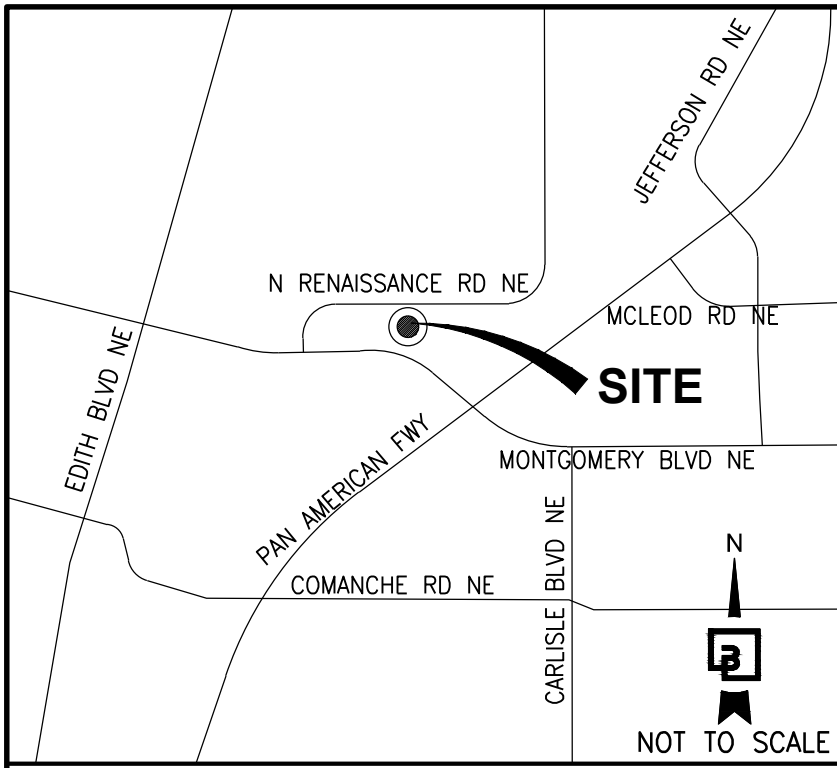




VICINITY MAP

PROJECT DATA

PROJECT ADDRESS: 1420 RENAISSANCE BLVD. ALBUQUERQUE, NM 87107

ZONING: SUI FOR C2 USES

JURISDICTION: CITY OF ALBUQUERQUE, NM

PROJECT AREA SUMMARY:

IMPERVIOUS: EXISTING 29,705 SF PROPOSED 30,798 SF

PERVIOUS: 2,682 SF 1,589 SF

TOTAL DISTURBANCE = 32,387 SF

PROJECT SITE DATA:

COSTCO SITE AREA

PARCEL 4B	646,621 SF (14.84 AC)
PARCEL 4C	63,598 SF (1.46 AC)
TOTAL SITE AREA	710,219 SF (16.4 AC)

BUILDING AREA

WAREHOUSE	149,014 SF
TIRE CENTER	5,937 SF
FUEL FACILITY	4,445 SF
TOTAL BUILDING AREA	159,396 SF

PARKING SUMMARY

WAREHOUSE: 149,014 SF @ 1/300 SF	497 STALLS
TIRE CENTER: 5,937 SF @ 1/1,000 SF	6 STALLS
FUEL FACILITY: 4,445 SF @ 4/1,000 SF	18 STALLS
TOTAL PARKING REQUIRED	521 STALLS

PARKING PROVIDED 733 STALLS

LANDSCAPE REQUIRED: 83,128 SF (15%)

(MIN. 15% OF NET AREA)

LANDSCAPE PROVIDED 254,982 SF (36%)

NOTE:

THIS PROJECT WILL BE REGULATED BY THE STATE OF NEW MEXICO ENVIRONMENTAL DEPARTMENT AND AIR QUALITY GROUP OF THE CITY OF ALBUQUERQUE ENVIRONMENTAL HEALTH DEPARTMENT.

OVERALL SITE PLAN

COSTCO WHOLESALE FUEL EXPANSION

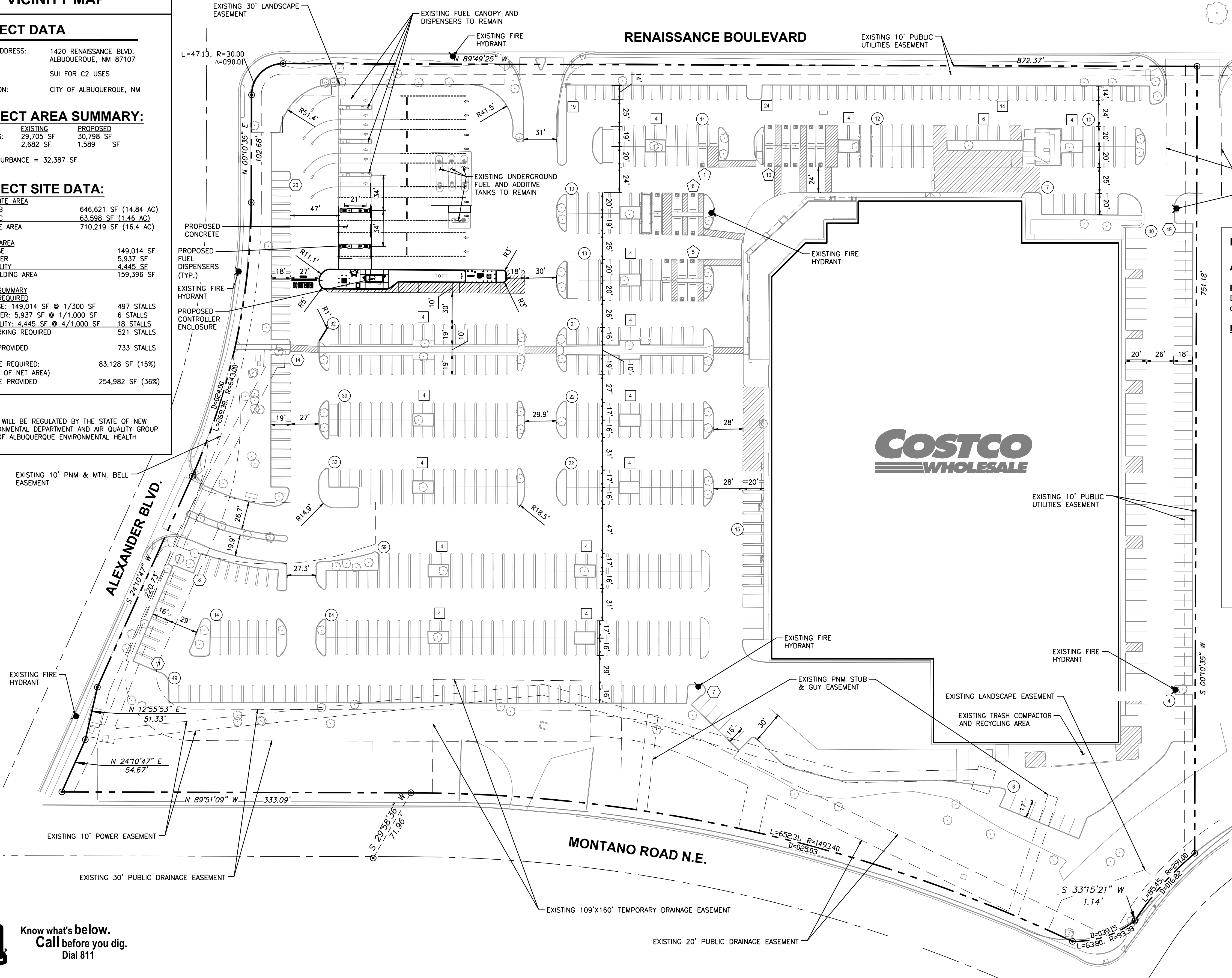
1420 RENAISSANCE BLVD. N.E.

ALBUQUERQUE, NM 87107

COSTCO WAREHOUSE LOCATION #116

LEGEND

	EX. CONCRETE		PROP. ASPHALT
	EX. CURB		PROP. CONCRETE
	EX. CANOPY DRIPLINE		PROP. CURB AND GUTTER
	EX. EASEMENT		SAWCUT LINE
	EX. EDGE OF PAVEMENT		PROP. STORM PIPE
	EX. STORM DRAIN		PROP. CANOPY
	EX. UNDERGROUND WATER LINE		PROP. CLEANOUT
	EX. STORM DRAIN CATCH BASIN		FLOW PATH
	EX. STORM CLEANOUT		PROP. SPOT GRADE
	EX. TREE TO REMAIN		PROP. GRADING SLOPE
			MATCH EX.
			PROP. MULTI-PRODUCT DISPENSER



PROJECT NUMBER:

Application Number:

Is an Infrastructure List required? () Yes () No. If yes, then a set of approved DRC plans with a work order is required for any construction within Public Right-of-Way or for construction of public improvements.

DFT SITE DEVELOPMENT PLAN APPROVAL:

Traffic Engineering, Transportation Division	Date
ABCWUA	Date
Parks and Recreation Department	Date
Hydrology	Date
Code Enforcement	Date
* Environmental Health Department (conditional)	Date
Solid Waste Management	Date
Planning Department	Date

OVERALL SITE PLAN

1420 RENAISSANCE BLVD. N.E.

ALBUQUERQUE, NM 87107

COSTCO WAREHOUSE LOCATION #116

COSTCO WHOLESALE

730 LAKE DRIVE

ISSAQUAH, WA 98027

For:



Scale: Horizontal 1" = 50' Vertical N/A

Designed SN SN

Drawn SN

Checked MESP

Approved CRJ

Date 8/31/23

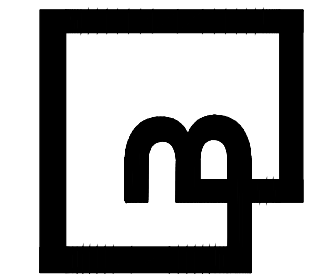
Barghausen Consulting Engineers, Inc.

18215 72nd Avenue South

Kent, WA 98032

425.251.6222

barghausen.com



Job Number 10896

Sheet 1 of 4



Know what's below.

Call before you dig.

Dial 811

RENAISSANCE BOULEVARD

ALEXANDER BOULEVARD

PROPOSED FUEL CANOPY EXPANSION

EX. FUEL CANOPY TO REMAIN

EX. USTs TO REMAIN

DO NOT ENTER

PROPOSED ADA COMPLIANT (E.S.O.)

EXISTING FIRE HYDRANT TO REMAIN

EXISTING LANDSCAPE EASEMENT WIDTH VARIES

EXISTING 10' PUBLIC UTILITY EASEMENT

EXISTING TREE TO REMAIN (TYP.)

EXISTING DISPENSER TO BE REMOVED AND RE-INSTALLED (TYP. OF 6)

EXISTING PAVEMENT TO REMAIN WITH A SLURRY SEAL COAT

EXISTING LOT LIGHT TO REMAIN

EXISTING CURB TO REMAIN

PROPOSED CONCRETE PAVEMENT (TYP.)

PROPOSED MULTI-PUMP DISPENSER (TYP. OF 4)

PROPOSED ASPHALT PAVEMENT (TYP.)

PROPOSED BARRIER CURB (TYP.)

SAWCUT (TYP.)

EXISTING PAVEMENT TO REMAIN

SAWCUT MATCH EXISTING GRADE (TYP.)

PROPOSED CURB AND GUTTER (TYP.)

EXISTING TRANSFORMER

PROPOSED SWALE

EXISTING E.S.O. ON COLUMN TO REMAIN

SAWCUT MATCH EXISTING GRADE (TYP.)

PROPOSED SWALE

EXISTING USTs TO REMAIN

PROPOSED CONCRETE PAVEMENT (TYP.)

EXISTING LOT LIGHT TO REMAIN

EXISTING CURB TO REMAIN

SAWCUT MATCH EXISTING GRADE (TYP.)

EXISTING TREE TO REMAIN (TYP.)

PROPOSED ASPHALT PAVEMENT (TYP.)

PROPOSED SWALE

EXISTING PAVEMENT TO REMAIN

EXISTING CART CORRAL TO REMAIN

EXISTING SD MANHOLE TO REMAIN

PROPOSED VENT RISERS

EXISTING ADDITIVE TANK TO REMAIN

PROPOSED REMOTE FILL BOX

PROPOSED TMS ADDITIVE DIRECT INJECTION CABINET

PROPOSED STORM DRAIN MANHOLE

PROPOSED CONTROLLER ENCLOSURE

PROPOSED CONCRETE PAVEMENT (TYP.)

PROPOSED TRANSFORMER

PROPOSED OIL/WATER SEPARATOR

PROPOSED RIDGELINE

PROPOSED ASPHALT PAVEMENT (TYP.)

PROPOSED BARRIER CURB (TYP.)

PROPOSED VST GREEN MACHINE

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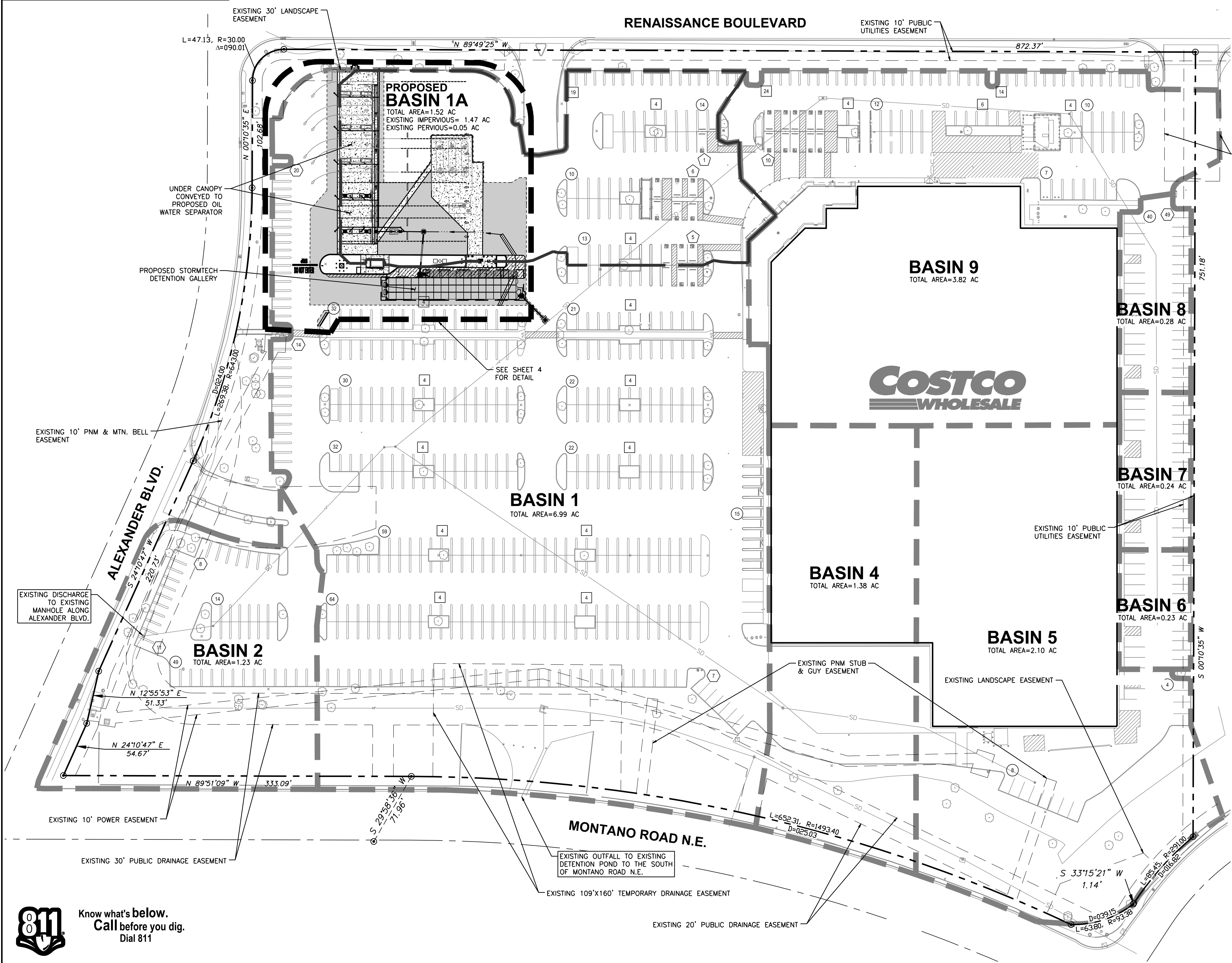
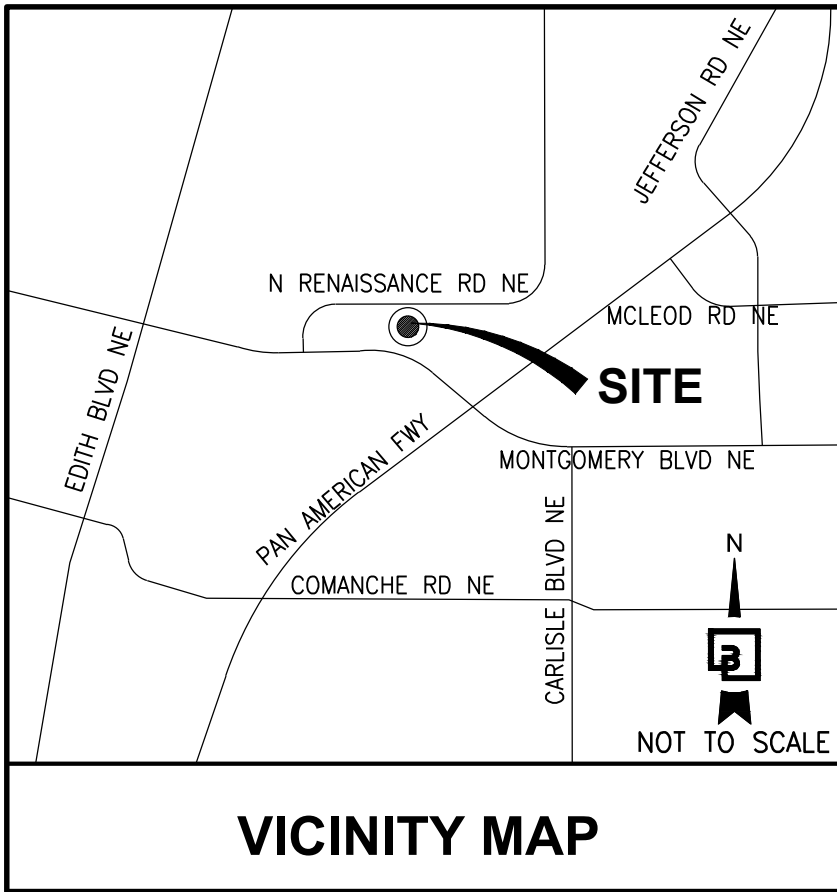
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PROPOSED CONTROLLER ENCLOSURE

PROPOSED CONCRETE PAVEMENT (TYP.)</

TOTAL AREA = 32,387 SF		
	EXISTING	PROPOSED
IMPERVIOUS:	29,705 SF	30,798 SF
PERVIOUS:	2,682 SF	1,589 SF



LEGEND

- EX. CONCRETE
- EX. CURB
- EX. CANOPY DRIPLINE
- EX. EASEMENT
- EX. EDGE OF PAVEMENT
- SD EX. STORM DRAIN
- W EX. UNDERGROUND WATER LINE
- EX. STORM DRAIN CATCH BASIN
- EX. STORM CLEANOUT
- EX. TREE TO REMAIN
- PROP. ASPHALT
- PROP. CONCRETE
- PROP. CURB AND GUTTER
- SAWCUT LINE
- PROP. STORM PIPE
- PROP. CANOPY
- PROP. CLEANOUT
- FLOW PATH
- PROP. MULTI-PRODUCT DISPENSER

Calculations-Costco Albuquerque 1-1420 Renaissance Blvd, N.E.
Based on City of Albuquerque DMP, Article 6-2 date June 26, 2020
100-Year, 6-hour Calculations-Precepition Zone 2

Drainage Area:	1,067,176 SF	=	24.50 ACRE
HISTORIC FLOWS:			
Area A	Treatment SF	%	Excess Percipitation:
Area B	111,514	10%	E _a = 0.62
Area C	0	0%	E _b = 0.8
Area D	955,662	90%	E _c = 1.03
Total Area	1,067,176	100%	E _d = 2.33
DEVELOPED FLOWS:			
Area A	Treatment SF	%	
Area B	110,421	10%	
Area C	0	0%	
Area D	956,755	90%	
Total Area	1,067,176	100%	

On-site Weighted Excess Precipitation (100-year, 6-hour storm)

Weighted E = $\frac{E_a A_a + E_b A_b + E_c A_c + E_d A_d}{A_a + A_b + A_c + A_d}$			
Historic E	=	2.17 in	Developed E = 2.17 in
On-site Volume of Runoff: V ₅₀	=	E x A / 12	
Historic V ₅₀	=	192,992 CF	Developed V ₅₀ = 193,131 CF
On-site Peak Discharge Rate: Q _p =Q _u A _u +Q _u A _u +Q _u A _u +Q _u A _u /43,560			
For Precipitation Zone:	2		
Q _u	=	1.71	Q _u = 3.05
Q _u	=	2.36	Q _u = 4.34
Historic Q _p	=	101.26 CFS	Developed Q _p = 101.31 CFS

GRADING AND DRAINAGE NARRATIVE:

THE SITE IS CURRENTLY DEVELOPED WITH AN EXISTING COSTCO WAREHOUSE, FUEL FACILITY, PARKING, STORMWATER FACILITIES, AND LANDSCAPING. STORMWATER RUNOFF FROM FUEL AREA IS NOT CAPTURED, NOR TREATED ON-SITE IN A WATER QUALITY UNIT BEFORE BEING CONVEYED THROUGH A CLOSED CONVEYANCE SYSTEM TO AN EXISTING MANHOLE IN ALEXANDER BLVD., THEN TO AN EXISTING DETENTION POND LOCATED SOUTH OF THE PROPERTY, SOUTH OF MONTANO ROAD N.E. THE EXISTING STORM SYSTEM WAS DESIGNED IN THE ORIGINAL WAREHOUSE PLAN DATED JULY, 1996. EXISTING GRADES WITHIN THE PAVED AREAS ARE RELATIVELY FLAT WITH SLOPES RANGING FROM 0.5 TO 4 PERCENT.

THE IMPROVEMENTS TO THE COSTCO PARKING LOT ARE LOCATED IN BASIN 1 OF THE EXISTING SITE'S DRAINAGE AREA. THE FUEL EXPANSION EXTENDS INTO THE EXISTING STORMWATER PARKING LOT DETENTION AND AS A RESULT A NEW STORMWATER DETENTION FACILITY IS PROPOSED TO PROVIDE STORMWATER DETENTION FOR DISPLACED STORMWATER PARKING LOT DETENTION.

THE IMPROVEMENTS INCLUDE EXPANSION OF THE EXISTING FUEL FACILITY, NEW CANOPY STORM DRAIN PIPES FOR BOTH THE NEW DISPENSER ISLANDS AND THE EXISTING DISPENSER ISLANDS. A NEW 1,000-GAL OIL WATER SEPARATOR AND SHUTOFF VALVE IS PROPOSED AND CONNECTS TO THE NEW STORMWATER DETENTION SYSTEM. THE PROPOSED IMPROVEMENTS WILL RESULT IN A MINIMAL INCREASE IN IMPERVIOUS AREA.

THE SUBJECT SITE IS LOCATED WITHIN ZONE X (FEMA FIRM NO. 35001C0138H DATED AUGUST 16, 2012) AND WILL NOT BE IMPACTED BY ANY FLOOD CONTROL REQUIREMENTS.

PROJECT AREA SUMMARY:

	EXISTING	PROPOSED
IMPERVIOUS:	29,705 SF	30,798 SF
PERVIOUS:	2,682 SF	1,589 SF
TOTAL DISTURBANCE = 32,387 SF		
REQUIRED SWOV = 0.74 AC x 43,560 SF x 0.26 IN x (1 FT/12 IN) = 698 CF		
PROVIDED SWOV = WITH PROPOSED WATER QUALITY UNIT		

Job Number
10896

Sheet
3 of **4**

Drainage Area Map

1420 RENAISSANCE BLVD. N.E.
ALBUQUERQUE, NM 87107
COSTCO WAREHOUSE LOCATION #116

For:

Scale: Horizontal 1" = 50' Vertical N/A

Designed: SN Drawn: SN Checked: MESP Approved: CRJ Date: 8/31/23

Barchausen Consulting Engineers, Inc.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222
barchausen.com

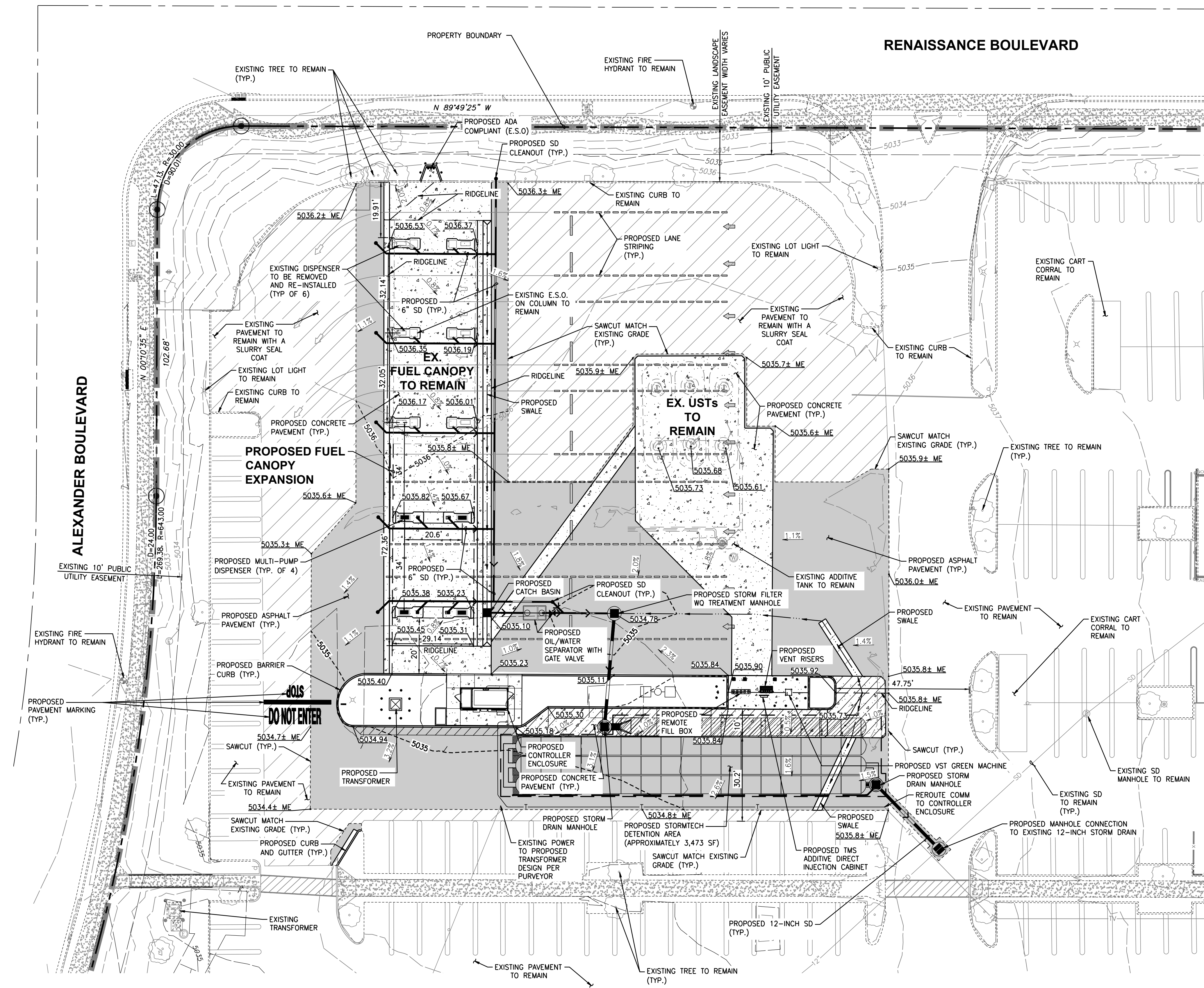
Job Number
10896

Sheet
3 of **4**



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**COSTCO WHOLESALE FUEL EXPANSION
1420 RENAISSANCE BLVD. N.E.
ALBUQUERQUE, NM 87107
COSTCO WAREHOUSE LOCATION #116**



TOTAL AREA = 32,387 SF		
	EXISTING	PROPOSED
IMPERVIOUS:	29,705 SF	30,798 SF
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