



PROJECT: NEIGHBORHOOD EXPANSION

SITE NAME: PH90XC831

SITE NUMBER: PH90XC831

SITE ADDRESS: TANGERINE RD. & LA CANADA DR.  
TUCSON, AZ 85737

COUNTY: PIMA COUNTY

SITE TYPE: NEW 68'-0" UTILITY POLE

MARKET: ARIZONA

LATITUDE: 32.423572°

LONGITUDE: -110.996138°

PREPARED FOR:

11811 N. TATUM BLVD, SUITE P155  
PHOENIX, AZ 85028

CONSULTING FIRM

1426 N. MARVIN STREET #101  
GILBERT, AZ 85233

PROJECT NO:	PH90XC831
DRAWN BY:	M.G.
CHECKED BY:	KF

REV	DATE	DESCRIPTION	BY
A	09/18/18	ISSUED FOR REVIEW	M.G.
0	09/27/18	FINAL ZONING	KAF

FINAL  
FOR ZONING  
ONLY

**Special Exception**  
**Preliminary Development Plan**  
S.E. \_\_\_\_\_ Date \_\_\_\_\_  
Planning & Development Services

PH90XC831

TANGERINE RD. & LA CANADA DR.  
TUCSON, AZ 85737  
PIMA COUNTY

SHEET TITLE

PROJECT INFORMATION  
AND DATE

SHEET NUMBER

T-1

SHEET INDEX	
T-1	PROJECT INFORMATION AND DATE
LS-1	TOPOGRAPHIC SURVEY
Z-1	OVERALL SITE PLAN
Z-2	EXISTING ENLARGED SITE PLAN
Z-3	NEW ENLARGED SITE PLAN
Z-4.0	ELEVATIONS
Z-4.1	ELEVATIONS
Z-5	NEW ANTENNA AND RRU PLAN

PROJECT DESCRIPTION

SCOPE OF WORK :  
SPRINT PROPOSES TO MODIFY AN EXISTING UNMANNED TELECOMMUNICATIONS FACILITY:

- INSTALL (6) NEW ANTENNAS ON NEW ANTENNA MOUNTS
- INSTALL (9) NEW RADIOS ON NEW ANTENNA MOUNTS
- INSTALL (1) NEW EQUIPMENT CABINETS ON NEW CONCRETE PAD
- INSTALL (3) NEW HYBRID CABLES AND (1) NEW FIBER CABLE
- INSTALL NEW 15'-0"x15'-0"x8'-0" TALL CMU WALL
- INSTALL (6) NEW UNDERGROUND CONDUITS
- INSTALL NEW 15'-0"x15'-0" CONCRETE PAD
- INSTALL NEW ELECTRICAL SERVICE
- INSTALL NEW FIBER SERVICE

CODE

ZONING: R.O.W.

PARCEL #: N/A

USE: UNMANNED COMMUNICATIONS

JURISDICTION: CITY OF TUCSON

GOVERNING CODES: 2012 IBC, 2012 IFC, 2012 IMC,  
2011 NEC

ALL BUILDING CODES LISTED ABOVE SHALL INCLUDE AMENDMENTS BY THE GOVERNING JURISDICTION

CONTACT INFORMATION

CLIENT:  
SPRINT  
11811 NORTH TATUM BLVD.  
SUITE P155  
PHOENIX, ARIZONA 85028  
CONTACT: BARBARA BROWN  
PHONE: (925) 464-3434

CONSTRUCTION MANAGER:  
CONTACT: JAY TANK  
PHONE: (310) 618-4071

TOWER OWNER:  
TUCSON ELECTRIC POWER  
4350 E IRVINGTON RD  
TUCSON, AZ 85714  
CONTACT: DANNY MADRIL  
PHONE: (520) 661-9460

SITE ACQUISITION:  
PINNACLE CONSULTING, INC.  
1426 N. MARVIN STREET #101  
GILBERT, AZ 85233  
CONTACT: ERIC HURLEY  
PHONE: (480) 664-9588 ext. 234

A&E FIRM:  
PINNACLE CONSULTING, INC.  
1426 N. MARVIN STREET #101  
GILBERT, AZ 85233  
CONTACT: KYLE FORTIN  
PHONE: (623) 217-4235

ENGINEER:  
ISE INC. STRUCTURAL ENGINEERS  
P.O. BOX 50039  
PHOENIX, AZ 85076  
CONTACT: GLEN HUNT  
PHONE: [602] 403-8614

AREA

VICINITY MAP

SITE DIRECTIONS

FROM THE SPRINT OFFICE IN PHOENIX, AZ:  
  
DEPART 11811 NORTH TATUM BLVD. SUITE P155 ONTO N TATUM BLVD. TURN LEFT ONTO N TATUM BLVD. TURN RIGHT ONTO E SHEA BLVD. TAKE RAMP FOR AZ-51 S. TAKE RAMP RIGHT FOR I-10 E. AT EXIT 240, TAKE RAMP RIGHT FOR TANGERINE RD TOWARD ORO VALLEY. TURN LEFT ONTO W TANGERINE RD. ARRIVE AT W TANGERINE RD ON THE RIGHT.

GENERAL NOTES

1. THIS WIRELESS TELECOMMUNICATIONS FACILITY WILL MEET THE HEALTH AND SAFETY STANDARDS FOR ELECTROMAGNETIC FIELD EMISSIONS AS ESTABLISHED BY THE FEDERAL COMMUNICATIONS COMMISSION OR ANY SUCCESSOR THEREOF, AND ANY OTHER FEDERAL OR STATE AGENCY.

2. THIS WIRELESS TELECOMMUNICATIONS FACILITY WILL MEET THE REGULATIONS OF THE FEDERAL COMMUNICATIONS COMMISSION REGARDING PHYSICAL AND ELECTROMAGNETIC INTERFERENCE.

3. LIGHTING OR SIGNS WILL BE PROVIDED ONLY AS REQUIRED BY FEDERAL OR STATE AGENCIES.

4. DEVELOPMENT AND CONSTRUCTION OF THIS PROJECT WILL COMPLY WITH ALL APPLICABLE CODES AND ORDINANCES.

5. EXISTING PARKING IS NOT AFFECTED BY THIS PROJECT.

6. THIS PROJECT DOES NOT INCLUDE WATER OR SEWER.

SIGNATURE BLOCK

APPROVAL	SIGNATURE	DATE
SITE ACQ. MGR.		
CONSTRUCTION MGR.		
A&E MGR.		
PLANNING CONS.		
RF MGR.		
RF ENGINEER		
PROPERTY OWNER		

FLOOD ZONE DESIGNATION

THE PROPOSED LEASE PREMISES SHOWN HEREON APPEAR TO BE WITHIN FLOOD ZONE "X" AS DELINEATED ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY FIRM MAP NO. 04019C1090L DATED 06/16/11.

FLOOD ZONE "X" IS DEFINED AS: AREAS DETERMINED TO BE OUTSIDE 500-YEAR FLOODPLAIN; DETERMINED TO BE OUTSIDE THE 1% AND 0.2% ANNUAL CHANCE FLOODPLAINS.

SURVEYOR NOTES

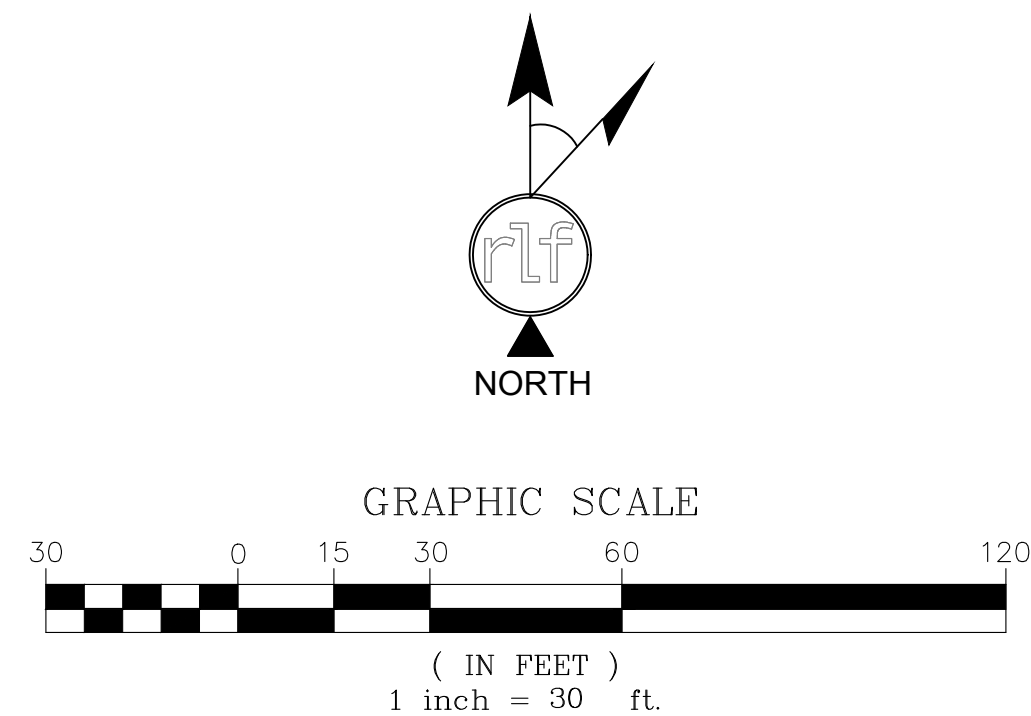
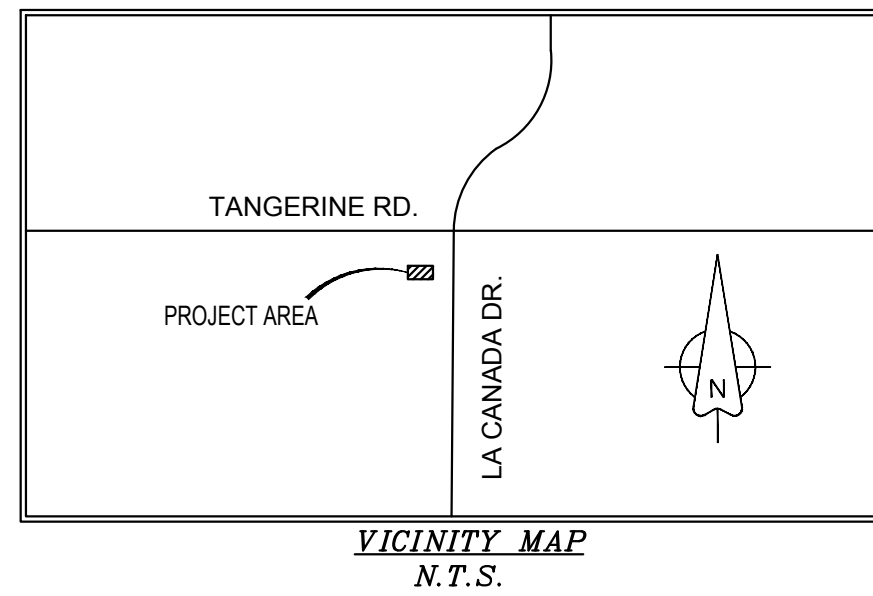
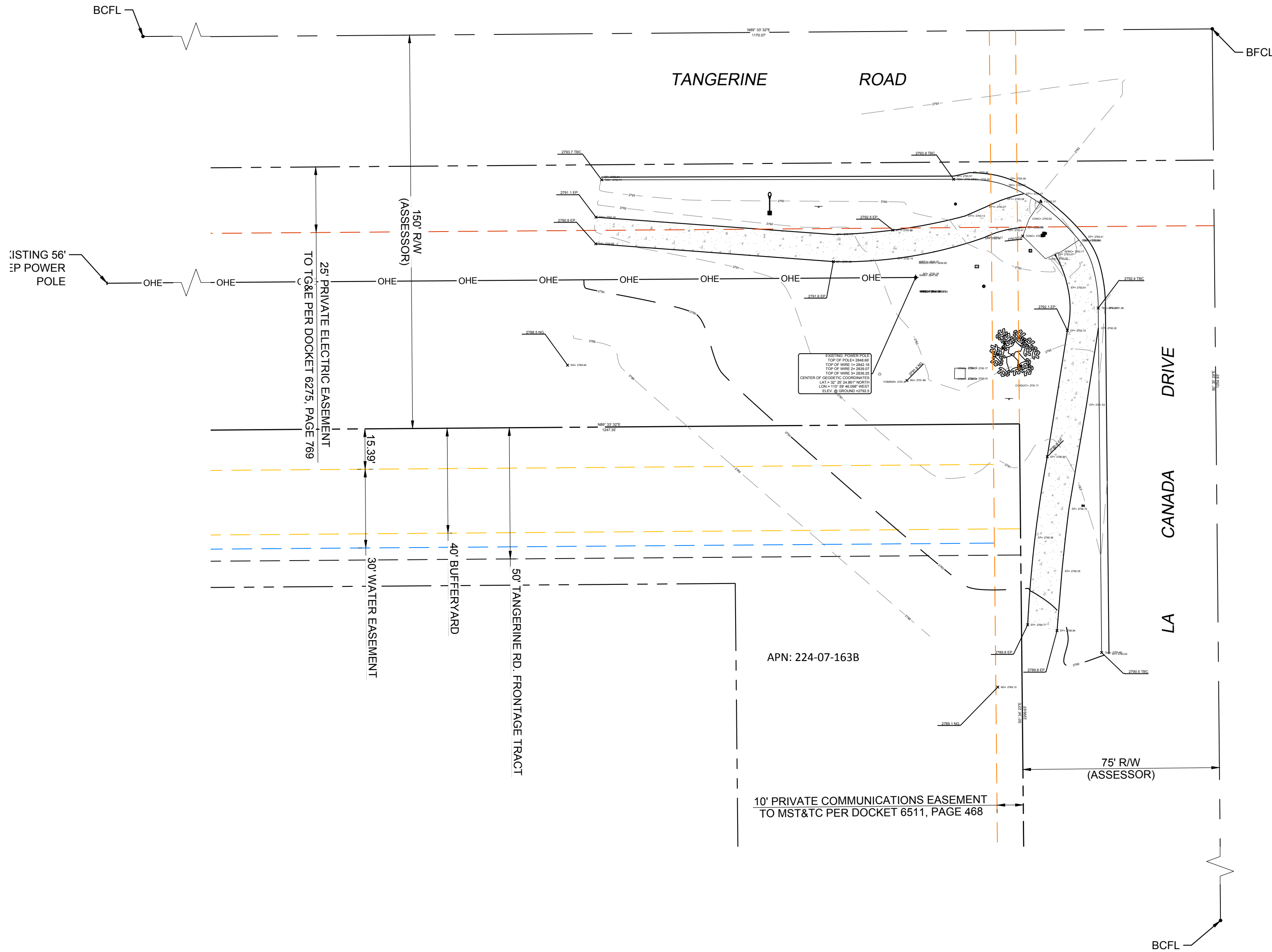
- A TITLE REPORT WAS NOT PROVIDED AT THE TIME OF THE SURVEY.
- SURVEYOR HAS NOT PERFORMED A SEARCH OF PUBLIC RECORDS TO DETERMINE ANY DEFECT IN TITLE.
- THE BOUNDARY SHOWN HEREON IS PLOTTED FROM RECORD INFORMATION AND DOES NOT CONSTITUTE A BOUNDARY SURVEY OF THE PROPERTY.
- SURVEYOR DOES NOT GUARANTEE THAT ALL UTILITIES ARE SHOWN OR THEIR LOCATIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR AND DEVELOPER TO CONTACT BLUE STAKE AND ANY OTHER INVOLVED AGENCIES TO LOCATE ALL UTILITIES PRIOR TO CONSTRUCTION. REMOVAL, RELOCATION AND/ OR REPLACEMENT IS THE RESPONSIBILITY OF THE CONTRACTOR.

PROJECT META DATA

- ELEVATIONS SHOWN HEREON ARE REPRESENTED IN *NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)* ESTABLISHED FROM GPS DERIVED ELLIPSOID HEIGHTS, APPLYING GEOID 12B SEPARATIONS CONSTRAINING TO NGS CORS STATIONS PROVIDED IN THE "ONLINE POSITIONING USER SERVICE" (OPUS) SOLUTION FOR THIS SPECIFIC SITE.
- BEARINGS SHOWN HEREON ARE BASED UPON U.S. STATE PLANE NAD83 COORDINATE SYSTEM ARIZONA STATE PLANE *COORDINATE ZONE CENTRAL*, DETERMINED BY GPS OBSERVATIONS.
- FIELD WORK FOR THIS PROJECT WAS PERFORMED ON 08/24/18.

LEGEND

	BRASS CAP FLUSH
	ELECTRICAL PULL BOX
	FIBER MANHOLE
	FIBER VAULT
	TRAFFIC SIGNAL
	POWER POLE
	STREET LIGHT W/ MAST ARM
	WATER VALVE
	WATER METER
	DECIDUOUS TREE
	SIGN
	SPOT ELEVATION
	POSITION OF GEODETIC COORDINATES
	NATURAL GRADE
	RIGHT OF WAY
	TOP OF CURB
	PROPERTY LINE (OTHER)
	RIGHT-OF-WAY LINE
	MONUMENT LINE
	EASEMENT LINE
	OVERHEAD ELECTRIC LINE



1426 N. MARVIN STREET #101  
GILBERT, AZ 85233

FIELD BY:	JMM
DRAWN BY:	STB
CHECKED BY:	RLF

REVISIONS

NO.	DATE	DESCRIPTION
0	09/08/18	PRELIMINARY



REUSE OF DOCUMENT  
THE IDEAS & DESIGN INCORPORATED HEREON, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF RLF CONSULTING, LLC & IS NOT TO BE USED FOR ANY OTHER PROJECT WITHOUT WRITTEN AUTHORIZATION OF RLF CONSULTING, LLC.

PROJECT No.  
10008601

SITE NAME:  
PH90XC831

SITE ADDRESS:  
TANGERINE RD. & LA CANADA DR.  
TUCSON, AZ 85737

SHEET TITLE:  
TOPOGRAPHIC SURVEY

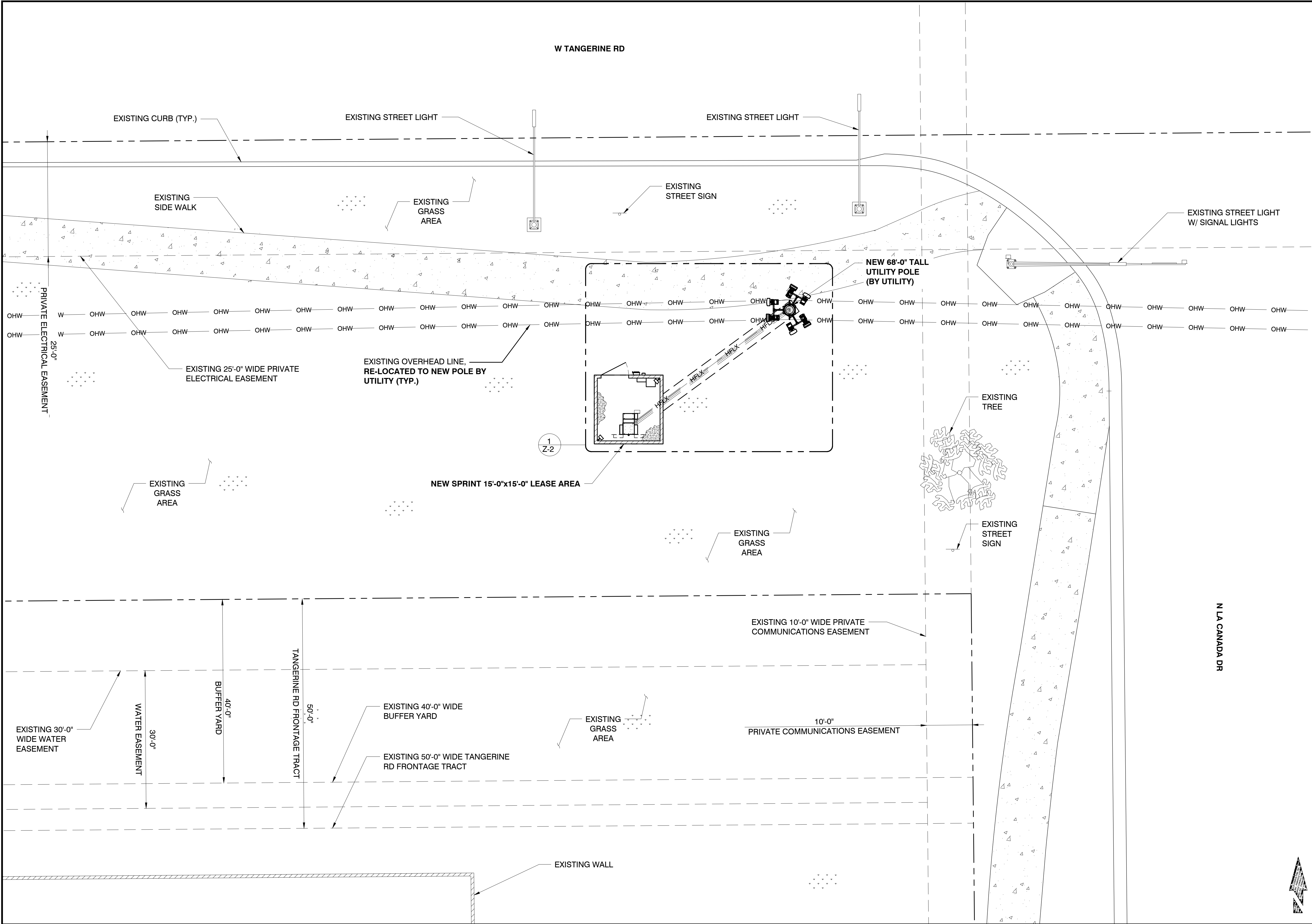
SHEET NO.

LS-1

REVISION:

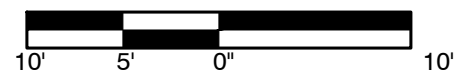
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OVERALL SITE PLAN

24"x36" SCALE: 1" = 10'  
11"x17" SCALE: 1" = 20'



1

PREPARED FOR:

**Sprint**

11811 N. TATUM BLVD, SUITE P155  
PHOENIX, AZ 85028

CONSULTING FIRM

**PINNACLE**  
CONSULTING, INC.

Construction - Project Management - Site Development

1426 N. MARVIN STREET #101  
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PROJECT NO:	PH90XC831
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CHECKED BY:	KF

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ONLY**

**Special Exception  
Preliminary Development Plan**  
S.E. \_\_\_\_\_ Date \_\_\_\_\_  
**Planning & Development Services**

PH90XC831

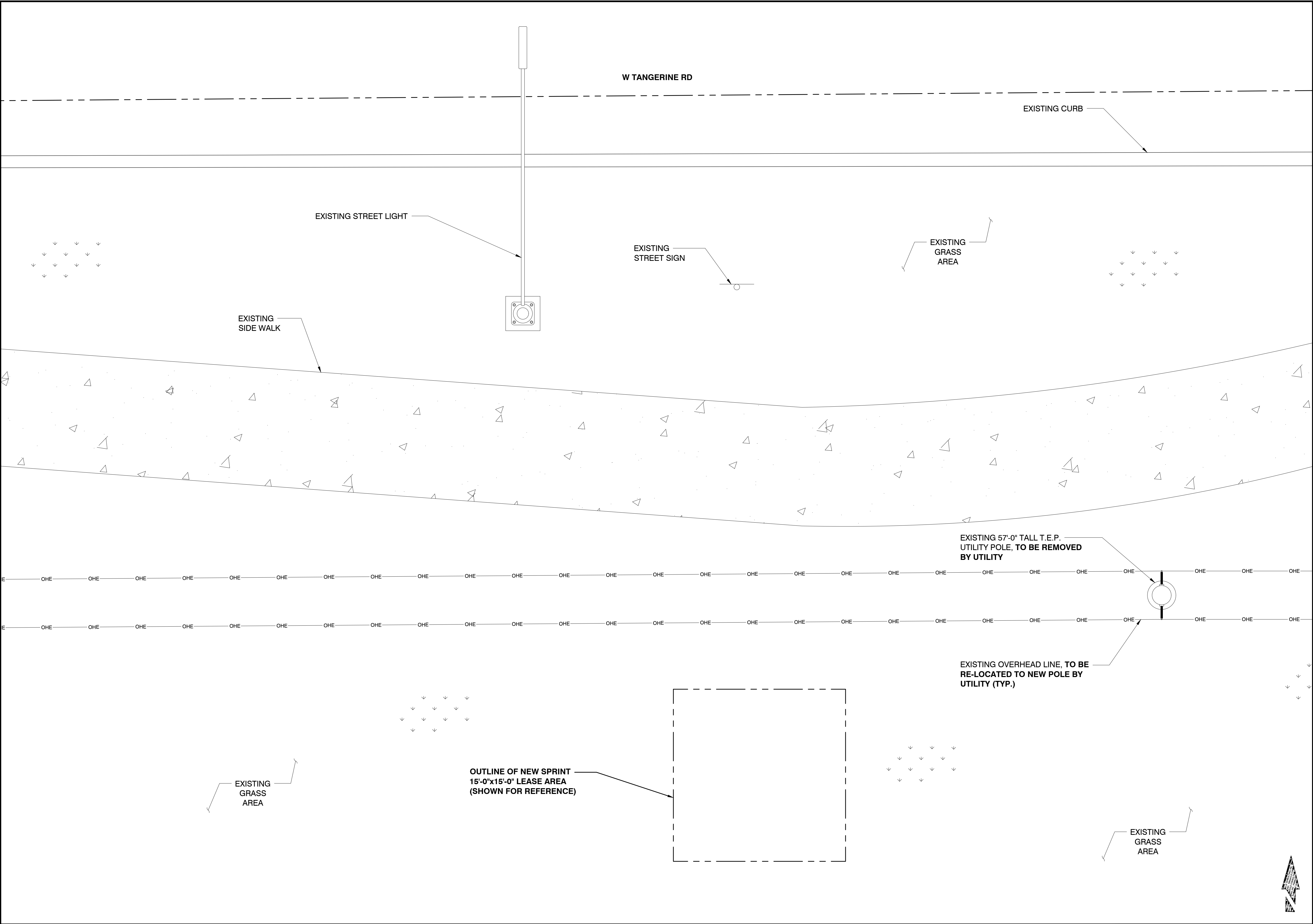
TANGERINE RD. & LA CANADA DR.  
TUCSON, AZ 85737  
PIMA COUNTY

SHEET TITLE

OVERALL SITE PLAN

SHEET NUMBER

**Z-1**



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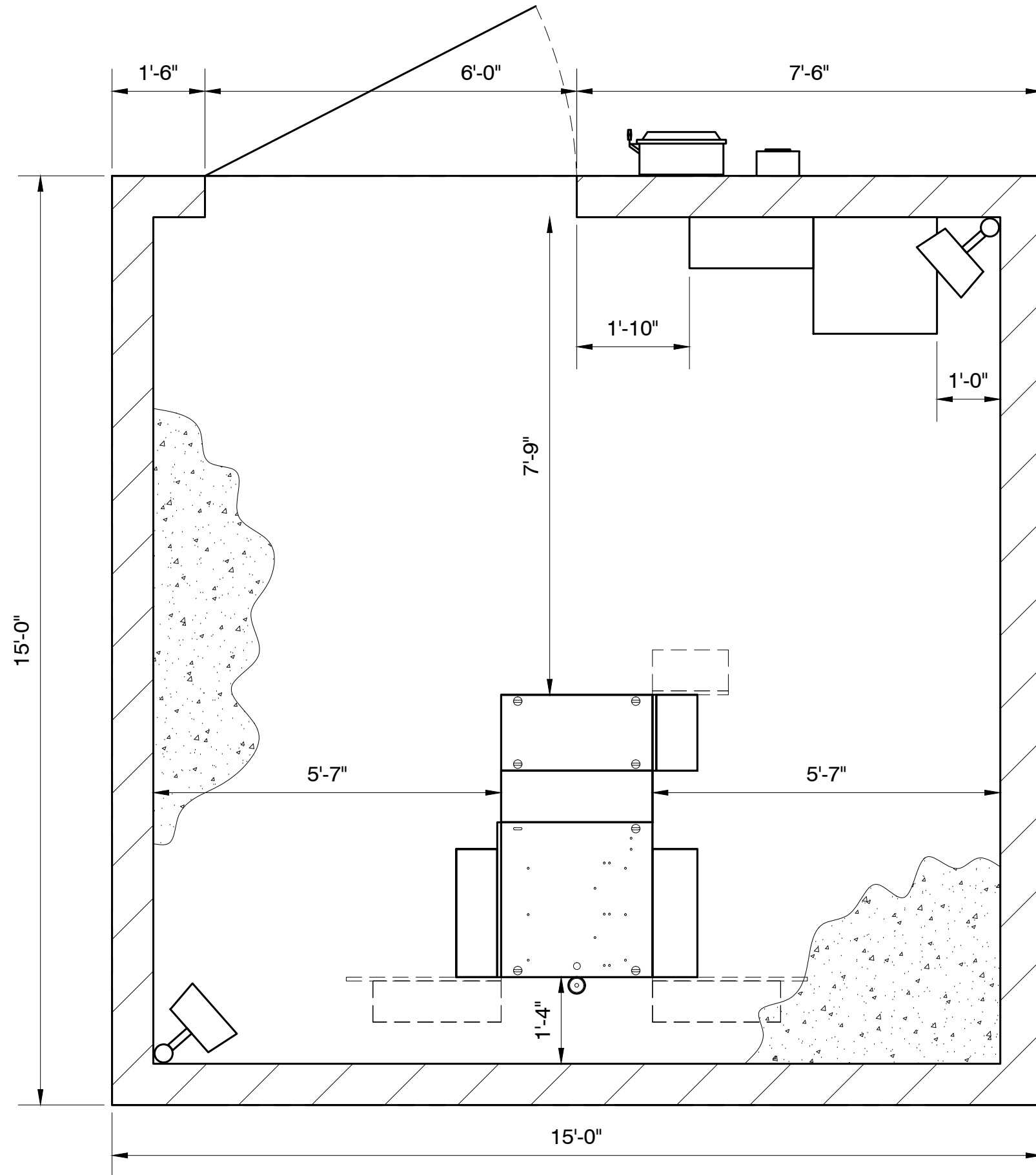
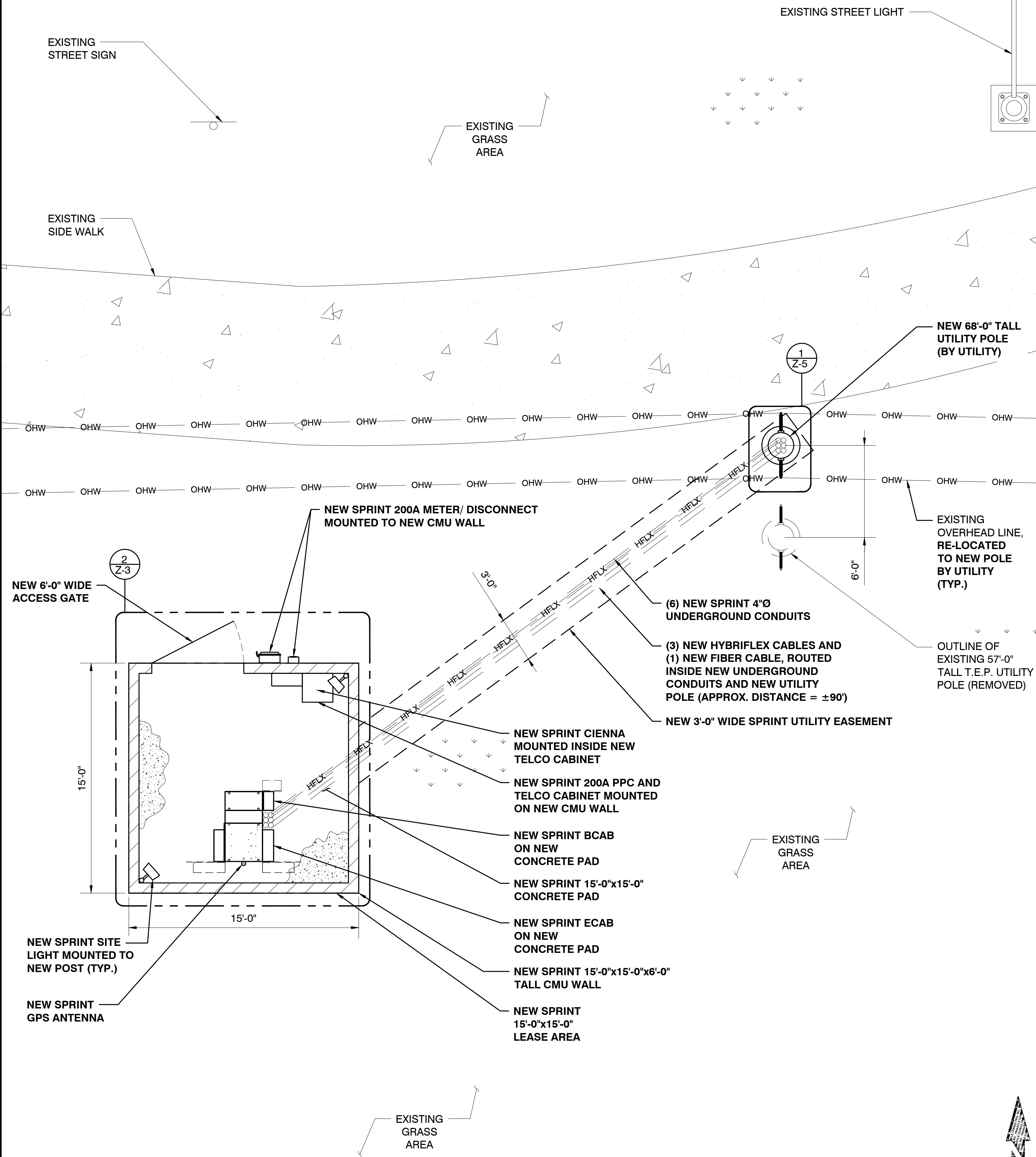
PH90XC831

TANGERINE RD. & LA CANADA DR.  
TUCSON, AZ 85737  
PIMA COUNTY

SHEET TITLE  
**EXISTING ENLARGED  
SITE PLAN**

SHEET NUMBER  
**Z-2**

NOTE: ANTENNAS, RADIOS, AND ANTENNA MOUNTS NOT SHOWN FOR CLARITY



## CABINET LAYOUT

SCALE: NTS 2

## NEW ENLARGED SITE PLAN

24"x36" SCALE: 1/4" = 1'-0"  
11"x17" SCALE: 1/8" = 1'-0"

1

## NOT USED

3

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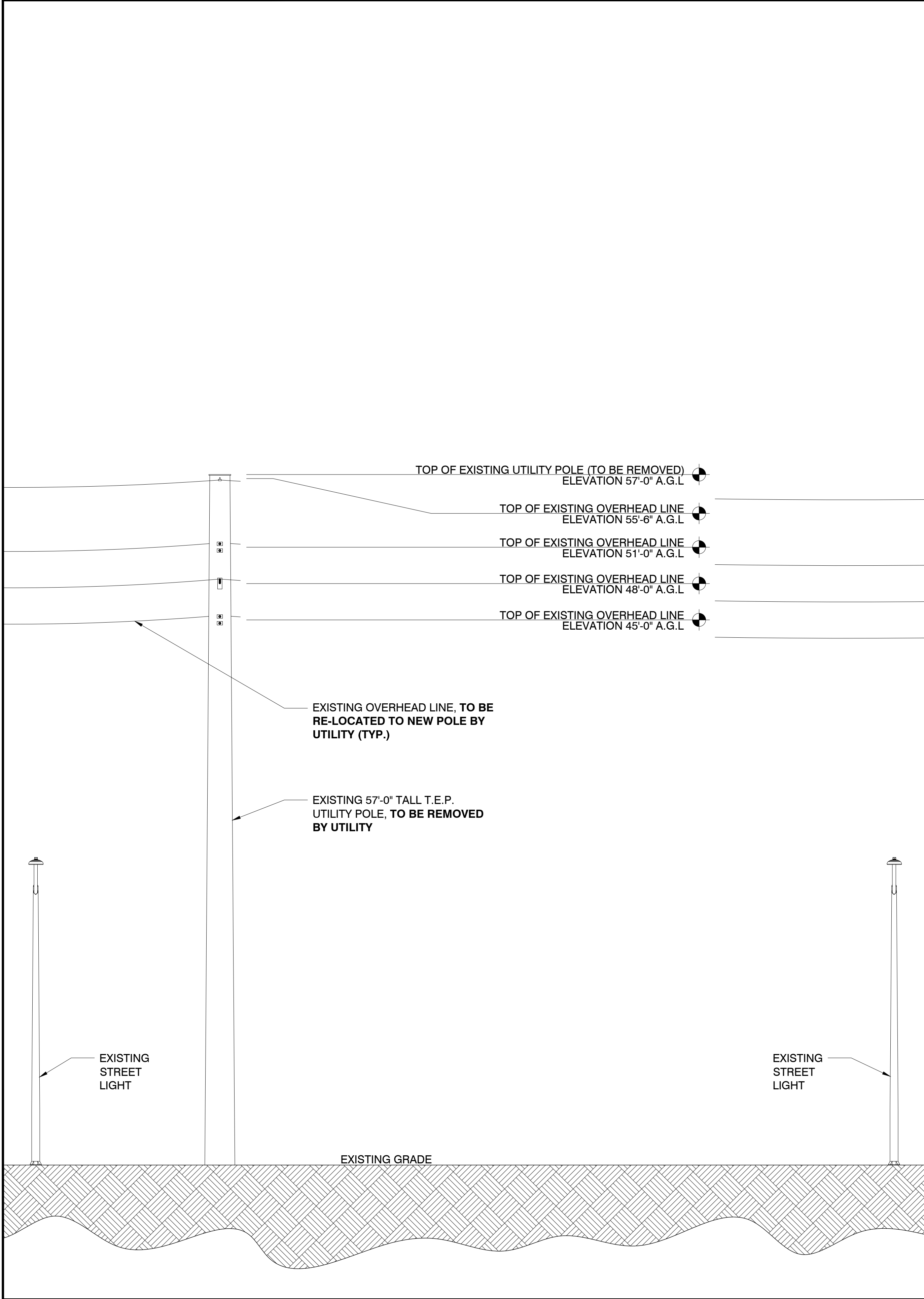
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TUCSON, AZ 85737  
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SHEET TITLE  
**NEW ENLARGED SITE  
PLAN**

SHEET NUMBER  
**Z-3**

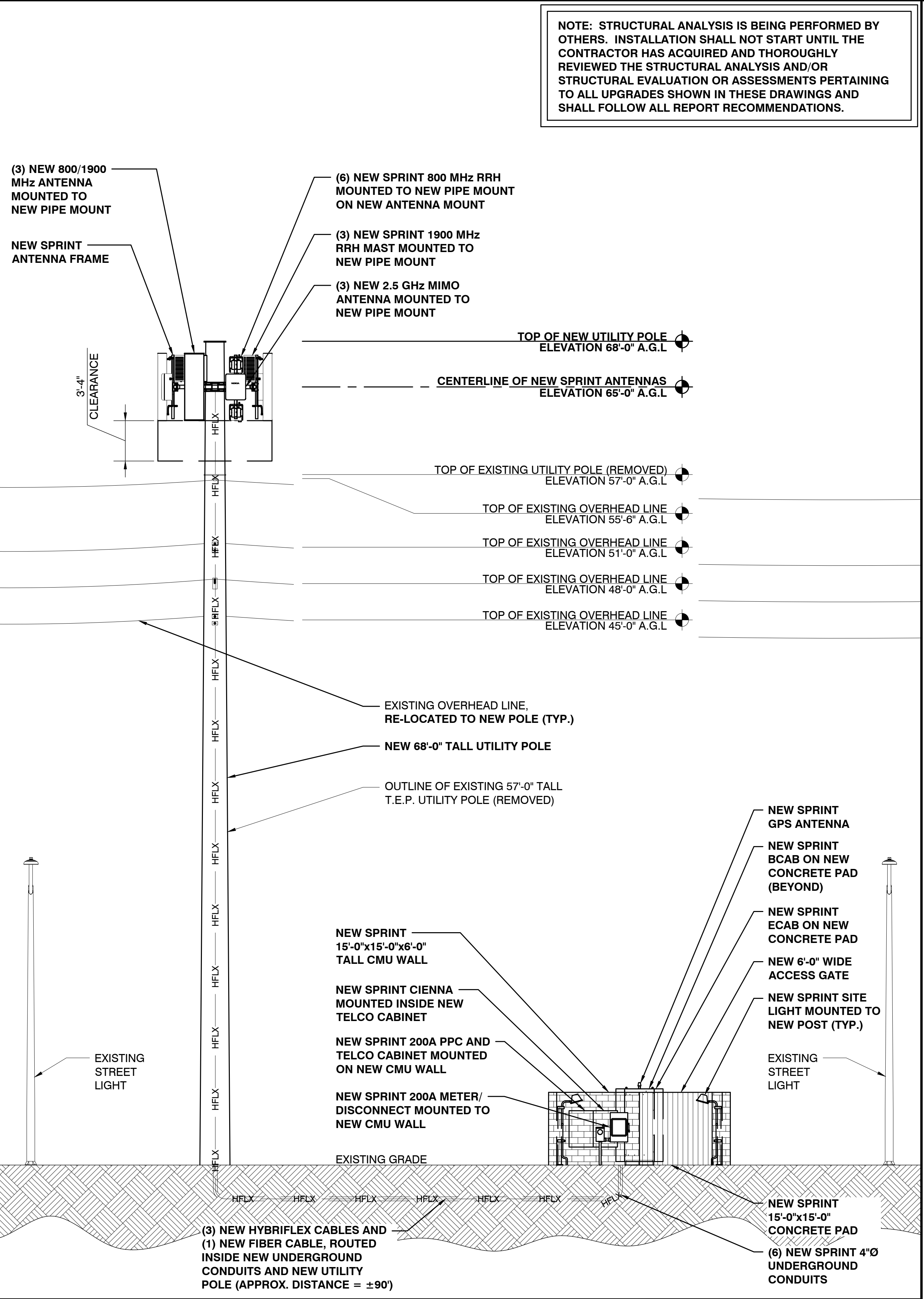




EXISTING NORTH ELEVATION

24"x36" SCALE: 3/16" = 1'-0"  
11"x17" SCALE: 3/32" = 1'-0"

1



NEW NORTH ELEVATION

24"x36" SCALE: 3/16" = 1'-0"  
11"x17" SCALE: 3/32" = 1'-0"

2

NOTE: STRUCTURAL ANALYSIS IS BEING PERFORMED BY OTHERS. INSTALLATION SHALL NOT START UNTIL THE CONTRACTOR HAS ACQUIRED AND THOROUGHLY REVIEWED THE STRUCTURAL ANALYSIS AND/OR STRUCTURAL EVALUATION OR ASSESSMENTS PERTAINING TO ALL UPGRADES SHOWN IN THESE DRAWINGS AND SHALL FOLLOW ALL REPORT RECOMMENDATIONS.

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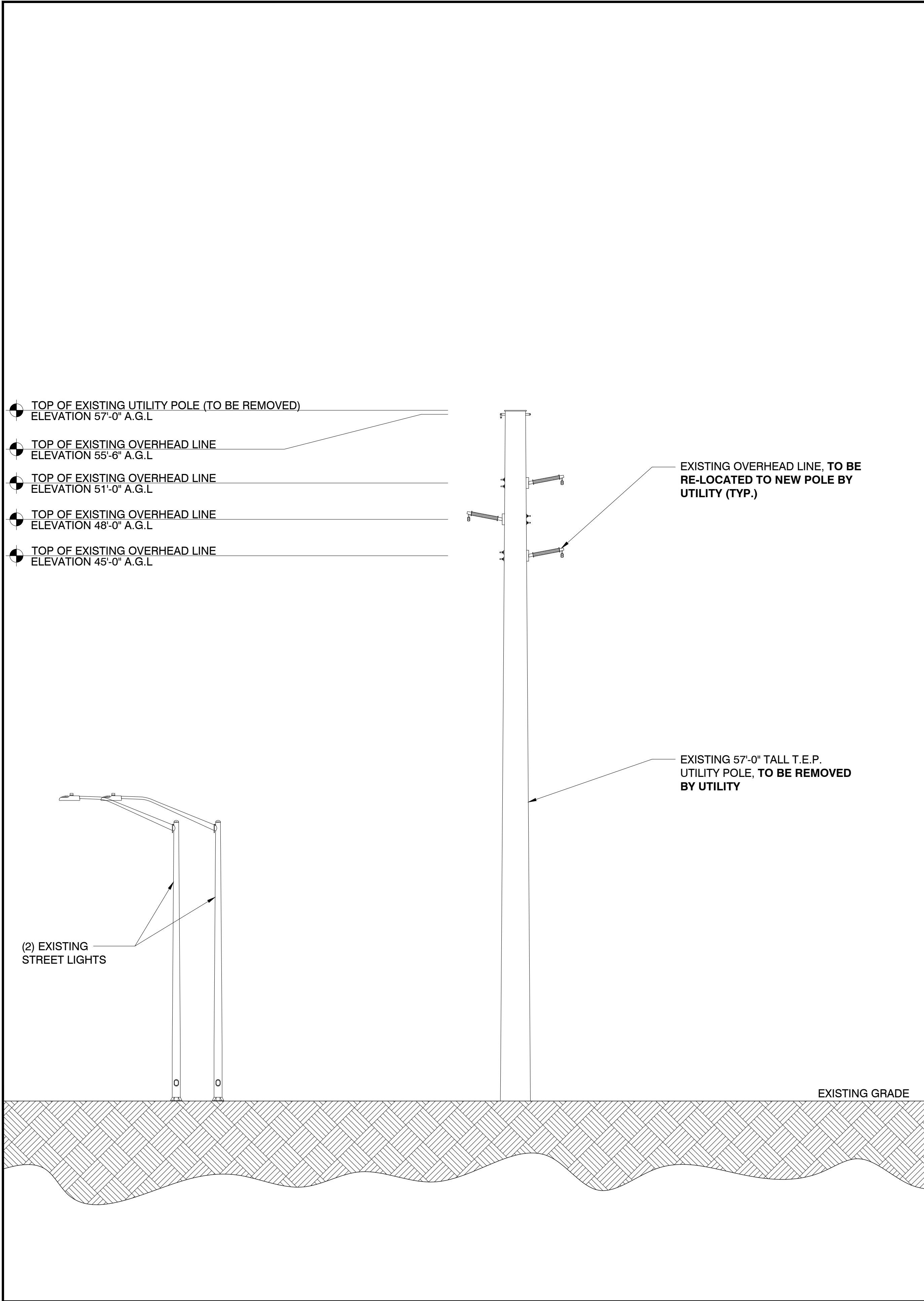
TANGERINE RD. & LA CANADA DR.  
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PIMA COUNTY

SHEET TITLE

ELEVATIONS

SHEET NUMBER

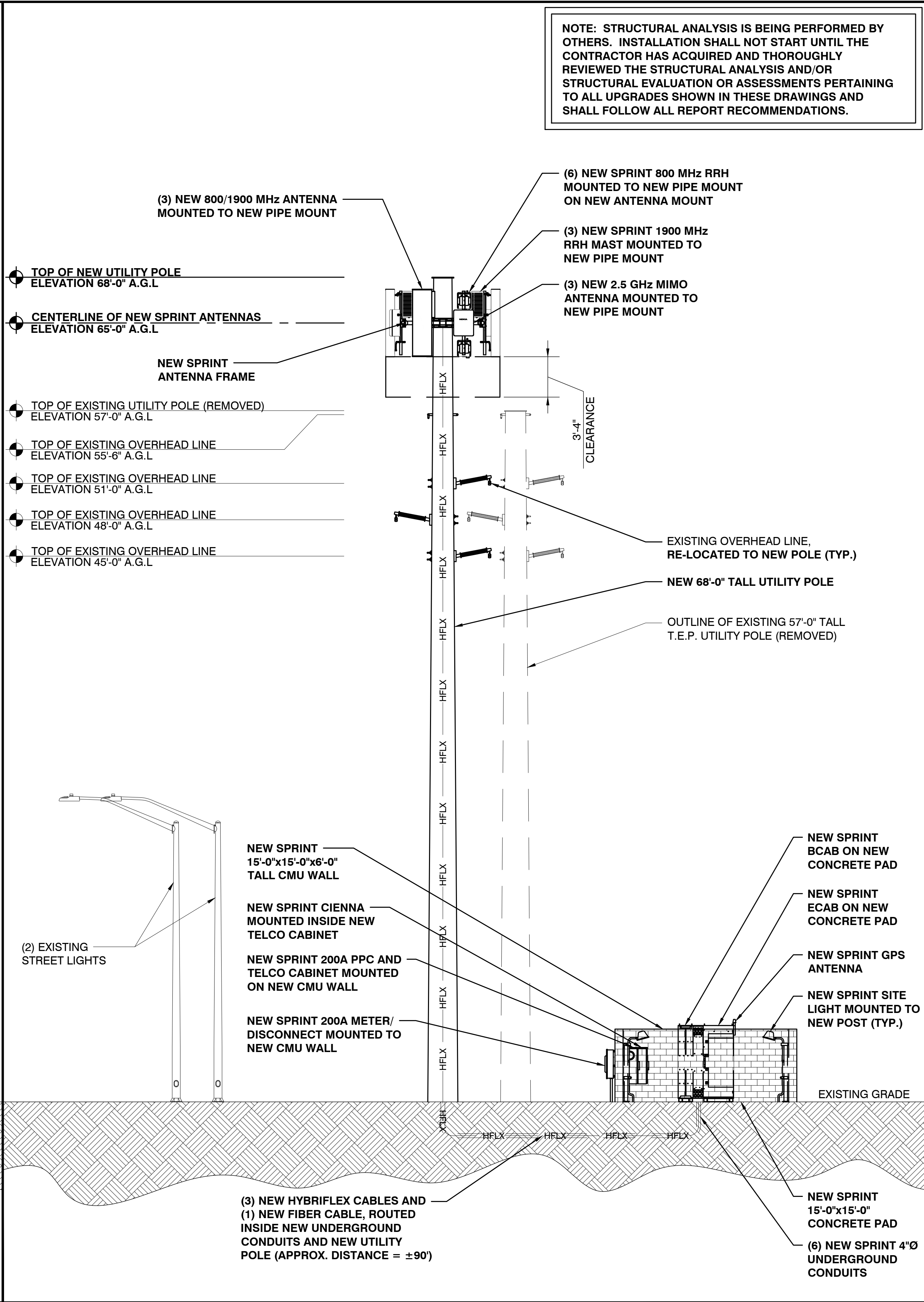
Z-4.0



EXISTING WEST ELEVATION

24"x36" SCALE: 3/16" = 1'-0"  
11"x17" SCALE: 3/32" = 1'-0"

1




NEW WEST ELEVATION

24"x36" SCALE: 3/16" = 1'-0"  
11"x17" SCALE: 3/32" = 1'-0"

2


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SHEET TITLE

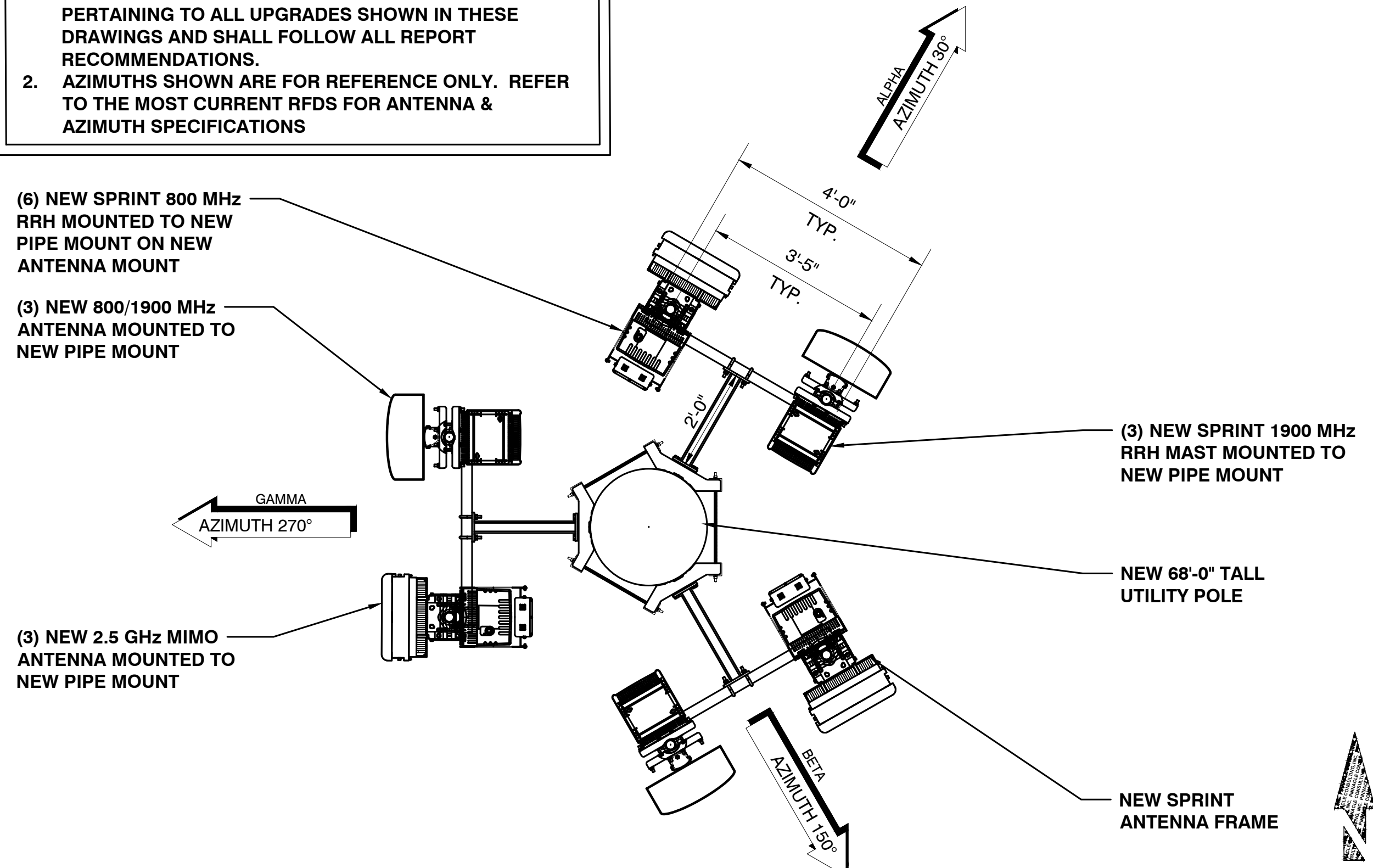
ELEVATIONS

SHEET NUMBER

**Z-4.1**



- NOTES:
1. STRUCTURAL ANALYSIS IS BEING PERFORMED BY OTHERS. INSTALLATION SHALL NOT START UNTIL THE CONTRACTOR HAS ACQUIRED AND THOROUGHLY REVIEWED THE STRUCTURAL ANALYSIS AND/OR STRUCTURAL EVALUATION OR ASSESSMENTS PERTAINING TO ALL UPGRADES SHOWN IN THESE DRAWINGS AND SHALL FOLLOW ALL REPORT RECOMMENDATIONS.
  2. AZIMUTHS SHOWN ARE FOR REFERENCE ONLY. REFER TO THE MOST CURRENT RFDS FOR ANTENNA & AZIMUTH SPECIFICATIONS



## NEW ANTENNA & RRU PLAN

24"x36" SCALE: 1/2" = 1'-0"  
11"x17" SCALE: 1/4" = 1'-0"

1

### NEW ANTENNA SCHEDULE

SECTOR	ANTENNA MANUFACTURER	ANTENNA MODEL	ANTENNA SIZE	ANTENNA FREQUENCY (MHz)	ANT. QUANT.	AZ.:	RAD CENTER (A.G.L.)	ELECTRICAL DOWNTILT RANGE			HYBRID LENGTH
								800 BAND	1900 BAND	2500 BAND	
SECTOR 1	NOKIA	MAA-AAHC (64T64R)	25.63"x19.72"x9.6"	2500	1	30°	65'-0"	N/A	N/A	1°	±90'
SECTOR 1	RFS	APXVBLL15X_43-C-I20	66.7"x19.6"x8.5"	800/1900	1	30°	65'-0"	4°	1°	N/A	-
SECTOR 2	NOKIA	MAA-AAHC (64T64R)	25.63"x19.72"x9.6"	2500	1	150°	65'-0"	N/A	N/A	4°	±90'
SECTOR 2	RFS	APXVBLL15X_43-C-I20	66.7"x19.6"x8.5"	800/1900	1	150°	65'-0"	7°	4°	N/A	-
SECTOR 3	NOKIA	MAA-AAHC (64T64R)	25.63"x19.72"x9.6"	2500	1	270°	65'-0"	N/A	N/A	2°	±90'
SECTOR 3	RFS	APXVBLL15X_43-C-I20	66.7"x19.6"x8.5"	800/1900	1	270°	65'-0"	5°	2°	N/A	-

### NEW RRH SCHEDULE

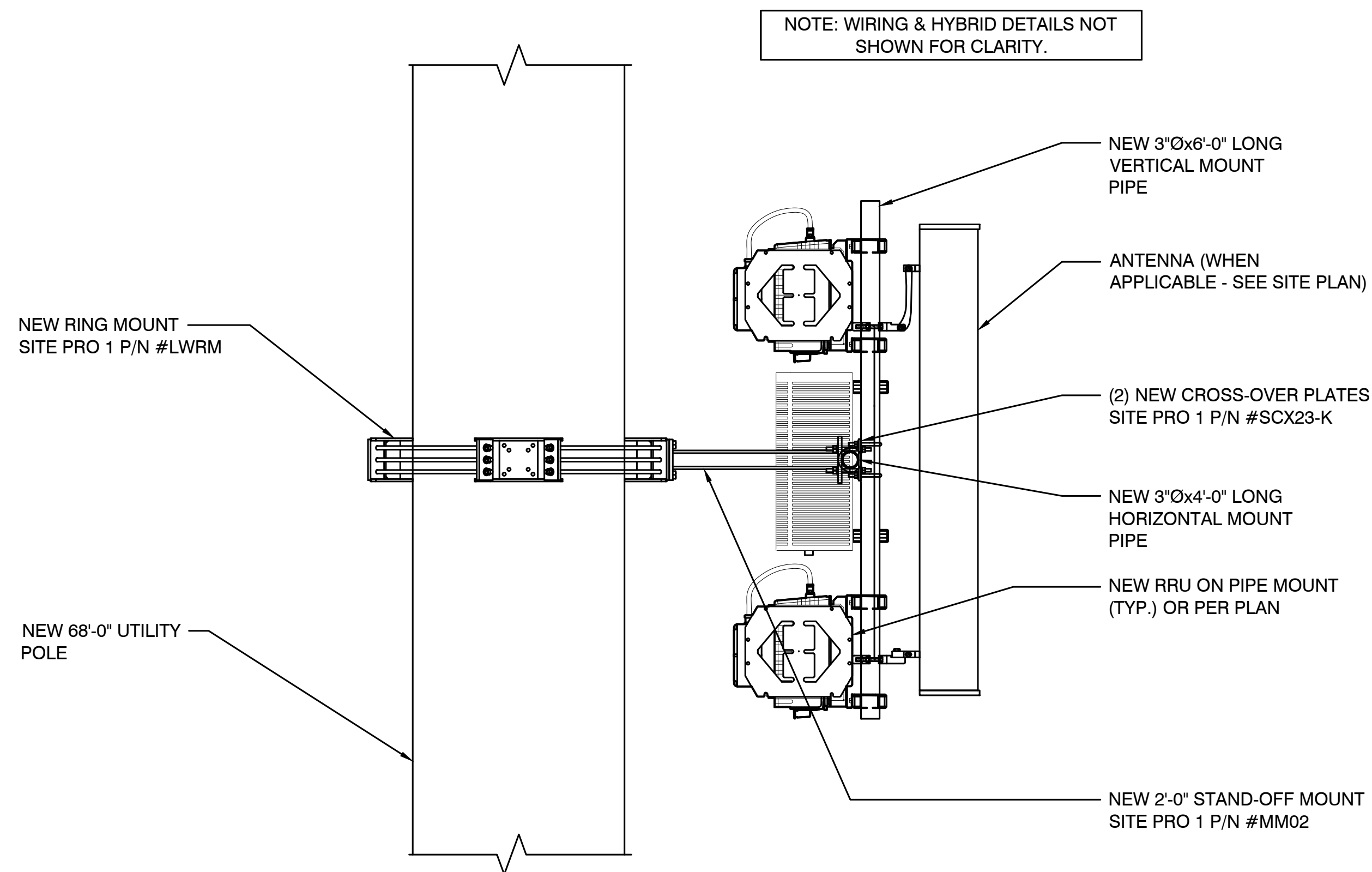
SECTOR	RRH MANUFACTURER	RRH MODEL	RRH SIZE	RRH WEIGHT (LBS)	RRH FREQ. RANGE (MHz)	RRH QUANTITY
SECTOR 1	ALCATEL-LUCENT	2x50	19"H x 13"W x 8.6" D w/FILTER 19"H x 13"W x 8.6" D	53 w/FILTER 64	862 - 869	2
SECTOR 1	ALCATEL-LUCENT	4x45	25.1"H x 11.1"W x 10.69"D	59.5	1930 - 1995	1
SECTOR 2	ALCATEL-LUCENT	2x50	19"H x 13"W x 8.6" D w/FILTER 19"H x 13"W x 8.6" D	53 w/FILTER 64	862 - 869	2
SECTOR 2	ALCATEL-LUCENT	4x45	25.1"H x 11.1"W x 10.69"D	59.5	1930 - 1995	1
SECTOR 3	ALCATEL-LUCENT	2x50	19"H x 13"W x 8.6" D w/FILTER 19"H x 13"W x 8.6" D	53 w/FILTER 64	862 - 869	2
SECTOR 3	ALCATEL-LUCENT	4x45	25.1"H x 11.1"W x 10.69"D	59.5	1930 - 1995	1

## NEW ANTENNA & RRU SCHEDULE

SCALE: NTS

2

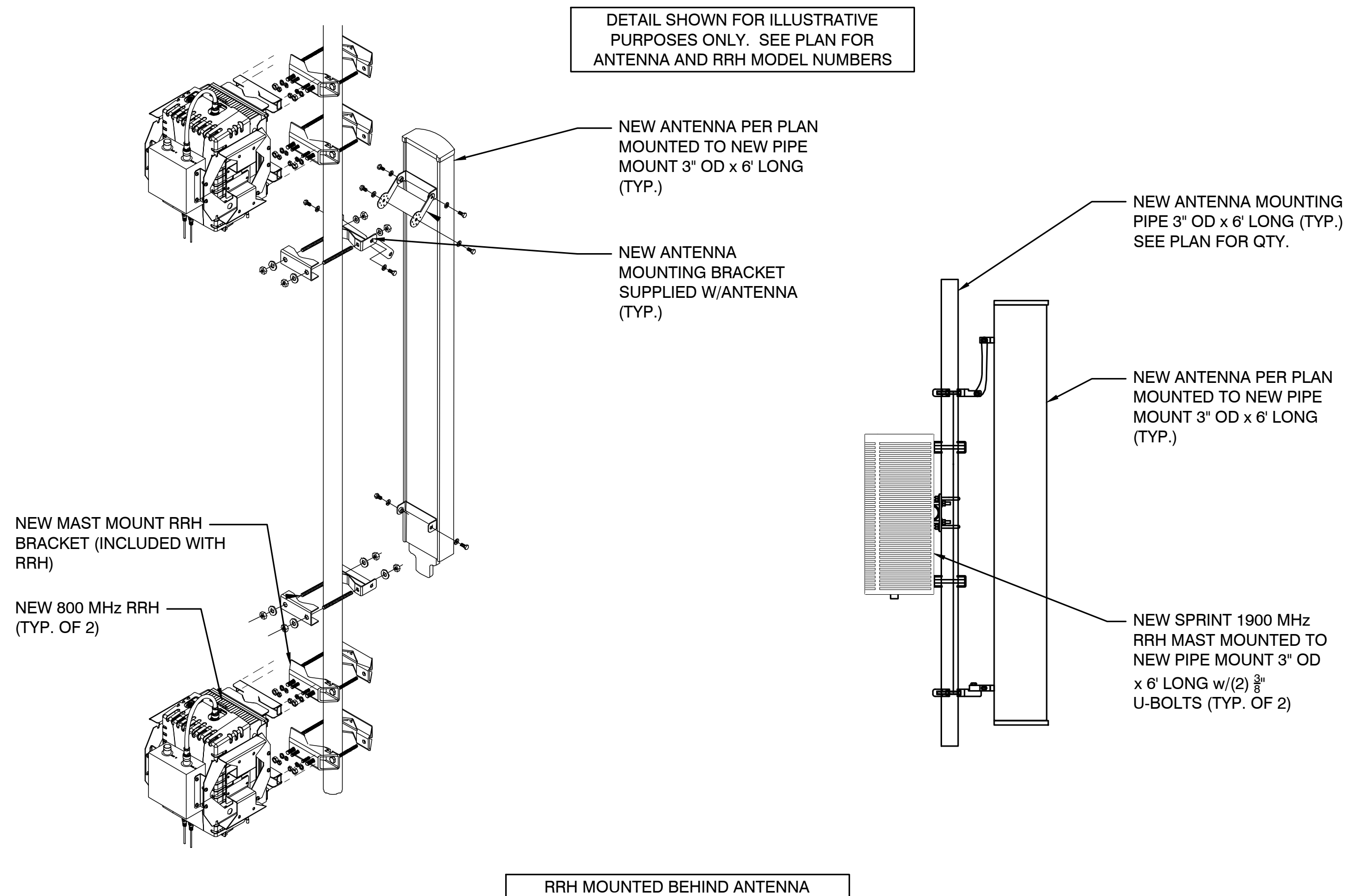
## ANTENNA AND RRH MOUNTING DETAILS



## TYPICAL SECTOR DETAIL

SCALE: NTS

3



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PIMA COUNTY

SHEET TITLE  
**NEW ANTENNA  
AND RRU PLAN**

SHEET NUMBER

**Z-5**

SCALE: NTS

4