

CALL BEFORE YOU DIG
1-800-227-2600
UNDERGROUND SERVICE (USA)

ANY INFORMATION OR DATA ON THIS DRAWING IS NOT INTENDED TO BE SUITABLE FOR REUSE BY ANY PERSON, FIRM, CORPORATION, OR ANY OTHERS ON EXTENSIONS OF THIS PROJECT OR FOR ANY USE ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION AND ADOPTION BY THE ENGINEER FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO THE ENGINEER.

BENCHMARK

11'000 2W4
RIVET & PLATE IN TOP OF CURB, NORTHEAST RETURN OF RAINBOW BLVD. AND CRAIG ROAD
2316.68 FEET
706.1261 METERS
NAVD88

FIRE FLOW CALCULATIONS

FIRE FLOW REQUIREMENT IS 1,750 GALLONS PER MINUTE AT 20 PSI RESIDUAL PRESSURE.

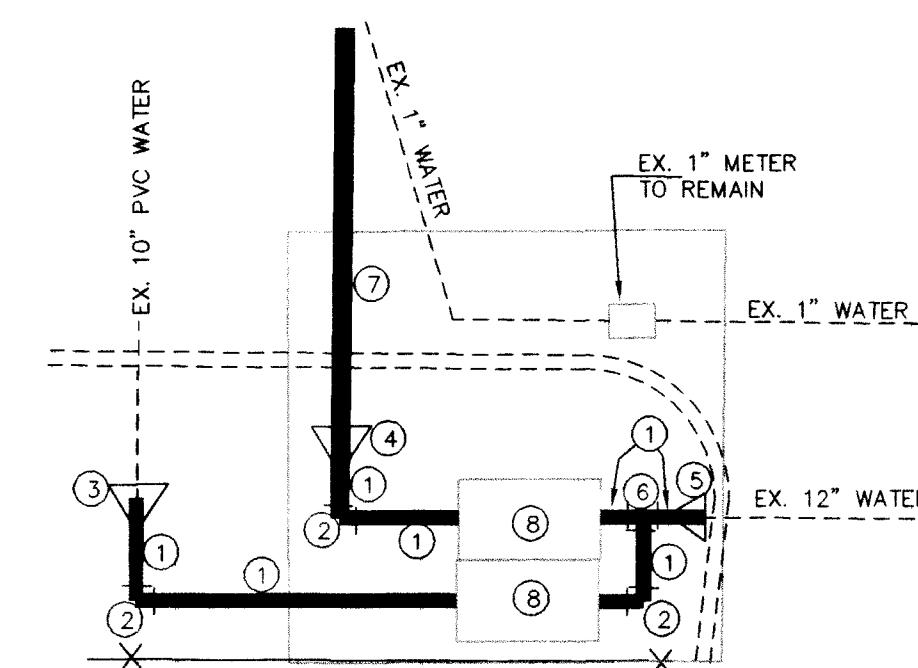
BASED ON:
SQUARE FOOTAGE: 22,000 SQUARE FEET
LARGEST AREA BETWEEN 4-HOUR AREA SEPARATION WALLS: 22,000 SQUARE FEET
BUILDING HEIGHT: 10 FEET
NUMBER OF STORES: 1 FLOOR
TYPE OF CONSTRUCTION: TYPE II - NON RATED
OCCUPANCY: MINI STORAGE
FULL AUTOMATIC FIRE SPRINKLER SYSTEM YES
THE SYSTEMS SHALL BE DESIGNED BASED ON NFPA-13 FOR AN 10-20-97

QUANTITIES ARE ESTIMATES ONLY. QUANTITIES MUST BE VERIFIED BY CONTRACTOR.

WATER QUANTITIES:
8" PVC: 990 LF
6" PVC: 105 LF
1" SERVICE: 305 LF
8"x8" TEE: 1 EA.
12"x6"x12" TEE: 1 EA.
10"x8"x10" TEE: 1 EA.
8"x6"x8" TEE: 2 EA.
6" GATE VALVE: 2 EA.
8" GATE VALVE: 1 EA.
8" 45 DEGREE ELBOW: 2 EA.
8" 90 DEGREE ELBOW: 2 EA.
6" 90 DEGREE ELBOW: 1 EA.
FIRE HYDRANT: 2 EA.
6" DCDA: 2 EA.

LAS VEGAS VALLEY WATER DISTRICT WATER NOTES

- NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN RELEASED FOR CONSTRUCTION BY THE LVVWD. FOLLOWING WATER PLAN APPROVAL, 48 HOUR NOTICE SHALL BE GIVEN TO THE LVVWD COMMUNICATION SUPPORT CENTER (258-7171) PRIOR TO THE START OF CONSTRUCTION. NOTICE MUST BE GIVEN BY 2:00PM THE BUSINESS DAY PRIOR TO A LVVWD INSPECTION.
- ALL WORK SHALL CONFORM TO LVVWD STANDARD PLATES, DRAWINGS, AND SPECIFICATIONS, LATEST EDITION, AND THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR WATER DISTRIBUTION SYSTEMS (UDACS), LATEST EDITION.
- ALL WORK, EXCEPT AS MODIFIED BY THESE PLANS OR BY NOTE 2, SHALL BE DONE IN ACCORDANCE WITH THE MOST CURRENT DRAFT OR EDITION OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFFSITE IMPROVEMENT, 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 COPPER TUBING WITH LVVWD APPROVED SADDLES.
- ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.
- ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS, VALLEY AND CURB GUTTERS.
- THE FOLLOWING REQUIREMENTS MUST BE MET IN THE EVENT A WATER LINE AND SANITARY OR STORM SEWER LINE CROSS:
A. A MINIMUM EIGHTEEN (18) INCH VERTICAL SEPARATION (OUTSIDE TO OUTSIDE) MUST BE MAINTAINED WHEN THE WATER LINE IS INSTALLED OVER THE SANITARY OR STORM SEWER LINE. IF THE VERTICAL SEPARATION CANNOT BE MAINTAINED OR THE WATER LINE MUST BE PLACED UNDER THE SANITARY OR STORM SEWER LINE, THE SANITARY OR STORM SEWER LINE MUST BE CONSTRUCTED WITH ONE OF THE FOLLOWING OR, AS SHOWN ON THESE PLANS:
A. POTABLE WATER SUPPLY QUALITY MATERIAL.
B. ENCASEMENT, WITH FOUR (4) INCH CONCRETE (MINIMUM)
C. SLEEVING WITH POTABLE WATER SUPPLY QUALITY PIPE.
EACH PROVISION MUST EXTEND ALONG THE SANITARY OR STORM SEWER, ON EITHER SIDE OF THE MAIN, A MINIMUM 10 FOOT DISTANCE PERPENDICULAR TO THE WATER MAIN EXTERIOR.
- WARNING TAPE SHALL BE REQUIRED OVER ALL MAINS, ALL SIX (6) INCH DIAMETER AND LARGER SERVICE LATERALS, AND ANY SERVICE LATERAL NOT INSTALLED PERPENDICULAR TO THE MAIN IN ACCORDANCE WITH STANDARD PLATE NO. 27.
- ALL WATER FACILITIES SHALL BE FILLED, DISINFECTED, PRESSURE TESTED, FLUSHED, FILLED AND AN ACCEPTABLE WATER SAMPLE OBTAINED, PRIOR TO CONNECTION TO THE LVVWD'S DISTRIBUTION SYSTEM.
- THE CONTRACTOR MUST OBTAIN ALL METERS TWO (2) INCHES AND SMALLER FROM LVVWD CENTRAL STORES. TELEPHONE 258-3152 FORTY-EIGHT (48) HOURS PRIOR TO PICKUP.
- CONSTRUCTION MAY INTERRUPT SERVICE, WITH LVVWD APPROVAL AND PROPER NOTIFICATION, BETWEEN HOURS OF 10PM AND 6AM SUNDAY THROUGH THURSDAY. CIRCUMSTANCES MAY REQUIRE TEMPORARY SERVICE FEES BE INSTALLED, WITHOUT LVVWD REIMBURSEMENT. ANY TEMPORARY SERVICE FEE MUST HAVE PRIOR LVVWD APPROVAL.
- ALL WATER FACILITY CONSTRUCTION MATERIALS USED MUST BE AS LISTED ON THE LVVWD'S FIRE-APPROVED MATERIALS AND MANUFACTURERS LISTING FOR NEW FACILITIES, LATEST REVISION, OR SPECIFICALLY APPROVED ON THESE PLANS.



REMOVE EX. 8" DETECTOR CHECK AND INSTALL (2) 6" DCDA - (1) FOR THE EX. FIRE LINE AND (1) FOR THE NEW FIRE LINE.
THE EXISTING METER SHALL BE REMOVED AND DELIVERED TO THE DISTRICT. THE CONTRACTOR SHALL THEN REMOVE AND/OR BACKFILL THE ABANDONED VAULT.
THE DDCA'S SHALL BE INSTALLED IN THE 15'x15' LVVWD EASEMENT.

- INSTALL 6" PVC WATER
- INSTALL 6" 90 DEGREE ELBOW
- INSTALL 6"x10" REDUCER - CONNECT TO EX. LINE
- INSTALL 6"x8" REDUCER
- INSTALL 6"x12" REDUCER - CONNECT TO EXISTING LINE
- INSTALL 6"x6"x6" TEE
- INSTALL 8" PVC WATER
- INSTALL 6" DCDA CLA-VAL MODEL DBSL OR FEBCO 6" MODEL 876

DETAIL 'H'

APPROVED
Bronia Craft 10-24-97
LAS VEGAS VALLEY WATER DISTRICT DATE

NOTE:
EXISTING UTILITIES AND IMPROVEMENTS SHOWN ON THESE PLANS WERE LOCATED FROM THE BEST INFORMATION AVAILABLE AT THE TIME. THE ENGINEER BEARS NO RESPONSIBILITY FOR EXISTING UTILITIES AND IMPROVEMENTS NOT SHOWN OR FOR UTILITIES AND IMPROVEMENTS NOT IN THE LOCATION SHOWN ON THESE PLANS. THE CONTRACTOR SHALL BEAR FULL RESPONSIBILITY FOR NOTIFYING ALL UTILITY COMPANIES BEFORE STARTING CONSTRUCTION, AND PHYSICALLY LOCATING ALL UTILITIES AND IMPROVEMENTS PRIOR TO COMMENCING CONSTRUCTION.

INSTALLATION OF DOUBLE CHECK DETECTOR ASSEMBLY 2 - 6"

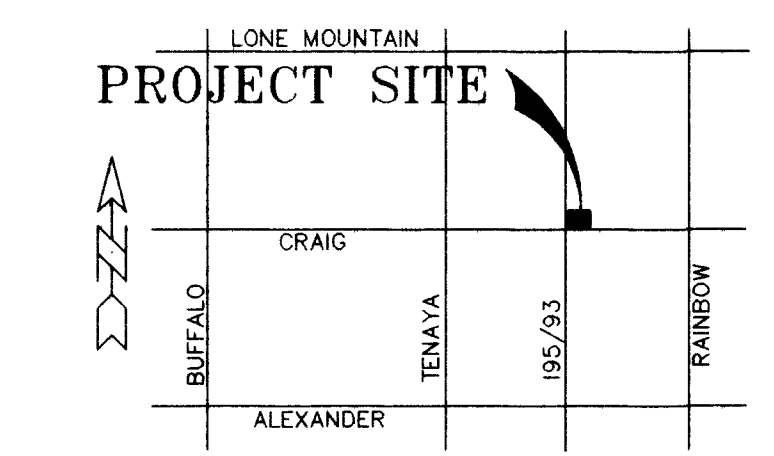
THE DOUBLE CHECK DETECTOR ASSEMBLIES SHALL BE INSTALLED IN ACCORDANCE WITH THE UDACS PLATE 20B.

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.

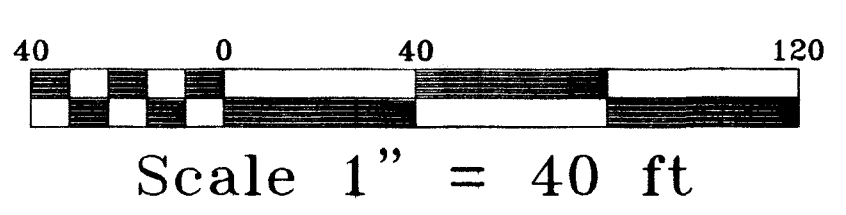
[Signature] 10-24-97
CLV FIRE DEPARTMENT DATE

CLV FIRE DEP. NOTES

- ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE CITY OF LAS VEGAS FIRE DEPARTMENT "HYDRANT SPECIFICATIONS", "HYDRANT INSTALLATION SPECIFICATIONS" AND ORDINANCE #3944.
- AUTHORIZED HYDRANTS FOR THIS PROJECT ARE:
A. KENNEDY GUARDIAN
B. MUELLER A-423 CENTURIAN
C. CLOW MODEL 2546 MEDALLION
- ON ANY NEW HOME OR BUILDING INSTALLATION, ACCESSIBLE FIRE HYDRANTS SHALL BE INSTALLED BEFORE COMBUSTIBLE CONSTRUCTION COMMENCES AND SAID FIRE HYDRANTS SHALL BE IN GOOD WORKING ORDER WITH AN ADEQUATE WATER SUPPLY.
- CONTRACTOR SHALL PLACE A BLUE REFLECTIVE MARKER AT CENTERLINE OF STREET ADJACENT TO FIRE HYDRANT AS REQUIRED IN ORDINANCE #3944 TO IDENTIFY FIRE HYDRANT LOCATIONS.
- CALL THE LAS VEGAS FIRE DEPARTMENT AT 229-2071 FOR UNDERGROUND INSPECTION, PRESSURE AND FLUSH VERIFICATION OF ALL FIRE HYDRANTS AND FIRE LINES BEFORE COVERING.
- PAINTING OF CURBS AND HYDRANT AND ANY WORK NECESSARY FOR PROTECTION OF HYDRANTS FROM PHYSICAL DAMAGE PER ORDINANCE #3944 SHALL BE COMPLETED BEFORE APPROVAL BY THE CITY OF LAS VEGAS FIRE DEPARTMENT.
- A PERMIT IS REQUIRED FROM THE FIRE DEPARTMENT FOR ON-SITE WATER LINE AND FIRE HYDRANT. THE PERMIT AND CONTRACTORS MATERIAL AND TEST CERTIFICATE FOR UNDERGROUND PIPING FORM SHALL BE OBTAINED FROM THE FIRE PROTECTION ENGINEER PRIOR TO ANY WORK BEGINNING.
- PRIVATE FIRE HYDRANTS SHALL BE PAINTED RED.
- A FLOW TEST MUST BE WITNESSED BY THE FIRE DEPARTMENT PRIOR TO OCCUPANCY FOR VERIFICATION OF REQUIRED ON-SITE WATER SUPPLY.
- ALL ON-SITE FIRE MAIN MATERIALS MUST BE U.L. LISTED AND A.W.W.A. APPROVED.



VICINITY MAP
NTS
A PORTION OF THE NORTHEAST QUARTER OF SECTION 3, TOWNSHIP 20 SOUTH, RANGE 80 EAST, 2.6 ACRES
APN 138-03-602-012



SEWER CONTRIBUTION - 0 UNITS

PEAK FLOW: 0 GPD
AVERAGE FLOW: 0 GPD

- ALL WATER SYSTEM FACILITIES OUTSIDE THE BUILDING ARE TO BE CONSTRUCTED AS PER THE SPECIFICATIONS CALLED OUT IN THE "UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR WATER DISTRIBUTION SYSTEMS", THE LATEST EDITION.
- ALL IMPROVEMENTS OUTSIDE THE BUILDING ARE TO BE CONSTRUCTED AS PER THE SPECIFICATIONS AND DRAWINGS CALLED OUT IN CLARK COUNTY'S STANDARD DRAWINGS AND SPECIFICATION, THE LATEST EDITION.

EX. MINI STORAGE

EXISTING DRIVEWAY R/W

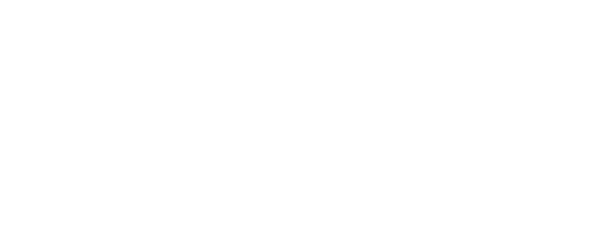
CRAIG ROAD

BALSAM ST.

STREET LIGHT LOCATION

NO SCALE

STREET LIGHT NOTE:
ALL HAND HOLE COVERS MUST BE INSTALLED. POLE CAPS POURED, AND PULL BOX LIDS BOLTED DOWN PRIOR TO ENERGIZING CIRCUIT. ALL WIRE MUST HAVE THW INSULATION.



EX. OFFICE
EX. SEPTIC TANK & LEACH FIELD

SEE DETAIL 'H' THIS SHEET

JOB No. 4006

CIVIL ENGINEERING
LAND DEVELOPMENT
CONSTRUCTION SERVICES

P.R.E. ENGINEERING

PHILLIP W. REBECKI
REGISTERED PROFESSIONAL ENGINEER - STATE OF NEVADA
NO. 11278

10/23/97
DRAWN BY: PWR
DESIGNED BY: PWR
CHECKED BY: KEM
SCALE: 1"=40'
FILE: 4006-UTL

MCFADDEN MINI STORAGE UTILITY SHEET

PREPARED FOR: MINI MASTERS

REVISIONS	NO.	DATE	DESCRIPTION	BY	APPROVAL

SHEET
3
SHT 3 OF 4

1793

107-12694

