

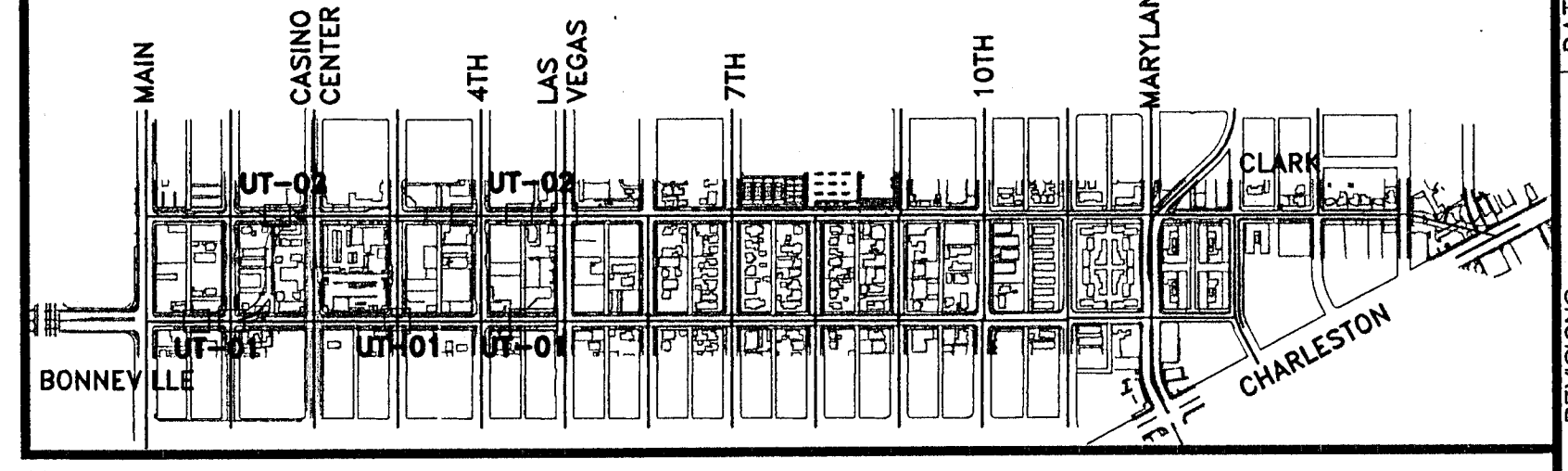
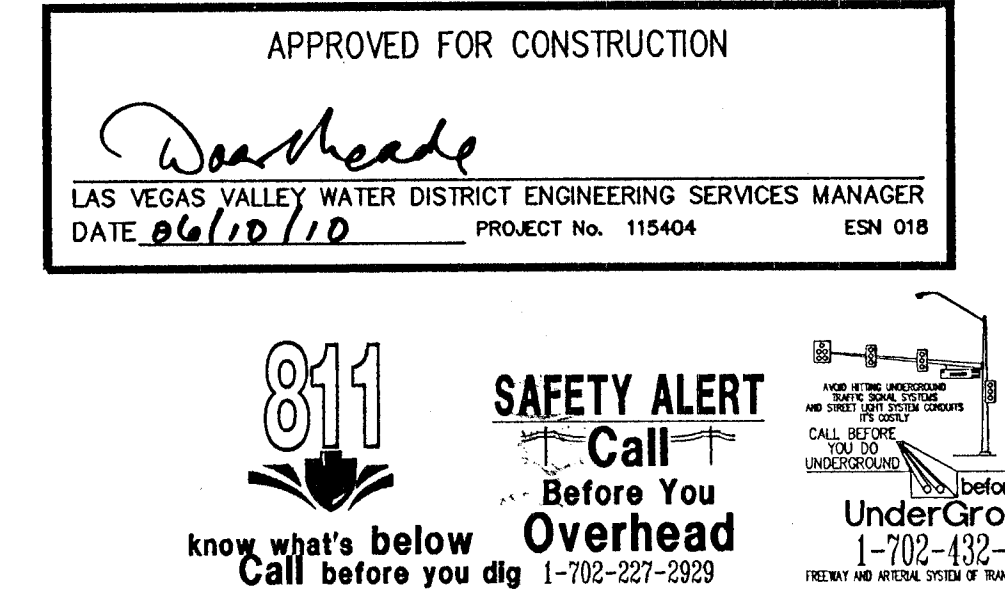
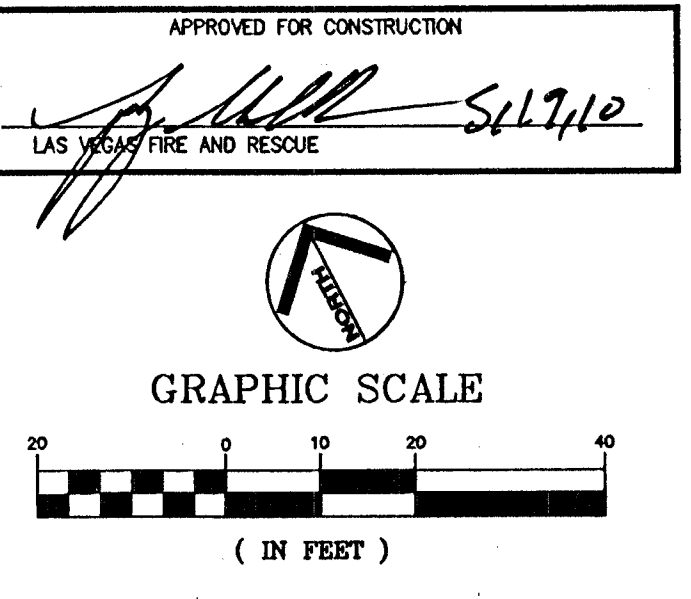
TAND, INC.
AS-BUILT
11-18-14
DATE DANIEL MEYER

LVVWD QUANTITIES	
8" DUCTILE IRON PIPE	168 LF
6" PVC C-905	5 LF
6" DUCTILE IRON PIPE	15 LF
8" 45° ELBOW	4 EA
6" GATE VALVE	4 EA

ABANDONMENT OF EXISTING SERVICE LATERALS
 THE CONTRACTOR SHALL NOTIFY THE INSPECTION DIVISION AT THE LVVWD (702-258-3227) 48 HOURS PRIOR TO THE REQUESTED REMOVAL TIME TO ALLOW THE DISTRICT TO TAKE THE FINAL METER READING. AFTER THE FINAL READING THE CONTRACTOR MAY THEN BEGIN REMOVAL PROCEDURES FOR THE AFFECTED SERVICE AS FOLLOWS:
 EXISTING SERVICE LATERALS THAT ARE TO BE ABANDONED FROM THE EXISTING WATER MAINS SHALL HAVE THE CORPORATION STOPS TURNED OFF AT MAIN, A MINIMUM OF TWELVE (12) INCHES OF THE LATERAL CUT OUT NEAR THE CORPORATION STOPS, AND A BRASS CAP INSTALLED ON THE CORPORATION STOP. IF THE CORPORATION STOP IS DAMAGED BEYOND REPAIR OR PULLED FROM THE EXISTING WATER MAIN, THE MAIN SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE, IN A MANNER APPROVED BY THE DISTRICT. IF THE CORPORATION STOP IS NOT WATER TIGHT, THE CONTRACTOR SHALL NOTIFY LVVWD COMMUNICATION SUPPORT CENTER 9702-3258-7171 FOR FURTHER DIRECTION. THE EXISTING METER(S) SHALL BE REMOVED AND DELIVERED TO THE DISTRICT.
 THE CONTRACTOR SHALL REMOVE THE EXISTING SERVICE METER BOX AND APPURTENANCES, FILL AND GRADE ANY AND ALL RESULTING VOIDS, AND REPLACE OR RESTORE TO ORIGINAL CONDITIONS OR BETTER, ALL LANDSCAPING, IRRIGATION SYSTEMS, CONCRETE, SIDEWALKS, ASPHALT, OR ANY OTHER ITEMS DAMAGED OR REMOVED DURING THE REMOVAL OF THE EXISTING SERVICE METER BOX.

RELOCATION OF FIRE HYDRANTS
 THE CONTRACTOR SHALL REMOVE AND RELOCATE BOTH THE UPPER AND LOWER BARRELS OF THE EXISTING FIRE HYDRANT(S) WHERE SHOWN, EXTEND THE EXISTING LATERAL AS REQUIRED, AND REINSTALL SUCH HYDRANT(S) AT THE NEW LOCATION(S) INDICATED. FIRE HYDRANTS SHALL BE TESTED PRIOR TO AND AFTER RELOCATION, UNDER THE DIRECTION OF THE DISTRICT, TO ENSURE QUALITY. INSTALLATION SHALL BE IN ACCORDANCE WITH UDACS PLATE 7. LATERALS MADE OF UNPROVED MATERIALS SHALL BE REPLACED FROM THE MAIN TO THE FIRE HYDRANT. RELOCATIONS WHERE THE LATERAL CANNOT BE EXTENDED SHALL BE TREATED AS NEW INSTALLATIONS.
BENCHMARK
 CITY OF LAS VEGAS VERTICAL CONTROL POINT "6001 34SW", BEING A RIVET & PLATE IN TOP OF CURB ON THE EAST SIDE OF MAIN BETWEEN BONNEVILLE & GARCES @ LIGHT POLE.
 ELEVATION: 2027.08 (FEET)
 617.8544 (METERS)
 CITY OF LAS VEGAS VERTICAL CONTROL DATED 06/2002 BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

BASIS OF BEARING
 THE BASIS OF BEARINGS FOR THIS SURVEY IS GRID NORTH AS DEFINED BY THE NORTH AMERICAN DATUM OF 1983 (NAD 83), NEVADA STATE PLANE EAST (2701) ZONE. SAID BEARINGS WERE DETERMINED BY STATO GLOBAL POSITIONING SYSTEM (GPS) MEASUREMENTS PROCESSED BY THE NATIONAL GEODETIC SURVEY DIVISION OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION USING THE ON-LINE POSITIONING USER SERVICE (OPUS). THE REFERENCE FRAME USED WAS NAD83 (CORRSE) WITH AN EPOCH OF 2002.0000. ALL DISTANCES SHOWN HEREON ARE GROUND VALUES.
LVVWD NOTES
 1. CONTRACTOR SHALL COMPLETE ALL WORK FOR MAINLINE RELOCATION DURING ONE CONTINUOUS PERIOD OR SHALL COORDINATE WITH ALL LVVWD CUSTOMERS AFFECTED BY THIS WORK PRIOR TO START OF RELOCATION. AFFECTED CUSTOMERS SHALL BE NOTIFIED AND MUST AGREE TO SCHEDULE OF RELOCATION PRIOR TO START OF WORK.



- CONSTRUCTION NOTES**
- RELOCATE EXISTING FIRE HYDRANT PER UDACS PLATE NO. 7.
 - ABANDON EXISTING SERVICE LATERAL FOR HYDRANTS ABANDON VALVE PER UDACS 2.09.07. SEE NOTE THIS SHEET.
 - WET TAP EXISTING ACP WATERLINE WITH MECHANICAL JOINT TAPPING SLEEVE AND 6" TAPPING VALVE PER UDACS PLATE NO. 22.
 - INSTALL 22.5" ELBOW PER UDACS PLATE NO. 5.
 - RELOCATE EXISTING SERVICE METER AND RPPA PER UDACS PLATE NO. 5, 10 AND 11A. WET TAP EXISTING WATERLINE AS NECESSARY.
 - INSTALL 3/4" WATER METER PER UDACS PLATE NO. 10.
 - INSTALL 1" RPPA PER UDACS PLATE NO. 11A.
 - INSTALL 6" WATERLINE PER UDACS PLATE NO. 6C.
 - INSTALL 1" COPPER WATERLINE PER UDACS PLATE NO. 10.
 - INSTALL 1" BRASS WATERLINE PER UDACS PLATE NO. 10.
 - NOT USED.
 - EXISTING CATV PULL BOX TO BE RELOCATED BY OTHERS.
 - INSTALL SERVICE SADDLE PER UDACS PLATE NO. 10.
 - RELOCATE EXISTING WATER METER (AND BACKFLOW DEVICE, IF APPLICABLE) PER UDACS PLATE NO. 1C. EXTEND EXISTING LATERAL IN ORDER TO LOCATE WATER METER WITHIN THE LIMITS OF PROPOSED SIDEWALK. MAINTAIN EXISTING SERVICE CONNECTION.
 - WATER METER TO BE REMOVED OR RELOCATED BY OTHERS PRIOR TO CONSTRUCTION.
 - NOT USED.
 - RELOCATE EXISTING SERVICE METER PER UDACS PLATE NO. 5, 10 AND 11A. TAP EXISTING 8" ACP WATERLINE PER UDACS REQUIREMENTS.
 - RELOCATE EXISTING SERVICE METER (AND RPPA, IF APPLICABLE) PER UDACS PLATE NO. 5, 10 AND 11A. TAP EXISTING 16" ACP WATERLINE PER UDACS REQUIREMENTS.
 - INSTALL 45° ELBOW PER UDACS PLATE NO. 5.
 - CUT EXISTING 8" PVC WATERLINE AND CONNECT TO PROPOSED 8" DIP WATERLINE WITH TRANSITION COUPLING.
 - EXISTING 8" WATERLINE TO REMAIN. PROTECT IN PLACE.
 - ABANDON/REMOVE 150 LINEAR FEET OF EXISTING 8" PVC WATERLINE.
 - NOT USED.
 - INSTALL 8" DUCTILE IRON PIPE (DIP) WATERLINE PER UDACS PLATE NO. 6C.
 - INSTALL 8" DIP TRANSITIONAL COUPLING
 - RECONNECT EXISTING 8" LATERAL, CONNECT TO PROPOSED 8" DIP WATERLINE WITH 8"x6" TEE. RELOCATE EXISTING GATE VALVE AS NECESSARY PER UDACS PLATE NO. 3 & 8.
 - RELOCATE EXISTING 8"x6" CROSS AND 6" GATE VALVES. EXTEND EXISTING 8" MAIN AND CONNECT TO PROPOSED 8" DIP WATERLINE PER UDACS PLATE NO. 3, 5, & 8.

- GENERAL NOTES**
- ALL EXISTING UTILITY LOCATIONS SHOWN HEREIN ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO DETERMINE THE MATERIAL OF PIPE AND THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.
 - CONTRACTOR TO FIELD VERIFY EXISTING INVERT ELEVATION PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
 - ON-SITE UTILITIES ARE TO BE INSTALLED PER THE CURRENTLY ADOPTED DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER AND POTABLE WATER SYSTEMS.
 - CONTRACTOR TO PROTECT ALL EXISTING UNDERGROUND UTILITIES IN PLACE DURING EXCAVATION BACKFILL.
- NOTES**
- ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE DESIGN AND CONSTRUCTION STANDARDS FOR WASTE WATER COLLECTION SYSTEMS FOR SOUTHERN NEVADA. (ESN. 053 REVISED 6/1/04)
 - DISPOSAL OF ASBESTOS CEMENT PIPE SHALL BE IN ACCORDANCE WITH AWWA, LOCAL, STATE AND FEDERAL REGULATIONS.
 - ALL VALVES TO BE ABANDONED SHALL BE ABANDONED IN THE CLOSED POSITION, UNLESS SHOWN OTHERWISE, BY REMOVING A MINIMUM OF THE TOP TWENTY-FOUR (24) INCHES OF THE VALVE BOX AND THEN FILLING THE BOTTOM OF THE BOX WITH A MINIMUM OF EIGHT (8) INCHES OF SAND OR TYPE II AGGREGATE BASE. THE REMAINING PORTION OF THE VALVE BOX SHALL BE FILLED WITH CONCRETE HAVING A COMPRESSION STRENGTH OF AT LEAST TWO THOUSAND (2,000) PSI.
 - THE LATERAL MUST BE CUT WITHIN THREE (3) FEET OF THE ABANDONED VALVE, OR AS SHOWN ON PLANS, AND CAPPED. THE CONTRACTOR SHALL CUT THE EXISTING PIPE WHERE SHOWN ON THE DRAWING AND INSTALL A CAP COMPLETE WITH THRUST BLOCK. WHERE A JOINT OR COUPLING IN THE EXISTING PIPE IS UNCOVERED AT THE CUT AND CAP LOCATIONS, THE INSTALLATION OF A PLUG MAY BE PERMITTED WITH AGENCY APPROVAL. A CONCRETE THRUST BLOCK SHALL BE INSTALLED AT ALL CAP OR PLUG LOCATIONS IN ACCORDANCE WITH THE PROVISIONS OF UDACS PLATE 5.
 - WHERE SHOWN ON THE DRAWING THE CONTRACTOR SHALL ABANDON THE EXISTING FIRE HYDRANT(S) BY REMOVING BOTH THE UPPER AND LOWER FIRE HYDRANT BARRELS SO NO PORTION OF THE REMAINING FIRE HYDRANT ASSEMBLY IS CLOSER THAN 2 FEET TO THE EXISTING GRADE. THE EXISTING HYDRANT SHALL BE DELIVERED TO THE AGENCY. THE EXISTING VALVE SHALL BE ABANDONED IN A CLOSED POSITION, UNLESS SHOWN OTHERWISE, BY REMOVING A MINIMUM OF THE TOP TWENTY-FOUR (24) INCHES OF THE VALVE BOX AND THEN FILLING THE BOTTOM OF THE BOX WITH A MINIMUM OF EIGHT (8) INCHES OF SAND OR TYPE II AGGREGATE BASE. THE REMAINING PORTION OF THE VALVE BOX SHALL BE FILLED WITH CONCRETE HAVING A COMPRESSION STRENGTH OF AT LEAST TWO THOUSAND (2,000) PSI. THE REMAINING PORTION OF THE LATERAL SHALL BE CUT WITHIN THREE (3) FEET OF THE ABANDONED VALVE, OR AS SHOWN ON PLANS, AND CAPPED. THE EXISTING CONCRETE HYDRANT PAD SHALL BE REMOVED.

DATE: FEBRUARY 2010
 SHEET REPLACEMENT
 SCALE: (H): 1"=20'
 SCALE (V): N/A
 DESIGNED BY: JH
 CHECKED BY: PM/CC
 DRAWN BY: WSW
 PROJECT: BONNEVILLE/CLARK ONEWAY COUPLET PHASE 1 IMPROVEMENT PLANS
 UTILITY SHEET
 SHEET NO. 107V5201
 SHEET 38 OF 91
 1-702-432-5300
 1-702-227-2929
 Call Before You Overhead
 Know what's below
 Call before you dig

Apr 25, 2010 - 8:54am USER: peter.meyer@tand.com BONNEVILLE-CLARK_2008A.CADD\256501\101-01_03.dwg
 LVVWD Projects\LVVWD\Mainline\256501\101-01_03.dwg

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