



OPENCAPe

Creating Regional Broadband Opportunities for Cape Cod and Southeast MA

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December 2, 2011

The OpenCape Corporation is seeking qualified Respondents to respond to this request for qualifications (RFQ) for the design of a Data Center within the OpenCape Regional Collocation Center in Barnstable, MA. This RFQ outlines the instructions for submitting a response and the criteria for selecting the successful Respondent.

Project Timeline – *all dates are subject to change at OpenCape's discretion*

- **December 2, 2011** – RFQ released
- **December 23, 2011** – RFQ response due by 4:00 pm
- **January 13, 2012** – Respondent Selection

This letter contains:

- A Request for Qualification (RFQ)

RFQ Response:

A response will not be deemed received until OpenCape has received six (6) copies of a Respondent's quotation. Hard copies shall be sent by regular mail to OpenCape, P.O. Box 1148, Barnstable, MA 02630-2148 or hand-delivered or sent by overnight delivery to OpenCape, C/O Cape Cod Commission, 3225 Main Street, Barnstable, MA 02630. Faxed or telephone proposals will not be accepted. An electronic copy should be either emailed to info@opencape.com, or provided on a USB "stick drive" with the hard copies. Respondents assume the risk of the methods of dispatch or delivery chosen.

Sincerely,

Daniel J. Gallagher, CEO

REQUEST FOR QUALIFICATIONS

**Design and Specifications
Services**

RFQ # 2011-12-001

**OpenCape Corporation
P.O. Box 1148
Barnstable, MA 02630-2148
www.opencape.com**

**Contact: Gary Delius
gdelius@opencape.com
(Please reference RFQ # in subject line of correspondence)**



1. Overview

The OpenCape Corporation is a 501 (C)3 non-profit corporation dedicated to improving the broadband network infrastructure on Cape Cod and in the southeast Massachusetts region.

The OpenCape Corporation announced on March 2, 2010 that it was awarded a \$32 million Broadband Technology Opportunity Program (BTOP) grant by the National Telecommunications and Information Administration (NTIA) from the American Recovery and Reinvestment Act (ARRA) stimulus funds. The \$32 million BTOP grant will be combined with matching funds totaling \$8 million from the Commonwealth of Massachusetts, a private network operating partner, and Barnstable County to construct a comprehensive middle mile network to support the economic, educational, public safety and governmental needs of the southeast Massachusetts region.

The OpenCape system will consist of a core fiber optic backbone on Cape Cod with extensions to two major regional network connection centers in Providence, RI and Brockton, MA, numerous fiber optic laterals extending off of the backbone, and a high capacity optical transport system (collectively, the “OpenCape Network”), a microwave radio overlay (the “Microwave Component”), a 700 Mhz mobile public safety radio system (the “Public Safety Component”), and a regional collocation center component (the “Regional Collocation Center”). The OpenCape Network, the Microwave Component, the Public Safety Component, and the Regional Collocation Center together make up the “OpenCape System.” All of these elements combine to provide a robust, high capacity comprehensive communications infrastructure for the region.

The Regional Collocation Center will be the focal point of network operations, aggregation of services, and data center type services. It will on its ground floor have a Data Center (the “Data Center”) that will provide leased collocation space and services for public and private organizations in the region. The design and associated specifications of the Data Center are the subject of this RFQ.

A contract was awarded to Stateside Construction to act as Construction Manager in the general renovation of the building. The general renovation will bring the building up to code and compliance with current laws and regulations. Demolition and construction began on November 28, 2011.





In addition to the general renovation of the building, Stateside will prepare the ground floor for data center equipment and configuration. Stateside will complete fire suppression, flooring, walls, ceilings and lighting in the ground floor data center area, construct generator and cooling pads, procure and arrange for the installation of an approximate 600Kw generator, initial electrical and uninterruptible power supply (UPS), and power distribution unit (PDU) equipment. OpenCape hopes to select the successful Respondent to this RFQ in sufficient time to permit input on some of these selections.



The successful Respondent to this RFQ will complete the design of the Data Center, provide OpenCape with support in its general renovation activity, and provide specification documents adequate for a later Request for Proposals (RFP) for the construction the Data Center.

This RFQ is not intended to limit a Respondent's creativity in suggesting ideas to accomplish the goals of OpenCape. **Innovative ideas and new concepts are welcome and encouraged, particularly with regard to Data Center energy management and efficiency.** Please indicate any other value-added arrangements, unique business features, sponsorship arrangements, special services, discounts or terms and conditions that might suggest solutions for the needs of OpenCape.

2. Evaluation Process and Criteria

Responses will be evaluated on the degree to which they help OpenCape meet the specific requirements of this RFQ. We will look at the following dimensions of each response:

- Scope of services – Respondent's ability and capacity to fulfill the Scope of Services in designing the Data Center and providing specifications for its construction.
- Expertise – Respondent's qualifications, experience, similar project history, and independence in solution and vendor recommendations.
- Timeliness – The ability to begin work with OpenCape promptly and complete the design and specifications of the Data Center rapidly to aid in ensuring construction is



completed in a timely manner and integration with the OpenCape Network is complete in the fourth quarter of 2012.

- Cost – The overall value of the design and specification work.

Costs will be evaluated on the assumption that the RFQ response offers the Respondent's most favorable terms to OpenCape. Notwithstanding any other provision of this RFQ, OpenCape expressly reserves the right to negotiate with any Respondent, using the Respondent's RFQ response as a basis for obtaining best and final offers prior to contract award.

The Respondent should be aware that time is of the essence. By submitting a quotation the Respondent agrees to negotiate in good faith with OpenCape to complete and finalize a contract in a manner consistent with the Project's timeline.

2.1. Evaluation criteria

OpenCape Corporation will generally employ a qualifications-based selection process in determining which firms it wishes to consider further. The following criteria will be used in the evaluation committee's review of submittals:

- Firm's qualifications and experience
- Firm's relevant similar project experience
- Firm's data center design and specifications expertise
- Firm's comprehension of the Data Center technical requirements and construction cost limitations
- Firm's ability to comply with the proposed project schedule.
- Firm's capacities and financial capabilities.
- Firm's experience with federally funded projects and reporting criteria
- Firm's proposed costs
- Firm's experience in working on Cape Cod
- Firm's capacity for working collaboratively with OpenCape's general renovation contractor, Stateside Construction
- Firm's independence in making solution and vendor recommendations
- Firm's commitment to making local residents and sub-contractors as well as Small Businesses (SBs), Veteran-Owned Small Businesses (VOSBs), Service-Disabled Veteran-Owned Small Businesses (SDVOSBs), HUBZone Small Businesses, Small Disadvantaged Businesses (SDBs) Woman-Owned Small Businesses (WOSBs), Historically Black Colleges/Universities or Minority Institutions (HBCU/MIs), Minority-Owned Businesses (MOBs), or Local (SE Mass) Businesses (LBs) a priority in the hiring and contracting for the project.



2.3 Liability for Costs Incurred for response Preparation

OpenCape is not, and shall not be, liable or responsible for any costs or expenses incurred by a proposing firm in the investigation, preparation, submission and production of a response, for expenses for any retained consultants, or for any work performed by the proposing firm prior to the final execution of agreements. All such costs and expenses are the sole and absolute responsibility of the proposing firm.

2.4 Right of Evaluation

Once responses are submitted and reviewed by OpenCape, OpenCape may select a short list of firms to interview. After the interview process, OpenCape will select a Respondent and begin negotiations to finalize a contract for services. If OpenCape cannot negotiate a contract successfully with the selected Respondent, the next highest-ranking Respondent will be contacted and negotiations will begin. The process will continue until a mutually agreeable contract is finalized between OpenCape and the selected Respondent.

Notwithstanding any other provision of this RFQ, OpenCape expressly reserves the right to:

1. Conduct discussions with any or all Respondents for the purpose of clarification of responses;
2. Waive, or decline to waive, any insignificant defect or informality in any response or response procedures;
3. Accept, reject, or negotiate any or all responses or the terms of any response, or any parts thereof, for the purpose of obtaining the best and final offer;
4. Cancel or amend this RFQ or issue other RFQs;
5. Select a Respondent or Respondents based on OpenCape's analysis and evaluation of responses submitted.
6. To request presentations of responses if OpenCape feels further information is appropriate to the decision-making process.
7. Select no Respondents at all, and
8. Select more than one Respondent.

OpenCape reserves the right to select and enter into a contract with a Respondent that provides the best qualified response that is most beneficial to OpenCape's goals. At its discretion, OpenCape may elect not to pursue an Agreement for any of the services requested in this RFQ, or to pursue an Agreement with one or more respondents for some or all of the requested services.

By executing the Officers Certification and Acceptance Form (Appendix D), Respondent acknowledges, understands and agrees to be bound by the procedures set forth in this RFQ and



agrees that it is compliant with them, and agrees that OpenCape shall not be liable under any circumstances for the subsequent disclosure of any materials submitted to it by Respondent pursuant to this RFQ, and agrees that it has read, understood, and accepted the Special Conditions of Appendix C.

It is the policy of OpenCape that contracts are awarded only to responsive and responsible Respondents. In order to qualify as responsive, the **Respondent must respond to the requirements of the RFQ in a complete and thorough manner.** In order to qualify as responsible, the Respondent must demonstrate the availability of adequate resources and staffing and the necessary experience, organization, qualifications, skills and facilities to fulfill the requirements of this RFQ. **Any response determined to be non-responsive to this RFQ, including instructions governing the submission of responses, will be disqualified without evaluation unless OpenCape determines that the noncompliance is insubstantial.**

Unless otherwise specified in this RFQ, all communications, responses, and documentation must be in English, and all cost responses or figures in U.S. currency.

Respondents are prohibited from communicating directly with any employee of OpenCape except as specified in this RFQ during the RFQ process, except as provided for under Section 2.6, "Questions Regarding RFQ."

OpenCape may provide reasonable accommodations, including the provision of material in an alternative format, for qualified Respondents with disabilities or other hardships. Respondents requiring accommodations shall submit requests in writing, with supporting documentation justifying the accommodations.

If a Respondent is unable to meet any of the specifications required in this RFQ, the Respondent's quotation must include an alternative method for meeting such specification by identifying the specification, the proposed alternative, and thoroughly describing how the alternative achieves substantially equivalent or better performance to the performance required in the RFQ specification. OpenCape will determine if a proposed alternative method of performance achieves substantially equivalent or better performance.

All responses submitted become the property of OpenCape; they will not be returned and may be released in whole or in part as required by applicable law, including the requirements of granting authorities, the Freedom of Information Act, and Massachusetts General Laws. Pricing and other information that is an integral part of the response cannot be considered confidential after an award has been made.



A Respondent may withdraw its response prior to the RFQ response deadline. Responses received after the deadline will not be considered. Responses will be opened and reviewed internally at the convenience of OpenCape.

The response constitutes an offer by the Respondent to do business with OpenCape under (at a minimum) the terms, conditions and pricing gathered from the Respondent in response to this RFQ, and such offer shall remain open and irrevocable for a time period of ninety (90) days after receipt. In the event a contract is awarded to a Respondent, OpenCape, at its option, may incorporate all or parts of a Respondent's response and any or all answers and information contained within that response into the final agreement between the successful Respondent and OpenCape.

Any information released either verbally or in writing prior to the issuance of this RFQ shall be deemed preliminary and not binding upon OpenCape in any manner.

OpenCape reserves the right to use any and all concepts presented in any response to obtain the most beneficial and effective path to achieving its desired goals for the project. Selection or rejection of responses shall not affect this right. All responses will be evaluated pursuant to the criteria set forth herein, and, at OpenCape's discretion, an award made to the Respondent(s) who demonstrates the best ability to satisfy the scope of work in the most timely and cost effective manner within the context of OpenCape's goals.

By submittal of a response, a Respondent attests to have read, understood, and agreed to all requirements, terms, and conditions in this RFQ, including any and all attachments, exhibits, appendices and addendum.

A Respondent must be properly licensed and registered and in good standing as required by the Commonwealth of Massachusetts as necessary to complete the scope of work contained in this RFQ and be able to secure any necessary bonds required to complete the work. Each Respondent may, before submitting a response, examine sites to determine the extent of work involved and the conditions under which the work would be performed. The submission of a response will be construed as evidence that such an examination has been made, and no subsequent allowance will be made in this regard on behalf of the Respondent for any error or negligence on its part.

Respondents must identify any conflict of interest that may arise from providing services to OpenCape. OpenCape reserves the right:

1. to disqualify any Respondent or reject any response at any time solely on the grounds that a real or perceived legal or policy conflict of interest is presented;



2. to require the Respondent to take any action or supply information necessary to remove the conflict; or
3. to terminate any contract arising from this solicitation if any such relationship would constitute or have potential to create a real or perceived conflict of interest that cannot be resolved to OpenCape's satisfaction.

2.5 Response Requirements

A response will not be deemed received until OpenCape has received six (6) copies and one (1) electronic copy of a Respondent's response. Hard copies shall be sent by regular mail to OpenCape, P.O. Box 1148, West Barnstable, MA 02630-2148 or hand-delivered or sent by overnight delivery to OpenCape, C/O Cape Cod Commission, 3225 Main Street, Barnstable, MA 02630. Faxed or telephone responses will not be accepted. An electronic copy should be either emailed to info@opencape.com, or provided on a USB "stick drive" with the hard copies. Respondents assume the risk of the methods of dispatch or delivery chosen.

2.6 Questions Regarding RFQ

All potential Respondents may request a site visit by contacting Gary Delius at gdelius@opencape.com.

Any questions regarding this RFQ should be submitted electronically no later than **4:00PM on December 9, 2011** to the following e-mail address: info@opencape.com. Please include the RFQ number in the subject heading.

All questions received by the deadline, along with the corresponding responses, will be posted to the OpenCape website (<http://www.opencape.com/contracts-and-requests-for-proposals>) at the end of the business day on **December 13, 2011**.

2.7 Availability of Responses

Any items that the Respondent wishes to cover under a non-disclosure agreement should NOT be included in this response.



2.8 Timeline and Due Dates

Project Timeline – *all dates are subject to change at OpenCape's discretion*

- **December 2, 2011** – RFQ released
- **December 23, 2011** – RFQ response due by 4:00 pm
- **January 13, 2012** – Respondent Selection

3. Scope

The scope of services is provided in Appendix A of this document.

4. Attachments

The following attachments are provided as supplemental materials about the project for your firm's review and use in preparing your submittal.

1. Ground, 1st Floor, and 2nd Floor floor plans.



Appendix A: Scope of Work

1.0 SCOPE OF SERVICES

The successful Respondent will, on behalf of OpenCape, design a Data Center within the ground floor level of the OpenCape Regional Collocation Center and provide specifications to support a request for proposals (RFP) for the construction of the Data Center. OpenCape intends to create a Data Center with a capacity of approximately 40 useable racks that can operate without interruption using an approximate 600Kw generator.

The OpenCape Regional Collocation Data Center shall be designed to offer standard collocation services (e.g. partial rack, rack, and cage leasing) within the facility as well as managed services such as disaster recovery, data storage and backup, security, monitoring, reporting, and application hosting.

The facility shall be constructed in a manner that will attain as many certifications as possible, to include

1. American Institute of Certified Public Accountants (AICPA) under Statement on Standards for Attestation Engagements (SSAE) 16 (replaced SAS 70);
2. the Payment Card Industry Security Standards Council Data Security Standard;
3. the Health Insurance Portability and Accountability Act of 1996 (HIPAA) Privacy and Security Rules.

The successful Respondent shall be guided in design by the Telecommunications Industry Association (TIA) Standards for Data Centers TIA-942 and subsequent updates ANSI/TIA-942-1 and TIA-942-2 , the ANSI/BICSI 002-2011 “Data Center Design and Implementation Best Practices,” the 2008 American Society of Heating, Refrigerating and Air-Conditioning Engineers Environmental Guidelines for Datacom Equipment, and the U.S. Department of Energy “Best Practices Guide for Energy-Efficient Data Center Design.”

The successful Respondent shall:

- manage all aspects of the project design to include but not limited to the following:
 - space configuration and equipment layout
 - energy/power infrastructure and systems integration
 - auxiliary power infrastructure and systems integration
 - energy efficiency and cogeneration
 - climate control/HVAC
 - cabling (demarcation, horizontal, cross-connect, management)



- fire detection and prevention, and suppression system integration
 - security systems/access and monitoring
 - access and installation logistics (ramps, etc.)
 - equipment specifications with biddable specifications (HVAC, UPS, PDU, racks, etc.)
 - operations space (1st floor) outfitting and integration with ground floor
 - remote management and monitoring systems
 - Integration with the OpenCape Network
-
- coordinate all design and specifications development with OpenCape and stakeholders OpenCape designates such as the Cape Cod Light Compact and Barnstable County;
 - provide final design and specification plans to OpenCape for use in construction RFP development;
 - provide biddable equipment specifications where appropriate;
 - Develop a base-line project plan for the project;
 - Create construction cost estimates.

1.1 Technical and Supporting Information and Requirements

The work intended by this RFQ will begin after, but occur in parallel with the general building renovation to be performed by Stateside Construction as OpenCape's Construction Manager. The successful Respondent to this RFQ will be expected to work closely with Stateside as it renovates the building to all current codes and aid in decision-making related to the Ground Floor renovation and first floor operations offices. The general renovation of the future OpenCape Regional Collocation Center began on November 28, 2011.

A primary responsibility of the design team is to produce a building and equipment specification that can be built and provisioned within a budget of approximately \$800,000, not including the work to be performed by Stateside as part of the general renovation to include Stateside's construction of generator and cooling pads and fences, and purchase of an approximate 600Kw generator, and initial outfit of UPS and PDUs and associated infrastructure.

The following technical information is provided to assist the Respondent in understanding the broader context of the scope of work:

1. The building shall be generally renovated by Stateside Construction into the following spaces:
 - a. Ground Floor: This floor, consisting of approximately 4500sqft in total, will undergo demolition by Stateside Construction and be prepared for the



construction of the Data Center within approximately 2500sqft. Several areas of the ground floor will be isolated and secure from disruption during renovation, to include County 911 space and spaces associated with the adjacent cell tower. Stateside will coordinate with OpenCape and its successful Respondent to this RFQ and a future Data Center construction company. Very little or no administrative or operations space is envisioned for the Ground Floor in order to maximize equipment space. See attached Ground Floor floor plan.

- b. First Floor: The East Wing will be the OpenCape Corporation's operations center and offices. The West Wing will include the operations centers for both the Network Operator and the Data Center Operator, as well as shared conference room space. The central portion of this floor will have common use kitchen, restrooms, recycling, and supply areas for all tenants. See attached 1st Floor floor plan.
 - c. Second Floor: The second floor will become the Barnstable County Regional Umbrella Services Support Center. The space will largely be made up of office and cubicle space. See attached 2nd Floor floor plan.
2. The Ground Floor Data Center shall have independent power, auxiliary power, fire suppression, HVAC, and access control systems. The First and Second Floors shall use existing power service and HVAC, and receive auxiliary power from an in-place generator. Stateside shall prepare access conduits for power and cooling as well as install the external generator and cooling pads, perform utility coordination for the Ground Floor electrical services, and procure the generator and UPS/PDU equipment for the Data Center.
 3. There is currently a radio transmitter room in the ground floor east side associated with an adjacent communications tower. This space shall be left intact and undisturbed. An adjacent communications area will be walled off and isolated from the OpenCape spaces by Stateside Construction. Telephone interconnects and County Campus fiber optic network circuits of the building will be marked, protected and maintained throughout construction, as well as all existing telecommunications "out" buildings that are adjacent to this building must remain undisturbed.
 4. OpenCape anticipates approximately 2500sqft of floor space will be useable for rack space, permitting approximately 40 useable racks with an average operating power consumption of 10Kw per rack. An initial outfitting of approximately 20 racks is envisioned.

1.2 Power and Electrical

1. OpenCape intends for the Respondent to refine power requirements given the goals and constraints provided.



2. Actual power needs of the datacenter will ultimately be determined by customer demand and technology; however, the design will create infrastructure that can operate without disruption using an approximate 600Kw generator. This limiting factor of a 600Kw generator should be used to size all other equipment and capacities within the Data Center.
3. The facility shall be designed to achieve at full capacity a Power Usage Effectiveness (PUE) ratio below 1.6 if possible within other constraints.
4. Conform to all National Electrical Code, and Commonwealth of Massachusetts and local codes and regulations with regard to all power and electrical work.

1.3 Energy Management

The successful Respondent shall make energy management, efficiency, and conservation a major objective of design. The Department of Energy “Best Practices Guide for Energy-Efficient Data Center Design” shall be used as a guide and its recommendations followed where practical. In addition, the successful respondent shall work collaboratively with the Cape Cod Light Compact to develop a program of energy efficiency that is most effective in reducing operational energy consumption and obtaining incentive funding.

Design of the Data Center shall incorporate technologies, practices, and standards that promote efficient energy consumption wherever possible through the following techniques:

1. Direct use of waste heat for low temperature heating applications such as preheating ventilation air for first and second floor heating.
2. Use of external free air cooling techniques.
3. Direct use of waste heat from the data center for generator block heaters.
4. Optimizing the UPS system to operate at a high load.
5. Thermal containment strategies that incorporate hot and cold aisle cooling techniques with enclosures and blanking panels in cabinets if appropriate.
6. To manage data center energy use, it must be fully instrumented to meter the demands of all service utilities with sub-metering for all major system energy consumers. The system should measure and track the entire data center energy profile, including water use, cooling water energy BTUH, power distribution units, power panels serving HVAC equipment, central plant systems, lighting, etc. The system should also monitor weather conditions at the site: dry bulb temperature, dew point, and wind speed. On the floor the system will monitor server cabinet inlet temperature, room dew point, server cabinet hot aisle temperature, and building pressure relationships. The control system



will monitor system and equipment alarm conditions and initiate operation of backup systems when component failures occur.

1.4 Access Control and Security

The successful Respondent shall design robust security technologies and systems where possible, to include, but not limited to the following:

1. The exterior perimeter walls, doors, and windows should be constructed of materials that provide Underwriters Laboratories Inc. (UL) rated ballistic protection.
2. Physical protection barriers that protect the facility from intruders.
3. Windows into and within the data center, such as the lobby area and other entrance mechanisms, shall be protected by bullet proof or bullet resistant glass.
4. The data center's security systems should be served by uninterruptible power supply (UPS) and generator power for ensuring its continuous operation.
5. The data center shall have a man trap that allows for secure access to the data center "floor".
6. Access to all entry points into and within the data center should be protected by electronic access control mechanisms which allow only authorized individuals to enter the facility. Included within the framework of electronic access control should also be biometric safeguards, such as palm readers, iris recognition, and fingerprint readers.
7. All exterior doors and sensitive areas within the facility must be hard wired with alarms.
8. The facility shall have a mixture of security cameras in place throughout all critical areas, both inside and out, of the data center. This should include the following cameras: Fixed and pan, tilt, and zoom (PTZ), and motion activated cameras.

1.5 Fire Protection

A fire detection and prevention system shall be designed in accordance with the National Fire Protection Association (NFPA) 75: *Standard for the Protection of Information Technology Equipment*, and local, state, and federal codes and regulations.

The Data Center shall have a very early warning aspirating smoke detection system with continuous air sampling, photoelectric, and ionization detection systems.

Stateside Construction shall install a dry pre-action fire suppression system in the Data Center area in accordance with NFPA 75.

The energy management system shall have the capability to permit shut down of power to individual racks, groups of racks, or cages.



An emergency power off (EPO) shall be installed in appropriate controlled spaces negotiated with local fire authorities to reduce the risk of accidental or malicious power interruption in accordance with the National Electric Code.

The Data Center shall have appropriate types, numbers and deployment of portable fire extinguishers.

A system to detect the presence of leaking or collecting water shall be installed. Systems such as drip pans/hoods to protect equipment from leaks or condensation shall be installed where practical. A system to drain water from the Data Center to the exterior of the building shall be constructed by Stateside Construction.

1.6 Environmental Control

The design of climate control systems shall be in accordance with TIA-942 and The American Society of Heating, Refrigerating and Air-Conditioning Engineers Environmental Guidelines for Datacom Equipment. The climate control system shall be designed and constructed to meet the following parameters at the equipment inlet when the Data Center is at full capacity:

Low End Dry Bulb Temperature: 18C (64.4F)

High End Dry Bulb Temperature: 27C (80.6F)

Low End Moisture: 5.5C Dew Point (41.9F)

High End Moisture: 60% Relative Humidity & 15C Dew Point (59F DP)

The climate control system shall provide N+1 redundancy. Other areas of the building, including the Ground Floor hallways, 911 Room, and “meet-me-room” will be cooled by other means.

The Data Center has inadequate floor-to-ceiling clearance to permit a raised floor. Climate control systems that rely on a raised floor are not feasible in this Data Center.

The climate control may be a traditional Computer Room Air Conditioning (CRAC) refrigerant based system, Computer Room Air Handling (CRAH) system with chiller system or more modern liquid cooling units, or a combination of systems if suited to the requirements of the Data Center.

Efficiency techniques shall be a major focus of climate control design and construction wherever possible to include, but not limited to

1. outside air economizer (free air) techniques;



2. indirect evaporative cooling of chilled water;
3. fan array technology;
4. electronic server cabinet hot and cool aisle containment;
5. provision to support liquid cooled cabinets;
6. adiabatic direct air evaporative cooling and humidification;
7. configuration of low, medium and high density and heat load spaces;
8. direct use of waste heat for preheating ventilation air for first and second floors;
9. direct use of waste heat from the data center for generator block heaters.

A static control system, to include anti-static flooring, shall be designed and implemented.

1.7 Cable, Network and Communications Facilities

The following networking and data cabling practices be implemented:

1. Data cabling shall be installed and tested in accordance with industry standards and best practices listed in the American National Standards Institute (ANSI)/Telecommunications Industry Association (TIA)-568 family of Telecommunications Standards;
2. Data cabling routed outside of cabinets shall be protected and contained, using solutions such as cable trays, flexible conduit, J-hooks, etc.;
3. Data cabling routed within or between bayed cabinets shall be done in a manner so as to not inhibit air flow through the cabinet. Cabling within a cabinet shall be dressed in such a way as to enhance air flow through the cabinet; Twisted-pair and fiber panels shall be labeled, and all cables shall be labeled at both ends, including twisted-pair and fiber patch cords;
4. Cabling, cable lengths, and terminations shall meet current Building Industry Consulting Service International (BICSI) cabling and termination standards.

The successful Respondent shall design the integration of the first floor Network Operator and Data Center Operator operations spaces with the Data Center.

The successful Respondent shall design the integration of the first floor operating spaces of the OpenCape Corporation and the second floor Barnstable County Regional Umbrella Services operations center with the Data Center.



Appendix B: Submittal Requirements

Responses to this Request for response must include the following information in sections as numbered below:

All respondents should provide responses in the following format:

1. Cover Letter: Indicate your firm's interest in the project. Include company name, address, contact name, email, and phone. Provide detailed contact information requested in Appendix D.

2. Overview of Respondent(s): Include company(s) history, number of employees and locations that will be assigned to this project, length of time your firm has provided similar services, and other relevant information.

3. Project Team: Identify the company staff that will be assigned to this project and provide their resumes.

4. Experience: Provide a description of the Respondent's experience in the design of Collocation and Data Centers. Provide information on relevant project experience with comparable projects completed in the last three years or currently in progress. Provide client information for three such projects as follows:

- 1) Client Contact Name, Title, Address, Telephone Number, Email
- 2) Project Title and Description

5. Sample Project Specifications: Provide a copy of design and specifications of a recent project similar in scope to this project.

6. High Level Design Assessment: Based on your examination of the intended Data Center space and other information provided in this RFQ provide a first impression preliminary anticipated floor plan and equipment layout for the Ground Floor Data Center using the attached Ground Floor floor plan. Describe anticipated systems, technologies and techniques to be used for energy management, climate control and HVAC, fire detection, and access control for this space. Provide an assessment of major obstacles and issues anticipated.

7. Other Current Projects: Indicate your existing client workload and what other projects your team is committed to, including project time frames. If you have any project that may



cause a conflict of interest or could otherwise hinder your proposed timeframes, please describe those projects and how your firm manages multiple client priorities.

8. Small, Minority, and Local Businesses: Respondents are to identify the extent to which Small Businesses (SBs), Veteran-Owned Small Businesses (VOSBs), Service-Disabled Veteran-Owned Small Businesses (SDVOSBs), HUBZone Small Businesses, Small Disadvantaged Businesses (SDBs) Woman-Owned Small Businesses (WOSBs), Historically Black Colleges/Universities or Minority Institutions (HBCU/MIs), Minority-Owned Businesses (MOBs), or Local (SE Mass) Businesses (LBs) would be utilized in the performance of this proposed contract.

9. Special Conditions: Indicate the Respondent's ability to meet all requirements contained in the Special Terms and Conditions in Appendix C and acknowledge in Appendix D.

10. Project Schedule: The timely completion of the design and construction services is critically important to the overall success of this project. Provide a proposed timeline/schedule depicting the anticipated activity of the firm during various phases of the project.

11. Fee Quotation: Each respondent shall provide a clear and understandable fee Quotation using Appendix E, "Fee Summary" to outline costs and indicate cost allocations.



APPENDIX C: Special Terms and Conditions

The Respondent acknowledges that OpenCape has received funds from the Broadband Technology Opportunity Program administered by the National Telecommunications and Information Administration as well as funds from the Commonwealth of Massachusetts, based on grant applications made by OpenCape. All or a portion of the funds received by OpenCape were provided under the American Recovery and Reinvestment Act (“ARRA”). As such, the Respondent warrants and guarantees that all actions by the Respondent under this Contract shall comply with OpenCape’s grant award conditions, and laws, rules and regulations applicable to ARRA funds and OpenCape’s funding sources, including without limitation the Special Award Conditions included within this Appendix, the ARRA Award Terms included within this Appendix, and 15 CFR Part 14.

Award Cancellation

An award resulting from this RFQ is automatically canceled if federal funds under ARRA are not appropriated or otherwise made available to support the contract’s commencement or continuation of performance. Services performed, up to that point, will be compensated on a pro rated basis.

Compliance

Upon request of OpenCape, the Respondent will furnish OpenCape with a certificate satisfactory in form to OpenCape that the Respondent’s performance of this Contract is in full compliance with the requirements of the Fair Labor Standards Act of 1938 as amended and the regulations and orders of the U.S. Department of Labor.

The Respondent shall in the performance of this Contract comply fully with the provisions of Executive Order No. 11246 (Equal Employment Opportunity) dated September 24, 1965, effective October 24, 1965, as amended by Executive Order No. 11375, “Amending Executive Order 11246 Relating to Equal Employment Opportunity,” and as supplemented by regulations at 41 CFR part 60, “Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor,” including without limitation the reporting and affirmative action requirements thereof.



The Respondent agrees and shall require all sub-contractors for this project to agree in writing that they shall comply with the following:

the provisions of M.G.L. c. 149 and shall pay the appropriate lawful prevailing wage rates to their employees as determined pursuant to the Massachusetts Division of Occupational Safety's Prevailing Wage Program.

Sections 102 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 327–333), as supplemented by Department of Labor regulations (29 CFR Part 5).

to the extent consistent with applicable law, endeavor to recruit and hire qualified workers who are residents of Cape Cod and Southeastern Massachusetts for each apprenticeable trade or occupation represented in their workforce.

maintain or participate in a bona fide and active apprentice training program as defined by M.G.L. c. 23, § 11H and 11I for each apprenticeable trade or occupation represented in their workforce that is approved by the Division of Apprentice Training of the Department of Labor and Workforce Development of the Commonwealth of Massachusetts and shall abide by the apprentice to journeymen ratio for each trade prescribed therein. For the purposes of this paragraph, the word "active" shall mean an apprentice training program that has operated without suspension for at least three (3) years prior to the bid date for the project in question (except in the case of a company that has been in existence for less than three (3) years in which case such program must have operated without suspension for that period the company had been in existence), and that has completed or graduated at least two (2) apprentices per year per trade for the same period.

comply with the terms, obligations and requirements of Chapter 30 of the Massachusetts Acts of 2009, including, without limitation, the apprenticeship requirements contained in Section 33 of said Act.

maintain appropriate industrial accident insurance coverage for all the employees employed on the project in accordance with M.G.L. c. 152.

classify employees employed on the project as employees rather than independent Respondents and shall properly classify said employees accordingly for purposes of workers' compensation insurance coverage, employment taxes, Social Security taxes and income tax withholding pursuant to M.G.L. c. 149, Sec. 148B. Similarly, those personnel retained as independent Respondents shall be treated as independent Respondents, and shall not be subject to the insurance and tax obligations owed to employees.



the Copeland “Anti-Kickback” Act (18 U.S.C. 874 and 40 U.S.C. 276c), as supplemented by Department of Labor regulations (29 CFR part 3, “Respondents and SubRespondents on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States”), which provides that each Respondent or subrecipient shall be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he is otherwise entitled.

Section 1606 of the American Recovery and Reinvestment Act and the Davis-Bacon Act, as amended (40 U.S.C. 276a to a–7), as supplemented by Department of Labor regulations (29 CFR part 5, “Labor Standards Provisions Applicable to Contracts Governing Federally Financed and Assisted Construction”), which requires, among other things, Respondents to pay wages to laborers and mechanics at a rate not less than the minimum wages specified in a wage determination made by the Secretary of Labor.

the Byrd Anti-Lobbying Amendment (31 U.S.C. 1352), which requires the Respondent or sub-contractor to certify that it will not and has not used federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352, and to disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award.

The Respondent represents and warrants that neither the Respondent nor its principal employees are listed on the General Services Administration’s List of Parties Excluded from Federal Procurement or Nonprocurement Programs in accordance with Executive Order Nos. 12549 and 12689, “Debarment and Suspension,” as implemented by Department of Commerce regulations at 15 CFR part 26. Moreover, the Respondent agrees that it shall not retain any sub-contractors who are listed on the List of Parties Excluded from Federal Procurement or Nonprocurement Programs.

Public Disclosure/Recordkeeping/Audit Requirements

Respondent should note that services performed and fees paid as provisioned under the NTIA BTOP compliance guidelines may be subject to disclosure under the Freedom of Information Act and are, therefore, responsible for identifying and labeling any confidential and proprietary information as such.



Pursuant to applicable federal law, Respondent must make available to the NTIA any information pertaining to services rendered for up to three years after the completion of the project (approximately December 31, 2012). NTIA representatives, the Inspector General, or any of their duly authorized representatives, shall have access to and the right to inspect any and all books, records, accounts, invoices, contracts and other documents, papers and records of the Respondent in order to make audits or other examinations as authorized by law, including the American Recovery and Reinvestment Act requirements. An audit of the Respondent's records may be conducted at any time and may involve interviews of officers and employees of the Respondent.



APPENDIX D: Officer Certification and Acceptance Form

1. Is your organization in compliance with of all of its obligations under all bank lending and other credit (e.g., equipment leases) arrangements and has it been in compliance with these requirements during the past 12 months?
_____Yes _____No
2. During the past 5 years has your organization filed for bankruptcy or has any Principal (more than 5% stockholder or other type of ownership) or officer been an officer or Principal of another firm that filed for or been the subject of any bankruptcy or insolvency proceeding?
_____Yes _____No
3. Is your organization current in all of its obligations to federal, state and local taxing authorities?
_____Yes _____No
4. Is your organization a party in any litigation proceeding or threatened litigation which could result in a material adverse effect on the organization?
_____Yes _____No
5. Has your organization or any officer or Principal been convicted in any criminal proceeding (other than minor traffic and other non-felony offenses) during the past 5 years or currently the subject of any similar criminal proceeding?
_____Yes _____No
6. Is your organization involved in any material dispute with any federal, state or local regulatory authority or been involved in any such material dispute during the past five years?
_____Yes _____No
7. Are your organization's financial statements audited?
_____Yes _____No
8. If so, have you received a "going concern" opinion from such audit firm during the past three years?
_____Yes _____No
9. Are more than 25% of your revenues derived from any single customer?
_____Yes _____No
10. Did your organization have positive net income in each of the two most recent fiscal years?
_____Yes _____No
11. Do your organization's tangible current assets (current assets less goodwill) exceed its current liabilities?
_____Yes _____No
12. Do you understand and acknowledge the Special Condition contained in Appendix C?
_____Yes _____No

If you have answered 'Yes' to questions 2, 4, 5, 6, 7(b), or 8, please explain.

If you have answered 'No' to questions 1, 3, 7(a), 9, or 10, please explain.

Attach additional sheets if necessary.



I certify that I have the authority to bind the Respondent indicated below to the specific terms and conditions imposed in this RFQ and offered in this bid proposal, that all of the foregoing answers and all statements contained in any explanation are complete, true and correct, and that by my signature on this document I specifically agree to all of the waivers, restrictions and requirements of this RFQ as conditions precedent to submitting this proposal. I further state that in making this bid proposal that the Respondent has not consulted with others for the purpose of restricting competition or violating State or Federal anti-trust laws and has not knowingly made any false statements in this proposal.

Authorized Signature:

Printed Name:

Title:

Telephone:

Fax Number:

E-Mail:

Business Name:

Address:

Federal ID Number:

Signed and sworn to before me, a Notary Public, this _____ day of _____, _____

Notary Public



**Appendix E
Fee Summary**

1. General Fee Summary

Provide a fixed price dollar cost of services. Do not provide a percentage of constructions costs.

Design and Specifications	Amount
Design Documents	
Specification Documents	
Stateside Renovation Coordination	
TOTAL	