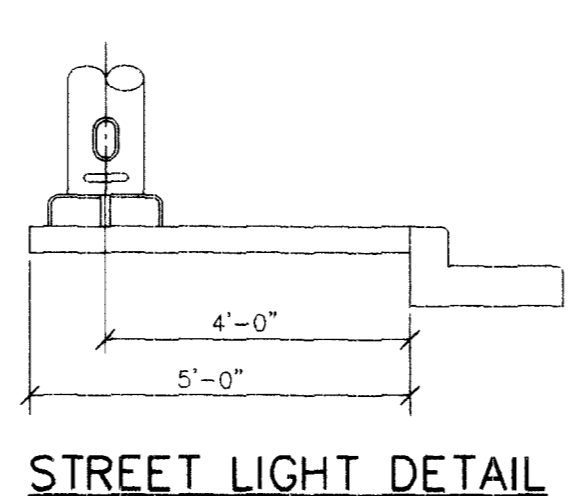


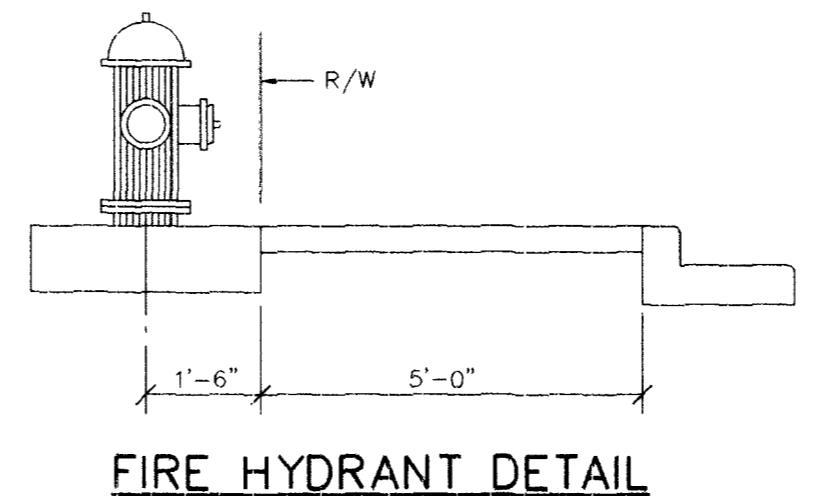
LAS VEGAS VALLEY WATER DISTRICT STANDARD NOTES

LVVWD PROJECT # 21747

- NO WORK SHALL BEGUN UNTIL THE WATER PLANS HAVE BEEN RELEASED FOR CONSTRUCTION BY THE LVVWD FOLLOWING WATER PLAN APPROVAL. 48 HOUR NOTICE SHALL BE GIVEN TO THE LVVWD COMMUNICATION SUPPORT CENTER (258-7171) PRIOR TO THE START OF CONSTRUCTION. NOTICE MUST BE GIVEN BY 2:00 P.M. THE BUSINESS DAY PRIOR TO A LVVWD INSPECTION. WHEN REQUESTING INSPECTIONS, PLEASE REFER TO THE PROJECT # IDENTIFIED ABOVE.
- ALL WORK SHALL CONFORM TO LVVWD'S STANDARD PLATES, DRAWINGS, AND SPECIFICATIONS AND TO THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR WATER DISTRIBUTION SYSTEMS (UDACS), LATEST EDITION.
- ALL WORK, EXCEPT AS MODIFIED BY THESE PLANS OR BY NOTE 2, SHALL BE DONE IN ACCORDANCE WITH THE MOST CURRENT DRAFT OR EDITION OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OF SITE IMPROVEMENTS, CLARK COUNTY AREA.
- A SINGLE PIPE MATERIAL SHALL BE USED THROUGHOUT THE PROJECT UNLESS OTHERWISE APPROVED BY THE LVVWD.
- ALL SERVICE LATERALS TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE OF COPPER TUBING WITH LVVWD APPROVED SERVICE SADDLES.
- ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.
- ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS, VALLEY AND CURB CUTTERS.
- THE FOLLOWING REQUIREMENTS MUST BE MET IN THE EVENT A WATER LINE AND SANITARY SEWER OR STORM SEWER LINE CROSS:
 - A MINIMUM EIGHTEEN INCH (18") VERTICAL SEPARATION (OUTSIDE TO OUTSIDE) MUST BE MAINTAINED WHEN THE WATER LINE IS INSTALLED OVER THE SANITARY OR STORM SEWER LINE. IF THE VERTICAL SEPARATION CANNOT BE MAINTAINED OR THE WATER LINE MUST BE PLACED UNDER THE SANITARY OR STORM SEWER LINE, THE SANITARY OR STORM SEWER LINE MUST BE CONSTRUCTED WITH ONE OF THE FOLLOWING OR, AS SHOWN ON THESE PLANS:
 - POTABLE WATER SUPPLY QUALITY MATERIAL
 - ENCASEMENT, WITH FOUR (4) INCH CONCRETE (MINIMUM)
 - SLEEPING WITH POTABLE WATER SUPPLY QUALITY PIPE
- EACH PROVISION MUST EXTEND ALONG THE SANITARY OR STORM SEWER, ON EITHER SIDE OF THE MAIN, A MINIMUM 10 FOOT DISTANCE PERPENDICULAR TO THE WATER MAIN EXTERIOR.
- WARNING TAPE SHALL BE REQUIRED OVER ALL MAINS, ALL SIX (6) INCH DIAMETER AND LARGER SERVICE LATERALS, AND ANY SERVICE LATERAL NOT INSTALLED PERPENDICULAR TO THE MAIN IN ACCORDANCE WITH STANDARD PLATE NO. 27.
- ALL WATER FACILITIES SHALL BE FILLED, DISINFECTED, PRESSURE TESTED, FLUSHED, FILLED AND AN ACCEPTABLE WATER SAMPLE OBTAINED, PRIOR TO CONNECTION TO THE LVVWD'S DISTRIBUTION SYSTEM.
- THE CONTRACTOR MUST OBTAIN ALL METERS TWO (2) INCHES AND SMALLER FROM LVVWD CENTRAL STORES. TELEPHONE 258-3152 FORTY-EIGHT (48) HOURS PRIOR TO PICKUP.
- CONSTRUCTION MAY INTERRUPT SERVICE, WITH LVVWD APPROVAL AND PROPER NOTIFICATION, BETWEEN THE HOURS OF 10 PM AND 6 AM, SUNDAY THROUGH THURSDAY. CIRCUMSTANCES MAY REQUIRE TEMPORARY SERVICE FEEDS BE INSTALLED, WITHOUT LVVWD REIMBURSEMENT. ANY TEMPORARY SERVICE FEED MUST HAVE PRIOR LVVWD APPROVAL.
- ALL WATER FACILITY CONSTRUCTION MATERIALS USED MUST BE AS LISTED ON THE LVVWD'S PRE-APPROVED MATERIALS AND MANUFACTURERS LISTING FOR NEW FACILITIES, LATEST REVISION, OR SPECIFICALLY APPROVED ON THESE PLANS.



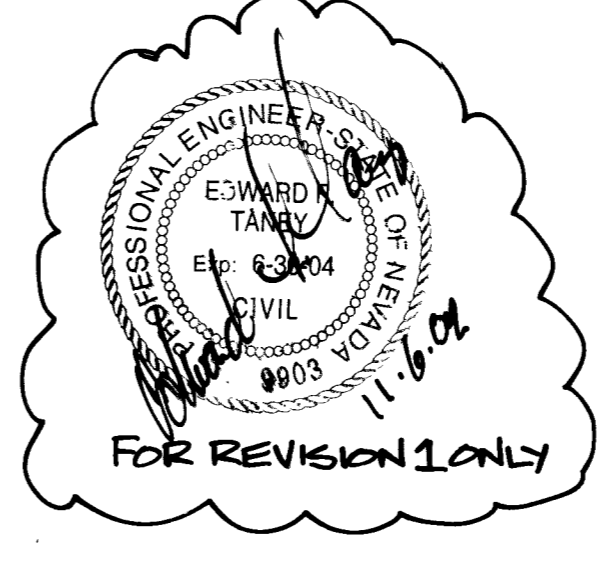
STREET LIGHT DETAIL



FIRE HYDRANT DETAIL

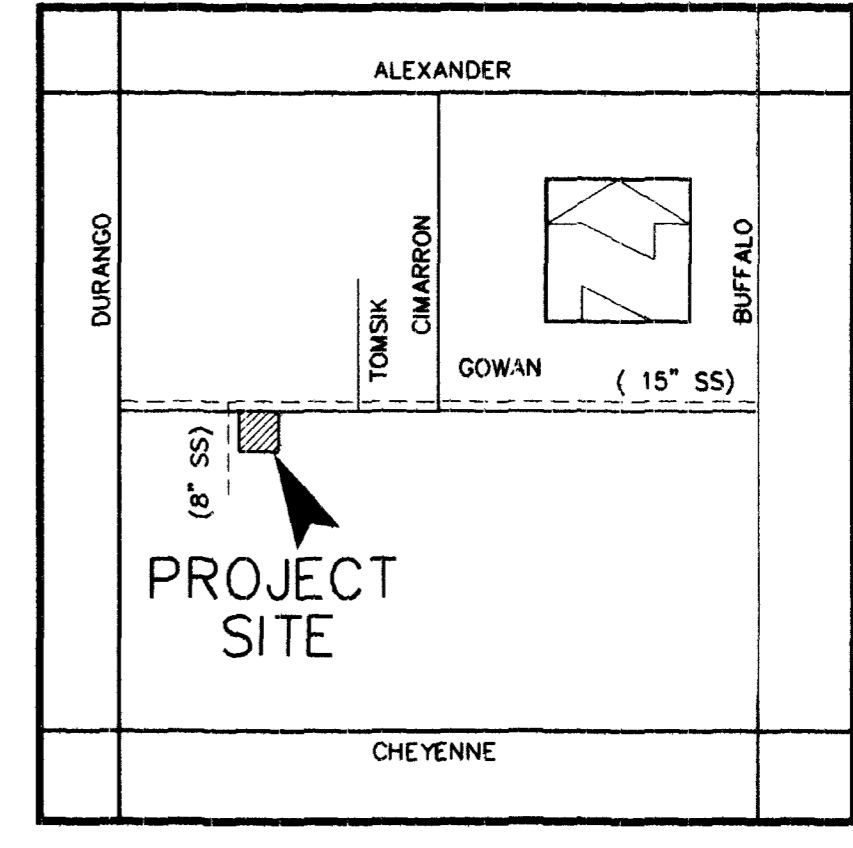
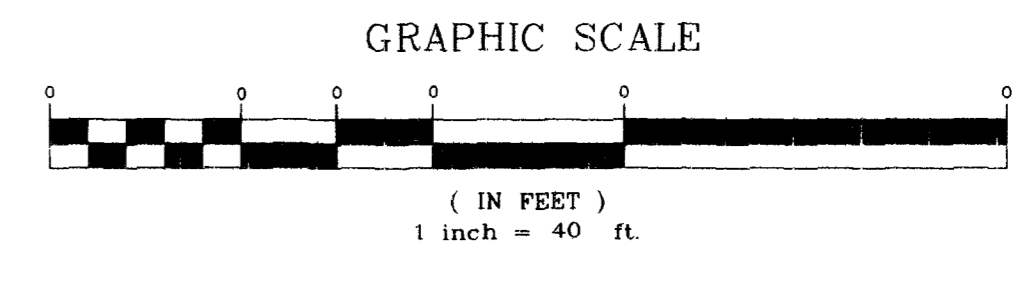
STREET LIGHT NOTE:
ALL HAND HOLE COVERS MUST BE INSTALLED, POLE CAPS POURED, AND PULL BOX LIDS BOLTED DOWN PRIOR TO ENERGIZING CIRCUIT. ALL WIRE MUST HAVE THW INSULATION.

NOTE: CONVERSION TO NAVD 88 DATUM. THE BENCHMARK SHOWN HEREON, NGVD 29 DATUM, CITY OF LAS VEGAS BENCHMARK OLVD0 16N4, HAS AN ELEVATION OF 2405.269 FEET. THE CONVERSION TO NAVD 88 DATUM FOR THIS BENCHMARK IS AS FOLLOWS:
 NAVD 88 DATUM = NGVD 29 DATUM + 2.38 FEET
 NAVD 88 DATUM = 2405.269 + 2.38 = 2408.07 FEET
 CORRECTION FOR THIS PLAN SET
 ALL ELEVATIONS SHOWN HEREON HAVE THE FOLLOWING CORRECTION FROM THE NAVD 88 DATUM
 ELEVATIONS SHOWN ON COLV #107Y-4714-1 PLAN SET = NAVD 88 DATUM + 0.90'



2 working days
Call before you Dig
1-800-227-2600

BENCHMARK PER NGVD29
 BENCH MARK: [2405.269] CITY OF LAS VEGAS DATUM
 STATION OLVD0 16N4, RIVET AND PLATE IN TOP OF CURB, SW RETURN OF CHEYENNE AVENUE AND SOARING GULLS DRIVE.
BASIS OF BEARINGS
 SOUTH 88°04'25" EAST BEING THE NORTH LINE OF THE NE 1/4 OF THE SW 1/4 OF SECTION 9, TOWNSHIP 20 SOUTH, RANGE 60 EAST, T10N, CLARK COUNTY, NEVADA
 NOTE: LOT BREAKOUT PER FILE 69, PAGE 72 OF SURVEYS.



LOCATION SCALE: NONE

SEWER CONTRIBUTION
 AVERAGE FLOW = 0.00345 MGD
 PEAK FLOW = 0.01019 MGD
 NOTE: SEWER LATERALS ARE TO BE A MINIMUM OF 5 FEET FROM WATER LATERALS & PER DRAWING # SD-17

APPROVALS
 LAS VEGAS FIRE DEPARTMENT

FIRE FLOW REQUIREMENT IS: 1500 GALLONS PER MINUTE AT 20 PSI RESIDUAL PRESSURE
 BASED ON:
 SQUARE FOOTAGE: 2,000 SF
 LARGEST AREA BETWEEN 4-HOUR AREA SEPARATION WALLS:
 BUILDING HEIGHT: 25 FT.
 NUMBER OF STORIES: 2 FLOOR
 TYPE OF CONSTRUCTION: V - N
 EXPOSURE: 10 FEET
 OCCUPANCY: R-3
 FULL AUTOMATIC FIRE SPRINKLER SYSTEM: NO
 ROOF CONSTRUCTION: TLE
 REVIEWED BY: [Signature]
 DATE: 9/23/02
 LAS VEGAS VALLEY WATER DISTRICT DATE: 8/23/02

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 AND 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.

- LEGEND**
- S - SEWER MAIN
 - (S) - EXISTING SEWER MAIN
 - W - WATER MAIN
 - (W) - EXISTING WATER MAIN
 - SL - STREET LIGHT CONDUIT
 - - SEWER MANHOLE
 - - 100 W HPS STREET LIGHT
 - - 150 W HPS STREET LIGHT
 - - 250 W HPS STREET LIGHT
 - - EXISTING STREET LIGHT
 - - EXISTING FIRE HYDRANT
 - - FIRE HYDRANT
 - - STREET NAME SIGN
 - - STOP SIGN
 - - DRIVEWAY LOCATION

WATER QUANTITY ESTIMATE

1 REMOVE CAP & 2" BLOW OFF & CONNECT	1 EA
2 8" 90° BEND	1 EA
* 3 FIRE HYDRANT ASSEMBLY	2 EA
4 8"x6" TEE	2 EA
5 6" END CAP & 2" BLOW-OFF PER UDACS PLT 4	1 EA
6 8" GATE VALVE	1 EA
7 6" GATE VALVE	2 EA
8 3/8" METER W/1" COPPER SERVICE (PER UDACS PLATE 1B)	12 EA
9 3/4" METER W/1" COPPER SERVICE (PER UDACS PLATE 1B)	4 EA
8" PVC	392 LF
6" PVC WATER	14 LF

STREET LIGHT QUANTITIES

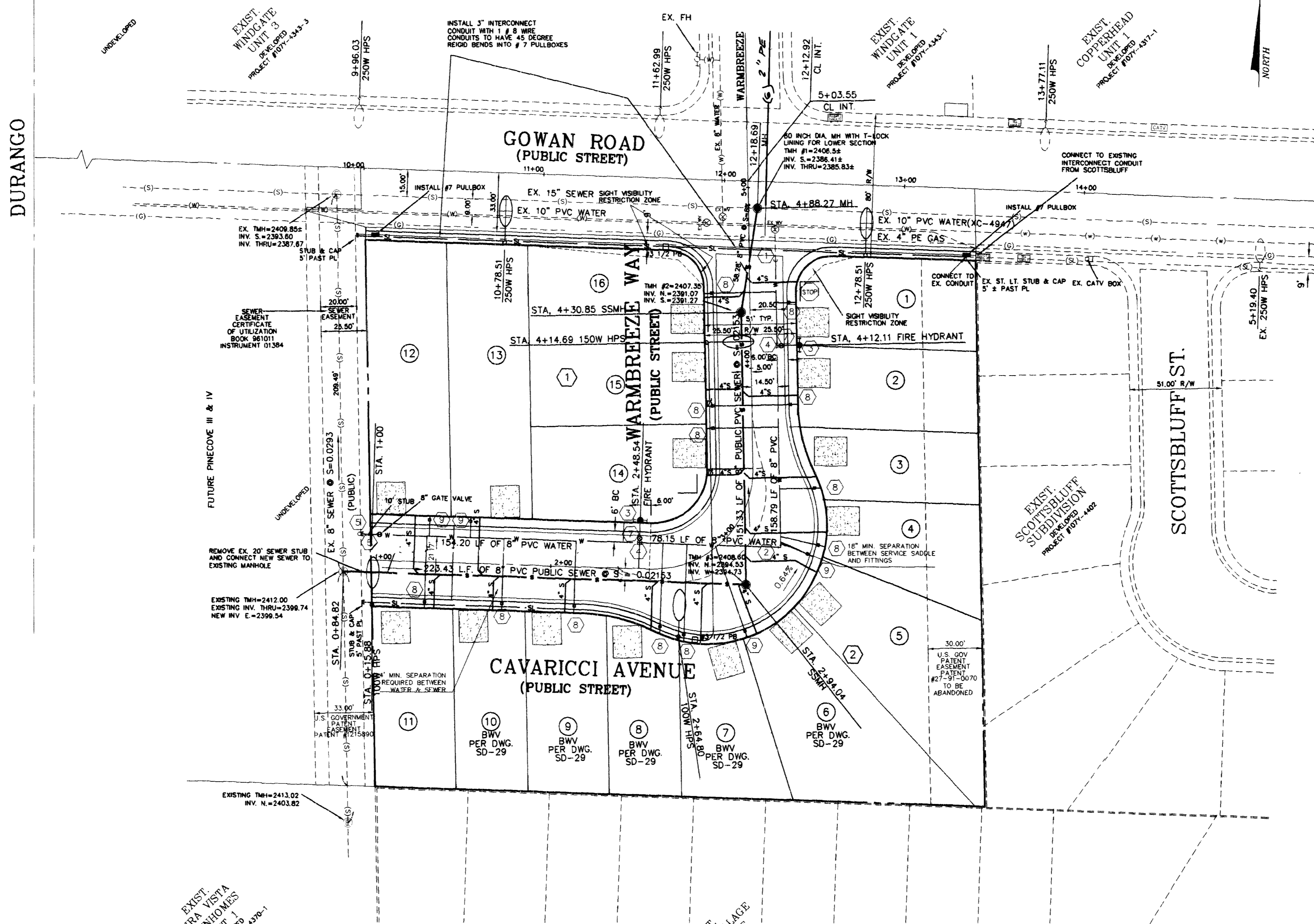
250 WATT HPS LUMINAIRE	2 EA
150 WATT HPS LUMINAIRE	1 EA
100 WATT HPS LUMINAIRE	2 EA
#3 1/2 PULLBOX	2 EA
1 1/4" PVC CONDUIT	693 LF

SEWER QUANTITIES ESTIMATE

MANHOLE	3 EA
8" PVC MAIN	430 LF
4" PVC SERVICE LATERAL	16 EA
BACK WATER VALVE ASSEMBLY	5 EA

FIRE HYDRANT INSTALLATION
 FIRE HYDRANTS TO BE INSTALLED IN ACCORDANCE WITH THE UDACS STANDARD PLATE NO. 7

CLV STREET LIGHT NOTES
 1. ALL STREET LIGHT INSTALLATIONS SHALL CONFORM TO THE STANDARD DETAILS AND SPECIFICATIONS OF THE CITY OF LAS VEGAS, AND SHALL ALSO CONFORM TO THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OF OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, LATEST EDITION, UNLESS OTHERWISE NOTED.



HEARTHSTONE HOMEBUILDERS INC.
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JOHNNY R. VEGA
 485 W. VEGAS AVE. 89130
 LAS VEGAS, NEVADA
 (702) 645-9216 FAX: (702) 645-9460

DRAWN BY: J.R. VEGA
 DESIGNED BY: J.R. VEGA
 CHECKED BY: J.R. VEGA
 PROJECT NO.: 21747-001

SCALE: 1" = 40'

4 OF 7 SHEETS
 DRAWING NO. 307-4714-1

UTIL2A.DWG 44438 46495
 [Signature]