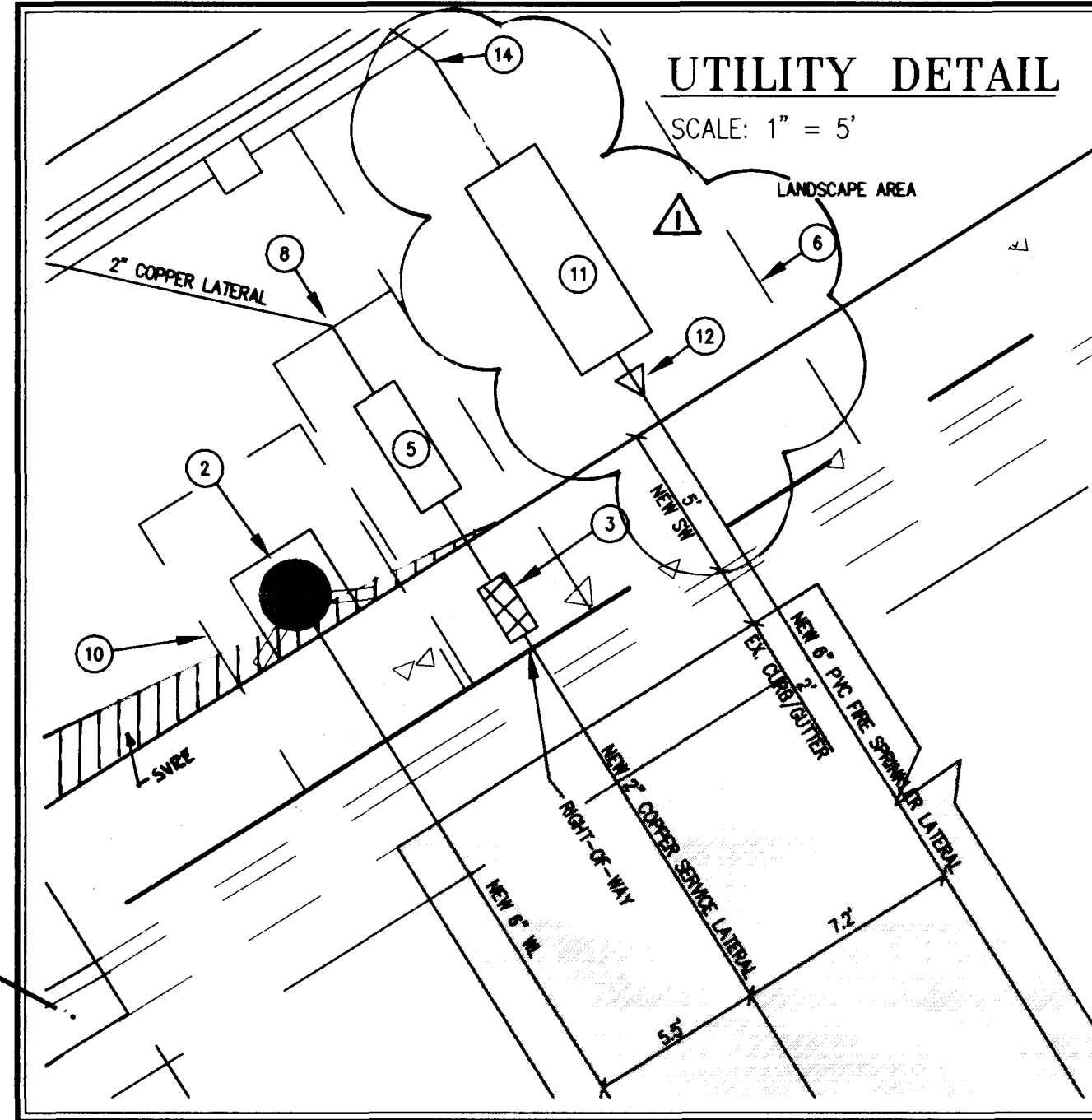
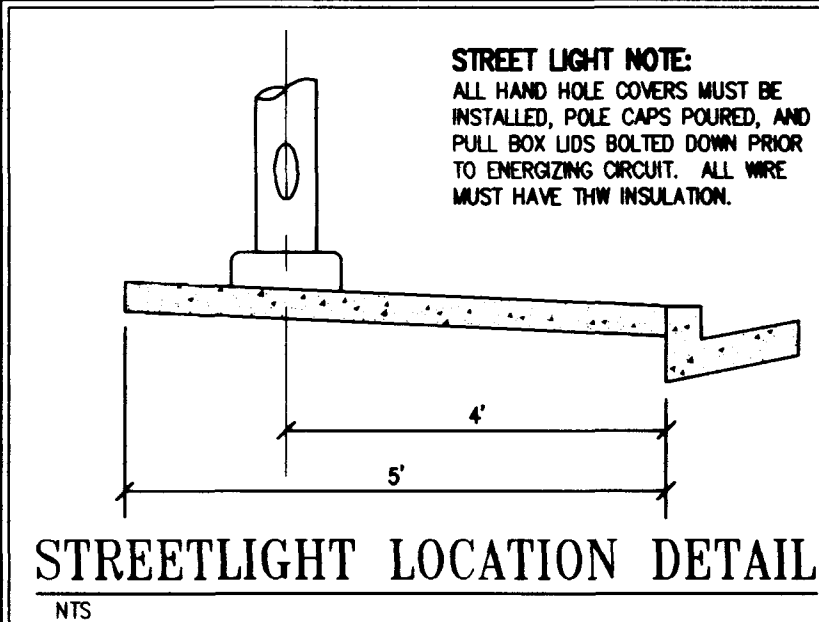


OWNER
REBEL OIL COMPANY, INC.
1900 WEST SAHARA AVENUE
LAS VEGAS, NEVADA 89102
TELEPHONE (702) 382-2851
FAX (702) 382-4263

GENERAL CONTRACTOR
BRESLIN BUILDERS
4125 WEST DEWEY DRIVE
LAS VEGAS, NEVADA 89118
TELEPHONE (702) 798-3977
FAX (702) 798-3908



WATER DISTRICT STANDARD 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 COMMUNICATIONS SUPPORT CENTER (258-7171) PRIOR TO THE START OF CONSTRUCTION. NOTICE MUST BE GIVEN BY 2:00 P.M. OF THE BUSINESS DAY PRIOR TO ANY LVVWD INSPECTION.
- ALL WORK SHALL CONFORM TO THE LVVWD'S STANDARD PLATES, DRAWINGS, AND SPECIFICATIONS, 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 SERVICE SADDLES.
- ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.
- ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS, VALLEY AND CURB CUTTERS.
- THE FOLLOWING REQUIREMENTS MUST BE MET IN THE EVENT A WATER LINE AND SANITARY OR STORM SEWER LINE CROSS:
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. ENCASUREMENT 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-FOUR (44) HOURS PRIOR TO PICKUP.
- CONSTRUCTION MAY INTERRUPT SERVICE, WITH LVVWD APPROVAL AND PROPER NOTIFICATION, BETWEEN THE HOURS OF 10 PM AND 6 AM, SUNDAY THROUGH THURSDAY. CIRCUMSTANCES MAY REQUIRE TEMPORARY SERVICE FEES BE INSTALLED, WITHOUT LVVWD REIMBURSEMENT. ANY TEMPORARY SERVICE FEES MUST HAVE PRIOR LVVWD APPROVAL.
- ALL WATER FACILITY CONSTRUCTION MATERIALS USED MUST BE AS LISTED ON THE LVVWD'S PRE-APPROVED MATERIALS AND MANUFACTURERS LISTING FOR NEW FACILITIES, LATEST REVISION, OR SPECIFICALLY APPROVED ON THESE PLANS.

CLV FIRE FLOW CALCS

FIRE FLOW REQUIREMENT IS: 1500 GALLONS PER MINUTE AT 20 PSI RESIDUAL PRESSURE.
BASED ON:
SQUARE FOOTAGE: 9,836 SQUARE FEET
LARGEST AREA BETWEEN 4-HOUR AREA SEPARATION WALLS: NA SQUARE FEET
BUILDING HEIGHT: 37 FEET
NUMBER OF STORIES: 2 FLOOR
TYPE OF CONSTRUCTION: V-N
OCCUPANCY: B
FULL AUTOMATIC FIRE SPRINKLER SYSTEM: YES
Reviewed By: *[Signature]* DATE: 1-29-98
Date: 3/1/98

PROJECT NAME: **Rebel Oil Office Complex**

This project water plan complies with the Las Vegas Valley Water District's technical requirements. However, this water plan is **NOT APPROVED FOR CONSTRUCTION** at this time and this signature does not provide or imply a water commitment.

[Signature] DATE: 1-29-98
LVVWD

Call before you Dig
1-800-227-2600
UNDERGROUND SERVICE ALERT (U.S.A.)

Call before you OVERHEAD
1-702-593-6111
NEVADA POWER ENVIRONMENT & SAFETY SERVICES DEPARTMENT

[Signature] DATE: 1-29-98
NEVADA POWER COMPANY

WATER CONSTRUCTION NOTES

- INSTALL 6"x6" TAPPING TEE AND 6" GATE VALVE.
- INSTALL NEW 6" FIRE HYDRANT ASSEMBLY PER UDS PLATE 7 AND CC AREA STD. DWG. NO. 516.
- INSTALL 2" METER PER UDS PLATE 10.
- SAWCUT, REMOVE AND REPLACE EX. AC PER CC AREA STD. DWG. NO. 503. TRENCH AND BACKFILL PER UDS. STD. PLATE NO. 68.
- INSTALL 2" REDUCED PRESSURE PRINCIPLE ASSEMBLY PER UDS PLATE 11A.
- 10'x15' LVVWD EASEMENT.
- INSTALL 2" SERVICE SADDLE.
- INSTALL 2"-45° BEND.
- INSTALL 24 LF 6" PVC WL (55'x25'x48").
- 6" x6" LVVWD EASEMENT.
- INSTALL 4" DOUBLE CHECK DETECTOR ASSEMBLY PER UDS PLATE 20B.
- INSTALL 4"x6" REDUCER ON 5/8" B.
- POINT OF CONNECTION FOR BUILDING FIRE SPRINKLER SYSTEM. REFER TO FIRE SPRINKLER SYSTEM PLANS FOR BACKFLOW PREVENTOR INSTALLATION.
- INSTALL 4"-22.5° BEND AND THRUST BLOCK.
- SAWCUT, REMOVE AND REPLACE EX. AC PER CC AREA STD. DWG. NO. 503. TRENCH AND BACKFILL PER UDS. STD. PLATE NO. 68. AC PATCH AREA TO MATCH MACHINE LAD WIDTH.

BENCH MARK

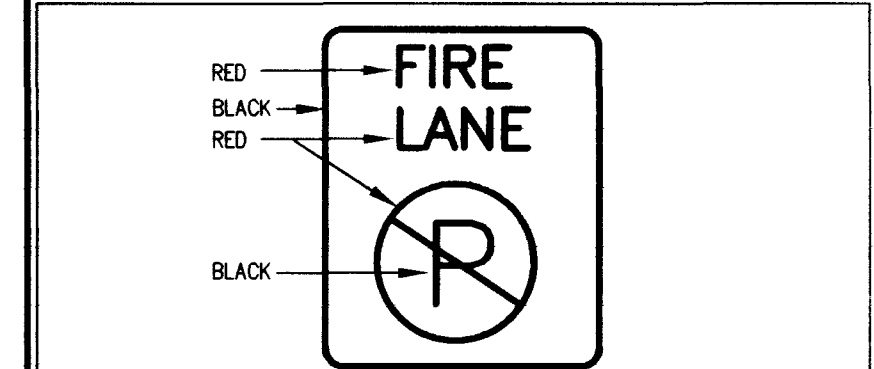
RIVET AND PLATE IN TOP OF JERSEYWALL, EAST SIDE OF WESTERN AVENUE AT NORTH EDGE OF SAHARA OVERPASS.
CITY OF LAS VEGAS STATION 2LV11 0488w6 (NAVD88)
ELEVATION = 628.5895 METERS (2062.30 FEET)

BASIS OF BEARING

N 57°56'15" E BEING THE CENTERLINE OF HIGHLAND DRIVE AS SHOWN BY GRANT, BARGAIN AND SELL DEED RECORDED ON JUNE 13, 1997 IN BOOK 970613 AS DOCUMENT NO. 01964, CLARK COUNTY RECORDER'S OFFICE.

CLV FIRE DEPARTMENT NOTES

- ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE CITY OF LAS VEGAS FIRE DEPT. "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 COMPLETION OF CONSTRUCTION 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 THE 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 THE 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 DEPT.
- A PERMIT IS REQUIRED FROM THE FIRE DEPARTMENT FOR ON-SITE WATER LINE AND FIRE HYDRANT. THE PERMIT AND CONTRACTOR'S 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.
- FIRE HYDRANT SPACING:
RESIDENTIAL - 500 FEET UNSPRINKLERED; 1,000 FEET SPRINKLERED.
COMMERCIAL, INCLUDING MULTI-FAMILY - 300 FEET UNSPRINKLERED; 600 FEET SPRINKLERED.
- WHERE NEW WATER MAINS ARE EXTENDED ALONG STREETS, WHERE HYDRANTS ARE NOT NEEDED FOR PROTECTION OF STRUCTURES, FIRE HYDRANTS SHALL BE SPACED AT MAXIMUM 1,000 FOOT SPACING TO PROVIDE FOR TRANSPORTATION HAZARDS.
- NO FIRE HYDRANT SHALL BE LOCATED WITHIN THE REQUIRED RADIUS OF A CUL-DE-SAC OR WITHIN 20 FEET OF THE PERIMETER OF THE RADIUS OF THE CUL-DE-SAC.
- NO FIRE HYDRANT SHALL BE LOCATED WITHIN 6' OF ANY CURB RETURN, DRIVEWAY, POWER POLE, STREET LIGHT, OR ANY OTHER OBSTRUCTION.
- TWO SOURCES OF SUPPLY ARE REQUIRED WHENEVER THERE ARE 4 OR MORE FIRE HYDRANTS INSTALLED ON A SINGLE SYSTEM.
- NOT MORE THAN 2 HYDRANTS CAN BE OUT OF SERVICE DUE TO A SINGLE MAIN BREAK.
- FIRE APPARATUS ACCESS ROADS SHALL HAVE AN UNOBSTRUCTED WIDTH OF NOT LESS THAN 20 FEET PROVIDED NO PARKING IS ALLOWED, NOT LESS THAN 28 FEET IF PARALLEL PARKING IS ALLOWED ON ONE SIDE, AND NOT LESS THAN 36 FEET IF PARALLEL PARKING IS ALLOWED ON BOTH SIDES. VERTICAL CLEARANCE SHALL BE NOT LESS THAN 13 FEET 6 INCHES.
- THE TURNING RADIUS FOR ANY FIRE APPARATUS ACCESS ROAD AND/OR FIRE LANE, PUBLIC OR PRIVATE SHALL BE NOT LESS THAN 45 FEET OUTSIDE RADIUS AND 22 FEET INSIDE RADIUS.
- A FIRE APPARATUS ROAD SHALL BE REQUIRED WHEN ANY PORTION OF AN EXTERIOR WALL OF THE FIRST STORY IS LOCATED MORE THAN 150 FEET FROM A FIRE DEPARTMENT VEHICLE ACCESS. (SEE EXCEPTIONS IN UFG 94, SECTION 902.2)
- ALL DEAD END FIRE APPARATUS ACCESS ROADS AND/OR FIRE LANES, PUBLIC OR PRIVATE, IN EXCESS OF 150 FEET IN LENGTH SHALL BE PROVIDED WITH AN APPROVED TURNAROUND AREA. SEE ORDINANCE #3944.
- ACCESS ROADS SHALL BE MARKED BY PLACING APPROVED SIGNS AT THE START OF THE DESIGNATED FIRE LANE. ONE SIGN AT THE END OF THE FIRE LANE AND WITH SIGNS AT INTERVALS OF 100 FEET ALONG ALL DESIGNATED FIRE LANES. SIGNS TO BE PLACED ON BOTH SIDES OF ACCESS ROADWAY IF NEEDED TO PREVENT PARKING ON EITHER SIDE. SIGNS TO BE INSTALLED NO HIGHER THAN 10 FEET OR LESS THAN 6 FEET FROM ROADWAY LEVEL. THE CURBS ALONG OR ON THE PAVEMENT OR CEMENT IF CURB IS NOT PRESENT, SHALL BE PAINTED WITH A RED WEATHER RESISTANT PAINT IN ADDITION TO THE SIGNS.
- ELECTRICALLY CONTROLLED ACCESS GATES SHALL BE PROVIDED WITH AN APPROVED EMERGENCY VEHICLE DETECTOR/RECEIVER SYSTEM. SAID SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF LAS VEGAS GUIDELINES FOR AUTOMATIC EMERGENCY VEHICLE ACCESS GATES.



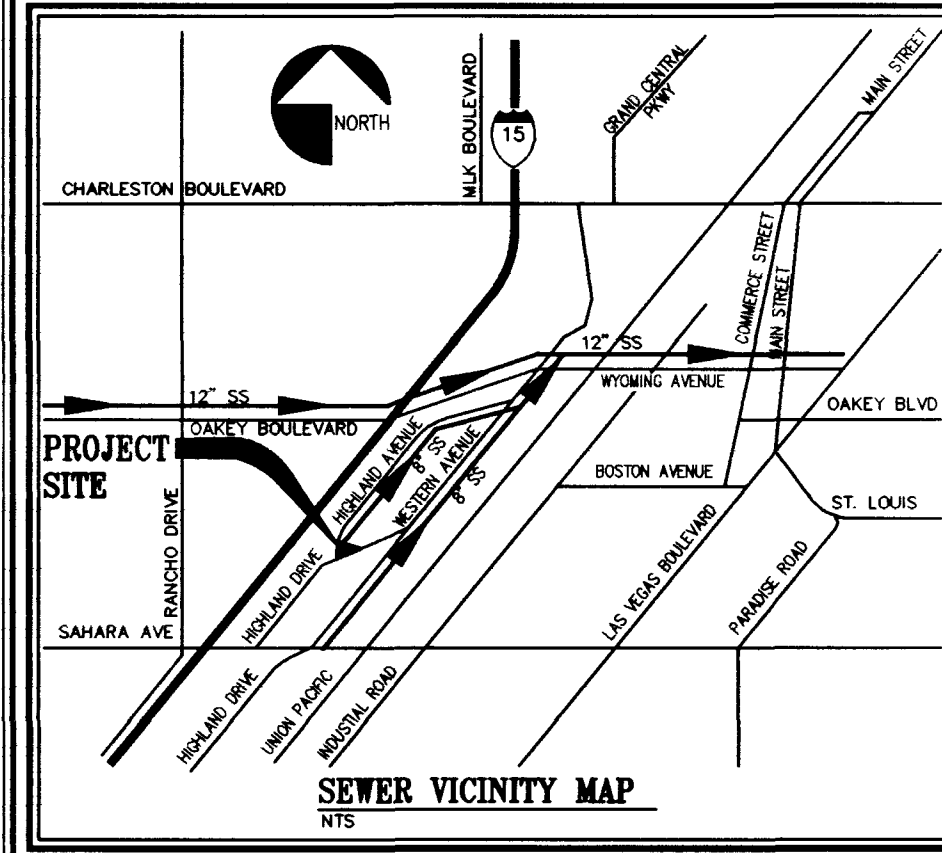
MINIMUM SPECIFICATIONS OF "NO PARKING FIRE LANE SIGNS"
SIZE: 1' WIDE x 1 1/2' LONG OR 2' WIDE x 2 1/2' LONG AS REQUIRED
COLOR: RED AND BLACK ON WHITE LUMINOUS BACKGROUND (SEE ABOVE EXAMPLE)
SYMBOL: INTERNATIONAL NO PARKING SYMBOL
HEIGHT: TO BE INSTALLED NOT LESS THAN SEVEN (7) FEET NOR MORE THAN TEN (10) FEET FROM GROUND LEVEL.

STREET LIGHT CONSTRUCTION NOTES

- RELOCATE EXISTING STREET LIGHT POLE PER CC AREA STD. DWG 325 AND PER STREET LIGHT LOCATION DETAIL THIS SHEET.

SEWER CONSTRUCTION NOTES

- CONNECT NEW SEWER LATERAL TO EXISTING MAIN LINE W/ 6" x6" WYE CONNECTION.
- SAWCUT, REMOVE AND REPLACE EX. AC PER CC AREA STD. DWG. NO. 503. TRENCH AND BACKFILL PER STD. DWG. NO. 50-16A.



NOTE TO CONTRACTOR:
CELLA BARR ASSOCIATES, INC. (CBA) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.

Use of the information contained in this instrument for other than the specific purpose for which it was intended and for other than the client for whom it was prepared is forbidden unless expressly permitted in writing in advance by Cella Barr Associates, and Cella Barr Associates shall have no liability to any use of this information without their written consent.

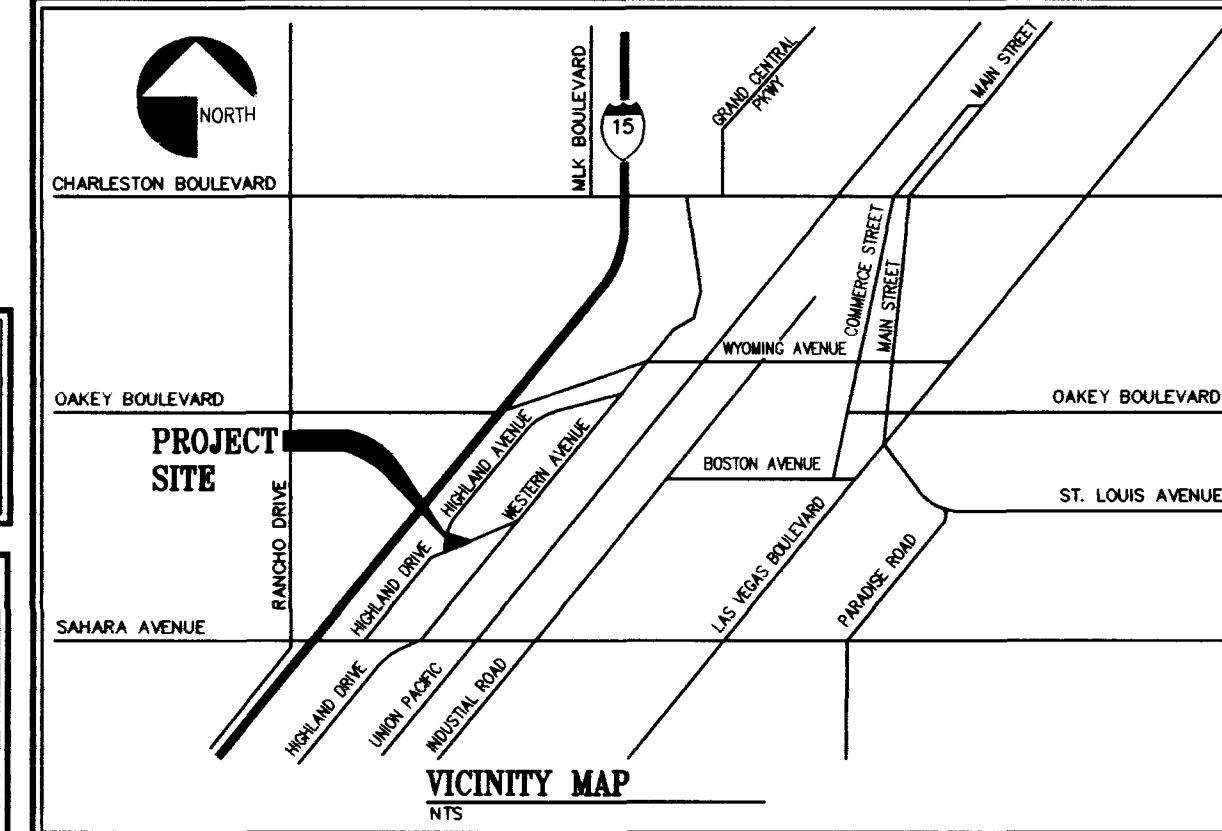
QUANTITIES					
ITEM#	DESCRIPTION	UNIT	QUANTITY	PUBLIC	PRIVATE
6"	GATE VALVE	EA	3	3	
2"	COPPER WATER	LF	147.5 LF	52.5 LF	95.0 LF
2"	RPPA	EA	1.0	1.0	
8"	DCDA	EA	1.0	1.0	
6"	PVC SEWER	LF	77.0	15 LF	62 LF
6"	WATER MAIN	LF	258.5 LF	139.5 LF	119.0 LF
13	WATER SERVICE TO LOT	EA	1.0	1.0	
14	FIRE HYDRANT	EA	2.0	2.0	
28	POWER TO LOT	EA	1	1	
29	TELEPHONE TO LOT	EA	1	1	
31	STREETLIGHT (STD.)	EA	3	3	

AVERAGE DAILY FLOW:
100FU / 20 = 5 ERU
5 ERU X 250 GPD = 1250 GPD
1250 GPD / 1000000 = .0013 MGD
PEAK FLOW
FROM TABLE C-3, CCSD MANUAL, PEAK FACTOR = 3.45
1250 X 3.45 = 4313 GPD
4313 / 1000000 = .0043 MGD

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

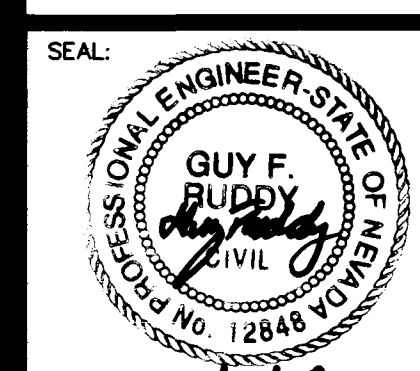
ONE 2" REDUCED PRESSURE PRINCIPLE ASSEMBLY
APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY(S) SHALL BE INSTALLED PER THE UDACS PLATE NO. 11A. NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW PREVENTION UNTIL THE REDUCED PRESSURE PRINCIPLE ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY THE LVVWD.

ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENTS TO ALLOW THE DISTRICT DIRECT ACCESS FROM THE ADJACENT RIGHT-OF-WAY.



BRESLIN BUILDERS
REBEL OIL OFFICE COMPLEX
UTILITY PLAN

CELLA BARR ASSOCIATES
Engineering Planning Surveying Landscape Architecture Hydrology
1771 E. Flamingo Road #103-B
Las Vegas, Nevada 89119
(702) 893-7779
Offices in Arizona, California and Nevada



DESIGNED BY: gfr
DRAWN BY: JAH
CHECKED BY: gfr
JOB NO.:
ISSUE DATE:
SHEET NUMBER

C3

3 OF 5

107-V2746

