



CAMBRIDGE HISTORICAL COMMISSION

831 Massachusetts Avenue, 2nd Fl., Cambridge, Massachusetts 02139
Telephone: 617 349 4683 TTY: 617 349 6112
E-mail: histcomm@cambridgema.gov URL: www.cambridgema.gov/Historic

APPLICATION FOR CERTIFICATE

1. The undersigned hereby applies to the Cambridge Historical Commission for a Certificate of (check one box): Appropriateness, Nonapplicability, or Hardship, in accordance with Chapter 40C of the Massachusetts General Laws and/or Chapter 2.78 of the Municipal Code.
2. Address of property: John F Kennedy ST Pole#11, Cambridge, Massachusetts
3. Describe the proposed alteration(s), construction or demolition in the space provided below:
(An additional page can be attached, if necessary).

Crown Castle Fiber LLC is proposing to install a small cell at existing city of Cambridge streetlight location in the Harvard Square Conservation District. Crown Castle is proposing to replace the current pole(28'-2") with a "look-a-like" (28'-2") pole for mouting the proposed equipment.

Proposed equipment for the location is (1) aphenol antenna, (1) apelio RCEN-SLIM-361812 enclosure, (2) comscope ion-ml radios, and (1) proposed PTS90X21 disconnect/load center. With proposed equipment pole height will be a total 32'-3". Please see attached Node Profile for photo sims as well as equipment cut sheets.

Proposed underground installation is for electric is installing from EMH #C125 63' of (1) 2" SCH 40 PVC for power to proposed Crown Castle handhole. For fiber installation of 21' of (1) 2" SCH 40 PVC for fiber from proposed Crown Castle handhole to Crown Castle handhole, then from the proposed handhole 37' of (2) 4" SCH 40 PVC to VZW MH #26/373 From the one proposed Crown Castle hand hole 5' of (1) 3" SCH 40 PVC will be intalled to proposed HSQ-009 Node pole location. Please see attached P-Plans for more detail on underground work.

I certify that the information contained herein is true and accurate to the best of my knowledge and belief.
The undersigned also attests that he/she has read the statements printed on the reverse.

Name of Property Owner of Record: Crown Castle Fiber LLC

Mailing Address: 3200 Horizon Drive Suite 150 King of Prussia, PA 19406

Telephone/Fax: 678-464-2027 E-mail: bryn.thornburgh@crowncastle.com

⇒ Signature of Property Owner of Record: *Bryn Thornburgh*
(Required field; the application will not be considered complete without the property owner's signature)

Name of proponent, if not record owner: _____

Mailing Address: _____

Telephone/Fax: _____ E-mail: _____

(for office use only):

Date Application Received: 9.10.21 Case Number: 4650 Hearing Date: _____

Type of Certificate Issued: _____ Date Issued: _____

Instructions for Completing this Application:

An application must be filed with the Cambridge Historical Commission (CHC) before work begins. Twelve (12) copies of the application should be attached to twelve (12) copies of supplementary material such as sketches, scale drawings, site plans, specifications, or photographs sufficient to enable the CHC to understand the details of the work proposed and to make a determination on the application. Plans no larger than 11" x 17" are preferred. Please submit reduced copies of plans if the originals are of a larger dimension. Do not use spiral bindings, plastic covers, or heavy stock (these will be removed prior to mailing). Double sided copies are encouraged to save paper and postage. See our website or call for a list of meeting dates and deadlines.

The CHC staff welcomes advance inquiries for interpretations or advice. Call 617/349-4683 for appointment. An application is considered incomplete without accompanying plans and drawings. The CHC reserves the right to determine an application incomplete at the time of hearing the application if it determines that the plans, drawings and other information submitted are not sufficient to enable it to determine whether to grant or deny a certificate.

Owners are urged to appear before the CHC in person or to designate an agent to act for them. The CHC will deem the agent to be authorized by the owner to make decisions regarding the extension or waiver of the period within which the CHC is otherwise required to make a determination on the application. All meetings are open to the public.

Administration of Historic Districts, Landmarks, and Protected Properties:

The administration of historic districts and landmarks is guided by the provisions of Ch. 40C of the Mass. General Laws and by Ch. 2.78 of the Code of the City Of Cambridge. Other properties may also be subject to CHC jurisdiction including properties with conditional variances and properties governed by individual preservation restrictions.

Any new construction, alteration of exterior architectural features, or demolition within an historic district or on the premises of a protected property or a designated landmark must be reviewed by the CHC. No building permit for such work on a protected property, designated landmark, or property within a historic district may be issued by the Inspectional Services Department until a certificate has been issued. The CHC must approve the alteration or construction of all structures, including signs, fences, walls, terraces, walks, driveways, light fixtures and the like, which are "open to view from a public street, public way, public park or public body of water," whether or not a building permit is required, and must approve changes in exterior color for properties within a historic district or as otherwise agreed.

Prior to each hearing, the CHC staff will take slides or digital photographs of the subject property in daylight with ordinary camera equipment for the purpose of documenting the publicly visible conditions of buildings and exterior architectural features for the CHC and the public to view at the hearing. More information can be provided on request.

The CHC issues three types of certificates. A Certificate of Appropriateness will be issued when the CHC has determined that the construction or alteration will be appropriate for or compatible with the preservation or protection of the historic district, designated landmark, or other protected property. A Certificate of Nonapplicability may be issued when an application does not involve an exterior feature, or when the exterior feature is not then subject to CHC review. A Certificate of Hardship may be issued when failure to approve an otherwise inappropriate project would involve substantial hardship to the applicant and the CHC determines that the project can be accomplished without substantial detriment to the purposes of the district, preservation restriction, or landmark designation.

The CHC considers each application on its own merits, and does not apply specific architectural guidelines. Landscaping with plant materials is not subject to CHC review unless it is planned in conjunction with alterations or new construction. The CHC must approve projects that are not incongruous with the historic aspects or the architectural characteristics of the protected property, landmark, or historic district.



PROJECT: VZW 4G NODE LOCATION

SITE CASCADE: HSQ-009

SCU# 464620

SITE TYPE: 28'-2" STREETLIGHT POLE

DRAWING DESCRIPTION: PERMIT DRAWING

SITE INFORMATION

LATITUDE (NAD83): 42°22'20.26"
LONGITUDE (NAD83): -71°07'13.74"
COUNTY: MIDDLESEX
ZONING JURISDICTION: CITY OF CAMBRIDGE
ZONING DISTRICT: OS - OPEN SPACE
POWER COMPANY: EVERSOURCE
TELEPHONE COMPANY: VERIZON NEW ENGLAND
ADA COMPLIANCE: FACILITY IS UNMANNED AND NOT FOR PUBLIC USE. ADA STATE REQUIREMENTS ARE MET OR ARE NOT APPLICABLE.

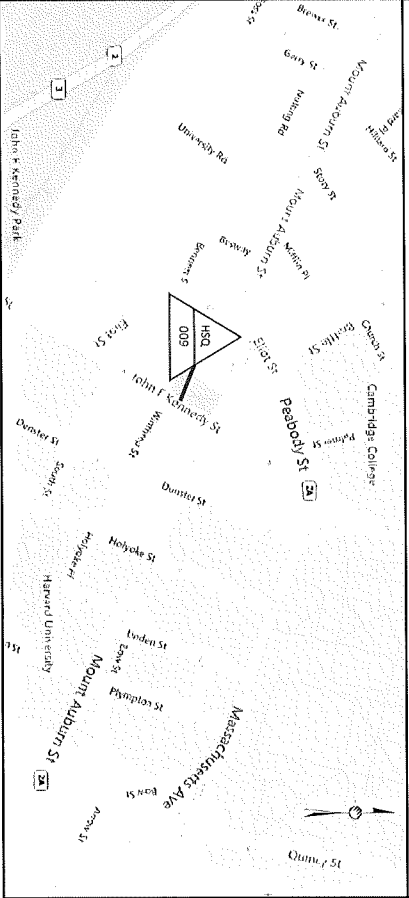
PROJECT TEAM

BACKHAUL PROVIDER: CROWN CASTLE FIBER
GROWN CASTLE PROJECT MANAGER: NAME SOPHIA BUCKLEY
GROWN CASTLE CONSTRUCTION MANAGER: NAME DAN WILLIAMS
CALL CROWN CASTLE SMALL CELL NOC AT (888) 693-0931 AND THE GROWN CASTLE CM PRIOR TO ACCESSING SITE

DO NOT SCALE DRAWINGS

SUBCONTRACTOR SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS & FIELD CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK ON BE RESPONSIBLE FOR SAME.

AREA MAP



1" = 400'

LOCATION MAP



1" = 200'

DRAWING INDEX

SH #	SHEET DESCRIPTION
1-1	TITLE SHEET NOTES
GN-1, 3, 4	GENERAL NOTES
A-1	OVERALL SITE PLAN
A-2	PROFILE
A-3, 4, 5, 6	PHOTOGRAPHIC SIMULATION
A-7	SHROUD DETAILS
A-8	EQUIPMENT DETAILS
A-9	4G ANTENNA DETAILS
A-10	4G MOUNT DETAILS
A-11	RIVE ANALYSIS AND STORAGE
A-12	FIBER DIAGRAM
E-1	ELECTRICAL WIRING DIAGRAM
E-2	DISCONNECT DETAILS
F-1	POLE SPECS DETAIL
F-3	STRUCTURAL FOUNDATION DETAIL

PROJECT EQUIPMENT

NEW GROWN CASTLE INSTALLED EQUIPMENT

- (1) AMPHERON, ZC4J3M7360X60F020 ANTENNA
- (1) APELO RICH-SLM-561812 ENCLOSURE
- (2) COMMSCOPE ION-M/L RADIOS

APPLICABLE CODE

ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY LOCAL GOVERNING AUTHORITIES, NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES:

- INTERNATIONAL BUILDING CODE
- INTERNATIONAL MECHANICAL CODE
- AS/NZS 2212-22 STRIKE PROTECTION CODE
- INTERNATIONAL PLUMBING CODE
- NATIONAL ELECTRICAL CODE
- 2017 NATIONAL ELECTRICAL
- 2017 NATIONAL ELECTRICAL SAFETY CODE

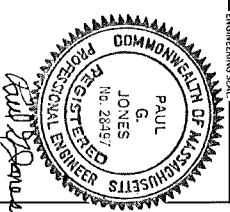
THE UTILITIES AS SHOWN ON THIS SET OF DRAWINGS WERE DEVELOPED BY THE ENGINEER AND THE ENGINEER HAS CONDUCTED A VISUAL INSPECTION OF THE UTILITIES IN THIS AREA. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL UTILITIES (WHETHER SHOWN OR NOT) AND PROTECT SAID UTILITIES FROM ANY DAMAGE CAUSED BY CONTRACTOR'S ACTIVITIES.

KNOW WHAT'S BELOW CALL BEFORE YOU DIG IT'S FREE AND IT'S THE LAW
 CALL 811 OR 1-888-DIG-5AVE



PLANS PREPARED BY:
PIKE TELECOM
 21 Oxford St
 Cambridge, MA 02138
 www.piketelcom.com
 1-508-337-7600

FOR PERMITTING PURPOSES ONLY



7/21/2021

DRAWING NOTES:
 THESE DOCUMENT'S ARE CONFIDENTIAL CROWN CASTLE AND MAY NOT BE REPRODUCED, DISSEMINATED OR REDISTRIBUTED WITHOUT THE EXPRESS WRITTEN CONSENT OF CROWN CASTLE.

REVISIONS:

REV	DESCRIPTION	BY	DATE
0	ORIGINAL	MS	04/29/21
1	UPDATE EQUIPMENT	DL	05/06/21

SITE CASCADE: HSQ-009
SCU# 464620

SITE ADDRESS: JOHN F KENNEDY ST
 CAMBRIDGE, MA 02138
POLE# 11

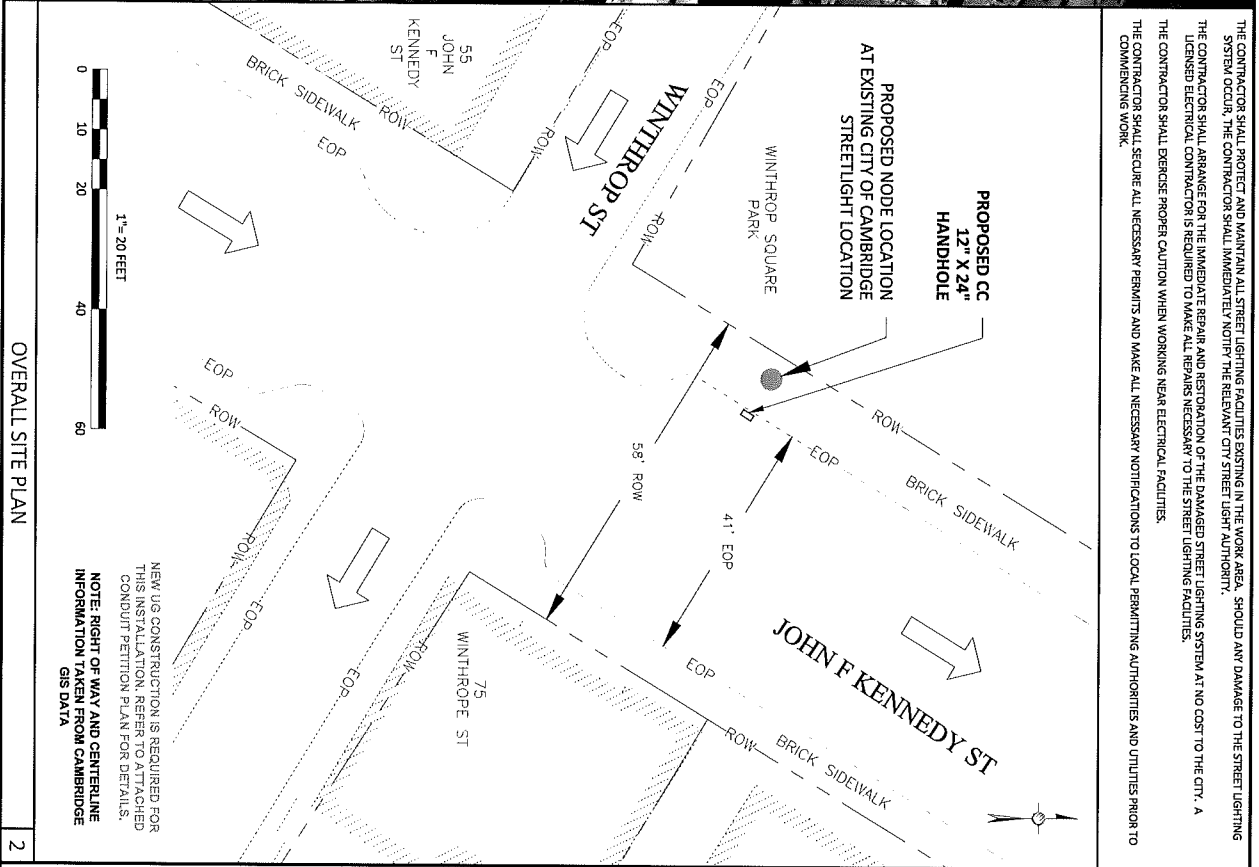
SHEET DESCRIPTION: TITLE SHEET

SHEET NUMBER: T-1



AERIAL SITE LOCATION

1"=50' 1



OVERALL SITE PLAN

2

THE CONTRACTOR SHALL PROTECT AND MAINTAIN ALL STREET LIGHTING FACILITIES EXISTING IN THE WORK AREA. SHOULD ANY DAMAGE TO THE STREET LIGHTING SYSTEM OCCUR, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE RELEVANT CITY STREET LIGHT AUTHORITY.

THE CONTRACTOR SHALL ARRANGE FOR THE IMMEDIATE REPAIR AND RESTORATION OF THE DAMAGED STREET LIGHTING SYSTEM AT NO COST TO THE CITY. A LICENSED ELECTRICAL CONTRACTOR IS REQUIRED TO MAKE ALL REPAIRS NECESSARY TO THE STREET LIGHTING FACILITIES.

THE CONTRACTOR SHALL EXERCISE PROPER CAUTION WHEN WORKING NEAR ELECTRICAL FACILITIES.

THE CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS AND MAKE ALL NECESSARY NOTIFICATIONS TO LOCAL PERMITTING AUTHORITIES AND UTILITIES PRIOR TO COMMENCING WORK.

PLANS PREPARED FOR:
CROWN CASTLE

PLANS PREPARED BY:
PIKE TELECOM
21 Oxford Rd
Marlborough, MA 01824
Tel: 508-337-7500

FOR PERMITTING PURPOSES ONLY

ENGINEERING SEAL:

DRAWING NOTICE:
THESE DOCUMENTS ARE CONFIDENTIAL AND ARE THE SOLE PROPERTY OF PIKE TELECOM. ANY REPRODUCTION, REPRODUCTION, OR REDISTRIBUTION WITHOUT THE EXPRESS WRITTEN CONSENT OF CROWN CASTLE.

REV	DESCRIPTION	BY	DATE
0	ORIGINAL	MS	04/19/21
1	UPDATE EQUIPMENT	GL	05/06/21

SITE CASCADE:
HSQ-009
SCU# 464620

SITE ADDRESS:
JOHN F KENNEDY ST
CAMBRIDGE, MA 02138
POLE# 11

SHEET DESCRIPTION:
OVERALL SITE PLAN

SHEET NUMBER:
A-1



EXISTING PHOTOGRAPHIC VIEW - FACING NORTHWEST

1



PROPOSED PHOTOGRAPHIC SIMULATION - FACING NORTHWEST

2

PLANS PREPARED FOR:
CROWN CASTLE

PLANS PREPARED BY:
PIKE TELECOM
 21 Oxford Rd
 Needham Heights, MA 02461
 1-508-337-7200

FOR PERMITTING PURPOSES ONLY

ENGINEERING SCALE:

DRAWING NOTICE:
 THESE DOCUMENTS ARE CONFIDENTIAL AND NOT BE LOANED, REPRODUCED, COPIED, REDISTRIBUTED WITHOUT THE EXPRESS WRITTEN CONSENT OF CROWN CASTLE.

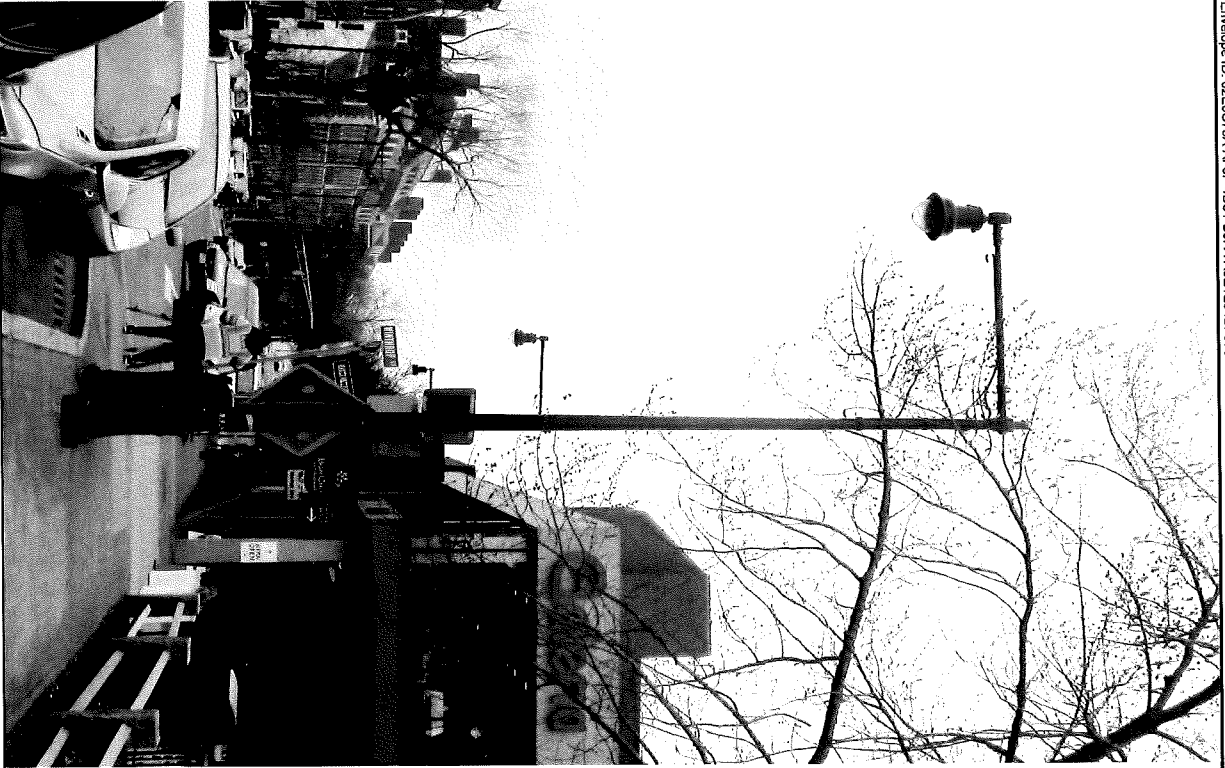
REV	DESCRIPTION	BY	DATE
0	ORIGINAL	MS	04/19/22
1	UPDATE EQUIPMENT	QL	02/06/23

DIMENSIONS:	

SITE CASCADE:
HSQ-009
SCU# 464620

SITE ADDRESS:
 JOHN F. KENNEDY ST
 CAMBRIDGE, MA 02138
 POLE# 11

PHOTOGRAPHIC SIMULATION
 SHEET NUMBER:
A-3



EXISTING PHOTOGRAPHIC VIEW - FACING SOUTHWEST

1



PROPOSED PHOTOGRAPHIC SIMULATION - FACING SOUTHWEST

2

PLANS PREPARED FOR:
CROWN CASTLE

PLANS PREPARED BY:
PIKE TELECOM
 21 Oxford St
 Mansfield, MA 02048
 www.piketelcom.org
 1-508-337-7188

FOR PERMITTING PURPOSES ONLY

ENGINEERING SEAL:

DRAWING NOTICE:
 THESE DOCUMENTS ARE CONFIDENTIAL AND ARE THE SOLE PROPERTY OF CROWN CASTLE AND MAY NOT BE REPRODUCED, DISSEMINATED OR DISTRIBUTED WITHOUT THE EXPRESS WRITTEN CONSENT OF CROWN CASTLE

REVISIONS:

REV	DESCRIPTION	BY	DATE
0	ORIGINAL	MS 04/09/21	
1	UPDATE EQUIPMENT	GL 05/06/21	

SITE CODE: **HSQ-009**
 SCU# **464620**

SITE ADDRESS:
JOHN F KENNEDY ST
CAMBRIDGE, MA 02138
POL# 11

SHEET DESCRIPTION:
PHOTOGRAPHIC SIMULATION

SHEET NUMBER:
A-4



EXISTING PHOTOGRAPHIC VIEW - FACING NORTHEAST

1



PROPOSED PHOTOGRAPHIC SIMULATION - FACING NORTHEAST

2

PLANS PREPARED FOR:
CROWN CASTLE

PLANS PREPARED BY:
PIKE TELECOM
 21 Oxford Rd
 Needham Heights, MA 02461
 www.piketelcom.com
 1-508-337-7090

FOR PERMITTING PURPOSES ONLY

ENGINEERING SEAL:

DRAWING NOTICE:
 THESE DOCUMENTS ARE CONFIDENTIAL. ANY REUSE OR DISSEMINATION OF THESE DOCUMENTS WITHOUT THE WRITTEN CONSENT OF CROWN CASTLE IS PROHIBITED. ANY REUSE OR DISSEMINATION OF THESE DOCUMENTS WITHOUT THE WRITTEN CONSENT OF CROWN CASTLE IS PROHIBITED. ANY REUSE OR DISSEMINATION OF THESE DOCUMENTS WITHOUT THE WRITTEN CONSENT OF CROWN CASTLE IS PROHIBITED.

REV	DESCRIPTION	BY	DATE
0	ORIGINAL	MS/DV/19/21	
1	UPDATE EQUIPMENT	GL/D5/06/21	

REVISIONS	BY	DATE

SITE OSCODE: HSCQ-009
 SCU# 484620
 SITE ADDRESS: JOHN F KENNEDY ST
 CAMBRIDGE, MA 02138
 POLE# 11

SHEET DESCRIPTION: PHOTOGRAPHIC SIMULATION
 SHEET NUMBER: A-5



EXISTING PHOTOGRAPHIC VIEW - FACING WEST

1



PROPOSED PHOTOGRAPHIC SIMULATION - FACING WEST

2

PLANS PREPARED FOR:

CROWN CASTLE

PLANS PREPARED BY:

PIKE TELECOM

31 Oxford St
Boston, MA 02114
www.piketelecom.org
1-508-337-7000

FOR PERMITTING PURPOSES ONLY

ENGINEERING SCALE _____

DRAWING NOTES:

THESE DOCUMENTS ARE CONFIDENTIAL. CROWN CASTLE AND ANY NOT BE REPRODUCED, DISSEMINATED OR REDISTRIBUTED WITHOUT THE EXPRESS WRITTEN CONSENT OF CROWN CASTLE.

REVISIONS:

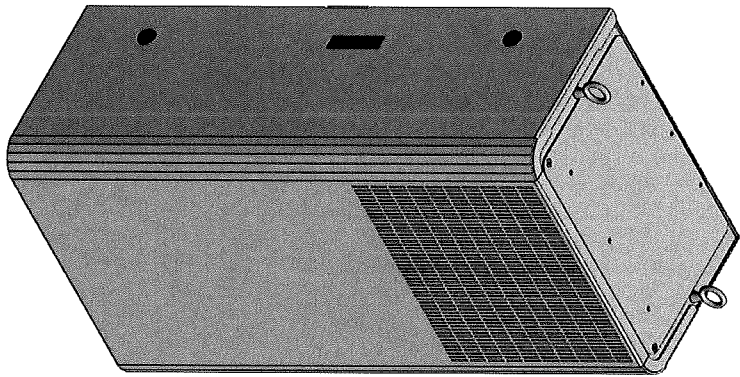
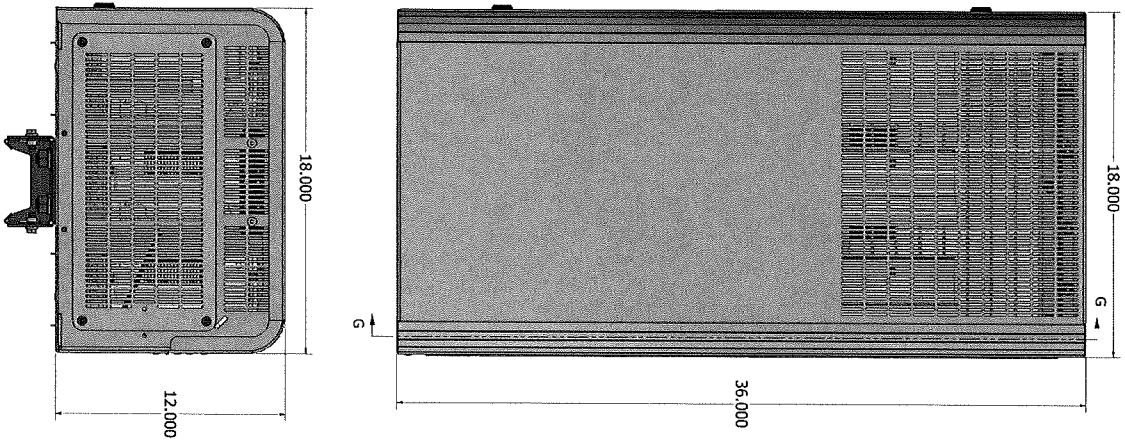
REV	DESCRIPTION	BY	DATE
0	ORIGINAL	MS	04/19/21
1	UPDATE EQUIPMENT	GL	05/06/21

SITE OSCODE: **HSQ-009**
SCU# 464620

SITE ADDRESS:
JOHN F KENNEDY ST
CAMBRIDGE, MA 02138
POL# 11

SHEET DESCRIPTION:
PHOTOGRAPHIC SIMULATION

SHEET NUMBER:
A-6



RCEN-SLIM-361812

1

PLANS PREPARED FOR:



21 Cabot Rd
Malden, MA 02148
www.piketelcom.com
1-508-337-7700

PLANS PREPARED BY:

ENGINEERING SEAL:

DRAWING NOTICE:

THESE DOCUMENTS ARE CONFIDENTIAL AND NOT BE LOANED, REPRODUCED, COPIED, REPRODUCED, DISSEMINATED OR REDISTRIBUTED WITHOUT THE EXPRESS WRITTEN CONSENT OF CROWN CASTLE

REVISIONS:

REV	DESCRIPTION	BY	DATE
0	ORIGINAL	MS	04/19/21
1	UPDATE EQUIPMENT	GL	05/06/21

SITE OR CODE:

HSQ-009
SCU# 464520

SITE ADDRESS:

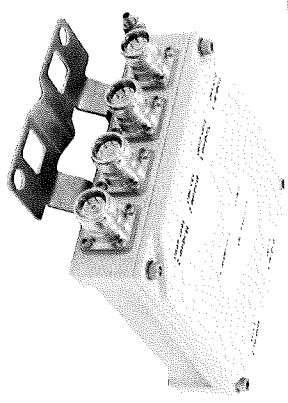
JOHN F KENNEDY ST
CAMBRIDGE, MA 02138
POLE# 11

SHEET DESCRIPTION:

SHROUD DETAILS

SHEET NUMBER:

A-7



CBCG26T-DL-4310 | E11F13P04
Twin Diplexer 555-960/1695-2690MHz, DC Low, 4.3-10

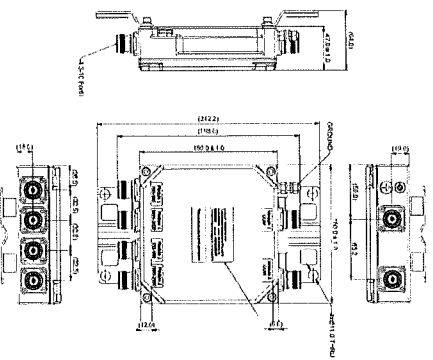
- Full performance in a fraction of the size
- High power handling
- Includes 600 MHz and AWS-3/4 bands
- New 4.3-10 connectors for improved PIM performance and size reduction
- dc/AISG pass-through on low frequency port

Mechanical Specifications

RF Connector Interface 4.3-10 Female
RF Connector Interface Body Style Long neck
Color Gray
Finish Painted

Dimensions

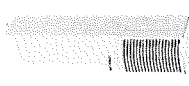
Height 150.0 mm | 5.9 in
Width 150.0 mm | 5.9 in
Depth 47.0 mm | 1.9 in
Weight 1.8 kg | 4.0 lb



TWIN DIPLEXER (CBCG26T-DL-4310 / E11F13P04)

1

7825719-0002 | CAP H 7E/80-85/17E/19 F-AC-F1



Carrier Access Point with 4-Band Support for High Power LMR 750, USA 700, USA 750, SMR 800, CEL 850, AWS 1700 and PCS 1900 Applications, Fiber Fed with Fan Kit

Product Classification

Product Type Access point
Product Brand ERA@

General Specifications

Minimum Software Requirement ION.E.SW.V27
Mounting Pole | Wall
Note Detailed Product Specifications are available. Please contact your local CommsScope representative.

Power Type

RF Antenna Port Interface High
RF Antenna Port, quantity 4.3-10 Female
RF Antenna Port, quantity 1

Dimensions

Height 824 mm | 32.441 in
Width 176 mm | 6.929 in
Depth 220 mm | 8.661 in

Electrical Specifications

ALC Default Threshold -45 dBm
Electrical Safety Standard IEC 62368 | UL 62368
Electrical Safety Standard Note This is not a consumer device. Additional information for US FCC on product label.
Electromagnetic Compatibility (EMC) EN 301489
Fitness, Inband link >2 dB
Impedance 50 ohm
License Band AWS 1700 | CEL 850 | LMR 750 | PCS 1900 | SMR 800 | USA 700 | USA

CAP-H 7E/80-85/17E/19 F-AC-F1

2

PLANS PREPARED BY: **CROWN CASTLE**

PLANS PREPARED BY: **PIKE TELECOM**
 21 Oxford St
 Mansfield, MA 02048
 www.piketec.com
 1-508-337-7500

FOR PERMITTING PURPOSES ONLY

ENGINEERING SCALE: _____

DRAWING NOTICE: THESE DOCUMENTS ARE CONFIDENTIAL AND ARE THE SOLE PROPERTY OF CROWN CASTLE AND MAY NOT BE REPRODUCED, DISSEMINATED OR REDISTRIBUTED WITHOUT THE EXPRESS WRITTEN CONSENT OF CROWN CASTLE.

REV	DESCRIPTION	BY	DATE
0	ORIGINAL	MS/PA/19/21	
1	UPDATE EQUIPMENT	GL/SS/06/21	

REVISIONS:

REV	DESCRIPTION	BY	DATE

SITE ADDRESS: JOHN F. KENNEDY ST
 CAMBRIDGE, MA 02138
POLE# 11

SITE CAGECODE: HSQ-009
 SCU# 464620

EQUIPMENT DETAILS

SHEET NUMBER: **A-8**



2C4U3MT360X06FxyS0

18-Port Canister Antenna

(2x) 696-960 | (4x) 1695-2700 | (2x) 3550-3700 | (1x) 5150-5925 MHz
OMNI | **24 IN** | **FIXED TILT**

- Features**
- 5G Pseudo Omni configuration with 18 connectors
 - Ideal for Small Cell / DAS applications
 - This antenna meets the requirements of the LNIII
 - Available for order with a grey, brown or black radome

FIXED TILT

Frequency Range (MHz)	LOW				MID				CBRS				LAA	
	Array	R1	R2	Y1	Y2	Y3	Y4	P1	P2	O1	O2	O3	O4	O5
Frequency Sub-Range	696-806				1695-2700				3550-3700				5150-5925	
Connector	4 PORTS				8 PORTS				4 PORTS				2 PORTS	
Polarization	XPOL				XPOL				XPOL				XPOL	
Azimuth Beamwidth (avg)	360°				360°				360°				360°	
Electrical Beamtilt	0°				2°, 4°, 6°				0°				0°	
Configuration	OMNI CONFIGURATION													
Total Connector Count	18 PORTS													
Connector Type	4.3-10 FEMALE													
Dimensions	610 x Ø371 mm (24.0 x Ø14.6 in)													
Radome Color Options	GREY, BROWN or BLACK													

ELECTRICAL SPECIFICATIONS

Frequency Range	Low Band	Mid Band	High Band
Frequency Range	696-806	1695-2700	3550-3700
Frequency Sub-Range	696-806	1695-2700	3550-3700
Polarization	XPOL		
Gain	4.2 ± 0.9	4.2 ± 0.9	3.9 ± 0.7
MAX	5.1	5.1	4.6
Azimuth Beamwidth (3 dB)	360°		
Elevation Beamwidth (3 dB)	96.9° ± 26.7°		
Electrical Beamtilt	0°		
Impedance	50 Ohms		
VSWR	≤ 1.5:1		
Passive Intermodulation	≤ -153		
3rd Order for 2x20 W Carriers	N/A		
Upper Sideband Suppression	25		
Isolation	> 28		
Input Power	500W		

2C4U3MT360X06FxyS0 | 1

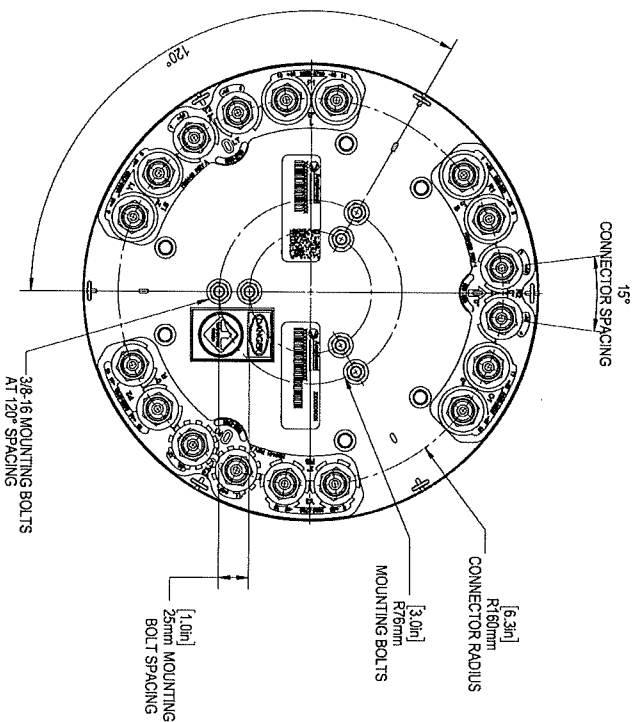


2C4U3MT360X06FxyS0

18-Port Canister Antenna

(2x) 696-960 | (4x) 1695-2700 | (2x) 3550-3700 | (1x) 5150-5925 MHz
OMNI | **24 IN** | **FIXED TILT**

FIXED TILT



2C4U3MT360X06FxyS0 - PORT DIAGRAM | 2



FOR PERMITTING PURPOSES ONLY

ENGINEERING SEAL

DRAWING NOTICE:
 THESE DOCUMENTS ARE CONFIDENTIAL AND ARE THE PROPERTY OF CROWN CASTLE. ANY REPRODUCTION, DISTRIBUTION OR REUSE OF THESE DOCUMENTS WITHOUT THE EXPRESS WRITTEN CONSENT OF CROWN CASTLE IS PROHIBITED.

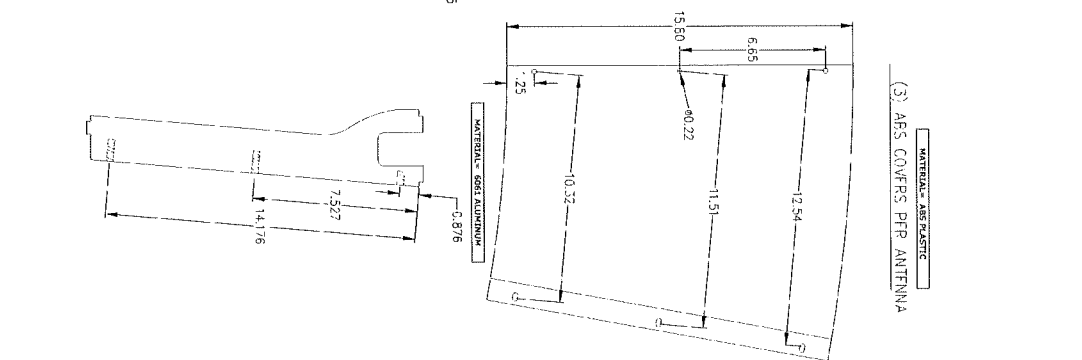
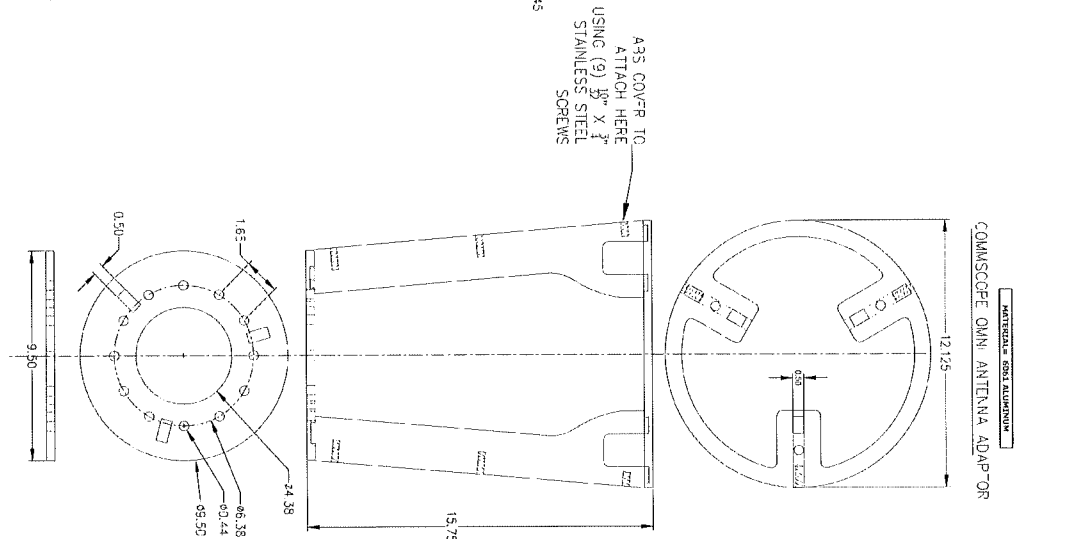
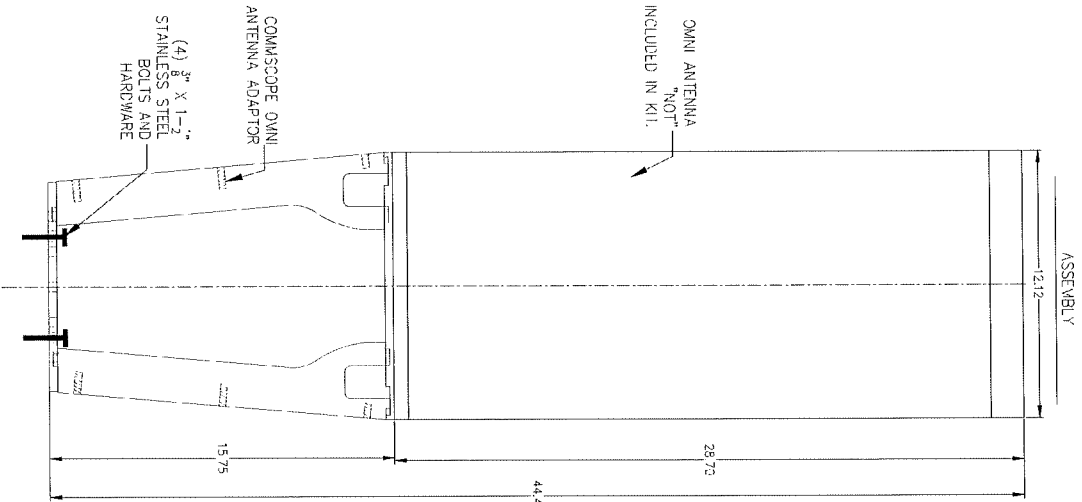
REV	DESCRIPTION	BY	DATE
0	ORIGINAL	MS PVL/19/22	
1	UPDATE EQUIPMENT	GL 55/06/22	

SITE PACKAGE:
 HSQ-009
 SCU# 464620

SITE ADDRESS:
 JOHN F. KENNEDY ST
 CAMBRIDGE, MA 02138
 POLE# 11

SHEET DESCRIPTION:
 4G ANTENNA DETAILS

SHEET NUMBER:
 A-9



RED HIDDEN LINES Represent any line of an object that is hidden from view.
 BLUE SOLID LINES Represent any line of an object that is visible in a particular view.
 BLACK HIDDEN LINES Represent hidden lines that are "not" included in the view.

ANTENNA KIT 008H (COMMSCOPE) 1

PLANS PREPARED FOR:

CROWN CASTLE

PLANS PREPARED BY:

PIKE TELECOM

31 Oxford Rd
 Mansfield, MA 02048
 www.piketec.com
 1-508-337-7500

FOR PERMITTING PURPOSES ONLY

ENGINEERING SEAL

DRAWING NOTES:

1. THESE DOCUMENTS ARE CONFIDENTIAL AND THE PROPERTY OF CROWN CASTLE AND MAY NOT BE REPRODUCED, DISSEMINATED OR REDISTRIBUTED WITHOUT THE EXPRESS WRITTEN CONSENT OF CROWN CASTLE.

REVISIONS:

REV	DESCRIPTION	BY	DATE
0	ORIGINAL	MS	04/19/21
1	UPDATE EQUIPMENT	GL	05/06/21

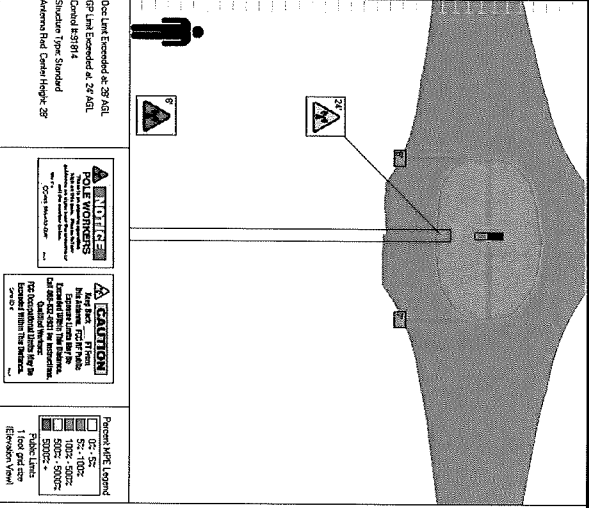
SITE CODE: HSC-009
 SCU# 464620

SITE ADDRESS: JOHN F. KENNEDY ST
 CAMBRIDGE, MA 02138
 POLE# 11

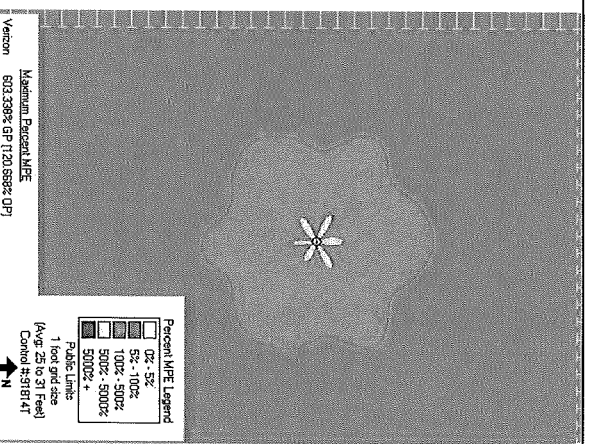
SHEET DESCRIPTION: 4G MOUNT BRACKET

SHEET NUMBER: A-10

NOTE:
EME ANALYSIS PROVIDED BY CROWN CASTLE



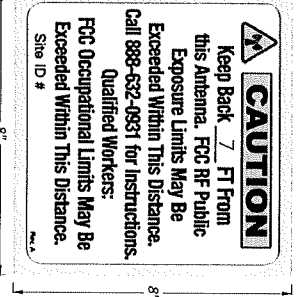
NOTE:
COVERAGE ANALYSIS PROVIDED BY CROWN CASTLE



NOTE:
COVERAGE ANALYSIS PROVIDED BY CROWN CASTLE

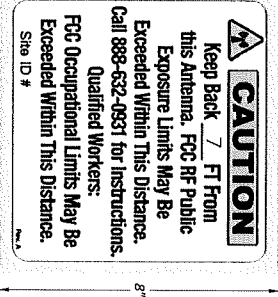
EME PROFILE GRAPHIC 1

COVER MAP 2



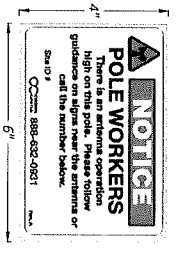
NOTE:
THESE "CAUTION" SIGNS MUST BE POSTED ON BOTH THE OWNI ANTENNA AND THE MOUNTING BRACKET SHOULD ANY TIME THERE IS AN AREA THAT EXCEEDS THE GENERAL PUBLIC (GP) EXPOSURE LIMIT.
THE KEEP-BACK DISTANCE FOR THE GP MUST BE FILLED IN ON THE SIGN.
THE EME REPORT MUST CLEARLY STATE THAT GP LIMIT KEEP-BACK DISTANCE WHEN IT IDENTIFIES THIS SIGN FOR POSTING.
IF SIGNS ARE MISSING OR ILLIBLE, CONTACT CROWN CASTLE ON PRIOR TO ACCESSING SITE.

(2) CAUTION SIGNS - POLE TOP



NOTE:
THESE "CAUTION" SIGNS MUST BE POSTED ON THE POLE AT 7 FT AS WELL AS DETERMINED BY CROWN CASTLE 5-6 EME ANALYSIS. ANY TIME THERE IS AN AREA THAT EXCEEDS THE GENERAL PUBLIC (GP) EXPOSURE LIMIT.
THE KEEP-BACK DISTANCE FOR THE GP MUST BE FILLED IN ON THE SIGN.
THE EME REPORT MUST CLEARLY STATE THAT GP LIMIT KEEP-BACK DISTANCE WHEN IT IDENTIFIES THIS SIGN FOR POSTING.
IF SIGN IS MISSING OR ILLIBLE, CONTACT CROWN CASTLE ON PRIOR TO ACCESSING SITE.

CAUTION SIGN - CABINET LEVEL



NOTE:
THESE "NOTICE" SIGNS MUST BE POSTED NEAR THE BOTTOM OF THE POLE OR ON THE SHOULD ANY TIME THERE IS ZONE 1 OR HIGHER. THE EME REPORT MUST CLEARLY STATE THAT GP LIMIT KEEP-BACK DISTANCE WHEN IT IDENTIFIES THIS SIGN FOR POSTING.
IF SIGN IS MISSING OR ILLIBLE, CONTACT CROWN CASTLE ON PRIOR TO ACCESSING SITE.

NOTICE SIGN - AFFIX TO CABINET

PLANS PREPARED BY:
CROWN CASTLE

PLANS PREPARED BY:
PIKE TELECOM
21 Oxford Rd
Malden, MA 02148
www.piketec.com
1-800-337-7600

FOR PERMITTING PURPOSES ONLY

ENGINEERING SEAL:

DRAWING NOTES:

THESE DOCUMENTS ARE CONFIDENTIAL. ANY REPRODUCTION, DISTRIBUTION, OR REPRODUCTION, DISSEMINATION OR REDISTRIBUTION WITHOUT THE EXPRESS WRITTEN CONSENT OF CROWN CASTLE.

REV	DESCRIPTION	BY	DATE
0	ORIGINAL	NS	04/19/21
1	UPDATE EQUIPMENT	GL	05/06/21

SITE QUADE:
HSQ-009
SCU# 464920

SITE ADDRESS:
JOHN F. KENNEDY ST.
CAMBRIDGE, MA 02138
POLE# 11

EME ANALYSIS AND SIGNAGE

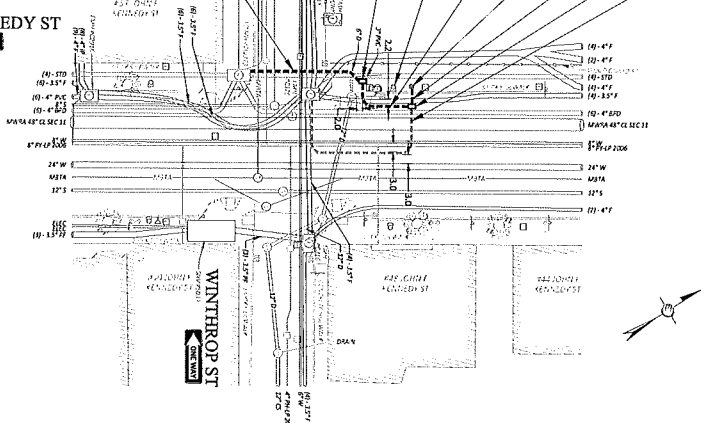
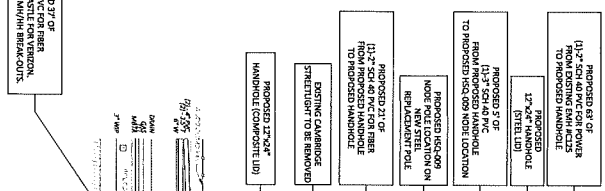
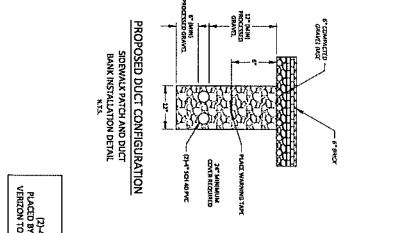
SHEET NUMBER:
A-11

GENERAL NOTES

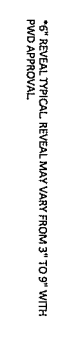
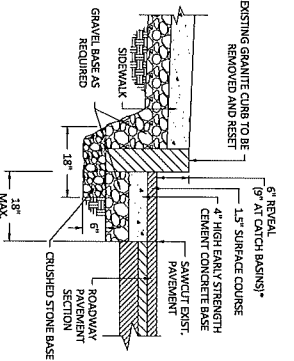
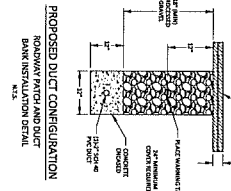
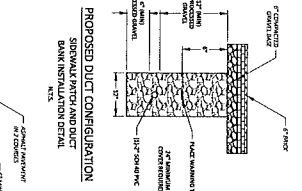
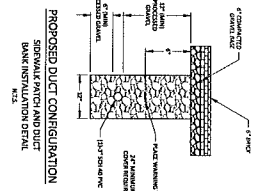
1. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE MANNER ONLY AND HAVE NOT BEEN VERIFIED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO BEGINNING ANY EXCAVATION WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL EXCAVATION WORK AND SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL EXCAVATION WORK AND SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL EXCAVATION WORK AND SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL EXCAVATION WORK.
2. WHEN AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE APPROXIMATELY DETERMINED BY THE CONTRACTOR AND THE LOCATION AND THE DEPTH OF THE UTILITY SHALL BE APPROXIMATELY DETERMINED BY THE CONTRACTOR.
3. THE CONTRACTOR SHOULD MAINTAIN A SEPARATION OF 36 INCHES MIN. WHEN CROSSING EXISTING WATER FACILITIES.
4. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERNATION AND THE UTILITY COMPANY, THE TELEPHONE AND ANY OTHER PRIVATE UTILITIES AND THE UTILITY COMPANY.
5. THE CONTRACTOR SHALL NOT DISBURSE BRICK.
6. ALL EXCAVATION OPERATIONS SHALL BE CONTROLLED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT NO CHARGE TO THE OWNER.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PLACING AND MAINTAINING THE EXCAVATION SHIELDING TO PROTECT ALL EXISTING UTILITIES AND TO PROTECT THE EXCAVATION TO GOOD WORKING CONDITION AS REQUIRED BY THE LATEST EDITIONS OF THE NATIONAL FIRE PROTECTION ASSOCIATION.
8. ALL EXISTING STATE, COUNTY, CITY, AND TOWN LOCATION LINES AND PRIVATE LINES SHALL BE MAINTAINED AND PROTECTED BY THE CONTRACTOR. ALL EXISTING STATE, COUNTY, CITY, AND TOWN LOCATION LINES AND PRIVATE LINES SHALL BE MAINTAINED AND PROTECTED BY THE CONTRACTOR.
9. THE CONTRACTOR SHALL PROTECT AND SUPPORT ALL EXISTING UTILITY LINES AND SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES AND SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES.
11. ALL EXISTING STATE, COUNTY, CITY, AND TOWN LOCATION LINES AND PRIVATE LINES SHALL BE MAINTAINED AND PROTECTED BY THE CONTRACTOR.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES AND SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES AND SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES AND SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES AND SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES.

ALL FIELD DATA ACQUIRED USING TOTAL STATION SURVEY EQUIPMENT

CONTRACTOR TO PRESERVE BRICK SIDEWALK AND RESTORE TO ORIGINAL CONDITION IN TRENCH AREA



FOR PERMITTING ONLY



LEGEND

1	ELECTRICAL DUCT	1	CONCRETE DUCT
2	TELEPHONE DUCT	2	CONCRETE DUCT
3	TELEPHONE DUCT	3	CONCRETE DUCT
4	TELEPHONE DUCT	4	CONCRETE DUCT
5	TELEPHONE DUCT	5	CONCRETE DUCT
6	TELEPHONE DUCT	6	CONCRETE DUCT
7	TELEPHONE DUCT	7	CONCRETE DUCT
8	TELEPHONE DUCT	8	CONCRETE DUCT
9	TELEPHONE DUCT	9	CONCRETE DUCT
10	TELEPHONE DUCT	10	CONCRETE DUCT
11	TELEPHONE DUCT	11	CONCRETE DUCT
12	TELEPHONE DUCT	12	CONCRETE DUCT
13	TELEPHONE DUCT	13	CONCRETE DUCT
14	TELEPHONE DUCT	14	CONCRETE DUCT
15	TELEPHONE DUCT	15	CONCRETE DUCT
16	TELEPHONE DUCT	16	CONCRETE DUCT
17	TELEPHONE DUCT	17	CONCRETE DUCT
18	TELEPHONE DUCT	18	CONCRETE DUCT
19	TELEPHONE DUCT	19	CONCRETE DUCT
20	TELEPHONE DUCT	20	CONCRETE DUCT

PROFESSIONAL ENGINEER

PAUL G. BREEN
No. 00000000000000000000
STATE OF MASSACHUSETTS
COMMISSION EXPIRES 12/31/2024

8/2/2024

PENDANT STREETLIGHT

PIKE TELECOM

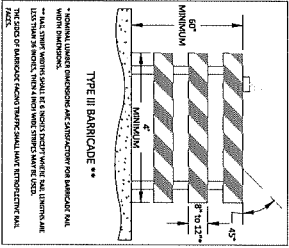
31 Central St
Waltham, MA 02451
Phone: 781-252-7200
Fax: 781-252-7200

CROWN CASTLE

1100 Main St
Waltham, MA 02451
Phone: 781-252-7200
Fax: 781-252-7200

PROJECT INFORMATION

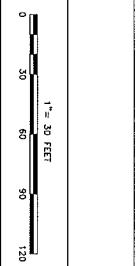
PROJECT NO: HSC-009 - 11-K ST AT WINTHROP ST
OWNER: PIKE TELECOM
DATE: 08/20/24



NO.	DESCRIPTION	DATE

EXISTING UTILITIES SHOWN ARE APPROXIMATE AND CONTRACTOR SHALL VERIFY THE LOCATION OF ALL PUBLIC AND PRIVATE UTILITIES PRIOR TO BEGINNING ANY CONSTRUCTION.

DISPATCH
 NEWLY PRINTED SIGNAGE
 17" X 26" AND 17" X 30"
 CALL SITE OR 1-888-DIG-SAFE



NOTE: CONTRACTOR TO PLACE SIGNAGE AND TRAFFIC CONTROL DEVICES PER THE MAINTENANCE MANUAL.

NOTE: POLICE DETAIL OFFICERS TO SET UP AND REMOVE AS REQUIRED IN FIELD.

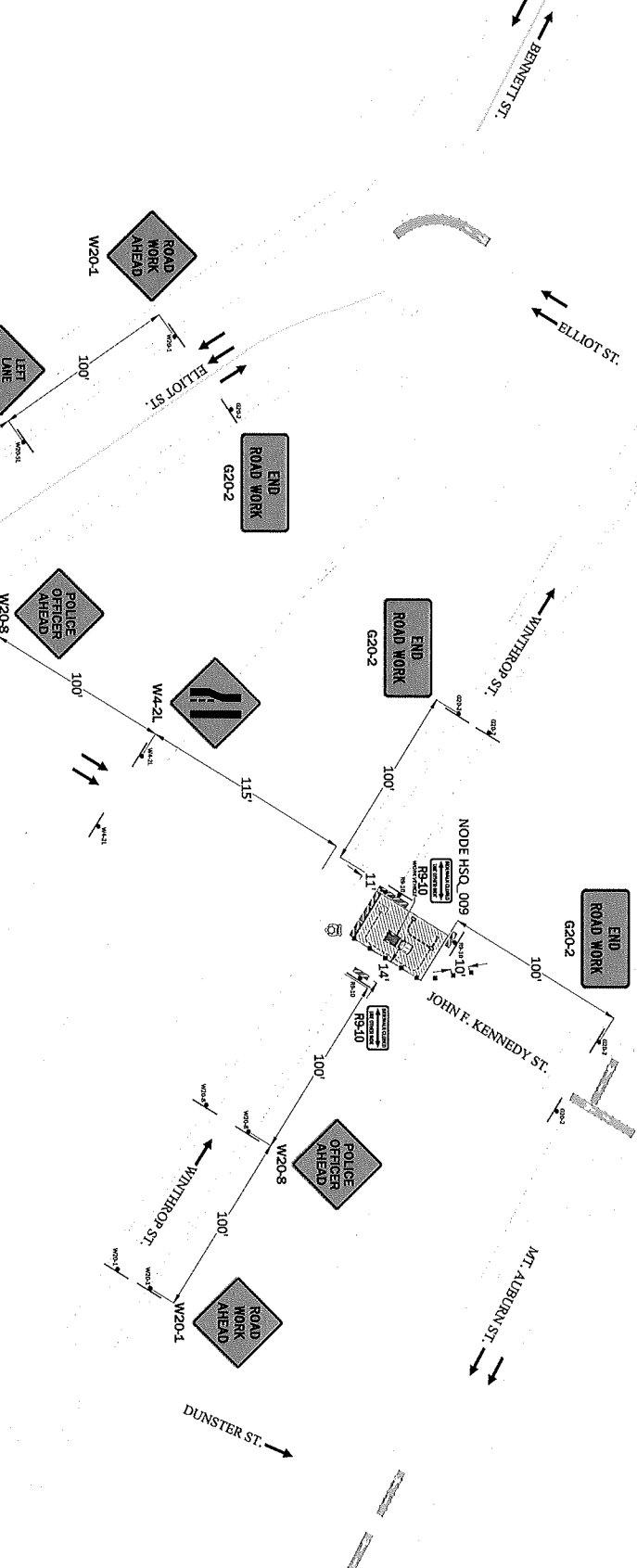
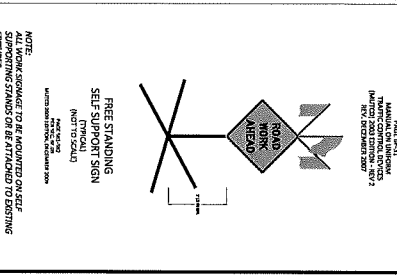
NOTE: MAINTENANCE PERSONNEL ACCESS AT ALL TIMES WITH AID OF CONVALESCENCE.

PREPARED BY: **PIKE TELECOM**
 31 Everside Rd
 Cambridge, MA 02142
 617-552-3700

DESIGNED BY: **CROWN CASTLE**

TITLE	DATE
TRAFFIC MANAGEMENT PLAN - PHASE I	05/09
JK ST AT WINTHROP ST, CAMBRIDGE, MA	1-19
DATE: 05/09	

- GENERAL NOTES:**
- ALL TEMPORARY TRAFFIC CONTROL WORK SHALL CONFORM TO THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND ALL REVISIONS.
 - ALL SIGN LEGENDS, BORDERES, AND MOUNTING SHALL BE IN ACCORDANCE WITH THE MUTCD.
 - THE MUTCD CONSTRUCTION SIGNING AND ALL OTHER TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF ANY WORK.
 - TEMPORARY CONSTRUCTION SIGNING, BARRICADES, AND ALL OTHER NECESSARY WORK ZONE TRAFFIC CONTROL DEVICES SHALL BE REMOVED FROM THE HIGHWAY OR COVERED WHEN THEY ARE NOT REQUIRED FOR CONTROL OF TRAFFIC.
 - ALL TRAFFIC CONTROL DEVICES SHALL BE MAINTAINED IN ACCORDANCE WITH THE CRITERIA SET FORTH IN THE INCHP REPORT 350, "RECOMMENDED PROCEDURES FOR THE SAFETY PERFORMANCE EVALUATION OF HIGHWAY CONSTRUCTION SIGNING".
 - CONTRACTORS SHALL NOTIFY EACH AGENCY AT LEAST 72 HOURS IN ADVANCE OF ANY CONSTRUCTION ACTIVITIES THAT MAY REQUIRE TRAFFIC CONTROL DEVICES, SUCH AS CONDUIT INSTALLATION, EXISTING PAVEMENT EXCAVATION, AND SIMILAR OPERATIONS.
 - DISTANCES ARE A GUIDE AND MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER.
 - MINIMUM LANE WIDTH IS TO BE 32 FEET UNLESS OTHERWISE SHOWN. MINIMUM LANE WIDTH SHALL BE 30 FEET UNLESS OTHERWISE SHOWN.
 - ALL SIGNS SHALL BE MOUNTED ON THEIR OWN STANDARD SIGN SUPPORTS.
 - ** INDICATES MEASUREMENTS NOT TO SCALE.
 - ** INDICATES SIGN IS SHOWN FOR GRAPHICAL PURPOSES ONLY, AND NOT TO BE USED FOR PLACEMENT LOCATION GUIDANCE.
 - POLICE DETAIL OFFICERS TO SET UP THIS POSITION AS NEEDED IN FIELD.



TRAFFIC LEGEND

Symbol	Description
[Symbol]	WORK ZONE
[Symbol]	HOV3+ LANE
[Symbol]	CHANNELIZING DEVICE (CONE)
[Symbol]	TRAIL
[Symbol]	SEMI
[Symbol]	POLICE DETAIL
[Symbol]	SINGLE PARKING METER
[Symbol]	DOUBLE PARKING METER
[Symbol]	VARIABLE MESSAGE BOARD
[Symbol]	ARROW BOARD
[Symbol]	TYPE III BARRICADE
[Symbol]	HIGH LEVEL WARNING DEVICE
[Symbol]	CONSTRUCTION TRUCK
[Symbol]	TRUCK MOUNTED ATTENUATOR
[Symbol]	TRAFFIC FLOW
[Symbol]	TRAFFIC FLOW
[Symbol]	TRAFFIC FLOW
[Symbol]	2 WAY TRAFFIC