

# Proposal for Renewal of the ExteNet I Mobile Telecommunications Services Franchise

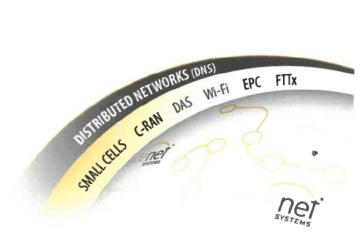
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Information Technology & Telecommunications

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SECTION 1

# **COVER LETTER**

August 3, 2018

Mr. Brett Sikoff, Director of Franchise Administration
Department of Information Technology and Telecommunications
City of New York
15 Metro Tech Center, 19th Floor
Brooklyn, New York 11201

Dear Mr. Sikoff:

Thank you for the opportunity to submit this Proposal for Renewal of the ExteNet I Mobile Telecommunications Franchise (Proposal) to the City of New York (City). ExteNet Systems, Inc. (ExteNet) greatly values its relationship with the City and we pride ourselves on having completed over 2,000 wireless facilities throughout the five boroughs over the past fourteen years. We are excited by the prospect of continuing our record of successful deployment of wireless facilities through partnership with the Department of Information Technology and Telecommunications (DoITT) and other City agencies to ensure that New York City and its residents, visitors, and businesses continue to enjoy access to the best wireless connectivity, coverage, and capacity available.

While we have enjoyed great success over the past decade, we welcome the opportunity to present for discussion several options that exceed the scope of operations permitted under the current Franchise. In addition to a Baseline Option that largely continues the process and procedures of the current Franchise, we have chosen to include in the attached Proposal several additional options for review and discussion that will enable ExteNet and the City to expand upon a successful foundation and create a framework for deployment of next generation wireless connectivity. Each option is designed to complement and build upon the Baseline Option, and none are mutually exclusive. It is our hope that the City will consider all of the possibilities presented and view the various options as a resource kit from which to craft a comprehensive wireless connecvity plan for New York City.

Thank you again for this opportunity. ExteNet looks forward to working with the City to address current and future wireless connectivity needs for years to come.

Kindest regards,

Oliver M. Valente

Executive Vice President and Chief Operating Officer



SECTION 2

# TECHNICAL PROPOSAL

A narrative and/or other appropriate form of presentation which describes:

(i) The equipment and facilities which would be located on Street Operations Poles, including at least a schematic design for, and a photograph of, the equipment intended to be installed including known power requirements (the fullest possible design description and photographic description of the proposed installations are encouraged).

# EXTENET RESPONSE: COMPLY

Over the past 14 years during which ExteNet has held a Franchise, we have installed over 2,000 wireless facilities throughout the City. All of our installations utilize the same set of attachments originally designed by Thomas Phifer and Partners and approved by the Public Design Commission, with different configurations to suit the variations of Street Operations Poles deployed throughout the City.

ExteNet currently uses 11 typical attachment configurations for the various streetlight pole designs used throughout the City. Under a baseline option, we intend to continue deployment of these typical pole configurations. Depicted on the following pages are example photographs for the two most common configurations, the Type FS Streetlight and the Type M-2 Traffic Signal. Please refer to the Appendix section for schematic drawings of each typical attachment configuration.





Figure 2-1: Type FS Streetlight Pole



Figure 2-2: Type FS Streetlight Pole





Figure 2-3: Type M-2 Traffic Signal Pole



Figure 2-4: Type M-2 Traffic Signal Pole



In addition to the Baseline Option, ExteNet proposes for consideration a Multi-Purpose Pole (MPP) Option. The MPP is designed to be capable of accommodating multiple WSPs as well as multiple City functions and Wi-Fi. Cognizant of the ever-increasing demand for a limited number of Street Operations Poles, coupled with the current and future need for municipal connectivity and smart city applications, ExteNet engineers have been working with an outside architect and equipment manufacturers to develop a pole design that accommodates current and future wireless connectivity needs in an aesthetically pleasing manner.

ExteNet is proposing a multi-carrier, multi-use pole that balances the needs of the wireless service providers (WSPs, e.g. AT&T, Verizon, Sprint, T-Mobile, etc.) with the functional and aesthetic needs of the City. ExteNet has incorporated space, power and interconnect facilities within its proposed pole to support the full complement of wireless services, both present (4th generation, or 4G) and future (upcoming 5th generation, or 5G), based on currently known configurations and requirements, for up to two WSPs. ExteNet strongly believes that the ability to co-locate two WSPs on the same pole provides optimal benefit for the WSPs and City. Co-location reduces the overall number of City pole locations and provides better economics for the WSPs through the sharing of facilities.

In addition to housing the WSP equipment, the pole will also provide space, power and capabilities for the City's direct use. ExteNet considered City applications such as metro Wi-Fi, Smart City applications (including LinkNYC), signage requirements and City resident needs when developing the pole solution. As a result, ExteNet's proposed pole will also be able to accommodate many City services within the same structure. See Section 2(ii) for specifics. ExteNet understands that accommodation of LinkNYC functionality in the MPP is subject to negotiation with the existing LinkNYC Franchisee.

The following page shows an annotated conceptual view of ExteNet's proposed solution. The following designs are preliminary and intended for discussion. Please see the Appendix section for additional information regarding the proposed MPP design.





Figure 2-5: MPP with LinkNYC Kiosk



Figure 2-6: MPP withwithout LinkNYC Kiosk



In addition and complementary to the Baseline and MPP options, ExteNet proposes a Metropolitan Transportation Authority (MTA) Infrastructure option that modifies existing MTA infrastructure located in the City rights-of-way for attachment of wireless facilities. ExteNet understands that any use of MTA infrastructure is subject to additional negotiation of attachment rights with the MTA, but we have included this option and submit the following conceptual designs in pursuit of support from DoITT for further discussions. Please see the Appendix section for additional information regarding the proposed MTA Infrastructure design.

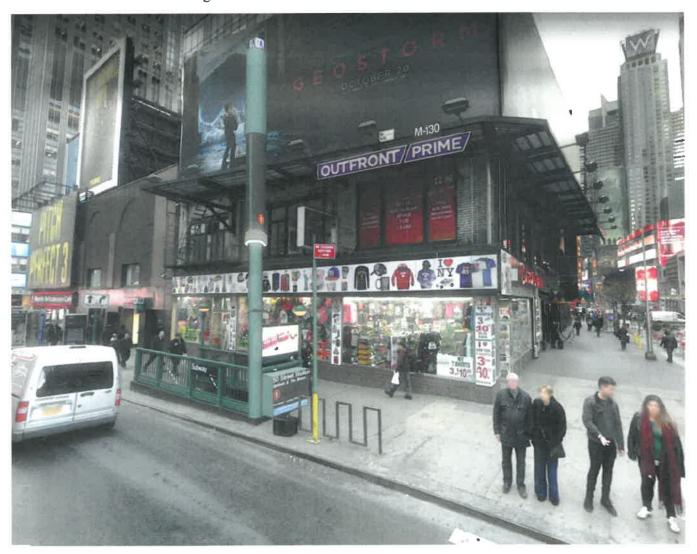


Figure 2-7: MTA Infrastucture Solution

Finally, in addition to the options presented above, ExteNet proposes a City-Owned Façade/Rooftop Option (depicted on the following page), whereby ExteNet would install rooftop and/or façade-mounted wireless facilities on City-owned buildings, where available. These wireless facilities would supplement the pole-mounted facilities described in the above options and maximize use of municipal property for wireless connectivity. The design of rooftop and façade-mounted facilities would vary according to the specific conditions and aesthetics of each location.





Figure 2-8: Façade-Mounted Antenna Solution: Before Figure 2-9: Façade-Mounted Antenna Solution: After



Figure 2-10: Façade-Mounted Antenna Solution: Before Figure 2-11: Façade-Mounted Antenna Solution: After



(ii) The services to be provided by such equipment and facilities, including the extent to which such equipment and facilities will be capable of serving multiple telecommunications service providers.

# EXTENET RESPONSE: COMPLY

ExteNet and its WSP tenants currently provide 4G, LTE and legacy wireless broadband and telephone service through the facilities. These services would continue under the Baseline Option. While the current and proposed attachments are suited for use by all of the WSPs, due to equipment size restrictions and WSP needs, the Baseline Option does not permit service for multiple WSPs through a single facility.

The MPP, MTA Infrastructure and City-Owned Façade/Rooftop Options are capable of accommodating multiple WSPs in a single facility. The MPP and MTA Infrastructure Options also incorporate space for potential municipal needs and smart city applications, as well as revenue-generating digital billboards, wayfinding/signage options and potential LinkNYC functionality. The MPP is designed to be a single functional and aesthetic solution for accommodation of multiple WSPs, municipal connectivity needs and smart city applications, revenue generation opportunities and public service functionality.

# Multi-Purpose Pole Option

ExteNet's proposed MPP solution will facilitate three groups of services:

- 1. Technical real estate and associated power and interconnection for the placement and operation of commercial, high-speed wireless data service. With the explosion of wireless usage, WSPs are constantly expanding their footprints to accommodate the bandwidth demands. This results in a large amount of equipment per WSP per pole location, driving up space, power and interconnection (fiber) needs. As an example, to accommodate the existing 4G needs and anticipated 5G needs for just one WSP, one location can require up to 17 different pieces of equipment, including an antenna. That number would double to accommodate two WSPs. ExteNet has allotted enough space and power for such needs for up to two WSPs per location with additional capacity for other services as well.
- Physical real estate for use by the City (e.g. signage space, street lights, street sign, banner space, etc.). The pole is designed with the needs of the City in mind. The base cabinet has enough volume to house equipment for two WSPs, yet does not negatively encroach on common street sign/street light/stoplight space.
- Technical real estate and associated power and interconnection for the benefit of the City and its
  residents. The ExteNet solution has the capability to support City technical initiatives, such as IPTV
  cameras, gunshot detection equipment, City-funded Wi-Fi services, air quality sensors and other
  solutions.

ExteNet is also proposing two additional functions to benefit the City and its residents. First, ExteNet proposes to place up to two LCD screens at the base of the poles exclusively for the City's use. These screens can display interactive maps and/or provide digital advertising, while simultaneously acting as shrouds for the base cabinets containing the wireless equipment. ExteNet technicians would "swing open" the LCD panels when accessing the wireless equipment, thereby creating an inconspicuous access point. ExteNet is also proposing to incorporate the full functionality of LinkNYC directly into the base of the pole, under terms to be negotiated with the existing LinkNYC Franchisee. Beyond providing the LCD panels similar to what NYCLink kiosks provide, ExteNet is preparing the pole base to also house the interactive panel and USB chargers identical to what the LinkNYC kiosks provide to residents. This could increase the number of LinkNYC access points for City residents without taking up additional real estate for kiosks.



## **MTA Infrastructure Option**

The proposed MTA infrastructure solution shares many of the same advantages and features of the MPP described above and can be considered a variation on the base MPP design. Following the description of the three groups of services facilitated by the MPP above, the proposed MTA solution provides:

- Technical real estate and associated power and interconnection for the placement and operation of
  commercial, high-speed wireless data service. As with the MPP, ExteNet has allotted enough space
  and power for such needs for up to two WSPs per location with additional capacity for other services.
- 2. Physical real estate for use by the City (e.g. signage space, street lights, street sign, banner space, etc.). The pole is designed with the needs of the City in mind. The base cabinet, incorporated into the stairway railing structure, has enough volume to house equipment for two WSPs, yet does not negatively encroach on common street sign/street light/stoplight space.
- Technical real estate and associated power and interconnection for the benefit of the City and its
  residents. The ExteNet solution has the capability to support City technical initiatives, such as IPTV
  cameras, gunshot detection equipment, City-funded Wi-Fi services, air quality sensors and other
  solutions.

Additionally, the pole is designed to be a wayfinding element that incorporates MTA information and signage and makes the subway entrance visible from afar.

(iii) The proposer's method(s) of installation of such facilities and equipment (including, to the extent not already included in the materials required by clause (i), a description of the mounting procedures and techniques to be used to attach the facilities and equipment to the poles) and a description of any connecting facilities proposed to be used as described in the third sentence of subsection (d) of Section 1 of this RFP.

## EXTENET RESPONSE: COMPLY

As demonstrated by the over 2,000 facilities currently installed under the existing Franchise, ExteNet has ample experience working in the varied and often challenging conditions presented by the City of New York. ExteNet currently complies with the design and installation requirements specified by the existing Franchise, Department of Transportation (DOT) regulations and City Code, in addition to state and federal law and the National Electric Safety Code (NESC). We expect to continue compliance with all required codes, regulations, standards and statutes under the Resulting Franchise.

Under the Baseline Option, ExteNet expects that the installation methods currently utilized will change very little, if at all. Currently, ExteNet's wireless attachments are mounted to the Street Operations Poles using hardware and techniques appropriate to the specific pole type. Please reference the Appendix section for detailed information. ExteNet currently provides service to its facilities utilizing fiber optic cable installed in conduit managed by Empire City Subway and in limited runs of microduct. We anticipate that the fiber connectivity methods will remain the same under the Resulting Franchise.

The designs presented for consideration under the Multi-Purpose Pole, MTA Infrastructure and City-Owned Façade/Rooftop Options are preliminary and final installation methods are subject to discussion and negotiation.



(iv) The proposer's plans for repair, maintenance, and/or removal of such facilities and equipment, including, in particular, the proposer's plan to ensure that all construction will be performed and completed in full compliance with the City's standards and specifications.

# EXTENET RESPONSE: COMPLY

ExteNet has over 10 years of experience planning, permitting, coordinating and delivering telecommunications infrastructure construction and maintenance services in New York City. Our local New York City teams, as well as our national Network Operations Center (NOC) are very well versed in the local NYC, DOT, Police, DoITT and other local requirements for construction, safety and other standards.

Under all proposed Options, ExteNet commits to maintain the highest level of performance and compliance with all City standards, specifications, rules and regulations for the installation, repair, maintenance, restoration and removal of its facilities and equipment. Over the past 14 years, ExteNet has demonstrated an ongoing and persistent commitment to full compliance with all City standards and we expect to continue that record under the Resulting Franchise.

ExteNet currently employs several companies in the City of New York for maintenance, repair and restoration services, including Hylan Datacom and Electrical, Rosciti Construction Corporation and JT Oronzio General Contracting and Development. We are equipped to respond to an emergency situation within minutes and to other maintenance situations within two to three hours.

ExteNet will ensure all construction and maintenance work performed will be overseen and verified by an experienced, trained, quality and compliance manager to ensure our work meets or exceeds NYC construction and worksite requirements. During deployment an ExteNet Implementation Director is onsite or on-call at all times to monitor installation of the wireless facilities and ensure full compliance with the City's standards and specifications. If any oversight occurs, ExteNet will diligently work toward correction and elimination of the non-compliance. ExteNet prides itself on the history of successful deployment of wireless facilities under its existing Franchise and we expect to continue or improve upon our successful record under the Resulting Franchise.



(v) The proposer's plans for maintaining the City's property in good condition during the term of the franchise.

# EXTENET RESPONSE: COMPLY

Over the past 14 years, ExteNet has demonstrated a consistent ability to deploy wireless facilities under the existing Franchise while respecting and maintaining the City's property and complying with all restoration requirements and standards. We expect to continue to maintain any City property made available for use under the Resulting Franchise at the highest level.

ExteNet conducts regular site inspections and planned maintenance on all of our deployed telecommunications infrastructure on an ongoing basis throughout each year. Any issues that arise in between these planned inspections and maintenance events will be directed to the ExteNet National Network Operations Center to be ticketed and immediately investigated and remediated.

In New York City, ExteNet utilizes Hylan Datacom and Electrical, Rosciti Construction Corporation and JT Oronzio General Contracting and Development for ongoing maintenance needs. During installation, our contractors Hylan Datacom and Electrical, Westmoreland Electric Services, Hellman Electric, JT Oronzio General Contracting and Development and Rosciti Construction Corporation have demonstrated unparalleled knowledge of and commitment to all required restoration standards. Where additional restoration work has proven necessary, ExteNet has completed all required work expeditiously and to the full satisfaction of the City and any interested parties. ExteNet will maintain the highest standards for restoration and maintenance under the Resulting Franchise.

(vi) The time period during which the proposer anticipates installing the franchise facilities and, to the extent the proposer's system generally is not yet operational in the City, an anticipated time line for such system to become operational in the City.

# **EXTENET RESPONSE: COMPLY**

ExteNet plans to install wireless facilities throughout the ten-year term of the Resulting Franchise. We expect the demand and need for wireless connectivity to continue to increase throughout the proposed term and ExteNet plans to meet those needs wherever and to the greatest extent possible.

The timeline for installation of a wireless facility from planning to on-air is typically a year to 18 months, depending on the location, WSP and approval required from the City. Following reservation of a pole, ExteNet typically expects to install facilities within 35-70 days of issuance of a Notice-to-Proceed (NTP), with facilities usually placed on-air shortly after completion of installation.



(vii) The material contemplated in subsection (a)(2) of Section 5 above.

# EXTENET RESPONSE: COMPLY

Over the term of the Resulting Franchise, ExteNet anticipates the need for new and creative approaches for provision of comprehensive wireless connectivity throughout the City of New York. The coming years will see new applications of wireless technology and accompanying new classes of wireless users. 5G, Internet of Things and Smart City functionality will render the current desire for ubiquitous connectivity into an absolute necessity, on par with other basic utilities. With this connected world in mind, ExteNet proposes the following options for deployment of wireless facilities under the Resulting Franchise. Each of these options, beyond the Baseline Option, is intended to serve as the starting point for further negotiations and discussions with the City. The options are not mutually exclusive, rather they work in complement to provide a comprehensive wireless connectivity solution for the entire City of New York. Ideally, all or part of each option will ultimately be adopted under the Resulting Franchise.

## **Baseline Option**

Under the Baseline Option, ExteNet proposes to continue installation of wireless facilities under terms and conditions largely similar to those in the current Franchise, with minor but significant changes. Specifically, we expect the Resulting Franchise to formally incorporate the eased mid-block pole review that has been in place for the past year and we anticipate an administrative mechanism for review and approval of new equipment attachments. Nearly all other terms, conditions and practices will remain the same, including use of the current approved equipment enclosures and designs. We consider the Baseline Option to be direct continuation of the Franchise held by ExteNet for the past 14 years.

#### **Multi-Purpose Pole Option**

The proposed MPP Option will permit deployment of the MPP depicted in the conceptual drawings in Section 2(i) of this proposal. The final design of the MPP is subject to negotiation and approval by the City, however, we would like to offer the included designs as ExteNet's vision for potential multi-carrier and multi-purpose solutions. Under the MPP Option, new pole locations would continue to be selected through the current pole reservation process, with replacement of the existing Street Operations Poles by the MPP to be an option upon deployment. Additionally, existing reserved poles would be made available for upgrade to the MPP at any time. ExteNet would complete installation of the new MPPs, including any functionality requested by the City, upon review and approval of either the new reserved location or the upgrade location, depending on the specific circumstances. ExteNet proposes to make the MPP design available for use by other Franchisees, so that a single design and form factor becomes the standard multi-carrier and multi-purpose pole for use throughout the City.

## Community Investment Option

Seamless wireless connectivity is important to the quality of life, opportunities and welfare of every citizen and visitor to the City. All too often those areas that are most in need of the benefits that comprehensive wireless connectivity can bring are the same areas where wireless infrastructure investment lags. By leveraging its extensive relationships with the major WSPs, ExteNet proposes to partner with a WSP to deploy wireless facilities and service in underserved areas of Zones B and C at reduced access rates. The proposed facilities can utilize any of the equipment options presented in this proposal. As part of the investment in underserved areas, ExteNet proposes provision of free Wi-Fi for the surrounding communities. Additionally, dedication of fiber optic cable for municipal and community purposes may be possible. ExteNet is interested in working with the City to determine which areas may



be in need of a targeted wireless infrastructure investment that, through partnership with a WSP, ExteNet can facilitate under the compensation terms specified in Section 6 of this proposal.

# LinkNYC Option

While ExteNet proposes to incorporate LinkNYC functionality as an option for its MPP, there may be a need for attachment of wireless facilities directly to the existing LinkNYC kiosks over the term of the Resulting Franchise. This need may become clear with the upcoming deployment of 5G technology. Under the LinkNYC Option, ExteNet proposes to work with the existing LinkNYC Franchisee to negotiate terms and conditions acceptable to both parties for attachment of ExteNet equipment to the existing LinkNYC kiosks utilizing a design that has yet to be determined. ExteNet anticipates that selection of LinkNYC kiosks for attachment will be handled on a first come, first serve basis outside the regular pole reservation process and subject to the terms of the agreement reached with the LinkNYC Franchisee.

# MTA Infrastructure Option

The MTA owns and manages a significant amount of infrastructure within City rights-of-way. In order to meet the tremendous need for wireless coverage and capacity in the coming years, ExteNet proposes to utilize some of the MTA infrastructure, perhaps in the modified form described in Section 2(i) of this proposal, to deploy wireless facilities. ExteNet would deploy the wireless facilities under agreement with the MTA and subject to the compensation terms specified in Section 6 of this proposal. ExteNet anticipates that selection of MTA infrastructure for attachment will be handled on a first come, first serve basis outside the regular pole reservation process and subject to the terms of the agreement reached with the MTA.

# City-Owned Façade/Rooftop Option

ExteNet expects there to be a continuing need for traditional rooftop and façade-mounted wireless facilities, in addition to the facilities proposed for infrastructure in the City rights-of-way and we're interested in discussion of potential use and management arrangements for utilization of rooftop and façade space on City-owned buildings throughout the five boroughs. The design, size and details of any such wireless facilities will vary according to the building and all facilities would remain subject to the review and approval of the City and its constituent agencies. ExteNet is interested in discussion of both lease of City-owned rooftop and façade space and in potential management of access to municipal assets on behalf of the City. The typical design included in Section 2(i) above and the proposed compensation terms in Section 6 below are intended to serve as launching points for further discussion.

ExteNet is open to inclusion of any or all of the options presented above in the Resulting Franchise and we look forward to further discussions with the City regarding each.



(viii) Existing Franchisees who obtain a franchise under the terms of this RFP must agree to the termination of their existing franchise(s) mandated by Section 1(e) of this RFP. A statement acknowledging such agreement must be included in the proposal.

# EXTENET RESPONSE: COMPLY

ExteNet Systems, Inc. acknowledges the requirement mandated by Section 1(e) of the RFP and agrees to terminate its existing ExteNet I Franchise upon issuance of the Resulting Franchise.



SECTION 3

# LEGAL AND MANAGERIAL PROPOSAL

# A narrative which

(i) Indicates the extent to which the proposer has secured any necessary authorizations, approvals, licenses and/or permits required to undertake the activities proposed and an acknowledgment that the proposer will not undertake such activities unless and until such authorizations, approvals, licenses and/or permits are obtained (for any system and/or equipment that requires FCC licensing, the proposer must confirm in its proposal that such system and/or equipment is, or will be prior to installation, fully licensed by the FCC.

# EXTENET RESPONSE: COMPLY

ExteNet Systems, Inc., a Delaware corporation, has been authorized since 2004 to do business in the State of New York as a foreign corporation by the New York Department of State. ExteNet is a certificated telecommunications utility in the State of New York operating under a Certificate of Public Convenience and Necessity as a facilities-based provider and reseller of telephone service without authority to provide local exchange service granted by the New York Public Service Commission in case number 05-C-1428 on December 2, 2005. Furthermore, ExteNet is registered with the Federal Communications Commission (FCC) under FCC Registration Number 0017819301.

As an infrastructure company, ExteNet does not currently hold any licensed spectrum. Responsibility for securing any needed federal spectrum licenses will remain with ExteNet's WSP tenants. ExteNet may choose to hold licenses spectrum in the future, as potential service offerings are regularly under review.

All wireless equipment attachments currently installed by ExteNet throughout the City under its existing Franchise comply with the Maximum Permissible Exposure Limits for field strength and power density of radio frequency (RF) emissions for transmitters operating at frequencies of 300kHz to 100 GHz adopted by the FCC in its Report and Order 96-326 and codified in the Code of Federal Regulations (47 C.F.R. 1.1307(b), 1.1310, 2.1091 and 2.1093). We anticipate continued compliance with all federal RF emission standards under the Resulting Franchise.



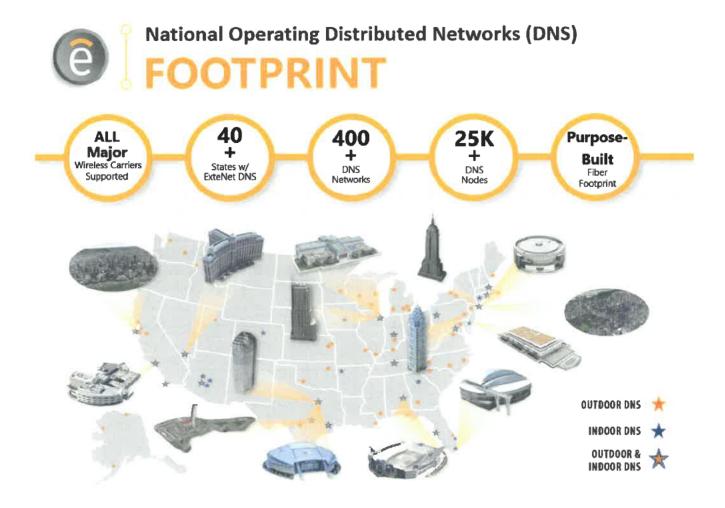
(ii) Describes the managerial experience and capabilities of the proposer.

## EXTENET RESPONSE: COMPLY

ExteNet enables advanced mobile connectivity for WSPs and their customers, including residential users, businesses, government agencies and other organizations, via its Distributed Networks deployed across indoor and outdoor settings. Our distributed networks, which are generally designed and available to host multiple WSPs, improve service coverage and boost capacity to meet the rapidly growing demand for advanced voice, data and video communications over mobile wireless systems.

ExteNet's distributed networks serve many communities across North America. Ongoing support for our communities is a core value for the entire company. Our goal is to continually engage and cooperate with residents and local officials to enable advanced and reliable cellular and Wi-Fi services and ultimately provide superior mobile connectivity for the people who live, work, grow and play in the community.

Mobile wireless connectivity is essential for everyone today. Businesses depend on connectivity for productivity and efficiency. People need connectivity to communicate, to conduct their daily activities and stay in touch with their family and friends. In life-saving and other critical scenarios, reliable and on the scene connectivity is needed to reach 911 to deploy first responders in the shortest timeframe.





# **ENGINEERING PROFICIENCIES**

ExteNet's core RF, IT and fiber network design engineering team supports ExteNet's regional RF Design and Fiber Engineering, Sales Engineering and Business Development personnel with technical guidance and established policies and procedures for all distributed network solutions. ExteNet's regional engineering teams are the points of contact for customer network initiatives and ensure that our customers' business objectives are achieved.

# NETWORK DESIGN AND IMPLEMENTATION MANAGEMENT PRACTICE

ExteNet's Network Implementation and Operations Team includes seasoned wireless and wireline industry professionals experienced in cross-functional network development and implementation techniques, with over a decade of distributed network design and deployment management experience. ExteNet deploys additional resources specifically to support the DAS design and construction phases concurrent with construction schedule requirements outlined in the RFP.

# MUNICIPAL RELATIONS AND REGULATORY EXPERTISE

ExteNet is a pioneer in the deployment of outdoor distributed networks, with over 15 years' experience facilitating all necessary entitlements and regulatory compliance required to deploy networks in jurisdictions across North America.

ExteNet's negotiation and permitting skills, planning backgrounds and extensive telecommunications experience enable efficient navigation of any municipality's processes, including:

- Acquisition of rights-of-way, municipal agreements and regulatory approvals
- Right-of-way access agreements; fiber and node placement permitting
- Utility and telco infrastructure access and attachment agreements

# QUALITY AND NETWORK OPERATIONS EXPERTISE

Network quality is measured in terms of availability (uptime) and is the direct result of our Network Operations Center's ability to efficiently manage planned and unplanned outages. Equipment, classroom and field training is required of every technician employed in the NOC. Aided by advanced diagnostic tools and documented NOC processes, ExteNet's NOC staff reacts quickly and accurately. In some cases, our NOC staff anticipates issues before they occur and plans for them, as in the case of natural disasters.

ExteNet maintains a 99.95% availability (uptime) on our indoor and outdoor networks.

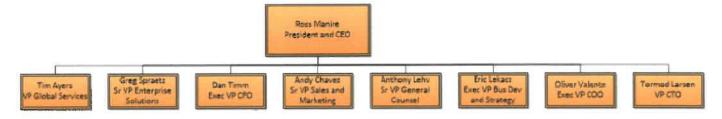
- 24x7x365 Active remote monitoring and management
- Ticketing, notification, update and escalation management
- Planned maintenance, Major Event Support and Repair and Emergency Restoration Services
- Network spares management
- Transparent, real-time network visibility and health status via the ExteNet Customer Portal visibility to equipment alarms, active tickets, configuration information and reports



# ORGANIZATION AND LEADERSHIP

ExteNet is helmed by a team of seasoned executives with a cumulative total of over a century of experience in the wireless telecommunication industry.

Please see below for an organization chart and biographies of our senior executives:



### Ross W. Manire, President and Chief Executive Officer

Ross brings more than 30 years of business management, finance and leadership experience to the company.

Prior to founding ExteNet, Ross was President, Enclosure Systems Division of Flextronics International, Ltd., a multi-billion-dollar electronics manufacturing services company. The Enclosure Systems Division was responsible for the manufacture and integration of electronic packaging systems for the telecommunications and high-technology industries. Ross came to Flextronics through the company's acquisition of Chatham Technologies, Inc., where he was Chief Executive Officer.

Before joining Chatham, Ross was Senior Vice President of 3Com Corporation's \$1 billion Carrier Systems Division. Prior to his position with 3Com, he led the dramatic expansion of U.S. Robotics' Network Systems Division, which he founded to capitalize on the growing demand for Internet access in the enterprise. Under Ross' leadership, the division grew from its founding to \$600 million in fewer than four years. Ross began his tenure at U.S. Robotics as Senior Vice President of Operations and Chief Financial Officer.

Ross was previously a partner at Ridge Capital, a leveraged buyout firm focusing on middle-market acquisition opportunities. He began his career at Ernst and Young, where he was a Partner in its Entrepreneurial Services Group. Ross holds a BA from Davidson College and an MBA from the University of Chicago.

# Dan Timm, Executive Vice President and Chief Financial Officer

Dan is an experienced senior executive and financial advisor, bringing to ExteNet a combination of investor perspective and managerial capabilities across all functional areas. He has a record of demonstrated success in company turnaround scenarios as well as in growth environments. He was the founder of Churchill Advisory Services, LLC, where he helped small and medium sized businesses develop and refine strategy, enhance operational execution and align strategy and execution with capital structure.



Throughout his 25+ year career, Dan has built and led management teams to reenergize sales and marketing functions, optimize manufacturing and procurement operations, revamp IT environments and streamline finance, accounting and administrative organizations. He has effectively managed relationships with all stakeholders, applying this skill to his transactional successes with corporate acquisitions, divestitures, recapitalizations and IPOs. Dan has significant experience across a broad spectrum of industries, including contract electronics manufacturing, food processing, transaction processing, BPO, healthcare services, IT services, specialty pharmaceuticals and telecommunications.

Prior to establishing Churchill in 2009, Dan was an operating partner with GTCR Golder Rauner where he was a director for numerous companies (public and private, large and small), acting as GTCR's primary interface with senior company executives and other constituents.

Dan has also served as SVP and CFO of Chatham Technologies, president and a director of The Bruss Company, a senior associate at Ridge Capital, a middle market focused private equity firm and he began his career at Coopers and Lybrand (now PwC), starting as an auditor and advancing to manager of M&A consulting.

Dan earned an MBA in Finance from the University of Chicago, a BS in Accountancy from the University of Illinois-Urbana and is a CPA.

# Oliver M. Valente, Executive Vice President and Chief Operating Officer

Oliver M. Valente is a senior telecommunications industry executive with nearly two decades of leadership experience in wireless and wireline product development and innovation.

Prior to joining ExteNet Systems, Valente served as Senior Vice President of Product Management and Development for Sprint Nextel Corporation, where he was responsible for key facets of the company's \$13 billion wireless and wireline product and services portfolio. In this capacity, he led all of Sprint's product development, including Sprint Application Developers Program, enterprise program management and product strategy, as well as the company's innovation efforts.

His employment with Sprint Nextel spanned 16 years, where he began his career as a network engineer. Since that time, he served in several executive leadership positions, including Vice President of Engineering & Operations where he managed the deployment of over 2,000 cell sites and multiple switch centers as well as all aspects of site development, construction, maintenance, switch & network engineering and RF engineering & optimization. In addition, Mr. Valente also served as Chief Technology Officer and Vice President of Engineering and Technology Development., where he was responsible for leading a team of 1,500 employees who delivered all new and emerging technologies for Sprint's integrated wireless and wireline network.

Valente served as President, Treasurer and Board Member of the CDMA Development Group and as Board Member for the Alliance for Telecommunications Industry Solutions. He is also the recipient of the CDMA Development Group's Industry Leadership Award.

Mr. Valente received his MBA from the Keller Graduate School of Management and earned his BS in Electrical Engineering from the University of Illinois at Urbana-Champaign.



# H. Anthony Lehv, Vice President, General Counsel

Anthony brings extensive legal skills and experience to the company, with more than 20 years as a telecommunications and business lawyer in private practice and corporate law departments.

Anthony was most recently a Partner in the telecommunications and real estate practice at Prince, Lobel & Tye, a Boston-based law firm, where he represented tower companies and DAS and small cell providers. He previously served as the General Counsel and Corporate Secretary at NextG Networks through its sale to Crown Castle in 2012. In addition, Anthony was a Senior Vice President and Associate General Counsel with American Tower Corporation from 2001 to 2011. Lehv began his career as an attorney in private practice in Washington, D.C. representing telecommunications and media companies.

# Eric Lekacz, Executive Vice President, Business Development and Strategy

Eric Lekacz is a senior executive with more than 20 years of sales, marketing and management experience.

Prior to his position with the company, Lekacz was Vice President of Business Development, Europe, for the Enclosure Systems Division of Flextronics International, Ltd., a multi-billion dollar electronics manufacturing services company. The Enclosure Systems Division was responsible for the manufacture and integration of electronic packaging systems for the telecommunications and high-technology industries. Lekacz came to Flextronics through the company's acquisition of Chatham Technologies, Inc., where he was the Senior Vice President of Business Development, Europe. In that position, he was responsible for growing Chatham's European operations from \$100 million to \$350 million in four years.

Mr. Lekacz's early career included executive marketing and management positions with Hitachi Data Systems and IBM. He holds BSME and BSEE degrees from the University of Arizona.

# Tim Ayers, Vice President, Global Services

Tim brings ExteNet more than 20 years of experience in global leadership, business strategy and technology based professional services. Tim has worked extensively in Asia, Europe, the Middle East, Africa and the Americas bringing value-based business and technology solutions to mobile telecommunications providers, enterprises and government agencies.

Tim demonstrated customer successes include the development of emerging mobile communications technology strategies and solution development, technology migration and integration, network security and resiliency, cloud computing, deep packet inspection and network analytics, customer experience management, business process engineering, mobile commerce and network operations.

Recent areas of services and technology focus include 4G/LTE network architecture, mobile 'smart' apps integrated into private wireless networks, small cell solutions including Pico cells, Femto cells, Wi-Fi offload and accelerating the business advantages of leveraging Ethernet transport in mobile telecom applications.

Prior to joining ExteNet Tim held similar global management roles at Tellabs, IBM Global Services and 3Com.

Tim holds a Bachelor of Arts in Business from North Central College and is a contributing member of the Technology Services Industry Association, the Human Capital Institute and the Project Management Institute.



# Andrew G. Chavez, Senior Vice President, Sales & Marketing

Andrew Chavez currently is the Senior Vice President of Sales & Marketing for ExteNet Systems. In this role, he is responsible for setting strategy, new business development and managing the overall client relationships for the Sales & Marketing team.

Andy joined ExteNet Systems in April 2013 and prior to that, led the North American Customer Business Team for Nokia Siemens Networks. Andy brings with him more than 20 years of experience in the telecommunications industry.

Prior to assuming the North American role, Andy was the Head of the T-Mobile Customer Business team and led the team in signing a multi-year, multi-billion-dollar contract with T-Mobile to modernize their network to LTE. This contract was the largest contract in the history of NSN. Andy was also the Managing Director & Head of the AT&T Customer Team from 2007-08 and spent over 16 years working at Lucent Technologies and Bell Labs (and its predecessor AT&T). At Lucent Technologies, he served in ever increasing roles of responsibility, ending his career at Lucent as the Vice President of Sales for the T-Mobile account team in 2007. In addition, Andy led the account team for the AT&T wireless services account, where his leadership was instrumental in building out AT&T's end-to-end wireless and broadband network until it was acquired by Cingular Wireless, now AT&T.

Andy holds a Bachelor of Science degree in business administration from Colorado State University and attended the Graduate School of Business at the University of Denver, as well as the Kenan-Flager Business School at the University of North Carolina at Chapel Hill.

# Gregory Spraetz, Senior Vice President and GM, Enterprise Network Solutions Business Unit

Greg Spraetz is a senior executive with more than 20 years of sales, marketing, sales operations and management experience. As the head of the Enterprise Network Solutions business unit at ExteNet Systems, Greg will oversee sales, business development, strategy and implementation teams dedicated to serve the in-building and enterprise markets.

Greg has previously worked with some of the leading companies in the communications industry with diversified responsibilities and distinguished accomplishments, including overall GM/operational management, building high-performance teams, thriving in high energy fast paced environments, driving operational efficiencies, channel expansion, profit-oriented growth, international experience, restructuring and successful M&A integrations. Prior to joining ExteNet Systems in January 2018, Greg was the EVP of Sales and Marketing for Conterra Broadband, a regional fiber and microwave solutions provider serving wireless, government, enterprise and wholesale customers. Previously, Greg served as the SVP of Wholesale and Carrier Services covering the North America and Asia Pacific regions for Level 3 Communications where he managed and grew the core data services revenue globally since October 2011. Prior experience includes several sales management roles with leading companies like Intermedia Communications and BellSouth Telecommunications.

Greg graduated from Miami of Ohio University with a Bachelor of Science (BS) in business administration, with a concentration in systems analysis.



# Tormod Larsen, Vice President and Chief Technology Officer

Tormod Larsen is an engineering and technology executive with a deep understanding of telecommunications infrastructure. He has developed, built and managed numerous network systems throughout the United States.

Prior to joining ExteNet Systems, Larsen was Vice President of Sales and Engineering for LGP Allgon, Ltd., where he was responsible for building the Coverage Systems Division that deployed large multi-operator systems. During his career at Allgon, Larsen held several other executive and managerial positions, including Director of Technology and Engineering for Allgon Telecom, Ltd. and Regional Manager of Coverage Engineering for North America.

A senior RF engineering specialist with extensive expertise in distributed antenna systems, he has managed network implementations for the Chicago Transit Authority, Microsoft Campus, Seattle Tacoma International Airport, Wynn Las Vegas and Mandalay Resorts Group.

Before Allgon, Mr. Larsen served as Global Product Manager for Repeater and Confined Area Communication Systems with Siemens AG. While at Siemens, Mr. Larsen held other senior technical and engineering positions with specific focus on distributed antenna systems as well as wireless communication in confined environments.

Mr. Larsen holds an MSEE from the Norwegian University of Science and Technology in Trondheim.

(iii) Describes whether the facilities proposer proposes to install on City poles will be serving one or multiple telecommunications service providers.

#### **EXTENET RESPONSE:**

ExteNet currently operates wireless facilities in the City for most of the WSPs under its existing Franchise and we anticipate continued installation of facilities for multiple telecommunication service providers under the Resulting Franchise.

# "Smart City" Design Considerations

ExteNet is involved in the integration of multiple infrastructure elements into an interconnected fabric to facilitate the often-used term Internet of Things (IoT) which then enables the Smart City concept. Our involvement with and design initiatives to support this IOT infrastructure has been centered on supporting the needs of communities.

ExteNet works with cities and local entities to provide the connectivity platform that supports:

- Commercial Wireless or Cellular Services
- Public Wireless Services (Wi-Fi and emerging CBRS)
- Fiber to the Tenant (direct broadband services from multiple service providers)
- Security Services Sensors (i.e. cameras, emergency calling stations, smoke detection and air analysis, sound locating devices, etc.)
- Smart Services (i.e. smart lighting, water, power/grid management, parking, traffic)



Broadband fiber and power distributed networks that support future services such as autonomous vehicles

We look forward to approaching these attributes with New York City to incorporate, or at least plan for, some of these initiatives for the community. Developing dense fiber optic pathways with remote powering capabilities is the typical hidden base infrastructure. Poles and attachment points for antennas and sensors become the visible infrastructure where attention to aesthetics is important.

extenet

**SECTION 4** 

# FINANCIAL CAPACITY PROPOSAL

A narrative which describes the proposer's financial ability to undertake the activities proposed and properly maintain affected City property. Such narrative may include any financial information the proposer deems relevant.

## EXTENET RESPONSE: COMPLY

ExteNet completed a \$1.4 billion recapitalization led by Digital Bridge Holdings and Stonepeak Infrastructure Partners, providing ExteNet with a solid financial foundation and extensive capital resources to fuel accelerated growth and leadership in distributed network infrastructure. ExteNet has demonstrated its ongoing financial capacity to comply with all requirements of the Franchise over the past 14 years. ExteNet currently has on deposit with the City a security fund in the amount of four-hundred-seventy-seven-thousand-eight-hundred-ninety-two dollars (\$477,892.00) and our monthly pole rent payments currently exceed four-hundred-thousand dollars (\$400,000.00). ExteNet possesses the financial capacity necessary to undertake the activities proposed under the Resulting Franchise, including the proper maintenance of City property.



SECTION 5

# SCOPE PROPOSAL

A statement as to which of the three zone options described in the last sentence of Section 9(c) above (all three zones, just Zones B and C, or just Zone C) that the proposer seeks to have reflected in a franchise agreement as the area covered by its franchise. Selections of less than all three zones will in any event be subject to a periodic option to expand the area covered.

#### EXTENET RESPONSE: COMPLY

ExteNet selects all three zones (Zone A, Zone B and Zone C) to be reflected in a franchise agreement as the area covered by the franchise. ExteNet's selection of all three zones applies to any franchise granted pursuant to the RFP and covers all Compensation Proposals described below.



**SECTION 6** 

# COMPENSATION PROPOSAL

A description of which zone option it proposes to select initially and its proposal of a per pole compensation amount for each zone, which amount will be used to determine pole allocation within that zone among franchisees receiving new franchises pursuant to this RFP as described in Section 9(a) of this RFP.

# EXTENET RESPONSE: COMPLY

### Minimum Compensation

ExteNet agrees to the Minimum Compensation of two-hundred-thousand dollars (\$200,000.00) per year for access to all three zones (Zone A, Zone B and Zone C), as specified by Section 9. (e) of the RFP, with the understanding that this Minimum Compensation will apply regardless of the compensation options described below and included in the final franchise agreement.

# Compensation Options

ExteNet proposes the following compensation options, which are non-exclusive and may be combined, if so desired by the City:

# **Baseline Option**

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At a minimum, ExteNet proposes to extend its current use and occupancy of New York City rights-ofway for placement of base stations and antennae on Street Operations Poles and on Street Utility Poles under the compensation terms specified in Section 9 of the RFP.

ExteNet proposes the following per pole compensation for Street Operations Poles:

- Zone A Poles: Three-hundred-fifty dollars (\$350.00) per pole per month
- Zone B Poles: Two-hundred-fifty dollars (\$250.00) per pole per month
- Zone C Poles: One-hundred dollars (\$100.00) per pole per month

ExteNet proposes the following per pole compensation for Street Utility Poles:

- Zone B Poles: Twenty-five dollars (\$25.00) per pole per month
- Zone C Poles: Ten dollars (\$10.00) per pole per month

ExteNet understands and accepts that all pole compensation described above will be subject to annual escalation of four percent (4%) effective on the anniversary of the effective date of the final franchise agreement and applied on each subsequent anniversary throughout the term of the agreement.



# Multi-Purpose Pole Option

ExteNet proposes to install, at its sole cost and expense, an MPP design identical or similar to that depicted in the Technical Proposal above, subject to review and approval by the City. The approved MPP design will incorporate smart city functionality for municipal applications, as well as multi-carrier capacity for WSPs.

ExteNet proposes the following per pole compensation for Multi-Purpose Poles:

- Zone A Poles: Five-hundred dollars (\$500.00) per pole per month
- Zone B Poles: Three-hundred-fifty dollars (\$350.00) per pole per month
- Zone C Poles: One-hundred-fifty dollars (\$150.00) per pole per month

ExteNet understands and accepts that all pole compensation described above will be subject to annual escalation of four percent (4%) effective on the anniversary of the effective date of the final franchise agreement and applied on each subsequent anniversary throughout the term of the agreement.

# Community Investment Option

ExteNet will partner with a WSP to construct nodes in underserved areas of Zone B and Zone C (as identified by the City) that include free Wi-Fi access points.

ExteNet proposes the following per pole compensation for Street Operations Poles:

- Zone B Poles: One-hundred dollars (\$100.00) per pole per month
- Zone C Poles: Twenty-five dollars (\$25.00) per pole per month

ExteNet proposes the following per pole compensation for Street Utility Poles:

- Zone B Poles: Fifteen dollars (\$15.00) per pole per month
- Zone C Poles: Five dollars (\$5.00) per pole per month

ExteNet understands and accepts that all pole compensation described above will be subject to annual escalation of four percent (4%) effective on the anniversary of the effective date of the final franchise agreement and applied on each subsequent anniversary throughout the term of the agreement.

In addition to the pole compensation described above, ExteNet proposes dedication of fiber optic cable to the City for municipal purposes. ExteNet typically values fiber optic cable in New York City at an average of approximately \$5,500.00 per strand per year per linear mile, although actual value is dependent on local conditions and specifications.

#### LinkNYC Option

ExteNet accepts the LinkNYC compensation terms specified in Section 9 of the RFP.

ExteNet proposes the following per Link compensation for Links:

- Zone A Links: One-hundred-five dollars (\$105.00) per Link per month
- Zone B Links: Seventy-five dollars (\$75.00) per Link per month



Zone C Links: Thirty dollars (\$30.00) per Link per month

ExteNet understands and accepts that all Link compensation described above will be subject to annual escalation of four percent (4%) effective on the anniversary of the effective date of the final franchise agreement and applied on each subsequent anniversary throughout the term of the agreement.

#### MTA Infrastructure Option

ExteNet proposes the placement of wireless telecommunications facilities on structures owned and maintained by the MTA within City rights-of-way, subject to agreement of the MTA. The proposed facilities will be identical or substantially similar to those described in the Technical Proposal above, as approved by the City.

ExteNet proposes the following per facility compensation for use of MTA infrastructure:

- Zone A: One-hundred-five dollars (\$105.00) per Facility per month
- Zone B: Seventy-five dollars (\$75.00) per Facility per month
- Zone C: Thirty dollars (\$30.00) per Facility per month

ExteNet understands and accepts that all Facility compensation described above will be subject to annual escalation of four percent (4%) effective on the anniversary of the effective date of the final franchise agreement and applied on each subsequent anniversary throughout the term of the agreement.

#### City-Owned Façade/Rooftop Option

ExteNet proposes the placement of wireless telecommunications facilities on the facades and rooftops of buildings owned and maintained by the City of New York and its various agencies and departments. The proposed facilities will be identical or substantially similar to those described in the Technical Proposal above, as approved by the City.

ExteNet proposes the following per facility compensation for use of MTA infrastructure:

- Zone A Facilities: Three-hundred-fifty dollars (\$350.00) per facility per month
- Zone B Facilities: Two-hundred-fifty dollars (\$250.00) per facility per month
- Zone C Facilities: One-hundred dollars (\$100.00) per facility per month

ExteNet understands and accepts that all Facility compensation described above will be subject to annual escalation of four percent (4%) effective on the anniversary of the effective date of the final franchise agreement and applied on each subsequent anniversary throughout the term of the agreement.

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SECTION 7

# RELEASE DATE OF RFP AND ACKNOWLEDGEMENT OF ADDENDA

(i) A form, which when completed and submitted with the proposal package, serves to confirm the release date of the RFP to which the proposer is responding and as the proposer's acknowledgement of the receipt of addenda to this RFP which may have been issued prior to the submission of the proposal. (See Exhibit C attached hereto).

#### EXTENET RESPONSE:

Please reference the completed Exhibit C later in this section.

(ii) The form of affirmation attached hereto as Exhibit D, signed by the proposer, which affirmation will also be included in any franchise agreement entered into pursuant to this RFP.

### EXTENET RESPONSE:

Please reference the completed Exhibit D later in this section.



## EXHIBIT C ACKNOWLEDGMENT OF RELEASE DATE AND ADDENDUM

APPLICANT'S NAME:	ExteNet Systems, Inc.
RFP RELEASE DATE:	June 12, 2018
NUMBER OF ADDENDA RECEIVED:	4
ISSUE DATE(S) OF ADDENDA:	June 27, 2018, June 29, 2018, July 11, 2018, July 25, 2018



## EXHIBIT D AFFIRMATION

The undersigned proposer or bidder affirms and declares that said proposer or bidder is not in arrears to the City of New York upon debt, contract, or taxes and is not a defaulter, as surety or otherwise, upon obligation to the City of New York, and has not been declared not responsible, or disqualified, by any agency of the City of New York, nor is there any proceeding pending relating to the responsibility or qualification of the proposer or bidder to receive public contracts except

Full r	name of Proposer or Bidder: <u>ExteNet Systems, Inc.</u>
Addr	ess: 3030 Warrenville Road, Suite 340
City:_	Lisle State: Illinois Zip Code: 60532
CHE	CK ONE BOX AND INCLUDE APPROPRIATE NUMBER:
	□A - Individual or Sole Proprietorship* SOCIAL SECURITY NUMBER
	☐B - Partnership, Joint Venture or other unincorporated organization EMPLOYER IDENTIFICATION NUMBER
Ву	Signature  Executive Vice President and Chief Operating Officer
	Title Executive Vice President and Chief Operating Officer

If a corporation, place seal here:

Must be signed by an officer or duly authorized representative.

<sup>\*</sup> Under the Federal Privacy Act the furnishing of Social Security Numbers by bidders on City contracts is voluntary. Failure to provide a Social Security Number will not result in a bidder's disqualification. Social Security Numbers will be used to identify bidders, proposers, or vendors to ensure their compliance with laws, to assist the City in enforcement of laws as well as to provide the City a means of identifying of businesses which seek City contracts.



**SECTION 8** 

## **APPENDIX**

**DOING BUSINESS DATA FORM** 

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## **Doing Business Data Form**

To be comp	eted by the C	ty agency	prior to	distribut	ion	Agency			Transactio	n ID
Check One	4		_	e (check o						
☐ Proposal	☐ Award	☐ Conce	ession	□ Econo	mic De	velopment Agreement	D F	ranchise	☐ Grant	☐ Pension Investment Contract ☐ Contract
either type res	ponses directly	into this f	illable for	m or print	answe	rs by hand in black ink,	and b	e sure to fi	Il out the c	rm (see Q&A sheet for more information). Please ertification box on the last page. Submission of a ve an award or enter into an agreement.
This Data Forn Data Form will	n requires infor be included in	mation to l	oe provid atabase	led on prin	ncipal o	fficers, owners and sen business with the City	ior ma	magers. The	e name, e	rnployer and title of each person identified on the ganizations that own 10% or more of the enitity. No PASSPort registration or VENDEX requirements.
						supplied it, Please comes regarding this Data f				ccountability Project at ooperation.
Entity Infor	mation								If you ar	re completing this form by hand, please print clear
Entity EIN/TIN				Entity	Name	ExteNet System	ns, lı	nc.		
Filing Status					(	Select One)				
	orms submitted				ı	Entity has never com	pleted	a Doing B	usiness Da	ata Form. Fill out the entire form.
or more owne	<b>nizations, a</b> s w rship of the ent	lity. Until s	uch certi	fication	1					. Fill out only those sections that have who no longer hold positions with the entity.
	is submitted the a no change for					_			_	21/2017 . Skip to the bottom of the last page.
-4					-					
Entity is a Non		☐ Yes		■ No						
Entity Type	Corporation (	any type)	□ Joint	Venture		Partnership (any	type)	☐ Sole P	roprietor	□ Other (specify)
Address										
City						St	ate			Zip
Phone				E-ma	il li					
Chief Executive	officer (CEO	) or equiv	alent of	licer					no indicati	e the date that the change became effective.  ☐ This position does not exis
						Sole Proprietor or Chairperso				Dieth Cata (man/ald/s s)
										, ,,,
						Employer (if not	t emple	oyed by er	itity)	
Home Address								-		
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Chief Financial The highest ranking					inancial t	Director or VP for Finance.				☐ This position does not exis
First Name	- 2:12		= 1020		∕II	Last				Birth Date (mm/dd/yy)
Office Title						Employer (if not	emplo	yed by en	tity)	
lome Address _										
☐ This person re	placed former	CFO								on date
Chief Operating					Director	of Operations or VP for Oper	rations.			☐ This position does not exis
irst Name				N	/II I	ast				Birth Date (mm/dd/yy)
								and the second second		

**Principal Owners** 

Please fill in the required identification information for all individuals or organizations that, through stock shares, partnership agreements or other means, **own or control**10% or more of the entity. If no individual or organization owners exist, please check the appropriate box to indicate why and skip to the Senior Managers section.

If the entity is owned by other companies that control 10% or more of the entity, those companies must be listed. If an owner was identified on the previous page,
fill in his/her name and write "See above," If the entity is filing a Change Form, list any individuals or organizations that are no longer owners at the bottom of this section.

If more space is needed, attach additional pages labeled "Additional Owners."

There are no owners listed because  ☐ The entity is not-for-profit	e (select one):  The entity is an indi	ividual	☐ No individual or organization owns 10% or more of the entity
Other (explain)			
Individual Owners (who own or con	trol 10% or more of the e	entity)	
First Name	Mi	Last _	Birth Date (mm/dd/yy)
Office Title			Emptoyer (if not employed by entity)
Home Address		_	
First Name	MI	_ Last _	Birth Date (mm/dd/yy)
			Employer (if not employed by entity)
Organization Owners (that own or o	control 10% or more of th	o entity	
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Senior Managers	or managers at the bottom	₩ 11 H3 S	ection. If more space is needed, attach additional pages labeled "Additional Senlor Managers.
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Office Title			Employer (if not employed by entity)
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			dditional pages is accurate and complete. I understand that willful or fraudulent submission of
	, ,	-	onsible and therefore denied future City awards.
Name Daniel L. Timm			Title_EVP and CFO
Entity Name ExteNet Systeme,	) )		Work Phone #
Signature 4 (0)	1	<b>6</b>	Date 06/29/2018



## **EXISTING NEW YORK POLE TYPES**

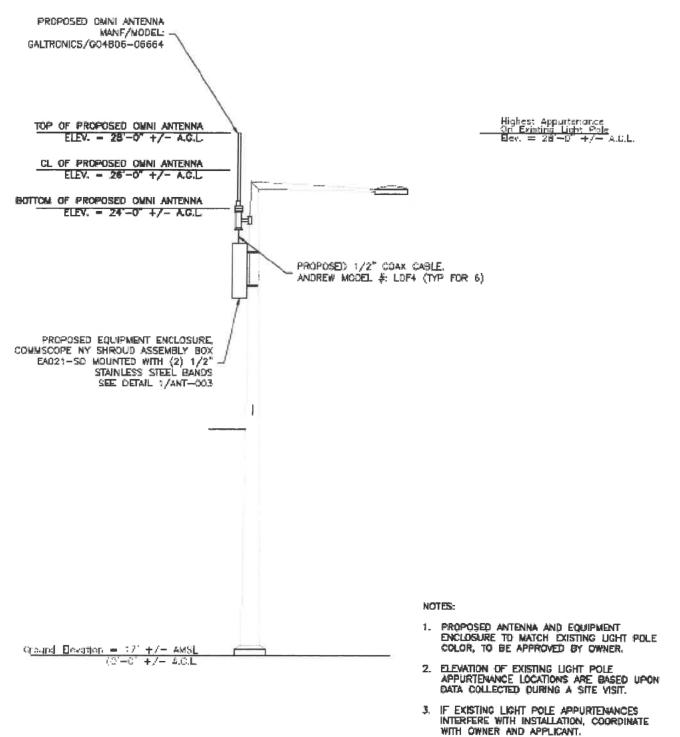


Figure 8-1: New York Street Light Pole Type Alliance



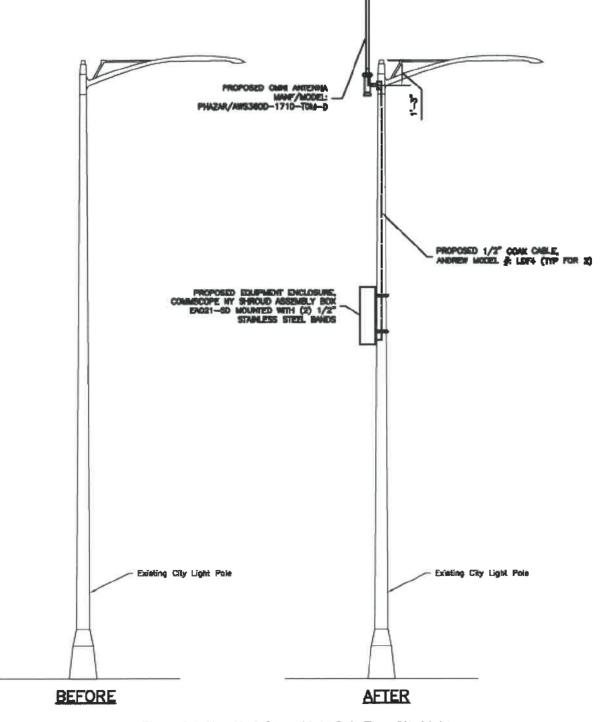


Figure 8-2: New York Street Light Pole Type City Light



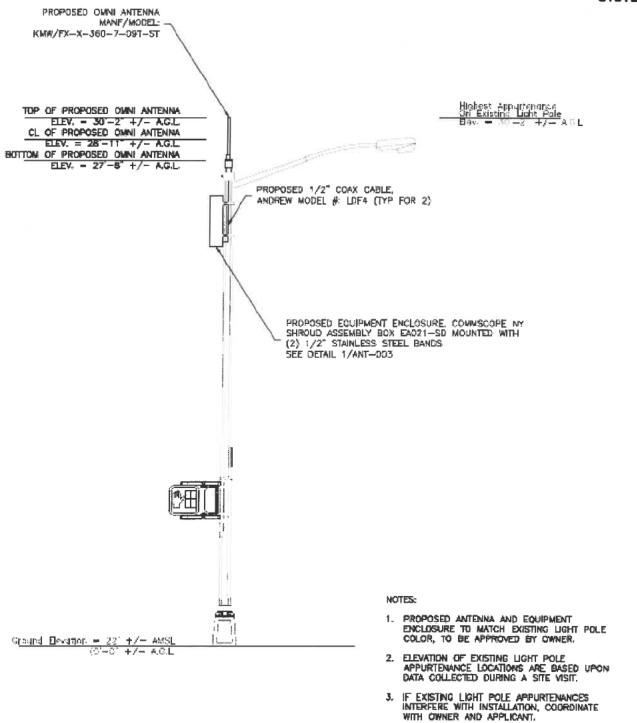


Figure 8-3: New York Street Light Pole Type FS



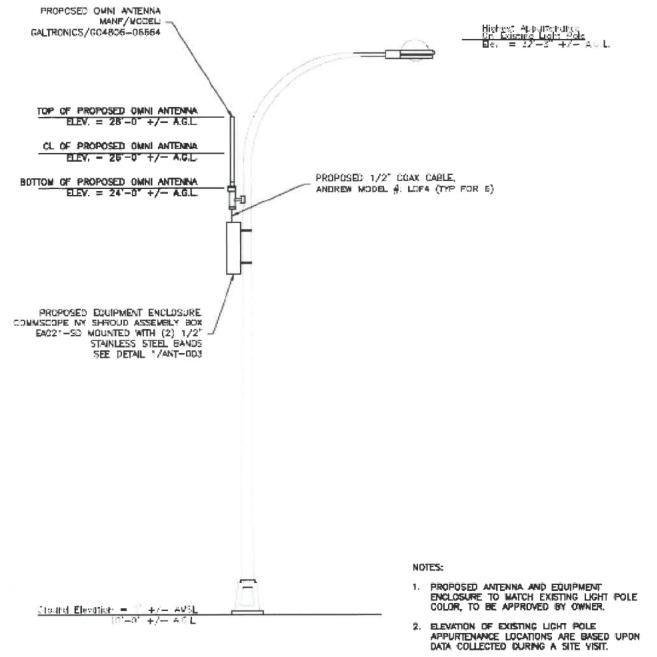


Figure 8-4: New York Street Light Pole Type Davit

 IF EXISTING LIGHT POLE APPURTENANCES INTERFERE WITH INSTALLATION, COORDINATE WITH OWNER AND APPLICANT.



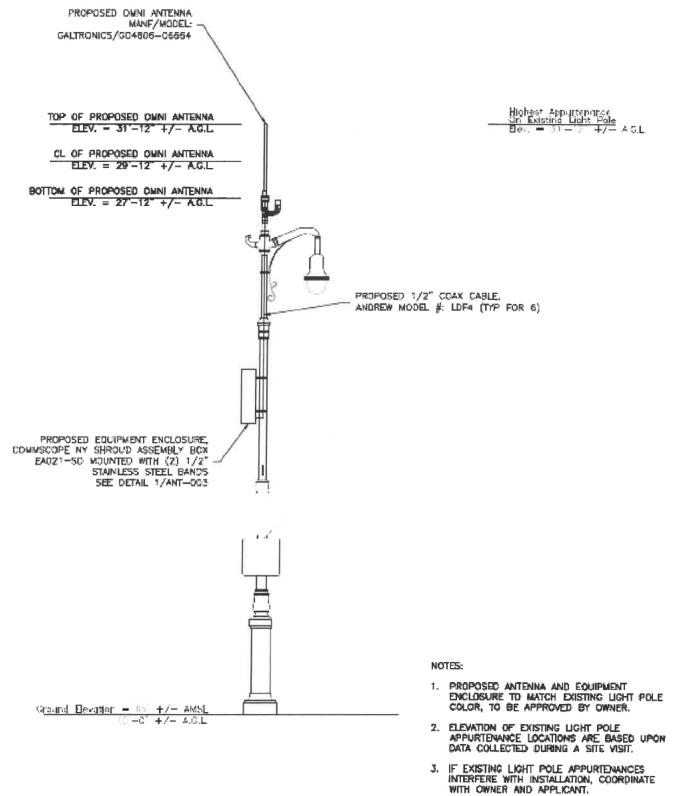


Figure 8-5: Decorative New York Street Light Pole Type F



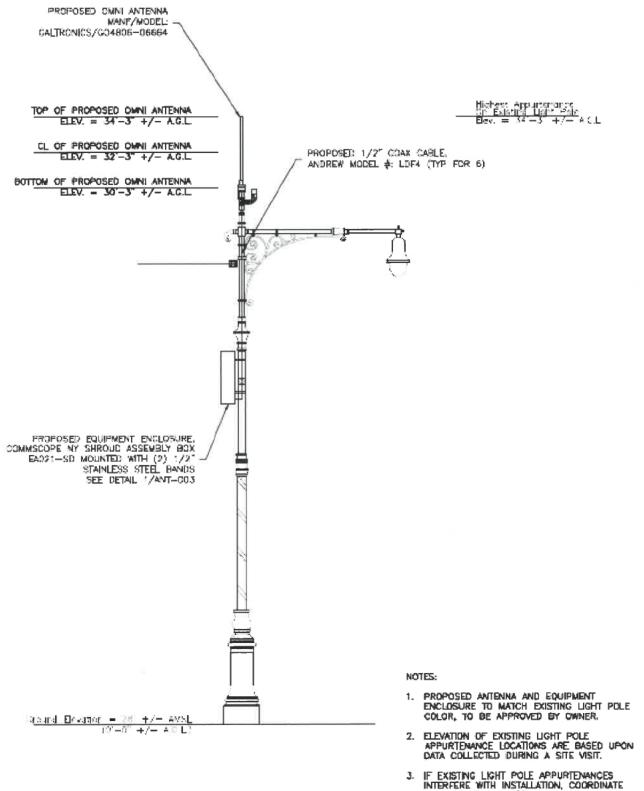


Figure 8-6: Decorative New York Street Light Pole Type M

WITH OWNER AND APPLICANT.



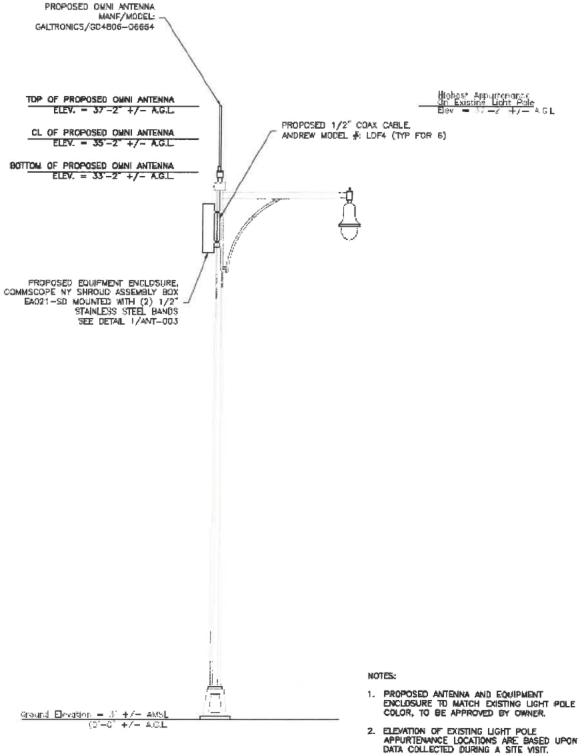


Figure 8-7: Decorative New York Street Light Pole Type Flatbush

 IF EXISTING LIGHT POLE APPURTENANCES INTERFERE WITH INSTALLATION, COORDINATE WITH OWNER AND APPLICANT.



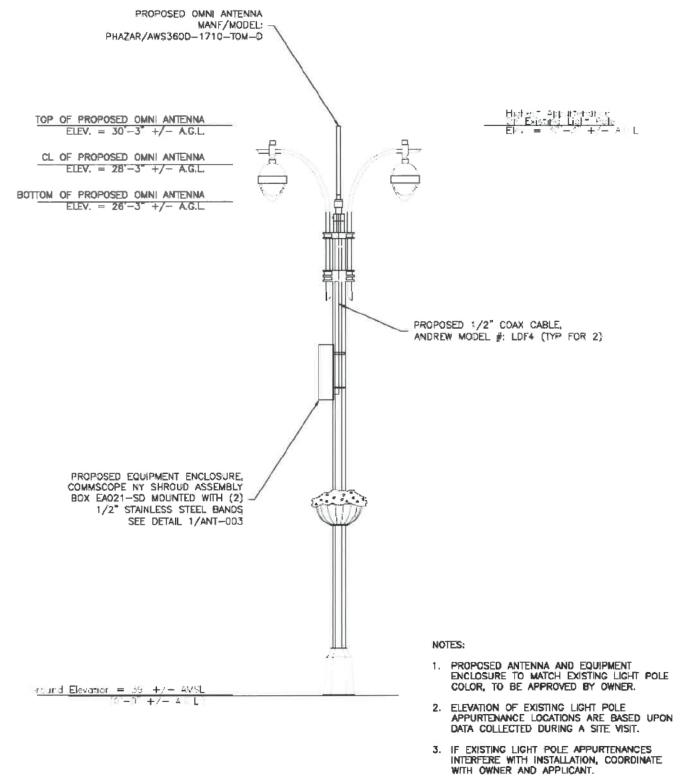


Figure 8-8: Decorative New York Street Light Pole Type Grand Central



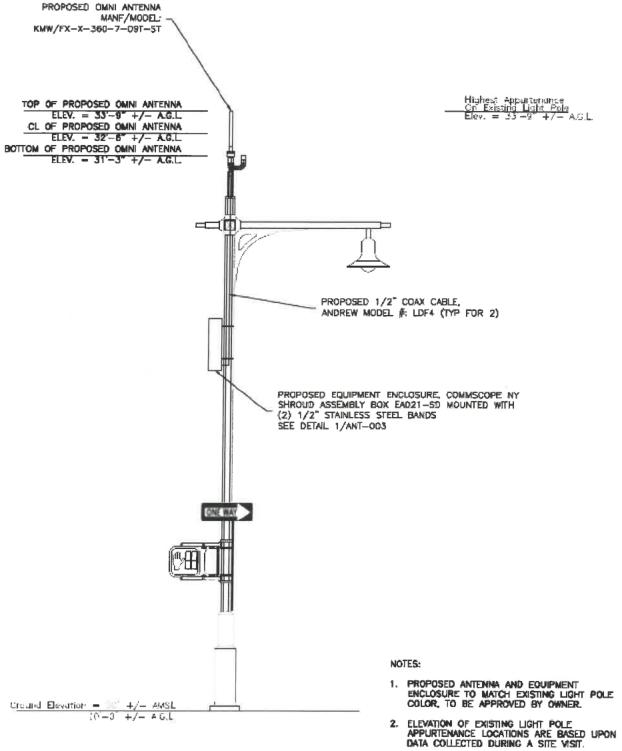


Figure 8-9: Decorative New York Street Light Pole Type TBTA

 IF EXISTING LIGHT POLE APPURTENANCES INTERFERE WITH INSTALLATION, COORDINATE WITH OWNER AND APPLICANT.



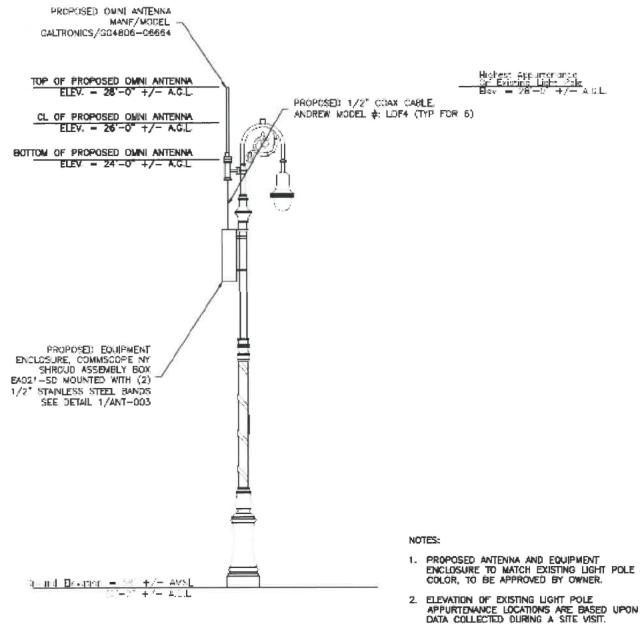


Figure 8-10: Decorative New York Street Light Pole Type Bishop's Crook

 IF EXISTING LIGHT FOLE APPURTENANCES INTERFERE WITH INSTALLATION, COORDINATE WITH OWNER AND APPLICANT.



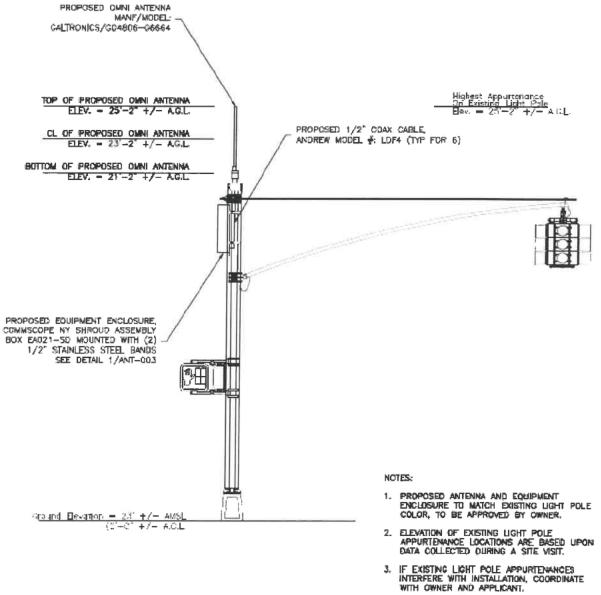


Figure 8-11: New York Traffic Light Pole Type M-2



## **MULTI-PURPOSE POLE DESIGN**



Figure 8-12: Multi-Purpose Pole Design with LinkNYC Kiosk





Figure 8-13: Multi-Purpose Pole Design with LinkNYC Kiosk and Mid-Size Enclosure



Figure 8-14: Multi-Purpose Pole Elevation

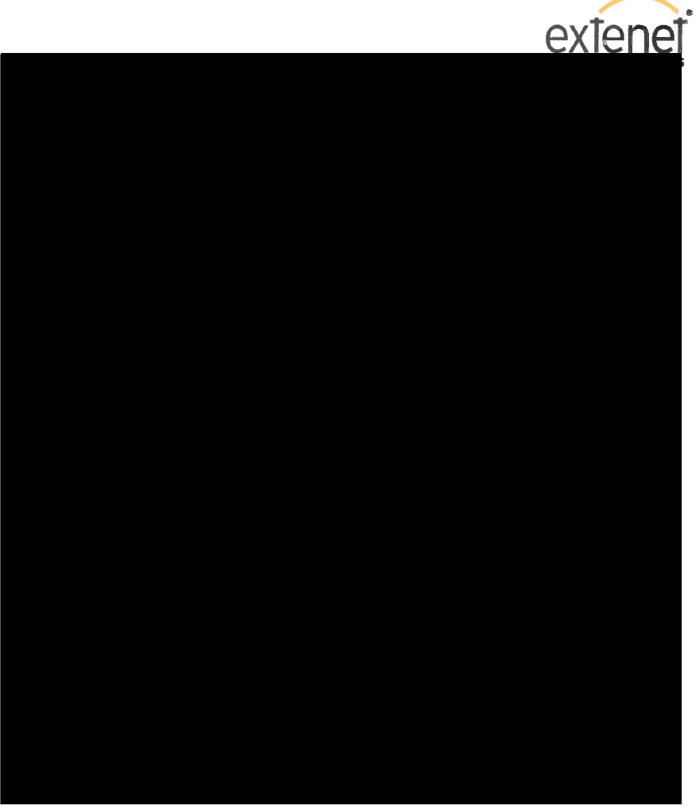


Figure 8-15: Multi-Purpose Pole Rendering



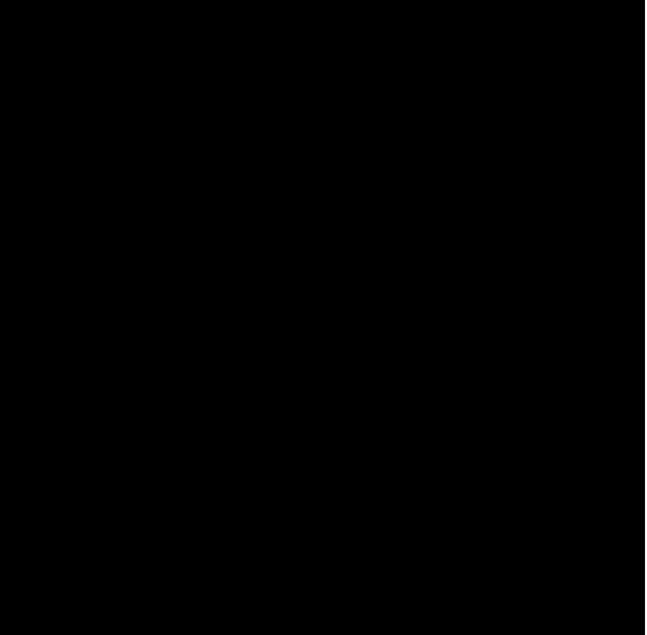


Figure 8-16: Multi-Purpose Pole with Mid-Size Enclosure Elevation





## **MTA INFRASTRUCTURE DESIGN**



Figure 8-18: MTA Infrastructure Design with Sign Cabinet





Figure 8-19: MTA Infrastructure Design with Bench Cabinet



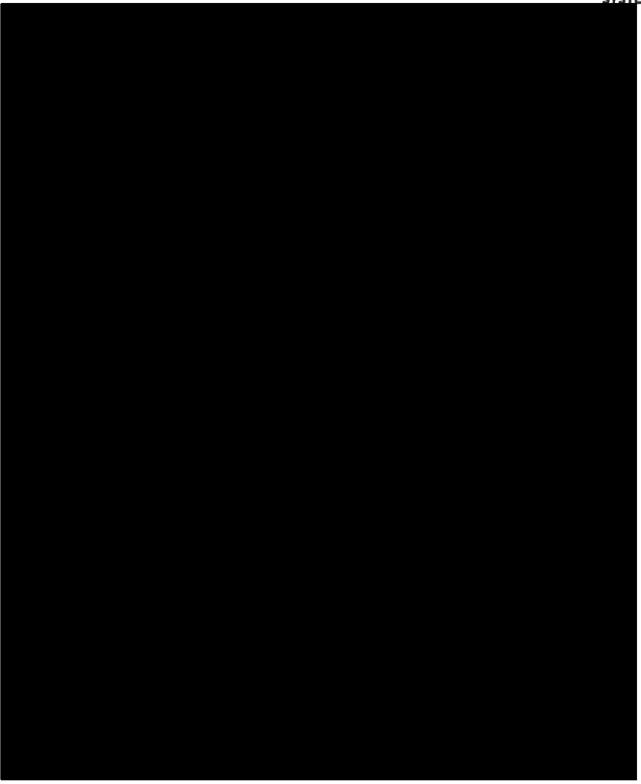


Figure 8-20: MTA Infrastructure Design with Sign Cabinet Elevation





Figure 8-21: MTA Infrastructure Design with Sign Cabinet Rendering



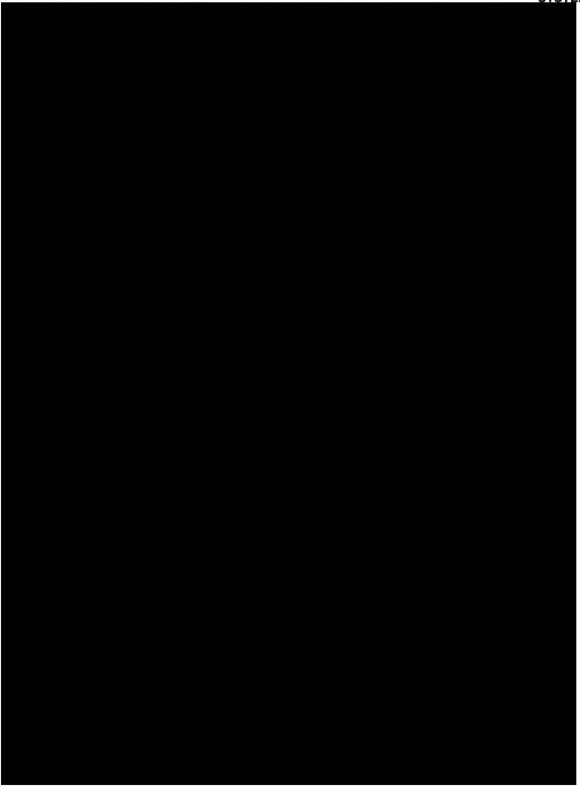


Figure 8-22: MTA Infrastructure Design with Bench Cabinet Elevation



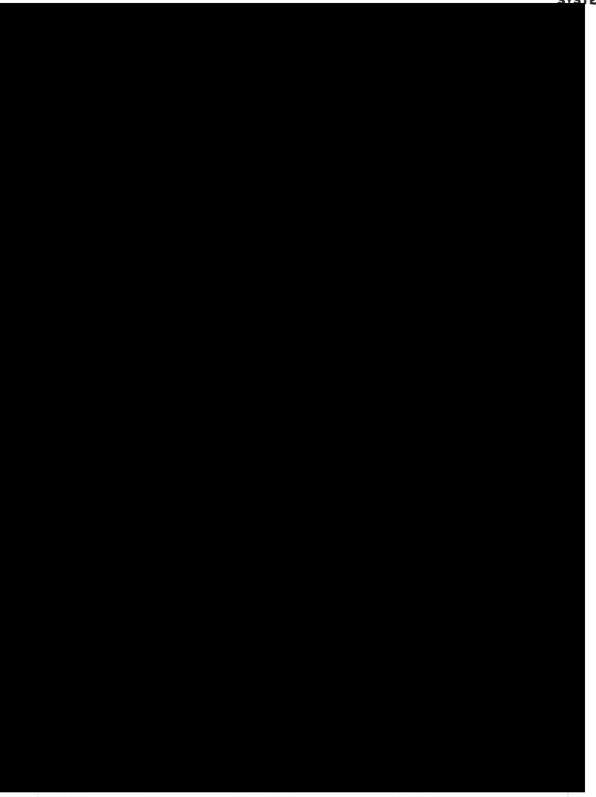


Figure 8-23: MTA Infrastructure Design with Bench Cabinet Rendering