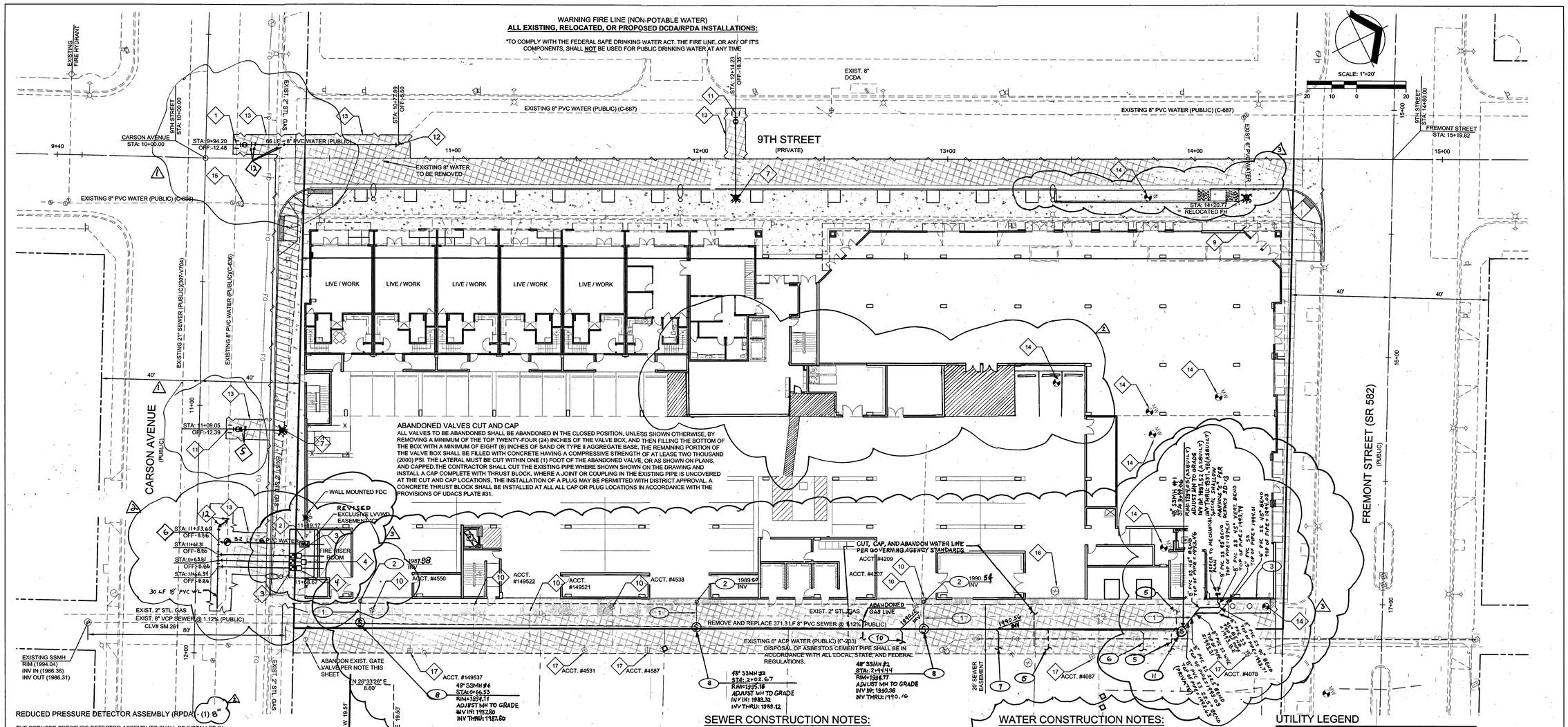


REDUCED PRESSURE DETECTOR ASSEMBLY (RPDA) - (1) 8"

THE REDUCED PRESSURE DETECTOR ASSEMBLIES SHALL BE INSTALLED IN ACCORDANCE WITH THE UDACS PLATE NO. 56. 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 EASEMENT(S) SO AS TO ALLOW LVVWD 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 (RPPA) - (3) 2"

THE REDUCED PRESSURE PRINCIPLE ASSEMBLIES SHALL BE INSTALLED IN ACCORDANCE WITH THE UDACS PLATE NO. 8. 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 EASEMENT(S) SO AS TO ALLOW LVVWD DIRECT ACCESS FROM THE ADJACENT RIGHT-OF-WAY. EASEMENTS SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.

ALL SEWER/STORM DRAIN CROSSING WATER LINES MUST CONFORM TO SECTION 2.19 OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR WATER DISTRIBUTION SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSING AND CLEARINGS.

BASIS OF BEARINGS:

SOUTH 62°04'40" WEST, BEING THE CENTERLINE OF A PORTION OF FREMONT STREET AS SHOWN BY MAP IN THE OFFICE OF THE CLARK COUNTY, NEVADA RECORDER IN FILE 67, PAGE 79 OF SURVEYS.

BENCHMARK:

CITY OF LAS VEGAS STATION CHAS 5
RIVET AND PLATE IN TOP OF CURB AT THE NORTHEAST CORNER OF LAS VEGAS BOULEVARD AND CHARLESTON BOULEVARD.

ELEVATION:
FEET = 2019.57' (NAVD88)
METERS = 615.566 M (NAVD88)

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

FAST
Call 811 before you UnderGround
1-702-432-5300
FREEWAY AND ARTERIAL SYSTEM OF TRANSPORTATION

AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY.
CALL BEFORE YOU DO OVERHEAD
1-702-227-2929

SEWER CONSTRUCTION NOTES:

1. INSTALL 8" PVC SEWER LATERAL PER DCSWCS SD-17 (PRIVATE) @ 2.00% MIN
2. INSTALL CLEANOUT PER DCSWCS SD-26
3. FUTURE 2500 GAL GREASE INTERCEPTOR; SEE MECHANICAL PLANS FOR SPECS
4. ADJUST EXISTING SEWER MANHOLE TO GRADE

SEWER CONSTRUCTION NOTES (CONTINUED):

5. ABANDON INNACTIVE SEWER LATERAL PER DCSWCS 3.18.1.B OR C.
6. REPLACE 6" WYE AND MAINTAIN EXISTING SANITARY SEWER LATERAL ACTIVE (PRIVATE)
7. INSTALL 6" PVC SEWER LATERAL PER DCSWCS SD-22 (PRIVATE) @ 2% MINIMUM SLOPE.
8. CONSTRUCT 48" TYPE I SSMH PER DCSWCS SD-1A, SD-1B, SD-4, AND SD-5, WITH SINGLE COVER (PUBLIC).
9. REMOVE EXISTING SANITARY SEWER MANHOLE PER DCSWCS 3.18.2.A.
10. INSTALL 6" PVC SEWER LATERAL PER DCSWCS SD-22 (PRIVATE) @ 2% MINIMUM SLOPE FOR CONSTRUCTION TRAILER. ABANDON, REMOVE, AND/OR STUB CAP PER CITY OF LAS VEGAS REQUIREMENTS.
11. PRIVATE SANITARY SEWER. ALL 6" SANITARY SEWER UPSTREAM OF SSMH #1 IS PRIVATE.

SEWER CONTRIBUTION

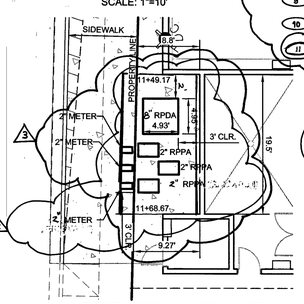
FACILITY TYPE: APARTMENTS

TOTAL UNITS AT BUILD OUT: 231

TYPE	FLOW CONTRIBUTION	AVERAGE FLOW	PEAK HOUR FLOW	WET PEAK HOUR FLOW
TOTAL	28.07 GPM (40,425 GPD)	0.040 MGD	0.144 MGD	0.180 MGD

EXCLUSIVE LVVWD EASEMENT "C"

SCALE: 1"=10'



METER INSTALLATION DETAIL

SCALE: 1"=10'

QUANTITIES

	PUBLIC	PRIVATE
6" RPDA	1 EA	
2" DOMESTIC METER	3 EA	
1 1/2" IRRIGATION METER	0 EA	
2" RPPA	3 EA	
1 1/2" RPPA (IRRIGATION)	0 EA	
FIRE HYDRANT RELOCATION	1 EA	
FIRE HYDRANT	2 EA	
8" SEWER MAIN	372 LF	
6" SEWER LATERAL		28 LF
8" WATER MAIN	98 LF	
6" WATER MAIN	28 LF	
2" WATER	75 LF	

DISCLAIMER NOTE

THE UNDERGROUND UTILITIES AS SHOWN HEREON HAVE BEEN LOCATED FROM OBSERVED FIELD SURVEY EVIDENCE AND EXISTING DRAWINGS, INCLUDING BUT NOT LIMITED TO THE FOLLOWING; PLANS PROVIDED BY THE CLIENT, UTILITY COMPANIES, AND MUNICIPAL AGENCIES. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

RELOCATION OF FIRE HYDRANTS

(EXTENSION OF EXISTING LATERAL)

THE CONTRACTOR SHALL REMOVE AND RELOCATE BOTH THE UPPER AND LOWER BARRELS OF THE EXISTING FIRE HYDRANT(S) WHERE SHOWN. EXTEND THE EXISTING LATERAL AS REQUIRED, AND REINSTALL SUCH HYDRANT(S) AT THE NEW LOCATION(S) INDICATED. FIRE HYDRANTS SHALL BE TESTED PRIOR TO AND AFTER RELOCATION, UNDER THE DIRECTION OF THE DISTRICT, TO ENSURE QUALITY. INSTALLATION SHALL BE IN ACCORDANCE WITH UDACS PLATE 40. LATERALS MADE OF UNAPPROVED MATERIALS SHALL BE REPLACED FORM THE MAIN TO THE FIRE HYDRANT. RELOCATIONS WHERE THE LATERAL CANNOT BE EXTENDED SHALL BE TREATED AS NEW INSTALLATIONS.

ABANDONMENT OF EXISTING SERVICE LATERALS - (4) 5/8", (1) 3/4", (1) 1 1/2"

(TWO (2) INCH AND SMALLER)

THE CONTRACTOR SHALL NOTIFY THE INSPECTION DIVISION AT LVVWD (702-285-3227) 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 CORPORATION STOP. IF 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 AT (702-285-7171) 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 VOIDS, 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.

WATER CONSTRUCTION NOTES:

1. CONNECT TO EXISTING 8" MAIN WITH TAPPING SLEEVE & 8" TAPPING VALVE PER UDACS #34, 39 & 2.24.01A
2. INSTALL 8" COMPACT RPDA PER UDACS PLATE #56
3. INSTALL 3- 2" METERS & SERVICE LATERALS W/ CORP STOP & SERVICE SADDLE PER UDACS PLATE #4
4. INSTALL 3 - 2" RPPA PER UDACS PLATE #8
5. INSTALL 6" 45° BEND WITH THRUST BLOCKS PER UDACS PLATE #31
6. INSTALL 8"x 8"x 8" TEE AND 8" GATE VALVE PER UDACS PLATE #30 AND PLATE #39.
7. INSTALL FIRE HYDRANT ASSEMBLY PER UDACS PLATE #40, CONDITION "A"
8. PROTECT WITH BOLLARDS PER UDACS PLATE #75
9. RELOCATE EXISTING FIRE HYDRANT PER NOTE THIS SHEET
10. EXISTING WATER METER TO BE REMOVED AND RETURNED TO LVVWD AND SERVICE ABANDONED PER NOTE THIS SHEET
11. CONNECT TO EXISTING 8" MAIN WITH 8"x6" TAPPING SLEEVE & 6" TAPPING VALVE PER UDACS #34, 39 & 2.24.01A
12. INSTALL 8" 45° BEND WITH THRUST BLOCKS PER UDACS PLATE #31
13. TRENCH BEDDING AND BACKFILL PER CCAUSD 503.1 & 505 AND UDACS PLATE #17
14. ABANDON EXISTING MONITORING WELL PER NEVADA DIVISION OF WATER RESOURCES REGULATIONS
15. CUT, CAP AND ABANDON EXISTING VALVE PER NOTE THIS SHEET
16. EXISTING UTILITY TO BE REMOVED PER GOVERNING AGENCY SPECIFICATIONS
17. ADJUST METER BOX TO FINAL GRADE PER UDACS PLATE #44

FIRE FLOW CALCULATION

FIRE FLOW REQUIREMENT IS 4,000 GALLONS PER MINUTE @ 20 PSI RESIDUAL PRESSURE.

SQUARE FOOTAGE: 255,057 SF
BUILDING HEIGHT: 54'
OF STORIES INCLUDING BASEMENT: 5
USE/OCCUPANCY: R-2, A-3, S-2, B, M
TYPE OF CONSTRUCTION: I-A AND V-A
AUTOMATIC FIRE SPRINKLERS: YES
NFPA 13; X 13R; 13D; ESFR:
LARGEST AREA BETWEEN 4 HOUR WALLS: N/A
HIGH PILED COMBUSTIBLE STORAGE: NO
OF HYDRANTS INSTALLED: 2
LARGEST AREA BETWEEN 4-HOUR: N/A

UTILITY LEGEND

- EXISTING RIGHT-OF-WAY/PROPERTY LINE
- PROPOSED RIGHT-OF-WAY/PROPERTY LINE
- EX. WATER LINE — EXISTING WATER LINE (SIZE PER PLAN)
- EX. SEWER LINE — EXISTING SEWER LINE (SIZE PER PLAN)
- EX. SD — EXISTING STORM DRAIN LINE (SIZE PER PLAN)
- PROPOSED WATER LINE (SIZE PER PLAN)
- PROPOSED SANITARY SEWER LINE (SIZE PER PLAN)
- PROPOSED FIRE HYDRANT
- PROPOSED WATER VALVE
- PROPOSED REDUCER
- EXISTING WATER VALVE
- PROPOSED STORM DRAIN MANHOLE
- EXISTING STORM DRAIN MANHOLE
- PROPOSED SEWER MANHOLE
- PROPOSED SEWER WYE (SIZE AND DIRECTION PER PLAN)
- EXISTING SEWER MANHOLE
- PROPOSED SS CLEANOUT

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

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 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.

12/2/15
LAS VEGAS FIRE & RESCUE — DATE

APPROVED FOR CONSTRUCTION
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE: 2/29/16 PROJECT No. 123905
LVVWD APPROVED FIRE FLOW 4000 GPM AT 20 PSI RESIDUAL

Cardno
Shaping the Future
LAS VEGAS
7115 AMIGO STREET, STE 100, LAS VEGAS, NV 89119
TEL: (702) 990-9300 FAX: (702) 990-9305 www.cardno.com

#	DATE	DESCRIPTION	BY
4	5-12-16	DEPICT UNFORESEEN EXISTING UTILITIES	EL
3	5-07-17	ASI-005: ADD NEW METER AND REALIGN EX. WATER LINE	EL
2		REVISE BUILDING INTERIOR.	EL
1	02-09-18	ASI-008: DEPICT GREASE INTERCEPTOR	EL
0		ASBUILTS AND REVISE LVVWD EASEMENT	EL

UTILITY PLAN
FREMONT & 9TH STREET
901 FREMONT, LLC.
CITY OF LAS VEGAS, NEVADA

PROFESSIONAL ENGINEER — STATE OF NEVADA
EDGAR LEÓN
EXP.: 12/31/2017
CIVIL
No. 21493
12-02-15

DATE	12-2-2015
DRAWN	BP
DESIGNED	BP
CHECKED	EL
PROJECT #	31509350
SHEET TITLE	UTILITY PLAN
SHEET NUMBER	C11
SHEET	11 OF 12

PROJ#:123905 AGR#:115593 QS:139-34-SE XC 111112