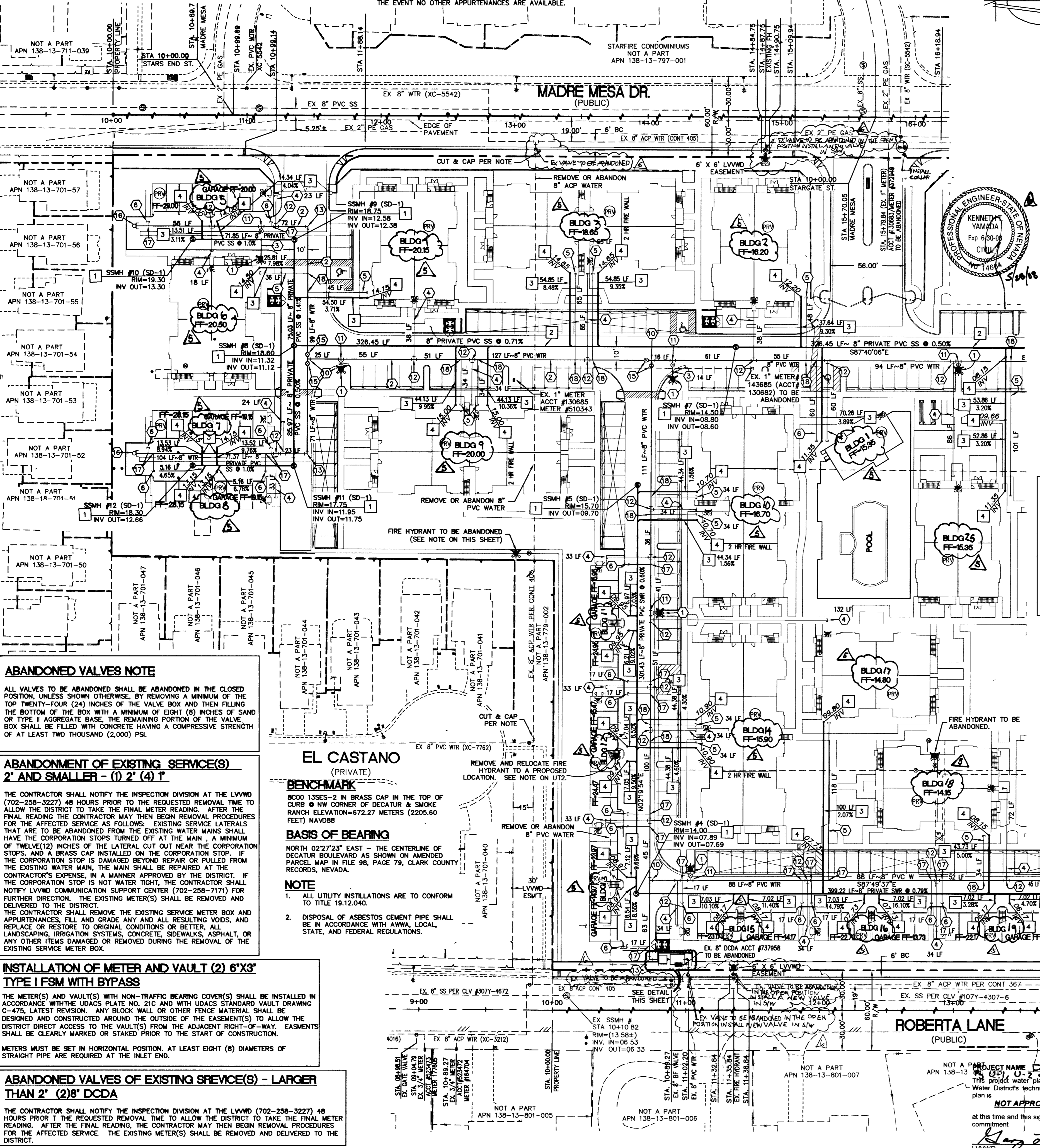


NOTE: THIS PROPERTY MAY HAVE STATIC WATER PRESSURE IN EXCESS OF 80 PSI. THE UNIFORM PLUMBING CODE REQUIRES THAT INDIVIDUAL, ON-SITE (PRIVATE), PRESSURE-REDUCING VALVES BE INSTALLED WHEN-EVER THE PRESSURE EXCEEDS 80 PSI. PRV'S ARE THE DEVELOPER'S RESPONSIBILITY, AND WILL NOT BE INSPECTED OR INCLUDED IN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

NOTE: THE DISTRICT CANNOT GUARANTEE A WATERLIGHT 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 TRAIL SHUTDOWN. CONTRACTOR TO INSTALL TEMPORARY SERVICE TO ENSURE PROPER SHUTDOWN IN THE EVENT NO OTHER APPURTENANCES ARE AVAILABLE.



**ABANDONED VALVES NOTE**  
 ALL VALVES TO BE ABANDONED SHALL BE ABANDONED IN THE CLOSED POSITION, UNLESS SHOWN OTHERWISE, BY REMOVING A MINIMUM OF THE TOP 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 REMAINING PORTION OF THE VALVE BOX SHALL BE FILLED WITH CONCRETE HAVING A COMPRESSIVE STRENGTH OF AT LEAST TWO THOUSAND (2,000) PSI.

**ABANDONMENT OF EXISTING SERVICE(S) 2' AND SMALLER - (1) 2' (4) 1'**  
 THE CONTRACTOR SHALL NOTIFY THE INSPECTION DIVISION AT THE LVWD (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 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 LVWD 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 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.

**INSTALLATION OF METER AND VAULT (2) 6'X3' TYPE I FSM WITH BYPASS**  
 THE METER(S) AND VAULT(S) WITH NON-TRAFFIC BEARING COVER(S) SHALL BE INSTALLED IN ACCORDANCE WITH THE UDAC'S PLATE NO. 21C AND WITH UDAC'S 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.  
 METERS MUST BE SET IN HORIZONTAL POSITION. AT LEAST EIGHT (8) DIAMETERS OF STRAIGHT PIPE ARE REQUIRED AT THE INLET END.

**ABANDONED VALVES OF EXISTING SERVICE(S) - LARGER THAN 2' (2) 8' DCDA**  
 THE CONTRACTOR SHALL NOTIFY THE INSPECTION DIVISION AT THE LVWD (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. THE EXISTING METER(S) SHALL BE REMOVED AND DELIVERED TO THE DISTRICT.

**EL CASTANO (PRIVATE) BENCHMARK**  
 8000 135S-2 IN BRASS CAP IN THE TOP OF CURB @ NW CORNER OF DECATUR & SMOKE RANCH ELEVATION=672.27 METERS (2205.60 FEET) NAVD88  
**BASIS OF BEARING**  
 NORTH 02°27'23" EAST - THE CENTERLINE OF DECATUR BOULEVARD AS SHOWN ON AMENDED PARCEL MAP IN FILE 98, PAGE 79, CLARK COUNTY RECORDS, NEVADA.  
**NOTE**  
 1. ALL UTILITY INSTALLATIONS ARE TO CONFORM TO TITLE 19.12.040.  
 2. DISPOSAL OF ASBESTOS CEMENT PIPE SHALL BE IN ACCORDANCE WITH AWWA, LOCAL, STATE, AND FEDERAL REGULATIONS.

**WATER CONSTRUCTION NOTES**

| ITEM  | QUANTITY |                |
|---|----------|----------------|
|   | UNIT     | PUBLIC PRIVATE |
| 1. INSTALL FIRE HYDRANT ASSEMBLY PER UDS PLATE NO. 7                          | EA       | - 8            |
| 2. INSTALL 8" PVC (CLASS 150) WATER LINE                                      | LF       | 600 2689       |
| 3. INSTALL 6" PVC (CLASS 150) WATER LINE                                      | LF       | - 103          |
| 4. INSTALL 4" PVC WATER LINE  | LF       | - 1559         |
| 5. INSTALL 2" WATER SERVICE   | LF       | - 1004         |
| 6. INSTALL 1-1/2" WATER SERVICE   | LF       | - 365          |
| 7. NOT IN USE 8"  | EA       | - -            |
| 8. INSTALL 8" REDUCED PRESSURE PRINCIPLE ASSEMBLY (RPPA) PER UDS PLT. NO. 11C | EA       | 2 - -          |
| 9. ABANDON EX. 8" DCDA AND INSTALL 8" X 3" TYPE I FSM PER UDS PLT. NO. 21C    | EA       | 2 - -          |
| 10. INSTALL 8" X 8" TEE W/THRUST BLOCK PER UDS PLT. NO. 5                     | EA       | 1 4            |
| 11. INSTALL 8" X 6" TEE W/THRUST BLOCK PER UDS PLT. NO. 5                     | EA       | - 8            |
| 12. INSTALL 8" X 4" TEE W/THRUST BLOCK PER UDS PLT. NO. 5                     | EA       | - 25           |
| 13. INSTALL 8" 90° BEND W/THRUST BLOCK PER UDS PLT. NO. 5                     | EA       | - 6            |
| 14. INSTALL 8" X 6" REDUCER   | EA       | - 4            |
| 15. INSTALL 8" GATE VALVE   | EA       | 1 8            |
| 16. INSTALL 8" MANUAL BLOW-OFF ASSEMBLY PER UDS PLT. NO. 4A                   | EA       | 1 2            |
| 17. INSTALL 1-1/2" SERVICE SADDLE   | EA       | - 23           |
| 18. INSTALL 2" SERVICE SADDLE   | EA       | - 21           |

**SEWER CONSTRUCTION NOTES**

| ITEM  | QUANTITY |                |
|---|----------|----------------|
|   | UNIT     | PUBLIC PRIVATE |
| 1. INSTALL 48" DIA. SANITARY SEWER MANHOLE PER STD. DWG. NO. SD-1 | EA       | 1 11           |
| 2. INSTALL 8" PVC (SDR-35) SEWER MAIN                             | LF       | - 2275         |
| 3. INSTALL 4" PVC (SDR-35) SEWER LATERAL                          | LF       | - 1329         |
| 4. INSTALL 4" SANITARY SEWER CLEANOUT                             | EA       | - 48           |

**PRIVATE MANHOLE SCHEDULE**

| MANHOLE  | TYPE | RIM   | INV IN | INV OUT | DEPTH |
|----------|------|-------|--------|---------|-------|
| SSMH #1  | SD-1 | 09.3± | 01.58  | 01.38   | 08.33 |
| SSMH #2  | SD-1 | 10.80 | 03.00  | 02.80   | 08.00 |
| SSMH #3  | SD-1 | 11.70 | 04.55  | 04.35   | 07.35 |
| SSMH #4  | SD-1 | 14.00 | 07.89  | 07.69   | 06.31 |
| SSMH #5  | SD-1 | 15.70 | -      | 09.70   | 06.00 |
| SSMH #6  | SD-1 | 13.10 | 06.97  | 06.77   | 06.35 |
| SSMH #7  | SD-1 | 14.50 | 08.80  | 08.60   | 05.90 |
| SSMH #8  | SD-1 | 18.60 | 11.32  | 11.12   | 07.48 |
| SSMH #9  | SD-1 | 18.75 | 12.58  | 12.38   | 06.37 |
| SSMH #10 | SD-1 | 19.30 | -      | 13.30   | 06.00 |
| SSMH #11 | SD-1 | 17.75 | 11.95  | 11.75   | 06.00 |
| SSMH #12 | SD-1 | 18.30 | -      | 12.66   | 05.64 |

**FIRE FLOW CALCULATIONS**  
 FIRE FLOW REQUIREMENT IS 1750 GALLONS PER MINUTE AT 20 PSI RESIDUAL PRESSURE.  
 BASED ON:  
 SQUARE FOOTAGE: 16,182 SQUARE FEET  
 LARGEST AREA BETWEEN 4-HOUR SEPARATION WALLS: N/A SQUARE FEET  
 BUILDING HEIGHT: 35' MAX  
 NUMBER OF STORIES: 2 FLOORS  
 TYPE OF CONSTRUCTION: V-B  
 OCCUPANCY: R  
 FULL AUTOMATIC FIRE SPRINKLER SYSTEM: NO YES  
 REVIEWED BY: Robert Bell DATE: 12/7/06  
 LAS VEGAS FIRE DEPT.

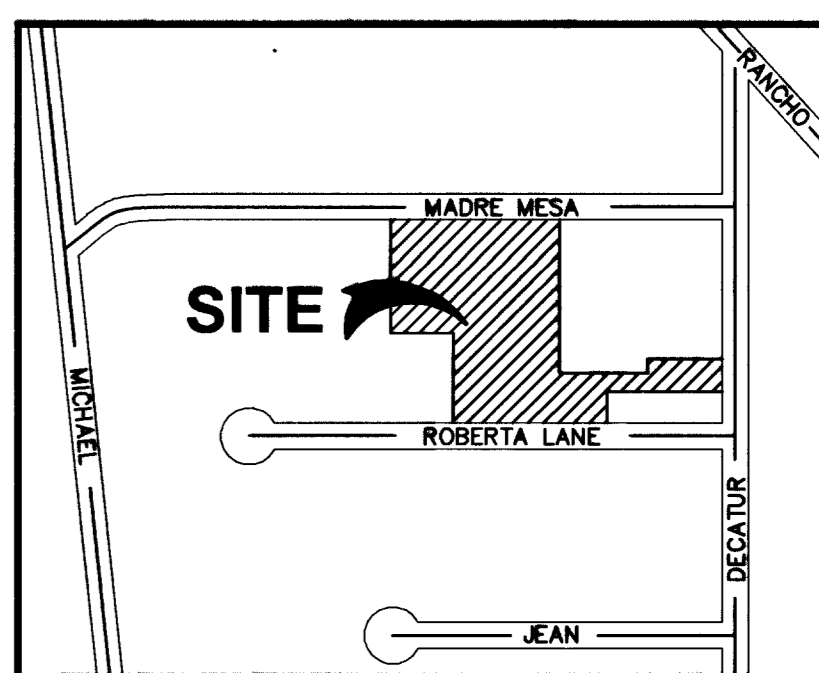
**REDUCED PRESSURE PRINCIPLE ASSEMBLY (2) 8" RPPA**  
 APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY(S) SHALL BE INSTALLED PER THE U.D.A.C.S. PLATE NO. 11C. NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW PREVENTION UNTIL THE REDUCED PRESSURE PRINCIPLE ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY THE LVWD. 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 VAULTS FROM THE ADJACENT RIGHT-OF-WAY. EASEMENT SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.

**RELOCATION OF PRIVATE FIRE HYDRANTS (4)**  
 (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 UDAC'S PLATE 7. LATERALS MADE OF UNAPPROVED MATERIALS SHALL BE REPLACED FROM THE MAIN TO THE FIRE HYDRANT. RELOCATIONS WHERE THE LATERAL CANNOT BE EXTENDED SHALL BE TESTED AS NEW INSTALLATIONS.

**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 TWO(2) FEET TO THE EXISTING GRADE. THE EXISTING HYDRANT SHALL BE DELIVERED TO THE DISTRICT. THE EXISTING VALVE SHALL BE ABANDONED IN A CLOSED POSITION, UNLESS SHOWN OTHERWISE, BY REMOVING A MINIMUM OF THE TOP 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 REMAINING PORTION OF THE VALVE 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 PLANS, AND CAPPED. THE EXISTING CONCRETE HYDRANT PAD SHALL BE REMOVED.

**DISCLAIMER NOTE**

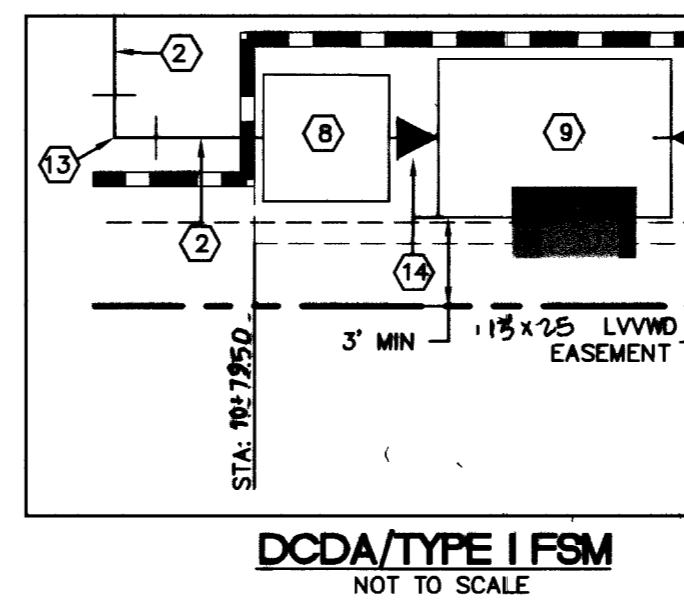
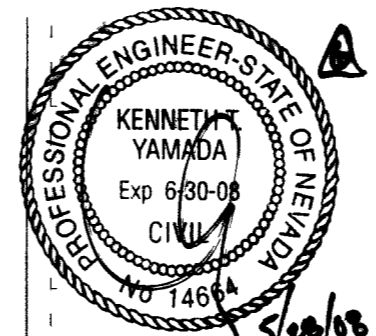
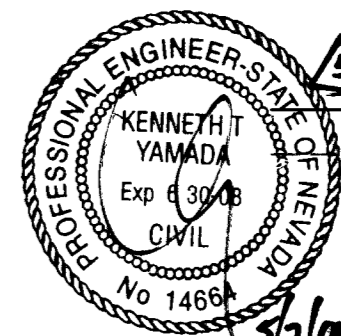
UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UNDERGROUND AND OVERHEAD UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN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



**VICINITY MAP**  
 NO SCALE

**LEGEND**

|     |  |
|-----|--|
| --- | PROPERTY LINE                                |
| --- | STREET CENTERLINE                            |
| --- | PROPOSED 1" CURB & GUTTER                    |
| --- | EXISTING 1" CURB & GUTTER                    |
| --- | PROPOSED "A" CURB & GUTTER                   |
| --- | EXISTING BLOCK WALL                          |
| --- | PROPOSED EDGE OF PAVEMENT                    |
| --- | EXIST. EDGE OF PAVEMENT                      |
| --- | WATER CONSTRUCTION NOTE                      |
| --- | SEWER CONSTRUCTION NOTE                      |
| --- | PROPOSED FIRE HYDRANT ASSY.                  |
| --- | EXISTING FIRE HYDRANT                        |
| --- | PROPOSED GATE VALVE                          |
| --- | PROPOSED WATERLINE                           |
| --- | EXISTING WATERLINE                           |
| --- | PROPOSED SEWER MANHOLE                       |
| --- | EXISTING SEWER MANHOLE                       |
| --- | PROPOSED SEWER LATERAL W/CLEANOUT            |
| --- | PROPOSED WATER LATERAL                       |
| --- | PROPOSED FIRE DEPARTMENT CONNECTION LOCATION |
| --- | PRESSURE REDUCING VALVE                      |



**DCDA/TYPE I FSM**  
 NOT TO SCALE

157 MTD 10/25/07  
 10/31/07  
 LAS VEGAS VALLEY WATER DISTRICT  
 PROJECT #113444 SHEET 011,012, U13  
 Robert Bell  
 CITY OF LAS VEGAS FIRE MARSHAL  
 12/7/06  
 FIRE FLOW REQUIREMENT IS 1750 GALLONS PER MINUTE AT 20 PSI RESIDUAL

**CLV DWG # 107V4783**  
 1-800-227-2600  
 1-702-455-7511  
 1-702-227-2929  
 1-702-229-6811