

Los Angeles Harbor Department Port Police



UHF Project 25 Radio System

Request for Proposal



December 2008

RFP INSTRUCTIONS

Request for Proposals

Los Angeles Harbor Department Port Police Radio System

Any questions relating to this RFP may be directed by email to the Project Manager:

Raul Velasco, Communications Engineer
Los Angeles Port Police
425 S. Palos Verdes Street
San Pedro, CA 90731
(310) 732-2607
<mailto:rvelasco@portla.org>

Vendor proposal packages shall consist of:

- One (1) bound original
- Two (2) bound copies
- Five (5) electronic copies (Adobe PDF format, version 7 or later) on CD

Printed copies of the Vendor's response shall be supplied in standard 8-1/2 x 11, 3-ring binders (documents greater than letter size shall be folded neatly to fit).

The vendor's proposal must be received no later than March 10, 2009, 4:00 PM Pacific time. The vendor shall submit their proposal packages to:

Ronald J. Boyd, Chief of Police
Los Angeles Port Police
425 S. Palos Verdes Street
San Pedro, CA 90731
Attention: Raul Velasco

Pre-Bidders Conference and Site Inspection

The Port of Los Angeles shall conduct a mandatory Pre-Bidders Conference and a limited number of site inspection tours. The vendor shall submit to LAPP the names, titles and company of those representatives who will attend. A maximum of three (3) vendor representatives shall be permitted to attend. The LAPP will develop a site visit itinerary, and the vendor shall be notified of the site inspection schedule. Transportation logistics will be identified in the itinerary.

Security

The LAPP sites may have unique site access requirements. Although no special security clearances are required for this project, certain access limitations may be imposed.

Acknowledgements

A copy of any questions and responses will be sent via email to all known RFP recipients. Firms wishing to follow the E-Mail response with a hard copy response must make a specific request for such response.

Table of Contents

Cover Letter	i
1 INTRODUCTION.....	1
1.1 Overall Project Goals and Objectives.....	1
1.2 Project Scope.....	1
1.3 Planned Schedule of RFP and Implementation Events	2
1.4 The Port of Los Angeles.....	3
1.5 The Los Angeles Port Police	3
2 PROPOSAL SUBMITTAL REQUIREMENTS	7
2.1 RFP Response	7
2.2 Responsibility for Compliance with Legal Requirements.....	9
2.3 Vendor Rights	9
2.4 Vender Incurred Costs.....	9
2.5 Vendor Errors or Omissions.....	9
2.6 Addendum.....	9
2.7 Proposal Validity.....	9
2.8 Rejection of a Solicitation Response.....	9
2.9 Work Plan and Performance Schedules	10
2.10 Project Milestone Schedule.....	10
2.11 Contract Award	10
2.12 Proposal Evaluation Criteria	10
3 TECHNICAL SPECIFICATIONS.....	14
3.1 Project Scope - General.....	14
3.2 Project Overview.....	14
3.3 System Specifications	15
3.4 UHF Wide Area System Specifications	16
3.5 Dedicated Data Network (LAN/WAN).....	29
3.6 Interoperable Communications Sub-System	30
3.7 Dispatch Console Sub-System	33
3.8 Console Furniture.....	39
3.9 Logging Recorder.....	40
3.10 Network Monitoring, Alerting and Diagnostics.....	45
3.11 Subscriber (Mobile & Portable) Radio Equipment	48
3.12 Compliance with APCO P25 Statement of Requirements	49
4 STATEMENT OF WORK.....	50
4.2 Preliminary System Design.....	55
4.3 Detailed System Design	56
4.4 Project Management.....	59
4.5 System Installation Requirements.....	61
4.6 System Documentation.....	68
4.7 Spare Parts and Test Equipment.....	71
4.8 Training.....	71
4.9 Warranty and Maintenance	73
4.10 Acceptance Tests.....	77
4.11 Final Acceptance.....	80
4.12 Trunking Capability – Budgetary Estimate.....	80
5 CONTRACTUAL REQUIREMENTS.....	83

5.1	Affirmative Action	83
5.2	Small Business Development Program	83
5.3	Business Tax Registration Certificate	83
5.4	Insurance Requirements	83
5.5	General Liability Insurance	84
5.6	Automobile Liability Insurance.....	84
5.7	Workers' Compensation.....	84
5.8	Professional Liability Insurance	84
5.9	Conflict of Interest	85
5.10	Governing Law / Venue	86
5.11	Termination Due to Non-Appropriation of Funds.....	86
5.12	Proprietary Information.....	87
5.13	Taxpayer Identification Number	87
5.14	Service Contractor Worker Retention Policy and Living Wage Policy Requirements	87
5.15	Wage and Earnings Assignment Orders/Notices of Assignments.....	87
5.16	Equal Benefits Policy.....	88
5.17	State Tidelands Grants.....	88
5.18	Public Information.....	88
5.19	Right to Reject All Bids	88
5.20	Evaluation Process/Selection Criteria	88
5.21	Term of Contract	89
5.22	Travel Per Diem Requirements	89
5.23	Format for Proposals	89
5.24	Checklist for Submittal.....	90
6	ATTACHMENTS AND EXHIBITS.....	91
	Exhibit A - Affirmative Action	1
	Exhibit B - Small Business Development Program.....	4
	Exhibit C - Business Tax Registration Certificate (BTRC) Number	1
	Exhibit D – Insurance Requirements.....	1
	Exhibit E – General Liability.....	1
	Exhibit F – Auto Liability	1
	Exhibit G – Workers' Compensation.....	1
	Exhibit H – Professional Liability	1
	Exhibit I – Equal Benefits Ordinance	2
	Exhibit J – City Travel & Per Diem Expense Requirements.....	1
	Exhibit K -- Property Insurance - Loss Payable Endorsement	1
	Exhibit L - Ocean Marine Liability - Additional Insured Endorsement	1
	Exhibit M – System Frequencies	1
	Exhibit N – Equipment Sites.....	1
	Exhibit O – Desired Coverage Area.....	1

Exhibit P – Applicable TIA/EIA-102 Documents	1
Exhibit Q – P25 Statement of Requirements.....	1
Exhibit R – Drawing Format Sample	1
Exhibit S – Proposal Price Information Form	1
1 Overview	1
2 Instructions.....	1
Exhibit T - Evaluation Process/Selection Criteria	1
1 Project:.....	1
1.1 Review Panel:.....	1
1.2 Process:	1



425 S. Palos Verdes Street Post Office Box 151 San Pedro, CA 90733-0151 TEL/TDD 310 SEA-PORT www.portoflosangeles.org

Antonio R. Villaraigosa

Mayor, City of Los Angeles

Board of Harbor
Commissioners

S. David Freeman
President

Jerilyn López Mendoza
Vice President

Kaylynn L. Kim

Douglas P. Krause

Joseph R. Radisich

Geraldine Knatz, Ph.D

Executive Director

December 26, 2008

The City of Los Angeles Harbor Department ("Harbor Department") invites the submittal of proposals for a new Radio System Buildout, commencing after a contract therefore is approved by the Board of Harbor Commissioners or Executive Director.

Instructions and forms to be used in preparing the proposal are found in the information included in this Request for Proposals ("RFP"). An original bound proposal, two (2) bound copies, and five (5) electronic copies (Adobe PDF format, version 7 or later) on CD must be returned to the Harbor Department Administration Building, Port Police Division, at 425 South Palos Verdes Street, San Pedro CA, Attention: Electronically transmitted proposals will not be considered.

Proposal Submission Deadline: March 10, 2009, 4:00 PM Pacific time. Printed copies of the Vendor's response shall be supplied in standard letter size, 8-1/2 X 11, 3-ring binders (documents greater than letter size shall be folded neatly to fit). Font size shall not be smaller than 10 point font.

Mailed proposals should be sent to: Los Angeles Harbor Department, Port Police Division, P.O. Box 151, San Pedro, CA 90733-0151, Attention: Ronald J. Boyd, Chief of Police.

All prospective proposers are required to attend a mandatory pre-proposal conference at the Harbor Department Administration Building located at 425 South Palos Verdes Street, San Pedro. The meeting will be held in Board Meeting Room at 10:00 a.m. on January 14, 2009.

Proposers solely are responsible for the timeliness of their submittals. As such, proposers are cautioned to budget adequate time to ensure that their proposals are delivered at the location designated at or before the deadline set forth above. Proposers are cautioned that matters including, but not limited to, traffic congestion, security measures of the Harbor Department and/or events in or around the Harbor Department Administration Building, may lengthen the amount of time necessary to deliver the proposal, whether the proposal is submitted in person or by mail.

Proposals will be logged in as the Harbor Department receives them, and no proposal will be opened until after 4:00 p.m., on March 10, 2009. After that time, the proposals will be opened and reviewed by Harbor Department staff. The

The right to reject any and all proposals shall, in every case, be reserved, as shall the right to waive any informality in the proposal when to do so would be to the advantage of the City.

If your firm cannot agree to these requirements, exactly as set forth, in this request for proposal, please do not submit a proposal. For questions, please contact Raul Velasco, Project Manager at (310) 732-2607 or rvelasco@portla.org.

Prior to being awarded a contract with the Port of Los Angeles, all contractors and subcontractors must be registered on the Port's Contracts Management Database, e-diversityXchange. You can register by going to www.portoflosangeles.org and clicking on the 'Business' link.



RONALD J. BOYD
Chief of Port Police
Port Police Division

1 INTRODUCTION

This section of the Request for Proposal (RFP) presents the overall project purpose, and describes the Los Angeles Harbor Department and the Port Police organizations.

1.1 Overall Project Goals and Objectives

The Los Angeles Harbor Department Port Police (LAPP) is soliciting proposals from qualified vendors to design and construct a multi-site, four channel, UHF, narrow-band, Project 25, conventional radio system. This RFP sets forth the terms and conditions, technical requirements, and operational constraints for the implementation of the infrastructure to support the system.

The primary objectives of this project are to:

1. Improve overall LAPP communications in terms of capacity, coverage area and reliability within the LAPP primary response area as identified in this RFP.
2. Construct a new LAPP radio system to support wide-area, Project 25 compliant digital radio communications using the existing UHF dispatch channel and three newly acquired 12.5 KHz, UHF-T band repeater channels.
3. Provide new dispatch console electronics for the new dispatch facility at 300 Water Street.
4. Provide and integrate a voice logging sub-system.
5. Provide and integrate new fixed radio hardware for interoperability with surrounding agencies.
6. Procure and deploy the new system in such a manner as to maximize forward compatibility with the anticipated Los Angeles Regional Interoperable Communications System (LA-RICS), region-wide interoperable radio system initiative.

Operational constraints associated with this project include:

1. There shall be no service disruption of the current radio system.
2. There are unique coverage requirements associated with a major port of entry.
3. Each FCC licensed radio site must be operational prior to the license construction deadline of June 5, 2009.

1.2 Project Scope

In addition to meeting the functional requirements of this RFP, the vendor shall adhere to referenced industry standards and related government regulations.

Proposers are responsible for and shall perform their own validation modeling or testing of suggested site(s), or shall propose viable alternatives to meet the coverage and reliability objectives.

At the discretion of the Port, the scope of this project may be expanded to add channel(s), site(s), and inherent P25/TIA102 features and functionality. In order to be considered compliant, vendors shall fully respond to all sections of this RFP.

The Port will accept the most beneficial and complete response to these requirements.

1.3 Planned Schedule of RFP and Implementation Events

The following schedule is based on an RFP release date of **December 26, 2008**

RFP Milestones	Calendar days following RFP release date:
Pre-Bidders Conference and Site Inspection Date (January 14, 2008)	19
RFP Question Submittal Due Date	21
Responses to RFP Questions Published	35
<i>Intent to Bid/No Bid Response Letter Due Date</i>	40
Proposal Due Date	74
Contract Award Date	185

Key Project Implementation Milestones	Calendar days following contract award date:
Kickoff and Detailed (Critical) Design Review.	10
Final system design completed and approved.	30
Acceptance Test Plan ATP) completed and approved	90
System Installation Plan completed and approved.	100
Factory Acceptance Test	120
Site Preparation/Development Completed	120
System Installation Completed	150
Field Optimization Completed	175
Complete In-Field System Acceptance Testing	195
Training Completed	195
30-Day Operational Test Completed	225
Documentation Completed	227
Final System Acceptance (The Port of Los Angeles)	230

1.4 The Port of Los Angeles

The Port of Los Angeles (POLA), Southern California's international commerce gateway, is located in San Pedro Bay, 20 miles south of downtown Los Angeles and is immediately adjacent to and contiguous with the Port of Long Beach. The two ports function under completely independent local jurisdictions but have regular interaction with each other.

This booming seaport complex is known for its groundbreaking environmental initiatives, progressive security measures, and diverse recreational and educational facilities.

POLA encompasses over 7,500 acres with over 43 miles of waterfront. Serving over 90 shipping and cruise lines, the 26 cargo terminals and World Cruise Center support over 3,000 vessel arrivals carrying nearly 170 million metric revenue tons of cargo, and 1.2 million passengers every year.

POLA is the busiest container port in the United States and 8th busiest in the world. It is the busiest cruise center on the west coast, and the 4th busiest in the United States.

The Port of Los Angeles is a proprietary (self funded) department of the City of Los Angeles charged with the operation and protection of the Port of Los Angeles. Los Angeles Harbor Department (LAHD) is a landlord port that leases properties private sector terminal, tug, and marine cargo and cruise industry transportation entities.

1.5 The Los Angeles Port Police

The Los Angeles Port Police (Port Police) functions as a Division of the Los Angeles Harbor Department. Port Police has a significantly different mission than traditional city law enforcement agencies. It is one of the few police forces in the nation dedicated exclusively to around-the-clock port activities. Its jurisdiction includes both land facilities in the vicinity of the port complex, and water operations extending from the inner port area out as far as the Los Angeles Breakwater.

The primary goals of the Port Police are to maintain the safety and security of the Port, maintain the free flow of commerce, and produce a safe environment that promotes uninterrupted Port operations. As sworn peace officers, Port Police enforce federal, state, and local public safety statutes as well as environmental and maritime safety regulations.

Port Police is led by its own Chief who reports to the Director of Operations for the Los Angeles Harbor Department. The 2008-2009 Fiscal Year budgeted staffing for Port Police includes 162 sworn officers, 42 civilian security officers, and 78 civilians.

Police administration and most functional units of Port Police are currently located in the Harbor Administration Building (HAB) in San Pedro. Nearly all personnel and operations will be moved to the new police headquarters upon its completion in 2010. Additionally, there are Port Police facilities and offices scattered throughout the Port of Los Angeles area, including a planned new Port Police substation in Wilmington. Port Police does not have its own prisoner processing or detention facilities. All arrestees are processed at one of the Los Angeles Police Department substations.

Port Police is responsible for safety and security of the Port of Los Angeles, and enforcement of the laws and regulations of the State, City and Port Tariffs including but not limited to:

- Penal Code
- Vehicle Code
- Health & Safety Code
- Welfare & Institutions Code
- Business & Professions Code
- Fish & Game Code
- City Municipal Code
- Tariff # 4 Regulations

As a result, Officers:

- Make arrests
- Write citations
- Take crime reports
- Conduct facility safety inspections
- File criminal complaints
- Conduct investigations
- Perform community outreach

Key functional units within Port Police include:

1.5.1 Patrol

Port Police officers are responsible for enforcing all laws and ordinances within the jurisdiction of the Port of Los Angeles, including its commercial operations, docks and marinas, recreational, residential and neighboring areas. Port Police Officers may also be involved with other programs such as participation in bicycle patrol, sea marshal operations, detectives, or anti-terrorism task forces.

1.5.2 Dive Team

This underwater unit polices the area from the docks to the breakwater and often assists the United States Coast Guard (USCG) to investigate spills, accidents and other suspicious incidents.

1.5.3 Canine Unit (K-9)

Using specially trained dogs to sniff and locate narcotics or explosives, the K-9 unit actively searches the cargo areas and World Cruise Terminal.

1.5.4 Marine Unit

Performs waterside patrol of the Port complex using a variety of small watercraft. Recently, the Marine Unit was expanded to provide two boats on patrol on a 24/7 basis.

1.5.5 Cargo Theft Interdiction Program (CTIP)

A partnership among major city, state and federal law enforcement agencies including Los Angeles Port Police, Los Angeles Police Department, California Highway Patrol, Vernon Police Department, Department of Insurance, and United States Customs.

1.5.6 High Intensity Drug Trafficking Area (HIDTA)

A coordinated anti-drug task force operated by the Federal Drug Enforcement Agency (DEA) and involves several Southern California local, state and federal law enforcement agencies.

1.5.7 Hazardous Materials

Works in conjunction with various agencies to monitor and maintain the security of various materials and sensitive areas within the Port of Los Angeles.

1.5.8 Detective Unit

The Detective Unit performs a variety of traditional investigative functions.

1.5.9 Port Security

In addition to the sworn operations described above, Port Police also staffs a full time non-sworn Port Security unit that is responsible for monitoring the physical security of LAHD facilities.

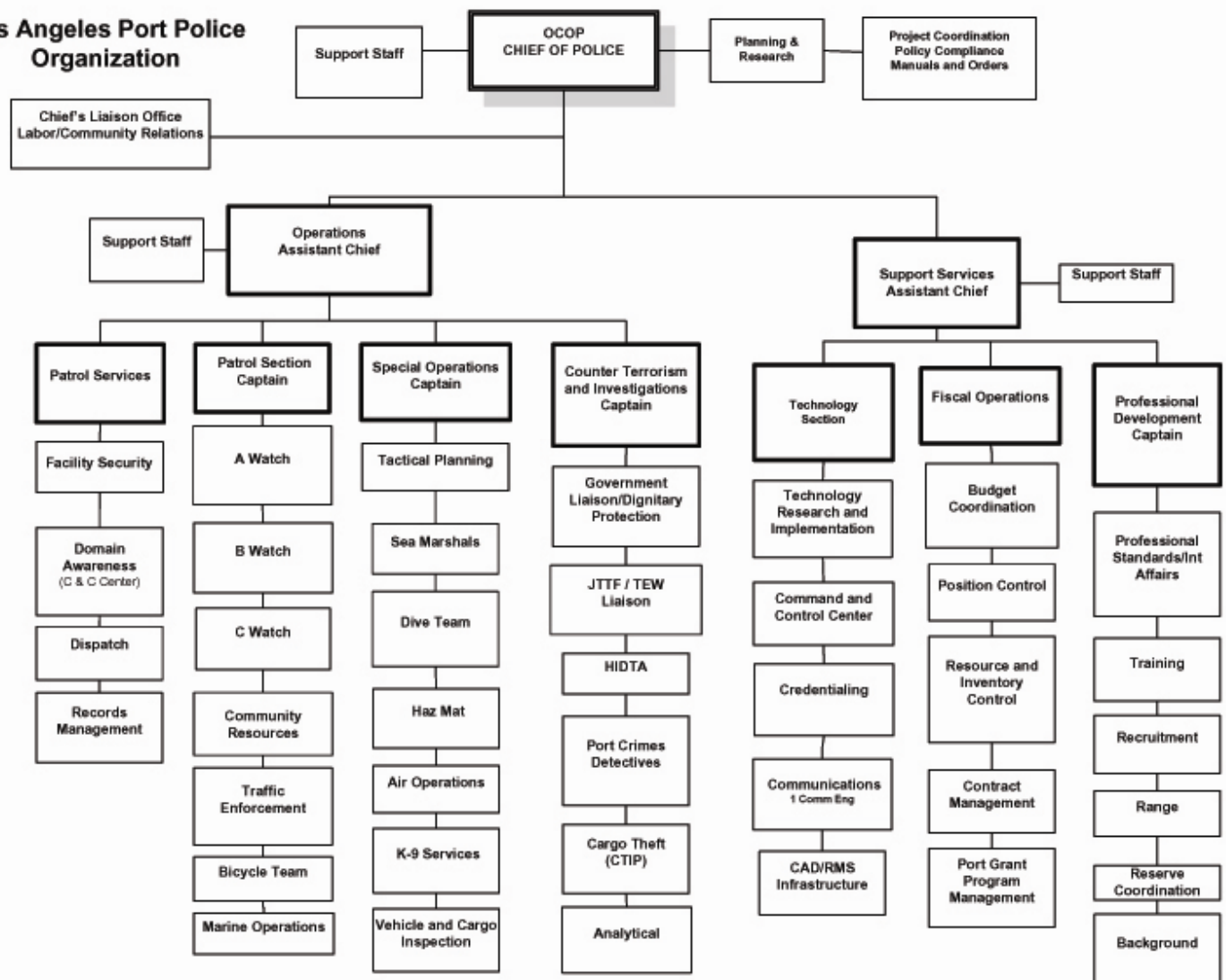
1.5.10 Planning and Research

Reporting to the Office of the Chief – the Planning and Research unit is charged with overall project coordination for significant projects, supporting the planning and research needs of the Port Police, overseeing and implementing policy compliance programs to improve the operational efficiency and integrity of the Port Police, and administering the Manuals and Orders unit to develop and distribute the Port Police's Policy Manual and refinement of policies and procedures.

1.5.11 Technology

The newly created Technology Section will be charged with overseeing the implementation of a Computer Assisted Dispatch System, Records Management System, and technology for the Command and Control Center (not part of this RFP). It will also administer the LAHD Credentialing, support and maintain the Port Police Communications systems, and provide overall research and project management for technology initiatives.

Los Angeles Port Police Organization



2 PROPOSAL SUBMITTAL REQUIREMENTS

This section outlines the minimum requirements for the preparation and presentation of a response. Proposals are requested on the equipment and services specified in this RFP. All responses shall adhere to the terms and conditions set forth in the contractual sections of this document.

The vendor shall define its capability to design, supply, maintain and train user personnel in the operation of a Telecommunications Industry Association / Electronic Industry Association-102 (TIA/EIA-102) compliant system as specified in this RFP. The response should be specific and complete in every detail, and prepared in a simple and straightforward manner. Instructions are for descriptive purposes to guide the vendor in the interpretation of the quality, design and performance desired.

Proposals must address all sections in the RFP by their reference number, on a point by point basis and shall be prepared in the format as detailed by this RFP.

2.1 RFP Response

Proposals shall be submitted on the forms and in the format as described in this section.

Vendors are encouraged to include references to any of their web sites that contain descriptive literature, specifications, samples, etc., which support their proposal. Such information will not be used or considered in lieu of a complete written response to these specifications.

Responses consisting solely of marketing material will be deemed unresponsive to the RFP requirements and will be eliminated from further consideration.

For Bidder's convenience, an electronic version of the system requirements, pricing matrix and Project 25 Statement of Requirements may be obtained from the contact person identified in the accompanying RFP instructions.

Beginning with RFP Section 3.3, Bidder shall respond to each numbered paragraph as follows:

1. In the appropriate column on the supplied forms, indicate with one of the following single letter codes that the requirement or statement is:
 - R (read and understood) – Also applies to items where a diagram, chart, schedule, map, or other graphic is required AND supplied as part of the bidder's appendix.
 - C (compliant)
 - N (non-compliant)
 - Q (needs a qualified response).
2. For each item that is marked N or Q, or for items that specifically request a written response, vendor shall fully explain the nature of their exception or clarification to the item.
3. No further statement is necessary for items that are marked R or C, although vendors may respond with additional, relevant information as required.

2.1.1 Complete Proposal

By submitting a proposal, vendors certify that such proposal constitutes their full and complete written response to the RFP and evidence their acknowledgement that additional written material

outside of such proposal shall not be considered by the City in connection with this RFP unless the City provides a written request that they submit additional written materials. Absent such written request, vendors are instructed to not submit to the City written or other materials outside of the proposal, either in a subsequent interview or otherwise.

Vendor proposals shall be organized per the following general table of contents:

- a) Cover transmittal letter
- b) Table of Contents
- c) Qualifications and References
- d) Proposed Project Organization and Staffing
- e) Project Approach, Methodology
- f) Project Work-plan, Schedule and Milestones
- g) Structured Response to RFP (in prescribed format)
- h) Detailed equipment list
- i) Project Pricing breakdown (on provided forms)
- j) Vendor prepared supplemental detail (deployment schedule(s), coverage maps, system diagrams, etc.)
- k) City Contracting Requirements and Forms
- l) Vendor Supplied Product Literature (Optional)

2.1.1.1 Letter of Transmittal

The letter of transmittal shall include the vendor's legal name and business name (if different), address, telephone numbers, fax numbers and email addresses of the office(s) responsible for the work. The letter shall state the full name of the contact person(s) who will be authorized to represent the company regarding all issues of the proposal or any contract subsequently awarded to the vendor. The letter must include the signature(s) of the person(s) with binding legal authority for the firm.

2.1.2 Price Proposal

The Port of Los Angeles requires the vendor to provide firm fixed pricing for its proposed design in response to the system requirements.

Expenses must comply with the Travel Per Diem Guidelines defined in RFP Section 5.22.

Vendors shall provide a total, detailed project price; including engineering, equipment, implementation services, project management, testing, training and all related expenses.

Vendors are instructed to use the format in the Proposal Price Information Form (Exhibit S) to provide a price breakdown of the proposed system.

2.1.2.1 Detailed Equipment List

In addition to Exhibit S, vendors shall provide a detailed equipment list organized to match the site(s) and sub-system(s) in the pricing matrix contained in Exhibit S of this RFP. The equipment list shall include at a minimum:

1. Item Description for all mainline items
2. Manufacturer's Part Number

3. Quantity

The vendor's price proposal shall be valid for 120-days after the published proposal due date. Upon notification of award, the selected vendor's pricing shall remain fixed until final system acceptance. Unless proposed otherwise as part of the vendor's response, payment terms will be Net 30 days upon final acceptance of the system, FOB Destination, freight prepaid.

The vendor's price proposal shall include a proposed schedule or plan of how equipment and services will be invoiced for the basic system requirement and options, and invoicing methods that will be used for delivery or order modifications if such modifications are required.

2.2 Responsibility for Compliance with Legal Requirements

The vendor's products, services and facilities shall be in full compliance with all applicable federal laws, regulations, codes, standards and ordinances.

2.3 Vendor Rights

Upon delivery, all materials submitted in response to this RFP become the property of the Port of Los Angeles and may be appended to any formal documentation that establishes a relationship between the Port of Los Angeles and the vendor. Any information or materials that the vendor deems as proprietary shall be marked accordingly and shall be treated accordingly by The Port of Los Angeles.

2.4 Vender Incurred Costs

The vendor shall be responsible for all costs incurred in preparing or responding to this RFP. All materials and documents submitted in response to this RFP become the property of The Port of Los Angeles and will not be returned.

2.5 Vendor Errors or Omissions

The Port of Los Angeles is not responsible for any vendor errors or omissions concerning the RFP process.

2.6 Addendum

The Port of Los Angeles shall not be responsible for any oral instructions made by any employees, officers of the LAPP, or their representatives in regard to the proposal instructions, specifications, or contract documents. Changes to the plans and specifications will be in the form of an addendum issued by the Port of Los Angeles to all parties receiving the RFP.

2.7 Proposal Validity

The vendor's proposal shall be valid for a period of at least 120 calendar days following the published proposal due date.

2.8 Rejection of a Solicitation Response

The Port of Los Angeles reserves the right to reject any or all responses received.

2.9 Work Plan and Performance Schedules

Vendors shall provide a detailed project schedule that illustrates the duration of each major task and identifies key task and deliverable milestones. Significant completion intervals for major tasks with itemized deliverables and clearly identified milestones shall be based upon, but not limited to, the milestones listed in Section 1.3, Planned Schedule of RFP and Implementation Events.

2.10 Project Milestone Schedule

The vendor shall propose a baseline schedule as required in this RFP to include all significant milestones for design, delivery, installation and testing of all items required for the system.

2.11 Contract Award

The Port of Los Angeles shall provide written notice of any resultant award that stems from this RFP.

2.12 Proposal Evaluation Criteria

The failure of a particular vendor to provide features and equipment meeting these specifications shall not be reason for protest or change to the specifications.

Vendor's proposal must adhere to the RFP terms and conditions. **Any exceptions must be noted in vendor's response.**

The evaluation factors for the system, including mandatory requirements, are:

1. Vendor's understanding of Scope of Work
2. Technical Solution
3. Organizational capabilities
4. Past performance
5. Implementation schedule
6. Maintenance support
7. Price, including both initial cost and anticipated cost of ownership for 5-years

2.12.1 Vendor's Understanding of Scope of Work

The vendor's proposal shall reflect a clear understanding of the project requirements in terms of:

1. Functional requirements
2. Project timeline
3. Technical standards
4. Installation standards
5. Training standards
6. Documentation

2.12.2 Technical Solution

An evaluation will be made of the vendor's proposed design. The proposed design documents will be evaluated in accordance with the following considerations listed in equal order of importance:

1. Quality of the design and demonstrated ability to meet performance requirements with particular emphasis on coverage, operational reliability, fault tolerance and recoverability.
2. Extent to which system performance exceeds the requirements in the performance specification.
3. Understanding of operational and security requirements, the performance risks and the relative changes associated with meeting the varied service, schedule, feature, and geographic requirements of the Port Police.
4. Extent to which the vendor employs proven, commercial technology and standards.

Significant consideration will be given to the degree to which the proposed system being offered by the vendor meets the minimum requirements.

Extra weight will be given to the proposals that provide current technology, long term compliance with TIA/EIA-102 standards and the APCO P25 Statement of Requirements (P25SoR), user friendly features, radio spectrum conservation, compatibility with existing systems and assets at the LAPP, and future compatibility with the anticipated LA-RICS system.

2.12.3 Organizational Capabilities

Consideration will be given to the capabilities, qualifications and experience of the vendor and the vendor's management and technical staff. Vendor shall describe their capabilities in each of the following areas:

- Product Design and Manufacturing
- System Engineering
- System Integration
- System Implementation
- Project Management
- Training
- Documentation
- Logistics Support Services
- Quality initiatives and certifications

2.12.3.1 Key Personnel

All key personnel must be approved by the Port of Los Angeles and they must remain committed to the project from the start date of the contract through project acceptance. Key personnel may not be replaced during this period without the express consent of the Port of Los Angeles except in cases of resignation or termination from the vendor's organization, serious illness or the death of the named individuals.

2.12.3.2 Management Approach

Each proposal will be evaluated to assess the vendor's management ability to plan, schedule, and coordinate implementation and operation of the system in accordance with the requirements.

The vendor's proposal must convey to Port of Los Angeles that the vendor has a suitable approach, the required resources, and sufficient management expertise and experience to manage resources and effectively achieve all requirements.

2.12.3.3 Resumes

Prior to final vendor selection and contract award, vendors may be required to present resumes for key personnel and job descriptions for all other key positions.

This request for information does not constitute an offer or award.

2.12.4 Vendor Experience

The vendor's past performance on similar projects will be considered as a significant indicator of the company's technical competency and capability to complete this project.

It is highly desired for the vendor to have a long, successful record of manufacturing and delivering land mobile radio products and systems to public safety agencies.

Vendor shall describe in the RFP response their history, including parent company affiliations and major project contract awards relevant to this project.

2.12.4.1 Project 25 Experience References

Vendor must have delivered and installed at least two (2) fully operational Project 25 radio systems to public-safety agencies.

Vendor shall provide, with their response, at least five (5) customer references, two (2) of which must be operational P25 systems, preferably in southern California, and installed within the last three (3) years.

Referenced systems should be of similar or larger size to that offered in response to this RFP and should incorporate similar products and techniques.

References will be contacted and the Port of Los Angeles or its designee may wish to visit one or more of the referenced systems.

2.12.5 Implementation

The vendor's proposal will be evaluated for the quality, completeness and realism of the approach to the complete and timely implementation of the system in accordance with the requirements of the SOW.

The following evaluation considerations are listed and are equal in order of importance:

1. Plans to coordinate activities, schedules and resources and ensure availability of required components to ensure timely implementation.
2. Availability of qualified personnel resources to complete a large scale implementation within schedule requirements.
3. Approach for coordinating with other service and equipment providers to obtain data, establish schedules and coordinate activities.

The Vendors shall make every effort to comply with the time frame specified in Section 1.3, *Planned Schedule of RFP and Implementation Events*, for this RFP. An alternate detailed time schedule, proposed by the vendor, will be considered.

2.12.6 Maintenance Support

The vendor's proposal will be evaluated for the understanding and completeness of the vendor's plans for meeting system maintenance requirements in the RFP.

The evaluation considerations are listed below and are equal in order of importance:

1. Availability of qualified personnel
2. Plans to provide timely warranty response
3. Plans for receiving, processing and tracking warranty calls
4. Proposed design, media, approach and content for developing training materials and training presentation.
5. Plans for providing spare parts and identifying/obtaining long lead-time equipment and materials
6. Ability to provide optional on-going maintenance after warranty expires.

2.12.7 Total Price

An important factor in the vendor selection will be the project price of the proposed solution that meets the goals of the system.

Responses will be evaluated based on both initial cost and projected five (5) year cost of ownership, including optional maintenance, site leases, connectivity, etc.

3 TECHNICAL SPECIFICATIONS

3.1 Project Scope - General

Information provided under this heading is provided as an overview of the entire project. In the event of any perceived conflict, the detailed specifications that follow shall prevail.

The LAPP requires a complete, turnkey P25 conventional radio communications system. The RFP includes the provision of a wide area conventional radio system, dispatch console, and other ancillary equipment as required for a fully functional, TIA102 standards based, land mobile radio system. The system shall allow TIA102 trunked capabilities to be seamlessly enabled. The system is required to support the wide area voice radio communications requirements of the Port of Los Angeles and other agencies as defined in this RFP.

In addition to the P25 radio infrastructure, this specification includes requirements for:

1. A dedicated data network to support the radio system and all subsystems.
2. A fixed interoperable radio sub-system.
3. A dispatch console sub-system.
4. A logging recorder sub-system.
5. System monitoring and maintenance facilities.

The vendor is required to furnish all equipment, services, documentation, training, and warranty as specified in this RFP including site preparation.

Turnkey services shall include engineering, installation, integration, optimization and testing in accordance with the specifications contained in this RFP. The vendor is responsible for providing all specified documentation, training, warranty and other services associated with the proposed system. In addition, the vendor shall identify and propose all goods or services that may be necessary but may not be specifically named in this RFP in order to provide a complete, operational system that meets the functional requirements of the RFP. Vendor supplied services shall as necessary include site acquisition and development, and preparation of any FCC license or coordination documentation.

Along with the RFP functional requirements, the vendor shall adhere to referenced industry standards and related government regulations.

Proposers are responsible for and shall perform their own validation modeling or testing of suggested site(s), or shall propose viable alternatives to meet the coverage and reliability objectives stated in this RFP.

The Port will accept what it considers to be the most beneficial and complete response to these requirements. With respect to price, the Port will evaluate both the initial cost of acquisition and installation, and the total five (5) year cost of ownership.

3.2 Project Overview

The wide-area conventional system shall be compliant with the Telecommunications Industry Association / Electronic Industry Association-102 (TIA/EIA-102) suite of standards and

specifications related to APCO Project 25 narrowband digital conventional systems as adopted at the RFP release date. Required, related subsystems are described below:

3.2.1 Dedicated Data Network

The existing proprietary LAPP data network shall not be used to support the radio network nor any of the proposed subsystems. The vendor shall furnish and install a separate, dedicated data network to support their system design. All remote site connectivity (i.e., leased lines, microwave, etc.) shall be furnished by LAPP.

3.2.2 Interoperable Subsystem

The interoperable radio sub-system shall functionally replicate the existing fixed interoperability equipment located at the Harbor Administration Building.

3.2.3 Console Subsystem

The console sub-system shall be capable of managing all features and functions supported by the proposed radio sub-systems.

3.2.4 Logging Recorder Subsystem

The logging recorder sub-system shall be capable of direct interface to the radio and console subsystems, shall support a variety of analog and telephone system inputs, and shall provide appropriate features and functions to meet local, state, and federal evidentiary requirements.

3.2.5 System Monitoring and Maintenance Facilities

Network monitoring and alerting shall be provided for all major components supplied as part of this RFP.

3.3 System Specifications

The following specifications define the system, subsystem and component functionality, and provide performance requirements for the installation and maintenance of the system obtained under this RFP.

Requirement	Response Code
3.3.1 System Feature Operational Specifications This RFP is intended to describe the operational requirements of the LAPP. In the event of any conflict of specifications, all features, functions, and capabilities of the proposed system must meet the applicable requirements set forth for Project 25 conventional systems, as defined in: • The <u>ANSI/TIA/EIA-102</u> suite of standards, as published on the release date of this RFP • <u>APCO Project 25 Statement of Requirements (P25SoR)</u> Both documents are referenced in Exhibit P, <u>Applicable TIA/EIA-102 Documents</u>. LAPP will not accept a proposed system that is not TIA/EIA-102 compliant.	
Qualified Response:	

3.4 UHF Wide Area System Specifications

Requirement	Response Code
3.4.1 Overview The system is required to support the wide area voice radio communications requirements of the Port of Los Angeles and interoperability with other agencies as defined in this RFP. The system shall be compliant with the Telecommunications Industry Association / Electronic Industry Association-102 (TIA/EIA-102) suite of standards and specifications related to APCO Project 25 narrowband digital conventional systems as adopted at the RFP release date.	
Qualified Response:	
3.4.1.1 The system shall support both voice and data communications, as specified in the TIA/EIA-102 standard.	
Qualified Response:	
3.4.1.2 All radio equipment shall meet applicable current FCC standards.	
Qualified Response:	
3.4.1.3 Station ID The radio system shall be programmed to automatically broadcast the FCC station identification as required by CFR Title 47 Part 90.425 rules.	
Qualified Response:	

Requirement	Response Code
3.4.2 Radio Sub-System Configuration The new LAPP conventional system shall be a 4-channel, multi-site, P25 digital, conventional UHF (450-512MHz) narrowband radio network. The vendor shall describe their technical approach to the multi-site system configuration, with emphasis on the following elements: • Ease of use • Seamless roaming between RF sites • Spectrum efficiency • Communications reliability • Fault Tolerance • Recoverability • System capacity • System throughput • Monitoring, diagnostics and maintenance	
Qualified Response:	
3.4.3 Primary System Frequencies The Port of Los Angeles currently operates on a single, 450-MHz channel. • 453.250MHz / 458.250MHz The Port of Los Angeles holds an exclusive license to operate three (3), UHF-T, narrowband channels under Part 90 Subpart L of the FCC Rules. • 472.1875MHz / 475.1875MHz • 472.2125MHz / 475.2125MHz • 508.0375MHz / 511.0375MHz All four of these channels will be utilized in the new system. See FCC License information in Exhibit M for all license details.	
Qualified Response:	
3.4.3.1 License Modification The FCC license(s) for these frequencies must be modified to meet the recommended location and system parameters identified by the selected vendor. It is the vendor's responsibility to assure that any recommended FCC license modifications are, with reasonable assurance, licensable under the terms of the existing license. Vendor shall be responsible for preparing any and all coordination, licensing, and supporting documentation required for modification of FCC licenses in support of the proposed design.	
Qualified Response:	

Requirement	Response Code
3.4.3.2 Failure to Identify FCC License Modifications Vendor shall be responsible for any costs incurred as a result of failure to disclose the impact of FCC license modifications that could be reasonably identified as part of the proposed design.	
Qualified Response:	
3.4.4 Wide Area Repeater Sites Known, <u>available</u> communication sites for this project are listed in <u>Exhibit N, Equipment Sites</u>. Vendors shall use these sites to the maximum allowable extent to support their system design, as long as system performance is not jeopardized.	
Qualified Response:	
3.4.4.1 Alternate Wide Area Sites Vendors may recommend replacement and/or additional sites to support their wide area RF coverage design. In the event that additional or alternate sites are proposed, the vendor shall as part of their proposal provide documentation that verifies contact with the site owner and confirms site availability. Vendors shall provide complete pricing for proposed sites based on documented discussions with the site owner, in accordance with the instructions provided in Section 4.2.2, <u>Site Selection</u>.	
Qualified Response:	
3.4.5 Standalone Repeater Sites Each of the three (3) UHF-T band channels are licensed for operation at remote sites to support specialized LAPP operations that are outside the core coverage area of the LAPP wide area system. The 3 remote sites are Saddle Peak (Malibu), Mount Lukens, and Sierra Peak (Corona). Each of these sites shall be equipped with a single, multi-frequency wireline controlled UHF repeater that will be used for expanded radio coverage and/or redundancy. The standalone repeaters shall include the same specifications and functionality of the wide area repeaters as described in Section 3.4.	
Qualified Response:	

Requirement	Response Code
3.4.5.1 Standalone Repeater Site Facilities As part of their response, vendors shall identify site facilities at or near the currently licensed coordinates for these locations. Vendors shall contact site owner(s) at each of these locations to determine space availability, installation requirements, plus the initial and recurring costs for operating the described equipment at each site. Vendor shall include, as part of their response to this RFP, a detailed description of the space availability and suitability at each location.	
Qualified Response:	
3.4.5.2 Standalone Repeater Installation Each remote site installation, including all rack(s), cabinet(s), power supply(ies), and antenna components shall be installed to the same security, seismic, power, grounding, interconnection (cables and demarcation points), weather, and lightning protection standards as described in Section 4, <i>System Installation Requirements</i> unless directed otherwise by the site owner	
Qualified Response:	

Requirement	Response Code
3.4.5.3 Standalone Repeater Site Power Requirements Vendor shall configure each site installation to operate on battery backup for a minimum of one (1) hour, based upon a five percent (5%) transmit, ninety-five percent (95%) standby duty cycle for all remote site hardware, with all transmitters operating at full authorized transmit power. Additional requirements include: • The charging system shall provide a maximum recharge time of 8 hours to 95% of battery capacity. • The site equipment shall operate without degradation while batteries are being recharged. • At a minimum, the charging system shall be properly sized at 75% of rated capacity (i.e., 25% excess capacity) to support future expansion. In any case, the minimum charging capacity shall be 50-Amperes. • The charging system shall include redundant rectifiers configured for N+1 operation. • Rectifiers and batteries must be modular and replaceable without disabling associated radio or network hardware. The use of UPS equipment is discouraged. Vendors are encouraged to provide equipment that is uniformly designed to operate with +12VDC, or -48VDC battery power systems. Vendor shall include all assumptions and calculations used to satisfy this requirement as part of their proposal.	
Qualified Response:	
3.4.5.4 Standalone Repeater Pricing Using the accompanying Price Matrix, vendor shall provide pricing to equip fully functional, standalone installations at each site. This shall include: 1. Firm pricing for all repeaters and associated hardware, backup power, all required transmission line, antennas, intermodulation suppression, cables, connectors, and any other equipment required by the site-owner or this RFP. 2. Firm pricing for all engineering, program management, and installation services necessary to install all proposed equipment at each site. 3. Estimated initial and recurring costs for site rental and maintenance. These costs shall be comprehensive to include direct, indirect, and incidental fees or costs.	
Qualified Response:	

Requirement	Response Code
3.4.6 Conventional System Features 3.4.6.1 Authorized System Access Only authorized radio system users shall be allowed access to the conventional system repeaters.	
Qualified Response:	
3.4.6.2 The system shall support both conventional voice and data, clear and encrypted, in a Project 25 environment. The UHF repeaters shall be transparent to Project 25 AES encryption.	
Qualified Response:	
3.4.6.3 Remote control of the P25 radio sub-system shall be in accordance with the TIA/EIA102 digital fixed station interface (FSI).	
Qualified Response:	
3.4.6.4 Wide Area Roaming The system shall allow seamless roaming between conventional wide area system repeater sites. Radio users shall not be required to manually change channels, switch sites, or otherwise perform any other manual operations while traveling between individual repeater sites in the wide area system. Manual selection of stand-alone repeater sites is acceptable (See Section 3.4.5).	
Qualified Response:	
3.4.6.5 Encryption The proposed conventional radio system shall be equipped to support digital encrypted voice and data communications over all narrowband digital radio channels without restriction as specified in the P25SoR. The supported encryption algorithm for this deployment shall be AES encryption. Encryption shall be compliant with the TIA/EIA-102 encryption standards listed in Exhibit P, <i>Applicable TIA/EIA-102 Documents</i> .	
Qualified Response:	
3.4.6.6 Key Management AES encryption functionality for the system shall be controlled by a secure key management subsystem that is functionally compatible with key loaders available for the subscriber equipment identified in Section 3.11, and compliant with the P25SoR.	
Qualified Response:	

Requirement	Response Code
3.4.6.7 FIPS Certification Vendor shall demonstrate appropriate, current FIPS (Federal Information Processing Standards) certification for all items proposed under this requirement prior to any award of contract.	
Qualified Response:	
3.4.7 System Reliability Reliability of the system shall be considered in terms of delivered, useable radio communications and features under degraded modes of operation. The LAPP requires that the RF system infrastructure is 99.99% reliable (i.e., no more than one (1) channel-hour or site-hour outage per year). Vendors shall describe in their response: • Vendor's approach to providing this level of reliability (e.g., equipment configuration, redundant communication links, backup power, spare parts, etc.). • How the vendor quantifies their reliability figures. • A clear explanation of the various stages of degraded communications capability if a prime site or remote RF site is disabled.	
Qualified Response:	

Requirement	Response Code
3.4.7.1 Site Power Vendor shall configure all components of the wide area radio sub-system to operate on battery backup for a minimum of four (4) hours based upon a duty cycle of 20% transmit/receive, 80% standby. Additional requirements include: • The charging system shall provide a maximum recharge time of 8 hours to 95% of battery capacity. • The site equipment shall operate without degradation while batteries are being recharged. • At a minimum, the charging system shall be properly sized at 75% of rated capacity (i.e., 25% excess capacity) to support future expansion. In any case, the minimum charging capacity shall be 50-Amperes. • The charging system shall include redundant rectifiers configured for N+1 operation. • Rectifiers and batteries must be modular and replaceable without disabling associated radio or network hardware. The use of UPS equipment is discouraged. Vendors are encouraged to provide equipment that is uniformly designed to operate with +12VDC, or -48VDC battery power systems. Vendor shall include all assumptions and calculations used to satisfy this requirement as part of their proposal. Finally, the LAPP prefers the use of backup generators at all equipment sites. Vendors should address generator type/capacity at all proposed leased sites.	
Qualified Response:	
3.4.7.2 Emergency Backup Site(s) The vendor shall include in their reliability approach an emergency backup site to be used in the event of catastrophic failure of the primary site. Switchover to the emergency backup site may be automatic or manual, but must be transparent to field radio users. Vendor shall provide complete pricing for this capability -- including engineering, equipment, implementation and site access – in the appropriate section of the accompanying Price Matrix. Pricing for this requirement is severable.	
Qualified Response:	

Requirement	Response Code
3.4.8 Radio Hardware Specifications The repeaters shall be FCC Type Accepted for emissions permitted under the Port of Los Angeles licenses and meet current, applicable TIA/EIA-102 guidelines and standards. All repeaters shall be equipped for narrowband digital, Project 25 Common Air Interface (CAI), and meet the applicable performance criteria defined in the TIA/EIA-102 documents listed in Exhibit P.	
Qualified Response:	
3.4.8.1 General Specifications The repeaters shall be of modular design with functionally separate modules. The repeater shall be EIA 19-inch rack mountable and have the following characteristics:	
Transmitter Specifications	
Transmitter Power Output:	25-110 Watts Variable
Duty Cycle	Continuous at full power
Frequency:	450-512 MHz
Output Impedance:	50 Ohms
Frequency Stability:	1 PPM
Receiver Specifications	
Frequency:	450-512 MHz
Digital Sensitivity (5% BER):	0.35µv
Adjacent Channel Rejection:	60 dB (Digital 12.5 KHz)
RF Input Impedance:	50 Ohms
General Specifications	
Temperature Range:	-30°C to +60°C
Input Voltage:	Uniform +12VDC or -48VDC
Humidity	0% - 90%, non-condensing
Service	Hot Swappable, field replaceable modules
Qualified Response:	
3.4.8.2 Programming It shall be possible to program the radios and perform diagnostic testing through a personal computer, either locally or from a remote location through the network and/or modem.	
Qualified Response:	

Requirement	Response Code
3.4.9 Antennas The antennas shall be of high-quality construction, designed for base-station application, and commensurate with public safety and homeland security applications.	
Qualified Response:	
3.4.10 Transmission Line Transmission lines for system repeaters and receivers shall use Andrew Heliac or equivalent coaxial cable with a solid outer shield conductor to minimize signal leakage and interference. Coaxial cables using braided outer conductors shall not be used for transmission lines.	
Qualified Response:	
3.4.11 Receiver Multicouplers If proposed, receiver multicouplers shall be equipped to allow for connection of eight (8) in-band receivers at time of installation. Unused ports shall be properly terminated. Tower mounted preamplifiers are not acceptable for this installation.	
Qualified Response:	
3.4.12 Transmitter Combiners If proposed, transmitter combiners shall be equipped to allow for connection of a four (4) in-band transmitters at time of installation.	
Qualified Response:	
Requirement	Response Code
3.4.13 Coverage Prediction The radio coverage requirements for this RFP are described in terms of: • Desired Coverage • Vendor Coverage Prediction Modeling based on system design • Coverage Acceptance Testing based on Vendor's Prediction	
Qualified Response:	

Requirement	Response Code
3.4.13.1 Prediction Model Selection 3.4.13.2 Vendor shall state the specific terrain database, prediction model (e.g. Okumura), resolution, and similar pertinent data as part of the response to this RFP. All coordinate and terrain data shall be based on The U.S. Geological Survey (USGS), NAD-83 terrain elevation data. The vendor shall include losses due to land use and clutter obstacles as appropriate.	
Qualified Response:	
3.4.14 Coverage Objectives The desired coverage reliability for the radio system within the designated boundaries described in Exhibit O are as follows: • 95 percent in-street, plus a 6dB defined loss, for portable talk-in (portable-to-repeater) and talk-out (repeater-to-portable) • 95 percent in-street for mobiles, plus a 6dB defined loss talk-in and talk-out • 95 percent in-building portable coverage within the San Pedro/Wilmington area using 20dB building penetration loss factor talk-in and talk-out The radio frequency (RF) signal level at the receiver's input for both talk-out and talk-in shall be adequate to support CM 4 (delivered audio quality [DAQ]-3.4) voice quality or 2 percent bit error rate data quality. The Channel Performance Criteria, defined in TSB-88-B, shall be applied to the defined/predicted coverage area.	
Qualified Response:	
3.4.14.1 Desired Coverage Area The desired radio coverage area for the system is defined in <i>Exhibit O</i>. Vendors shall propose a system that optimizes coverage over the identified "desired" coverage area specified in this RFP. Coverage acceptance tests shall be performed over the selected vendor's proposed coverage area.	
Qualified Response:	

Requirement	Response Code
3.4.15 Coverage Simulation Maps Vendor shall provide as part of the response to this RFP, coverage simulation maps. All coverage prediction maps shall show the predicted RF coverage contours described in RFP Section 3.4.14, shall be based upon the vendor's proposed system design and site selection, and upon the following assumptions: Portable Coverage • Portable radio specifications are identical to those in RFP Section 3.11. • Portable radio transmit power = 5-watts • Digital receiver sensitivity (1% BER) = .25µv • Portable radios are worn on the waist for both transmitting and receiving. Mobile Coverage • Mobile radio specifications are identical to those is RFP Section 3.11 • Mobile radio transmit power output = 35-watts • Digital receiver sensitivity (1% BER) = .40µv. • A unity gain antenna is mounted on the roof of a standard sedan. Predicted coverage for each individual site and the composite system, shall be overlaid on topographic style base maps. The predicted coverage contours shall be overlaid with the desired coverage boundaries shown in RFP Exhibit O. Coverage Prediction results that satisfy the coverage reliability goals of this RFP and are depicted on the System Composite prediction maps shall not be cropped or truncated. Instead, the scale of the map may be adjusted to depict the furthest extent of the RF coverage. A list of all relevant system assumptions and parameters must accompany each map.	
Qualified Response:	

Requirement	Response Code
3.4.15.1 Portable Coverage Maps Coverage prediction models for all <u>portable</u> coverage (indoor and outdoor) shall use a constant scale with a preference of 1:18,000 or larger such that major roads, bridges, terrain features, and landmarks can be readily identified. The vendor shall select a constant center point that most effectively depicts coverage in populated areas and avoids large expanses of ocean. Using vendor selected shading and colors, but without significantly obscuring terrain or landmark features, the following prediction maps, shall be provided as part of the Vendor's response to the RFP: a) Site 1 - Portable radio talk-in (portable to base) on street and in-building b) Site 2 - Portable radio talk-in (portable to base) on street and in-building c) Site 3-n (if used) - Portable radio talk-in (portable to base) on street and in-building d) Site 1 - Portable radio talk-out (base to portable) on street and in-building e) Site 2 - Portable radio talk-out (base to portable) on street and in-building f) Site 3-n (if used) - Portable radio talk-out (base to portable) on street and in-building g) System composite – Portable talk-in h) System composite – Portable talk-out	
Qualified Response:	
3.4.15.2 Mobile Coverage Maps Coverage prediction models for all <u>mobile</u> coverage shall use a constant scale with a preference of 1:62,500 or larger such that all major roads, bridges, and other significant terrain features can be readily identified. The vendor shall select a constant center point that most effectively depicts coverage in populated areas and avoids large expanses of ocean. Using vendor selected shading and colors, but without significantly obscuring terrain or landmark features, the following prediction maps, shall be provided as part of the Vendor's response to the RFP: a) Site 1 - Mobile radio talk-in & talk-out on street b) Site 2 - Mobile radio talk-in & talk-out on street c) Site 3 – n (if used) - Mobile radio talk-in & talk-out on street d) System composite – mobile talk-in & talk-out	
Qualified Response:	

Requirement	Response Code
3.4.16 Critical Coverage Locations The Port has identified critical coverage locations within the desired coverage area. These locations include: 1. The Harbor Administration Building, including parking area. 2. The San Pedro City Hall. 3. 300 East Water Street, Wilmington. 4. Cruise Terminal Campus, San Pedro. These locations must be included in and must pass the 95% in building coverage acceptance test criteria.	
Qualified Response:	

3.5 Dedicated Data Network (LAN/WAN)

Requirement	Response Code
The vendor shall furnish and install a separate, dedicated data network – including hardware, software, wiring and services-- to support their system design. In addition to the P25 radio system infrastructure, the network shall support all related subsystems identified in this RFP, including interoperable radios, consoles, logging recorder and network monitoring subsystem.	
Qualified Response:	
3.5.1 Proprietary LAPP Network Neither the radio network nor any of the proposed subsystems shall interface to the existing proprietary LAPP data network, except as defined in this RFP.	
Qualified Response:	
3.5.2 Network Attached Storage (NAS) In addition to the onsite data storage specified for the various, networked communications subsystems, the LAPP requires offsite backup storage at a Port facility yet to be determined. The vendor shall furnish and install all required network and NAS equipment at this location. Specific storage requirements (i.e., capacity, etc.) shall be determined during the detailed design phase.	
Qualified Response:	

Requirement	Response Code
3.5.3 Remote Site Connectivity All required connectivity between equipment site locations shall be furnished by LAPP. The vendor shall clearly identify connectivity requirements, including circuit specifications, between these locations.	
Qualified Response:	

3.6 Interoperable Communications Sub-System

The proposed system shall include a fixed interoperable voice radio communications sub-system comprised of several low-power transceivers operating various bands and configurations as described herein. This sub-system installation shall facilitate independent communications with outside agencies and/or cross-patching of any, or all, LAPP primary radio channel(s) to one or more independent fixed radios via the dispatch console operator positions.

Requirement	Response Code
3.6.1 Location The new interoperable radio facilities will be installed at a site to be determined. Candidate sites shall be provided during the pre-bid vendor's conference.	
Qualified Response:	
3.6.2 Configuration and Specifications The interoperable radio sub-system shall be comprised of eight (8) each base station radios. Each radio shall meet the following minimum general specifications:	
General	
Input Voltage	90-120VAC, 47-63 Hz with auto battery charging & revert Or +12VDC and/or -48VDC with external rectifier/charger
Temperature Range:	-30°C to +60°C
Humidity	0% - 90%, non-condensing
Mounting	Standard 19" EIA rack
Radio Control	P25 Fixed Station Interface
Operational Modes (Channels)	Minimum of sixteen (16), fully selectable at each console operator position.
Bandwidth	As appropriate, radios shall be capable of transmitting and receiving over the following bands, as appropriate, with no sub-band restrictions. VHF – 136 – 174MHz UHF – 450 – 512MHz 800MHz – 764 – 870MHz
Channel Bandwidth	Each radio shall be type accepted and programmable, on a per channel

Requirement	Response Code
Protocols Transmit Power Output Receiver Sensitivity (Analog, 12db SINAD, Digital, 2% BER)	basis, for operation in the following channel bandwidths as appropriate for the band: Analog – 12.5/20/25/30KHz Digital – 12.5KHz Each radio shall be type accepted, and programmable on a per channel basis, for operation in the following modes: Analog P25 Conventional P25 Trunking Minimum Adjustable Range 1-35 Watts, programmable per channel. Analog, 20/25/30KHz - .30uV Analog, 12.5kHz - .25uV Digital, 12.5kHz - .20uV
Qualified Response:	
3.6.2.1 Controls Access and control of the interoperable radio base stations shall be via the dispatch console system. Vendor shall describe how the interoperable radios may be accessed and controlled in the event of dispatch console failure.	
Qualified Response:	
3.6.2.2 EDACS The City of Los Angeles operates an 800MHz EDACS trunking system. For interoperability, vendor shall describe their approach to providing access to this system from within the Interoperable subsystem.	
Qualified Response:	
3.6.2.3 Antennas Each base station radio shall be connected to a separate fiberglass housed, unity gain, antenna. Each antenna shall rated for a minimum 35-watt transmit input power and shall be capable of operating over a minimum 25MHz transmit bandwidth at no more than 1.5:1 VSWR. Each antenna shall be independently mounted and secured.	
Qualified Response:	

Requirement	Response Code
3.6.2.4 Interoperable System Battery Backup Vendor shall configure all components of the Interoperable Communications Sub-System to operate on battery backup for a minimum of four (4) hours based upon a duty cycle of ten percent (10%) transmit, (10%) receive, eighty percent (80%) standby for all remote site hardware, and based on all transmitters being configured to operate at full rated transmit power. Additional requirements include: • The charging system shall provide a maximum recharge time of 8 hours to 95% of battery capacity. • The site equipment shall operate without degradation while batteries are being recharged. • At a minimum, the charging system shall be properly sized at 75% of rated capacity (i.e., 25% excess capacity) to support future expansion. In any case, the minimum charging capacity shall be 50-Amperes. • The charging system shall include redundant rectifiers configured for N+1 operation. • Rectifiers and batteries must be modular and replaceable without disabling associated radio or network hardware. The use of UPS equipment is discouraged. Vendors are encouraged to provide equipment that is uniformly designed to operate directly with +12VDC, or -48VDC battery power systems. Vendor shall include all assumptions and calculations used to satisfy this requirement as part of their proposal.	
Qualified Response:	
3.6.2.5 Installation The interoperable radio sub-system installation, including all rack(s), cabinet(s), power supply(ies), and antenna components shall be installed to the same security, seismic, power, grounding, interconnection (cables and demarcation points), weather, and lightning protection standards as described in Section 4, <u>System Installation Requirements</u>	
Qualified Response:	

Requirement	Response Code
3.6.2.6 Interoperable Radio System Pricing Using the accompanying Price Matrix, vendor shall provide pricing to furnish and install the described system. This shall include: 1. Firm pricing for all base stations and associated hardware, backup power, all required transmission line, antennas, cables, connectors, and any other required equipment required for a fully functional subsystem. 2. Firm pricing for all engineering, program management, programming, and installation services necessary to install all proposed equipment. 3. Estimated recurring maintenance costs.	
Qualified Response:	

3.7 Dispatch Console Sub-System

The console sub-system shall integrate with all features of the proposed radio and interoperability sub-systems.

Requirement	Response Code
3.7.1 P25 Standards Based The dispatch console sub-system, including all operator positions shall comply with applicable TIA-102 Project 25 standards and shall utilize the vendor furnished, dedicated data network described in Section 3.5 for all audio and ancillary control communications. Dispatcher (operator) positions shall be capable of operating from any connected point within the network. The dispatch console sub-system shall be fully compliant and compatible with: • All relevant features and functions of the EIA/TIA-102 suite of standards as required by this RFP, including digital fixed station interface (FSI). • The P25SoR as provided with this RFP All features and functions delivered by the radio sub-system as offered by the vendor	
Qualified Response:	
3.7.2 System Connectivity Primary access to the radio and interoperability sub-systems shall be via the system network. RF control station access is not acceptable as the primary connection.	
Qualified Response:	

Requirement		Response Code
3.7.2.1 Performance Characteristics Vendor shall provide detailed minimum requirements or performance characteristics regarding acceptable line-loss, network bandwidth, latency, jitter, priority, etc. that is anticipated and/or must be provided by the network or communication links.		
Qualified Response:		
3.7.3 Operator Positions The dispatch console sub-system shall consist of three (3) dispatch operator positions and shall be expandable to at least of fifteen (15) operator positions.		
Qualified Response:		
3.7.3.1 Operating System The Operator console application software shall be capable of operating supporting Windows Vista™ and Windows XP™, and shall be operable on any Pentium 4 class computer or better. The dispatch console application shall not require “Administrator” privileges or similar global permissions to be enabled on any device within the network in order to operate. The dispatch console application shall not preclude the installation and/or concurrent use of other common off-the-shelf (COTS), commercial software that is designed to operate under the same operating system (e.g., Microsoft Office Applications operating under Microsoft Windows).		
Qualified Response:		
3.7.3.2 Hardware Vendors shall provide all hardware and software necessary to deploy the quantity of fully functional Operator Positions required under this RFP. At a minimum, vendor shall provide and equip each operator position with the following hardware devices:		
Item	Detail	
Personal Computer	Physical size not to exceed “mini-tower” configuration.	
Monitor	Touch Screen LCD, minimum 19”Diagonal measure	
Keyboard	Full 102-key QWERTY	
Mouse	Three Button minimum	
SELECT Speaker		
UNSELECT Speaker		
Desk Microphone with PTT switch		
Dual Headset Jack	To include switches to prevent SELECT speaker audio when a headset is in use.	
Headset with quick-disconnect jack	Monaural earpiece, noise-cancelling microphone	
Miscellaneous Hardware and Cables	All local power cables, interconnection cables,	

Requirement	Response Code
	connectors, miscellaneous buttons, switches, knobs, etc.
Qualified Response:	
3.7.3.3 Telephone Audio Interface The system shall include a telephone audio interface that allows a dispatcher to use a common headset for telephone and radio operation. The interface shall provide automatic switching of transmit audio between the radio and telephone systems based on PTT status. Vendor shall state any specific telephone instrument requirement or similar limitations.	
Qualified Response:	
3.7.4 Console Features 3.7.4.1 History Display Each console position shall be equipped to allow a historical display of Unit ID and/or channel call history on each radio equipped for such feature. The system shall, at minimum, be capable of displaying P25 Unit ID. Vendor shall also state abilities to support additional formats such as MDC1200, G-Star, Kenwood Fleet-Sync, and DTMF. Fields available for display shall include as applicable, but not be limited to: • Time • Priority • Unit ID • Unit Alias • Group Alias • Status • Emergency • Unique and/or trunking specific information	
Qualified Response:	
3.7.4.2 Selective Call If the field unit radios are equipped with selective-call receive capability, it shall be possible to signal individual units directly from any console position.	
Qualified Response:	

Requirement		Response Code
3.7.4.3 Additional Features		
The following additional console operational features and functions are listed for reference and are further detailed in the P25SoR.		
Item	Detail	
Transmit	Touch Screen, Headset Inline button, Footswitch, Mouse, etc.	
All Mute	Programmable audio level and timeout period for all UNSELECT audio.	
Cross Mute / Busy Channel Lockout	Programmable mute and/or lockout of transmit audio between operator positions to eliminate feedback.	
Radio/Resource SELECT	Directs calls to SELECT speaker and Headset (if used)	
Frequency/Mode Select	As appropriate per radio/resource.	
Active / Busy Call Icon	Identifies assets with active communication traffic	
Master Volume	Separate controls for SELECT and UNSELECT speakers, and headset audio	
Individual Volume	Ability to set volume for each UNSELECTed asset.	
Individual Mute	Programmable audio level and timeout period for an individual UNSELECT audio.	
Unit ID / ALIAS / EMERGENCY ID	Programmable visual and audio alerts.	
Simultaneous Select	Dispatcher can broadcast on multiple channels simultaneously	
Patch	Minimum three (3) simultaneous discrete patches can be invoked using any or all telephone and radio resources with no loss of audio quality.	
Alert	Pre-set alert tones or tone sequences can be transmitted on the SELECTed radio channels	
Intercom	Dispatcher (operator) can call any or all other dispatch positions without transmitting over radio	
Qualified Response:		

Requirement	Response Code
3.7.5 Legacy Radio Interfaces The system shall be capable of interfacing to all EIA standard 2W/4W/6W radio base stations with tone remote control (TRC) or E&M signaling. A minimum of 16 function tones shall be available for TRC operation. Function tones shall be able to be sequenced for a variety of functions. “M” lead shall be available for direct PTT and other control functions. Gateways may be used for remote control of legacy radios such that all audio and commands are delivered over the data network and converted locally near the radio.	
Qualified Response:	
3.7.5.1 Analog Line Audio Level Adjustments Output line audio levels shall be adjustable over the range -10dBm to +10dBm Receive line audio levels shall be adjustable over the range of -33dBm to +10dBm	
Qualified Response:	
3.7.5.2 COR Carrier-Operated-Relay (COR) input shall be available for each legacy base station interface. COR shall support “through-console-repeat” and squelch functions. An “E” lead may also serve as the COR input.	
Qualified Response:	
3.7.6 Additional interfaces For interoperability the console sub-system shall be capable of direct interface to equipment that enables push-to-talk carrier-based system access such as: a) Sprint/Nextel b) Verizon c) AT&T Vendor shall state any capabilities, features, or limitations of such interface(s).	
Qualified Response:	

Requirement	Response Code
3.7.7 Instant Recall Recorder The proposed system shall be capable of recording two-way voice communication of radio and telephone calls at each position for the purpose of future playback by the dispatcher. Each operator position shall have the capability of immediately accessing and playing back (instant recall/playback) a minimum of the last ten (10) minutes of recording for every active audio resource, radio and telephone, on that operator position.	
Qualified Response:	
3.7.7.1 Instant Playback The recorder shall be capable of instant playback without going through more than two (2) menu selections or similar operations. A means to rapidly move backwards and forwards through the messages shall be provided so that multiple messages and sources can be handled efficiently.	
Qualified Response:	
3.7.8 Auxiliary Control and Alarm Interfaces The system shall be capable of providing both “local” and “remote” Auxiliary and Alarm control/interface displays with control from any operator position. The interface shall be capable of monitoring and controlling a number of functions, including: • Digital inputs/outputs. • Dry closure outputs (low current control, 50 mA at 12 VDC) • Dry closure outputs (relay driven, 2PDT with 5A at 50VDC rating) • SNMP interface (for industry-standard alarm reporting systems) Interface with external alarm and control devices is not part of this RFP. Vendor shall describe their capabilities of providing such features, including any limitations. Vendor shall provide a minimum of one (1) I/O for each function listed above to demonstrate performance capability.	
Qualified Response:	

Requirement	Response Code
3.7.8.1 Each Auxiliary Function key shall have two (2) variables; the state of the output and the state of the input allowing for clear description of the function's current state. Each of these variables shall have an associated status display, which shall include a unique, two-line alphanumeric label and any of several background colors, which shall be programmable.	
Qualified Response:	
3.7.9 CAD Interface Vendor shall state the ability to provide an interface with Computer-Aided-Dispatch (CAD) system and the availability of a standardized API for such interface. Such interface may allow the CAD to command and control common features within the radio communications console, including, but not limited to: (a) The selection of radio channels or talk-groups; (b) the sending of analog page signaling on pre-determined channels; (c) the ability to send commands from CAD to perform a variety of functions, and (d) received Unit ID from radio system. If offered, the CAD interface to the system shall be via the radio system's network connection. Vendor shall state experience with Tiburon Systems and other CAD vendors in their response.	
Qualified Response:	

3.8 Console Furniture

Requirement	Response Code
Console furniture will be provided by the LAPP. Furniture specifications shall be provided to all vendors during the Pre-bid Vendors Conference.	
Qualified Response:	

3.9 Logging Recorder

The communications system shall include a digital logging recorder that will record and provide archival storage of all radio, dispatch console and telephone audio as defined in this specification.

Requirement	Response Code
3.9.1 Open Architecture The logging recorder system shall be designed to work on an open architecture, commercial off the shelf (COTS) hardware and OS platform. The platform shall incorporate a fault tolerant system design (duplicate, hot swappable hard drives in RAID configurations, fans, power supplies, etc.) which will ensure that the failure of any single component does not disable the system. If a component does fail, it shall not be necessary to take the entire system off-line to facilitate the repair.	
Qualified Response:	
3.9.2 Capacity The recorder shall include a minimum of 10,000 hours of online storage using internal, fully redundant mirrored hard drives in a RAID-1 configuration. Vendor shall also quote an optional RAID-5 configuration.	
Qualified Response:	
3.9.3 Archival Data In addition to the hard drives, the recorder shall include a dual 9.4GB CD/DVD-RAM multi-drive to support data management and archiving. Every archived CD/DVD shall be automatically labeled and tracked by the system. Backup shall occur automatically on a user-definable schedule. The system shall generate an alarm when the remaining DVD capacity drops below a user-defined level. Manual backup shall also be possible on an as needed basis.	
Qualified Response:	

Requirement	Response Code
3.9.4 Users The proposed system shall be initially equipped to support seven (7) users (5 simultaneous) and expandable to support a minimum total of sixteen (16) simultaneous users. The initial users shall include: • Dispatch Console Operators (3) • Network Manager (2) • Crime Analyst (1) • Records Management Analyst (1)	
Qualified Response:	
3.9.4.1 User Interface The vendor shall describe any available local controls on the logging recorder. In addition to local controls, the platform shall be compatible with and include a client and/or web browser based Graphical User Interface (GUI) designed to operate on a Windows® XP™ or Vista™ based personal computer.	
Qualified Response:	
3.9.4.2 User Hardware The vendor shall provide the necessary PC hardware to support the logging recorder GUI. The GUI's for previously described dispatch console positions and network monitor positions shall operate on the same equipment furnished in accordance with RFP sections 3.7 and 3.10. Vendor shall provide additional hardware, including a PC, 19" LCD monitor, keyboard and mouse, to support the Crime Analyst and Records Management Analyst positions. Vendor shall provide full hardware specifications for these workstations as part of their response.	
Qualified Response:	
3.9.5 Security System security shall prevent unauthorized access to recordings and provide optimal data protection. Data shall be protected through encryption, digital signatures and information processing methodology to preserve recording integrity. Vendor shall provide a detailed description of the methodology, standards, and criteria that is used to assure court-admissible evidentiary status of all recordings.	
Qualified Response:	

Requirement	Response Code
3.9.6 Administrative Features It shall be possible for the system administrator to create multiple user profiles, allowing permissions to be managed down to the channel level using password and user ID security. The system shall provide a comprehensive audit trail and a variety of alarms, notifications, and monitoring tools to help protect the recording system and the recorded data. Vendor shall describe in detail all alarms, notifications and monitoring tools.	
Qualified Response:	
3.9.7 Inputs It shall be possible to accept analog, digital PBX/telephone circuits, VoIP channels, and P25 digital inputs in the same unit. The number and types of inputs shall be determined by the vendor's radio/console system design and by the telephone recording requirements to be defined by the LAPP. Specific telephone requirements will be provided by LAPP at the Pre-Bid Conference.	
Qualified Response:	
3.9.7.1 Digital Interfaces The system shall be capable of supporting the following digital interfaces: • Digital PBX • ISDN Basic Rate Interface channels • T1, E1 or ISDN Primary Rate Interface circuits • VoIP telephones • P25 Digital Vendor shall provide all specification details for proposed equipment.	
Qualified Response:	

Requirement	Response Code
3.9.7.2 Analog Interface The recorder shall be equipped to support a minimum of 8 channels and shall be expandable to 96 channels. At a minimum, the following analog interfaces shall be supported: • Analog Telephone (POTS) • Dedicated 2-wire and 4-wire (selectable per channel) radio or point-to-point service Minimum Specifications: Frequency Response: 200 to 3400Hz Signal-to-Noise: 50dB Crosstalk: -60dB AGC: 24dB boost Impedance: 10k Ohm Beep Tone – selectable on a per-channel basis Record Activation: VOX, off-hook, continuous, external Vendor shall provide all specification details for proposed equipment.	
Qualified Response:	
3.9.8 Recording Analog audio presented to the system shall be converted directly for digital storage. Recorded audio should not require multiple conversions prior to recording in order to preserve audio quality. At a minimum, it shall be possible to record up to 50 simultaneous conversations without degrading performance specifications. In the accompanying Price Matrix, the vendor shall optionally quote the capability to simultaneously record up to 100 conversations.	
Qualified Response:	
3.9.9 Retrieval of Recorded Data The system shall provide efficient retrieval and use of the recorded information. Regardless of the source, all audio and data shall be recorded and stored in a unified fashion. All associated data from all source systems shall reside in a single central database. The system must provide programmable archive protection that prevents previously recorded media from being re-recorded or reformatted.	
Qualified Response:	

Requirement	Response Code
3.9.10 Call Record Database All calls shall be stored in a scalable, state-of-the-art, open architecture relational database that provides efficient data management and organization. The database shall support fast search and retrieval functions and unlimited record storage. The system shall allow DTMF and CLID (Calling Line IDentification) to be included into the call records database. It shall be possible to playback recorded calls on a standard Windows PC without requiring proprietary equipment.	
Qualified Response:	
3.9.11 Playback Search Parameters At a minimum, it shall be possible for an authorized user to search for a recording using any or all of the following parameters as appropriate: • Channel Name • Call Duration • Dialed Number • Call Record Filtering • Unit ID • Time/Date • Call Direction • CLID Number • Channel Number • User Defined	
Qualified Response:	
3.9.12 Network All logging recorder network connections, including user terminals, shall be via the vendor furnished, dedicated Ethernet network proposed for the radio system. Exception: The Crime Analyst and Records Management Analyst PC's will connect to the LAPP LAN. It shall be LAPP's responsibly to provide the cross connection to the vendor furnished network.	
Qualified Response:	
3.9.13 Physical The recorder shall be configured for EIA 19" rack mount installation. Vendor shall identify available rack/cabinet space and include any additional hardware required for installation. It is desired that the fully equipped (maximum capacity) unit height be less than or equal to 5.25" (4 RU). Vendor shall provide actual dimensions and maximum weight in their proposal.	
Qualified Response:	

Requirement	Response Code
3.9.14 Power The recorder shall be designed to operate from a +12VDC or -48 VDC power source, uniform with other system equipment, and shall have redundant, hot-swappable power supplies. Vendor shall include their power supply specifications.	
Qualified Response:	

3.10 Network Monitoring, Alerting and Diagnostics

Requirement	Response Code
Vendor shall propose a system-wide network monitoring, alerting, and diagnostic system. Network monitoring and alerting shall be provided for all major components supplied as part of this RFP. For purposes of network monitoring, major components are considered to be all fixed radio hardware, all network connected control stations, all dispatch operator positions, logging recorder(s), electrical and backup power systems, and any component that may be service affecting for the system.	
Qualified Response:	

Requirement	Response Code
3.10.1 Workstation A commercially available, current production, desktop workstation (PC) computer shall be provided by the vendor and connected to the radio system network. This workstation shall be used as a dedicated network monitoring workstation. The vendor provided hardware configuration shall be complete including: • Central Processor, Memory, Hard Drive(s) • Read/Write CD or DVD-ROM • Color LCD monitor (19" minimum) • Keyboard • Mouse • Desktop Speakers • USB, Ethernet and similar ports as necessary • All necessary power and interconnection cables and connectors • Any ancillary devices that are required by the vendor's system implementation in order to make this a functionally complete network monitoring location The workstation shall be configured with a RAID-1 array or similar technology and sufficient internal memory and data storage to support at least ninety (90) days of logged information. Vendor shall provide full hardware specifications for this workstation as part of their response.	
Qualified Response:	
3.10.2 Backup Workstation Capability. A redundant workstation is required. Alternately, the vendor shall include the means to access/monitor the system from any network location using Microsoft Internet Explorer. The vendor shall fully describe their approach, including all software and hardware requirements, features, functions, and capabilities of this application.	
Qualified Response:	
3.10.3 Alarm Thresholds Alarm thresholds shall be settable on a per device basis for every monitored parameter of each major component as defined in this section.	
Qualified Response:	

Requirement	Response Code
3.10.4 Database All alarms, alerts, and operator actions including timestamp for each activity shall be maintained in a database on the network monitoring workstation. The database format and/or application shall be non-proprietary.	
Qualified Response:	
3.10.5 Configuration The network monitoring workstation shall be configured such that any query or report of archived information or diagnostics activity shall not inhibit the collection of current alarms or status information.	
Qualified Response:	
3.10.6 Data Storage The system shall be configured to automatically and/or manually backup the alarm database to removable storage media (e.g., DVD).	
Qualified Response:	
3.10.7 Operating System The Operating System for the network monitoring workstation shall be the most currently available version of Microsoft Windows (Vista or XP). Vendor shall state as part of their response the intended operating system and supply all necessary operating system software and license(s) as part of the deliverables for this RFP.	
Qualified Response:	

Requirement	Response Code
3.10.8 Reports The network monitoring workstation shall provide reports and ad hoc queries including, but not limited to: • Base Station status: Transmit power, reflected power, temperature, receive BER, (P25) receive signal level. • Operator console status • System Message Traffic (per channel): Time and duration of messages. The system shall be equipped to allow historical display of Unit ID and/or channel call history on each radio equipped for such feature. Fields available for display shall include as applicable, but not be limited to: • Time • Priority • Unit ID • Unit Alias • Group Alias • Status • Emergency • Unique and/or trunking specific information	
Qualified Response:	

3.11 Subscriber (Mobile & Portable) Radio Equipment

Los Angeles Port Police use the Motorola XTS5000 and XTL5000 “Model III” portable and mobile radio hardware platforms for all subscriber applications. Acquisition of subscriber equipment is not part of this RFP.

Requirement	Response Code
3.11.1 Subscriber Functional Compliance Within the constraints of TIA/EIA102 specifications, proposer shall certify that the proposed network is operationally and functionally compatible with all features of the described Motorola XTL and XTS subscriber devices. The vendors proposed system acceptance test plan shall include a full demonstration of features and performance with these devices. Should any part of the acceptance test fail, vendor shall work with the Port Police and Motorola to resolve the discrepancies to the satisfaction of the Port Police. Port Police will be responsible to the system vendor for any reasonable costs of compliance if it is demonstrated that the failure is not due to any deficiency in the Vendor's implementation of TIA102 standards or the APCO P25 Statement of Requirements.	
Qualified Response:	

3.12 Compliance with APCO P25 Statement of Requirements

The accompanying table described in [Exhibit Q](#) reflects the entire P25SoR. As part of their response, vendors shall complete the three (3) rightmost columns based on the legend as provided. Responses to this matrix will be included as part of any contract award under this RFP and may be considered during the detailed design, or later phases of the project.

4 STATEMENT OF WORK

The Statement of Work (SOW) describes the services to be provided by the vendor for engineering, furnishing, installing, integrating, testing, documenting, training, and warranting equipment and services to be acquired under this RFP.

Requirement	Response Code
4.1.1 Understanding of Scope of Work The vendor shall describe its understanding of the project's scope of work and the vendor's concept of the methodologies used to achieve the results described.	
Qualified Response:	
4.1.2 Understanding of Engineering and Design Requirements The vendor shall describe their understanding of the engineering, design, equipment selection, implementation, optimization, training, system testing, integration, and other associated tasks necessary for a complete, functional system that meets the RFP specifications.	
Qualified Response:	
4.1.3 Understanding of Project Management Requirements The vendor shall describe their understanding of project management responsibilities with respect to installation, testing, training, and original equipment manufacturer (OEM) vendor support services as required to implement and warrant a complete and fully operational system in accordance with the RFP specifications and requirements.	
Qualified Response:	

Requirement	Response Code
4.1.4 Work Plan and Project Approach Vendors shall describe their approach to each milestone, documenting a logical technical approach to each task/subtask. The schedule shall include the vendors' general work plan as well as their proposed approach to undertaking the task(s) described earlier in this RFP. Describe the technical approach, and methodology for designing, installing, and optimizing the radio system. • Present a work plan detailing major tasks and subtasks, describing the work to be conducted in each task or subtask. • If specific project team members or vendors are critical to specific tasks, identify where they will be utilized and/or committed to these tasks. • Include the results expected from each major task, and deliverables for each major task. • Identify appropriate assumptions and considerations that could impact the scope and timeline for completing each task. • Identify the critical elements and security plans that will be important to include in deliverables.	
Qualified Response:	
4.1.5 Issue Resolution and Risk Management Vendor shall describe their preferred or suggested methods and techniques for issue resolution including responsibilities, product or services requirement changes, and signoff including timelines and communications.	
Qualified Response:	

Requirement	Response Code
4.1.6 Delivery and Installation As part of their RFP response, the vendor shall include a baseline schedule for design, delivery, installation and testing of all items required for the system. The schedule shall address, as a minimum, the following milestones: • Site Preparation • Preliminary Design Review • Detailed (Critical) Design Review • Equipment Manufacturing • System Staging and Factory Acceptance Test • Equipment Delivery • System Installation • System Optimization • Acceptance Testing • Training • System Documentation	
Qualified Response:	
4.1.7 Organization/Personnel Provide a brief description of all key personnel and technical staff (including vendors, partners or subcontractors) to be involved, and their relationship to the service needs to be provided. The description should include names, titles, licenses, certificates, fields of expertise, and relevant state and local area experience of individuals who will perform the services.	
Qualified Response:	
4.1.8 Project Team Resumes Prior to final vendor selection and contract award, vendors may be required to present resumes for key personnel and job descriptions for other key positions. This request for information will not constitute an offer or award.	
Qualified Response:	
4.1.9 Organization Chart Provide a project organization chart which depicts the organization of the project team, its reporting relationship to the Port's Project Manager and Chief of Police, and supervision of project team staff.	
Qualified Response:	

Requirement	Response Code
4.1.10 LAPP Responsibilities It shall be the responsibility of the LAPP to: 1. Obtain and provide FCC authorized frequencies. 2. Provide site access, site maps (as available), and any required escorts to gain access to the LAPP buildings and other restricted areas of the Port for the installation team to perform work as related to this SOW. 3. Execute any required lease agreements for sites or facilities. 4. Provide any spare subscriber units required to maintain system operations during the cutover and testing phase of the implementation. 5. Furnish and install all necessary connectivity by microwave links, T1 circuits, or fiber links, as well as telephone lines as required. The vendor shall identify any additional tasks that that Port of Los Angeles must perform to maintain the schedule.	
Qualified Response:	

Requirement	Response Code
4.1.11 Vendor Responsibilities As part of the RFP response, the vendor shall provide preliminary system design, including RF propagation studies and frequency analysis report. Following contract award, the selected vendor shall be responsible for performing tasks that include, but are not limited to, the following items: 1. Conduct site surveys to verify all construction and/or modifications of required facilities, including towers, equipment rooms, power systems, HVAC, buildings, ground systems and connectivity circuits. The vendor shall identify and price the modifications and/or upgrades for these facilities to support the system. 2. Identify and define all connectivity circuits required to support the system design. 3. Develop a detailed design for the system. Prepare, in a format agreed upon during contract negotiations, all documentation, drawings and implementation plans necessary for system installation, testing and acceptance. 4. Provide antenna supporting structures and associated hardware for antenna systems at RF Site locations as required. 5. Furnish suitable equipment shelters at non-developed sites. 6. Assemble, integrate stage and test all system elements, and demonstrate system performance at the vendor's factory location prior to shipping the equipment to the LAPP. 7. Furnish and install power equipment as defined in the RFP. 8. Ground all system equipment as defined in the Motorola R56 manual or other approved standard 9. Measure and verify ground resistance. 10. Furnish and install cable trays 11. Furnish and install wall feed-throughs and cable boots 12. Provide antenna support structure analysis at all sites to ensure structural integrity. 13. Provide secure system equipment warehousing, as required 14. In remote sites not controlled by the Port, it shall be the vendor's responsibility to provide a secure area for safeguarding vendor test equipment and tools during the installation period until system acceptance. 15. Furnish and install the system as defined in the approved detailed design document. 16. Furnish all required spare parts. 17. Furnish all required test equipment, jigs and other tools. 18. Verify the integrity of all required microwave links, T1 circuits, fiber links, and phone lines. 19. Install and test all system networking equipment. 20. Prepare and conduct test plans, including factory tests and acceptance tests. 21. Set system levels, optimize, and perform in-field acceptance testing of the	

Requirement	Response Code
system 22. Perform detailed site audits at all system infrastructure sites after installation is complete. 23. Design and provide all user, management and technical training. 24. Develop and coordinate Cutover Plan activities, as required 25. Provide project management and scheduling for proper coordination and timely completion of the system implementation and acceptance. 26. Develop and provide “as-built” documentation, including wiring and cable diagrams, system manuals, equipment manuals and maintenance manuals.	
Qualified Response:	

4.2 Preliminary System Design

The preliminary system design will serve as a system baseline to begin contract negotiations and is defined as those functions performed by the vendor during the preparation of the proposal to satisfy RFP requirements and provide substantiated pricing and baseline project schedule for engineering, materials, construction, implementation, testing, and acceptance of the project.

Requirements	Response Code
4.2.1 Contents of Preliminary Design The preliminary design shall be based on the functional and performance requirements of this RFP and the results of any vendor analyses performed. The preliminary design for the overall system and each subsystem shall include: • List of site modifications • Propagation analysis • Interference analysis and mitigation (if expected) for each site. • Block diagram representing the overall system and subsystems • Description of the system and subsystem functions • Interface definitions • Project working schedule • List of major system elements required to substantiate the design • List of site support services and utilities required for proper system operation, including network connectivity requirements.	
Qualified Response:	
4.2.2 Site Selection The sites described in Exhibit N shall be available to support the system design. The vendor shall coordinate with the Port of Los Angeles for arranging and ensuring access to the proposed sites.	
Qualified Response:	

Requirements	Response Code
4.2.2.1 Site Surveys The vendor shall be responsible for gathering all required data and shall conduct site surveys at each location to determine its present condition and suitability for use. The vendor shall identify all site improvements required to meet the system performance specifications outlined in this RFP. Estimated site improvement costs shall be identified in the Price Matrix and will include direct, indirect, and incidental fees or costs. The vendor may be required to perform the modifications at the request of LAPP. In any case, the vendor shall submit written statements that verify each site is suitable (e.g., electrical, HVAC, grounding, etc.) for the proposed equipment.	
Qualified Response:	
4.2.2.2 Alternate Sites If alternate and/or additional sites are recommended by the vendor, vendor must demonstrate that contact has been made with the site owner regarding the scope of the intended installation prior to submission of their bid. Vendor shall provide estimated pro-forma one-time and recurring costs for any recommended additional or substituted sites as defined in the accompanying price matrix. Estimated costs shall be comprehensive to include direct, indirect, and incidental fees or costs.	
Qualified Response:	
4.2.3 Preliminary Interference Analysis The vendor shall provide a preliminary interference analysis report with their RFP response. The analysis and subsequent report shall identify on-site and off-site harmful interference, including that created by the proposed system, and will be based upon frequency and equipment data gathered at the site and/or provided by the Port. These analyses shall be used to identify the vendor's recommended interference mitigation measures needed at each site. Preliminary interference analysis shall address: • Co-channel and adjacent channel interference • Intermodulation • Transmitter noise • Receiver desensitization	
Qualified Response:	

4.3 Detailed System Design

Upon approval of the preliminary design, the vendor shall begin the detailed design of each subsystem, including equipment configuration, antenna and transmission lines.

Requirement	Response Code
-------------	---------------

Requirement	Response Code
4.3.1 Contents of Detailed Design The vendor shall provide documentation detailing the design in a Critical Design Review (CDR) Report. This report shall include engineering calculations, interference analysis results, detailed functional descriptions of systems and subsystems, system configurations, connectivity requirements, interface designs, equipment layout, equipment cabinet elevations, cabling diagrams, equipment lists, and all other details required for a complete and successful system implementation. The draft CDR report shall be submitted according to the schedule in Section 1.3, <i>Planned Schedule of RFP and Implementation Events</i>..	
Qualified Response:	
4.3.2 Detailed Interference Analysis Upon award of contract, the vendor shall perform a comprehensive RF Interference analysis at each site to establish a baseline for system performance and minimize interference effects. As part of the Interference Analysis, and at the discretion of the Port of Los Angeles, with direct participation of Port of Los Angeles personnel, vendor shall: • Investigate, review, and develop a listing of all radio frequencies within a 1(one) mile radius of each proposed site. • Perform a visual inspection of each proposed site and any adjacent sites, as appropriate, to determine if there are any potential interference generating conditions, such as equipment operating without proper filtering or RF protection devices and intermodulation inducing conditions, i.e., rusty towers and nearby fences, or improperly grounded devices.	
Qualified Response:	

Requirement	Response Code
4.3.2.1 Interference Mitigation Criteria The interference analysis will show anticipated results, and actual interference can only be identified after system implementation. Field tests (described in Section 4.10.4) shall include subjective interference monitoring. Acceptable interference levels: - Levels which can be detected as background noise and can be evident to a radio user during normal field operations. - Levels which do not interfere with or in any manner adversely impact a radio user during normal field operations on that channel. Unacceptable interference levels: - The LAPP shall not accept the complete loss of a channel for an extended period of time (i.e., continuous interference or high frequency of occurrence) that prohibits field-to-dispatch, dispatch-to-field communications. This includes full quieting audio from an outside source or static or random noise on channel which renders the channel unusable.	
Qualified Response:	
4.3.3 Detailed Interference Analysis Report The results of each interference analysis shall be included in a report submitted to the Port of Los Angeles as part of the detailed design and shall include: - Co-channel and adjacent channel interference - Intermodulation - Transmitter noise - Receiver desensitization - Frequency listing with location detail if not on-site for all considered frequencies. - IM Calculations designed to identify potential IM products including two-signal/3rd, 5th and 7th order and three-signal/3rd, 5th and 7th order considerations. - Assessment of the results and a comprehensive interference mitigation plan.	
Qualified Response:	
4.3.4 Design Approval Process A detailed design document shall be provided to the Port of Los Angeles for final review, comment, modification and evaluation. The vendor shall obtain LAPP approval prior to beginning any implementation activities that have not been previously authorized.	
Qualified Response:	

Requirement	Response Code
4.3.5 Factory Integration and Staging The vendor shall fully assemble, rack, wire, integrate, program, and test all fixed network equipment to demonstrate that all equipment meets published specifications and that the system delivers the specified performance and functional requirements. The vendor shall successfully perform the Factory Acceptance Test (reference Section 4.10.3) to Port of Los Angeles representatives prior to shipping the system to the Port of Los Angeles. The Port intends to send three (3) people to witness the FAT. The vendor shall include in their price proposal all travel related expenses to accommodate these individuals for the duration of the test period.	
Qualified Response:	
4.3.6 Subscriber Equipment for Factory Tests UHF (450-512 MHz) portable radios furnished by the Port of Los Angeles shall be used to conduct the factory system test. Vendor shall specify the number of portables required to conduct the test. Vendor shall also be responsible for programming or re-programming of all test radios, if necessary and as approved by LAPP.	
Qualified Response:	

4.4 Project Management

Project Management shall be provided throughout the design and implementation of the system. The vendor shall describe their established Project Management service offerings in support of the program.

Requirement	Response Code
4.4.1 At a minimum, Project Management shall: 1. Provide the Port of Los Angeles with single point of contact for system issues and activities 2. Coordinate and schedule project activities with all involved departments, agencies, and contractors 3. Update the Port of Los Angeles on project status 4. Assign and control vendor resources 5. Plan and manage design activities 6. Develop and manage system milestones and schedules 7. Track system order(s) 8. Perform equipment inventory / reconciliation 9. Manage all system integration activities 10. Manage all site preparation and development activities 11. Reconcile issues and mitigate risks 12. Supervise field installation 13. Coordinate system optimization through final acceptance 14. Conduct Acceptance testing 15. Develop migration and cutover plans in conjunction with the Port of Los Angeles.	
Qualified Response:	
4.4.2 Project Progress Updates The Project Manager shall be responsible for keeping LAPP and the entire project team informed of progress throughout the project life cycle. This information shall be disseminated on a regular basis during team meetings and in written reports.	
Qualified Response:	
4.4.2.1 Project Kick Off Meeting At a minimum, the kick-off meeting shall be designed to set expectations, clarify the work plan, schedule, deliverables, and communicate roles and responsibilities.	
Qualified Response:	
4.4.2.2 Regularly Scheduled Project Team Meetings The meeting agendas shall be aligned with key milestones and organized to discuss project issues and progress.	
Qualified Response:	
4.4.2.3 Written Progress Reports Progress Reports will be required to support all invoices for work conducted. This shall include detailed shipping and receiving documents for all equipment and parts, time reports to support labor, expense reports and appropriate receipts to support additional expenses. These monthly reports shall summarize tasks completed, Estimate to Complete (ETC) schedule, ETC budget, identify any possible issues and list all resolved issues.	
Qualified Response:	

4.5 System Installation Requirements

The equipment installation shall conform to (a) the applicable requirements outlined in this section, (b) the vendor's applicable installation and quality practices, and (c) mutually agreed upon contract documents. LAPP shall make the final determination of applicable standards if a conflict arises during the installation.

The vendor shall be responsible for the installation of all equipment furnished for the system project. During the detailed design phase, the vendor shall develop detailed design plans and procedures to perform the work in accordance with the schedule, implementation plan and contract documents. The vendor shall install all equipment furnished for the system in accordance with good engineering and workmanship practices. The constituent installations shall conform to good, industry standard engineering and workmanship practices (e.g., Motorola R56 Manual, Standards and Guidelines for Communications Sites). All equipment installations shall meet local codes and ordinances, and shall be approved by LAPP.

Requirement	Response Code
4.5.1 Installation Plans The vendor shall prepare in the RFP response an installation plan which outlines the infrastructure equipment installation on a site-by-site basis. The preliminary plan shall provide enough detail to allow easy evaluation of vendor's intended installation. A detailed installation plan shall be provided after contract award. The detailed plan will include the proposed plot plan, floor plan, equipment layout, equipment cabinet elevations, antenna supporting structure elevations, cabling and wiring diagrams, antenna installation drawings, and seismic bracing details.	
Qualified Response:	
4.5.2 Installation Coordination The proposed installations shall be approved prior to commencement of a particular stage of work on a site-by-site basis. Installation at any site or facility may not commence without written approval. The vendor shall install the equipment within the designated space as proposed in the installation plan, and all changes require prior written approval. Access to all existing Port of Los Angeles facilities shall require prior coordination with the LAPP.	
Qualified Response:	
4.5.3 Equipment Placement Requirements The vendor shall use existing equipment rooms and antenna support structures for the installation of the equipment wherever possible. The use of any alternative locations must be approved by LAPP.	
Qualified Response:	

Requirement	Response Code
4.5.4 Subscriber Radio Equipment Programming Portable, mobile and desktop base station programming and/or installation is not included in this scope of work and shall be addressed separately from this procurement. Vendor shall coordinate and cooperate as needed with the City and the Port of Los Angeles to assure that all information, including but not limited to system and unit identification codes (e.g., NAC codes), feature codes, and system keys are mutually agreed upon and documented prior to completion of factory staging.	
Qualified Response:	
4.5.5 Installation Standards and Building Codes All equipment provided, and the installation of system equipment, shall comply with the most current requirements specified in: • The Uniform Building Code • The Motorola R56 Manual, <i>Standards and Guidelines for Communication Sites</i> or similar • The National Fire Protection Association's National Electric Code • City of Los Angeles Electrical Code • Cal/OSHA • Any other applicable municipal, state, or federal codes and ordinances that may become evident during the design or installation of the proposed system. The vendor shall provide a copy of its latest installation and quality standards.	
Qualified Response:	
4.5.6 Equipment Surge Protection Requirements The vendor shall install surge protection devices for all RF cabling and wiring associated with the project. This includes AC power, RF cabling to the towers, telephone lines, and other equipment interfaces. All coaxial transmission lines to external antennas shall be protected using suitable bulkhead mounted surge protectors.	
Qualified Response:	

Requirement	Response Code
4.5.7 Equipment Grounding, Bonding and Lightning Protection Requirements The vendor shall provide all grounding, bonding and lightning protection equipment, including surge arrestors to comply with the requirements of this section for all installed equipment as part of the project. This shall include metal conduit, trays, racks, cabinets, antennas, transmission lines, electrical service entrance conductors, telephone lines, and other metallic conductors. Vendor shall state, and provide the standards used in reference to this requirement. The grounding system installation plan supplied by the vendor will be evaluated with respect to items such as, but not limited to: 1. Each single row of equipment shall have a separate ground bus. Each bus shall be connected to the single point ground window. 2. Suitable ground connectors bonding all racks, enclosures, transmission line, etc., to a single point ground near the equipment installation. 3. The use of exothermic welded ground connectors. 4. Transmission lines grounded with proper sized ground kits and connected to the tower and entry bus. 5. A total ground system resistance of 5-ohms or less.	
Qualified Response:	
4.5.7.1 Single Point Ground System A single point ground system shall be used on equipment installed as part of this project. The single point ground system installed within equipment shelters or buildings shall be connected to the exterior building/tower ground system.	
Qualified Response:	
4.5.7.2 Site Grounding The vendor shall inspect the grounding systems at all facilities and provide a written report delineating any deficiencies and identifying the required corrective action. The report shall be submitted to the LAPP at least sixty (60) days prior to the installation of new equipment. The LAPP will consider the deficiencies and make disposition in a timely manner. The LAPP may elect to correct the noted deficiencies or have the deficiencies corrected by the vendor. Once any of the deficiencies have been corrected, a ground resistance test shall be performed to demonstrate compliance with the defined standards. All ground resistance measurements shall be witnessed by LAPP representative(s), and the readings shall be recorded and provided to LAPP prior to site acceptance.	
Qualified Response:	

Requirement	Response Code
4.5.8 Equipment Racks and Cabinets All EIA 19" equipment shall be mounted in sturdy, enclosed lockable cabinets. Alternate enclosures or racks must be approved by the LAPP. The height of the cabinets shall conform to the specific equipment requirement and equipment room space availability. The equipment cabinets shall be positioned with a minimum spacing of 36-inches between equipment rows.	
Qualified Response:	
4.5.8.1 Earthquake Protection The equipment cabinets and equipment shall comply with the appropriate earthquake protection standards for the Southern California coast. The cabinets shall be braced and/or attached to the overhead superstructure, as required, to prevent equipment from toppling during an earthquake. As a minimum, all racks and cabinets shall be anchored to the floor using at least four (4) anchor points.	
Qualified Response:	
4.5.9 Interface Requirements (Main Distribution Frame) A main distribution frame (MDF) shall be provided at each site to facilitate the clear and centralized demarcation point of voice, alarm, control, and other wiring between different pieces of equipment at the site and any external lines. Connectorized MD110 punch blocks with bridging clips shall be used to establish connection between the equipment and line and shall be used as signal demarcations to facilitate fault isolation. The MDF may be implemented as follows: • Connectorized MD110 punch blocks attached to a plywood panel mounted on a wall. • Connectorized MD110 punch blocks mounted in an equipment cabinet or standalone distribution frame. All equipment provided for the project shall be wired and tested to the assigned demarcation point. A 36-inch (minimum) aisle shall be provided in front of the MDF and/or individual demarcation panels.	
Qualified Response:	

Requirement	Response Code
4.5.10 Antenna and Transmission Line Installation The antennas and transmission lines shall be designed and installed with particular care to ensure proper system performance, reliability and maintainability. Transmission lines should use adequate service loops and strain relief at cable interfaces and building entrances to prevent physical damage to the cables The manufacturers recommended minimum bend radius shall not be exceeded in the installation. The transmit and receive transmission lines shall be securely fastened to the waveguide bridge and antenna support structure using correctly sized Microflect cushion type cable hangers or an equivalent alternative. Hoisting grips shall be left in place to secure the installed cable. The cable hangers shall be spaced in accordance with the transmission line manufacturer's recommendation.	
Qualified Response:	
4.5.10.1 RF Coaxial Cable Connectors Standard type RF connectors suitable for the UHF frequency band are required for all system applications. The connector installation procedure should be designed to prevent oxidation and corrosion of the mating surfaces by the installer, particularly by contact with the installer's fingers. Connectors shall be tightened to the manufacturer's specification with a proper torque wrench; hand tightening is not acceptable. All outdoor connections shall be weatherproof. Silicone compounds and other insulating material shall not be used in the assembly of the connector in order to provide low electrical resistance between mating surfaces. Vendor shall state in the RFP response the method to be used for weatherproofing outdoor connections. Terminating connectors shall be installed in accordance with the manufacturer's instructions.	
Qualified Response:	
4.5.10.2 Grounding Straps Correctly sized grounding straps shall be installed at the top and bottom of each transmission line. The lower grounding strap shall be at to point of the surge and drip loop. The grounding straps shall be installed in accordance with the manufacturer's instructions and routed by the most direct path to the nearest grounding system conductor. The grounding strap connection with the transmission line shall be weatherproofed according to the manufacturer's instructions using the manufacturer's supplied material to preclude corrosion.	
Qualified Response:	

Requirement	Response Code
4.5.10.3 Radio Antennas Separate transmitter and receiver antennas shall be used at all multi-station repeater sites. The antennas shall be carefully located to minimize interference. Antennas shall be mounted to the tower using either galvanized or stainless steel hardware. All support brackets and antennas shall be rugged, heavy duty type designed to withstand the harsh environments present in and around the Port of Los Angeles.	
Qualified Response:	
4.5.10.4 Receiver Multicouplers Receiver multicouplers and associated preamplifiers and filters shall, if possible, be installed in equipment cabinets that do not contain transmitter related equipment. All interconnecting coaxial cables shall use Andrew Super flexible Helix cable or equivalent coaxial cable. All joints and fasteners associated with the multicouplers and equipment shall be securely tightened to preclude RF noise generation. All unused ports shall be properly terminated with 50-ohm loads.	
Qualified Response:	
4.5.10.5 Transmitter Combiners The transmitter combiner components shall, if possible, be mounted in a suitable equipment cabinet that does not contain receivers or receiver multicoupler equipment. All interconnecting coaxial cables shall use Andrew Super flexible Helix cable or equivalent coaxial cable. All joints and fasteners shall be securely tightened to preclude RF noise generation.	
Qualified Response:	
4.5.10.6 Antenna Support Structures The vendor shall perform a structural analysis of existing towers and other antenna support structures, as required, prior to the installation of additional antennas and transmission line.	
Qualified Response:	
4.5.11 Site Internal Cabling The vendor shall install all site cabling in a professional manner and in accordance with industry standards. AC and DC power cables shall be correctly sized to minimize voltage drop. Control, voice and data cables shall be routed separately from AC and DC power cables. A minimum separation of 2 inches shall be provided between power and signal cables. All cables in cable trays shall be secured at intervals of no more than 36 inches. Cables shall be supported for all runs in excess of 24 inches. All cables and transmission lines shall be installed with an adequate service loop and strain relief to allow some movement.	
Qualified Response:	

Requirement	Response Code
4.5.12 Labeling All RF, audio, alarm, and data cables shall be clearly labeled. Labels shall be plastic, metal or Mylar, rather than unprotected paper, and shall stand up to the particular site environment. During the detailed design phase, the vendor shall be required to develop a labeling scheme that provides unique designation codes for site, equipment destination, termination, etc.	
Qualified Response:	
4.5.13 Cable Tray Requirements In buildings and equipment rooms not already equipped, the vendor shall provide a cable tray or ladder to appropriately support all RF and power cables. The cable tray system shall be designed and constructed with the proper size and type sections as intended to be installed by the manufacturer, including straight sections, elbows, tees, dropouts and expansion connectors. The cable tray system must be designed with suitable strength and rigidity to provide adequate support for all contained wiring. Cable ladders or other suitable methods shall be used to provide adequate support for all contained wiring and to connect the cable tray system with cable entrances, the MDF and equipment. The cable tray layout and installation shall consider factors including ceiling height, light fixture locations, cable entry ports, equipment location, minimum cable bending radius, and personnel safety. Cable trays shall be positioned so they are easily accessible with sufficient space to permit access for installation and maintenance of the cables. Cable trays shall be installed as designed and shall be securely attached to the ceiling and/or wall so that they are rigid and immovable. Horizontal and vertical tray supports should provide adequate bearing surface and load capacity to meet the requirements of the cable tray system. A support shall be located within 2 feet of each side of an expansion connector.	
Qualified Response:	
4.5.14 Cleaning All work areas shall be cleaned at the end of each workday. The vendor shall keep all premises clear of all rubbish and debris generated by the work involved and shall leave all premises neat and clean. The vendor shall dispose of all surplus material, rubbish and debris.	
Qualified Response:	
4.5.15 System Optimization Following system installation, the vendor shall optimize all equipment and system parameters to maximize system performance. System optimization shall include, but is not limited to: Proper audio and data levels, proper RF transmitter and receiver performance levels, proper frequency alignment of all radio and antenna combining devices, timing parameters, etc.	
Qualified Response:	

Requirement	Response Code
4.5.16 Installation Completion Report Following equipment installation and optimization, the vendor shall provide an Installation Completion Report. A draft Installation Completion Report shall be submitted to the Port of Los Angeles, and vendor shall incorporate any and all comments received from the LAPP into the final document.	
Qualified Response:	

4.6 System Documentation

The documents provided as part of the contract shall reflect the as-built configuration of the delivered product at the time of system acceptance.

Requirement	Response Code
4.6.1 Preliminary Documentation The vendor shall provide the preliminary documentation for use in the field during the assembly, installation, optimization, and testing of the system. Throughout the various implementation phases, “red-lined changes” shall be made to the preliminary documentation as required. After system acceptance, the vendor shall update all prior documentation with the “red-lined” information determined during installation. All redlined drawings shall be revised and delivered in the final drawing format within sixty (60) days of the successful completion of the in-field system acceptance test and prior to final acceptance.	
Qualified Response:	
4.6.2 Drawing Detail All drawings, including vendor manuals, must have traceability to allow technicians to follow signals through the system in a logical sequence during troubleshooting. On system drawings, all listed wiring shall have the same labeling nomenclature used in the installation (Section 4.5.12). A sample of the desired drawing format is provided in Appendix Exhibit R.	
Qualified Response:	

Requirement	Response Code
4.6.3 Manuals The vendor shall provide, as part of the contract, as a minimum, the following types of and quantities of system and equipment specific manuals: Printed / Bound Manuals • System Manuals – Two (2) sets of the final, accepted system configuration. • Maintenance Manuals -- Two (2) sets for any wide-area or common primary site equipment and one (1) set for each remote site. • Operator Manuals – Two (2) sets. • Original Equipment Manufacturers' Equipment - User, Operation, and Maintenance manuals in the quantities and formats listed above for any ancillary products provided as part of this procurement. Electronic Documentation • In addition to the printed and/or bound material listed above, all as-built drawings, system documentation, System, Operator, and Maintenance manuals, and training material shall be delivered on standard CD-ROM in Adobe Acrobat (.PDF) Version 7 or later format. • All as-built drawings shall be provided on CD-ROM in AutoCAD (.DXF) version 2008 or higher, format • Original Equipment Manufacturers' Equipment – User, Operation, and Maintenance manuals for any ancillary products provided as part of this procurement shall be provided in Adobe Acrobat (.PDF) version 7 or later format. Prior to final vendor selection and contract award, vendors may be required to submit examples of their training material and/or maintenance manuals. This request for information does not constitute an offer or award.	
Qualified Response:	

Requirement	Response Code
4.6.3.1 System Manual At a minimum, the System Manual shall include the following documentation: 1. System Block Diagrams 2. Site Floor Plans 3. Cabinet/Rack Diagrams 4. Description of system functionality 5. Programming templates (as required) for products tested 6. Specific test results from pre-shipment integration and testing 7. Point-to-point wiring charts 8. Detailed equipment interconnection cable diagrams 9. Printout of equipment parameters (i.e., programming configuration) 10. Unique product configuration information 11. Inventory (with serial numbers and installation references)	
Qualified Response:	
4.6.3.2 Maintenance Manuals Maintenance manuals shall be provided for all proposed equipment, including OEM ancillary equipment. The manuals shall include detailed equipment information that supports all aspects of maintenance, troubleshooting and installation procedures associated with the equipment.	
Qualified Response:	
4.6.3.3 Operator Manuals Operator manuals shall be provided for the following sub-systems: • Dispatch Consoles • Logging Recorder • Network Monitoring System • Interoperable Radio System (as required) The operator manuals shall thoroughly and clearly describe: (a) All aspects of equipment operation; (b) all equipment features and functions.	
Qualified Response:	

4.7 Spare Parts and Test Equipment

Requirement	Response Code
4.7.1 Recommended Spare Parts The vendor shall list and price a recommended inventory of spare parts that will be delivered to the Port upon final system acceptance. The recommended spare parts shall support all major system elements, including wide area network equipment, repeaters, and dispatch console elements. All recommended spares shall be at the field replaceable module level. Qualified Response:	
4.7.2 Component Parts The vendor shall maintain a complete stock of component parts for the system both for repair and future expansion. Such parts shall include all electronic and mechanical components, circuit boards, control modules and standard cabinet modules used as part of the standard system. Parts support and availability for both repair and system expansion shall be continued for a period of not less than seven (7) years from the date of system acceptance. Qualified Response:	
4.7.3 Test Equipment The vendor shall provide for LAPP approval, a complete inventory of all recommended test equipment - including specific model, manufacturer and pricing - required to fully maintain the proposed system. LAPP reserves the option to purchase this equipment from the selected vendor. Any specialized test or maintenance equipment, fixtures, or jigs necessary for normal, routine maintenance of the system shall be identified as part of the vendor's response and shall include pricing. Qualified Response:	

4.8 Training

The vendor shall provide the training described in this section to personnel as directed by the LAPP.

Requirement	Response Code
4.8.1 Training Plans Training will enable the LAPP staff and/or others as directed by the LAPP, to effectively operate and maintain the system over its life cycle. The detailed training plan shall include a list of all subjects (including subject descriptions), provided class material, class duration, class size, training location, and price. Qualified Response:	

Requirement	Response Code
4.8.1.1 Preliminary Training Plan The vendor shall provide a condensed training plan in their RFP response that describes how the vendor intends to provide training. At a minimum, LAPP expects that the respective training schedules will include two (2) identical training sessions for each class type to accommodate the Port's full-time operations schedule.	
Qualified Response:	
4.8.1.2 Detailed Training Plan During the detailed design phase, the selected vendor shall submit to the LAPP for approval, a comprehensive, integrated training plan and schedule of courses. This training plan shall be compatible with the vendor provided implementation schedule, and shall include class types, location, duration, size and price.	
Qualified Response:	
4.8.2 Training Topics Three types of training shall be provided: (a) technical training; (b) system manager, and (c), operator training.	
Qualified Response:	
4.8.2.1 Technical Training The vendor shall provide complete and comprehensive technical training in the theory, maintenance and repair of each type of equipment and system provided for the project. The training shall include, as a minimum, system theory, trouble shooting, operation and use of any specialized test equipment or software, and service and repair techniques applicable to the selected item.	
Qualified Response:	
4.8.2.2 System Manager Training The vendor shall provide complete and comprehensive system management training that shall include but not be limited to planning and setup of the network, building and implementing system and network profiles and configurations, performing database management functions, monitoring and managing the system performance, and writing/printing system reports.	
Qualified Response:	
4.8.2.3 Operator Training Operator training shall include, as a minimum, an overview and demonstration of all features, functions, operation, and special care considerations pertaining to the provided equipment. Training shall be designed to assure that each operator is competent to operate all system features and functions assigned to that position.	
Qualified Response:	

Requirement	Response Code
4.8.3 Training Materials The vendor shall provide for LAPP approval all instructional material, including printed materials, audio, video, interactive self-paced personal computer programs, and complete equipment operating instructions.	
Qualified Response:	

4.9 Warranty and Maintenance

Requirement	Response Code
4.9.1 Warranty The vendor warrants that the communications system provided will be free from defects in material and workmanship for a period of one (1) year from the date of system acceptance. The vendor shall repair or replace, at their expense, any and all defective items discovered during the one-year warranty period. The vendor shall have sufficient appropriate test equipment to ensure swift and effective adjustment and repair of radios and fixed equipment. Test equipment must meet all requirements of the FCC, manufacturer's recommendations, and must be available for inspection by LAPP.	
Qualified Response:	
4.9.2 Extended Warranty (Maintenance) Services The vendor shall offer an extended warranty or maintenance plan that begins upon expiration of the initial warranty and continues for years two (2) through five (5) after system acceptance. All features, services, response times, and other requirements delivered and accepted for the initial warranty period shall be included as conditions of the Extended Warranty (Maintenance) period. Vendors shall provide pricing for these services in the accompanying Price Matrix.	
Qualified Response:	

Requirement	Response Code
4.9.3 Specific Services The vendor shall provide the following specific warranty and maintenance services and shall explain how they will provide and manage the requested services. 4.9.3.1 On-Site Fixed Equipment Response and Repair: The vendor will describe their onsite repair capability for all fixed infrastructure equipment installed at the Port of Los Angeles during the warranty period. Individual board repair shall be at the manufacturer's authorized repair depot. Vendor shall describe their capability to respond on-site within four (4) hours after notification by the Port of Los Angeles of a major system failure and/or major site failure. For purposes of maintenance response, LAPP considers the following to be examples of a major system failure: • The loss of one (1) communications site • The loss of transmit capability from any one (1) transmitter • The loss of one (1) console dispatch position In their RFP response, vendor shall define their criteria for major system failure and for major site failure. At a minimum, the vendor shall respond to minor system failures within 24-hours during standard business hours -- Monday – Friday, 8:00 AM – 5:00 PM Pacific Time Zone. The vendor shall describe their capability, and include pricing in the attached Price Matrix, for on-site response within eight (8) hours after notification by the LAPP of a minor system failure.	
Qualified Response:	
4.9.3.2 Preventive Maintenance Inspection At least one (1) comprehensive annual Preventive Maintenance Inspection (PMI) shall be conducted forty-five (45) days prior to the expiration of the initial warranty. The LAPP witnessed PMI shall include system testing, alignment checks, and equipment cleaning procedures. The PMI schedule will be coordinated with LAPP to ensure minimal impact on routine operations. Upon completion of the PMI, vendor shall compare the findings against the as-built and/or final acceptance test results and prepare and deliver a comparative analysis report for review by the Port at least thirty (30) days prior to the expiration of the initial warranty period.	
Qualified Response:	

Requirement	Response Code
4.9.3.3 Dispatch Service The vendor shall provide a 24/7 dispatch service that provides a central point of contact for all system service requests. This service shall dispatch appropriate service personnel and provide call management by tracking the progress of all service calls to completion. The vendor shall retain, and make available upon request from the LAPP, a detailed account of system responses and repairs.	
Qualified Response:	
4.9.3.4 Network Monitoring Service (Optional) The vendor shall offer, as an option, a Network Monitoring Service to maximize resource availability and minimize system downtime. The service shall include dispatching and monitoring onsite arrival of field technicians. At a minimum, the service shall provide: • Proactive system monitoring and dispatching 7 x 24 x 365 • Remote diagnostics and monitoring • Detection of intermittent issues • Escalation Management • Case Management to ensure timely resolution • Periodic (monthly and ad hoc) device performance and activity reports • System labs for problem re-creation and resolution • Technical support and access to vendor's developmental engineering to address very difficult issues • In cooperation with the Port of Los Angeles, pre-defined severity levels and on-site response times	
Qualified Response:	
4.9.4 Access to Technical and Manufacturing Resources The vendor's technical support staff shall have direct access to the manufacturer's system, software, and product engineering staff to supplement its problem solving capabilities in instances of unusual or complex problems.	
Qualified Response:	
4.9.5 Repair Qualifications Personnel hired or contracted by the vendor must be fully qualified to service, maintain, and install (if necessary) in a professional manner according the standards established by the equipment manufacturer and in accordance with the requirements of LAPP. Vendor's proposals shall identify the number of technicians to be dedicated to this task and describe the general qualifications and typical training they have received.	
Qualified Response:	

Requirement	Response Code
4.9.6 Routine Telephone Support (Help Line) For the duration of the warranty period, the vendor shall provide a telephone support function during regular business hours, Monday through Friday, 8:00 AM to 4:00 PM Pacific time zone. Customer support shall be available for technical questions, customer satisfaction issues and user support questions relating to radio communications equipment features, functions and software. This service shall be staffed with system support engineers and technical consultants able to assist the Port of Los Angeles in troubleshooting issues that may exist within the system infrastructure.	
Qualified Response:	
4.9.7 Extended Telephone Support (Optional) For the duration of the warranty period, the vendor shall describe and price optional extended telephone support that provides technical assistance 24 hours per day, 7 days per week. Customer support shall be available for technical questions, customer satisfaction issues and user support questions relating to radio communications equipment features, functions and software. This service shall be staffed with system support engineers and technical consultants able to assist the Port of Los Angeles in troubleshooting issues that may exist within the system infrastructure. Vendors shall provide pricing for this service in the accompanying Price Matrix.	
Qualified Response:	
4.9.8 Technology Refreshment Software Updates 4.9.8.1 Warranty Period During the installation, acceptance, and initial warranty period, the vendor shall notify the Port of Los Angeles immediately upon commercial release of any software or firmware updates. These updates shall be provided and installed at no cost to the Port of Los Angeles. Vendor shall coordinate with the Port so as to minimize any disruption of Port activities, and shall provide all necessary labor and material necessary to deliver and install such upgrades at no charge.	
Qualified Response:	

Requirement	Response Code
4.9.8.2 Post Warranty Period Software Updates In the accompanying Pricing Matrix, vendor shall provide pricing for technology refreshment software update subscriptions after the first year warranty period. Enhancement releases shall include feature and performance improvements to the current version of software released by the vendor, and to those prior versions that the vendor may be currently supporting during the term of subscription. Vendor shall describe the process that shall be used to pro-actively notify the Port of Los Angeles of the availability of such updates or enhancements.	
Qualified Response:	

4.10 Acceptance Tests

The vendor shall perform all tests necessary to demonstrate that the system fully and completely meets the requirements of the RFP. The vendor shall provide all necessary personnel, labor, materials, documentation and test equipment to perform all tests, except as delineated elsewhere in this RFP.

Requirement	Response Code
4.10.1 LAPP Witnessed Test At the sole discretion of the LAPP, designated representatives from the LAPP shall witness all or part of the testing.	
Qualified Response:	
4.10.2 Acceptance Test Plans The vendor shall prepare Acceptance Test Plans (ATP's) for review and approval by LAPP, to demonstrate that all system components, both individually and collectively, meet the requirements of the RFP. The ATP's shall consist of factory acceptance testing, site acceptance, and field operational tests. The field operational test section shall include equipment level, system level and RF coverage testing components. The test methodology shall be described in the ATP's.	
Qualified Response:	

Requirement	Response Code
4.10.3 Factory Acceptance Testing A Factory Acceptance Test (FAT) plan shall contain test procedures and acceptance criteria for the factory test that follows factory system integration and staging. The vendor shall fully assemble, rack, wire, integrate, program, and test all fixed network equipment to demonstrate that all equipment meets published specifications and that the system delivers the specified performance and functional requirements. The vendor shall successfully perform the Factory Acceptance Test to Port of Los Angeles representatives prior to shipping the system to the Port of Los Angeles. The Port intends to send three (3) people to witness the FAT. The vendor shall include in their price proposal all travel related expenses to accommodate these individuals for the duration of the test period.	
Qualified Response:	
4.10.4 Field Acceptance Testing The vendor shall develop a Field Acceptance Test Plan during the detailed design phase that fully and completely tests all components and functions of the system. “Fully and completely” means furnishing all personnel, test equipment, supplies, materials, software and hardware to conduct the tests, as required, verifying that the radio system complies with the RFP requirements. Field acceptance testing includes acceptance testing performed at the equipment and system levels after the system has been installed and optimized. Field testing is divided into three general categories: (1) Functional Tests; (2) Performance Tests; (3) RF Coverage Tests.	
Qualified Response:	
4.10.4.1 Functional Tests The functional testing shall include the following equipment, individual systems and system level tests. • Verification that all equipment is delivered and installed in a professional manner in accordance with the RFP. • Demonstration that the system includes the attributes and features necessary to comply with the RFP • Verification that all functions perform in accordance with the system specifications • Performance testing of individual sites after they are installed.	
Qualified Response:	

Requirement	Response Code
4.10.4.2 Performance Tests The functional testing shall include the following equipment, individual systems and overall system tests: • Demonstration that all equipment meets the performance requirements of the RFP by the examination of test data and performing specific tests • Verification that the performance of the system is in accordance with the RFP • A successful thirty (30) day operational test.	
Qualified Response:	
4.10.4.3 RF Coverage Tests RF coverage tests shall demonstrate that the coverage is in accordance with the vendor's proposal and the RFP objectives. The RF coverage tests shall verify that the system provides the required signal level necessary to meet the Channel Performance Criteria (CPC) throughout the coverage area and shall validate coverage predictions. The coverage test data shall identify the measurement location, absolute signal strength, bit error rate (BER), Circuit Merit measurements and the CPC. This data shall be collected and processed, and the coverage depicted on suitably scaled maps consistent with the coverage prediction maps. Sample measurements throughout the service area with statistical processing shall be used to expedite the measurement process. At least the minimum number of measurements necessary to produce measurement validity in accordance with the TIA/EIA TSB-88-B document shall be performed during the coverage tests. Should the results of the coverage acceptance test fail to confirm the Vendor's proposed coverage, and without cost to LAPP, vendor shall be responsible for any corrective action necessary to bring the system into conformance with their proposed predicted coverage. The Coverage Acceptance Tests shall be repeated at Vendor's expense until actual coverage is verified to match predicted coverage. The RF coverage tests shall be conducted according to <u>TIA/EIA TSB-88-B, Wireless Communications Systems - Performance in Noise and Interference-Limited Situations – Recommended Methods for Technology-Independent Modeling, Simulation, and Verification</u>. Vendor shall provide a current copy of TSB-88-B to LAPP at the beginning of the detailed design review.	
Qualified Response:	
4.10.5 Operational Test Upon completion of acceptance testing and with the concurrence of LAPP, the system shall be placed into operation on a conditional basis for a 30-day operational test period. During this time, LAPP shall be responsible to have operators and managers monitor the system for any variations from expected operation.	
Qualified Response:	

Requirement	Response Code
4.10.5.1 System Failures The vendor is responsible for the resolution of any system failures or issues that occur during the Operational Test Period. During the 30-day operational test period, a major failure is defined as any failure that reduces the overall system, individual sub-system, or site availability as follows: • Loss of repeater operation • Significant loss of coverage within the accepted service area. • Loss of a repeater site • Dispatch console position • Logging recorder failure • Network Monitoring system failure • Failure of any other critical system In the event of a major system failure, the Operational Test period will restart only upon identification and resolution of the root cause of said failure.	
Qualified Response:	

4.11 Final Acceptance

Requirement	Response Code
The vendor shall demonstrate that the system fulfills all requirements of the RFP. Final acceptance and the Warranty start date shall be based on the following criteria: 1. Completion of all facility work, system, component, hardware and software delivery, installation, testing, optimization, integration 2. Acceptance of system, facilities, individual systems and equipment by LAPP. 3. Written certification by the vendor of compliance with the RFP requirements, including RF coverage performance and acceptance test results. 4. Successful conclusion of the thirty (30) day system operation period 5. Delivery and approval by LAPP of all required documentation Completion of minor punch list (defined as not service affecting) items shall be negotiated on a case-by-case basis.	
Qualified Response:	

4.12 Trunking Capability – Budgetary Estimate

The Port of Los Angeles is highly interested in determining the commitment and ability of the selected vendor to immediately augment the delivered system with P25, TIA/EIA102 trunking capabilities.

Requirement	Response Code
4.12.1 Assumptions Using the following assumptions and conditions, the vendor shall describe in detail their	

Requirement	Response Code
methodology for providing trunking capability. a) System – This is a conventional system augmentation. b) Timing - Decision to construct a trunking system will be made immediately after final system acceptance of the delivered system. c) Sites - All wide-area conventional sites and facilities remain unchanged for comparison purposes. The conventional, standalone sites (Mt. Lukens, Sierra Peak and Saddle Peak) shall not be included in the trunked system). d) Network Connectivity – Network connectivity, i.e. leased lines, fiber, or microwave connections will remain as implemented for the delivered system. e) Dispatch Consoles –The number of locations and operator positions does not change as a result of this upgrade. The dispatch console system shall be directly connected to the trunked system via wireline, fiber, etc. Primary connection via RF control stations is unacceptable. f) Frequencies – Four (4) additional UHF-T channels (470-512 MHz) are made available by the Port of Los Angeles and the existing 450MHz channel will not be included in the trunked configuration. Therefore, the trunking system will comprised of seven (7) total channels. All additional frequencies are fully licensed and available for operation under the same parameters and sites as those identified in the basic, conventional RFP. g) Installation Standards – All installation standards and requirements remain unchanged from the basic proposal. h) Warranty – All maintenance and warranty standards and requirements remain the same as the basic proposal.	
Qualified Response:	
4.12.2 Vendor Allowed Assumptions Vendor shall explicitly state any additional assumptions or conditions used in responding to this section. Additional conditions may include such factors as product delivery timing, industry standards adoption, etc. All vendor assumptions shall be fully explained and documented with appropriate references.	
Qualified Response:	

Requirement	Response Code
4.12.3 Instructions Regarding Trunked System Budgetary Estimate Vendors shall provide all pricing detail requested in the separate portion of the pricing matrix, Exhibit S, titled “Trunking Capability – Budgetary Estimate”. To the best of the vendor’s ability, pricing shall include all equipment and services required to augment the delivered system within the constraints of the assumptions listed in Section 4.12.1. <u>Considerations shall include:</u> 1. All radio sub-system hardware, including expansion of racks, backup power, ancillary equipment 2. All software and firmware 3. All factory, field, and installation engineering 4. All installation services 5. Any trunking controllers or trunking specific hardware or software items. 6. Any additional wide area system related hardware or software. 7. Any hardware, software, firmware, engineering services, or installation for console upgrade or replacement that is beyond the scope of the original proposal. 8. Providing field radio (mobile and portable) programming and fleetmapping support to LAPP technical staff. 9. Any additional network monitoring or equipment needed to properly monitor, manage, and maintain the overall trunking system.	
Qualified Response:	

5 CONTRACTUAL REQUIREMENTS

Vendors shall adhere to the City of Los Angeles's contracting requirements as described below. Applicable forms or detailed requirements can be found in Section 6 – Attachments and Exhibits.

5.1 Affirmative Action

Vendor, during the performance of the Agreement, shall not discriminate in its employment practices against any employee or applicant for employment because of the employee's or applicant's race, religion, national origin, ancestry, sex, age, sexual orientation, disability, marital status, domestic partner status, or medical condition. The provisions of Section 10.8.4 of the Los Angeles Administrative Code shall be incorporated and made a part of the agreement. All subcontracts awarded shall contain a like nondiscrimination provision. See Exhibit A.

5.2 Small Business Development Program

It is the policy of the Department to provide Small Business Enterprises (SBE) and Minority-Owned, Women-Owned and all Other Business Enterprises (MBE/WBE/OBE) an equal opportunity to participate in the performance of all City contracts in all areas where such contracts afford such participation opportunities. Consultant shall assist the City in implementing this policy and shall use its best efforts to afford the opportunity for SBEs, MBEs, WBEs, and OBEs to achieve participation in subcontracts where such participation opportunities present themselves and attempt to ensure that all available business enterprises, including SBEs, MBEs, WBEs, and OBEs, have equal participation opportunity which might be presented under this Agreement. See Exhibit B.

NOTE: Prior to being awarded a contract with the City, Consultant and all subconsultants must be registered with the Department's Contracts Management Database, e-DiversityXchange.

5.3 Business Tax Registration Certificate

The City of Los Angeles, Office of Finance requires the implementation and enforcement of Los Angeles Municipal Code Section 21.190. This section provides that every person, other than a municipal employee, who engages in any business within the City of Los Angeles, is required to obtain the necessary Business Tax Registration Certificate and pay business taxes. The City Controller has determined that this Code Section applies to consulting firms that are doing work for the Los Angeles Harbor Department. See Exhibit C.

5.4 Insurance Requirements

REQUIRED AT PROPOSAL STAGE: A letter from each Vendor's broker must be provided with their proposal. The letter should indicate that the requirements below are presently part of the Vendor's coverage, or that the broker is able to provide such coverage should the Vendor be selected. The broker must be aware of the indemnification requirements below. Vendors are not required to purchase the required insurance in order to respond, however all required insurance will need to be submitted at the time of contract award. See Exhibit D.

5.5 General Liability Insurance

Vendor shall procure and maintain in effect throughout the term of the agreement, without requiring additional compensation from the City, commercial general liability insurance covering personal and advertising injury, bodily injury, and property damage providing contractual liability, independent contractors, products and completed operations, and premises/operations coverages written by an insurance company authorized to do business in the State of California rated VII, A- or better in Best's Insurance Guide (or an alternate guide acceptable to City if Best's is not available) within Vendor's normal limits of liability but not less than Five Million Dollars (\$5,000,000) combined single limit for injury or claim. Said limits shall provide first dollar coverage except that Executive Director may permit a self-insured retention or self-insurance in those cases where, in his or her judgment, such retention or self-insurance is justified by the net worth of Vendor. The insurance provided shall contain a severability of interest clause and shall provide that any other insurance maintained by Department shall be excess of Vendor's insurance and shall not contribute to it. In all cases, regardless of any deductible or retention, said insurance shall contain a defense of suits provision. Each policy shall contain an additional insured endorsement naming the City of Los Angeles Harbor Department, its boards, officers, agents, and employees and a 30-day notice of cancellation by receipted mail as shown in Exhibit E.

5.6 Automobile Liability Insurance

Vendor shall procure and maintain at its expense and keep in force at all times during the term of the agreement automobile insurance written by an insurance company authorized to do business in the State of California rated VII, A- or better in Best's Insurance Guide (or an alternate guide acceptable to City if Best's is not available) within Vendor's normal limits of liability but not less than Five Million Dollars (\$5,000,000) covering injuries or death resulting from each accident or claim arising out of any one claim or accident. Each policy shall contain an additional insured endorsement naming the City of Los Angeles Harbor Department, its board, officers, agents, and employees and a 30-day notice of cancellation by receipted mail as shown in Exhibit F.

5.7 Workers' Compensation

Vendor shall certify that it is aware of the provisions of Section 3700 of the California Labor Code which requires every employer to be insured against liability for Workers' Compensation or to undertake self-insurance in accordance with the provisions of that Code, and that the Vendor shall comply with such provisions before commencing the performance of the tasks under the agreement. Vendor shall submit Workers' Compensation policies, whether underwritten by the state insurance fund or private carrier, which provide that the public or private carrier waives its right of subrogation against the City in any circumstance in which it is alleged that actions or omissions of the City contributed to the accident. See Exhibit G.

5.8 Professional Liability Insurance

Vendor certifies that it now has professional liability insurance in the amount of Two Million Dollars (\$2,000,000), which covers the work to be performed pursuant to this proposal and that it will keep such insurance or its equivalent in effect at all times during performance of said Agreement and until two (2) years following acceptance of the completed project by Board.

Two (2) executed copies of the special endorsement, Exhibit H attached hereto and made a part hereof shall be filed with Executive Director. Alternatively, two (2) certified copies of the full policy containing a 30-calendar-day cancellation notice by receipted mail may be submitted. Notice of occurrences or claims under the policy shall be made to the _____ Division with copies to Executive Director.

5.8.1 Indemnification

5.8.1.1 Indemnification for Professional Liability

Except for the sole negligence or willful misconduct of City, Vendor shall at all times indemnify, protect, defend, and hold harmless City and any and all of its boards, officers, agents, or employees from and against all claims, charges, demands, costs, expenses (including counsel fees), judgments, civil fines and penalties, liabilities or losses of any kind or nature whatsoever which may be sustained or suffered by or secured against the City, its boards, officers, agents, and/or employees by reason of any damage to property, injury to persons, or any action that may arise out of the performance of the Agreement that is caused by any act, omission, or negligence of Vendor, its boards, officers, agents, employees, or subvendors.

5.8.1.2 Indemnity for Other Liability

Except for the sole negligence or willful misconduct of City, Vendor shall at all times indemnify, protect, defend, and hold harmless City and any and all of its boards, officers, agents, or employees from and against all claims, charges, demands, costs, expenses (including counsel fees), judgments, civil fines and penalties, liabilities or losses of any kind or nature whatsoever which may be sustained or suffered by or secured against the City, its boards, officers, agents, and/or employees by reason of any damage to property, injury to persons, or any action that may arise out of the performance of the Agreement that is caused by any act, omission, or negligence of Vendor, its boards, officers, agents, employees, or subvendors regardless of whether any act, omission, or negligence of City, its boards, officers, agents, or employees contributed thereto; provided that (1) if the City contributes to a loss, Vendor's indemnification of the City for the City's share of the loss shall be limited to One Million Dollars (\$1,000,000), (2) notwithstanding the limitation in (1), Vendor shall remain responsible for one hundred percent (100%) of any loss attributable to it, and (3) the provisions in (1) and (2) apply on a per-occurrence basis.

5.9 Conflict of Interest

It is hereby understood and agreed that the parties to this Agreement have read and are aware of the provisions of Section 1090 et seq. and Section 87100 et seq. of the California Government Code relating to conflict of interest of public officers and employees, as well as the Los Angeles Municipal Code (LAMC) Municipal Ethics and Conflict of Interest provisions of Section 49.5.1 et seq. and the Conflict of Interest Codes of the City and Department. All parties hereto agree that they are unaware of any financial or economic interest of any public officer or employee of City relating to this Agreement. Notwithstanding any other provision of this Agreement, it is further understood and agreed that if such financial interest does exist at the inception of this Agreement, City may immediately terminate this Agreement by giving written notice thereof.

5.9.1 Compliance with Applicable Laws

Consultant shall at all times in the performance of its obligations comply with all applicable laws, statutes, ordinances, rules and regulations, and with the reasonable requests and directions of Executive Director.

5.10 Governing Law / Venue

This Agreement shall be governed by and construed in accordance with the laws of the State of California, without reference to the conflicts of law, rules and principles of such State. The parties agree that all actions or proceedings arising in connection with this Agreement shall be tried and litigated exclusively in the State or Federal courts located in the County of Los Angeles, State of California, in the judicial district required by court rules.

5.10.1 Trademarks, Copyrights, and Patents

Consultant agrees to save, keep, hold harmless, protect and indemnify the City and any of its officers or agents from any damages, cost, or expenses in law or equity from infringement of any patent, trademark, service mark or copyright of any person or persons, or corporations in consequence of the use by City of any materials supplied by Consultant in the performance of this Agreement.

5.11 Termination Due to Non-Appropriation of Funds

This Agreement is subject to the provisions of the Los Angeles City Charter which, among other things, precludes the City from making any expenditure of funds or incurring any liability, including contractual commitments, in excess of the amount appropriated thereof.

The Board, in awarding this Agreement, is expected to appropriate sufficient funds to meet the estimated expenditure of funds through June 30 of the current fiscal year and to make further appropriations in each succeeding fiscal year during the life of the Agreement. However, the Board is under no legal obligation to do so.

The City, its boards, officers, and employees are not bound by the terms of this Agreement or obligated to make payment thereunder in any fiscal year in which the Board does not appropriate funds therefore. The Consultant is not entitled to any compensation in any fiscal year in which funds have not been appropriated for the Agreement by the Board.

Although the Consultant is not obligated to perform any work under the Agreement in any fiscal year in which no appropriation for the Agreement has been made, the Consultant agrees to resume performance of the work required by the Agreement on the same terms and conditions for a period of sixty (60) days after the end of the fiscal year if an appropriation therefore is approved by the Board within that 60 day period. The Consultant is responsible for maintaining all insurance and bonds during this 60 day period until the appropriation is made; however, such extension of time is not compensable.

If in any subsequent fiscal year funds are not appropriated by the Board for the work required by the Agreement, the Agreement shall be terminated. However, such termination shall not relieve the parties of liability for any obligation previously incurred.

5.11.1 Termination Provision

The Board of Harbor Commissioners, in its sole discretion, shall be able to terminate and cancel all or any part of the Agreement it enters into with the selected Vendor for any reason upon giving the Vendor ten (10) days' notice in writing of its election to cancel and terminate the Agreement. It is agreed that any Agreement entered into shall not limit the right of the City to hire additional Vendors to perform the services described in the Agreement either during or after the term of the Agreement.

5.12 Proprietary Information

The Vendor may not disclose to any party without City's permission any information developed pursuant to the Agreement. The Los Angeles Harbor Department will, however, have the right to disclose the information as it determines appropriate considering the nature of the information, its use and the laws applicable to the Los Angeles Harbor Department.

5.12.1 Confidentiality

The data, documents, reports, or other materials which contain information relating to the review, documentation, analysis and evaluation of the work described in this Agreement and any recommendations made by Consultant relative thereto shall be considered confidential and shall not be reproduced, altered, used or disseminated by Consultant or its employees or agents in any manner except and only to the extent necessary in the performance of the work under this Agreement. In addition, Consultant is required to safeguard such information from access by unauthorized personnel.

5.13 Taxpayer Identification Number

The Internal Revenue Service (IRS) requires that all Vendors and suppliers of materials and supplies provide a Taxpayer Identification Number (TIN) to the party that pays them. Vendor declares that its authorized Taxpayer Identification Number (TIN) is . No payments will be made under the Agreement without a valid TIN

5.14 Service Contractor Worker Retention Policy and Living Wage Policy Requirements

The Board of Harbor Commissioners of the City of Los Angeles adopted Resolution No. 5771 on January 3, 1999, agreeing to adopt the provisions of the Los Angeles City Ordinance No. 171004 relating to Service Contractor Worker Retention (SCWR), Section 10.36 et seq. of the Los Angeles Administrative Code, as the policy of the Harbor Department. Further, Charter Section 378 requires compliance with the City's Living Wage requirements as set forth by ordinance, Section 10.37 et seq. of the Los Angeles Administrative Code. Vendor shall comply with the policy wherever applicable. Violation of this provision, where applicable, shall entitle the City to terminate the Agreement and otherwise pursue legal remedies that may be available.

5.15 Wage and Earnings Assignment Orders/Notices of Assignments

Vendor and/or any subvendor are obligated to fully comply with all applicable state and federal employment reporting requirements for the Vendor and/or subvendor's employees.

Vendor and/or subvendor shall certify that the principal owner(s) are in compliance with any Wage and Earnings Assignment Orders and Notices of Assignments applicable to them personally. Vendor and/or subvendor will fully comply with all lawfully served Wage and Earnings Assignment Orders and Notices of Assignments in accordance with Cal. Family Code § 5230 et seq. Vendor or subvendor will maintain such compliance throughout the term of the Agreement.

5.16 Equal Benefits Policy

The Board of Harbor Commissioners of the City of Los Angeles adopted Resolution No. 6328 on January 12, 2005, agreeing to adopt the provisions of Los Angeles City Ordinance 172,908, as amended, relating to Equal Benefits, Section 10.8.2.1 et seq. of the Los Angeles Administrative Code, as a policy of the Harbor Department. Vendor shall comply with the policy wherever applicable. Violation of the policy shall entitle the City to terminate any Agreement with Vendor and pursue any and all other legal remedies that may be available. See Exhibit I.

5.17 State Tidelands Grants

The Agreement will be entered into in furtherance of and as a benefit to the State Tidelands Grant and the trust created thereby. Therefore, the Agreement will at all times be subject to the limitations, conditions, restrictions and reservations contained in and prescribed by the Act of the Legislature of the State of California entitled “An Act Granting to the City of Los Angeles the Tidelands and Submerged Lands of the State Within the Boundaries of Said City,” approved June 3, 1929, (Stats. 1929, Ch. 651), as amended, and provisions of Article VI of the Charter of the City of Los Angeles relating to such lands. Vendor agrees that any interpretation of the Agreement and the terms contained therein must be consistent with such limitations, conditions, restrictions and reservations.

5.18 Public Information

Any information submitted as part of this request for proposal becomes public information and may be released without further notification.

5.19 Right to Reject All Bids

The right to reject all offers is reserved.

5.20 Evaluation Process/Selection Criteria

All proposals received at the required date and time, and meeting the requirements of the request for proposal shall be reviewed and rated according to the criteria specified in RFP Section 2.12 and Exhibit T.

A short list of the most qualified vendors will be invited to present their proposals before the review panel. The review panel will make the final recommendation for selecting the vendor. All recommendations are subject to the approval of the Director of Operations and the Executive Director of the Harbor Department.

5.21 Term of Contract

The duration of this contract will be twenty four months from the date of contract execution, and may be extended for an additional 12 months as per the needs of the Port Police.

5.22 Travel Per Diem Requirements

The City Administrative Officer (CAO) publishes travel allowances as part of its annual Departmental Manual for the Budget System. The Travel Allowances provides amounts for airfare, per diem en route and per diem at destination. Allowances apply equally to employees, executives and commissioners. The following define how travel allowances and amounts are applied by the Controller's Office, Demand Audit Division. Information is provided for domestic and international travel, and a section is dedicated to other travel considerations. See Exhibit J.

5.23 Format for Proposals

To ease in the evaluation of vendor capabilities and approach, vendors shall submit their proposals in the following format and order.

- Cover transmittal letter
- Table of Contents
- Qualifications and References
- Proposed Project Organization and Staffing
- Project Approach, Methodology
- Project Work-plan, Schedule and Milestones
- Structured Response to RFP (in proscribed format)
- Detailed equipment list
- Project Pricing breakdown (on proscribed forms)
- Vendor prepared supplemental detail (deployment schedule(s), coverage maps, system diagrams, etc.)
- City Contracting Requirements and Forms
- Vendor Supplied Product Literature (Optional)

Refer to RFP Section 2 for additional details.

5.24 Checklist for Submittal

In order to facilitate the Vendor's adherence to the requirements of this RFP and the City's Contracting Requirements, Vendors may wish to use the checklist below to verify that they have addressed the required elements.

We encourage vendors to review the entirety of the RFP and contracting requirements and not to rely solely on this list for a complete listing of the RFP requirements.

- ☐ Cover transmittal letter signed by an authorized principal
- ☐ Plan to attend mandatory Pre Proposal Conference
- ☐ Acknowledge proposal schedule and deadlines
- ☐ Proposal in required form and format
- ☐ Project approach and methodology
- ☐ Project work plan, schedule and milestones
- ☐ Project organization, staffing, resumes
- ☐ Firm experience and project references
- ☐ Proposed Pricing in required form and format
- ☐ Affirmative Action Program
- ☐ Small Business Development Participation
- ☐ Affidavit
- ☐ Contract Description Form
- ☐ Business Tax Registration Certificate (BTRC) Number
- ☐ Insurance and Liability Requirements Met
 - ☐ General Liability
 - ☐ Auto Liability
 - ☐ Workers' Compensation
 - ☐ Professional Liability
 - ☐ Property Liability
 - ☐ Ocean Marine Liability
- ☐ Equal Benefits Ordinance requirements met
- ☐ Expenses adhere to City's Travel Per Diem requirements
- ☐ Living Wage requirements met
- ☐ Wage and Earnings Assignment Orders requirements met
- ☐ State Tidelands Grants requirements met
- ☐ Acknowledge Public Information requirements
- ☐ Acknowledge Right to Reject All Bids
- ☐ Acknowledge Option to Award to Multiple Firms or Split Work on Phases
- ☐ Acknowledge Termination
- ☐ Acknowledge Evaluation Process
- ☐ Acknowledge Term of Contract

6 ATTACHMENTS AND EXHIBITS

This RFP section contains the referenced exhibits.

Exhibit A - Affirmative Action

Sec. 10.8.4 Affirmative Action Program Provisions.

Every non-construction contract with or on behalf of the City of Los Angeles for which the consideration is \$100,000 or more and every construction contract with or on behalf of the City of Los Angeles for which the consideration is \$5,000 or more shall contain the following provisions which shall be designated as the AFFIRMATIVE ACTION PROGRAM provisions of such contract:

- A. During the performance of City contract, the contractor certifies and represents that the contractor and each subcontractor hereunder will adhere to an affirmative action program to ensure that in its employment practices, persons are employed and employees are treated equally and without regard to or because of race, religion, ancestry, national origin, sex, sexual orientation, age, disability, marital status, domestic partner status, or medical condition.
 - 1. This provision applies to work or services performed or materials manufactured or assembled in the United States.
 - 2. Nothing in this section shall require or prohibit the establishment of new classifications of employees in any given craft, work or service category.
 - 3. The contractor shall post a copy of Paragraph A hereof in conspicuous places at its place of business available to employees and applicants for employment.
- B. The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to their race, religion, ancestry, national origin, sex, sexual orientation, age, disability, marital status, domestic partner status, or medical condition.
- C. As part of the City's supplier registration process, and/or at the request of the awarding authority or the Office of Contract Compliance, the contractor shall certify on an electronic or hard copy form to be supplied, that the contractor has not discriminated in the performance of City contracts against any employee or applicant for employment on the basis or because of race, religion, ancestry, national origin, sex, sexual orientation, age, disability, marital status, domestic partner status, or medical condition.
- D. The contractor shall permit access to and may be required to provide certified copies of all of its records pertaining to employment and to its employment practices by the awarding authority or the Office of Contract Compliance, for the purpose of investigation to ascertain compliance with the Affirmative Action Program provisions of City contracts, and on their or either of their request to provide evidence that it has or will comply therewith.
- E. The failure of any contractor to comply with the Affirmative Action Program provisions of City contracts may be deemed to be a material breach of contract. Such failure shall only be established upon a finding to that effect by the awarding authority, on the basis of its own investigation or that of the Board of Public Works, Office of Contract Compliance. No such finding shall be made except upon a full and fair hearing after notice and an opportunity to be heard has been given to the contractor.
- F. Upon a finding duly made that the contractor has breached the Affirmative Action Program provisions of a City contract, the contract may be forthwith cancelled, terminated or suspended, in whole or in part, by the awarding authority, and all monies due or to become due hereunder may be forwarded to and retained by the City of Los Angeles. In addition thereto, such breach may be the basis for a determination by the awarding authority or the Board of Public Works that the said contractor is an irresponsible bidder or proposer pursuant to the provisions of Section 371 of the Los Angeles City Charter. In the event of such determination, such contractor shall be

- disqualified from being awarded a contract with the City of Los Angeles for a period of two years, or until he or she shall establish and carry out a program in conformance with the provisions hereof.
- G. In the event of a finding by the Fair Employment and Housing Commission of the State of California, or the Board of Public Works of the City of Los Angeles, or any court of competent jurisdiction, that the contractor has been guilty of a willful violation of the California Fair Employment and Housing Act, or the Affirmative Action Program provisions of a City contract, there may be deducted from the amount payable to the contractor by the City of Los Angeles under the contract, a penalty of TEN DOLLARS (\$10.00) for each person for each calendar day on which such person was discriminated against in violation of the provisions of a City contract.
- H. Notwithstanding any other provisions of a City contract, the City of Los Angeles shall have any and all other remedies at law or in equity for any breach hereof.
- I. The Public Works Board of Commissioners shall promulgate rules and regulations through the Office of Contract Compliance and provide to the awarding authorities electronic and hard copy forms for the implementation of the Affirmative Action Program provisions of City contracts, and rules and regulations and forms shall, so far as practicable, be similar to those adopted in applicable Federal Executive Orders. No other rules, regulations or forms may be used by an awarding authority of the City to accomplish this contract compliance program.
- J. Nothing contained in City contracts shall be construed in any manner so as to require or permit any act which is prohibited by law.
- K. The Contractor shall submit an Affirmative Action Plan which shall meet the requirements of this chapter at the time it submits its bid or proposal or at the time it registers to do business with the City. The plan shall be subject to approval by the Office of Contract Compliance prior to award of the contract. The awarding authority may also require contractors and suppliers to take part in a pre-registration, pre-bid, pre-proposal, or pre-award conference in order to develop, improve or implement a qualifying Affirmative Action Plan. Affirmative Action Programs developed pursuant to this section shall be effective for a period of twelve months from the date of approval by the Office of Contract Compliance. In case of prior submission of a plan, the contractor may submit documentation that it has an Affirmative Action Plan approved by the Office of Contract Compliance within the previous twelve months. If the approval is 30 days or less from expiration, the contractor must submit a new Plan to the Office of Contract Compliance and that Plan must be approved before the contract is awarded.
1. Every contract of \$5,000 or more which may provide construction, demolition, renovation, conservation or major maintenance of any kind shall in addition comply with the requirements of Section 10.13 of the Los Angeles Administrative Code.
 2. A contractor may establish and adopt as its own Affirmative Action Plan, by affixing his or her signature thereto, an Affirmative Action Plan prepared and furnished by the Office of Contract Compliance, or it may prepare and submit its own Plan for approval.
- L. The Office of Contract Compliance shall annually supply the awarding authorities of the City with a list of contractors and suppliers who have developed Affirmative Action Programs. For each contractor and supplier the Office of Contract Compliance shall state the date the approval expires. The Office of Contract Compliance shall not withdraw its approval for any Affirmative Action Plan or change the Affirmative Action Plan after the date of contract award for the entire contract term without the mutual agreement of the awarding authority and the contractor.
- M. The Affirmative Action Plan required to be submitted hereunder and the pre-registration, pre-bid, pre-proposal or pre-award conference which may be required by the Board of Public Works,

Office of Contract Compliance or the awarding authority shall, without limitation as to the subject or nature of employment activity, be concerned with such employment practices as:

1. Apprenticeship where approved programs are functioning, and other on-the-job training for non-apprenticeable occupations;
 2. Classroom preparation for the job when not apprenticeable;
 3. Pre-apprenticeship education and preparation;
 4. Upgrading training and opportunities;
 5. Encouraging the use of contractors, subcontractors and suppliers of all racial and ethnic groups, provided, however, that any contract subject to this ordinance shall require the contractor, subcontractor or supplier to provide not less than the prevailing wage, working conditions and practices generally observed in private industries in the contractor's, subcontractor's or supplier's geographical area for such work;
 6. The entry of qualified women, minority and all other journeymen into the industry; and
 7. The provision of needed supplies or job conditions to permit persons with disabilities to be employed, and minimize the impact of any disability.
- N. Any adjustments which may be made in the contractor's or supplier's workforce to achieve the requirements of the City's Affirmative Action Contract Compliance Program in purchasing and construction shall be accomplished by either an increase in the size of the workforce or replacement of those employees who leave the workforce by reason of resignation, retirement or death and not by termination, layoff, demotion or change in grade.
- O. Affirmative Action Agreements resulting from the proposed Affirmative Action Plan or the pre-registration, pre-bid, pre-proposal or pre-award conferences shall not be confidential and may be publicized by the contractor at his or her discretion. Approved Affirmative Action Agreements become the property of the City and may be used at the discretion of the City in its Contract Compliance Affirmative Action Program.
- P. This ordinance shall not confer upon the City of Los Angeles or any Agency, Board or Commission thereof any power not otherwise provided by law to determine the legality of any existing collective bargaining agreement and shall have application only to discriminatory employment practices by contractors or suppliers engaged in the performance of City contracts.
- Q. All contractors subject to the provisions of this section shall include a like provision in all subcontracts awarded for work to be performed under the contract with the City and shall impose the same obligations, including but not limited to filing and reporting obligations, on the subcontractors as are applicable to the contractor. Failure of the contractor to comply with this requirement or to obtain the compliance of its subcontractors with all such obligations shall subject the contractor to the imposition of any and all sanctions allowed by law, including but not limited to termination of the contractor's contract with the City.

Exhibit B - Small Business Development Program

The City of Los Angeles Harbor Department is committed to creating an environment that provides all individuals and businesses open access to the business opportunities available at the Port of Los Angeles in a manner that reflects the diversity of the City of Los Angeles. The Port of Los Angeles Small Business Development Program (SBDP or the “Program”) was created to provide additional opportunities for small businesses to participate in any and all contracts. An overall Department goal of 25% has been established for the Program. The specific goal or requirement for each contract to be let may be higher or lower based on the scope of work.

It is the policy of the Harbor Department to solicit participation in the performance of all service contracts by all individuals and businesses, including but not limited to, small business entities (SBEs), women-owned businesses (WBEs), and minority-owned businesses (MBEs). The Program will allow the Port to target more effectively small business participation (including MBEs and WBEs). It is also the intent of the Department to make it easier for small businesses to participate in Port contracts by providing education and assistance on how to do business with the City, including, but not limited to, insuring that payments to small businesses are processed in a timely manner.

A Small Business Enterprise (SBE) is an independently owned and operated business that is not dominant in its field and meets criteria set forth by the Small Business Administration in Title 13, Code of Federal Regulations, Part 121.

The SBDP is a results-oriented program, requiring contractors who receive contracts from the Port to perform outreach and utilize certified small businesses. **Based on the work to be performed, it has been determined that the percentage of small business participation will be 5%.** Consultant shall be responsible for determining the SBE status of its subconsultants for purposes of meeting the small business requirement.

The Consultant shall not substitute an SBE firm without obtaining prior approval of the City and amending its Agreement. A request for substitution must be based upon demonstrated good cause. If substitution is permitted, Consultant shall endeavor to make an in-kind substitution for the substituted SBE.

In the event of Consultant’s noncompliance during the performance of the Agreement, Consultant shall be considered in material breach of contract. In addition to any other remedy available to City under this Agreement or by operation of law, the City may withhold invoice payments to Consultant until noncompliance is corrected, and assess the costs of City’s audit of books and records of Consultant and its subconsultants. In the event the Consultant falsifies or misrepresents information contained in any form or other willful noncompliance as determined by City, City may disqualify the Consultant from participation in City contracts for a period of up to five (5) years.

Consultant shall complete, sign, and submit as part of the executed agreement the Contract Description Form (see form attached). The Contract Description Form, when signed, will signify the Consultant’s intent to comply with the Small Business Requirement. In addition, prior to being awarded a contract with the City, Consultant and all subconsultant’s must be registered with the Department’s Contract Management Database, e-DiversityXchange.

AFFIDAVIT

"The undersigned declares under penalty of perjury pursuant to the laws of the State of California that the following is true and correct and include all material information necessary to identify and explain the operations of

Name of Firm

as well as the ownership thereof. Further, the undersigned agrees to provide either through the prime consultant or, directly to the Harbor Department, complete and accurate information regarding ownership in the named firm, any proposed changes of the ownership and to permit the audit and examination of firm ownership documents in association with this agreement."

Please indicate the ownership of your company: ☐SBE ☐MBE ☐WBE ☐OBE

- A Small Business Enterprise (SBE) is an independently owned and operated business that is not dominant in its field and meets criteria set forth by the Small Business Administration in Title 13, Code of Federal Regulations, Part 121.
- A Minority Business Enterprise (MBE) is defined as a business in which a minority owns and controls at least 51% of the business. A Woman Business (WBE) is defined as a business in which a woman owns and controls at least 51% of the business. For the purpose of this project, a minority includes:
 1. Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
 2. Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
 3. Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, The Indian Subcontinent, or the Pacific Islands); and
 4. American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
- An OBE (Other Business Enterprise) is any enterprise that is not a MBE or WBE.

Signature _____ Title _____

Printed Name _____ Date Signed _____

NOTARY

On this _____ day of _____, 20_____, before me appeared

_____ to me personally known, who being duly sworn, did execute the
Name

foregoing affidavit, and did state that he/she was properly authorized by _____

Name of Firm

to execute the affidavit and did so act and deed.

SEAL

Notary Public _____

Commission Expires _____

Contract Description Form

PRIME CONTRACTOR

Contract #: _____ Award Date: _____ Contract Term: _____

Contract Title: _____

Business Name: _____ Award Total: \$ _____

Owner's Ethnicity: _____ Gender _____ Group: SBE MBE WBE OBE

Address: _____

City/State/Zip: _____

Telephone: () _____ FAX: () _____

Contact Person: _____

Email Address: _____

SUBCONTRACTOR

Business Name: _____ Award Total: \$ _____

Services to be provided: _____

Owner's Ethnicity: _____ Gender _____ Group: SBE MBE WBE OBE

Address: _____

City/State/Zip: _____

Telephone: () _____ FAX: () _____

Contact Person: _____

Email Address: _____

Contract Description Form

SUBCONTRACTOR

Business Name: _____ Award Total: \$ _____

Services to be provided: _____

Owner's Ethnicity: _____ Gender _____ Group: SBE MBE WBE OBE

Address: _____

City/State/Zip: _____

Telephone: () _____ FAX: () _____

Contact Person: _____

Email address: _____

Authorized Representative of Prime Contractor Date

SUBCONTRACTOR

Business Name: _____ Award Total: \$ _____

Services to be provided: _____

Owner's Ethnicity: _____ Gender _____ Group: SBE MBE WBE OBE

Address: _____

City/State/Zip: _____

Telephone: () _____ FAX: () _____

Contact Person: _____

Email address: _____

Contract Description Form

SUBCONTRACTOR

Business Name: _____ Award Total: \$ _____

Services to be provided: _____

Owner's Ethnicity: _____ Gender _____ Group: SBE MBE WBE OBE

Address: _____

City/State/Zip: _____

Telephone: () _____ FAX: () _____

Contact Person: _____

Email address: _____

SUBCONTRACTOR

Business Name: _____ Award Total: \$ _____

Services to be provided: _____

Owner's Ethnicity: _____ Gender _____ Group: SBE MBE WBE OBE

Address: _____

City/State/Zip: _____

Telephone: () _____ FAX: () _____

Contact Person: _____

Email address: _____

Authorized Representative of Prime Contractor

Date

Exhibit C - Business Tax Registration Certificate (BTRC) Number

The City of Los Angeles, Office of Finance requires all firms that engage in any business activity within the City of Los Angeles to pay City business taxes. Each firm or individual (other than a municipal employee) is required to obtain the necessary Business Tax Registration Certification (BTRC) and pay business tax. (Los Angeles Municipal code Section 21.09 et seq.)

All firms and individuals that do business with the City of Los Angeles will be required to provide a BTRC number or an exemption number as proof of compliance with Los Angeles City business tax requirements in order to receive payment for goods or services. Beginning October 14, 1987, payments for goods or services will be withheld unless proof of tax compliance is provided to the City.

The Tax and Permit Division of Los Angeles Office of Finance, has the sole authority to determine whether a firm is covered by business tax requirements. Those firms not required to pay will be given an exemption number.

If you do NOT have a BTRC number contact the Tax and Permit Division at the nearest office listed below, or log on to www.lacity.org/finance to download the business tax registration application.

MAIN OFFICE

LA City Hall	201 N. Main Street, Rm. 101	(213) 626-9271
--------------	-----------------------------	----------------

BRANCH OFFICES

Van Nuys Civic Center	14401 Erwin Mall	(818) 756-8531
-----------------------	------------------	----------------

W. LA City Hall	1828 Sawtelle Blvd.	(310) 575-8888
-----------------	---------------------	----------------

Hollywood Office	6501 Fountain Ave.	(213) 485-3935
------------------	--------------------	----------------

San Pedro City Hall	638 S. Beacon St., Rm. 303	(310) 732-4537
---------------------	----------------------------	----------------

Westchester Municipal Bldg.	7166 Manchester, Rm. 9	(213) 473-6750
-----------------------------	------------------------	----------------

Watts City Hall	10221 Compton Ave., Rm. 202	(213) 473-5109
-----------------	-----------------------------	----------------

Exhibit D – Insurance Requirements

Los Angeles Harbor Department - Risk Management Division INSTRUCTIONS FOR COMPLETING, EXECUTING AND SUBMITTING EVIDENCE OF INSURANCE TO THE CITY OF LOS ANGELES, HARBOR DEPARTMENT

Insured: _____ Date _____
(Contractor, Lessee, Permittee, Etc.)

Agreement/Reference No. _____

A. INSURED

1. To expedite completion of the insurance requirements, please give your insurance agent or broker a copy of the Insurance Requirements along with these instructions and endorsement forms.
2. If your contract requires Workers' Compensation coverage and you have been authorized by the State of California to self-insure Workers' Compensation, then a copy of the certificate from the State consenting to self-insurance will meet the evidence requirements.
3. All questions relating to insurance should be directed to Harbor Department Risk Management (see item 10 below) or office responsible for your contract, lease, permit, purchase order, or other agreement.

B. INSURANCE AGENT OR BROKER

1. **Acceptable Evidence.** The appropriate Harbor Department Special Endorsements are preferred forms of evidence. No modifications to the form are permitted. Alternatively, certified copies of the full policy containing additional insured and 30-day cancellation notice language will be accepted subject to review by the City Attorney. **Certificates, Verifications, Memoranda of Insurance and other non-binding documents submitted alone are not acceptable as evidence of insurance. Binders are acceptable as interim evidence until policies are available.**
2. **Multiple Policies.** More than one insurance policy may be required to comply with the insurance requirements. Endorsement forms appropriate to your insured's agreement, contract, lease or permit are included.
3. **Signature.** Please have an authorized representative of the insurance company manually sign the completed endorsement forms. Signatures must be originals as the City Attorney will not accept facsimile (rubber stamp, photocopy, etc.) or initialed signatures.
4. **Underwriter.** The name and address of the insurance company underwriting the coverage must be noted on the endorsement form. In the case of syndicates or subscription policies, indicate lead underwriters or managing agent and attach a schedule of subscribers.
5. **Acceptable Insurance Company.** All insurance must be provided by an insurer admitted to do business in California or written through a California-licensed surplus lines broker. Non-admitted coverage must contain a Service of Suit clause in which the underwriters agree to submit as necessary to the jurisdiction of a California court in the event of a coverage dispute. Service of process for this purpose must be allowed upon an agent in California designated by the insurer or upon the California Insurance Commissioner.
6. **Harbor Department Reference.** All written agreements will be covered unless noted otherwise.
7. **Coverage & Limits.** The coverage and limits for each type of insurance are specified on the insurance requirement sheet. When coverage is on a schedule basis, a separate sheet may be attached to the endorsement listing such schedule locations, vehicles, etc. so covered.
8. **Excess Insurance.** Endorsements to excess policies will be required when primary insurance is insufficient to comply with the requirements.
9. **Additional Pages.** If there is insufficient space on the form to note pertinent information, such as inclusions, exclusions or specific provisions, etc., attach separate sheets and note this on the endorsement form.
10. **More Information.** Correspondence, questions, request for additional blank forms or assistance relating to the required insurance are to be directed to the Harbor Department, Risk Management Division at (310) 732-3758 or faxed to (310) 833-8230.
11. **Submittals.** Completed endorsements should be sent to: Port of Los Angeles, Risk Management, 425 S. Palos Verdes St., San Pedro, CA 90731. Improperly completed endorsements will be returned for correction. **Delay in submitting properly completed endorsements forms may delay your insured's intended occupancy or operation.**
12. **Renewals.** For extension or renewals of insurance policies which have the Harbor Department's Endorsement Form(s) attached, we will accept a renewal endorsement or certified copies of the full policy (with an original signature) as evidence of continued coverage if it includes the statement that the insurance protection afforded the Harbor Department has been renewed under the same terms and conditions as previously approved.

Exhibit E – General Liability

City of Los Angeles - Los Angeles Harbor Department - Risk Management Section GENERAL LIABILITY - ADDITIONAL INSURED ENDORSEMENT

In consideration of the premium charged and notwithstanding any inconsistent statement in the policy to which this endorsement is attached or any endorsement now or hereafter attached thereto, it is agreed as follows:

- 1. ADDITIONAL INSURED.** The City of Los Angeles Harbor Department, its officers, agents and employees are included as additional insured's with regard to liability and defense of claims arising from the operations and uses performed by or on behalf of the named insured regardless of whether liability is attributable to the named insured or a combination of the named and the additional insured.
- 2. CONTRIBUTION NOT REQUIRED.** Any other insurance maintained by the City of Los Angeles Harbor Department shall be excess of this insurance and shall not contribute with it.
- 3. SEVERABILITY OF INTEREST.** This insurance applies separately to each insured against whom claim is made or suit is brought except with respect to the company's limits of liability. The inclusion of any person or organization as an insured shall not affect any right which such person or organization would have as a claimant if not so included.
- 4. CANCELLATION NOTICE.** With respect to the interest of the additional insured, the insurance shall not be canceled, changed in coverage, reduced in limits or non-renewed except after thirty (30) days prior written notice by certified mail return receipt requested has been given to both the City Attorney of Los Angeles and the Board of Harbor Commissioners addressed as follows:

City Attorney	Board of Harbor Commissioners
Harbor Division	425 South Palos Verdes Street
425 South Palos Verdes Street	San Pedro, CA 90731
San Pedro, CA 90731	Attn: Risk Manager
- 5. APPLICABILITY.** This insurance pertains to the operations and/or tenancy of the named insured under all written agreements and permits in force with the City of Los Angeles Harbor Department unless checked below in which case only the following specific agreements and permits with the City of Los Angeles Harbor Department are covered:

☐ Agreement/Permit Number(s): _____

Except as stated above, nothing herein shall be held to waive, alter or extend any of the limits, conditions, agreements or exclusions of the policy to which this endorsement is attached.

I _____ (print/type name), warrant that I have authority to bind the below-listed insurance company and by my signature hereon do so bind this company. Signature: _____ Authorized Representative (ORIGINAL SIGNATURE required on copy furnished to the Board of Harbor Commissioners) Title: _____ Organization: _____ Address: _____ Telephone: _____		Report claims pursuant to this insurance to: Name: _____ Address: _____ Telephone: _____															
		Includes (check as applicable): <table><tbody><tr><td>☐ Broad Form Property Damage</td><td>☐ Contractual Liability</td></tr><tr><td>☐ Personal Injury</td><td>☐ Owned Automobiles</td></tr><tr><td>☐ Independent Contractors</td><td>☐ Non-Owned Automobiles</td></tr><tr><td>☐ Premises-Operations</td><td>☐ Hired Automobiles</td></tr><tr><td>☐ Explosion-Collapse Hazard</td><td>☐ Fire Legal Liability</td></tr><tr><td>☐ Underground Hazard</td><td>☐ _____</td></tr><tr><td>☐ Products/Completed Operations</td><td>☐ _____</td></tr></tbody></table>		☐ Broad Form Property Damage	☐ Contractual Liability	☐ Personal Injury	☐ Owned Automobiles	☐ Independent Contractors	☐ Non-Owned Automobiles	☐ Premises-Operations	☐ Hired Automobiles	☐ Explosion-Collapse Hazard	☐ Fire Legal Liability	☐ Underground Hazard	☐ _____	☐ Products/Completed Operations	☐ _____
☐ Broad Form Property Damage	☐ Contractual Liability																
☐ Personal Injury	☐ Owned Automobiles																
☐ Independent Contractors	☐ Non-Owned Automobiles																
☐ Premises-Operations	☐ Hired Automobiles																
☐ Explosion-Collapse Hazard	☐ Fire Legal Liability																
☐ Underground Hazard	☐ _____																
☐ Products/Completed Operations	☐ _____																
Type of Coverage	Limits of Liability From _____ To _____ ☐ Per Claim ☐ Per Occurrence	Policy Period	☐ Deductible \$ _____ ☐ Self-insured Retention \$ _____ For _____ (Coverage) ☐ Per Claim ☐ Per Occurrence														
Other Conditions:																	
Named Insured and Address																	

Insurance Company	Policy Number	Endorsement Number	Effective Date of Endorsement
-------------------	---------------	-----------------------	----------------------------------

Exhibit F – Auto Liability

City of Los Angeles - Los Angeles Harbor Department - Risk Management Section AUTO LIABILITY - ADDITIONAL INSURED ENDORSEMENT

In consideration of the premium charged and notwithstanding any inconsistent statement in the policy to which this endorsement is attached or any endorsement now or hereafter attached thereto, it is agreed as follows:

- ADDITIONAL INSURED.** The City of Los Angeles Harbor Department, its officers, agents and employees are included as additional insureds with regard to liability and defense of claims arising from the operations and uses performed by or on behalf of the named insured regardless of whether liability is attributable to the named insured or a combination of the named and the additional insured.
- CONTRIBUTION NOT REQUIRED.** Any other insurance maintained by the City of Los Angeles Harbor Department shall be excess of this insurance and shall not contribute with it.
- SEVERABILITY OF INTEREST.** This insurance applies separately to each insured against whom claim is made or suit is brought except with respect to the company's limits of liability. The inclusion of any person or organization as an insured shall not affect any right which such person or organization would have as a claimant if not so included.
- CANCELLATION NOTICE.** With respect to the interest of the additional insured, the insurance shall not be canceled, changed in coverage, reduced in limits or non-renewed except after thirty (30) days prior written notice by certified mail return receipt requested has been given to both the City Attorney of Los Angeles and the Board of Harbor Commissioners addressed as follows:

City Attorney
Harbor Division
425 South Palos Verdes Street
San Pedro, CA 90731

Board of Harbor Commissioners
425 South Palos Verdes Street
San Pedro, CA 90731
Attn: Risk Manager

- APPLICABILITY.** This insurance pertains to the operations and/or tenancy of the named insured under all written agreements and permits in force with the City of Los Angeles Harbor Department unless checked below in which case only the following specific agreements and permits with the City of Los Angeles Harbor Department are covered:

☐ Agreement/Permit Number(s): _____

Except as stated above, nothing herein shall be held to waive, alter or extend any of the limits, conditions, agreements or exclusions of the policy to which this endorsement is attached.

I _____ (print/type name), warrant that I have authority to bind the below-listed insurance company and by my signature hereon do so bind this company. Signature: _____ Authorized Representative (ORIGINAL SIGNATURE required on copy furnished to the Board of Harbor Commissioners) Title: _____ Organization: _____ Address: _____ Telephone: _____		Report claims pursuant to this insurance to: Name: _____ Address: _____ Telephone: _____	
		Includes (check as applicable): ☐ All Autos ☐ Owned Automobile ☐ Hired Automobile ☐ Non-owned Automobile ☐ _____	
Type of Coverage	Limits of Liability	Policy Period	☐ Deductible \$ _____
	From		☐ Self-insured Retention \$ _____
	To		For _____
			(Coverage)
	☐ Per Claim ☐ Per Occurrence		☐ Per Claim ☐ Per Occurrence

Other Conditions:

Named Insured and Address

Insurance Company	Policy Number	Endorsement Number	Effective Date of Endorsement
-------------------	---------------	-----------------------	----------------------------------

Exhibit G – Workers' Compensation

City of Los Angeles - Los Angeles Harbor Department - Risk Management Section WORKERS' COMPENSATION / EMPLOYER'S LIABILITY - SPECIAL ENDORSEMENT

In consideration of the premium charged and notwithstanding any inconsistent statement in the policy to which this endorsement is attached or any endorsement now or hereafter attached thereto, it is agreed as follows:

1. **APPLICABILITY.** This insurance pertains to the operations and/or tenancy of the named insured unless checked below in which case only the following specific agreements with the City of Los Angeles Harbor Department are covered:

Agreement/Permit Number(s): _____

2. **CANCELLATION NOTICE.** With respect to the interests of the City of Los Angeles Harbor Department, this insurance shall not be canceled, changed in coverage, reduced in limits or non-renewed except after thirty (30) days prior written notice by certified mail return receipt requested has been given to both the City Attorney of Los Angeles and the Board of Harbor Commissioners addressed as follows:

City Attorney
Harbor Division
425 South Palos Verdes Street
San Pedro, CA 90731

Board of Harbor Commissioners
425 South Palos Verdes Street
San Pedro, CA 90731
Attn: Risk Manager

Except as stated above, nothing herein shall be held to waive, alter or extend any of the limits, conditions, agreements or exclusions of the policy to which this endorsement is attached.

I _____ (print/type name), warrant that I have authority to bind the below-listed insurance company and by my signature hereon do so bind this company. Signature: _____ Authorized Representative (ORIGINAL SIGNATURE required on copy furnished to the Board of Harbor Commissioners) Title: _____ Organization: _____ Address: _____ Telephone: _____		Includes (check as applicable): Broad Form All States Endorsement Voluntary Compensation Endorsement United States Longshoremen and Harbor Workers Compensation Act Jones Act Other Continental Shelf Endorsement _____ _____
Type of Coverage	Limits of Liability	Policy Period
<i>Workers' Compensation</i>	<i>Statutory</i>	From
<i>Employer's Liability</i>		To
Other Provisions:		
Named Insured and Address		

Insurance Company	Policy Number	Endorsement Number	Effective Date of Endorsement
-------------------	---------------	-----------------------	----------------------------------

Exhibit H – Professional Liability
City of Los Angeles - Los Angeles Harbor Department - Risk Management Section
PROFESSIONAL LIABILITY - SPECIAL ENDORSEMENT

In consideration of the premium charged and notwithstanding any inconsistent statement in the policy to which this endorsement is attached or any endorsement now or hereafter attached thereto, it is agreed as follows:

1. **APPLICABILITY.** This insurance applies to the liability assumed by the insured under all written agreements with the City of Los Angeles Harbor Department provided such liability results from an error, omission or negligent act of the insured or any of its officers agents, employees or subcontractors unless checked below in which case only the following specific agreements with the City of Los Angeles Harbor Department are covered:

Agreement Number(s): _____

2. **CANCELLATION NOTICE.** With respect to the interests of the City of Los Angeles Harbor Department, this insurance shall not be canceled, changed in coverage, reduced in limits or non-renewed except after thirty (30) days prior written notice by certified mail return receipt requested has been given to both the City Attorney of Los Angeles and the Board of Harbor Commissioners addressed as follows:

City Attorney
Harbor Division
425 South Palos Verdes Street
San Pedro, CA 90731

Board of Harbor Commissioners
425 South Palos Verdes Street
San Pedro, CA 90731
Attn: Risk Manager

3. **OTHER PROVISIONS:** The following inclusions, exclusions, extensions or specific provisions apply to this coverage:

Except as stated above, nothing herein shall be held to waive, alter or extend any of the limits, conditions, agreements or exclusions of the policy to which this endorsement is attached.

I _____ (print/type name), warrant that I have authority to bind the below-listed insurance company and by my signature hereon do so bind this company. Signature: _____ Authorized Representative (ORIGINAL SIGNATURE required on copy furnished to the Board of Harbor Commissioners) Title: _____ Organization: _____ Address: _____ Telephone: _____	Report claims pursuant to this insurance to: Name: _____ Address: _____ Telephone: _____
--	--

Type of Coverage Professional Liability	Limits of Liability From _____ To _____ ☐ Per Claim ☐ Per Occurrence	Policy Period ☐ Deductible \$ _____ ☐ Self-insured Retention \$ _____ For _____ (Coverage) ☐ Per Claim ☐ Per Occurrence
--	--	--

Other Conditions:

Named Insured and Address

Insurance Company	Policy Number	Endorsement Number	Effective Date of Endorsement

Exhibit I – Equal Benefits Ordinance

Sec. 10.8.2.1. Equal Benefits Ordinance.

Discrimination in the provision of employee benefits between employees with domestic partners and employees with spouses results in unequal pay for equal work. Los Angeles law prohibits entities doing business with the City from discriminating in employment practices based on marital status and/or sexual orientation. The City's departments and contracting agents are required to place in all City contracts a provision that the company choosing to do business with the City agrees to comply with the City's nondiscrimination laws.

It is the City's intent, through the contracting practices outlined in this Ordinance, to assure that those companies wanting to do business with the City will equalize the total compensation between similarly situated employees with spouses and with domestic partners. The provisions of this Ordinance are designed to ensure that the City's contractors will maintain a competitive advantage in recruiting and retaining capable employees, thereby improving the quality of the goods and services the City and its people receive, and ensuring protection of the City's property.

(c) Equal Benefits Requirements.

(1) No Awarding Authority of the City shall execute or amend any Contract with any Contractor that discriminates in the provision of Benefits between employees with spouses and employees with Domestic Partners, between spouses of employees and Domestic Partners of employees, and between dependents and family members of spouses and dependents and family members of Domestic Partners.

(2) A Contractor must permit access to, and upon request, must provide certified copies of all of its records pertaining to its Benefits policies and its employment policies and practices to the DAA, for the purpose of investigation or to ascertain compliance with the Equal Benefits Ordinance.

(3) A Contractor must post a copy of the following statement in conspicuous places at its place of business available to employees and applicants for employment: "During the performance of a Contract with the City of Los Angeles, the Contractor will provide equal benefits to its employees with spouses and its employees with domestic partners." The posted statement must also include a City contact telephone number which will be provided each Contractor when the Contract is executed.

(4) A Contractor must not set up or use its contracting entity for the purpose of evading the requirements imposed by the Equal Benefits Ordinance.

(d) Other Options for Compliance. Provided that the Contractor does not discriminate in the provision of Benefits, a Contractor may also comply with the Equal Benefits Ordinance in the following ways:

(1) A Contractor may provide an employee with the Cash Equivalent only if the DAA determines that either:

a. The Contractor has made a reasonable, yet unsuccessful effort to provide Equal Benefits;
or

b. Under the circumstances, it would be unreasonable to require the Contractor to provide Benefits to the Domestic Partner (or spouse, if applicable).

(2) Allow each employee to designate a legally domiciled member of the employee's household as being eligible for spousal equivalent Benefits.

(3) Provide Benefits neither to employees' spouses nor to employees' Domestic Partners.

(e) Applicability.

(1) Unless otherwise exempt, a Contractor is subject to and shall comply with all applicable provisions of the Equal Benefits Ordinance.

(2) The requirements of the Equal Benefits Ordinance shall apply to a Contractor's operations as follows:

a. A Contractor's operations located within the City limits, regardless of whether there are employees at those locations performing work on the Contract.

b. A Contractor's operations on real property located outside of the City limits if the property is owned by the City or the City has a right to occupy the property, and if the Contractor's presence at or on that property is connected to a Contract with the City.

c. The Contractor's employees located elsewhere in the United States but outside of the City limits if those employees are performing work on the City Contract.

(3) The requirements of the Equal Benefits Ordinance do not apply to collective bargaining agreements ("CBA") in effect prior to January 1, 2000. The Contractor must agree to propose to its union that the requirements of the Equal Benefits Ordinance be incorporated into its CBA upon amendment, extension, or other modification of a CBA occurring after January 1, 2000.

(f) Mandatory Contract Provisions Pertaining to Equal Benefits. Unless otherwise exempted, every Contract shall contain language that obligates the Contractor to comply with the applicable provisions of the Equal Benefits Ordinance. The language shall include provisions for the following:

(1) During the performance of the Contract, the Contractor certifies and represents that the Contractor will comply with the Equal Benefits Ordinance.

(2) The failure of the Contractor to comply with the Equal Benefits Ordinance will be deemed to be a material breach of the Contract by the Awarding Authority.

(3) If the Contractor fails to comply with the Equal Benefits Ordinance the Awarding Authority may cancel, terminate or suspend the Contract, in whole or in part, and all monies due or to become due under the Contract may be retained by the City. The City may also pursue any and all other remedies at law or in equity for any breach.

(4) Failure to comply with the Equal Benefits Ordinance may be used as evidence against the Contractor in actions taken pursuant to the provisions of Los Angeles Administrative Code Section 10.40, et seq., Contractor Responsibility Ordinance.

(1) If the DAA determines that a Contractor has set up or used its Contracting entity for the purpose of evading the intent of the Equal Benefits Ordinance, the Awarding Authority may terminate the Contract on behalf of the City. Violation of this provision may be used as evidence against the Contractor in actions taken pursuant to the provisions of Los Angeles Administrative Code Section 10.40, et seq., Contractor Responsibility Ordinance.

Exhibit J – City Travel & Per Diem Expense Requirements

The City Administrative Officer (CAO) publishes travel allowances as part of its annual Departmental Manual for the Budget System. The Travel Allowances provides amounts for airfare, per diem en route and per diem at destination. Allowances apply equally to employees, executives and commissioners. The following define how travel allowances and amounts are applied by the Controller's Office, Demand Audit Division. Information is provided for domestic and international travel, and a section is dedicated to other travel considerations.

A. DOMESTIC TRAVEL

When requesting approval to travel, travelers should be aware that expenses are limited to those authorized in the travel request. Expenses in excess and in addition to the planned and authorized expenses will be closely reviewed and may not be approved or reimbursed.

The Controller's Office shall consider the following as expense categories for travel requests and travel expense statements:

- Transportation (including airfare, rail, boat, or mileage)
- Per Diem En Route
- Per Diem At Destination to include the following:
 - Lodging
 - Meals
 - Other Expenses as defined by the Traveler

Transportation (Airfare, rail, etc.)

Airfare is an amount provided for transportation to and from the traveler's destination. As detailed in the CAO's Travel Allowances, departments may use web-based travel agencies to estimate airfare. The Travel Allowances states that airfares should be based on a round trip flight, coach class, unrestricted ticket. In accordance with the Administrative Code, all airfare shall be for the lowest regular fare available for regularly scheduled airlines for the date and time selected.

Per Diem En Route

Per diem en route is an amount that is provided for transport to and from the traveler's home. Travelers may choose to use this amount for taxi, shuttle, or parking at the airport. Travelers are encouraged to use off-airport or economy parking. Excessive parking amounts will not be reimbursed. The per diem en route amount is \$33 and may increase to a maximum of \$55 for travel to multiple destinations.

Per Diem at Destination

Per diem at destination is an amount that is provided for expenses at the travel destination. Typically, this amount should cover lodging and meals. In accordance with Administrative Code, hotel and restaurant selections shall be with moderately priced establishments of acceptable quality. The Controller's Office will not reimburse first class, premiere, or luxury accommodations. The per diem at destination shall be calculated exclusive of the amounts for airfare, registration, and per diem en route.

Miscellaneous and Other Expenses

Other incidental or miscellaneous expenses include taxi, automobile rental, laundry, city business and personal telephone calls, gratuities and other minor or miscellaneous expenses. Other incidental or miscellaneous expenses shall be detailed at the time the travel request is submitted for approval.

B. INTERNATIONAL TRAVEL

Transportation (Airfare, rail, etc.)

Certain allowances are provided for International travel. When traveling internationally, travelers may purchase business class tickets for flights in excess of six hours. While traveling on the continent, the

Controller's Offices requests that individuals be cognizant of Administrative Code requirements for air travel and in the selection of hotels and restaurants.

Per Diem En Route

As with domestic travel, per diem en route is an amount that is provided for transport to and from the traveler's home. Travelers may choose to use this amount for taxi, shuttle, or parking at the airport. Travelers are encouraged to use off-airport or economy parking. Excessive parking amounts will not be reimbursed. The per diem en route amount is \$33 and may increase to a maximum of \$55 for travel to multiple destinations.

Per Diem at Destination

For international travel, travelers may comply with federal international per diem amounts as detailed by the federal government at: <https://secureapp2.hqda.pentagon.mil/perdiem/pdrates.html>. When preparing travel expense statements for international travel, travelers are required to provide conversion amounts for all transactions.

Travelers may use the interactive conversion tool at: <http://www.oanda.com/convert/classic%20>. All travel expense statements must be submitted in United States dollars (USD). All other per diem at destination requirements apply.

C. OTHER TRAVEL CONSIDERATIONS

Commissioner Travel

There are no separate policies and procedures that apply to commissioner travel or expenses. City travel policies and procedures with respect to travel accommodations and expenses apply to commissioners as well. Travel Allowances, as discussed in this document, apply equally to employees, executives and commissioners.

City Council must approve travel to a foreign country for more than one commissioner. This restriction is contained in Administrative Code Section 4.242.9.a. When evaluating travel for more than one commissioner to a foreign country, the Controller's Office requires a copy of the City Council action permitting the travel.

Exceptions

Requests for exceptions to the policies, procedures and guidelines must be submitted in writing, are subject to approval of POLA Management and the Controller's Office, and travel for which the exception is being requested must meet with the POLA's and City's goals and objectives. Exceptions could include higher than normal airfare, hotel rates, or special accommodations.

When considering requests for exceptions, the Controller's Office shall evaluate the reasonability of the request by applying good accounting practices and procedures, Charter and Administrative Code requirements, and determine whether permitting the exceptions meets with the general spirit of the City's practices for the use of public funds.

Expense Statements

When reviewing travel expense statements, the Controller's Office will ensure that all expenses meet the guidelines above, and may determine that certain expenses are not reimbursable. Those expenses not supported by bona fide receipts are subject to review and approval by the Controller's Office and may not be approved or reimbursed.

A bona fide receipt is considered to be one that provides the name of the establishment, date and time of the transaction, and a description of each item that was purchased. Receipt requirements are detailed by the Internal Revenue Service (IRS) in a number of their publications.

In the review of travel expense statements, the Controller's Office reserves the right to request additional information related to all expenses appearing on the travel expense statement, including conference and meeting agendas, hotel invoices or folios, and restaurant and other receipts.

All travel expense statements must be submitted to the Controller's Office within 30 (calendar) days of completion of travel. Travel (cash) advances are considered resolved when the travel expense statement is submitted and all items are accepted and approved by the Controller's Office. Items that are not resolved within 120 (calendar) days are reported to the IRS per IRS requirements. Travel (cash) advance amounts that are reported to the IRS appear on the traveler's W-2 as additional income.

Hosting

All hosting expenses shall comply with the Los Angeles Harbor Department Sponsorship/Hosting Policy. Hosting expenses shall be clearly defined on travel expense statements by Harbor staff, including the name, title and company of the individual(s) being hosted. This information is required to create a complete record of activities and of the use of public funds, and to create a complete audit trail. Harbor staff should be aware that once documents are approved by the Controller's Office, they are subject to inspection by the public and the media under the California Public Records Act.

Exhibit K -- Property Insurance - Loss Payable Endorsement

<This item has been intentionally deleted.>

Exhibit L - Ocean Marine Liability - Additional Insured Endorsement

<This item has been intentionally deleted.>

Exhibit M – System Frequencies

UHF Repeater Channels		
Ch #	Tx Freq. (MHz)	Rx Freq. (MHz)
1	453.250	458.250
2	472.1875	475.1875
3	472.2125	475.2125
4	508.0375	511.0375

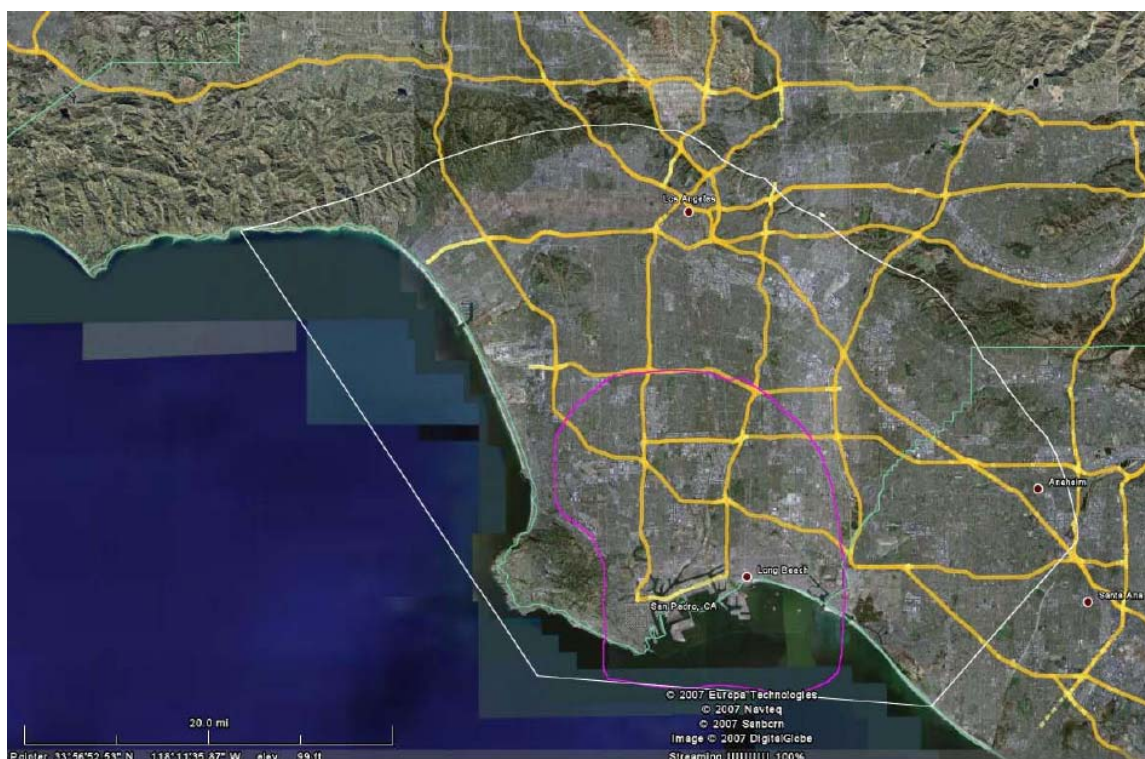
The remainder of this Section includes all applicable license information.

Exhibit N – Equipment Sites

Wide Area Network Site				
Site Name	Latitude	Longitude	Elevation (Ft. AMSL)	Tower Height (Ft. AGL)
300 East Water Street				
Repeater Sites				
Site Name	Latitude	Longitude	Elevation (Ft. AMSL)	Tower Height (Ft. AGL)
Warehouse #1				
Signal Hill				
Dispatch Console Sites				
Site Name and Address				# Positions
LAPP Dispatch Center, 300 East Water Street, Wilmington				3

Exhibit O – Desired Coverage Area

The bounded areas of the following map show the desired mobile and portable radio coverage areas. These boundaries shall be overlaid on a composite coverage map that reflects the predicted coverage area of the vendor's proposed system design. Refer to RFP Section 3.4.14 for coverage design criteria and coverage map instructions.



Bounded Areas: White = Desired mobile coverage. Pink = Desired portable coverage.

Exhibit P – Applicable TIA/EIA-102 Documents

General Requirements	
TSB102-A	System and Standards Definition
	Project 25 Statement of Requirements
Air Interface & System Related Standards	
TIA-102.BAAA-A	FDMA – Common Air Interface
TIA-102.BAAB-B	Common Air Interface Conformance Test
TIA-102.BAAC-A	Common Air Interface Reserved Values
TIA-102.BAAD	Common Air Interface Description for Conventional Channels
TIA-102.BABA	Vocoder Description
TIA-102.BABB	Vocoder Mean Opinion Score Conformance Test
TIA-102.BABC	Vocoder Reference Test
TIA-102.BACA	Inter-RF Subsystem Interface Messages and Procedures for Voice Service
TIA-102.BACA-1	Inter-RF Subsystem Interface Messages and Procedures –Addendum 1 Erratum 1 to Fix Errors and Omissions
TIA-102.BACA-2	Inter-RF Subsystem Interface Messages and Procedures for Voice Services Addendum 2 – Trunked Console ISSI
TIA-102.BACA-3	Inter-RF Subsystem Interface Messages and Procedures for Voice and Mobility Management Services Addendum 3
TIA-102.BACD	Inter-RF Subsystem Interface (ISSI) Messages and Procedures for Supplementary Data
TIA-102.BADA	Telephone Interconnect Requirements and Definitions (Voice Service)
TIA-102.BADA-1	Telephone Interconnect Requirements and Definitions (Voice Service) Addendum 1 - Conventional Individual Calls
Equipment Standards & Conformance	
TIA-102.CAAA-B	Digital C4FM/CQPSK Transceiver Measurement Methods
TIA-102.CAAB-B	Land Mobile Radio Transceiver Recommendations Project 25 – Digital Radio Technology C4FM/CQPSK Modulation
TIA-102.CABB	Interoperability Test Procedures Over-the-Air Rekeying (OTAR)
TIA-102.CABC	Interoperability Testing for Voice Operation in Trunked Systems
TIA-102.CACA	Inter RF Subsystem Interface (ISSI) Measurement Methods for Voice Services
TIA-102.CACB	Inter-RF Subsystem Interface (ISSI) Performance Recommendations for Voice Services

TIA-102.CADA	Fixed Station Interface Conformance Test Procedure
Trunking & Encryption Related Standards	
TIA-102.AAAA-A	DES Encryption Protocol
TIA-102.AAAB-A	Digital Land Mobile Radio – Security Services Overview
TIA-102.AAAC	Conformance Test for the Project 25 DES Encryption Protocol
TIA-102.AAAD	Block Encryption Protocol
TIA-102.AABA	Trunking Overview
TIA-102.AABB-A	Trunking Control Channel Formats
TIA-102.AABC-B	Trunking Control Channel Messages - New Technology Standards Project – Digital Radio Technical Standards
TIA-102.AABC-B-1	Trunking Control Channel Messages Addendum for Link Layer Authentication Service
TIA-102.AABF-A	Link Control Word Formats and Messages
TIA-102.AABF-A-1	Link Control Word Formats and Messages Addendum 1 Link Layer Authentication Service
TIA-102.AACA	Digital Radio Over-the-Air Rekeying (OTAR) Protocol
TIA-102.AACA-1	OTAR Protocol Addendum 1 - Key Management Security Requirements for Type 3 Block Encryption Algorithms
TIA-102.AACA-2	OTAR Protocol Addendum 2 – Data Link Independent OTAR
TIA-102.AACB	Over-the-Air-Rekeying (OTAR) Operational Description
TIA-102.AACC-A	Conformance Tests for Project 25 Over-The-Air Rekeying (OTAR) Protocol
TIA-102.AACD	Digital Land Mobile Key Fill Device (KFD) Interface Protocol
Data Related Standards	
TIA-102.BAEA	Data Overview
TIA-102.BAEA-1	Data Overview - Addendum 1 – USB/PPP
TIA-102.BAEB-A	Packet Data Specification
TIA-102.BAEC	Circuit Data Specification
TIA-102.BAEE	Radio Control Protocol (RCP)
TIA-102.BAEE-A	Radio Management Protocols
TIA-102.BAHA	Fixed Station Interface Messages and Procedures

Telecommunications System Bulletins	
TSB102.AABD	Trunking Procedures
TSB102.AABF-1	Link Control Word Formats and Messages - Addendum 1 Multiband Operations
TSB102.AABG	Conventional Control Messages
TSB102.BAAB-A-1	FDMA Common Air Interface Conformance Test - Addendum 1
TSB102.BACC-A	Inter-RF Subsystem Interface Overview
TSB102.BAFA-A	Network Management Interface Overview
TSB102.CABA	Interoperability Test Procedures Conventional Voice Equipment
TSB102.CAAC	Mobile Radio Push-to-Talk Audio Interface – Definitions Methods of Measurement
P25 System Test Lab Conformance	
NIST Handbook 153:2007	Laboratory Recognition Process for Project 25 Compliance Assessment

Exhibit Q – P25 Statement of Requirements

The complete Project 25 Statement of Requirements has been provided separately. As part of their response, vendors shall complete the three (3) rightmost columns based on the legend as provided, and return the completed document with their proposal. Responses to the matrix will be included as part of any contract award under this RFP and may be considered during the detailed design, or later phases of the project.

Exhibit R – Drawing Format Sample

This section contains a sample of the desired drawing format as described in RFP Section 4.6.2.

<Insert Sample Drawing Here>

Exhibit S – Proposal Price Information Form

Vendors shall use the format on the following page to prepare and submit their price proposal. The actual form has been provided in a separate Microsoft Excel worksheet, allowing easier input and evaluation.

LAPP will not accept “one-line” summary system pricing.

Vendors MUST use this form and Contract Line Item Number (CLIN) structure.

1 Overview

There are three worksheets within the MS Excel workbook:

- (1) Required Items
- (2) Optional Items
- (3) Trunking Capability (Budgetary Estimate)

The Required Items are broken down into the following categories:

- Equipment Items
- Implementation Services
- Annual Recurring Costs

The Optional Items include Network Monitoring. Space has been provided for vendors to price additional value added items

The vendor shall provide pricing for each separate Contract Line Item Number (CLIN) within each category. Each CLIN has been cross referenced to the applicable RFP sections(s).

Space has been provided for additional CLINs that support their proposed system design.

2 Instructions

1. Enter the name of your company and contact information in the space provided.
2. Enter the complete price for each individual CLIN.
3. Submit printed and electronic versions of the complete form with your proposal in accordance with the accompanying RFP instructions.

Exhibit T - Evaluation Process/Selection Criteria

1 Project:

The Port Police is undertaking the Radio System Buildout Project and will use a competitive bid process to select a vendor to design and implement a new radio system. The desired radio system is compliant with the APCO Project 25 standards and meets the operational needs of the Port Police.

1.1 Review Panel:

A Review Panel consisting of POLA managers and staff with a cross section of skills and perspectives was assembled to review and evaluate the vendor bids and make a final vendor selection. Participation includes Port Police operations staff (project manager, police officer, radio dispatcher, and Port Police technical staff) and at least one member outside of the awarding division. Although the Executive Director of the Chief of Police and the Executive Director of the Harbor Department will not directly participate in the review, evaluation and final selection process, timely notifications will be provided to the respective offices.

The membership of the Review Panel includes:

- Julia Kirwan - Manager of the Port Police Research, Planning and Integration Section (RPI)
- Raul Velasco, - Communications Engineer - RPI
- Representatives from the Research, Planning and Integration Staff
- Sergeant Nathen Ewert - Port Police Security System Specialist
- Jane Broadwell – Information Technology Division (or delegate)
- Radio System consultant to Port Police

Review Panel members will be presented to Contracts and Purchasing Division and the Executive Director for approval.

Potential members of the Selection Committee will be asked to disclose, in writing, any possible conflicts of interest through their participation in the selection process. Should conflict exist, the potential member will be excused from participation on the Review Panel.

1.2 Process:

The following evaluation process will be followed:

1.2.1 Proposal Review:

- The Request for Proposals is expected to be published sometime in fourth quarter of calendar year 2008.
- Upon receipt, the proposals will be distributed to the Review Panel along with the Evaluation Criteria and selection matrix for assigning numerical scores to each proposal.
- Meetings will be scheduled to discuss panel members' assessments and issues/concerns with the responsiveness of the bids and the qualifications of the vendors.

- Reference checks will be conducted to evaluate each proposer's ability to perform the statement of work, their technical expertise, past experience and other related barometers.
- The Review Panel shall be informed of the OMB Circular A-133 relative to contracts utilizing Federal Funds and will abide by the requirements that prohibit the Port from contracting with or making sub awards to parties that are suspended or disbarred under this Circular. Staff will obtain certification from selected contractor stating that the organization they represent and its principals are not suspended or disbarred.
- The Review Panel will decide if vendor interviews can further assist in the evaluation. Individual vendor interviews will be scheduled, as necessary.

1.2.2 Vendor Evaluation:

- Numerical scores and weights shall be assigned to each factor of the evaluation criteria and each member of the Review Panel shall complete a separate and independent evaluation for each proposer.
- Scores assigned by each member of the Review Panel shall be tallied to reach the final score for each vendor.
- Based on the interview results, the Review Panel will recommend the vendor who the members believe to be best qualified to successfully implement the Radio System Buildout for the Port Police.
- Appropriate Senior Management staff will be notified of the results of the interviews and make available the selection documentation prior to conducting contract negotiations.
- Correspondence to Senior Management requesting approval to move forward with the contract negotiations will be prepared. Copy of correspondence will be furnished to Contracts and Purchasing Division and the Office of the City Attorney.

In general, decisions of the panel will be based on discussions and consensus building. This process has proved effective in developing a common understanding of the value of the different proposed approaches and vendor capabilities.

1.2.3 Evaluation Criteria:

The Request for Proposal identifies the following criteria upon which the vendor proposals would be evaluated.

- Vendor's understanding of Scope of Work.
- Vendor's proposed technical solution.
- Vendor's organizational capabilities
- Vendor's past performance
- Vendor's proposed project implementation schedule
- Vendor's proposed maintenance support
- Proposed project price, including both initial cost and anticipated cost of ownership for 5-years.

Exhibit T - RFP SELECTION EVALUATION FORM

PROJECT: PORT POLICE GEOGRAPHIC INFORMATION SYSTEMS CONSULTING SERVICES

SCORING GUIDELINES: (Range 0-5) 0 – not included/non responsive; 1 – Marginal Abilities, Serious Deficiencies; 2 – Adequate with Minor Deficiencies; 3 – Adequate, Standard-Acceptable; 4 – Well Qualified;

5 – Exceptionally Well Qualified. **Total points possible: 100**

Firm Name: _____

Evaluated by: _____

Date: _____

CRITERIA TO BE RATED		RATER'S SCORE	WEIGHING FACTOR	WEIGHTED SCORE
Understanding of the Project	Does the quality of the vendor's proposal demonstrate a clear understanding of the scope of work?		2	
Proposed Technical Solution	Does the quality of proposed technical solution adhere with the requirements of the RFP?		6	
Organizational Capabilities	How long has the company been in business? Has the company done similar work? Level of expertise in subject matter areas? Qualification and experience of proposed personnel for requested services. On-site availability of team and project manager?		6	
Project price, including initial cost and anticipated cost of ownership for 5 years	Are competitive rates and fees proposed? Are proposed budget management, fees and staff hours proposed and clearly defined? Is total cost of 5-year ownership reasonable?		4	
Past performance	Does the vendor demonstrate successful and positive project experience and firm capabilities in radio systems design, development and implementation?		6	
Project implementation schedule	Is the implementation schedule reasonable, does it have clearly delineated milestones, and does it meet licensing requirements of the Port?		2	
Proposed maintenance support	Does the vendor supply maintenance and support that meets the requirements of the project?		2	
Small Business Program	Has the level of Small Business participation been met (5%)?	YES/NO		
Administrative Requirements • Affidavit (Prime) • Contract Description Form (Prime and subs) • Insurance – Letter of Intent (Prime)	Are all required forms submitted and are they complete and accurate?	YES/NO		
			TOTAL POINTS	