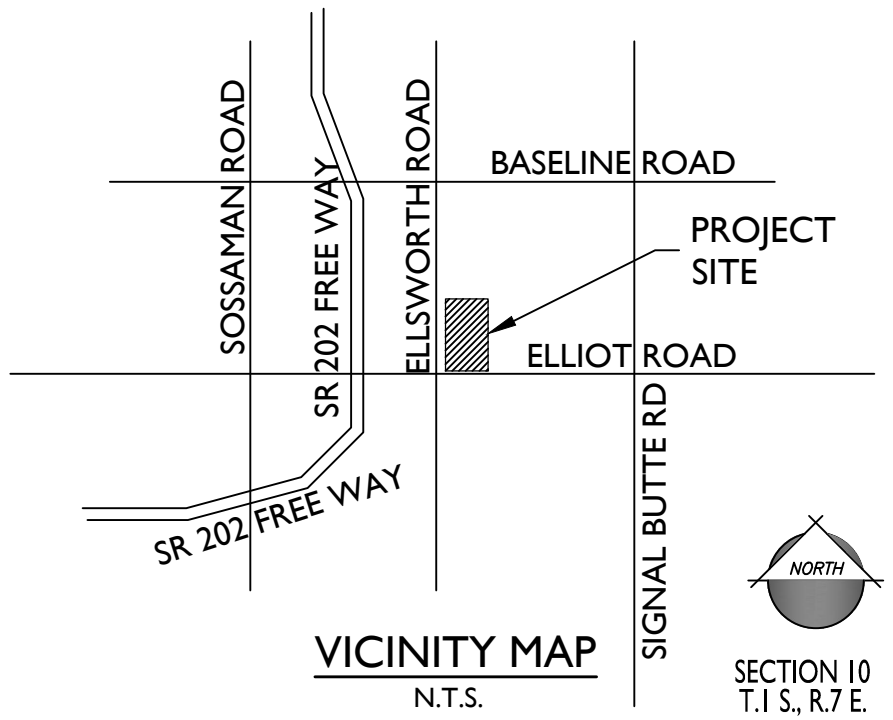


PRELIMINARY GRADING & DRAINAGE PLAN

FOR

ELLSWORTH & ELLIOT MOB

A PORTION OF THE NORTHEAST CORNER OF SECTION 10, TOWNSHIP 1 SOUTH, RANGE 7 EAST,
OF THE GILA AND SALT RIVER MERIDIAN,
MARICOPA COUNTY, ARIZONA



PROJECT TEAM

CIVIL ENGINEER:

EPS GROUP, INC.
1130 N. ALMA SCHOOL ROAD, SUITE 120
MESA, AZ 85201
TEL: (480) 503-2250
FAX: (480) 503-2258
CONTACT: DANIEL AUXIER
dan.auxier@epsgruppinc.com

ARCHITECT:

RKAA ARCHITECTS, INC.
2233 E. THOMAS ROAD
PHOENIX, ARIZONA 85016
CONTACT: NEIL FEASER
TEL: (602) 955-3900
FAX: (602) 955-0496
EMAIL: nfeaser@rkaa.com

LEGAL DESCRIPTION

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE COUNTY OF MARICOPA, STATE OF ARIZONA, AND IS DESCRIBED AS FOLLOWS:

LOT 1, FIRST MESA COMMERCE PARK, PHASE 1 AMENDED, ACCORDING TO BOOK 1167 OF MAPS, PAGE 45, RECORDS OF MARICOPA COUNTY, ARIZONA.

APN: 304-04-923

BASIS OF BEARING

THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 10, TOWNSHIP 1 SOUTH, RANGE 7 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA BEARING N89°28'45"W. (ASSUMED BEARING)

BENCHMARK

BRASS TAG TOP OF CURB SOUTHEAST CORNER FOUND AT THE INTERSECTION OF ELLSWORTH & GUADALUPE, LOCATED IN THE SOUTHWEST QUARTER OF SECTION 10, TOWNSHIP 1 SOUTH, RANGE 7 EAST, OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA.
ELEVATION = 1424.42' (NAVD 88 DATUM)

FLOOD PLAIN STATEMENT

PROPERTY IS LOCATED WITHIN AN AREA HAVING A ZONE "X" SHADED DESIGNATION BY THE SECRETARY OF HOUSING AND URBAN DEVELOPMENT ON FLOOD INSURANCE RATE MAP NO. 04013C2760L WITH A DATE IDENTIFICATION OF OCTOBER 16, 2013, COMMUNITY 040048 (CITY OF MESA).

ZONE "X" SHADED IS LABELED AS: 0.2% ANNUAL CHANCE FLOOD HAZARD. AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTH LESS THAN ONE FOOT OR WITH DRAINAGE AREAS OF LESS THAN ONE SQUARE MILE.

RETENTION CALCULATIONS

Project: Elliot & Ellsworth MOB

Storm Event: 100-yr 2-hr

Prepared by: Gabriel Romero

$V = C \cdot A \cdot P / 12^{(1)}$

Where:

V = Runoff Volume

C = Runoff Coefficient

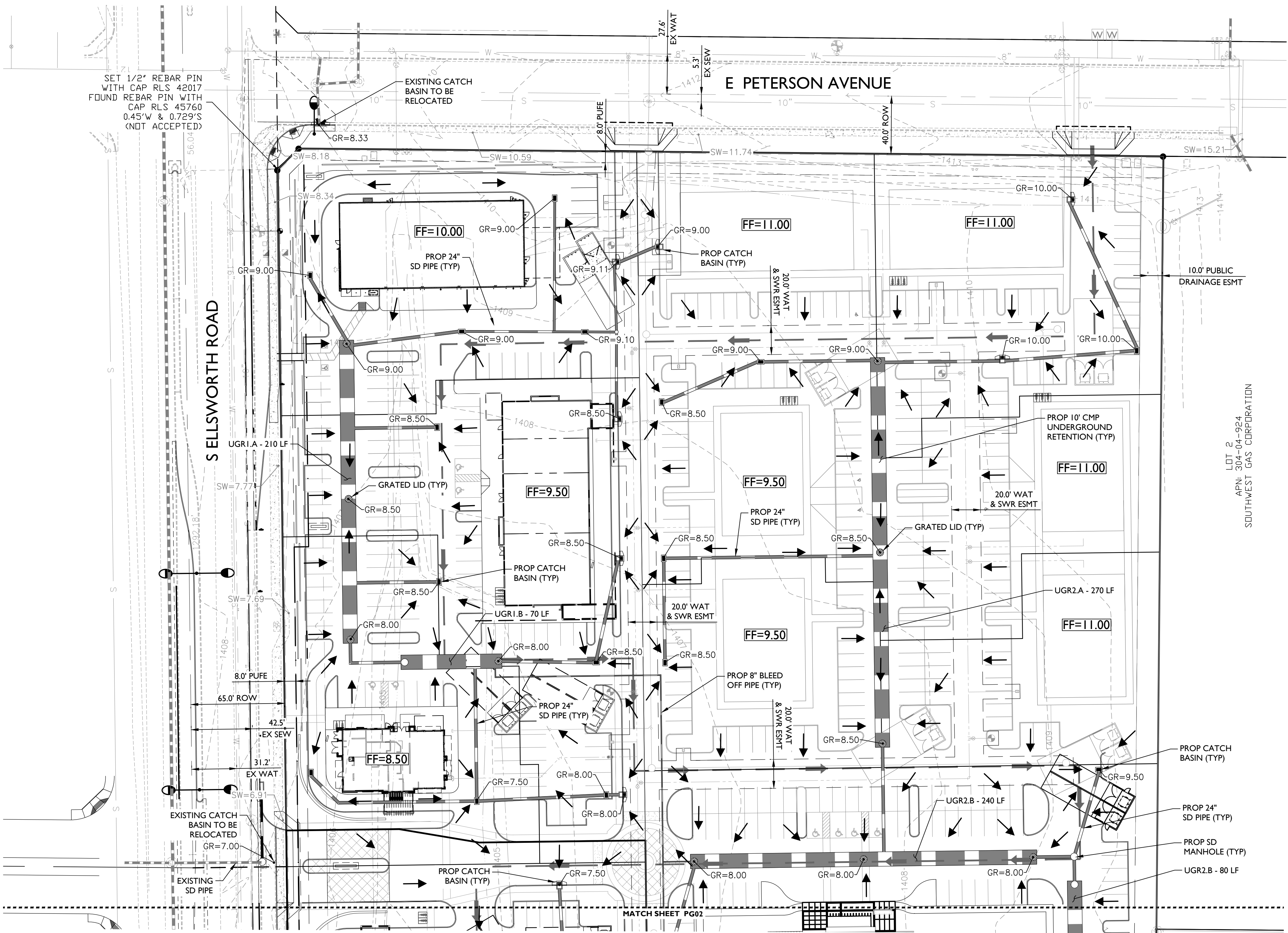
A = Drainage Area

P = 2.20 in

Underground Retention Volume Calculations

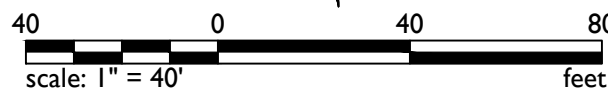
UGR ID	Diameter of Pipe (ft)	Length of Pipe (ft)	Volume Provided, V_p (ft ³)	TOTAL Volume Provided, V_p (ft ³)
UGR1.A	10	210	16,493	21,991
UGR1.B	10	70	5,498	
UGR2.A	10	270	21,206	
UGR2.B	10	240	18,850	46,338
UGR2.C	10	80	6,283	
UGR3.A	10	60	4,712	
UGR3.B	10	60	4,712	13,744
UGR3.C	10	55	4,320	
UGR4	10	90	7,069	
UGR5	10	210	16,493	16,493
UGR6.A	10	70	5,498	
UGR6.B	10	100	7,854	
UGR7.A	10	115	9,032	18,064
UGR7.B	10	115	9,032	

(1) Equation 806.13 taken from The City of Mesa 2022 Engineering & Design Standards



LEGEND

	SEWER LINE		FIRE LINE
	SEWER MANHOLE		SLOPE DIRECTION
	WATER LINE		STORM DRAIN PIPE
	FIRE HYDRANT		CATCH BASIN
	WATER VALVE		STORM DRAIN MANHOLE
	FF=		ACCESS RISER W/GRATED LID



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Ellsworth & Elliot MOB

Project:

Revisions:



Designer: TB
Drawn by: CC



Job No.
20-1443

PG01

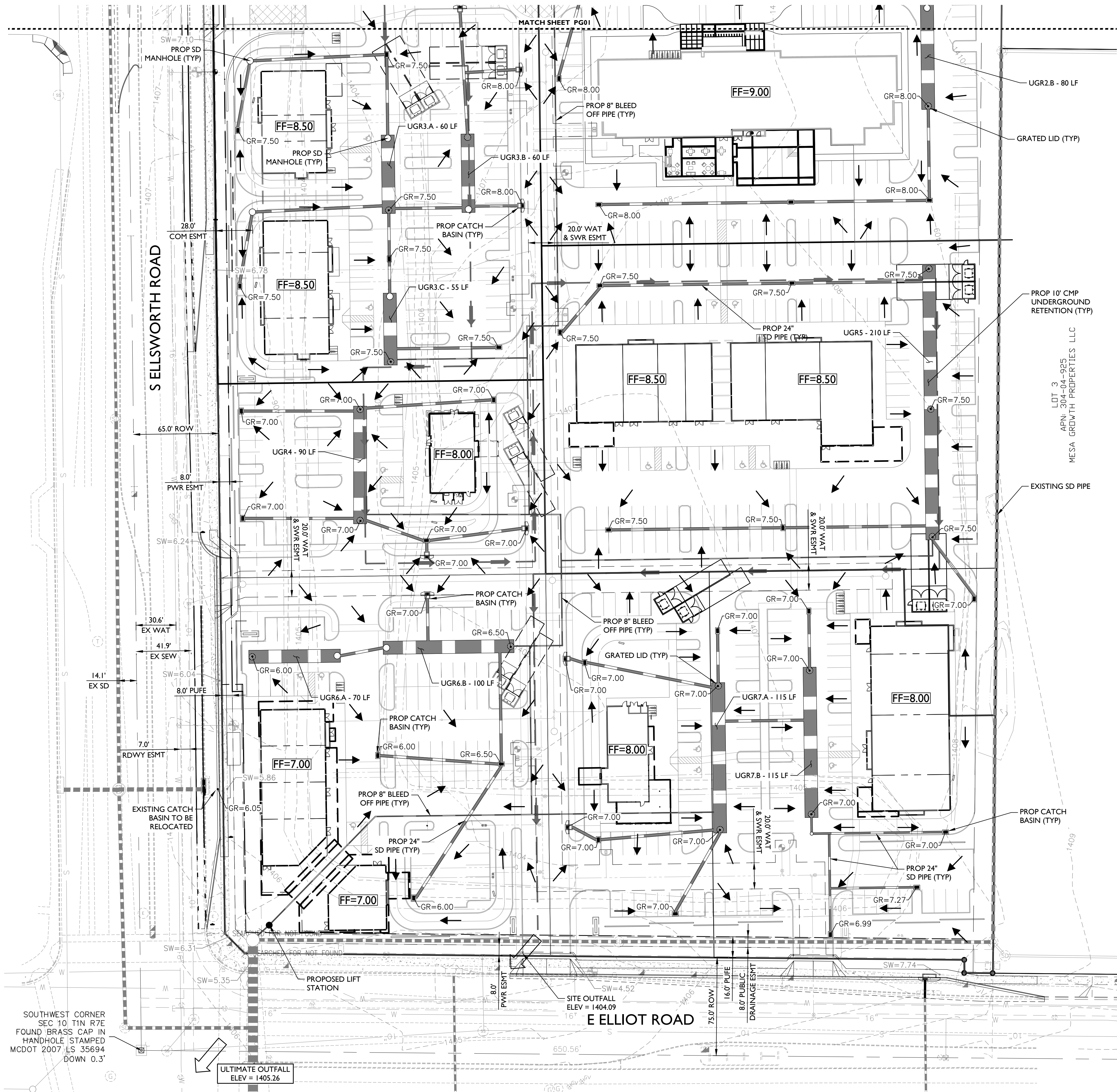
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of 2

20-1443 - Ellsworth & Elliot MOB - Preliminary Grading & Drainage Plan

Feb 02, 2023 8:02pm S:\Projects\2020\20-1443\Civil\Preliminary_Pre G&D\20-1443 - PG02.dwg jholman

LEGEND

- FIRE LINE
- SLOPE DIRECTION
- STORM DRAIN PIPE
- CATCH BASIN
- STORM DRAIN MANHOLE
- ACCESS RISER W/GRATED LID
- SEWER LINE
- SEWER MANHOLE
- WATER LINE
- FIRE HYDRANT
- WATER VALVE
- FF= FINISHED FLOOR



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EPS
GROUP

Ellsworth & Elliot MOB

Preliminary Grading & Drainage

Project:

Revisions:

Call or text me at least two full working days before you begin excavation
ARIZONA
Professional Engineer
No. 59630
John R. Holman
Expires 02-28-2025

Designer: TB
Drawn by: CC

Job No.
20-1443

PG02

Sheet No.
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