

Call before you Dig
1-800-227-2600

CITY OF LAS VEGAS FIRE DEPT. NOTES

- ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE CITY OF LAS VEGAS FIRE DEPARTMENT "HYDRANT SPECIFICATIONS", "HYDRANT INSTALLATION SPECIFICATIONS", AND ORDINANCE NO. 3545.
- AUTHORIZED HYDRANTS FOR THIS PROJECT ARE:
A - KENHEDY GUARDIAN
B - MUELLER A-423 CENTURION
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 NO. 3545 TO IDENTIFY FIRE HYDRANT LOCATIONS.
- CALL THE LAS VEGAS BUILDING 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 NO. 3545 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.
- 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.M. APPROVED.
- FIRE HYDRANT SPACING:
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 20 FEET OF THE PERIMETER OF THE RADIUS OF THE CUL-DE-SAC.
2. NO FIRE HYDRANT SHALL BE LOCATED WITHIN 6' OF ANY CURB RETURN, DRIVEWAY, POWER POLE, STREETLIGHT, OR ANY OTHER OBSTRUCTION.
- NOT MORE THAN 2 HYDRANTS CAN BE OUT OF SERVICE DUE TO A SINGLE MAIN BREAK.
- THE TURNING RADIUS OF 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 U.F.C. 88, SECTION 10.207).
- 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 NO. 3545.



QUANTITY ESTIMATE:

WATER	
8" PVC WATERLINE	1,432 LF
6" PVC WATERLINE	27 LF
8" x 6" TEE	4 EA
8" x 45" BEND	2 EA
8" CAP	2 EA
8" GATE VALVE	7 EA
6" GATE VALVE	3 EA
FIRE HYDRANT ASSY.	3 EA
2" BLOW-OFF ASSY.	2 EA
3/4" WATER SERVICE w/5/8" METER	37 EA

* THESE QUANTITIES ARE ESTIMATES ONLY. THE CONTRACTOR IS RESPONSIBLE FOR EXACT QUANTITIES FOR BIDDING PURPOSES.

REFER TO COVER SHEET FOR ADDITIONAL UTILITY QUANTITIES.

WATERMAIN NOTE:

TO AVOID CONFLICTS WITH SEWER LATERALS, CONSTRUCT ALL WATERMAINS AT 1 FOOT BELOW ADJACENT SEWER MAIN, TYPICAL ALL STREETS.

CITY OF LAS VEGAS SEWER 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 SUPERCEDE THE UNIFORM STANDARD SPECIFICATIONS. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BE AWARE OF THE CONTENTS OF THE ABOVE SPECIFICATION BOOKS.
- THESE STANDARDS SHALL APPLY TO ALL CONSTRUCTION.
- SEWER MAINS ONLY TO BE LAID IN SEWER TRENCHES.
- ALL LATERALS TO BE LAID AT NOT LESS THAN MINIMUM SLOPES AS SHOWN IN THESE STANDARDS.
- 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.
- SOILS TESTING SHALL BE DONE IN ACCORDANCE WITH SECTION 3.11 OF THESE STANDARDS.
- ALL EXFILTRATION, INFILTRATION, AIR TESTING AND TELEVISION OF LINES SHALL BE IN ACCORDANCE WITH THESE STANDARDS.
- CUT SHEETS MUST BE SUBMITTED TO THE AGENCY BEFORE CONSTRUCTION WILL BE PERMITTED TO START.
- ALL CONTRACTORS INSTALLING SEWER MAINS THAT WILL BE UNDER THE JURISDICTION OF THE CONTROLLING AGENCY MUST BE CLASS "A" CONTRACTORS.

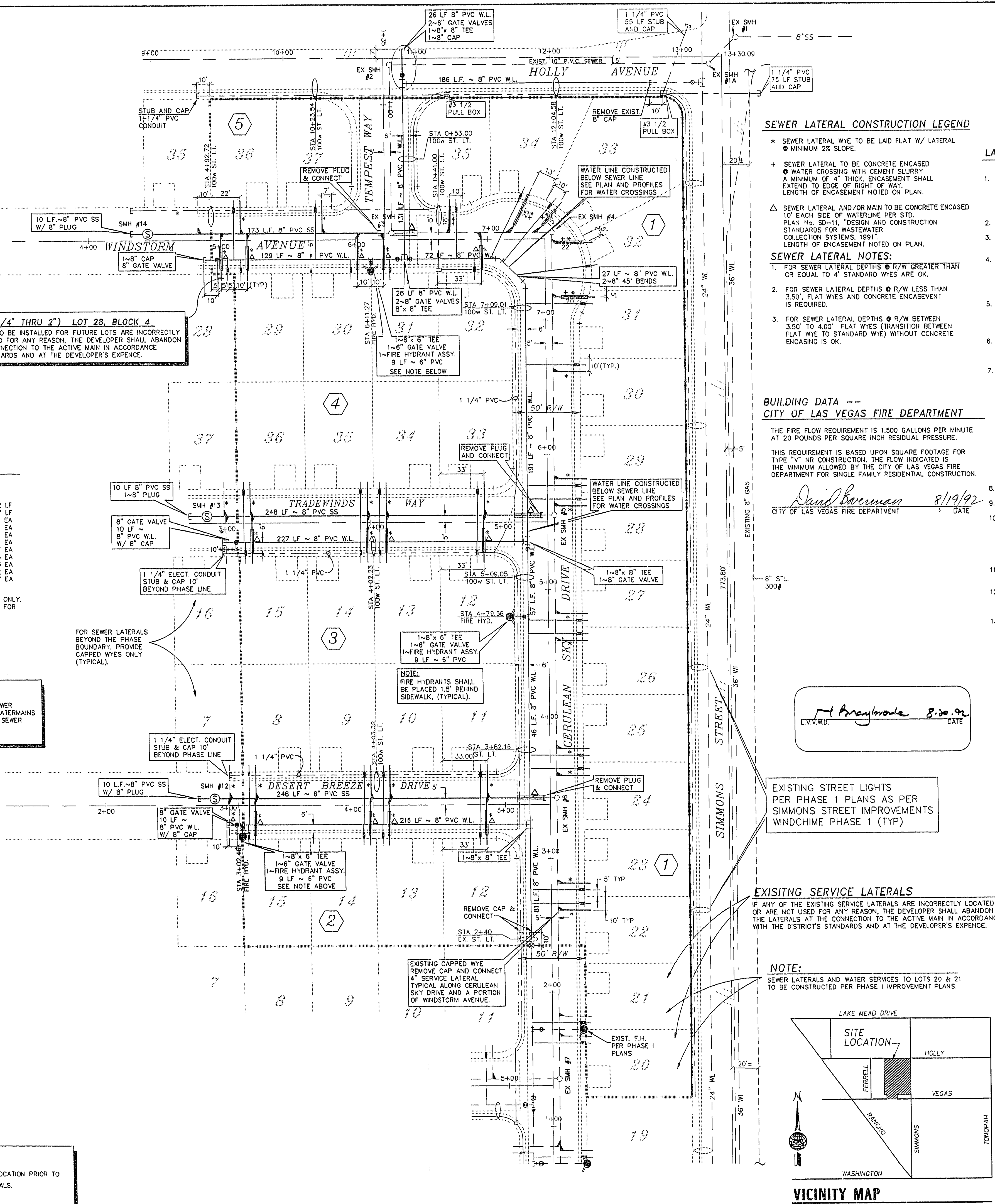
CITY OF LAS VEGAS STREETLIGHT NOTES

- ALL STREET LIGHTING INSTALLATIONS SHALL CONFORM TO THE LATEST ISSUE OF THE STANDARD DETAILS AND SPECIFICATIONS OF THE CITY OF LAS VEGAS AND SHALL ALSO CONFORM TO THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OF OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, 1986 UNLESS OTHERWISE NOTED.
- SEE UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION CITY OF LAS VEGAS, DRAWING NO. 313.
- 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.

NOTES:

- CONFIRM DRIVEWAY WIDTHS LOCATION PRIOR TO CONSTRUCTING UTILITY LATERALS.

FUTURE SERVICES (3/4" THRU 2") LOT 28, BLOCK 4
IF ANY OF THE SERVICES TO BE INSTALLED FOR FUTURE LOTS ARE INCORRECTLY LOCATED OR ARE NOT USED FOR ANY REASON, THE DEVELOPER SHALL ABANDON THE LATERALS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH THE DISTRICT'S STANDARDS AND AT THE DEVELOPER'S EXPENSE.



SEWER LATERAL CONSTRUCTION LEGEND

- * SEWER LATERAL WYE TO BE LAID FLAT W/ LATERAL
- MINIMUM 2% SLOPE.
- + SEWER LATERAL TO BE CONCRETE ENCASED
- WATER CROSSING WITH CEMENT SLURRY
- A MINIMUM OF 4" THICK ENCASEMENT SHALL EXTEND TO EDGE OF RIGHT OF WAY.
- LENGTH OF ENCASEMENT NOTED ON PLAN.
- △ SEWER LATERAL AND/OR MAIN TO BE CONCRETE ENCASED
- 10' EACH SIDE OF WATERLINE PER STD.
- PLAN 110, SD-11, "DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS, 1991"
- LENGTH OF ENCASEMENT NOTED ON PLAN.

SEWER LATERAL NOTES:

- FOR SEWER LATERAL DEPTHS @ R/W GREATER THAN OR EQUAL TO 4' STANDARD WYES ARE OK.
- FOR SEWER LATERAL DEPTHS @ R/W LESS THAN 3.50', FLAT WYES AND CONCRETE ENCASEMENT IS REQUIRED.
- FOR SEWER LATERAL DEPTHS @ R/W BETWEEN 3.50' TO 4.00' FLAT WYES (TRANSITION BETWEEN FLAT WYE TO STANDARD WYE) WITHOUT CONCRETE ENCASEMENT IS OK.

BUILDING DATA -- CITY OF LAS VEGAS FIRE DEPARTMENT

THE FIRE FLOW REQUIREMENT IS 1,500 GALLONS PER MINUTE AT 20 POUNDS PER SQUARE INCH RESIDUAL PRESSURE.

THIS REQUIREMENT IS BASED UPON SQUARE FOOTAGE FOR TYPE "V" NR CONSTRUCTION. THE FLOW INDICATED IS THE MINIMUM ALLOWED BY THE CITY OF LAS VEGAS FIRE DEPARTMENT FOR SINGLE FAMILY RESIDENTIAL CONSTRUCTION.

David Boreman 8/19/92
CITY OF LAS VEGAS FIRE DEPARTMENT DATE

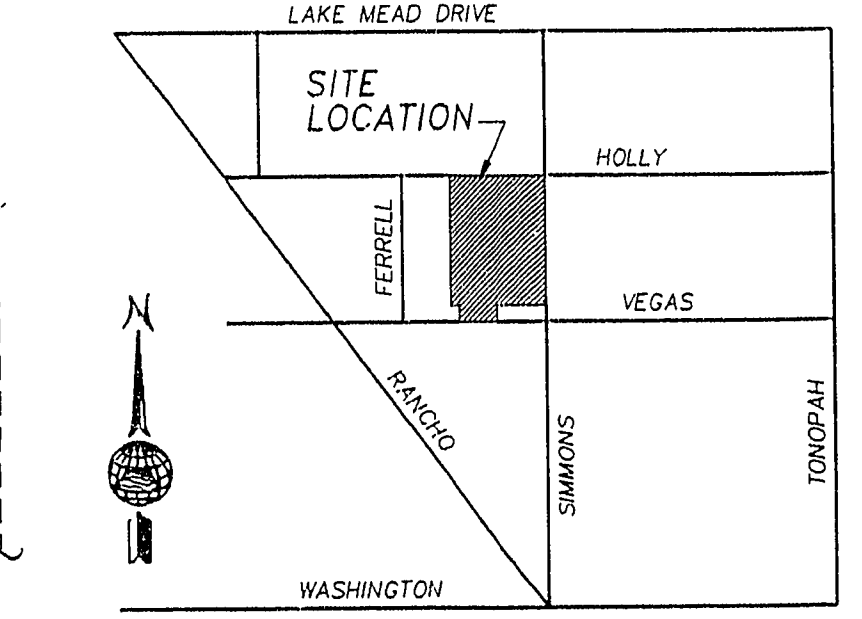
Araymbo 8.20.92
C.V.V.W.D. DATE

EXISTING STREET LIGHTS PER PHASE 1 PLANS AS PER SIMMONS STREET IMPROVEMENTS WINDCHIME PHASE 1 (TYP)

EXISTING SERVICE LATERALS

IF ANY OF THE EXISTING SERVICE LATERALS ARE INCORRECTLY LOCATED OR ARE NOT USED FOR ANY REASON, THE DEVELOPER SHALL ABANDON THE LATERALS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH THE DISTRICT'S STANDARDS AND AT THE DEVELOPER'S EXPENSE.

NOTE:
SEWER LATERALS AND WATER SERVICES TO LOTS 20 & 21 TO BE CONSTRUCTED PER PHASE I IMPROVEMENT PLANS.



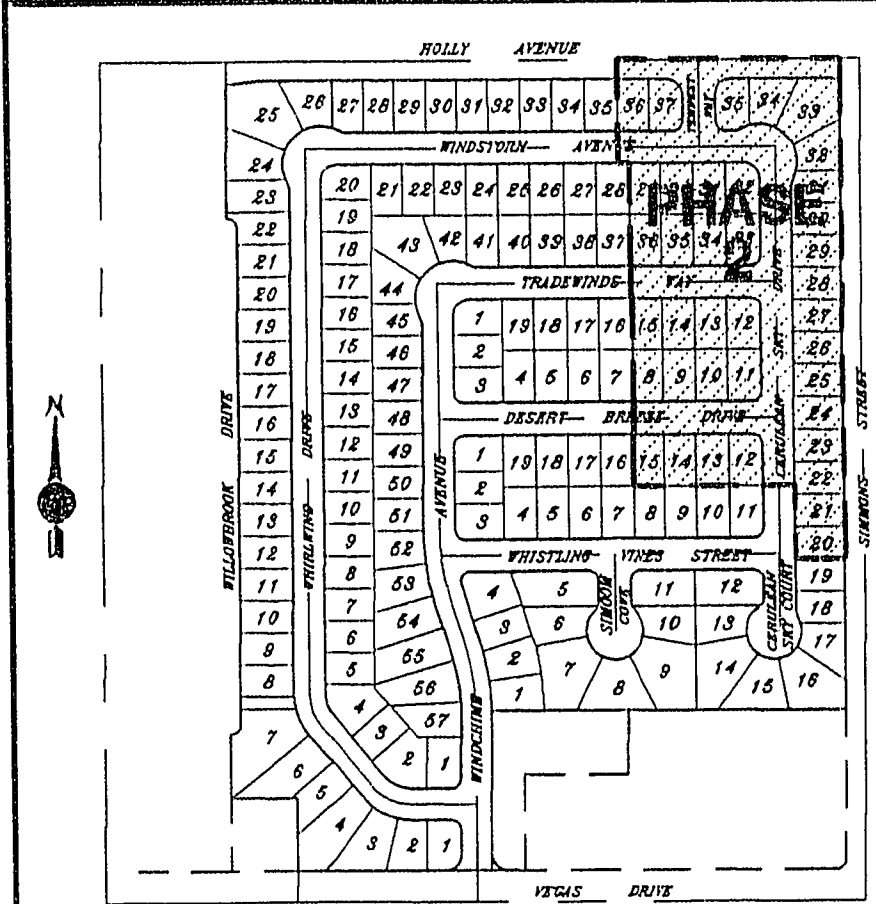
VICINITY MAP

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 : 1-800-227-2600.
- ALL WORK SHALL CONFORM TO LVWD LATEST STANDARD PLATES, DRAWINGS, AND SPECIFICATIONS.
- ALL WORK, EXCEPT AS MODIFIED HEREON OR BY NOTE 3, SHALL BE DONE IN ACCORDANCE WITH THE MOST CURRENT DRAFT OR ADDITION OF UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE 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 TUBING IN ACCORDANCE WITH THE DISTRICT'S SPECIFICATIONS AND STANDARD PLATES.
- THE MAXIMUM ALLOWABLE JOINT DEFLECTION FOR A.C.P. AND DUCTILE IRON PIPE SHALL BE AS FOLLOWS:

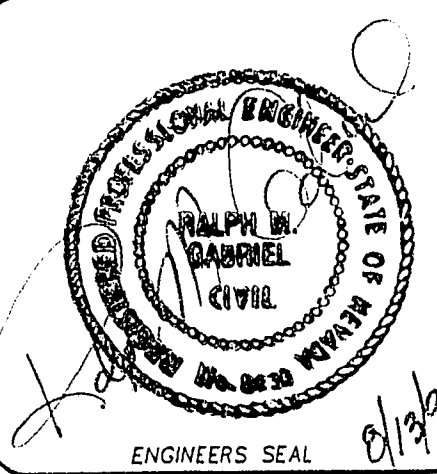
PIPE SIZES	ACP	DUCTILE IRON SLIP JOINT	DUCTILE IRON MECHANICAL JOINT
6 INCH	2.5 DEGREES	2.5 DEGREES	3.5 DEGREES
8-12 INCH	2.5 DEGREES	2.5 DEGREES	2.5 DEGREES
14-16 INCH	2.0 DEGREES	1.5 DEGREES	1.5 DEGREES
18-24 INCH	N/A	1.5 DEGREES	1.5 DEGREES

ON P.V.C. PIPE, THE MAXIMUM OFFSET FOR A 20' LENGTH OF FACTORY BELLED PIPE SHALL BE 16 INCHES FOR 6" PIPE, 12 INCHES FOR 8" PIPE, AND 9 INCHES FOR 10" AND 12" PIPE. IF THESE OFFSETS CONFLICT WITH THE PIPE MANUFACTURER'S RECOMMENDATION, THE MORE STRINGENT REQUIREMENT SHALL APPLY.
- OVER ALL MAINS NOT INSTALLED 6 FEET FROM BACK OF CURB.
- OVER ALL SERVICE LATERALS NOT INSTALLED AT RIGHT ANGLES TO MAIN.
- ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.
- ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS AND VALLEY GUTTERS.
- 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 200 P.S.I. 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 THE WATER MAIN(S) AND/OR LATERAL(S) TO THE DISTRICT'S SYSTEM.
- CONTRACTOR TO OBTAIN ALL METERS 2" AND SMALLER FROM L.V.V.W.D. CENTRAL STORES. TELEPHONE 258-3152 FORTY-EIGHT (48) HOURS PRIOR TO PICKUP.



KEY MAP

Not to scale



Job Number 7089.401		Drawn by KTB	Scale 1" = 40'	UTILITY PLAN PHASE 2		Church Engineering of Nevada., Inc.  6600 W. Charleston Blvd. Suite 140 Las Vegas, NV 89102 (702) 878-6244 Consulting Engineers Planners Surveyors		No.		REVISIONS		Date	Instr.	Appr.	Date
Sheet Number 4 OF 7		Checked by UMB	File No. 401IMP					Date AUGUST 12, 1992							

10-22-74 307K-4219-2