

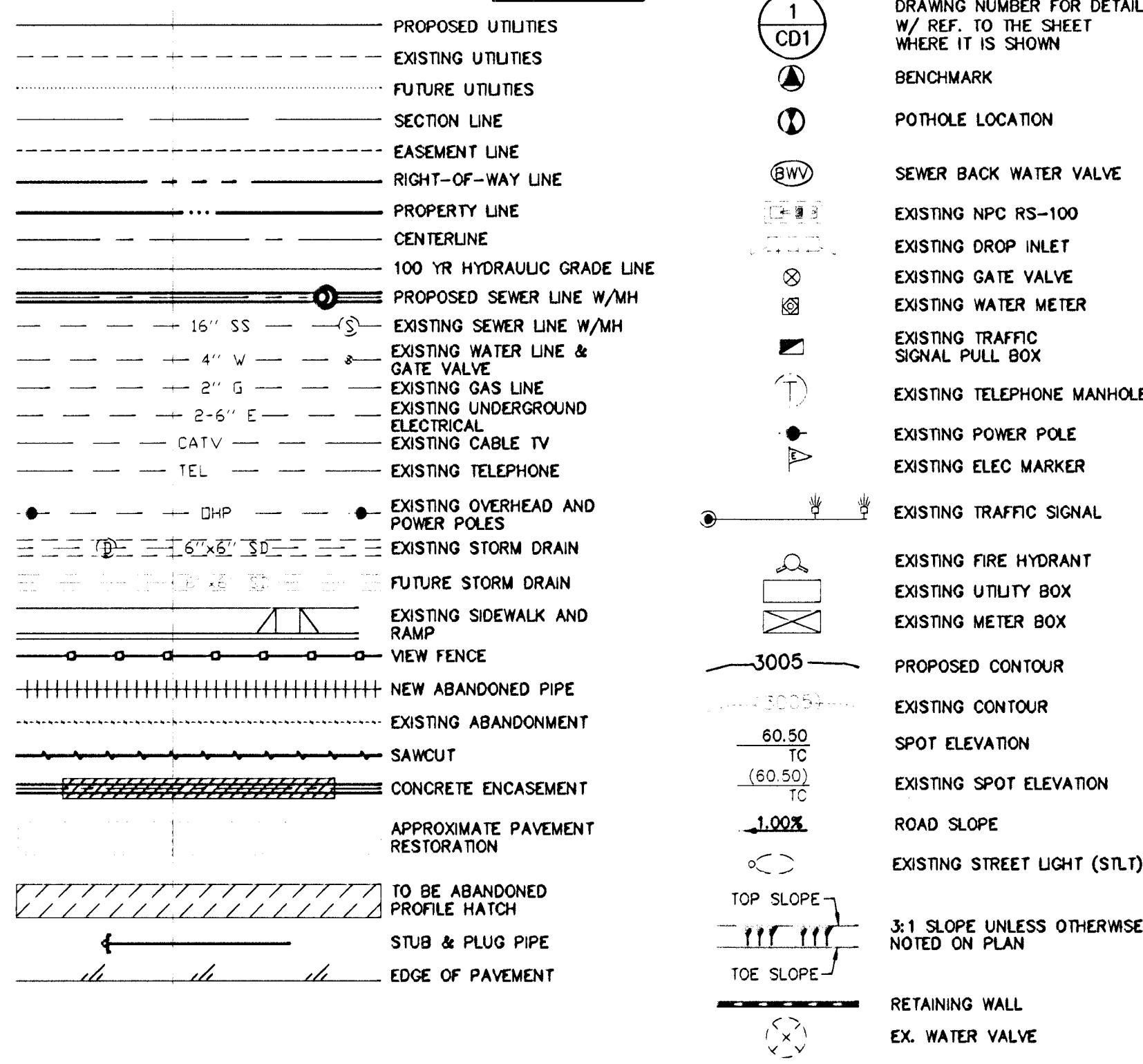
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STREET QUANTITIES (PUBLIC)

STREETS	IRRIIGATION	STREET LIGHTS
4" A.C. PAVEMENT	20,230 S.Y.	720 L.F.
TYPE II BASE	2,800 C.Y.	
CURB & GUTTER (TYPE "L" & "A")	10,225 L.F.	
		SINGLE ARM ST. 12 EA.
		DOUBLE ARM ST. LT. 15 EA.
		SERVICE PEDESTAL 2 EA.
		CONDUIT 3,900 L.F.

LEGEND



CONSTRUCTION NOTES

- IMPROVEMENTS**
- 1. INSTALL A.C. PAVEMENT PER STREET SECTIONS, SEE SHEET 23
 - 2. INSTALL 6" "L" TYPE CURB & GUTTER, SEE SUMMERLIN IMP. STDS.
 - 3. PROTECT IN PLACE
 - 4. INSTALL "A" TYPE ISLAND CURB, SEE SUMMERLIN IMP. STDS.
 - 5. INSTALL CURB DEPRESSION FOR FUTURE HANDICAP RAMP, BY OTHERS
 - 6. INSTALL CONCRETE ENCASEMENT
 - 7. INSTALL CONCRETE BUS TURNOUT
 - 8. VERIFY LOCATION AND ELEVATION OF EX ROADWAY IMP. & MATCH TO EX. CONDITION
- WATER**
- 1. INSTALL FIRE HYDRANT ASSEMBLY
 - 2. INSTALL 12" GATE VALVE & BOX W/ CONCRETE COLLAR
 - 3. INSTALL 8" GATE VALVE & BOX W/ CONCRETE COLLAR
 - 4. REMOVE CAP & BLOWOFF & CONNECT TO EX WATER LINE (CONTRACTOR TO VERIFY SIZE, INVERT, AND LOCATION OF EXISTING WATER LINE)
 - 5. INSTALL CAP W/ 2" BLOW-OFF ASSEMBLY
 - 6. INSTALL 45° BEND AND THRUST BLOCK
 - 7. INSTALL 90° BEND AND THRUST BLOCK
 - 8. INSTALL TEE AND THRUST BLOCK
 - 9. CONNECT COPPER SERVICE LATERAL TO WATER MAIN
 - 10. INSTALL 8" GATE VALVE & BOX W/ 1' RADIUS CONCRETE COLLAR
 - 11. INSTALL WATER QUALITY CASING
 - 12. ADJUST TO FG & PROTECT IN PLACE (WATER VALVES TO REMAIN ACCESSIBLE AT ALL TIMES)
 - 13. INSTALL 3/4" METER W/ CONCRETE COLLAR AND 1" RPPA (BRASS BETWEEN METER & RPPA)
 - 14. INSTALL 1 1/2" METER W/ CONCRETE COLLAR AND 1 1/2" RPPA (BRASS BETWEEN METER & RPPA)
 - 15. INSTALL 24"x8" TAPPING SLEEVE W/ 8" TAPPING VALVE PER UDACS 2.24.01 (B)
 - 16. ABANDON EXISTING VALVE AND STUB PER ABANDONED VALVE CUT AND CAP NOTE (SEE SHEET 3)
- SEWER**
- 1. INSTALL 60" DIA. SEWER MANHOLE
 - 2. INSTALL SEWER PLUG AND CAP PER DETAIL 4, SHEET 18
 - 3. REMOVE PLUG & CONNECT TO EX. SEWER LINE (CONTRACTOR TO VERIFY SIZE, INVERT, AND LOCATION OF EXISTING SEWER LINE) PRIOR TO CONSTRUCTION
 - 4. ADJUST TO FG
 - 5. INSTALL 4" CONCRETE SLURRY CLSM II ENCASEMENT OR USE WATER QUALITY C-900 PIPE 10' ON EACH SIDE OF CROSS POINT PER UDACS SEC.2.2.22 & UDACS 2.22
 - 6. INSTALL 48" DIA. SEWER MANHOLE
- STORM DRAIN**
- 1. INSTALL TYPE II STORM DRAIN MANHOLE
 - 2. INSTALL TYPE III STORM DRAIN MANHOLE
 - 3. INSTALL TEMPORARY PLUG AND CAP
 - 4. ADJUST TO FG
 - 5. INSTALL TYPE "CM2" DROP INLET
 - 6. INSTALL CONCRETE COLLAR
 - 7. INSTALL MODIFIED STORM DRAIN MANHOLE
 - 8. CONNECT TO EXISTING STORM DRAIN LINE (CONTRACTOR TO VERIFY SIZE, INVERT, AND LOCATION OF EXISTING STORM DRAIN LINE)
 - 9. CONNECT TO EXISTING RCB
- IRRIGATION**
- 1. BANK "A"; 1-6" & 2-4" SCH40 PVC

ABBREVIATIONS

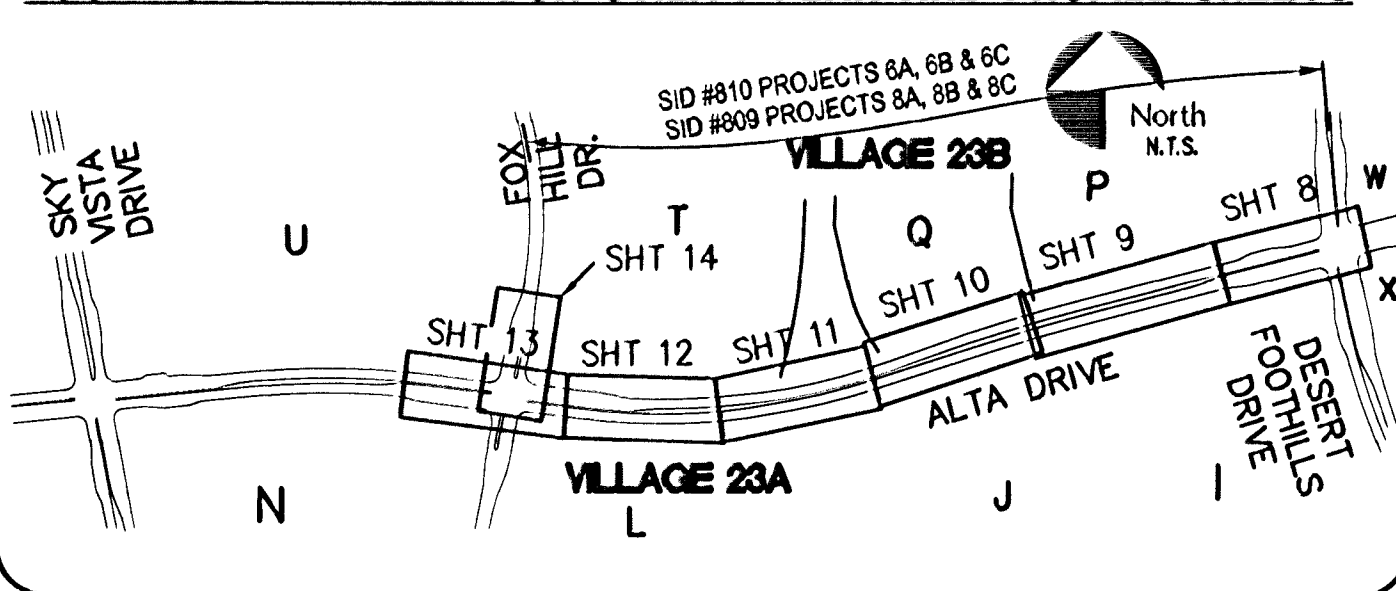
A	AIR	FG	FINISH GRADE	R, RAD	RADIAL RADIUS
AC	ASPHALT CONCRETE, ACRE	FH	FIRE HYDRANT	R, RT	RIGHT
ACP	ASBESTOS CEMENT PIPE	FL	FLOW LINE	RCB	REINFORCED CONCRETE BOX
ADD'L	ADDITIONAL	FO	FIBER OPTIC	RCP	REINFORCED CONCRETE PIPE
AP	ANGLE POINT	FRP	FIBERGLASS REINFORCED PLASTIC	RD	ROAD
APH	ASSESSOR'S PARCEL NUMBER	FS	FINISH SURFACE	RDWY	ROADWAY
APPROX	APPROXIMATELY	FT	FOOT/FEET	REC	RECTANGULAR
AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS	FTG	FOOTING	REF	REFERENCE
		FUT	FUTURE	REIN	REINFORCED
		G	GAS	REQD	REQUIRED
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	GA	GAGE, GUY ANCHOR	RIM	TOP OF RIM ELEVATION
		GB	GRADE BREAK	RND	ROUND
AVE	AVENUE	GND	GROUND	R/W, R/W	RIGHT OF WAY
AVAR	AIR VALVE, AIR RELEASE	GRD	GRADE, GROUND	R	RADIUS POINT
		H, HGT	HEIGHT	RPM	RAISED PAVEMENT MARKERS
AWWA	AMERICAN WATER WORKS ASSOCIATION	HDL	HEADWALL	RSGV	RESILIENT SEAT GATE VALVE
BC	BACK OF CURB	HORIZ	HORIZONTAL	S	SEWER, SOUTH
BCR	BEGIN CURB RETURN	HP	HIGH POINT, HIGH PRESSURE	SCH	SCHEDULE
BLM	BUREAU OF LAND MANAGEMENT	HPS	HIGH POINT, HIGH PRESSURE	SD	STORM DRAIN
BLVD	BOULEVARD	IBC	INTERNATIONAL BUILDING CODE	SDMH	STORM DRAIN MANHOLE
BM	BENCHMARK	INV	INVERT	SECT	SECTION
BO	BLOW-OFF	INT	INTERIOR	SF	SQUARE FOOT/FEET
BVCS	BEGIN VERTICAL CURVE ELEVATION	JO	JOINT	SFLDR	SHOULDER
BW	BACK OF SIDEWALK	L	LENGTH	SHT	SHEET
C, L	CENTERLINE	L, LT	LEFT	SL	STREET LIGHT
C&G	CURB AND GUTTER	LF	LINEAR FEET	SP	SERVICE POINT
CATV	UNDERGROUND CABLE TV	LIP	LIP OF GUTTER	SQ	SQUARE
CCBM	CLARK COUNTY BENCH MARK	LN	LANE	SR	SEWER RECLAIM MAIN
CCPW	CLARK COUNTY PUBLIC WORKS	LP	LINEAR POINT	SS	SANITARY SEWER
CCTV	CLOSED-CIRCUIT TELEVISION	LSPC	LANDSCAPE	SSMH	SANITARY SEWER MANHOLE
CCWRD	CLARK COUNTY WATER RECLAMATION DISTRICT	LVWD	LAS VEGAS VALLEY WATER DISTRICT	ST	STREET
CFS	CUBIC FEET PER SECOND	MAX	MAXIMUM	STD	STANDARD
CIP	CORRUGATED IRON PIPE	MH	MANHOLE	STD	STEEL
CIPM	CURED-IN-PLACE MANHOLE	MLCP	MORTAR LINED AND COATED PIPE	STRUC	STRUCTURE
CIPR	CURED-IN-PLACE PIPE	MOD	MODIFY/MODIFIED	SVZ	SIGHT VISIBILITY ZONE
CL	CLEAR OR CLEARANCE	MON	MONUMENT	SW	SIDEWALK
CLSM	CONTROLLED LOW STRENGTH MATERIAL	MPH	MILES PER HOUR	SWG	SOUTHWEST GAS
CLV	CITY OF LAS VEGAS	N	NORTH	T	TELEPHONE OR TOP
CM	CORRUGATED METAL PIPE	NDOT	NEVADA DEPARTMENT OF TRANSPORTATION	TAN	TANGENT
CMU	CONCRETE MASONRY UNIT	NO	NUMBER	TB	TOP OF BERM
CNLV	CITY OF NORTH LAS VEGAS	NOSHA	STATE OF NEVADA OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION	TC	TOP OF CURB
CONC	CONCRETE	NPC	NEVADA POWER COMPANY	TCE	TEMPORARY CONSTRUCTION ESMT
COND	CONDUIT	NTS	NOT TO SCALE	TEL, TELE	TELEPHONE
CONST	CONSTRUCT OR CONSTRUCTION	OC	ON CENTER	TEMP	TEMPORARY
COORD	COORDINATE	OHC	OVERHEAD COX COMMUNICATION	TF	TOP OF FOOTING
COR	CORNER	OP	OVERHEAD POWER LINE	TG	TOP OF GRADE
CPEP	CORRUGATED POLYETHYLENE PIPE	P	POWER LINE	TMH	TOP OF MANHOLE
CT	COURT	PB	PLANT MIX BITUMINOUS SURFACE	TOP	TOP OF PIPE
CY	CUBIC YARD(S)	PBS	POINT OF CURVE, PRESSURE CLASS	TP	TELEPHONE POLE
Δ	DELTA	PCC	POINT OF COMPOUND CURVE	TRANS	TRANSITION
DBL	DOUBLE	PE	PROJECT ENGINEER OR POLYETHYLENE	TRW	TOP OF RETAINING WALL
DCS	DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEM (LATEST EDITION)	PH	POTHOLE	TS	TRAFFIC SIGNAL
DIP	DIP	PI	POINT OF INTERSECTION	TW	TOP OF WALL
DIST	DISTANCE	PIV	POST INDICATOR VALVE	UT	UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR WATER DISTRIBUTION SYSTEMS (LATEST EDITION)
DR	DRIVE	P	PROPERTY LINE	UT	UNDERGROUND TELEPHONE
DS	DOWNSPOUT	PLOP	POLYURETHANE LINED AND COATED STEEL PIPE	VC	VERTICAL CURVE
DTL	DETAIL	PMF	PAVEMENT MARKING FILM	VCP	VIRIFIED CLAY PIPE
DW	DRIVEWAY	POB	POINT OF BEGINNING	VERT	VERTICAL
DWG	DRAWING	POC	POINT ON CURVE	VG	VALLEY GUTTER
E	EAST	P.O.C.	POINT OF CONNECTION	VOL	VOLUME
ECR	END CURB RETURN	POT	POINT ON TANGENT	W	WATER, WEST
ELELEC	ELECTRICAL	PROP	PROPOSED	W	WITH
EP, EOP	ELEVATION	PRC	POINT OF REVERSE CURVE	WS	WATER SUPPLY
ESMT	EASEMENT	PRV	POINT OF REVERSE VERTICAL CURVE	WT	WATER
EVC	END VERTICAL CURVE	PSI	POUNDS PER SQUARE INCH	WTR	WATER
EXIST, EX	EXISTING	PT	POINT OF TANGENCY	XING	CROSSING
EXP	EXPANSION JOINT	PVC	POLYVINYL CHLORIDE	YD	YARD, YARD DRAIN
FC	FACE OF CURB	PVI	POINT OF VERTICAL INTERSECTION		
FF, FFE	FINISH FLOOR ELEVATION	PVMT	PAVEMENT		
		PZ	PRESSURE ZONE		

NOTE: LEGEND AND ABBREVIATIONS IN THE "SUMMERLIN IMPROVEMENT STANDARDS", LATEST EDITION WILL BE UTILIZED FOR ANY LEGEND OR ABBREVIATION REQUIRED WHICH ARE NOT SHOWN.

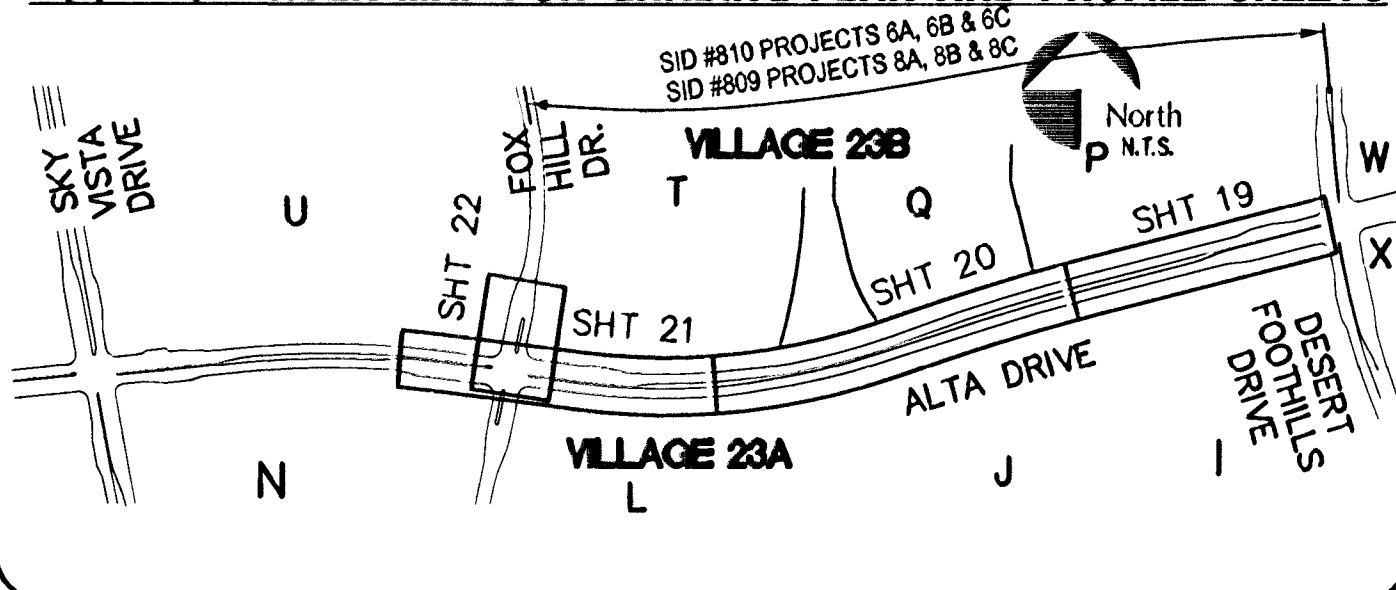
SUMMERLIN STREET CLASSIFICATION

DESERT FOOTHILLS DRIVE:	NEIGHBORHOOD ARTERIAL WITH BIKE LANES
MOUNTAIN SHADOW ROAD:	NEIGHBORHOOD COLLECTOR (LEVEL 1)
ANTELOPE RIDGE DRIVE:	NEIGHBORHOOD COLLECTOR (LEVEL 1)
FOX HILL DRIVE:	NEIGHBORHOOD COLLECTOR (LEVEL 1)
ALTA DRIVE:	NEIGHBORHOOD ARTERIAL WITH BIKE LANES
FAR HILLS AVENUE:	NEIGHBORHOOD ARTERIAL WITH BIKE LANES

LOCATION INDEX MAP FOR UTILITY PLAN AND PROFILE SHEETS



LOCATION INDEX MAP FOR GRADING PLAN AND PROFILE SHEETS



- NOTE TO CONTRACTOR:**
1. ALL EXISTING UTILITY CROSSINGS MUST BE VERIFIED PRIOR TO CONSTRUCTION OF ANY MAIN LINES OR LATERALS THAT MAY BE ADVERSELY AFFECTED. ANY DISCREPANCIES IN LOCATION AND/OR ELEVATION MUST BE PROVIDED TO THE ENGINEER FOR ACCEPTANCE PRIOR TO CONSTRUCTION.
 2. TOPOGRAPHY SHOWN HEREIN REFLECTS ORIGINAL EXISTING TOPOGRAPHY. ACTUAL FIELD CONDITIONS MAY INCLUDE ADDITIONAL SITE ROUGH GRADING.
 3. ALL COMMON LOTS AS SHOWN HEREIN TO BE PRIVATELY MAINTAINED BY THE SUMMERLIN H.O.A. A FUTURE MEANDERING SIDEWALK WILL BE INSTALLED BY SUMMERLIN AS REQUIRED TO SERVICE THE DEVELOPMENT OF EACH PARCEL.
 4. ALL WATER LINE GATE VALVES, SERVICE GATE VALVES, AND FIRE HYDRANT GATE VALVES ARE TO BE CONSTRUCTED UNDER A.C. PAVEMENT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THAT ALL WATER VALVE CANS DO NOT CREATE CONFLICTS WITH THE PROPOSED CURB LINE PRIOR TO PLACEMENT OF CONCRETE. ALL WATER FACILITIES SHOWN IN THESE DRAWINGS HAVE BEEN "SCALED-UP" FOR CLARITY ONLY.

NOTE: FOR ELECTRICAL CONSTRUCTION NOTES SEE SHEET 28

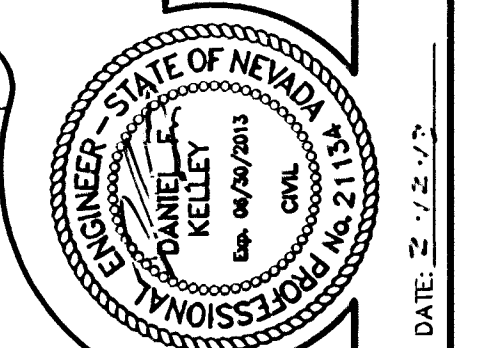
BENCHMARK

DESCRIPTION	NAVD 88 DATUM	NAVD 88 DATUM
RIVET AND PLATE IN TOP OF CURB @ NORTHEAST CORNER OF DESERT FOOTHILLS AND ALTA DRIVE	3304.45 (FEET)	1007.197 (METERS)
CLV BM No. SLV09 34NE8		

BASIS OF BEARING

NORTH 89°45'00" EAST BEING THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION 35, TOWNSHIP 20, RANGE 59 EAST, M.D.M., AS SHOWN BY MAP ON FILE IN FILE 91, PAGE 28 OF PARCEL MAPS IN THE CLARK COUNTY RECORDER'S OFFICE, CLARK COUNTY, NEVADA.

APPROVED FOR CONSTRUCTION
Da-Head
 LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
 PROJECT NO. 121343 DATE: 02/27/13



G.C. WALLACE COMPANIES
 ENGINEERS | PLANNERS | SURVEYORS
 1555 S. RAINBOW BOULEVARD - LAS VEGAS, NV 89146
 T: 702.884.2000 - F: 702.884.2299 - G: WALLACE.COM

THE HOWARD HUGHES COMPANY, LLC
 VILLAGE 23A/23B ALTA DRIVE IMPROVEMENTS
 PROJECT DATA SHEET

20130331

11/27/11 CLV DRAWING NO. 107V 5722