

December 28, 2017

**Via Hand Delivery**

Todd Satter  
City of Boston Environmental Department  
Boston City Hall  
1 City Hall Ave  
Boston, MA 02201

Re: Certificate of Appropriateness or Design Approval  
Property Address: Various Wireless DAS Nodes (on Existing Pole Locations)  
Applicant: ExteNet Systems, Inc. (the "Applicant")

Dear Mr. Satter:

Enclosed please find an application for Certificate of Appropriateness from the Boston Landmarks Commission (the "BLC") for the expansion of the Applicant's Wireless Distributed Antenna System ("DAS") Network located in the City of Boston. The Applicant proposes to expand its existing DAS Network by adding nine (9) new DAS Nodes on various street lights located along the Back Bay Fens and one (1) streetlight located adjacent to the Boston Public Library in the Back Bay (the "DAS Extension"). Each proposed installation will consist of an in-kind replacement of an existing street light with a new, City of Boston approved street light and DAS antenna design, a base cabinet and associated coaxial cabling.

Furthermore, as discussed at our meeting on December 14, 2017, we have included an overview map showing the proposed locations of an additional eight (8) DAS nodes located in the Financial District. These nodes are located outside and adjacent to pending or existing historic landmarks in the Financial District and we are seeking a determination of whether or not the BLC has jurisdiction to review these nodes.

The proposed DAS Extension will allow the existing DAS Network (and ExteNet's wireless tenants on the DAS Network) to offer a more robust wireless service for the residents and businesses of the City. ExteNet is licensed as a public utility to construct and to operate DAS Networks in various markets throughout the country, including the State of Massachusetts and in particular in the City of Boston. The DAS Networks are utilized by wireless carriers that are licensed by the Federal Communications Commission (the "FCC").

ExteNet is in the process of designing and construction an expansion of its existing DAS Network for the City of Boston and simultaneously upgrading its existing DAS Network for the City of Boston to provide the quality of wireless service that customers demand, and to meet the objectives of Congress that a robust, competitive and low cost wireless communications capacity be developed to serve the entire nation.

The DAS Extension will allow the Applicants clients to provide reliable coverage to its users and the residents of the City of Boston, as well as enhanced wireless

Prince Lobel Tye LLP  
One International Place  
Suite 3700  
Boston, MA 02110  
TEL: 617 456 8000  
FAX: 617 456 8100



communications services as mandated by its FCC licenses and as required by congress under the Telecommunications Act of 1996.

The Applicant respectfully requests a Certificate of Appropriateness from the BLC and any additional approvals it may deem necessary.

Should you have any questions or concerns, do not hesitate to contact me directly at the telephone number indicated below. Thank you for your attention to this matter.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ricardo M. Sousa', written over a light gray grid background.

Ricardo M. Sousa

Direct: 617-456-8123

Email: [rsousa@princelobel.com](mailto:rsousa@princelobel.com)

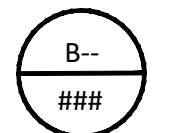
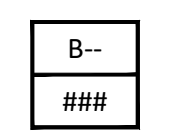
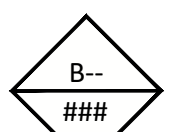
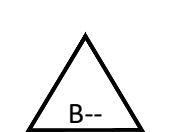
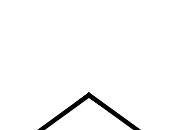




TOWN/COUNTY:  
 BOSTON, MA  
 SUFFOLK COUNTY

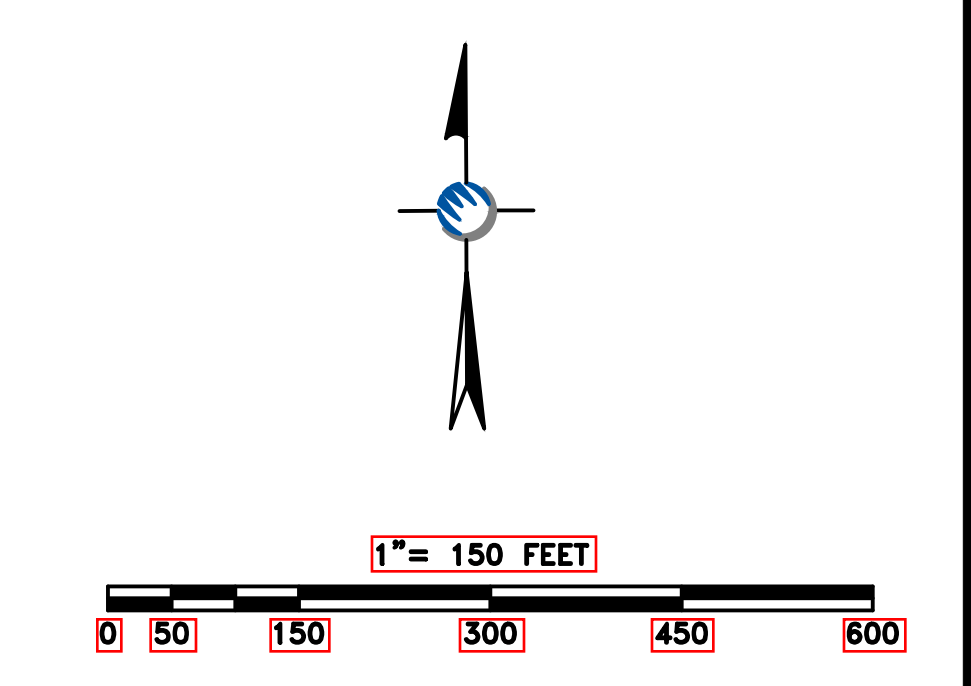
LEGEND:

**STREETLIGHT TYPE (QUANTITY)**

-  SINGLE ACORN (0)
-  DOUBLE ACORN (0)
-  CONCRETE SHOEBOX(0)
-  PENDANT (0)
-  STREET LIGHT (9)

**NODE LOCATION (QUANTITY)**

- BDT: FINANCIAL DISTRICT (0)
- BNE: NORTH END (0)
- BBH: BEACON HILL (BBH) (0)
- BBX: BACK BAY EXPANSION (9)
- BCT: CHINATOWN (0)



NOTES:

DCR LANDMARKS

PREPARED FOR:



PREPARED BY:



JOB:

EXTENET NODE SITES  
 BOSTON, MA  
 OVERVIEW

**REVISIONS**

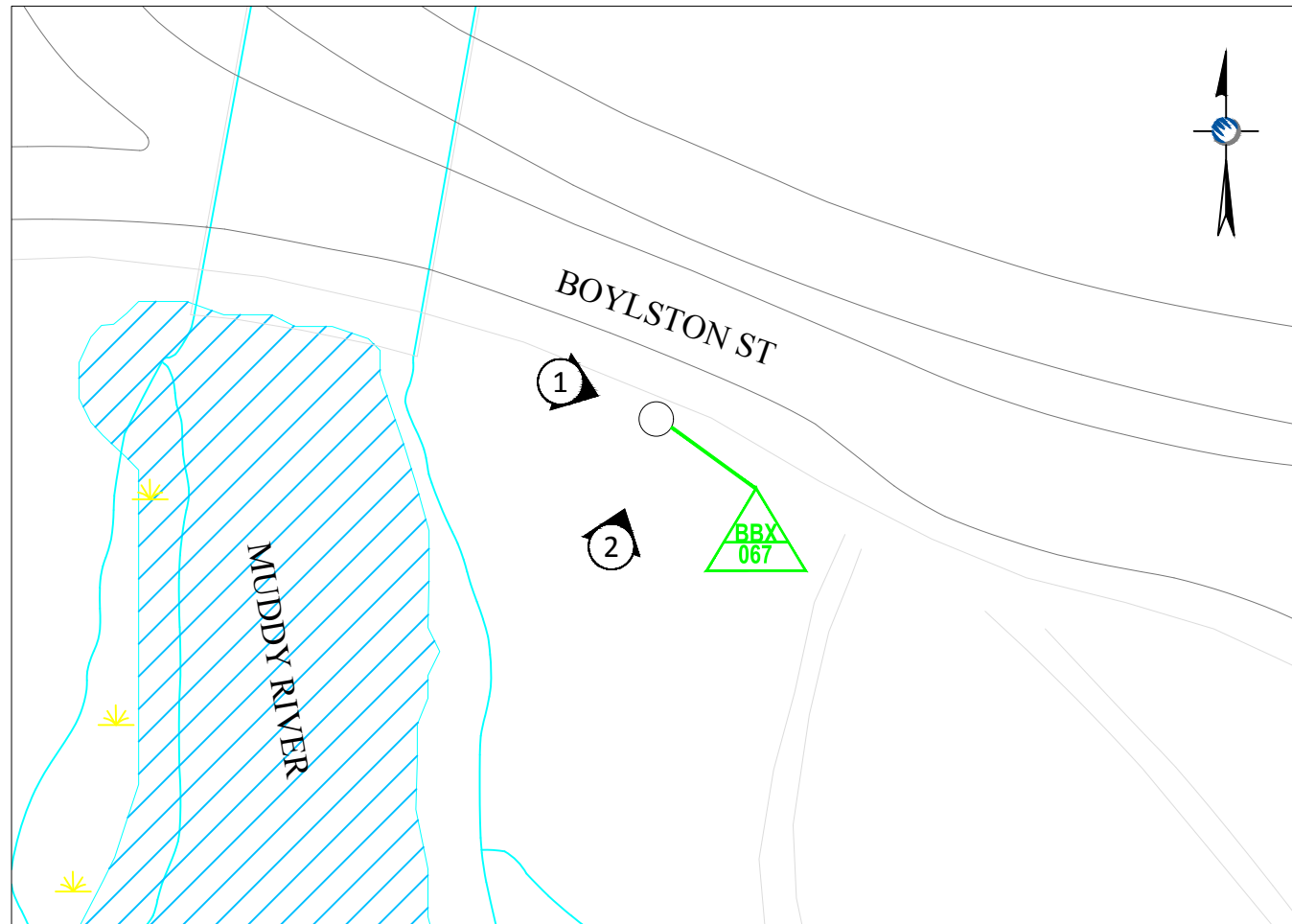
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ENGINEER: UCS	
SCALE: 1" = 150'	
DRAWING NAME: NEIGHBORHOOD OUTREACH - OV MAP - BOSTON MA.DWG	
ISSUE DATE: 09/26/17	SHEET: 1 OF 1

11/8/2017 N:\Engineering\District Systems\BA - Boston 21st\BosOutreach - Overview Map\ALU 2017 OV MAP - ALL AREAS\Neighborhood Outreach - OV MAP - BOSTON MA.DWG

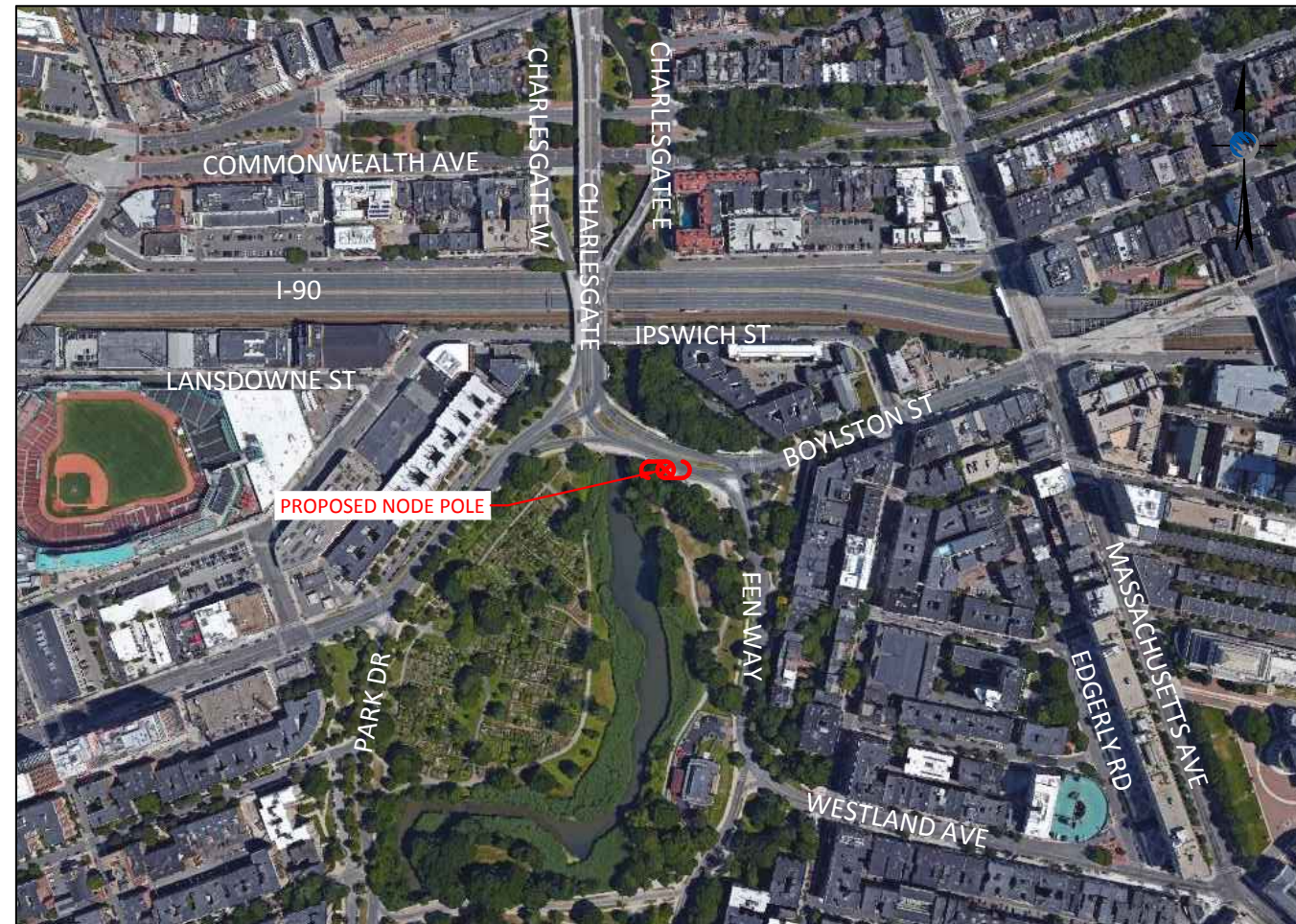


EXTENET SYSTEMS  
CITY OF BOSTON  
SUFFOLK COUNTY, MA



LOCATION MAP

LATITUDE: 42.346587° LONGITUDE: -71.091707°  
SCALE: 1" = 50'



LOCUS MAP

PROJECT LOCATION - NODE BBX-067  
SCALE: 1" = 500'

LOCATION:  
BOSTON, MA  
SUFFOLK COUNTY

NOTES:  
EXISTING CITY OF BOSTON STREET LIGHT TO BE REMOVED AFTER REPLACEMENT LIGHT HAS BEEN INSTALLED, INSPECTED AND POWERED.

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NODE  
BBX-067

REVISIONS		
REV	DESCRIPTION	DATE
1	UPDATED TO BASE CABINET	5/5/16
2	UPDATED INFORMATION	04/17/17

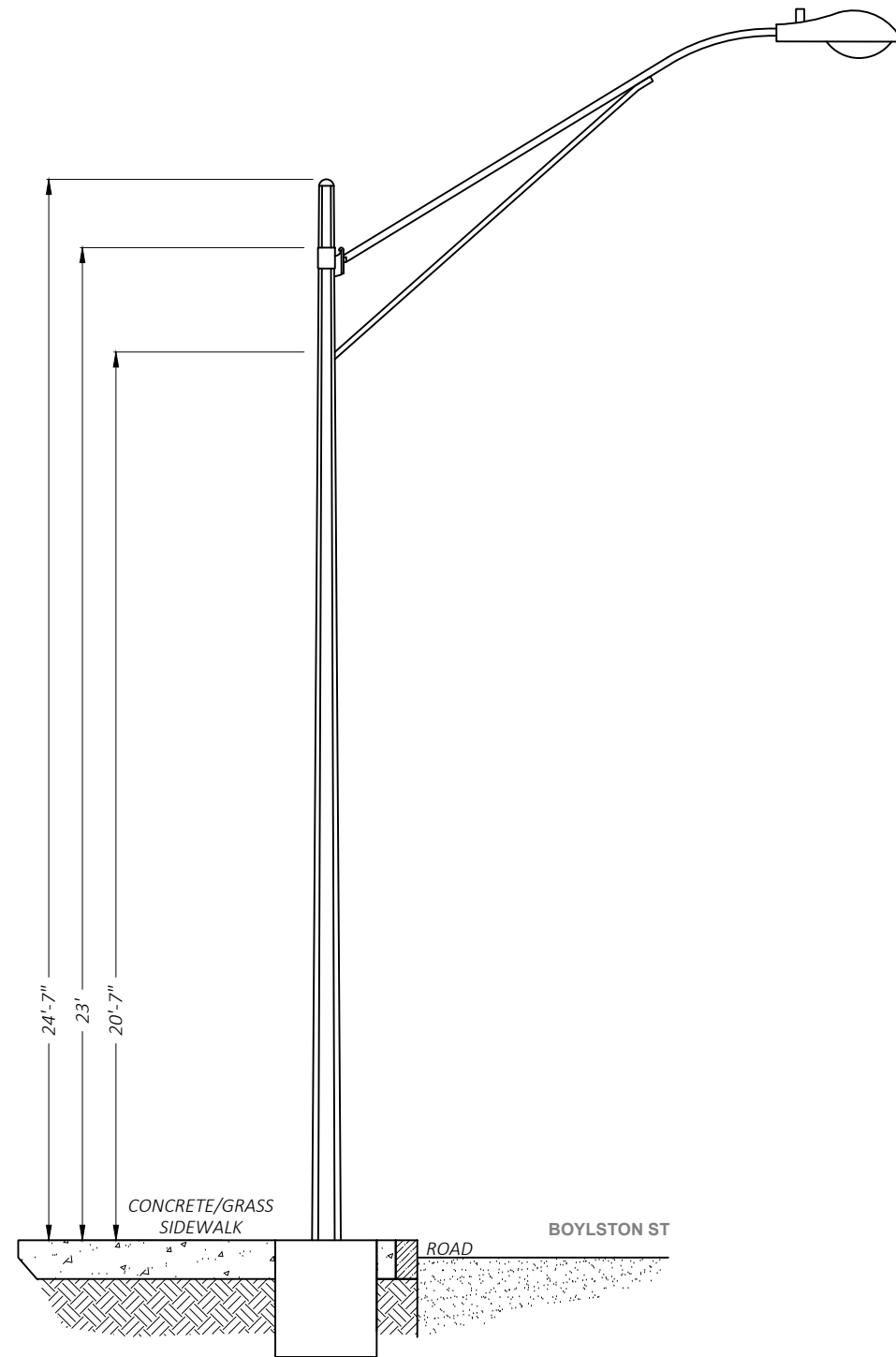
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SCALE: AS SHOWN  
ISSUE DATE: 02/10/16  
INDEX NAME: BBX-067  
SHEET #: 1 OF 6

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04/17/17

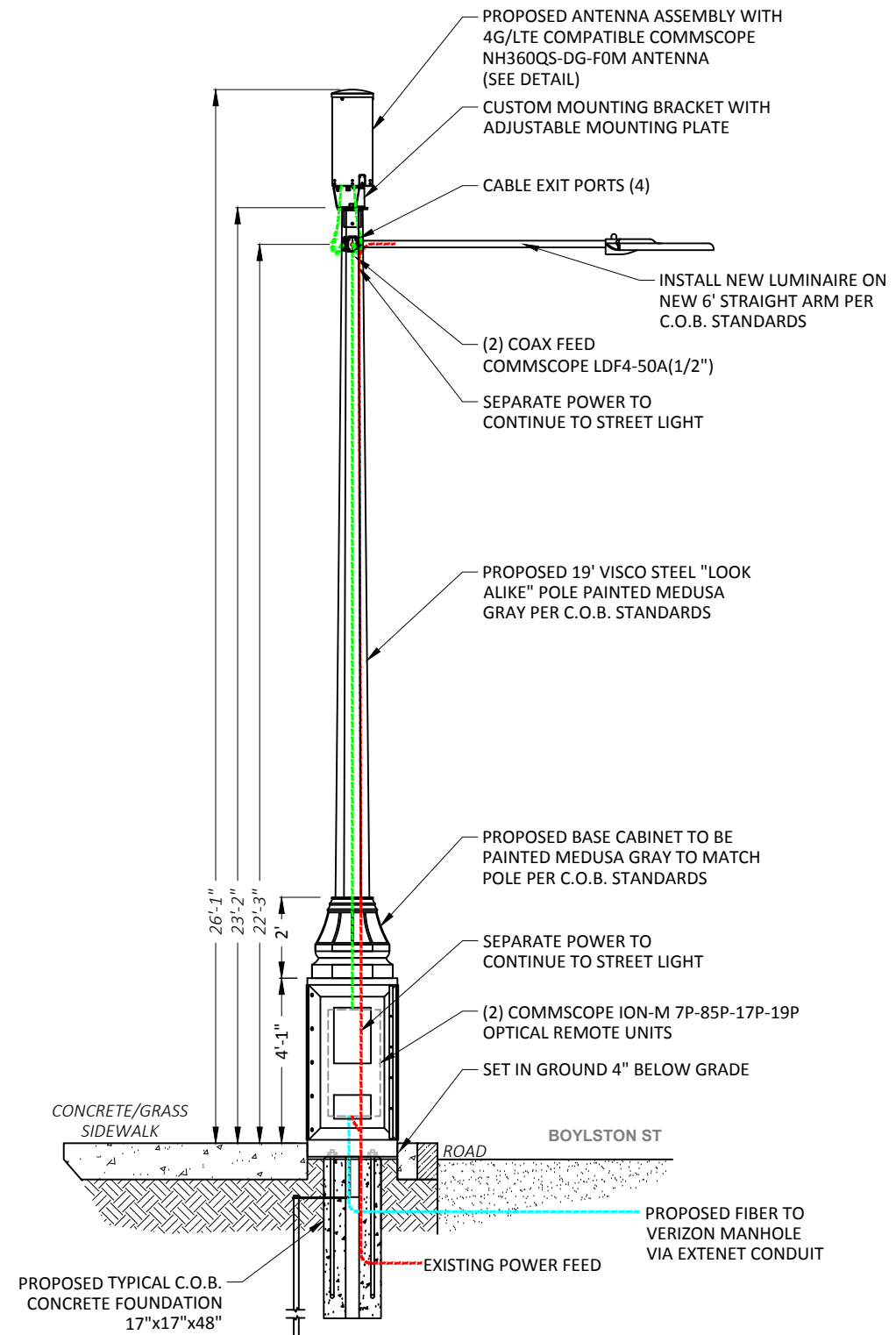
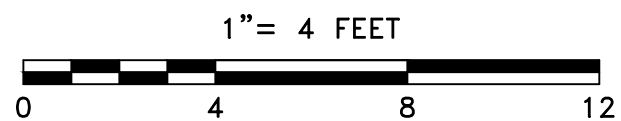
# EXTENET DOWNTOWN BOSTON NODE BBX-067

## SIDE VIEW

AZIMUTH  
OVERTURE: 205°  
ACTUAL: 85°/205°/325°



① EXISTING PROFILE - SIDE VIEW  
LOOKING SOUTHEAST ALONG BOYLSTON ST



① PROPOSED PROFILE - SIDE VIEW  
LOOKING SOUTHEAST ALONG BOYLSTON ST

LOCATION:  
BOSTON, MA  
SUFFOLK COUNTY

NOTES:  
EXISTING CITY OF BOSTON STREET LIGHT TO BE REMOVED **AFTER** REPLACEMENT LIGHT HAS BEEN INSTALLED, INSPECTED AND POWERED.

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NODE  
BBX-067

REVISIONS		
REV	DESCRIPTION	DATE
1	UPDATED TO BASE CABINET	5/5/16
2	UPDATED INFORMATION	04/17/17

DRAFTER: JDL/SML  
SCALE: 1" = 4'  
ISSUE DATE: 02/10/16  
INDEX NAME: BBX-067  
SHEET #: 2 OF 6

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EXISTING PHOTOGRAPHIC VIEW



PROPOSED PHOTOGRAPHIC SIMULATION

NOTES:

PREPARED FOR:



PREPARED BY:



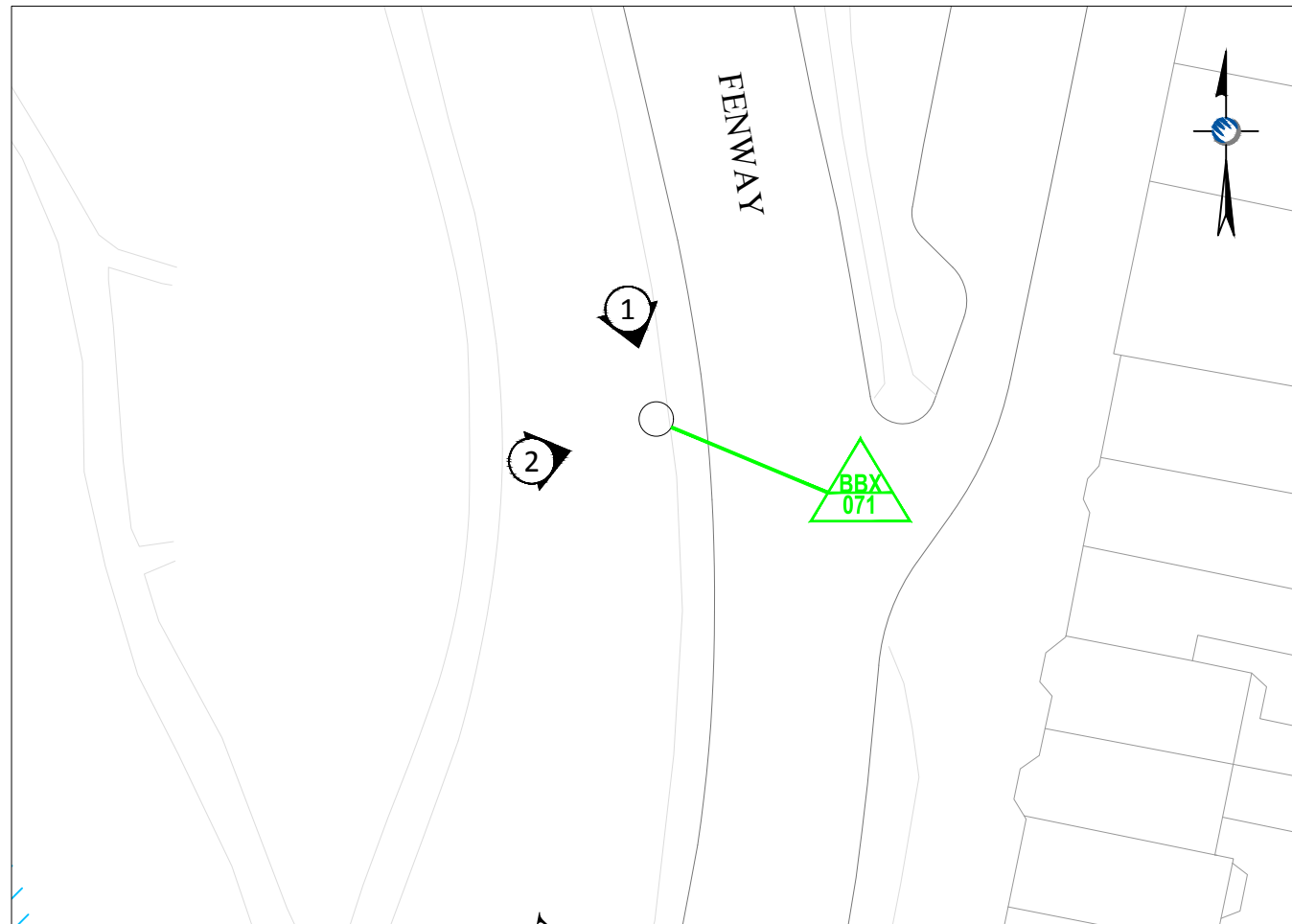
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REV	DESCRIPTION	DATE

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ISSUE DATE: 09/13/17	
INDEX NAME: NODE BBX-067	

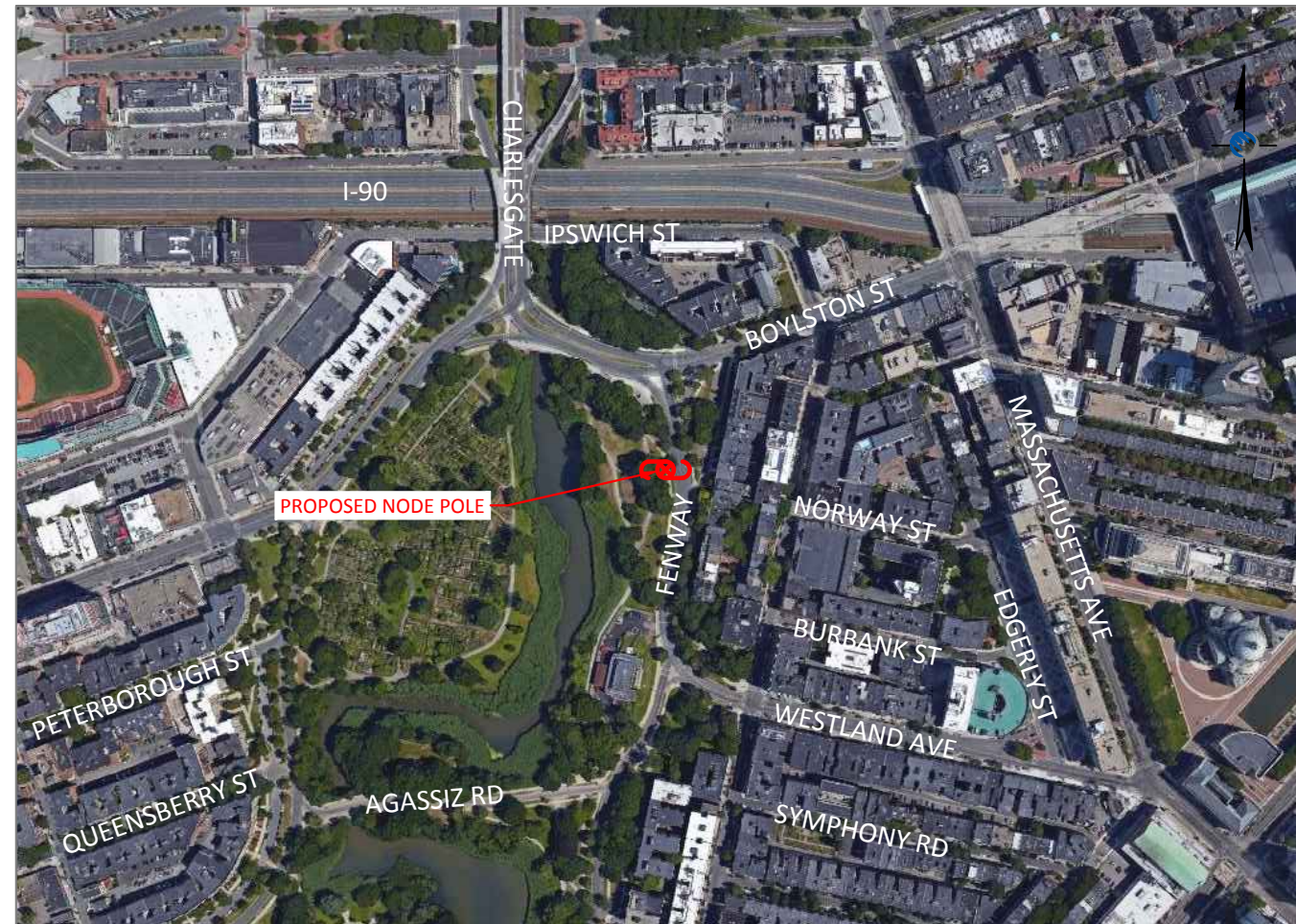


EXTENET SYSTEMS  
CITY OF BOSTON  
SUFFOLK COUNTY, MA



LOCATION MAP

LATITUDE: 42.345739° LONGITUDE: -71.090723°  
SCALE: 1" = 50'



LOCUS MAP

PROJECT LOCATION - NODE BBX-071  
SCALE: 1" = 500'

LOCATION:  
BOSTON, MA  
SUFFOLK COUNTY

NOTES:  
EXISTING CITY OF BOSTON STREET LIGHT TO BE REMOVED **AFTER** REPLACEMENT LIGHT HAS BEEN INSTALLED, INSPECTED AND POWERED.



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NODE  
BBX-071

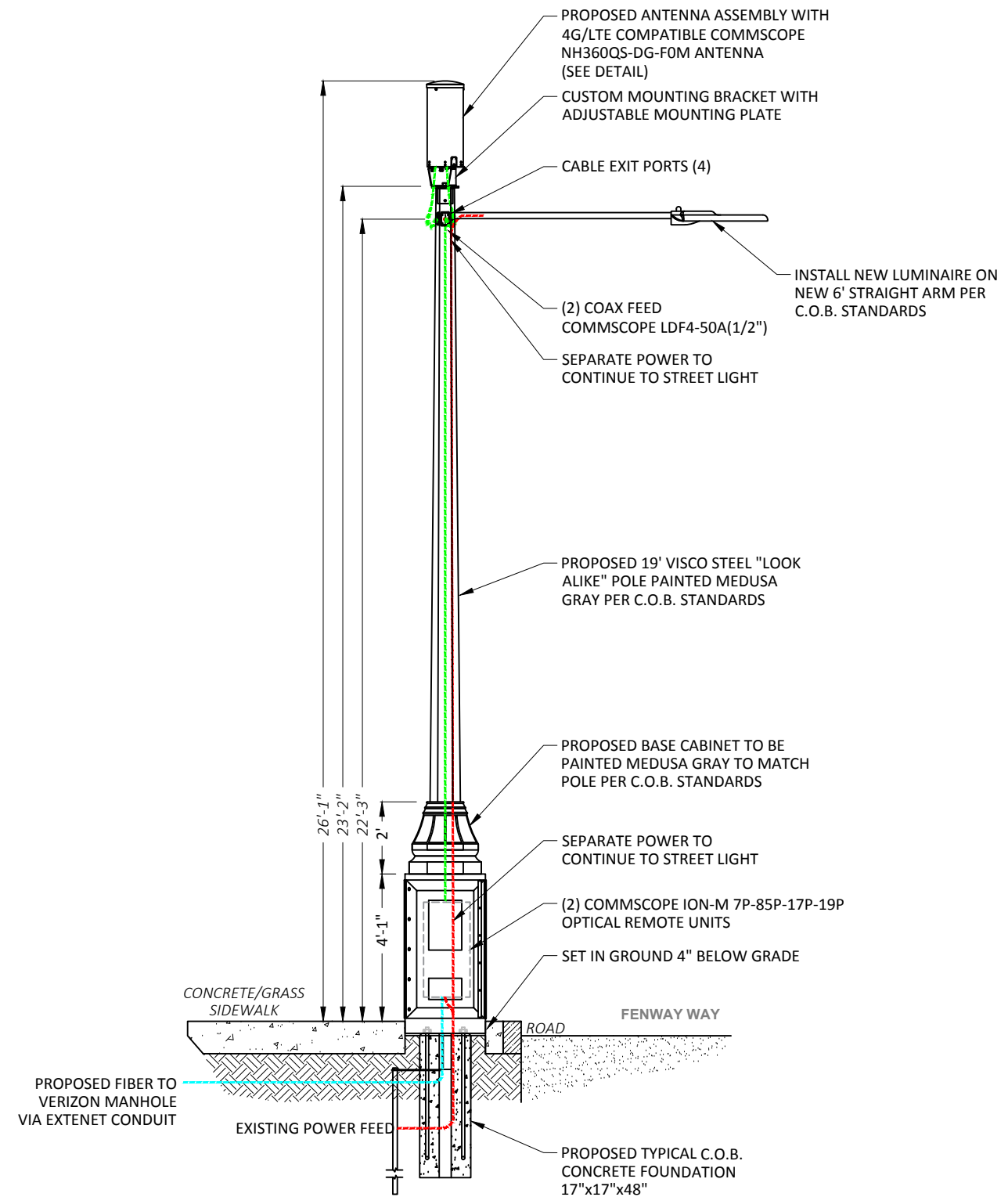
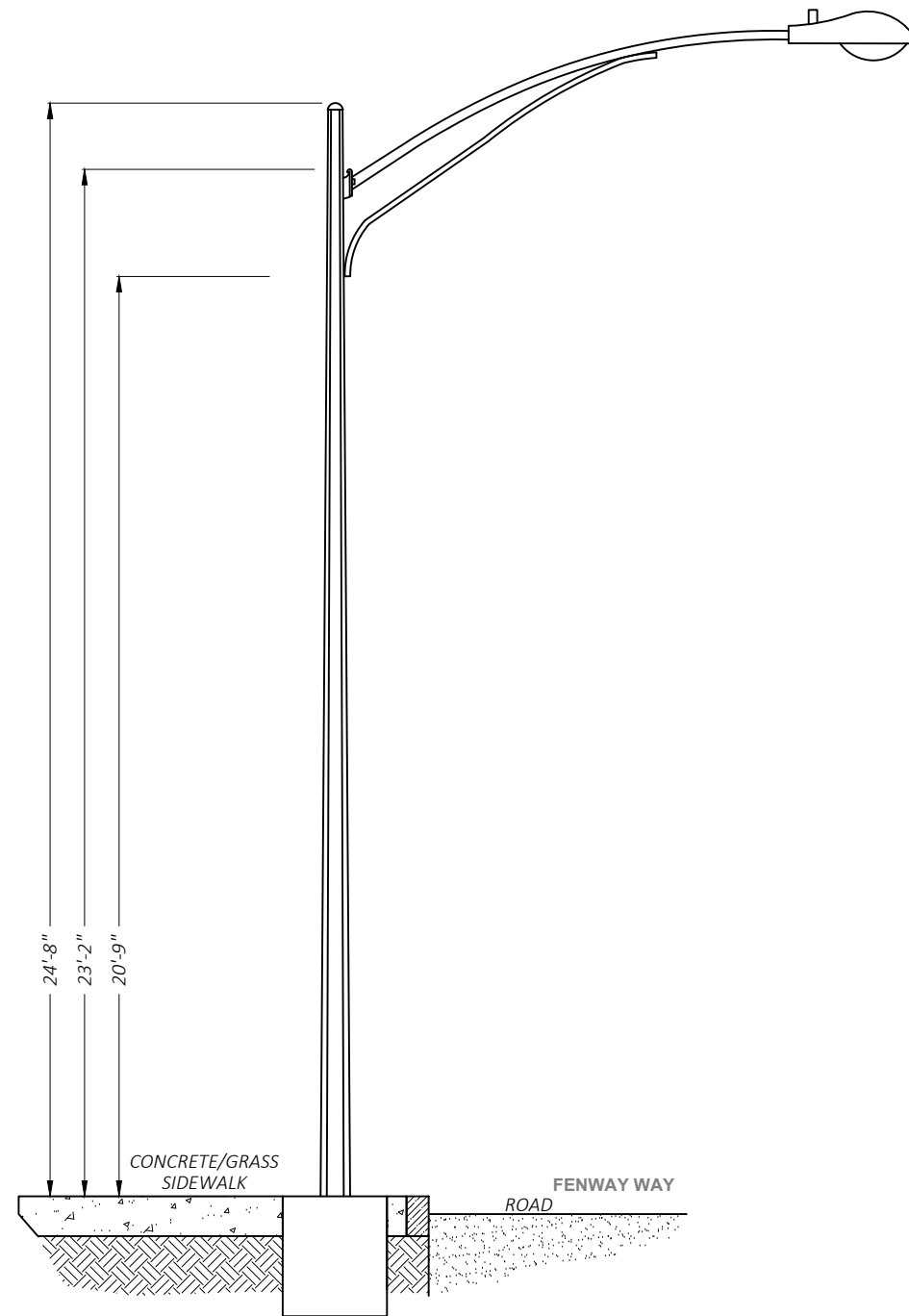
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1	UPDATED TO BASE CABINET	5/23/16
2	UPDATED INFORMATION	04/17/17

DRAFTER: DTB/SML  
SCALE: AS SHOWN  
ISSUE DATE: 01/29/16  
INDEX NAME: BBX-071  
SHEET #: 1 OF 6

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# EXTENET DOWNTOWN BOSTON NODE BBX-071 SIDE VIEW

AZIMUTH  
OVERTURE: 270°  
ACTUAL: 30°/150°/270°



LOCATION:  
BOSTON, MA  
SUFFOLK COUNTY

NOTES:  
EXISTING CITY OF BOSTON STREET LIGHT TO BE REMOVED **AFTER** REPLACEMENT LIGHT HAS BEEN INSTALLED, INSPECTED AND POWERED.

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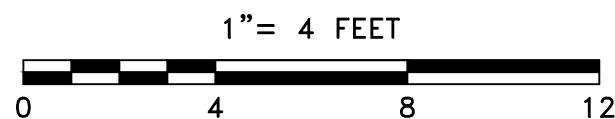
NODE  
BBX-071

REVISIONS		
REV	DESCRIPTION	DATE
1	UPDATED TO BASE CABINET	5/23/16
2	UPDATED INFORMATION	04/17/17

DRAFTER: DTB/SML  
SCALE: 1" = 4'  
ISSUE DATE: 01/29/16  
INDEX NAME: BBX-071  
SHEET #: 2 OF 6

2

① EXISTING PROFILE - SIDE VIEW  
LOOKING SOUTHEAST ALONG FENWAY



① PROPOSED PROFILE - SIDE VIEW  
LOOKING SOUTHEAST ALONG FENWAY





EXISTING PHOTOGRAPHIC VIEW



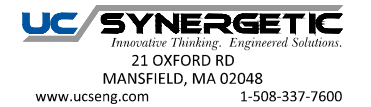
PROPOSED PHOTOGRAPHIC SIMULATION

NOTES:

PREPARED FOR:



PREPARED BY:



REVISIONS

REV	DESCRIPTION	DATE

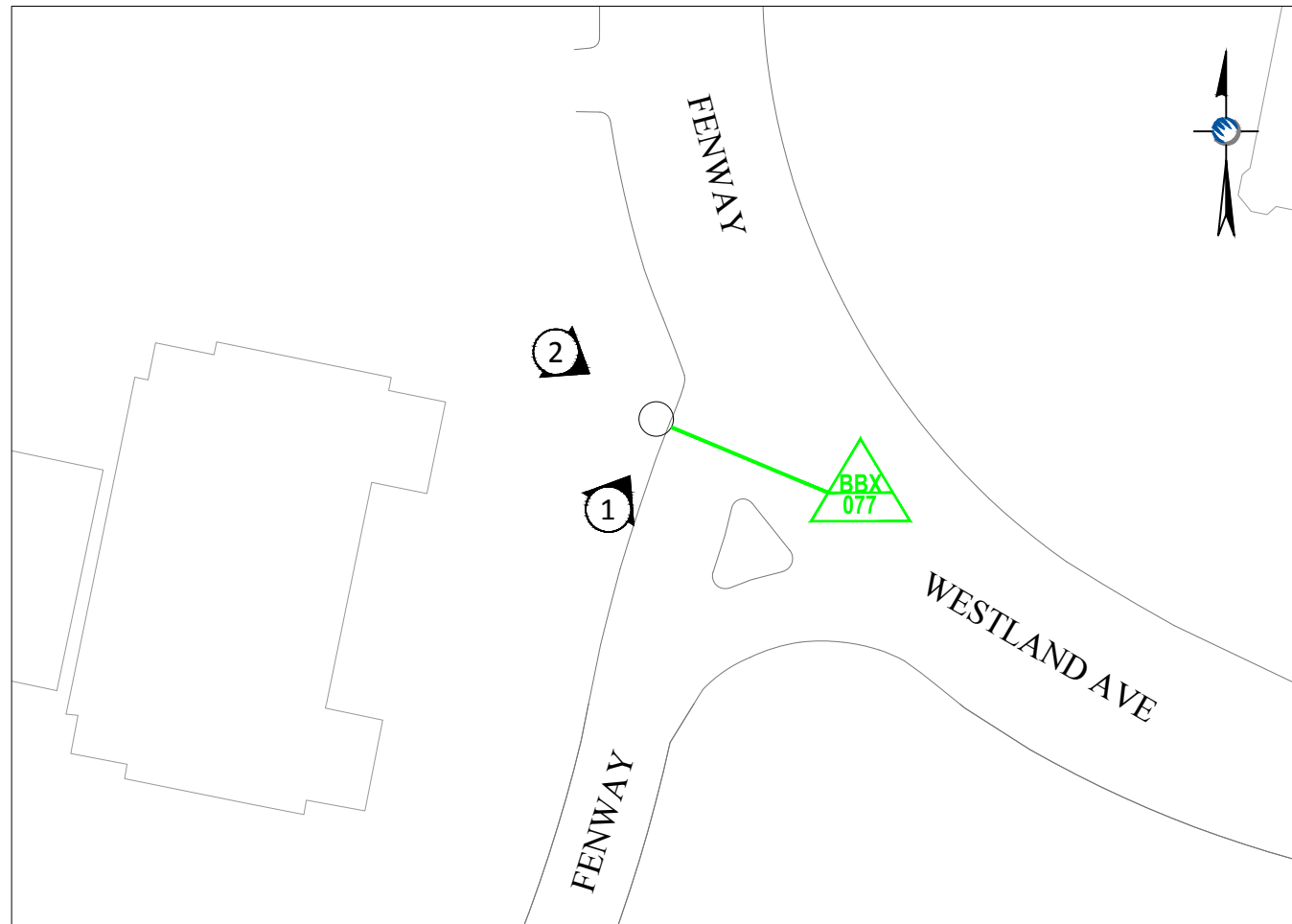
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SCALE: NTS	<b>1</b>
ISSUE DATE: 09/13/17	
INDEX NAME: NODE BBX-071	



EXTENET SYSTEMS  
CITY OF BOSTON  
SUFFOLK COUNTY, MA



LOCATION MAP

LATITUDE: 42.344272° LONGITUDE: -71.090816°  
SCALE: 1" = 50'



LOCUS MAP

PROJECT LOCATION - NODE BBX-077  
SCALE: 1" = 500'

LOCATION:  
BOSTON, MA  
SUFFOLK COUNTY

NOTES:  
EXISTING CITY OF BOSTON STREET LIGHT TO BE REMOVED **AFTER** REPLACEMENT LIGHT HAS BEEN INSTALLED, INSPECTED AND POWERED.



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BBX-077

REVISIONS		
REV	DESCRIPTION	DATE
1	UPDATED TO BASE CABINET	5/5/16
2	UPDATED INFORMATION	04/17/17

DRAFTER: DTB/SML  
SCALE: AS SHOWN  
ISSUE DATE: 01/12/16  
INDEX NAME: BBX-077  
SHEET #: 1 OF 6

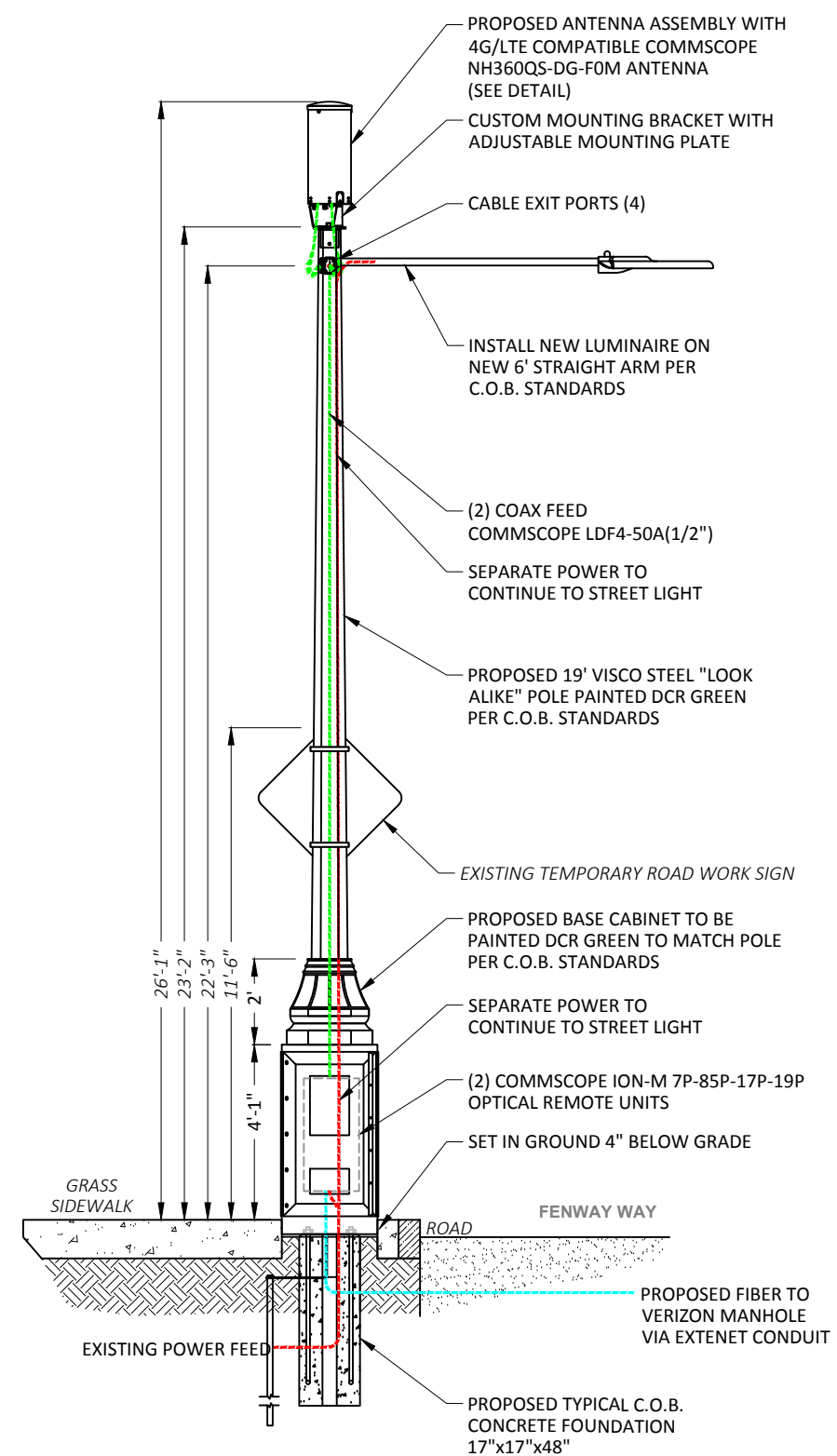
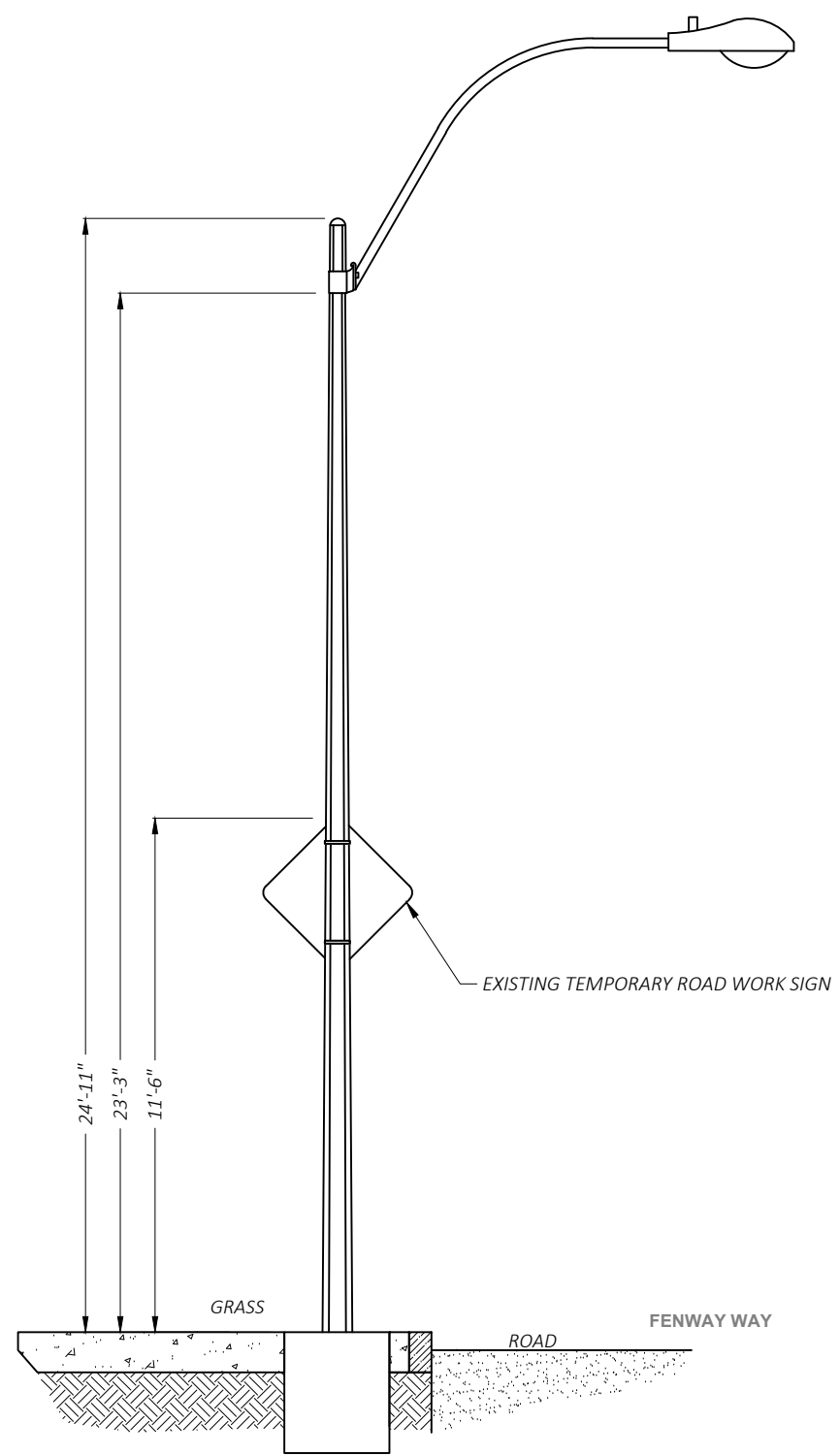
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# EXTENET DOWNTOWN BOSTON NODE BBX-077

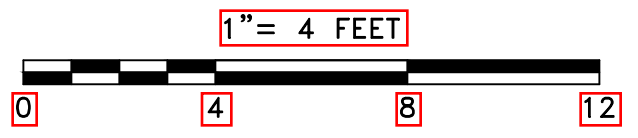
## SIDE VIEW

AZIMUTH  
OVERTURE: 0°  
ACTUAL: 0°/120°/240°




① EXISTING PROFILE - SIDE VIEW  
LOOKING NORTHEAST FROM FENWAY


① PROPOSED PROFILE - SIDE VIEW  
LOOKING NORTHEAST FROM FENWAY



LOCATION:  
BOSTON, MA  
SUFFOLK COUNTY

NOTES:  
EXISTING CITY OF BOSTON  
STREET LIGHT TO BE  
REMOVED **AFTER**  
REPLACEMENT LIGHT HAS  
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BBX-077

REVISIONS		
REV	DESCRIPTION	DATE
1	UPDATED TO BASE CABINET	5/5/16
2	UPDATED INFORMATION	04/17/17

DRAFTER: DTB/SML  
SCALE: 1" = 4'  
ISSUE DATE: 01/12/16  
INDEX NAME: BBX-077  
SHEET #: 2 OF 6

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EXISTING PHOTOGRAPHIC VIEW



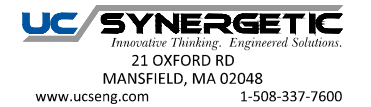
PROPOSED PHOTOGRAPHIC SIMULATION

NOTES:

PREPARED FOR:



PREPARED BY:



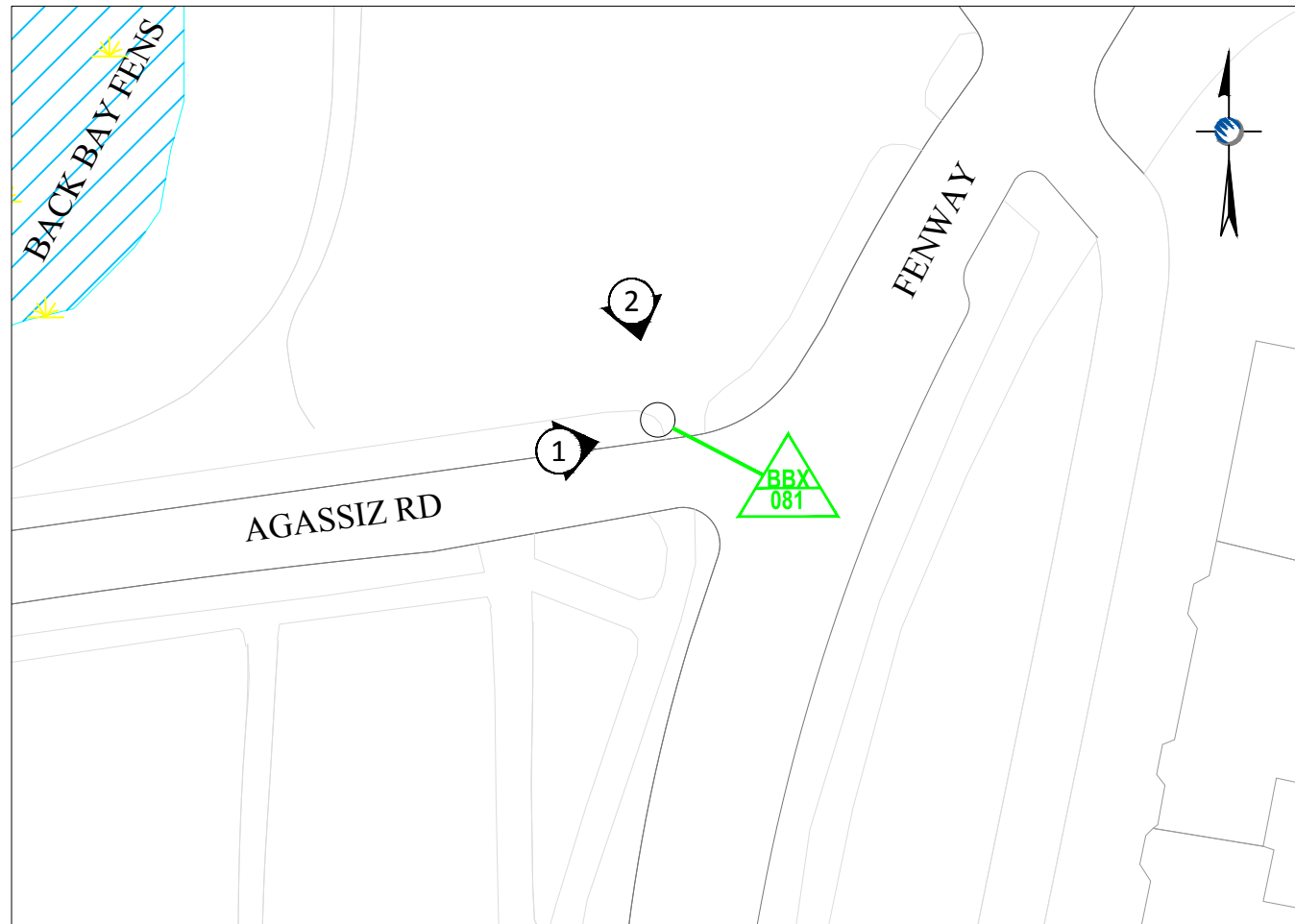
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REV	DESCRIPTION	DATE

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ISSUE DATE: 09/13/17	
INDEX NAME: NODE BBX-077	

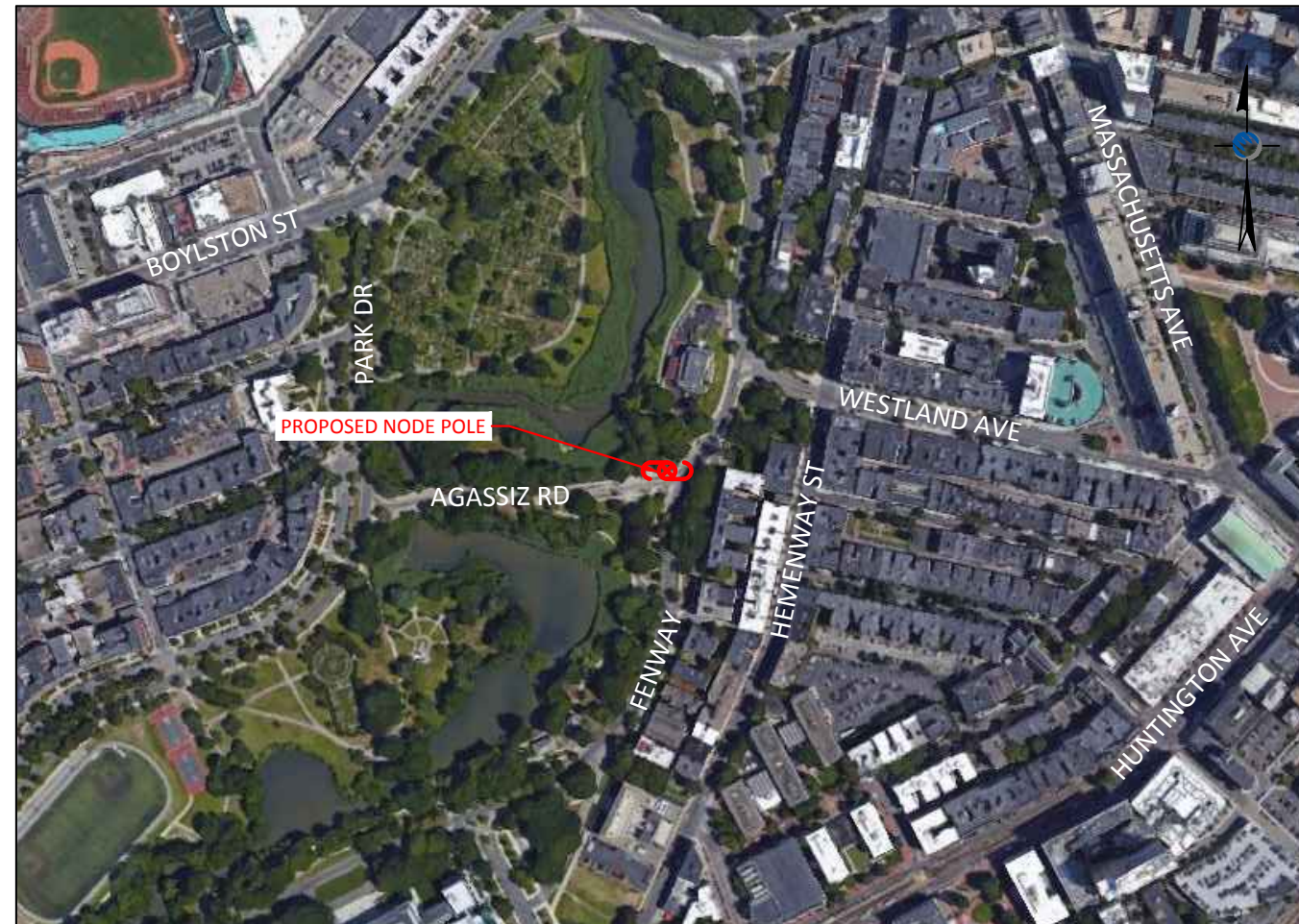


EXTENET SYSTEMS  
CITY OF BOSTON  
SUFFOLK COUNTY, MA



LOCATION MAP

LATITUDE: 42.343351° LONGITUDE: -71.091493°  
SCALE: 1" = 50'



LOCUS MAP

PROJECT LOCATION - NODE BBX-081  
SCALE: 1" = 500'

LOCATION:  
BOSTON, MA  
SUFFOLK COUNTY

NOTES:  
EXISTING CITY OF BOSTON  
STREET LIGHT TO BE  
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NODE  
BBX-081

REVISIONS		
REV	DESCRIPTION	DATE
1	UPDATED TO BASE CABINET	5/5/16
2	UPDATED INFORMATION	04/17/17

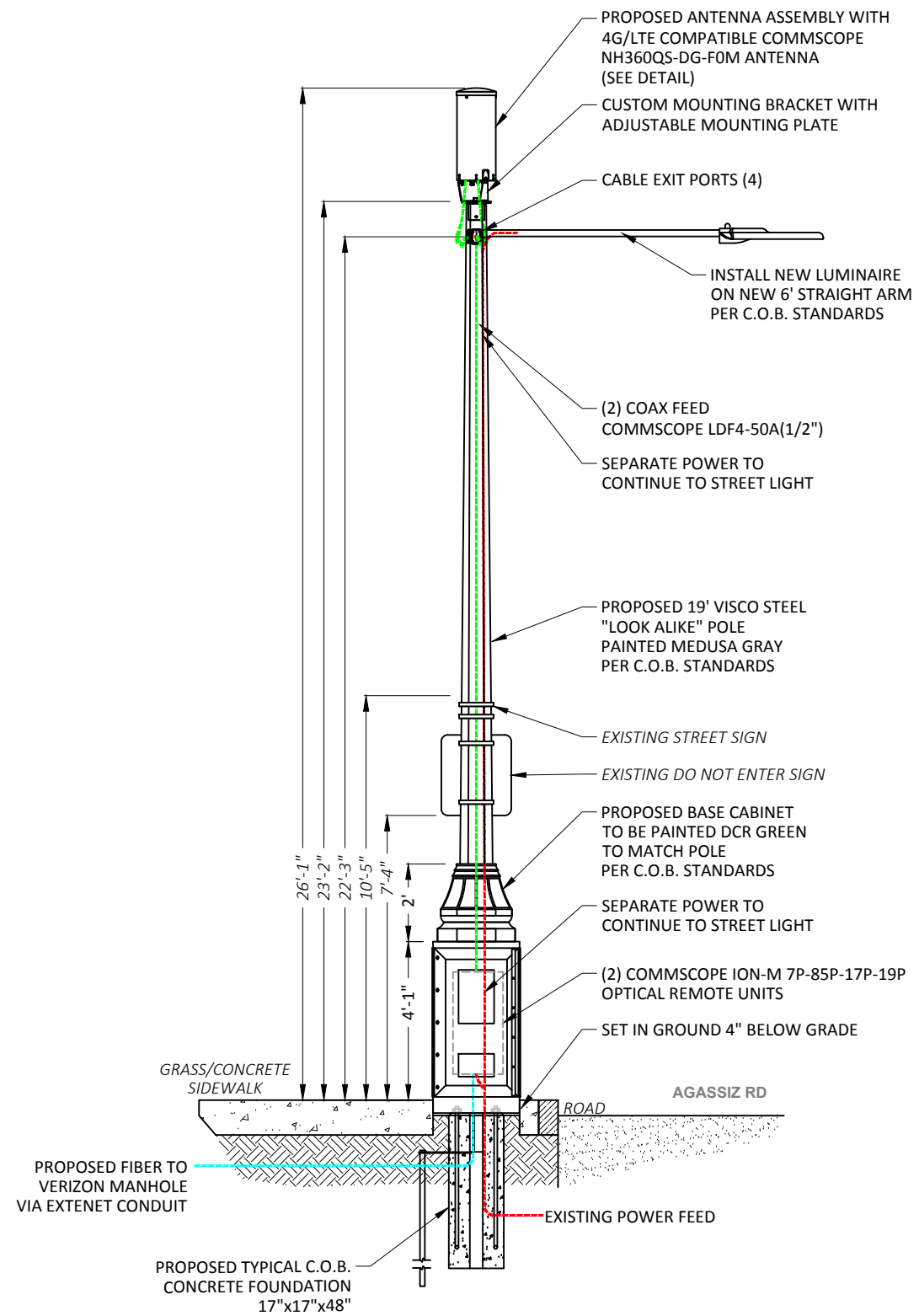
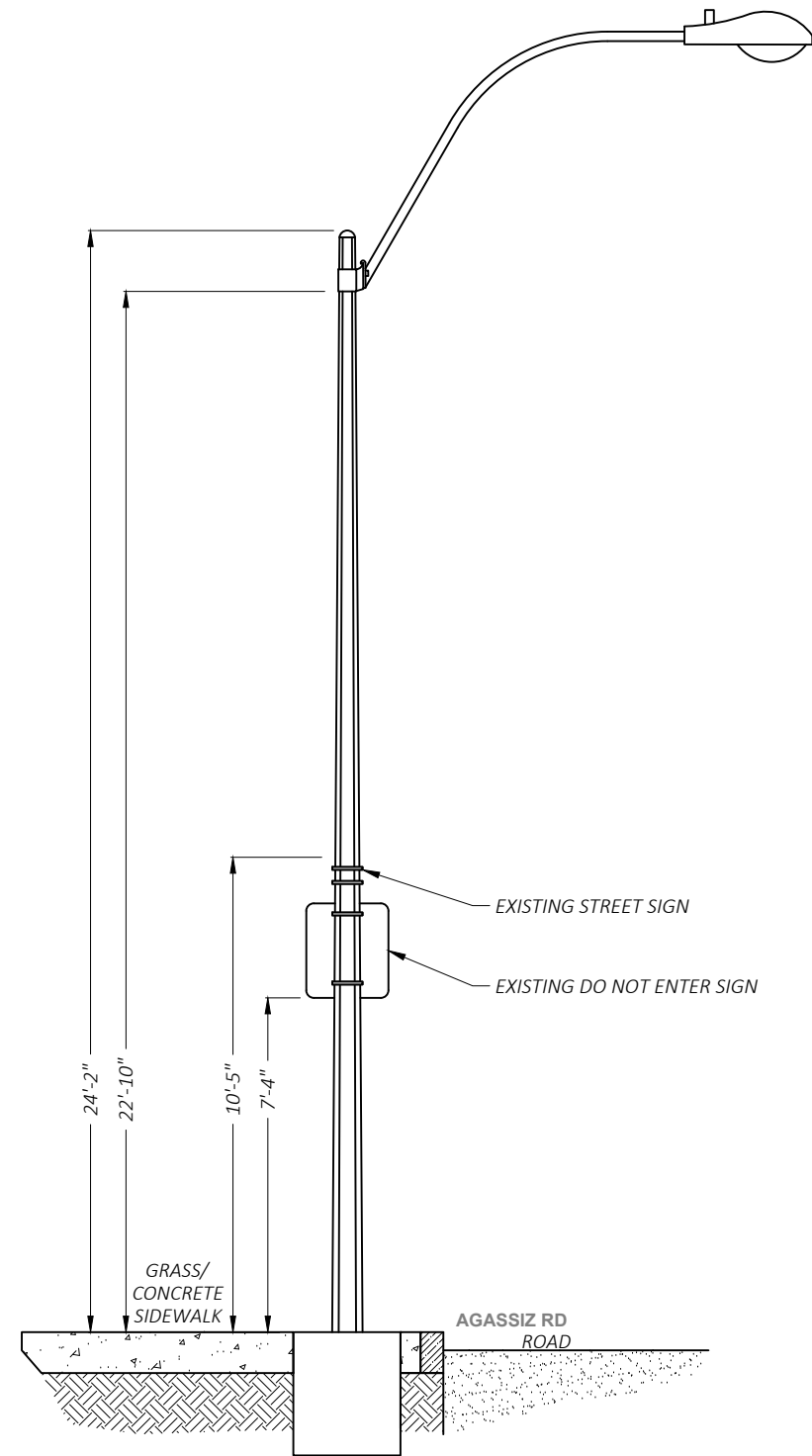
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ISSUE DATE: 01/12/16  
INDEX NAME: BBX-081  
SHEET #: 1 OF 6

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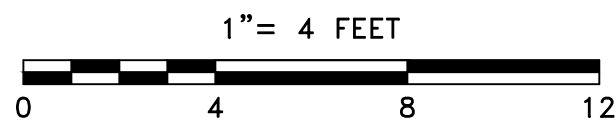
# EXTENET DOWNTOWN BOSTON NODE BBX-081

## SIDE VIEW

AZIMUTH  
OVERTURE: 270°  
ACTUAL: 30°/150°/270°



① EXISTING PROFILE - SIDE VIEW  
LOOKING NORTHEAST ALONG AGASSIZ RD



① PROPOSED PROFILE - SIDE VIEW  
LOOKING NORTHEAST ALONG AGASSIZ RD

LOCATION:  
BOSTON, MA  
SUFFOLK COUNTY

NOTES:  
EXISTING CITY OF BOSTON  
STREET LIGHT TO BE  
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1	UPDATED TO BASE CABINET	5/5/16
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DRAFTER: DTB/SML  
SCALE: 1" = 4'  
ISSUE DATE: 01/12/16  
INDEX NAME: BBX-081  
SHEET #: 2 OF 6

N:\Engineering\Extenet Systems\NE-MA-BKBA\EXP-VZW - Back Bay Expansion\AA-AUTOCAD\NPP\NODE BBX-081.dwg 04/17/17





EXISTING PHOTOGRAPHIC VIEW



PROPOSED PHOTOGRAPHIC SIMULATION

NOTES:

PREPARED FOR:



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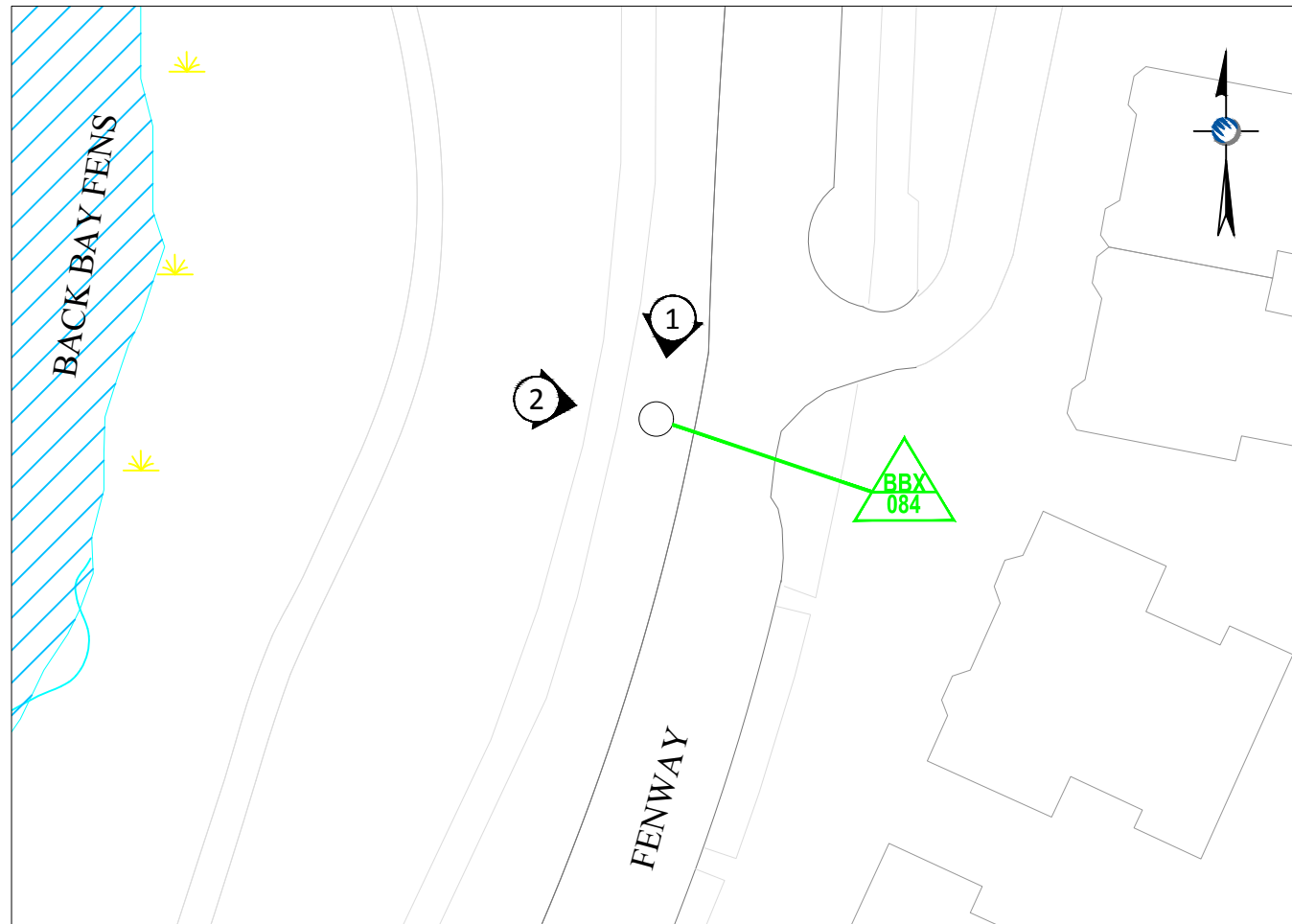
REVISIONS		
REV	DESCRIPTION	DATE

DRAWING TITLE:  
**PHOTO SIMULATION**

DRAFTER: MI	DRAWING NO.
SCALE: NTS	<b>1</b>
ISSUE DATE: 09/13/17	
INDEX NAME: NODE BBX-081	

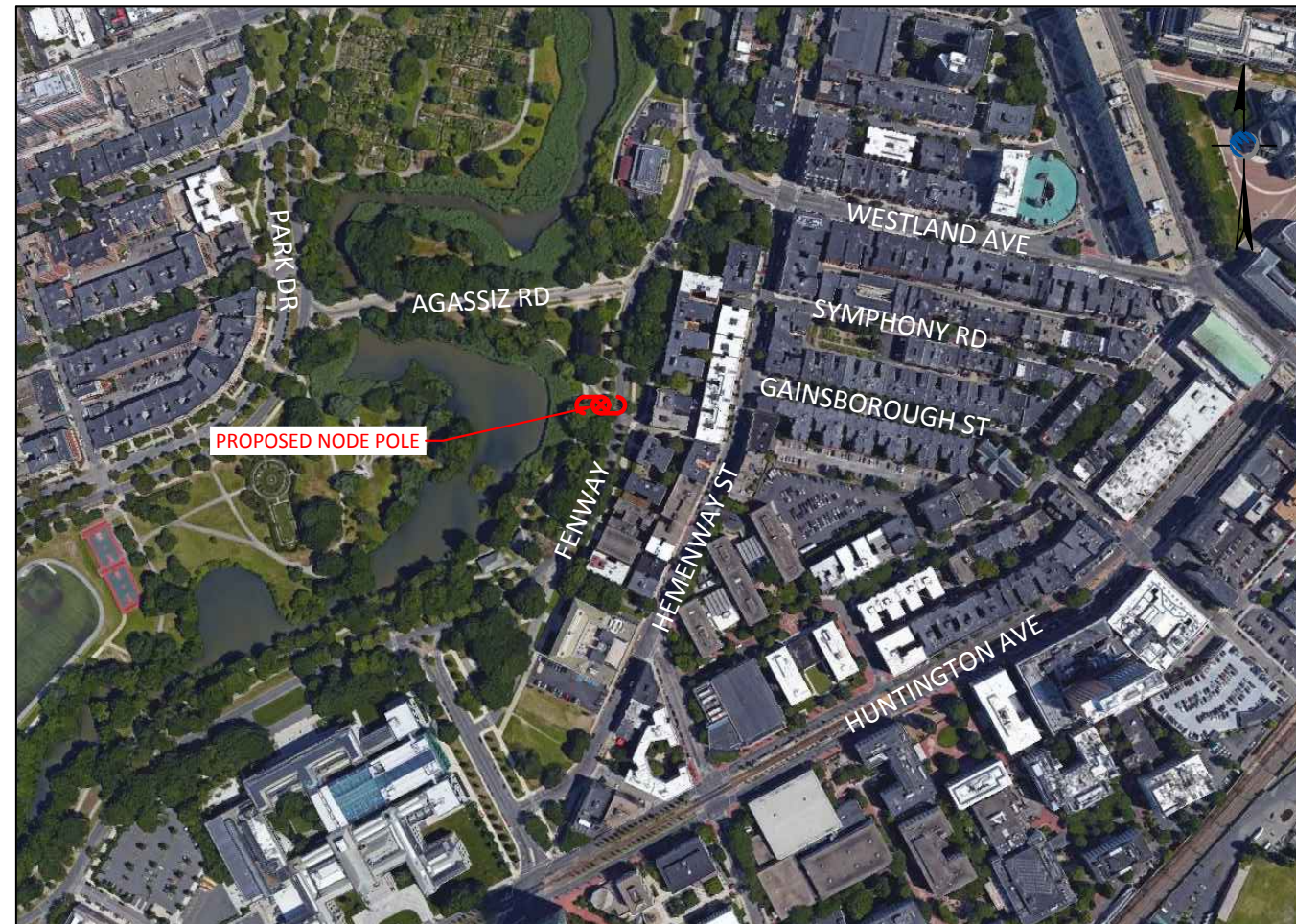


EXTENET SYSTEMS  
CITY OF BOSTON  
SUFFOLK COUNTY, MA



LOCATION MAP

LATITUDE: 42.342333° LONGITUDE: -71.091637°  
SCALE: 1" = 50'



LOCUS MAP

PROJECT LOCATION - NODE BBX-084  
SCALE: 1" = 500'

LOCATION:  
BOSTON, MA  
SUFFOLK COUNTY

NOTES:  
EXISTING CITY OF BOSTON  
STREET LIGHT TO BE  
REMOVED **AFTER**  
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BEEN INSTALLED,  
INSPECTED AND POWERED.



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NODE  
BBX-084

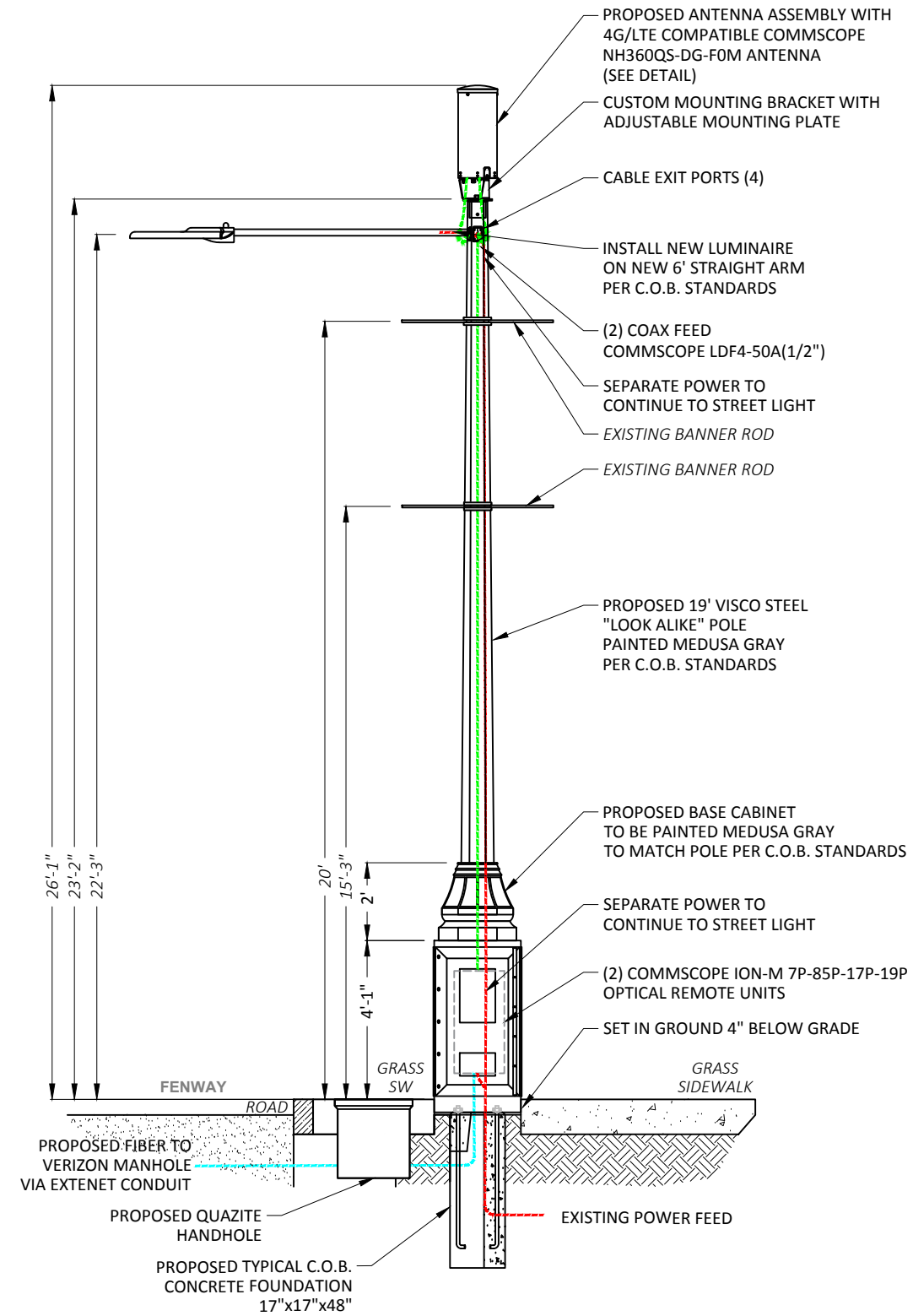
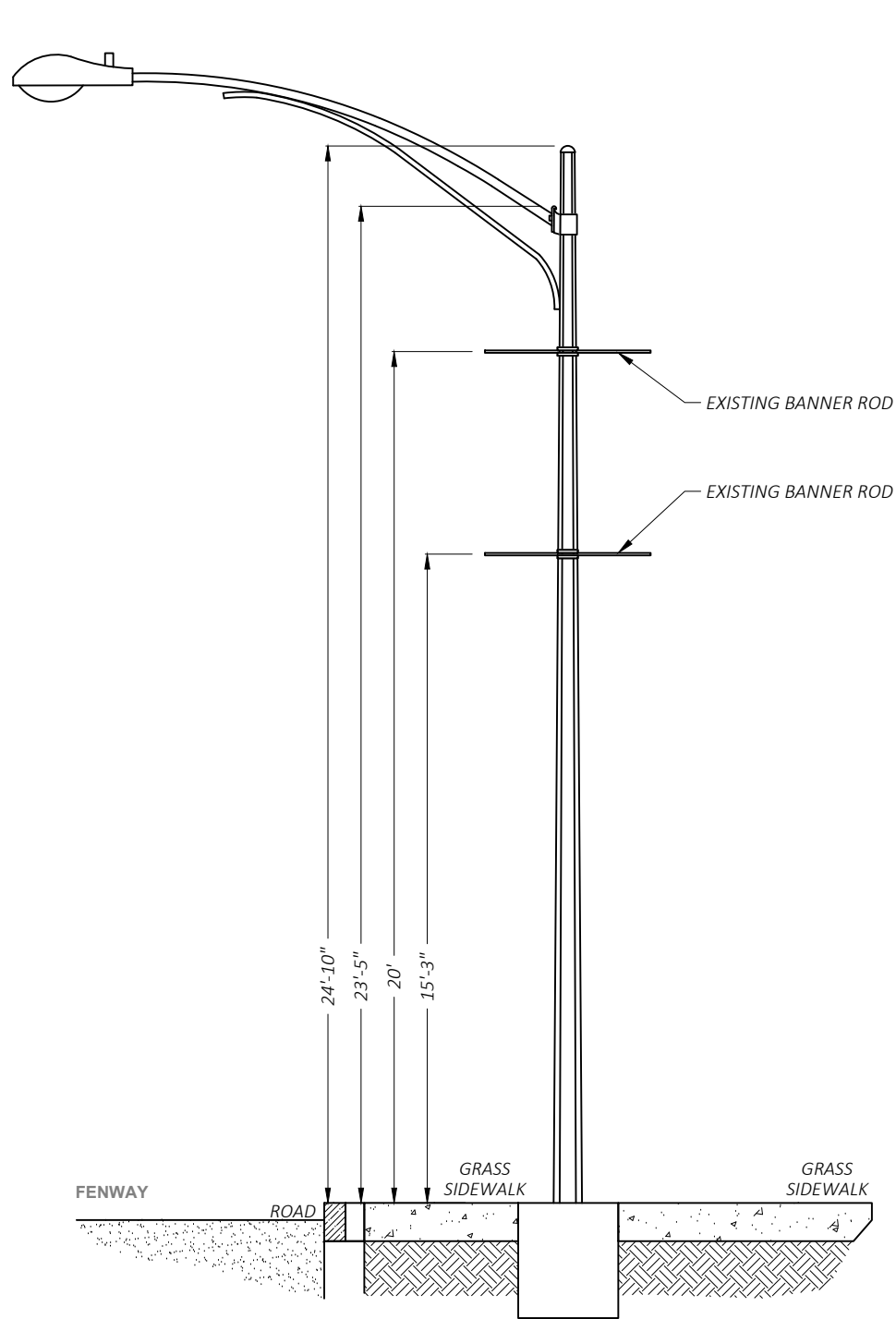
REVISIONS		
REV	DESCRIPTION	DATE
1	UPDATED TO BASE CABINET	5/5/16
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DRAFTER: DTB/SML  
SCALE: AS SHOWN  
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INDEX NAME: BBX-084  
SHEET #: 1 OF 6

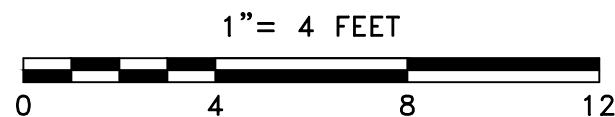
# EXTENET DOWNTOWN BOSTON NODE BBX-084

## SIDE VIEW

AZIMUTH  
OVERTURE: 0°  
ACTUAL: 0°/120°/240°



① EXISTING PROFILE - SIDE VIEW  
LOOKING SOUTH ALONG FENWAY



① PROPOSED PROFILE - SIDE VIEW  
LOOKING SOUTH ALONG FENWAY

LOCATION:  
BOSTON, MA  
SUFFOLK COUNTY

NOTES:  
EXISTING CITY OF BOSTON STREET LIGHT TO BE REMOVED **AFTER** REPLACEMENT LIGHT HAS BEEN INSTALLED, INSPECTED AND POWERED.

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www.ucsend.com 1-508-337-7600

NODE  
BBX-084

REVISIONS		
REV	DESCRIPTION	DATE
1	UPDATED TO BASE CABINET	5/5/16
2	UPDATED INFORMATION	04/17/17

DRAFTER: DTB/SML  
SCALE: 1" = 4'  
ISSUE DATE: 01/29/16  
INDEX NAME: BBX-084  
SHEET #: 2 OF 6

N:\Engineering\Extenet Systems\NE-MA-BK\BAYEXP-VZW - Back Bay Expansion\AA-AUTOCAD\NPP\NODE BBX-084.dwg 04/17/17





EXISTING PHOTOGRAPHIC VIEW



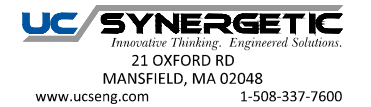
PROPOSED PHOTOGRAPHIC SIMULATION

NOTES:

PREPARED FOR:



PREPARED BY:



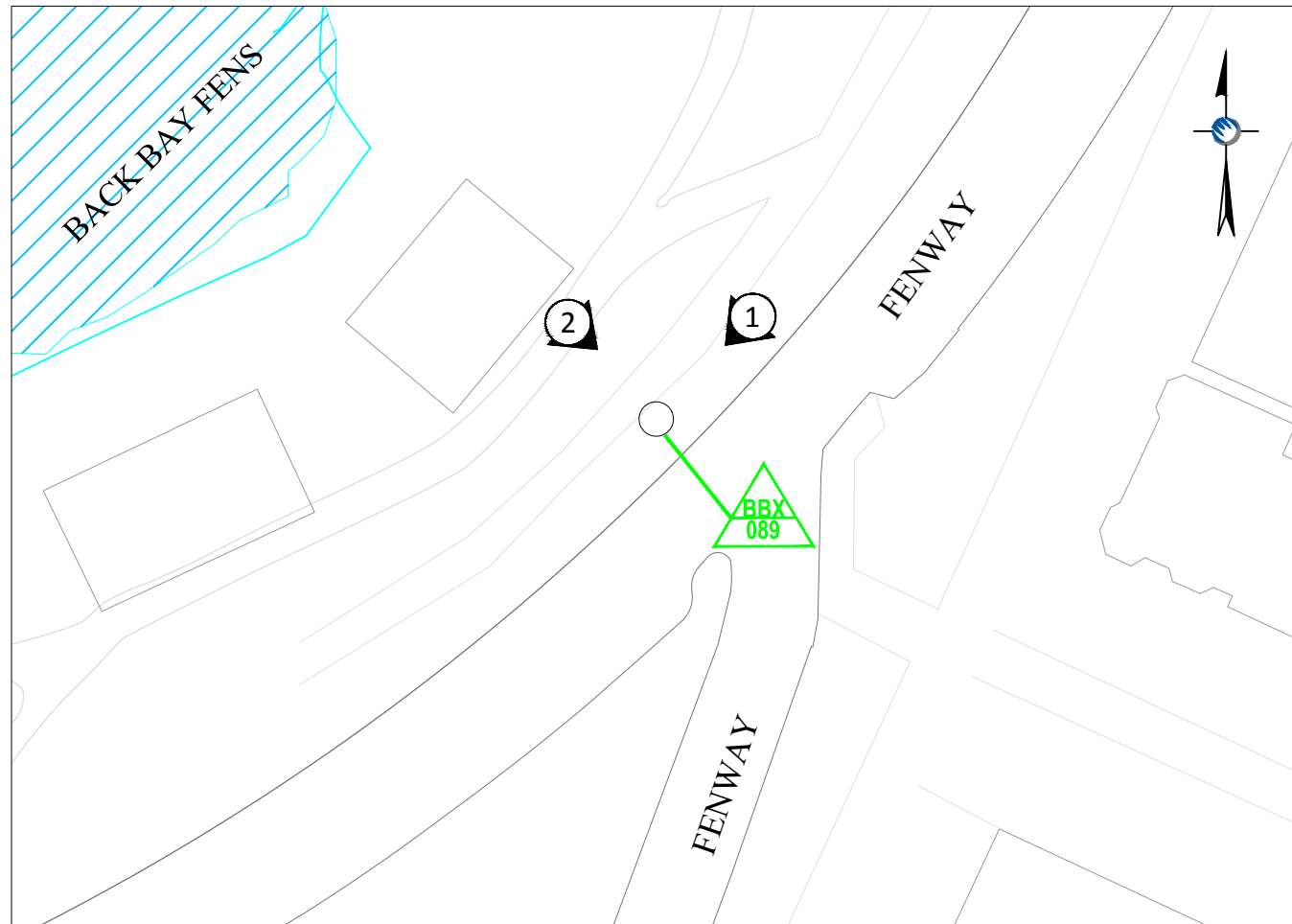
REVISIONS		
REV	DESCRIPTION	DATE

DRAWING TITLE:  
**PHOTO SIMULATION**

DRAFTER: MI	DRAWING NO.
SCALE: NTS	<b>1</b>
ISSUE DATE: 09/13/17	
INDEX NAME: NODE BBX-084	

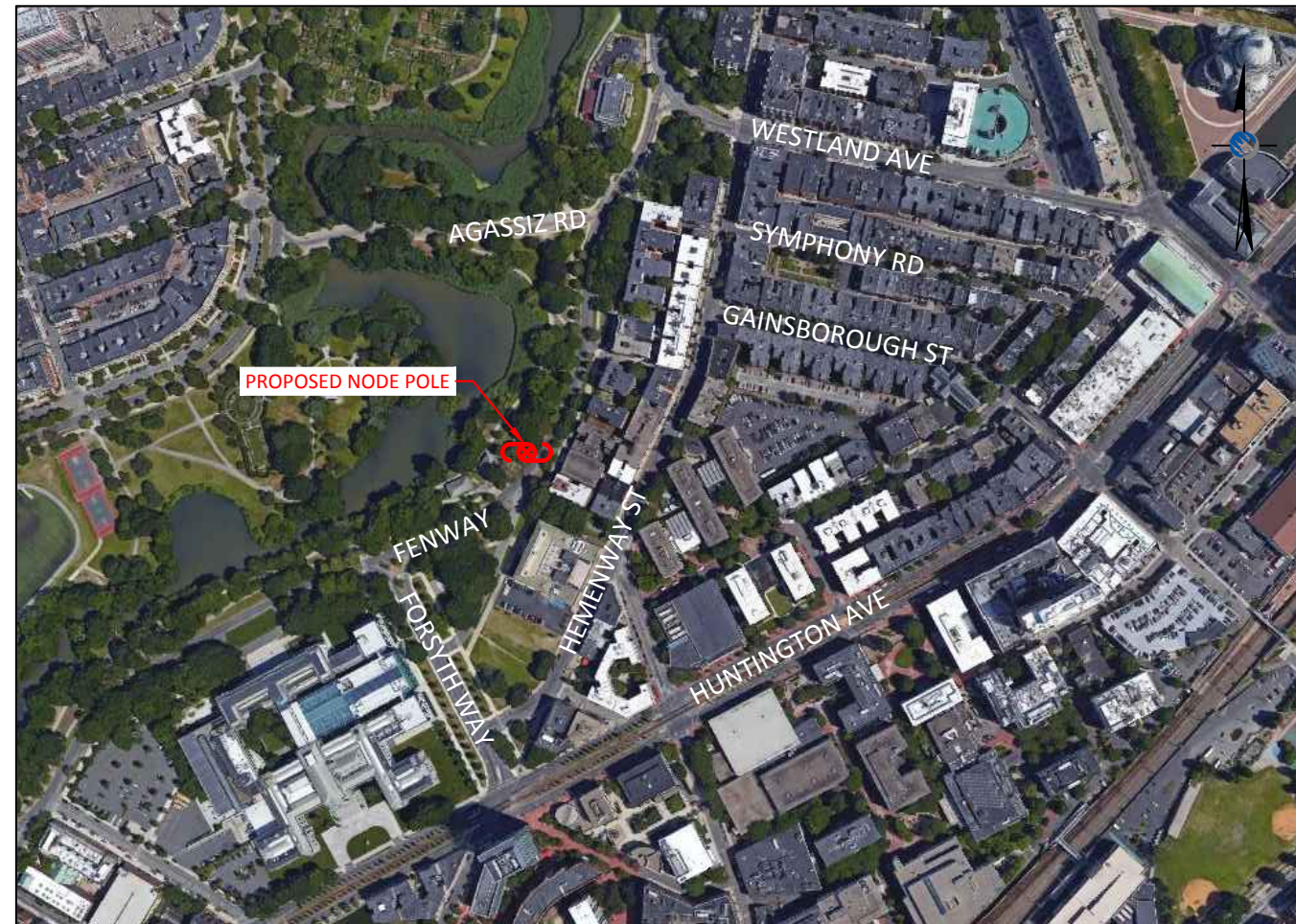


EXTENET SYSTEMS  
CITY OF BOSTON  
SUFFOLK COUNTY, MA



LOCATION MAP

LATITUDE: 42.341589° LONGITUDE: -71.092034°  
SCALE: 1" = 50'



LOCUS MAP

PROJECT LOCATION - NODE BBX-089  
SCALE: 1" = 500'

LOCATION:  
BOSTON, MA  
SUFFOLK COUNTY

NOTES:  
EXISTING CITY OF BOSTON  
STREET LIGHT TO BE  
REMOVED **AFTER**  
REPLACEMENT LIGHT HAS  
BEEN INSTALLED,  
INSPECTED AND POWERED.

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NODE  
BBX-089

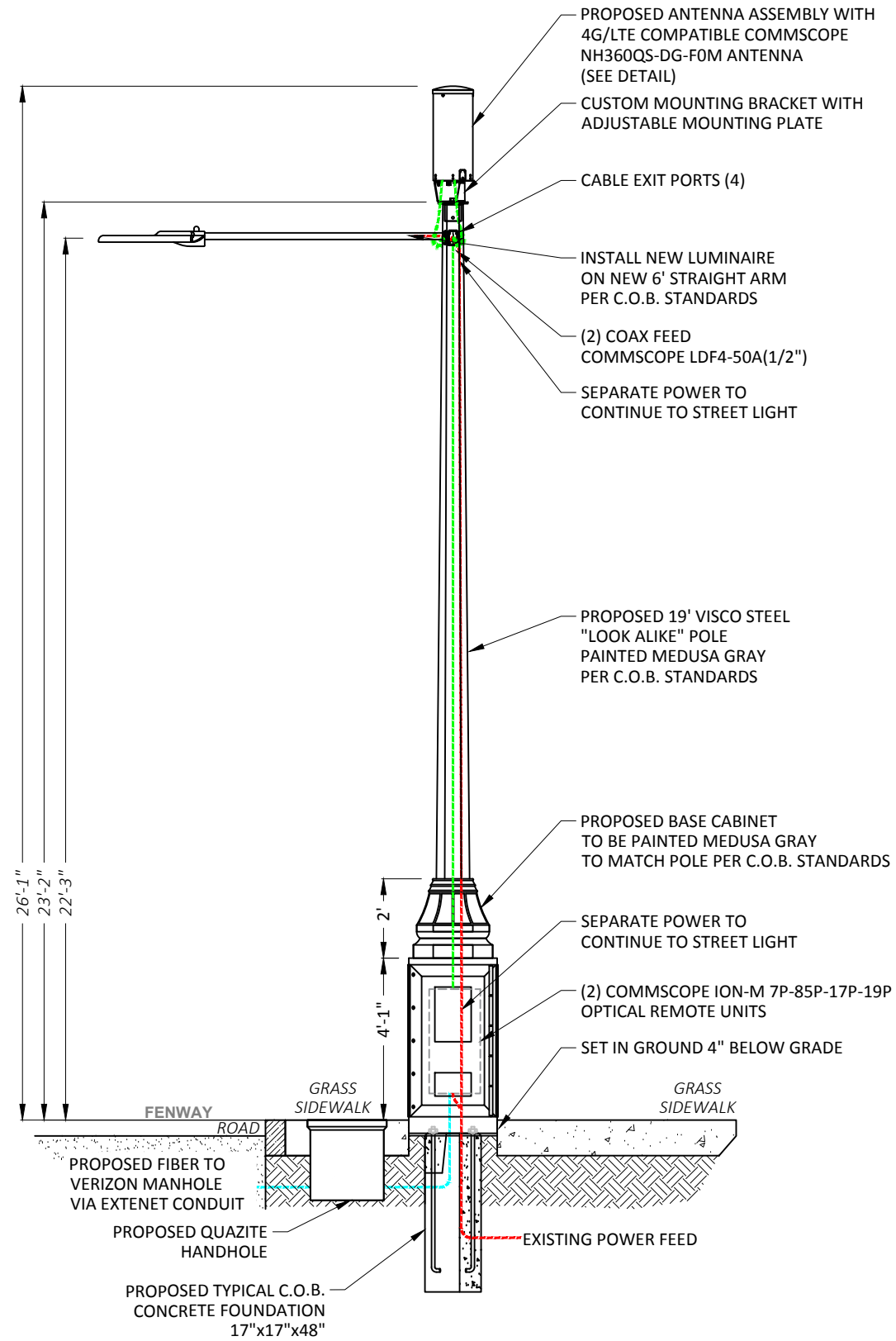
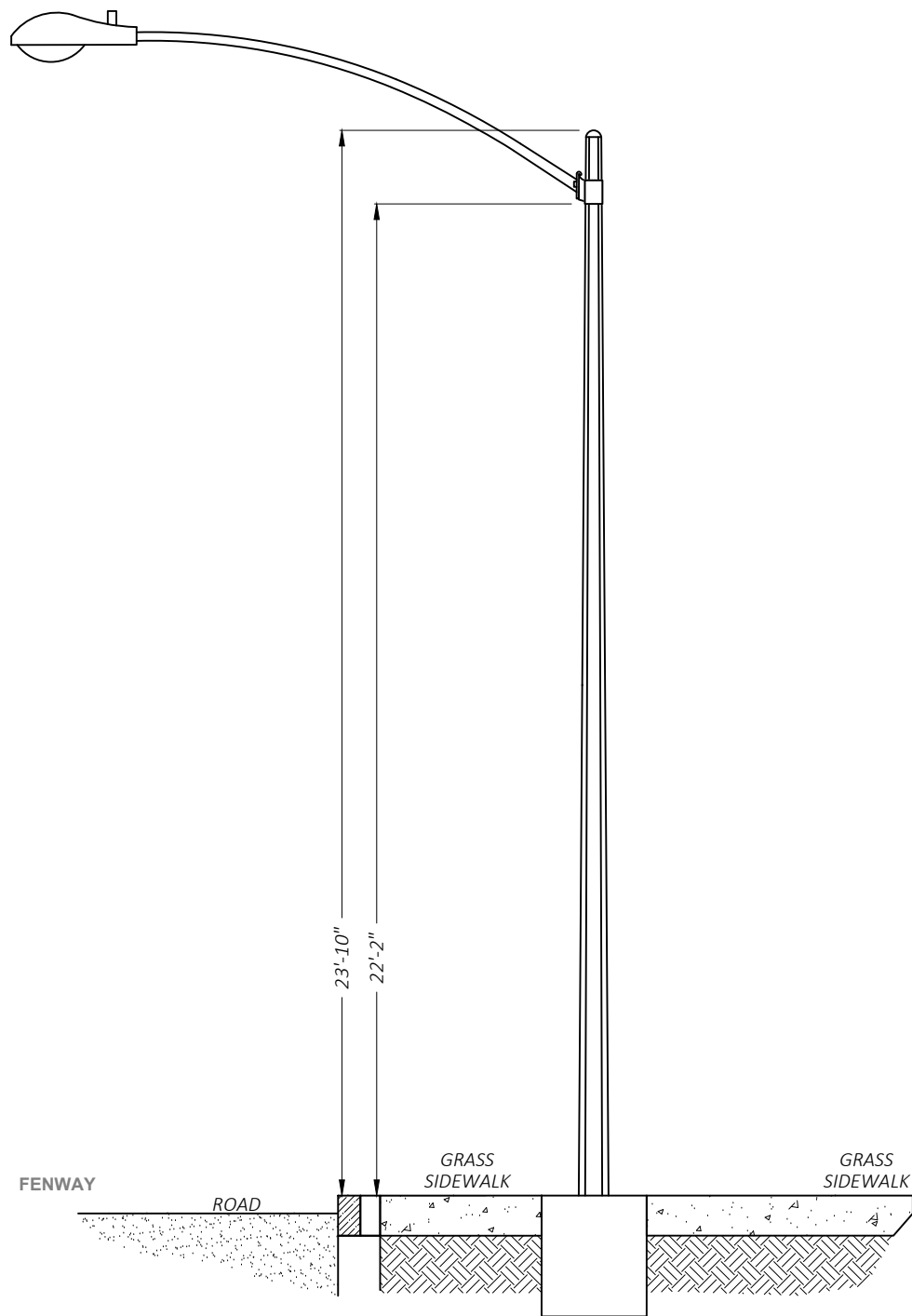
REVISIONS		
REV	DESCRIPTION	DATE
1	UPDATED TO BASE CABINET	5/5/16
2	UPDATED INFORMATION	04/17/17

DRAFTER: DTB/SML  
SCALE: AS SHOWN  
ISSUE DATE: 1/29/16  
INDEX NAME: BBX-089  
SHEET #: 1 OF 6

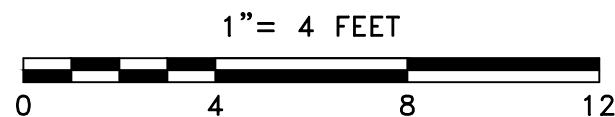
# EXTENET DOWNTOWN BOSTON NODE BBX-089

## SIDE VIEW

AZIMUTH  
OVERTURE: 155°  
ACTUAL: 35°/155°/275°



① EXISTING PROFILE - SIDE VIEW  
LOOKING SOUTHWEST ALONG FENWAY



① PROPOSED PROFILE - SIDE VIEW  
LOOKING SOUTHWEST ALONG FENWAY

LOCATION:  
BOSTON, MA  
SUFFOLK COUNTY

NOTES:  
EXISTING CITY OF BOSTON  
STREET LIGHT TO BE  
REMOVED **AFTER**  
REPLACEMENT LIGHT HAS  
BEEN INSTALLED,  
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NODE  
BBX-089

REVISIONS		
REV	DESCRIPTION	DATE
1	UPDATED TO BASE CABINET	5/5/16
2	UPDATED INFORMATION	04/17/17

DRAFTER: DTB/SML  
SCALE: 1" = 4'  
ISSUE DATE: 1/29/16  
INDEX NAME: BBX-089  
SHEET #: 2 OF 6

N:\Engineering\Extenet Systems\NE-MA-BK\BAYEXP-VZW - Back Bay Expansion\AA-AUTOCAD\NPP\NODE BBX-089-1.DWG 04/17/17





EXISTING PHOTOGRAPHIC VIEW



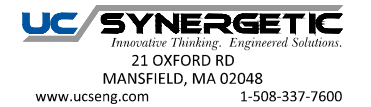
PROPOSED PHOTOGRAPHIC SIMULATION

NOTES:

PREPARED FOR:



PREPARED BY:



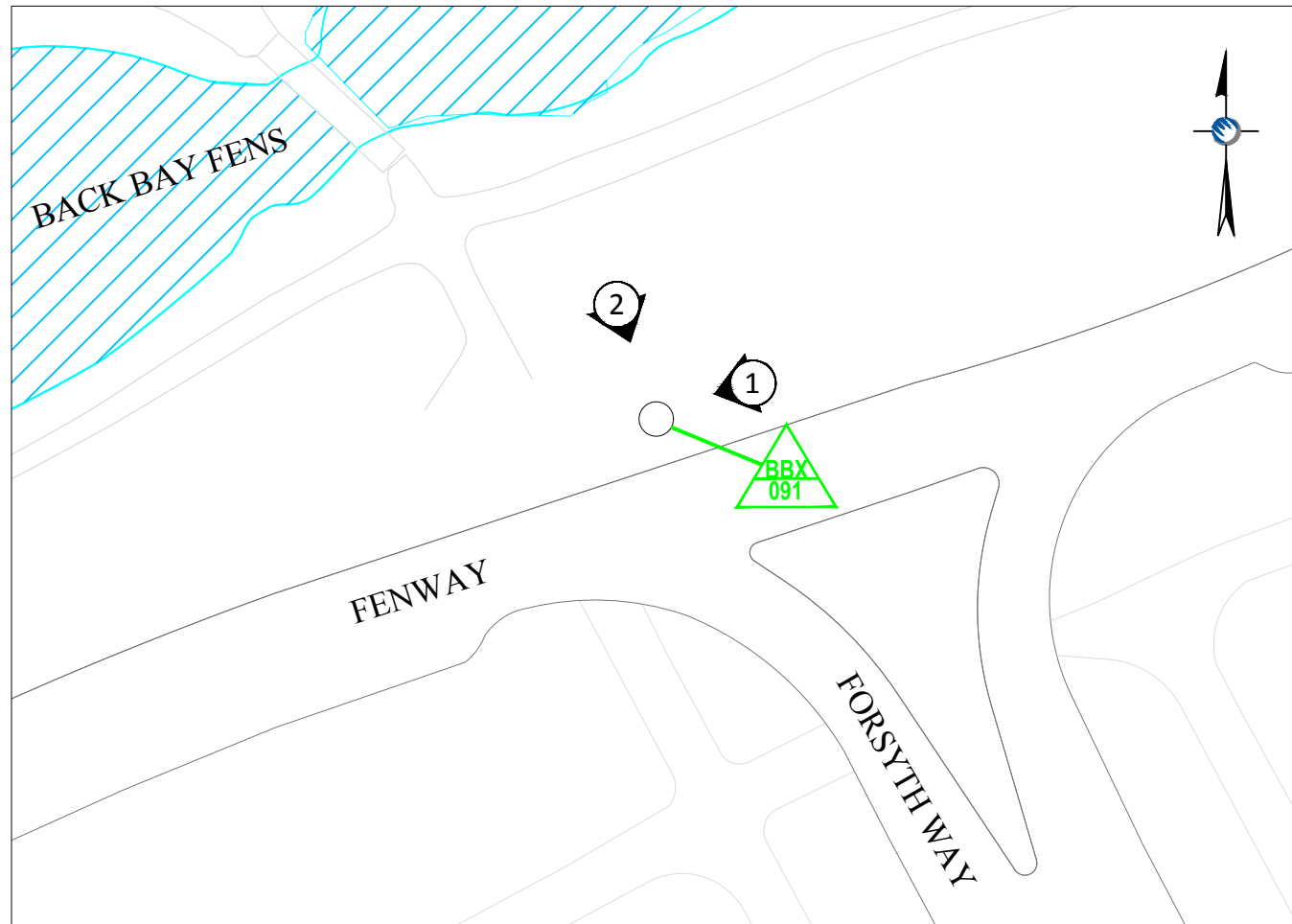
REVISIONS		
REV	DESCRIPTION	DATE

DRAWING TITLE:  
**PHOTO SIMULATION**

DRAFTER: MI	DRAWING NO.
SCALE: NTS	<b>1</b>
ISSUE DATE: 09/13/17	
INDEX NAME: NODE BBX-089	

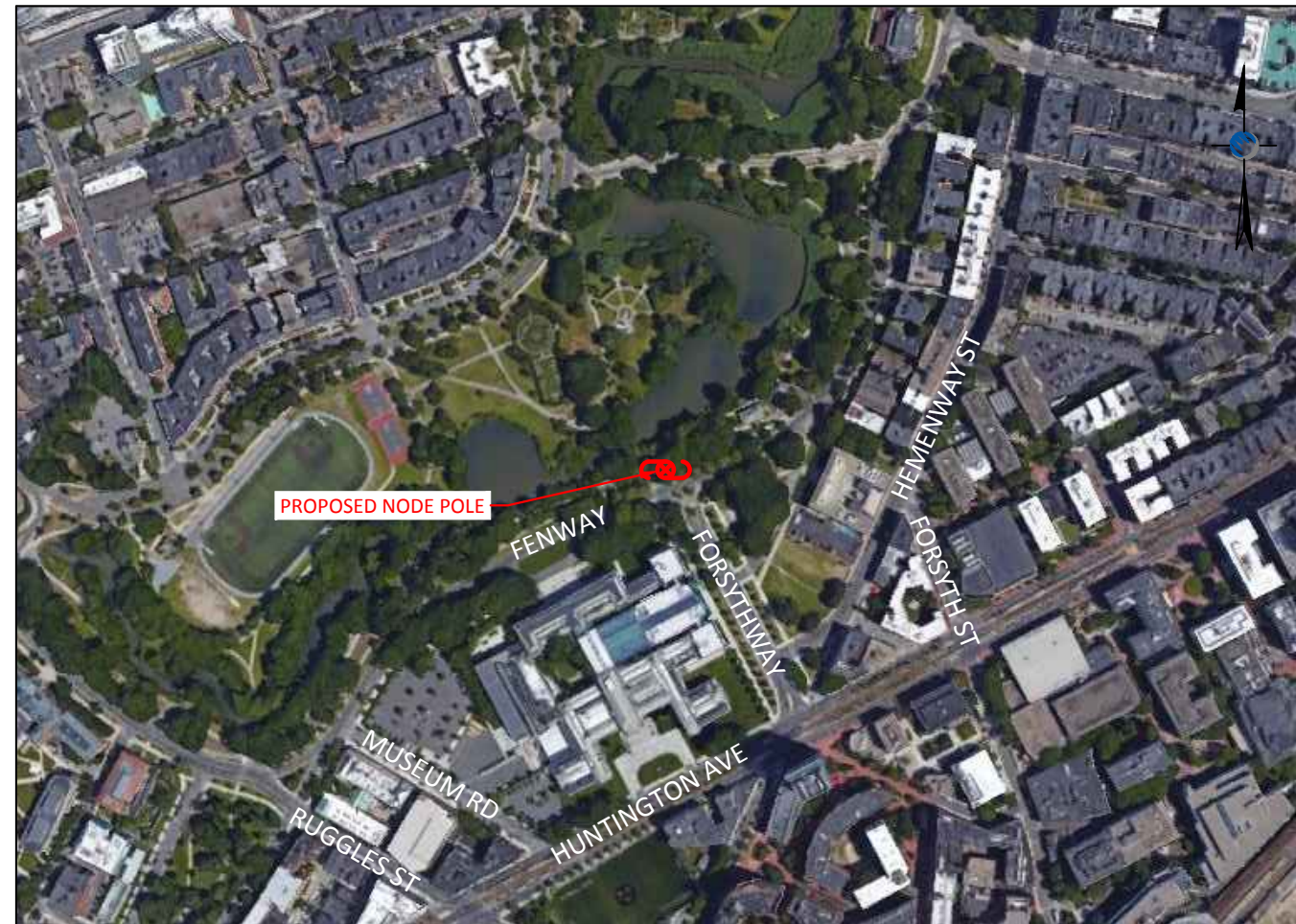


EXTENET SYSTEMS  
CITY OF BOSTON  
SUFFOLK COUNTY, MA



LOCATION MAP

LATITUDE: 42.340849° LONGITUDE: -71.093713°  
SCALE: 1" = 50'



LOCUS MAP

PROJECT LOCATION - NODE BBX-091  
SCALE: 1" = 500'

LOCATION:  
BOSTON, MA  
SUFFOLK COUNTY

NOTES:  
EXISTING CITY OF BOSTON STREET LIGHT TO BE REMOVED **AFTER** REPLACEMENT LIGHT HAS BEEN INSTALLED, INSPECTED AND POWERED.

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NODE  
BBX-091

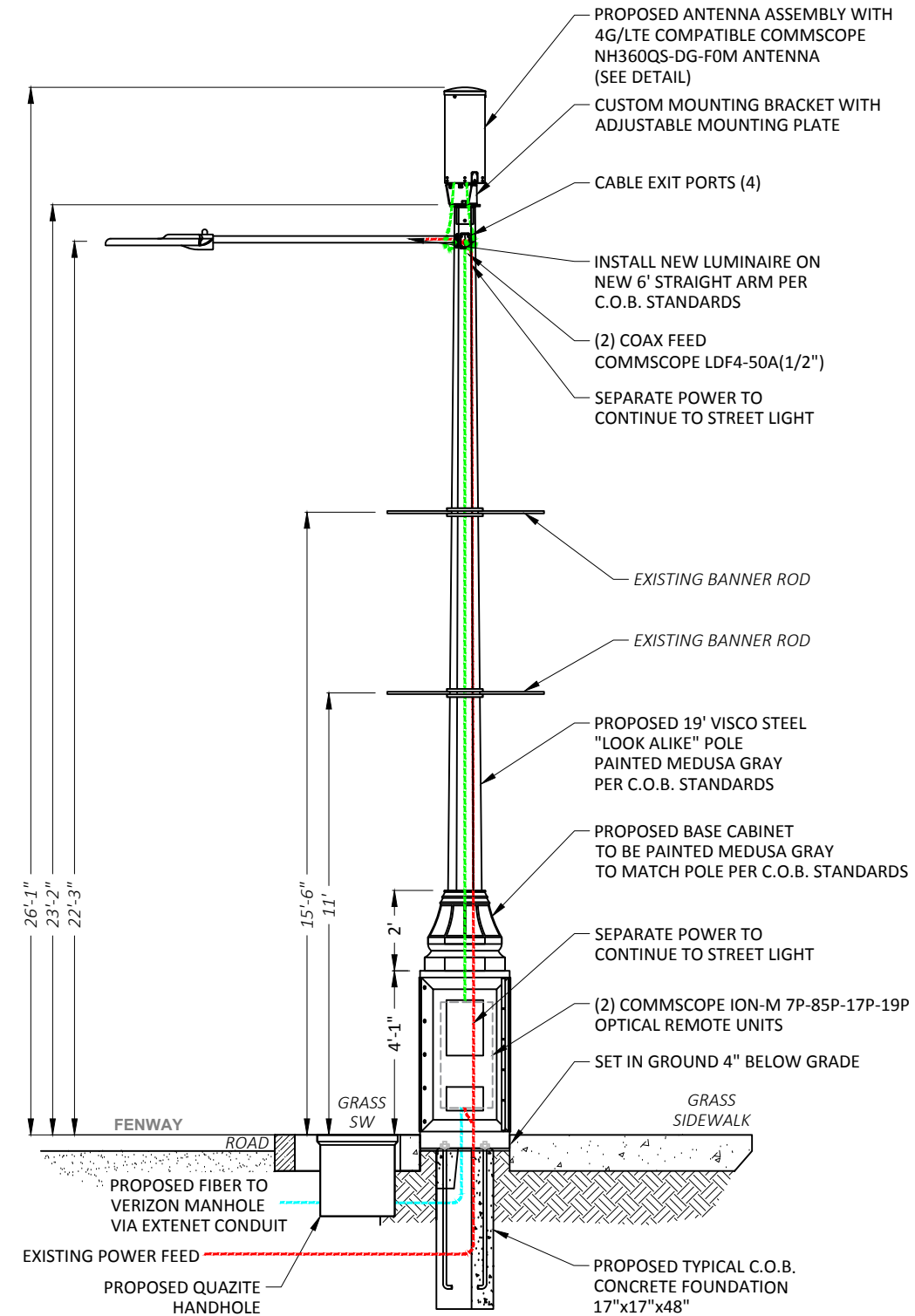
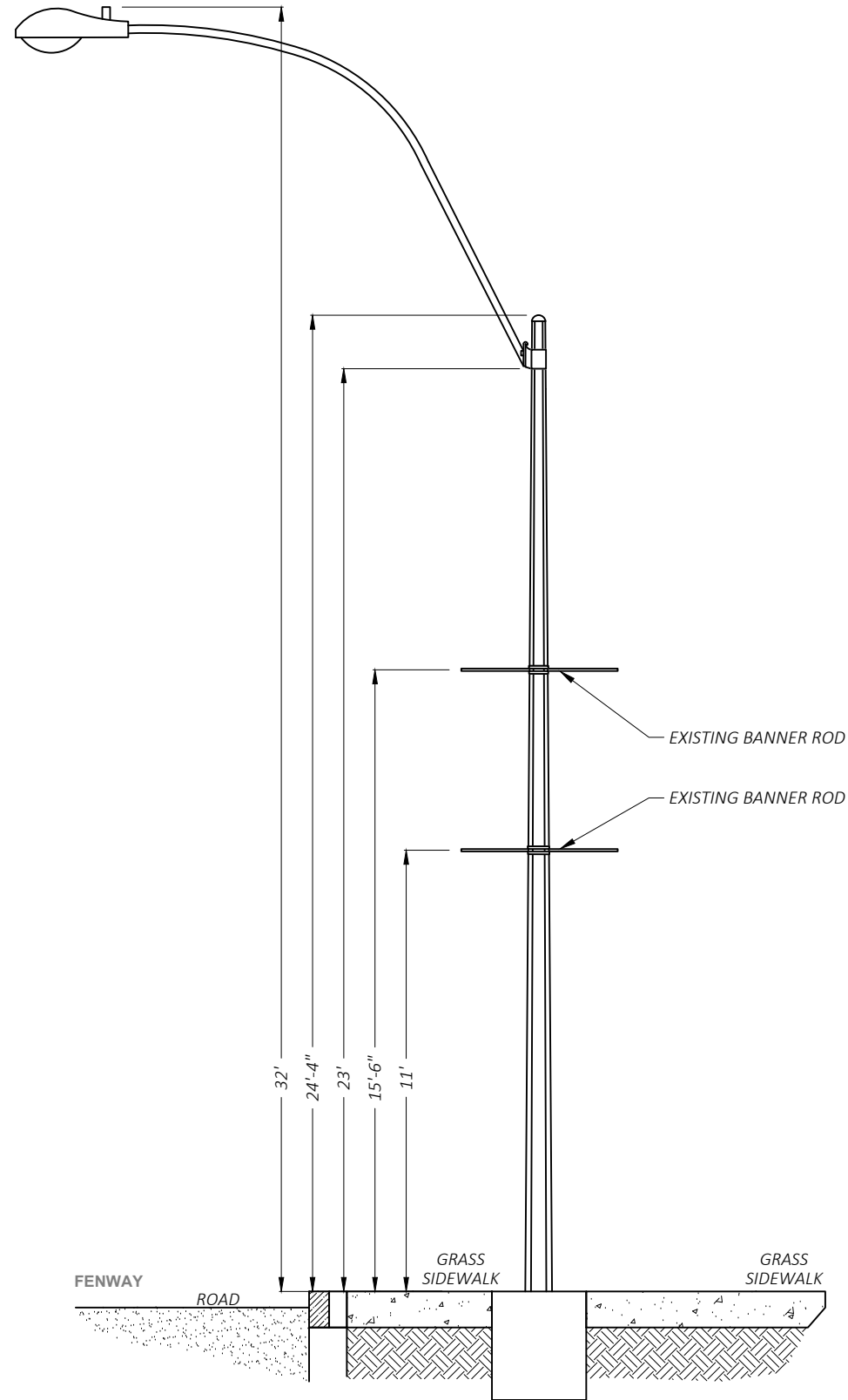
REVISIONS		
REV	DESCRIPTION	DATE
1	UPDATED TO BASE CABINET	5/5/16
2	UPDATED INFORMATION	04/17/17

DRAFTER: DTB/SML  
SCALE: AS SHOWN  
ISSUE DATE: 01/29/16  
INDEX NAME: BBX-091  
SHEET #: 1 OF 6

N:\Engineering\Extenet Systems\NE-MA-BKBAEXP-VZW - Back Bay Expansion\AA-AUTOCAD\NPP\NODE BBX-091.dwg 04/17/17

# EXTENET DOWNTOWN BOSTON NODE BBX-091 SIDE VIEW


AZIMUTH  
OVERTURE: 155°  
ACTUAL: 35°/155°/275°



LOCATION:  
BOSTON, MA  
SUFFOLK COUNTY

NOTES:  
EXISTING CITY OF BOSTON STREET LIGHT TO BE REMOVED **AFTER** REPLACEMENT LIGHT HAS BEEN INSTALLED, INSPECTED AND POWERED.

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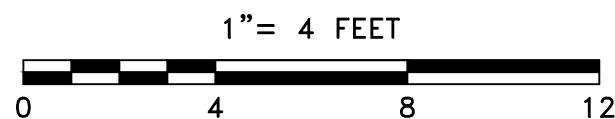
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NODE  
BBX-091

REVISIONS		
REV	DESCRIPTION	DATE
1	UPDATED TO BASE CABINET	5/5/16
2	UPDATED INFORMATION	04/17/17

DRAFTER: DTB/SML  
SCALE: 1" = 4'  
ISSUE DATE: 01/29/16  
INDEX NAME: BBX-091  
SHEET #: 2 OF 6

① EXISTING PROFILE - SIDE VIEW  
LOOKING SOUTHWEST ALONG FENWAY



① PROPOSED PROFILE - SIDE VIEW  
LOOKING SOUTHWEST ALONG FENWAY

N:\Engineering\Extenet Systems\NE-MA-BKBA\EXP-VZW - Back Bay Expansion\AA-AUTOCAD\NPP\NODE BBX-091.dwg 04/17/17





EXISTING PHOTOGRAPHIC VIEW



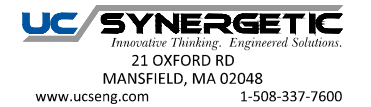
PROPOSED PHOTOGRAPHIC SIMULATION

NOTES:

PREPARED FOR:



PREPARED BY:



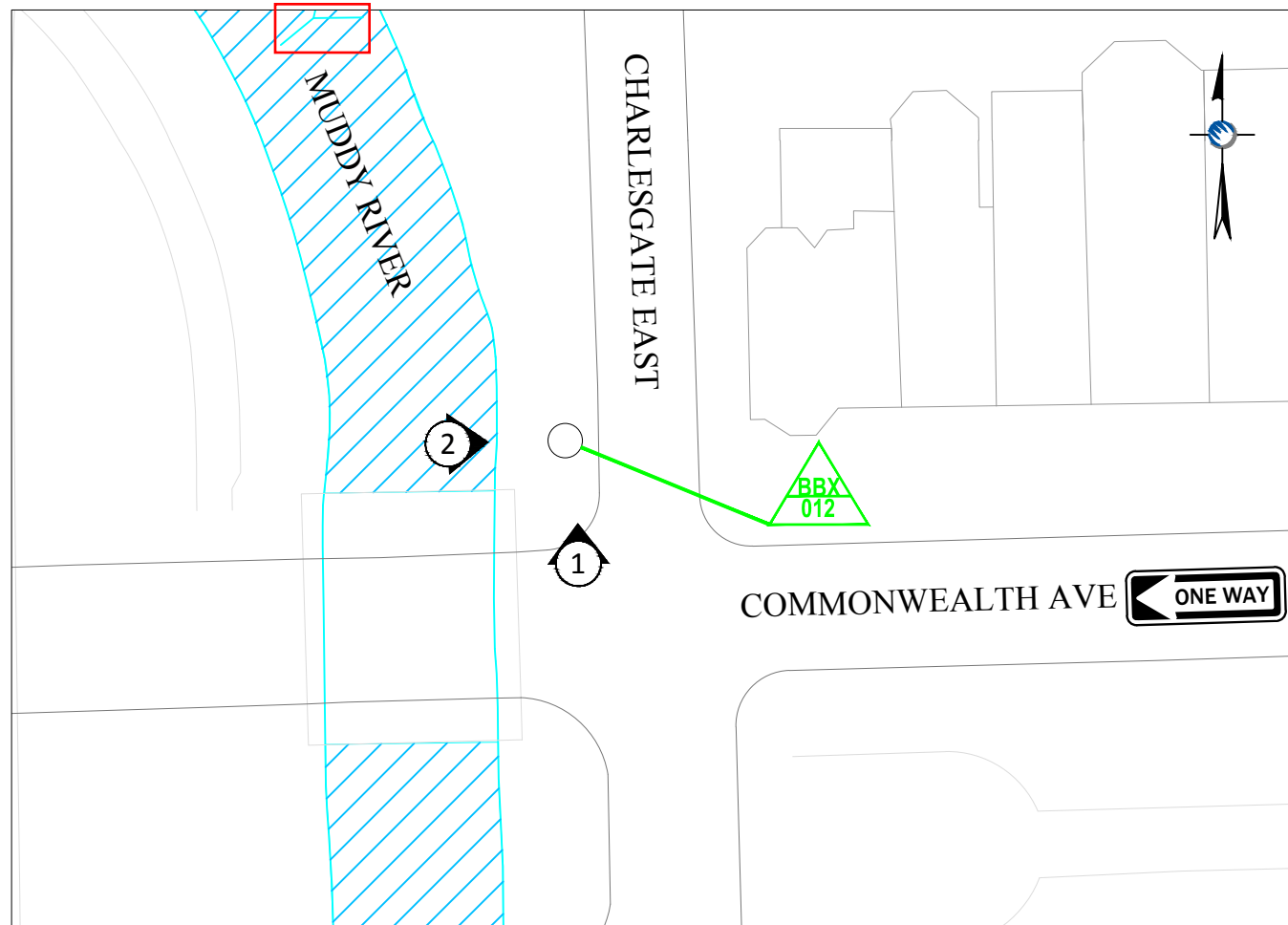
REVISIONS		
REV	DESCRIPTION	DATE

DRAWING TITLE:  
**PHOTO SIMULATION**

DRAFTER: MI	DRAWING NO.
SCALE: NTS	<b>1</b>
ISSUE DATE: 09/13/17	
INDEX NAME: NODE BBX-091	

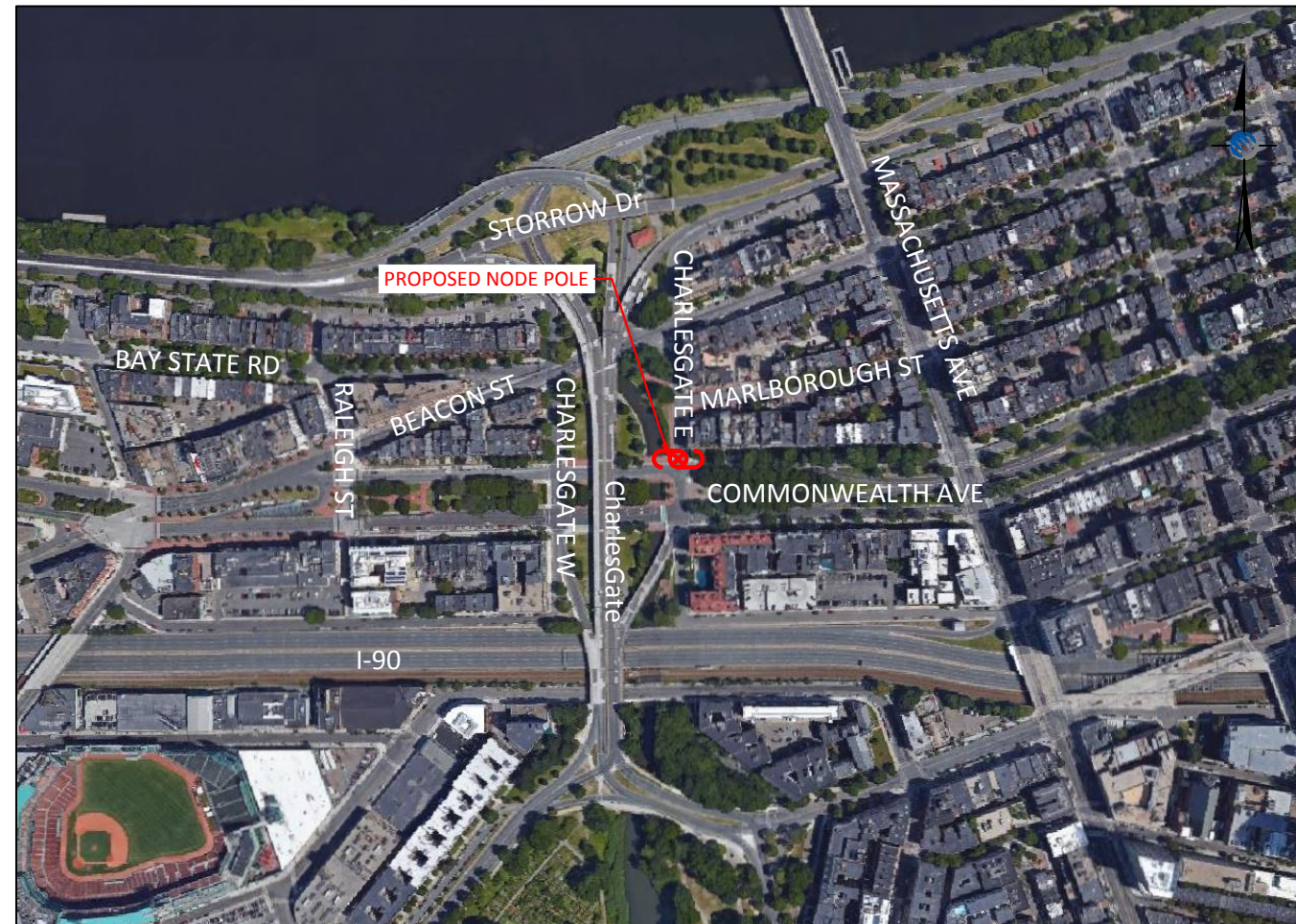


EXTENET SYSTEMS  
CITY OF BOSTON  
SUFFOLK COUNTY, MA



LOCATION MAP

LATITUDE: 42.349323° LONGITUDE: -71.091658°  
SCALE: 1" = 50'



LOCUS MAP

PROJECT LOCATION - NODE BBX-012  
SCALE: 1" = 500'

LOCATION:  
BOSTON, MA  
SUFFOLK COUNTY

NOTES:  
EXISTING CITY OF BOSTON  
STREET LIGHT TO BE  
REMOVED **AFTER**  
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NODE  
BBX-012

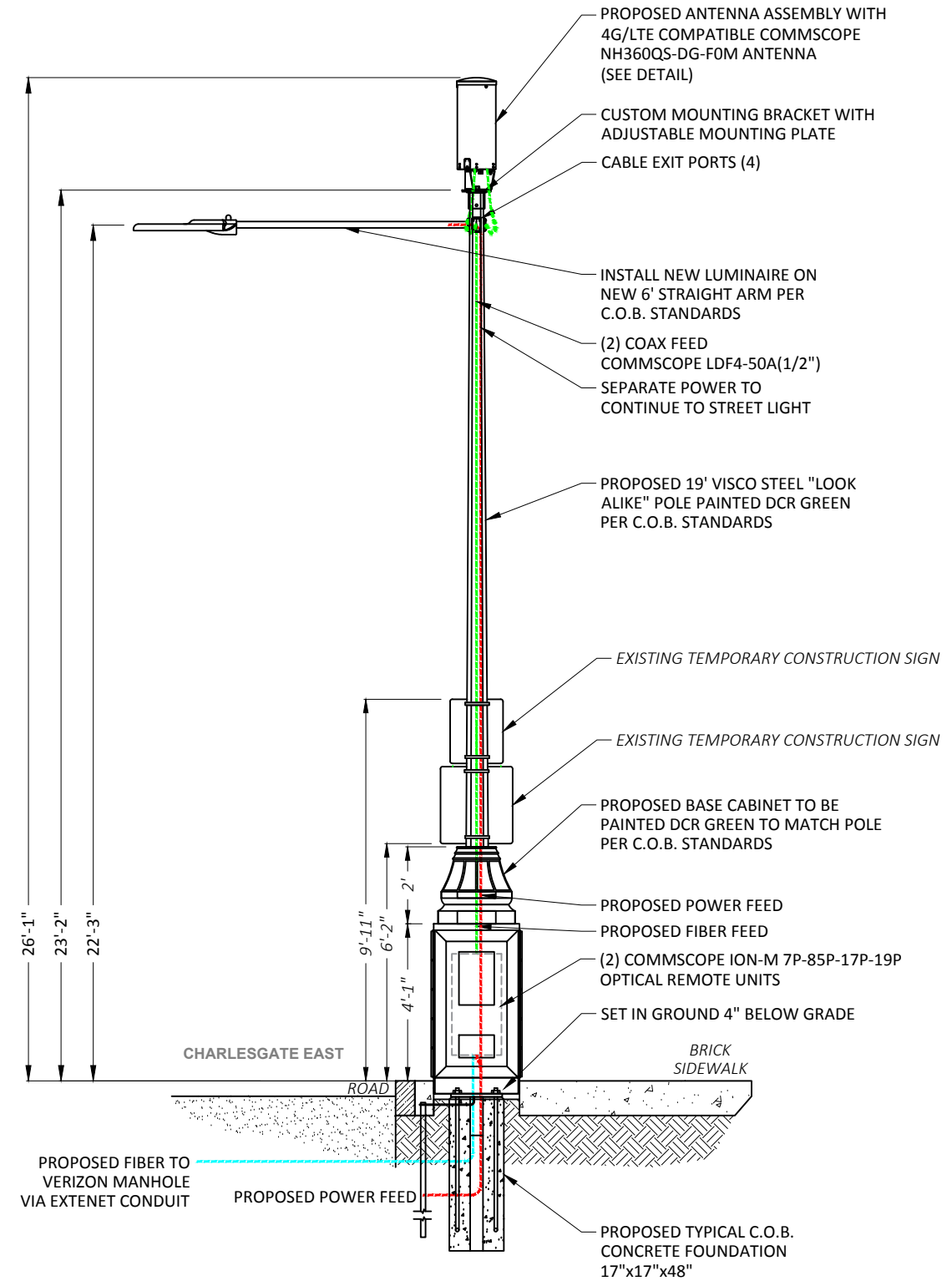
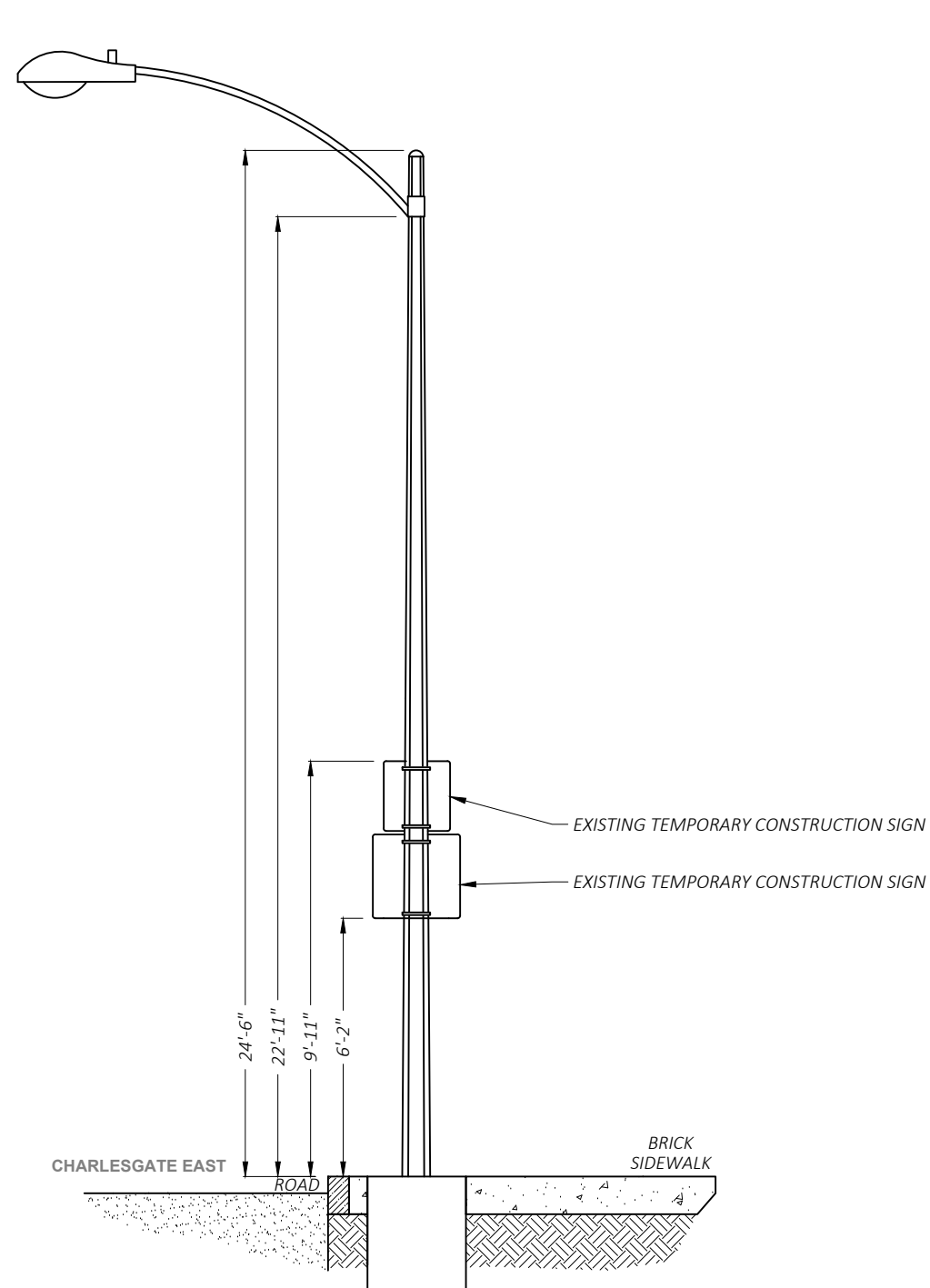
REVISIONS		
REV	DESCRIPTION	DATE
1	UPDATED TO BASE CABINET	5/5/16
2	UPDATED INFORMATION	04/12/17

DRAFTER: JB/JDL/SML  
SCALE: AS SHOWN  
ISSUE DATE: 2/1/16  
INDEX NAME: BBX-012  
SHEET #: 1 OF 6

# EXTENET DOWNTOWN BOSTON NODE BBX-012

## SIDE VIEW

AZIMUTH  
OVERTURE: 330°  
ACTUAL: 90°/210°/330°



LOCATION:  
BOSTON, MA  
SUFFOLK COUNTY

NOTES:  
EXISTING CITY OF BOSTON STREET LIGHT TO BE REMOVED **AFTER** REPLACEMENT LIGHT HAS BEEN INSTALLED, INSPECTED AND POWERED.

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NODE  
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REVISIONS		
REV	DESCRIPTION	DATE
1	UPDATED TO BASE CABINET	5/5/16
2	UPDATED IHNFORMATION	04/12/17

DRAFTER: JB/JDL/SML

SCALE: 1" = 4'

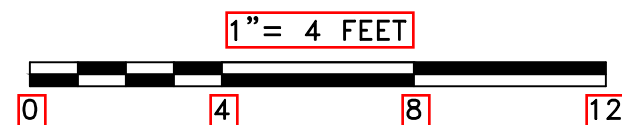
ISSUE DATE: 2/1/16

INDEX NAME: BBX-012

SHEET #: 2 OF 6

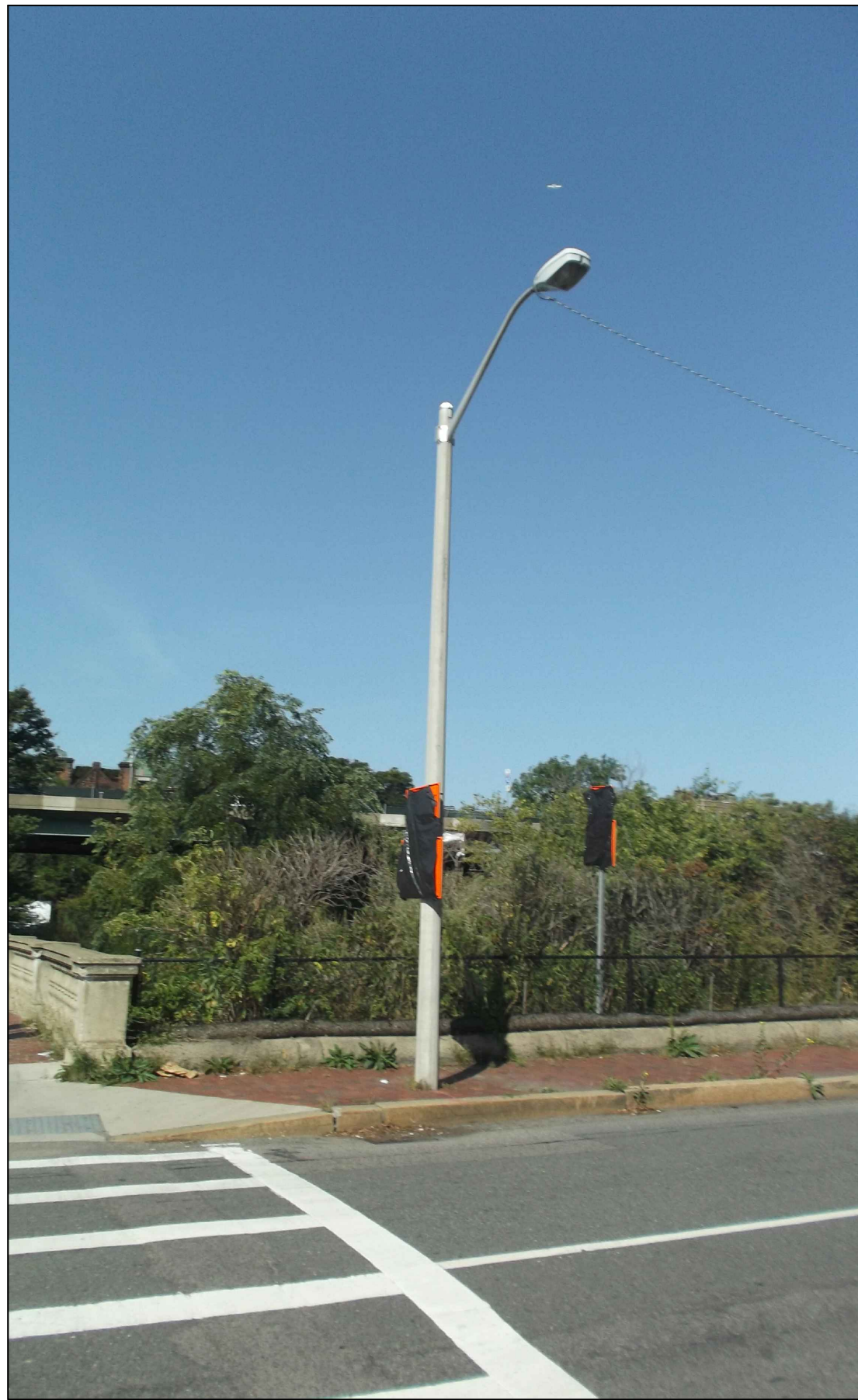
2

① EXISTING PROFILE - SIDE VIEW  
LOOKING NORTH ALONG CHARLES GATE EAST



① PROPOSED PROFILE - SIDE VIEW  
LOOKING NORTH ALONG CHARLES GATE EAST





EXISTING PHOTOGRAPHIC VIEW



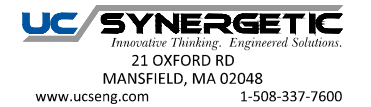
PROPOSED PHOTOGRAPHIC SIMULATION

NOTES:

PREPARED FOR:



PREPARED BY:



REVISIONS

REV	DESCRIPTION	DATE

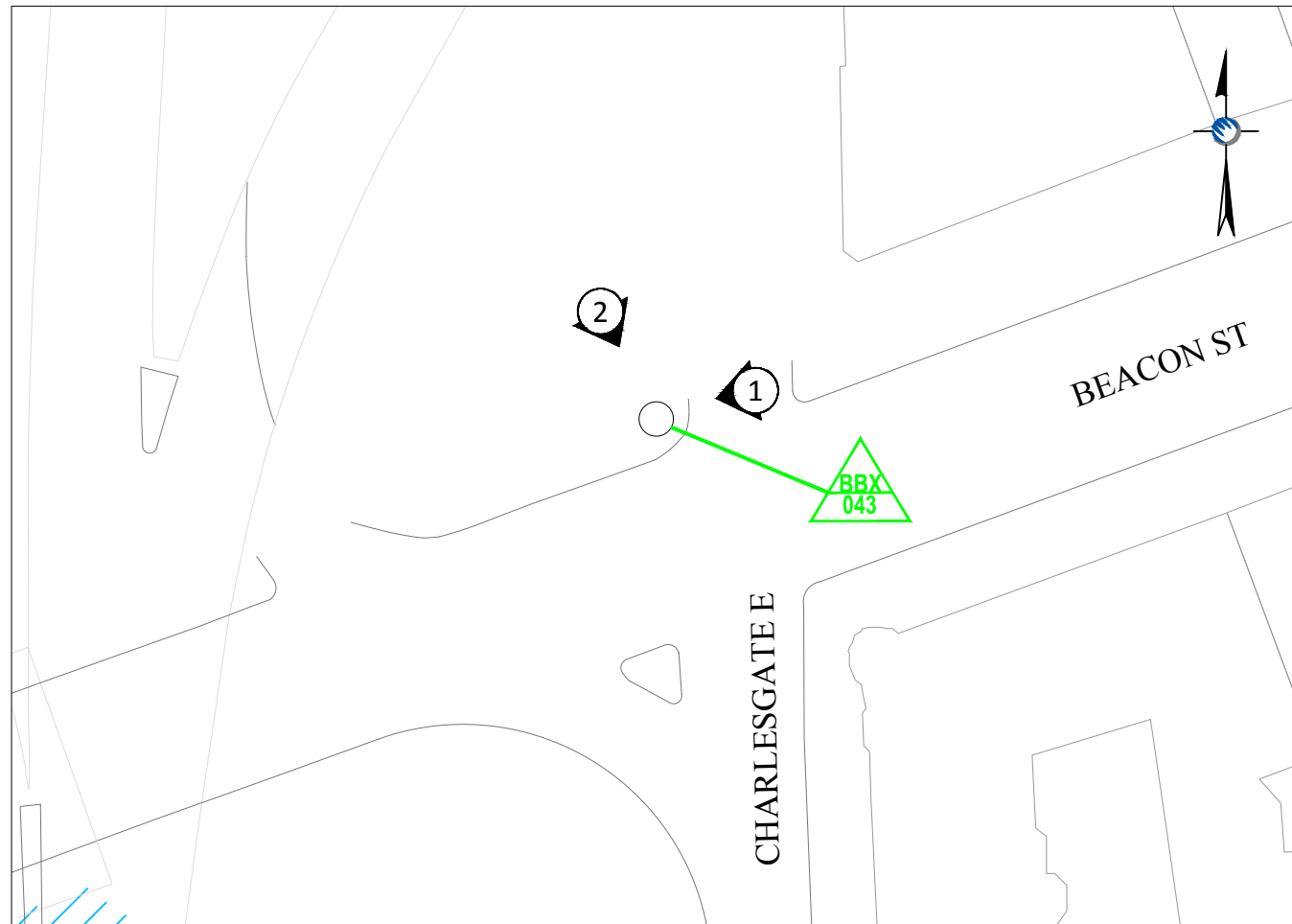
DRAWING TITLE:

**PHOTO SIMULATION**

DRAFTER: MI	DRAWING NO.
SCALE: NTS	<b>1</b>
ISSUE DATE: 09/29/17	
INDEX NAME: NODE BBX-012	

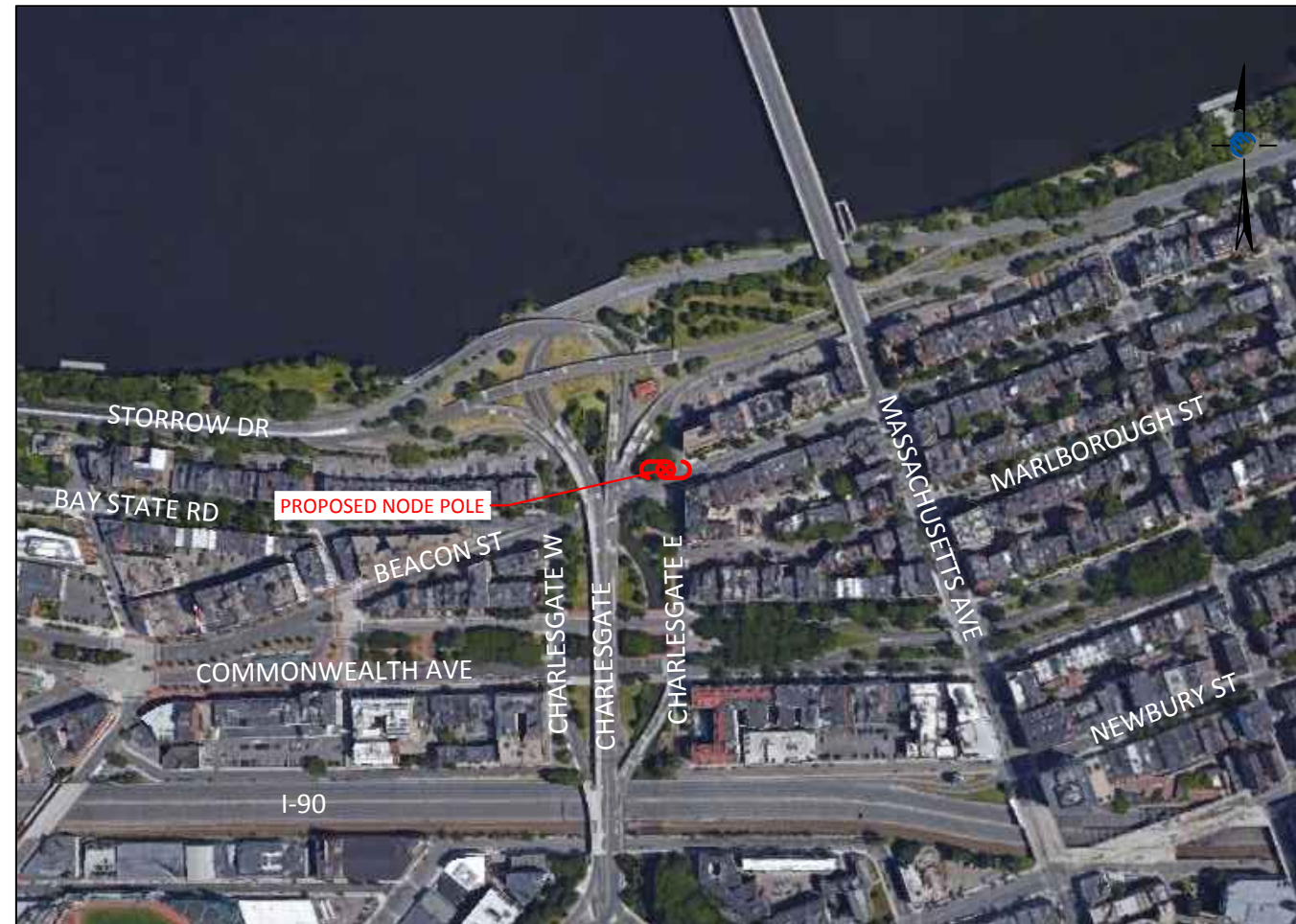


EXTENET SYSTEMS  
CITY OF BOSTON  
SUFFOLK COUNTY, MA



LOCATION MAP

LATITUDE: 42.350325° LONGITUDE: -71.091741°  
SCALE: 1" = 50'



LOCUS MAP

PROJECT LOCATION - NODE BBX-043  
SCALE: 1" = 500'

LOCATION:  
BOSTON, MA  
SUFFOLK COUNTY

NOTES:  
EXISTING CITY OF BOSTON STREET LIGHT TO BE REMOVED **AFTER** REPLACEMENT LIGHT HAS BEEN INSTALLED, INSPECTED AND POWERED.

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NODE  
BBX-043

REVISIONS		
REV	DESCRIPTION	DATE
1	UPDATED TO BASE CABINET	5/5/16
2	UPDATED INFORMATION	04/14/17

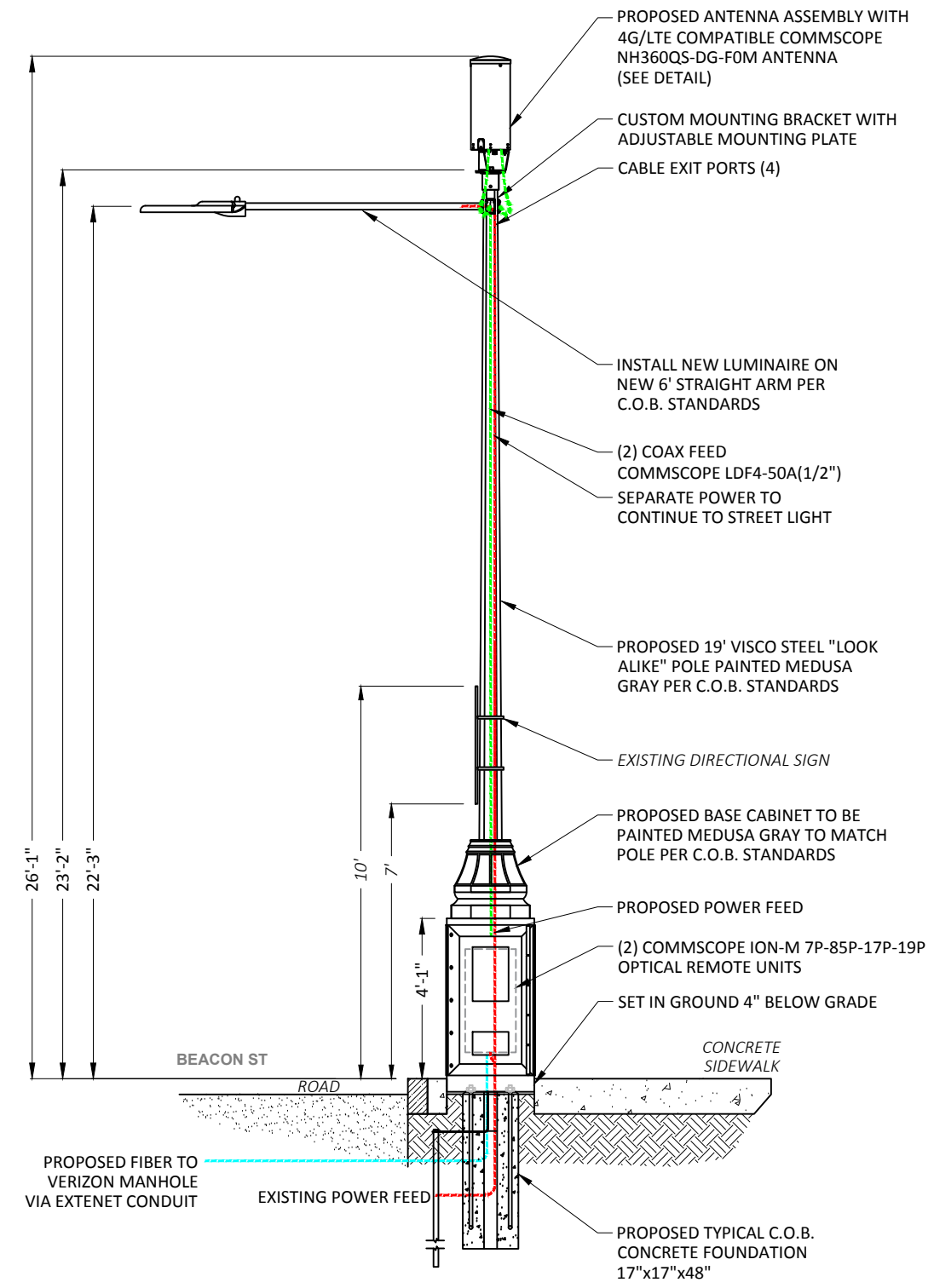
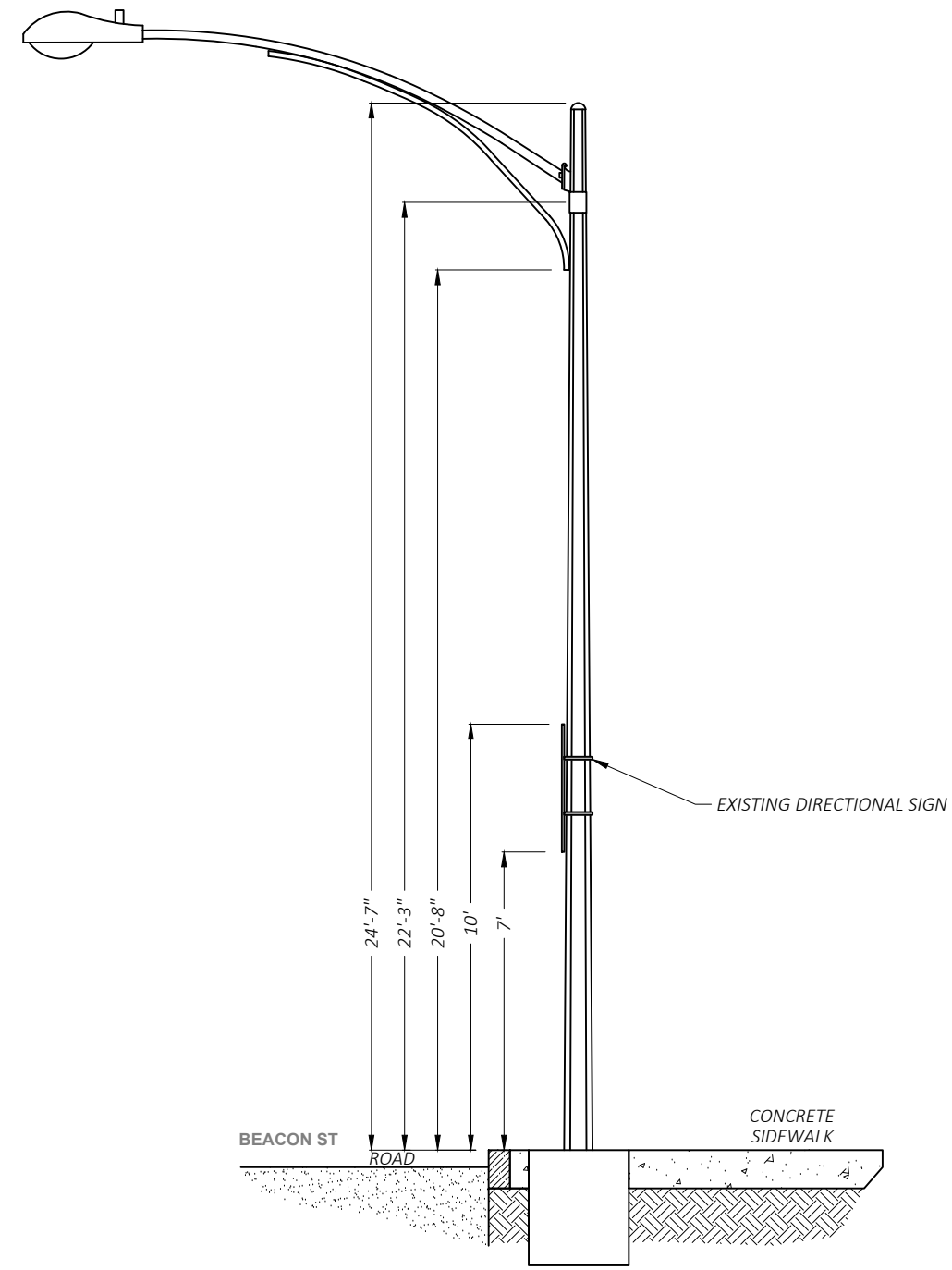
DRAFTER: DTB/SML  
SCALE: AS SHOWN  
ISSUE DATE: 01/28/16  
INDEX NAME: BBX-043  
SHEET #: 1 OF 6

N:\Engineering\Extenet Systems\NE-MA-BKBA\EXP-VZW - Back Bay Expansion\AA-AUTOCAD\NPP\NODE BBX-043.dwg 04/14/17

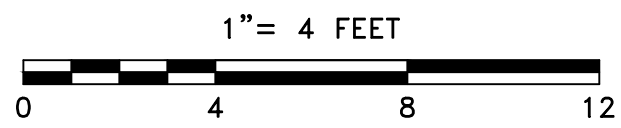
# EXTENET DOWNTOWN BOSTON NODE BBX-043

## SIDE VIEW

AZIMUTH  
OVERTURE: 190°  
ACTUAL: 70°/190°/310°



① EXISTING PROFILE - SIDE VIEW  
LOOKING WEST ALONG CHARLESGATE E




① PROPOSED PROFILE - SIDE VIEW  
LOOKING WEST ALONG CHARLESGATE E

LOCATION:  
BOSTON, MA  
SUFFOLK COUNTY

NOTES:  
EXISTING CITY OF BOSTON STREET LIGHT TO BE REMOVED **AFTER** REPLACEMENT LIGHT HAS BEEN INSTALLED, INSPECTED AND POWERED.

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NODE  
BBX-043

REVISIONS		
REV	DESCRIPTION	DATE
1	UPDATED TO BASE CABINET	5/5/16
2	UPDATED INFORMATION	04/14/17

DRAFTER: DTB/SML  
SCALE: 1" = 4'  
ISSUE DATE: 01/28/16  
INDEX NAME: BBX-043  
SHEET #: 2 OF 6

N:\Engineering\Extenet Systems\NE-MA-BK\BAYEXP-VZW - Back Bay Expansion\AA-AUTOCAD\NPP\NODE BBX-043.dwg 04/14/17





EXISTING PHOTOGRAPHIC VIEW



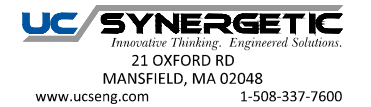
PROPOSED PHOTOGRAPHIC SIMULATION

NOTES:

PREPARED FOR:



PREPARED BY:



REVISIONS

REV	DESCRIPTION	DATE

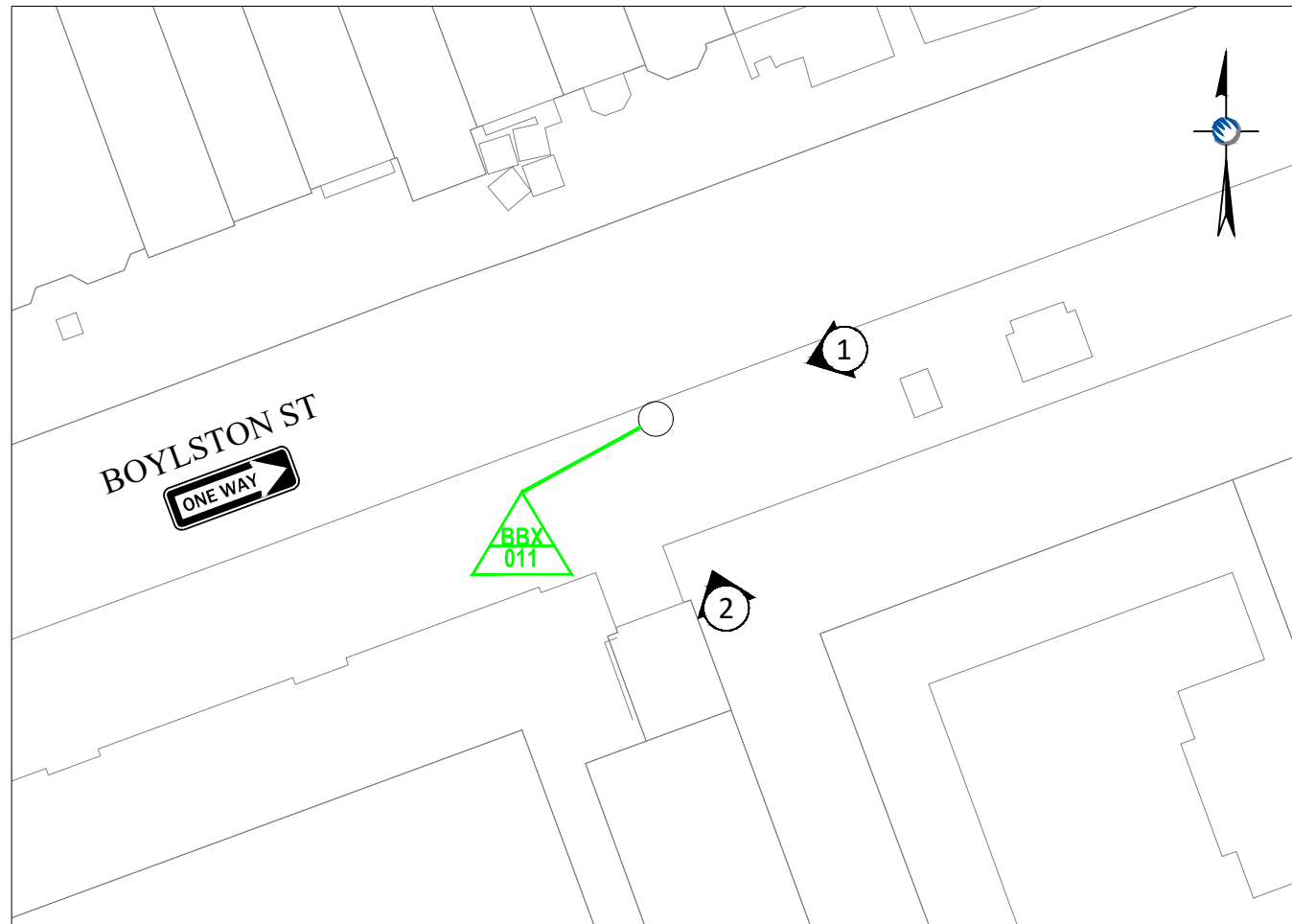
DRAWING TITLE:

**PHOTO SIMULATION**

DRAFTER: MI	DRAWING NO.
SCALE: NTS	<b>1</b>
ISSUE DATE: 09/29/17	
INDEX NAME: NODE BBX-043	



EXTENET SYSTEMS  
CITY OF BOSTON  
SUFFOLK COUNTY, MA



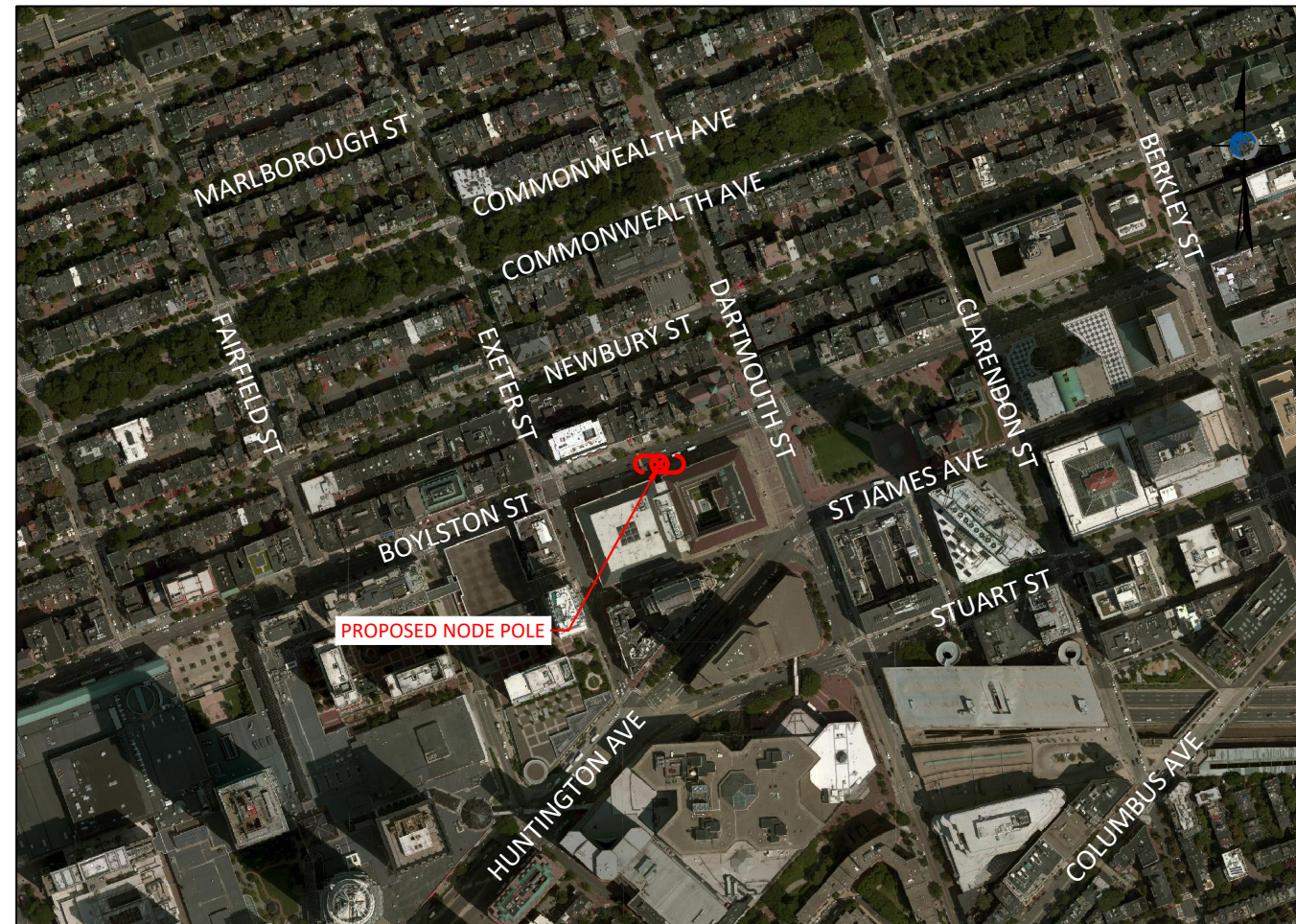
**LOCATION MAP**

LATITUDE: 42.349735° LONGITUDE: -71.078421°  
SCALE: 1" = 50'

**Location and Design Approved  
Boston Public Works  
Street Lighting Department**

By: \_\_\_\_\_

Date: \_\_\_\_\_



**LOCUS MAP**

PROJECT LOCATION - NODE BBX-011  
SCALE: 1" = 500'

LOCATION:  
BOSTON, MA  
SUFFOLK COUNTY

NOTES:

PREPARED FOR:



PREPARED BY:



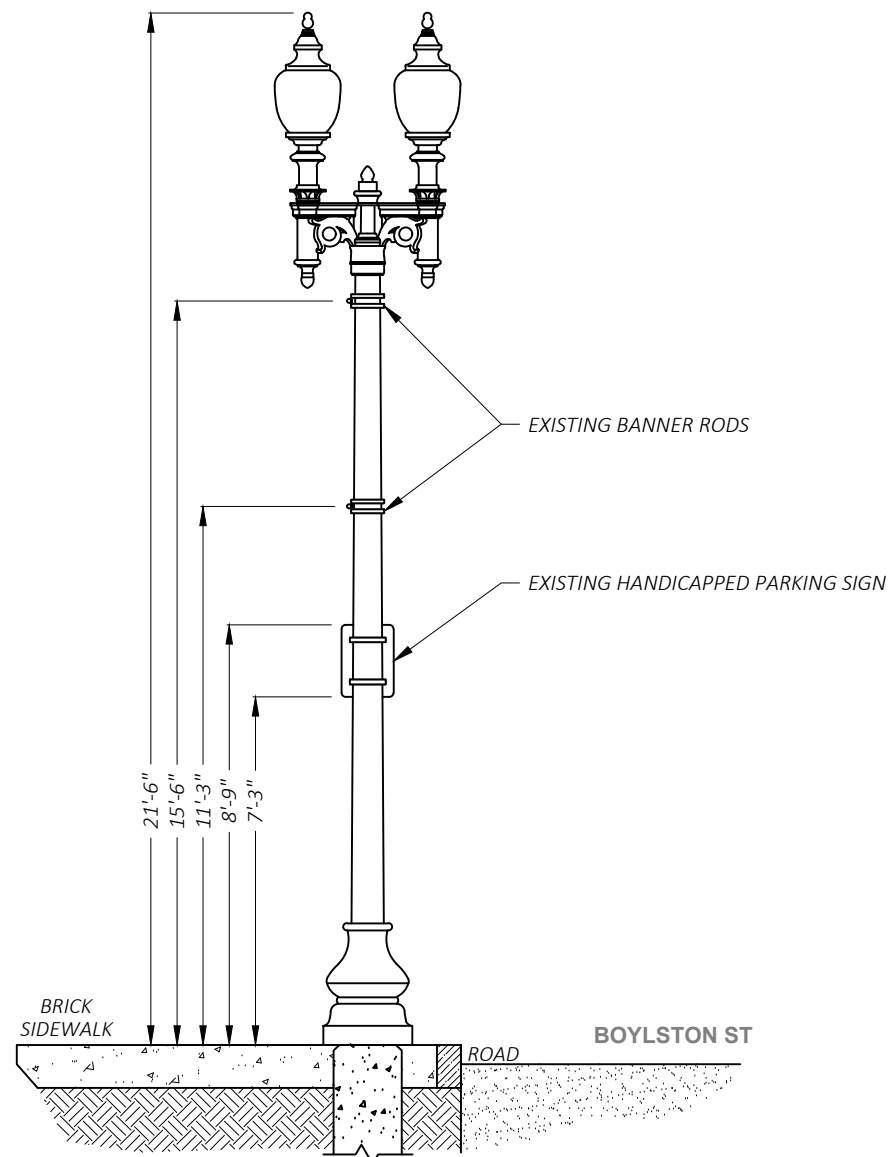
**NODE  
BBX-011**

REVISIONS		
REV	DESCRIPTION	DATE
1	NODE RELOCATION	05/19/17
2	EQUIPMENT CHANGE	10/10/17

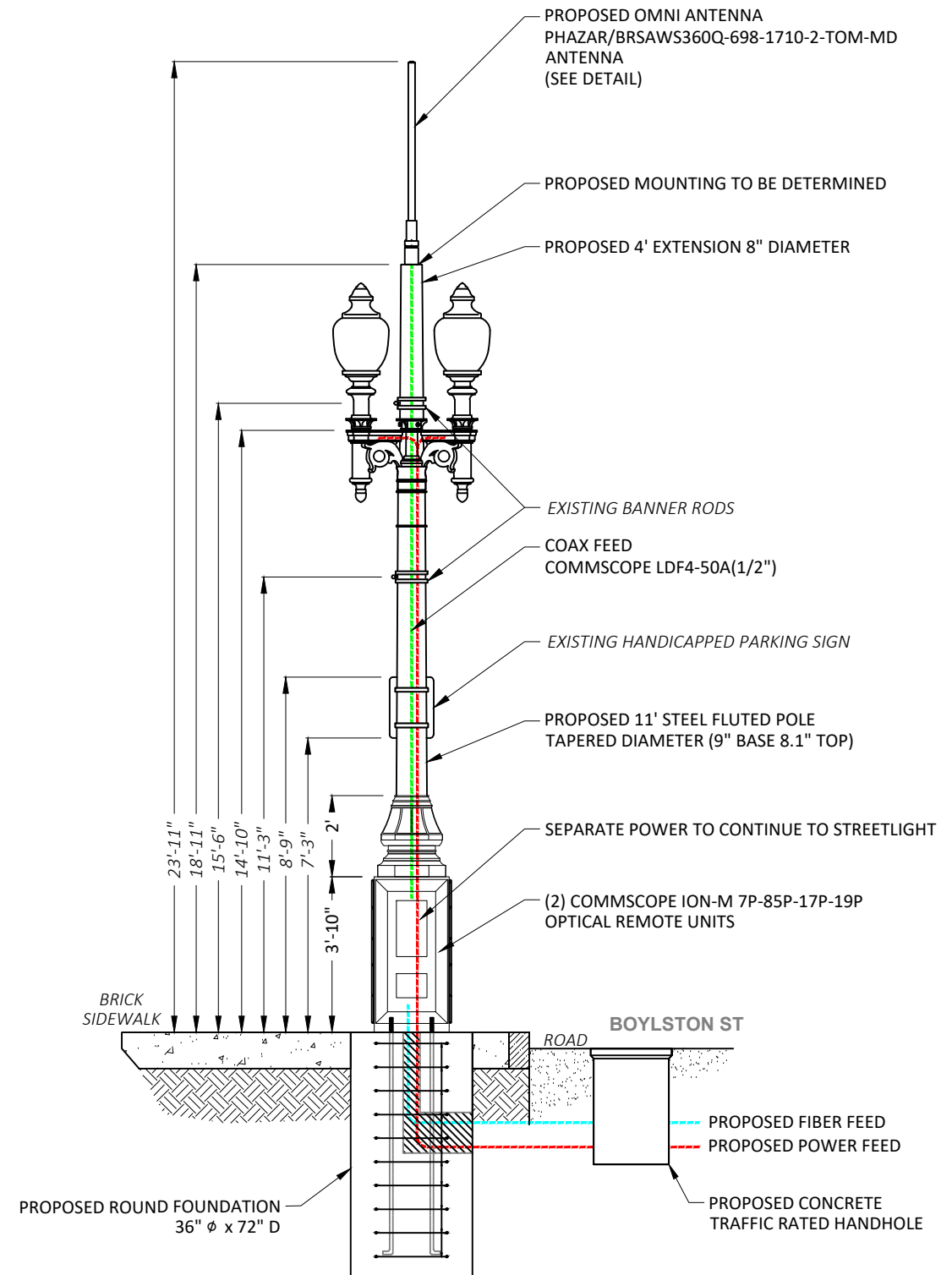
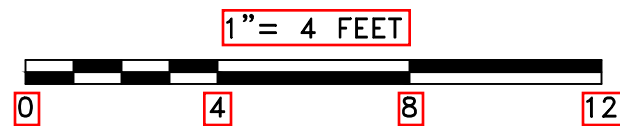
DRAFTER: MI/EP  
SCALE: AS SHOWN  
ISSUE DATE: 01/26/16  
INDEX NAME: BBX-011  
SHEET #: 1 OF 7

10/11/2017 \\MANV-FILE01\Files\Engineering\Extenet Systems\BA - Boston 216 Nodes\BBX - Back Bay\NPPs\AUTOCAD\NODE BBX-011 OPT-1.dwg

# EXTENET DOWNTOWN BOSTON NODE BBX-011 SIDE VIEW



① EXISTING PROFILE - SIDE VIEW  
LOOKING WEST ALONG BOYLSTON ST



① PROPOSED PROFILE - SIDE VIEW  
LOOKING WEST ALONG BOYLSTON ST

LOCATION:  
BOSTON, MA  
SUFFOLK COUNTY

NOTES:

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**NODE  
BBX-011**

REVISIONS		
REV	DESCRIPTION	DATE
1	NODE RELOCATION	05/19/17
2	EQUIPMENT CHANGE	10/10/17

DRAFTER: MI/EP  
SCALE: 1" = 4'  
ISSUE DATE: 01/26/16  
INDEX NAME: BBX-011  
SHEET #: 2 OF 7

10/11/2017 \\MANV-FILE01\Files\Engineering\Extenet Systems\BA - Boston 216 Nodes\BBX - Back Bay\NPPs\AUTOCAD\NODE BBX-011 OPT-1.dwg





EXISTING PHOTOGRAPHIC VIEW



PROPOSED PHOTOGRAPHIC SIMULATION

NOTES:

PREPARED FOR:



PREPARED BY:



REVISIONS

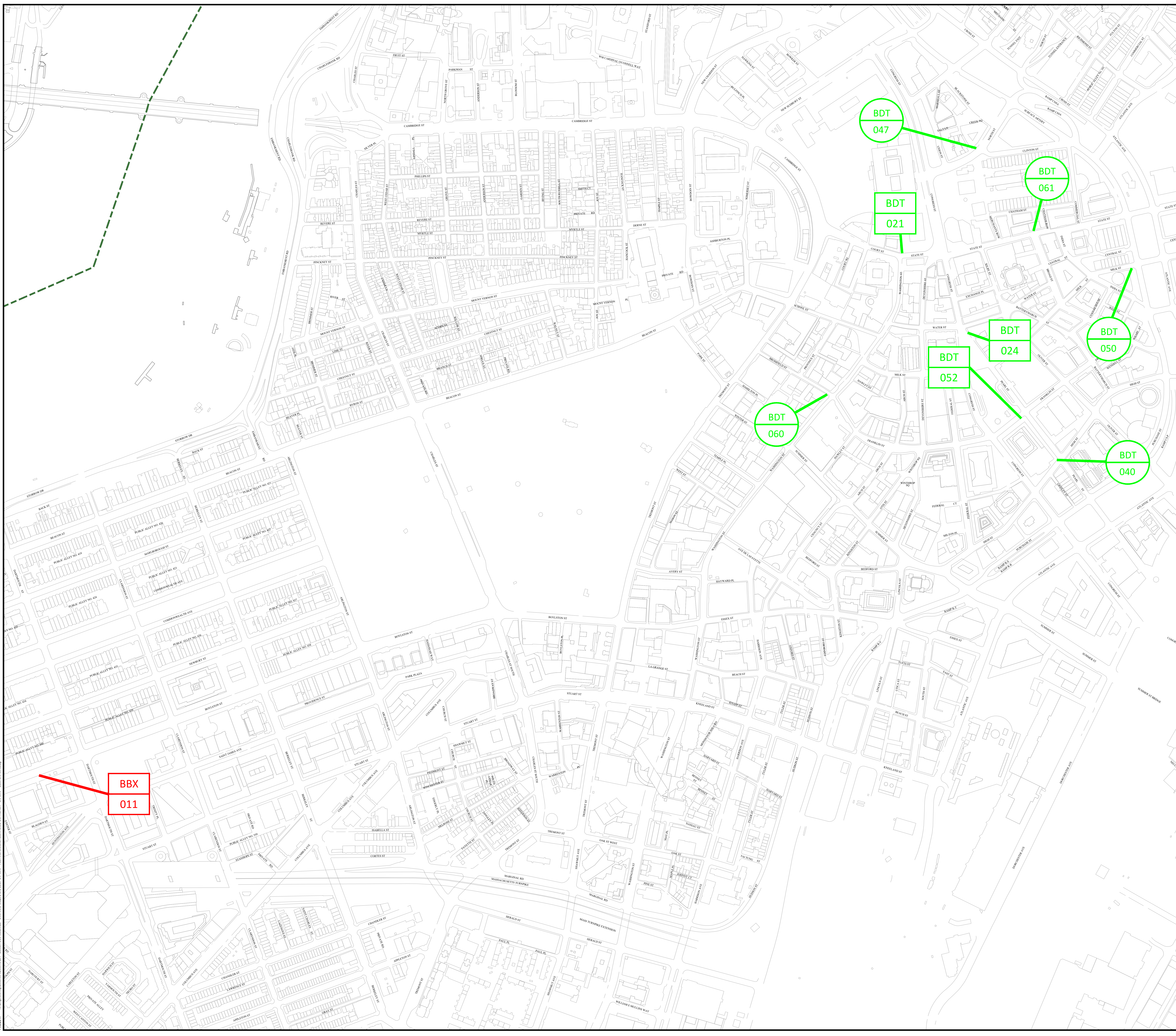
REV	DESCRIPTION	DATE

DRAWING TITLE:

**PHOTO SIMULATION**

DRAFTER: MI	DRAWING NO.
SCALE: NTS	<b>1</b>
ISSUE DATE: 09/29/17	
INDEX NAME: NODE BBX-012	

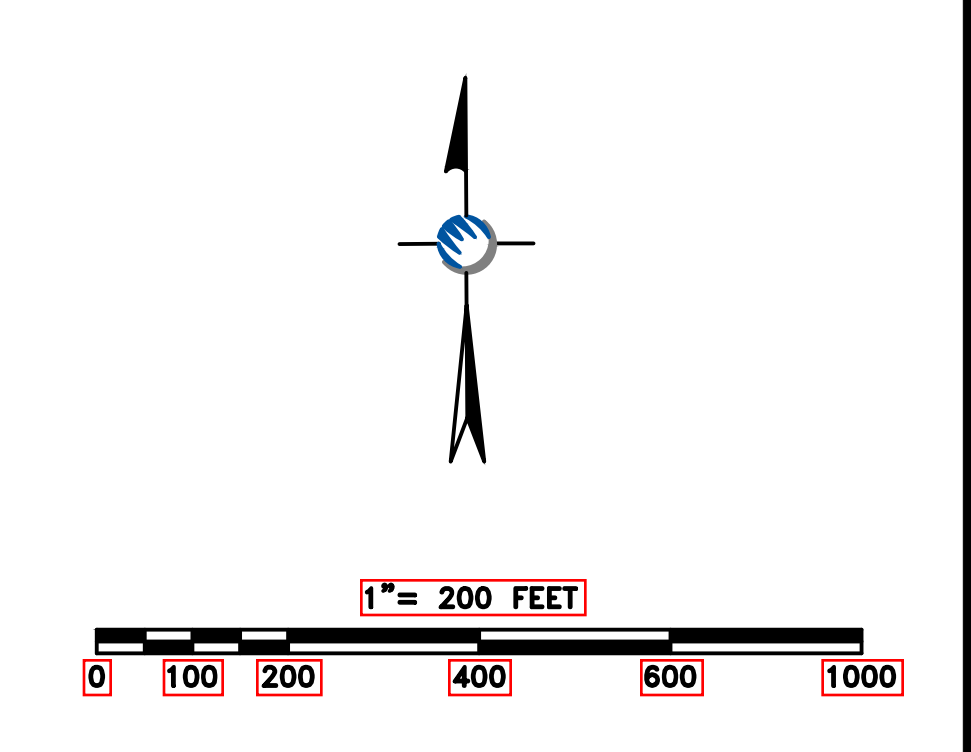




TOWN/COUNTY:  
 BOSTON, MA  
 SUFFOLK COUNTY

- LEGEND:
- STREETLIGHT TYPE (QUANTITY)**
- SINGLE ACORN (5)
  - DOUBLE ACORN (4)
  - CONCRETE SHOEBOX(0)
  - PENDANT (0)
  - STREET LIGHT (0)

- NODE LOCATION (QUANTITY)**
- BDT: FINANCIAL DISTRICT (8)
  - BNE: NORTH END (0)
  - BBH: BEACON HILL (BBH) (0)
  - BBX: BACK BAY EXPANSION (1)
  - BCT: CHINATOWN (0)



NOTES:  
 LANDMARKS

PREPARED FOR:  
**extenet** YOUR NETWORK EVERYWHERE. SYSTEMS

PREPARED BY:  
**UC SYNERGETIC**  
*Innovative Thinking. Engineered Solutions.*  
 21 OXFORD RD  
 MANSFIELD, MA 02048  
 www.uc seng.com 1-508-337-7600

JOB:  
 EXTENET NODE SITES  
 BOSTON, MA  
 OVERVIEW

REVISIONS		
REV	DESCRIPTION	DATE

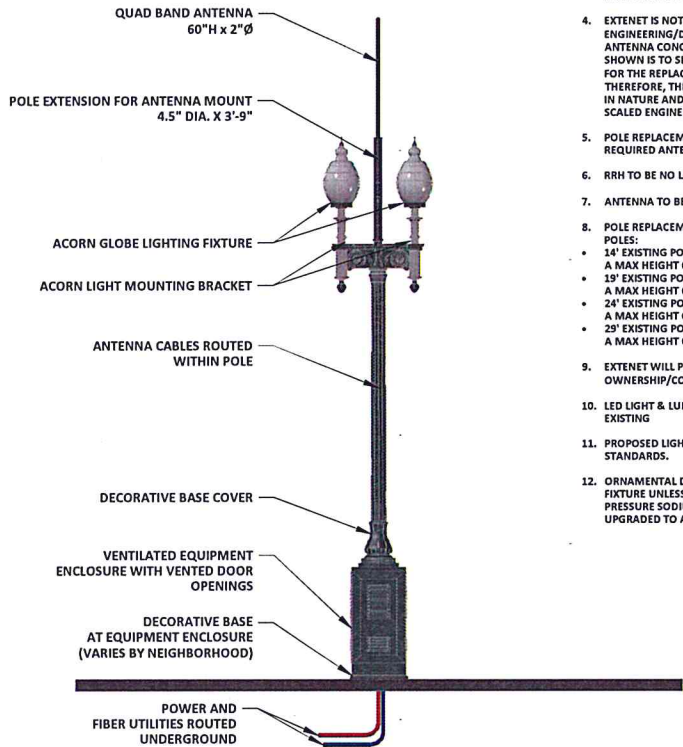
DRAFTER: SHB  
 ENGINEER: UCS  
 SCALE: 1" = 200'  
 DRAWING NAME: NEIGHBORHOOD OUTREACH - OV MAP - BOSTON MA.DWG  
 ISSUE DATE: 09/26/17 SHEET: 1 OF 1



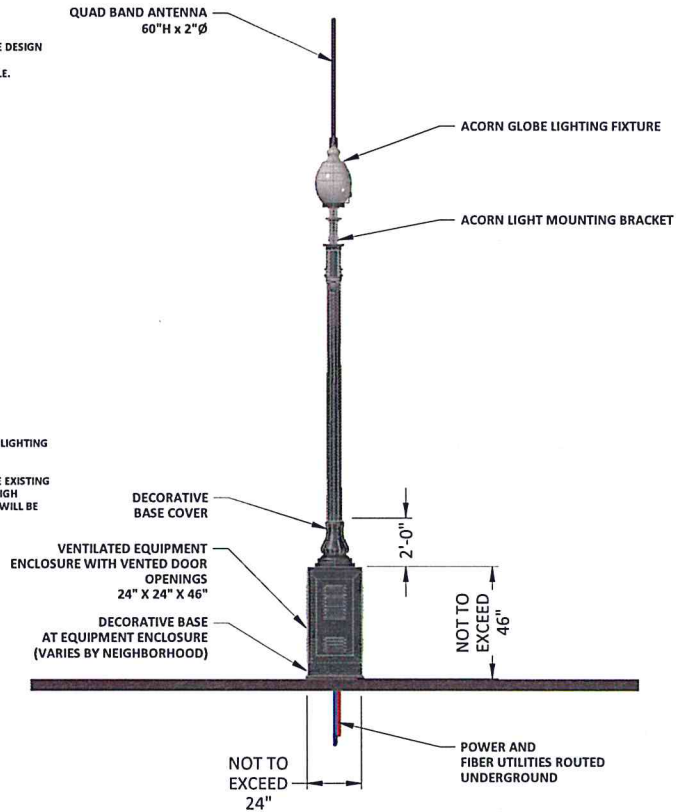
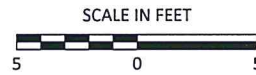
# PROPOSED DOUBLE ACORN STREETLIGHT SOLUTION

**NOTES:**

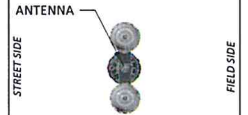
1. ALL DISTANCES, DIMENSIONS, LOCATIONS AND EQUIPMENT DESIGNATIONS AND SPECIFICATIONS ARE APPROXIMATE.
2. ALL MATERIALS WILL MATCH CURRENTLY EXISTING MATERIALS AND WHERE NEEDED ANY RF FRIENDLY MATERIAL WILL BE PAINTED TO MATCH.
3. IT IS ASSUMED THAT ALL PROPOSED UTILITIES WILL BE ROUTED BELOW GRADE TO THE PROPOSED INSTALLATION.
4. EXTENET IS NOT RESPONSIBLE FOR THE ENGINEERING/DESIGN OF THE PROPOSED EQUIPMENT & ANTENNA CONCEALMENT SHOWN HEREIN. THE PURPOSE OF THE DESIGN SHOWN IS TO SHOW A CONCEPTUAL DESIGN FOR THE REPLACEMENT/MODIFICATIONS OF EXISTING LIGHT POLE. THEREFORE, THEY ARE INHERENTLY APPROXIMATE IN NATURE AND SHOULD NOT BE USED AS AN EXACT, SCALED ENGINEERING DRAWING.
5. POLE REPLACEMENT HEIGHTS WILL VARY BASED ON REQUIRED ANTENNA HEIGHTS REQUESTED BY EXTENET.
6. RRH TO BE NO LARGER THAN 16"Wx12"Dx40"H.
7. ANTENNA TO BE NO LARGER THAN 16"Øx40"H.
8. POLE REPLACEMENT INFO FOR ALL STANDARD LIGHT POLES:
  - 18' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 16.8'
  - 19' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 22.8'
  - 24' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 28.8'
  - 29' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 34.8'
9. EXTENET WILL PLACE SMALL PLACARD ON POLE IDENTIFYING OWNERSHIP/CONTACT INFORMATION.
10. LED LIGHT & LUMINAIRE ARM WILL BE AT SAME HEIGHT AS EXISTING
11. PROPOSED LIGHTING WILL CONFORM TO THE CITY OF BOSTON'S LIGHTING STANDARDS.
12. ORNAMENTAL DECORATIVE FIXTURES WILL BE IDENTICAL TO THE EXISTING FIXTURE UNLESS THE EXISTING FIXTURE IS A METAL HALIDE OR HIGH PRESSURE SODIUM FIXTURE. IN THESE SCENARIOS, THE FIXTURE WILL BE UPGRADED TO AN LED APPROVED FIXTURE.



① PROPOSED PROFILE - FRONT VIEW FROM FIELD LOOKING FROM ROAD



② PROPOSED PROFILE - SIDE VIEW FROM ROADSIDE LOOKING UP ROAD



**PROPOSED TOP VIEW**

SCALE 1"=6"

NOTE: CABLES & EXISTING POLE EQUIPMENT NOT SHOWN FOR CLARITY

LOCATION: BOSTON, MA

NOTES:

PREPARED FOR:



PREPARED BY:

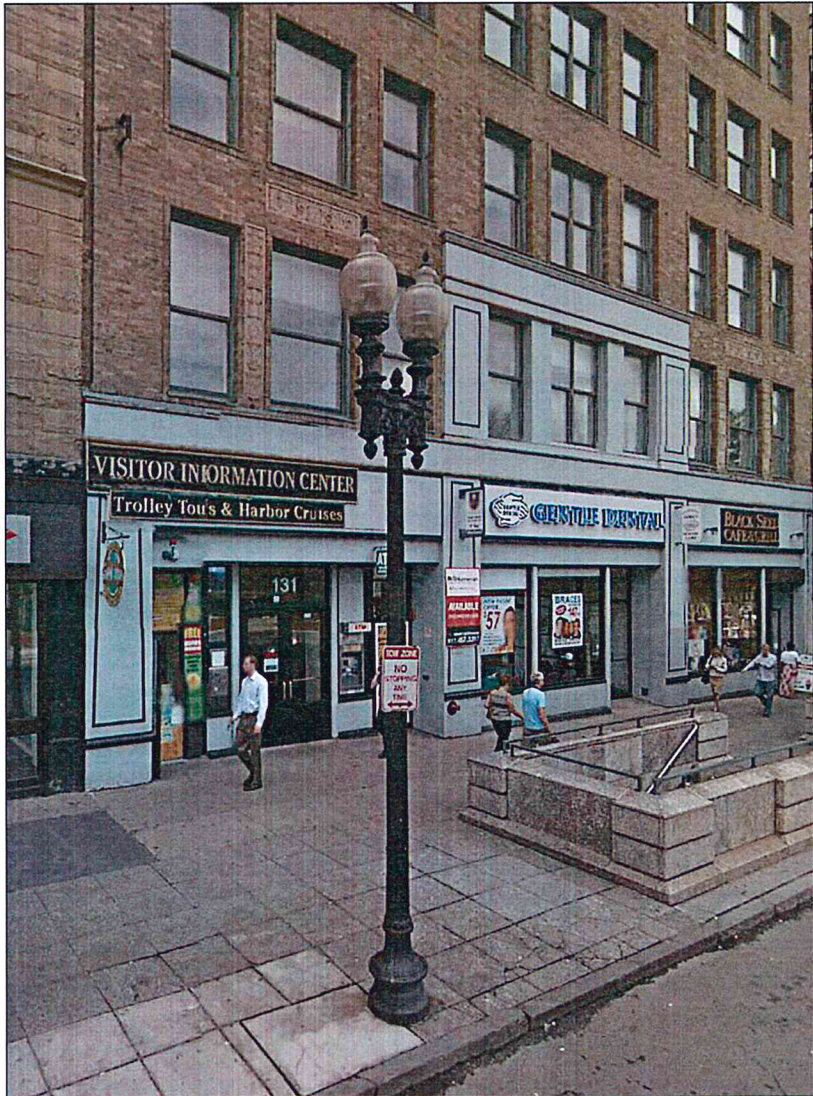


**EXTENET SMALL CELL PROPOSED**

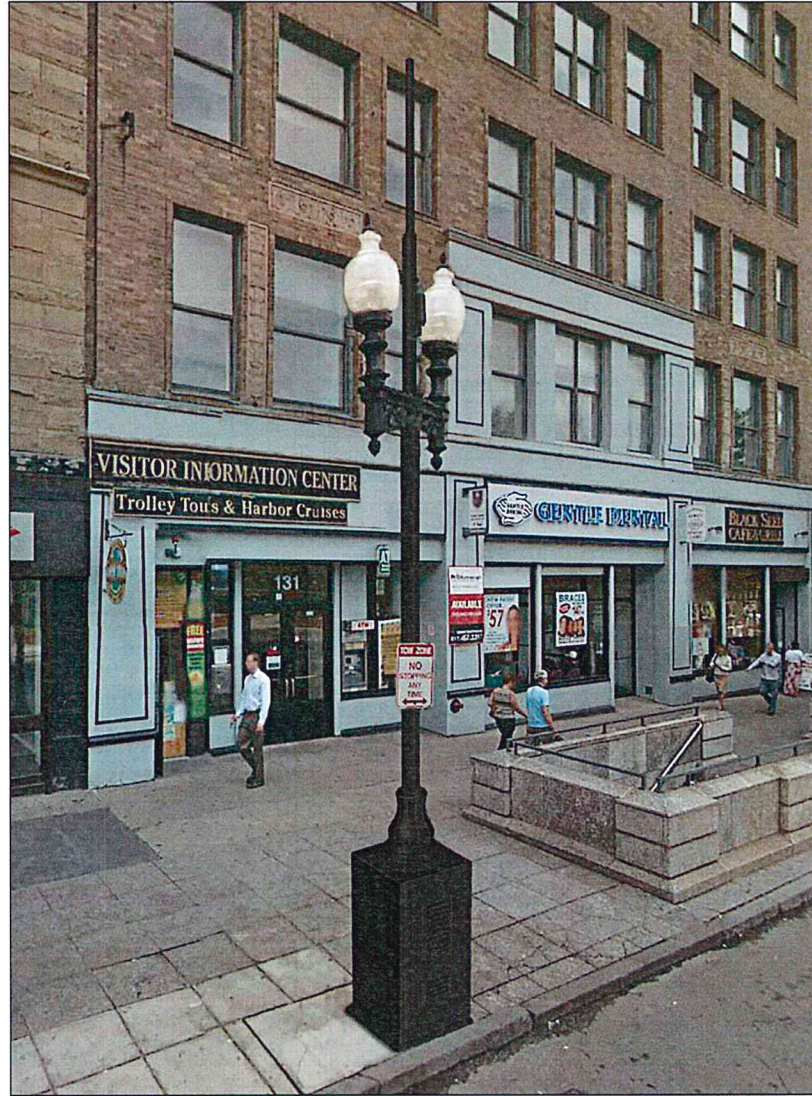
REVISIONS		
REV	DESCRIPTION	DATE

DRAFTER: DTR	<b>1</b>
SCALE: 1" = 5'	
ISSUE DATE: 12/21/16	
NODE NAME: EXHIBIT X-8	
SHEET #: 1 OF 2	





EXISTING PHOTOGRAPHIC VIEW



PROPOSED PHOTOGRAPHIC SIMULATION

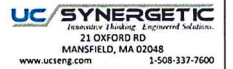
LOCATION: BOSTON, MA

NOTES:

PREPARED FOR:



PREPARED BY:



EXTENET SMALL CELL  
PHOTO SIM

REVISIONS		
REV	DESCRIPTION	DATE

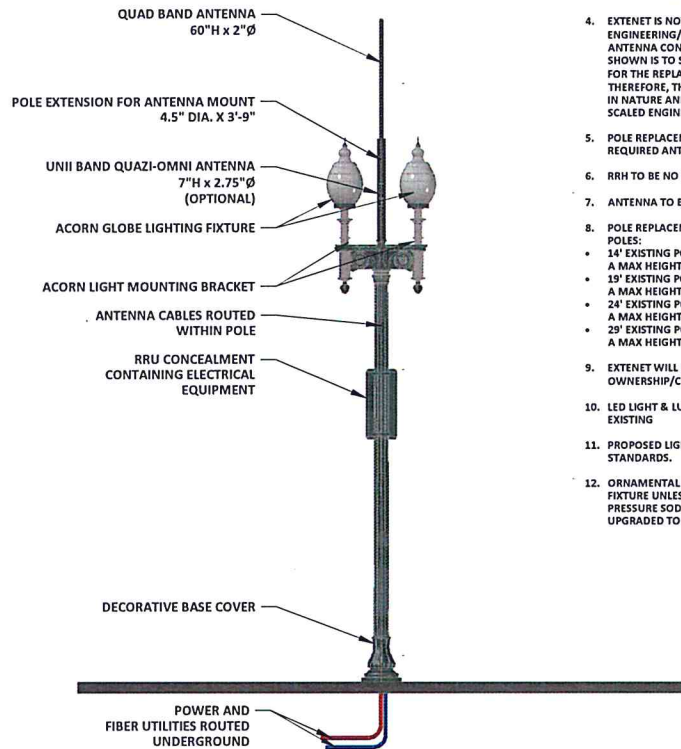
DRAWER: DTS  
SCALE: NTS  
ISSUE DATE: 12/21/16  
NODE NAME: EXHIBIT 4-B  
SHEET #: 2 OF 2



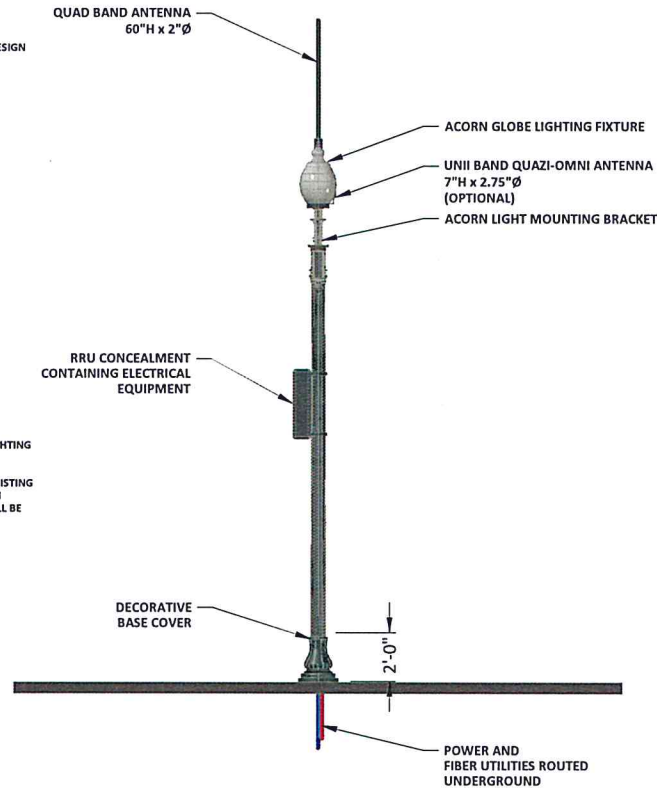
# PROPOSED DOUBLE ACORN STREETLIGHT SOLUTION

### NOTES:

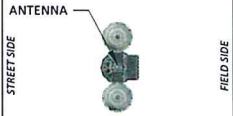
1. ALL DISTANCES, DIMENSIONS, LOCATIONS AND EQUIPMENT DESIGNATIONS AND SPECIFICATIONS ARE APPROXIMATE.
2. ALL MATERIALS WILL MATCH CURRENTLY EXISTING MATERIALS AND WHERE NEEDED ANY RF FRIENDLY MATERIAL WILL BE PAINTED TO MATCH.
3. IT IS ASSUMED THAT ALL PROPOSED UTILITIES WILL BE ROUTED BELOW GRADE TO THE PROPOSED INSTALLATION.
4. EXTENET IS NOT RESPONSIBLE FOR THE ENGINEERING/DESIGN OF THE PROPOSED EQUIPMENT & ANTENNA CONCEALMENT SHOWN HEREIN. THE PURPOSE OF THE DESIGN SHOWN IS TO SHOW A CONCEPTUAL DESIGN FOR THE REPLACEMENT/MODIFICATIONS OF EXISTING LIGHT POLE. THEREFORE, THEY ARE INHERENTLY APPROXIMATE IN NATURE AND SHOULD NOT BE USED AS AN EXACT, SCALED ENGINEERING DRAWING.
5. POLE REPLACEMENT HEIGHTS WILL VARY BASED ON REQUIRED ANTENNA HEIGHTS REQUESTED BY EXTENET.
6. RRRH TO BE NO LARGER THAN 16"Wx12"Dx40"H.
7. ANTENNA TO BE NO LARGER THAN 16"Øx40"H.
8. POLE REPLACEMENT INFO FOR ALL STANDARD LIGHT POLES:
  - 14' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 16.8'
  - 15' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 22.8'
  - 24' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 28.8'
  - 29' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 34.8'
9. EXTENET WILL PLACE SMALL PLACARD ON POLE IDENTIFYING OWNERSHIP/CONTACT INFORMATION.
10. LED LIGHT & LUMINAIRE ARM WILL BE AT SAME HEIGHT AS EXISTING
11. PROPOSED LIGHTING WILL CONFORM TO THE CITY OF BOSTON'S LIGHTING STANDARDS.
12. ORNAMENTAL DECORATIVE FIXTURES WILL BE IDENTICAL TO THE EXISTING FIXTURE UNLESS THE EXISTING FIXTURE IS A METAL HALIDE OR HIGH PRESSURE SODIUM FIXTURE. IN THESE SCENARIOS, THE FIXTURE WILL BE UPGRADED TO AN LED APPROVED FIXTURE.



① PROPOSED PROFILE - FRONT VIEW  
FROM FIELD LOOKING TOWARDS ROAD



② PROPOSED PROFILE - SIDE VIEW  
FROM ROADSIDE LOOKING UP ROAD



### PROPOSED TOP VIEW

SCALE 1"=6"  
NOTE:  
CABLES & EXISTING POLE EQUIPMENT  
NOT SHOWN FOR CLARITY

LOCATION: BOSTON, MA

### NOTES:

PREPARED FOR:



PREPARED BY:

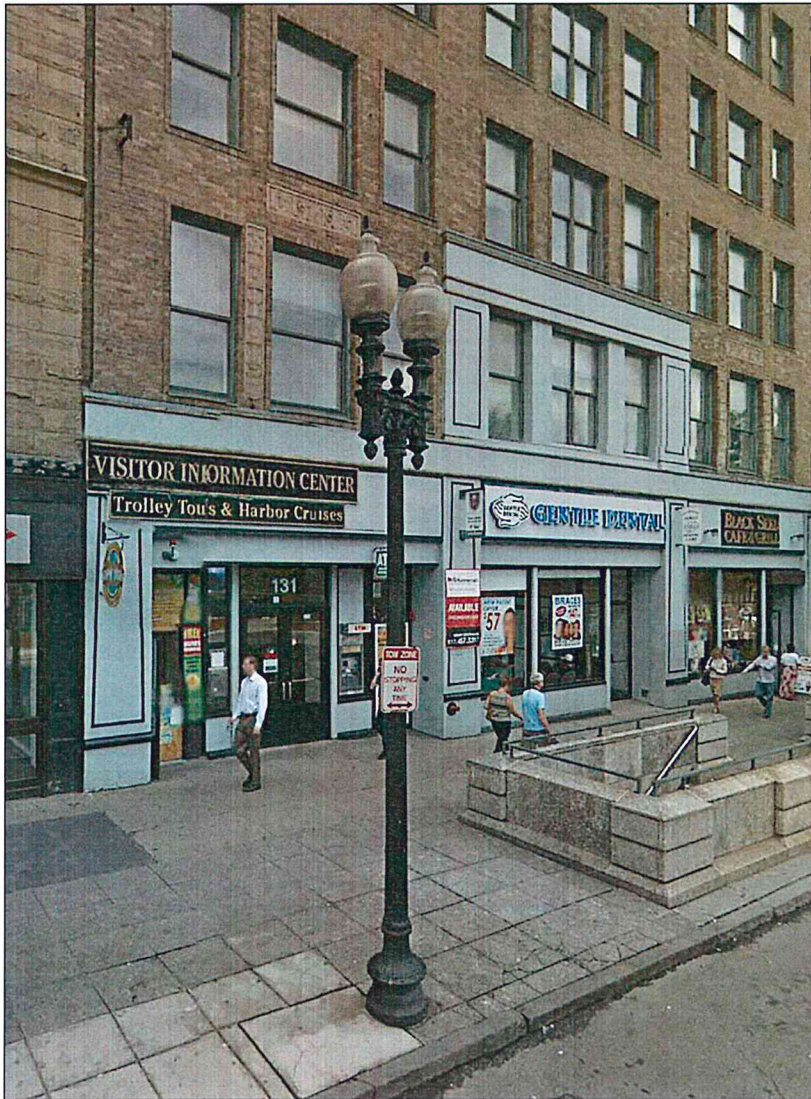


### EXTENET SMALL CELL PROPOSED

REVISIONS		
REV	DESCRIPTION	DATE

DRAWER: DTB	1
SCALE: 1" = 3'	
ISSUE DATE: 12/21/14	
NODE NAME: EXHIBIT A-20	
SHEET #: 1 OF 2	





EXISTING PHOTOGRAPHIC VIEW



PROPOSED PHOTOGRAPHIC SIMULATION

LOCATION: BOSTON, MA

NOTES:

PREPARED FOR:



PREPARED BY:



EXTENET SMALL CELL  
PHOTO SIM

REVISIONS		
REV	DESCRIPTION	DATE

DRAWN: DTB  
SCALE: NTS  
ISSUE DATE: 12/21/16  
NODE NAME: EXHIBIT A-20  
SHEET #: 2 OF 2



**EXHIBIT X-1**

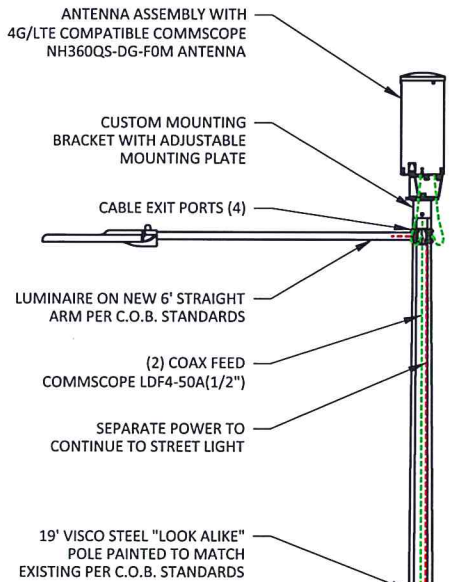
**SCHEDULE OF APPROVED WIRELESS FACILITIES**

<b>Facility Number</b>	<b>X-1 Standard Concrete Light Pole with Cobra Light (RRH Concealment)</b>
<b>Attachment Types</b>  <i>(check all that apply And provide detail below)</i>	<input checked="" type="checkbox"/> Replacement City Pole (streetlight) <input checked="" type="checkbox"/> Replacement City Property Pole (streetlight) <input type="checkbox"/> Attach to existing City Pole (streetlight) <input type="checkbox"/> Attach to existing City Property Pole (streetlight) <input type="checkbox"/> Attach to existing City Pole (traffic signal) <input type="checkbox"/> Attach to existing City Property Pole (traffic signal) <input type="checkbox"/> Attach to existing City Pole (street furniture) <input type="checkbox"/> Attach to existing City Property Pole (street furniture) <input type="checkbox"/> Attach to Non-City Pole
<b>Attachment Type Detail</b>	<i>Standard concrete light pole (existing or replacement)</i>
<b>Physical Description</b>	<p><i>Mount antenna (no more than 16" diameter and no more than 40" height) in fiberglass enclosure painted to match pole and affixed to top of pole with tapered extension. Remote radiohead, power and fiber equipment concealed within stealth expanded base, not to exceed 2.5' in width and will be painted and designed to match exterior pole.</i></p> <p><i>Pole Replacement information for all standard lightpoles</i></p> <ul style="list-style-type: none"> <li>• <i>14' existing pole to be replaced with new pole with a max height of 16.8'</i></li> <li>• <i>19' existing pole to be replaced with new pole with a max height of 22.8'</i></li> <li>• <i>24' existing pole to be replaced with new pole with a max height of 28.8'</i></li> <li>• <i>29' existing pole to be replaced with new pole with a max height of 34.8'</i></li> </ul>
<b>Concealment</b>	<i>Antenna contained within enclosure painted to match pole. Cables run inside pole. Remote radiohead, power and fiber equipment concealed within stealth expanded base, not to exceed 2.5' in width and 4'1" in height. A maximum of an additional 2' above enclosure will be used to add decorative tapering.</i>

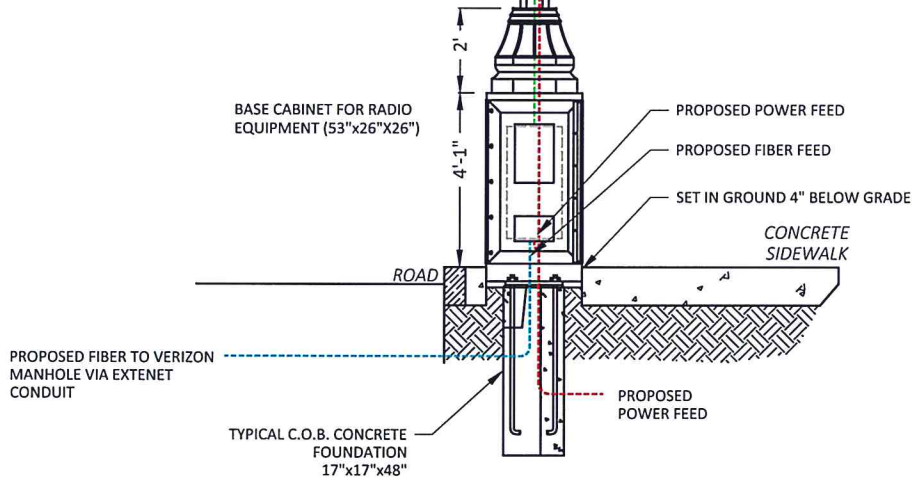


<p><b>Included Documents</b></p>	<p><i>The following documents:</i></p> <ul style="list-style-type: none"> <li><i>A. For each Attachment Type listed or checked above, an engineering drawing of replacement pole or existing pole with attached equipment. The drawing must show the location on the pole where each component of the Wireless Facility is attached or enclosed. Drawings should depict any underground portion of the typical installation for that Attachment Type.</i></li> <li><i>B. Photo showing an example of each Attachment Type listed or checked above.</i></li> <li><i>C. Photo mockup of each Attachment Type listed or checked above showing the appearance after the Approved Wireless Facility is installed.</i></li> </ul> <p><i>Engineering drawings and photo attachments should reflect the dimensions and characteristics of a representative actual City Pole or City Property Pole of the type to which the Approved Wireless Facility design applies rather than generic examples.</i></p> <p><i>Where there is considerable variation among City Poles/City Property Poles of a particular type (e.g. traffic signals), drawings can show a typical installation, provided that equipment volumes and attachment locations will not vary significantly from one installation to the next in ways that are material to the City's interests.</i></p>
<p><b>RF Compliance Information</b></p>	<p><i>X Facility conforms to information already on file    <input type="checkbox"/> information attached</i></p>
<p><b>Comments</b></p>	





- NOTES:**
1. ALL DISTANCES, DIMENSIONS, LOCATIONS, EQUIPMENT DESIGNATIONS AND SPECIFICATIONS ARE APPROXIMATE.
  2. ALL MATERIAL, COLOR & STYLE WILL MATCH CURRENTLY EXISTING MATERIALS AND WHERE NEEDED ANY RF FRIENDLY MATERIAL WILL BE PAINTED TO MATCH.
  3. IT IS ASSUMED THAT ALL PROPOSED UTILITIES WILL BE ROUTED BELOW GRADE TO THE PROPOSED INSTALLATION.
  4. THE PURPOSE OF THE DESIGN SHOWN IS TO SHOW A CONCEPTUAL DESIGN FOR THE REPLACEMENT/MODIFICATIONS OF EXISTING LIGHT POLE. THEREFORE, THESE DESIGNS ARE INHERENTLY APPROXIMATE IN NATURE AND SHOULD NOT BE USED AS AN EXACT, SCALED ENGINEERING DRAWING.
  5. POLE REPLACEMENT HEIGHTS WILL VARY BASED ON REQUIRED ANTENNA HEIGHTS REQUESTED BY EXTENET SYSTEMS.
  6. EQUIPMENT CLOSURE TO BE NO LARGER THAN (53"Hx26"Wx26"D).
  7. ANTENNA TO BE NO LARGER THAN 16"Øx40"H.
  8. 14' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 16.8'  
19' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 22.8'  
24' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 28.8'  
29' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 34.8'
  9. EXTENET SYSTEMS WILL PLACE SMALL PLACARD ON POLE IDENTIFYING OWNERSHIP/CONTACT INFORMATION.
  10. LED LIGHT & LUMINAIRE ARM WILL BE AT SAME HEIGHT AS EXISTING
  11. PROPOSED LIGHTING WILL CONFORM TO THE CITY OF BOSTON'S LIGHTING STANDARDS.
  12. ORNAMENTAL DECORATIVE FIXTURES WILL BE IDENTICAL TO THE EXISTING FIXTURE UNLESS THE EXISTING FEATURE IS A METAL HALIDE OR HIGH PRESSURE SODIUM FIXTURE. IN THESE SCENARIOS, THE FIXTURE WILL BE UPGRADED TO AN APPROVED LED FIXTURE.



STANDARD CONCRETE LIGHT POLE WITH RRH CONCEALMENT

3030 WARRENVILLE RD  
LISLE, IL 60532  
(630) 505-3800  
WWW.EXTENETSYSTEMS.COM

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21 OXFORD RD  
MANSFIELD, MA 02048  
www.ucseng.com 1-508-337-7600

SUBMITTALS			
REV	DATE	DESCRIPTION	INITIALS

T-X-1





2015 8-10 10:00





NO TRUCKS  
OR BUSES

AHEAD

TOW ZONE  
NO STOPPING  
NO PARKING  
STREET CLEANING  
TOW ZONE  
GAM - BAH  
TOW ZONE  
TOW ZONE  
NO STOPPING



**EXHIBIT X-2**

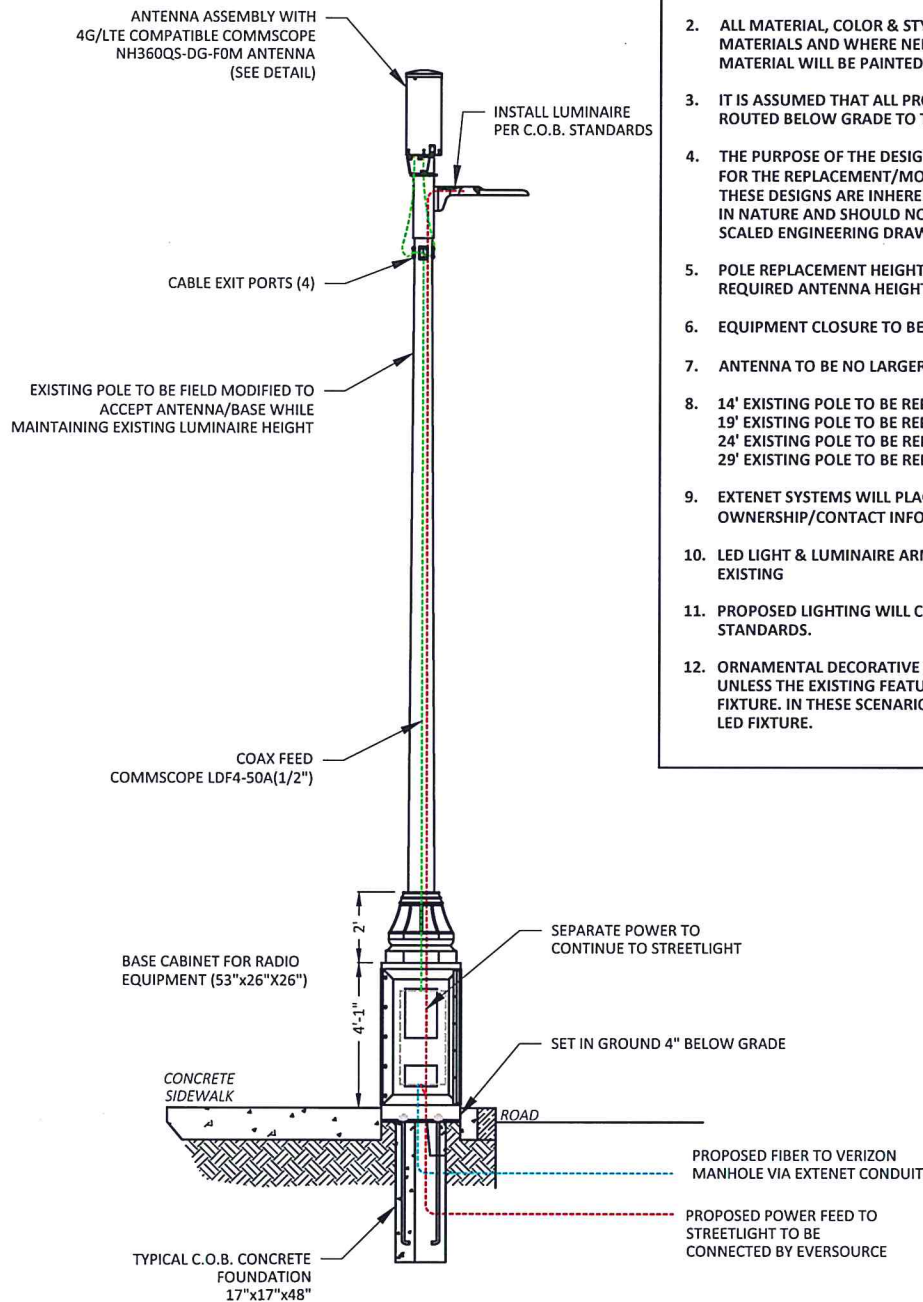
**SCHEDULE OF APPROVED WIRELESS FACILITIES**

<b>Facility Number</b>	<b>X-2 Standard Concrete Light Pole with Aeriata Light (RRH Concealment)</b>
<b>Attachment Types</b>  <i>(check all that apply And provide detail below)</i>	<input checked="" type="checkbox"/> Replacement City Pole (streetlight) <input checked="" type="checkbox"/> Replacement City Property Pole (streetlight) <input type="checkbox"/> Attach to existing City Pole (streetlight) <input type="checkbox"/> Attach to existing City Property Pole (streetlight) <input type="checkbox"/> Attach to existing City Pole (traffic signal) <input type="checkbox"/> Attach to existing City Property Pole (traffic signal) <input type="checkbox"/> Attach to existing City Pole (street furniture) <input type="checkbox"/> Attach to existing City Property Pole (street furniture) <input type="checkbox"/> Attach to Non-City Pole
<b>Attachment Type Detail</b>	<i>Standard concrete light pole (existing or replacement)</i>
<b>Physical Description</b>	<p><i>Mount antenna (no more than 16" diameter and no more than 40" height) in fiberglass enclosure painted to match pole and affixed to top of pole. Remote radiohead, power and fiber equipment concealed within stealth expanded base, not to exceed 2.5' in width and will be painted and designed to match exterior pole.</i></p> <p><i>Pole Replacement information for all standard lightpoles</i></p> <ul style="list-style-type: none"> <li>• <i>14' existing pole to be replaced with new pole with a max height of 16.8'</i></li> <li>• <i>19' existing pole to be replaced with new pole with a max height of 22.8'</i></li> <li>• <i>24' existing pole to be replaced with new pole with a max height of 28.8'</i></li> <li>• <i>29' existing pole to be replaced with new pole with a max height of 34.8'</i></li> </ul>
<b>Concealment</b>	<i>Antenna contained within enclosure painted to match pole. Cables run inside pole. Remote radiohead, power and fiber equipment concealed within stealth expanded base, not to exceed 2.5' in width and 4'1" in height. A maximum of an additional 2' above enclosure will be used to add decorative tapering.</i>



<p><b>Included Documents</b></p>	<p><i>The following documents:</i></p> <ul style="list-style-type: none"> <li><i>A. For each Attachment Type listed or checked above, an engineering drawing of replacement pole or existing pole with attached equipment. The drawing must show the location on the pole where each component of the Wireless Facility is attached or enclosed. Drawings should depict any underground portion of the typical installation for that Attachment Type.</i></li> <li><i>B. Photo showing an example of each Attachment Type listed or checked above.</i></li> <li><i>C. Photo mockup of each Attachment Type listed or checked above showing the appearance after the Approved Wireless Facility is installed.</i></li> </ul> <p><i>Engineering drawings and photo attachments should reflect the dimensions and characteristics of a representative actual City Pole or City Property Pole of the type to which the Approved Wireless Facility design applies rather than generic examples.</i></p> <p><i>Where there is considerable variation among City Poles/City Property Poles of a particular type (e.g. traffic signals), drawings can show a typical installation, provided that equipment volumes and attachment locations will not vary significantly from one installation to the next in ways that are material to the City's interests.</i></p>
<p><b>RF Compliance Information</b></p>	<p><i>X Facility conforms to information already on file    <input type="checkbox"/> information attached</i></p>
<p><b>Comments</b></p>	





**NOTES:**

1. ALL DISTANCES, DIMENSIONS, LOCATIONS, EQUIPMENT DESIGNATIONS AND SPECIFICATIONS ARE APPROXIMATE.
2. ALL MATERIAL, COLOR & STYLE WILL MATCH CURRENTLY EXISTING MATERIALS AND WHERE NEEDED ANY RF FRIENDLY MATERIAL WILL BE PAINTED TO MATCH.
3. IT IS ASSUMED THAT ALL PROPOSED UTILITIES WILL BE ROUTED BELOW GRADE TO THE PROPOSED INSTALLATION.
4. THE PURPOSE OF THE DESIGN SHOWN IS TO SHOW A CONCEPTUAL DESIGN FOR THE REPLACEMENT/MODIFICATIONS OF EXISTING LIGHT POLE. THEREFORE, THESE DESIGNS ARE INHERENTLY APPROXIMATE IN NATURE AND SHOULD NOT BE USED AS AN EXACT, SCALED ENGINEERING DRAWING.
5. POLE REPLACEMENT HEIGHTS WILL VARY BASED ON REQUIRED ANTENNA HEIGHTS REQUESTED BY EXTENET SYSTEMS.
6. EQUIPMENT CLOSURE TO BE NO LARGER THAN (53"Hx26"Wx26"D).
7. ANTENNA TO BE NO LARGER THAN 16"Øx40"H.
8. 14' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 16.8'  
19' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 22.8'  
24' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 28.8'  
29' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 34.8'
9. EXTENET SYSTEMS WILL PLACE SMALL PLACARD ON POLE IDENTIFYING OWNERSHIP/CONTACT INFORMATION.
10. LED LIGHT & LUMINAIRE ARM WILL BE AT SAME HEIGHT AS EXISTING
11. PROPOSED LIGHTING WILL CONFORM TO THE CITY OF BOSTON'S LIGHTING STANDARDS.
12. ORNAMENTAL DECORATIVE FIXTURES WILL BE IDENTICAL TO THE EXISTING FIXTURE UNLESS THE EXISTING FEATURE IS A METAL HALIDE OR HIGH PRESSURE SODIUM FIXTURE. IN THESE SCENARIOS, THE FIXTURE WILL BE UPGRADED TO AN APPROVED LED FIXTURE.

## AERIATA LIGHT POLE WITH RRH CONCEALMENT



3030 WARRENVILLE RD  
LISLE, IL 60532  
(630) 505-3800  
WWW.EXTENETSYSTEMS.COM



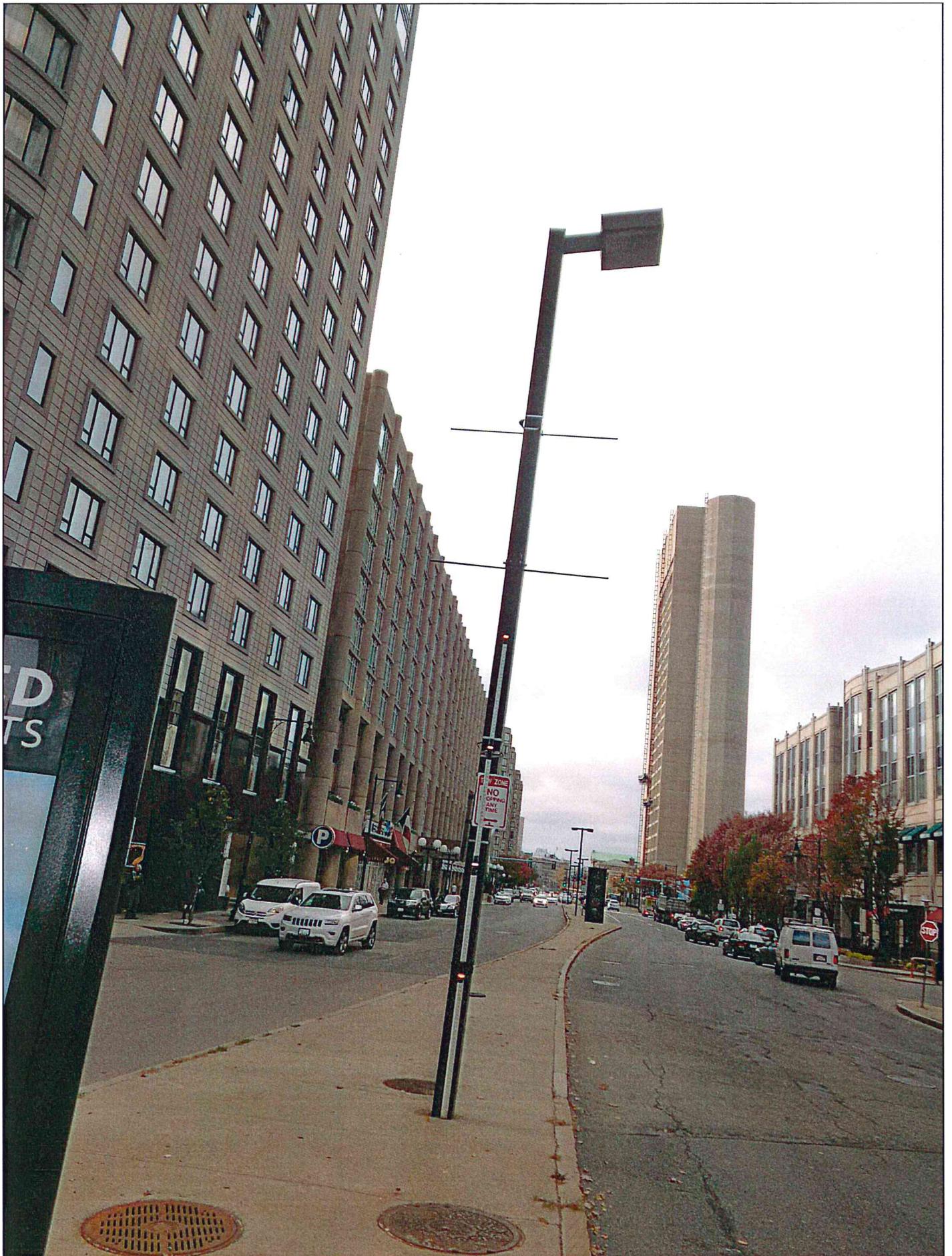
21 OXFORD RD  
MANSFIELD, MA 02048  
www.ucseng.com 1-508-337-7600

### SUBMITTALS

REV	DATE	DESCRIPTION	INITIALS

X-2









JCDecaux



WHO KNEW YOU  
COULD FIND SO MUCH  
PERSONAL SPACE IN  
A PUBLIC ONE?



FRIENDS  
PUBLIC GARDEN

THE COMMON

THE GARDEN

THE MALL

in partnership with preservation.

friendsofthepublicgarden.org

100

MIRRA



**EXHIBIT X-3**

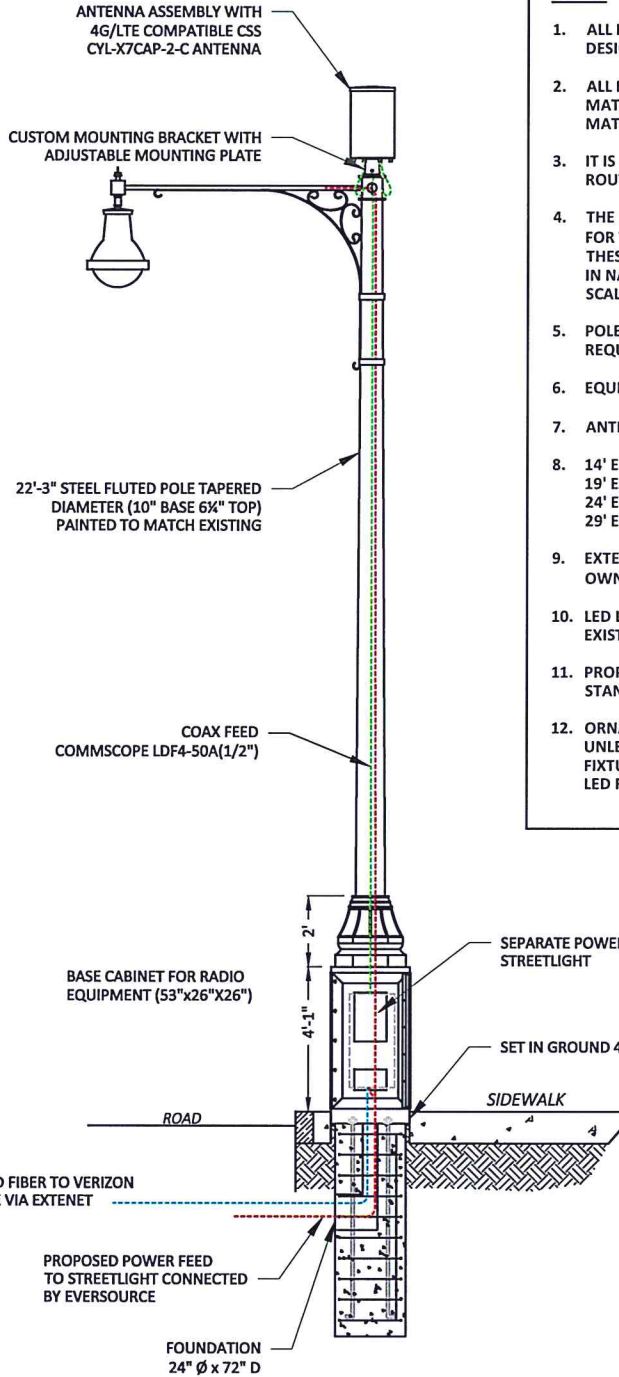
**SCHEDULE OF APPROVED WIRELESS FACILITIES**

<p><b>Facility Number</b></p>	<p><b>X-3 Standard Pendant Light Pole (RRH Concealment)</b></p>
<p><b>Attachment Types</b>  <i>(check all that apply And provide detail below)</i></p>	<p><input checked="" type="checkbox"/> Replacement City Pole (streetlight)  <input checked="" type="checkbox"/> Replacement City Property Pole (streetlight)  <input type="checkbox"/> Attach to existing City Pole (streetlight)  <input type="checkbox"/> Attach to existing City Property Pole (streetlight)  <input type="checkbox"/> Attach to existing City Pole (traffic signal)  <input type="checkbox"/> Attach to existing City Property Pole (traffic signal)  <input type="checkbox"/> Attach to existing City Pole (street furniture)  <input type="checkbox"/> Attach to existing City Property Pole (street furniture)  <input type="checkbox"/> Attach to Non-City Pole</p>
<p><b>Attachment Type Detail</b></p>	<p><i>Standard Pendent light pole (existing or replacement)</i></p>
<p><b>Physical Description</b></p>	<p><i>Mount antenna no more than 16" diameter and no more than 40" height for standard antenna. Option two for the antenna (not to exceed more than 16" diameter and no more than 40" height) will include a fiberglass enclosure painted to match pole and affixed to top of pole with tapered extension. Remote radiohead, power and fiber equipment concealed within stealth expanded base, not to exceed 2.5' in width and will be painted and designed to match exterior pole.</i></p> <p><i>Pole Replacement information for all standard lightpoles:</i></p> <ul style="list-style-type: none"> <li>• <i>14' existing pole to be replaced with new pole with a max height of 16.8'</i></li> <li>• <i>19' existing pole to be replaced with new pole with a max height of 22.8'</i></li> <li>• <i>24' existing pole to be replaced with new pole with a max height of 28.8'</i></li> <li>• <i>29' existing pole to be replaced with new pole with a max height of 34.8'</i></li> </ul>
<p><b>Concealment</b></p>	<p><i>Antenna contained within enclosure painted and tapered to match pole. Cables run inside pole. Remote radiohead, power and fiber equipment concealed within stealth expanded base, not to exceed 2.5' in width and 4'1" in height. A maximum of an additional 2' above enclosure will be used to add decorative tapering.</i></p>



<p><b>Included Documents</b></p>	<p><i>The following documents:</i></p> <ul style="list-style-type: none"> <li><i>A. For each Attachment Type listed or checked above, an engineering drawing of replacement pole or existing pole with attached equipment. The drawing must show the location on the pole where each component of the Wireless Facility is attached or enclosed. Drawings should depict any underground portion of the typical installation for that Attachment Type.</i></li> <li><i>B. Photo showing an example of each Attachment Type listed or checked above.</i></li> <li><i>C. Photo mockup of each Attachment Type listed or checked above showing the appearance after the Approved Wireless Facility is installed.</i></li> </ul> <p><i>Engineering drawings and photo attachments should reflect the dimensions and characteristics of a representative actual City Pole or City Property Pole of the type to which the Approved Wireless Facility design applies rather than generic examples.</i></p> <p><i>Where there is considerable variation among City Poles/City Property Poles of a particular type (e.g. traffic signals), drawings can show a typical installation, provided that equipment volumes and attachment locations will not vary significantly from one installation to the next in ways that are material to the City's interests.</i></p>
<p><b>RF Compliance Information</b></p>	<p><i>X Facility conforms to information already on file    <input type="checkbox"/> information attached</i></p>
<p><b>Comments</b></p>	





**NOTES:**

1. ALL DISTANCES, DIMENSIONS, LOCATIONS, EQUIPMENT DESIGNATIONS AND SPECIFICATIONS ARE APPROXIMATE.
2. ALL MATERIAL, COLOR & STYLE WILL MATCH CURRENTLY EXISTING MATERIALS AND WHERE NEEDED ANY RF FRIENDLY MATERIAL WILL BE PAINTED TO MATCH.
3. IT IS ASSUMED THAT ALL PROPOSED UTILITIES WILL BE ROUTED BELOW GRADE TO THE PROPOSED INSTALLATION.
4. THE PURPOSE OF THE DESIGN SHOWN IS TO SHOW A CONCEPTUAL DESIGN FOR THE REPLACEMENT/MODIFICATIONS OF EXISTING LIGHT POLE. THEREFORE, THESE DESIGNS ARE INHERENTLY APPROXIMATE IN NATURE AND SHOULD NOT BE USED AS AN EXACT, SCALED ENGINEERING DRAWING.
5. POLE REPLACEMENT HEIGHTS WILL VARY BASED ON REQUIRED ANTENNA HEIGHTS REQUESTED BY EXTENET SYSTEMS.
6. EQUIPMENT CLOSURE TO BE NO LARGER THAN (53"Hx26"Wx26"D).
7. ANTENNA TO BE NO LARGER THAN 16"Øx40"H.
8. 14' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 16.8'
- 19' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 22.8'
- 24' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 28.8'
- 29' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 34.8'
9. EXTENET SYSTEMS WILL PLACE SMALL PLACARD ON POLE IDENTIFYING OWNERSHIP/CONTACT INFORMATION.
10. LED LIGHT & LUMINAIRE ARM WILL BE AT SAME HEIGHT AS EXISTING
11. PROPOSED LIGHTING WILL CONFORM TO THE CITY OF BOSTON'S LIGHTING STANDARDS.
12. ORNAMENTAL DECORATIVE FIXTURES WILL BE IDENTICAL TO THE EXISTING FIXTURE UNLESS THE EXISTING FEATURE IS A METAL HALIDE OR HIGH PRESSURE SODIUM FIXTURE. IN THESE SCENARIOS, THE FIXTURE WILL BE UPGRADED TO AN APPROVED LED FIXTURE.



ANTENNA OPTION 2

**PENDANT LIGHT POLE WITH RRH CONCEALMENT**

**SUBMITTALS**

REV	DATE	DESCRIPTION	INITIALS
1	6/22/17	ADDED OPTION 2	LS

**X-3**

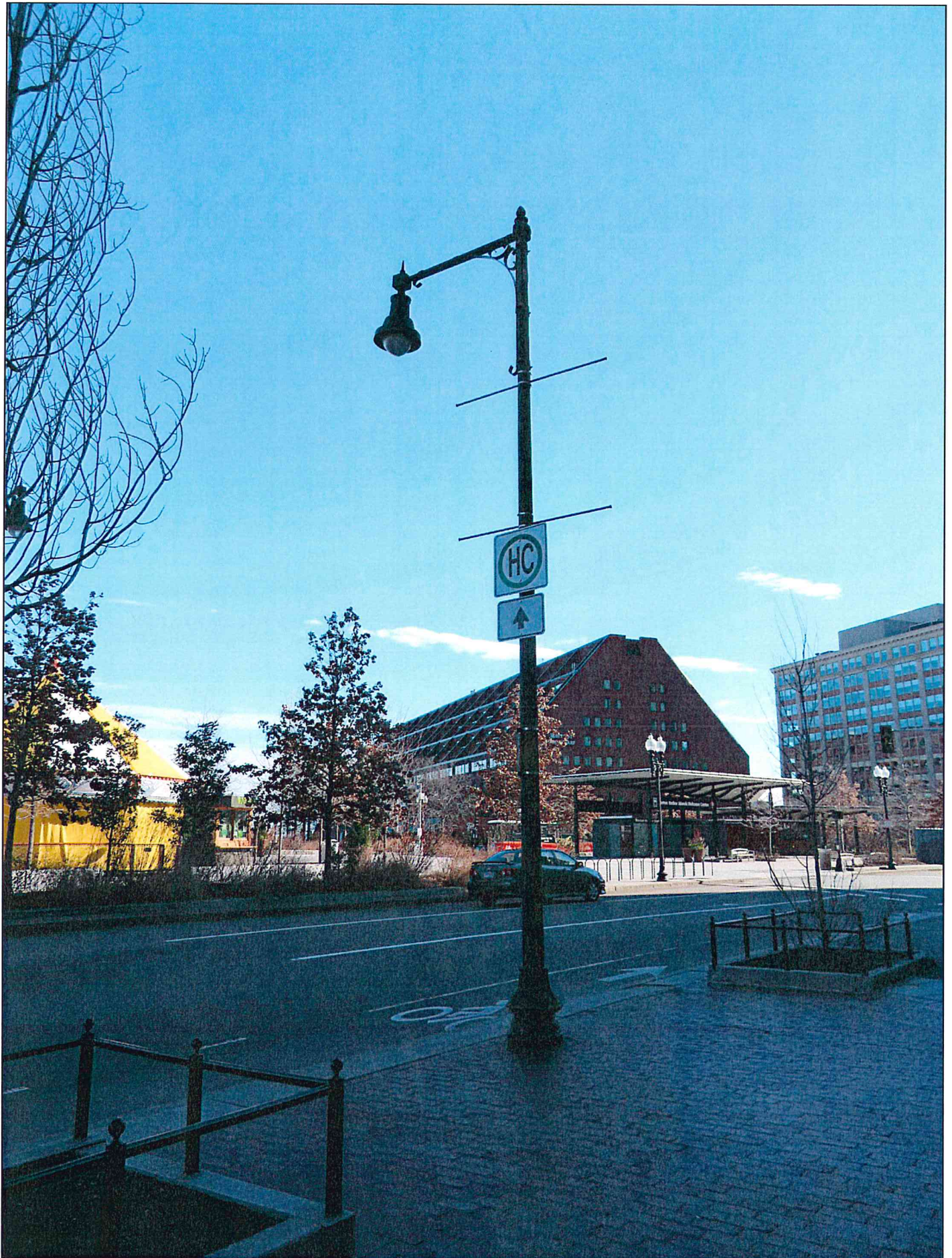


3030 WARRENVILLE RD  
LISLE, IL 60532  
(630) 505-3800  
WWW.EXTENETSYSTEMS.COM

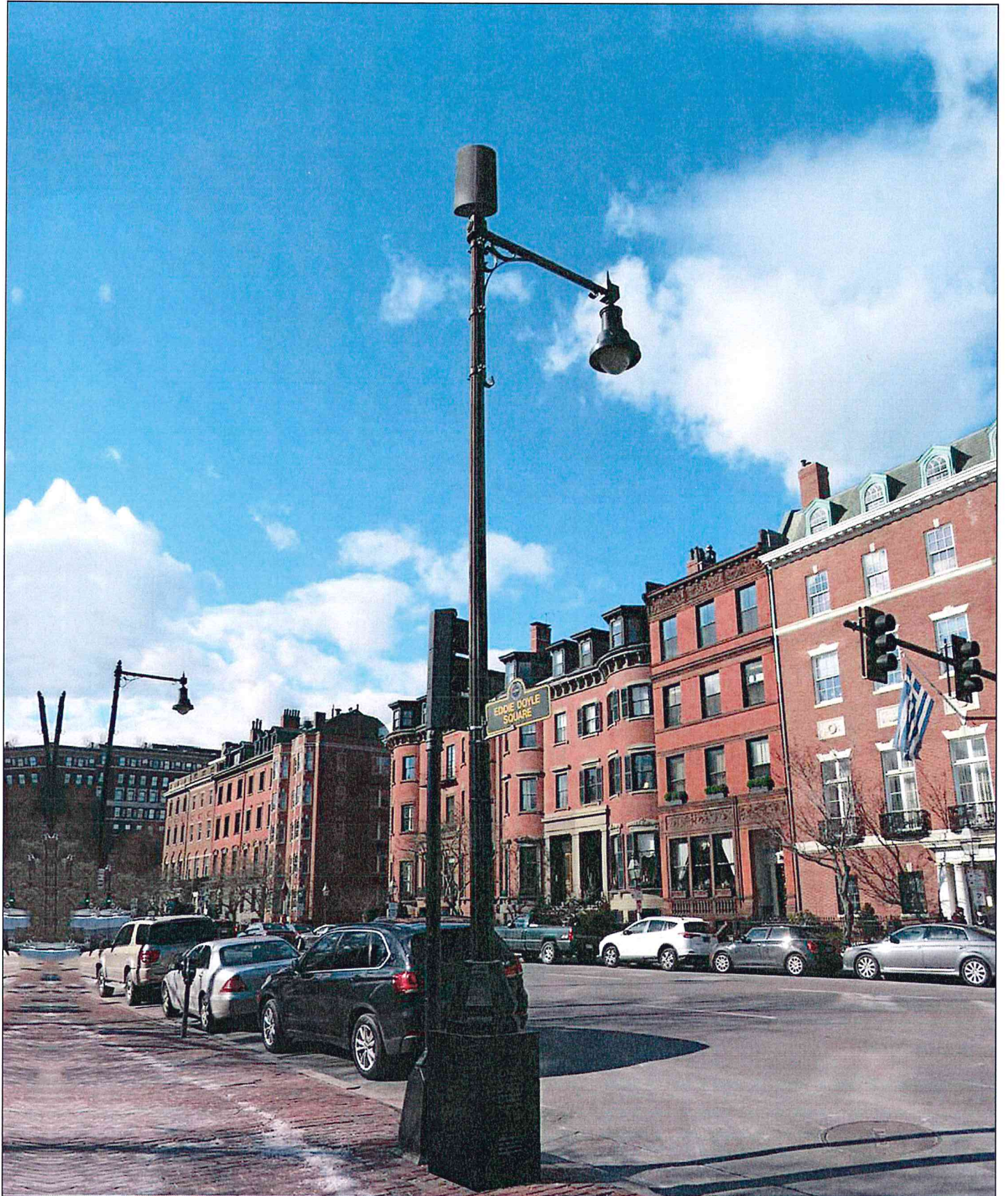


21 OXFORD RD  
MANSFIELD, MA 02048  
www.ucseeng.com 1-508-337-7600

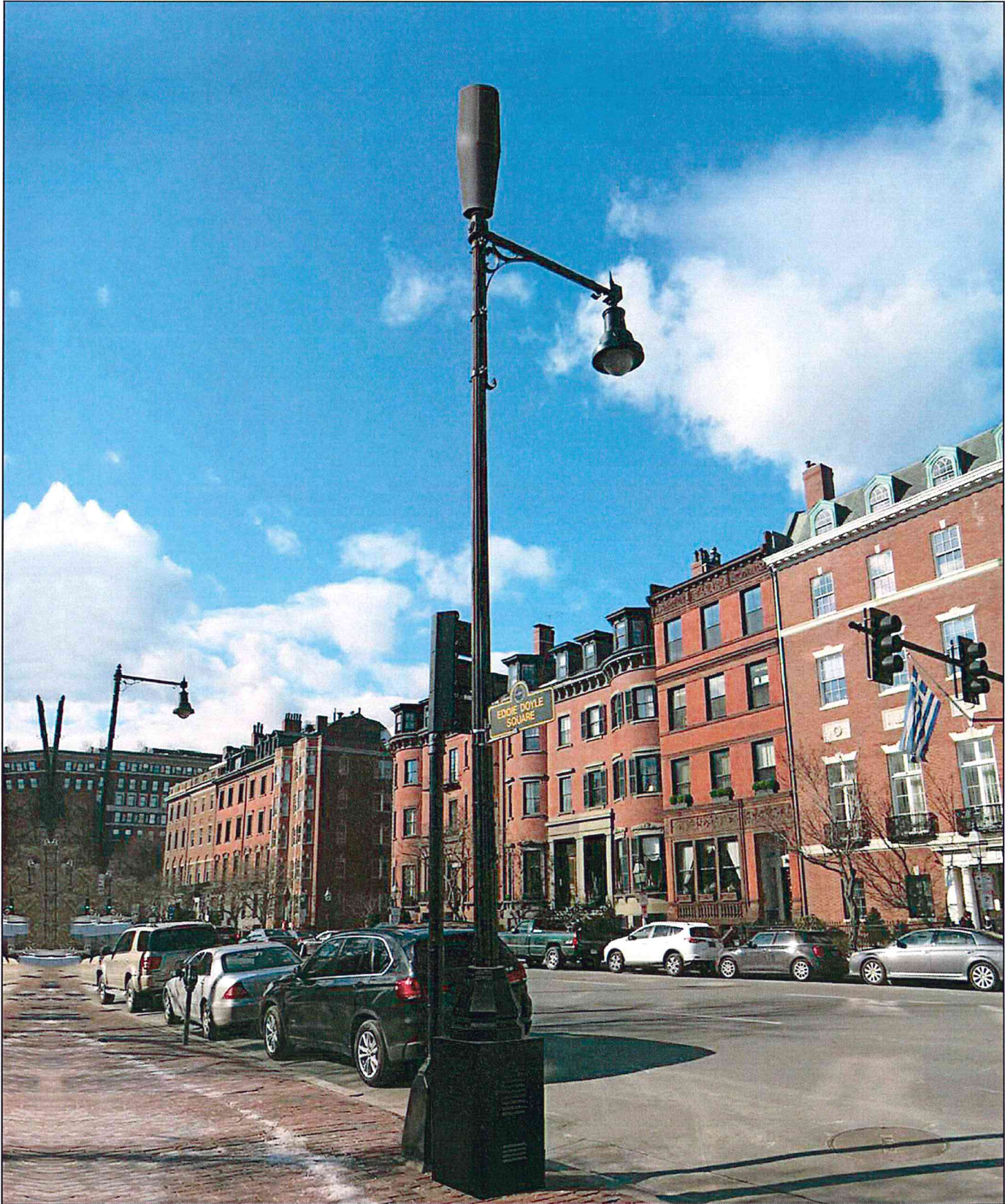














**EXHIBIT X-4**

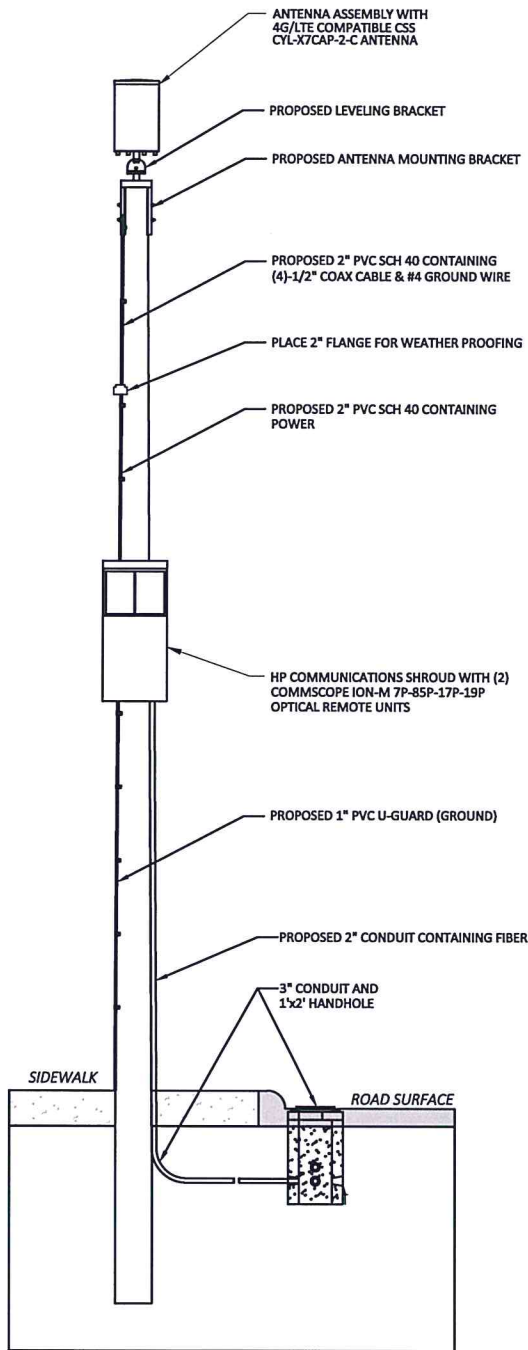
**SCHEDULE OF APPROVED WIRELESS FACILITIES**

<b>Facility Number</b>	<b>X-4 Wood Utility Pole with Antenna Top Mount</b>
<b>Attachment Types</b>  <i>(check all that apply And provide detail below)</i>	<input type="checkbox"/> Replacement City Pole (streetlight) <input type="checkbox"/> Replacement City Property Pole (streetlight) <input type="checkbox"/> Attach to existing City Pole (streetlight) <input type="checkbox"/> Attach to existing City Property Pole (streetlight) <input type="checkbox"/> Attach to existing City Pole (traffic signal) <input type="checkbox"/> Attach to existing City Property Pole (traffic signal) <input type="checkbox"/> Attach to existing City Pole (street furniture) <input type="checkbox"/> Attach to existing City Property Pole (street furniture) <input checked="" type="checkbox"/> Attach to Non-City Pole (Top Mount)
<b>Attachment Type Detail</b>	<i>Standard wood utility pole (existing or replacement)</i>
<b>Physical Description</b>	<p><i>Mount antenna (no more than 16" diameter and no more than 40" height) affixed to top of utility pole. Remote radiohead, power and fiber equipment mounted to pole within stealth shroud and will be painted to match exterior pole.</i></p> <p><i>Pole Replacement information for all standard wooden utility poles.</i></p> <ul style="list-style-type: none"> <li>• <i>14' existing pole to be replaced with new pole with a max height of 16.8'</i></li> <li>• <i>19' existing pole to be replaced with new pole with a max height of 22.8'</i></li> <li>• <i>24' existing pole to be replaced with new pole with a max height of 28.8'</i></li> <li>• <i>29' existing pole to be replaced with new pole with a max height of 34.8'</i></li> </ul>
<b>Concealment</b>	<i>Antenna contained within enclosure painted to match pole. Remote radiohead, power and fiber equipment mounted to Pole within stealth shroud and will be painted to match exterior of Pole.</i>



<p><b>Included Documents</b></p>	<p><i>The following documents:</i></p> <ul style="list-style-type: none"> <li><i>A. For each Attachment Type listed or checked above, an engineering drawing of replacement pole or existing pole with attached equipment. The drawing must show the location on the pole where each component of the Wireless Facility is attached or enclosed. Drawings should depict any underground portion of the typical installation for that Attachment Type.</i></li> <li><i>B. Photo showing an example of each Attachment Type listed or checked above.</i></li> <li><i>C. Photo mockup of each Attachment Type listed or checked above showing the appearance after the Approved Wireless Facility is installed.</i></li> </ul> <p><i>Engineering drawings and photo attachments should reflect the dimensions and characteristics of a representative actual City Pole or City Property Pole of the type to which the Approved Wireless Facility design applies rather than generic examples.</i></p> <p><i>Where there is considerable variation among City Poles/City Property Poles of a particular type (e.g. traffic signals), drawings can show a typical installation, provided that equipment volumes and attachment locations will not vary significantly from one installation to the next in ways that are material to the City's interests.</i></p>
<p><b>RF Compliance Information</b></p>	<p><i>X Facility conforms to information already on file    <input type="checkbox"/> information attached</i></p>
<p><b>Comments</b></p>	





**NOTES:**

1. ALL DISTANCES, DIMENSIONS, LOCATIONS, EQUIPMENT DESIGNATIONS AND SPECIFICATIONS ARE APPROXIMATE.
2. ALL MATERIAL, COLOR & STYLE WILL MATCH CURRENTLY EXISTING MATERIALS AND WHERE NEEDED ANY RF FRIENDLY MATERIAL WILL BE PAINTED TO MATCH.
3. IT IS ASSUMED THAT ALL PROPOSED UTILITIES WILL BE ROUTED BELOW GRADE TO THE PROPOSED INSTALLATION.
4. THE PURPOSE OF THE DESIGN SHOWN IS TO SHOW A CONCEPTUAL DESIGN FOR THE REPLACEMENT/MODIFICATIONS OF EXISTING LIGHT POLE. THEREFORE, THESE DESIGNS ARE INHERENTLY APPROXIMATE IN NATURE AND SHOULD NOT BE USED AS AN EXACT, SCALED ENGINEERING DRAWING.
5. POLE REPLACEMENT HEIGHTS WILL VARY BASED ON REQUIRED ANTENNA HEIGHTS REQUESTED BY EXTENET SYSTEMS.
6. EQUIPMENT CLOSURE TO BE NO LARGER THAN (53"Hx26"Wx26"D).
7. ANTENNA TO BE NO LARGER THAN 16"Øx40"H.
8. 14' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 16.8'  
19' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 22.8'  
24' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 28.8'  
29' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 34.8'
9. EXTENET SYSTEMS WILL PLACE SMALL PLACARD ON POLE IDENTIFYING OWNERSHIP/CONTACT INFORMATION.
10. LED LIGHT & LUMINAIRE ARM WILL BE AT SAME HEIGHT AS EXISTING
11. PROPOSED LIGHTING WILL CONFORM TO THE CITY OF BOSTON'S LIGHTING STANDARDS.
12. ORNAMENTAL DECORATIVE FIXTURES WILL BE IDENTICAL TO THE EXISTING FIXTURE UNLESS THE EXISTING FEATURE IS A METAL HALIDE OR HIGH PRESSURE SODIUM FIXTURE. IN THESE SCENARIOS, THE FIXTURE WILL BE UPGRADED TO AN APPROVED LED FIXTURE.

**WOOD UTILITY POLE WITH ANTENNA TOP MOUNT**



3030 WARRENVILLE RD  
LISLE, IL 60532  
(630) 505-3800  
WWW.EXTENETSYSTEMS.COM



21 OXFORD RD  
MANSFIELD, MA 02048  
www.ucseeng.com 1-508-337-7600

**SUBMITTALS**

REV	DATE	DESCRIPTION	INITIALS

**X-4**





2015. 7. 28 10:50





2015. 7.28 10:50



**EXHIBIT X-5**

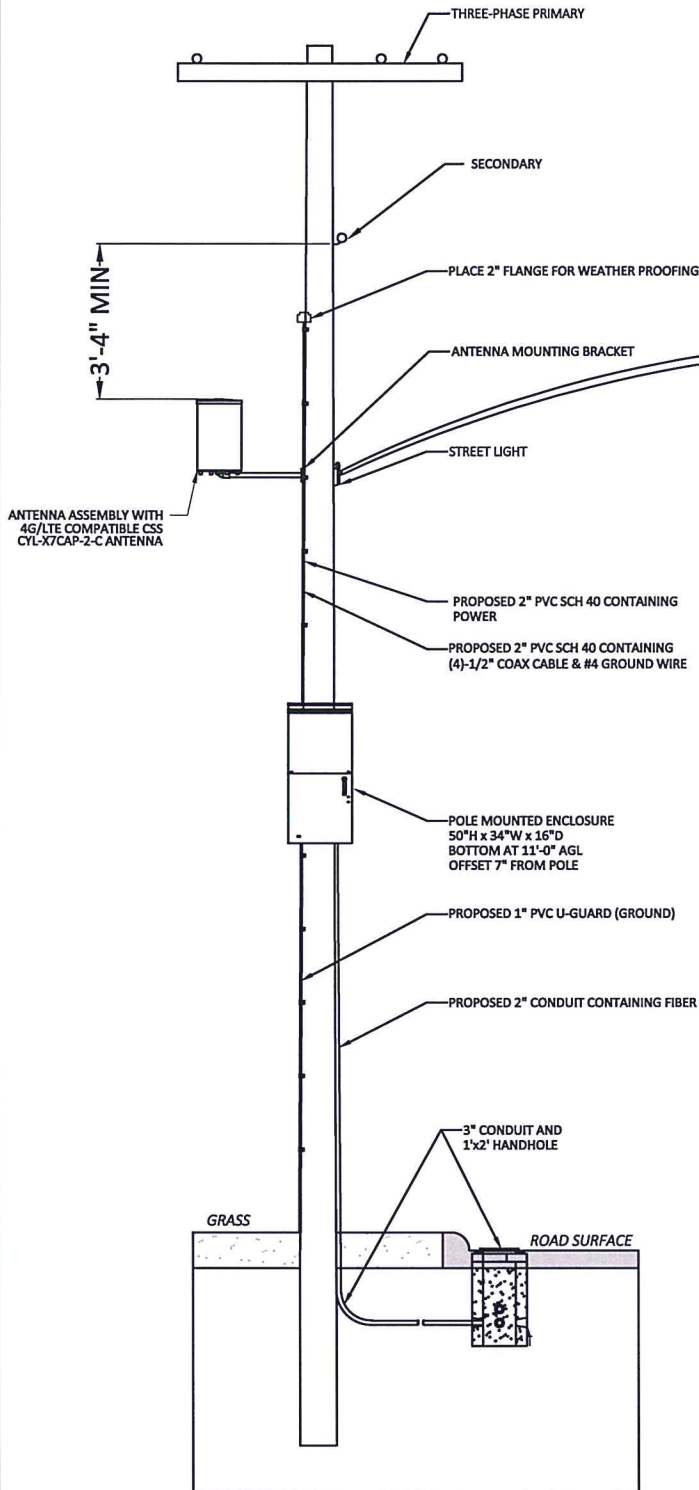
**SCHEDULE OF APPROVED WIRELESS FACILITIES**

<b>Facility Number</b>	<b>X-5 Wood Utility Pole with Antenna Side Mount</b>
<b>Attachment Types</b>  <i>(check all that apply And provide detail below)</i>	<input type="checkbox"/> Replacement City Pole (streetlight) <input type="checkbox"/> Replacement City Property Pole (streetlight) <input type="checkbox"/> Attach to existing City Pole (streetlight) <input type="checkbox"/> Attach to existing City Property Pole (streetlight) <input type="checkbox"/> Attach to existing City Pole (traffic signal) <input type="checkbox"/> Attach to existing City Property Pole (traffic signal) <input type="checkbox"/> Attach to existing City Pole (street furniture) <input type="checkbox"/> Attach to existing City Property Pole (street furniture) <input checked="" type="checkbox"/> Attach to Non-City Pole (side mount)
<b>Attachment Type Detail</b>	<i>Standard concrete light pole (existing or replacement)</i>
<b>Physical Description</b>	<p><i>Mount antenna (no more than 16" diameter and no more than 40" height) in fiberglass enclosure painted to match pole and affixed to the side of the Pole. Remote radiohead, power and fiber equipment mounted on side of pole within stealth shroud and will be painted to match exterior pole.</i></p> <p><i>Pole Replacement information for all standard utility poles.</i></p> <ul style="list-style-type: none"> <li><i>• 14' existing pole to be replaced with new pole with a max height of 16.8'</i></li> <li><i>• 19' existing pole to be replaced with new pole with a max height of 22.8'</i></li> <li><i>• 24' existing pole to be replaced with new pole with a max height of 28.8'</i></li> <li><i>• 29' existing pole to be replaced with new pole with a max height of 34.8'</i></li> </ul>
<b>Concealment</b>	<i>Antenna contained within enclosure painted and tapered to match pole. Cables run inside pole. Remote radiohead, power and fiber equipment mounted on Pole within stealth shroud.</i>



<p><b>Included Documents</b></p>	<p><i>The following documents:</i></p> <p>A. <i>For each Attachment Type listed or checked above, an engineering drawing of replacement pole or existing pole with attached equipment. The drawing must show the location on the pole where each component of the Wireless Facility is attached or enclosed. Drawings should depict any underground portion of the typical installation for that Attachment Type.</i></p> <p>B. <i>Photo showing an example of each Attachment Type listed or checked above.</i></p> <p>C. <i>Photo mockup of each Attachment Type listed or checked above showing the appearance after the Approved Wireless Facility is installed.</i></p> <p><i>Engineering drawings and photo attachments should reflect the dimensions and characteristics of a representative actual City Pole or City Property Pole of the type to which the Approved Wireless Facility design applies rather than generic examples.</i></p> <p><i>Where there is considerable variation among City Poles/City Property Poles of a particular type (e.g. traffic signals), drawings can show a typical installation, provided that equipment volumes and attachment locations will not vary significantly from one installation to the next in ways that are material to the City's interests.</i></p>
<p><b>RF Compliance Information</b></p>	<p>X Facility conforms to information already on file    <input type="checkbox"/> information attached</p>
<p><b>Comments</b></p>	





**NOTES:**

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5. POLE REPLACEMENT HEIGHTS WILL VARY BASED ON REQUIRED ANTENNA HEIGHTS REQUESTED BY EXTENET SYSTEMS.
6. EQUIPMENT CLOSURE TO BE NO LARGER THAN (53"Hx26"Wx26"D).
7. ANTENNA TO BE NO LARGER THAN 16"Øx40"H.
8. 14' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 16.8'  
19' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 22.8'  
24' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 28.8'  
29' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 34.8'
9. EXTENET SYSTEMS WILL PLACE SMALL PLACARD ON POLE IDENTIFYING OWNERSHIP/CONTACT INFORMATION.
10. LED LIGHT & LUMINAIRE ARM WILL BE AT SAME HEIGHT AS EXISTING
11. PROPOSED LIGHTING WILL CONFORM TO THE CITY OF BOSTON'S LIGHTING STANDARDS.
12. ORNAMENTAL DECORATIVE FIXTURES WILL BE IDENTICAL TO THE EXISTING FIXTURE UNLESS THE EXISTING FEATURE IS A METAL HALIDE OR HIGH PRESSURE SODIUM FIXTURE. IN THESE SCENARIOS, THE FIXTURE WILL BE UPGRADED TO AN APPROVED LED FIXTURE.

**WOOD UTILITY POLE  
WITH ANTENNA SIDE MOUNT**



3030 WARRENVILLE RD  
LISLE, IL 60532  
(630) 505-3800  
WWW.EXTENETSYSTEMS.COM



21 OXFORD RD  
MANSFIELD, MA 02048  
www.ucseeng.com 1-508-337-7600

**SUBMITTALS**

REV	DATE	DESCRIPTION	INITIALS

**X-5**





2015. 9. 22 11:22





2015. 9. 22 11:22



**EXHIBIT X-8**

**SCHEDULE OF APPROVED WIRELESS FACILITIES**

<b>Facility Number</b>	<b>X-8 Double Acorn Light Pole RRH concealment (Base)</b>
<b>Attachment Types</b>  <i>(check all that apply And provide detail below)</i>	<input checked="" type="checkbox"/> Replacement City Pole (streetlight) <input checked="" type="checkbox"/> Replacement City Property Pole (streetlight) <input type="checkbox"/> Attach to existing City Pole (streetlight) <input type="checkbox"/> Attach to existing City Property Pole (streetlight) <input type="checkbox"/> Attach to existing City Pole (traffic signal) <input type="checkbox"/> Attach to existing City Property Pole (traffic signal) <input type="checkbox"/> Attach to existing City Pole (street furniture) <input type="checkbox"/> Attach to existing City Property Pole (street furniture) <input type="checkbox"/> Attach to Non-City Pole
<b>Attachment Type Detail</b>	<i>Double Acorn Pole Light RRH Concealment</i>
<b>Physical Description</b>	<p><i>Mount antenna (no more than 2" diameter and no more than 60" height) in fiberglass enclosure painted to match pole and affixed to top of pole with tapered extension. Remote radiohead, power and fiber equipment concealed within stealth expanded base, not to exceed 2' in width and will be painted and designed to match exterior pole.</i></p> <p><i>Pole Replacement information for all standard lightpoles</i></p> <ul style="list-style-type: none"> <li>• <i>14' existing pole to be replaced with new pole with a max height of 16.8'</i></li> <li>• <i>19' existing pole to be replaced with new pole with a max height of 22.8'</i></li> <li>• <i>24' existing pole to be replaced with new pole with a max height of 28.8'</i></li> <li>• <i>29' existing pole to be replaced with new pole with a max height of 34.8'</i></li> </ul>
<b>Concealment</b>	<p><i>Antenna contained within enclosure painted to match pole. Cables run inside pole. Remote radiohead, power and fiber equipment concealed within stealth expanded base, not to exceed 24" in width and 46" in height. A maximum of an additional 2' above enclosure will be used to add decorative tapering.</i></p>



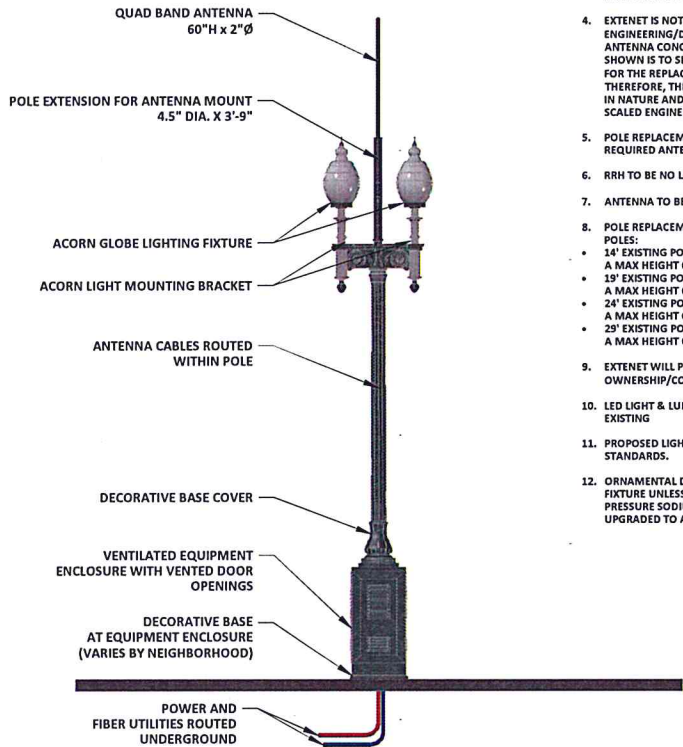
<p><b>Included Documents</b></p>	<p><i>The following documents:</i></p> <ul style="list-style-type: none"> <li><i>A. For each Attachment Type listed or checked above, an engineering drawing of replacement pole or existing pole with attached equipment. The drawing must show the location on the pole where each component of the Wireless Facility is attached or enclosed. Drawings should depict any underground portion of the typical installation for that Attachment Type.</i></li> <li><i>B. Photo showing an example of each Attachment Type listed or checked above.</i></li> <li><i>C. Photo mockup of each Attachment Type listed or checked above showing the appearance after the Approved Wireless Facility is installed.</i></li> </ul> <p><i>Engineering drawings and photo attachments should reflect the dimensions and characteristics of a representative actual City Pole or City Property Pole of the type to which the Approved Wireless Facility design applies rather than generic examples.</i></p> <p><i>Where there is considerable variation among City Poles/City Property Poles of a particular type (e.g. traffic signals), drawings can show a typical installation, provided that equipment volumes and attachment locations will not vary significantly from one installation to the next in ways that are material to the City's interests.</i></p>
<p><b>RF Compliance Information</b></p>	<p><i>X Facility conforms to information already on file</i></p> <ul style="list-style-type: none"> <li><i>• Information attached</i></li> </ul>
<p><b>Comments</b></p>	



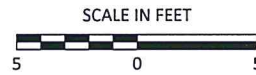
# PROPOSED DOUBLE ACORN STREETLIGHT SOLUTION

**NOTES:**

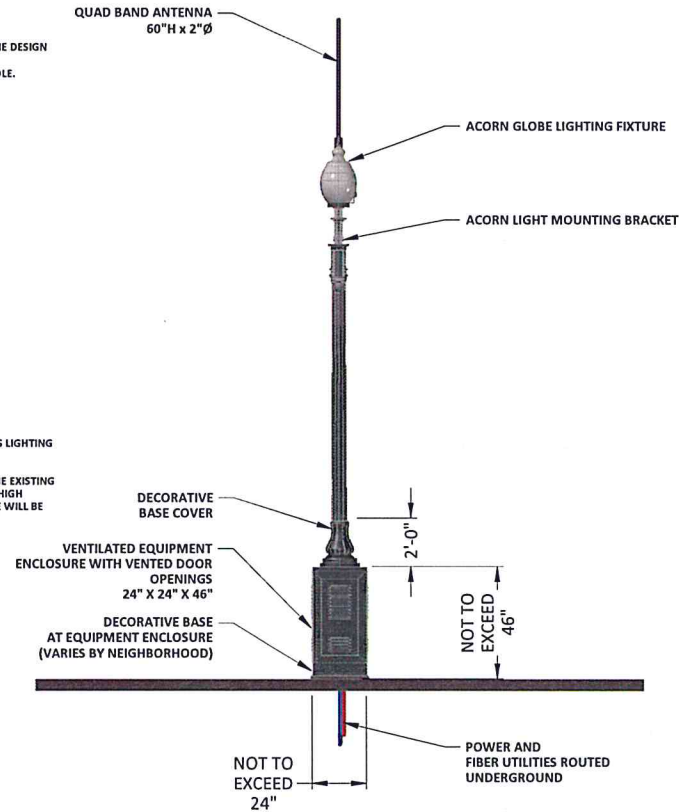
1. ALL DISTANCES, DIMENSIONS, LOCATIONS AND EQUIPMENT DESIGNATIONS AND SPECIFICATIONS ARE APPROXIMATE.
2. ALL MATERIALS WILL MATCH CURRENTLY EXISTING MATERIALS AND WHERE NEEDED ANY RF FRIENDLY MATERIAL WILL BE PAINTED TO MATCH.
3. IT IS ASSUMED THAT ALL PROPOSED UTILITIES WILL BE ROUTED BELOW GRADE TO THE PROPOSED INSTALLATION.
4. EXTENET IS NOT RESPONSIBLE FOR THE ENGINEERING/DESIGN OF THE PROPOSED EQUIPMENT & ANTENNA CONCEALMENT SHOWN HEREIN. THE PURPOSE OF THE DESIGN SHOWN IS TO SHOW A CONCEPTUAL DESIGN FOR THE REPLACEMENT/MODIFICATIONS OF EXISTING LIGHT POLE. THEREFORE, THEY ARE INHERENTLY APPROXIMATE IN NATURE AND SHOULD NOT BE USED AS AN EXACT, SCALED ENGINEERING DRAWING.
5. POLE REPLACEMENT HEIGHTS WILL VARY BASED ON REQUIRED ANTENNA HEIGHTS REQUESTED BY EXTENET.
6. RRH TO BE NO LARGER THAN 16"Wx12"Dx40"H.
7. ANTENNA TO BE NO LARGER THAN 16"Øx40"H.
8. POLE REPLACEMENT INFO FOR ALL STANDARD LIGHT POLES:
  - 18' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 16.8'
  - 19' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 22.8'
  - 24' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 28.8'
  - 29' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 34.8'
9. EXTENET WILL PLACE SMALL PLACARD ON POLE IDENTIFYING OWNERSHIP/CONTACT INFORMATION.
10. LED LIGHT & LUMINAIRE ARM WILL BE AT SAME HEIGHT AS EXISTING
11. PROPOSED LIGHTING WILL CONFORM TO THE CITY OF BOSTON'S LIGHTING STANDARDS.
12. ORNAMENTAL DECORATIVE FIXTURES WILL BE IDENTICAL TO THE EXISTING FIXTURE UNLESS THE EXISTING FIXTURE IS A METAL HALIDE OR HIGH PRESSURE SODIUM FIXTURE. IN THESE SCENARIOS, THE FIXTURE WILL BE UPGRADED TO AN LED APPROVED FIXTURE.



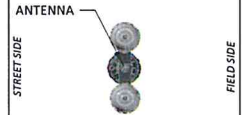
① PROPOSED PROFILE - FRONT VIEW FROM FIELD LOOKING FROM ROAD



SCALE IN FEET



② PROPOSED PROFILE - SIDE VIEW FROM ROADSIDE LOOKING UP ROAD



PROPOSED TOP VIEW  
SCALE 1"=6"  
NOTE:  
CABLES & EXISTING POLE EQUIPMENT NOT SHOWN FOR CLARITY

LOCATION: BOSTON, MA

NOTES:



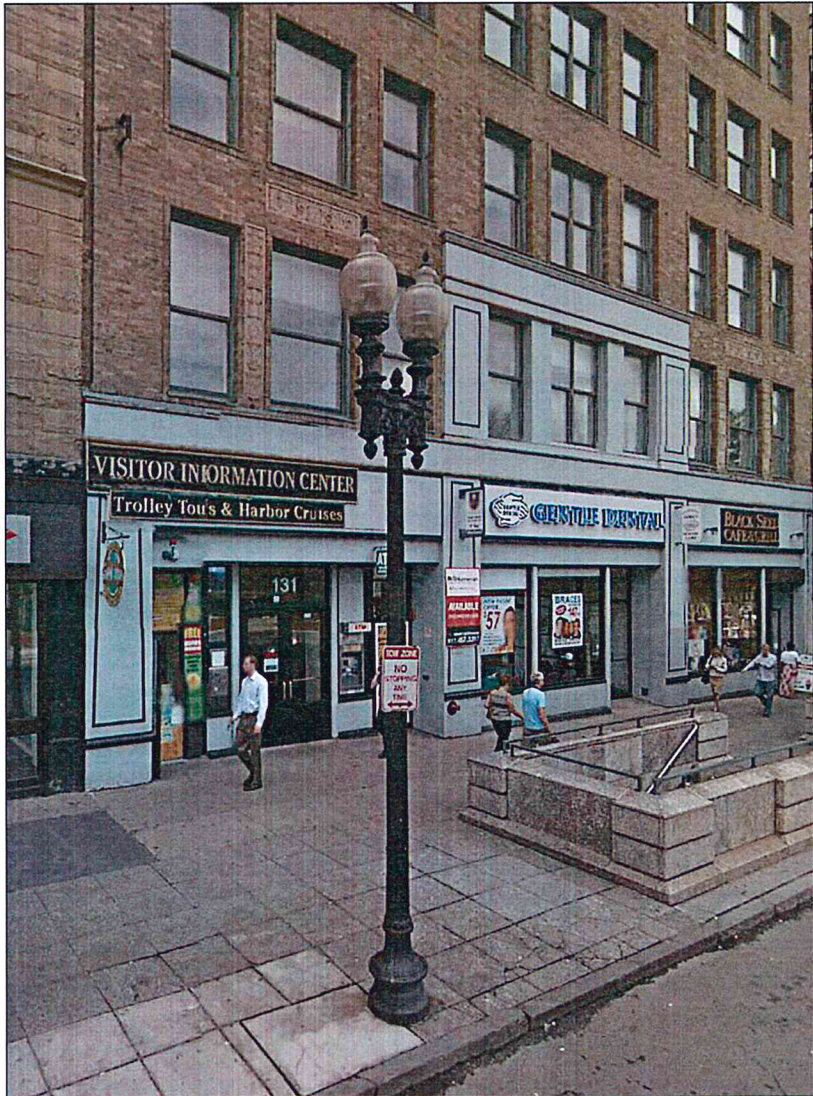
PREPARED BY:  
**UC SYNERGETIC**  
Innovative Thinking. Engineered Solutions.  
21 OXFORD RD  
MANSFIELD, MA 02048  
www.ucseeng.com 1-508-337-7600

EXTENET SMALL CELL PROPOSED

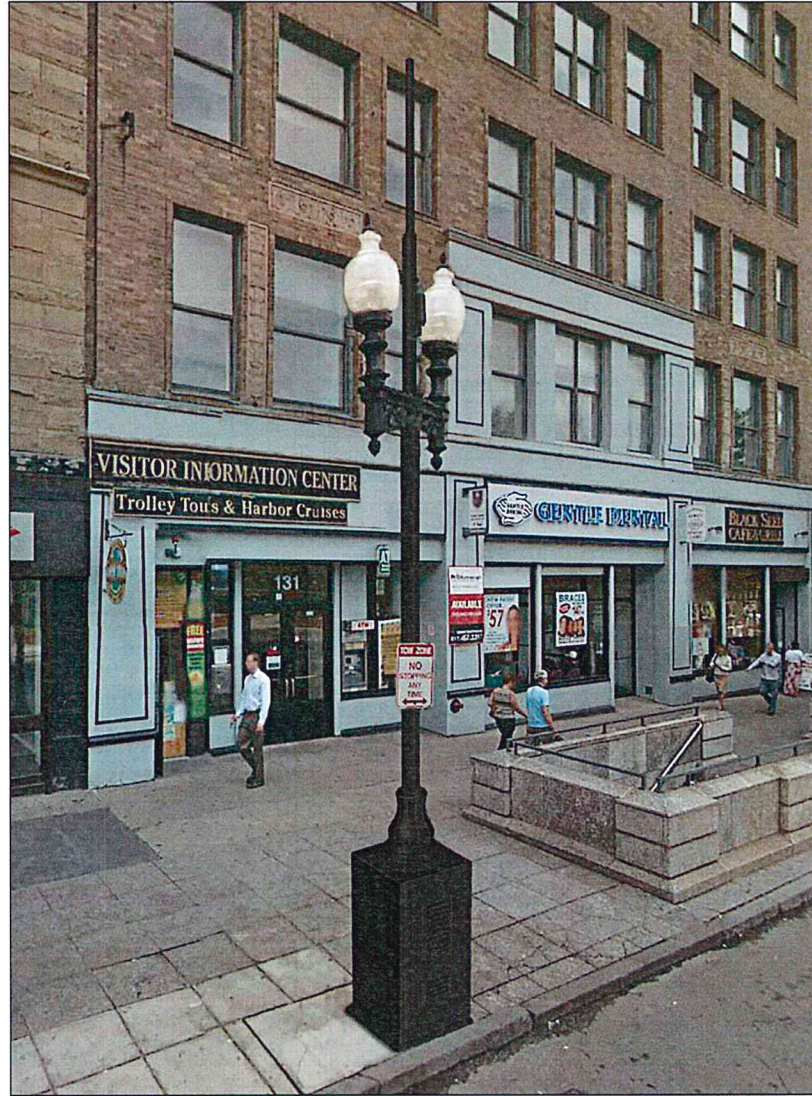
REVISIONS		
REV	DESCRIPTION	DATE

DRAFTER: DTR  
SCALE: 1" = 5'  
ISSUE DATE: 12/21/16  
NODE NAME: EXHIBIT X-8  
SHEET #: 1 OF 2





EXISTING PHOTOGRAPHIC VIEW



PROPOSED PHOTOGRAPHIC SIMULATION

LOCATION: BOSTON, MA

NOTES:

PREPARED FOR:



PREPARED BY:



EXTENET SMALL CELL  
PHOTO SIM

REVISIONS		
REV	DESCRIPTION	DATE

DRAWER: DTS	2
SCALE: NTS	
ISSUE DATE: 12/21/16	
NODE NAME: EXHIBIT 4-B	
SHEET #: 2 OF 2	



**EXHIBIT X-13**

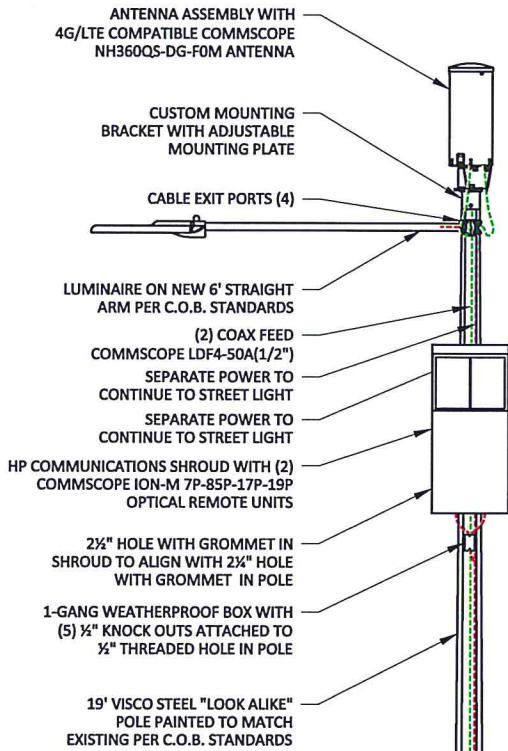
**SCHEDULE OF APPROVED WIRELESS FACILITIES**

<p><b>Facility Number</b></p>	<p><b>X-13 Concrete Light Pole with Aeriata Light or Cobra Light (Pole Mounted Shroud)</b></p>
<p><b>Attachment Types</b>  <i>(check all that apply And provide detail below)</i></p>	<p><input checked="" type="checkbox"/> Replacement City Pole (streetlight)  <input checked="" type="checkbox"/> Replacement City Property Pole (streetlight)  <input type="checkbox"/> Attach to existing City Pole (streetlight)  <input type="checkbox"/> Attach to existing City Property Pole (streetlight)  <input type="checkbox"/> Attach to existing City Pole (traffic signal)  <input type="checkbox"/> Attach to existing City Property Pole (traffic signal)  <input type="checkbox"/> Attach to existing City Pole (street furniture)  <input type="checkbox"/> Attach to existing City Property Pole (street furniture)  <input type="checkbox"/> Attach to Non-City Pole</p>
<p><b>Attachment Type Detail</b></p>	<p><i>Standard concrete light pole (existing or replacement)</i></p>
<p><b>Physical Description</b></p>	<p><i>Mount antenna (no more than 16: diameter and no more than 40" height) painted to match pole and affixed to top of pole. Remote radiohead, power and fiber equipment mounted on Pole within stealth shroud.</i></p> <p><i>Pole Replacement information for all standard lightpoles</i></p> <ul style="list-style-type: none"> <li>• <i>14' existing pole to be replaced with new pole with a max height of 16.8'</i></li> <li>• <i>19' existing pole to be replaced with new pole with a max height of 22.8'</i></li> <li>• <i>24' existing pole to be replaced with new pole with a max height of 28.8'</i></li> <li>• <i>29' existing pole to be replaced with new pole with a max height of 34.8'</i></li> </ul>
<p><b>Concealment</b></p>	<p><i>Antenna contained within enclosure painted and tapered to match pole. Cables run inside pole. Remote radiohead, power and fiber equipment mounted on Pole within stealth shroud.</i></p>



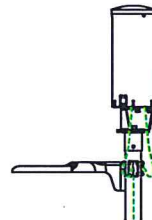
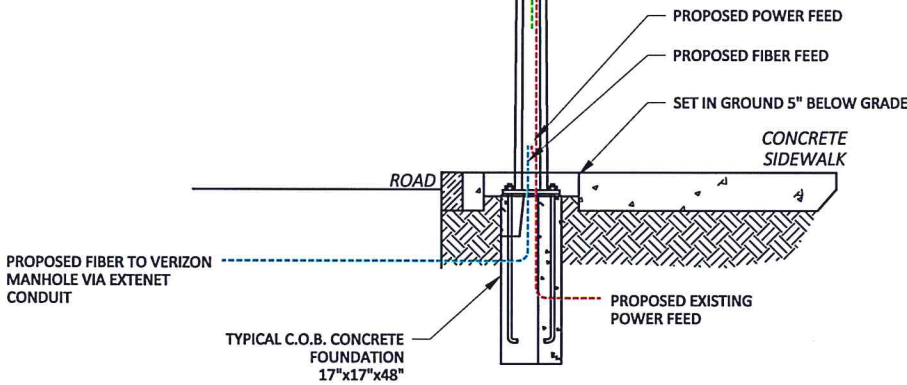
<p><b>Included Documents</b></p>	<p><i>The following documents:</i></p> <p>A. <i>For each Attachment Type listed or checked above, an engineering drawing of replacement pole or existing pole with attached equipment. The drawing must show the location on the pole where each component of the Wireless Facility is attached or enclosed. Drawings should depict any underground portion of the typical installation for that Attachment Type.</i></p> <p>B. <i>Photo showing an example of each Attachment Type listed or checked above.</i></p> <p>C. <i>Photo mockup of each Attachment Type listed or checked above showing the appearance after the Approved Wireless Facility is installed.</i></p> <p><i>Engineering drawings and photo attachments should reflect the dimensions and characteristics of a representative actual City Pole or City Property Pole of the type to which the Approved Wireless Facility design applies rather than generic examples.</i></p> <p><i>Where there is considerable variation among City Poles/City Property Poles of a particular type (e.g. traffic signals), drawings can show a typical installation, provided that equipment volumes and attachment locations will not vary significantly from one installation to the next in ways that are material to the City's interests.</i></p>
<p><b>RF Compliance Information</b></p>	<p>X Facility conforms to information already on file    <input type="checkbox"/> information attached</p>
<p><b>Comments</b></p>	





**NOTES:**

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2. ALL MATERIAL, COLOR & STYLE WILL MATCH CURRENTLY EXISTING MATERIALS AND WHERE NEEDED ANY RF FRIENDLY MATERIAL WILL BE PAINTED TO MATCH.
3. IT IS ASSUMED THAT ALL PROPOSED UTILITIES WILL BE ROUTED BELOW GRADE TO THE PROPOSED INSTALLATION.
4. THE PURPOSE OF THE DESIGN SHOWN IS TO SHOW A CONCEPTUAL DESIGN FOR THE REPLACEMENT/MODIFICATIONS OF EXISTING LIGHT POLE. THEREFORE, THESE DESIGNS ARE INHERENTLY APPROXIMATE IN NATURE AND SHOULD NOT BE USED AS AN EXACT, SCALED ENGINEERING DRAWING.
5. POLE REPLACEMENT HEIGHTS WILL VARY BASED ON REQUIRED ANTENNA HEIGHTS REQUESTED BY EXTENET SYSTEMS.
6. EQUIPMENT CLOSURE TO BE NO LARGER THAN (53"Hx26"Wx26"D).
7. ANTENNA TO BE NO LARGER THAN 16"Øx40"H.
8. 14' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 16.8'  
 19' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 22.8'  
 24' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 28.8'  
 29' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 34.8'
9. EXTENET SYSTEMS WILL PLACE SMALL PLACARD ON POLE IDENTIFYING OWNERSHIP/CONTACT INFORMATION.
10. LED LIGHT & LUMINAIRE ARM WILL BE AT SAME HEIGHT AS EXISTING
11. PROPOSED LIGHTING WILL CONFORM TO THE CITY OF BOSTON'S LIGHTING STANDARDS.
12. ORNAMENTAL DECORATIVE FIXTURES WILL BE IDENTICAL TO THE EXISTING FIXTURE UNLESS THE EXISTING FEATURE IS A METAL HALIDE OR HIGH PRESSURE SODIUM FIXTURE. IN THESE SCENARIOS, THE FIXTURE WILL BE UPGRADED TO AN APPROVED LED FIXTURE.



LUMINAIRE OPTION 2

## STANDARD AERIATA LIGHT POLE WITH POLE MOUNTED ENCLOSURE

### SUBMITTALS

REV	DATE	DESCRIPTION	INITIALS
1	6/23/17	ADDED OPTION 2	TLLA

X-13

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2014.10.28 11:57









2014.10.27 22:46







**EXHIBIT X-14**

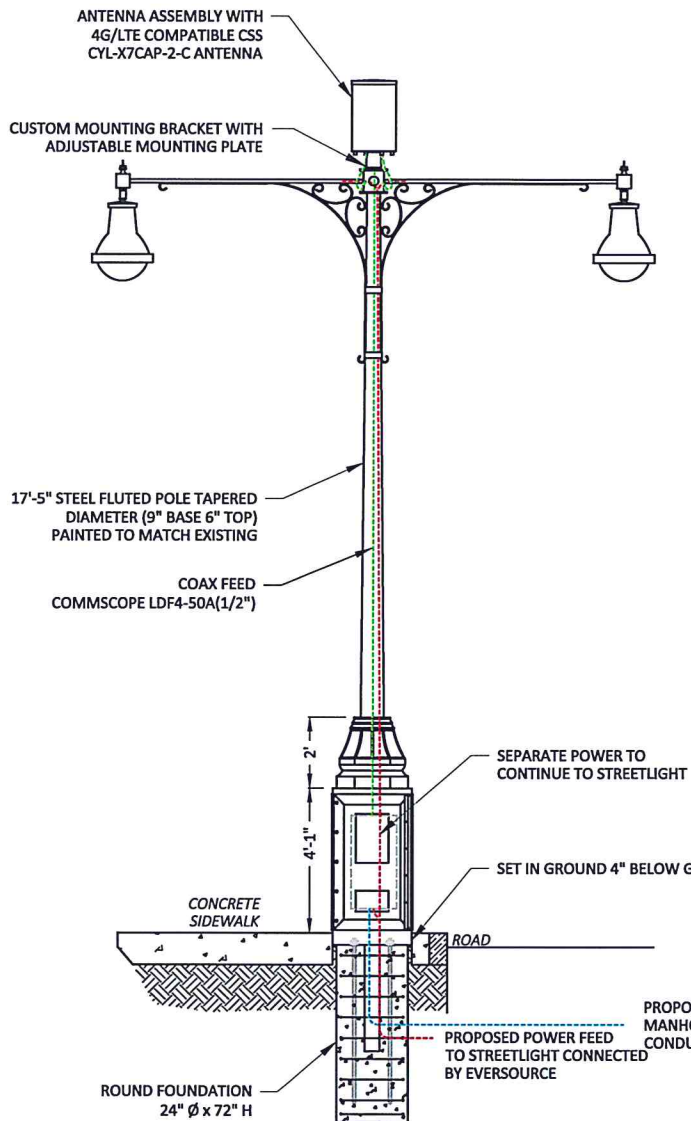
**SCHEDULE OF APPROVED WIRELESS FACILITIES**

<b>Facility Number</b>	<b>X-14 Standard Double Pendant Light Pole (RRH Concealment)</b>
<b>Attachment Types</b>  <i>(check all that apply And provide detail below)</i>	<input checked="" type="checkbox"/> Replacement City Pole (streetlight) <input checked="" type="checkbox"/> Replacement City Property Pole (streetlight) <input type="checkbox"/> Attach to existing City Pole (streetlight) <input type="checkbox"/> Attach to existing City Property Pole (streetlight) <input type="checkbox"/> Attach to existing City Pole (traffic signal) <input type="checkbox"/> Attach to existing City Property Pole (traffic signal) <input type="checkbox"/> Attach to existing City Pole (street furniture) <input type="checkbox"/> Attach to existing City Property Pole (street furniture) <input type="checkbox"/> Attach to Non-City Pole
<b>Attachment Type Detail</b>	<i>Standard dual pendant light pole (existing or replacement)</i>
<b>Physical Description</b>	<p><i>Mount antenna no more than 16" diameter and no more than 40" height for standard antenna. Option two for the antenna (not to exceed more than 16" diameter and no more than 40" height) will include a fiberglass enclosure painted to match pole and affixed to top of pole with tapered extension. Remote radiohead, power and fiber equipment concealed within stealth expanded base, not to exceed 2.5' in width and will be painted and designed to match exterior pole.</i></p> <p><i>Pole Replacement information for all standard lightpoles</i></p> <ul style="list-style-type: none"> <li><i>• 14' existing pole to be replaced with new pole with a max height of 16.8'</i></li> <li><i>• 19' existing pole to be replaced with new pole with a max height of 22.8'</i></li> <li><i>• 24' existing pole to be replaced with new pole with a max height of 28.8'</i></li> <li><i>• 29' existing pole to be replaced with new pole with a max height of 34.8'</i></li> </ul>
<b>Concealment</b>	<i>Antenna contained within enclosure painted and tapered to match pole. Cables run inside pole. Remote radiohead, power and fiber equipment concealed within stealth expanded base, not to exceed 2.5' in width and 4'1" in height. A maximum of an additional 2' above enclosure will be used to add decorative tapering.</i>



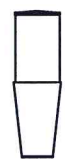
<p><b>Included Documents</b></p>	<p><i>The following documents:</i></p> <ul style="list-style-type: none"> <li>A. <i>For each Attachment Type listed or checked above, an engineering drawing of replacement pole or existing pole with attached equipment. The drawing must show the location on the pole where each component of the Wireless Facility is attached or enclosed. Drawings should depict any underground portion of the typical installation for that Attachment Type.</i></li> <li>B. <i>Photo showing an example of each Attachment Type listed or checked above.</i></li> <li>C. <i>Photo mockup of each Attachment Type listed or checked above showing the appearance after the Approved Wireless Facility is installed.</i></li> </ul> <p><i>Engineering drawings and photo attachments should reflect the dimensions and characteristics of a representative actual City Pole or City Property Pole of the type to which the Approved Wireless Facility design applies rather than generic examples.</i></p> <p><i>Where there is considerable variation among City Poles/City Property Poles of a particular type (e.g. traffic signals), drawings can show a typical installation, provided that equipment volumes and attachment locations will not vary significantly from one installation to the next in ways that are material to the City's interests.</i></p>
<p><b>RF Compliance Information</b></p>	<p>X Facility conforms to information already on file    <input type="checkbox"/> information attached</p>
<p><b>Comments</b></p>	





**NOTES:**

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3. IT IS ASSUMED THAT ALL PROPOSED UTILITIES WILL BE ROUTED BELOW GRADE TO THE PROPOSED INSTALLATION.
4. THE PURPOSE OF THE DESIGN SHOWN IS TO SHOW A CONCEPTUAL DESIGN FOR THE REPLACEMENT/MODIFICATIONS OF EXISTING LIGHT POLE. THEREFORE, THESE DESIGNS ARE INHERENTLY APPROXIMATE IN NATURE AND SHOULD NOT BE USED AS AN EXACT, SCALED ENGINEERING DRAWING.
5. POLE REPLACEMENT HEIGHTS WILL VARY BASED ON REQUIRED ANTENNA HEIGHTS REQUESTED BY EXTENET SYSTEMS.
6. EQUIPMENT CLOSURE TO BE NO LARGER THAN (53"Hx26"Wx26"D).
7. ANTENNA TO BE NO LARGER THAN 16"Øx40"H.
8. 14' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 16.8'  
 19' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 22.8'  
 24' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 28.8'  
 29' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 34.8'
9. EXTENET SYSTEMS WILL PLACE SMALL PLACARD ON POLE IDENTIFYING OWNERSHIP/CONTACT INFORMATION.
10. LED LIGHT & LUMINAIRE ARM WILL BE AT SAME HEIGHT AS EXISTING
11. PROPOSED LIGHTING WILL CONFORM TO THE CITY OF BOSTON'S LIGHTING STANDARDS.
12. ORNAMENTAL DECORATIVE FIXTURES WILL BE IDENTICAL TO THE EXISTING FIXTURE UNLESS THE EXISTING FEATURE IS A METAL HALIDE OR HIGH PRESSURE SODIUM FIXTURE. IN THESE SCENARIOS, THE FIXTURE WILL BE UPGRADED TO AN APPROVED LED FIXTURE.



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**SUBMITTALS**

REV	DATE	DESCRIPTION	INITIALS
1	6/23/17	ADDED OPTION 2	TLLA

**X-14**















**EXHIBIT X-15**

**SCHEDULE OF APPROVED WIRELESS FACILITIES**

<p align="center"><b>Facility Number</b></p>	<p align="center"><b>X-15 Double Pendant Light Pole with Pole Mounted Cabinet and Shrouded Antenna</b></p>
<p><b>Attachment Types</b>  <i>(check all that apply And provide detail below)</i></p>	<p><input checked="" type="checkbox"/> Replacement City Pole (streetlight)  <input checked="" type="checkbox"/> Replacement City Property Pole (streetlight)  <input type="checkbox"/> Attach to existing City Pole (streetlight)  <input type="checkbox"/> Attach to existing City Property Pole (streetlight)  <input type="checkbox"/> Attach to existing City Pole (traffic signal)  <input type="checkbox"/> Attach to existing City Property Pole (traffic signal)  <input type="checkbox"/> Attach to existing City Pole (street furniture)  <input type="checkbox"/> Attach to existing City Property Pole (street furniture)  <input type="checkbox"/> Attach to Non-City Pole</p>
<p><b>Attachment Type Detail</b></p>	<p><i>Standard dual pendant light pole (existing or replacement)</i></p>
<p><b>Physical Description</b></p>	<p><i>Mount antenna no more than 16" diameter and no more than 40" height for standard antenna. Option two for the antenna (not to exceed more than 16" diameter and no more than 40" height) will include a fiberglass enclosure painted to match pole and affixed to top of pole with tapered extension. Remote radiohead, power and fiber equipment mounted to Pole in stealth shroud and designed to match exterior pole.</i></p> <p><i>Pole Replacement information for all standard lightpoles</i></p> <ul style="list-style-type: none"> <li>• <i>14' existing pole to be replaced with new pole with a max height of 16.8'</i></li> <li>• <i>19' existing pole to be replaced with new pole with a max height of 22.8'</i></li> <li>• <i>24' existing pole to be replaced with new pole with a max height of 28.8'</i></li> <li>• <i>29' existing pole to be replaced with new pole with a max height of 34.8'</i></li> </ul>
<p><b>Concealment</b></p>	<p><i>Antenna contained within enclosure painted and tapered to match pole. Cables run inside pole. Remote radiohead, power and fiber equipment mounted to Pole within shroud.</i></p>

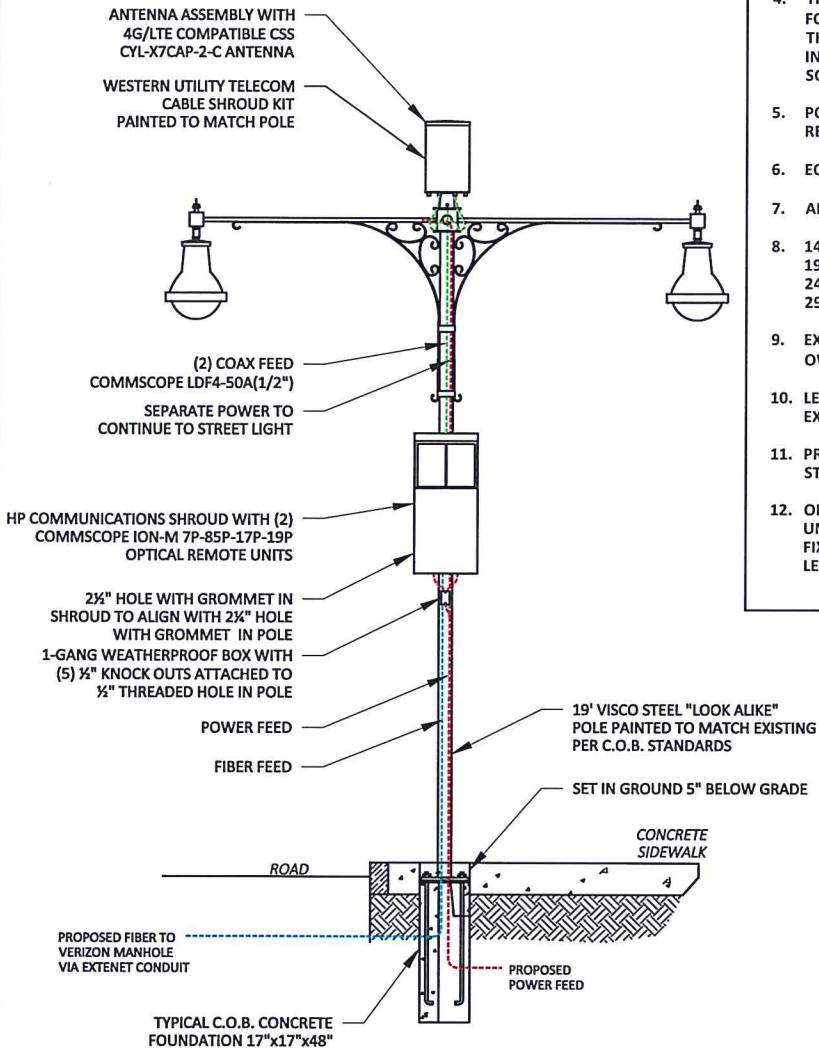


<p><b>Included Documents</b></p>	<p><i>The following documents:</i></p> <ul style="list-style-type: none"> <li>A. <i>For each Attachment Type listed or checked above, an engineering drawing of replacement pole or existing pole with attached equipment. The drawing must show the location on the pole where each component of the Wireless Facility is attached or enclosed. Drawings should depict any underground portion of the typical installation for that Attachment Type.</i></li> <li>B. <i>Photo showing an example of each Attachment Type listed or checked above.</i></li> <li>C. <i>Photo mockup of each Attachment Type listed or checked above showing the appearance after the Approved Wireless Facility is installed.</i></li> </ul> <p><i>Engineering drawings and photo attachments should reflect the dimensions and characteristics of a representative actual City Pole or City Property Pole of the type to which the Approved Wireless Facility design applies rather than generic examples.</i></p> <p><i>Where there is considerable variation among City Poles/City Property Poles of a particular type (e.g. traffic signals), drawings can show a typical installation, provided that equipment volumes and attachment locations will not vary significantly from one installation to the next in ways that are material to the City's interests.</i></p>
<p><b>RF Compliance Information</b></p>	<p>X Facility conforms to information already on file    <input type="checkbox"/> information attached</p>
<p><b>Comments</b></p>	



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5. POLE REPLACEMENT HEIGHTS WILL VARY BASED ON REQUIRED ANTENNA HEIGHTS REQUESTED BY EXTENET SYSTEMS.
6. EQUIPMENT CLOSURE TO BE NO LARGER THAN (53"Hx26"Wx26"D).
7. ANTENNA TO BE NO LARGER THAN 16"Øx40"H.
8. 14' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 16.8'  
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10. LED LIGHT & LUMINAIRE ARM WILL BE AT SAME HEIGHT AS EXISTING
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ANTENNA OPTION 2

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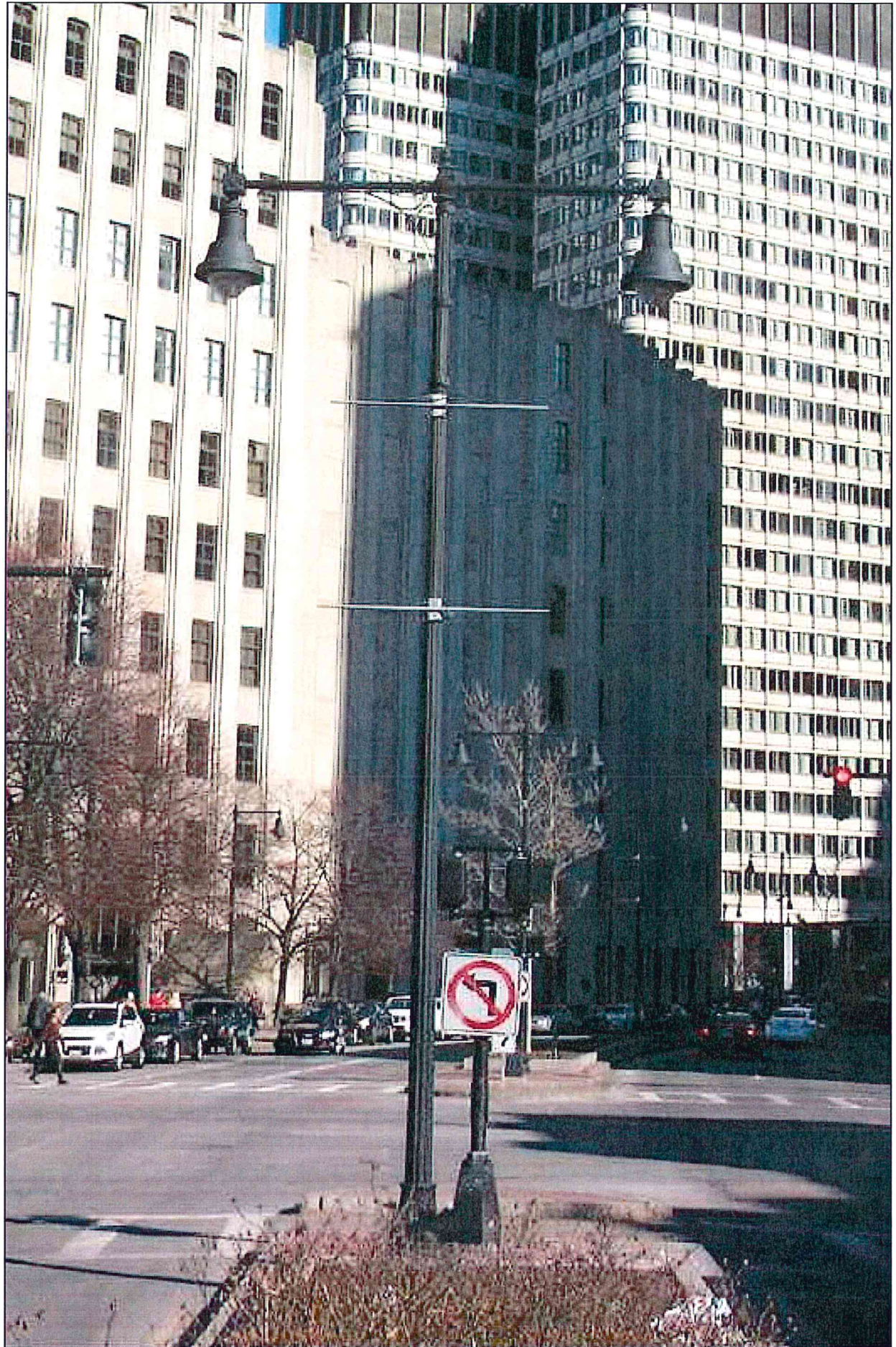
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**SUBMITTALS**

REV	DATE	DESCRIPTION	INITIALS
1	6/23/17	ADDED OPTION 2	TLLA

**X-15**















**EXHIBIT X-16**

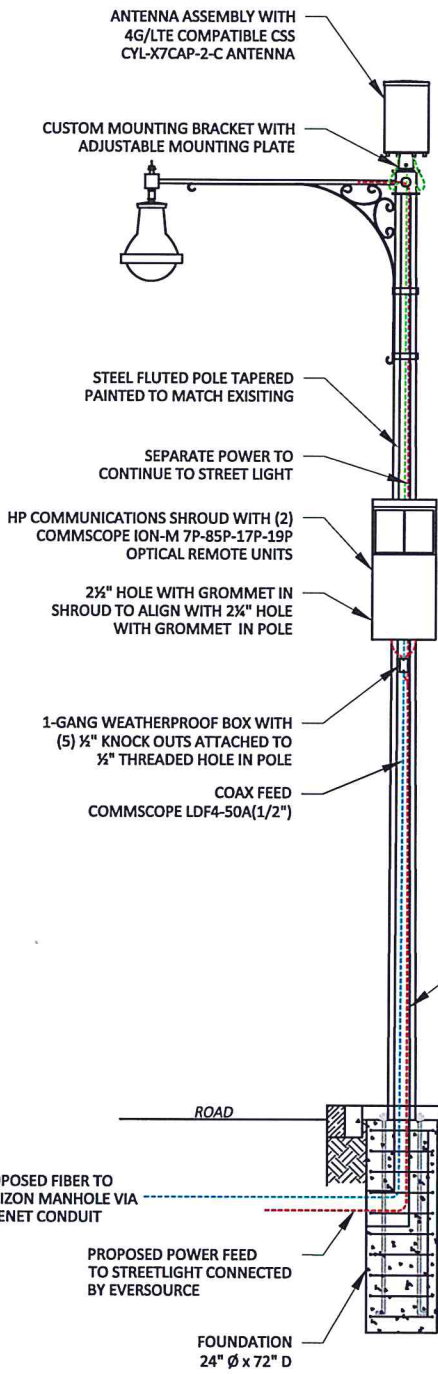
**SCHEDULE OF APPROVED WIRELESS FACILITIES**

<b>Facility Number</b>	<b>X-16 Pendant Light Pole with Side Mount</b>
<b>Attachment Types</b>  <i>(check all that apply And provide detail below)</i>	<input checked="" type="checkbox"/> Replacement City Pole (streetlight) <input checked="" type="checkbox"/> Replacement City Property Pole (streetlight) <input type="checkbox"/> Attach to existing City Pole (streetlight) <input type="checkbox"/> Attach to existing City Property Pole (streetlight) <input type="checkbox"/> Attach to existing City Pole (traffic signal) <input type="checkbox"/> Attach to existing City Property Pole (traffic signal) <input type="checkbox"/> Attach to existing City Pole (street furniture) <input type="checkbox"/> Attach to existing City Property Pole (street furniture) <input type="checkbox"/> Attach to Non-City Pole
<b>Attachment Type Detail</b>	<i>Standard Pendant light pole (existing or replacement)</i>
<b>Physical Description</b>	<p><i>Mount antenna no more than 16" diameter and no more than 40" height for standard antenna. Option two for the antenna (not to exceed more than 16" diameter and no more than 40" height) will include a fiberglass enclosure painted to match pole and affixed to top of pole with tapered extension. Remote radiohead, power and fiber equipment mounted to Pole within stealth shroud and will be painted to match exterior pole.</i></p> <p><i>Pole Replacement information for all standard lightpoles</i></p> <ul style="list-style-type: none"> <li><i>• 14' existing pole to be replaced with new pole with a max height of 16.8'</i></li> <li><i>• 19' existing pole to be replaced with new pole with a max height of 22.8'</i></li> <li><i>• 24' existing pole to be replaced with new pole with a max height of 28.8'</i></li> <li><i>• 29' existing pole to be replaced with new pole with a max height of 34.8'</i></li> </ul>
<b>Concealment</b>	<i>Antenna contained within enclosure painted and tapered to match pole. Cables run inside pole. Remote radiohead, power and fiber equipment mounted to Pole within stealth shroud.</i>



<p><b>Included Documents</b></p>	<p><i>The following documents:</i></p> <p>A. <i>For each Attachment Type listed or checked above, an engineering drawing of replacement pole or existing pole with attached equipment. The drawing must show the location on the pole where each component of the Wireless Facility is attached or enclosed. Drawings should depict any underground portion of the typical installation for that Attachment Type.</i></p> <p>B. <i>Photo showing an example of each Attachment Type listed or checked above.</i></p> <p>C. <i>Photo mockup of each Attachment Type listed or checked above showing the appearance after the Approved Wireless Facility is installed.</i></p> <p><i>Engineering drawings and photo attachments should reflect the dimensions and characteristics of a representative actual City Pole or City Property Pole of the type to which the Approved Wireless Facility design applies rather than generic examples.</i></p> <p><i>Where there is considerable variation among City Poles/City Property Poles of a particular type (e.g. traffic signals), drawings can show a typical installation, provided that equipment volumes and attachment locations will not vary significantly from one installation to the next in ways that are material to the City's interests.</i></p>
<p><b>RF Compliance Information</b></p>	<p>X Facility conforms to information already on file    <input type="checkbox"/> information attached</p>
<p><b>Comments</b></p>	





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5. POLE REPLACEMENT HEIGHTS WILL VARY BASED ON REQUIRED ANTENNA HEIGHTS REQUESTED BY EXTENET SYSTEMS.
6. EQUIPMENT CLOSURE TO BE NO LARGER THAN (53"Hx26"Wx26"D).
7. ANTENNA TO BE NO LARGER THAN 16"Øx40"H.
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10. LED LIGHT & LUMINAIRE ARM WILL BE AT SAME HEIGHT AS EXISTING
11. PROPOSED LIGHTING WILL CONFORM TO THE CITY OF BOSTON'S LIGHTING STANDARDS.
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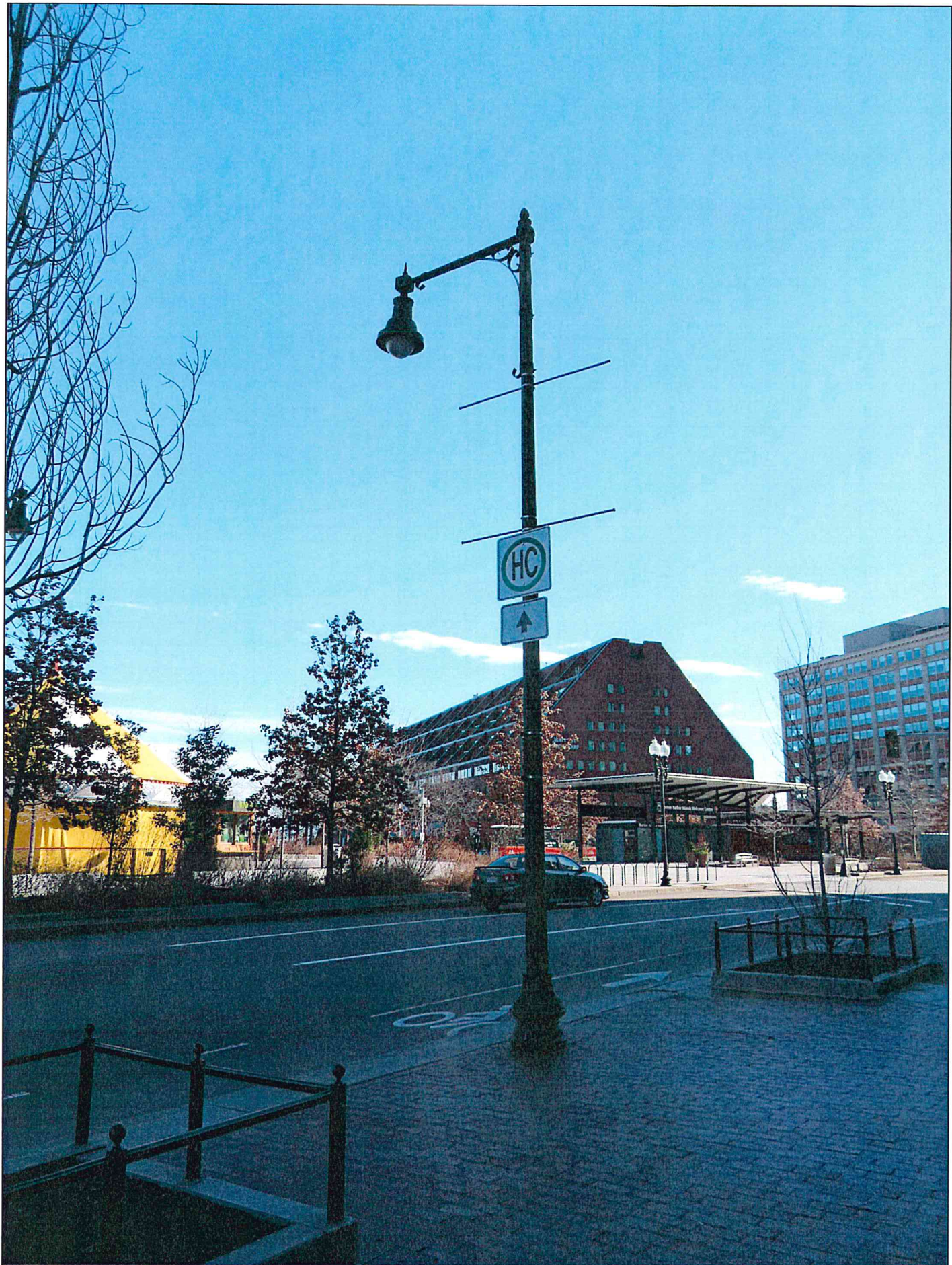
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**SUBMITTALS**

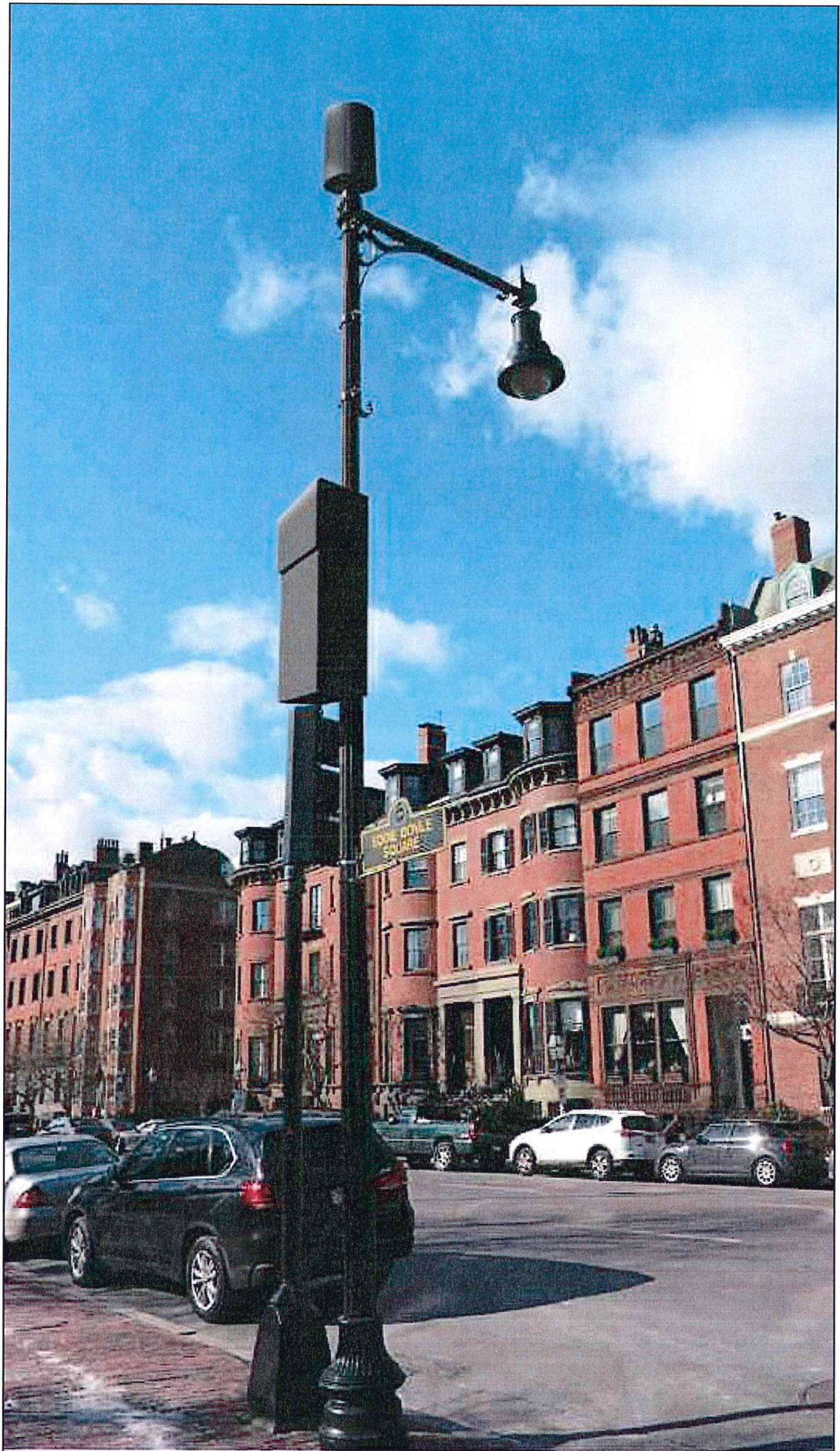
REV	DATE	DESCRIPTION	INITIALS
1	6/23/17	ADDED OPTION 2	TLLA

**X-16**











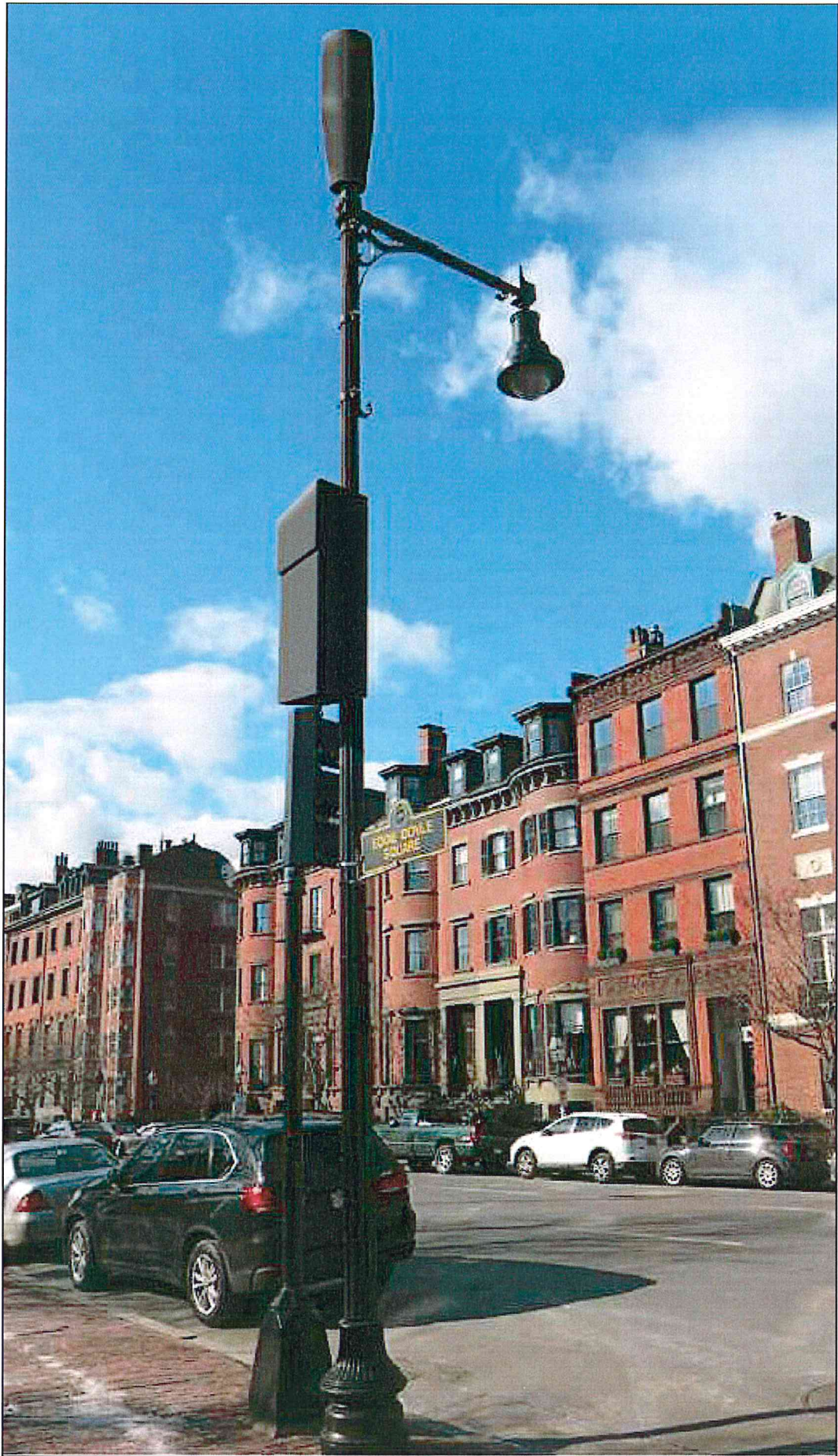




EXHIBIT X-20

SCHEDULE OF APPROVED WIRELESS FACILITIES

<b>Facility Number</b>	<b>X-20 Double Acorn Light Pole RRH Concealment (Side)</b>
<b>Attachment Types</b> <i>(check all that apply And provide detail below)</i>	<input checked="" type="checkbox"/> Replacement City Pole (streetlight) <input checked="" type="checkbox"/> Replacement City Property Pole (streetlight) <input type="checkbox"/> Attach to existing City Pole (streetlight) <input type="checkbox"/> Attach to existing City Property Pole (streetlight) <input type="checkbox"/> Attach to existing City Pole (traffic signal) <input type="checkbox"/> Attach to existing City Property Pole (traffic signal) <input type="checkbox"/> Attach to existing City Pole (street furniture) <input type="checkbox"/> Attach to existing City Property Pole (street furniture) <input type="checkbox"/> Attach to Non-City Pole
<b>Attachment Type Detail</b>	<i>Double Acorn Pole Light RRH Concealment</i>
<b>Physical Description</b>	<p><i>Mount antenna (no more than 2" diameter and no more than 60" height) in fiberglass enclosure painted to match pole and affixed to top of pole with tapered extension. Remote radiohead, power and fiber equipment concealed within stealth expanded shroud, not to exceed 15" in width and will be painted and designed to match exterior pole.</i></p> <p><i>Pole Replacement information for all standard lightpoles</i></p> <ul style="list-style-type: none"> <li>• <i>14' existing pole to be replaced with new pole with a max height of 16.8'</i></li> <li>• <i>19' existing pole to be replaced with new pole with a max height of 22.8'</i></li> <li>• <i>24' existing pole to be replaced with new pole with a max height of 28.8'</i></li> <li>• <i>29' existing pole to be replaced with new pole with a max height of 34.8'</i></li> </ul>
<b>Concealment</b>	<i>Antenna contained within enclosure painted and tapered to match pole. Cables run inside pole. Remote radiohead, power and fiber equipment concealed within stealth shroud, not to exceed 15" in width, 9" in depth, and 36" in height.</i>



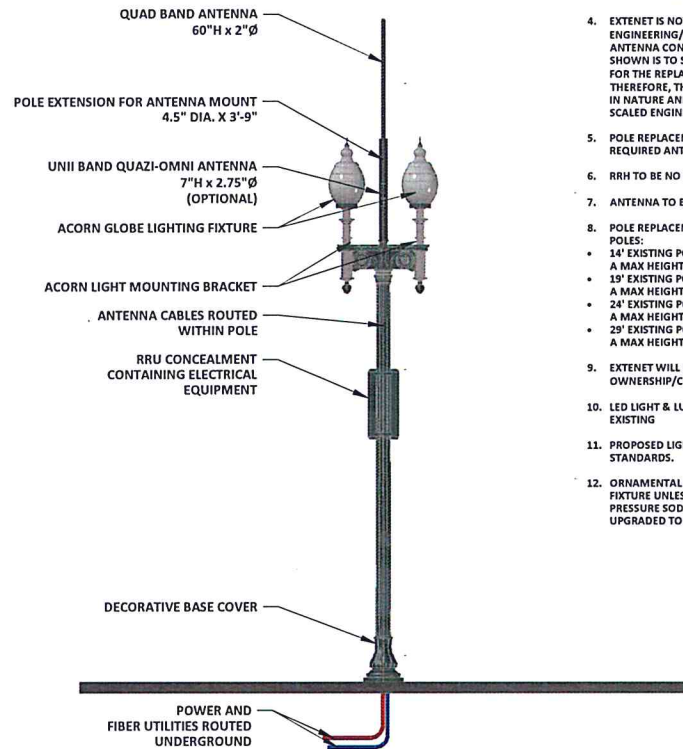
<p><b>Included Documents</b></p>	<p><i>The following documents:</i></p> <p>A. <i>For each Attachment Type listed or checked above, an engineering drawing of replacement pole or existing pole with attached equipment. The drawing must show the location on the pole where each component of the Wireless Facility is attached or enclosed. Drawings should depict any underground portion of the typical installation for that Attachment Type.</i></p> <p>B. <i>Photo showing an example of each Attachment Type listed or checked above.</i></p> <p>C. <i>Photo mockup of each Attachment Type listed or checked above showing the appearance after the Approved Wireless Facility is installed.</i></p> <p><i>Engineering drawings and photo attachments should reflect the dimensions and characteristics of a representative actual City Pole or City Property Pole of the type to which the Approved Wireless Facility design applies rather than generic examples.</i></p> <p><i>Where there is considerable variation among City Poles/City Property Poles of a particular type (e.g. traffic signals), drawings can show a typical installation, provided that equipment volumes and attachment locations will not vary significantly from one installation to the next in ways that are material to the City's interests.</i></p>
<p><b>RF Compliance Information</b></p>	<p>X <i>Facility conforms to information already on file</i></p> <ul style="list-style-type: none"> <li>• <i>Information attached</i></li> </ul>
<p><b>Comments</b></p>	



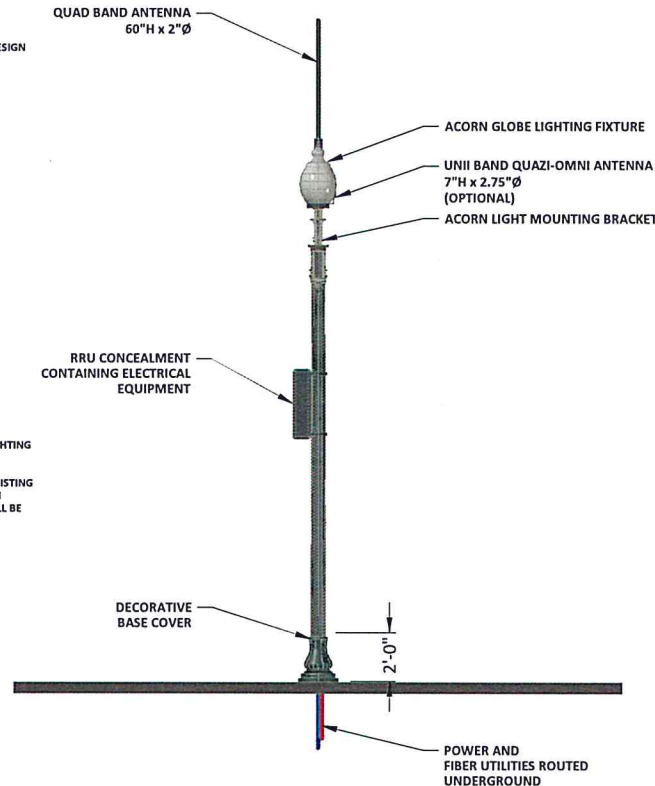
# PROPOSED DOUBLE ACORN STREETLIGHT SOLUTION

### NOTES:

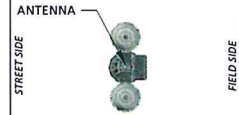
1. ALL DISTANCES, DIMENSIONS, LOCATIONS AND EQUIPMENT DESIGNATIONS AND SPECIFICATIONS ARE APPROXIMATE.
2. ALL MATERIALS WILL MATCH CURRENTLY EXISTING MATERIALS AND WHERE NEEDED ANY RF FRIENDLY MATERIAL WILL BE PAINTED TO MATCH.
3. IT IS ASSUMED THAT ALL PROPOSED UTILITIES WILL BE ROUTED BELOW GRADE TO THE PROPOSED INSTALLATION.
4. EXTENET IS NOT RESPONSIBLE FOR THE ENGINEERING/DESIGN OF THE PROPOSED EQUIPMENT & ANTENNA CONCEALMENT SHOWN HEREIN. THE PURPOSE OF THE DESIGN SHOWN IS TO SHOW A CONCEPTUAL DESIGN FOR THE REPLACEMENT/MODIFICATIONS OF EXISTING LIGHT POLE. THEREFORE, THEY ARE INHERENTLY APPROXIMATE IN NATURE AND SHOULD NOT BE USED AS AN EXACT, SCALED ENGINEERING DRAWING.
5. POLE REPLACEMENT HEIGHTS WILL VARY BASED ON REQUIRED ANTENNA HEIGHTS REQUESTED BY EXTENET.
6. RRU TO BE NO LARGER THAN 16"Wx12"Dx40"H.
7. ANTENNA TO BE NO LARGER THAN 16"Øx40"H.
8. POLE REPLACEMENT INFO FOR ALL STANDARD LIGHT POLES:
  - 14' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 16.8'
  - 15' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 22.8'
  - 24' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 28.8'
  - 29' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 34.8'
9. EXTENET WILL PLACE SMALL PLACARD ON POLE IDENTIFYING OWNERSHIP/CONTACT INFORMATION.
10. LED LIGHT & LUMINAIRE ARM WILL BE AT SAME HEIGHT AS EXISTING
11. PROPOSED LIGHTING WILL CONFORM TO THE CITY OF BOSTON'S LIGHTING STANDARDS.
12. ORNAMENTAL DECORATIVE FIXTURES WILL BE IDENTICAL TO THE EXISTING FIXTURE UNLESS THE EXISTING FIXTURE IS A METAL HALIDE OR HIGH PRESSURE SODIUM FIXTURE. IN THESE SCENARIOS, THE FIXTURE WILL BE UPGRADED TO AN LED APPROVED FIXTURE.



① PROPOSED PROFILE - FRONT VIEW  
FROM FIELD LOOKING TOWARDS ROAD



② PROPOSED PROFILE - SIDE VIEW  
FROM ROADSIDE LOOKING UP ROAD



### PROPOSED TOP VIEW

SCALE 1"=6"  
NOTE:  
CABLES & EXISTING POLE EQUIPMENT  
NOT SHOWN FOR CLARITY

LOCATION: BOSTON, MA

NOTES:

PREPARED FOR:

PREPARED BY:

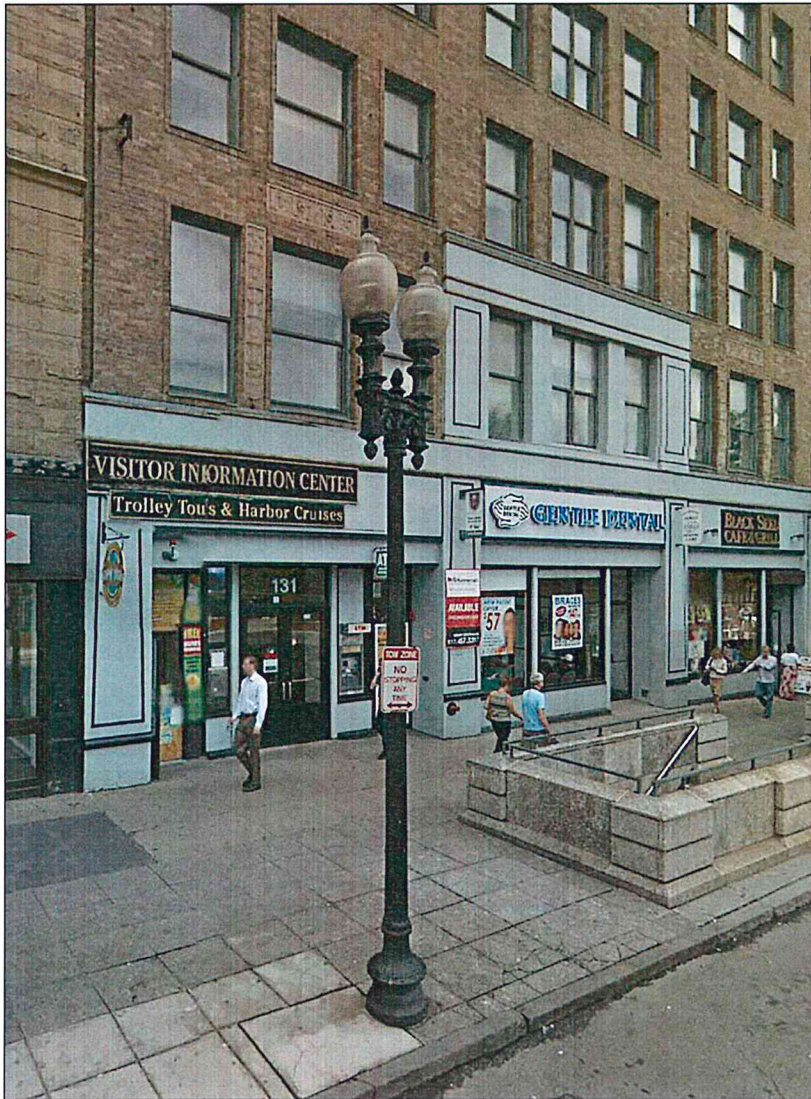
21 OXFORD RD  
MANSFIELD, MA 02048  
www.uceng.com 1-508-337-7600

### EXTENET SMALL CELL PROPOSED

REVISIONS		
REV	DESCRIPTION	DATE

DRAWER: DTB	1
SCALE: 1" = 3'	
ISSUE DATE: 12/21/14	
NODE NAME: EXHIBIT A-20	
SHEET #: 1 OF 2	





EXISTING PHOTOGRAPHIC VIEW



PROPOSED PHOTOGRAPHIC SIMULATION

LOCATION: BOSTON, MA

NOTES:

PREPARED FOR:



PREPARED BY:



EXTENET SMALL CELL  
PHOTO SIM

REVISIONS		
REV	DESCRIPTION	DATE

DRAWN: DTB  
SCALE: NTS  
ISSUE DATE: 12/21/16  
NODE NAME: EXHIBIT A-20  
SHEET #: 2 OF 2



**EXHIBIT X-23**

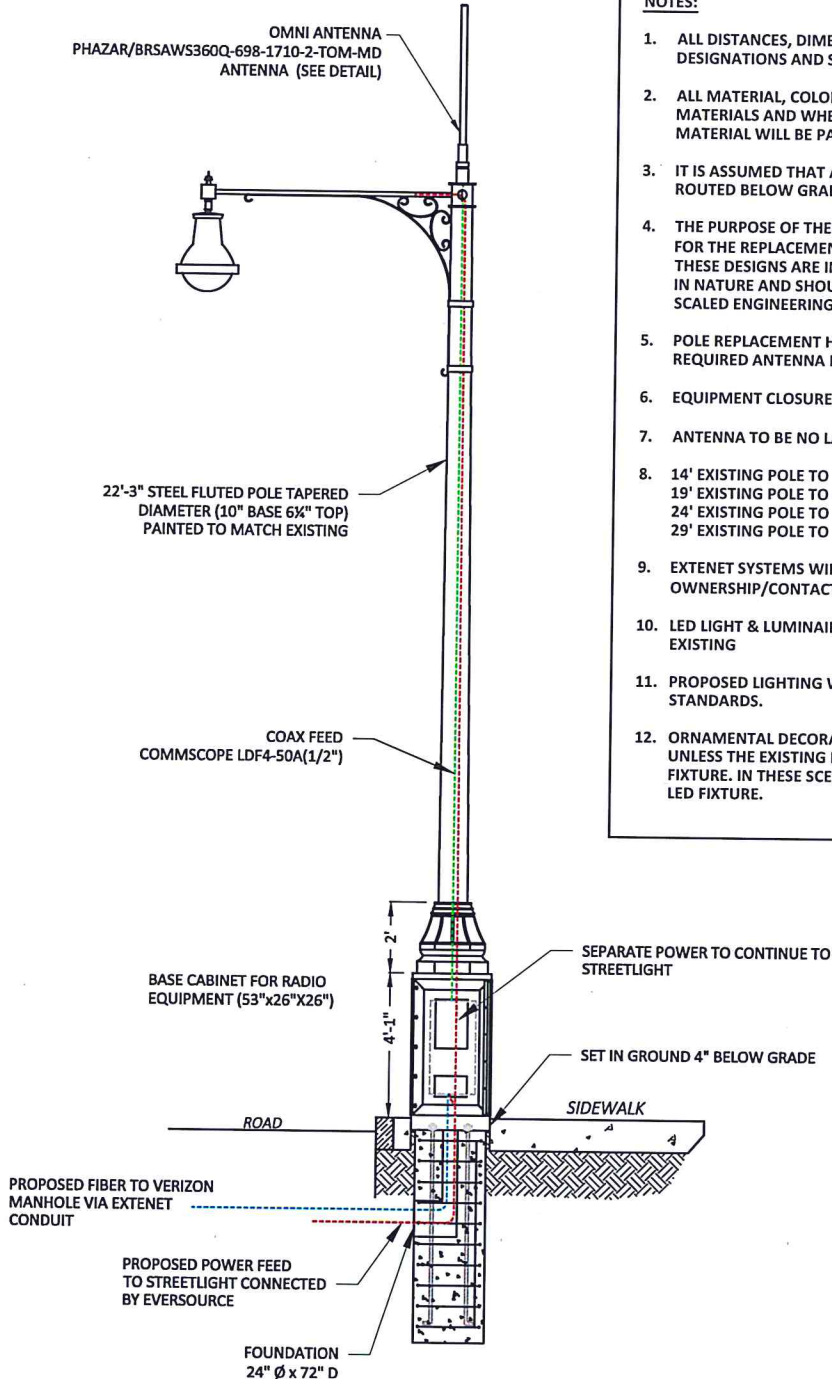
**SCHEDULE OF APPROVED WIRELESS FACILITIES**

<b>Facility Number</b>	<b>X-23 Pendant Light Pole RRH concealment (Base) and Omni Antenna</b>
<b>Attachment Types</b>  <i>(check all that apply And provide detail below)</i>	<input checked="" type="checkbox"/> Replacement City Pole (streetlight) <input checked="" type="checkbox"/> Replacement City Property Pole (streetlight) <input type="checkbox"/> Attach to existing City Pole (streetlight) <input type="checkbox"/> Attach to existing City Property Pole (streetlight) <input type="checkbox"/> Attach to existing City Pole (traffic signal) <input type="checkbox"/> Attach to existing City Property Pole (traffic signal) <input type="checkbox"/> Attach to existing City Pole (street furniture) <input type="checkbox"/> Attach to existing City Property Pole (street furniture) <input type="checkbox"/> Attach to Non-City Pole
<b>Attachment Type Detail</b>	<i>Pendant Pole Light RRH Concealment</i>
<b>Physical Description</b>	<p><i>Mount antenna (no more than 2" diameter and no more than 60" height) in fiberglass enclosure painted to match pole and affixed to top of pole with tapered extension. Remote radiohead, power and fiber equipment concealed within stealth expanded base, not to exceed 2' in width and will be painted and designed to match exterior pole.</i></p> <p><i>Pole Replacement information for all standard lightpoles</i></p> <ul style="list-style-type: none"> <li>• <i>14' existing pole to be replaced with new pole with a max height of 16.8'</i></li> <li>• <i>19' existing pole to be replaced with new pole with a max height of 22.8'</i></li> <li>• <i>24' existing pole to be replaced with new pole with a max height of 28.8'</i></li> <li>• <i>29' existing pole to be replaced with new pole with a max height of 34.8'</i></li> </ul>
<b>Concealment</b>	<i>Antenna contained within enclosure painted to match pole. Cables run inside pole. Remote radiohead, power and fiber equipment concealed within stealth expanded base, not to exceed 24" in width and 46" in height. A maximum of an additional 2' above enclosure will be used to add decorative tapering.</i>



<p><b>Included Documents</b></p>	<p><i>The following documents:</i></p> <p>A. <i>For each Attachment Type listed or checked above, an engineering drawing of replacement pole or existing pole with attached equipment. The drawing must show the location on the pole where each component of the Wireless Facility is attached or enclosed. Drawings should depict any underground portion of the typical installation for that Attachment Type.</i></p> <p>B. <i>Photo showing an example of each Attachment Type listed or checked above.</i></p> <p>C. <i>Photo mockup of each Attachment Type listed or checked above showing the appearance after the Approved Wireless Facility is installed.</i></p> <p><i>Engineering drawings and photo attachments should reflect the dimensions and characteristics of a representative actual City Pole or City Property Pole of the type to which the Approved Wireless Facility design applies rather than generic examples.</i></p> <p><i>Where there is considerable variation among City Poles/City Property Poles of a particular type (e.g. traffic signals), drawings can show a typical installation, provided that equipment volumes and attachment locations will not vary significantly from one installation to the next in ways that are material to the City's interests.</i></p>
<p><b>RF Compliance Information</b></p>	<p>X <i>Facility conforms to information already on file</i></p> <ul style="list-style-type: none"> <li>• <i>Information attached</i></li> </ul>
<p><b>Comments</b></p>	





**NOTES:**

1. ALL DISTANCES, DIMENSIONS, LOCATIONS, EQUIPMENT DESIGNATIONS AND SPECIFICATIONS ARE APPROXIMATE.
2. ALL MATERIAL, COLOR & STYLE WILL MATCH CURRENTLY EXISTING MATERIALS AND WHERE NEEDED ANY RF FRIENDLY MATERIAL WILL BE PAINTED TO MATCH.
3. IT IS ASSUMED THAT ALL PROPOSED UTILITIES WILL BE ROUTED BELOW GRADE TO THE PROPOSED INSTALLATION.
4. THE PURPOSE OF THE DESIGN SHOWN IS TO SHOW A CONCEPTUAL DESIGN FOR THE REPLACEMENT/MODIFICATIONS OF EXISTING LIGHT POLE. THEREFORE, THESE DESIGNS ARE INHERENTLY APPROXIMATE IN NATURE AND SHOULD NOT BE USED AS AN EXACT, SCALED ENGINEERING DRAWING.
5. POLE REPLACEMENT HEIGHTS WILL VARY BASED ON REQUIRED ANTENNA HEIGHTS REQUESTED BY EXTENET SYSTEMS.
6. EQUIPMENT CLOSURE TO BE NO LARGER THAN (53"Hx26"Wx26"D).
7. ANTENNA TO BE NO LARGER THAN 16"Øx40"H.
8. 14' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 16.8'  
19' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 22.8'  
24' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 28.8'  
29' EXISTING POLE TO BE REPLACED WITH NEW POLE WITH A MAX HEIGHT OF 34.8'
9. EXTENET SYSTEMS WILL PLACE SMALL PLACARD ON POLE IDENTIFYING OWNERSHIP/CONTACT INFORMATION.
10. LED LIGHT & LUMINAIRE ARM WILL BE AT SAME HEIGHT AS EXISTING
11. PROPOSED LIGHTING WILL CONFORM TO THE CITY OF BOSTON'S LIGHTING STANDARDS.
12. ORNAMENTAL DECORATIVE FIXTURES WILL BE IDENTICAL TO THE EXISTING FIXTURE UNLESS THE EXISTING FEATURE IS A METAL HALIDE OR HIGH PRESSURE SODIUM FIXTURE. IN THESE SCENARIOS, THE FIXTURE WILL BE UPGRADED TO AN APPROVED LED FIXTURE.

**PENDANT LIGHT POLE WITH RRH CONCEALMENT**



3030 WARRENVILLE RD  
LISLE, IL 60532  
(630) 505-3800  
WWW.EXTENETSYSTEMS.COM



21 OXFORD RD  
MANSFIELD, MA 02048  
www.ucseng.com 1-508-337-7600

**SUBMITTALS**

REV	DATE	DESCRIPTION	INITIALS

**X-23**













MASSACHUSETTS GENERAL HOSPITAL  
MUSEUM OF MEDICAL HISTORY AND INNOVATION

MASSACHUSETTS GENERAL HOSPITAL

YAWKEY CENTER  
FOR OUTPATIENT CARE

N. GROVE ST





MASSACHUSETTS GENERAL HOSPITAL  
MUSEUM OF MEDICAL HISTORY AND INNOVATION  
FAIRBANKS BUILDING

MASSACHUSETTS GENERAL HOSPITAL

YAWKEY CENTER  
FOR OUTPATIENT CARE

N. GROVE ST

NO LEFT TURN

MUSEUM



**EXHIBIT X-24**

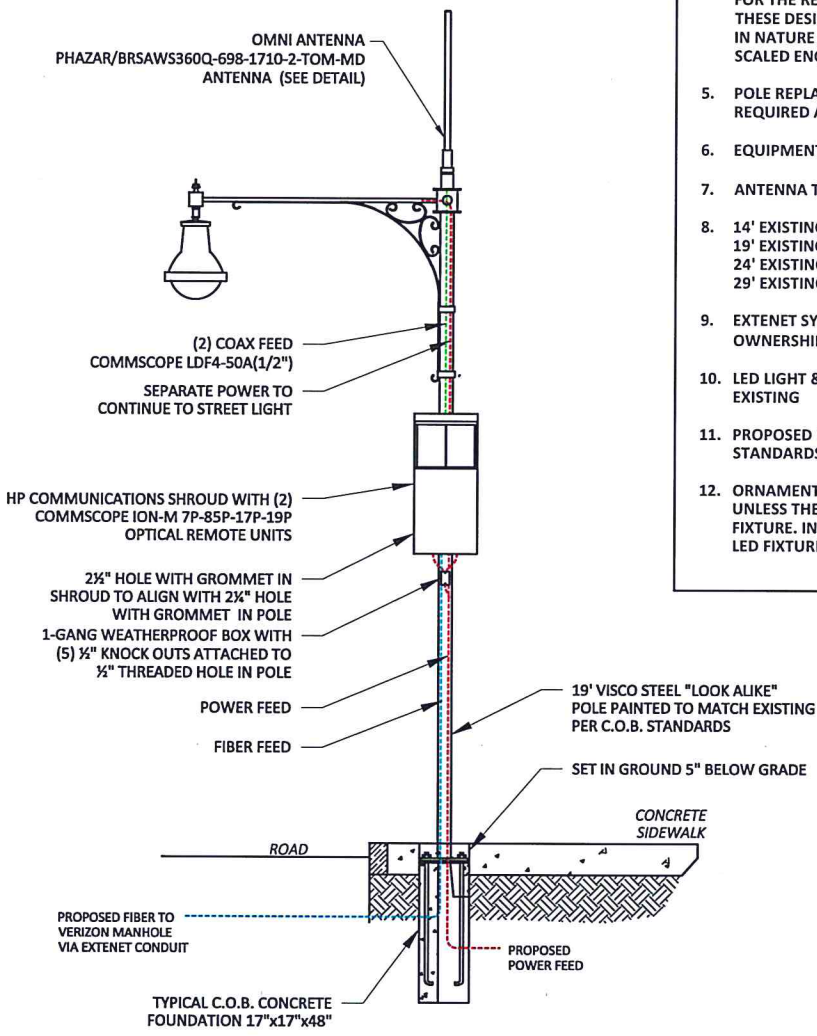
**SCHEDULE OF APPROVED WIRELESS FACILITIES**

<b>Facility Number</b>	<b>X-24 Pendant Light Pole RRH Concealment (Side) and Omni Antenna</b>
<b>Attachment Types</b>  <i>(check all that apply And provide detail below)</i>	<input checked="" type="checkbox"/> Replacement City Pole (streetlight) <input checked="" type="checkbox"/> Replacement City Property Pole (streetlight) <input type="checkbox"/> Attach to existing City Pole (streetlight) <input type="checkbox"/> Attach to existing City Property Pole (streetlight) <input type="checkbox"/> Attach to existing City Pole (traffic signal) <input type="checkbox"/> Attach to existing City Property Pole (traffic signal) <input type="checkbox"/> Attach to existing City Pole (street furniture) <input type="checkbox"/> Attach to existing City Property Pole (street furniture) <input type="checkbox"/> Attach to Non-City Pole
<b>Attachment Type Detail</b>	<i>Pendant Light Pole RRH Concealment</i>
<b>Physical Description</b>	<p><i>Mount antenna (no more than 2" diameter and no more than 60" height) in fiberglass enclosure painted to match pole and affixed to top of pole with tapered extension. Remote radiohead, power and fiber equipment concealed within stealth expanded shroud, not to exceed 15" in width and will be painted and designed to match exterior pole.</i></p> <p><i>Pole Replacement information for all standard lightpoles</i></p> <ul style="list-style-type: none"> <li>• <i>14' existing pole to be replaced with new pole with a max height of 16.8'</i></li> <li>• <i>19' existing pole to be replaced with new pole with a max height of 22.8'</i></li> <li>• <i>24' existing pole to be replaced with new pole with a max height of 28.8'</i></li> <li>• <i>29' existing pole to be replaced with new pole with a max height of 34.8'</i></li> </ul>
<b>Concealment</b>	<i>Antenna contained within enclosure painted and tapered to match pole. Cables run inside pole. Remote radiohead, power and fiber equipment concealed within stealth shroud, not to exceed 15" in width, 9" in depth, and 36" in height.</i>



<p><b>Included Documents</b></p>	<p><i>The following documents:</i></p> <ul style="list-style-type: none"> <li><i>A. For each Attachment Type listed or checked above, an engineering drawing of replacement pole or existing pole with attached equipment. The drawing must show the location on the pole where each component of the Wireless Facility is attached or enclosed. Drawings should depict any underground portion of the typical installation for that Attachment Type.</i></li> <li><i>B. Photo showing an example of each Attachment Type listed or checked above.</i></li> <li><i>C. Photo mockup of each Attachment Type listed or checked above showing the appearance after the Approved Wireless Facility is installed.</i></li> </ul> <p><i>Engineering drawings and photo attachments should reflect the dimensions and characteristics of a representative actual City Pole or City Property Pole of the type to which the Approved Wireless Facility design applies rather than generic examples.</i></p> <p><i>Where there is considerable variation among City Poles/City Property Poles of a particular type (e.g. traffic signals), drawings can show a typical installation, provided that equipment volumes and attachment locations will not vary significantly from one installation to the next in ways that are material to the City's interests.</i></p>
<p><b>RF Compliance Information</b></p>	<p><i>X Facility conforms to information already on file</i></p> <ul style="list-style-type: none"> <li><i>• Information attached</i></li> </ul>
<p><b>Comments</b></p>	





- NOTES:**
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  5. POLE REPLACEMENT HEIGHTS WILL VARY BASED ON REQUIRED ANTENNA HEIGHTS REQUESTED BY EXTENET SYSTEMS.
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## STANDARD SINGLE PENDANT LIGHT POLE WITH POLE MOUNTED CABINET

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MANSFIELD, MA 02048  
www.ucseeng.com 1-508-337-7600

SUBMITTALS			
REV	DATE	DESCRIPTION	INITIALS

X-24







