

PRELIMINARY GRADING, DRAINAGE AND UTILITY PLAN
FOR
EASTMARK

N.W.C. OF EAST POINT TWENTY-TWO BLVD. & SOUTH SIGNAL BUTTE RD.
MESA, ARIZONA

LOCATED IN THE SOUTHEAST QUARTER OF SECTION 14, TOWNSHIP 1 SOUTH, RANGE 7 EAST
OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA.

LEGAL DESCRIPTION

A REPLAT OF LOTS 1,6 & 7 OF THE FINAL PLAT FOR "EASTMARK DEVELOPMENT UNIT 6 SOUTH, PARCEL 6-3 COMMERCIAL REPLAT", RECORDED AS BOOK 1303, PAGE 38, MARICOPA COUNTY RECORDER, AND A PORTION OF SECTION 14, TOWNSHIP 1 SOUTH, RANGE 7 EAST, OF THE GILA & SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA.

FLOOD ZONE

THIS PROPERTY LIES IN FLOOD ZONE "D", DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT ASSOCIATION (FEMA) AS "AREAS OF UNDETERMINED FLOOD HAZARD" PER FLOOD INSURANCE RATE MAP (FIRM) PANEL NUMBER 04013C2780L UNPUBLISHED.

RETENTION CALCULATIONS

WEIGHTED RUNOFF COEFFICIENT:

ROOF/CONCRETE (C=0.95) = 241,152 S.F.
ASPHALT PAVEMENT (C=0.85) = 428,114 S.F.
DESERT LANDSCAPING (C=0.50) = 139,292 S.F.
WEIGHTED C = (241,152*0.95 + 428,114*0.85 + 139,292*0.50)/808,558 = 0.82

VOLUME REQUIRED = C(P/12)A

P = 2.20" - 100 YEAR, 2 HOUR STORM

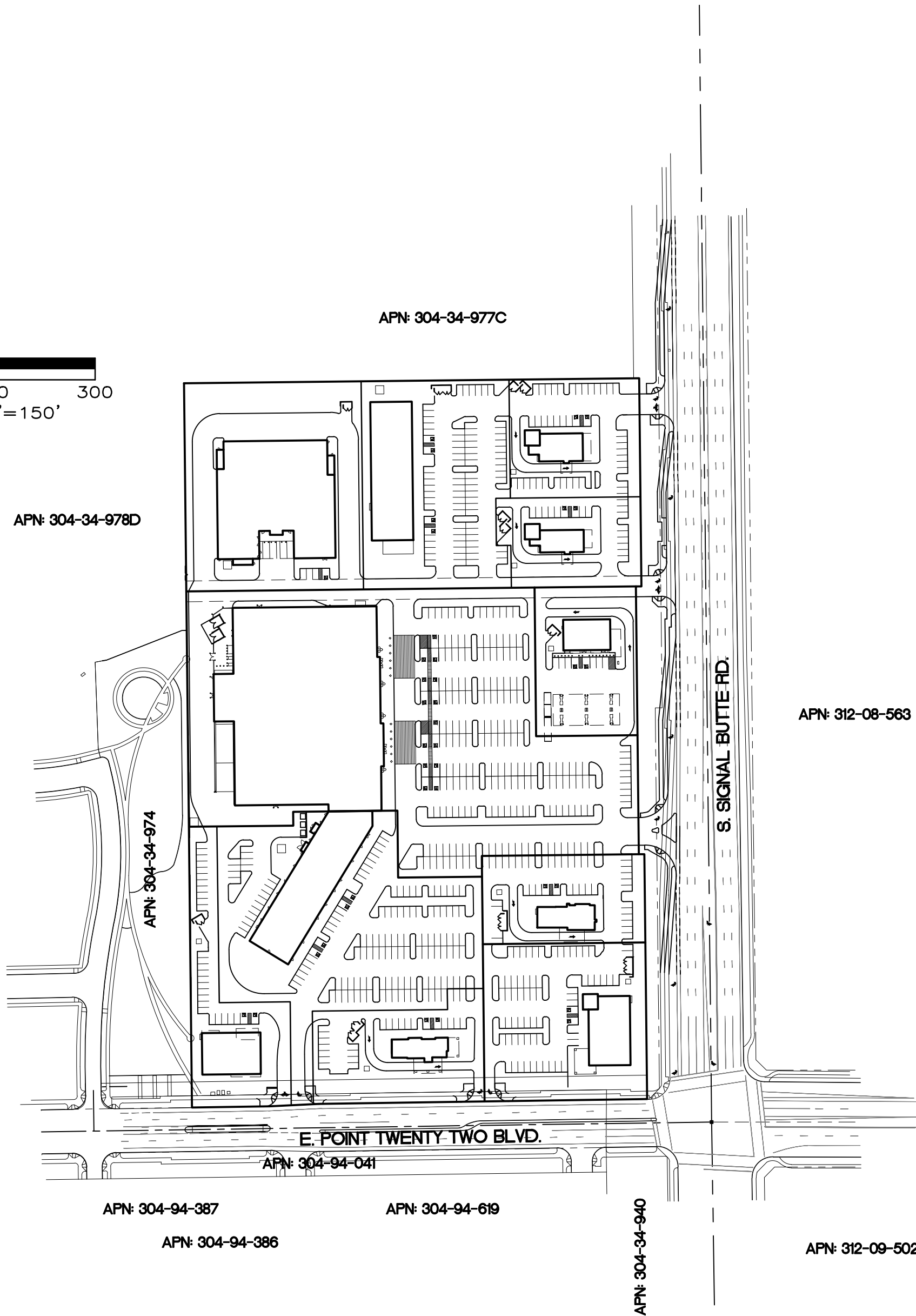
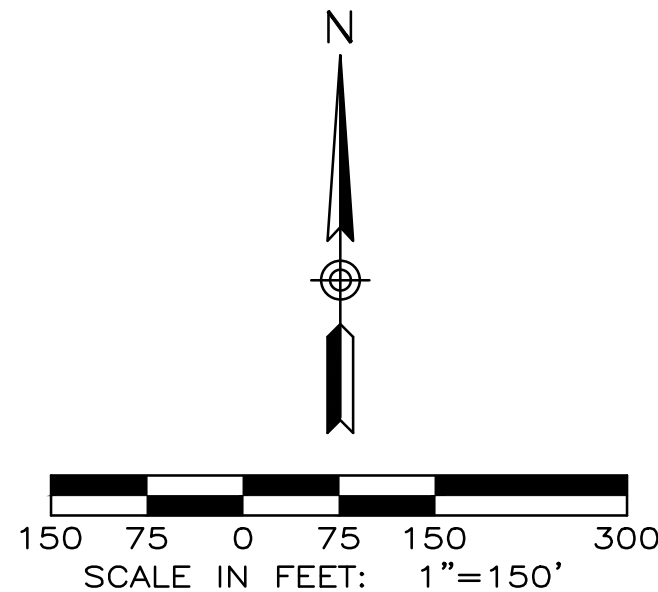
A = DRAINAGE AREA (S.F.)

C = WEIGHTED RUNOFF COEFFICIENT

VOLUME REQUIRED = 0.82(2.2/12)808,558 = 121,553 CF

RETENTION PROVIDED:

RETENTION BASIN = 5,985 CF
1,473 L.F. OF 10' DIAMETER UNDERGROUND RETENTION PIPE
VOL. REQUIRED: 121,553 C.F.
VOL. PROVIDED: 121,615 C.F.



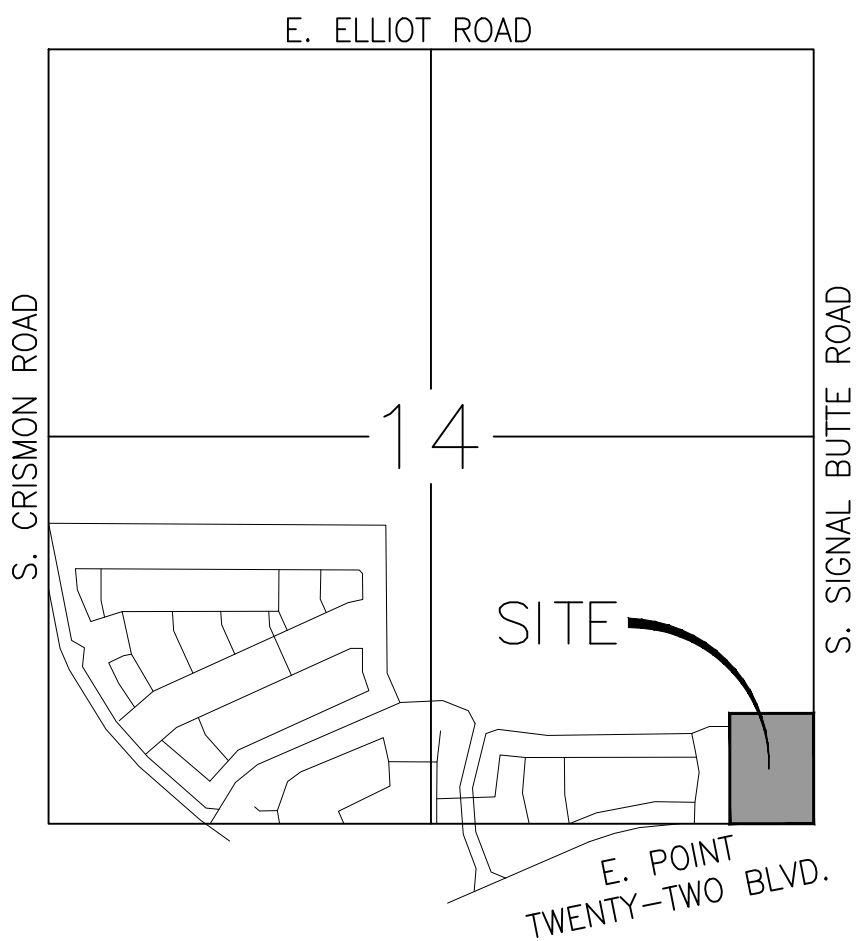
KEY MAP

INDEX OF PLAN SHEETS

- | | | |
|---|-------|--|
| 1 | (C-1) | COVER SHEET |
| 2 | (C-2) | PRELIMINARY GRADING, DRAINAGE AND UTILITY PLAN |
| 3 | (C-3) | PRELIMINARY GRADING, DRAINAGE AND UTILITY PLAN |

LEGEND

	FOUND BRASS CAP IN HAND HOLE		EXISTING CATCH BASIN		EXISTING SHUT OFF SWITCH		P XX.XX SPOT ELEVATION		PROPOSED CATCH BASIN
	FOUND BRASS CAP FLUSH		EXISTING STORM DRAIN MANHOLE		EXISTING PULL/JUNCTION BOX		C CONCRETE ELEVATION		PROPOSED STORM DRAIN MANHOLE
	FOUND MONUMENT AS SHOWN		EXISTING SIGN		EXISTING ELECTRIC UTILITY		CO CURB OPENING ELEVATION		PROPOSED RIPRAP
	SET 1/2" REBAR WITH CAP		EXISTING SANITARY SEWER MANHOLE		EXISTING TELEPHONE MANHOLE		GR GRATE ELEVATION		PROPOSED FLOW LINE
	EASEMENT LINE		EXISTING SEWER CLEANOUT		EXISTING LIGHT POLE		P PAVEMENT ELEVATION		PROPOSED WALL
	PROPERTY LINE		EXISTING TRAFFIC SIGNAL		EXISTING OVERHEAD ELECTRIC		 PROPOSED STORM DRAIN		DRAINAGE AREA BOUNDARY
	BOUNDARY LINE		EXISTING FIRE HYDRANT		EXISTING STORM DRAIN		 PROPOSED WATER LINE		FLOW ARROW
	RIGHT OF WAY		EXISTING BACKFLOW PREVENTER		EXISTING SEWER MAIN		 PROPOSED SEWER CLEANOUT		DRAINAGE AREA DESIGNATOR
			EXISTING WATER VALVE		EXISTING WATER MAIN		 PROPOSED BACKFLOW		
			EXISTING UTILITY POLE		EXISTING SPOT ELEVATION		 PROPOSED WATER METER		
			EXISTING POST						



VICINITY MAP

SEC 14, T. 1 S, R. 7 E.

OWNER/DEVELOPER

EVERGREEN-POINT TWENTY TWO & SIGNAL BUTTE, LLC
C/O EVERGREEN DEVCO, INC.
2390 EAST CAMELBACK ROAD, SUITE 410
PHOENIX, ARIZONA 85016
PHONE: (602) 808-8600
FAX: (602) 567-7155
CONTACT: CAMERON MILLER

ARCHITECT

BUTLER DESIGN GROUP
5017 E. WASHINGTON STREET, SUITE 107
SUITE 107, PHOENIX, AZ 85008
PHONE: (602) 957-1800
CONTACT: CLAY CHIAPPINI

ENGINEER:

OPTIMUS CIVIL DESIGN GROUP
4650 EAST COTTON CENTER BLVD.,
SUITE 200
PHOENIX, ARIZONA 85034
PHONE: (602) 286-9300
FAX: (602) 286-9400
CONTACT: JEFF BEHRANA

BASIS OF BEARINGS

THE EAST LINE OF THE SOUTHWEST QUARTER OF SECTION 14, TOWNSHIP 1 SOUTH, RANGE 7 EAST. OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA. HELD N 00°38'01" W, BETWEEN A BRASS CAP IN HAND-HOLE FOUND AT THE SOUTHEAST CORNER OF SECTION 14, AND A BRASS CAP IN HAND-HOLE FOUND AT THE EAST 1/4 CORNER OF SECTION14.

BENCHMARK

CITY OF MESA 2006 BENCHMARK : BRASS TAG IN THE TOP OF CURB AT THE NORTHWEST CORNER OF MERIDIAN AND WARNER ROAD.

ELEVATION = 1481.15 CITY OF MESA DATUM

AREA

GROSS: 18.56 AC.
NET: 15.68 AC.

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RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA



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DESIGNED: EPA
DRAWN: DEB
CHECKED: JDB
DATE: 5/18
JOB NO.: 171275

DRAWING NO
C-1
1 OF 3

USE OF THE INFORMATION CONTAINED IN THIS INSTRUMENT FOR OTHER THAN THE SPECIFIC PURPOSE FOR WHICH IT WAS INTENDED AND FOR OTHER THAN THE CLIENT FOR WHOM IT WAS PREPARED IS FORBIDDEN UNLESS EXPRESSLY PERMITTED IN WRITING IN ADVANCE BY OPTIMUS CIVIL DESIGN GROUP. OPTIMUS CIVIL DESIGN GROUP SHALL HAVE NO LIABILITY TO ANY USE OF THIS INFORMATION WITHOUT THEIR WRITTEN CONSENT.

CONSTRUCTION NOTES

- 1 PROPOSED CATCH BASIN.
- 2 PROPOSED STORM DRAIN.
- 3 PROPOSED STORM DRAIN MANHOLE WITH SOLID LID.
- 4 1,431 LF 10"Ø UNDERGROUND RETENTION PIPE. $V_p = 112,333$ CF.
- 5 PROPOSED EJECTOR PUMP WITH GRAVITY LINE CONNECTION TO EXISTING STORM DRAIN STUB FOR POSITIVE BLEED OFF.
- 6 PROPOSED DRIVEWAY.
- 7 PROPOSED DECELERATION LANE.
- 8 EXISTING CATCH BASIN.
- 9 PROPOSED 8" PUBLIC WATER LINE.
- 10 PROPOSED WATER SERVICE AND BACKFLOW WITH 2" WATER METER.
- 11 PROPOSED FIRE SERVICE.
- 12 PROPOSED FIRE HYDRANT.
- 13 PROPOSED 8" SEWER LINE.
- 14 PROPOSED SEWER SERVICE.
- 15 PROPOSED SEWER MANHOLE.
- 16 EXISTING 8" WATER STUB.
- 17 EXISTING 8" SEWER STUB.
- 18 PROPOSED WATER IRRIGATION SERVICE AND BACKFLOW WITH 2" WATER METER.
- 19 PROPOSED 24"x12" TS&V.
- 20 12" WATER EXTENSION PAST THE PUF (BY OTHERS).
- 21 PROPOSED 12"x8" REDUCER.

LINE TABLE		
LINE	BEARING	DISTANCE
L1	N89°22'03"E	8.00'
L2	S89°22'03"W	8.00'

APN: 304-34-977C

APN: 304-34-978D

APN: 304-34-974

TRACT "A"
BK. 1303, PG. 38
M.C.R.

MATCHLINE SEE SHEET C-3

FOUND 3" C.O.M. BCHH
E 1/4 CORNER SECTION 14

S SIGNAL BUTTE ROAD

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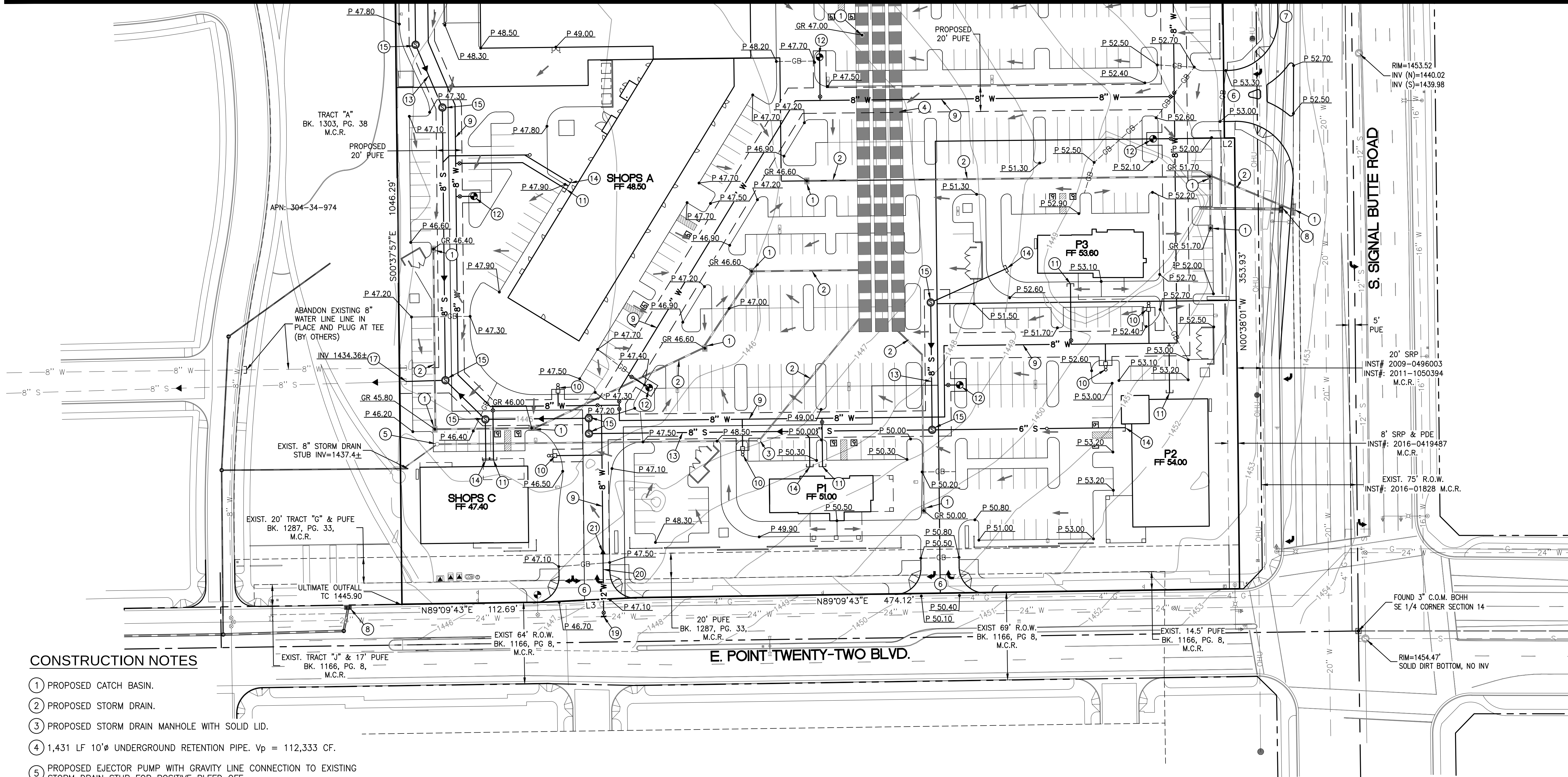
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DRAWING NO
C-2
2 OF 3

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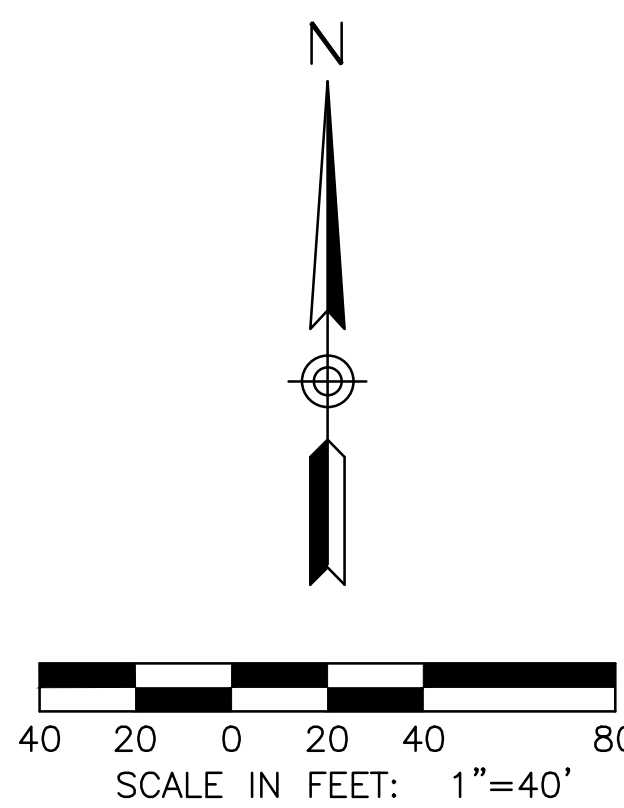
MATCHLINE SEE SHEET C-2



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LINE TABLE		
LINE	BEARING	DISTANCE
L3	N87°08'43"E	71.04'



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