICT'S WATER METER IN ACCORDANCE WITH UDACS PLATE NO. 8. THE NEW SERVICE SHALL NOT BE ACTIVATED UNTIL THE BACKFLOW PREVENTION ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY THE DISTRICT.

NOTE

ALL ABOVE GROUND UTILITY APPURTENANCES SHALL CONFORM TO THE REQUIREMENTS OF TITLE 19.12.040

NOTE

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.

BENCHMARK

THE ELEVATION DATA SHOWN HEREON ARE U.S. SURVEY FEET REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988, CLARK COUNTY VERTICAL CONTROL v.2003, BASED UPON BENCHMARK No. 75, STATION "5LV00 13S6" BEING A CITY OF LAS VEGAS PIN AND PLATE IN THE TOP OF CURB AT THE NORTHWEST CORNER OF MICHEAL WAY AND CLEARLY COURT, NEAR THE PT OF MICHAEL WAY.

ELEVATION 679.849 METERS – PUBLISHED

ELEVATION 2,230.47 U.S. SURVEY FEET – COMPUTED

LEGAL DESCRIPTION

THAT PORTION OF THE NORTHWEST QUARTER (NW 1/4) OF THE SOUTHEAST QUARTER (SE 1/4) OF SECTION 13, TOWNSHIP 20 SOUTH, RANGE 60 EAST, M.D.M., CLARK COUNTY, NEVADA,

BASIS OF BEARINGS

THE BASIS OF BEARINGS FOR THIS RECORD OF SURVEY IS NORTH 06° 42' 12" WEST AS DEFINED BY THE MONUMENTS SHOWN HEREON, BEING THE NORTH-SOUTH CENTER SECTION LINE OF SECTION 13, TOWNSHIP 20 SOUTH, RANGE 60 EAST, MOUNT DIABLO MERIDIAN, CITY OF LAS VEGAS, CLARK COUNTY, NEVADA, ESTABLISHED BY STRAIGHT LINE INTERSECTION BETWEEN OPPOSING ONE-QUARTER CORNERS PER FILE 02, PAGE 23 OF SURVEYS, SAME BEING THE CONTROL LINE OF MICHAEL WAY AS DERIVED BY FILE 02, PAGE 23 OF SURVEYS.

CITY OF LAS VEGAS SEWER CONTRIBUTION

PHASE 1:
AVE. FLOW: 159 FIXTURES * 0.65 ERV'S/FIXTURE * 250 GPD/ERU = 25,838 GPD.
PEAK FLOW: AVE. FLOW * 3.14 = 81,131 GPD.
FULL BUILD OUT:
AVE. FLOW: 289 FIXTURES * 0.65 ERV'S/FIXTURE * 250 GPD/ERU = 46,963 GPD
PEAK FLOW: AVE. FLOW * 3.14 = 147,464 GPD.

CURVE & LINE DATA

PROPERTY LINE LINE TABLE		
LINE	LENGTH	BEARING
L1	39.63	S01°27'20"W
L2	52.99	S87°37'05"E

BACK OF CURB LINE TABLE		
LINE	LENGTH	BEARING
L3	26.99	N88°36'13"W
L4	5.00	S01°14'26"W
L5	5.00	S01°28'18"W
L6	9.99	S88°44'13"E
L7	18.61	S88°41'12"E
L8	5.01	S70°21'54"E
L9	5.00	S70°21'54"E
L10	5.00	S01°18'48"W
L11	5.00	S01°18'48"W
L12	10.00	S86°55'51"E
L13	18.32	S87°37'05"E
L14	24.05	S87°37'05"E
L15	10.00	N06°53'37"W

PROPERTY LINE CURVE TABLE				
CURVE	LENGTH	RADIUS	DELTA	TANGENT
C1	76.43	280.00	15°38'22"	38.45
C2	37.49	25.00	85°55'09"	23.28
C3	115.12	45.50	144°57'54"	144.15
C4	13.91	14.50	54°57'54"	7.54

BACK OF CURB CURVE TABLE				
CURVE	LENGTH	RADIUS	DELTA	TANGENT
C5	42.77	25.00	98°01'00"	28.77
C6	35.77	25.00	81°59'00"	21.73
C7	44.99	30.00	85°55'09"	27.94
C8	73.29	275.00	15°16'11"	36.86
C9	39.23	25.00	89°54'17"	24.96
C10	39.27	25.00	90°00'00"	25.00
C11	39.27	25.00	90°00'00"	25.00
C12	39.25	25.00	89°57'33"	24.98
C13	18.71	19.50	54°57'54"	10.14
C14	0.05	40.50	0°04'25"	0.03
C15	25.01	40.50	35°23'14"	12.92
C16	87.27	40.50	123°27'51"	75.32

Call before you Dig
Avoid cutting underground utility lines. It's costly.
Call 811
OR
1-800-227-2600
AND
CLARK COUNTY TRAFFIC OPERATIONS
1-702-455-7544

AVOID HITTING UNDERGROUND TRAFFIC SIGNAL SYSTEMS AND STREET LIGHT SYSTEM CONDUITS IT'S COSTLY
Call before you UnderGround
1-702-455-7511
CLARK COUNTY TRAFFIC OPERATIONS
AND
1-702-229-6611
LAS VEGAS AREA COMPUTERIZED TRAFFIC SYSTEM

Avoid overhead power line contact. It's costly.
CALL BEFORE YOU OVERHEAD
1-702-593-6111

NOTE:

1. 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.

2. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL ALIGNMENT OF EXISTING UTILITIES AND TO NOTIFY THE DESIGN ENGINEER IMMEDIATELY ON ANY DISCREPANCIES PRIOR TO CONSTRUCTION.

3. ALL DIMENSIONS TO UTILITIES ARE TO CENTERLINE OF PIPE UNLESS INDICATED OTHERWISE.

4. ALL SEWER LENGTHS SHOWN ARE FROM CENTER OF MANHOLE TO CENTER OF MANHOLE.

5. 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.

6. SEE H SHEETS FOR FIRE LANE LOCATION.

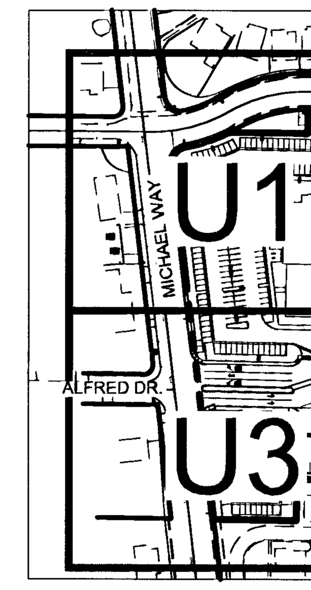
7. SEE ARCHITECTURAL PLANS FOR ALL CONNECTION DETAILS AT THE BUILDING.

8. SEE LANDSCAPE PLANS BY OTHERS FOR ALL IRRIGATION AND LANDSCAPING INFORMATION.

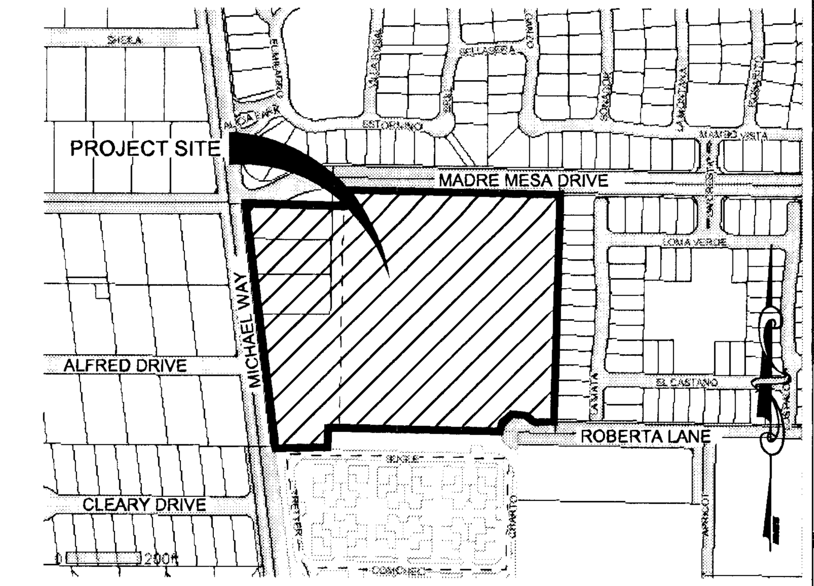
9. SEE SHEET C2 FOR QUANTITIES.

10. THIS PROJECT IS NOT PART OF AN EXISTING COMMERCIAL SUBDIVISION.

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 feet



KEY MAP
N.T.S.



VICINITY MAP
N.T.S.

NO	WATER CONSTRUCTION NOTES — ITEM
1	WET TAP EXISTING 8" WATERLINE WITH 8"x8" MJ TAPPING SLEEVE (OR APP. EQUAL) AND 8" TAPPING VALVE PER UDACS PLATE 34 & 39. EXCAVATE PER UDACS PLATE 17 & 19.
2	INSTALL 10" RPDA (CONBRACO 40-70G-E3) PER UDACS PLATE 56
3	INSTALL 8" X 6" TEE PER UDACS PLATE 31
4	WET TAP EXISTING 8" WATERLINE WITH 8"x6" MJ TAPPING SLEEVE (OR APP. EQUAL) AND 6" TAPPING VALVE PER UDACS PLATE 34 & 39. EXCAVATE PER UDACS PLATE 17 & 19.
5	INSTALL 2" SERVICE SADDLE & CORPORATION STOP PER UDACS PLATE 4
6	INSTALL 1 1/2" SERVICE SADDLE & CORPORATION STOP PER UDACS PLATE 4
7	INSTALL 2" METER PER UDACS PLATE NO 4
8	INSTALL 1 1/2" METER PER UDACS PLATE NO 4
9	INSTALL 2" RPPA PER UDACS PLATE NO 8
10	INSTALL 1 1/2" RPPA PER UDACS PLATE NO 8
11	INSTALL 8" PVC WL – C900, CLASS 150
12	INSTALL 6" PVC WL – C900, CLASS 150
13	INSTALL 2" COPPER WATER LINE (PUBLIC)
14	INSTALL 1 1/2" COPPER WATER LINE (PUBLIC)
15	INSTALL 2" BRASS WATER LINE (PUBLIC)
16	INSTALL 1 1/2" BRASS WATER LINE (PUBLIC)
17	INSTALL 3"X 2" REDUCER PER UDACS PLATE 30
18	INSTALL 3"X 1 1/2" REDUCER PER UDACS PLATE 30
19	INSTALL 3" WATER LINE (PVC) ON-SITE (PRIVATE)
20	INSTALL 8"x 8" TEE PER UDACS PLATE 31
21	INSTALL 3"x 3" TEE PER UDACS PLATE 31
22	INSTALL FIRE HYDRANT AND 6" GATE VALVE PER UDACS PLATES 40
23	INSTALL GATE VALVE SAME SIZE AS LINE PER UDACS PLATES 30 & 39
24	INSTALL 90° BEND SAME SIZE AS LINE PER UDACS PLATE NO 31
25	INSTALL 45° BEND SAME SIZE AS LINE PER UDACS PLATE NO 31
26	INSTALL 22.5° BEND SAME SIZE AS LINE PER UDACS PLATE NO 31
27	INSTALL 11.25° BEND SAME SIZE AS LINE PER UDACS PLATE NO 31
28	MINIMUM 18" CLEAR BETWEEN WATER & SEWER PER UDACS 2.22.02A
29	INSTALL BLUE REFLECTIVE PAVEMENT MARKER IN THE FIRE LANE ADJACENT TO EACH HYDRANT
30	INSTALL 10" X 8" REDUCER PER UDACS PLATE 30
31	INSTALL 6" DIP WL

LEGEND

	EXISTING	PROPOSED
WATER LINE	(12"W)	12"W
SEWER LINE	(12"SS)	12"SS
GAS LINE	(12"G)	12"G
STORM DRAIN LINE	(12"SD)	12"SD
POWER LINE(OVERHEAD)	(P)	P
ELEC LINE(UNDERGROUND)	(E)	E
TELEPHONE LINE	(T)	T
FIRE HYDRANT		
WATER VALVES		
REDUCER		
SEWER MANHOLE		
STORM DRAIN MANHOLE		
CLEANOUT	CO	CO
SIGHT VISIBILITY ZONE		
PHASE II		

CITY OF LAS VEGAS FIRE DEPARTMENT

FIRE FLOW REQUIREMENT IS 4,000 GALLONS PER MINUTE AT 20 POUNDS PER SQUARE INCH RESIDUAL BASED ON:

	PHASE 1	FULL BUILD OUT
REQ'D FIRE FLOW*	2,250	4,000
SQUARE FOOTAGE **	45,417	106,571
LARGEST AREA BETWEEN AREA SEPARATION WALLS	N/A	N/A
HEIGHT	50'	50'
TYPE OF CONSTRUCTION ***	IIB/V-B	IIB/V-B
SPRINKLER SYSTEM	YES	YES
OCCUPANCY	A-3/B	A-3/B
NO. OF STORIES	2	2
HIGH PILED STORAGE	NO	NO

* BASED ON 50% REDUCTION FOR FIRE SPRINKLERS
** BASED ON MAXIMUM SQUARE FOOTAGE POSSIBLE
*** TYPE OF CONSTRUCTION IS SPLIT

NO	SEWER CONSTRUCTION NOTES — ITEM
1	CONTRACTOR TO VERIFY INVERT PRIOR TO CONSTRUCTION & MODIFY MANHOLE INVERT FOR 8" SS
2	INSTALL 48" DIA. PRE-CAST SEWER MANHOLE PER SD-1A & SD-1B
3	INSTALL 8" DIA PVC SDR-35 SEWER MAIN
4	REMOVE EXISTING 10" SS TO EX. SSMH
5	STUB AND CAP FOR FUTURE CONNECTION
6	INSTALL 6" CLEAN OUT PER SD-26
7	INSTALL 6" DIA PVC SDR-35 SEWER LATERAL PER SD-22 WITH MARKER PER SD-25
8	INSTALL WYE & 45° BEND PER SD-22

REDUCED PRESSURE DETECTOR ASSEMBLY (RPDA) - (2) 10"

THE REDUCED PRESSURE DETECTOR ASSEMBLIES SHALL BE INSTALLED IN ACCORDANCE WITH THE UDACS PLATE 56. 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 PRINCIPLE ASSEMBLY - (1) 2" & (1)1-1/2"

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 PRINICIPLE 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.

NOTE:

INSTALL PIPELINE MARKER BALLS IN TRENCH ABOVE EACH HORIZONTAL ELBOW FITTING, PER UDACS PLATE 15

PAVEMENT MARKERS:

INSTALL BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS ADJACENT TO THE FIRE HYDRANT ON ALL IMPROVED FIRE APPARATUS ACCESS ROADWAYS WITH HARD SURFACES, INCLUDING BOTH PUBLIC AND PRIVATE ROADS, STREETS OR FIRE LANES:

- ON ROADWAYS WITH NO PARKING PERMITTED ON THE HYDRANT SIDE: EIGHT (8) FEET FROM THE FACE OF THE CURB ON THE HYDRANT SIDE.
- ON ROADWAYS WITH PARKING PERMITTED ON THE HYDRANT SIDE: SIXTEEN (16) FEET FROM THE FACE OF THE CURB ON THE HYDRANT SIDE.

SIGHT VISIBILITY ZONES NOTE

NO WALLS, FENCES, TREES, SHRUBS, UTILITY APPURTENANCES OR ANY OTHER OBJECT, OTHER THAN TRAFFIC CONTROL DEVICES AND STREET LIGHT POLES, MAY BE CONSTRUCTED OR INSTALLED WITHIN THE SIGHT VISIBILITY ZONE UNLESS SAID OBJECT IS MAINTAINED AT LESS THAN 24 INCHES IN HEIGHT, MEASURED FROM THE TOP OF CURB.

APPROVED FOR CONSTRUCTION

Dod Gregory
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
PROJECT NO. 116386 DATE: 03/28/11

CITY OF LAS VEGAS FIRE DEPARTMENT APPROVAL

BY: K Mila DATE: 2/17/11

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 4,000 GPM AT 20 PSI RESIDUAL.

CLV DRAWING NO. 107V5608-1

WE
meeting your land development needs
WALKER ENGINEERING, LLC
5765 S. RAINBOW BLVD.
SUITE 101
LAS VEGAS, NV 89118
TEL: 702.873.5197
FAX: 702.873.5346

STATE OF NEVADA PROFESSIONAL ENGINEER TREASEA WOLF CIVIL EXP.6-30-12 No. 17879 2-16-11

APPROVAL	DATE	INITIALS

REVISIONS

DATE	REV	DESCRIPTION OF REVISION

CATALYST CONSULTING COMPANY
AGUILAS CFC CHURCH
MASTER UTILITY PLAN
SHEET 4 OF 4
PHASE I
H37715

CC HTE: 10-10763
SUBMITTAL NO. FINAL
DATE: FEBRUARY 16, 2011
WE PROJECT NO. 1167.00
AGENCY NO. CLV:37715
SHEET NO.: U4
18 OF 27 SHEETS

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