

TOWN OF EAST WINDSOR CONNECTICUT

Qualifications & Proposal for a LMR Analysis

Land Mobile Consultant

FEBRUARY 19, 2021

NEW ENGLAND RADIO CONSULTANTS LLC Shelton, CT Center Ossipee, NH

Shelton, CT

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Letter of Transmittal

William Freeman, Communications and Technology Supervisor Town of East Windsor, CT 25 School Street East Windsor, CT 06088

Request for submission of qualifications for an independent consultant for the Town's LMRs.

New England Radio Consultants LLC is pleased to summit the attached proposal to the Town of East Windsor in response to the Town's Request for an independent consultant to evaluate the Town's public safety LMR communication systems.

The plan attached outlines a proposal for consulting services to provide the Town with the necessary guidance to upgrade and seamlessly migrate public safety agencies to a new or upgraded communications platform.

As shown in my attached resume, I have many years of experience in highly technical analog and digital public safety communications systems. 25 years ago, I was the architect of the Connecticut State Police digital communications system. Until my retirement from the State of Connecticut, Department of Emergency Services and Public Protection, I held the position of Public Safety Director of Telecommunications. During my tenure, the system received four major life cycle upgrades and was expanded to include all relevant requirements of the APCO P25 standard. The system is now used by all State agencies, DOJ, Federal agencies and many Connecticut municipalities.

Since leaving State service, I have used my technical skills to actively consult for a variety of public safety agencies, including Northwest Connecticut Public Safety Dispatch, the Town of Newington, the Town of Woodbridge, the Town of North Haven, Yale University Public Safety and the Cromwell Fire District. Past experience shows New England Radio Consultants LLC is vendor and manufacturer neutral.

New England Radio Consultants LLC has read the RFP, meets and does not take exception with all the requirements of Sections I through XIV. New England Radio Consultants LLC further agrees to the insurance provision outlined in Section XIII with the exception of Workers Compensation Insurance. In accordance with Connecticut State Law, as a sole proprietor, I am not required to obtain Workers Compensation Insurance. Proof of additional required insurance will be provided before the Town issues a PO for this project.

Paul Zito

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Project Development

New England Radio Consultants LLC (NERC) is submitting this RFP in response to the Town's desire to improve its public safety communication systems. RFP due date February 19, 2021. The Town of East Windsor is seeking proposals from qualified consultants to provide an overview of their current radio systems. NERC will identify future functional and performance requirements, make recommendations on upgrade/replacement strategies and, in a subsequent contract, oversee the procurement and implementation of the chosen replacement system.

The plan below outlines a proposal for consulting services to provide the Town with the necessary guidance to seamlessly migrate public safety agencies to a new or upgraded communications platform.

New England Radio Consultants LLC will provide consulting services that will assist the Town of East Windsor to:

- Plan for and acquire a replacement/upgrade for its existing Land Mobile Public Safety Radio Systems (LMR's).
- Analyze the Town's current operations to identify areas and services where the Town's existing
 radio systems and associated infrastructure could be leveraged to meet the Town's immediate
 and future communications needs.
- Identify opportunities for conventional LMR replacement systems from qualified communications providers which could serve the Town's public safety communications and interoperability needs.
- Identify both the operational considerations and training requirements for the replacement radio system and any potential enhancements or extensions which might be put in place to meet the Town's communications needs for its public safety community.
- Analyze the Towns current systems for reliability, workmanship, survivability and overall system coverage.
- Review the possibility of using the State's CLMRN trunked radio system as a Town-wide first responder communications replacement system.
- Participate in meetings as necessary to address user needs and technical requirements.



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Project Phases (Overview)

This proposed project will be divided into three (3) phases:

Phase 1 Planning Phase will include, but may not be limited to:

- a. A comprehensive user needs assessment.
- b. An analysis of existing communication sites as they pertain to a conventional LMR radio solution.
- c. Analysis of conventional LMR verses migration to the State CLMRN trunked radio system.
- d. An analysis of future communications sites as they pertain to a replacement LMR radio system/s solution.
- e. Consultation concerning replacement options and system enhancements.
- f. Cost estimate(s) for budgetary purposes.

Phase 1 timeline is approximately 8 to 13 weeks, subject to the Governors executive orders on Covid-19.

Proposed outline of phase 2 and 3 of this project to be priced when the project parameters are better defined.

Phase 2 Acquisition Support will include:

- a. Assisting the Town in negotiations with a chosen supplier for the replacement of the existing public safety LMR radio systems.
- b. Assisting the Town in negotiations with the local and state agencies in design, integration and development of an interoperable LMR communications solution.
- c. A "Functional Design Plan" for replacement of the Town's existing LMR systems.
- d. Formulate a site development plan for civil work that saves the Town vendor price markup on construction expenses.
- e. If appropriate, assist the Town in evaluation of materials and pricing recommended by chosen vendor based on the State of Connecticut master contract *A-99-001*.
- f. A technical, non-legal, review of any documents between the Town and a chosen vendor.



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Phase 3 Implementation and Acceptance will include:

- a. Supervision of the installation of the conventional LMRs or trunked radio system solution.
- b. Supervision of the integration of interoperability requirements outlined by the Town.
- c. Coordinate site leases for additional sites that are identified as system critical.
- d. Review of the certification of documented system coverage testing results.
- e. Assist with the closeout of any documented punch list items.



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Scope of Work

Phase 1 - Planning

New England Radio Consultants LLC will research and produce a Needs Assessment/Planning Report. The system design will include operability and regional interoperability solutions. Town agencies that would be served by the proposed system include the Police Department, Fire Department, EMS, Department of Public Works and Town owned schools.

This research and reporting will include the following:

- Distribute a "Needs Analysis" questionnaire to each discipline to determine present and conceptual needs of each department.
- Meet with current vendors and Town public safety stake holders to assess current conditions and needs as they compare to the questionnaire.
- Analysis of all conditions (including dispatch), TIA_R-56 grounding, operability, coverage, signal
 propagation and functionality of the desired radio system, including identification of the
 capabilities, dependencies and areas for potential improvement or enhancement.
- Identification of desired levels of regional interoperability and analysis of desired methods of integration.
- Explore the possibility of partnering with regard for the possibility of cost sharing with area municipalities and possible migration to the State CLMRN trunked radio system.
- Analysis of the current location and functionality of LMR's infrastructure sites to include their suitability for use with the replacement system/s.
- Identification and analysis of potential additional (or alternate) infrastructure site locations to include their suitability and desirability for use with the replacement LMR.
- Analysis of the condition and functionality of existing infrastructure site ancillary equipment (UPS, generator, climate control, grounding, etc.) and the suitability (and desirability) of re-use of some of this equipment with the new radio system/s.
- Identification of alternate methods to the used in lieu of leased line backhaul between site locations. (i.e. microwave, point-to-point radio, point-to-multipoint radio, fiber, etc.)
- Identification of additional features, functionality and/or enhancements that current system users may find desirable or practical, to include but not be limited to, OTAR, OTAP, data capabilities, enhanced and/or system-wide encryption, interoperability alternatives, GPS based geolocation, etc.
- Identification of alternative or enhanced subscriber equipment including the need (or desirability) to procure special purpose subscriber equipment (covert, intrinsically safe, etc.).
- Identification of best practices for the new radio system/s as they relate to system durability, sustainability, redundancy, disaster recovery and the elimination of single points of failure.
- Work with the Town to identify "Areas of Concern" were radio coverage is mandatory and propose solutions to enhance communications coverage at these indicated locations.



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Phase 2 – Acquisition Support

NERC will work with the desired vendor, or its designated representative, to develop a functional design plan for the replacement communication radio system/s. The functional design will include:

- a. Functional requirements for the replacement LMRS.
- b. High level technical requirements for the replacement LMRS.
- c. Equipment requirements for the replacement LMRS.
- d. Conduct a System Design Review with the chosen vendor to insure the complete understanding of the vendor's scope of work.
- e. Identification of a timeline for acquisition, implementation, cutover, testing and acceptance of a complete replacement LMRS.

Phase 3 – Implementation and Acceptance

The installation of a replacement LMR communication systems is a highly technical endeavor and is a critical part of the Town's public safety communications network. The following generally describes the services to be provided by New England Radio Consultants LLC during the LMR's replacement and implementation of replacement radio system/s:

- Assisting the Town in establishing a Project Management process to include development of a schedule for regular Project Management meetings, development of an implementation timeline and development of a project item tracking and reporting methodology.
- b. Attendance at Project Management meetings and/or conference calls as may be necessary.
- c. Coordinate services provided to the Town by the chosen supplier or its designated service agency.
- d. Provide technical advice and assistance to the Town's project team or designated Communication Manager.
- e. Tracking project action items and expediting their completion.
- f. Assisting in the review of any documents submitted by the desired vendor for approval, including, but not limited to any preliminary and final system designs or change orders.
- g. Assisting the Town in overseeing the proper installation of any system component or subsystem.
- h. Assisting the Town in creating and maintaining a Master Punch List of items relating to deficiencies in operation, installation or function and making recommendations for resolving the deficiency as appropriate.
- i. Assisting the Town in the review of documents submitted by chosen vendor for approval related to acceptance or rejection of any supplier field test(s), or acceptance or rejection of any installed components, subsystems or equipment provided by chosen vendor or its suppliers.
- j. Assisting the Town in overseeing the performance and coverage testing, to include ensuring that the coverage testing methodology used is robust and accurate.
- k. Assisting the Town with the review of any performance coverage testing acceptance documents.



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Pricing (New England Radio Consultants LLC)

Until the wide range of possible vendor solutions are evaluated and a vendor is chosen, pricing for phase 2 and 3 cannot be defined. Phase 1 is a detailed, complex first step in the procurement of the replacement communication system. The completion of phase 1 will include cost estimates for Phase 2 and 3.

Consulting services, Phase 1:

\$27,750 (Based on approximately 185 hours of work)

I propose the Town issue a "Not to exceed" PO for this phase. Consulting service costs will be billed monthly, on an hourly rate \$150/Hr. Upon the completion of Phase 1, any remaining funds can be transferred to phases 2 and 3. Billing for Phase 1 will be for actual consulting services provided. Reasonable travel time and phone consultations to the Town's point of contact or his/her designee will not be billed.

Any changes in scope must be agreed to in writing with the Town of East Windsor and New England Radio Consultants, LLC

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Insurance Requirements

New England Radio Consultants LLC agrees to the Towns insurance requirements and will issue a certificate of insurance naming the Town as an additional insured before a PO is issued. NERC will also provide proof of Professional Liability Insurance. In accordance with Connecticut State law, New England Radio Consultants LLC is exempt from workman's compensation coverage.



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PAUL H. ZITO

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OBJECTIVE

To provide leadership and technical skills in the design, installation and operation of sophisticated interoperable telecommunication systems.

SUMMARY

- Knowledgeable in system design of complex systems with excellent skills in transforming concepts into working designs.
- Excellent communication skills with strong ability to interact with all levels of management
- Meticulous and exacting work habits with strong supervisory and training skills.
- Computer literate: Working knowledge of software used for RF intermodulation calculations, microwave radio path calculations, radio frequency propagation, database, graphics, word processing, and synchronous communications
- FCC General Class Radio-telephone License #PG-1-66668
- APCO Certified Radio Technician #1-6616

EDUCATION

- State University of New York, Farmingdale
- AS degree in Electrical Technology
- Erricson GE, EDACS (Trunking) training school
- Motorola Astro (Trunking) training school
- FEMA COML certified
- FEMA NIMS certified



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EXPERIENCE

Owner of New England Radio Consultants LLC, March 2013 to present.

- Provide consulting services to the public safety community.
- Proven history of vendor neutrality.
- Able to work with a vast variety of manufactures and vendors to deliver quality public safety communications solutions.
- Experienced in project management, system experience and implementation.
- Experienced with simplex and simulcast systems.
- Experienced with analog and digital systems.
- Well versed in TIA R56 grounding standards

Connecticut Public Safety Director of Telecommunications, State of Connecticut Department of Emergency Services and Public Protection, Division of State Police July 2009 to March 2015(retired)

- Responsible for the overall operation of the \$160 million dollar Connecticut
 Statewide Interoperable Communications systems.
- Responsible for expansion and technology refresh of all systems including conventional, P25 Phase 2 Trunked and analog systems
- Supervised 9 employees and major contractors
- Interfaced with federal agencies on a "need to know" bases

Telecommunications Engineer II, State of Connecticut Department of Public Safety, Division of State Police November 2000 to 2009

Responsible for the supervising and managing of the Motorola and various subcontractors involved in the implementation for the State Police statewide radio system.

- Supervised the Electronic Maintenance Unit. This unit consisted of 2 lead
 Technicians, 7 Electronic Technicians and 1 secretary.
- Specify and evaluate telecommunications equipment and systems for the Department of Public Safety use.
- Represent the Department of Public Safety to other State, Federal and local entities.

Telecommunications Engineer I, State of Connecticut Department of Public Safety, Division of State Police November 1996 to March 2000

• Responsible for the primary design and writing of the RFP for the State Police statewide radio system.



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References

Kevin Glenn, Chief of Police Town of North Haven 8 Linsley Street North Haven, CT 06473 (203) 239-1616

This project included the analysis of all existing public safety communications systems for the Town of North Haven. Recommendations and pricing for replacements systems. Implementation of a multi-discipline P25 Public Safety communications system for Police, Fire and Public Works Departments. Project included backbone dispatch system, 3 console positions and subscriber units.

Kevin Halloran, Chief of Police Town of North Branford 260 Forest Road North Branford, CT 06472 (203) 484 - 2703

This project included the analysis of all existing public safety communications systems for the Town of North Branford. Recommendations and pricing of replacement P25 systems for Police, Fire and Public Works Departments. Project included backbone dispatch system, 2 console positions and subscriber units. This system is presently under review by the Town.

Anthony Genovese, Finance Director Town of Woodbridge 11 Meetinghouse Lane Woodbridge, CT 06525 (203) 389-3414

Implementation of a multi-discipline P25 public safety communications system for Police, Fire and Public Works Departments. Project included backbone dispatch system, 2 console positions and subscriber units.



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Duane Lovello Yale University Security, Director of Security 79 Howe Street New Haven, CT 06511 (203) 432-7197

A needs analysis and inventory report for Yale's main and West Campuses. Project culminated with a report that offered an in depth plan for a campus wide migration of sixteen desperate radio systems to a single P25 public safety platform.

Keith Chapman, Town Manager Town of Newington Newington, CT 06111 (860) 665-8507

This project included analysis, recommendations and pricing for a new, upgraded public safety radio system for the Town of Bethany Fire Department and Bethany Highway Department. This solution provided for the integration of the new dispatch system with Northwest Connecticut Public Safety Dispatch.

Susan Webster, former Executive Director
Northwest Connecticut Public Safety Dispatch
Now: City of Hartford, Director
Hartford Public Safety Complex
23 High Street
Hartford, CT 06103
(860) 757-4050

This project involved an analysis of legacy equipment to determine its usefulness and functionality at Northwest Connecticut Public Safety's new location in Waterbury CT.

The second phase of this project included moving and expanding the dispatch center from 5 dispatch positions to 17 dispatch and NG911 positions. NERC services included recommendations on system and power resources, radio network configuration, and integration with the State's Public Safety radio dispatch network, microwave and BTOP fiber network.



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