

**March 19, 2007**

**CRITICAL INFRASTRUCTURE MONITORING SYSTEM**

**for**

**CITY OF BOSTON**

**ISSUED BY:**

**Mayor's Office of Emergency  
Preparedness/Metro-Boston Homeland  
Security Region  
Boston City Hall  
Room 603, One City Hall Plaza  
Boston, MA 02201**

**SECTION I**  
**INTRODUCTION**

## SECTION I: INTRODUCTION

### GENERAL NOTICE TO OFFERORS

Offerors are advised to conduct a thorough review of this Request for Proposals (RFP). Review all Sections of the RFP, including attached documents and those incorporated by reference. Offeror's Non-Price Proposal must include the signed, completed Minimum Evaluation Criteria checklist, all required forms, Technical Approach, and a Plan of Services.

Direct all questions or correspondence regarding this RFP to:

ADAM WEHREBERG  
MAYOR'S OFFICE OF EMERGENCY PREPAREDNESS  
BOSTON CITY HALL ROOM 603  
BOSTON, MA 02201  
ADAM.WEHREBERG@CITYOFBOSTON.GOV

Only written or emailed questions received **by Monday, April 2, 2007 at 5:00 PM EDT** at the above email and/or mailing address will be accepted and responded to. Answers will be provided at the mandatory Offerors' Conference on **Friday, April 6, 2007 at 10:00 AM EDT**. Additional questions asked at the Offeror's Conference will be answered via email on or before **Tuesday, April 10 at 12:00 Noon EDT**.

#### **Complete Offeror Proposals shall consist of the following elements:**

- 1) One (1) original and Six (6) exact duplicate copies of the NON-PRICE PROPOSAL, which must be submitted in a sealed envelope or box marked:  
"Critical Infrastructure Monitoring Project"  
(NON-PRICE PROPOSAL)  
Submitted By: <Name of Offeror>  
<Date Submitted>
  
- 2) One (1) original and Six (6) exact duplicate copies of the PRICE PROPOSAL, which must be submitted in a sealed envelope or box marked:  
"Critical Infrastructure Monitoring Project"  
(PRICE PROPOSAL)  
Submitted By: <Name of Offeror>  
<Date Submitted>

## SECTION I: INTRODUCTION

**DELIVER or MAIL the complete original NON-PRICE PROPOSAL and six (6) exact duplicate copies and the complete original PRICE PROPOSAL and six (6) exact duplicate copies to:**

ADAM WEHREBERG  
MAYOR'S OFFICE OF EMERGENCY PREPAREDNESS  
BOSTON CITY HALL ROOM 603  
BOSTON, MA 02201

### PLEASE NOTE:

- Any proposal not received at the above addresses by the deadline listed in the timetable below will not be accepted.
- Any proposal not submitted and constructed in the manner specified in this RFP will not be evaluated.
- A register of Offerors with the name of each Offeror will be available for public inspection following the opening of proposals.
- The contents of each proposal submitted shall remain confidential and will not be made available to competing Offerors. Offerors wishing to review the contents of competing proposals may do so only after a contract has been awarded and executed.
- **The Non-Price Proposal shall contain absolutely no reference to cost or price.**

### TIMETABLE

RFP Advertisement Appears in City of Boston Record:

Monday, March 19, 2007

Monday, March 26, 2007

RFP Package Available On and After:

Monday, March 19, 2007 12:00 Noon Eastern Daylight Time (EDT)

Deadline for questions to be received at the mail or email address indicated above:

Monday, April 2, 2007 5:00 PM EDT

Offerors' Conference to address questions asked prior to above deadline:

Friday, April 6, 2007 10:00 AM EDT

Deadline for reviewing documents on file in Mayor's Office of Emergency Preparedness, as outlined in RFP:

Wednesday, April 18, 2007 5:00 PM EDT

Deadline for Non-Price and Price Proposals to be received at the address indicated above:

Friday, April 20, 2007 5:00 PM EDT

## SECTION I: INTRODUCTION

Three highest-rated Offerors notified:

Friday, April 27, 2007

Oral Presentations and Live Demonstrations by three highest-rated Offerors:

Week of May 14, 2007

Target Date for Award

Monday, June 4, 2007

### Definitions and Acronyms

See Section IV for definitions and acronyms.

### Background

As part of the Federal Fiscal Year 2003 Urban Area Security Initiative, Boston Mayor Thomas M. Menino created the Mayor's Office of Emergency Preparedness – a central point of coordination for homeland security programs and activities in Metro-Boston.

The mission of the Mayor's Office of Emergency Preparedness (MOEP) is to enhance the MBHSR's capacity to prevent, prepare for, respond to, and recover from chemical, biological, radiological, nuclear and explosive attacks. MOHS achieves its mission by working with neighboring communities and regional stakeholders to effectively leverage the region's homeland security resources.

MBHSR stakeholders have identified sites of interest within the Region as "Critical Infrastructure" relative to continuity of government, municipal operations, historic importance and/or general governmental or economic stability. Further, evacuation planning projects have identified sites of high pedestrian and vehicle traffic within the Region. Live and archived video have proven to be beneficial to planning, prevention, and response to various types of incidents. The purpose of the Critical Infrastructure Monitoring System (CIMS) is to provide the region with an interoperable internet-based monitoring system to provide video data to public safety agencies within the Region. This RFP seeks a vendor to provide new video infrastructure to integrate with existing video infrastructure in the Region to create the CIMS.

**SECTION II**  
**INSTRUCTIONS FOR**  
**PREPARATION AND**  
**SUBMITTAL OF PROPOSAL**

**SECTION II: INSTRUCTIONS FOR PREPARATION AND  
SUBMITTAL OF PROPOSAL**

**1 TERMS AND CONDITIONS**

- A. The successful Offeror agrees to provide services to the City as detailed in Section 4.
- B. By responding to this RFP, Offerors stipulate that they will meet and abide by all requirements set forth in this RFP.
- C. Timelines identified in Section II shall serve as guidelines; final timelines shall be determined upon the mutual agreement of the Parties during contract negotiation.

Final deliverable timelines will be determined during the contract negotiation with the successful Offeror. The City is interested in proceeding expeditiously.

- D. The City has published this RFP in a prescribed secure format and will not provide this document in other software versions that could subject it or the City's contract documents to material alteration. Should an Offeror wish to present further documentation in order to compose a more accurate proposal, the Offeror may do so with supplementary attachments or addenda.

All forms that the City makes available in electronic format are included electronically in the RFP package but most of the forms are not writeable. The City does not provide the unlocking password for its contracting forms. Offerors are advised to print the Minimum Evaluation Criteria worksheet from the RFP document and complete it manually.

- E. Recommendations made by City of Boston contractors shall not be based on affiliations, agreements, or arrangements with other entities and must be based on nothing other than the best interests of the City. Recommendations shall be made in good faith and on the basis of the congruence of a recommended solution or technology to the City's needs. Offerors are advised to provide full disclosure in their Non-Price Proposal. While Offerors with related affiliate(s) are not precluded from responding to this RFP, proposals which are deemed to contain an overriding potential conflict of interest are subject to disqualification on that basis.
- F. The City has a finite budget for its operations. This RFP was uniquely constructed to facilitate receipt by the City of the most advantageous plan. The RFP process was used to obtain a superior quality plan of services without lending primacy to cost. That is why the Price Proposal must be submitted separately. The Price Proposal is reviewed only after the most advantageous proposals have been determined. It is anticipated that

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Offerors will submit an equitable fee schedule to match the services they propose to provide.

- G. The City will select a vendor no later than 45 days from opening, which will take place shortly after the proposal due date. Contract negotiations will proceed following vendor selection. Offerors are advised that the City is interested in proceeding expeditiously.
- H. The City attempts to procure services from local, minority and women-owned businesses whenever practicable. There are no additional points awarded these firms in the City of Boston procurement process. In this RFP process, the most advantageous proposals shall be considered, regardless of the type of business ownership.
- I. The City makes no prescriptions in the RFP for Proposal page limits, fonts, and margins except where otherwise indicated. Offerors are instructed to format their proposals in a manner that is as concise and accurate as possible. While there is no limit imposed on the addenda an Offeror may attach, material must be relevant and must serve as a clear and reasonable adjunct to the proposal.
- J. Services provided by the successful Offeror shall be in accordance with allowable expenses set forth in the US Department of Homeland Security Office for Domestic Preparedness FFY2005 and FFY2006 Urban Areas Security Initiative Program Guidance.
- K. An oral presentation shall be required of the three highest-rated and responsive Offerors as determined by the Official. The presentation shall not exceed sixty (60) minutes and thirty (30) slides. The presentation shall integrate relevant information of all major subcontractors (more than 25% of the effort) proposed to be employed. Offeror will be permitted to present and address its slides to conclusion uninterrupted by questions. Following the presentation, evaluators will ask questions for up to thirty minutes. Offeror may use additional slides to respond to the questions during this thirty minute period. Only the slides used during the presentation (maximum of thirty [30]) plus any additional slides used to answer questions during the thirty (30) minute period may be left with the evaluators. The oral presentation shall address past performance and planned performance on this project (Reference grading factors a and f).
- L. Past Performance: Past performance categories that Offeror shall address: program management, prior relevant experience, Offeror expertise and schedule.

Planned Performance: Planned performance categories that Offeror shall address: program management, Offeror expertise, proposed Workplan, project staffing, and schedule.



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- M. A live demonstration of a system integrated by the Offeror and utilizing the same software as selected for the CIMS shall be required of the three highest-rated, responsive Offerors, as determined by the Official. The demonstration shall not exceed sixty (60) minutes and should demonstrate the capabilities outlined in the Offeror's proposal in a real-time environment.

**2 EVALUATION OF PROPOSALS**

Evaluation of responses to this Request for Proposal will be on a "Best Proposal" basis. While price is a consideration, the contract may not necessarily be awarded to the Proposer with the lowest price. "Best Proposal" is defined as that total Proposal which, in the opinion of the City, best serves the interest of the City.

This Request for Proposal (RFP) prepared by the City and issued to prospective Proposers contains the parameters and the performance requirements for the services, the administrative guidelines and procedures established by law or City resolutions, and the salient points of the evaluation criteria to ensure that all Proposers are treated equitably. Refer to Section IV for requirements of the Proposal Documents.

- A. Following the receipt of the Proposals, the City will initially evaluate whether each proposal is responsive. A determination of initial responsiveness will be based upon whether all Proposal Documents are completed and included in properly executed form and that mandatory requirements have been met. A qualitative evaluation will not be performed at this time. The City of Boston will evaluate all initially responsive Proposals in their entirety. The City reserves the right to waive inconsequential or immaterial defects in the Proposal Documents.
- B. Following the evaluation of initial responsiveness, an Evaluation Committee will evaluate the remaining Proposals. The Evaluation Committee will evaluate each proposal. Other City employees and/or consultants may evaluate the proposal and advise the Evaluation Committee. The members of the Evaluation Committee will grade the Proposals by assigning grades for the evaluation factors listed. Using the predetermined grading scale and weight factors, the Evaluation Committee members will determine scores for each proposal. The Evaluation Committee will recommend the best three proposals. The Offerors with the three highest-rated, responsive proposals will then provide an Oral Presentation and Live Demonstration, as explained in Section II.
- A. As stated in Section I, the RFP process was used to obtain a superior quality plan of services without lending primacy to cost. Cost will be

**SECTION II: INSTRUCTIONS FOR PREPARATION AND SUBMITTAL OF PROPOSAL**

evaluated only after the most advantageous proposals are selected. The proposal that provides the best, most effective and efficient solution will be selected.

Factors of evaluation for the proposal and the weight assigned each factor are as follows:

<b>Factor</b>	<b>Weight (%)</b>
a. Company Qualifications, Personnel, and Team Experience	15
b. Proposed Critical Infrastructure Monitoring System	40
c. Mitigating Risk	15
d. Design Experience	5
e. Schedule	10
f. Proposed Integration Procedures	15

B. Grading Factors: Factors “a., b., c., d., e., and f.” from all responsive proposals will be graded according to the following scale with only full point grades awarded (i.e., 2.0, 3.0, etc.):

- 1 = Minimally responds to functional requirements (“Not Advantageous”)
- 2 = Partially responds to functional requirements (“Less Advantageous”)
- 3 = Meets functional requirements (“Advantageous”)
- 4 = Exceeds functional requirements (“More Advantageous”)
- 5 = Substantially exceeds functional requirements (“Highly Advantageous”)

C. The Company Qualifications, Personnel, and Team Experience grade will be based upon how the Proposer’s experience compares with the work requirements for this project. References from previous clients will be considered when evaluating this factor. This factor shall include all of the names, titles, and resumes of key personnel, including all subcontractors or joint venture partners, and shall include an organization chart. The

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submission of a name, and corresponding resume, represents a commitment from the Proposer that this specific person will participate on the project if selected. Personnel substitutions are highly discouraged.

- D. The Proposed Critical Infrastructure Monitoring System grade will be based upon how the vendor's system description, specifications, and drawings demonstrate that the proposed system will meet the RFP requirements. Proposer shall ensure enough detailed information is included to determine that the equipment, and the proposed system as a whole, conforms to the RFP requirements.
- E. The Mitigating Risk grade will be based upon the identification of risks and mitigation measures developed by the Proposer to insure project completion on schedule and at the proposed price as defined by the Contract and the proposal.
- F. The Design Experience grade will be based upon the design team's ability to develop and design a complex system within an operating municipal environment. The Designer must have the ability to generate stamped design drawings for the proposed system.
- G. The Schedule grade will be based upon how the Proposer's submitted resource schedule meets the Proposal schedule requirements. All things being equal, a more detailed schedule that completes the project prior to the contract duration and/or milestones will be graded higher.
- H. The Proposed Integration Procedures grade will be based upon the Proposer's description of system cutover, potential cutover problems, and suggested methods to mitigate or resolve potential problems.
- I. Total score for each factor will be computed by multiplying the weight times the grade.

Weight x Grade = Score  
Best)

Grading Scale: 1-5 (5 Being the

Grades will be whole numbers using the computation above.

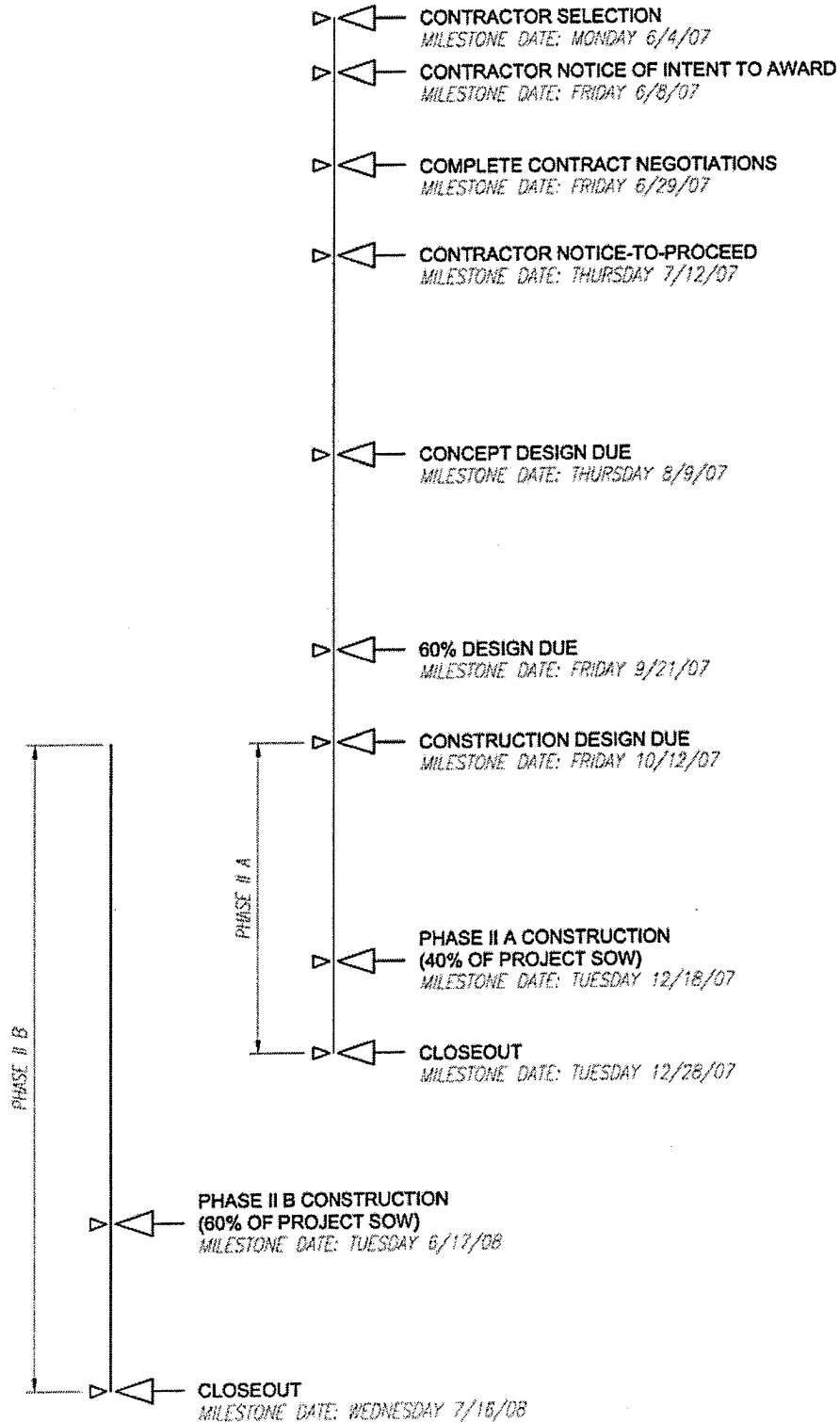
- J. Procedure When Only One Proposal is Received: In the event that a single responsive Proposal is received, the Proposer shall provide any additional data required by the City to analyze the Proposal. The City reserves the right to reject such Proposals for any reason.
- K. Acceptance of Proposal (Award):
  - 1. The City shall have the right to waive any informality or irregularity in any Proposal received. The City reserves the right to:

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- a. Accept the best Proposal based upon the Proposer's Experience Record provided by the entity submitting the Proposal, or
  - b. Reject any or all Proposals or re-advertise the Request for Proposal if, in the judgment of the City, the best interest of the City is served thereby.
2. The City reserves the right to cancel the award of any contract at any time before the execution of said contract by all parties without liability to the City.

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3 PROJECT SCHEDULE



**SECTION II: INSTRUCTIONS FOR PREPARATION AND  
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**4 MINIMUM EVALUATION CRITERIA**

Minimum Evaluation Criteria reflect those standards or attributes that the City considers essential to the satisfactory performance of the contract.

**IMPORTANT:** The City will use the Minimum Evaluation Criteria to identify "responsive" proposals (those containing all required forms and information and offering all of the requested supplies or services in the RFP) and to identify Offerors who are "responsible," i.e., who possess the capability, integrity, and reliability to perform under the contract.

The City will evaluate each proposal to determine whether it meets all Minimum Evaluation Criteria. Only those proposals in which an authorized representative of the Offeror has unconditionally checked "Yes" for each requirement set forth below in this section shall be deemed responsive. Proposals deemed non-responsive shall not be considered.

**Instructions**

In order for a proposal to receive consideration, an authorized representative of the Offeror must unconditionally check "Yes" in response to each question below. The City shall reject in its entirety the proposal of any Offeror who refuses or fails to check "Yes" to each question below, or who checks "Yes" but attempts to modify, qualify or limit its affirmative response. The Offeror shall also attach to its proposal any and all information and/or documentation requested in this section of the RFP. The Offeror's authorized representative shall sign on the line provided following the last Minimum Evaluation Criterion.

**Criteria**

Was the Offeror's proposal delivered to the City prior to the deadline for receipt of proposals and in accordance with the instructions in the Public Notice?

Yes  No

Does the Offeror's proposal conform to the RFP requirements in all respects?

Yes  No

Did the Offeror submit separate, sealed price and Non-Price Proposals as required by law and this RFP?

Yes  No

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Are all copies of the Non-Price Proposal exact duplicates of the original  
(INCLUDING APPENDICES)?

Yes  No

Are all copies of the Price Proposal exact duplicates of the original?

Yes  No

Has the Offeror reviewed and does the Offeror unconditionally agree to accept  
and enter into a contract governed by Form CM 11, City of Boston/County of  
Suffolk Standard Contract General Conditions?

Yes  No

Does the Offeror's proposal include full and complete responses to Section III 1.2  
B, titled "Company Qualifications, Personnel, and Team Experience"?

Yes  No      Where? Section and/or Page #: \_\_\_\_\_

Has an authorized representative of the Offeror signed and returned each of the  
following forms as part of its Non-Price Proposal?

Minimum Evaluation Criteria - Signature required;  
Form CM 9: Contractor Certification - Signature required;  
Form CM 6: Certificate of Authority (for Corporations only) - Signature required;  
CB Form #7: Non-Collusion Certificate - Signature required;  
CB Form #8: State Tax Return Certificate - Signature required; and

Yes       No      Where? Section and/or Page #: \_\_\_\_\_

Does the Offeror agree to be the primary contractor for the purposes of services  
delivered under any contract entered into pursuant to this RFP?

Yes  No

If awarded a contract, does the Offeror accept responsibility for and  
unconditionally agree to provide all services in full compliance with the Statement  
of Work and requirements set forth in this RFP?

Yes  No

Are all proposal costs broken down and completed as set forth in Section III and  
IV of this RFP titled "Price Proposal"?

Yes  No

Is the proposal offered at an all-inclusive fixed price in strict accordance with the  
requirements set forth in Sections III and IV of this RFP titled "Price Proposal"?

Yes  No

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Is the Offeror financially solvent (i.e., currently not bankrupt and currently not considering filing for bankruptcy protection)?

Yes  No

Has Offeror demonstrated experience in the homeland security sector by presenting successful outcomes from at least two (2) previous homeland security-related contracts?

Yes  No      Where? Section and/or Page #: \_\_\_\_\_

Has Offeror demonstrated experience with management of complex projects with multiple deadlines and deliverables?

Yes  No      Where? Section and/or Page #: \_\_\_\_\_

Has Offeror included as members of the project team individuals who have been involved in developing and installing interoperable camera systems for more than five (5) years and who have successfully completed at least five (5) projects? (see Sections 3 and 4)?

Yes  No      Where? Section and/or Page #: \_\_\_\_\_

Has Offeror listed all public and private sector clients it (or, if appropriate, its subcontractor[s]) has(ve) worked with over the past five (5) years?

Yes  No      Where? Section and/or Page #: \_\_\_\_\_

Has Offeror provided at least two (2) references capable of commenting substantively on the Offeror's work in the realm of developing and installing interoperable camera systems in accordance with Section IV?

Yes  No      Where? Section and/or Page #: \_\_\_\_\_

Has Offeror provided at least one (1) and up to five (5) client references where the Offeror was lead in producing an interoperable camera system in accordance with Section IV?

Yes  No      Where? Section and/or Page #: \_\_\_\_\_

Has Offeror submitted a project workplan and schedule with the Plan of Services that illustrates the project structure through the duration of the effort?

Yes  No      Where? Section and/or Page #: \_\_\_\_\_

In its Workplan, has Offeror highlighted all substantive differences (+/- five [5] calendar days) between the timeline guidelines set forth in Section IV and its proposed project timelines?

Yes  No      Where? Section and/or Page #: \_\_\_\_\_



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Has Offeror reviewed and understood all Attachments on file at the Mayor's Office of Emergency Preparedness?

Yes  No

Did Offeror attend Offeror's Conference?

Yes  No

Is Offeror capable of complying with reporting requirements outlined in Section IV?

Yes  No

**Signature**

The Offeror's authorized representative shall sign on the line provided here, certifying that the responses provided by the Offeror to these Minimum Evaluation Criteria are provided without modification, qualification, or limit.

SIGNED UNDER THE PAINS AND PENALTIES OF PERJURY

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Company Name

**SECTION III  
PROPOSAL  
REQUIREMENTS**

## SECTION III: PROPOSAL REQUIREMENTS

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## SECTION III: PROPOSAL REQUIREMENTS

### 1.1 FORMAT OF THE PROPOSAL

The City of Boston is strongly committed to waste reduction, recycling and the use of recycled materials. Therefore, all proposals must meet the following requirements: paper must have post consumer recycled content and be printed on both sides; proposals should contain no plastic or metal, except for easily removable staples, binder clamps, or similar fasteners; proposals should contain no photographic, glossy or other non-recyclable paper, or content.

### 1.2 REQUIREMENTS AND INFORMATION TO BE SUBMITTED

The Proposal shall be organized into the sections listed below and shall respond fully to all applicable requirements of the RFP. Forms are provided for some (but not all) sections of the proposal to facilitate the evaluation of those sections. These forms must be completed and included in your proposal. Additional information may be attached to the forms as needed. Sections B through H identified below will be weighted and scored per Section I, Instructions for Preparation and Submittal of Proposal.

#### A. SECTION A: Contract Documents

1. Section A documents are not assigned an evaluation weight.

#### B. SECTION B: Company Qualifications, Personnel, and Team Experience (15 Points)

1. The Proposal shall include a description of the team(s) proposed for delivering the Critical Infrastructure Monitoring System (CIMS) described in this RFP. Organize Section B as follows and include the items listed, at a minimum.
2. **Section B-1:** Summary description of the team, including subcontractors and joint venture partners, and including all names and addresses. Clearly print or type on Form 1, Proposer's General Business Information, and Form 2, Subcontractor List. Forms are provided at the back of the RFP, following the Attachments.
3. **Section B-2:** Statement of Qualifications summarizing the experience and qualifications of the Proposer and subcontractors. Clearly print or type on Form 3, Proposer's Experience Statement.
  - a. On Form 3, list the design and construction contract(s) completed by your firm that document meeting the requirements indicated in Paragraph 1.2.B.3.d. If joint venture, list each joint venture partner's contracts separately.

## SECTION III: PROPOSAL REQUIREMENTS

For each contract: 1) indicate if the construction was performed by your firm's own forces or via a subcontractor, 2) provide a brief description of each such contract, including the construction cost, the number and type of cameras installed, number and type of wireless antennas, the type of headend installed and its configuration, any unique features, and compliance with schedules, and 3) provide the name and telephone number of the owner's representative familiar with the work.

- b. Include in Section B documentation demonstrating the Proposer is a general construction contractor or a CCTV system integrator with the capability through its own organization and/or its subcontractors to provide a complete and operational CCTV system as described in this RFP. The Proposer, as an organization or team, shall have experience designing and providing CCTV systems to municipalities or equivalent facilities and shall be a factory authorized dealer of the CCTV equipment provided to the City.
- c. The Proposer must also be able to demonstrate its ability to complete the design work set forth in this Proposal. To this end, attach the following information to Form 3:
  - (1) Any firm performing infrastructure design work must submit its Certificate of Authorization that ensures only qualified licensed professionals are providing professional architectural or engineering services in accordance with the laws of the State of Massachusetts; design work for system components is exempt. Any infrastructure designer not associated with a design firm must provide his/her license to perform professional engineering services in accordance with the laws of the State of Massachusetts.
- d. Include documentation to show that the Proposer, as an organization or team, possesses adequate staff and technical experience with the design and installation of a similar CCTV system. A similar CCTV system could include at least one municipality or an equivalent facility using the same or similar system components. A similar system will be defined as a system having:

## SECTION III: PROPOSAL REQUIREMENTS

- (1) A wireless backbone system, Ethernet radio transmission, and associated communication equipment
- (2) A local area network distribution of input and output signals over copper and fiber optic cables using comparable network equipment
- (3) Network equipment installation and configuration
- (4) Electrical circuits and associated pathways
- (5) CCTV inputs into a system with 50 or more cameras
- (6) Greater than 3 CCTV nodes of similar size that are interconnected and interoperable
- (7) A digital video recording and playback system
- (8) A demonstrated capability for archiving and retrieval across multiple headend nodes
- (9) Structural components including cable pathways, wireless towers, and CCTV mounts
- (10) Installation of exterior environment cameras in a wide variety of scene and lighting conditions

In addition include documentation that the Proposer has:

- (1) Adequate staff in the Boston area to provide manufacturer's extended warranty program, as required. Include Form 4, Location of Nearest Service and Support Center, as part of this section.
  - (2) Personnel sufficient to meet project milestones
  - (3) Adequate technical staff to install and configure the CIMS properly and expeditiously
- e. Include Form 5, Work On Hand/Proposals Submitted, as part of this section. Clearly print or type on form provided. Form 5 shall include the Proposer's projects currently under design and/or construction (work on hand) and proposals submitted by the entity performing the work. If joint venture, list each joint venture's partner's projects separately.

## SECTION III: PROPOSAL REQUIREMENTS

4. **Section B-3: References from previous clients**
  - a. References shall include the company name, contract value, date of contract, brief description of work, a contact person name and title, telephone and email address.
  - b. The Proposer's referenced sites must be in current operation, and have been in operation for at least the 6 months preceding the date of proposal submittal. The Proposal shall contain detailed information regarding the reference sites that meet these requirements.
  
5. **Section B-4: Organization & responsibilities matrix**
  - a. Provide a detailed organizational chart depicting all members of the project team, and key personnel including job titles. If the Proposer is a joint venture, an organization chart shall be provided for each joint venture partner separately as well as for the joint venture. The organizational chart shall depict all relationships within the proposed team including contractors, subcontractors, prime contractor and/or Joint Venture partners. Lines of authority for quality control, safety enforcement, and management oversight shall be clearly delineated.
  - b. The Contractor may with the City's approval, have one individual fulfill more than one position. Where the team members are not required full time on the project, the Contractor shall state in the proposal the percentage of their time that will be spent on the project.
  - c. Quality Management Approach. Describe the Proposer's Quality Management System. Specifically identify how the Proposer intends to ensure quality control during the design and construction phases of the project.
  
6. **Section B-5: Resumes of key personnel**
  - a. Include Form 6, Key Personnel, experience, and qualifications as part of this section. Clearly print or type on form provided.
  - b. Provide qualifications of key personnel from all levels of the organization including subcontractors, software or subsystem providers, and system specialists. The qualifications in the form of resumes, direct work experience,

## SECTION III: PROPOSAL REQUIREMENTS

and Proposer training for staff members of the Proposer's team shall be provided. At minimum, provide resumes for the following individuals: Project Manager, Superintendent, Project Scheduler, and Technical Leads (Design/Installation of Video Headend, Wireless Transmission, and System Software/Integration). The Proposer is strongly encouraged to submit resumes for everyone listed on their organizational chart submitted under Section B-4. Please limit resumes to two pages per individual (and three pages for Project Managers).

### C. SECTION C: Proposed Critical Infrastructure Monitoring System (40 points)

1. The Proposal shall include a detailed description of the proposed critical infrastructure monitoring system (system). Include Forms 7, 8, and 9 in Section C. The system description shall include, but is not limited to, the following:
  - a. Description of the System/Technical approach (Basis of Design). Limit responses to 20 double-sided pages.
  - b. System block diagrams of the complete proposed system, including cameras, antenna, network/wireless transmission topology and network edge devices/wireless transmission equipment, headend/NVR devices, and workstations. No page limitation.
  - c. Bandwidth calculations for system connection. No page limitation.
  - d. Specifications for system equipment, including network equipment. Include Form 7, Major Equipment and Materials to be Used, Condition and Availability, as part of this section. No page limitation.
  - e. Administrative, remote access, and self-diagnostic capabilities of the system. No page limitation.
  - f. Interoperability capabilities, including a discussion of what is required to integrate the Phase II System with the existing Phase I System. No page limitation.
  - g. Service and Warranty descriptions. Identify what is included and excluded from manufacturer's warranty and describe the service/support that will be provided. Include Form 8,



## SECTION III: PROPOSAL REQUIREMENTS

Options, and Form 9, Software License and Maintenance Agreements, as part of this section. No page limitation.

- h. Any other features, functions, modules, or elements of the system that the Proposer believes will provide benefit to the City. Limit responses to 15 double-sided pages.
2. Refer to paragraph 1.3 of this section and Section IV of this RFP for additional technical requirements of the system that shall be provided in the diagrams and specifications in this Section C of the Proposal.

### D. SECTION D: Mitigating Risk (15 points)

1. Unforeseen Conditions. The work in this project includes installing cameras, radios, pathways, and edge equipment in existing structures, and system integration of new and existing hardware and software. In addition, signal repeaters may be required depending on existing conditions. The Proposal will be evaluated and scored for the steps the Proposer has identified to mitigate the potential construction risks involved in installing the described work. The Proposer shall qualitatively and quantitatively describe how their proposal mitigates potential risks as part of their proposal.
  - a. The Proposal shall include a detailed description of how the Proposer will mitigate the probability of increased cost to the City for the work due to field or other conditions.
  - b. The Proposal shall include examples of the type of unforeseen conditions the Proposer has included in its proposed price, and examples of unforeseen conditions that the Proposer has not included in its proposed price.

### E. SECTION E: Design Experience (10 points)

1. As part of the Contract Work, the Contractor will provide a complete system design that meets the requirements identified in Section IV of this RFP, and integrates with the existing Phase I system. The proposal shall include documentation demonstrating that the design firms and the professionals who will be designing the CIMS have a minimum of 5 years of experience designing: 1) system networks, electrical power supplies, structural mounts and bracing, and wireless transmission systems; and 2) the site-specific items described in the System and Infrastructure Design portion of Section IV. In addition, the proposal shall document that the design

## SECTION III: PROPOSAL REQUIREMENTS

professionals are registered professionals licensed in the State of Massachusetts.

### F. SECTION F: Schedule (10 points)

1. The Proposal shall include a schedule for completing the project work. All other things being equal, shorter project duration will receive a higher score. No page limitation. The proposed schedule shall include at a minimum:
  - a. Milestones for completion of design phase deliverables as identified in Section III, paragraph 9.
  - b. Work by area and by contractor
  - c. Milestones for completion of specific areas or subareas
  - d. Relationships between work, including subcontractors
  - e. Testing, commissioning, and cutover by area or subarea
  - f. Any anticipated service interruptions at existing Phase I node facilities and other locations during integration
  - g. Demonstrations, including headend/interface, interoperability with existing system, and transmission system peak demand performance
  - h. Training, including node personnel, City maintenance, and City IT administration staff.

### G. SECTION G: Proposed Integration Procedures (15 points)

1. Maintaining the operability of the existing Phase I system is a requirement of this project. Integration of the Phase II system with the Phase I system must be done in a way that 1) can quickly and easily be reversed to restore complete functionality of the Phase I system, and 2) minimizes disruption to and inconvenience of City staff.
2. The proposal shall include 1) a description of how the Proposer intends to perform integration, and 2) a discussion of potential issues that could arise during integration and how the Contractor will mitigate these potential issues, and 3) a description of any changes to the existing Phase I system that are required to achieve the design objectives identified in Section IV of this RFP. Limit responses to 5 double-sided pages.

## SECTION III: PROPOSAL REQUIREMENTS

If the Proposer cannot demonstrate all of the qualifications listed in Sections B through G above, then the Proposer shall submit any information requested by the City, to demonstrate to the satisfaction of the City that the Proposer has the capability to complete the Work of the Contract.

### 1.3 PROJECT REPORTING – ONGOING BASIS DURING CONTRACT TERM

- A. Establish and track tasks, schedules, resources, costs, timelines, and project status. Develop a project calendar that reflects projected activities.
- B. Update the calendar on a frequency to be determined in consultation with the City, providing the updated document in both print and electronic formats.
- C. Provide to the City on a weekly basis a status report that includes a summary of work performed, key issues or challenges identified during the reporting period, a description of plans to address those issues or challenges, and an updated summary of the work for the upcoming 7-day period.
- D. Provide to the City invoicing on a monthly basis. Monthly invoicing includes, but may not be limited to, any invoices for equipment purchases, timesheets for all individuals working on CIMS project, copy of warrant to prove payment.

### 1.4 TECHNICAL REQUIREMENTS OF THE SYSTEM

- A. The proposed Critical Infrastructure Monitoring System must meet the requirements identified in Section IV of this RFP. The Proposer must submit the following information as part of its proposal. Provide this information in Section C of the proposal. No page limitation.
  - 1. A detailed summary of the Proposer's understanding of the project as a whole, the project's CIMS, any subsystems, and the project's interfaces.
  - 2. System and subsystem block diagrams describing the system's headend configuration and interfaces, connection to equipment, and typical field device connections.
  - 3. The Proposal shall provide a detailed description of how the new Phase II system will integrate with the existing Phase I system and describe what equipment will be used including applications and equipment descriptions.

### SECTION III: PROPOSAL REQUIREMENTS

4. Provide a network flow diagram indicating signal types, bandwidth calculations, communication media, processor functionality and "typicals" for major equipment proposed for the systems.
5. Technical descriptions defining products that the Proposer is proposing to use to achieve the performance and functionality of the design intent. The City recognizes that proprietary, closed computer hardware may be used in the CIMS; the proposal shall describe the hardware on these systems and any potential conflicts to attached peripheral and network equipment.
6. Internet connectivity will be established through the logical core of each node's existing network. The Contractor is responsible for determining the available City network resources to establish a secure Internet connection. For the Proposal, the Proposer shall describe their preferred network system connection and the proposed firewall to be provided for Internet connection.
7. Required system and application software shall be described in detail including the development language, current software version, expected software upgrade dates, standard interfaces, optional interfaces, features and functionality.
8. Describe the security features of your products (user assigned access, auditing and tracking).
9. Provide a description of the typical user interface with screenshots. This applies to live video manipulation features, stored video manipulation features, and administrative functions.
10. Describe the system reliability including diagnostic tools, reporting features (e-mail, pager alerts, alarms, etc.), mean time between failure data for components, preventive maintenance procedures, overall system lifecycle, and any specialized training required to maintain the system. The Proposal shall provide an analysis of the proposed system regarding potential points of failure.
11. Provide specifications for each component proposed for the system, including, but not limited to: cameras, antennas (point-to-point and point-to-multipoint), Ethernet radios, backbone radios, servers, encoders, decoders, switches, repeaters, network video recorders, RAID storage devices, uninterruptible power supplies, and workstation computers/keyboards/monitors.
12. The system headend control(s) must support the camera quantities as listed in the RFP documents. Identify the practical limitations of

### SECTION III: PROPOSAL REQUIREMENTS

the proposed CIMS in terms of adding additional capacity, cameras, antennas, and nodes beyond the Phase II scope.

13. Provide an approach to the installation of the wireless edge devices with regards to minimizing interference with existing Phase I equipment, and to providing the system uptime and the bandwidth required. Provide a statement of the approach that will be taken to troubleshoot areas of signal deficiency or interference. Include in this statement the means by which, in the event of temporary bandwidth reduction, the system will prioritize the re-allocation of resources to ensure that the video remains as useful as possible to the users.

**SECTION IV  
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## SECTION IV: TECHNICAL REQUIREMENTS

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### ATTACHMENTS

ATTACHMENT 1 PHASE I PARTIAL DESIGN DOCUMENTS

ATTACHMENT 2 PHASE I DRAWINGS

ATTACHMENT 3 PHASE II DRAWINGS

Note: Attachments are considered Security Sensitive and are available for examination at the Mayor's Office of Emergency Preparedness.



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### Definitions, Abbreviations and Acronyms

AES	advanced encryption standard
AHJ	authority having jurisdiction
CIMS	Critical Infrastructure Monitoring System
CCTV	closed-circuit television
CIF	common intermediate format
DVI	digital video interface
DVR	digital video recorder
FPS	frames per second, also Federal Protective Service
GIS	geographic information system
GUI	graphical user interface
IRE	Institute of Radio Engineers
IP	internet protocol
LAN	local area network
MBHSR	Metro-Boston Homeland Security Region. The MBHSR is made up of nine communities including Boston, Brookline, Cambridge, Chelsea, Everett, Quincy, Revere, Somerville, and Winthrop.
MOEP	Mayor's Office of Emergency Preparedness, also OEP.
MOU	Memorandum(a) of Understanding
MPEG	file extension, Moving Picture Experts Group
MJPEG	motion JPEG (Joint Photographic Experts Group)
NEMA	National Electrical Manufacturers Association
NFPA	National Fire Protection Association
NTSC	National Television System Committee
NVR	network video recorder
OEP	Office of Emergency Preparedness
PTZ	pan/tilt/zoom
RAID	redundant array of inexpensive disks
RFP	request for proposal
SOP(s)	Standard Operating Procedure(s)
SDLW	Smiths Detection/LiveWave
UPS	uninterruptible power supply
Vendor	The prime contractor awarded a contract pursuant to this RFP
VPN	Virtual Private Network
WLAN	wireless local area network

## SECTION IV: TECHNICAL REQUIREMENTS

### 1 PROJECT BACKGROUND AND SCOPE

#### 1.1 BACKGROUND

The City of Boston is installing video cameras along evacuation routes in nine cities within the greater Boston metropolitan area, and linking them together in a wireless network of video nodes capable of sharing video and video control. The primary goal of the project is to provide situational awareness to assist in the evacuation of the City of Boston or any of the cities involved in the Metro-Boston Homeland Security Region (MBHSR). In addition to Boston, the following MBHSR cities are participating in the project: Everett, Chelsea, Revere, Brookline, Cambridge, Winthrop, Somerville, and Quincy. The Contracting entity is the City of Boston, herein referred to as the "City". The City acts as fiduciary and programmatic agent for the MBHSR.

A secondary goal of the project is to provide monitoring of key pieces of critical physical infrastructure (at times when traffic flow does not need to be monitored and evacuation routes may not be in use for emergency purposes).

This RFP represents Phase II of a program of evacuation and infrastructure monitoring begun in 2006, and the term Phase II will be understood to refer to the work of this RFP.

In Phase I of the program, the City of Boston contracted with Smiths Detection/LiveWave (SDLW) to provide and create an interoperable system of approximately 60 cameras throughout the cities of Boston, Everett, and Revere, to integrate a separately procured Pelco DX8000 video headend system with 27 cameras in the City of Chelsea, and to install a wireless backbone network between all nodes of the Phase I system.

In addition to the network described above, a connection to an existing Federal Protective Service (FPS) video system was established during Phase I. The function of the connection between the Phase I system and the existing FPS system is for viewing/control only, and is a two-way function operated through a limited-bandwidth VPN connection served from a communications room inside the JFK/FPS building. The Contractor must duplicate this functionality in the final Phase II system. The Federal Protective Service CCTV system is also an SDLW FirstView system. The Contractor will not be replacing any existing hardware associated with the Federal Protective Service system.

Refer to Attachments 1 and 2 for schematic drawings and installed equipment currently being used in Phase I. All existing conditions are subject to verification

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by the Contractor. Complete Phase I as-built documents will be made available to the selected Contractor.

### 1.2 SCOPE OF WORK

Work will include the design, construction, testing, and integration of the following: at least 65 wireless cameras in the base bid (and as many as 165 wireless cameras if options one, two, and three are exercised), new video headend systems (including video management workstations and storage) at five cities, and integration with or replacement of the video headend systems and workstations (one workstation per police department) of the four cities integrated during Phase I (Boston, Revere, Everett, and Chelsea). In addition, Phase II will provide an expansion of the Phase I wireless backbone, through a star network topology, with a City option for the creation of an expanded redundant backbone.

The City is the contractual and managing representative for the nine jurisdictions of the MBHSR being joined by this interoperable system. The Contractor shall be responsible for coordinating the execution of this contract with both the City and representatives of the nine jurisdictions of the MBHSR.

Work must integrate with the work of Phase I to create a single unified system. Any user of the system from any participating jurisdiction will have access to and may have control of any camera in the system, subject to the rights and rules defined by the system administrators.

If the Contractor opts to retain existing video headend equipment, the user interface and functionality of the final system shall be the same across all jurisdictions; e.g., a user in Cambridge shall access and control a camera in Quincy (a new system) and in Boston (an existing system) in an identical manner. If the Contractor opts to utilize Phase I headend equipment, the Contractor's Warranty shall cover that existing equipment and the integration of it for the full warranty duration.

The Contractor will design and build the CIMS based on the requirements in this RFP, including furnishing, installing, programming, testing, and commissioning the system, and training staff to use and maintain the equipment and system.

The Contractor shall design and implement a cable labeling scheme. All cables installed shall be labeled at each end and at accessible intermediate points.

In addition, the Contractor shall replace four existing Motorola dome cameras with four P/TZ dome cameras and mounts in the city of Everett. All power supplies and transmission equipment will be re-used. The four replaced cameras

## SECTION IV: TECHNICAL REQUIREMENTS

will be used in lieu of new cameras elsewhere within the city of Everett. Coordinate with City for locations.

### 1.3 CONTRACT OPTIONS

As indicated in the Price Proposal Form, the City has identified seven options to the contract, which the Proposer will provide costs for. Below are descriptions of each of the options.

- Option 1: Consists of furnishing and installing 34 additional cameras, transmission equipment, and related infrastructure, software, and integration at the locations shown in Attachment 3.3: Phase II MBHSR Prioritized Cameras. This set of cameras is referred to as Priority Group 2.
- Option 2: Consists of furnishing and installing 36 additional cameras, transmission equipment, and related infrastructure, software, and integration at the locations shown in Attachment 3.3: Phase II MBHSR Prioritized Cameras. This set of cameras is referred to as Priority Group 3.
- Option 3: Consists of furnishing and installing 30 additional cameras, transmission equipment, and related infrastructure, software, and integration at the locations shown in Attachment 3.3: Phase II MBHSR Prioritized Cameras. This set of cameras is referred to as the "Boston 30".
- Option 4: Additional system support and training: On-site support eight hours per month for duration of six months at each of the Project's nine jurisdictions. This support may include, but will not be limited to the following activities: operational or maintenance training, system programming, technical support.
- Option 5: Upgrade the star topology WLAN to a redundant topology. The redundant topology is defined as providing more than one transmission leg per backbone hub, so that in the event one leg fails, data can pass along another route. In addition to adding transmission legs, this Option requires that each transmission leg be upgraded to 100Mbps bandwidth and that switching hardware be sufficiently robust to intelligently direct data traffic over the WLAN, and that the switching hardware interface with diagnostics in the transmission equipment to detect fluctuations in transmission bandwidth.
- Option 6: Provide extended service on hardware and software, measured from project completion, for the following periods: two years from project completion, three years from project completion, four years from project completion, and five years from project completion.

## SECTION IV: TECHNICAL REQUIREMENTS

- Option 7: Provide one year of additional system administration on the installed WLAN. A six-hour response time is required for any WLAN outage. This option is in addition to the Warranty.

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### 2 CRITICAL INFRASTRUCTURE MONITORING SYSTEM (CIMS)

#### 2.1 SYSTEM FUNCTIONALITY

The final system will be comprised of nine video headend nodes, one for each of the nine participating jurisdictions. Each node will provide monitoring and recording of local video (from within the jurisdiction) and serve as a source of local (jurisdictional) system control.

Four of the nodes exist (from Phase I) and are operational and interoperable. See Part 1 of this Section and Attachments 1 and 2 for existing conditions. The Contractor shall provide a fully-operational and integrated system as part of this Phase II work. The Contractor may achieve this goal by integrating its system with the existing system, or by replacing those portions of the existing system necessary for complete integration.

Video headend nodes will be connected by wireless Ethernet transceivers and repeaters suitable to the bandwidth required of the System. See Part 5 of this Section for wireless transmission requirements.

Camera programming, access, and connectivity requirements are as follows:

- Users of the CIMS will be able to view and control any camera in the system, except as provided for elsewhere in this document.
- Administrators of the nodes may agree to alter the shared use of live and archived video on a per-user or per-camera basis. The proposed system must allow for flexibility of permissions and be able to make all necessary distinctions between live and recorded video on a per-channel and per-user basis.
- The final configuration of the system, with respect to user rights, will be defined during the contract phase. The Contractor will work with the City to establish what this configuration will be.
- The cameras will be programmed according to local node administrators.
- Cameras will be connected to each node via wireless Ethernet radio transceivers, repeaters, hubs, and aggregators as necessary. Aggregators (point to multi-point transceivers, or a collection of point to point transceivers linked to a hub and repeated via a single link) must not restrict system bandwidth.

## SECTION IV: TECHNICAL REQUIREMENTS

For purposes of proposal pricing, cameras have been broken into three priority levels, and a fourth camera group called the Boston 30. Priority Level 1 cameras (65 total) shall be included in the Contractor's base proposal. Priority Level 2 cameras (34 total), Priority Level 3 cameras (36 cameras), and the Boston 30 (30 cameras) shall be included in the Proposal as separate options. Camera locations and priority levels are listed in the Camera Location Schedule provided in Attachment 2.

Also for purposes of proposal pricing, the Contractor can assume that some work will be done by others. For example, the Cities will coordinate with owners of existing buildings, poles, and other structures on which cameras will be installed.

### 2.2 SYSTEM INTEROPERABILITY

Each node of the system will be independent with respect to administrative control of the node. There will be no overriding authority with administrative control of the entire CIMS, or with administrative privileges on all nodes, (unless this is agreed to by a future Memorandum of Understanding by the City).

The Contractor shall set up a system of user groups for each node with the following interoperability rights as a guideline:

1. Rights of users with respect to their local node are defined in Part 4 of this section.
2. The rights of users with respect to other system nodes are as follows, but note that as defined in 2.1, these basic rights are subject to change within the design and installation phases of the Contract.
  - Users may view live video feeds from other nodes' cameras with the same matrix functionality as is available in their local node
  - Users may control pan/tilt/zoom functions
  - Users may be allowed or denied access to the recorded video of cameras associated with other nodes. These configurations will be negotiated between jurisdictions.
  - Users may be allowed or denied access to view live or recorded video for cameras that have been "hidden" or "blanked" as defined in Part 4.
  - Users will generally have no priority on camera control or system bandwidth on other jurisdiction's nodes; that is, the system shall distinguish between users with local rights (whether a local or remote connection is used) and those with "guest" rights. "Guest"

## SECTION IV: TECHNICAL REQUIREMENTS

user rights shall always be subservient to local user rights, unless defined otherwise by the system administrator.

Video sharing between jurisdictions will be achieved in two ways:

- By using transportable physical media (DVD or CD) to preserve chain of custody using established procedures for evidence.
- By sharing video or stills in real time for tactical purposes. The Contractor should note in its Proposal any features of its system that would facilitate this function, or otherwise describe how this would be accomplished.

### 2.3 SYSTEM SCALABILITY

The Contractor should indicate in its proposal response the work required for any future build out to include additional agencies or systems, and any limitations inherent in the proposed system that may impact future expansion.

### 2.4 SYSTEM SERVICE AND MAINTENANCE

In addition to the Warranty Requirements, the Contractor shall provide on-call service to the City for a period of one year from System Acceptance. Service shall include the following:

1. Telephone service shall be available 24 hours a day, 7 days a week, for a period of 52 weeks from System Acceptance.
  - Provide escalated service call procedure with at least three telephone numbers.
2. Emergency service, on site, within six hours for outages due to backbone transmission failure, aggregated signal failure, or headend failure.
  - Provide escalated service call procedure
3. Emergency service, on site, within 24-hours for outages due to edge equipment failure.



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### 3 CLOSED-CIRCUIT TELEVISION SYSTEM (CCTV)

#### 3.1 CAMERA FUNCTIONALITY

The existing CCTV system consists of fixed and PTZ color CCTV cameras viewing evacuation routes in four cities. These cameras transmit video via a wireless network to local Police Department buildings for monitoring and storage in an NVR. The stored video is currently shared with local law enforcement personnel over a standard web browser using a secure username and password using existing wireless broadband LAN.

The City has identified physical locations for the Phase II cameras, and primary objectives for the cameras. The Contractor will be responsible for meeting with the City to finalize locations and objectives, and for ensuring that the locations are suitable for the objectives. Notify the City of any impediments to the stated camera objectives.

The primary purpose of the cameras will be to monitor traffic flow and provide intelligence on the status of a mass evacuation. The secondary purpose of any and all cameras will be to assist local jurisdictions in providing for the public safety by monitoring critical infrastructure.

#### 3.2 CAMERA SPECIFICATIONS

The CCTV system will use pan/tilt/zoom (PTZ) cameras; there are no fixed cameras in this phase of the project, though there are several fixed cameras installed in Phase I that will become part of the final system. PTZ camera requirements are as follows:

- Proportional pan/tilt movement, auto-flipping at tilt nadir, multiple presets with greater than 0.5 percent preset accuracy and freeze-framing between presets (during camera movement)
- Auto-focus
- Automatically switch between color (daytime) and black/white (low-light or nighttime) operation
- Operate in low-light conditions down to .013 lux at ½ second shutter speed in b/w mode at 35 IRE and with automatic gain control enabled
- Image sensors: at least 768 pixels horizontal and 494 vertical pixels with a horizontal resolution of 470 TV lines (NTSC format).
- Camera lens: minimum zoom of 23X (optical) with a variable zoom speed.

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- Rated for sustained exterior use in the installed location (-40° to 140°) and furnished with heater/blower and a window wiper if the glass is subject to moisture droplet accumulation. Provide pressurized optics cartridge.
- Camera must be able to view all available terrain and view may not be limited by tilt limits. Provide camera types for each location in detailed design.
- Provide site-specific adjustments at cameras to mitigate the effects of glare and other lighting conditions.
- Preset window blanking that adjusts to the changing position and zoom of the camera. No information is currently available on the locations and programming of window blanking. The Contractor shall provide training to representatives from each video headend node (police station) in the programming of window blanking.
- Cameras will be programmed from the video headend over the network.

### 3.3 INTERNET PROTOCOL (IP) VIDEO ENCODERS/RECEIVERS

IP video encoder/receiver requirements are as follows:

- Capable of MPEG-4 and MJPEG transmission at CIF, 2CIF, and 4CIF resolutions at frame rates up to 30 frames per second (FPS).
- Provide the ability to update software and to change encoder settings over the network.
- Provide alarm on video loss, alarm input for power loss and for tamper switches.
- Provide communications for camera telemetry control and programming.
- Encoders will be compatible with all other elements of the System.

### 3.4 CAMERA PROGRAMMING

The Contractor shall provide the City with camera preset options to assist them in developing a cameras schedule for each node.

- The system shall be able to be configured such that any camera can return to any one of its preset views after a certain amount of inactivity. Cameras shall also be capable of being "held" at a position indefinitely. The system shall be capable of operating the camera in "tour mode".

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### 4 HEADEND NODES AND WORKSTATIONS

The system will consist of nine video headend nodes: Boston, Everett, Chelsea, Revere, Winthrop, Quincy, Brookline, Cambridge, and Somerville. Of these, Boston, Everett, Chelsea, and Revere have existing nodes. Each of the existing nodes have LiveWave Firstview Enterprise servers systems, except for Chelsea, which has a 32-channel Pelco DX8000 DVR.

The system must be fully integrated with the existing video headend systems noted above. All cameras within the system shall be viewable and operable from any location. The system can be integrated with the existing systems either by configuring the existing headend nodes to work with the proposed headend system, or by replacing the existing headend nodes.

Provide equipment operating at no greater than 70 percent capacity (unless otherwise noted), sized according to the baseline configuration and any options selected by the City during contract negotiations.

Users of any dedicated workstation on the node shall, in theory, be able to view all cameras from all other nodes simultaneously. In practice, system bandwidth and monitor real-estate will govern the ability of any user to monitor cameras.

#### 4.1 VIDEO HEADEND NODE AND WORKSTATION FUNCTIONALITY

##### 4.1.1 Network Video Recorder (NVR)

The NVR will provide for recording of video cameras. The Contractor will provide the City with training on configuring storage duration and options. See 6 – Training for more information.

Video storage drives may be on the NVR or enclosed in a separate unit, but the drives shall be hot-swappable and configured for RAID-5 fault tolerance with parity. In either case, the video operator shall see the system storage as a single unit of storage regardless of the number of storage discs and arrays.

The Contractor shall provide four terabytes of RAID-5 video storage at each NVR. The Contractor shall provide an additional 2 terabytes of RAID-5 storage at existing NVRs in Boston, Everett, Revere, and Chelsea. Note that the storage provided at existing NVRs must be compatible with the installation location and with the overall system.

## SECTION IV: TECHNICAL REQUIREMENTS

Watermark all video on recording to include date, time, and camera name. The Contractor shall submit documentation during the design phase describing the means by which video can be verified for use as evidence in a court of law.

### 4.1.2 Workstation(s)

A workstation shall be located in the operations or dispatch center at each video headend node. Coordinate with the City for location at each jurisdiction. Each workstation shall provide the following functions, at a minimum.

1. Program camera functions and presets
2. Search recorded video
3. Provide a Graphical User Interface with the following features:
  - A GIS-style map of the system's cameras, showing the status of the camera and alarm conditions.
  - Provide a means by which the operator can discern, at a glance, the operational status of each camera.
  - The GUI should report not only alarms received from individual encoders (such as "video loss"), but shall also have an alarm for wireless transmission failure, and NVR failure-to-record.
4. Provide display switching, search functions and camera control via an outboard PTZ controller keyboard/joystick.
5. Digital zoom and video enhancement. Note that video enhancement should not be permanently applied to recorded video; rather, it should work on a local, cached, or otherwise separate file in order that the evidentiary integrity of recorded video should be left intact.
6. File exporting and printing:
  - Users should be able to freeze-frame and send an image or a series of images via email, or to a local or remote printer using a minimum of standard commands (e.g., "ctrl-p" or "ctrl-c") or a preprogrammed hot key.
  - Users should be able to bookend a live or prerecorded video clip and export the clip in a manner similar to that used to export a single image. Video should be available in a nonproprietary format.
  - Any file should be able to be written to a CD or DVD in a similarly simple fashion.
7. Provide administrative control of the node. Administrative control consists of the following:

## SECTION IV: TECHNICAL REQUIREMENTS

- The ability to “hide” or “blank” one or more cameras from other users of the system without impinging on the NVR’s ability to record the video stream. When a camera is hidden, only the administrator and those users specifically allowed to view the camera(s) will be able to see the live or recorded video during the duration of the blanking, and the recorded video shall be blanked for unauthorized users until released by an authorized user. This function must be able to be accomplished either at the workstation, or from a remote location, and it must be accomplished with a minimum number or steps. When users other than those authorized attempt to view a blanked camera, they will see a message informing them that the camera is temporarily restricted.
  - View all current users of the node, including which cameras are being controlled and by whom. The administrators shall be able to view audit logs of which users controlled which cameras and when.
  - Configure and update system firmware of remote video encoders.
  - Program camera presets and other functions.
  - Allow or prevent camera preset reprogramming by other users.
  - Grant or deny system programming rights to individual users or groups of users.
  - Control the rights of remote users outside the local node; that is, users from jurisdictions participating in the CIMS but not part of the local video node user group. See the system description above for greater detail on the interoperability of the CIMS nodes.
8. Provide user-level control of administrative functions of the node.
- User rights and group user rights shall be as defined or granted by the node’s administrator(s).
  - Displays: The workstation shall have three 20” monitors suitable for the application, and one 40” plasma display. Video shall be capable of being displayed as any one of several matrix formats and also use other monitors for spot monitors and for GUI real estate. At a minimum, the user shall be able to display a 4x4 matrix on one monitor and show full-resolution video on the remaining monitors, up to the available real estate of the monitors. The displays shall be capable of showing video at different resolutions and frame rates simultaneously.
  - Provide cabling to the monitors. Cabling should be DVI, not analog.

## SECTION IV: TECHNICAL REQUIREMENTS

### 4.1.3 Uninterruptible Power Supplies (UPS)

Provide UPS and batteries at each headend node to provide 30 minutes of backup power. Provide calculations to support the rating of the UPS. The following devices shall be attached to UPS:

- NVR
- Video storage unit
- Network switch

Provide a UPS at each video workstation sufficient to provide 30 minutes of backup power for the computer and monitors. This UPS will be located at the workstation. Provide calculations to support the rating of the UPS.

### 4.2 COMMUNICATIONS ROOMS

For proposal purposes, the Contractor shall assume sufficient contiguous rack units are available for use in an existing rack in each police department communications room. Work in and relating to communications rooms (within police departments and transmission locations) will include the following:

- Pathway installation (communications and/or electrical) from radio equipment to a switch located in the communications room
- Provide a new normal and a new emergency power circuit to new rack-mounted equipment.

### 4.3 REMOTE ACCESS TO THE SYSTEM

The video headend shall be capable of providing a version of the functionality of the workstation to any authenticated user with a web browser and Internet access. Remote users will log in to the system and be granted rights as defined by the system administrator. Once authenticated, remote users will be able to view live and recorded video, conduct searches, control camera PTZ functions, and perform authorized administrative functions.

These functions shall be available to users of Personal Digital Assistant devices as well, either through generic browser functions or via client software.

Provide full-function performance (subject to the bandwidth limitations of the installed location) accessible through the Internet. The local jurisdictions are responsible for providing a physical connection to the Internet.

## SECTION IV: TECHNICAL REQUIREMENTS

Provide a Cisco PIX 515E Security Appliance firewall, or an equivalent/updated CISCO product at each node. The same model of device shall be used at all nodes.

## SECTION IV: TECHNICAL REQUIREMENTS

### 5 WIRELESS TRANSMISSION

#### 5.1 EXISTING CONDITIONS

For existing conditions information refer to the description below and the Existing Conditions System Diagram in Attachment 1.

##### EXISTING BACKBONE TRANSMISSION

- Licensed-frequency backbone transmission was installed during Phase I, creating the network legs shown in the Attachments.

##### EXISTING EDGE TRANSMISSION

- Typical Phase I installation included Ethernet radios, antennae, and corresponding receivers and switchgear at the police departments (or the aggregator points). Transmission was achieved over 5 GHz public frequencies. No additional load shall be placed on existing edge transmission systems.

#### 5.2 GENERAL EQUIPMENT REQUIREMENTS

All equipment shall be rated for continuous outdoor use in the location installed (from -40°F to 140°F). The Contractor shall provide heater/blower equipment if necessary to ensure continuous operation without degradation to the manufacturer's published mean-time-between-failure values.

#### 5.3 NEW WIRELESS EDGE DEVICES

Transmission from each camera to the headend node shall be via Ethernet radios with secure encrypted transmissions. It is permissible to use public frequencies for this purpose, but it may be necessary to provide radios using licensed frequencies in some locations. The Contractor shall provide Ethernet radios at each camera and at the police department or aggregation point. It is permissible to use either point-to-point or point-to-multipoint radios.

The Contractor shall mount all transmission equipment (save the antenna) in NEMA 4x enclosures sized for the equipment installed. The enclosure shall be designed to guarantee the operational integrity of the components within. This enclosure shall be mounted such that it is accessible with a six-foot ladder, and shall be fitted with a lock and a tamper switch terminated at the encoder. Antennas shall be mounted where maximum signal strength is achieved (as determined by the installer).



## SECTION IV: TECHNICAL REQUIREMENTS

1. Ethernet radios shall be capable of transmitting encoded video at 4CIF resolution and 7.5 frames per second, and also of transmitting camera programming and control data and alarm signals.
2. Power to each camera site will be tapped off of locally available, existing service (e.g., building, street, or signal lighting). The Contractor shall provide pathway and cabling at each location, and secure necessary permits. The Contractor shall coordinate with the AHJ for suitable line voltage supply at each camera location.
  - Provide an uninterruptible power supply (UPS) within each equipment enclosure capable of ensuring that the camera, transmitter and encoder can run for a minimum of 30 minutes on backup battery alone. Provide calculations in design phase to support the rating of the UPS.
3. All cabling that is installed below nine feet above grade in a public area and is not concealed in structure shall be installed within galvanized rigid steel conduit. Conceal all cabling where possible. Flexible conduit is permitted within light poles for low-voltage cabling. Cable plant design shall conform to NFPA 70, Article 100 and all other applicable portions of the National Electrical Code.
4. All cabling shall be labeled at each end of the cable and at all access points along the pathway.
5. The Contractor is responsible for all field engineering and for provision of any intermediate transmitters necessary for signal continuity between the camera and the headend node.

### 5.4 NEW WIRELESS BACKBONE

The work shall include the design, construction, testing, and integration of the wireless backbone. The wireless backbone system shall form a star topology backbone and shall integrate with the existing wireless backbone system, with the ring topology installed as part of Phase I to remain. The new backbone shall have a minimum bidirectional throughput of 24 Mbps for each leg. The transmissions shall be secure and encrypted with AES 128-bit algorithms, or an equivalent technology.

1. Refer to Attachment 3 for sample layouts showing locations of existing and new backbone network nodes. The Contractor shall be responsible for the design and integration of the overall system.
2. The resultant WLAN must have an effective uptime of 99.9% in all expected weather conditions.

## SECTION IV: TECHNICAL REQUIREMENTS

3. The Contractor shall be responsible for network configuration of the system.
4. The locations of backbone equipment are subject to approval by the City.
5. Backbone wireless transmission equipment shall be furnished with a UPS capable of powering all equipment for 30 minutes. Provide calculations supporting the sizing of the UPS units.
6. Backbone wireless equipment shall be installed with transient protection on all cables.

### 5.5 PRIMARY HUB

The Federal Protective Service/JFK building has been designated as the primary hub for Phase II, based on its key role in Phase I, and because the City of the building has previously allowed radio equipment to be installed on the roof.

An existing Cisco 3550 switch manages backbone traffic at FPS. The Contractor shall provide all necessary programming, and any additional switches or routers.

## SECTION IV: TECHNICAL REQUIREMENTS

### 6 TRAINING

#### 6.1 SYSTEM TRAINING

The Contractor shall provide administrator and user training for the system, in distinct sessions. The City will provide a venue for the training sessions. The first training series will occur first during the System Acceptance phases of the project. A second training series will be held sixty days later. The schedule of training is as follows:

- User training, first series: Two days, two four-hour sessions each day, with ten students per session, for a total of forty students.
- User training, second series: One day, two four-hour sessions, with ten students per session for a total of twenty students.
- Administrator training, first series: Two days, one eight-hour session per day, for a total of twenty students.
- Administrator training, second series: One day, one eight-hour session, for a total of ten students.

The Contractor shall provide at least one functioning headend/workstation at each training session, and a separate computer to be used to demonstrate remote access functions. Internet service will be provided by the City.

The Contractor shall submit one copy each of training manuals, classroom materials, and a training plan 60 days prior to the first training session. The instructor may be a trade or manufacturer's representative, or a representative from the integrating contractor.

## SECTION IV: TECHNICAL REQUIREMENTS

### 7 TESTING

#### 7.1 TESTING PLANS AND SYSTEM ACCEPTANCE

The Contractor shall prepare and submit system testing plans for the City's review, and execute the testing plans to demonstrate system completion and performance. System testing plans shall be submitted for each headend node, and for the overall system. The testing plans shall include a testing script designed to demonstrate that all system components are installed and that they are functioning properly.

The system shall be in full operation for a minimum of 14 days before acceptance will be considered complete.

#### 7.2 KEY ELEMENTS OF THE TESTING PLANS

The test script and submittals shall include, but not be limited to the following:

Edge Devices:

- Make and model of edge device (i.e., camera, lens, encoder, radio) and mounting type
- Verification that the correct devices are installed for the location
- Verification that the device is installed correctly
- Verification of tamper switch operability
- Are there customer-oriented care and cleaning instructions for the device?
- IP address

Transmission points:

- Verification of continuous signal strength and data rates
- Verification of network switch function

CCTV headend:

- Verification of all listed headend/GUI/workstation functions, including programming, control, alarm, diagnostics, troubleshooting, and video exporting and watermarking
- Verification of recording ability and of failure-to-record alarm, and hot drive exchange

## SECTION IV: TECHNICAL REQUIREMENTS

### System Interoperability:

- Verify that the system is interoperable per these specifications.

## SECTION IV: TECHNICAL REQUIREMENTS

### 8 DESIGN AND FINAL DOCUMENTS

#### 8.1 DESIGN ACTIVITIES

Contractor's work under this contract will include a range of design services, including system network and connectivity, electrical power, structural, and wireless transmission. Design work will include, but will not be limited to:

- System equipment and connectivity,
- Wireless transmission and other network connectivity,
- Electrical power required for the system, including pathways and infrastructure as necessary to provide power at each location,
- Structural designs for mounting antennas, pathway support and bracing, wall-mounted displays, and other infrastructure elements.

The Contractor shall submit documents for the following phases of work:

- Concept design
- 60 per cent design
- Final construction documents
- As-built documents

The City will respond to submittals within two weeks using standard submittal responses:

- Accepted
- Accepted as Noted
- Revise and Resubmit

The Contractor shall, in the case of designs being returned "Accepted as Noted" or "Revise and Resubmit", have one week to respond or resubmit.

The design documents shall include, but not be limited to the following:

- Location plans for cameras and transmission equipment. Provide a separate plan for each jurisdiction, and an overall system plan.
- System one-line diagrams. Provide a one-line for each jurisdiction and an overall system one-line. CCTV and transmission systems may be on the same drawing.

## SECTION IV: TECHNICAL REQUIREMENTS

- Logical network diagram.
- Riser diagrams where applicable.
- Typical and specific installation details.
- Cable labeling scheme.
- Cut sheets for all products
- Construction cost estimates

Locations known or expected to require site-specific designs include but are not limited to:

1. Mounting details for cameras,
2. Police Department buildings for
  - New or upgraded electrical circuits
  - New or upgraded antenna(s)
  - New or upgraded pathways to connect equipment at or near the Police Departments
  - Communications room/rack designs (in existing communications rooms)
3. Wireless network transmitters, receivers, and hubs/repeaters as required to provide a complete and fully-operable wireless network:
  - From cameras to Police Departments or aggregation points within each jurisdiction,
  - Between backbone hubs, in configuration as shown on the RFP Drawings
4. Central transmission hub at Federal Protective Service
  - New or upgraded antennas
  - New or upgraded electrical circuits
  - New or upgraded rooftop or other shelter or enclosure for CIMS equipment

The Contractor shall obtain permits required by applicable city, county, state, and other jurisdictions.

## SECTION IV: TECHNICAL REQUIREMENTS

### 8.2 PROJECT RECORD DOCUMENTS

The Contractor shall maintain a set of redlined design documents that are updated at least every week. These shall be available, by appointment, for City review.

### 8.3 FINAL PROJECT RECORD DOCUMENTS (AS-BUILTS)

The Contractor shall provide hard and electronic copies of as-built documents as a condition of contract closeout. Provide two sets of hard copies, and two CDs of soft copies of documents. Drawings shall be in AutoCad 2004 format, and cable and other schedules shall be in Microsoft Excel format. The following drawings or documents are required, at a minimum:

- Location plans for cameras and transmission equipment. Provide a separate plan for each jurisdiction, and an overall system plan.
- System one-line diagrams. Provide a one-line for each jurisdiction and an overall system one-line. CCTV and transmission may be on the same drawing.
- Logical network diagram.
- Riser diagrams where applicable.
- Typical installation details.
- Cable labeling scheme.



# **PROPOSAL FORMS**

**To receive consideration for award the forms in this section MUST be completed. The Proposal package MUST be received at the address below and be date/time stamped, on or before April 20, 2007**

**Mayor's Office of Emergency  
Preparedness/Metro-Boston Homeland Security  
Region  
Boston City Hall  
Room 603, One City Hall Plaza  
Boston, MA 02201**

**FORM 1**  
**PROPOSER'S GENERAL BUSINESS INFORMATION**

*State on this form your general business information including design firm, work breakdown, and financial information. Use additional sheets as necessary.*

**Organization Information**

**A. Statement Submitted By:**

Name of Organization:

Name of Individual:

Title:

Address:

Telephone No.:

Name & Telephone No. of Contact  
Person if other than above:

**B. How will proposal be submitted?:**       Single Entity       Joint Venture

If a Joint Venture, each participant in such Joint Venture must submit all the information that is required for a single entity.

For single entity, the firm must be qualified to perform general contracting and design and have a Certificate of Authorization to provide professional services.

**C. License Information:**

State/Lic. No.:

State/Lic. No.:

State/Lic. No.:

State/Lic. No.:

FORM 1

PROPOSER'S GENERAL BUSINESS INFORMATION

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D. Proposed Design Consultants  
for Architectural:

Structural:

Electrical:

Mechanical:

Communications:

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E. Provide Hourly Rate Fee Schedule for the design work including rates for Subconsultants listed above. The rates in the fee schedule are to be all inclusive of, but not limited to, direct labor costs, overhead, profit, bonds/insurance, consumables, B&O Tax, permits and any other costs associated with performing the work.

Hourly Rate Fees shall be provided for all positions anticipated for work on the design, including but not limited to: Project Manager, System Designer, CAD Technician, Electrical Engineer, Architect, Structural Engineer, Mechanical Engineer, Administrative Support

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F. Indicate what work described in Section V of this RFP you plan on performing with your own forces and what work you plan on subcontracting to another firm.

Own personnel and equipment:

Subcontractor personnel and  
equipment:

**FORM 1**  
**PROPOSER'S GENERAL BUSINESS INFORMATION**

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**G.** Has your firm ever failed to complete any construction contract awarded to it?  Yes  No

If yes, describe the circumstances on a separate piece of paper.

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**H.** In the last five years, has your firm ever failed to substantially complete a contract in a timely manner?  Yes  No

If yes, describe the circumstances on a separate piece of paper.

---

**I.** Identify prior contracts that contained stated goals for MBE/WBE participation and how such goals were met or exceeded:

Contract	Stated Goals	Actual % Obtained	Comments

**FORM 1**  
**PROPOSER'S GENERAL BUSINESS INFORMATION**

**Financial Information**

- A.** Can your Organization provide a Performance and Payment Bond for the full amount required?       Yes       No

Indicate approximate total bonding capacity:

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Indicate the name of the Surety company you propose to use:

Agent name:

Address:

Phone Number:

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Attach a letter from your Surety documenting your ability to submit the required Bond.

**FORM 1**  
**PROPOSER'S GENERAL BUSINESS INFORMATION**

**Certification**

**A.** I hereby certify that the information submitted herewith, including attachments, is true to the best of my knowledge and belief.

\_\_\_\_\_  
(Type or print business name of Proposer)

\_\_\_\_\_  
(Signature of officer of Proposer)

\_\_\_\_\_  
(Type or print name of officer of Proposer)

\_\_\_\_\_  
(Type or print title of officer of Proposer)

\_\_\_\_\_  
(Type or print date)

**FORM 2**  
**SUBCONTRACTOR LIST**

***Provide names of all subcontractors Proposer intends to use if awarded Contract.  
Use additional sheets as necessary.***

Subcontractor Name:

Address:

Phone No.:

Contact:

Work to be Subcontracted:

Subcontractor Name:

Address:

Phone No.:

Contact:

Work to be Subcontracted:

Subcontractor Name:

Address:

Phone No.:

Contact:

Work to be Subcontracted:

**FORM 2**  
**SUBCONTRACTOR LIST**

Subcontractor Name:

Address:

Phone No.:

Contact:

Work to be Subcontracted:

Subcontractor Name:

Address:

Phone No.:

Contact:

Work to be Subcontracted:

Subcontractor Name:

Address:

Phone No.:

Contact:

Work to be Subcontracted:



**FORM 3**  
**PROPOSER'S EXPERIENCE STATEMENT**

**State on this form the number of years your business has provided networked video camera systems. Identify the projects (minimum of three, maximum of nine) supported with video surveillance systems of the scope and complexity comparable to the project presently being undertaken by the City of Boston. Provide all information described in Section IV that is to be included in Section B-2. Use additional sheets as necessary. Qualifying projects shall have been in satisfactory operation with the equipment furnished for a period of at least 6 months.**

Proposer's years of experience in video surveillance systems: \_\_\_\_\_

<b>Design/Construction Contracts Completed</b>	<b>Number of Cameras</b>	<b>Date Operational</b>	<b>Number of Wireless Antennas</b>	<b>Percent of Work Performed By Own Forces</b>
1. Project Name:				
Design/Build: Y <input type="checkbox"/> N <input type="checkbox"/>				
Owner Name:				
Design Engineer Name:				
Reference Contact Phone No:				
License Number:				
Location/Description:				
Project Reference Name/Title:				
Project Reference Phone No:				
Contract Price: <span style="float: right;">Prime Contractor <input type="checkbox"/> General Contractor <input type="checkbox"/></span>				

**FORM 3**  
**PROPOSER'S EXPERIENCE STATEMENT**

<b>Design/Construction Contracts Completed</b>	Number of Cameras	Date Operational	Number of Wireless Antennas	Percent of Work Performed By Own Forces
2. Project Name:				
Design/Build: Y <input type="checkbox"/> N <input type="checkbox"/>				
Owner Name:				
Design Engineer Name:				
Reference Contact Phone No:				
License Number:				
Location/Description:				
Project Reference Name/Title:				
Project Reference Phone No:				
Contract Price: <span style="float: right;">Prime Contractor <input type="checkbox"/> General Contractor <input type="checkbox"/></span>				

<b>Design/Construction Contracts Completed</b>	Number of Cameras	Date Operational	Number of Wireless Antennas	Percent of Work Performed By Own Forces
3. Project Name:				
Design/Build: Y <input type="checkbox"/> N <input type="checkbox"/>				
Owner Name:				
Design Engineer Name:				
Reference Contact Phone No:				
License Number:				
Location/Description:				
Project Reference Name/Title:				
Project Reference Phone No:				
Contract Price: <span style="float: right;">Prime Contractor <input type="checkbox"/> General Contractor <input type="checkbox"/></span>				

**FORM 3**  
**PROPOSER'S EXPERIENCE STATEMENT**

<b>Design/Construction Contracts Completed</b>	Number of Cameras	Date Operational	Number of Wireless Antennas	Percent of Work Performed By Own Forces
4. Project Name:				
Design/Build: Y <input type="checkbox"/> N <input type="checkbox"/>				
Owner Name:				
Design Engineer Name:				
Reference Contact Phone No:				
License Number:				
Location/Description:				
Project Reference Name/Title:				
Project Reference Phone No:				
Contract Price: <span style="float: right;">Prime Contractor <input type="checkbox"/> General Contractor <input type="checkbox"/></span>				

<b>Design/Construction Contracts Completed</b>	Number of Cameras	Date Operational	Number of Wireless Antennas	Percent of Work Performed By Own Forces
5. Project Name:				
Design/Build: Y <input type="checkbox"/> N <input type="checkbox"/>				
Owner Name:				
Design Engineer Name:				
Reference Contact Phone No:				
License Number:				
Location/Description:				
Project Reference Name/Title:				
Project Reference Phone No:				
Contract Price: <span style="float: right;">Prime Contractor <input type="checkbox"/> General Contractor <input type="checkbox"/></span>				

**FORM 3**  
**PROPOSER'S EXPERIENCE STATEMENT**

<b>Design/Construction Contracts Completed</b>	Number of Cameras	Date Operational	Number of Wireless Antennas	Percent of Work Performed By Own Forces
6. Project Name:				
Design/Build: Y <input type="checkbox"/> N <input type="checkbox"/>				
Owner Name:				
Design Engineer Name:				
Reference Contact Phone No:				
License Number:				
Location/Description:				
Project Reference Name/Title:				
Project Reference Phone No:				
Contract Price: <span style="float: right;">Prime Contractor <input type="checkbox"/> General Contractor <input type="checkbox"/></span>				

<b>Design/Construction Contracts Completed</b>	Number of Cameras	Date Operational	Number of Wireless Antennas	Percent of Work Performed By Own Forces
7. Project Name:				
Design/Build: Y <input type="checkbox"/> N <input type="checkbox"/>				
Owner Name:				
Design Engineer Name:				
Reference Contact Phone No:				
License Number:				
Location/Description:				
Project Reference Name/Title:				
Project Reference Phone No:				
Contract Price: <span style="float: right;">Prime Contractor <input type="checkbox"/> General Contractor <input type="checkbox"/></span>				

**FORM 3**  
**PROPOSER'S EXPERIENCE STATEMENT**

<b>Design/Construction Contracts Completed</b>	<b>Number of Cameras</b>	<b>Date Operational</b>	<b>Number of Wireless Antennas</b>	<b>Percent of Work Performed By Own Forces</b>
8. Project Name:				
Design/Build: Y <input type="checkbox"/> N <input type="checkbox"/>				
Owner Name:				
Design Engineer Name:				
Reference Contact Phone No:				
License Number:				
Location/Description:				
Project Reference Name/Title:				
Project Reference Phone No:				
Contract Price: <span style="float: right;">Prime Contractor <input type="checkbox"/> General Contractor <input type="checkbox"/></span>				

<b>Design/Construction Contracts Completed</b>	<b>Number of Cameras</b>	<b>Date Operational</b>	<b>Number of Wireless Antennas</b>	<b>Percent of Work Performed By Own Forces</b>
9. Project Name:				
Design/Build: Y <input type="checkbox"/> N <input type="checkbox"/>				
Owner Name:				
Design Engineer Name:				
Reference Contact Phone No:				
License Number:				
Location/Description:				
Project Reference Name/Title:				
Project Reference Phone No:				
Contract Price: <span style="float: right;">Prime Contractor <input type="checkbox"/> General Contractor <input type="checkbox"/></span>				

**FORM 4**  
**LOCATION OF NEAREST SERVICE AND SUPPORT CENTER**

***Provide the location of nearest service and support center that will be providing full system warranty maintenance as defined herein.***

Company Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
City/State/Zip: \_\_\_\_\_  
Phone No.: \_\_\_\_\_  
Contact Person: \_\_\_\_\_

Description of Service(s) Offered:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Proximity in miles to Boston: \_\_\_\_\_

Qualifications and Experience:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**FORM 5**  
**WORK ON HAND/PROPOSALS SUBMITTED**

*List your ongoing contracts that are in construction/design and any proposals/bids you have submitted for other jobs. Use additional sheets as necessary.*

	Number of Cameras	Scheduled Completion Date	Number of Wireless Antennas	Total Contract Price
<b>Work on Hand</b> 1. Project Name:				
Design/Build: Y <input type="checkbox"/> N <input type="checkbox"/>				
Owner Name:				
Design Engineer Name:				
Design Engineer Phone No:				
Reference Contact Phone No:				
Location/Description:				
Project Reference Name/Title:				
Project Reference Phone No:				
Amount of Proposer's Contract: <span style="float: right;">Prime Contractor <input type="checkbox"/> General Contractor <input type="checkbox"/></span>				

	Number of Cameras	Scheduled Completion Date	Number of Wireless Antennas	Total Contract Price
<b>Work on Hand</b> 2. Project Name:				
Design/Build: Y <input type="checkbox"/> N <input type="checkbox"/>				
Owner Name:				
Design Engineer Name:				
Design Engineer Phone No:				
Reference Contact Phone No:				
Location/Description:				
Project Reference Name/Title:				
Project Reference Phone No:				
Amount of Proposer's Contract: <span style="float: right;">Prime Contractor <input type="checkbox"/> General Contractor <input type="checkbox"/></span>				

**FORM 5**  
**WORK ON HAND/PROPOSALS SUBMITTED**

<b>Work on Hand</b>	Number of Cameras	Scheduled Completion Date	Number of Wireless Antennas	Total Contract Price
3. Project Name:				
Design/Build: Y <input type="checkbox"/> N <input type="checkbox"/>				
Owner Name:				
Design Engineer Name:				
Design Engineer Phone No:				
Reference Contact Phone No:				
Location/Description:				
Project Reference Name/Title:				
Project Reference Phone No:				
Amount of Proposer's Contract: <span style="float: right;">Prime Contractor <input type="checkbox"/> General Contractor <input type="checkbox"/></span>				

<b>Work on Hand</b>	Number of Cameras	Scheduled Completion Date	Number of Wireless Antennas	Total Contract Price
4. Project Name:				
Design/Build: Y <input type="checkbox"/> N <input type="checkbox"/>				
Owner Name:				
Design Engineer Name:				
Design Engineer Phone No:				
Reference Contact Phone No:				
Location/Description:				
Project Reference Name/Title:				
Project Reference Phone No:				
Amount of Proposer's Contract: <span style="float: right;">Prime Contractor <input type="checkbox"/> General Contractor <input type="checkbox"/></span>				



**FORM 5**  
**WORK ON HAND/PROPOSALS SUBMITTED**

<b>Proposals/Bids Submitted</b>	Number of Cameras	Scheduled Completion Date	Number of Wireless Antennas	Total Proposal Price
1. Project Name:				
Design/Build: Y <input type="checkbox"/> N <input type="checkbox"/>				
Owner Name:				
Design Engineer Name:				
Design Engineer Phone No:				
Reference Contact Phone No:				
Location/Description:				
Project Reference Name/Title:				
Project Reference Phone No:				
Amount of Proposer's Proposal Price:                      Prime Contractor <input type="checkbox"/> General Contractor <input type="checkbox"/>				

<b>Proposals/Bids Submitted</b>	Number of Cameras	Scheduled Completion Date	Number of Wireless Antennas	Total Proposal Price
2. Project Name:				
Design/Build: Y <input type="checkbox"/> N <input type="checkbox"/>				
Owner Name:				
Design Engineer Name:				
Design Engineer Phone No:				
Reference Contact Phone No:				
Location/Description:				
Project Reference Name/Title:				
Project Reference Phone No:				
Amount of Proposer's Proposal Price:                      Prime Contractor <input type="checkbox"/> General Contractor <input type="checkbox"/>				

**FORM 5**  
**WORK ON HAND/PROPOSALS SUBMITTED**

<b>Proposals/Bids Submitted</b>	Number of Cameras	Scheduled Completion Date	Number of Wireless Antennas	Total Proposal Price
3. Project Name:				
Design/Build: Y <input type="checkbox"/> N <input type="checkbox"/>				
Owner Name:				
Design Engineer Name:				
Design Engineer Phone No:				
Reference Contact Phone No:				
Location/Description:				
Project Reference Name/Title:				
Project Reference Phone No:				
Amount of Proposer's Proposal Price:                      Prime Contractor <input type="checkbox"/> General Contractor <input type="checkbox"/>				

<b>Proposals/Bids Submitted</b>	Number of Cameras	Scheduled Completion Date	Number of Wireless Antennas	Total Proposal Price
4. Project Name:				
Design/Build: Y <input type="checkbox"/> N <input type="checkbox"/>				
Owner Name:				
Design Engineer Name:				
Design Engineer Phone No:				
Reference Contact Phone No:				
Location/Description:				
Project Reference Name/Title:				
Project Reference Phone No:				
Amount of Proposer's Proposal Price:                      Prime Contractor <input type="checkbox"/> General Contractor <input type="checkbox"/>				























**FORM 9**  
**SOFTWARE LICENSE AND MAINTENANCE AGREEMENTS**

***Attach copies of any and all proposed software license and maintenance agreements that may be applicable to any software offered by Proposer.***

**CITY OF BOSTON/COUNTY OF SUFFOLK  
STANDARD CONTRACT GENERAL CONDITIONS**

FORM CM 11

**ARTICLE 1 – DEFINITION OF TERMS:**

1.1 The following terms or pronouns used in their stead wherever they appear in these Contract documents shall be construed as follows:

1.1.1 "City" shall mean the City of Boston or the County of Suffolk.

1.1.2 "Contract" and "Contract Documents" shall include, as applicable, all Advertisements, Invitations for Bids, Requests for Proposals, Proposals, Applications, Purchase Description/Specifications, Evaluation Criteria, Performance Bonds, General Conditions/Special Agreements/Requirements Contract General Provisions, letter to the Mayor of Boston concerning the award of the Contract, and all amendments thereto, which documents are incorporated herein by reference.

1.1.3 "Contractor" shall mean the individual, partnership, corporation or other entity to whom this Contract is awarded.

1.1.4 "Official" shall mean the awarding authority/officer acting on behalf of the City in the execution of the Contract.

**ARTICLE 2 – PERFORMANCE:**

2.1 The Contractor shall conform to all determinations and directions, in accordance with provisions of this Contract, of the Official concerning all questions which may arise relating to the performance of services under this Contract.

2.2 The Contractor shall, upon written request of the Official, remove from City premises and replace all individuals in the Contractor's employ whom the Official determines to be disorderly, careless or incompetent or to be employed in violation of the terms of this Contract.

2.3 All work papers, reports, questionnaires and other written materials prepared or collected by the Contractor in the course of completing the work to be performed under this Contract shall at all times be the exclusive property of the City. The Contractor shall not use such materials for any purposes other than the purpose of this Contract without the prior written consent of the Official.

**ARTICLE 3 – ACCEPTANCE OF SERVICE:**

3.1 The City shall have a reasonable opportunity to inspect all service performed by and work product of the Contractor and accept or reject such service or work product.

**ARTICLE 4 – TIME:**

4.1 It is understood and agreed that all specified times or periods of performance are of the essence of this Contract.

**ARTICLE 5 – COMPENSATION:**

5.1 The Contractor may, in the absence of a payment schedule, periodically submit to the Official invoices, itemizing service, labor and expenses for which compensation is due and requesting payment for services rendered by the Contractor during the period covered by the invoice.

5.2 Thereupon the Official shall estimate the value of services accepted by the City, and City shall pay to the Contractor such amount less sums retained under the provisions of Article 8 of these General Conditions.

5.3 The City shall pay in full and complete compensation for services performed under this Contract in an amount not to exceed the amount shown on the face of this Contract paid in accordance with the rate indicated or in accordance with a prescribed schedule.

5.4 In the event that this Contract provides for reimbursement by the City to the Contractor for travel or other expenses, the Contractor shall submit such proposed expenses to the Official for approval prior to the incurrence of such expenses, unless the Contract specifically provides otherwise.

5.5 The Contractor shall furnish such information, estimate or vouchers relating to the services or to documentation of labor or expenses as may be requested by the Official.

**ARTICLE 6 – RELATIONSHIP WITH THE CITY**

6.1 The Contractor is retained solely for the proposes of and to the extent set forth in this Contract. Contractor's relationship to the City during the term of this Contract shall be that of an independent Contractor. The Contractor shall have no capacity to involve the City in any contract nor to incur any liability on the part of the City. The Contractor, its agents or employees shall not be considered as having the status or pension rights of an employee; provided that the Contractor shall be considered an employee for the purpose of General Laws c. 268A (the Conflict of Interest Law). The City shall not be liable for any personal injury to or death of the Contractor, its agents or employees.

6.2 Unless all the terms and conditions for the delivery or provision of goods or services by the Contractor to the City specified by this Contract are expressly set forth in a writing incorporated herein by reference, such delivery of goods or services shall require written approval of or direction by the Official prior to the incurrence of any liability by the City.

6.3 All alterations or additions, material or otherwise, to the terms and conditions of this Contract must be in writing and signed by the Official and Contractor and filed with the City Auditor.

6.4 Any waiver, expressed or implied, by the City or the Official of any rights, terms or conditions of this Contract shall not operate to waive such rights, terms or conditions or any other rights, terms or conditions, beyond the specific instance of waiver.

**ARTICLE 7 – ASSUMPTION OF LOSS AND LIABILITY:**

7.1 The Contractor shall pay and be exclusively responsible for all debts for labor and material contracted for by Contractor for the rental of any appliance or equipment hired by Contractor and/or for any expense incurred on account of services to be performed under this Contract.

7.2 The Contractor shall bear all loss resulting from any cause before performance of services is completed and after performance of services if the service or work product fails to conform to specifications.

7.3 The Contractor shall assume the defense of and hold the City, its officers, agents or employees, harmless from all suits and claims against them or any of them arising from any act or omission of the Contractor, its agents or employees in any way connected with performance under this Contract.

**ARTICLE 8 – REMEDIES OF THE CITY:**

8.1 If the Contractor shall provide services in a manner which is not to the satisfaction of the Official, the Official may request that the Contractor furnish services at no additional cost to the City until approved by the Official. If the Contractor shall fail to provide services or shall provide services which are not satisfactory to the Official, the Official, in the alternative, may make any reasonable purchase or Contract to purchase services in substitution for those due from the Contractor. The City may deduct the cost of any substitute Contract or nonperformance of services together with incidental and consequential damages from the Contract price and shall withhold such damages from sums due or to become due to the Contractor.

8.2 If the damages sustained by the City as determined by the Official exceed sums due or to become due, the Contractor shall pay the difference to the City upon demand.

8.3 The Contractor shall not be liable for any damages sustained by the City due to the Contractor's failure to furnish services under the terms of this Contract if such failure is in fact caused by the occurrence of a contingency the nonoccurrence of which was a basic assumption under which this Contract was made, including but not necessarily limited to a state of war, act of enemies, embargoes, expropriation or labor strike or any unanticipated federal, state, or municipal governmental regulation or order, provided that the Contractor has notified the Official in writing of such cause within fourteen (14) days after its occurrence.

8.4 This Contract may be terminated at any time for the convenience of the City at the option of the Official by delivering or mailing to the Contractor at the Contractor's business address a written notice of termination setting forth the date, not less than seven (7) days after the date of such delivery or mailing, when such termination shall be effective. In the event of such termination for convenience, the Contractor shall be compensated for services rendered to the effective date of said termination in accordance with the rates of compensation specified in this Contract.

**ARTICLE 9 – REMEDIES OF CONTRACTOR:**

9.1 If damages, other than loss on nonconforming services or on services not performed, are actually sustained by the Contractor due to any act or material omission for which the City is legally responsible, the City may allow a sum equal to the amount of such damages sustained by the Contractor as determined by the Official in writing, provided the Contractor shall have delivered to the Official a detailed written statement of such damages and cause thereof within thirty (30) days after the act or material omission by the City.

**ARTICLE 10 - PROHIBITION AGAINST ASSIGNMENT:**

10.1 The Contractor shall not assign, delegate, subcontract or in any way transfer any interest in this Contract without prior written consent of the Official.

**ARTICLE 11 - COMPLIANCE WITH LAWS AND PUBLIC POLICY:**

11.1 This Contract is made subject to all laws of the Commonwealth of Massachusetts.

11.2 The Contractor shall provide, at its sole expense, all necessary licenses, permits or other authorizations required by the City, the Commonwealth of Massachusetts or any other governmental agency with proper jurisdiction.

11.3 The Contractor shall where applicable take out and maintain during the term of this Contract such Worker's Compensation insurance as may be reasonably necessary to protect the Contractor from claims under General Laws c. 152 (the Worker's Compensation Law).

11.4 The Contractor agrees and shall require any subcontractor to agree not to discriminate in connection with the performance of work under the Contract against any employee or applicant for employment because of sex, race, religious creed, national origin or age. The Contractor agrees and shall require any subcontractor to agree to post in conspicuous places notices to be provided by the Massachusetts Commission Against Discrimination, setting forth provisions of the Fair Employment Practice Law of the Commonwealth.

11.5 The Contractor's attention is called to General Laws c. 268A (the Conflict of Interest Law). The Contractor shall not act in collusion with any City officer, agent, employee or any other party, nor shall the Contractor make gifts regarding this Contract or any other matter in which the City has a direct and substantial interest.

11.6 The Contractor shall keep himself fully informed of all City Ordinances and Regulations, and State and Federal laws, which in any manner affect the work herein specified. The Contractor shall at all times observe and comply with said ordinances, regulations or laws, and shall protect and indemnify the City, its officers, agents and employees against any claim or liability arising from or based on the violations of such ordinances, regulations or laws, caused by the negligent actions of the Contractor, his agents, or employees.

11.7 In furtherance of the Mayor's Executive Order "Minority and Women Business Enterprise Development" dated December 31, 1987 and the Ordinance entitled "Promoting Minority and Women Owned Business Enterprises in the City of Boston" (Ordinances of 1987, Chapter 14), it is understood and agreed by the Contractor, and the Contractor by the execution of this Contract so certifies, as follows: (1) That the contractor shall actively solicit bids for the subcontracting of goods and services from certified minority and women businesses; (2) That in reviewing substantially equal proposals the Contractor shall give additional consideration to the award of subcontracts to certified minority and women bidders.

**ARTICLE 12 – AVAILABLE APPROPRIATION:**

12.1 This Contract is subject to the availability of an appropriation therefor.

12.2 If the Contract is funded under a grant with the Federal Government, it is being executed without further appropriation pursuant to General Laws c. 44, s.53A.

12.3 When the amount of the City Auditor's certification of available funds is less than the face amount of the Contract, the City shall not be liable for any claims or requests for payment by the Contractor which would cause total claims or payments under this Contract to exceed the amount so certified.

12.4 Unless otherwise expressly provided in a writing incorporated herein by reference, the amount certified by the City Auditor as available funds under this Contract may be increased or decreased by the Official with the written approval of such change by the City Auditor. In the event of any decrease in the amount certified, the Contractor shall be compensated for services rendered to the effective date of such reduction, in accordance with the rates of compensation specified in this Contract.

**ARTICLE 13 – RELEASE OF CITY ON FINAL PAYMENT:**

13.1 Acceptance by the Contractor of payment from the City for final services under this Contract shall be deemed to release forever the City from all claims and liabilities, except those which the Contractor notifies the Official in writing within six (6) months after such payment.



CITY OF BOSTON /COUNTY OF SUFFOLK

**CONTRACTOR CERTIFICATION\***

To the Official, acting in the name and behalf of the City of Boston/County of Suffolk:

- A. The undersigned agrees to furnish all labor and materials and to perform all work required for:

\_\_\_\_\_

\_\_\_\_\_  
(Official will describe work here prior to issue)

in accordance with the terms of the accompanying contract documents.

- A. The Contractor is a/an \_\_\_\_\_  
(Individual-Partnership-Corporation-Joint Venture-Trust)

- 1. If the Contractor is a Partnership, state name and residential address of all partners:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- 2. If the Contractor is a Corporation, state the following:

Corporation is incorporated in the State of \_\_\_\_\_

President is \_\_\_\_\_

Treasurer is \_\_\_\_\_

Place of business is \_\_\_\_\_

(Street)

\_\_\_\_\_  
(City, State and Zip Code)

- 3. If the Contractor is a Joint Venture, state the name and business address of each person, firm or company that is party to the joint venture:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

A copy of the joint venture agreement is on file at \_\_\_\_\_

and will be delivered to the Official on request.

[\*NOTE: This form should be included with all contracts awarded without advertising.]



4. If the Contractor is a Trust, state the name and residential address of all Trustees:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

The trust document(s) are on file at \_\_\_\_\_  
and will be delivered to the Official on request.

C. If the business is conducted under any title other than the real name of the owner, state the time when, and place where, the certificate required by General Laws, c.110, §5, was filed:

\_\_\_\_\_  
\_\_\_\_\_

D. The Taxpayer Identification Number\* of the contractor (the number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941) is:

\_\_\_\_\_.

\*If individual use Social Security Number: \_\_\_\_\_.

E. Pursuant to M.G.L. c.60, §93, the undersigned certifies that the Collector-Treasurer of the City of Boston may withhold from amounts owing and payable to the Contractor under this contract any sums owed to any department or agency of the City of Boston which remain wholly or partially unpaid. This shall include but not be limited to unpaid taxes and assessments, police details, and any other fees and charges until such sums owed have been paid in full, and the Collector-Treasurer further may apply any amount owing and payable to the Contractor to satisfy any monies owed to the City.

F. Pursuant to M.G.L. c.62C, §49A, the undersigned certifies under the penalties of perjury that to the best of his/her knowledge and belief all state tax returns have been filed and all state taxes required under law have been paid. (NOTE: The Taxpayer Identification Number will be furnished to the Massachusetts Department of Revenue to determine compliance with the above-referenced law).





Contractor: \_\_\_\_\_

By: \_\_\_\_\_  
(Sign Here)

Business Address: \_\_\_\_\_  
(Street)

\_\_\_\_\_  
(City, State and Zip Code)

**NOTE: This statement must bear the written signature of the contractor.**

**If the Contractor is an individual doing business under a name other than his own name this statement must so state, giving the address of the individual.**

**If the Contractor is a partnership this statement must be signed by a general partner designated as such.**

**If the Contractor is a corporation, trust or joint venture this statement must be signed by a duly authorized officer or agent of such corporation, trust or joint venture.**

**APPROVED AS TO FORM BY CORPORATION COUNSEL FEBRUARY, 1998  
THIS FORM IS VOID AND WITHOUT LEGAL EFFECT IF ALTERED IN ANY WAY**



**CERTIFICATE OF AUTHORITY**

(For Corporations Only)

\_\_\_\_\_, \_\_\_\_\_  
(Current Date)

At a meeting of the Directors of the \_\_\_\_\_  
(Name of Corporation)

duly called and held at \_\_\_\_\_

on the \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, at

which a quorum was present and acting, it was VOTED, that

\_\_\_\_\_  
(Name)

the \_\_\_\_\_ of this corporation is hereby  
(Office)

authorized and empowered to make, enter into, sign, seal and deliver in behalf of this

corporation a contract for \_\_\_\_\_

\_\_\_\_\_

(Describe Service)

with the City of Boston, and a performance bond in connection with said contract.

I do hereby certify that the above is a true and correct copy of the record, that  
said vote has not been amended or repealed and is in full force and effect as of this date,  
and that \_\_\_\_\_

(Name)

is the duly elected \_\_\_\_\_

(Office)

of this corporation.

Attest:

**(Affix Corporate Seal Here)**

\_\_\_\_\_  
(Clerk) (Secretary) of the Corporation



CITY OF BOSTON/COUNTY OF SUFFOLK

APPLICATION

(TO QUALIFY FOR REQUIREMENTS CONTRACTS)

To the Official, acting in the name of and on behalf of the City of Boston/County of Suffolk:

- A. The undersigned hereby makes application to furnish all goods and services and all labor and materials to perform all work required for:

---



---



---

(Official will describe work here prior to issue)

in accordance with the terms of the accompanying specifications and other contract documents, and with special reference to the Notice to Applicants and the Requirements Contract General Conditions, the terms of which are incorporated herein and made a part thereof, and a copy of which has been provided by the City, for prices to be established for purchases or tasks, as may be required by the Official from time to time and documented by City of Boston/County of Suffolk Officials.

- B. The names and addresses of all persons interested in this application as principals other than the undersigned are:

---



---



---

The applicant is a/an:

---

(Individual-Partnership-Corporation-Joint Venture- Trust)

- 1. If applicant is a Partnership, state name and residential address of all general and limited partners (or attach listing):

---



---



---

- 2. If applicant is a Corporation, state the following:



Corporation is incorporated in the State of \_\_\_\_\_

President is \_\_\_\_\_

Treasurer is \_\_\_\_\_

Place of Business is \_\_\_\_\_

(Street)

\_\_\_\_\_  
(City, State and Zip Code)

- 3. If applicant is a Joint Venture, state the names and business addresses of each person, firm or company that is party to the joint venture:

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

A copy of the joint venture agreement is on file at \_\_\_\_\_  
 and will be delivered to the Official on request.

- 4. If applicant is a Trust, state the name and residential address of all Trustees:

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

The Trust documents are on file at \_\_\_\_\_

C. Reference(s):

- 1. List three (3) or more contracts on which you served as vendor/contractor within the past two (2) years for work of similar character as required for the above named contract:

<u>Work of Contract:</u>	<u>Business or Govt. Entity:</u>	<u>Amount of Contract:</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____



2. Bank reference(s):

Name of Bank:

Telephone No.:

\_\_\_\_\_  
\_\_\_\_\_

D. If the business is conducted under any title other than the real name of the owner, state the time when, and place where, the certificate required by General Laws c.110, §5, was filed:

\_\_\_\_\_

E. The Taxpayer Identification Number\* of the applicant (the number used on Employer's Quarterly Federal Tax Return, U. S. Treasury Form 941) is: \_\_\_\_\_

\*If individual, use Social Security Number: \_\_\_\_\_

F. Have been is business under present business name \_\_\_\_\_ years.

G. Ever failed to complete any work awarded? \_\_\_\_\_ (If answer is yes, state circumstances)

\_\_\_\_\_  
\_\_\_\_\_

H. Pursuant to M.G.L. c.60, §93, the undersigned understands and agrees that if a contract is awarded to the applicant, that the Collector-Treasurer of the City of Boston may withhold from amounts owing and payable under any contract awarded to the successful applicant any and all sums owed to any department or agency of the City of Boston which remain wholly or partially unpaid. This shall include but not be limited to unpaid taxes and assessments, police details, and any other fees and charges until such sums owed have been paid in full, and the Collector-Treasurer further may apply any amount owing and payable to the successful applicant to satisfy any monies owed to the City.

I. Pursuant to M.G.L. c.62C, §49A, the undersigned certifies under the penalties of perjury that to the best of his/her knowledge and belief all state tax returns have been filed and that all state taxes required under law have been paid. (NOTE: The Taxpayer Identification Number will be furnished to the Massachusetts Department of Revenue to determine compliance with the above-referenced law.)



J. The undersigned certifies under penalties of perjury that this application has been made and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club or other organization, entity, or group of individuals.

Bidder: \_\_\_\_\_

By: \_\_\_\_\_  
(Sign Here)

Business Address: \_\_\_\_\_  
(Street)

\_\_\_\_\_  
(City, State, Zip Code)

**NOTE: This application must bear the written signature of the applicant.**

**If the applicant is an individual doing business under a name other than his own name, the application must so state, giving the address of the individual.**

**If the applicant is a partnership, the application must be signed by a general partner designated as such.**

**If the applicant is a corporation, trust or joint venture, the application must be signed by a duly authorized officer or agent of such corporation, trust or joint venture.**

**APPROVED AS TO FORM BY CORPORATION COUNSEL FEBRUARY, 1998  
THIS FORM IS VOID AND WITHOUT LEGAL EFFECT IF ALTERED IN ANY WAY**



## STATE TAX RETURN CERTIFICATE

The City of Boston is subject to Section 49A of Chapter 62C of the Massachusetts General Laws which provides, in subsection (b), "[t]hat no contract or other agreement for the purposes of providing goods, services or real estate space ... shall be entered into, renewed or extended with any person unless such person certifies in writing, under the penalties of perjury, that had complied with all laws of the commonwealth relating to taxes."

CERTIFICATION

Pursuant to M.G.L. Chapter 62C, Section 49A, I certify under the penalties of perjury, that to my best knowledge and belief, I have filed all state tax returns and paid all state taxes required under law.

---

Name of Bidder or Proposer

---

Authorized Signature of  
Bidder or Proposer

---

Social Security #  
Federal Identification #

---

Date

Approval of a contract or other agreement will not be granted unless this certificate is signed by the bidder.

Social Security number of Federal Identification number, as applicable, will be furnished to the Massachusetts Department of Revenue to determine compliance with the above-referenced law.

# **PROPOSAL PRICE**

**To receive consideration for award the forms in this section MUST be completed. The Proposal package MUST be received at the address below and be date/time stamped, on or before April 20, 2007.**

**Mayor's Office of Emergency  
Preparedness/Metro-Boston Homeland Security  
Region  
Boston City Hall  
Room 603, One City Hall Plaza  
Boston, MA 02201**



Critical Infrastructure Monitoring System

PRICE PROPOSAL SHEET

**Complete all pages of this document in ink. An authorized representative of the Proposer must sign this form in ink.**

1. Having carefully examined the Contract Documents entitled Critical Infrastructure Monitoring System Project, the undersigned offers to furnish all the labor, material and other services necessary to provide the Goods and Services required by and in strict accordance with these Documents and the implied intent thereof, for the rates (price) listed on the following pages.
2. Taxes: This proposal does not include State of Massachusetts or local sales tax.
3. Withdrawal: This proposal will not be withdrawn within ninety (90) days after the actual date of the opening thereof.
4. Proposer agrees, if this proposal is accepted, to enter into a Contract with the City in the form of the Contract contained in the RFP Documents and to begin the work ten (10) days after date of notice of award.

DATED this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

PROPOSER: \_\_\_\_\_

BY: \_\_\_\_\_

(Signature)

(Print Name of Signer)

PRINT NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

PHONE ( ) \_\_\_\_\_

Zip Code: \_\_\_\_\_

FAX number (if available): ( ) \_\_\_\_\_

**Critical Infrastructure Monitoring System**

**PRICE PROPOSAL SHEET**

1. Detailed cost breakdown information with this proposal shall include unit pricing and extensions. In case of discrepancy between the two, the unit price(s) shall govern.
2. Unit price(s) shall include freight and delivery. Freight/delivery shall not be an "add-on" cost.
3. Prices shall not include State of Massachusetts sales or local retail tax.
4. Payment Terms: Prompt Payment Discount \_\_\_% \_\_\_ days (not less than 30 days); Net \_\_\_ days (not less than 30 days).
5. Total System Cost, which includes all design, equipment and services for a turnkey system that is fully operational, should be reflected in the table below.

Item	Costs
A. Digital Video Recording System (DVRS) (attach detailed breakdown to proposal)	\$ _____
B. Video Transmission Equipment (attach detailed breakdown to proposal)	\$ _____
C. Wireless Local Area Network (WLAN) (attach detailed breakdown to proposal)	\$ _____
D. Other Costs (attach detailed breakdown to proposal)	\$ _____
E. Total System Cost (A through D above)	\$ _____*

\*Use this amount to compute amount for Proposal Guarantee and Performance Bond/Letter of Credit.

Proposal Guarantee = Total System Cost X 5%

Performance Bond/Letter of Credit = Total System Cost X 100%

**Critical Infrastructure Monitoring System**

**PRICE PROPOSAL SHEET**

6. Option Pricing: The City reserves the right to exercise its option at its discretion for up to six (6) months after Award of Contract at the prices stated. See Section IV for more information on options.

#	Item	Cost
1	Priority Two Cameras: Furnish and install an additional 34 cameras and associated hardware, software, and design services in addition to that required for the baseline CIMS.	\$ _____
2	Priority Three Cameras: Furnish and install an additional 36 cameras and associated hardware, software, and design services in addition to that required for the baseline CIMS.	\$ _____
3	Boston 30 Cameras: Furnish and install an additional 30 cameras and associated hardware, software, and design services in addition to that required for the baseline CIMS.	\$ _____
4	Additional Support: On-site for eight hours per month for 6 months for each of the Project's nine jurisdictions.	\$ _____
5	WLAN upgrade to Redundant Topology: create transmission path redundancy and increase transmission rate to 100Mbps.	\$ _____
6	Hardware and Software Extended Service: Years 2, 3, 4 & 5 services past the initial year warranty. Each year may be individually optioned by the City at the price indicated.	Year 2: \$ _____ Year 3: \$ _____ Year 4: \$ _____ Year 5: \$ _____
7	WLAN System Admin: one-year hardware and software system administration for all nine jurisdictions within the CIMS project.	\$ _____

**Critical Infrastructure Monitoring System**

**PRICE PROPOSAL SHEET**

7. Unit Pricing: The City reserves the right to exercise its option at any time during the installation phase for the addition or deletion of materials at the below calculated costs:

Item	Costs
QTY 1 Camera - PTZ, with lens, mount, sun shield, fan, heater, UPS, encoder	\$ _____
QTY 1 Wireless Point-to-Point (P2P) Radio pair	\$ _____
QTY 1 Wireless Point-to-Multipoint (P2MP) Radio pair	\$ _____
QTY 1 Network Data Switch	\$ _____
QTY 1 Network Video Recorder (16 Channel)	\$ _____
QTY 1 One TB of Video Storage compatible with NVR	\$ _____

CITY OF BOSTON  
MAYOR'S OFFICE OF EMERGENCY PREPAREDNESS  
1 CITY HALL PLAZA, ROOM 603  
BOSTON, MA 02201

NOTICE TO PROPOSERS

ADDENDUM #1

The attention of all contractors submitting proposals for:

CRITICAL INFRASTRUCTURE MONITORING SYSTEM

is called to the following Addendum.

The items set forth herein, whether of omission, addition, or substitution, shall be included in and form a part of the proposal submitted.

*All proposers shall note in their proposal submitted to the Awarding Authority that Addendum #1 is included in their proposal.*

**ALL PROPOSERS ARE ADVISED OF THE APPLICABILITY OF THE FOLLOWING TERMS AND THE ATTACHED REVISED TIMELINE.**

All general contractors and filed subcontractors are hereby notified of the following:

1. CB Form 7 or CB Form 7 RS are not required for this contract, and therefore can be disregarded as minimum requirements in Section II of the RFP.
2. The proposals of Offerors will not be made available following this proposal process, pursuant to M.G.L. c.4, §7, Clause 26 (n).
3. Each proposer must submit with its Price Proposal a Bid Bond/Proposal Guarantee in the amount of 5% of the total proposal price. The 5% Bid Bond can be submitted in the form of a Certificate of Insurance or a Certified Bank Check, and must be submitted along with the sealed Price Proposal.
4. The selected proposer must submit at the time of award:
  - a. A performance bond, underwritten by a certified surety company in the amount of 100% of the total proposal price.

- b. A Workers' Compensation Certificate of Insurance, and an assurance that all subcontractors will also meet the same insurance requirements.

PLEASE NOTE THE FOLLOWING REVISIONS TO THE CIMS RFP TIMELINE.

RFP Advertisement Appears in City of Boston Record:

Monday, March 19, 2007

Monday, March 26, 2007

RFP Package Available On and After:

Monday, March 19, 2007 12:00 Noon Eastern Daylight Time (EDT)

Deadline for questions to be received at the mail or email address indicated above:

Monday, April 2, 2007 5:00 PM EDT

Offerors' Conference to address questions asked prior to above deadline:

Friday, April 6, 2007 10:00 AM EDT

Deadline for reviewing documents on file in Mayor's Office of Emergency Preparedness, as outlined in RFP:

Wednesday, April 18, 2007 5:00 PM EDT

Deadline for Non-Price and Price Proposals to be received at the address indicated above:

Friday, April 27, 2007 5:00 PM EDT

Three highest-rated Offerors notified:

Friday, May 4, 2007

Oral Presentations and Live Demonstrations by three highest-rated Offerors:

Week of May 21, 2007

Target Date for Award

Monday, June 11, 2007