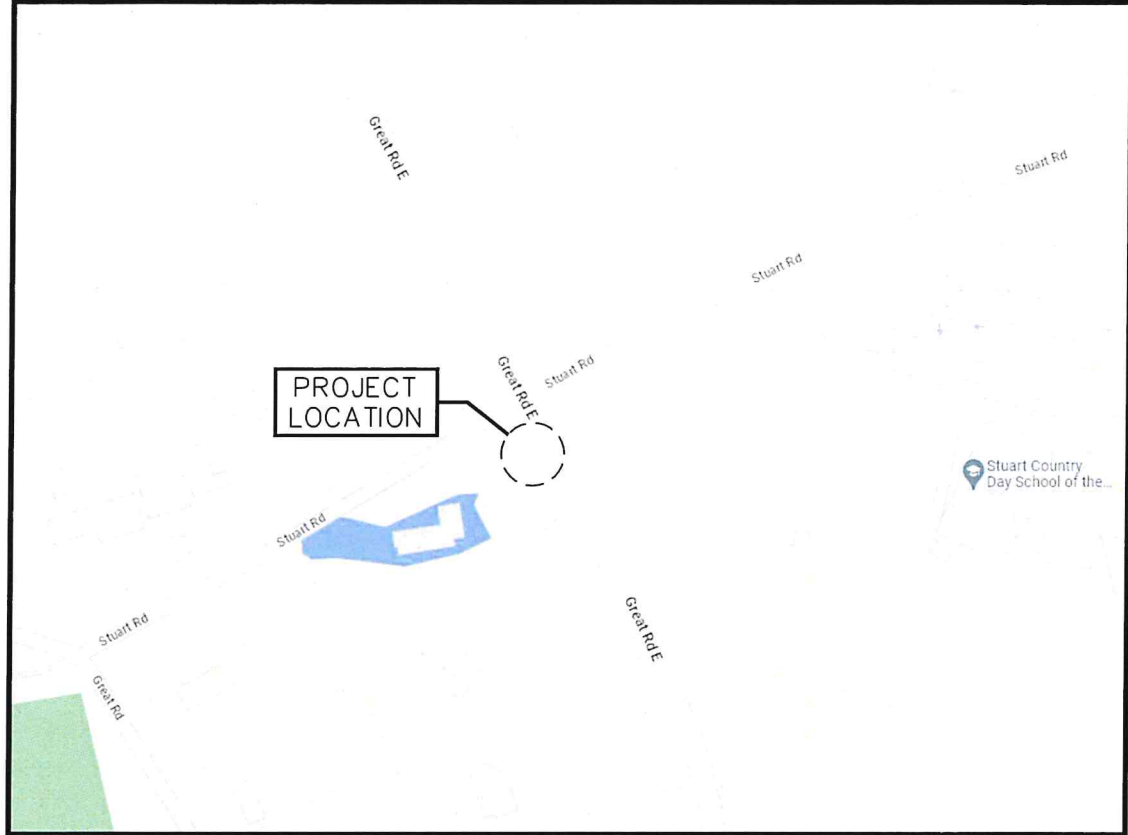




INDEX TO SHEETS	
DWG #	DRAWING TITLE
1	COVER SHEET
2	PROPOSED POLE CONFIGURATION
3	PROPOSED POLE LOCATION PHOTOS (N&S)
4	PROPOSED POLE LOCATION PHOTOS (E&W)
5	PROPOSED EQUIPMENT DETAILS
6	PROPOSED ANTENNA & RADIO DETAILS
7	WIRING DIAGRAM
8	DISCONNECT BOX

PROPOSED POLE CLASS: 2

Crown Castle Fiber LLC
1288 STUART ROAD
JURISDICTION: MUNICIPALITY OF PRINCETON
PROPOSED SMALL CELL SITE



NOT TO SCALE



NOT TO SCALE

LOCATION MAP

LATITUDE: 40.367635°N
LONGITUDE: -74.689228°W
BLOCK: 3702, LOT 1

NODE PLACEMENT

1288 STUART ROAD
PROPOSED CROWN CASTLE WOOD POLE
ON THE SOUTHWEST CORNER OF
STUART ROAD AND GREAT ROAD E.
POLE ID: NT



Peter J Tardy
PETER J TARDY, PE
NEW JERSEY PROFESSIONAL ENGINEER
DATE: 12/18/2025
NJ LIC NO 41990

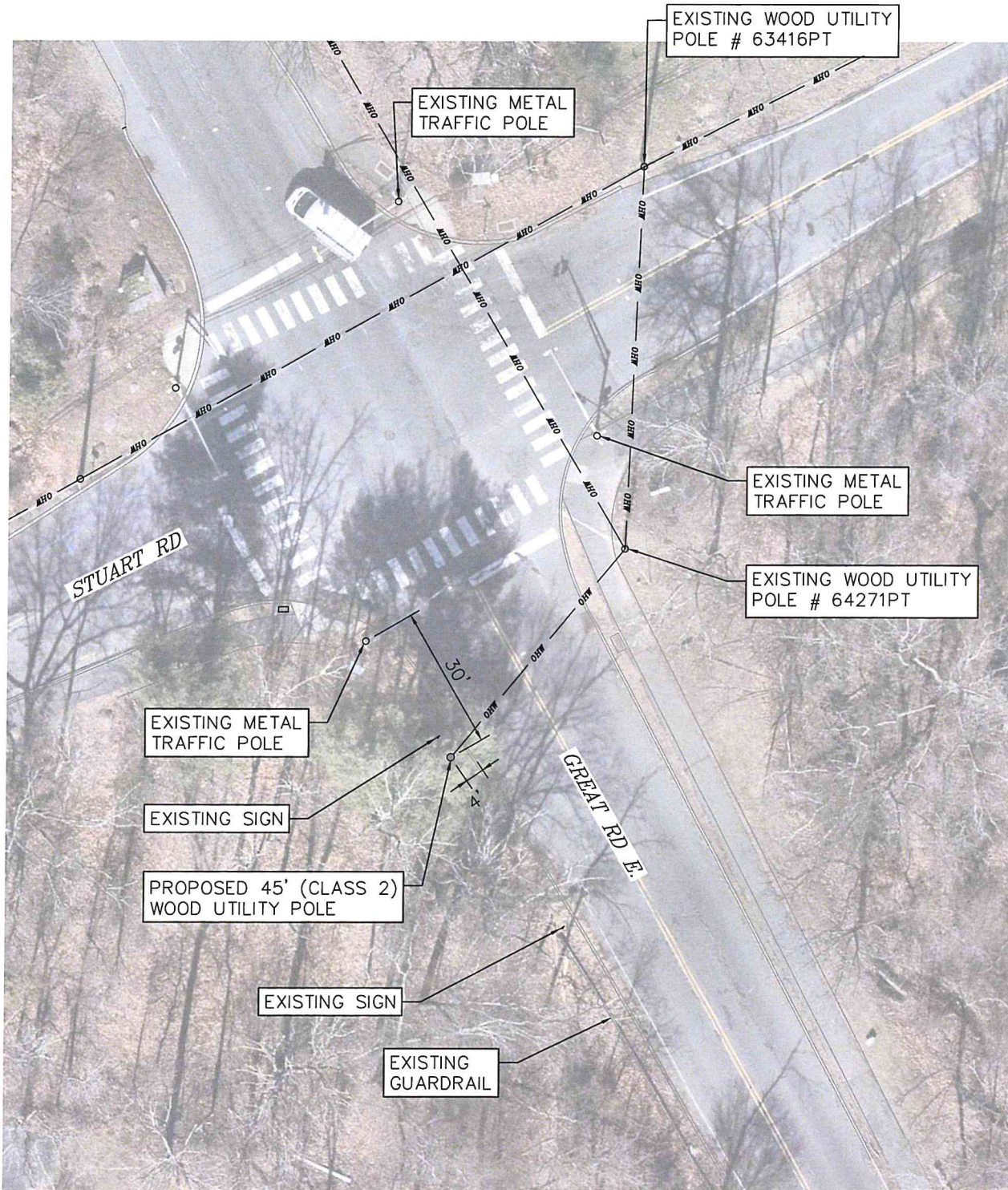


TITLE:
Crown Castle Fiber LLC
1288 STUART ROAD
PRINCETON, NJ
JURISDICTION: MUNICIPALITY OF PRINCETON

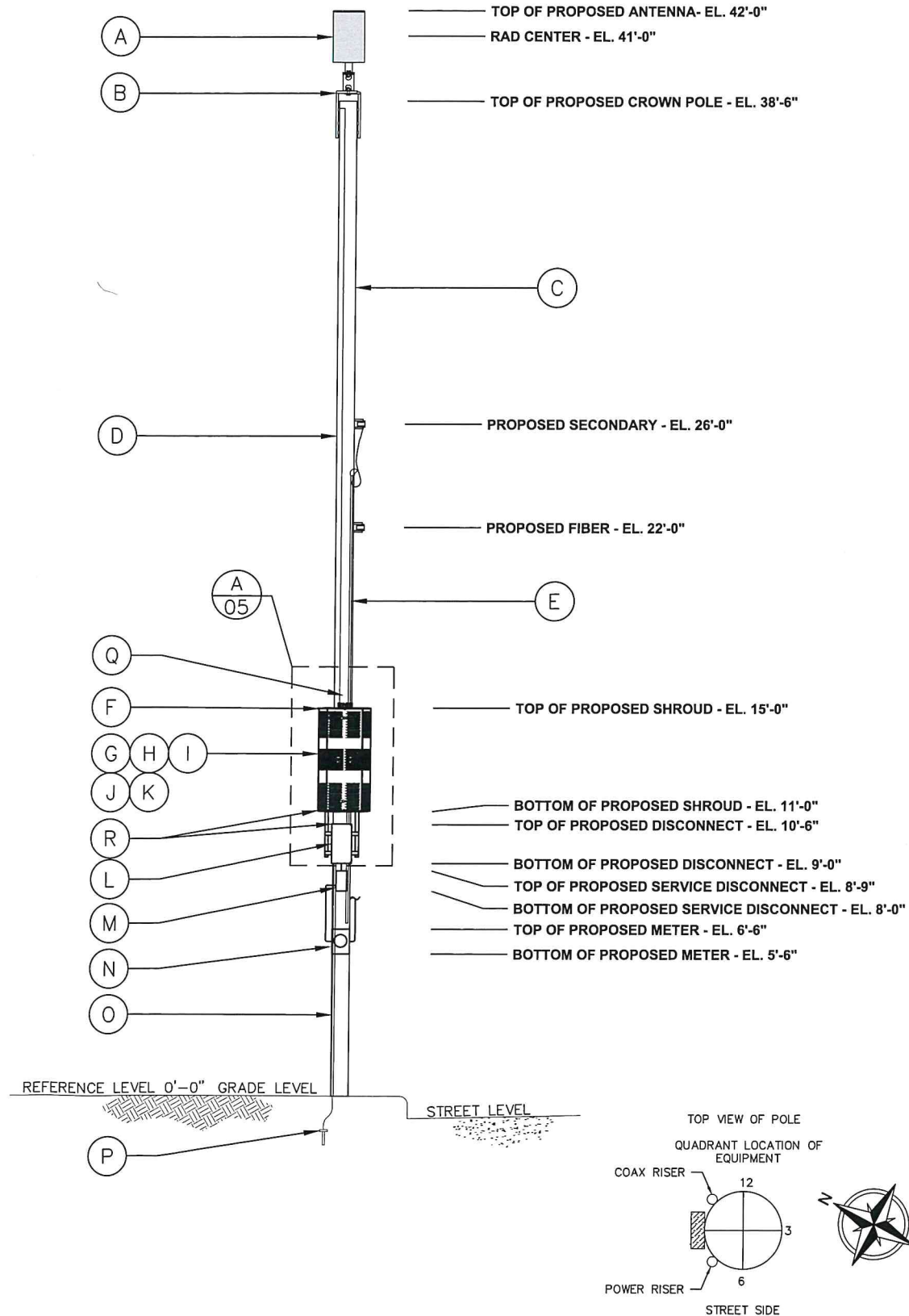
REVISIONS		
REV.	DATE	REVISION DESCRIPTION
2	02/21/24	REVISED PER COMMENTS
3	11/27/24	REVISED ANTENNA MODEL
4	09/10/25	REVISED POLE LOCATION
5	10/15/25	REVISED POLE LOCATION
6	12/18/25	ISSUED AS FINAL

DRAWN BY:	CHECKED BY:	APPROVED BY:
ARC	ARC	PJT
PROJECT NUMBER:	2438C.129.003	
NODE ID:	PCT-006	
SCU #:	402142	
DATE DRAWN:	11/02/2023	
SHEET:	1 of 8	

- NOTES:**
- POINT OF CONTACT FOR POWER AND TELCO TO BE DETERMINED PENDING UTILITY COORDINATION.
 - PROPOSED SECONDARY AND FIBER LOCATION AND HEIGHT TBD PENDING UTILITY COORDINATION.



PROPOSED POLE LOCATION



PROPOSED POLE DETAIL
LOOKING NORTHWEST

- PROPOSED ANTENNA:
(1) JMA WIRELESS CYL2016R-2xy
24.0' x 14.6" (HxW) - 26 LBS
- PROPOSED POLE TOP MOUNT:
(1) NYM MK-1B3
TO BE THRU-BOLTED TO POLE
MOUNT COLOR: BROWN
- INSTALL NEW 45' CLASS 2 WOOD UTILITY POLE
TOP HEIGHT = 38'-6" (AGL)
- INSTALL 3" PVC RISER U-GUARD:
PROPOSED #4 AWG GROUND WIRE AND COAX/FIBER CABLES
TO BE ROUTED WITHIN
- INSTALL 1.25" PVC SCH. 80 POWER RISER CONDUIT FROM METER TO
SECONDARY
- INSTALL SHROUD CABINET:
RAYCAP RAS-235418-C35
48.0' x 24.0' x 24.0" (HxWxD) - 433 LBS
EQUIPMENT COLOR: BROWN
TO BE THRU-BOLTED TO POLE
- INSTALL RADIO UNIT WITHIN NEW SHROUD:
(1) SAMSUNG RADIO RFV01U-D1A B2 B66
18.73' x 15.96' x 10.04" (HxWxD) - 84.4 LBS
- INSTALL RADIO UNIT WITHIN NEW SHROUD:
(1) SAMSUNG RADIO RFV01U-D2A B5 B13
19.73' x 15.0' x 8.1" (HxWxD) - 70.3 LBS
- INSTALL DIPLEXER WITHIN NEW SHROUD:
(1) COMMSCOPE SDX1250-43
4.17' x 6.93' x 2.91" (HxWxD) - 6.17 LBS
- INSTALL DIPLEXER WITHIN NEW SHROUD:
(1) COMMSCOPE CBC78-DS-43
6.59' x 5.93' x 2.89" (HxWxD) - 5.95 LBS
- INSTALL RECTIFIER WITHIN NEW SHROUD:
(1) DELTA ESR-48/38A U-5
15.5' x 11.3' x 3.7" (HxWxD) - 21.0 LBS
- INSTALL 100A DISCONNECT:
(1) RAYCAP RSC-FWC-216MS-21NY
8.25' x 10' x 6.05" (HxWxD) - 23.6 LBS
EQUIPMENT COLOR: BROWN
TO BE MOUNTED BELOW EQUIPMENT SHROUD
- INSTALL SERVICE DISCONNECT:
(1) SQUARE D Q02-4L70RB
9.37' x 4.88" (HxW) - 5.05 LBS
EQUIPMENT COLOR: BROWN
TO BE MOUNTED BELOW 100A DISCONNECT
- INSTALL POWER METER:
(1) MILBANK UB568-T-PSE&G-DES
11.5' x 6.1' x 3.3" (HxWxD)
EQUIPMENT COLOR: BROWN
TO BE MOUNTED BELOW 100A DISCONNECT
- INSTALL 1" PVC U-GUARD:
PROPOSED #4 AWG GROUND WIRE ROUTED WITHIN
- INSTALL 8' GROUND ROD
- INSTALL (2) "YELLOW" CAUTION SIGNS ABOVE EQUIPMENT SHROUD
ON EITHER SIDE OF POLE
- INSTALL SITE ID SIGN ON BOTTOM LEFT CORNER OF EQUIPMENT
SHROUD AND INSIDE DOOR OF DISCONNECT

Peter J Tardy

12/18/2025

PETER J TARDY, PE
NEW JERSEY PROFESSIONAL ENGINEER
NJ LIC NO 41990

ENGINEER:

Corporate Office:
1800 Rt 34, Suite 101
Wall, New Jersey 07719
732.312.9800
FPAengineers.com
New Jersey • New York • Pennsylvania • Massachusetts

OWNER/DEVELOPER:

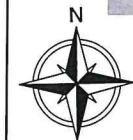
The Foundation for a Wireless World.

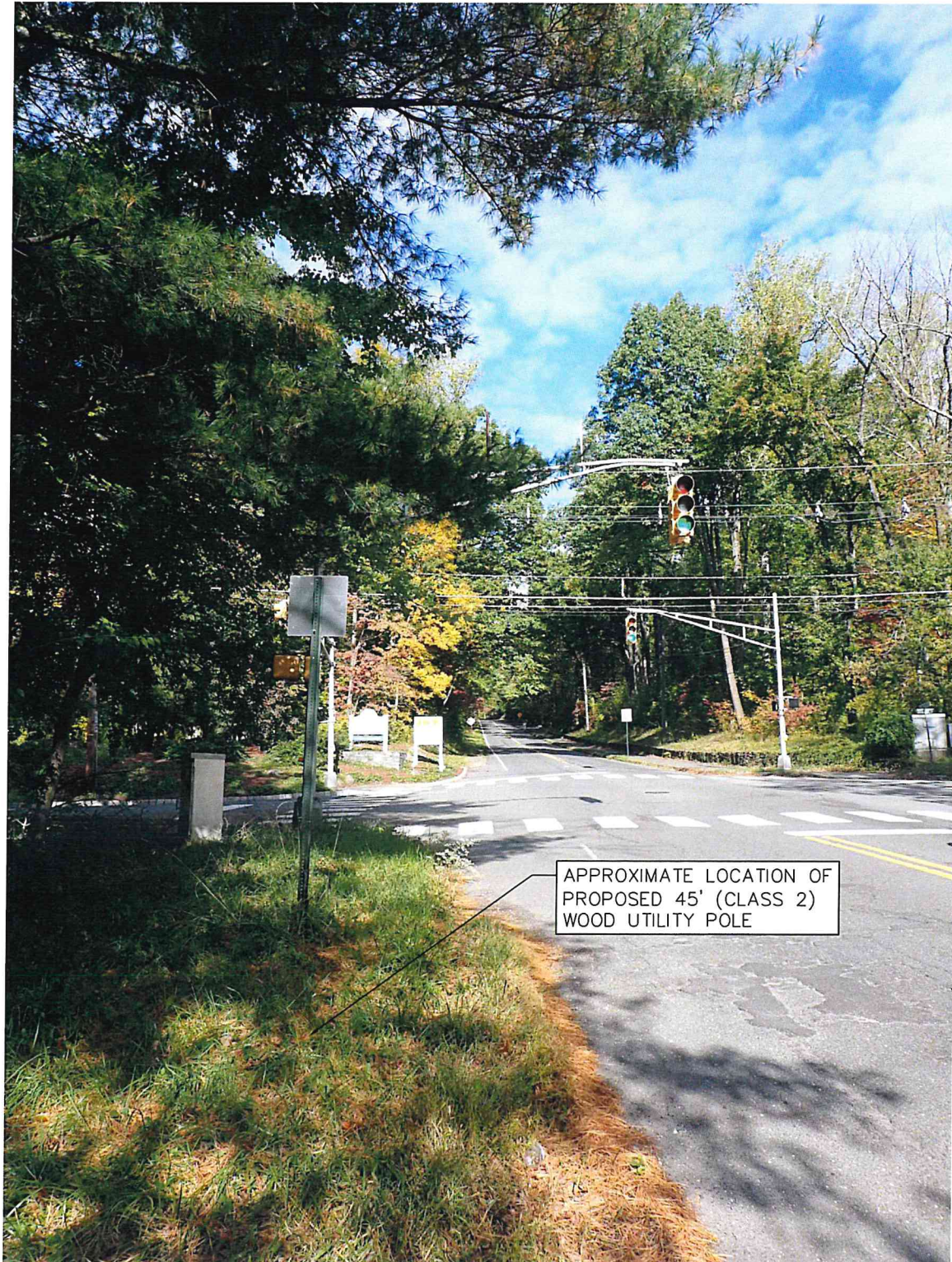
TITLE:
Crown Castle Fiber LLC
1288 STUART ROAD
PRINCETON, NJ
JURISDICTION: MUNICIPALITY OF PRINCETON

REVISIONS		
REV.	DATE	REVISION DESCRIPTION
2	02/21/24	REVISED PER COMMENTS
3	11/27/24	REVISED ANTENNA MODEL
4	09/10/25	REVISED POLE LOCATION
5	10/15/25	REVISED POLE LOCATION
6	12/18/25	ISSUED AS FINAL

DRAWN BY:	CHECKED BY:	APPROVED BY:
ARC	ARC	PJT

PROJECT NUMBER:	2438C.129.003
NODE ID:	PCT-006
SCU #:	402142
DATE DRAWN:	11/02/2023
SHEET:	2 of 8





PROPOSED POLE PHOTO
LOOKING NORTH



PROPOSED POLE PHOTO
LOOKING SOUTH

Peter J Tardy
PETER J TARDY, PE
NEW JERSEY PROFESSIONAL ENGINEER
DATE: 12/18/2025
NJ LIC NO 41990

ENGINEER:
FPA
FRENCH & PARRELLO
ASSOCIATES
Corporate Office:
1800 Rt 34, Suite 101
Wall, New Jersey 07719
732.312.9800
FPAengineers.com
New Jersey • New York • Pennsylvania • Massachusetts

OWNER/DEVELOPER:
CC CROWN CASTLE
The Foundation for a Wireless World.

TITLE:
Crown Castle Fiber LLC
1288 STUART ROAD
PRINCETON, NJ
JURISDICTION: MUNICIPALITY OF PRINCETON

REVISIONS		
REV.	DATE	REVISION DESCRIPTION
2	02/21/24	REVISED PER COMMENTS
3	11/27/24	REVISED ANTENNA MODEL
4	09/10/25	REVISED POLE LOCATION
5	10/15/25	REVISED POLE LOCATION
6	12/18/25	ISSUED AS FINAL

DRAWN BY:	CHECKED BY:	APPROVED BY:
ARC	ARC	PJT

PROJECT NUMBER: 2438C.129.003

NODE ID: PCT-006

SCU #: 402142

DATE DRAWN: 11/02/2023

SHEET: 3 of 8



PROPOSED POLE PHOTO
LOOKING EAST

Peter J Tardy
12/18/2025
DATE
PETER J TARDY, PE
NEW JERSEY PROFESSIONAL ENGINEER
NJ LIC NO 41990

ENGINEER:
FPA
FRENCH & PARRELLO
ASSOCIATES
Corporate Office:
1800 Rt 34, Suite 101
Wall, New Jersey 07719
732.312.9800
FPAengineers.com
New Jersey • New York • Pennsylvania • Massachusetts

OWNER/DEVELOPER:
CC CROWN
CASTLE
The Foundation for a Wireless World.

TITLE:
Crown Castle Fiber LLC
1288 STUART ROAD
PRINCETON, NJ
JURISDICTION: MUNICIPALITY OF PRINCETON

REVISIONS		
REV.	DATE	REVISION DESCRIPTION
2	02/21/24	REVISED PER COMMENTS
3	11/27/24	REVISED ANTENNA MODEL
4	09/10/25	REVISED POLE LOCATION
5	10/15/25	REVISED POLE LOCATION
6	12/18/25	ISSUED AS FINAL

DRAWN BY:	CHECKED BY:	APPROVED BY:
ARC	ARC	PJT

PROJECT NUMBER:	2438C.129.003
NODE ID:	PCT-006
SCU #:	402142
DATE DRAWN:	11/02/2023
SHEET:	4 OF 8

REV	DESCRIPTION	DATE	DRWN BY	APP
0	RELEASED	10/30/2024	JM	

7.745 24.000 44.282 24.000 48.000 6.546

REMOVABLE FAN TRAY (OPTIONAL)

3 POINT QUARTER TURN LATCH WITH PADLOCK

DETAIL A SCALE 0.25:1

NOTES:
1. MATL: ALUMINUM ENCL. W. STEEL FRAME.
2. COLOR: AS REQUIRED
3. WEIGHT: APPROX. 157LBS (WITHOUT RADIOS)
4. WEIGHT: APPROX. 433LBS (WITH RADIOS)
5. ACTIVE COOLING AS SHOWN.
6. VOLUME: 16 CU FT

RAYCAP	RAES-235418-C35	7/25/2023	46 SARKIS ST, KENNY, NJ 07033
DESIGNER	DESIGNED BY	DATE	PHONE
PROJECT	PROJECT NO.	REV	EMAIL
ISSUED FOR	ISSUED BY	ISSUE DATE	ISSUE DESCRIPTION
ISSUED FOR	ISSUED BY	ISSUE DATE	ISSUE DESCRIPTION

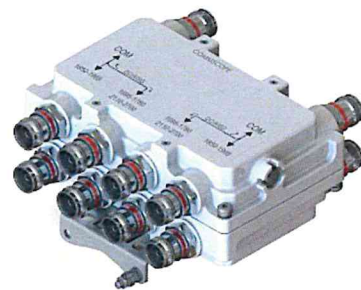
FINAL PLACEMENT OF COMPONENTS PENDING CABLE MANAGEMENT AND THERMAL ANALYSIS

DETAIL A
RAYCAP RAES-235418-C35
SHROUD



MECHANICAL SPECIFICATIONS:
HEIGHT: 15.5 IN.
WIDTH: 11.3 IN.
DEPTH: 3.7 IN.
WEIGHT: 21.0 LBS.

DELTA
RECTIFIER ESR-48/38A U-S



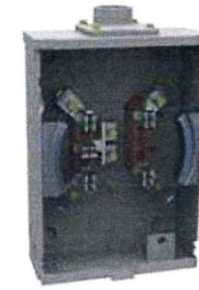
MECHANICAL SPECIFICATIONS:
HEIGHT: 4.17 IN.
WIDTH: 6.93 IN.
DEPTH: 2.91 IN.
WEIGHT: 6.17 LBS.

COMMSCOPE
DIPLEXER SDX1926Q-43



MECHANICAL SPECIFICATIONS:
HEIGHT: 6.38 IN.
WIDTH: 6.93 IN.
DEPTH: 2.89 IN.
WEIGHT: 5.95 LBS.

COMMSCOPE
DIPLEXER CBC78-DS-43



MECHANICAL SPECIFICATIONS:
HEIGHT: 11.5 IN.
WIDTH: 8.0 IN.
DEPTH: 3.3 IN.

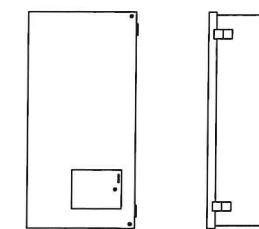
MILBANK U8569-YL-PSEG-DES
METER PAN



MECHANICAL SPECIFICATIONS:
HEIGHT: 9.37 IN.
WIDTH: 4.88 IN.
WEIGHT: 5.05 LBS.

SQUARE D Q02-4L70RB
DISCONNECT

FRONT SIDE



TOP



LED POWER ON STATUS INDICATOR (SEE NOTE)

NOTES:
1. NEMA 4 RATED, UL LISTED
2. CONTRACTOR SHALL ORDER BROWN ENCLOSURE COLOR TO MATCH EXISTING/PROPOSED STRUCTURE

MECHANICAL SPECIFICATIONS:
HEIGHT: 18.25 IN.
WIDTH: 9.10 IN.
DEPTH: 6.05 IN.
WEIGHT: 23.6 LBS.

RAYCAP RSD-FMC-Z16MS-21NN
DISCONNECT

Peter J Tardy
12/18/2025
PETER J TARDY, PE
NEW JERSEY PROFESSIONAL ENGINEER
NJ LIC NO 41990

FPA
FRENCH & PARRELLO
ASSOCIATES
Corporate Office:
1800 Rt 34, Suite 101
Wall, New Jersey 07719
732.312.9600
FPAengineers.com
New Jersey • New York • Pennsylvania • Massachusetts

OWNER/DEVELOPER:
CROWN CASTLE
The Foundation for a Wireless World.

TITLE:
Crown Castle Fiber LLC
1288 STUART ROAD
PRINCETON, NJ
JURISDICTION: MUNICIPALITY OF PRINCETON

REV.	DATE	REVISION DESCRIPTION
2	02/21/24	REVISED PER COMMENTS
3	11/27/24	REVISED ANTENNA MODEL
4	09/10/25	REVISED POLE LOCATION
5	10/15/25	REVISED POLE LOCATION
6	12/18/25	ISSUED AS FINAL

DRAWN BY:	CHECKED BY:	APPROVED BY:
ARC	ARC	PJT

PROJECT NUMBER: 2438C.129.003

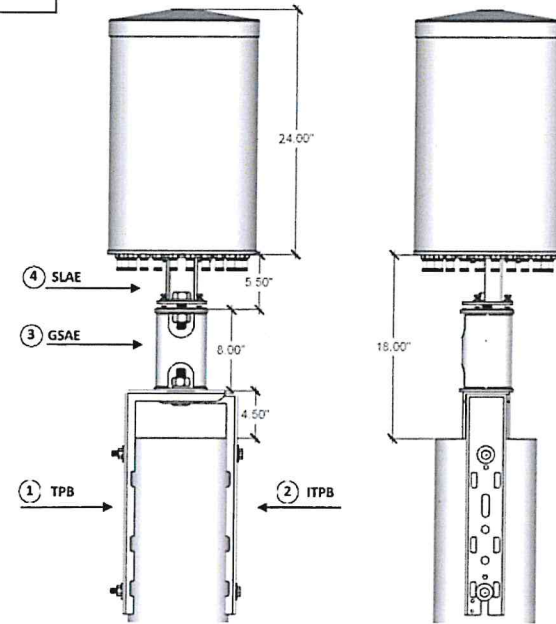
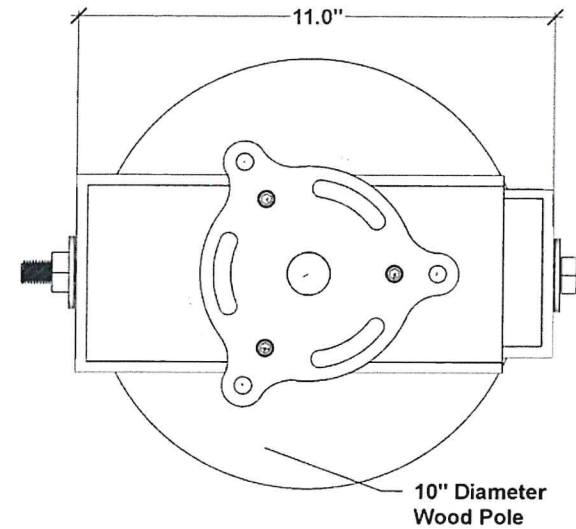
NODE ID: PCT-006

SCU #: 402142

DATE DRAWN: 11/02/2023

SHEET: 5 of 8

ITEM NO.	PART NUMBER	DESCRIPTION PART NAME	DIMENSIONS	MATERIAL	QTY	UNIT WT. LBS
1	TPB	Top Pole Bracket	Length 10" Width 4.60" Height 22"	Hot Rolled Steel, Galvanized	x1	11.25 lbs.
2	ITPB	Interlock Top Pole Bracket	Length 8.10" Width 3.90" Height 21.75"	Hot Rolled Steel, Galvanized	x1	9 lbs.
3	GSAE-10	Galvanized Steel Antenna Extension 8" Height	Height 8" Diameter 5" Flange 5.375"	Steel Tubing	x1	8 lbs.
4	SLAE	Self Leveling Antenna Extension	Length 6" Width 6" Height 5.25"	Hot Rolled Steel, Galvanized	x1	4 lbs.



NYM MK-183
POLE TOP MOUNT

NYM
6 Cain Street Rochester, NY 14611
P: 585-254-9353 NYMFG.COM

PROPRIETARY AND CONFIDENTIAL
THE INFORMATION IN THIS DRAWING IS THE SOLE PROPERTY OF NEW YORK MANUFACTURING. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT WRITTEN PERMISSION OF NEW YORK MANUFACTURING IS PROHIBITED

FILE: MK-183

COMMENTS:

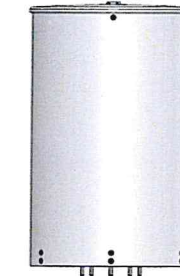
DESCRIPTION:
Wood Pole Top

DRAWN BY: SAL ANSELMO DATE: 2/21/2023

REV	DESCRIPTION	DATE	BY

PAGE: 1 of 4

PART NUMBER:
MK-183-PT-PC8028



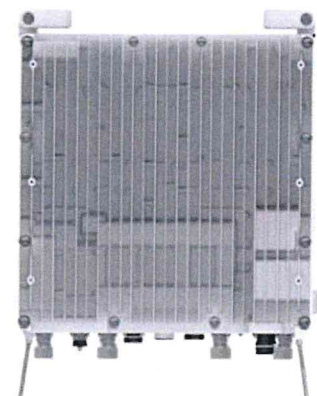
MECHANICAL SPECIFICATIONS:
HEIGHT: 24 IN.
DIAMETER: 14.6 IN.
WEIGHT: 26 LBS.

JMA WIRELESS
CYL2Q16R-2xy
ANTENNA



MECHANICAL SPECIFICATIONS:
HEIGHT: 19.73 IN.
WIDTH: 15.96 IN.
DEPTH: 10.04 IN.
WEIGHT: 84.4 LBS.

SAMSUNG
RADIO RFV01U-D1A B2 B66



MECHANICAL SPECIFICATIONS:
HEIGHT: 19.73 IN.
WIDTH: 15.0 IN.
DEPTH: 8.1 IN.
WEIGHT: 70.3 LBS.

SAMSUNG
RADIO RFV01U-D2A B5 B13



NOTES:

- SIGNAGE ATTACHED ON:
WOOD POLES = SIGN ON ALUMINUM WITH STAINLESS STEEL SCREWS.
METAL POLES = ADHESIVE VINYL OR PLACARD STRAPPED WITH STAINLESS STEEL TIES.
CONCRETE/COMPOSITE = PLACARD STRAPPED WITH STAINLESS STEEL TIES.
FIBERGLASS = PLACARD STRAPPED WITH STAINLESS STEEL TIES.
- AFFIX SIGN TO THE STRUCTURE AS PER EME REPORT.
- THE SIGN MUST BE COMPLETELY READABLE FROM OUTSIDE THE DANGER ZONE.

RF "YELLOW"
CAUTION SIGN

CROWN CASTLE CrownCastle.com

FOR LEASE INFORMATION: **877-486-9377**
FOR EMERGENCY 24 HOUR SERVICE: **888-632-0931**

SYSTEM NAME:
A LOC SCU:
Z LOC SCU:
SITE ADDRESS:

SITE ID SIGN

Peter J Tardy 12/18/2025
PETER J TARDY, PE
NEW JERSEY PROFESSIONAL ENGINEER NJ LIC NO 41990

ENGINEER:

FPA
FRENCH & PARRELLO ASSOCIATES
Corporate Office:
1800 Rt 34, Suite 101
Wall, New Jersey 07719
732.312.9800
FPAengineers.com
New Jersey • New York • Pennsylvania • Massachusetts

OWNER/DEVELOPER:

CROWN CASTLE
The Foundation for a Wireless World.

TITLE:
Crown Castle Fiber LLC
1288 STUART ROAD
PRINCETON, NJ
JURISDICTION: MUNICIPALITY OF PRINCETON

REV.	DATE	REVISION DESCRIPTION
2	02/21/24	REVISED PER COMMENTS
3	11/27/24	REVISED ANTENNA MODEL
4	09/10/25	REVISED POLE LOCATION
5	10/15/25	REVISED POLE LOCATION
6	12/18/25	ISSUED AS FINAL

DRAWN BY: ARC CHECKED BY: ARC APPROVED BY: PJT

PROJECT NUMBER: 2438C.129.003

NODE ID: PCT-006

SCU #: 402142


DATE DRAWN: 11/02/2023

SHEET: 6 of 8

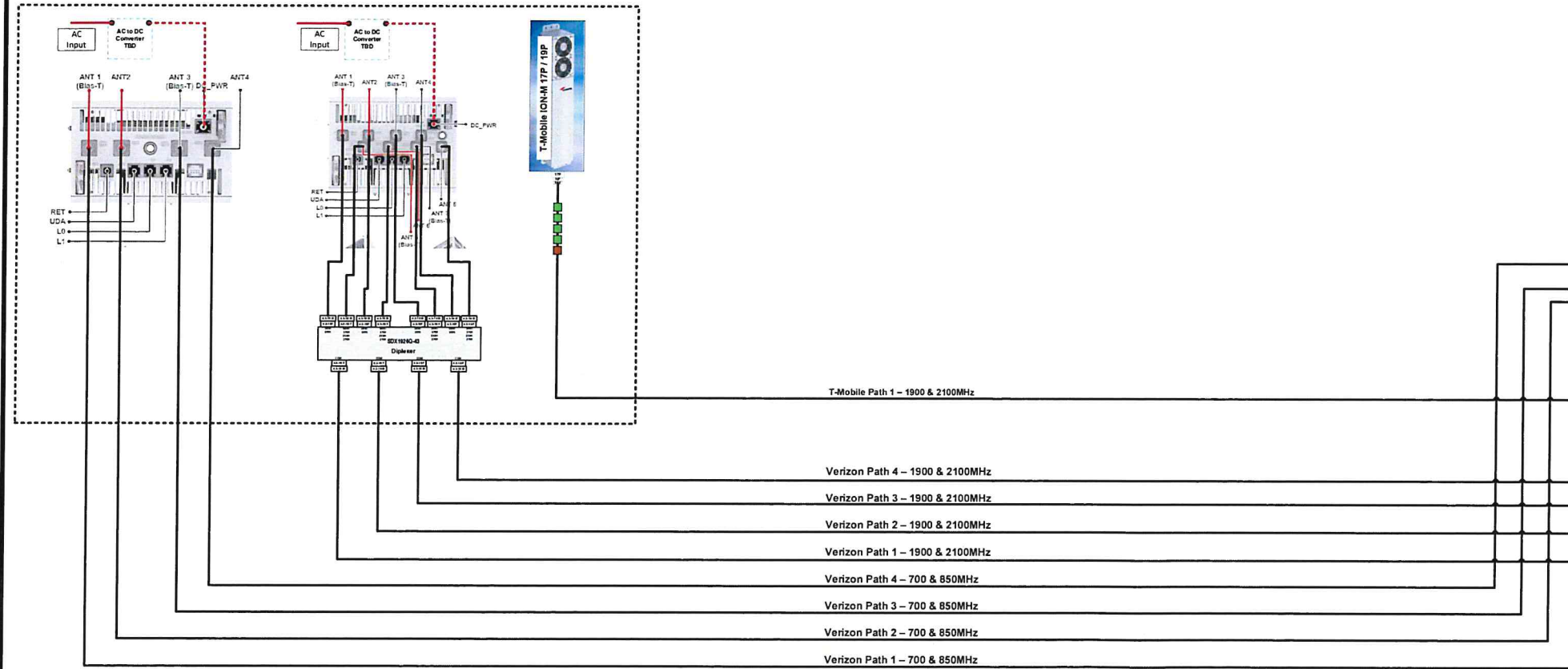
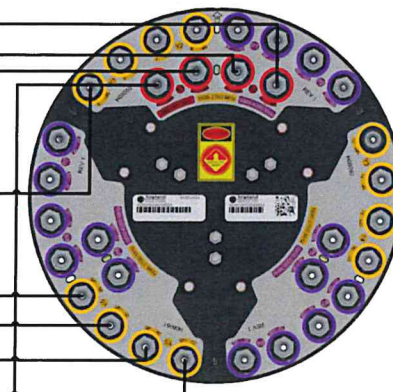
Scenario Name:-
Scenario 107

Project:- Princeton
Cluster Name:- Philadelphia Market

Designed by:- Prashant Patel
Customer:- Verizon
Date Created:- 10/31/2023
Revision:- 1
Sheet:- 107



New Antenna



Carrier	Band (MHz)	Color	Description	Path 1	Path 2	Comments
Verizon	700	1x Red	Brown	Brown/Brown		Alternatively named Cellular Band
	850	2x Red	Brown	Brown/Brown		Alternatively named PCS Band
	1900	3x Red	Brown	Brown/Brown		Alternatively named AWS or 1700 Band
	2100	4x Red	Brown	Brown/Brown		Alternatively named AWS or 1700 Band
AT&T	700	1x Blue	Brown	Brown/Brown		Alternatively named Cellular Band
	850	2x Blue	Brown	Brown/Brown		Alternatively named PCS Band
	1900	3x Blue	Brown	Brown/Brown		Alternatively named AWS or 1700 Band
	2100	4x Blue	Brown	Brown/Brown		Alternatively named WCS Band
T-Mobile	700	1x Green	Brown	Brown/Brown		
	1900	3x Green	Brown	Brown/Brown		Alternatively named PCS Band
	2100	4x Green	Brown	Brown/Brown		Alternatively named AWS or 1700 Band
Metro	2100	4x Purple	Brown	Brown/Brown		Alternatively named AWS or 1700 Band
Sprint	700	1x Yellow	Brown	Brown/Brown		
	850	2x Yellow	Brown	Brown/Brown		Alternatively named Cellular Band
	1900	3x Yellow	Brown	Brown/Brown		Alternatively named PCS Band
	2100	4x Yellow	Brown	Brown/Brown		Alternatively named AWS or 1700 Band
	2300	5x Yellow	Brown	Brown/Brown		Alternatively named WCS Band
	2500	6x Yellow	Brown	Brown/Brown		Alternatively named WCS Band

FREQUENCY	ARRAY	CONNECTOR	CONNECTOR TYPE	FREQUENCY	ARRAY	CONNECTOR	CONNECTOR TYPE
3300-4200 MHz	P1	17-18	(2x) 4.3-10 Female	696-960 MHz	R1	1-2	(2x) 4.3-10 Female
3300-4200 MHz	P2	19-20	(2x) 4.3-10 Female	696-960 MHz	R2	3-4	(2x) 4.3-10 Female
3300-4200 MHz	P3	21-22	(2x) 4.3-10 Female	1695-2700 MHz	Y1	5-6	(2x) 4.3-10 Female
3300-4200 MHz	P4	23-24	(2x) 4.3-10 Female	1695-2700 MHz	Y2	7-8	(2x) 4.3-10 Female
3300-4200 MHz	P5	25-26	(2x) 4.3-10 Female	1695-2700 MHz	Y3	9-10	(2x) 4.3-10 Female
3300-4200 MHz	P6	27-28	(2x) 4.3-10 Female	1695-2700 MHz	Y4	11-12	(2x) 4.3-10 Female
3300-4200 MHz	P7	29-30	(2x) 4.3-10 Female	1695-2700 MHz	Y5	13-14	(2x) 4.3-10 Female
3300-4200 MHz	P8	31-32	(2x) 4.3-10 Female	1695-2700 MHz	Y6	15-16	(2x) 4.3-10 Female

Peter J Tardy
PETER J TARDY, PE
NEW JERSEY PROFESSIONAL ENGINEER
DATE: 12/18/2025
NJ LIC NO. 41990

FPA
FRENCH & PARRELLO ASSOCIATES
Corporate Office:
1800 RI 34, Suite 101
Wall, New Jersey 07719
732.312.9800
FPAengineers.com
New Jersey • New York • Pennsylvania • Massachusetts

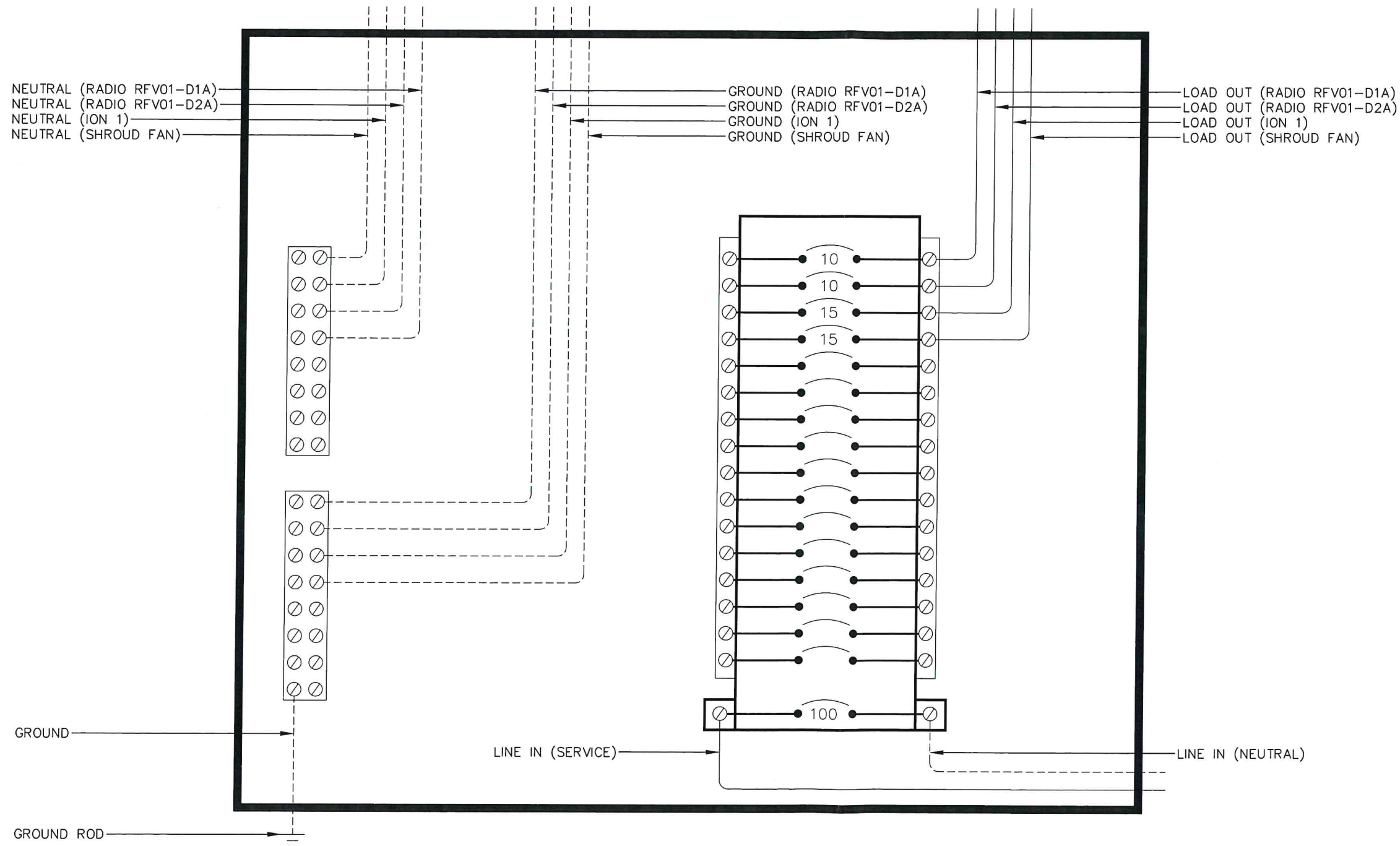
OWNER/DEVELOPER:
CROWN CASTLE
The Foundation for a Wireless World.

TITLE:
Crown Castle Fiber LLC
1288 STUART ROAD
PRINCETON, NJ
JURISDICTION: MUNICIPALITY OF PRINCETON

REV.	DATE	REVISION DESCRIPTION
2	02/21/24	REVISED PER COMMENTS
3	11/27/24	REVISED ANTENNA MODEL
4	09/10/25	REVISED POLE LOCATION
5	10/15/25	REVISED POLE LOCATION
6	12/18/25	ISSUED AS FINAL

DRAWN BY: ARC
CHECKED BY: ARC
APPROVED BY: PJT

PROJECT NUMBER: 2438C.129.003
NODE ID: PCT-006
SCU #: 402142
DATE DRAWN: 11/02/2023
SHEET: 7 of 8



Peter J Tardy

12/18/2025

PETER J TARDY, PE
NEW JERSEY PROFESSIONAL ENGINEER NJ LIC NO 41990

ENGINEER:



Corporate Office:
1800 Rt 34, Suite 101
Wall, New Jersey 07719
732.312.9800

FPAengineers.com

New Jersey New York Pennsylvania Massachusetts

OWNER/DEVELOPER:



TITLE:

Crown Castle Fiber LLC
1288 STUART ROAD
PRINCETON, NJ
JURISDICTION: MUNICIPALITY OF PRINCETON

REVISIONS

REV.	DATE	REVISION DESCRIPTION
2	02/21/24	REVISED PER COMMENTS
3	11/27/24	REVISED ANTENNA MODEL
4	09/10/25	REVISED POLE LOCATION
5	10/15/25	REVISED POLE LOCATION
6	12/18/25	ISSUED AS FINAL

DRAWN BY:	CHECKED BY:	APPROVED BY:
ARC	ARC	PJT

PROJECT NUMBER: 2438C.129.003

NODE ID: PCT-006

SCU #: 402142

DATE DRAWN: 11/02/2023

SHEET: 8 OF 8