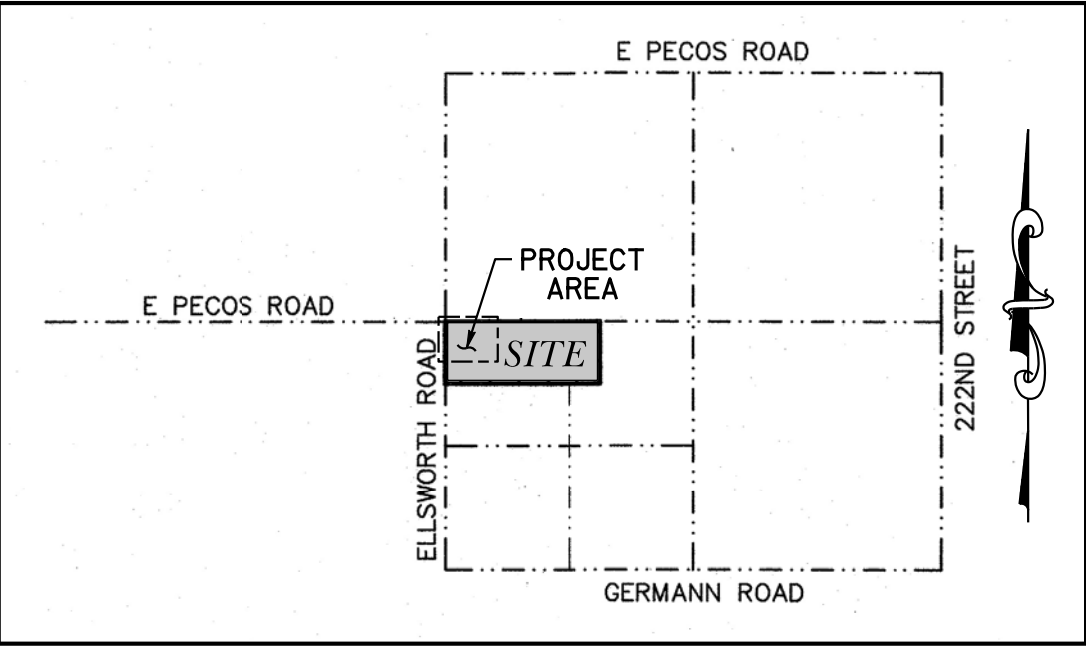
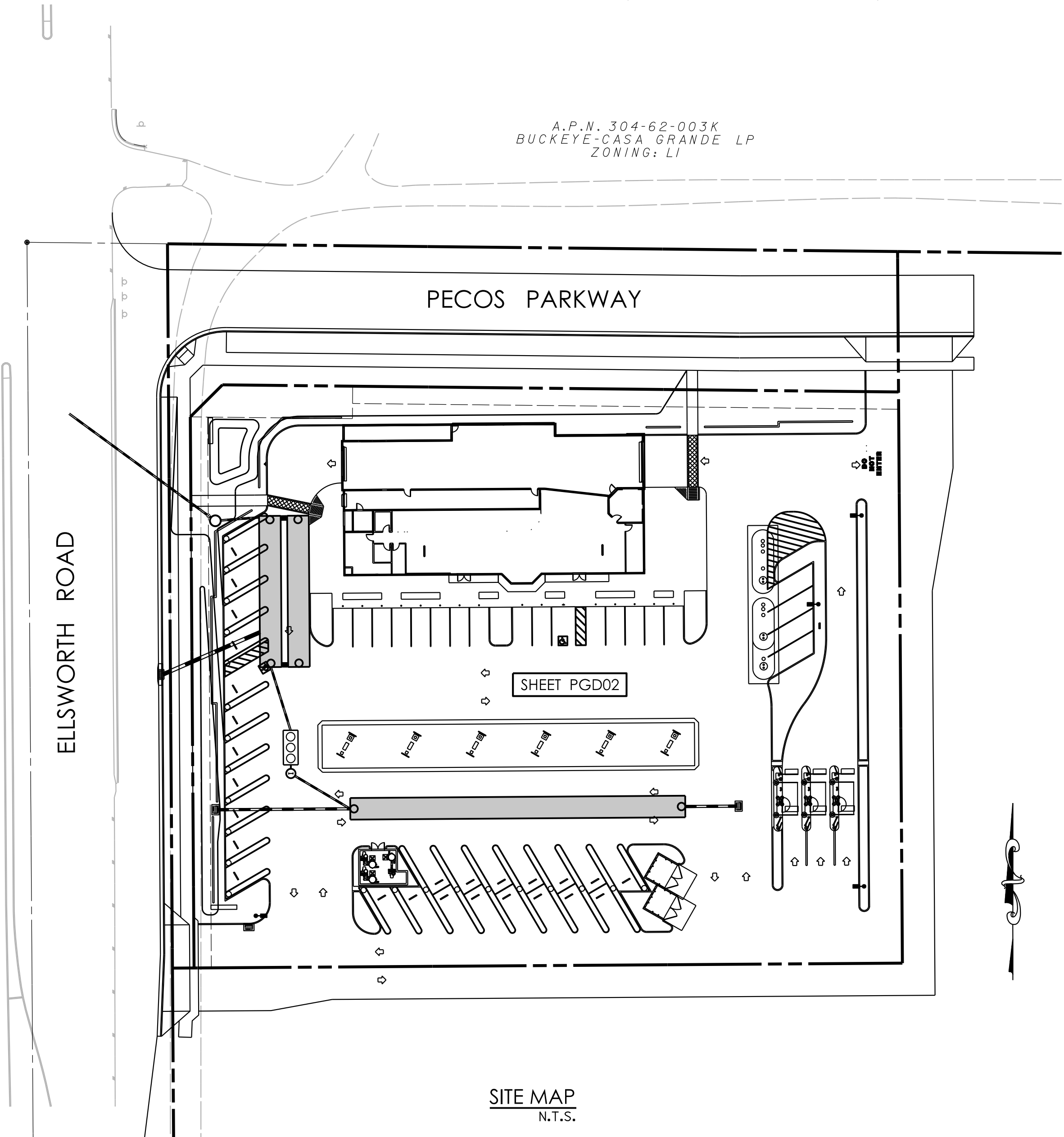


PRELIMINARY GRADING & DRAINAGE PLAN
FOR
COBBLESTONE AUTO SPA #17
SEC PECOS PARKWAY & ELLSWORTH RD, MESA, AZ. 85212
LOCATED IN A PORTION OF THE SOUTHWEST QUARTER OF SECTION 3, TOWNSHIP 2 SOUTH, RANGE 7 EAST
OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA



VICINITY MAP
N.T.S.



SITE MAP
N.T.S.

LEGEND

- PROPERTY / BOUNDARY LINE
- - - DRAINAGE BASIN BOUNDARY
- 1183 EXISTING CONTOUR ELEVATION
- 85 PROPOSED CONTOUR ELEVATION
- +86.34 EXISTING SPOT ELEVATION
- TC: 80.51 EXISTING TOP OF CURB & GUTTER ELEV.
- G: 80.07
- +P: 84.05 EXISTING PAVEMENT ELEVATION
- +C: 85.35 INDICATES EXISTING CONCRETE ELEVATION
- 15.0 PROPOSED GROUND ELEVATION
- 1% DIRECTION OF FLOW & SLOPE
- TC= PROPOSED TOP OF CURB & GUTTER ELEV.
- G=
- P= PROPOSED PAVEMENT ELEVATION
- C= PROPOSED TOP OF CONC. ELEVATION
- G+8 PROPOSED GRADE BREAK
- FF= PROPOSED FINISH FLOOR ELEVATION
- PAD= PROPOSED PAD ELEVATION
- ①-② PROPOSED DRYWELL
- PROPOSED UNDERGROUND RETENTION PIPE
- LPX EXISTING LIGHT POLE
- ET EXISTING ELECTRIC TRANSFORMER
- EB EXISTING ELECTRIC BOX
- WM EXISTING WATER METER
- BWP EXISTING BACKFLOW PREVENTER VALVE
- T EXISTING BURIED TELEPHONE CONDUIT
- E EXISTING BURIED ELECTRIC CONDUIT
- 8" W EXISTING WATER LINE, VALVE & SIZE
- FH EXISTING FIRE HYDRANT
- 8" S EXISTING SEWER LINE & SIZE
- PROPOSED WATER LINE & V.B.&C.
- PROPOSED SEWER PIPE
- PROPOSED SEWER CLEANOUT

INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
PGD01	PRELIMINARY GRADING & DRAINAGE PLAN - COVER SHEET
PGD02	PRELIMINARY GRADING & DRAINAGE PLAN

ENGINEER:
3 ENGINEERING
6370 E. THOMAS ROAD, SUITE 200
SCOTTSDALE, ARIZONA 85251
CONTACT: DAN G. MANN, P.E.
PHONE: (602) 334-4387
EMAIL: DAN@3ENGINEERING.COM

OWNER/DEVELOPER:
COBBLESTONE AUTO SPA
3739 E. BELL ROAD
PHOENIX, ARIZONA 85032
CONTACT: TUCK BETTIN
PHONE: (602) 920-9274
EMAIL: T.BETTIN@COBBLESTONE.COM

ARCHITECT:
PM DESIGN GROUP
76 EAST MITCHELL DRIVE
PHOENIX, ARIZONA 85012
CONTACT: PAT MUSSER
PHONE: (602) 457-5269
EMAIL: PMUSSER@PMDGINC.COM

APN NUMBER:
PORTION OF APN 304-62-004P

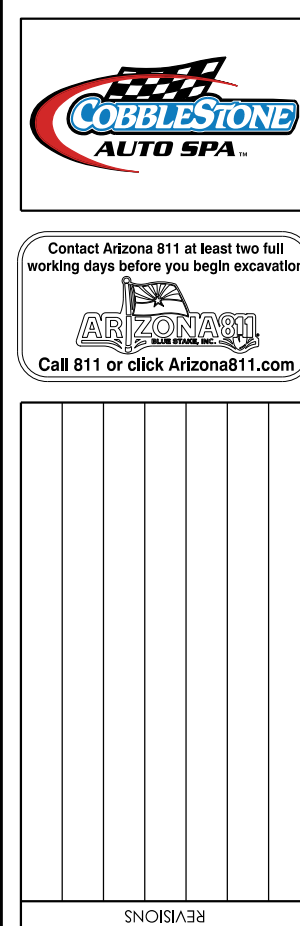
ADDRESS:
SEC PECOS PKWY & ELLSWORTH RD
MESA, AZ. 85212

BENCHMARK:
FOUND BRASS CAP IN HANDHOLE
GDACS 21012-1
ELEVATION: 1401.85 NAVD88
CITY OF MESA DATUM

RETENTION CALCULATIONS
100-YR 2-HOUR STORM EVENT

REQUIRED VOLUME
 V_R = REQUIRED RETENTION VOLUME, CF
D = DEPTH OF WATER TO RETAIN, 2.21 INCHES
A = TOTAL DISTURBED AREA, 134,078 SF OR 3.08 ACRES*
C = RUNOFF COEFFICIENT, 0.90
 $V_R = \left(\frac{D}{12} \right) \times A \times C$
 $V_R = \left(\frac{2.21}{12} \right) \times 134,078 \times 0.90$
 $V_R = 22,224$ CF
PROVIDED VOLUME
SURFACE VOLUME = 0 CF
UNDERGROUND VOLUME (10" DIA.) = 23,169 CF
TOTAL VOLUME PROVIDED = 23,169 CF

*NOTE: AREA INCLUDES ADJACENT RIGHT-OF-WAY.



COBBLESTONE AUTO SPA #17
SEC PECOS PKWY & ELLSWORTH RD, MESA, AZ. 85212
PRELIMINARY GRADING & DRAINAGE PLAN



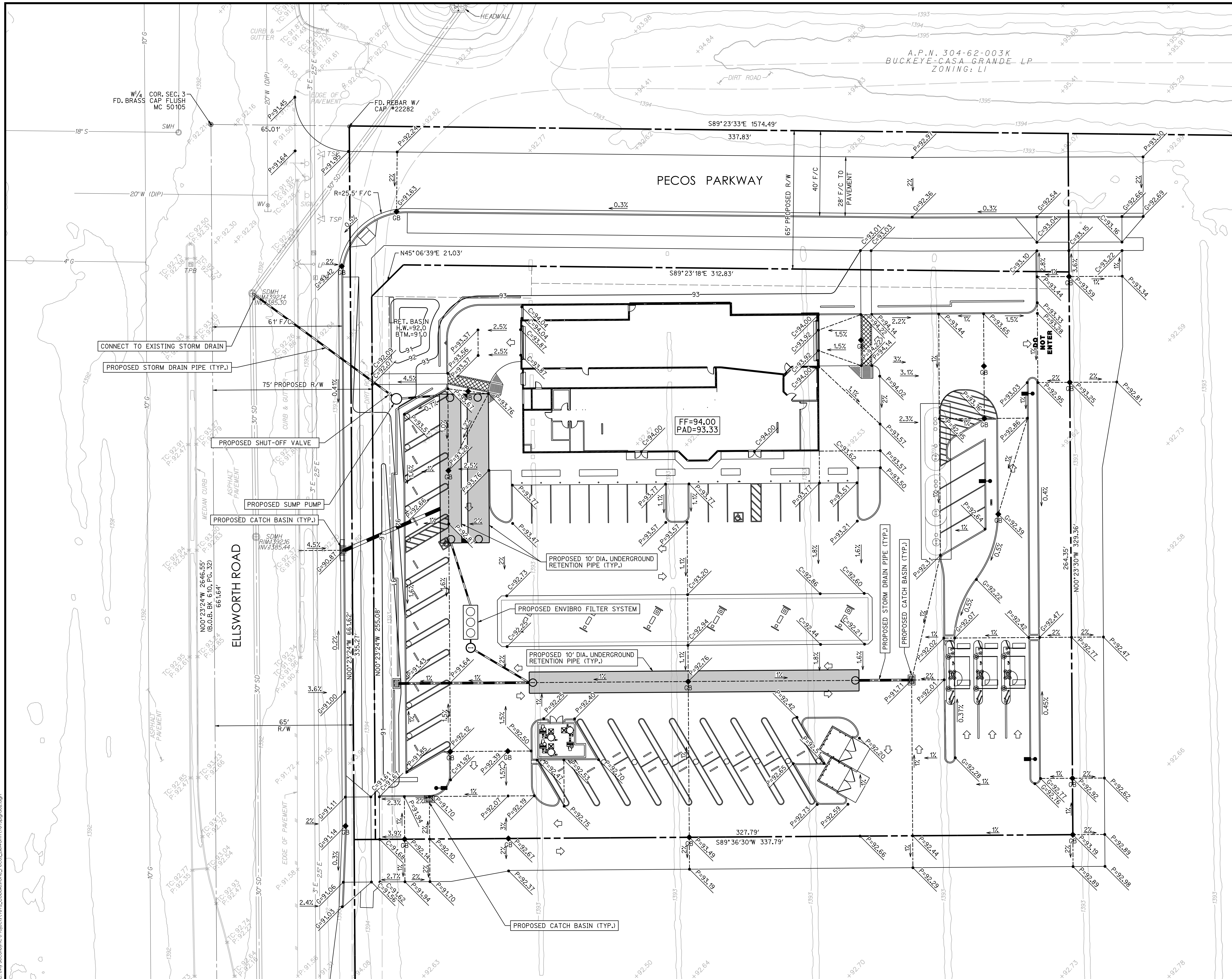
EXPIRES: 9/30/2019

3 engineering
civil engineering
planning
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DATE: 03/05/19
PROJECT NO.
1615
SHEET NO.
PGD01
1 of 2

C:\My Documents\Projects\1615_Cobblestone_Pecos_Ellsworth\1615pg02.dgn



Contact Arizona 811 at least two full working days before you begin excavation.
Call 811 or click Arizona811.com

COBBLESTONE AUTO SPA #17

SEC PECOS PKWY & ELLSWORTH RD, MESA, AZ. 85212

PRELIMINARY GRADING & DRAINAGE PLAN



EXPIRES: 9/30/2019

3eengineering
planning
civil engineering
surveying

ENGINEER: D. MANN
DESIGNER: D. MANN
CAD TECH: PHILIP Y.
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DATE: 03/05/19

PROJECT NO.
1615

SHEET NO.
PGD02
2 of 2