



# CITY OF CAMBRIDGE

## POLE AND CONDUIT COMMISSION

831 Massachusetts Avenue, Cambridge, Massachusetts 02139

### POLE AND CONDUIT SITING POLICY RELATING TO GRANTS OF LOCATION FOR TELECOMMUNICATIONS SERVICES NETWORKS

#### INTRODUCTION

Acting through the Cambridge Pole and Conduit Commission, (the "P&C Commission"), the City of Cambridge adopts this siting policy to maximize the availability of underground Telecommunications Services Networks; provided, that Siting, construction, operation, and maintenance of Networks shall not:

- I. disrupt functional and safe use of public ways and public rights of way;
- II. interfere with essential utility projects of the City of Cambridge, including water supply, the storm drainage and sewer separator project, the storm drainage and sewer system, and police and fire telecommunications;
- III. create an economic burden to the City of Cambridge or its residents;
- IV. create or cause a hazard to health from radiation, heat, chemicals, or mechanical functions;
- V. discharge contaminated water into the storm drainage or public sewer systems or otherwise cause an adverse environmental impact;
- VI. create nuisance from noise, electromagnetic interference, traffic disruption, or lack of security;
- VII. adversely impact the public good by disruption, disturbance, nuisance, or hazard to the public good; and provided further, that Siting, construction, operation, and maintenance of Telecommunications Services Networks shall:
- VIII. facilitate rational, planned development of limited conduit space in public ways and public rights of way;
- IX. afford competitive access to and competitive neutrality in the use of public ways and public rights of way for Telecommunications Services; and
- X. comply with public safety, zoning, public works, engineering, and electrical requirements and ordinances of the City of Cambridge.

The City implements this Siting Policy in accordance with home rule authority under Article 2, §6 of the Articles of Amendment to the Massachusetts Constitution and G.L. c.43B, §13; the City's authority to operate, manage, and police public ways and public rights of way under G.L. c.82, §§17, 21-24,32,34, 40-40E; and the City's authority and responsibilities under the state and federal telecommunications acts, G.L. c.166, §§ 21 et seq.; 47 U.S.C. §§ 151 et seq.

## **1. EFFECTIVE DATE**

1.0 This Sitting Policy shall apply to all Network Grants of Location issued in the City of Cambridge from and after April 1, 2000. In addition, this Sitting Policy shall apply from and after April 1, 2000 to substantial rebuilding or reconstruction, expansion or addition to a Network and to conversion, in whole or part, of any electric, steam, gas, or other conduit or tunnel to Telecommunication Services.

1.1 A new Grant of Location will not be required for Network maintenance, repair, or replacement that does not involve significant construction in public ways or public rights of way. Other than in the case of a public safety emergency, however, the P&C Commission shall, in each case, determine that work qualifies as maintenance, repair, or replacement. In every case other than a public safety emergency and whether or not a Grant of Location is required, a Network operator or developer must obtain permits from the Department of Public Works, Electrical Department, and Police Department before conducting any work in or under a public way or public right of way. Maintenance, repair, or replacement work must be documented and accounted for in all Applications under Section 4 and all Network forecasts and updated forecasts under Section 5 of this Sitting Policy.

## **2. DEFINITIONS**

2.0 Network shall be defined, interpreted, and understood broadly to include all public and private poles, towers, transmitters, receivers, relay devices, conduits, pipelines, cables, wires, ducts, structures, manholes, hand holes, and related structures and equipment, which are sited in a public way or a public right of way or any part of a public way or public right of way and which are used for Telecommunications Services.

2.1 Telecommunications Services shall be defined, interpreted, and understood broadly to include any method of transmitting or receiving video, voice, or data intelligence, including, but not limited to, those related to telecommunications, cable, Internet or Intranet, digital and conventional broadcast and incorporating such transmission media as electromagnetic radiation, copper wire, coaxial, fiber optic, laser, or electromagnetic cable. Telecommunications Services shall not include so-called cable television to the extent that the developer or operator of such service has in force a separate agreement with the City of Cambridge that provides authorization to develop, build, rebuild, construct, reconstruct, expand, add to, or convert a Network for cable television services.

2.2 Grant of Location shall mean an authorization by the P&C Commission to develop, build, rebuild, construct, reconstruct, expand, add to, or convert a Telecommunications Services Network in accordance with this Sitting Policy and in accordance with an Order of Conditions issued by the P&C Commission. A Grant of Location will not be required where Network work involves maintenance, repair, replacement, or use of unused or vacant Telecommunications Services Network capacity and does not involve significant construction in rights of way. However, the P&C Commission shall in each case determine that work qualifies as maintenance, repair, or replacement. In every case other than a public safety emergency, and whether or not a Grant of Location is required, a Network operator or developer must obtain written approvals from the Department of Public Works, Electrical Department, and Police Department before conducting any work in or under a public way or public right of way. Maintenance, repair, or replacement work must be documented and accounted for in Networks forecasts and updated forecasts under Section 4 of this Sitting Policy.

2.3 Telecommunications Services Forecast shall be defined, interpreted, and understood broadly to include a five-year assessment of the demand for Telecommunications Services Networks in accordance with Section 5 of this Siting Policy.

### **3. USE OF PUBLIC WAYS AND PUBLIC RIGHTS OF WAY**

3.0 The P&C Commission has the duty to regulate and oversee use of the City's public ways and public rights of way, underground spaces, and air rights. The P&C Commission finds that management of the public ways and public rights of way has become more complex and expensive for the City and more open to safety and health hazard and adverse environmental impact. At the same time, the P&C Commission finds there is growing demand for Telecommunications Services, utility, and transportation uses of public ways and public rights of way. Therefore, it is essential to manage, oversee, and safeguard all uses in public ways and public rights of way in accordance with a comprehensive and systematic Siting Policy.

3.1 All Telecommunications Services Networks shall be developed, built, rebuilt, constructed, reconstructed, expanded, added to, or converted to Telecommunications Services use only in accordance with a Grant of Location issued by the P&C Commission.

3.2 To minimize disruption and to conserve and safeguard scarce conduit area, the P&C Commission will ordinarily authorize only one new street opening and a single common trench for underground Telecommunications Services in each public way and public right of way in the City.

3.3 Networks and Network developers must exhaust use of existing conduit and related structure capacity before seeking authorization to develop, build, rebuild, construct, reconstruct, expand, add to, or convert conduit or related structures.

3.4 Owners of Telecommunications Services conduit shall make unused or vacant conduit capacity available for use by other Networks or Networks developers. No owner may decline to lease or sell unused or vacant conduit capacity to an Applicant for Network conduit capacity.

3.5 Networks and Networks developers applying for Grants of Location to develop, build, rebuild, construct, reconstruct, expand, add to, or convert conduit must document all current conduit use and demonstrate absence of unused or vacant capacity for Telecommunication Services.

### **4. APPLICATION FOR CONDUIT DEVELOPMENT AND USE**

4.0 Networks and Network developers must apply for and obtain Grants of Location from the P&C Commission for construction, expansion, addition to, rebuilding, or conversion of conduits for Telecommunications Services.

4.1 An Application for a Grant of Location, with ten copies, shall be filed with the P&C Commission. Concurrently, the Application, with two copies each, shall be filed with the Department of Public Works and the Electrical Department. The first Applicant for Network development or work in a public way or public right of way shall be the Lead Company and shall coordinate the Applications, filings, and responses of all other Network developers and operators involved in the project or common trench.

#### 4.2 Each Application shall include:

- A locus map of the proposed Network project;
- Engineering drawings of the locus in American Public Works Association ("APWA") format, showing all current Network structures; energy and water transmission conduits, pipelines, and structures; tunnels; and storm drain and sanitary sewer systems and structures. Where the Department of Public Works has approved engineering drawings on file in its offices, the Applicant may revise and update those drawings in place of preparing new drawings;
- Engineering drawings of the locus in APW A format, showing all proposed Network structures, including conduit, laterals, and surface connection points;
- Where more than one Applicant is involved in a project or a common trench or where multiple projects are proposed for the public way or public right of way, the Lead Company shall coordinate the preparation and filing of a single, comprehensive set of engineering drawings;
- Certification of Application to the Department of Public Works and Electrical Department for all required permits related to street openings, Network location, safety of proximate structures, street repair and resurfacing, wiring, and connections;
- Maintenance plan demonstrating that operations and maintenance activities will not adversely impact public ways or public rights of way; other Networks; energy and water transmission conduits, pipelines, and structures; tunnels; and storm drain and sanitary sewer systems and structures.
- As specified in Section 5, every Application must demonstrate that there is no unused or vacant Telecommunications Service Network capacity available as an alternative to construction, expansion, addition to, rebuilding, or conversion of Network structures;
- As specified in Section 5, every Application must include a Telecommunications Services Forecast;
- Every Application shall identify the project manager, including, name, title, business address, telephone number, and emergency telephone number; and
- Every Application shall include a statement of the proposed start date and time for construction.

4.3 As specified in Section 5, every Applicant for a Grant of Location shall enter into a process of consultation and mitigation with the City through the P&C Commission. This process will be conducted concurrently with and as part of the Application review and is intended to assist the City with environmental and engineering monitoring and mitigation and direct cost recovery or in kind services.

### **5. COMMISSION REVIEW AND GRANT OF LOCATION**

5.0 To promote rational, comprehensive, and systematic development and use of Networks; to minimize disruption, hazard, and damage; to make best use of limited conduit space; and to afford competitive access to and competitive neutrality in the use of public ways and public rights of way, every Applicant for a Grant of Location shall prepare and submit a five year Telecommunications Services Forecast as part of the Application.

- The forecast shall include an inventory of all unused or vacant Telecommunications Services Network capacity. The inventory shall include all unused or vacant Telecommunications Services Network capacity for which public information is available.

The inventory shall also disclose all unused or vacant Telecommunications Services Network capacity under the control of or used by the Applicant or its related companies even if such information has not been made public prior to the Application.

- The forecast shall assess the demand for Telecommunications Services by all public and private users within the City, including the City of Cambridge and its departments and agencies, and shall include a forecast of conduit capacity sufficient to meet 125% of forecast demand by all users. The five-year period to be studied for the forecast shall begin with the in service date proposed by the Applicant.
- The forecast shall include an assessment of the need for new, expanded, rebuilt, reconstructed, or additional Telecommunications Services Network capacity in place of use of any unused or vacant capacity which has been identified.
- Where more than one Applicant is involved in a project or a common trench or where multiple projects are proposed for the public way or public right of way, the Lead Company shall coordinate the preparation and filing of a single, comprehensive set forecast.

5.1 The P&C Commission shall review and may modify and approve the Telecommunications Services Forecast. The Applicant shall be responsible for the reasonable cost of the City's review of the forecast.

5.2 The P&C Commission shall, in the reasonable exercise of its discretion and in furtherance of its obligations and authority under this policy, determine the use of the 25% reserve capacity in each newly constructed conduit.

5.3 Construction, operation, and maintenance of Telecommunications Services Networks and ongoing regulatory oversight by the City generate costs which are D.Q reimbursed directly or through taxation. Also, construction, operation, and maintenance may raise engineering, health and safety, and environmental issues which are beyond the City's staff resources. Consequently, every Applicant for a Grant of Location shall participate in a process of consultation and mitigation directed to consideration of:

- an annual maintenance reimbursement payment to the City;
- in kind provision of technical assistance and dedicated Networks and Telecommunications Services to the City;
- environmental and environmental health and safety monitoring and mitigation programs; and
- engineering monitoring and mitigation programs.

5.4 The Grant of Location will include an Order of Conditions which incorporates, but is not limited to the following provisions:

- reimbursement of all reasonable costs associated with regulatory review and oversight; insurance; and all public works, electrical, and public safety costs associated with street opening, traffic control, utility and conduit location, and utility permitting, monitoring, and relocation.
- Indemnification of the City of Cambridge for all costs, damages, and liability associated with property damage or personal injury claims of any sort related to the Network project.

- A requirement that the Applicant shall obtain permits from the Department of Public Works and Electrical Department for all project work related to street openings, Network location, safety of proximate structures, street repair and resurfacing, wiring, and connections; and
- A requirement that the Applicant shall make unused or vacant conduit capacity available for sale or leased use by other Networks and Networks developers.

5.5 After issuance of a Grant of Location, construction must begin within 60 days and be substantially completed within a construction period proposed by the Applicant and approved by the P&C Commission.

## **6. UNUSED OR VACANT CONDUIT CAPACITY**

6.0 Unused or vacant conduit capacity must be made available for leased use by other Networks or Network developers or Applicants at a reasonable commercial price, generally not to exceed actual costs for development, construction, operation, and maintenance, plus a reasonable risk and profit margin.

6.1 Every Networks owner or Networks operator shall make an information filing of its leased use charges for currently unused or vacant conduit capacity with the P&C Commission on or before June 30th of each year and within 30 days of any change in leased use charges. Leased use charges should be consistent with the P&C Commission's policy of assuring competitive access to and competitive neutrality in the use of public ways and public rights of way. The P&C Commission reserves the right to review and seek enforcement against leased charges or Networks owner or operator practices which are inconsistent with this policy or with the requirements of state and federal telecommunications acts.

## **7. POLICY IMPLEMENTATION**

7.0 Where several Applicants are involved with a proposed Network or common trench project, they may designate a Lead Company. Alternatively, the first Applicant for a Grant of Location will be the Lead Company with the overall operational responsibility for coordination of the Applications, permitting, construction, wiring, operation, and maintenance at the requested location. The P&C Commission will communicate with only the Lead Company concerning all aspects of Network project.

7.1 Within five business days of filing of an Application under Section 4, the Applicant or the Lead Company must notify all companies on file with the P&C Commission and must make the same notice by publication in a newspaper of general circulation in the City of Cambridge -with copies of all such notices to the P&C Commission. The notices shall be approved by the P&C Commission and shall contain a locus map and a general description of the proposed Network. The Applicant or Lead Company shall invite interested firms to join with it, and interested companies, institutions, and entities shall have a minimum of 30 days from publication of the notice to respond with a statement of intent to enter into a joint construction project, to share costs, and to use jointly some or all of the proposed Network or common trench.

7.2 The Applicant or Lead Company shall enter into good faith negotiations with interested companies, institutions, and entities for joint construction, cost sharing, and joint conduit use. All interested companies ("Participants") shall work with the Lead Company to submit a single, revised, and coordinated Application to the P&C Commission.

7.3 Applicants, Lead Companies, Participants, holders of Grants of Location, Networks, and Network developers shall, at their sole cost and expense, comply with all a rant of Location will be the Lead Company with the overall operational responsibility for coordination of the Applications, permitting, construction, wiring, operation, and maintenance at the requested location. The P&C Commission will communicate with only the Lead Company concerning all aspects of Network project.

7.4 All conduit construction, wiring, cabling, connections, and related structures and uses shall meet City of Cambridge electrical and engineering requirements, including those of the Institute of Electrical and Electronics Engineers, Inc. ("IEEE"). Among engineering specifications that will ordinarily be required, manholes or hand holes shall be installed at major intersections, or other designated locations, at such appropriate intervals as the P&C Commission may deem necessary. Laterals and service connections shall terminate at the nearest manhole, hand hole or duct bank and shall be located to minimize traffic disruption and future street openings. The use of pedestals or any surface mounted structures shall require advance P&C Commission approval. Manholes and hand holes shall be shared with all companies, institutions, and entities licensed to occupy the designated locations. Single use manholes and hand holes will not be constructed unless special permission is granted by the P&C Commission.

7.5 Generally, all work under a Grant of Location must be completed within 90 days of the approved start date unless that is in conflict with the P&C Commission's policies barring winter, holiday season, or special events construction. If work has not been initiated or completed within the time approved by the P&C Commission, the Grant of Location shall expire; provided that an extension may be authorized in writing by the P&C Commission.

7.6 When Network project work is in progress, the P&C Commission or its delegate may inspect work prior to closing of street openings. Similarly, the P&C Commission or its delegate may inspect a Network at any time. The City retains the right, upon determination that a condition is hazardous to public health or safety, to revoke a Grant of Location, to order remedial work, or to halt work or Network operations.

7.7 The Lead Company and Networks shall submit to and maintain with the P&C Commission current as-built drawings for their conduits. As-built drawings shall be submitted within 30 days of completion of any Telecommunications Services conduit, completion of a substantially rebuilt conduit, or completion of a conduit which has been expanded, added to, or converted to Telecommunications Services. As built drawings should be submitted also in an electronic format which can be read directly to the City's Government Information Services ("GIS") database system.

7.8 A Grant of Location for a conduit is not an authorization to install Networks cabling. Installation or substantial replacement, expansion, addition, or conversion of cables requires a Grant of Location from the P&C Commission.

7.9 City policy prohibits excavation of new street surfaces and sidewalks within five years of construction or reconstruction. Lead Companies, holders of grants of location, and Participants shall comply with this policy. Exceptions may include emergency repairs or other unforeseen need. In such event, the P&C Commission will require reconstruction to an "as new" condition.

7.1 In the case of any public way, street, right of way, or sidewalk excavation, Lead Companies, holders of Grants of Location, and Participants shall reconstruct the way, street, right of way, and sidewalk to pre-construction condition; provided that the P&C Commission may require more substantial

reconstruction to avoid damage, a condition of hazard, or nuisance.

7.11 A Grant of Location will not be issued to an Applicant if the P&C Commission determines that any other interested company, institution, firm, or entity has been excluded from participating in a Network project without good cause.

7.12 A Grant of Location will not be issued and may be revoked if the P&C Commission determines that an Applicant, Lead Company, or other Participant has failed or refused to make unused or vacant conduit capacity available for sale or leased use by other Networks or Network developers at a reasonable commercial price and in a competitively neutral manner.

7.13 Networks developers may apply to the P&C Commission at any time for authorization to occupy unused, vacant, or reserve conduit capacity; and the P&C Commission will enforce the requirements of Section 6. Where unused or vacant capacity is not reasonably available, the P&C Commission will permit Application for construction of new conduit in accordance with this Siting Policy.