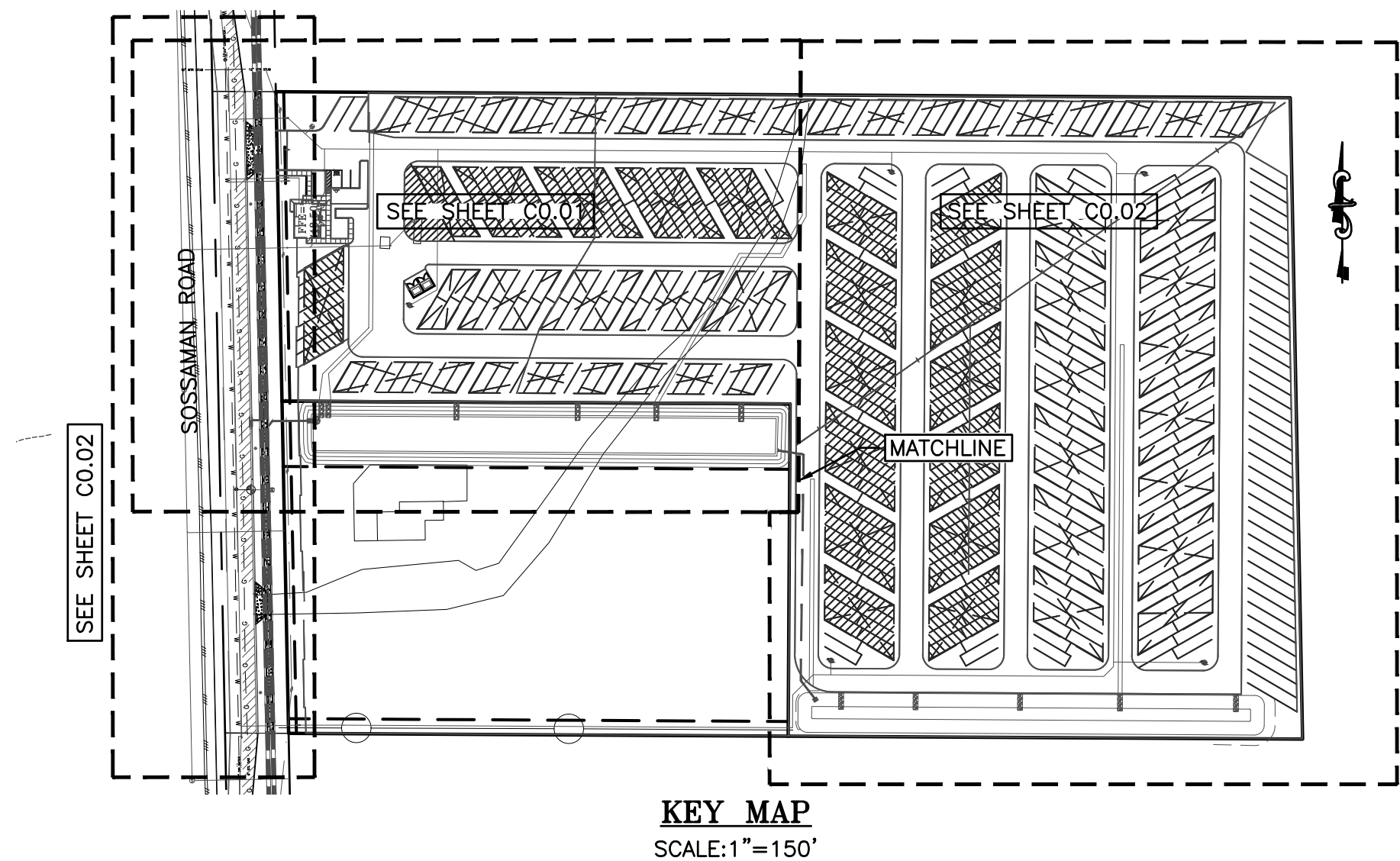


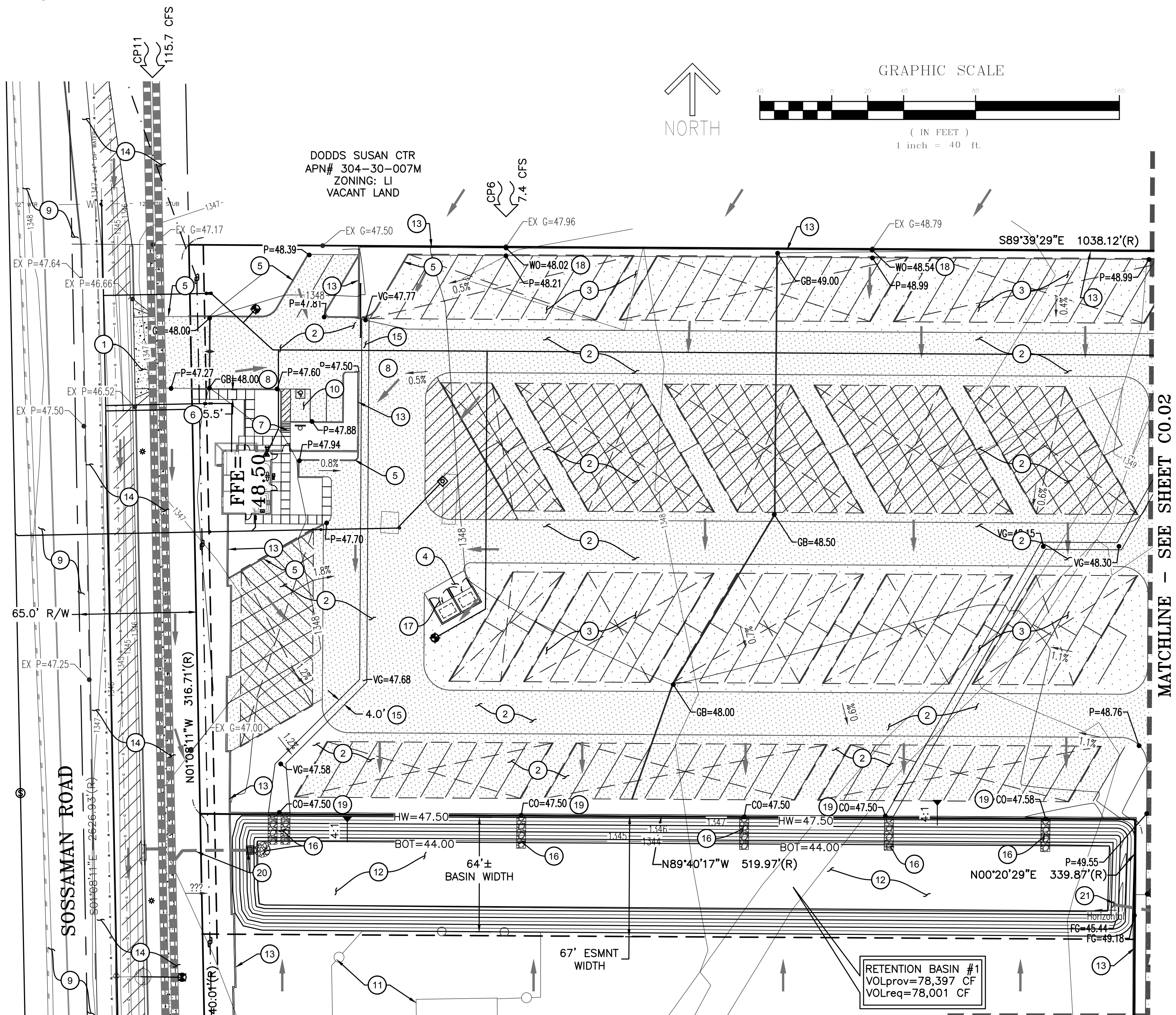
PRELIMINARY GRADING AND DRAINAGE PLAN

FOR
MESA RV STORAGE

MESA, ARIZONA
APN: 304-30-007N

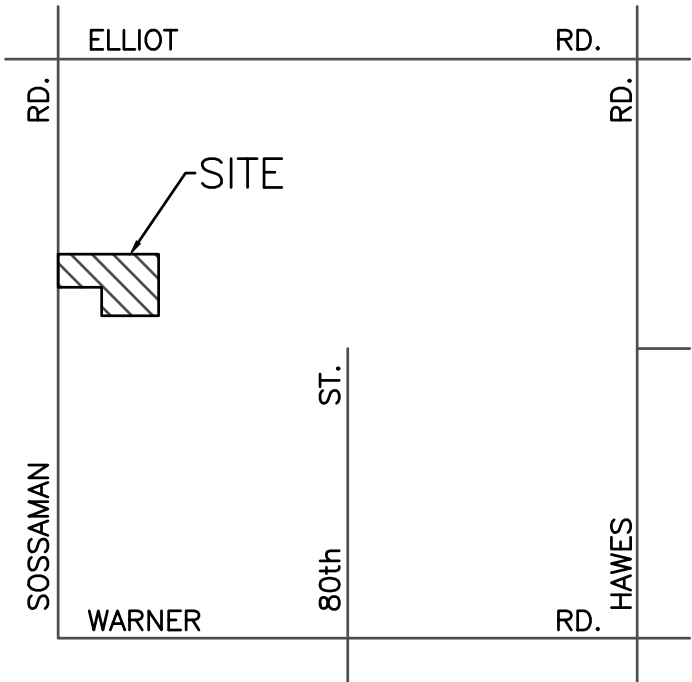


WEST HALF GRADING AND DRAINAGE



SHEET INDEX

- CO.01 WEST HALF - GRADING AND DRAINAGE
- CO.02 EAST HALF - GRADING AND DRAINAGE, PUBLIC IMPROVEMENTS
- CO.03 UTILITIES



VICINITY MAP

SCALE: NTS

SITE AREA

GROSS AREA = 723,961 S.F. (16.61 AC)
NET AREA = 694,408 S.F. (15.94 AC)

LEGAL DESCRIPTION

EXCEPTING THEREFROM THE FOLLOWING:
THAT PART OF THE EASTERLY 225.40 FEET OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER, AND THE NORTH HALF OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 17, TOWNSHIP 1 SOUTH, RANGE 7 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA, DESCRIBED AS FOLLOWS:
FROM THE NORTHEAST CORNER OF SAID NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 17; MEASURE THENCE SOUTH 00 DEGREES 08 MINUTES 42 SECONDS WEST ALONG THE EAST LINE OF THE SAID NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 17, A DISTANCE OF 33.01 FEET TO THE POINT OF BEGINNING;
THENCE CONTINUING SOUTH 00 DEGREES 08 MINUTES 42 SECONDS WEST, 1932.58 FEET TO THE SOUTHEAST CORNER OF THE SAID NORTH HALF OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 17; THENCE NORTH 88 DEGREES 15 MINUTES 49 SECONDS WEST ALONG THE SOUTH LINE OF THE SAID NORTH HALF OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 17, A DISTANCE OF 225.49 FEET; THENCE NORTH 00 DEGREES 08 MINUTES 42 SECONDS EAST, PARALLEL TO AND 225.40 FEET WESTERLY FROM THE EAST LINE OF THE WEST HALF OF THE NORTHWEST QUARTER OF SECTION 17, A DISTANCE OF 1932.54 FEET TO A POINT 33.00 FEET SOUTHERLY FROM THE NORTH LINE OF THE SAID NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 17; THENCE SOUTH 88 DEGREES 16 MINUTES 26 SECONDS EAST, 225.49 FEET TO THE POINT OF BEGINNING.

FLOOD INFO - FIRM DATA

ACCORDING TO FEMA FLOOD INSURANCE RATE MAP NO. 04013C2760 L DATED OCTOBER 16, 2013, THE SUBJECT PROPERTY IS LOCATED IN SHADED ZONE X. SHADED ZONE X IS DESCRIBED AS: "AREAS OF 500-YEAR FLOOD; AREAS OF 100-YEAR FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 100-YEAR FLOOD."

OFFSITE DRAINAGE

THERE ARE OFFSITE FLOWS AFFECTING THE SITE FROM THE NORTH AND EAST. ALL FLOWS WILL BE ACCEPTED AND ROUTED TO HISTORICAL LOCATIONS. ALL ONSITE FLOWS WILL BE RETAINED ONSITE.

ELEVATION BENCHMARK

BRASS TAG IN HEADWALL AT THE INTERSECTION OF SOSSAMAN ROAD AND ELLIOT ROAD.
NAVD 88 ELEVATION = 1350.18. (CITY OF MESA)

RETENTION CALCULATIONS

FIRST FLUSH STORM EVENT

VOLUME REQUIRED

$V_{req} = C \cdot A \cdot P / 12$
 $C = 0.950$
 $P = 2.20$ IN

WATERSHED

$A = 694,408$ S.F.
 $V_{req} = 120,943$ C.F.
 $V_{prov} = 121,732$ C.F.

NEW CONSTRUCTION #

1. NEW CONCRETE DRIVEWAY ENTRANCE
2. NEW ASPHALT PAVEMENT
3. NEW DG GRAVELED AREA
4. NEW CONCRETE PAVEMENT
5. NEW CONCRETE CURB
6. NEW CONCRETE SIDEWALK
7. NEW SIDEWALK RAMP
8. NEW SURFACE GRADEBREAK
9. EXISTING ASPHALT PAVEMENT
10. 2% MAXIMUM SLOPE FOR ADA PARKING SPACES.
11. EXISTING FENCE AND STRUCTURE
12. NEW RETENTION BASIN
13. NEW CMU BLOCK SCREEN WALL
14. SEE SHEET C0.02 FOR PROPOSED OFFSITE PAVEMENT AND DRAINAGE IMPROVEMENTS
15. NEW VALLEY GUTTER
16. NEW RIP RAP
17. NEW TRASH ENCLOSURE
18. NEW WALL OPENING
19. NEW CURB AND WALL OPENING
20. NEW CONCRETE CATCH BASIN AND BLEEDER PIPE OUT TO PUBLIC SD PIPES.
21. NEW CONCRETE HEADWALL. INLET FROM BLEEDER FROM EASTERN RETENTION BASIN.

PRELIMINARY GRADING AND DRAINAGE PLAN
COVER SHEET
MESA RV STORAGE
11243 SOUTH SOSSAMAN ROAD
MESA, ARIZONA

PRE-CEG

34081
NATHAN J
COTTRELL
08/07/18
RES: 09/30/2020

ARIZONA
State Seal
Official Seal of the State of Arizona

SHEET 1 OF 3

C0.01

PUBLIC PAVING AND DRAINAGE IMPROVEMENTS

ELLIOT ROAD

SOSSAMAN ROAD

NORTH

GRAPHIC SCALE
(IN FEET)
1 inch = 60 ft.

NEW CONSTRUCTION (#)

- 1. NEW CONCRETE HEADWALL IN EXISTING ROAD SIDE DITCH.
- 2. NEW 36" DIA STORM DRAIN PIPES
- 3. NEW EDGE OF PAVEMENT TAPER, 250'-FT LENGTH.
- 4. NEW CURB AND GUTTER. 34' B/C (33.5' F/C AS SHOWN)
- 5. NEW 30" WIDE CITY OF MESA STANDARD COMMERCIAL DRIVEWAY.
- 6. NEW STORM DRAIN CATCH BASIN. DIRECT CONNECT TO PUBLIC SD PIPES
- 7. NEW DETACHED CONCRETE SIDEWALK.
- 8. END OF NEW CURB AND GUTTER
- 9. CONNECTION TO BLEEDER PIPE FROM ONSITE RETENTION BASIN(S)

SEE C0.03 FOR UTILITIES WORK

STA:10+65.42 OFF:0.00'

STA:10+79.56 OFF:22.08'L

STA:13+74.75 OFF:33.50'L

STA:16+50.88 OFF:33.50'L

STA:18+37.97 OFF:33.50'L

STA:19+71.84 OFF:33.50'L

STA:22+47.97 OFF:25.43'L

11' SB

15'± MED

11' NB

17.5'

NOT'08'11"W 316.71'(R)

NOT'08'11"W 340.01'(R)

65.0' R/W

6.0'

SB 89'40'±

TYPICAL STREET SECTION

WEST NEW
EXST

65.0' (FUT)

130' R/W

65.0'

33.0' (EXST)

MED

S.B.

9.5'

5.5'

11.0' N.B.

11.0' N.B.**

6.5' BIKE**

9.5'

6.0' SW

S.D. PIPES

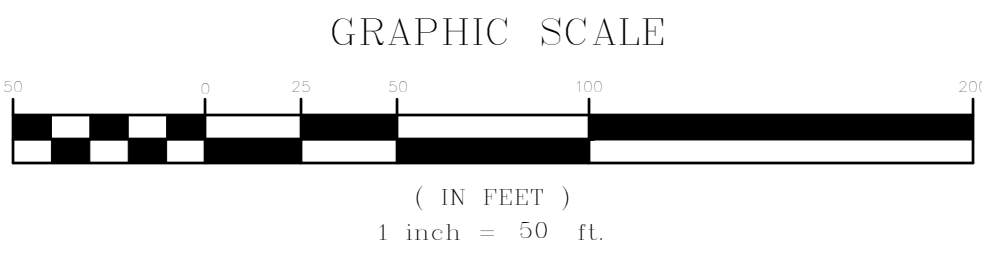
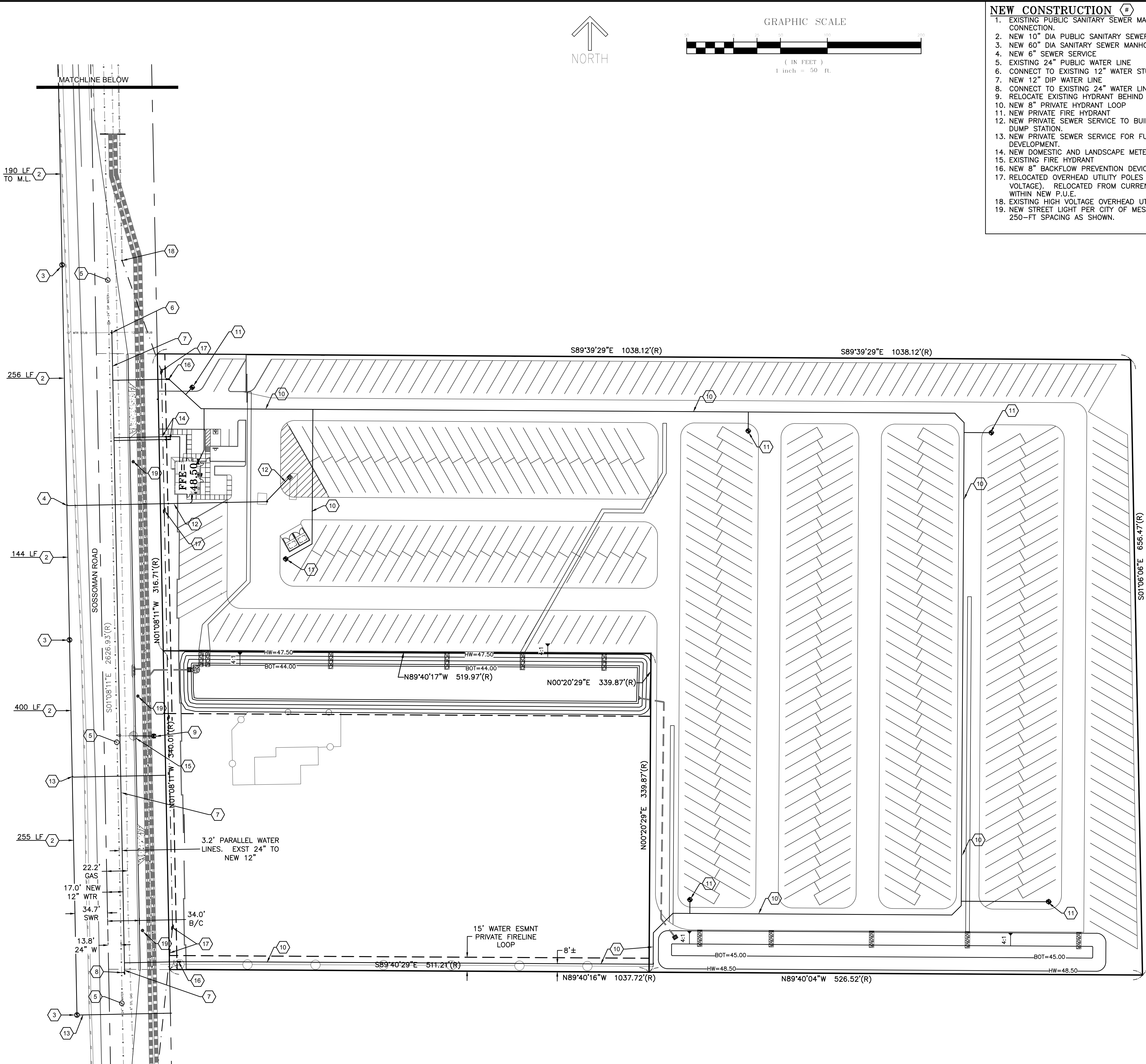
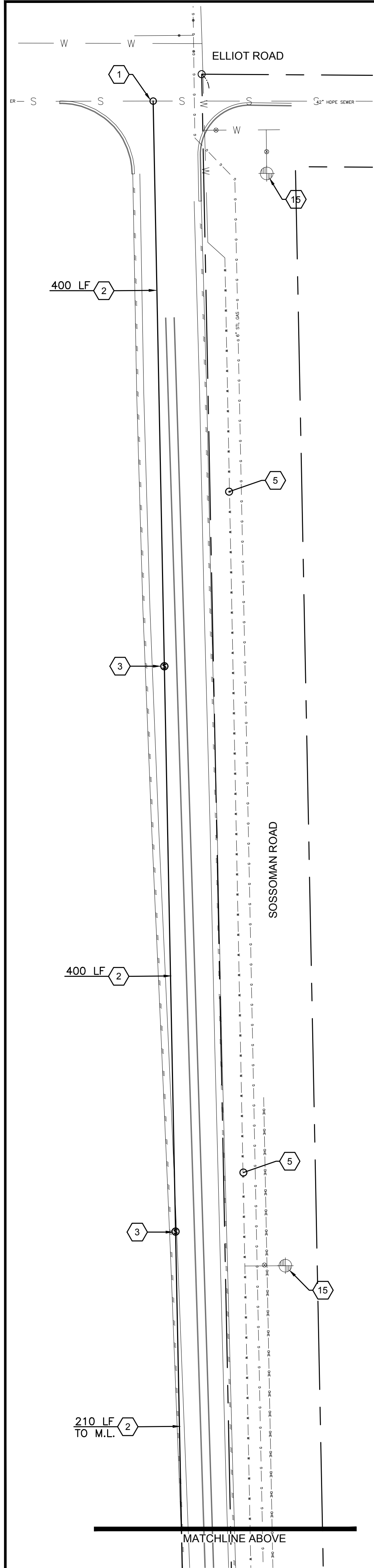
8' PUE

EAST

EXST PVMNT
2-LANE WITH
4' MEDIAN

MONUMENT LINE

** SECOND NB LANE AND BIKE LANE CROSS STRIPED FOR TEMPORARY CONDITION (MAINTAIN SINGLE NB LANE)



- NEW CONSTRUCTION**
- EXISTING PUBLIC SANITARY SEWER MANHOLE. NEW CONNECTION.
 - NEW 10" DIA PUBLIC SANITARY SEWER
 - NEW 60" DIA SANITARY SEWER MANHOLE
 - NEW 6" SEWER SERVICE
 - EXISTING 24" PUBLIC WATER LINE
 - CONNECT TO EXISTING 12" WATER STUB
 - NEW 12" DIP WATER LINE
 - CONNECT TO EXISTING 24" WATER LINE
 - RELOCATE EXISTING HYDRANT BEHIND NEW SIDEWALK
 - NEW 8" PRIVATE HYDRANT LOOP
 - NEW PRIVATE FIRE HYDRANT
 - NEW PRIVATE SEWER SERVICE TO BUILDING AND R.V. DUMP STATION.
 - NEW PRIVATE SEWER SERVICE FOR FUTURE DEVELOPMENT.
 - NEW DOMESTIC AND LANDSCAPE METERED SERVICES.
 - EXISTING FIRE HYDRANT
 - NEW 8" BACKFLOW PREVENTION DEVICE
 - RELOCATED OVERHEAD UTILITY POLES (HIGH VOLTAGE). RELOCATED FROM CURRENT LOCATION TO WITHIN NEW P.U.E.
 - EXISTING HIGH VOLTAGE OVERHEAD UTILITY POLE
 - NEW STREET LIGHT PER CITY OF MESA STANDARDS. 250-FT SPACING AS SHOWN.

ENGINEER	
CEG APPLIED SCIENCES 12409 W. INDIAN SCHOOL ROAD AVONDALE, AZ 85392 (623) 536-1993 CONTACT: NATE COTTRELL	
DRAWN BY:	dk
CHECKED BY:	NJC
DATE:	08/07/18
SCALE:	1" = 50'
PROJECT #:	18-022
PURPOSE:	

PRELIMINARY UTILITIES
FOR
MESA RV STORAGE
11243 SOUTH SOSSAMAN ROAD
MESA, ARIZONA

PRE-CEG

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