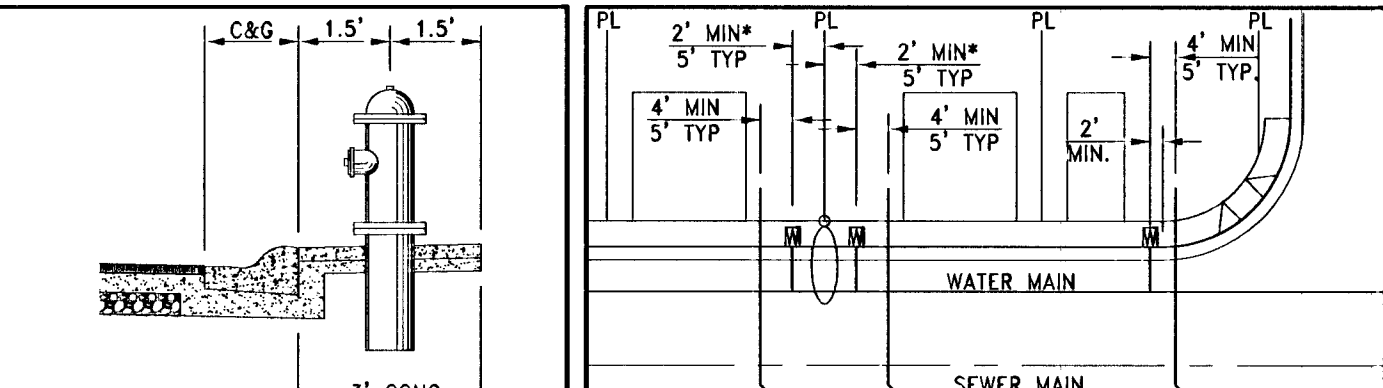


DISCLAIMER NOTE:

UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UNDERGROUND OR OVERHEAD 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 LOCATION. CONTRACTOR TO NOTIFY ENGINEER OF ANY CHANGES OR DISCREPANCIES.

Avoid overhead power line contact. If a costly.
Call before you Overhead
1-702-227-2929
Nevada Power
Environment and Safety
Services Department

Call before you Dig
Avoid cutting underground utility lines. If a costly.
Call 811
1-800-227-2600
CLARK COUNTY UTILITY OPERATIONS
1-702-455-7544



- ## WATER CONSTRUCTION NOTES
- INSTALL FIRE HYDRANT ASSEMBLY PER UDACS PLATE No. 40 (INCLUDES 6" GATE VALVE)
 - REMOVE EXISTING 8" CAP AND 2" BLOWOFF AND CONNECT TO EXISTING 8" WATER MAIN
 - INSTALL 8" GATE VALVE PER UDACS PLATE No. 30 & No. 39
 - INSTALL 8" X 6" TEE PER UDACS PLATE No. 31
 - INSTALL 8" X 8" TEE PER UDACS PLATE No. 31
 - INSTALL 8" X 6" REDUCER PER UDACS PLATE No. 30
 - INSTALL 8" CAP WITH 2" BLOW OFF ASSEMBLY PER UDACS PLATE No. 30
 - INSTALL 1" COPPER SERVICE LATERAL WITH 3/4" METER PER UDACS PLATE No. 2
 - INSTALL 8" X 5" BEND PER UDACS PLATE No. 31
 - INSTALL 8" 11.25" BEND PER UDACS PLATE No. 31
 - INSTALL 6" 11.25" BEND PER UDACS PLATE No. 31
 - INSTALL 6" CAP WITH 2" BLOW OFF ASSEMBLY PER UDACS PLATE No. 30
 - INSTALL 8" 5" VERTICAL BEND PER UDACS PLATE No. 22
 - INSTALL STEEL CASING PER UDACS PLATE No. 23
 - INSTALL WATERLINE IN EASEMENT PER DETAIL 1 ON SHEET MU-1

- ## SEWER CONSTRUCTION NOTES
- INSTALL 48" STANDARD MANHOLE (PER DCSWCS STD. No. SD-1A, SD-4, SD-5 & SD-6)
 - INSTALL 4" SEWER LATERAL (PER DCSWCS STD. No. SD-17, SD-22 & SD-25) AND 1 CU-FT THRUST BLOCK @ CAP
 - TYPICAL LOCATION FOR SEWER LATERAL AT WATER MAIN CROSSING. ALL SEWER LATERALS MUST MAINTAIN 24" VERTICAL CLEARANCE BELOW WATER MAIN AT CROSSINGS.
 - REFORM MANHOLE BASE TO PROVIDE SMOOTH FLOW.

BENCHMARK

CITY OF LAS VEGAS BENCHMARK 6LV99 24NNW6
RIVET & PLATE CONCRETE PAD (ELECTRIC) 200' +/- SW OF P.I. OF ELKHORN RD & SCHAUMBER RD (LANSFORD ST)
ELEVATION = 914.637 METERS (2008 ADJUSTMENT)
ELEVATION = 3000.77 U.S. SURVEY FEET (2008 ADJUSTMENT)

BASIS OF BEARINGS

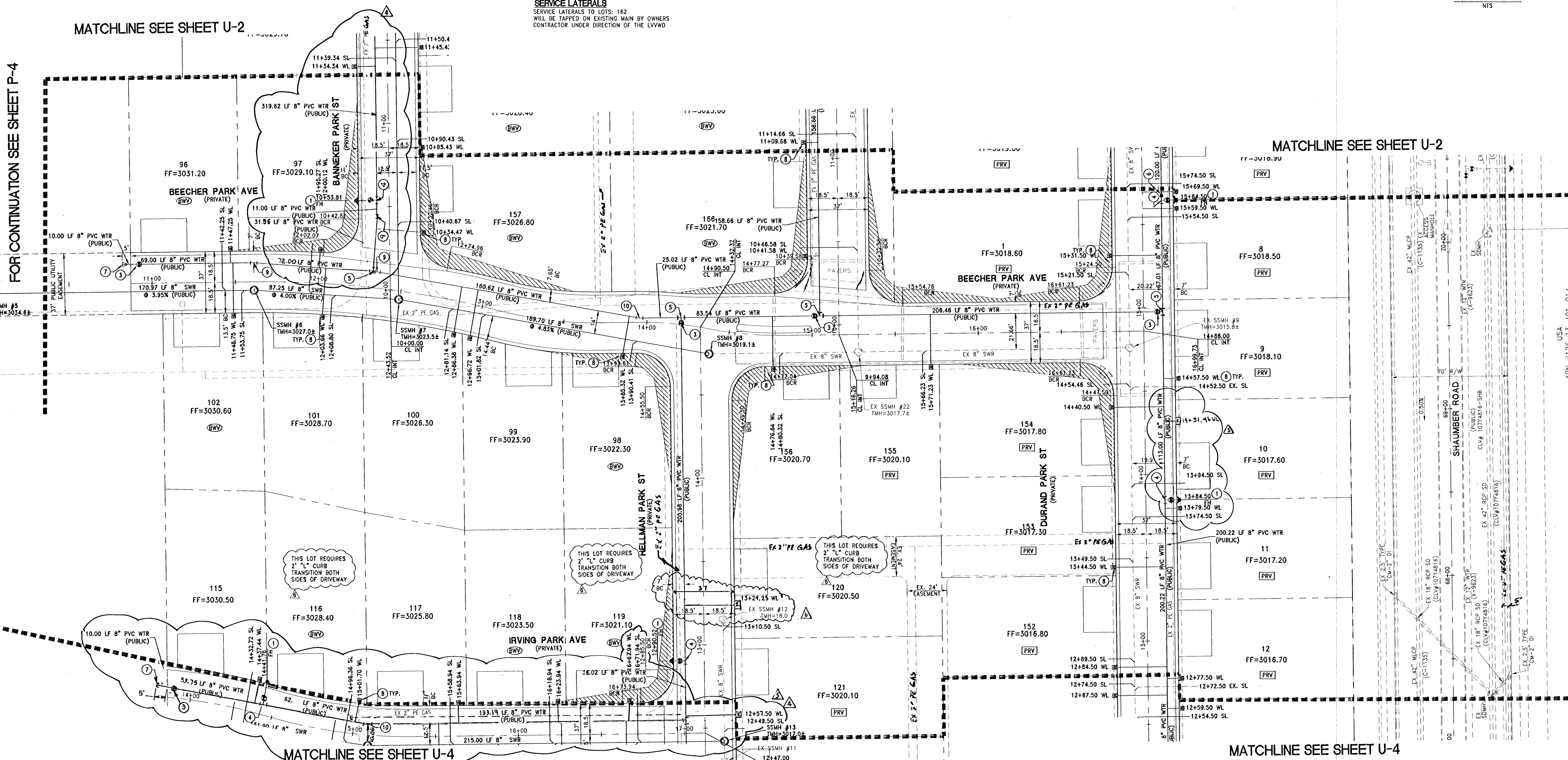
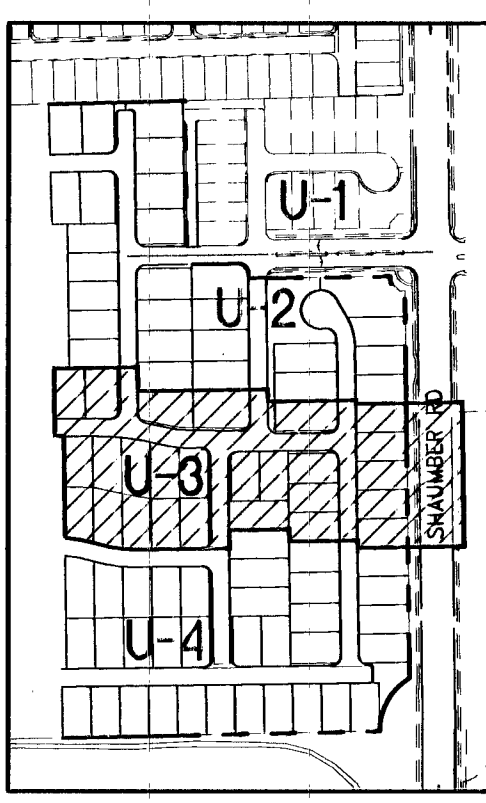
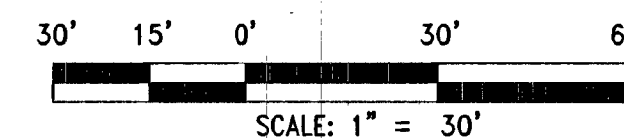
NORTH 00°45'09" EAST BEING THE BEARING OF THE EAST LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION 13, TOWNSHIP 19 SOUTH, RANGE 59 EAST, A.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA AS SHOWN ON THAT CERTAIN MAP ON FILE IN THE CLARK COUNTY'S RECORDER'S OFFICE IN BOOK 118, PAGE 88 OF PLATS.

BACKWATER VALVE

ALL LOTS WITH THIS SYMBOL REQUIRE A BACKWATER VALVE

PRESSURE REDUCING VALVE

ALL LOTS WITH THIS SYMBOL REQUIRE A PRESSURE REDUCING VALVE



WATER NOTE

LOTS: 1-3, 5-23, 121-123, 145-155

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. PRIVATE ARE THE DEVELOPER'S RESPONSIBILITY AND WILL NOT BE INSPECTED OR INCLUDED IN THE ACCEPTANCE OF LVVWD FACILITIES.

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 2.07.01 AND 2.07.02

FOR CHANGES IN DIRECTION EXCEEDING THE MAXIMUM ALLOWABLE JOINT DEFLECTION, FITTINGS SHALL BE USED.

NOTE:
INSTALL PIPELINE MARKER BALLS IN TRENCH ABOVE EACH HORIZONTAL ELBOW FITTING PER UDACS PLATE NO. 15

EXISTING UTILITY NOTE:

EXISTING UTILITIES AS SHOWN ARE FOR REFERENCE ONLY. CONTRACTOR TO FIELD VERIFY BOTH VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. ENGINEER ASSUMES NO RESPONSIBILITY FOR EXISTING UTILITIES SHOWN INCORRECTLY OR OTHERWISE NOT SHOWN.

NOTES

- ADJUST WATER VALVE BOXES TO FINISH GRADE PER UDACS PLATE NO.39.
- VALVES SHALL BE ACCESSIBLE AT ALL TIMES.
- ALL SEWER/STORM DRAINS CROSSING WATERLINES MUST CONFORM TO SECTION 2.22 OF UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSING AND CLEARANCES.
- ALL WATER PIPE DIMENSIONS SHOWN ARE GIVEN FROM FITTING TO FITTING AND ARE FOR REFERENCE ONLY. CONTRACTOR TO VERIFY ALL DIMENSION PRIOR TO CONSTRUCTION.

UTILITY LATERAL NOTE:

WATER AND SEWER LATERAL STATIONS SHOWN ON THIS PLAN SET ARE CALCULATED AT THE BACK OF CURB

WASTEWATER FLOW CALCULATION

CALCULATIONS:
87 ERU (87 LOTS) * 250 GPD = 0.0218 MGD
= 0.0218 * 3.5 = 0.0763 MGD PEAK

BUILDING INFORMATION

TYPE OF CONSTRUCTION:
TOTAL LIVING AREA: < 4,800 S.F.
TOTAL SF UNDER ROOF: < 4,800 S.F.
NUMBER OF STORIES: 2
BUILDING USE: SINGLE FAMILY RESIDENTIAL
SPRINKLERED: NO
NUMBER OF FIRE HYDRANTS: 9
FIRE FLOW: 1,250 GPM AT 20 PSI RESIDUAL

CITY OF LAS VEGAS FIRE DEPARTMENT APPROVAL

BY: *[Signature]* DATE: 2/6/14

APPROVAL OF THESE PLANS SHALL NOT BE CONSTRUED TO BE A PERMIT FOR, OR ANY APPROVAL OF, ANY VIOLATION OF ANY OF THE PROVISIONS OF THE STATE OR COUNTY LAWS.

APPROVAL BY THE FIRE DEPARTMENT HAVING JURISDICTION IS REQUIRED PRIOR TO OBTAINING FINAL APPROVAL FROM THE LVVWD.

FIRE FLOW 1,250 GPM AT 20 PSI RESIDUAL

APPROVED FOR CONSTRUCTION

[Signature]
DATE: 02/12/14 PROJECT: 122409

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER

LVVWD APPROVED FIRE FLOW 1,250 GPM AT 20 PSI RESIDUAL

DATE: FEBRUARY 05, 2014
HORIZ. SCALE: 1"=50'
VERT. SCALE: N/A
DRAWN BY: OS
DESIGNED BY: SC
CHECKED BY: JIL
APPROVED BY: JIL
PROJECT #: 3110.0003

RENAME LATERALS, METERS AND STREETS UNITS
RELOCATE WATER MAIN POINT OF CONNECTION
RELOCATE 8" WATER LINE & REVISE STORM DRAIN

USA
JPN 4176-01-014

TOLL NORTH, LLC
1140 TOWN CENTER DRIVE SUITE 250
LAS VEGAS, NV 89144
PHONE: 702-243-8800 FAX: 702-243-8810

RCI Engineering
3281 S. HIGHLAND DRIVE SUITE 810, Las Vegas, NV 89109
PHONE: 702.453.0800 FAX: 702.453.0801

NEVADA

IMPROVEMENT PLANS FOR
FRANKLIN PARK PHASE 2A
A SINGLE FAMILY RESIDENTIAL SUBDIVISION

UTILITY PLAN (SHEET 3 OF 4)

CITY OF LAS VEGAS

JOHN I. LAND
Exp. 12/31/2015
CIVIL
No. 16441

2/6/14

DRAWING

U-3

SHEET 15 OF 38

CLY DRAWING NUMBER
145-5-2031
10742822-2A

CLY DRAWING