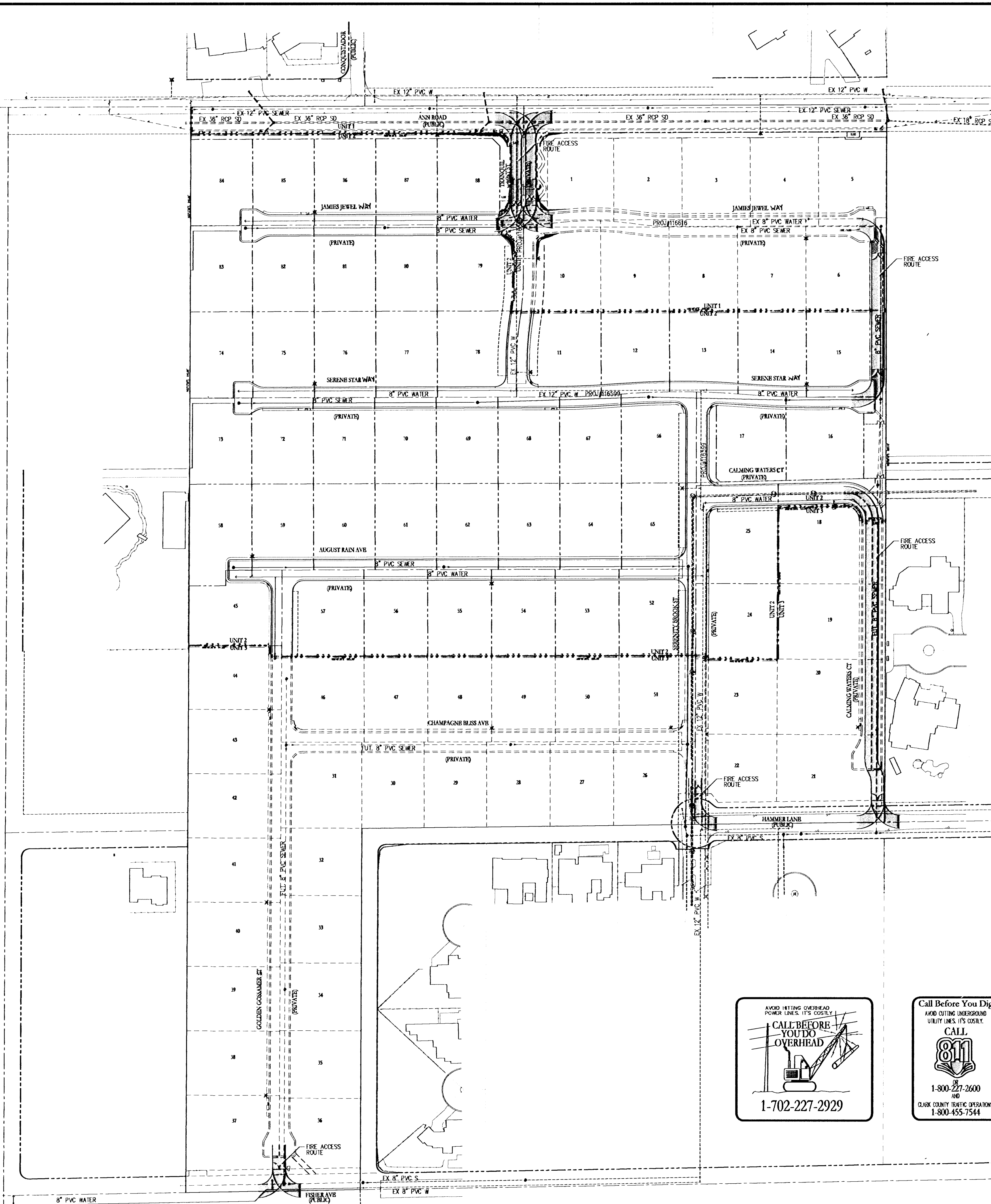
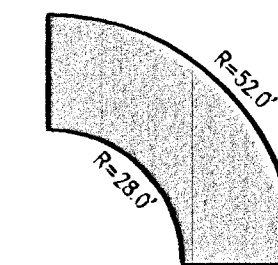


SEE ABOVE

126201



FIRE TURNING RADIUS



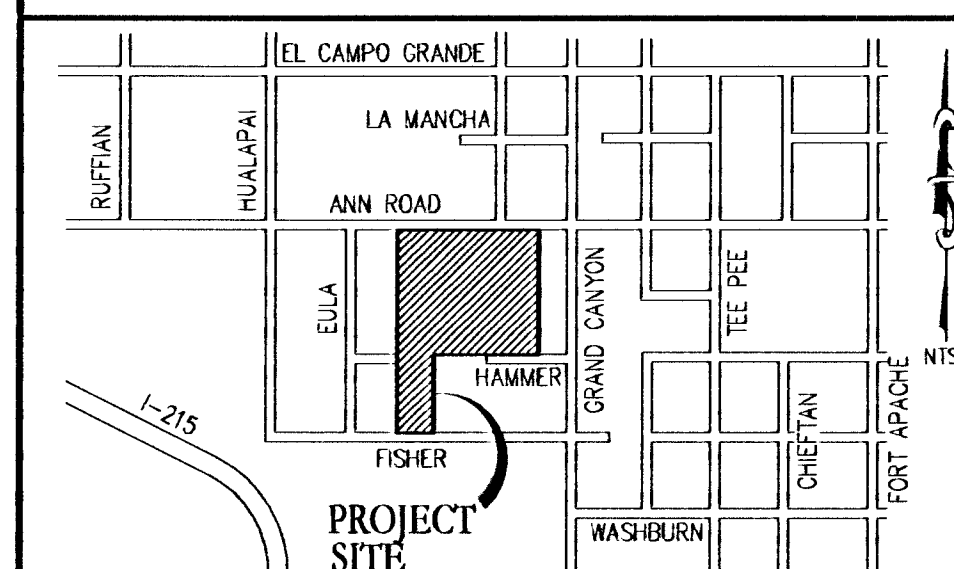
WASTEWATER CALCULATIONS

FACILITY TYPE: SINGLE FAMILY RESIDENTIAL
TOTAL UNITS AT BUILD OUT: 47 HOUSES

AVERAGE FLOW (MGD) = 0.0116
PEAK FLOW (MGD) = 0.0406

CALCULATIONS:
AVG FLOW = $47 \times \frac{90,000}{365} \times \frac{1}{1,000,000} = 0.0116$ MGD
PEAK FLOW = $0.0116 \times 3.5 = 0.0406$ MGD

KEY MAP



UTILITY NOTES

1. ALL WATER FACILITIES CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE "UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR WATER DISTRIBUTION SYSTEMS" (UDACS), LATEST EDITION.
2. FIRE, WATER, AND SEWER SERVICES, AS APPROVED ON THIS PLAN, ARE INTENDED SPECIFICALLY FOR THE LOT AND USE SHOWN, AND ARE NOT INTENDED TO SERVICE ADDITIONAL PARCELS OR STRUCTURES WHICH MAY BE CREATED IN THE FUTURE. IN THE EVENT THAT THE PARCELS AND/OR LOTS SHOWN ON THIS PLAN ARE FURTHER DIVIDED TO CREATE ADDITIONAL PARCELS OR LOTS, THE OWNER IS REQUIRED TO PROVIDE SEPARATE FIRE, WATER, & SEWER SERVICES TO EACH.
3. WATER AND SEWER LATERALS SHALL BE INSTALLED A MINIMUM OF 48" APART IN SEPARATE TRENCHES. WATER LATERALS SHALL BE A MINIMUM OF 12" ABOVE THE SEWER LATERAL. (REF: UNIFORM PLUMBING CODE)
4. LOCATOR WIRE SHALL BE USED FOR ALL SERVICE LATERALS NOT PERPENDICULAR TO THE MAIN. (TYPICAL)
5. ALL SEWER/STORM DRAINS CROSSING WATER LINES MUST CONFORM TO SECTION 2.22 OF "UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR WATER DISTRIBUTION SYSTEMS" (UDACS) FOR WATER AND STORM MAIN CROSSINGS AND CLEARANCES.
6. ALL WORK TO BE PERFORMED OUTSIDE OF THE PROJECT BOUNDARY AND ON PRIVATE PROPERTY SHALL NOT BE PERFORMED UNTIL WRITTEN PERMISSION AND EASEMENTS HAVE BEEN OBTAINED FROM THE OFFSITE OWNER AND GIVEN TO CLARK COUNTY.
7. ALL ONSITE STREETS AND DRAINAGE EASEMENTS ARE TO BE PRIVATELY OWNED AND MAINTAINED.

APPROVAL SIGNATURES

Dee Gregory 01/24/11
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER (PROJ 116617) DATE

Steven White 19 Jan 2011
CLARK COUNTY FIRE DEPARTMENT 1-635-7400 DATE

APPROVAL OF THESE PLANS SHALL NOT BE CONSIDERED TO BE A PERMIT FOR, OR AN APPROVAL OF, ANY VIOLATION OF ANY OF THE PROVISIONS OF THE STATE OR COUNTY LAWS. FIRE FLOW = 2,000 G.P.M. AT 20 PSI RESIDUAL.

LEGEND

EXISTING	PROPOSED
CENTERLINE	---
RIGHT-OF-WAY	---
OUT LINE-ASPHALT CURB AND GUTTER	---
FENCE	X X
POWER POLE	○
SIDEWALK RAMP	---
CURB DROP INLET	---
STORM DRAIN W/MANHOLE	---
SIDEWALK	---
PROPERTY LINE	---
EDGE OF PAVEMENT	---
CAP & 2" BLOW OFF VALVE	---
WATERLINE FITTINGS	---
GATE VALVE	---
FIRE HYDRANT	---
SEWER LINE W/MANHOLE	---
SEWER LATERAL	---
WATER LINE	---
WATER LATERAL W/METER	---
BACKWATER VALVE	---
PRESSURE REDUCING VALVE	---

FIRE FLOW CALCULATIONS

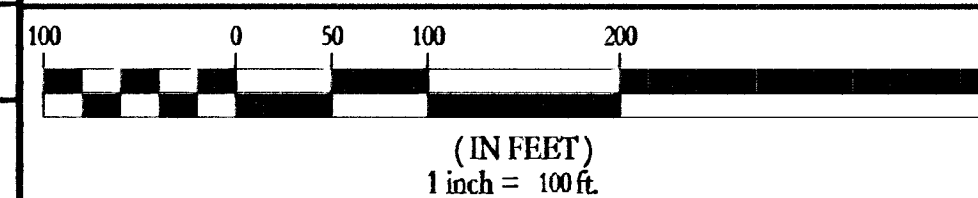
FIRE FLOW REQUIREMENT IS 2,000 GPM AT 20 POUNDS PER SQUARE INCH RESIDUAL. HYDRANTS TO BE INSTALLED: 5 BASED ON:
SQUARE FOOTAGE: 6,200 SQ. FT.
HEIGHT: 35'-11"
SPRINKLER SYSTEM: NO
ROOF CONSTRUCTION: TLE
HIGH PILED COMBUSTIBLE STORAGE: NO

LARGEST AREA BETWEEN SEPARATE WALLS: N/A
TYPE OF CONSTRUCTION: V-B
OCCUPANCY: R-3
STORIES: 1-STORY
ESFR SYSTEM: NO

UTILITY DISCLAIMER NOTE

EXISTING UTILITY LOCATIONS SHOWN HEREIN ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATIONS.
CALL BEFORE YOU DIG: 1-800-227-2600
CALL BEFORE YOU OVERHEAD: 1-702-227-2929

SCALE



LEGAL DESCRIPTION

BEING A PORTION OF THE NORTHWEST QUARTER (¼) OF SECTION 31, TOWNSHIP 19 SOUTH, RANGE 80 EAST, M.D.B. & M. CLARK COUNTY, NEVADA

BASIS OF BEARINGS

S 89°14'18" E, BEING THE NORTH LINE OF THE SE ¼ & NW ¼ SECTION 31, T19S, R80E; M.D.M. AS SHOWN ON FILE 97, PAGE 85 OF PARCEL MAPS, CLARK COUNTY, NEVADA OFFICIAL RECORDS.

BENCHMARK

B.M. 104V90-3104 CLV RIVET & ROUND PLATE IN CONC PAD WEST SIDE OF GRAND CANYON DR, 120 FEET SOUTH OF WASHBURN ROAD.
ELEVATION = 795.579 M (2010.16 FEET) NAVD 88

ABBREVIATIONS

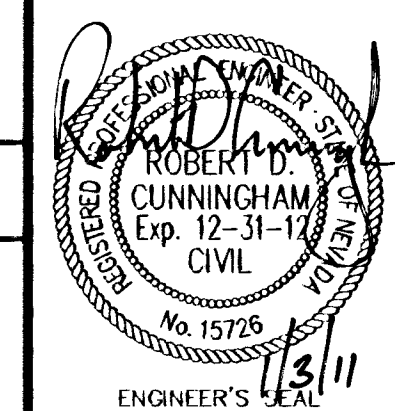
AC	ASPHALTIC CONCRETE	DC	ON CENTER
BCR	BACK OF CURB	PC	PULL BOX
BOC	BACK OF CURB RADIUS	POC	POINT OF CURVE
BM	BENCHMARK	POC	POINT OF COMPOUND CURVE
BVC	BEGIN VERTICAL CURVE	PI	POINT OF INTERSECTION
CAV	CABLE TELEVISION	PL	PROPERTY LINE
CC	CLARK COUNTY	PL	PLATE
CL	CENTERLINE	PPC	POINT OF CONNECTION
CLV	CITY OF LAS VEGAS	PPC	POWER POLE
CLW	CITY OF NORTH LAS VEGAS	PPC	POINT OF REVERSE CURVE
CO	CLEAN OUT, SEWER	PVC	POINT OF TANGENCY
COM	CITY OF HENDERSON	PVC	POLYVINYL CHLORIDE
CO	CUBIC YARD	R	RADIUS
DCSWS	DESIGN AND CONSTRUCTION STANDARDS OF WASTE WATER COLLECTION SYSTEMS	RCS	REINFORCED CONCRETE BOX
DG	DESIGN GRADE	RCP	REINFORCED CONCRETE PIPE
DI	DRAIN INLET	R/W	RIGHT-OF-WAY
DIP	DUCTILE IRON PIPE	RT	RIGHT
EC	END OF CURVE	SD	STORM DRAIN
EP	EDGE OF PAVEMENT	STLT	STREETLIGHT
END	END VERTICAL CURVE	SNWA	SOUTHERN NEVADA WATER AUTHORITY
EX	EXISTING	SS	SANITARY SEWER
FF	FINISH FLOOR ELEVATION	STA	STATION
FG	FINISH GRADE	STD	STANDARD
FL	FIRE HYDRANT	TC	TOP OF CURB
FT	FEET	TR	TOP OF FOOTING
GB	GRADE BREAK	TR	TOP OF RETAINING
GFT	GARAGE FINISH FLOOR	TW	TOP OF WALL
HP	HIGH POINT	TYP	TYPICAL
INV	INVERT	UDACS	UNIFORM DESIGN AND CONSTRUCTION STANDARDS
LF	LINEAR FEET	UDC	UNIFORM STANDARD DRAWING
LT	LEFT	USC	VERTICAL CURVE
LWVD	LAS VEGAS VALLEY WATER DISTRICT	VP	VERTICAL CURVE
MAX	MAXIMUM	VP	VERTICAL CURVE
M1	MANHOLE	VG	VALLEY GUTTER
MIN	MINIMUM	W	WATER
NIS	NOT TO SCALE	ZC	ZERO UP CURB

WILLIAM LYON HOMES
500 PILOT ROAD, STE 4 G
LAS VEGAS, NV 89119
(702) 263-8020 FAX: (702) 263-8220

TANEY ENGINEERING
6030 S. JONES BLVD STE# 100
LAS VEGAS, NV 89118
(702) 362-8844 FAX: (702) 362-5233

ANN AND GRAND CANYON - UNIT 2
(SERENITY RIDGE)
A RESIDENTIAL SUBDIVISION

MASTER UTILITY PLAN



DATE: 1/3/11

SCALE: 1"=100'

JOB NO: WLL-10-068

DESIGNED BY: MC

CHECKED BY: RDC

SHEET NAME: MUT

SHEET: 8 OF 25

10-26904