

FIBER LICENSE AGREEMENT IN CONNECTION WITH THE DEPLOYMENT AND OPERATION OF A CITY-WIDE WIRELESS NETWORK

This License Agreement ("Agreement") is entered into, effective as of _____, 2007, ("Effective Date"), by and between the City of Sacramento, California, a chartered municipal corporation (the "City") and Sacramento Metro Connect LLC, a corporation ("Licensee"). The City and Licensee may be referred to herein individually as a "Party" or collectively as the "Parties" to this Agreement.

RECITALS

WHEREAS:

- A. The City of Sacramento has constructed within its jurisdictional boundaries a Fiber Optic System. The City's Fiber Optic System facilitates the application of telecommunications services for traffic control, surveillance cameras, utilities facilities monitoring and controlling, network connectivity, and communication purposes among all its various facilities and potentially other agencies and institutions. The Fiber Optic System meets the City's current and immediate future fiber optic cable needs. Title to the Fiber Optic System and every part thereof is vested exclusively in the City.
- B. The City's Fiber Optic System may have excess capacity fiber strands available for licensing. The City may construct, install, operate, maintain, repair, disconnect, replace and remove facilities, cable and other equipment associated with the Fiber Optic System.
- C. Licensee is now duly authorized, licensed or otherwise qualified to operate telecommunications as required by applicable state or federal laws. The City and Licensee have entered into an Agreement for the Design, Deployment and Operation of Wireless Broadband Network in Sacramento, City Agreement No. 2007-0630 ("Wireless Network Agreement"), dated June 21, 2007, and Licensee desires to use fibers from the City's Fiber Optic System to support the Wireless Broadband Network.

AGREEMENT PROVISIONS

In consideration of the Recitals above and the mutual promises contained in the Wireless Network Agreement, the Parties agree as follows:

ARTICLE 1. DEFINITIONS AND EXHIBITS

- 1.1 DEFINITIONS.** For purposes of this Agreement and all Exhibits, the terms, phrases, words and their derivations, have the meanings set forth herein and apply generally to this Agreement. Other terms, phrases, words and their derivations shall have the meaning given in other portions of this Agreement.

Words not defined in this Agreement shall be given their common and ordinary meaning. The word "shall" is always mandatory.

Building Entrance

The exhibit of Licensable or Licensed Fiber to a meet-me-box, a panel inside a privately owned building or other privately owned point-of-presence.

Building Main Distribution Facility (Building MDF)

The location in a building where (i) cabling entering the facility from the outside is terminated; (ii) the main facility multiplexer, telephone switch, UPS, and/or network switch/router are located; and (iii) if applicable, cabling is terminated to connect to secondary cabling termination points in a building.

Dark Fiber

The individual strands of telecommunications optical fiber cable that the City installed in the Fiber Optic System that is not being used but is capable of the transmission of voice and data information via electromagnetic waves in the visible light spectrum ranges when connected to the proper telecommunications transmission and receiving equipment.

Demarcation Point Construction Fee

The pro-rata share of total construction cost for each Demarcation Point within the Fiber Optic System requested by Licensee. The Fee includes the proportionate share of cost for each manhole requested plus the proportionate share of cost for each splice case and the cost for each splice requested.

Demarcation Point

The physical point in the Fiber Optic System at which Licensee splices its fiber(s) into the Fiber Optic System.

Emergency Restoration Costs

The cost incurred by the City to repair any portion of the Fiber Optic System if any fiber strand(s) in use by Licensee is damaged or fails to function for transmission of communications.

Emergency Restoration Fee

Licensee's pro-rata share of the Emergency Restoration Costs incurred by the City.

End User Equipment

Equipment owned or controlled by Licensee which is required for Licensee's access and use of the Fiber Optic System.

Excess Fiber

The amount of Fiber Feet in the System that exceeds City's requirements.

Fiber Feet

The sum of the length(s) in feet of one or more fiber strand(s).

Fiber Optic System

The optical fiber infrastructure that is currently in place underground in the City conduits in the general route set forth in Exhibit 1 to this Agreement and which is capable of the transmission of information and voice data via electromagnetic waves in the visible light spectrum range, including all necessary associated transmission and receiving equipment. Exhibit 1 is for illustration, not-to-scale, and for convenience purposes only.

Licensed Fibers

The optical fiber strands licensed to Licensee as described in Exhibit 4.

Licensed Infrastructure

The combination of Licensed Fibers, Demarcation Points, Building Main Distribution Facilities or Building Entrances which Licensee is entitled to use pursuant to this Agreement or pursuant to approved amendments.

Licensee's Infrastructure

Any conduit, fiber, premises, buildings, or meet-me-boxes belonging to Licensee.

Maintenance and Operations Fee

Licensee's pro-rata share of the actual costs incurred by the City for the maintenance and operation of the Fiber Optic System.

1.2 EXHIBITS. The Exhibits to this Agreement are incorporated by reference as though set forth fully in this Agreement, notwithstanding that such Exhibits may not be physically attached to this Agreement. These Exhibits are listed as follows:

- Exhibit 1 Route map of City's Fiber Optic System
- Exhibit 2 Licensed Demarcation Points
- Exhibit 3 Licensed MDF
- Exhibit 4 Licensed Fibers
- Exhibit 5 Engineering Request Form for connecting to an existing/new Demarcation Point or additional Licensed Infrastructure
- Exhibit 6 Fiber Specifications and Performance Standards
- Exhibit 7 Notice of Completion/Acceptance/Rejection
- Exhibit 8 Additional Licensed Fiber Request Form
- Exhibit 9 Personnel Contact Information

ARTICLE 2. GRANT AND SCOPE OF LICENSE

2.1 Grant. Subject to the provisions of this Agreement, the City grants to Licensee, and Licensee accepts from the City, the right and privilege to use the Licensed Fibers, Demarcation Points and Building Main Distribution Facilities (referred to herein collectively as "Licensed Infrastructure") and any additional Licensed Infrastructure later licensed to Licensee per Articles 2.2, 2.3, and 2.4.

2.2 Additional Licensed Fibers. In the future, the City may license additional Dark Fibers requested by Licensee during the remainder of the term of this Agreement, if capacity is available and all of the following conditions are met:

2.2.1 Licensee will be granted a license for use of additional Dark Fibers so long as the City's excess capacity remains available and Licensee is not in material breach of this Agreement or the Wireless Network Agreement. If Licensee is currently, or in the past has been, in material breach of this Agreement or the Wireless Network Agreement, then it is within the discretion of the City's Chief Information Officer (CIO) to allow or deny the license of additional Dark Fibers to Licensee.

2.2.2 Licensee shall make a request for additional Dark Fibers by submitting the Request Form, attached as Exhibit 8, executed by a person authorized to bind Licensee ("Authorized Representative"). The price and any additional terms and conditions of licensing additional Dark Fibers shall be negotiated in good faith and agreed upon by the Parties. Upon mutual agreement by the Parties, any modifications shall be witnessed by a Supplemental Agreement signed by authorized representatives of the Parties and a revised Exhibit 4. All other terms and conditions set forth in this Agreement will apply to the additional Licensed Fibers.

2.3 Demarcation Points. Licensee shall have use of, and access to, the Licensed Fibers through Demarcation Points listed on Exhibit 2. All Demarcation Points are an integral part of the Fiber Optic System and are the property of the City.

2.3.1 Cost of Demarcation Points. The City will provide Licensee with the Demarcation Points listed on Exhibit 2 at the cost set forth in this Agreement.

2.3.2 Splicing. Upon receiving construction approval from the City, Licensee shall be responsible for infrastructure construction and termination of its fibers from the City's Demarcation Points to Licensee's facilities, including but not limited to trenching, boring, patch panels, power distribution units, fiber jumpers, network equipment, etc. All Licensee's infrastructure construction works shall be in compliance with City's Standard Specifications. All splicing and terminations within the City's Fiber Optic System shall be solely done by the City. Ownership of fiber on the City's side of the Demarcation Points shall be vested with the City. When applicable, Licensee shall pay the City the fees specified in Article 4 "License Payment and Other Fees".

2.3.3 Additional Demarcation Points. If, after execution of this Agreement by the Parties, Licensee desires to attach to other Demarcation Points that were not listed in Exhibit 2, then Licensee shall submit an Advanced Engineering Request Form (Exhibit 5) executed by an Authorized Representative for Licensee. The City will cooperate in accommodating Licensee's requests for additional Demarcation Points so long as, in the judgment of City, adequate space exists to attach Licensee to that

Demarcation Point, the request for additional Demarcation Points is not excessive, and the Additional Demarcation Points do not materially and adversely affect the City's Fiber Optic System. Any additional terms and conditions of licensing Additional Demarcation Points shall be negotiated and agreed upon by the Parties and set forth in Exhibit 5. The price for Additional Demarcation Points is set forth in Article 4.4.2. Upon mutual agreement by the Parties, any modifications shall be witnessed by a Supplemental Agreement signed by authorized representatives of the Parties and a revised Exhibit 2. All other terms and conditions set forth in this Agreement will apply to the Additional Demarcation Points.

- 2.4 Building Entrances and City Point-of Presence.** The City will deliver Licensee to the Building Main Distribution Facility ("Building MDF"), also known as Telecommunication Closet or Point-of-Presence, at the locations so designated on Exhibit 3.
- 2.4.1** Some City Demarcation Points are at the Building MDF and so long as the City has space available in its rack at the MDF, City will agree to provide Licensee with space on that Building MDF to terminate its fiber. However, the number of Licensee's fibers to be connected at the specific Building MDF shall be set forth in Exhibit 4.
- 2.4.2** Some City Demarcation Points are not at the Building MDF but may be located in meet-me-boxes located on an easement near the building. The City shall only deliver Licensee to the meet-me-box at that City Demarcation Point. Licensee shall be responsible for negotiating the Right-of-Entry and securing the Building Entrance on its own behalf and providing the City with any rights necessary for City to deliver fiber to Licensee at the Building Entrance.
- 2.4.3** Licensee shall be responsible for obtaining an agreement on its own behalf to enable Licensee's Infrastructure to be located within a privately-owned building.
- 2.5 Dedicated Dark Fibers.** Licensee shall use its Licensed Fibers only for installing, operating, and supporting the Wireless Broadband Network set forth in the Wireless Network Agreement. Any other uses and/or applications of the Licensed Fibers are prohibited.
- 2.6 No Exclusivity.** Nothing in this Agreement limits the City's right of use or right to license Demarcation Points, Building Main Distribution Facilities, conduit or Dark Fibers to others.
- 2.7 Limitations.** This is a license for the use of the Licensed Infrastructure only, subject to the terms and conditions herein. City is not transferring or granting to Licensee any other property interest in the Licensed Infrastructure including any fee, easement or any franchise rights. This Agreement is not a contract for fiber service. This is also not a franchise agreement for providing cable services.

2.8 No Agency. Licensee is not a City's agent and shall have no authority, express or implied, to act as agent of City or any of its departments for any purpose. The City is not Licensee's agent and shall have no authority, express or implied, to act as agent of Licensee for any purpose.

ARTICLE 3. TERM

3.1 Effective Date of Agreement. This Agreement shall be binding on the Parties beginning on the Effective Date.

3.2 Term of License. The term of this Agreement shall commence on the Effective Date and shall run concurrently with the term of the Wireless Network Agreement, including any renewal terms. Upon expiration or termination of the Wireless Network Agreement, this License Agreement shall also expire or terminate.

3.3 Renewal Terms. Provided Licensee is not in default of any of the material terms or provisions of this Agreement (including but not limited to payment of all fees and charges) beyond the applicable cure period, Licensee may renew this Agreement as set forth in the Wireless Network Agreement.

ARTICLE 4. LICENSE PAYMENT AND OTHER FEES

4.1 Licensed Fiber Maintenance Fees. Licensee shall make annual payments of \$ 0.055 per linear foot of Licensed Fiber strand used for City's ongoing fiber maintenance administration. The license payment is based on the total number and length of the Licensed Fiber strand used (fiber linear feet calculated to the nearest foot) as shown in Exhibit 4.

4.2 Payments. Payments shall be paid yearly on the 15th day of July for the period beginning July 1 through June 30 of the preceding year. For the initial year, Licensee shall pay to the City a pro rata amount of the costs listed in Exhibit 4.

4.2.1 The City shall send Licensee an invoice thirty (30) calendar days prior to the end of the calendar year as a courtesy reminder of the total amount of the payment due. If Licensee does not receive such an invoice, it is still bound to pay the annual payment in a timely manner, which amount is set forth in Exhibit 4. Licensee shall make each annual payment to the City under this Agreement in a timely manner to:

City of Sacramento
Revenue Administration Division
915 I Street
Sacramento, CA. 95814

4.2.2 If annual payment is not paid as required herein, simple interest on unpaid, undisputed amounts of the annual payment shall accrue, until paid, at one percent (1%) per month.

4.3 License Payment for Renewal Term. Licensee may elect to renew this License as set forth in section 3.3 for that Renewal Term.

4.3.1 Price Inflation Adjustment. During any Renewal Period, the rate shall be adjusted annually for price inflation ("PIA") for each successive year after the first year of the Renewal Term. The base for computing the PIA shall be the most current Consumer Price Index for *All Urban Consumers* for the San Francisco-Oakland-San Jose CMSA, published by the United States Department of Labor, Bureau of Labor Statistics available on December 1 of each year.

4.3.2 Market Rate Adjustment. The rate may be adjusted at the commencement of each Renewal Term to reflect prevailing market conditions at that time. The change in the rate in the first year of any such rate adjustment period shall not exceed plus or minus 20 percent relative to the average rate charged in the immediately preceding five-year period. For a rate adjustment to take effect, the Parties shall mutually agree upon the terms and rates.

4.4 Construction Costs and Engineering Fees. The City charges for engineering services and construction of infrastructure under certain circumstances as set forth below. Unless otherwise specified below, payment for those services shall be invoiced upon completion by the City, and payment of that invoice is due thirty (30) days from the date on the invoice. If payment of the invoice is not paid on the Due Date, then simple interest on the unpaid, undisputed amounts shall accrue until paid, at one percent (1%) per month.

4.4.1 Preliminary Engineering Fees. Subsequent to execution of this Agreement, it is anticipated that the City will be required to provide to Licensee Preliminary Engineering Services. The City will perform these Preliminary Engineering Services and will render an invoice every thirty (30) days detailing the hours of Preliminary Engineering Services performed for Licensee at a department prevailing rate. Licensee shall pay for the Preliminary Engineering Services performed, which payment is due within thirty (30) days of date on the invoice.

4.4.2 Demarcation Points. If a Demarcation Point currently exists on the City's Fiber Optic System and if space is available for Licensee to attach at that Demarcation Point, then the charge to Licensee is the actual cost of splicing plus ten percent (10%). If a Demarcation Point is not available and if the City agrees to construct a Demarcation Point at the location desired by Licensee, then Licensee shall pay all the costs of engineering services and costs of construction to that Demarcation Point, plus ten percent (10%).

- 4.4.3 Building Entrances.** If the City has excess fibers available to a Building Entrance in privately-owned locations and Licensee desires to have an entrance at that location, then Licensee is responsible for negotiating the right of entry and construction to the Building Entrance. The City may agree to establish a new Demarcation Point via a meet-me-box for connecting to the Building Entrance at the location desired by Licensee. Licensee shall pay all the actual costs of engineering services and actual costs of construction of the requested Demarcation Point, plus ten percent (10%).
- 4.5 Third Party Charges.** Licensee shall reimburse the City for charges assessed or imposed on the City by third parties, including, but not limited to, any fees for Building Entrances directly attributable to Licensee's entrance into that building which may be incurred by the City in accommodating Licensee's infrastructure requirements within the City, or as required by law relating to this Agreement. City will advise Licensee, in advance, of potential or anticipated costs imposed by third parties for accommodating Licensee's infrastructure and which are directly attributable to Licensee, to the extent City is aware of those charges in advance and can obtain an estimate from that third party. If Licensee does not agree to the charge imposed by the third party, then Licensee shall be responsible for negotiating with that third party and shall hold the City harmless from any claim of delay in completing the subject work due to Licensee's negotiations of the third party charges. If Licensee chooses not to pay the third party charges, then City shall not perform the work requested by Licensee.
- 4.6 Taxes and Franchise Fees.** None of the annual payments charged to Licensee pursuant to this Agreement includes any tax or franchise fee charged by any governmental entity. Licensee shall be solely responsible for paying any and all taxes, franchise fee or assessments by any governmental entity related to the Licensed Infrastructure, if any, when due.
- 4.6.1** The City represents that currently, there is no tax imposed by the City that would be levied on Licensee associated with this Agreement. Utilizing the Licensed Fibers to provide cable services without a franchise agreement constitutes a material breach of this Agreement and a violation of the Sacramento Municipal Code.
- 4.6.2** Notice is hereby given that this Agreement may create possessory interest subject to property taxation and in such case the party obtaining such interest expressly agrees to pay any property tax levied on such interest.

ARTICLE 5. CONSTRUCTION AND ACCEPTANCE OF LICENSED INFRASTRUCTURE

- 5.1 Notice of Completion.** City has constructed and shall continue to cause to be constructed the Fiber Optic System. City shall provide Licensee in writing a Notice of Completion (Exhibit 7) upon completion of construction of the configuration of all of the Licensed Infrastructure. If Licensee requests City to

construct and/or license to Licensee additional Licensed Infrastructure, the City shall provide Licensee with a Notice of Completion as soon as construction is complete. The City shall use its commercially reasonable efforts to complete construction of the Licensed Infrastructure and any additional Licensed Infrastructure. Upon the completion of construction of the foregoing, the City shall perform testing in accordance with standards and procedures enumerated in Exhibit 6.

- 5.2 New Construction.** Upon the completion of construction of any Licensed Infrastructure, the City shall promptly conduct construction tests to verify that the particular item meets the Performance Specifications set forth in Exhibit 6 ("Post-Construction Testing"). The results of such tests will be provided to Licensee concurrently with the Notice of Completion.
- 5.3 Existing Fiber Optic System.** If any Licensed Infrastructure is to be provided from the Fiber Optic System that is not newly constructed, the City shall perform verification testing to verify that the item to be licensed meets the Performance Specifications set forth in Exhibit 6 ("Verification Testing"). The results of such tests shall be provided to Licensee within ten (10) business days of completion thereof. The cost to perform required verification test will be included in the Preliminary Engineering Fees.
- 5.4 Licensee's Acceptance Testing.** Licensee may conduct its own testing of the Licensed Infrastructure or of the additional Licensed Fibers, Demarcation Points, Building MDF or Building Entrances upon receipt of the Notice of Completion as to any of those items in order to verify that the Licensed Infrastructure or the individual item meets the Performance Specifications set forth in Exhibit 6. Licensee is solely responsible for ensuring that Licensee has installed the necessary Licensee Infrastructure or obtained required Building Entrances to perform its own Acceptance Testing.
- 5.4.1** Licensee shall complete Acceptance Testing within thirty (30) calendar days of the later of receipt of (a) the Notice of Completion as to the Licensed Infrastructure or any additional Licensed Fibers, Demarcation Points, Building MDF, or Building Entrances; or (b) receipt of the results of the City's Post-Construction Testing or Verification Testing as to the same. The time for Licensee to perform Acceptance Testing shall not be extended because Licensee has failed to install Licensee Infrastructure or obtain entrance into private locations (unless City has specifically assumed, in writing, that responsibility for gaining that entrance into a Building Entrance).
- 5.4.2** The City will participate in joint testing, if requested, in each case at Licensee's sole cost and expense. Licensee shall provide City with a minimum of forty-eight (48) hours notice if it desires City to participate in joint testing.
- 5.4.3** If Licensee shall have failed to complete Acceptance Testing within the time period set forth in this Article, it shall be deemed to have waived its rights to conduct Acceptance Testing as to the Licensed Infrastructure

that is the subject of the Notice of Completion and said Licensed Infrastructure shall be deemed accepted by Licensee upon expiration of such thirty-day period;

5.4.4 If Licensee chooses to perform Acceptance Testing, Licensee must provide the City in writing a Notice of Acceptance/Rejection (Exhibit 7) within thirty (30) calendar days of the later of the date of receipt of (a) the Notice of Completion as to the Licensed Infrastructure or any additional Licensed Fiber, Demarcation Point, Building MDF, or Building Entrance, or (b) the results of the City's Post-Construction Testing or Verification Testing as to the same. Licensee shall indicate in the Notice of Acceptance/Rejection what portion of the Licensed Infrastructure or which of the additional Licensed Fibers, Demarcation Points or Building Entrances failed to pass the Acceptance Testing and the reasons thereof.

5.5 Notice of Rejection. In the event Licensee delivers a Notice of Rejection, City shall use its commercially reasonable efforts to correct or repair the Licensed Fibers, Demarcation Points or Building Entrances that are not in compliance. Thereafter, City shall provide Licensee a Notice of Completion with respect to the particular item previously identified in Licensee's Notice of Rejection as not in compliance. The foregoing procedure shall apply again and successively thereafter until City, in its sole judgment, has remedied all defects or failures that are not substantially in conformance with the Performance Specifications set forth in Exhibit 6. Once compliance with the Performance Specifications set forth in Exhibit 6 is achieved and demonstrated by the City, or if the cited nonconformities do not materially affect the Licensed Infrastructure's performance, as determined by City consistent with industry standards, Licensee shall within five (5) business days provide City with an executed Notice of Acceptance. Licensee shall not unreasonably withhold acceptance.

5.6 Use of Fiber. Unless otherwise agreed by the Parties, Licensee may not use any part of the Licensed Infrastructure until acceptance of the entire Licensed Infrastructure has been received by the City from Licensee.

5.6.1 Licensee shall use the Licensed Infrastructure as specified in Article 2.5. Licensee shall not use the Licensed Infrastructure to provide cable services unless and until it has obtained a franchise agreement from the City of Sacramento. The City reserves the right to require a franchise agreement for any application that may later be allowed by changes in federal or state law.

5.7 Date of Delivery. Upon the use of any Licensed Fibers or upon receipt by the City of an executed Notice of Acceptance, the Licensed Infrastructure that is the subject of the Notice of Acceptance shall be deemed to have been ready for immediate use and interconnection by Licensee to Licensee's Infrastructure as of the Date of Delivery. The earliest of the date on which Licensee first uses the Licensed Fiber, or the date that the City sent the Notice of Completion to Licensee (which was subsequently executed by Licensee as accepted) shall be the "Date of Delivery" of the affected Licensed Infrastructure. Payment to the City for engineering and construction costs for the Licensed Infrastructure that is

the subject of the Notice of Acceptance shall be due thirty (30) days from Date of Delivery.

- 5.8 As-Built Drawings.** The City will not share detailed as-built drawings of its Fiber Optic System with the public, nor will it provide those as-built to Licensee. A general configuration of Licensee's route is attached hereto as Exhibit 1.

ARTICLE 6. LICENSEE'S INTERFACE WITH CITY'S INFRASTRUCTURE

6.1 Licensee's Fiber Route

6.1.1 Any time Licensee applies for a permit for additional fiber routes within the City boundaries for interconnection to the Fiber Optic System, Licensee shall, in addition to any other required City permit processes, submit a "Licensed Fiber Request Form" substantially in the form of Exhibit 8 to the City Project Manager identified in the Wireless Network Agreement. Licensee shall also provide interconnection status information as may be requested by the City Project Manager from time to time. To the extent Licensee deems any such information is Confidential Information, it shall comply with the provisions of Article 20 of this Agreement. Following completion of the installation of Licensee's Infrastructure and fiber route within the City, Licensee shall, within thirty (30) calendar days of completion and to the extent necessary, identify the location of Licensee's Infrastructure located within the City, providing the City with information accurately reflecting the actual location of Licensee's Infrastructure and fiber route configurations located within the City ("As-Built Infrastructure"). Licensee's As-Built Infrastructure will be treated as Confidential Information, will be labeled as such and shall be treated as set forth in Article 20. Licensee's As-Built Infrastructure shall be used solely by the City for purposes of joint testing and trouble diagnosis (e.g., to determine trouble origination as City or Licensee's facility problem).

6.1.2 From time to time either Party may request that the other Party perform installation work on its behalf as an adjunct to installation work occurring and related to their respective Infrastructures. Each Party will cooperate with the other in accommodating such requests, but is not obligated to do so if it is deemed to introduce delays or complications to the planned work. Any costs incurred by one Party on behalf of the other Party shall be documented and then reimbursed by the Party receiving the benefit, with the exception of personnel time or overhead unless each Party has explicitly agreed that personnel time be included and that time exceeds eight (8) hours.

6.2 Licensee's Infrastructure. Licensee shall assume ownership, installation, and maintenance responsibility for Licensee's Infrastructure beginning at least one foot from City-owned Demarcation Points, splice cases, pull boxes, or other City-owned structures.

- 6.2.1** At each Demarcation Point, the City shall provide a capped, stubbed-out conduit, 3" to 4" in length, from the Fiber Optic System to the Demarcation Point.
- 6.2.2** At each capped, stubbed-out conduit, City shall provide a fiber drop cable in the amount of thirty (30) feet. Licensee shall be responsible for splicing its own fiber to that thirty-foot drop, unless the Parties agree otherwise in writing.
- 6.2.3** Licensee shall be responsible for installation and interconnection of fiber within structures located on Licensee's side of the Demarcation Points, which structures are the sole responsibility of Licensee.
- 6.2.4** Installation of conduit, fiber, splice cases and other structures on Licensee's side of the Demarcation Points shall be the responsibility of Licensee, and title shall be vested with Licensee, if and as appropriate.
- 6.3 Licensee Covenants.** Except as expressly authorized by applicable laws or this Agreement, in the exercise and performance of its rights and obligations under this Agreement, Licensee covenants and agrees:

 - 6.3.1** Licensee shall comply with all applicable federal, state and local laws in the exercise and performance of its rights and obligations under this Agreement. Licensee shall comply with any City permit issued to Licensee in connection with the location of Licensee's Infrastructure within the public right-of-way. Licensee shall obtain, as required, any and all necessary approvals for the design, construction, installation, operation and testing of Licensee's Infrastructure to be located within the City.
 - 6.3.2** Licensee shall not interfere in any manner with the existence and operation of any and all public and private rights-of-way, sanitary sewers, water mains, storm drains, gas mains, poles, aerial and underground electric and telephone wires, electroliers, cable television, and other telecommunications, utility, and municipal property without the express written approval of the owner or owners of the affected property or properties. Licensee shall not do or permit anything to be done by anyone under its direct control or doing work on its behalf, other than the City, its employees, subcontractors, and agents, to do anything that which may in any way obstruct or interfere with the rights of any person located within the public right-of-way, or injure them, or use or allow the public right-of-way to be used by anyone under its direct control or doing work on its behalf for any improper or unlawful purpose. Notwithstanding the foregoing, this shall not be construed to prohibit Licensee from installing Infrastructure within the City or other Agreement, provided however that this sentence is not intended nor shall it be construed to increase Licensee's rights under this Agreement.
 - 6.3.3** Licensee shall keep all parts of the Licensed Infrastructure that belong to City free of any liens that may be created or which may attach as the result of the acts or omissions of Licensee, its employees, subcontractors

or agents. If such lien is filed, Licensee shall indemnify and hold harmless City from any and all costs to remove such lien including, but not limited to, reasonable attorneys' fees.

- 6.3.4** Licensee shall be permitted to present this Agreement for purposes of obtaining financing; however, if any entity to whom this Agreement has been presented attempts to perfect an interest therein, that entity must comply with the provisions of Article 15 of this Agreement. Licensee shall not, under any circumstances pledge or present the actual Dark Fiber or Licensed Infrastructure as an asset to anyone for any purpose. The Licensed Infrastructure is public property owned by the City and shall not be pledged to any party.
- 6.3.5** Licensee shall not do or permit anything to be done by anyone under its direct control or doing work on its behalf, other than the City, its employees, subcontractors, and agents, in, on or about the Licensed Infrastructure or Licensee's Infrastructure located within the City, which is prohibited by, or will in any way conflict with, any laws now in force by the City or which may hereafter be enacted or promulgated by an entity other than the City. However, if any laws, rules, ordinances, resolutions, or other regulations which are enacted or promulgated by a governmental entity (other than the City) after the Effective Date of this Agreement materially (a) change the economics of this Agreement, or (b) interfere with Licensee's rights provided hereunder, City shall provide Licensee sixty (60) days notice of the required change and if the Licensee does not agree to comply, Licensee shall have the right to terminate this Agreement without penalty.
- 6.3.6** Licensee shall not, in connection with this Agreement, commit, cause, maintain or permit nor suffer, or allow to be committed, caused, maintained or permitted by anyone under its direct control or doing work on its behalf, other than the City, its employees, subcontractors, and agents, any waste, abuse or destructive use within the public right-of-way, nor any public or private nuisance, nor any other act or thing which may disturb the quiet enjoyment of any other person lawfully using the public right-of-way,
- 6.3.7** Licensee shall be solely and fully responsible for the reporting of all hazardous materials re-licenses to the appropriate agencies, when such re-licenses are caused by, or result from, Licensee's activities or by anyone under its direct control or doing work on its behalf, other than the City, its employees, subcontractors, and agents. Licensee shall take all necessary precautions to prevent any hazardous materials used by Licensee or by anyone under its direct control or doing work on its behalf, from entering into any storm or sewage drain system or from being re-licensed within the public right-of-way. Licensee shall be solely responsible for any cleanup and/or remediation required by any federal, state or local agency.

- 6.4 Cooperation.** Licensee shall use reasonable commercial efforts to cooperate with the City concerning construction, installation and testing activities involving other licenses or licensees under separate agreements with the City. City will provide Licensee with reasonable advance notice, in writing, of the necessity for any such cooperation. The City shall reimburse Licensee for any and all documented direct costs and expenses incurred as a direct consequence of the City requesting such cooperation; however, Licensee shall not charge the City for personnel time or overhead unless City explicitly requested that personnel time and that time exceeds eight (8) hours.
- 6.5 No Access by Licensee.** Other than as authorized in this Agreement, Licensee is prohibited from accessing, directly or indirectly, the Fiber Optic System, or any part thereof, the transmission pathway, or any part thereof, or any City electric or other utility facility on City's side of the Demarcation Points. Unauthorized access by Licensee to, or use of, the Fiber Optic System, the transmission pathway, or any City electric or other utility facility shall constitute a material breach of this Agreement.

ARTICLE 7. FIBER OPTIC SYSTEM MONITORING, MAINTENANCE, REPAIRS AND ALTERATIONS

- 7.1 General.** City shall maintain the Fiber Optic System in good operating condition and in accordance with the specifications set forth on Exhibit 6, throughout the term of this Agreement.
- 7.2 Contact Persons or Representatives**
- 7.2.1** Licensee shall furnish to the City, and update as changes occur, the current name, title, telephone number, and personal communications device number (including facsimile transmission number, cellular telephone number, and paging device number) of a representative of Licensee who shall be kept informed of the City's maintenance schedules ("Licensee's Representative"). Licensee shall also furnish this information for an emergency contact. This information shall be provided on the Personnel Contact Form (Exhibit 9) and provided to the City's Representative. If Licensee fails to keep the City informed of its current Representative, then the City shall not be held liable for any failure to meet any notification or response provisions resulting directly therefrom and Licensee shall indemnify and hold City harmless from and against any claims, demands and/or actions resulting therefrom.
- 7.2.2** City shall provide to Licensee's Representative a 24x7x365 telephone number that Licensee may call to report any perceived damage to or failure, interruption or impairment of the Licensed Infrastructure to City's Representative. This information shall be provided on the Personnel Contact Form (Exhibit 9) and provided to the Licensee's Representative.

7.3 Routine Monitoring

7.3.1 The City, at its sole cost and expense, shall undertake timely maintenance and repairs to cure deficiencies in the Fiber Optic System. Licensee is responsible for all maintenance and repairs on Licensee's side of the Demarcation Points. Where routine monitoring reveals a potential maintenance issue, each Party shall, with regard to their respective infrastructure, take reasonable and appropriate steps to address the issue prior to it affecting the operation or functionality of their respective infrastructures. With regard to emergency repairs, see Article 7.5 below.

7.3.2 Licensee may conduct independent diagnostic testing, fault isolation, repair verification, and end-to-end network testing, as it deems appropriate, on Licensee's side of the Demarcation Points. Licensee may notify the City's Representative in writing if it is determined as a result of its independent testing and surveillance programs, review of City-provided reports or otherwise, that any part of the Licensed Infrastructure does not conform to the performance standards set forth in Exhibit 6. The Parties shall confer to expedite trouble resolution and resolve possible differences in interpretation of trouble reports.

7.4 Routine Operations. City, at its sole cost and expense, shall schedule and perform Fiber Optic System alterations, and routine operations, maintenance and repairs. City shall identify the time, location, and nature of each alteration or maintenance and repair job potentially affecting the Licensed Infrastructure and/or Licensee's Infrastructure, and notify Licensee's Representative, via E-mail or facsimile transmission, at the earliest possible time but not less than 96 hours prior to the scheduled time.

7.5 Emergency Repairs.

7.5.1 Licensee shall notify City's Representative whether it has the in-house capability of testing and troubleshooting its own infrastructure or if Licensee plans to subcontract that expertise to an outside source. If Licensee subcontracts for that service, it shall inform City in writing with whom City should be dealing in joint testing and trouble isolation related to emergency repairs.

7.5.2 The City will facilitate emergency and non-scheduled alterations, maintenance and repairs of any damaged, failed or impaired part of the Fiber Optic System. Upon receipt of notification from Licensee's Representative to City indicating the existence of a potential problem, City will acknowledge with a best effort to respond within four (4) business hours. Licensee through its representative, who shall have sufficient technical knowledge of Licensee's system, shall provide the City access to the ends of the Licensed Fiber or to Licensee's Infrastructure (if applicable). Licensee shall provide City with written information as to how City shall be granted such access to enable the City to troubleshoot. If such access is not granted such that City cannot troubleshoot, then City

is relieved from further obligations to troubleshoot. If access is allowed, troubleshooting shall continue until the source of the problem is detected. The City will use commercially reasonable efforts to restore the availability of the Licensed Infrastructure in as timely manner as reasonably possible.

7.5.3 Licensee, at its sole cost and expense, shall be responsible for emergency repairs on Licensee's side of the Demarcation Points, notifying the City of such repairs, and for maintaining Licensee's Infrastructure, including Licensee-owned splice cases beyond the Demarcation Points.

7.6 Route Modifications. The City, at its sole cost and expense, may upon reasonable notice, modify the Fiber Optic System as conditions and circumstances may warrant. These modifications may cause portions of the Fiber Optic System to be relocated, permanently or temporarily, to one or more alternate locations within the public right-of-way, public utility easements, and licensed service properties.

7.6.1 Relocation of Licensed Infrastructure shall not affect the price Licensee pays for use of that Licensed Infrastructure.

7.6.2 The City will use its commercially reasonable efforts to ensure such action will minimize any impact on Licensee's Licensed Infrastructure. Licensee shall cooperate with the City to effect any such modifications, in each case at the City's sole cost and expense.

ARTICLE 8. ACCESS TO LICENSEE'S INFRASTRUCTURE

8.1 Grant of Access. From time to time access to Licensee's Infrastructure located within the City may facilitate scheduled and non-scheduled maintenance and repair work associated with the Licensed Infrastructure and related to the Fiber Optic System. Licensee will cooperate with the City, its officers, employees, agents, representatives and contractors to allow ingress and egress for repairs to Licensed Infrastructure and the Fiber Optic System. Notwithstanding the foregoing, the City shall have no right or obligation to alter, maintain or repair Licensee's Network Infrastructure. Other than as necessary to make emergency repairs, in no event shall City have access to Licensee's Infrastructure unless a representative of Licensee is present.

8.2 Written Notice. So long as an emergency situation does not exist, the City shall provide a written request at least forty-eight (48) hours notice in advance of any required ingress to Licensee's Infrastructure located within the City. If an emergency situation exists, the City shall provide a verbal request to Licensee's Representative identified pursuant to Article 7.2.

ARTICLE 9. JOINT MARKETING

The City will cooperate with Licensee in joint marketing efforts to the extent that this does not conflict with the City's interests or those of other network service providers who otherwise may license capacity from the City. The City shall not be obligated to incur any direct or indirect cost or expense pursuant to any work, activities, or marketing efforts under this article. Licensee shall not use City's name or logo or imply City's endorsement of Licensee's services in any such marketing effort without first obtaining City's written consent, which consent may be withheld by City.

ARTICLE 10. UTILITIES AND OTHER SERVICES

Other than the services described herein, no other utility or other service is provided by the City to Licensee pursuant to this Agreement. Other such services, if provided, are either governed by the City's Rules and Regulations or by separate agreement between the Parties.

ARTICLE 11. DEFAULT AND TERMINATION

11.1 Licensee's Default. The occurrence of any one of the following shall constitute a default by Licensee:

- 11.1.1** Failure to comply with any material provisions of this Agreement or has violated any material term or condition of this Agreement.
- 11.1.2** Failure to pay any invoice, License Payment and/or other applicable fees within five (5) business days following the due date, unless Licensee in good faith disputes all or any portion of such License Payment, fees or invoice, in which case Licensee shall pay only the undisputed portion, if any, until such dispute is resolved.
- 11.1.3** Failure to perform any other obligation requiring the payment of money under the provisions of this Agreement, unless Licensee in good faith disputes all or any portion of such obligation, in which case Licensee shall only the undisputed portion, if any, until such dispute is resolved.
- 11.1.4** Abandonment of Licensee's Infrastructure in the public right-of-way or a failure to notify the City of such abandonment.
- 11.1.5** Assignment or transfer of Licensee's interest in this Agreement, whether voluntarily or by operation of law, in violation of the provisions of this Agreement.
- 11.1.6** General assignment of assets for the benefit of creditors.
- 11.1.7** Filing a petition for bankruptcy or reorganization or any arrangement under any laws relating to bankruptcy or insolvency, and Licensee is not current in its payment of all License Payments, City may terminate this Agreement immediately by issuing a written notice of termination.

If Licensee is current on all License Payments and continues to remain current on any License Payments, Licensee shall have ninety (90) calendar days after the filing of the petition to have the petition dismissed, vacated or set aside without being in default of this Agreement.

- 11.1.8** A third party obtains an order or decree in any court of competent jurisdiction enjoining or prohibiting Licensee from performing under this Agreement and the Licensee is not current in its payment of all License Payments, City may terminate this Agreement immediately by issuing a written notice of termination. If the Licensee is current on all License Payments and continues to remain current on any License Payments, then the Party shall have ninety (90) calendar days after the issuance of the order to have the order vacated without being declared in default.

11.2 Receivership and Foreclosure

- 11.2.1** At the option of the City, this Agreement shall be deemed terminated one hundred twenty (120) calendar days after the appointment of a receiver or trustee, unless (a) the receivership or trustee is vacated within one hundred (120) days of such appointment; or (b) the receiver or trustee has, within one hundred (120) days of appointment, fully complied with all terms and conditions of this Agreement and has remedied all defaults under this Agreement.

- 11.2.2** If there is a foreclosure or an involuntary sale of the whole or any part of Licensee's Infrastructure, the City may serve a written notice of termination of this Agreement on Licensee and to the purchaser or successor to Licensee's Infrastructure. The termination and revocation of this Agreement shall be effective thirty (30) days after service of such notice of termination, unless (a) the City, in its sole discretion, has approved in writing the transfer of this Agreement, and (b) the purchaser or successor has agreed in writing to be bound by all the terms and conditions of this Agreement.

- 11.3 Notice of Default.** In the event of a material breach of this Agreement, the Parties shall give a Notice of Default to the other Party specifying the alleged default. Except as otherwise stated in this Agreement, the defaulting Party shall have thirty (30) calendar days from receipt of the Notice of Default to cure the material breach. If the breach remains uncured after expiration of the cure period, a party may terminate this Agreement by issuing a written notice of termination. Any extension of time in issuing the Notice of Default or notice of termination shall not constitute as a waiver of the party's rights and obligations under this Agreement.

- 11.3.1** If Licensee receives a Notice of Default for failure to make a License Payment or to pay an invoice, Licensee shall have ten (10) business days from the date on the Notice of Default to cure the non-payment.

Payment must be received by the City's Revenue Division no later than the tenth (10th) day following the date on the Notice of Default.

11.3.2 If, at the time of a breach for non-payment, Licensee has Adequate Assurance in the form of a Letter of Credit, surety bond or cash deposit in place naming the City as beneficiary, the City may elect to draw on that Adequate Assurance to cover all outstanding amounts owed on the thirtieth (30th) calendar day following the date on the Notice of Default or terminate this Agreement.

11.4 Termination. This Agreement may be terminated upon the occurrence of any of the following events:

11.4.1 Licensee may exercise its right to terminate this Agreement for convenience for all or a portion of the Licensed Infrastructure. Licensee shall provide City with sixty (60) days advanced written notice of termination. Licensee shall continue to make License Payments with respect to any Licensed Infrastructure that have not been the subject of the termination. However, Licensee does not have the right to terminate this Agreement for convenience as to any stranded fiber, which fiber is stranded due to the manner in which Licensee chose to route or splice the Licensed Fiber.

11.4.2 Licensee may terminate the license of fiber of any Demarcation Point without penalty and without paying the Termination Fees for that fiber so long as Licensee has fully paid all engineering and construction costs, or accrued third party charges for entrance fees (provided Licensee was obligated to pay City for any such engineering and construction costs or accrued third party charges for entrance fees), due to City for that item. Licensee's License Payment shall be reduced by the amount of fiber that it no longer licenses in that Demarcation Point.

11.4.3 The City's failure to deliver the Licensed Infrastructure (excluding any new extensions of new construction to accommodate the unique requirements of Licensee) on or before the date mutually agreed upon by the Parties, unless such failure is caused by a Force Majeure event or Licensee's failure to meet its obligations under this Agreement. Such termination shall be without liability to either City or Licensee unless, and to the extent that, the failure to meet the deadline is caused by Licensee.

11.4.4 A Force Majeure event destroys Licensee's Network Infrastructure located within the City such that substantially all of Licensee's Network Infrastructure located within the City cannot be repaired, restored or replaced at a reasonable cost within sixty (60) calendar days after an event of destruction. Licensee shall be excused from its obligations to make License Payments, not to exceed six (6) months from the date of the destruction. The City may elect to terminate this

Agreement if Licensee does not commence License Payments within six (6) months of the date of destruction.

11.4.5 The City may elect to terminate this Agreement if the Fiber Optic System is substantially destroyed by a Force Majeure event such that it cannot be repaired at a reasonable cost and within six (6) months from the date of destruction. If the City elects to terminate this Agreement, Licensee shall not owe the City any License Payment or shall be entitled to an appropriate credit if prepayments are involved, for the period from the date of destruction until the Agreement either is terminated or the Fiber Optic System is repaired by the City.

11.5 Termination Fee. Upon termination by Licensee of all or any portion of the Licensed Fibers, Licensee shall pay a Termination Fee equal to three times the (apportioned) annual payment due within the subsequent four quarters, or 40 percent of remaining (apportioned) license payments due under terms of the Agreement, whichever is less. Termination Fees shall be based on current year prices (at the time of termination) without inclusion of going forward CPI adjustments.

11.6 Force Majeure. Any causes beyond the affected party's reasonable control, including, but not limited to, governmental actions, fire, work stoppages, shortages, civil disturbances, transportation problems, interruptions of power or communications, failure of suppliers or subcontractors, natural disasters or other acts of God. Neither party shall be liable for, and each party shall be excused from, any failure to deliver or perform or for delay in delivery or performance due to a Force Majeure event.

11.6.1 For the duration of the Force Majeure event, the obligations of the party claiming Force Majeure (other than the obligations to make payments then due or becoming due with respect to performance prior to the event) shall be suspended to the extent required.

11.6.2 A party rendered unable to fulfill any of its obligations by reason of a Force Majeure event shall give prompt written notice and full details of the event to be confirmed in writing to the other party, as soon as possible, but in no event later than five (5) days after the occurrence (unless additional time is required by virtue of Force Majeure). The party claiming Force Majeure shall exercise due diligence to remove such inability within a reasonable time period.

11.7 Specific Performance. The rights and remedies provided by law and under this Agreement are cumulative and either Party may seek the specific performance of the terms of this Agreement, unless this Agreement provides otherwise.

ARTICLE 12. LIMITATION OF LIABILITY

12.1 EXCEPT AS OTHERWISE PROVIDED FOR IN THIS AGREEMENT, NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR ANY CONSEQUENTIAL,

INDIRECT, LIQUIDATED, OR SPECIAL DAMAGES OR LOST REVENUE OR LOST PROFITS ARISING OUT OF THE PERFORMANCE OR NON-PERFORMANCE OF ANY PROVISION OF THIS AGREEMENT, EVEN IF SUCH PARTY HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES.

- 12.2** City is not liable to Licensee for damage caused to the Fiber Optic System by independent third parties not under contract with the City that are engaged in construction or other business operations which damage the Fiber Optic System. City will respond and repair any damage to the Fiber Optic System caused by such a third party as if it were an Emergency Repair under Article 7.5.
- 12.3** Inability to use the Licensed Fiber due to an electrical power outage is not covered by this Agreement.

ARTICLE 13. INDEMNITY

- 13.1** Licensee shall fully indemnify, defend and hold harmless City, its officers, employees, agents, contractors and representatives from and against any and all claims, demands, causes of action, losses, damages, liability, judgments, penalties, fines, costs and expenses of any kind and character, including, but not limited to, attorneys' fees and expenses incurred by City in enforcing this provision (hereafter collectively referred to as "Liabilities"), to the extent such Liabilities are caused by or arise from any negligent act or omission, recklessness or willful misconduct of Licensee, its employees, contractors subcontractors or agents, and their respective officers and employees, in connection with the performance or nonperformance of this Agreement, whether or not (a) the City, its officers or employees reviewed, accepted or approved any service or work product performed or provided by the Licensee, or (b) such Liabilities are litigated, settled or reduced to judgment.
- 13.2** The existence or acceptance by City of any of the insurance policies or coverage described in this Agreement shall not affect or limit any of City's rights under this Article, nor shall the limits of such insurance limit the liability of Licensee hereunder. The provisions of this Article shall survive any expiration or termination of this Agreement.

ARTICLE 14. REPRESENTATIONS AND WARRANTIES

- 14.1** City will maintain the Fiber Optic System in good operating condition for normal use as contemplated by the manufacturers and in accordance with City's standards. THE CITY OTHERWISE EXPRESSLY DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY BEYOND THE MANUFACTURER'S WARRANTY AS TO THE FITNESS OF ANY MATERIALS, EQUIPMENT OR ANY OTHER PART OR ALL OF THE FIBER OPTIC SYSTEM OR THE LICENSED INFRASTRUCTURE, CONSTRUCTED OR TO BE CONSTRUCTED. The warranties and remedies set forth above constitute the only warranties and remedies by City with respect to this Agreement and are in lieu of all other

warranties, written or oral, statutory, express or implied, including, without limitation, the warranty of merchantability or fitness for a particular purpose or use.

14.2 Licensee represents and warrants:

14.2.1 Licensee has all licenses, permits, City Business Operations Tax Certificate, qualifications, and approvals of whatsoever nature legally required for Licensee to operate its business. Licensee represents and warrants that it shall, at its sole cost and expense, keep in effect or obtain at all times during the term of this Agreement any licenses, permits, and approvals that are legally required for Licensee to operate its business. Without limiting the generality of the foregoing, if Licensee is an out-of-state corporation, Licensee warrants and represents that it possesses a valid certificate of qualification to transact business in the State of California.

14.2.2 Licensee has the power and authority to enter into this Agreement and perform its obligations hereunder. The execution, delivery and performance of this Agreement have been duly authorized by all necessary corporate actions and proceedings. This Agreement is, and any other instruments, documents or writings to be executed and delivered by Licensee pursuant to this Agreement will be, legal, valid and binding obligations of Licensee, and enforceable against Licensee in accordance with the provisions hereof except as may be limited by applicable laws.

14.2.3 The execution and delivery by Licensee of this Agreement and of any other instruments, documents or writings contemplated by this Agreement will not conflict with or violate or constitute a breach or default under the Articles of Incorporation or bylaws of Licensee or the provision of any mortgage, trust, indenture, bond, lien, pledge, re-license, agreement, guaranty or instrument to which Licensee is subject.

14.2.4 There are no known unresolved claims or disputes between Licensee and the City. There are no known actions, suits or proceedings pending or, to the knowledge of Licensee, threatened against Licensee that, if adversely determined to Licensee, would materially and adversely affect the ability of Licensee to perform its obligations under this Agreement.

14.2.5 Licensee will obtain and maintain any certificates, licenses or approvals required by law that relate to its obligations under this Agreement.

14.2.6 Neither Licensee, nor any officer or principal of its firm, has or shall acquire any interest, directly or indirectly, that would conflict in any manner with the interests of City or that would in any way hinder Licensee's performance of its obligations under this Agreement.

Licensee further covenants that in the performance of its obligations under this Agreement, no person having any such interest shall be employed by Licensee as an officer, employee, agent or subcontractor, without the written consent of City. Licensee agrees to avoid conflicts of interest or the appearance of any conflicts of interest with the interests of City at all times during the performance of this Agreement.

ARTICLE 15. ASSIGNMENT

- 15.1** Licensee shall not assign, sublicense or otherwise transfer in whole or in part (whether voluntarily or by action of law), directly, indirectly, or contingently this License or any interest herein to any third party without the prior written consent of City.
- 15.2** Any assignment, transfer, sublicense, conveyance, sale, hypothecation or encumbrance hereof by Licensee not authorized by the City shall be null and void, and, at the option of the City, shall constitute a material breach of this Agreement by Licensee hereunder.
- 15.3** Licensee, as assignor, and any person, including an Affiliate, as assignee, to whom the rights and obligations of Licensee under this Agreement are assigned shall be and remain jointly and severally liable for the performance of all obligations of Licensee under this Agreement.

ARTICLE 16. NON-WAIVER

The consent by a Party to any act by the other Party shall not be deemed to imply consent to, or to constitute the waiver of, a breach of any provision of this Agreement nor shall any custom or practice which may arise between the Parties in the administration of any part of the provisions of this Agreement be construed to waive or lessen the right of a Party to insist upon the performance by the other Party in strict accordance with the provisions of this Agreement.

ARTICLE 17. INSURANCE REQUIREMENTS.

During the term of this Agreement, Licensee shall purchase and maintain in full force and effect all the insurance policies as required in the Wireless Network Agreement.

ARTICLE 18. DISPUTE RESOLUTION.

Any dispute between the Parties which arise during the Term of this Agreement and which the Parties cannot resolve shall be subject to the Dispute Resolution process described in the Wireless Network Agreement.

ARTICLE 19. NOTICE

- 19.1** Unless otherwise stated herein, all notices which shall or may be given pursuant to this Agreement shall be in writing and delivered by means of certified United States Postal Service mail, return receipt requested, or private

overnight delivery systems, or by facsimile transmission, provided a copy of the facsimile is also sent on that same date by United States Postal Service mail or by private express delivery systems, addressed as follows:

To City:

City of Sacramento
1000 I Street Suite 120
Sacramento, CA 95814
Attn.: Chief Information Officer
Telephone No.: (916) 808-8600
Facsimile No.: (916) 808-5087

To Licensee:

SACRAMENTO METRO CONNECT LLC
182 Howard Street
San Francisco, CA 94105
To the attention of: Chief Operating Officer

19.2 Notices shall be deemed received on the same day as a facsimile is sent, the day following the date on which the Notice was sent via an overnight mail service, and five (5) calendar days from the date postmarked by the United States Postal Service. If Notice is given pursuant to two different methods receipt shall be deemed to occur on the earliest date.

ARTICLE 20. CONFIDENTIALITY

The confidentiality of City and Licensee information shall be governed by the Confidentiality provisions set forth in section 4 and section 5 of Exhibit H of the Wireless Network Agreement.

ARTICLE 21. ENTIRE AGREEMENT

This Agreement and its Exhibits contain the entire understanding between the Parties with respect to the subject matter herein. There are no representations, warranties, agreements or understandings (whether oral or written) between the Parties relating to the subject matter hereof which are not fully expressed herein.

ARTICLE 22. AMENDMENT

This Agreement may not be amended except pursuant to a written instrument signed by each of the Parties.

ARTICLE 23. HEADINGS

The Article headings hereof are inserted for convenience of reference only, are not a part hereof and shall have no effect on the construction or interpretation hereof. All Exhibits referred to in this Agreement and any addenda and schedules which may, from

time to time, be referred to in any duly executed amendment to this Agreement are incorporated by this reference into this Agreement and shall be deemed a part hereof.

ARTICLE 24. GOVERNING LAW; VENUE

This Agreement shall be governed, construed and enforced in accordance with the state laws of California. Venue of any litigation arising out of or connected with this Agreement shall lie exclusively in the state trial court or Federal District located in Sacramento County in the state of California, and Parties consent to jurisdiction over their persons and over the subject matter of any such litigation in such courts, and consent of service of process issued by such courts.

ARTICLE 25. SEVERABILITY

If any provision of this Agreement is held by court of competent jurisdiction in a final judicial action to be void, voidable, or unenforceable, such provision shall be deemed severable from the remaining provisions and shall in no way affect the validity of the remaining portions hereof.

THIS PAGE LEFT INTENTIONALLY BLANK

//
//
//

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement effective as of the Effective Date.

CITY OF SACRAMENTO
A Municipal Corporation

SACRAMENTO METRO CONNECT, LLC

By: _____

By: 
Signature of Authorized Person

Print Name: _____

Print Name: A. Fowler
Title: Principal

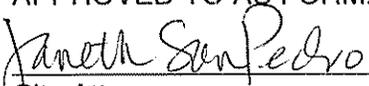
Title: _____

For: Ray Kerridge, City Manager

Additional Signature (if required)

APPROVED TO AS FORM:

Print Name & Title: _____

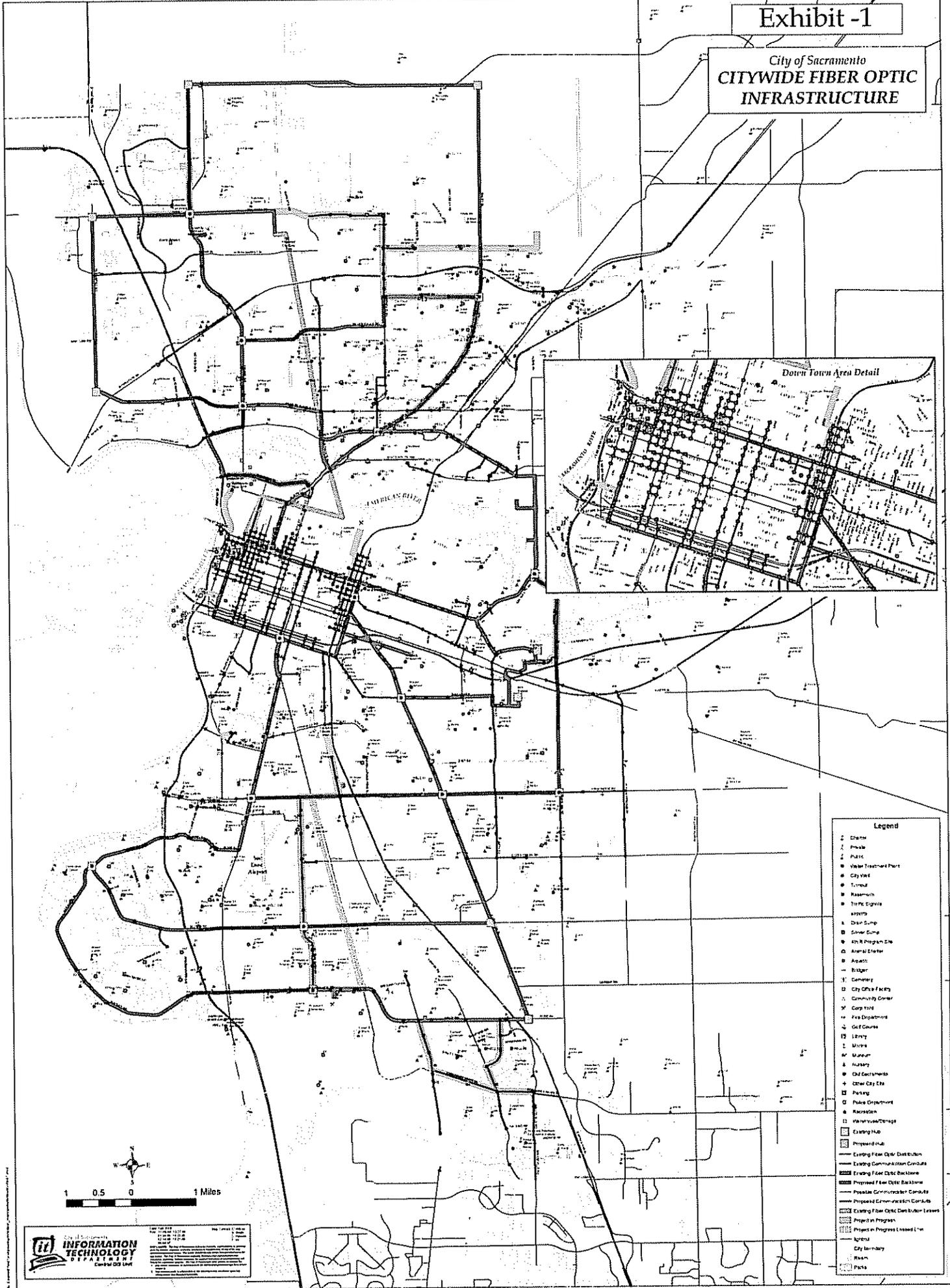
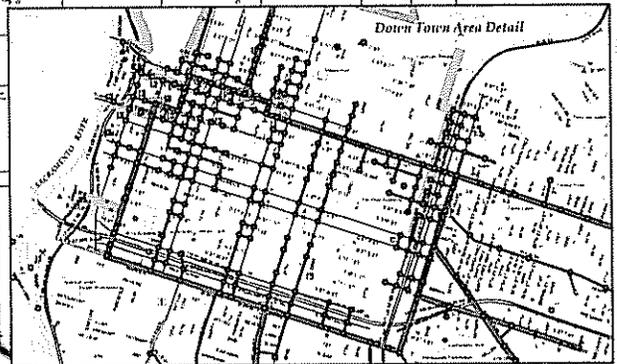
Deputy 
City Attorney

ATTEST:

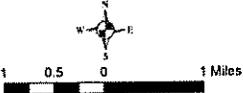
City Clerk

Exhibit -1

City of Sacramento CITYWIDE FIBER OPTIC INFRASTRUCTURE



Legend	
[Symbol]	Chow
[Symbol]	Private
[Symbol]	Public
[Symbol]	Water Treatment Plant
[Symbol]	City Hall
[Symbol]	Terminal
[Symbol]	Reservoir
[Symbol]	Trip Point
[Symbol]	Assets
[Symbol]	Draw Pump
[Symbol]	Silver Pump
[Symbol]	City Hall Program Site
[Symbol]	Animal Shelter
[Symbol]	Asphalt
[Symbol]	Bridge
[Symbol]	Commuter
[Symbol]	City Office Facility
[Symbol]	Community Center
[Symbol]	Corp Yard
[Symbol]	Fire Department
[Symbol]	Golf Course
[Symbol]	Library
[Symbol]	Museum
[Symbol]	Market
[Symbol]	Old Courthouse
[Symbol]	Other City Site
[Symbol]	Parking
[Symbol]	Police Department
[Symbol]	Recreation
[Symbol]	Warehouse/Storage
[Symbol]	Existing Hub
[Symbol]	Proposed Hub
[Symbol]	Existing Fiber Optic Distribution
[Symbol]	Existing Communication Conduits
[Symbol]	Existing Fiber Optic Backbone
[Symbol]	Proposed Fiber Optic Backbone
[Symbol]	Possible Communication Conduits
[Symbol]	Proposed Communication Conduits
[Symbol]	Existing Fiber Optic Distribution Lines
[Symbol]	Project in Progress
[Symbol]	Project in Progress Limited Use
[Symbol]	Agency
[Symbol]	City Boundary
[Symbol]	Water
[Symbol]	Park



IT INFORMATION TECHNOLOGY DEPARTMENT
 City of Sacramento
 1000 Capitol Mall, Sacramento, CA 95833
 (916) 498-3000
 www.cityofsacramento.gov/it

EXHIBIT 2

DEMARCATION POINTS

- 2921 Truxel Rd. Sacramento, CA. 95833 (South Natomas Community Center)
- 915 27th Street Sacramento, CA. 95816 (Hart Senior Center)
- 5699 S Land Park Drive Sacramento, CA. 95822 (Belle Coolidge Community Center)
- 4623 T Street Sacramento, CA. 95819 (Coloma Community Center)
- 2450 Meadowview Rd Sacramento, CA. 95832 (Pannell Community Center)
- 1000 I Street Sacramento, CA. 95814 (IT Department/Water Fall Garage)
- 2101 Arena Blvd. Sacramento, CA. 95834 (North Permit Center)
- 918 Del Paso Road Sacramento, CA. 95834 (North Corp Yard)
- 3145 Granada Way Sacramento, CA. 95816 (Alhambra Reservoir/Fire Station #4)
- 7399 San Joaquin St Sacramento, CA. 95820 9-1-1 Dispatch Center
- 7501 College Town Drive Sacramento, CA. 95826 (Water Treatment Plant)
- 3581 23rd St Sacramento, CA. 95818 (City College Reservoir)
- 3530 Riverside Blvd Sacramento, CA. 95818 (DOU Sump 2 Station)
- 1391 35th Avenue Sacramento, CA. 95822 (DOU HQ)

EXHIBIT 3

MAIN DISTRIBUTION FACILITIES (MDF)

- 1000 I Street Sacramento, CA. 95814 (Water Fall Garage)
- 7399 San Joaquin St Sacramento, CA. 95820 (9-1-1 Dispatch Center)
- 918 Del Paso Road Sacramento, CA. 95834 (North Corp. Yard)
- 3145 Granada Way Sacramento, CA. 95816 (Alhambra Reservoir)
- 7501 College Town Drive Sacramento, CA. 95826 (Water Treatment Plant)
- 3581 23rd St Sacramento, CA. 95818 (City College Reservoir)
- 3530 Riverside Blvd Sacramento, CA. 95818 (DOU Sump 2 Station)
- 1391 35th Avenue Sacramento, CA. 95822 (DOU HQ)

EXHIBIT 4

LICENSED FIBER, ROUTE, FIBER COUNT

Route	Cable Segment Description	Cable Linear Feet	Fiber Strands	Fiber Linear Feet
A	Downtown Ring	35,000	2	70,000
B	Stockton blvd. (Alhambra - Meadowview Rd.)	70,000	2	140,000
C	Freeport blvd. (Broadway - 47th Ave)	11,000	2	22,000
D	East J Street (Alhambra - Northgate blvd.)	43,000	2	86,000
E	N. Corp Yard - Data Center	44,000	2	88,000
F	Hub 5 Arden Way/Del Paso - Data Center	15,000	2	30,000
G	9-1-1 Communication Center	17,000	2	34,000
H	South Corp Yard - Riverside/Broadway blvd.	26,000	2	52,000
I	CIG/Downtown Inner Ring	20,000	2	40,000
J	Richards blvd. (I 5 - N. 12th Street)	8,500	2	17,000
K	North B street - Data Center	8,000	2	16,000
L	Coloma Center - T Street/Stockton blvd.	10,000	2	20,000
	Estimated TOTAL	272,500		545,000

EXHIBIT 5

City of Sacramento
Fiber Optic System Interconnection Request

ADVANCED ENGINEERING REQUEST FORM

REQUEST SUBMITTED BY	FIELD INVESTIGATION CONTACT:
Name:	Name:
Title:	Title:
Company:	Company:
Street Address:	Street Address:
City, State, Zip	City, State, Zip
Telephone Number:	Telephone Number:
Fax Number:	Fax Number:
Email Address:	Email Address:

Project Description *(Attach drawings if applicable)*

- Example: 1. Add a new demarcation point on Folsom blvd.
 2. Connect to a private owned building
 3. Conduct a preliminary assessment on existing fiber route

1.
2.
3.

Description of Licensed Infrastructure to be installed

(Use additional pages and attach drawings if necessary)

- Example: 1. Request for 2 fiber strands from Alhambra blvd. and N Street to 6550 Folsom blvd.

City of Sacramento to Assign
1.
2.
3.

Type of Connectors (check one):

None SC ST FC LC Other (specify) _____

Estimated Completion Date: _____

(Note: Shorter lead times may require higher interconnection costs to cover overtime expenses and/or outside consulting fees.)

ADVANCE ENGINEERING CONDITIONS:

I am submitting this advance engineering request and associated payment of the required fees with full understanding of the following conditions:

1. The advance engineering fee is a non-refundable fee required to cover the cost of preparing a detailed estimate (within +/- 10%) of the cost and time required for the City of Sacramento Department of Information Technology to complete the works described in the above mentioned Project Description.
2. The detailed cost estimate prepared with the advance engineering fee will establish an interconnection fee that must be paid in full prior to the start of the construction activities associated with the interconnection.
3. If the project is constructed, the advance engineering fee could be credited against the interconnection fee.

Signature: _____ Date: _____

FORM SUBMITTAL:

Please submit the completed form and direct questions to:

IT Project Manager, Fiber Optic Systems
 Project Management Office
 City of Sacramento, Information Technology Department
 1000 I Street Suite 170
 Sacramento, CA 95814
 Phone: (916) 808-7988
 Fax: (916) 808-5087

This Request Form is submitted on behalf of Sacramento Metro Connect LLC ("Licensee"). By their signatures below, Licensee and the City agree that a Supplemental Agreement signed by authorized representatives of the Parties and a revision of the applicable Exhibit to the License Agreement shall witness any modifications resulting from this request. City will use its commercially reasonable efforts to meet the estimated completion dates above; however, Licensee understands and agrees that the estimated completion dates are estimated dates, and not guaranteed by the City.

CITY OF SACRAMENTO

SACRAMENTO METRO CONNECT LLC

By: _____

By: _____
Name & Title:

Dated: _____

Dated: _____

Exhibit 6

Fiber Specifications and Performance Standards

The following specifications are for the fiber optic cable installation and maintenance needed for the City's fiber, including backbone, distribution, Traffic Signals, and Traffic Surveillance CCTVs.

- The same specifications may also apply for the City's backbone fiber in the downtown ring, along Freeport Blvd., 12th Street from the TOC to Arden and Del Paso, and other routes with the only modification being the Corning Cable System's cable part number need to be changed to the right part number, reflecting fiber cable size.
- Use the following part numbers when ordering the Pretium Connector Housings from Corning:
 - 144 fibers = PR4E4P12-A9-3RHCF0
 - 96 fibers = PR496P12-A9-3RHCF0
 - 48 fibers = PR448P12-A9-3RHCF0
 - 24 fibers = PR424P12-A9-3RHCF0
 - 12 fibers = PR412P12-A9-3RHCF0

Fiber Optic Cable

A. General Fiber Characteristics

1. Fiber Optic Cable shall be single mode Corning Cable Systems ALTOS All-Dielectric cables or equal as Approved by the Engineer as shown below:

12 Strand Fiber	012RW4-T4101A20
24 Strand Fiber	024RW4-T4101A20
48 Strand Fiber	048RW4-T4101A20
96 Strand Fiber	096RW4-T4101A20
144 Strand Fiber	0144RW4-T4101A20
2. Fiber Connector shall be AT&T – Type **LC**.
3. Each fiber optic (F/O) cable, unless otherwise indicated, shall be dielectric central membrane, gel filled or Water-Swellable Tape, duct type, loose tube, and contain single mode fibers (SM) as indicated and shall conform to these special provisions.
4. The optical fibers shall be contained within loose buffer tubes. The loose buffer tubes shall be stranded around an all dielectric central member with aramid yarn as the primary strength member and a polyethylene sheath for overall protection.
5. All F/O cable on this project shall be from the same manufacturer, who is regularly engaged in the production of this material.
6. The cable shall be BellCore Certified TR-TSY-00020 for single-mode.
7. Each optical fiber shall be glass and consist of a doped silica core surrounded by concentric silica cladding. All fibers in the buffer tube shall be usable fibers, and shall be sufficiently free of surface imperfections and inclusions to meet the

Exhibit 6 Fiber Specifications and Performance Standards

optical, mechanical, and environmental requirements of these specifications.

8. Fiber coating shall be layered, UV cured acrylate. The coating shall be mechanically or chemically strippable without damaging the fiber.
9. The required fiber grade shall reflect the maximum individual fiber attenuation, to guarantee the required performance of each and every fiber in the cable.
10. Cable shall comply with the optical and mechanical requirements over an operating temperature range of -40 degrees C to +75 degrees C.
11. Single mode fibers within the finished cable shall meet the requirements in the following table: (SMF-28)

Fiber Characteristics Table	
Parameters	SM
Type	Step Index
Core Diameter	8.2 μm (nominal)
Cladding Non-circulatory	125 $\mu\text{m} \pm 0.7 \mu\text{m}$
Core to Cladding Offset	$\leq 1.0 \mu\text{m}$
Coating Diameter	250 $\mu\text{m} \pm 15 \mu\text{m}$
Cladding Non-Circularity Defined as: $[1 - (\text{min. cladding dia} / \text{max. cladding dia.})] \times 100$	$\leq 2.0\%$
Proof/Tensile Test	100 kpsi, min.
Attenuation @ 1,300 nm (MM)/1310 nm (SM) @ 1,550 nm	$\leq 0.4 \text{ dB/km}$ $\leq 0.3 \text{ dB/km}$
Attenuation at the Water Peak	$\leq 2.1 \text{ dB/km @ } 1383 + 3 \text{ nm}$
Bandwidth: @ 1,300 nm [(MM)/1310 nm (SM)]	N/A
Chromatic Dispersion Zero Dispersion Wavelength Zero Dispersion Slope	1302 to 1322 nm $\leq 0.092 \text{ ps}/(\text{nm}^2 \cdot \text{km})$
Maximum Dispersion	3.3 $\text{ps}/(\text{nm} \cdot \text{km})$ for 1285 - 1330 nm $< 18 \text{ ps}/(\text{nm} \cdot \text{km})$ for 1550 nm
Cut-Off Wavelength	$< 1,260 \text{ nm}$
Numerical Aperture (measured in accordance with EIA-455-47)	N/A
Mode Field Diameter (Peterman II)	9.2 $\pm 0.4 \mu\text{m}$ at 1310 nm 10.4 $\pm 0.8 \mu\text{m}$ at 1550 nm

Exhibit 6

Fiber Specifications and Performance Standards

13. For buffer tubes containing multiple fibers, each fiber shall be distinguishable from others in the same tube by means of color coding according to the following:

- | | |
|-----------|------------|
| 1. Blue | 7. Red |
| 2. Orange | 8. Black |
| 3. Green | 9. Yellow |
| 4. Brown | 10. Violet |
| 5. Slate | 11. Rose |
| 6. White | 12. Aqua |

14. The colors shall be targeted in accordance with the Munsell color shades and shall meet EIA/TIA-598 "Color Coding of Fiber Optic Cables."
15. The color formulation shall be compatible with the fiber coating and the buffer tube filling compound and be heat stable. It shall not fade or smear or be susceptible to migration and it shall not affect the transmission characteristics of the optical fibers and shall not cause fibers to stick together.

B. Cable Construction

1. Buffer Tubes

The loose buffer tubes shall provide clearance between the fibers and the inside of the tube to allow for thermal expansion without containing the fiber. The fibers shall be loose or suspended within the tubes. The fibers shall not adhere to the inside of the buffer tube. Each buffer tube shall contain a maximum of 12 fibers.

The loose buffer tubes shall be extruded from material having a coefficient of friction sufficiently low to allow the fiber free movement. Buffer tubes shall be made of tough abrasion resistant material to provide mechanical and environmental protection of the fibers yet designed to permit safe intentional "scoring" and breakout entry without jeopardizing the internal fibers.

Buffer tube filling compound shall be homogenous hydrocarbon-based gel (with anti-oxidant additives) USRD to prevent water intrusion and migration. The filling compound shall be non-toxic and dermatological safe to exposed skin. It shall be chemically and mechanically compatible with all cable components, non-nutritive to fungus, non-hygroscopic and electrically non-conductive. The filling compound shall be free from dirt and foreign matter and shall be readily removable with conventional non-toxic solvents.

Buffer tubes shall be stranded around a central member by a method that will prevent stress on the fibers when the cable jacket is placed under strain, such as the reverse oscillation stranding process.

Each buffer tube shall be distinguishable from other buffer tubes in the cable by

Exhibit 6

Fiber Specifications and Performance Standards

means of color-coding.

2. **Central Member**

The central member, which functions as an anti-buckling element shall be a glass reinforced plastic rod with similar expansion and contraction characteristics as the optical fibers. A linear overcoat of Low Density Polyethylene shall be applied to the central member of the main trunk fiber cable to achieve the optimum diameter to provide the proper spacing between buffer tubes during stranding.

3. **Filler Rods**

Fillers may be included in the cable to lend symmetry to the cable cross-section where needed. Filler rods shall be solid medium or high-density polyethylene. The diameter of filler rods shall be the same as the outer diameter of the buffer tubes.

4. **Stranding**

Completed buffer tubes shall be stranded around the over coated central member using stranding methods, lay lengths and positioning such that the cable shall meet mechanical, environmental and performance specification. A polyester binding shall be applied over the stranded buffer tubes to hold them in place. Binders shall be applied with sufficient tension to secure the buffer tubes to the central member without crushing the buffer tubes. The binders shall be non-hygroscopic, non-wicking (or rendered so by the flooding compound), and dialectic with low shrinkage.

5. **Core and Cable Flooding**

The cable core interstices shall be filled with a polyolefin-based compound to prevent water ingress and migration. The flooding compound shall be homogenous, free from dirt and other foreign matter, non-hygroscopic, electrically non-conductive, non-nutritive to fungus and readily removable. The compound shall also be non-toxic, dermatological safe and compatible with all other cable components. The compound shall be free from dirt and foreign matter and shall be readily removable with congenial non-toxic solvents.

6. **Tensile Strength Member**

Tensile strength shall be provided by high tensile strength armored yarns and fiberglass which shall be helically stranded evenly around the cable core.

7. **Outer Jacket**

The jacket shall be free from holes, splits, and blisters and shall be high density polyethylene (PE) with a total minimum jacket thickness of 40 " 5 mils. Jacketing

Exhibit 6

Fiber Specifications and Performance Standards

material shall be applied directly over the tensile strength members and flooding compound and shall not adhere to the armored strength material. The polyethylene shall contain carbon black to provide ultraviolet light protection and shall not promote the growth of fungus.

The outer jacket or sheath shall be marked with the manufacturer's name, the words "Fiber Optic Cable", date of manufacture, and sequential meter markers. The markings shall be repeated every meter. The actual length of the cable shall be within 0 " 1 percent of the length marking, the marking shall be in a contrasting color to the cable jacket. The height of the marking shall be approximately 2.5mm.

The cable shall contain at least one ripcord under the inner sheath for easy sheath removal.

The finished cable shall be capable of withstanding a pulling tension of 2700 N (600 lbs.), minimum.

Interior CCTV Cabling--All cabling within the building used for the CCTV control and video signal shall be plenum rated in accordance with UL910/CSA OFNP/FT6 listings. Fibers shall be as specified for single mode fibers with Kevlar Aramid yarn strength member, ripcord and fluoride co-polymer outer jacket. Cable shall be capable of sustaining tensile loads of 180 pounds short term and a long term of 45 pounds.

C. Cable Performance

1. General

The F/O cable shall withstand water penetration when tested with one-meter static head or equivalent continuous pressure applied at one end of a one-meter length of filled cable for one hour. No water shall leak through the open cable end. Testing shall be done in accordance with EIA-455-82, "Fluid Penetration Test for Filled Fiber Optic Cable."

The cable shall exhibit no flow (drip or leak) at 70 degrees C. The weight of any compound that drips from the sample shall be less than 0.05 grams (0.002 ounce). A representative sample of cable shall be tested in accordance with EIA-455-81, "Compound Flow (Drip) Test for Filled Fiber Optic Cable". The test sample shall be prepared in accordance with Method A.

Crush resistance of the finished F/O cables shall be 220 N/cm applied uniformly over the length of the cable without showing evidence of cracking or splitting when tested in accordance with EIA-455-25A. The average increase in attenuation for the fibers shall be < 0.10 dB at 1550 nm (single-mode) for a cable subjected to this load. The cable shall not exhibit any measurable increase in

Exhibit 6

Fiber Specifications and Performance Standards

attenuation after removal of load. Testing shall be in accordance with EIA-455-45, "Compressive Loading Resistance of Fiber Optic Cable" except that load shall be applied at the rate of 3 mm to 20 mm per minute and maintained for 10 minutes.

The cable shall withstand 25 cycles of mechanical flexing at a rate of 30 " 1 Cycles/minute. The average increase in attenuation for the fibers shall be <0.10 dB at 1550 nm (single-mode) at the completion of the test. Outer cable jacket cracking or splitting observed under 10X magnification shall constitute failure. The test shall be conducted in accordance with EIA-455-1-4, "Fiber Optic Cable Cyclic Flexing Test," except that the sheave diameter shall be a maximum diameter of 20X the cable OD. The cable shall be tested in accordance with Test Conditions I and III of the ES-455.

The cable shall withstand 25 impact cycles. The average increase in attenuation for the fibers shall be <0.20 dB at 1550 nm (single-mode). The cable jacket shall not exhibit evidence of cracking or splitting. The test shall be conducted in accordance with EIA-455-25, "Impact Testing of Fiber Optic Cables and Cable Assemblies."

The cable shall withstand a tensile load of 2700 N (600 lbs) without exhibiting an average increase in attenuation of greater than 0.10 dB (single-mode). The test shall be conducted in accordance with EIA-455-33, "Fiber Optic Cable Tensile Loading and Bending Test," using a maximum mandrel and sheath diameter of 560 mm. The load shall be applied for one hour in Test Condition II of the EIA-455 procedure.

2. Quality Assurance

All optical fibers shall be proof tested by the F/O cable manufacturer at a minimum load of 100 kpsi. Documentation of factory results shall be provided to the Engineer prior to shipping.

All optical fibers shall be 100% attenuation tested by the manufacturer. The attenuation of each fiber shall be provided with each cable reel.

Attention is directed to "Testing" elsewhere in these special provisions.

3. Packaging and Shipping

The completed cable shall be packaged for shipment on lagged reels. The cable and reel shall be wrapped in water resistant covering.

Each end of the cable shall be securely fastened to the reel to prevent the cable from coming loose during transport. Six feet of cable length on each end of the cable shall be accessible for testing. Both ends of the cable shall be sealed to

Exhibit 6

Fiber Specifications and Performance Standards

prevent the ingress of moisture.

Each cable reel shall have a durable weatherproof label or tag showing the manufacturer's name, the cable type, and the actual length of cable on the reel, the Contractor's name, the contract number, and the reel number. A shipping record shall be included in an attached weatherproof envelope showing the above information and shall include the date of manufacture, cable characteristics (size, attenuation, bandwidth, etc.), cable information number and any other pertinent information.

The diameter of the reel shall be at least thirty times the diameter of the cable. The F/O cable shall be in one continuous length per reel with no factory splices in the fiber. Each reel shall be marked to indicate the direction the reel should be rolled to prevent loosening of the cable.

D. Cable Installation

1. General

Installation procedures and technical support information shall be furnished at the time of delivery. Installation procedures shall be in conformance with the procedures specified by the cable manufacturer for the specific cable being installed.

During cable installation, the bend radius shall be maintained at a minimum of twenty times the outside diameter of the cable.

Fiber optic cable shall be installed without splices except where specifically allowed on the plans or described in these special provisions.

2. Splicing

The fiber optic cable splices shall be the fusion type and shall not exceed 0.3 dB loss per splice.

Splice losses shall be measured and computed as specified on the Link Loss Budget Worksheet herein.

The field splices shall connect the fibers of the two fiber optic cable lengths together. The termination splice shall connect the fiber optic cable span ends with pigtails. The field splices shall be placed in a splice tray, and then the splice tray with splice shall be placed in the splice closure.

The termination splices shall be placed in a splice tray and the splice tray with splice shall then be placed in the Fiber Distribution Unit (FDU). All splices shall be protected with a thermal shrink sleeve.

Exhibit 6

Fiber Specifications and Performance Standards

Payment for splicing will be part of the contract price bid for Fiber Optic Communications Trunk line item and no additional compensation will be allowed therefore.

3. Splice Enclosures

The fiber optic field splices shall be enclosed in splice closures, which shall be waterproof, rodent proof, and re-enterable, and shall accommodate all the fibers in a single cable.

Splice closures shall be complete with splice organizer trays, brackets, plugs, clips, cable ties, seals, and sealants and a dry encapsulate.

The splice closure shall be suitable for pull box application.

A signal splice closure with splice organizer trays shall be capable of holding all the splices required. The optical fiber shall not be bent less than a 2-inch radius during installation or after final assembly in the splice tray. Each bare fiber shall be individually restrained in the splice tray.

The optic fibers in buffer tubes and the placement of the bare optical fibers in the splice tray shall be such that there is no discernible tensile force on the optical fiber.

Location of the splice enclosures shall be as shown on the plans or as described in these special provisions. Payment for splice enclosures will be part of Fiber Optic Communications Trunk line item and no additional compensation will be allowed therefore.

4. Fiber Optic Jumper Cable

Provide fiber optic cable jumpers with factory installed LC-type connectors at both ends. Return losses shall be less than or equal to -40 dB and in caption losses less than or equal to .5 dB. Jumpers shall be single mode optical fiber with a core size of 8.2 micrometers from the same manufacturer as the connecting main trunk, and shall be in lengths of 10 feet.

5. Fiber Optic Connectors

All optical fibers shall be terminated with a LC type nickel-plated zinc bayonet, zircona ceramic tip, keyed connector. Fiber optic equipment and cable shall use the same type connectors. The connectors shall conform to the following:

A. Attenuation: 0.25 dB typical, 0.5 dB Maximum.

Exhibit 6

Fiber Specifications and Performance Standards

- B. Optical Fiber Nominal Outside Diameter: 125 micrometers (8.2/125 single mode).
 - C. Tensile Strength: Less than a 0.2 dB change, based upon a 22 lb. load without adhesive.
 - D. Temperature Cycling: Less than a 0.3 dB change, based upon -40 degrees C. to +75 degrees Celsius, 100 cycles
 - E. Humidity: Less than 0.2 dB change, 60 degrees C. at 95% relative humidity for 500 hours.
 - F. Durability: Less than 0.2 dB changes per 1000 insertions cleaned every 25th insertion.
- E. Fiber Optic Testing and Documentation

Prior to conducting any tests, the Contractor shall provide the Engineer with detailed descriptions of test procedures for review and approval.

Documentation of all test results shall be provided within 2 weeks to the Engineer for review and approval. System documentation shall incorporate test results, ongoing maintenance, and performance measurements.

The Contractor shall provide the Engineer with a copy of the manufacturers' test procedures and quality assurance procedures for information. If the Engineer determines that these procedures are not adequate, the Engineer may require that additional tests be conducted by the Contractor prior to installation. Additional testing ordered by the Engineer will be paid for as extra work, as provided in Section 4-1.03D of the State Standard Specifications.

There are two progressive broad levels of testing: (1) Component Tests and (2) Operational test Period. Contractor shall refer to Section 9-2, "Sequence of Work" located elsewhere in these Special Provisions. Progression to the next level of testing is built upon successful completion and acceptance of the previous level. Testing for the various system components shall be as specified herein and may include tests at (1) the factory, (2) upon arrival at the job site, (3) during installation, and (4) upon completion of the installation.

All test procedures and equipment required under for this testing shall be furnished and maintained by the Contractor. Testing shall be performed in the presence of the Engineer.

The Contractor shall submit documents containing proposed test procedures, test equipment and expected results to the Engineer for review and approval at least ten (10) calendar days prior to performing any tests. The test shall be complete in all details as determined by the Engineer. If the Engineer determines that the test procedure proposed by the Contractor is

Exhibit 6

Fiber Specifications and Performance Standards

incomplete, the Contractor shall make modifications required by the Engineer. Tests shall not be performed without written approval of the Engineer.

A complete report of each test performed shall be submitted to the Engineer following completion of the test. The report shall include all actions and results and all failures and corrective or preventative measures taken.

The Contractor shall notify the City of his/her intention to conduct any test at least ten (10) calendar days in advance. The Engineer shall have the right to delay the start of the testing up to seven (7) calendar days to accommodate personnel schedules. The Contractor shall plan on this possible delay, and if exercised by the City, this delay shall not be considered a valid cause for time extension, missed milestones, or additional compensation. If any piece of equipment fails during the individual testing, the Contractor shall request that the tests be rescheduled with appropriate notification and approval by the Engineer. All equipment must be repaired and restored to full operation before being resubmitted for inspection or testing.

Full compensation for all testing and documentation shall be considered as included in the contract price paid and no additional compensation will be allowed therefor.

Component Tests:

Testing under this section applies to the components pertaining to the transmission of traffic data via the fiber optic hardware installed by the Contractor. All other testing is contained elsewhere in other sections of these Special Provisions.

Factory Tests:

Fiber Optic Cable--While on the shipping reel, after cabling but before shipment, 100 percent of all Fiber Optic line fibers shall be tested for attenuation. Copies of the results shall be (1) maintained on file, (2) attached to the cable reel in a waterproof pouch, and (3) submitted to the Contractor and to the Engineer prior to the delivery of the cable to the job site.

Attenuation tests shall be performed with a Optical Time Domain Reflectometer (OTDR) capable and calibrated to show anomalies of 0.2 dB as a minimum. Single mode fibers (SM) shall be tested at 1,310 nm and 1,550 nm. The OTDR used shall have a printer capable of producing a verifying test trace with cable identification, numerical loss values, date, and operator name. It shall be Windows based and have associated software to do comparisons and reproductions on 8-1/2-inch by 11-inch paper, via a personal computer (e.g. for example 383 PCW). OTDR for testing shall be provided by the Contractor at no cost to the City.

Pre-Installation Tests:

Prior to installation, the Contractor shall conduct pre-installation tests on all equipment to be used for this project.

Exhibit 6

Fiber Specifications and Performance Standards

Fiber Optic Cables--Upon arrival at the site, the cable and reel shall be physically inspected for damage and 100 percent of the fibers shall be tested with the OTDR for attenuation. Test results shall be recorded and compared with the filed copy stored with the shipping reel. The cable shall not be installed until completion of this test sequence. Copies of traces and test results shall be submitted to the Engineer. If the OTDR test results are unsatisfactory, the Fiber Optic cable segments shall be unacceptable and shall be replaced with a new segment of equal cable at the Contractor's expense. The new segment of cable shall then be tested to demonstrate acceptability. Copies of the test results shall be submitted to the Engineer.

Post Installation Tests:

The Contractor shall test each item after installation to ensure that the equipment has been installed without damage and operates correctly.

Fiber Optic Cables: After the fiber optic cable has been pulled, but before breakout and termination, 100 percent of all the fibers shall be tested with the OTDR for attenuation. Test results shall be recorded, compared, and filed with the previous copies of these tests. Copies of traces and test results shall be submitted to the Engineer. If the OTDR test results are unsatisfactory, the F/O cable segment shall be unacceptable. The unsatisfactory segments of cable shall be replaced with a new segment of cable at the Contractor's expense. The new segment of cable shall then be tested to demonstrate acceptability. Copies of the test results shall be submitted to the Engineer.

Outdoor Fiber Optic Cable Splices-At the conclusion of all outdoor fiber optic cable splices at one location, and before they are enclosed and sealed, all splices shall be tested with the OTDR, in both directions, at 1,310 nm (SM). Individual fusion splice losses shall not exceed 0.3 dB. Measurement results shall be recorded, validated by trace and filed with the records of the respective cable runs. Copies of traces and test results shall be submitted to the Engineer. If the OTDR test results are unsatisfactory, the F/O cable segment shall be unacceptable. The unsatisfactory segments of cable shall be replaced with a new segment of cable at the Contractor's expense. The new segment of cable shall then be tested to demonstrate acceptability. Electronic Copies of the fiber optic traces shall be saved in Bell-core Standard and a copy of all traces shall be submitted to the Engineer for analysis. Hard copies of the test results shall be submitted to the Engineer. End to End testing shall also be done from one direction using a transmission test set to measure attenuation at both 1310 and 1550 nm using a one jumper reference. Attenuation results shall be submitted to the Engineer for records in a hard copy format.

Acceptance of Communications Functional Tests—Successful completion of the functional tests as described above, shall constitute acceptance of the work and equipment for this area of testing.

Operational Test Period:

Exhibit 6

Fiber Specifications and Performance Standards

The Contractor shall furnish the City with a list of names and telephone numbers where persons designated by the Contractor can be reached to give notification of any alleged defects for which the Contractor has repair or replacement responsibility.

Any day during which the Contractor fails to restore the System to use within twenty-four (24) hours of a City notification to Contractor of a failure other than due to power failure, will extend the operational test period by one (1) working day in which no additional compensation will be allowed.

Should the Contractor fail to respond to the Engineer's request in this respect within twenty-four (24) hours of the Engineer's notification to the Contractor, the Engineer will cause the defective equipment to be removed and returned to the Contractor and shall be entitled to deduct freight and labor charges from any monies due to or become due to the Contractor. Alternatively, the Engineer may have defective parts or parts repaired or replaced at the sole expense of the Contractor. The Engineer's decision shall be final as the nature and cause of such defects and the necessity and means of remedying them.

The Contractor shall assume full responsibility to maintain the equipment supplied, and every part thereof, in complete repair for the period of the Operational Test Period and make good in a permanent manner, satisfactory to the Engineer, any and all damages or injury to equipment.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals and for doing all work involved in Operational Test Period as directed by the Engineer shall be considered in the bid price and no additional compensation will be allowed therefore.

Documentation:

The Contractor shall provide as built drawings and fiber configurations and test results.

Each submission shall be prominently identified including the date, name and address of the Contractor, and shall further indicate the specific individual (mailing address, telephone and fax number) to contact relative to matters in the submission. If more than one volume is used, each should be so identified.

Complete documentation shall be delivered at least fifteen (15) calendar days prior, and approved at least seven (7) days prior (unless otherwise approved by the Engineer), to conducting any training sessions.

The City shall have the right to reproduce copies of all documentation provided by the Contractor hereunder, provided that such reproduction is solely for the use of the City and its designated representatives.

Throughout the testing period, the Contractor shall correct all errors in documentation. Such corrections shall be made within 15 calendar days after discovery of error and shall

Exhibit 6 Fiber Specifications and Performance Standards

be at no cost to the City.

F. Data Center

The City Data Center is located at 904 11th Street, Sacramento, CA 95814.

G. Traffic Operations Center

The Traffic Operations Center (TOC) is located in the Traffic Engineering Services Offices at 915 I Street Room 2000, Sacramento, CA 95814.

H. Inside Traffic Cabinets

Manufacture	Description	Part number
Corning	Single Mode Fiber Patch Panel for Traffic Signal Cabinet	WIC-02P-FTTB
Corning	Single Mode ST connector panel	CCH-CP06-19T
Corning	Panel Door	WIC2-DOOR
Corning	Splice Tray	M67-068
Corning	Pigtails for Fusion Splice to OSP Cable	610001E3131001M

EXHIBIT 7

NOTICE OF COMPLETION AND NOTICE OF ACCEPTANCE/REJECTION

NOTICE OF COMPLETION

This Notice of Completion is issued pursuant to that License Agreement dated _____, 2007 (the "Agreement") by and between the City of Sacramento and Sacramento Metro Connect LLC ("Licensee"). This Notice of Completion is dated _____ and hereby notifies Licensee that the following items of the License Infrastructure identified as follows:

are complete and available for acceptance testing by Licensee.

Please take notice that if Licensee desires to perform acceptance testing, it must do so in accordance with Article 5.4 of the Agreement.

Signature: _____
Name and Title: _____
Dated: _____

NOTICE OF ACCEPTANCE/REJECTION

Licensee hereby accepts the following items of the License Infrastructure as in compliance with the Acceptance Testing:

The following items of the License Infrastructure are found not in compliance with the Acceptance Testing and are not accepted by Licensee: (Briefly describe the condition that is the basis for your claim that said portions of the License Infrastructure are not in compliance:

Signature: _____
Name and Title: _____
Dated: _____

EXHIBIT 8

LICENSED FIBER REQUEST FORM – ADDITIONAL FIBER ROUTES

Licensee's Fiber Route Description

- Advanced Engineering Request Form
- Route(s) Layout
- Build Out Plan(s)
- Terminating Points
- Mileage
- Fiber Count

Licensee's Schedule

- Anticipated Service Date
- Anticipated Tests

Licensee's Construction Plans

- Attached Drawings
- Demarcation Points
- Manhole Locations
- Terminal Equipment

Licensee's Coordination with City

- Joint Testing
- Network Interfaces
- Construction Support

Licensee's Project Manager

- Name, telephone, fax, address

CITY OF SACRAMENTO

By: _____

Dated: _____

SACRAMENTO METRO CONNECT LLC

By: _____
Name & Title:

Dated: _____

EXHIBIT 9

PERSONNEL CONTACT INFORMATION

For City:

Primary Contact during normal business hours:

Name:
Title:
Address:
Telephone: (office), (cell)
Facsimile:

Secondary Contact or for emergencies (24x7x365) and after normal business hours:

Name:
Title:
Address:
Telephone: (office), (cell)
Facsimile:

For Licensee:

Primary Contact during normal business hours:

Name:
Title:
Address:
Telephone: (office), (cell)
Facsimile:

Secondary Contact or for emergencies (24x7x365) and after normal business hours:

Name:
Title:
Address:
Telephone: (office), (cell)
Facsimile: