FIRE DEPT. NOTES

1. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE CITY OF LAS VEGAS FIRE DEPARTMENT "HYDRANT SPECIFICATIONS", "HYDRANT INSTALLATION SPECIFICATIONS" AND ORDINANCE #3545.
2. AUTHORIZED HYDRANTS FOR THIS PROJECT ARE:
   A – KENNEDY GUARDIAN
   B – MUELLAR A-423 CENTURIAN
   C – CLOW MODEL 2546 MEDALLION
3. 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.
4. CONTRACTOR SHALL PLACE A BLUE REFLECTIVE MARKER AT CENTER-LINE OF STREET ADJACENT TO FIRE HYDRANT AS REQUIRED IN ORDINANCE #3545 TO IDENTIFY FIRE HYDRANT LOCATIONS.
5. CALL THE LAS VEGAS BUILDING DEPARTMENT AT 799-2071 FOR UNDER-GROUND INSPECTION, PRESSURE AND FLUSH VERIFICATION OF ALL FIRE HYDRANTS AND FIRE LINES BEFORE COVERING.
6. PAINTING OF THE CURBS AND HYDRANT AND ANY WORK NECESSARY FOR PROTECTION OF HYDRANTS FROM PHYSICAL DAMAGE PER ORDINANCE #3545 SHALL BE COMPLETED BEFORE APPROVAL BY THE CITY OF LAS VEGAS FIRE DEPARTMENT.
7. 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.
8. A FLOW TEST MUST BE WITNESSED BY THE FIRE DEPARTMENT PRIOR TO OCCUPANCY FOR VERIFICATION OF REQUIRED ON-SITE WATER SUPPLY.
9. ALL ON-SITE FIRE MAIN MATERIALS MUST BE U.L. LISTED AND F.M. APPROVED.
10. FIRE HYDRANT SPACING:

    RESIDENTIAL – 500 FEET UNSPRINKLERED, 600 FEET SPRINKLERED
    COMMERCIAL, INCLUDING MULTI-FAMILY – 300 FEET UNSPRINKLERED, 400 FEET SPRINKLERED.
11. NO FIRE HYDRANTS 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.
12. NO FIRE HYDRANT SHALL BE LOCATED WITHIN 6 FEET OF ANY CURB RETURN, DRIVEWAY, POWER POLE, STREET LIGHT OR ANY OTHER OBSTRUCTION.
13. NOT MORE THAN 2 HYDRANTS CAN BE OUT OF SERVICE DUE TO A SINGLE MAIN BREAK.
14. 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.
15. 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 UFC 88, SECTION 10.207).
16. 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 #3545

LAS VEGAS VALLEY WATER DISTRICT STANDARD NOTES

1. NO WORK SHALL BEGIN ON THE WATER PLANS UNTIL THEY HAVE BEEN RELEASED FOR CONSTRUCTION BY THE LVWMD. FOLLOWING APPROVAL OF THE PLANS, NOTICE MUST BE GIVEN TO THE LVWD CUSTOMER SERVICE DEPARTMENT (870-4194) 48 HOURS PRIOR TO ACTUAL CONSTRUCTION AND 24 HOURS PRIOR TO AN INSPECTION.
2. CALL BEFORE YOU DIG 1-800-227-2600.
3. ALL WORK SHALL CONFORM TO LVWMD LATEST STANDARD PLATES, DRAWINGS AND SPECIFICATIONS.
4. ALL WORK, EXCEPT AS MODIFIED HEREON OR BY NOTE 3, SHALL BE DONE IN ACCORDANCE WITH THE MOST CURRENT DRAFT OR ADOPTION OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFFSITE IMPROVEMENTS, CLARK COUNTY AREA.
5. DISTRICT APPROVED SERVICE SADDLES OR TAPPED COLLARS WILL BE REQUIRED ON ALL 3/4" AND 1" SERVICE LATERALS. SERVICE SADDLES ONLY WILL BE PERMITTED ON 1-1/2" AND 2" SERVICE LATERALS. DOUBLE TAPPED COLLARS ARE NOT PERMITTED.
6. 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.
7. THE MAXIMUM ALLOWABLE JOINT DEFLECTION FOR ACP 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 DEGREES	1.5 DEGREES	1.5 DEGREES
18 – 24 INCH	N/A	1.5 DEGREES	1.5 DEGREES

ON PVC PIPE, THE MAXIMUM OFFSET FOR A 20' LENGTH OF FACTORY BELLED PIPE SHALL BE 17" FOR A 6" PIPE, 12 INCHES FOR 8" PIPE, 11 INCHES FOR 10" PIPE AND 9 INCHES FOR 12" PIPE.

8. ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.
9. ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS AND VALLEY GUTTERS.
10. DETECTOR TAPE IS REQUIRED IN ACCORDANCE WITH STANDARD PLATE NO. 27 WHERE INDICATED, AND AS FOLLOWS:
    A) OVER ALL MAINS NOT INSTALLED 6 FEET FROM BACK OF CURB.
    B) OVER ALL SERVICE LATERALS NOT INSTALLED AT RIGHT ANGLES TO MAIN.
11. ALL WATER MAINS ARE TO BE PRESSURED TESTED AT 200 PSI FOR A CONTINUOUS TWO HOUR PERIOD.
12. ALL WATER MAINS AND LATERALS SHALL BE DISINFECTED AND FLUSHED, AND AN ACCEPTABLE WATER SAMPLE OBTAINED, PRIOR TO ACCEPTANCE BY THE DISTRICT.
13. 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.

ESTIMATE OF QUANTITIES

WATER :

STD. F.H. W/ 6" G.V. & 6" A.C.P. LATERAL	2 EA.
8" PVC	807 LF.
8" GATE VALVE	2 EA.
8"-45° BEND	2 EA.
12" X 8" REDUCER	1 EA.
3/4" SERVICE W/ METER BOX	15 EA.
3/4" METER FROM L.V.V.W.D.	15 EA.
1 1/2" IRRIGATION METER W/RPPA	2 EA.
1 1/2" PVC	969 LF.
12"-45° BEND	1 EA.
12"-22.5° BEND	1 EA.
12" GATE VALVE	1 EA.

TRAFFIC SIGN QUANTITIES

6" D-3 STREET NAME SIGN 1 EA.

LAS VEGAS FIRE DEPARTMENT

Fire flow Requirement is 1527 gallons per minute at 20 pounds per square inch residual.

Based on:

Square footage 3948 S.F.

Largest area between area seperation walls N/A

Height 21 FEET

Type of Construction FRAME/STUCCO

Exposures 15 FEET

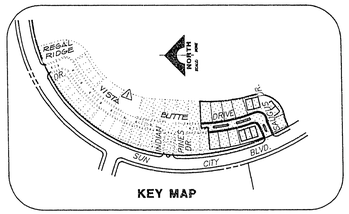
Sprinkler System NONE

Occupancy RESIDENTIAL

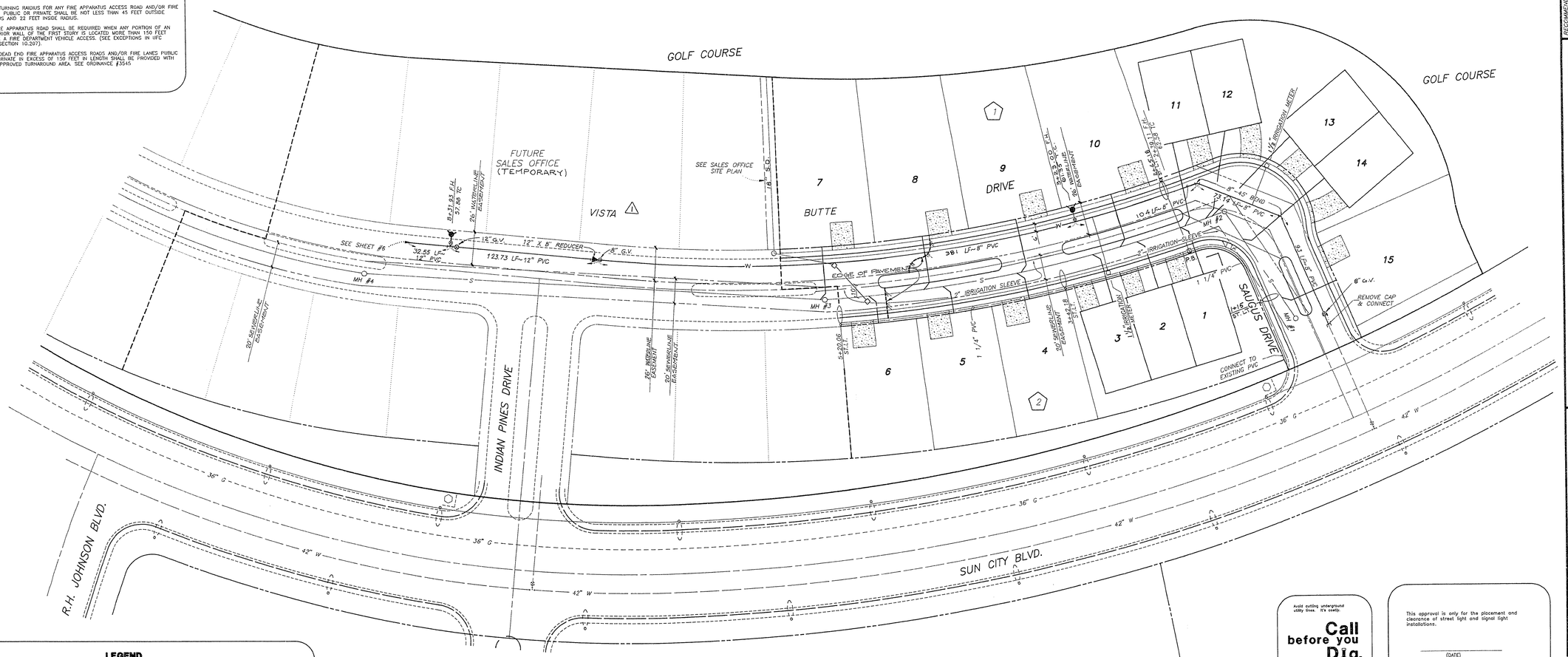
Roof Construction TILE

Review By: Richard G. Brown

Date: 3-18-92



KEY MAP



LEGEND

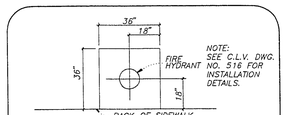
- RIGHT OF WAY LINE
- EASEMENT LINE
- 8" W — EXIST. WATER LINE
- 8" S — EXIST. SEWER LINE
- FIRE HYDRANT W/LEAD AND G.V.
- W — WATER LINE
- S — MH #3 — SEWER LINE WITH MANHOLE
- SEWER LATERAL
- GATE VALVE
- 1 1/4" PVC CONDUIT (STREET LIGHTS)
- CONCRETE DRIVEWAY
- 250W HPS LUMINAIRE W/11 GA. POLE
- 100W HPS LUMINAIRE W/11 GA. POLE
- P.B. NO. 3 1/2 CONCRETE PULL BOX W/METAL COVER
- STOP SIGN
- STREET SIGN

NORTH
SCALE: 1" = 40'

TEMPORARY DOMESTIC AND FIRE PROTECTION WATER SERVICE FOR THE PROJECT WILL BE SUPPLIED BY THE TEMPORARY 2975 ZONE PUMPING STATION UNDER AN AGREEMENT WITH THE DISTRICT DATED FEBRUARY 4, 1992, WHICH LIMITS BOTH THE AMOUNT OF DEVELOPMENT TO BE SERVED AND THE OPERATIONAL PERIOD OF THE STATION.

PERMANENT DOMESTIC AND FIRE PROTECTION WATER SERVICE FOR THIS PROJECT IS DEPENDENT UPON THE COMPLETION OF THE 2975 ZONE PIPELINE PHASE II & III WITH HOWARD HUGHES PROPERTIES (OVERSIZING AGREEMENT NUMBER 72-001) AND PHASE IV WITH DEL WEBB (OVERSIZING AGREEMENT NUMBER 72-002).

NOTE: NO OBSTRUCTIONS WITHIN 36" OF THE FIRE HYDRANT.



NOTE: SEE C.L.V. DWG. NO. 516 FOR INSTALLATION DETAILS.

FIRE HYDRANT LOCATION DETAIL

Avoid cutting underground utility lines. It's costly.
Call before you Dig.
1-800-227-2600
UNDERGROUND SERVICE (USA)

This approval is only for the placement and clearance of street light and signal light installations.

(DATE)

by NEVADA POWER COMPANY

BENCHMARKS

CLV BENCHMARK: TOP OF CURB AT END OF CURB, WEST SIDE OF DURANGO DRIVE, 250' SOUTH OF WESTCLIFF BOULEVARD. ELEVATION: 2610.16

PROJECT BENCHMARK: BRASS CAP IN WEST CURB OF DEL WEBB BLVD., 100' SOUTH OF THE INTERSECTION OF DEL WEBB BLVD. AND SUN CITY BLVD. ELEVATION: 2593.15

APPROVED FOR CONSTRUCTION

LAS VEGAS WATER DISTRICT — DATE 3/18/92

REV	DATE	DESCRIPTION	C.L.V. DATE
1	1/22/92	CLARIFIED SITE NAME	5/28/92

RECOMMENDED Michael D. Ross 6218 7 MAR 92
MICHAEL D. ROSS P.E. NO. DATE

G.C. WALLACE, INC.
Engineering/Architecture 1555 SOUTH RAINBOW BLVD./LAS VEGAS, NEVADA 89102

DEL WEBB COMMUNITIES, INC.
SUN CITY LAS VEGAS UNIT NO. 33A

UTILITY PLAN

SHEET 4 OF 9 SHEETS

JOB NO. 701.132 PLOTTED: 12/03/91 10:10 am

10-3-92

3071-4/4/-33A