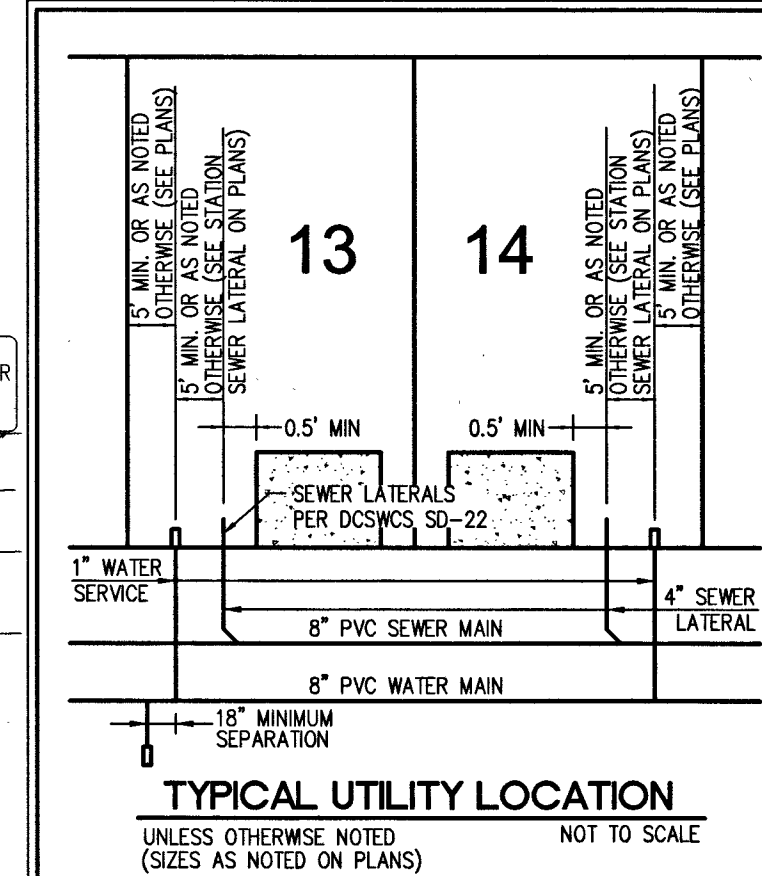
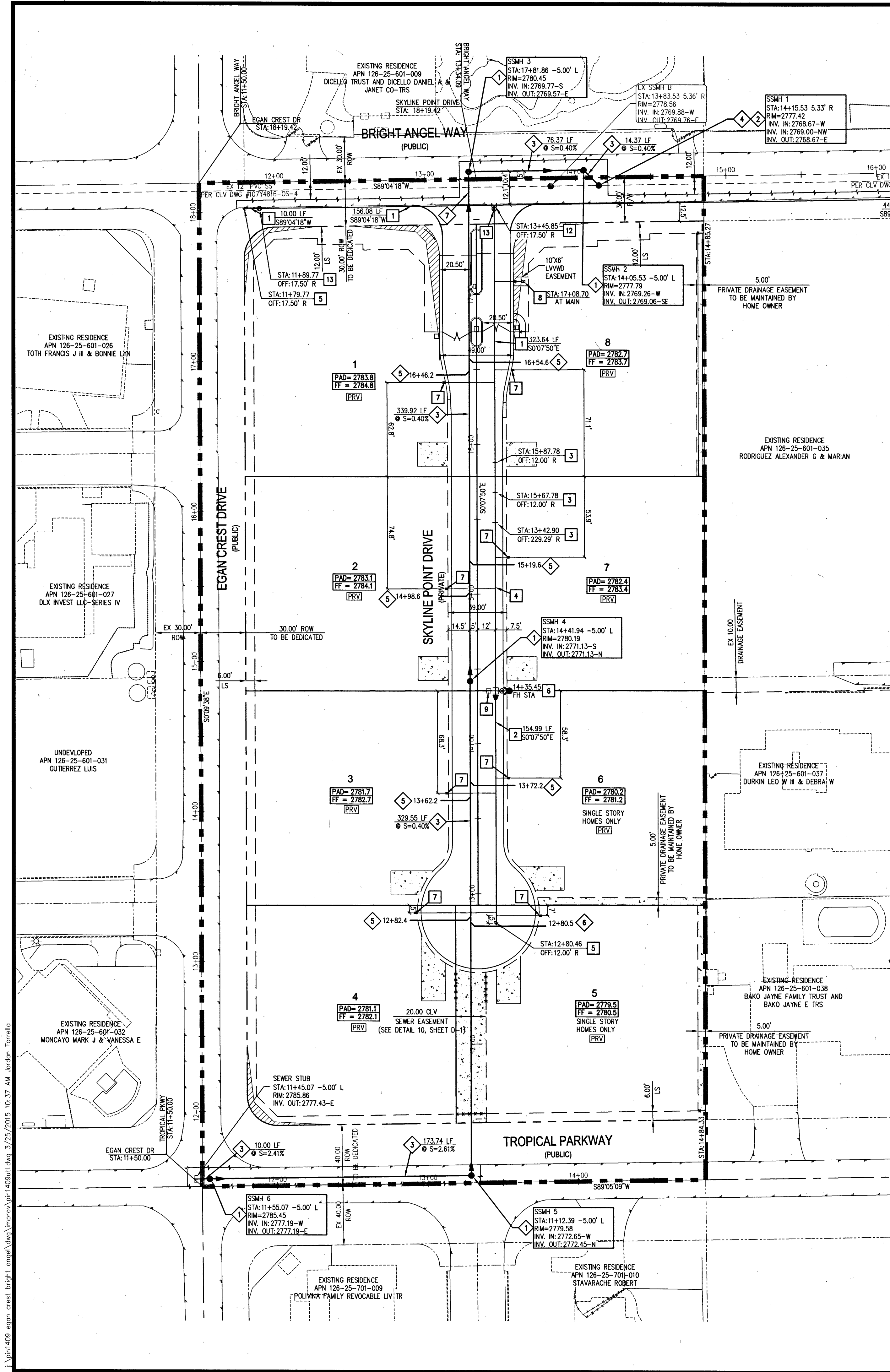
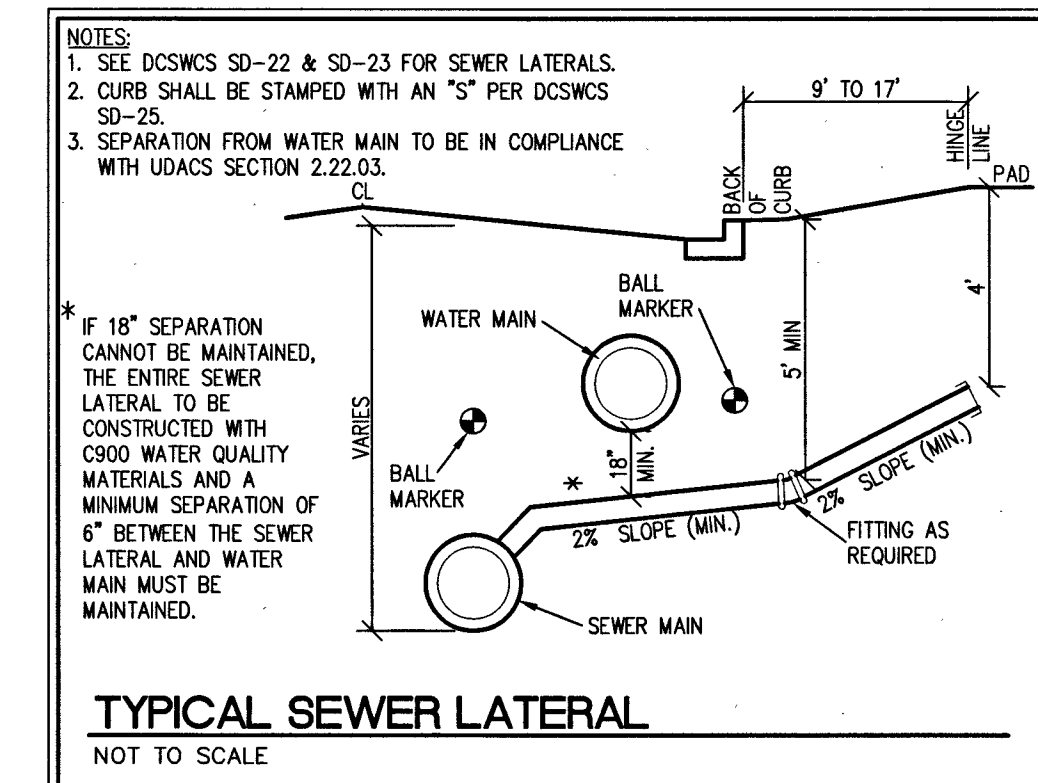




- GENERAL NOTES**
1. REPLACE ALL TRAFFIC CONTROL DEVICES (SIGNS AND/OR PAVEMENT MARKINGS), UNDER CLARK COUNTY'S JURISDICTION, THAT ARE DISTURBED, DESTROYED, MOVED OR MODIFIED BY TRENCHING ACTIVITIES TO CLARK COUNTY'S SATISFACTION. ALL MATERIAL USED SHALL MEET CLARK COUNTY'S SPECIFICATIONS OR WILL BE AN APPROVED EQUIVALENT.
 2. IN THE EVENT THAT THE TRAFFIC SIGNAL CONDUITS, LOOP DETECTORS OR ASSOCIATED EQUIPMENT ARE DAMAGED BY CONTRACTOR, THE CONTRACTOR WILL HIRE AN MSA LEVEL II ELECTRICAL CONTRACTOR TO MAKE REPAIRS PER UNIFORM SPECIFICATION NO. 643.01.02.
 3. ALL SEWER / STORM DRAINS CROSSING WATER LINES MUST CONFORM TO SECTION 2.2.2 OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSINGS AND CLEARANCES.
 4. THE CONTRACTOR IS TO VERIFY THE ACTUAL FIELD CONDITIONS OF ALL LOTS AND INSTALL SEWER DRAIN VALVES WHERE REQUIRED PER THE LATEST EDITION OF THE UNIFORM PLUMBING CODE.
 5. FITTINGS SHALL NOT FALL UNDER CURBS, GUTTERS OR SIDEWALK.

ESTIMATED AVERAGE DAILY SEWER CONTRIBUTIONS
8 UNITS X 250 GPD/UNIT = 2,000 GPD = 0.0020 MGD
TOTAL PEAK FLOW = 0.0020 X 3.82 (PEAK FACTOR) = 0.00764 MGD



- FOR ALL DRY UTILITY CROSSING**
- MAINTAIN MINIMUM 12" VERTICAL SEPARATION AT ALL POINTS OF CROSSING
 - MAINTAIN MINIMUM 3" PARALLEL SEPARATION
 - ANY EXCAVATION AT BACK OF CURB MUST REMAIN OPEN FOR INSPECTION OF COPPER SERVICE LATERALS. ANY COPPER SERVICE LATERAL KINKED, BENT OR OTHERWISE DAMAGED MUST BE REPLACED FROM THE MAIN TO THE ANGLE METER STOP.

EXISTING SERVICES (ALL LOTS)
IF ANY OF THE EXISTING SERVICES ARE INCORRECTLY LOCATED OR NOT USED FOR ANY REASON, THE DEVELOPER SHALL ABANDON THE LATERALS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH THE UDACS STANDARDS, AND AT THE DEVELOPER'S EXPENSE.

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 THE DEVELOPER'S RESPONSIBILITY, AND WILL NOT BE INSPECTED OR INCLUDED IN THE ACCEPTANCE OF LVMD FACILITIES.

THE DISTRICT CANNOT GUARANTEE A WATERTIGHT SHUTDOWN WHERE CONNECTIONS OR REPAIRS TO EXISTING FACILITIES ARE REQUIRED. THE CONTRACTOR SHALL ENSURE ALL LABOR AND EQUIPMENT IS AVAILABLE TO REMOVE FUGITIVE WATER THAT MAY IMPEDE CONSTRUCTION AT ALL TIMES. COORDINATION WITH INSPECTION DIVISION MUST TAKE PLACE PRIOR TO ANY TRIAL SHUTDOWN.

CONTRACTOR TO INSTALL TEMPORARY SERVICE TO ENSURE PROPER SHUTDOWN IN THE EVENT NO OTHER APPOINTMENTS ARE AVAILABLE.

FIRE SPRINKLER SYSTEM SHALL BE PLUMBED TO THE MASTER TOILET. NO EXCEPTIONS ALLOWED

- MANHOLE LINING AND ENCASEMENT NOTE**
- A. TO PROTECT AGAINST CORROSION, THE SEWER MANHOLE WILL BE INSTALLED IN ACCORDANCE WITH DCSWCS 2.2.01.01 OR AGENCY APPROVED "RAVEN LINING SYSTEM" OR AGENCY APPROVED EQUAL (SEWER MANHOLE ONLY).
 - B. TO HELP ENSURE WATER TIGHTNESS, THE MANHOLE WILL BE CONSTRUCTED AS FOLLOWS:
 1. USE OF FULL STRENGTH GROUT PER DCSWCS STANDARDS.
 2. WATER TIGHT JOINTS USING AGENCY APPROVED SEALS AT MANHOLE SECTIONS AND GRADE RINGS PER DCSWCS STANDARDS.
 - C. ALL OF THE FOLLOWING APPLY:
 1. ENCASEMENT OF MANHOLE WITH A MINIMUM OF FOUR (4) INCHES OF CEMENT SLURRY (300 PSF). THE SLURRY WILL EXTEND FROM 6 INCHES ABOVE THE JOINT WHERE THE CONE MEETS THE TOP OF THE BARREL TO A DEPTH OF AT LEAST 12 INCHES BELOW THE INVERT OF THE WATER MAIN PER UDACS 2.2.01.8.2(c)(2).
 2. THE SEWER LINE (MAIN) SHALL BE INSTALLED PER UDACS 2.2.02.8.3(b) IN A SLEEVE OF WATER QUALITY PIPE.
- MANHOLES SHALL BE TESTED FOR LEAKAGE IN ACCORDANCE WITH DCSWCS 3.19.1.

DISCLAIMER NOTE
EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND 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 IN THEIR PROPER LOCATION.

COUNTY OF CLARK FIRE DEPARTMENT APPROVED
And Johnson 3/6/16
APPROVAL OF THESE PLANS SHALL NOT BE CONSIDERED TO BE A PERMIT FOR OR AN APPROVAL OF ANY VIOLATION OF ANY OF THE PROVISIONS OF THE STATE OR COUNTY LAWS. FIRE FLOW 1,500 GPM AT 20 P.S.I. RESIDUAL.

Call before you Dig
Call 1-800-227-2600
CLARK COUNTY TRAFFIC OPERATIONS AND COMPUTERIZED TRAFFIC SYSTEM

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FIRE FLOW CALCULATIONS

FIRE FLOW 1,500 GPM AT 20 P.S.I. RESIDUAL

USE/OCCUPANCY	SINGLE FAMILY
TYPE OF CONSTRUCTION (IBC)	TYPE V-B
SQUARE FOOTAGE	67,700
LARGEST AREA BETWEEN 4 HOUR WALLS	N/A
BUILDING HEIGHT	<35
NO. STORES INCLUDING BASEMENT	<35
FIRE SPRINKLER (NFPA 130)	YES (LOTS 1-8)
NO. OF HYDRANTS INSTALLED	

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 1,500 FEET, PER UDACS 2.07.01 AND 2.07.02.

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

REDUCED PRESSURE PRINCIPLE ASSEMBLY (1" - 12")
APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY(S) SHALL BE INSTALLED PER THE UDACS PLATE NO. 8. NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW PREVENTION UNTIL THE REDUCED PRESSURE PRINCIPLE ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY THE LVMD. ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENT(S) 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.

BASIS OF BEARING
SOUTH 89°03'27" WEST, BEING THE BEARING OF THE NORTH LINE OF THE SOUTHEAST QUARTER (SE1/4) OF THE NORTHEAST QUARTER (NE1/4) OF SECTION 25, TOWNSHIP 19 SOUTH, RANGE 59 EAST, M.D.M., CLARK COUNTY, NEVADA, AS SHOWN BY MAP THEREOF ON FILE 180, PAGE 62 OF SURVEYS IN THE CLARK COUNTY RECORDER'S OFFICE, NEVADA.

BENCHMARK
CITY OF LAS VEGAS BENCHMARK NUMBER: 61099 2566
RIVET AND PLATE IN A CONCRETE TELEPHONE VAULT IN THE CORNER OF EGAN CREST WAY AND TROPICAL PARKWAY, 52' NORTHWEST OF P.I.
ELEVATION: 2786.74 US SURVEY FEET (NAVD83)
845.400 METERS

APPROVED FOR CONSTRUCTION
Las Vegas Valley Water District Engineering Services Manager
DATE: 3/15/16 PROJECT NO.: 123445

Call before you Dig
Call 1-800-227-2600
CLARK COUNTY TRAFFIC OPERATIONS AND COMPUTERIZED TRAFFIC SYSTEM

SLATER HANIFAN GROUP
CONSULTING ENGINEERS & PLANNERS
5740 S. ARVILLE STREET #216 LAS VEGAS, NV 89118
PHONE (702) 284-5300 FAX (702) 284-5399

DATE	BY	APP	DESCRIPTION
3/5/15	CZ		
3/15/16	CZ		
3/15/16	TJS		

CLARK COUNTY, NEVADA

PINNACLE HOMES

SKYLINE POINT (AKA EGAN CREST/TROPICAL)

UTILITY PLAN

DATE: 3/5/15
DRAFTER: CZ
DESIGNER: CZ
CHECKED: TJS
PROJECT NO. PIN1409

PROFESSIONAL ENGINEER - STATE OF NEVADA
TODD J. STEADHAM
Exp. 06/30/2016
CIVIL
No. 15297
3/15

U-1
SHEET 11 OF 12
30741195