

LAS VEGAS VALLEY WATER DISTRICT STANDARD NOTES

- NO WORK SHALL BEGIN ON THE WATER PLANS UNTIL THEY HAVE BEEN RELEASED FOR CONSTRUCTION BY THE LVWD. FOLLOWING APPROVAL OF THE PLANS, NOTICE SHALL BE GIVEN TO THE LVWD CUSTOMER SERVICE DEPARTMENT (870-4194) 48 HOURS PRIOR TO ACTUAL CONSTRUCTION, AND 24 HOURS PRIOR TO AN INSPECTION.
- CALL BEFORE YOU DIG 1-800-217-3400.
- ALL WORK SHALL CONFORM TO LVWD LATEST STANDARD PLATES, DRAWINGS AND SPECIFICATIONS.
- ALL WORK, EXCEPT AS NOTIFIED HEREON OR BY NOTE 3, SHALL BE DONE IN ACCORDANCE WITH THE MOST CURRENT DRAFT OR ADDITION OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFFSITE IMPROVEMENTS, CLARK COUNTY AREA.
- DISTRICT APPROVED SERVICE SADDLES OR TAPPED COLLARS SHALL BE REQUIRED ON ALL 3/4" AND 1" SERVICE LATERALS. SERVICE SADDLES ONLY SHALL BE PERMITTED ON 1-1/2" AND 2" SERVICE LATERALS. DOUBLE TAPPED COLLARS ARE NOT PERMITTED.
- COPPER SERVICE LATERALS: ALL 3/4" TO 2" SERVICE LATERALS SHALL BE OF COPPER TYPING IN ACCORDANCE WITH THE DISTRICT'S SPECIFICATIONS AND STANDARD PLATES.
- THE MAXIMUM ALLOWABLE JOINT DEFLECTION FOR ACP AND DUCTILE IRON PIPE SHALL BE AS FOLLOWS:

PIPE SIZES	ACE	DUCTILE IRON	DUCTILE IRON
		SLIP JOINT	MECHANICAL JOINT
8 INCH	2.5 DEGREES	2.5 DEGREES	3.5 DEGREES
10 INCH	2.5	2.5	2.5
14 - 16 INCH	2.0	1.5	1.5
18 - 24 INCH	1.5	1.5	1.5

- IF THESE OFFSETS CONFLICT WITH THE PIPE MANUFACTURER'S RECOMMENDATION, THE MORE STRINGENT REQUIREMENT SHALL APPLY.
- ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.
- ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS AND VALLEY CUTTERS.
- DETECTOR TAPE SHALL BE REQUIRED IN ACCORDANCE WITH STANDARD PLATE NO. 27 WHERE INDICATED, AND AS FOLLOWS:
 - OVER ALL MAINS NOT INSTALLED 6 FEET FROM BACK OF CURB.
 - OVER ALL SERVICE LATERALS NOT INSTALLED AT RIGHT ANGLES TO MAIN.
- ALL WATER MAINS SHALL BE PRESSURE TESTED AT 100 PSI FOR A CONTINUOUS TWO HOUR PERIOD, IN ACCORDANCE WITH DISTRICT STANDARDS.
- ALL WATER MAINS SHALL BE DISINFECTED, FLUSHED, AND AN ACCEPTABLE HEALTH SAMPLE OBTAINED, PRIOR TO THE CONNECTION OF WATER MAIN(S) AND/OR LATERAL(S) TO THE DISTRICT'S SYSTEM.
- CONTRACTOR TO OBTAIN ALL METERS 2" AND SMALLER FROM LVWD CENTRAL STORES. TELEPHONE 258-3122. FORTY-EIGHT (48) HOURS PRIOR TO PICKUP.

CURVE	RADIUS	LENGTH	TANGENT	DELTA
C1	27.00'	42.41'	27.00'	90°00'00"
C2	27.00'	42.41'	27.00'	90°00'00"
C3	2.50'	3.92'	2.50'	89°53'55"
C4	15.00'	23.58'	15.00'	90°00'00"
C5	15.00'	23.58'	15.00'	90°00'00"
C6	15.00'	23.58'	15.00'	90°00'00"
C7	15.00'	23.58'	15.00'	90°00'00"
C8	2.50'	3.92'	2.50'	89°53'55"
C9	25.00'	39.35'	25.08'	90°10'22"
C10	7.50'	11.76'	7.48'	89°49'38"
C11	2.50'	3.92'	2.50'	90°00'00"
C12	2.50'	3.92'	2.50'	90°00'00"
C13	7.50'	11.76'	7.48'	89°49'38"
C14	25.00'	39.35'	25.08'	90°10'22"
C15	25.00'	39.35'	25.08'	90°10'22"
C16	2.50'	3.92'	2.51'	90°10'22"
C17	2.50'	5.95'	6.23'	136°16'19"
C18	2.50'	1.91'	1.00'	43°43'41"
C19	2.50'	2.02'	1.07'	46°16'19"
C20	2.50'	5.83'	5.85'	133°43'41"
C21	2.50'	5.83'	5.85'	133°43'41"
C22	2.50'	2.02'	1.07'	46°16'19"
C23	2.50'	1.91'	1.00'	43°43'41"
C24	2.50'	5.95'	6.23'	136°16'19"
C25	2.50'	3.92'	2.51'	90°10'22"
C26	25.00'	39.19'	24.92'	89°49'38"

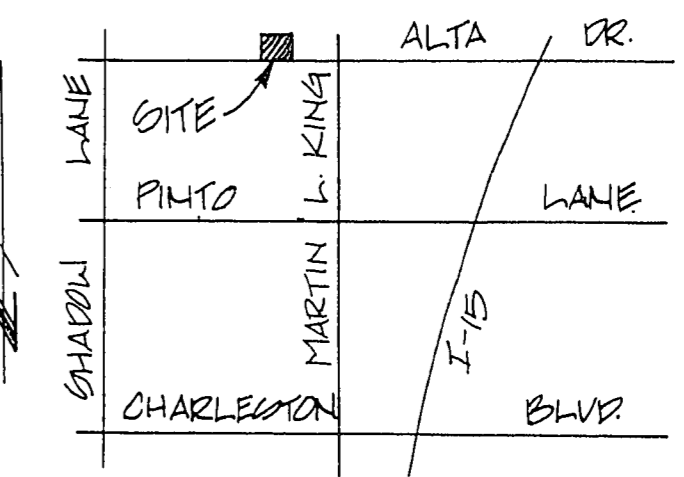
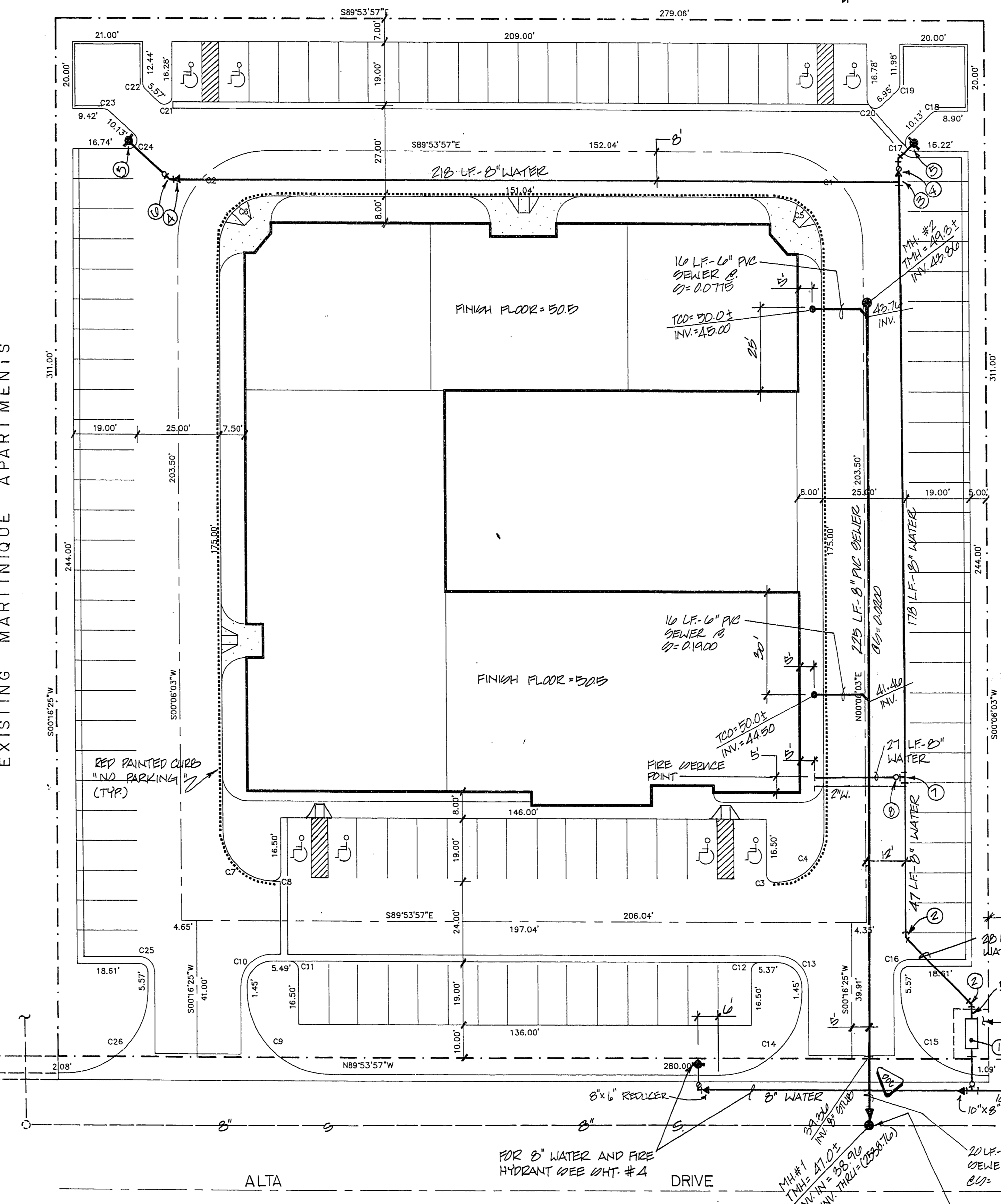
FIRE DEPARTMENT NOTES

- ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE CITY OF LAS VEGAS FIRE DEPARTMENT "HYDRANT SPECIFICATIONS", "HYDRANT INSTALLATION SPECIFICATIONS" AND ORDINANCE #2677.
- AUTHORIZED HYDRANTS FOR THIS PROJECT ARE:
 - KENNEDY GUARDIAN
 - HULLER-423 CONTINUM
 - CLAW MODEL 2164 MEDALLION
- ON ANY NEW HOME OR BUILDING INSTALLATION, ACCESSIBLE FIRE HYDRANTS SHALL BE INSTALLED BEFORE COMPLETION OF 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 #2677 TO IDENTIFY FIRE HYDRANT LOCATIONS.
- CALL THE LAS VEGAS FIRE DEPARTMENT AT 229-2277 FOR UNDERGROUND INSPECTION, PRESERVE AND FLAG VERIFICATION OF ALL FIRE HYDRANTS AND FIRE LINES BEFORE COVERING.
- 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.
- 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 F.N. APPROVED.
- FIRE HYDRANT BRACING:
 - RESIDENTIAL - 500 FEET UNSPRINKLERED, 600 FEET SPRINKLERED COMMERCIAL, INCLUDING MULTI-FAMILY - 300 FEET UNSPRINKLERED, 400 FEET SPRINKLERED.
- NO FIRE HYDRANT SHALL BE LOCATED WITHIN THE REQUIRED RADIUS OF A CUL-DE-SAC OR WITHIN 10 FEET OF THE PERIMETER OF THE RADIUS OF THE CUL-DE-SAC.
- NO FIRE HYDRANT SHALL BE LOCATED WITHIN 6 FEET OF ANY CURB RETURN, DRIVEWAY, POWER POLE, STREET LIGHT OR ANY OTHER OBSTRUCTION.
- NOT MORE THAN 2 HYDRANTS CAN BE OUT OF SERVICE DUE TO A SINGLE MAIN BREAK.
- 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 ACCESS 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 UPC 88, SECTION 10.207).
- ALL DEAD END FIRE APPARATUS ACCESS ROADS AND/OR FIRE LANE, PUBLIC OR PRIVATE, IN EXCESS OF 150 FEET IN LENGTH SHALL BE PROVIDED WITH AN APPROVED TURN AROUND AREA. SEE ORDINANCE #2677.

STREET LIGHT NOTES

- ALL STREET LIGHTING INSTALLATION EXCEPT AS NOTED ON THE STREET LIGHTING PLANS SHALL CONFORM TO THE IMPROVEMENT STANDARDS, DEPARTMENT OF PUBLIC WORKS, CLARK COUNTY, NEVADA, AND THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA.
- NEW SERVICE REQUIRED
- POLES TO BE GALVANIZED

UNDEVELOPED



VICINITY MAP N.T.S.

NOTE:
CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL ALIGNMENT OF EXISTING UTILITIES AND TO NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.

LAS VEGAS FIRE DEPARTMENT

Fire Flow Requirement is 2,000 gallons per minute at 20 pounds per square inch residual.

Based on:
Square footage 2,128

Largest area between area separation walls:
Height: _____
Type of Construction: I-N

Exposures: _____
Sprinkler System: YES
Occupancy: _____
Roof Construction: TILE
Reviewed By: J. Lopez
Date: 2/19/94

NOTE: ALL ON-SITE SEWERS ARE PRIVATELY OWNED & MAINTAINED.

APPROVALS

J. Lopez 2/19/94
CITY OF LAS VEGAS FIRE MARSHALL DATE

[Signature] 3/28/94
LAS VEGAS VALLEY WATER DISTRICT DATE

[Signature] 2/17/94
NEVADA POWER COMPANY DATE

NEVADA POWER COMPANY APPROVAL IS ONLY FOR THE PLACEMENT & CLEARANCE OF STREETLIGHT & SIGNAL LIGHT INSTALLATION.

PROJECT NAME: ALTA QUAIL PARK

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 contract.

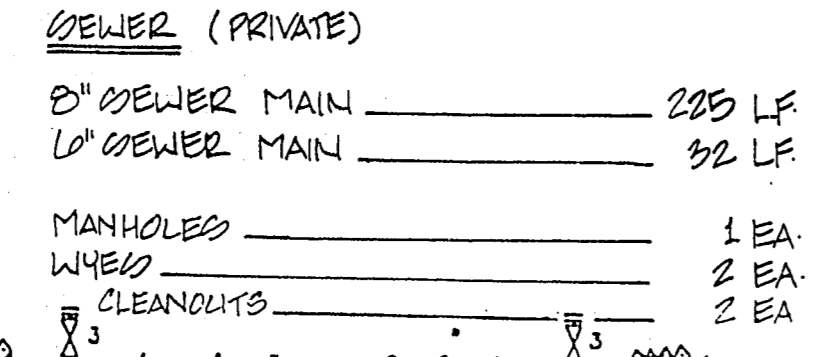
[Signature] 2-11-94
LVWD Date

CITY OF LAS VEGAS GENERAL NOTES

- ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS AND THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA, AS AMENDED. IN ALL CASES, THESE STANDARDS SHALL SUPERSEDE THE UNIFORM STANDARD SPECIFICATIONS. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BE AWARE OF THE CONTENTS OF THE ABOVE SPECIFICATION BOOKS.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM CONSTRUCTION AS PER PLANS. ANY ADDITIONS, DELETIONS, OR CHANGES SHALL FIRST MEET WITH THE APPROVAL OF THE CONTROLLING AGENCY.
- CHISEL "40" OR "40" IN CURBS WHERE SEMI OR GAS LATERALS PASS UNDER THE CURB.
- POLYVINYL (PVC) SEMI PIPE SHALL MEET ASTM D-3034 STD 35 SPECIFICATIONS, INSTALLED WITH SAND BEDDING AND BACKFILL OF TYPE II GRAVEL.
- ALL MANHOLES IN PAVED STREETS 8" R/W AND LARGER, SHALL HAVE CONCRETE COLLARS.
- THE SADDLES SHALL BE USED TO CONNECT SEMI LATERALS TO EXISTING MAIN LINES TO 12" DIA. SIE. CONNECTIONS TO 15" OR LARGER MAINS SHALL REQUIRE SPECIAL PROCEDURES.
- A SEMI MAIN CROSSING OVER A WATER MAIN OR LESS THAN 18" UNDER A WATER MAIN, MUST BE REINFORCED CONCRETE ENCASED FOR A DISTANCE NOT LESS THAN TEN FEET (10') TO EACH SIDE OF THE CENTERLINE OF THE WATER MAIN.
- ALL CONTRACTORS INSTALLING SEMI MAINS THAT WILL BE UNDER THE JURISDICTION OF THE CONTROLLING AGENCY MUST BE CLASS "A" CONTRACTORS.

ESTIMATE OF QUANTITIES

- WATER (PRIVATE)
- 1 8" WATER METER 1 EA.
 - 2 8" WATER BEND 2 EA.
 - 2 8" TEE 1 EA.
 - 2 8" 1/2" REDUCER 2 EA.
 - 2 FH ACPY PIPE (VALVE BEND) 2 EA.
 - 2 8" 1/2" BEND 1 EA.
 - 2 8" 1/2" TEE 1 EA.
 - 2 8" GATE VALVE 1 EA.
 - 2" WATER MAIN 27 LF.
 - 2" WATER 27 LF.
- SEWER (PRIVATE)
- 2" SEWER MAIN 225 LF.
 - 10" SEWER MAIN 32 LF.
- MANHOLES 1 EA.
- WELLS 2 EA.
- CLEANOUTS 2 EA.



ITEM NO. QTY. DESCRIPTION

- 2 FLANGED SCHED 40 FABRICATED STEEL EPOXY COATED AND LINED WALL SPOOL WITH THRUST RING
- 2 FLANGED CAST IRON TEE
- 2 BYPASS VALVE WITH SCREW ON CAP OR BLIND FLANGE
- 2 FLANGED GATE VALVE
- 2 8" x 2" METER
- 2 FLANGED X PLAIN END SCHED 40 FABRICATED STEEL EPOXY COATED AND LINED SPOOL
- 2 SLEEVE TYPE COUPLING
- 3 INSTALL ADJUSTABLE PIPE SUPPORTS, GRINNEL NO. 264 OR APPROVED EQUAL

BENCHMARK

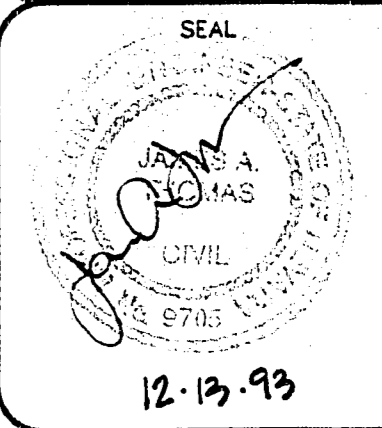
BM - CIVILIAN-8804 RIVET AND PLATE IN TOP OF CURB, SOUTHWEST RETURN, ALTA DRIVE AND MARTIN LUTHER KING BOULEVARD. ELEV. = 2044.276

NOTE: ALL PIPING, FITTINGS, AND APPURTENANCES SHALL CONFORM TO APPLICABLE DISTRICT SPECIFICATIONS

RIBEIRO CORPORATION
CITY OF LAS VEGAS, NEVADA

DATE: 2/19/94
BY: J. Lopez
REV: 1/1/94
DATE: 2/19/94

MASTER UTILITY PLAN
ALTA QUAIL PARK



NO. 4280
DATE: 12/93
SCALE: 1"=20'
SHEET: 3 OF 5 SHEETS