

RESOLUTION
of the
BOROUGH OF NEW PROVIDENCE
Resolution No. 2015-128

Council Meeting Date: 03-23-2015

Date Adopted: 03-23-2015

TITLE RESOLUTION ACCEPTING THE PROPOSAL OF MASER
CONSULTING, P.A. FOR PROFESSIONAL ENGINEERING SERVICES
REGARDING CENTRAL AVENUE AND MAPLE STREET
INTERSECTION IMPROVEMENTS

Councilperson Madden submitted the following resolution, which was duly
seconded by Councilperson Muñoz .

WHEREAS, the Borough of New Providence acquired Professional Engineering
and Professional Environmental Consulting Services as a non-fair and open contract
pursuant to the provisions of N.J.S.A. 19-44A-20.5; and

WHEREAS, Maser Consulting was awarded a contract with the Borough of New
Providence via Resolution 2014-023 provide professional engineering services; and,

WHEREAS, Maser Consulting Services has submitted a proposal dated March
18, 2015 indicating they will provide professional engineering services relating to the
Central Avenue and Maple Street Intersection Improvements, for an amount not to
exceed \$18,000.00; and

WHEREAS, the fees assessed with this proposal are contained in said contract;
and

WHEREAS, the maximum amount of the contract is not to exceed \$18,000.00,
and said funds are available from the following accounts:

10-15-001-301-2-07410

and have been certified by the Chief Financial Officer; and

NOW, THEREFORE, BE IT RESOLVED by the Mayor and Council of the
Borough of New Providence that they hereby approve and authorize the professional
services included in the Maser Consulting Services proposal dated March 18, 2015.

APPROVED, this 23rd day of March, 2015.

RECORD OF VOTE

	AYE	NAY	ABSENT	NOT VOTING
GALLUCCIO	X			
GENNARO	X			
KAPNER	X			
MADDEN	X			
MUÑOZ	X			
ROBINSON	X			
MORGAN			TO BREAK COUNCIL TIE VOTE	

I hereby certify that the above resolution was adopted at a meeting of the Borough Council held on the 23rd day of March, 2015.

Wendi B. Barry, Borough Clerk



Engineers
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Surveyors
Landscape Architects
Environmental Scientists

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March 18, 2015

VIA EMAIL

Mr. Douglas Marvin, Borough Administrator
Borough of New Providence
360 Elkwood Avenue
New Providence, NJ 07974

Re: Proposal for Professional Services
Central Avenue and Maple Street Intersection Improvements
Borough of New Providence, Union County New Jersey
MC Project No. NPT-524P

Dear Mr. Marvin:

Maser Consulting P.A. (Maser Consulting) is pleased to present this proposal to provide professional engineering services to be performed immediately, in an effort to facilitate the implementation of traffic signalization at the intersection of Central Avenue and Maple Street.

The following scope of services has been separated into phases, so that it may be more easily reviewed. The order in which the phases are presented generally follows the sequence in which the project will be accomplished; however, depending on the project, the various authorized services contained in this proposal may be performed in a sequence as deemed appropriate by Maser Consulting to meet project deadlines.

SECTION I – SCOPE OF SERVICES

Based on our conversations and information noted above, we propose to complete the following:

This proposed signalization of the four-leg intersection shall be located on Central Avenue and Maple Street in New Providence. This proposal is for engineering services to survey the location, design a traffic signal and prepare an electrical plan for bidding.





We envision the project to contain the following five (5) major tasks:

- Task I Survey
- Task II Preliminary Design
- Task III Traffic Signal, Signing, Striping and Construction Plans
- Task IV Final Design
- Task V Bidding Services

The following comprehensive Scope of Services will further describe the tasks in great detail:

SCOPE OF SERVICES

I. Survey

A. SURVEY LIMITS

The survey limits are to extend 500 feet on Central Avenue and 300 feet on Maple Street approaches to the intersection.

B. RIGHT-OF-WAY

1. Right-of-way (ROW) and property lines are to be verified for the four (4) properties at the intersection corners. Tax map ROW will be employed throughout the remainder of the project limits.
2. Existing easements are to be determined.
3. Existing observed monumentation is to be located.

C. TOPOGRAPHIC SURVEY

1. The topographic survey must be prepared following NJDOT graphic standards.
2. 2-dimensional planimetric survey.
3. Visible roadway features are to be located as follows:
 - a. Edge of pavement.
 - b. Edge of travel way.
 - c. Existing pavement markings.
 - d. Existing signage with sign designations.
 - e. Existing utilities, above and below ground (if marked), lighting and height of aboveground services at intersection.
 - f. Existing storm water drainage structures, NOT including inverts and pipe sizes.
 - g. Buildings and parking facilities within 50 feet of ROW limits.
 - h. Visible remaining existing features, trees within ten feet (10') of road edge at intersection, mailboxes, and other permanent visible features within the ROW roadway construction baselines and stationing are to be established for all legs of the intersection.
4. The survey baseline is to be located outside the zone of construction and tied to three (3) fixed objects. Digital swing ties are to be provided on the base map.



D. GENERAL SURVEY REQUIREMENTS

1. Survey is to utilize the N.J. Plane Coordinate System.
2. Elevations are to be NGVD 1929.
3. Copies of all survey notes are to be provided, including all reference material.
4. A digital drawing in AutoCAD.DWG format (following MASER standard layers), as closely as possible, with completed planimetrics is to be provided.
5. An ASCII point coordinate file is to be provided, including all control, boundary, easement, survey baseline, ROW, and topographic points collected during the field survey, or computed utilizing field survey information. The file shall be comma delineated in the following format:
Point #, Northing, Easting, Elevation, Description
6. Utility companies servicing the immediate area are to be contacted and given the opportunity to mark facilities in the project area prior to survey commencement.
7. Reference material to be provided:
 - a. Tax Maps
 - b. Municipal Utility Maps
 - c. 7 ½ minute USGS Map of site
 - d. Zoning Map

II. Preliminary Design

All field information will be plotted on a standard 24" x 36" sheet at a scale of 1"=20'. All physical features identified in the field, including all marked underground utilities, will be depicted on the plan. The title block on the plan will include the necessary local identification as required.

Once the base map for the intersection is established, the functional traffic signal design will be prepared depicting the layout of the aboveground equipment, including traffic signal poles, mast arms, vehicular and pedestrian signal heads and supporting traffic control devices including signs and lane markings. As an experienced firm in traffic signal design, we are well versed in the requirements to complete the required design specifics. The criteria contained in the Manual on Uniform Traffic Control Devices (MUTCD) will be adhered to, as well as the normal design guidelines practiced by NJDOT. A separate timing schedule will be prepared in Word format and submitted along with the Traffic Signal Plan. We do not anticipate performing a signal progression analysis to establish timing offsets associated with adjacent signals on this roadway.

III. Traffic Signal, Signing, Striping and Construction Plans

Maser Consulting will prepare a Construction, Signing and Striping Plan for the intersection. It is anticipated that construction will be limited to the construction of minor curb replacement and installation of any required ADA compliant curb ramps. The design of ADA compliant curb ramps will include limited grading information for each ramp and specific detail reference for each location. Based on a cursory review of the project site, pedestrian accommodations will be limited due to the lack of available sidewalk in the area.



The signing and striping design will conform to the 2009 Edition of the MUTCD and Borough design guidelines. All existing traffic signs will be replaced on the project, and the proposed signs detailed in the design will comply with the appropriate sizes and retro-reflectivity as specified in the MUTCD.

IV. Final Design (Electrical Plan)

Once the Traffic Signal Plan is approved by the Borough Engineer, electrical construction drawings will be prepared to illustrate all aboveground and underground traffic signal equipment, signage, and pavement markings. The plans will be prepared using typical NJDOT standards. All items will be identified with appropriate construction notes. Wiring diagrams and vehicle detectors will be included on each drawing.

Typical details, referencing the latest NJDOT documents will be included in the construction plans package, as will specialty details, as needed. A key sheet will be prepared to include proper location map and sheet index. A traffic control plan will be prepared for typical control at a four-leg urban intersection during construction.

Supplementary technical specifications will be prepared in Word format utilizing the latest edition of the NJDOT Standard Specifications and County standards. An Engineer's Cost Estimate will be prepared for all items based on the latest NJDOT average bid prices.

Final Plans, Specifications and Engineer's Estimate will be prepared.

The completed set of final construction drawings is anticipated to include the following:

- Title Sheet/Key Map
- Standard Legend and Notes
- Construction, Signing and Striping Plan
- Traffic Signal Plan
- Electrical Plan
- Detail Sheets

It is anticipated that the NJDOT Standard Maintenance and Protection of Traffic Details will be referenced for this design and no site specific details or schemes will be necessary.

This proposal does not include the preparation of a final As-built drawing nor any inspection and certification of the traffic signal installation.



V. Bidding Services

Maser Consulting will be responsible for assisting the Borough in the bid phase of this project. The following tasks will be included as part of this effort:

- Prepare and assist the Borough in issuing any contract addenda.
- Review and respond to any bidder inquiries or requests for information.
- Assist the Borough in a comprehensive bid review, bid comparison/tabulation (per NJDOT guidelines), review of contractor references and preparation of a Recommendation of Award.

SCHEDULE OF FEES

For your convenience, we have broken down the total estimated cost of the project into the categories identified within the scope of services.

I. SURVEY	\$ 3,100.00
II. PRELIMINARY DESIGN	\$ 3,200.00
III. TRAFFIC SIGNAL, SIGNING, STRIPING & CONSTRUCTION PLANS	\$ 4,500.00
IV. FINAL DESIGN (ELECTRICAL PLAN)	\$ 5,700.00
V. <u>BIDDING SERVICES</u>	\$ 1,500.00
TOTAL	\$18,000.00

Maser Consulting will provide the services outlined in PHASE I through PHASE V for a COST NOT TO EXCEED \$18,000.00. The hourly rates utilized for the project will be in accordance with the Borough Engineering Contract previously approved by Mayor and Council.

PROJECT SCHEDULE

The following is the anticipated project schedule:

Authorization to Proceed	March 23, 2015
Survey and Design	April 24, 2015
Advertise	April 28, 2015
Opening of Bids	May 12, 2015
Council Award	May 18, 2015
Construction Start	June 1, 2015
Signal Activation	August 30, 2015



EXCLUSIONS

If any item listed herein, or otherwise not specifically mentioned within this agreement or the Borough Engineering Agreement, is deemed necessary, Maser Consulting may prepare an addendum to this agreement for your review, outlining the scope of additional services and associated professional fees regarding the extra work. All unanticipated additional work shall be in accordance with the Schedule of Hourly Rates for the number of hours performed. No extra work will be performed without authorization from the Borough.

If you find this proposal acceptable, please forward a copy of the Resolution of Approval for this proposal to this office. This will constitute approval of the proposed work.

Thank you for the opportunity to offer our services for the Central Avenue and Maple Street Intersection Improvements. We look forward to working with you on this and future projects. In the meantime, should you have any questions regarding this proposal, please feel free to contact me.

Very truly yours,

MASER CONSULTING P.A.

A handwritten signature in black ink, appearing to read 'Andrew R. Hipolit', with the word 'for' written in a smaller, cursive script to the right of the main signature.

Andrew R. Hipolit, P.E., P.P., C.M.E.
Borough Engineer

A handwritten signature in black ink, appearing to read 'John J. Jahr', written in a cursive style.

John J. Jahr, TSOS
Sr. Associate

ARH/JJJ/cb