

THE REDUCED PRESSURE DETECTOR ASSEMBLIES SHALL BE INSTALLED IN ACCORDANCE WITH THE UDACS PLATE NO. 59. NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW PREVENTION UNLESS THE DETECTOR ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY LVMD. ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENT(S) SO AS TO ALLOW LVMD DIRECT ACCESS FROM THE ADJACENT RIGHT-OF-WAY. EASEMENTS SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.

REDUCED PRESSURE PRINCIPLE ASSEMBLY (5)-1 1/2"; (2)-2"; (1)-1"

THE REDUCED PRESSURE PRINCIPLE ASSEMBLY(S) SHALL BE INSTALLED IN ACCORDANCE WITH THE UDACS PLATE NO. 8. NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW PREVENTION UNLESS THE ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY LVMD. ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENT(S) SO AS TO ALLOW LVMD DIRECT ACCESS FROM THE ADJACENT RIGHT-OF-WAY. EASEMENTS SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.

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

ALL SEWER/STORM DRAINS CROSSING WATER LINES MUST CONFORM TO SECTION 2.22 OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSINGS AND CLEARANCES.

ALL WATER FACILITIES CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE "UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER DISTRIBUTION SYSTEMS" UDACS, LATEST EDITION.

ALL ABOVE GROUND UTILITY APPURTENANCES SHALL CONFORM TO THE REQUIREMENTS OF TITLE 19.12.040.

TREES, SHRUBS, OR DECORATIVE ROCKS, AND ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE EASEMENT(S) TO ALLOW THE DISTRICT DIRECT ACCESS TO THE VAULT(S), BACKFLOW ASSEMBLIES, AND PIPING FROM THE ADJACENT RIGHT-OF-WAY.

WARNING FIRE LANE (NON-POTABLE WATER)

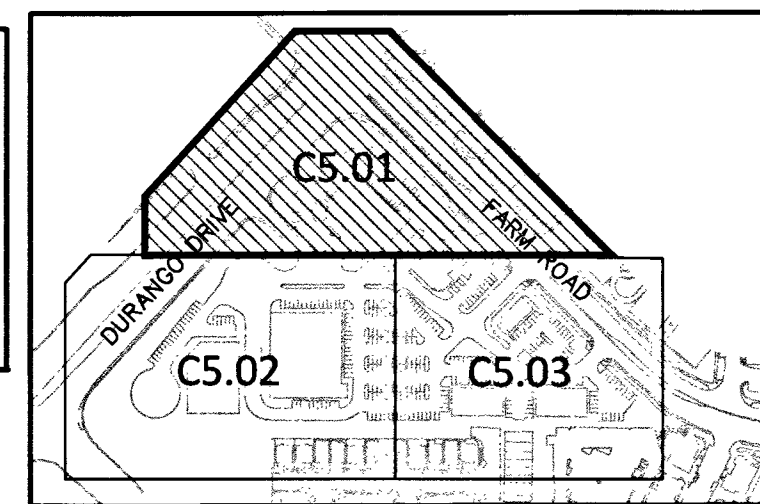
WARNING FIRE LANE (NON-POTABLE WATER)
ALL EXISTING, RELOCATED OR PROPOSED CDCA/RPDA
INSTALLATIONS

"TO COMPLY WITH THE FEDERAL SAFE DRINKING WATER ACT, THE FIRE LINE,
OR ANY OF ITS COMPONENTS, SHALL NOT BE USED FOR POTABLE DRINKING
WATER AT ANY TIME"

PROTECT IN PLACE AND ADJUST LVVWD EXISTING FACILITIES TO FINISHED GRADE. ALL LVVWD FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.

ANNULAR SPACE BETWEEN PIPE AND CASING SHALL BE FILLED WITH FINE SAND OR CONTROLLED LOW STRENGTH MATERIAL (CLSM 50 PSI - 75 PSI). SEE UDACS PLATES 16, 17, 18 AND 19 FOR BEDDING AND BACKFILL REQUIREMENTS.

INSTALL WATERLINE IN STEEL CASING PER UDACS PLATES NO.21 AND 23. MINIMUM CLEARANCE IS REQUIRED ABOVE THE TOP OF THE CASING. FROM THE UPPER BENDS THROUGHOUT THE LOWERED SECTION OF THE PIPE. DUCTILE IRON PIPE WITH RESTRAINED JOINTS IS REQUIRED. IN ADDITION, THRUST BLOCKS ARE TO BE INSTALLED AT THE UPPER BENDS.



KEY MAIN POINTS

30 0 15 30

SCALE: 1"=30'

SOUTH 00°06'57" WEST, BEING THE WEST LINE OF THE GOVERNMENT LOT 11, LYING WITHIN THE SOUTHWEST QUARTER (SW 1/4) OF SECTION 17, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., AS SHOWN IN BOOK 140, PAGE 12 OF PLATS IN THE CLARK COUNTY, NEVADA, RECORDER'S OFFICE.

BENCHMARK
CITY OF LAS VEGAS BENCHMARK # 5LV90 17S6
A RIVET AND PLATE IN THE TOP OF CURB AT THE NORTHWEST CORNER OF
OSO BLANCA ROAD AND DURANGO DRIVE.

NAVD 88 ELEVATION = 798.4331 METERS / 2619.53 FEET
NORTH AMERICAN DATUM OF 1988

NO.	ITEM	UDACS: PLATE NO. PER UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR WATER DISTRIBUTION SYSTEMS
①	INSTALL PVC WATER LINE (C-900) (SIZE PER PLAN) PER UDACS PLATE NO. 17.	
②	INSTALL 45° BEND (SAME SIZE AS LINE) PER UDACS PLATE NO. 31.	
③	INSTALL 90° BEND (SAME SIZE AS LINE) PER UDACS PLATE NO. 31.	
④	INSTALL TEE (SIZE PER PLAN) PER UDACS PLATE NO. 31.	
⑤	INSTALL FIRE HYDRANT ASSEMBLY PER UDACS PLATE NO. 40.	
⑥	INSTALL GATE VALVE (SAME SIZE AS LINE) PER UDACS PLATE NO. 30 & 39.	
⑦	INSTALL 12"x8" TAPPING SLEEVE W/8" TAPPING VALVE PER UDACS PLATE NO. 34 & SEC 2.24.01.	
⑧	INSTALL 8" RPPA PER UDACS PLATE NO. 59.	
⑨	POINT OF CONNECTION. SEE PLUMBING PLANS FOR CONTINUATION.	
⑩	INSTALL COPPER TYPE 'K' WATER LINE (SIZE PER PLAN) PER UDACS PLATE NO. 5.	
⑪	INSTALL PVC WATER LINE (SIZE PER PLAN) PER UDACS PLATE NO. 17.	
⑫	INSTALL 12"x 2" SERVICE SADDLE PER UDACS PLATE NO. 4.	
⑬	INSTALL 12"x 1 1/2" SERVICE SADDLE PER UDACS PLATE NO. 4.	
⑭	INSTALL 12"x 1" SERVICE SADDLE PER UDACS PLATE NO. 4.	
⑮	INSTALL 2" DOMESTIC METER PER UDACS PLATE NO. 4 WITH 2" RPPA PER UDACS PLATE NO. 8.	
⑯	INSTALL 1 1/2" DOMESTIC METER PER UDACS PLATE NO. 4 WITH 1 1/2" RPPA PER UDACS PLATE NO. 8.	
⑰	INSTALL 1" DOMESTIC METER PER UDACS PLATE NO. 4 WITH 1" RPPA PER UDACS PLATE NO. 8.	
⑱	POINT OF CONNECTION. SEE LANDSCAPING PLANS FOR CONTINUATION.	
⑲	RELOCATE EXISTING FIRE HYDRANT PER NOTE.	

NO.	ITEM
	*SS STD PER DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS
1	INSTALL PVC SEWER LINE (SDR-35) PER DCSWCS, DWG. NO. SD-15, DWG. NO. SD-17, (PAVED AREA)
2	INSTALL WYE PER DCSWCS DWG. NO. SD-22 AND DETAIL 'U' SHEET C8.01.
3	REMOVE EXISTING CAP AND CONNECT TO EXISTING SEWER MAIN.
4	INSTALL 48" SSMH PER SD1-A, SD18 AND SD-4.
5	POINT OF CONNECTION. SEE PLUMBING PLANS FOR CONTINUATION AND USE.
6	INSTALL 60" SSMH PER SD-1A, SD-1B AND SD-4.
7	INSTALL 6" CLEAN-OUT PER DCSWCS DWG. NO. SD-26
8	STORM DRAIN/EXIST. WATER LINE CROSSING. PER UDACS PLATE NO. 21 SEE SHEET C5.05
9	INSTALL SEWER BACK WATER VALVE SAME SIZE AS LINE SHOWN.

USE/OCCUPANCY M
TYPE OF CONSTRUCTION V-B
FIRE FLOW 1500 GPM ● 20 PSI
AUTOMATIC FIRE SPRINKLERS X YES/NO
MFT 13 X 13K 13D
ESFR YES/NO
SQAURE FOOTAGE 12,900
LARGEST AREA BETWEEN 4 HOUR WALLS NO
BUILDING HEIGHT 28'
OF STORIES INCLUDING BASEMENT 1
HIGH PILED COMBUSTIBLE STORAGE YES/NO X
OF HYDRANTS INSTALLED 2


10/6/16
 LAS VEGAS FIRE & RESCUE DATE

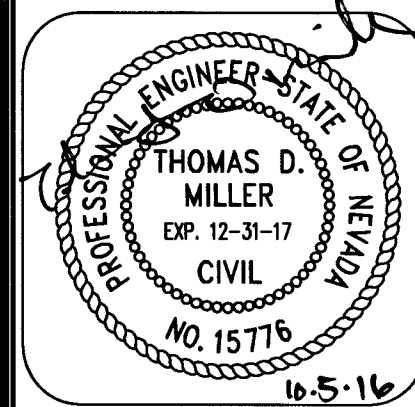
APPROVED FOR CONSTRUCTION


10/6/16
 LAS VEGAS VALLEY-WATER DISTRICT ENGINEERING SERVICES MANAGER

DATE: 10/24/16 PROJECT NO: 124663
 SHEETS: C1.01, C1.02, C4.01-C4.09, C4.10, C4.11, C4.12, C4.13, C5.01, C5.02
 LVWMD: APPROVED FIRE FLOW 2372 GPM AT 20 PSI RESIDUAL
 C5.03, C5.04, C5.05, C5.11, C5.12

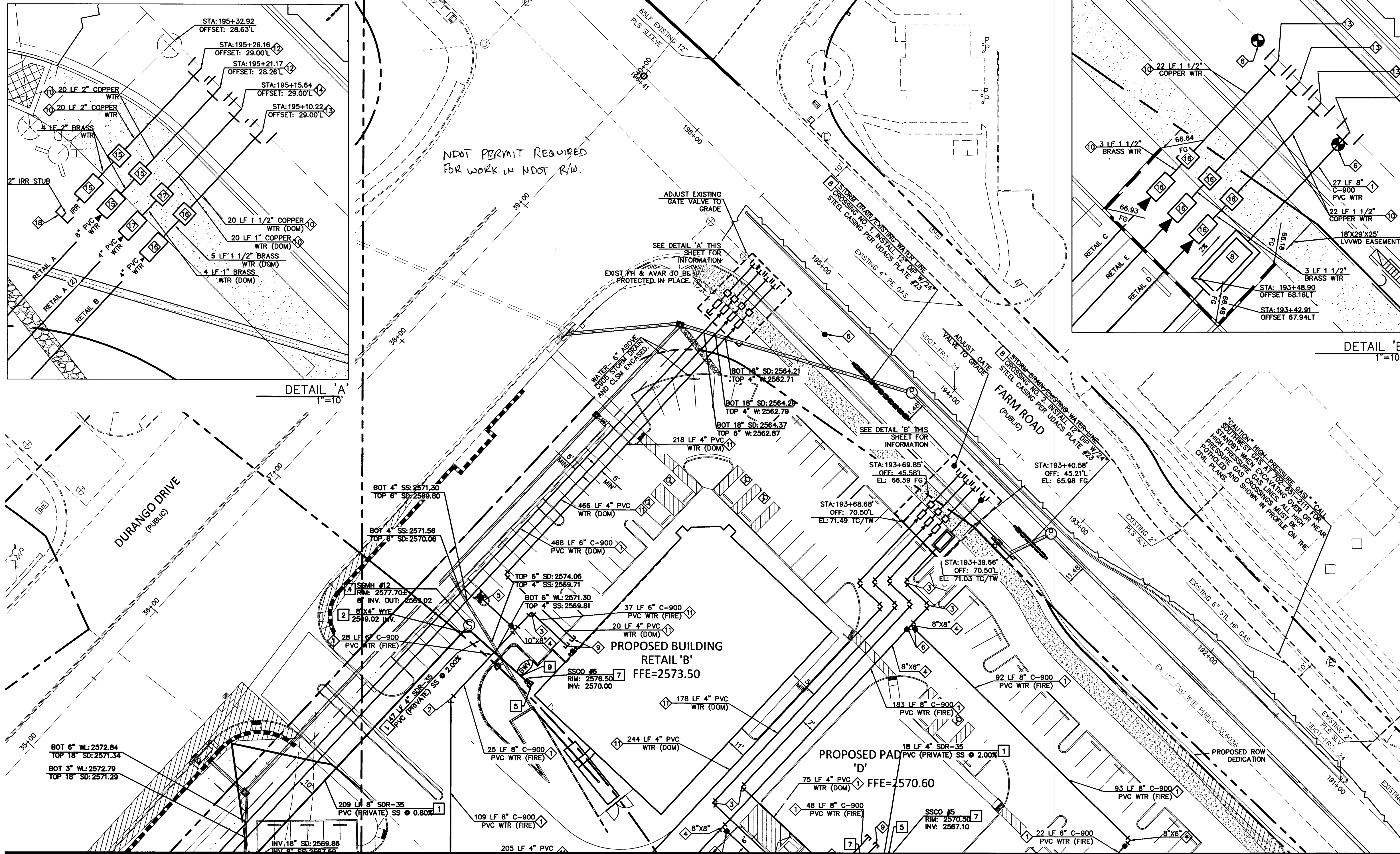
ALL NON-POTABLE FIRE WATER LINES CROSSING POTABLE DOMESTIC WATER LINES ARE TO BE INSTALLED WITH A "VERTICAL SEPARATION OF NO LESS THAN SIX INCHES..." AND IN ACCORDANCE WITH THE UDACS 2.23.01, 2.04.03, 2.22.02.B1, AND 2.22.02.B2.

**COLLINS
ENGINEERS**
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LAS VEGAS, NV 89117
(702) 248-8000
PHONE:
(702) 248-8070
FAX:
www.collinsengr.com



**IMPROVEMENT PLANS FOR DC PLAZA
APN:125-17-601-007,010,013,020 AND 021**

DESCRIPTION		DESIGN BY		DATE		NO.	
CEI PROJECT:		4136					
DESIGN BY:		JDM SR					
DRAWN BY:		JDM SR					
CHECKED BY:		TDM P.E.					
DATE: 09/19/16							
SCALE: 1"=30'							
SHEET NUMBER C5.01							
SHEET 20 OF 46							
107V6734 H#64486							



FOR CONTINUATION SEE SHEET C5.02

FOR CONTINUATION SEE SHEET C5.03

CALL BEFORE YOU DIG AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY. Call 811 or 1-800-227-2600	AVOID HITTING UNDERGROUND TRAFFIC SIGNAL AND STREET LIGHT SYSTEMS. IT'S COSTLY. CALL BEFORE YOU DO UNDERGROUND WORK CALL 1-702-432-5300 (FREE SERVICE - NO MINIMUM)	AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY. CALL BEFORE YOU DO OVERHEAD WORK 1-702-227-2929
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COLLINS ENGINEER ASSUMES NO RESPONSIBILITY FOR EXISTING UTILITY LOCATIONS AND ELEVATIONS. THE UTILITIES SHOWN ON THIS DRAWING HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. IT IS, HOWEVER, THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION. CONTRACTOR TO FIELD VERIFY ALL EXISTING SITE CONDITIONS PRIOR TO CONSTRUCTION. IF A CONFLICT EXISTS BETWEEN WHAT IS SHOWN ON THIS DRAWING AND WHAT IS FOUND IN THE FIELD, THE CONTRACTOR IS TO NOTIFY THE ARCHITECT OR ENGINEER IMMEDIATELY.

LEGEND

EXISTING	PROPOSED		EXISTING	PROPOSED	
		ELEVATION TAG			POWER LINE/POLE
		TELEPHONE LINE			WATER LINE
		DRAIN INLET			SANITARY SEWER LINE
		RETAINING WALL			STORM SEWER LINE
		SCREEN WALL			GAS LINE
		UTILITY POLE			STORM MANHOLE
		STREET LIGHT			

<u>EXISTING</u>	<u>PROPOSED</u>	
		FIRE HYDRANT
		FIRE DEPARTMENT CONNECTION
		WATER VALVE
		REDUCER
		SEWER MANHOLE
		CLEANOUT
		GAS VALVE

EXISTING	PROPOSED	
---	---	PL-RIGHT-OF-WAY
---	---	PL-ADJACENT
---	---	CENTERLINE
---	---	EASEMENT LINE
---	---	FLOW LINE
---	---	SIGN W/POLE
---	---	SAWCUT LINE
☆	☆	AREA LIGHT
□	□	WATER METER

EXISTING	PROPOSED
	AC PAVEMENT
	6" TYPE "A" CURB
	24" TYPE "L" CURB & GUTTER
	30" ROLL CURB
	 BACK WATER VALVE