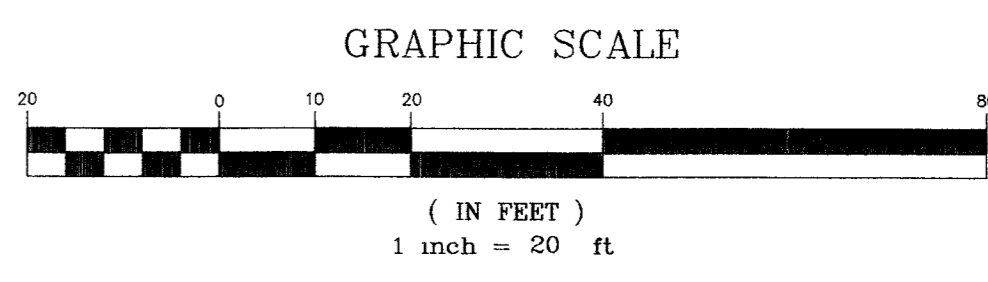
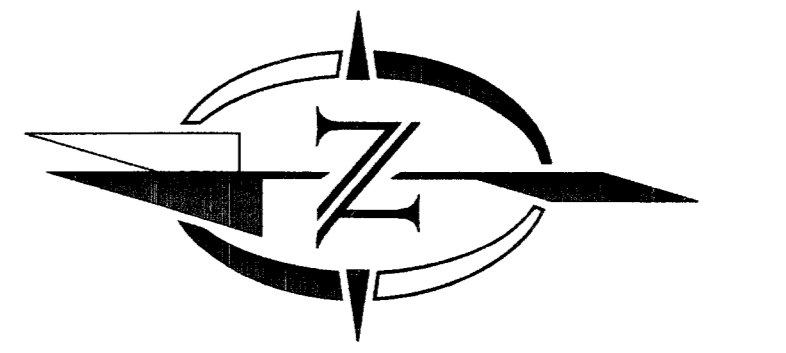


As Built
w/ sewer

PROJECT NAME: Freedom Park Pool & Bathroom
 PLAN NO: 104561
 This project water plan complies with the Las Vegas Valley Water District's technical requirements. However, this water plan is subject to C.I.D.I., C.I.O., C.I.U.
NOT APPROVED FOR CONSTRUCTION
 at this time and this signature does not provide or imply a water commitment.
 LVWWD DATE 9/29/04 ESN 052

DATE 9/29/04
 ESN 052



SEWER CONTRIBUTION

BATHHOUSE	
AVE DAILY FLOW = #FIXTURE UNITS * ERUS/FIXTURE * ERU FACTOR	= 112.25 * 0.45 * 250 GPD = 12,628 GPD
	= 8.77 GPM = 0.012628 MGD
PEAK DAILY FLOW = PEAK FACTOR * AVE DAILY FLOW	= 3.4 * 12,628.13 GPD = 42,936 GPD
	= 29.82 GPM = 0.042936 MGD
EQUIPMENT BUILDING FROM POOL	
AVE DAILY FLOW = ERUS (248,255 GAL POOL) * ERU FACTOR	= 0.85 * 250 = 213 GPD
	= 0.15 GPM = 0.000213 MGD
PEAK DAILY FLOW = PEAK FACTOR * AVE DAILY FLOW	= 3.4 * 212.50 GPD = 723 GPD
	= 0.50 GPM = 0.000723 MGD
TOTALS	
AVE DAILY = 8.92 GPM = 12,841 GPD = 0.012841 MGD	
PEAK DAILY = 30.32 GPM = 43,660 GPD = 0.043661 MGD	

- 5' off the equipment room Deck Drain
- 8' from the deck drain
- Electrical conduits 21' from the conduits irrigation pipe 1" pipe.
- 34' from irrigation pipe is main irrigation pipe.
- 35' from the main irrigation pipe is another irrigation pipeline.

CLV FIRE FLOW CALCULATIONS

FIRE FLOW REQUIREMENT IS 1500 GALLONS PER MINUTE AT 20 PSI RESIDUAL PRESSURE
 BASED ON:
 SQUARE FOOTAGE 3500 SQUARE FEET
 LARGEST AREA BETWEEN 4-HOUR AREA SEPARATION WALLS N/A SQUARE FEET
 BUILDING HEIGHT 25 FEET
 NUMBER OF STORIES 1 FLOORS
 TYPE OF CONSTRUCTION V-B
 OCCUPANCY A-3
 FULL AUTOMATIC FIRE SPRINKLER SYSTEM YES NO
 REVIEWED BY: [Signature] DATE 9/29/04

SEWER CONSTRUCTION NOTES

- INSTALL SANITARY SEWER CLEANOUT
- CONSTRUCT 48" MANHOLE PER CCSD STD DWG #SD-1 WITH 24" LOCKING MANHOLE COVER PER CCSD STD DWG #SD-3
- TRENCH BACKFILL PER CCSD STD DWG #SD-16B
- END STUB 5' FROM BUILDING - SEE PLUMBING PLANS FOR CONTINUATION

WATER CONSTRUCTION NOTES

- P.O.C. - CONNECT TO 24" WATER LINE WITH 2" SERVICE SADDLE AND CORP STOP PER UDACS PLATE #10
- P.O.C. - CONNECT TO EXISTING 24" WATER LINE WITH 8" M.J. WET TAPPING SLEEVE AND 8" TAPPING VALVE PER UDACS PLATE #22
- INSTALL 2" METER WITH 2" RPPA PER UDACS PLATE NOS 10 AND 11A
- INSTALL 3" x 2" REDUCER
- INSTALL 3" 90° ELBOW
- INSTALL 3" 90° TEE
- END STUB 5' FROM BUILDING - SEE PLUMBING PLANS FOR CONTINUATION
- INSTALL 2" 22 1/2° ELBOW
- INSTALL 2" 90° ELBOW
- INSTALL 8" FBCCO "N" PATTERN DCCA PER UDACS PL #10C
- INSTALL 8" 45° ELBOW PER UDACS PLATE #5
- INSTALL 8" x 6" REDUCER PER UDACS PLATE #3
- INSTALL FIRE HYDRANT ASSEMBLY PER UDACS PLATE #7
- TRENCH BACKFILL PER USD NO 504
- 15' x 20' LVWWD EASEMENT

DOUBLE CHECK DETECTOR ASSEMBLY (DCDA) (1) - 8"

THE DOUBLE CHECK DETECTOR ASSEMBLIES SHALL BE INSTALLED IN ACCORDANCE WITH THE UDACS STANDARD PLATE NO 11C
 ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENT(S) SO AS TO ALLOW THE DISTRICT DIRECT ACCESS FROM THE ADJACENT RIGHT-OF-WAY
 EASEMENTS SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION

REDUCED PRESSURE PRINCIPLE ASSEMBLY (1)-2"

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 LVWWD

PIPE MATERIAL CONSTRUCTION LIST

UNLESS OTHERWISE NOTED ON THE PLANS, ALL PIPE MATERIALS USED SHALL BE AS FOLLOWS
WATER SYSTEM
 ALL PIPES GREATER THAN OR EQUAL TO 4" IN DIAMETER SHALL BE CONSTRUCTED USING C-900 PVC
 ALL PIPES LESS THAN 4" IN DIAMETER SHALL BE CONSTRUCTED USING SCH 40 PVC
SEWER SYSTEM
 ALL PIPES SHALL BE CONSTRUCTED USING SDR-35
STORM DRAIN SYSTEM
 ALL PIPES SHALL BE CONSTRUCTED USING MATERIALS AS NOTED ON PLANS

BENCHMARK
 CLV BM 2LV02 30W4 RIVET & PLATE IN TOP OF CURB, SE CORNER OF WASHINGTON AVENUE AND PECOS ROAD, ELEV 1805.04' (NAV08)

BASIS OF BEARING
 THE NORTH LINE OF THE SOUTHEAST QUARTER (SE 1/4) OF SECTION 25, TOWNSHIP 20 SOUTH, RANGE 61 EAST M.D.M., CLARK COUNTY, NEVADA, BEING THE CENTERLINE OF WASHINGTON AVENUE, BEARS N 89°06'43" W AS SHOWN ON CERTAIN PARCEL MAP RECORDED IN FILE 86 OF PARCELS, PAGE 48, CLARK COUNTY, NEVADA, OFFICIAL RECORDS

AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY

Call before you Dig. 1-800-222-2600 UNDERGROUND SERVICE (USA)

AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY

CALL BEFORE YOU CRANE 1-702-227-2929

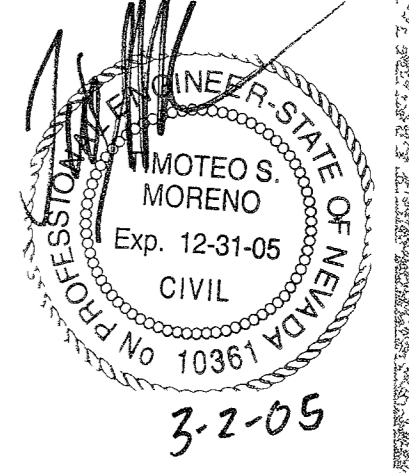
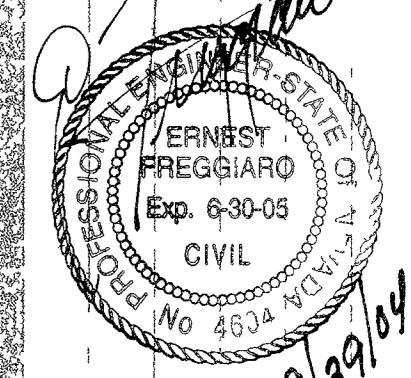
Call before you UnderGround 1-702-455-7511 OR 1-702-229-6611

APPROVED FOR CONSTRUCTION
 [Signature] 9/29/04
 CITY OF LAS VEGAS FIRE DEPARTMENT DATE

APPROVED FOR CONSTRUCTION
 [Signature] 11/02/04
 LAS VEGAS VALLEY WATER DISTRICT (PROJECT # H109366) DATE

1/21 03 2006

2480 E. Tompkins Ave.
 Suite 252
 Las Vegas, NV 89121
 phone: 702.456.4664
 fax: 702.456.4919



OWNER: CITY OF LAS VEGAS
 DEPARTMENT OF PUBLIC WORKS
 ARCHITECTURAL SERVICES

400 EAST STEWART AVENUE
 LAS VEGAS, NEVADA 89101
 PHONE: (702) 229-6335
 FAX: (702) 382-5232
 TDD: (702) 386-9108

TOWN	IE
DATE	09-17-04
SCALE	1"=20'
RID NO	04.15341.06
CLV DWG NO	650.22-17
SHEET NO	
CLV DWG NO	674/123

C4.01

ESTAR ARCHITECTS
 ARCHITECTURE • PLANNING • INTERIOR DESIGN
 3800 MEADOWS LANE SUITE 220 LAS VEGAS, NEVADA 89107
 TELEPHONE: (702) 878-0000 FAX: (702) 878-8430
 www.wagnarchitects.com

FREEDOM PARK POOL AND BATHHOUSE
 WASHINGTON AVE. & PECOS RD.
 LAS VEGAS, NV.
 100% CONSTRUCTION DOCUMENTS
 UTILITY PLAN

WATER
 GAS
 SEWER

REVISIONS
 CONSULTANT
 THE CLIENT MAY BE LIMITED ONLY FOR COPIES OF THE PROJECT FOR WHICH THESE MEASUREMENTS AND NOT FOR THE CONSTRUCTION OF ANY OTHER PROJECT IN A CITY OR COUNTY.