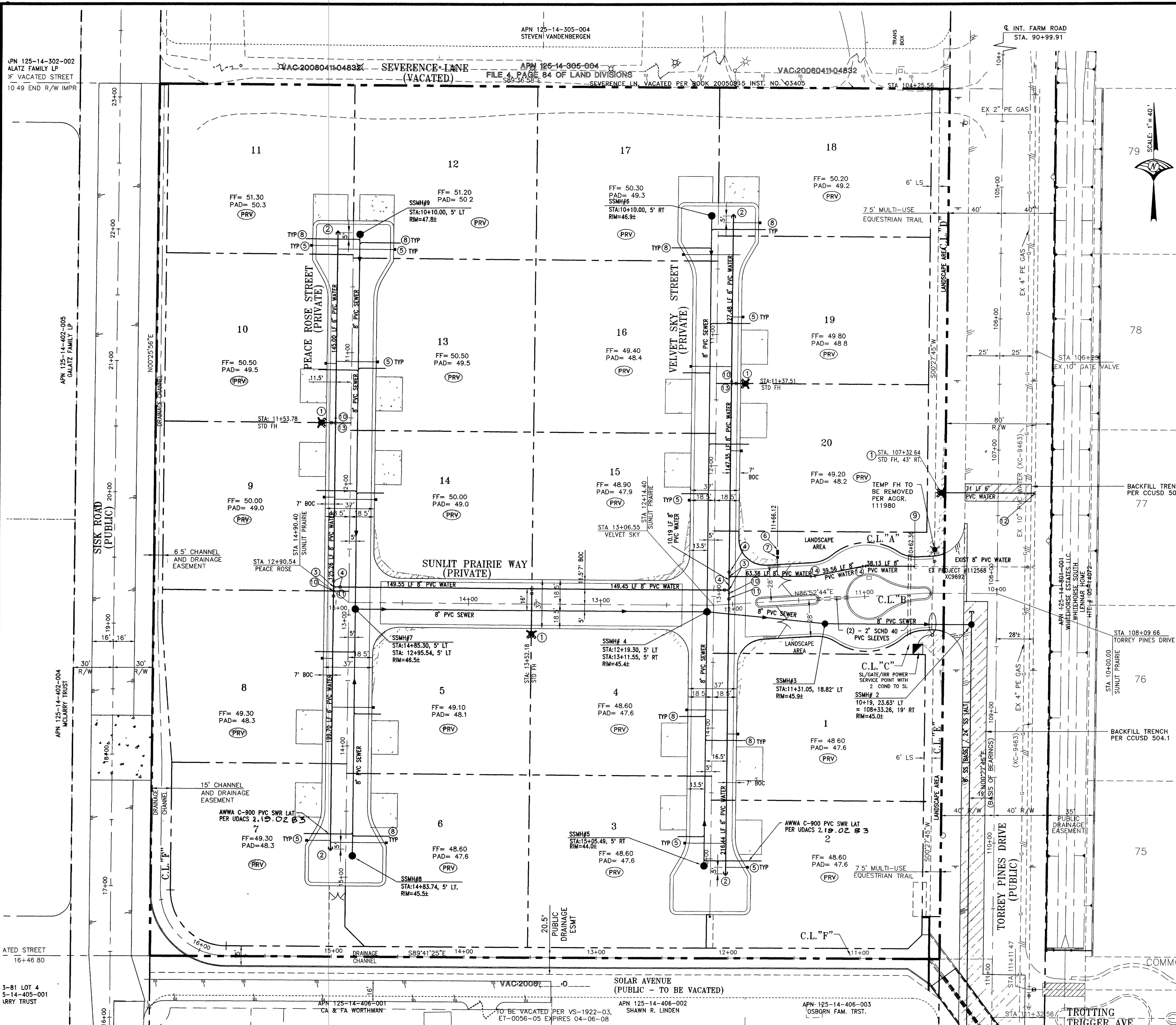


### WATER MAIN JOINT DEFLECTION (PVC, 4'-24')

PVC PIPE SHALL BE DEFLECTED AT THE JOINT ONLY. THE MAXIMUM ALLOWABLE DEFLECTION SHALL BE ONE (1) DEGREE PER JOINT WITH A MINIMUM RADIUS OF CURVATURE OF 1,150 FEET. PER UDACS 2.06.02. FOR CHANGES IN DIRECTION EXCEEDING THE MAXIMUM ALLOWABLE JOINT DEFLECTION, FITTINGS SHALL BE USED.

### SINGLE METER BOX-ARMOR CAST

BOX - #600048ST  
LID - #600048AT

### ALL LOTS WHITEHORSE WEST

THIS PROPERTY MAY HAVE STATIC WATER PRESSURE IN EXCESS OF 80 PSI. THE UNIFORM PLUMBING CODE REQUIRES THAT INDIVIDUAL ON-SITE (PRIVATE) PRESSURE REDUCING VALVES BE INSTALLED WHENEVER THE PRESSURE EXCEEDS 80 PSI. PRVS ARE IN THE DEVELOPERS RESPONSIBILITY, AND WILL NOT BE INSPECTED OR INCLUDED IN THE ACCEPTANCE OF LVWD FACILITIES.

### WATER ESTIMATE OF QUANTITIES

|                                      |         |
|--------------------------------------|---------|
| 8" PVC WATER MAIN                    | 717 LF± |
| 6" PVC WATER MAIN                    | 765 LF± |
| STD. FIRE HYD. W/ASSY.               | 4 EA    |
| 3/4" WATER METER (IRRIGATION)        | 1 EA    |
| 1" WATER METER (DOMESTIC)            | 20 EA   |
| 1" RPPA                              | 1 EA    |
| 2" BLOW-OFF ASSEMBLY                 | 4 EA    |
| 8" GATE VALVE                        | 4 EA    |
| 10" x 8" TAPPING W/ 8" TAPPING VALVE | 1 EA    |
| 8" x 8" x 8" TEE                     | 3 EA    |
| 8" x 6" REDUCER                      | 4 EA    |
| 6" GATE VALVE                        | 2 EA    |
| 8" x 6" x 8" TEE                     | 2 EA    |
| 11.5" ELBOW                          | 2 EA    |

### WATER/SEWER NOTES

- INSTALL PIPELINE MARKER BALLS IN TRENCH ABOVE EACH HORIZONTAL ELBOW FITTING, PER UDACS PLATE NO. 27.
- ALL SEWER/STORM DRAINS CROSSING WATER LINES MUST CONFORM TO SECTION 2.19 OF UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR WATER DISTRIBUTION SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSINGS AND CLEARANCES.
- ALL PRIVATE STREETS ARE CLV SEWER & PUBLIC DRAINAGE EASEMENTS TO BE PRIVATELY MAINTAINED.

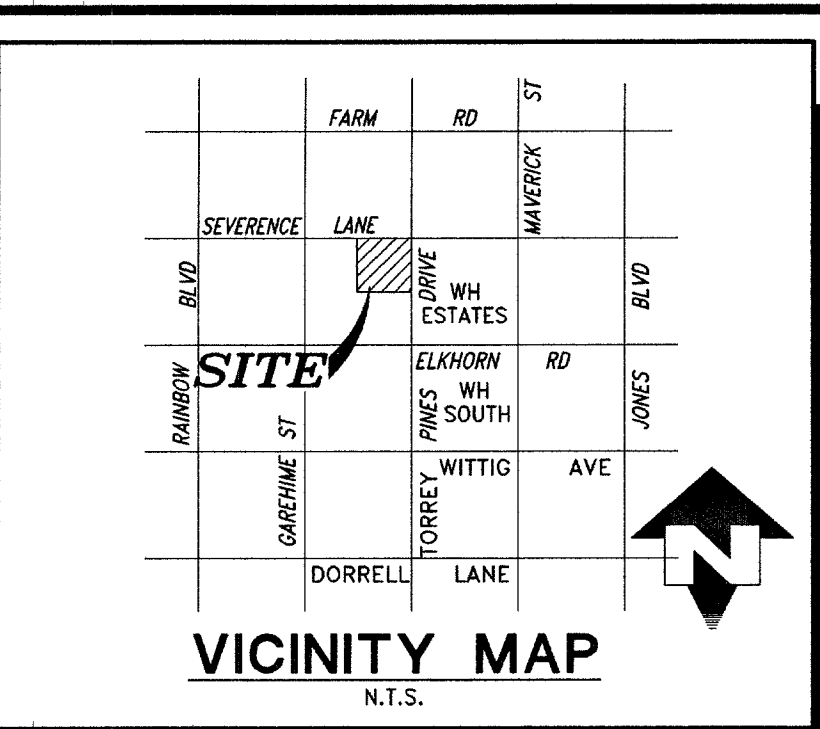
### REDUCED PRESSURE PRINCIPLE ASSEMBLY (1) - 1"

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 LVWD.

ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENTS TO ALLOW THE DIRECT ACCESS FROM THE ADJACENT RIGHT OF WAY. EASEMENTS SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.

### WATER CONSTRUCTION NOTES

- STD. FIRE HYD. W/ASSY. PER UDACS PLATE 7
- CAP AND 2" BLOW OFF ASSEMBLY PER UDACS PLATE 4A
- 8" x 8" x 8" TEE PER UDACS PLATE 5
- 8" GATE VALVE PER UDACS PLATE 8
- INSTALL 1" TYPE "K" COPPER SERVICE W/ 1" METER PER UDACS PLATE 10
- INSTALL 1" RPPA PER UDACS PLATE 11A
- INSTALL 1" SERVICE W/ 3/4" METER FOR IRRIG. PER UDACS PLATE 10
- INSTALL 4" SANITARY SEWER LATERAL
- REMOVE CAP AND BLOWOFF AND CONNECT TO EXISTING 8" WATER STUB
- 8" x 6" REDUCER PER UDACS PLATE 3
- 6" GATE VALVE PER UDACS PLATE 8 & 3
- INSTALL 10" x 8" TAPPING SLEEVE AND TAPPING VALVE PER UDACS PLATES 3, 8, AND 22
- 8" x 6" x 8" TEE PER UDACS PLATE 5
- INSTALL 8" 11.25" BEND PER UDACS PLATE 5



### BASIS OF BEARING

NORTH 89°38'01" WEST, BEING THE BEARING OF THE NORTH LINE OF THE SOUTHEAST QUARTER (NE 1/4) OF THE SOUTHEAST QUARTER (SE 1/4) OF SECTION 14, TOWNSHIP 19 SOUTH, RANGE 60 EAST, MOH. CLARK COUNTY, NEVADA, AS SHOWN ON THAT CERTAIN MAP ON FILE IN THE CLARK COUNTY RECORDER'S OFFICE.

### BENCHMARK

CITY OF LAS VEGAS BENCHMARK 9LV90 14C4  
A RIVET AND PLATE IN A CONCRETE PAD (POWER) AT THE SOUTHWEST CORNER OF FARM ROAD AND TORREY PINES DRIVE.  
ELEVATION=717.2224 METERS (NAV'D'88)  
ELEVATION=2353.09 U.S. SURVEY FEET (NAV'D'88)

### SEWER CONTRIBUTION

SINGLE FAMILY, ERU = 1.0, P. F. CURVE G  
AVG: 230 UNITS X 250 GPD X 1 ERU = 57,500 GPD  
57,500 GPD = 0.0575 MGD  
PEAK FACTOR = 3.5 FROM TABLE C  
PEAK FLOW CONTRIBUTION: 0.0575 X 3.5 = 0.2013 MGD

### FIRE FLOW DATA

FIRE FLOW REQUIREMENT IS 2250 GALLONS PER MINUTE AT 20 PSI RESIDUAL PRESSURE.

|                                       |                |
|---------------------------------------|----------------|
| BASED ON:                             |                |
| SQUARE FOOTAGE:                       | 7,379± SQ. FT. |
| LARGEST AREA BETWEEN 4-HOUR AREA      |                |
| SEPARATION WALLS:                     | N/A            |
| BUILDING HEIGHT:                      | 28 FT.         |
| NUMBER OF STORIES:                    | 2              |
| TYPE OF CONSTRUCTION:                 | V-B            |
| OCCUPANCY:                            | R-1            |
| FULL AUTOMATIC FIRE SPRINKLER SYSTEM: | N/A            |
| REVIEWED BY:                          |                |
| DATE:                                 |                |

### APPROVALS

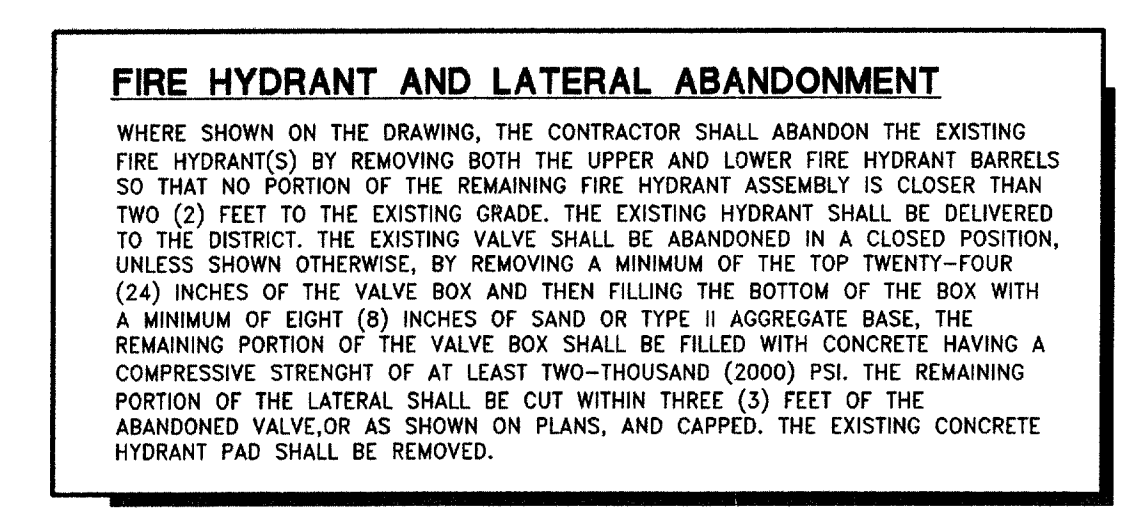
*Steven W. White* 21 MAR 2007  
CLARK COUNTY FIRE DEPARTMENT  
APPROVAL OF THESE PLANS SHALL NOT BE CONSTRUED TO BE A PERMIT FOR, OR AN APPROVAL OF, ANY VIOLATION OF ANY OF THE PROVISIONS OF THE STATE OR COUNTY LAWS. REQUIRED FIRE FLOW = 2250 GPM. AT 20 P.S.I. RESIDUAL. ALL BUILDINGS ARE LESS THAN 7700 TOTAL SQUARE FEET.

### APPROVED FOR CONSTRUCTION

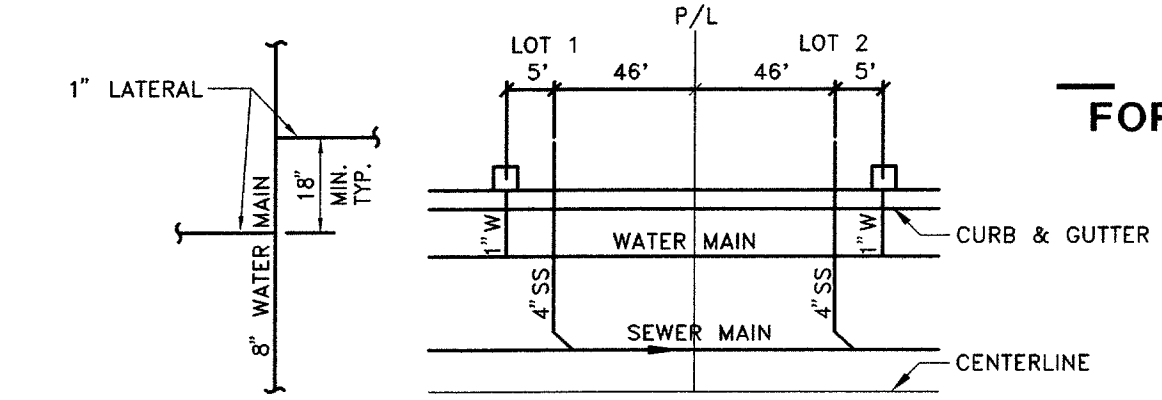
*Sei J. Jang* 4-12-07  
LAS VEGAS VALLEY WATER DISTRICT PROJ. 105705  
SHEETS 1 & 5

### CLV SEWER

JORGE A. CERVANTES, P.E. #13977, P.T.O.E  
CITY ENGINEER  
APPROVAL OF THESE PLANS IS LIMITED TO THOSE IMPROVEMENTS CONSTRUCTED IN THE DEDICATED RIGHT-OF-WAY AND/OR DEDICATED EASEMENTS. THIS APPROVAL DOES NOT AUTHORIZE THE CONSTRUCTION OF ANY IMPROVEMENTS THAT DEVIATE FROM ADOPTED STANDARDS AND/OR SPECIFICATIONS, EXCEPT THOSE SPECIFICALLY LISTED UNDER DEVIATIONS FROM STANDARD. THE ENGINEER SHALL RESOLVE ANY DEVIATION OTHER THAN THOSE LISTED IN DEVIATIONS FROM STANDARDS IN FAVOR OF THE UNIFORM STANDARD DRAWINGS AND SPECIFICATIONS CLARK COUNTY AREA, NEVADA.

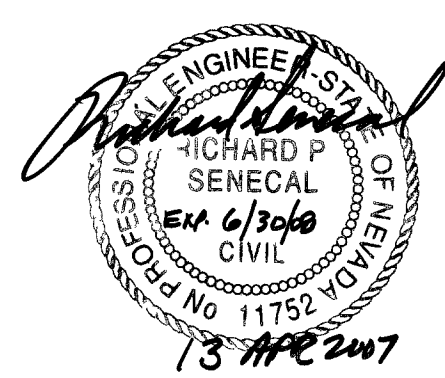


FIRE HYDRANT DETAIL  
NTS



TYPICAL SERVICE LOCATION  
UNLESS OTHERWISE SHOWN

FOR SEWER CONTINUATION  
SEE SHEET 9



Call before you Dig  
1-800-227-2600

Call before you OVERHEAD  
1-702-227-2929

UnderGround  
1-702-455-7511  
CLARK COUNTY TRAFFIC OPERATIONS  
1-702-229-6611  
LAS VEGAS AREA TRANSPORTATION SYSTEM

WOOD RODGERS  
ENGINEER  
RICHARD P. SENECA  
CLV  
No. 11752

DATE: 21 MAR 2007  
HTE# 06-27964  
CLV # 307V996

PROJECT NO. 1881.001  
DRAWING 5  
SHT 5 OF 15

WOOD RODGERS  
DESIGNING • INNOVATIVE • DESIGN • SOLUTIONS  
9900 Covington Cross Dr. Ste. 102 Tel 702.434.2953  
Las Vegas, NV 89144 Fax 702.434.2957

NEVADA

IMPROVEMENT PLANS FOR  
WHITEHORSE WEST  
UTILITY PLAN

CLARK COUNTY

DATE: MARCH 2007  
SCALE: H: 1"=40' V: 1"=40'  
DRAWN BY: NSA  
DESIGNED BY: NSA  
CHECKED BY: RPS  
NO.