



TOWNSHIP OF WEST ORANGE

25 LAKESIDE AVENUE, WEST ORANGE, N.J. 07052

DEPARTMENT OF PUBLIC WORKS

ROBERT D. PARISI

Mayor

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LEONARD R. LEPORE

Director/Municipal Engineer

February 2, 2018

Frank J. Mescall, PE
Senior Associates
Mott MacDonald
111 Wood Avenue South
Iselin, New Jersey 08830-4111

RE: **REQUEST FOR PROPOSAL**
ENGINEERING DESIGN AND CONTRACT DOCUMENTS
FOR THREE EMERGENCY POWER GENERATORS
NJ OFFICE OF EMERGENCY MANAGEMENT
DISASTER NO. 4086
NJ ID 1817
HMGP-DR-4086-NJ-436 R

Dear Mr. Mescall:

The Township of West Orange requests proposals for engineering services to prepare plans specifications and bid documents for three emergency power generators at the following Municipal Buildings:

1. West Orange Municipal Building, 66 Main Street
2. West Orange Fire Station No. 2, 84 Washington Street
3. West Orange Fire Station No. 3, 93 Ridgeway Avenue

The emergency services include general civil engineering and mechanical, electrical and plumbing (MEP).

The Township applied to the New Jersey Office of Emergency Management, Hazard Mitigation Grant Program for funding for the three emergency power generators under the Disaster No. 4086. The Township received a grant in the amount of \$250,000 to fund these three emergency power generators. The New Jersey Identification No. is S1817. The full project number is HMGP-Dr-4086-NJ-436R

The tasks required under this proposal include the following:

1. Design, plans, specifications and bid documents for the three emergency power generators at the indicated locations including but not limited to:

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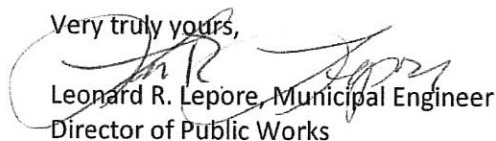
- A. Review of the NJOEM Application, attached;
- B. Review of the NJ OEM Grant requirements;
- C. Review and verification of emergency power generator sizes including power, voltage and phase requirements for each building.
- D. Design and specifications for each generator including a partial site plan at each location.
- E. Verification that the location of each emergency power generator has no conflicts with underground utilities or any underground storage tanks; This will include a sweep of all locations for emergency power generators with ground penetrating radar (GPR);
- F. Contracting Public Service Electric and Gas Company with a gas service inquiry for each location. Each facility is currently serviced by Natural Gas.
- G. Providing new main electrical service panel boxes with breakers for the West Orange Municipal Building and West Orange Fire Station No. 3;
- H. Preparation of Bid Documents. The three emergency power generators shall be included in one bid document.
- I. Attend the Bid Opening, review all bid submittals for compliance with bid documents and New Jersey Local Public Contracts Laws and prepare a contract award recommendation;
- J. Provide contract administration, management and construction observation including review and approval of design submittals and shop drawings, attendance of kick off and monthly progress meetings as needed, schedule of payment submissions, verification that all warranty and maintenance documents are submitted to the Township and project closeout.
- K. Grant Administration and Management as required by the Grant Agreement and Grant requirements including reimbursement request, see attachment.
- L. Preparation of any NJDEP permit requirements including air quality permits

Please submit your proposal by 10:00 A.M. February 16, 2018 to Leonard R. Lepore, P.E., Municipal Engineer, Township of West Orange, Department of Public Works, 25 Lakeside Avenue, West Orange, New Jersey 07052, with your submission. Please submit evidence of Professional Liability Insurance which names the Township of West Orange as an additional insured.

The Township is in the process of obtaining a timeline extension for this project. A Professional Services Contract will be awarded once the timeline extension is obtained which is expected later this summer. Once the professional services contract is awarded the successful firm will be authorized to proceed with the professional services contract within ten (10) days and then have 60 days to complete the design, specifications and bid documents for public bidding.

If you have any questions please feel free to contact me.

Very truly yours,


Leonard R. Lepore, Municipal Engineer
Director of Public Works

LRL/tp

enc.

file:request for proposal engineering design and contract documents power generators



Mr. Leonard R. Lepore
Municipal Engineer
Director of Public Works
Township of West Orange
25 Lakeside Ave.
West Orange, NJ 07052

Your Reference
HMGP-DR-4086-NJ-436 R

**Proposal for Professional Engineering Services Township of West Orange
Standby Power Generators for Three Township Facilities**

March 6, 2018

Dear Mr. LePore:

111 Wood Avenue South
Iselin NJ 08830-4112
United States of America

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www.mottmac.com/americas

Mott MacDonald (MM) wishes to thank you again for the opportunity to provide this proposal to **Provide Engineering Design and Contract Documents for Three Emergency Power Generators** for three separate facilities in the Township of West Orange. It is our understanding that the Township is in the process of securing HGMP funding for this project and that the cost for procurement and installation of the new generators as well as professional engineering services are eligible for reimbursement by FEMA. Accordingly, Mott MacDonald (MM) is pleased to provide you this professional design, bid and construction engineering phase services proposal so that the project can be designed, bid and constructed.

Understanding of Proposed Work

Given the foregoing, the Township desires the following:

West Orange Municipal Building, 66 Main Street

During the funding process, Mott MacDonald and the Township preliminarily sized the generator at 175 KW based upon the available information at that time. This sizing can be confirmed once we have confirmed electrical demand from utility billing. Due to the power requirements of the facility, it is recommended that a natural gas system be installed. The existing gas service for the building will be utilized or upgraded as needed.

In addition to the foregoing, the building electrical service would require modifications to allow for backup power. Installation of a new automatic transfer switch (ATS) is necessary ahead of the main power distribution panel for the building. The existing power distribution panel appears adequate to locate the new transfer switch and install the new conduit connection between the ATS and the existing power panel.

The new generator will be located on the South side of the building on a new reinforced concrete pad foundation, similar to the concept prepared for HMGP. The generator would be a "non-Walk-In" style enclosure, sound attenuated to meet

Township Ordinances for noise and would have a series of access doors as provided by the generator manufacturer. As discussed, unless applicable codes dictate otherwise, an access platform is not proposed to be included for this site.

In addition to the above, the only other site improvements will be trench restoration of disturbed pavement or lawn areas, installation of bollards and pavement markings immediately adjacent to the generator.

Fire House #2 (84 Washington Street) Proposed Improvements

Also during the funding process, the Township requested funding for a generator for the Fire House #2. The generator was sized at 75 KW.

MM's recommendation is to install the transfer switch inside the building in an electric room where the utility main service entrance will be located. This can be determined firm once we have received updated architectural and engineering plans for the building. Similar to the Municipal Building and due to the power requirements of the facility, it is recommended that a natural gas fueled system be installed.

The current concept plan shows that the new generator could be located South of the building in a grass area adjacent to the vehicle driveway for the Fire Station.

This generator would also be placed on a new reinforced concrete pad foundation. The generator would be a "non-Walk-In" style enclosure, sound attenuated to meet Township Ordinances for noise and would have a series of access doors as provided by the generator manufacturer. An access platform is not proposed to be included for this site.

In addition to the above, the only other site improvements will be trench restoration of disturbed pavement or lawn areas, installation of bollards and pavement markings immediately adjacent to the generator.

Fire House #3 (92 Ridgeway Avenue) Proposed Improvements

Also during the funding process, the Township requested funding for a generator for the Fire House #2. The generator was sized at 25 KW.

MM's recommendation is to install the transfer switch inside the building in the electric room where the utility main service entrance is located. This can be confirmed once we have surveyed and prepared plans for the building. Similar to the Municipal Building and due to the power requirements of the facility, it is recommended that a natural gas fueled system be installed.

The current concept plan shows that the new generator could be located West of the building in a grass area adjacent to the vehicle driveway for the Fire Station.

This generator would also be placed on a new reinforced concrete pad foundation. The generator would be a "non-Walk-In" style enclosure, sound attenuated to meet Township Ordinances for noise and would have a series of access doors as provided by the generator manufacturer. An access platform is not proposed to be included for this site.

In addition to the above, the only other site improvements will be trench restoration of disturbed pavement or lawn areas, installation of bollards and pavement markings immediately adjacent to the generator.

Engineering Services Proposal

In order to proceed with the foregoing, MM proposes the following professional engineering services.

Design and Bid Phase Services

- MM will coordinate with the NJOEM HMGP program to help administer and manage the Grant funds and the application of the funds to the project.
- MM will coordinate with the utility power company and Township to review and document the existing electrical service (s) to the facility. This documentation will formally support the sizing and configuration of the new generators
- Preparation of an update to the existing location survey at each building. Existing site features and a limited amount of topographic data will be selected. Property surveys or title deed searches are not included.
- Confirm sizing and location of generator and related equipment.
- Preparation of site plan, construction details and electrical plans for each site. Construction Notes necessary for bidding the project as a part of a public bid will also be prepared as will a construction sequence.
- Preparation of technical specifications to identify the features and standards of the proposed equipment for procurement. Technical specifications for site, concrete and electrical work will also be prepared.
- Preparation of bid documents that will incorporate Mott MacDonald standard front end specifications.
- A final construction cost estimate will also be prepared.
- Soil Borings are excluded. It is assumed existing Boring data is not required. If Soil Borings are needed, MM can provide a separate proposal for a boring subcontractor to perform the work.
- Coordinate for Ground Penetrating Radar Scan of each site by MM subcontracting firm. **It is estimated that this fee would not exceed \$12,000 for budgetary purposes, we have included this amount in our fee proposal.**

Bid Phase

During the project bid phase, MM will assist the Township in response to questions from bidders. MM will include the preparation of 1 addendum if necessary to respond to bidder questions.

MM will review the apparent low bidders experience and provide a bid award recommendations letter.

Design and Bid Phase Cost

We would propose the design and bid phase engineering services based upon a lump sum fee of \$60,000. We would prepare monthly invoices based upon a percent complete basis.

Construction Phase Services

Upon the Township successful bidding and awarding the project, MM would propose to proceed with Construction Phase Engineering Services based upon a time and materials basis for services actually required. Services would be provided based upon a rate schedule in place with the Township for the current year. Our services include the following:

- Conduct and coordinate project initiation services including project management, preparation of sealed plans for submission to the local code official are also included. Review of bonds and insurances is not included. Coordinate and attend a preconstruction meeting at Township Offices with Contractor and Township staff. MM would also prepare a notice to proceed letter to the Contractor after the meeting is held along with minutes from the meeting. ***We have budgeted 40 hours for this item.***
- Review contractor's initial submittals and shop drawings for site and installation work. Shop Drawing review of the contractor's shop drawings for the generator equipment as well as for equipment testing, O&M manuals and service agreement for conformance with the contract. Only one round of submittal review and comments are included. Value Engineering review or additional reviews are not included in the proposal. ***We have budgeted 40 hours of time for this item.***
- MM will perform primarily part-time inspection services, however during trenching and other excavations, limited full-time inspection is proposed. Perform inspection services during the preparation and installation of the concrete pad, conduit installation, site and restoration work. Electrical inspection services will be performed prior to startup and testing. One punchlist will be developed if necessary. ***We have budgeted 40 hours for this task.***
- Office Coordination and Office time shall also be performed. ***We have budgeted 40 hours for this task.***
- Attend 1 day of generator testing and startup per site with generator manufacturer's representative and contractor. 1 punchlist will be developed if necessary. ***We have budgeted 24 hours for this task.***
- Review applications for payment by the contractor for recommendation of payment by Township upon delivery of the equipment in accordance with the contract. MM anticipates the need to process three (3) payment applications for the procurement contractor. ***We have budgeted 18 hours for this task.***
- Preparation of an as-built plan depicting final site features constructed under this contract. Plans will be prepared in an electronic cad file. ***We have budgeted 16 hours for this task***
- Prepare a certification that the completed project is in compliance with NFIP regulations and a certification regarding a critical facility in a special Flood Hazard Area if applicable. ***We have Budgeted 18 hours (\$2,500.00) for this work.***

- Prepare and file of air quality permits for the new generators. Per our discussions the Township will pay the fees directly. **We have Budgeted 24 hours (\$4,800.00) for this work.**

Our not-to exceed reimbursable fee for the above construction phase services is \$37,800.

Project Costs Summary

Design Engineering	\$60,000
Construction Engineering	\$37,800
Total	\$97,800

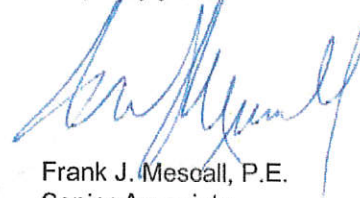
We trust that the information and recommendations provided are adequate to allow you to proceed. Should you have any questions or wish to discuss this in greater detail, please do not hesitate to call me

Very truly yours,



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