

SANITARY SEWER MANHOLE SCHEDULE

MH#	ID	TYPE	STATION	OFFSET	RIM EL	8" INV IN	8" INV OUT
1		SD-1	2+44, MELLO AVE.	5' RT	2312.46	2305.46	2305.28

AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY.
 Call before you Dig.
 Call 811
 OR
 1-800-227-2600
 CLARK COUNTY TRAFFIC OPERATIONS
 1-702-455-7544

AVOID OVERHEAD POWER LINE CONTACT. IT'S COSTLY.
 Call before you OVERHEAD
 1-702-227-2929
 NEVADA POWER ENVIRONMENT AND SAFETY SERVICES DEPARTMENT

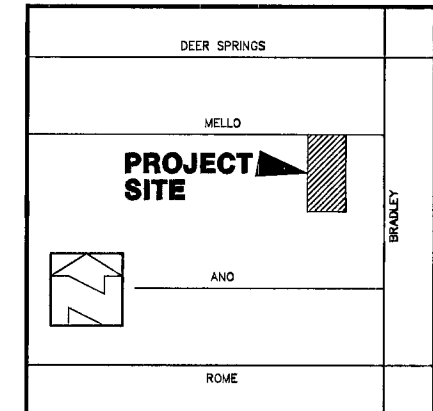
AVOID HITTING UNDERGROUND TRAFFIC SIGNAL SYSTEMS AND STREET LIGHT SYSTEM CONDUITS. IT'S COSTLY.
 Call before you UNDERGROUND
 1-702-455-7511
 CLARK COUNTY TRAFFIC OPERATIONS
 AND
 1-702-432-5300
 LAS VEGAS AREA COMPUTERIZED TRAFFIC SYSTEM

BENCHMARK
 CITY OF LAS VEGAS DATUM - BENCHMARK NO. SLV90 24WB
 NAVD 88 ELEVATION = 2317.56 FT (706.39452 M)
 RIVET & PLATE IN TOP OF CURB @ NW CORNER OF LEON AVE. & DEER SPRINGS RD.

BASIS OF BEARINGS
 NORTH 87°09'38" EAST BEING THE CENTERLINE OF MELLO AVENUE BETWEEN JONES BOULEVARD AND BRADLEY ROAD AS SHOWN BY MAP THEREOF IN FILE 52 OF RECORDS OF SURVEY, PAGE 70, OFFICIAL RECORDS, CLARK COUNTY, NEVADA.

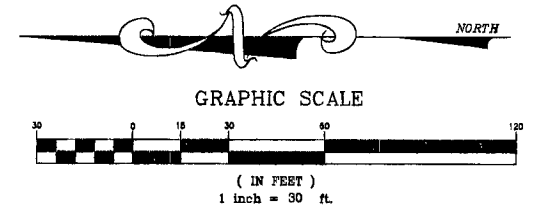
LEGAL DESCRIPTION
 LOT 176 IN FILE 52 OF RECORDS OF SURVEY, PAGE 70, OFFICIAL RECORDS, CLARK COUNTY, NEVADA, BEING A PORTION OF THE NORTHEAST QUARTER (NE 1/4) OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION 24, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., CLARK COUNTY, NEVADA.

APN 125-24-302-012



LOCATION
 SCALE: NONE

SEWER CONTRIBUTION
 AVERAGE FLOW = 181 GPD
 PEAK FLOW = 525 GPD



LAS VEGAS VALLEY WATER DISTRICT STANDARD NOTES

- LVVWD PROJECT # 116179
- NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN APPROVED FOR CONSTRUCTION BY THE LVVWD. FOLLOWING WATER PLAN APPROVAL, NOTICE SHALL BE GIVEN TO THE LVVWD COMMUNICATION SUPPORT CENTER (258-7171) TWO (2) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION. FOR FUTURE INSPECTIONS, NOTICE MUST BE GIVEN BY 2:00 P.M. THE BUSINESS DAY PRIOR TO THE REQUESTED LVVWD INSPECTION. WHEN REQUESTING INSPECTIONS, PLEASE REFER TO THE PROJECT # IDENTIFIED ABOVE.
 - ALL WORK SHALL CONFORM TO THE LVVWD'S STANDARD PLATES, DRAWINGS, AND SPECIFICATIONS AND TO THE 2003 EDITION OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS (UDACS).
 - ALL WORK, EXCEPT AS MODIFIED BY THESE PLANS OR BY NOTE 2 ABOVE, SHALL BE DONE IN ACCORDANCE WITH THE MOST RECENT DRAFT OR EDITION OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OF THE IMPROVEMENTS, CLARK COUNTY AREA.
 - A SINGLE PIPE MATERIAL SHALL BE USED THROUGHOUT THE PROJECT UNLESS OTHERWISE APPROVED BY THE LVVWD.
 - ALL SERVICE LATERALS TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE TYPE K COPPER TUBING WITH LVVWD APPROVED SERVICE SADDLES.
 - ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.
 - ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS, VALLEY AND CURB OUTTERS.
 - ALL WATER AND STORM DRAIN OR SANITARY SEWER CROSSINGS SHALL CONFORM TO SECTION 2.19 OF THE 2003 EDITION OF THE UDACS.
 - ALL WATER FACILITIES SHALL BE FILLED, DISINFECTED, PRESSURE TESTED, FLUSHED, FILLED AND AN ACCEPTABLE WATER SAMPLE OBTAINED, PRIOR TO CONNECTION TO THE LVVWD DISTRIBUTION SYSTEM.
 - THE CONTRACTOR MUST OBTAIN ALL METERS TWO (2) INCHES AND SMALLER FROM LVVWD CENTRAL STORES. TELEPHONE 258-3152 OR 258-3802, TWO (2) WORKING DAYS PRIOR TO METER PICKUP.
 - ANY INTERRUPTION OF SERVICE MUST BE PERFORMED IN ACCORDANCE WITH UDACS SECTION 3.13.01, AND APPROVED BY THE LVVWD INSPECTION DIVISION PRIOR TO SHUTDOWN. PROPER WRITTEN NOTIFICATION MUST BE GIVEN TO ALL AFFECTED CUSTOMERS.
 - ALL WATER FACILITY CONSTRUCTION MATERIALS USED MUST BE AS LISTED ON THE LVVWD PRE-APPROVED MATERIALS AND MANUFACTURERS LISTING FOR NEW FACILITIES, LATEST REVISION, OR SPECIFICALLY APPROVED ON THESE PLANS.
 - TELEPHONE "CALL BEFORE YOU DIG" AT 811 OR 1-800-227-2800.

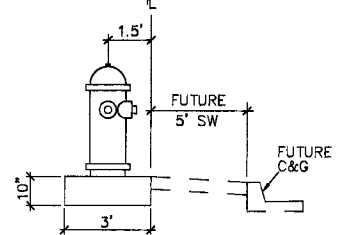
WATER QUANTITIES ESTIMATE & CONSTRUCTION NOTES

- | | | |
|----|--|--------|
| 1 | INSTALL 10"x10" M.J. (OR APPROVED EQUAL) TAPPING SLEEVE W/ 10" TAPPING VALVE PER UDACS PLT 3, 8 & 22 | 1 EA |
| 2 | INSTALL 10" GATE VALVE PER UDACS PLTS 3 & 8 | 1 EA |
| 3 | INSTALL 10"x8" TEE PER UDACS PLT 5 | 1 EA |
| 4 | INSTALL 8"x8" TEE PER UDACS PLT 5 | 2 EA |
| 5 | INSTALL 8" GATE VALVE PER UDACS PLTS 3 & 8 | 2 EA |
| 6 | FIRE HYDRANT ASSEMBLY PER UDACS PLT 7 | 2 EA |
| 7 | INSTALL 8" END CAP, 10' STUB & 2" BLOWOFF PER UDACS PLT 4A | 1 EA |
| 8 | INSTALL 1" WATER SERVICE (COPPER) & 8"x1" SERVICE SADDLE PER UDACS PLT 1D | 1 EA |
| 9 | INSTALL 1" WATER METER PER UDACS PLATE 1D | 1 EA |
| 10 | INSTALL 10" END CAP, 10' STUB & 2" BLOWOFF PER UDACS PLT 4A | 1 EA |
| 11 | INSTALL 8" GATE VALVE PER UDACS PLTS 3 & 8 | 2 EA |
| 12 | INSTALL 1.0' DEFLECTION | 4 EA |
| 13 | INSTALL 0.41' DEFLECTION | 1 EA |
| 14 | INSTALL 0.31' DEFLECTION | 1 EA |
| | 10" PVC | 335 LF |
| | 8" PVC | 302 LF |

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. PRIVATE ARE THE DEVELOPER'S RESPONSIBILITY AND WILL NOT BE INSPECTED OR INCLUDED IN THE ACCEPTANCE OF LVVWD FACILITIES.

NOTE:
 INSTALL PIPELINE MARKER BALLS IN TRENCH ABOVE EACH HORIZONTAL ELBOW FITTING, PER UDACS PLATE NO. 27

WATER MAIN JOINT DEFLECTION (PVC, 4-24")
 PVC PIPE SHALL BE DEFLECTED AT THE JOINT ONLY. THE MAXIMUM ALLOWABLE DEFLECTION SHALL BE ONE (1) DEGREE PER JOINT WITH A MINIMUM RADIUS OF CURVATURE OF 1,150 FEET, PER UDACS 2.06.01 AND 2.06.02. FOR CHANGES IN DIRECTION EXCEEDING THE MAXIMUM ALLOWABLE JOINT DEFLECTION, FITTINGS SHALL BE USED.



FIRE HYDRANT DETAIL

WATER LEGEND

- PROPOSED FIRE HYDRANT
- ⊙ EXISTING WATER VALVE
- ⊙ PROPOSED WATER VALVE
- 10"W- EXISTING WATER LINE
- 8"W- PROPOSED WATER LINE
- - - PROPERTY LINE
- [] PROPOSED CAP
- PROPOSED WATER METER
- PVC POLYVINYL CHLORIDE PIPE

CONSTRUCTION NOTES

- SAWCUT EX. AC PAVEMENT PER CCASD 500B.2 & 500B.3. TRENCH BACKFILL PER CCASD 503. AC PATCHES MUST BE MACHINE LAID.
- 4" PVC SS LATERAL @ 2% MIN.

APPROVALS

LAS VEGAS FIRE DEPARTMENT

FIRE FLOW REQUIREMENT IS: 2,500 GALLONS PER MINUTE AT 20 PSI RESIDUAL PRESSURE.
 BASED ON:
 SQUARE FOOTAGE: 8,051 SF
 LARGEST AREA BETWEEN 4-HOUR: -
 AREA SEPARATION WALLS: -
 BUILDING HEIGHT: 32 FT.
 NUMBER OF STORIES: 2 FLOORS
 TYPE OF CONSTRUCTION: V - B
 OCCUPANCY: R-3
 FULL AUTOMATIC FIRE SPRINKLER SYSTEM: NO

REVIEWED BY: *[Signature]*
 DATE: 12/20/09

KATHERINE & CECIL FREDI
 2017 WINTO LANE
 LAS VEGAS, NV 89105
 TEL (702) 303-6876 FAX (702) 395-3537

ROBERT J. LANGAN
 ENGINEERING
 3300 Spring Mountain Road - Suite 81
 Las Vegas, NV 89129
 TEL (702) 398-8482 FAX (702) 398-8485

MASTER UTILITY PLAN

MELLO, 5410 FOR FREDI WATER MAIN & SERVICE

DRAWN BY: R. J. LANGAN 12/14/09
 DESIGNED BY: R. J. LANGAN 12/14/09
 CHECKED BY: R. J. LANGAN 12/14/09
 PROJECT NO: FREDI
 SCALE: 1" = 30' VER.
 SHEET: 3 OF 5 SHEETS
 CLV DRAWING NO. 107V5345

SEAL
 ROBERT J. LANGAN
 Exp: 12-31-11
 CIVIL
 No. 6487

SHEET **C3**
 3 OF 5 SHEETS
 DATE
 H # 35991

120780