

VILLAGE OF LOMBARD
REQUEST FOR BOARD OF TRUSTEES ACTION
For Inclusion on Board Agenda

 X Resolution or Ordinance (Blue) _____ Waiver of First Requested

Recommendations of Boards, Commissions & Committees (Green)
Other Business (Pink)

TO: PRESIDENT AND BOARD OF TRUSTEES

FROM: Scott Niehaus, Village Manager

DATE: August 9, 2016 (COW) (B of T) **Date:** August 18, 2016

TITLE: Gatz Pond Outfall
Design Engineering

SUBMITTED BY: David Gorman, P.E., Assistant Director of Public Works *DG*

BACKGROUND/POLICY IMPLICATIONS:

Contract for the Gatz Pond Outfall programmed for Fiscal Year (FY) 16. The project entails construction of storm sewer from North Broadway north on Chase Avenue to Maple Street to Westmore/Meyers Road.

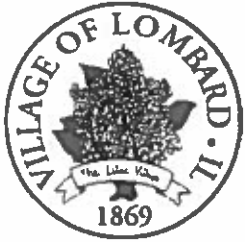
FISCAL IMPACT/FUNDING SOURCE:

Total Contract Amount: \$122,850.00
Project Number: SS 16 01, Design Engineering
Account: Sewer & Water Fund: 520.790.715.75420 (\$267,000)

Review (as necessary):

Village Attorney X _____ Date _____
Finance Director X _____ Date _____
Village Manager X _____ Date _____

NOTE: All materials must be submitted to and approved by the Village Manager's Office by 12:00 noon, Wednesday, prior to the Agenda Distribution.



To: Scott Niehaus, Village Manager
Through: Carl S. Goldsmith, Director of Public Works
From: David Gorman, P.E., Assistant Director of P.W. *DEH*
Date: August 9, 2016
Subject: Gatz Pond Outfall
Design Engineering Contract

The current Capital Improvement Plan (CIP) has the Gatz Pond Outfall programmed to be designed in Fiscal Year (FY) 2016. The project entails extending the large diameter storm sewer from North Broadway north on Chase Avenue to Maple Street and east on Maple Street to Westmore/Meyers Road. This sewer would allow the discharge from Gatz Pond to be separated. This project would separate approximately 450 acres.

A Request For Proposal (RFP) was sent to the Village's Design Engineering short list of firms on June 10, 2016. Engineering Resource Associates, Inc. (ERA) was determined to be the most qualified firm. ERA was the design engineer for the Fuel Station Improvements project. The project scope and fee was directly negotiated with ERA and agreed to by both parties.

The scope of work includes final engineering. Included in the final engineering work are: evaluation of existing drainage, assessment of underground utility structures, design the storm sewer system, prepare bid documents (plans, specifications and engineer's estimate of cost), utility permitting, and participation in a project public information meeting.

This work will be performed for a total not to exceed engineering fee of \$122,850.00. The engineering costs will be paid through the Sewer and Water Fund. The current CIP budgets \$2,169,000.00 in FY 2017 for construction.

Please present this agreement and resolution for Design Engineering services to the President and Board of Trustees for their review at their regular meeting of August 18, 2016. If approved, please return two original signed copies of the agreement to Public Works-Engineering for further processing.

R E S O L U T I O N
R _____ 16

**A RESOLUTION AUTHORIZING SIGNATURE OF
PRESIDENT AND CLERK ON AN AGREEMENT**

WHEREAS, the Corporate Authorities of the Village of Lombard have received an Agreement between the Village of Lombard, and Engineering Resource Associates Inc. (REA) regarding the Gatz Pond Outfall project as attached hereto and marked Exhibit "A"; and

WHEREAS, the Corporate Authorities deem it to be in the best interest of the Village of Lombard to approve such agreement.

NOW, THEREFORE, BE IT RESOLVED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF LOMBARD, DU PAGE COUNTY, ILLINOIS as follows:

SECTION 1: That the Village President be and hereby is authorized to sign on behalf of the Village of Lombard said agreement as attached hereto.

SECTION 2: That the Village Clerk be and hereby is authorized to attest said agreement as attached hereto.

Adopted this 18th day of August, 2016.

Ayes; _____

Nays: _____

Absent: _____

Approved this 18th day of August, 2016.

Keith Giagnorio
Village President

ATTEST:

Sharon Kuderna
Village Clerk

VILLAGE OF LOMBARD CONTRACT

CONTRACT DOCUMENT NUMBER SS 16-01

This agreement is made this 18th day of August, 2016, between and shall be binding upon the VILLAGE of Lombard, an Illinois municipal Corporation hereinafter referred to as the "VILLAGE" and Engineering Resource Associates, Inc. hereinafter referred to as the "ENGINEER" and its successors.

Witnessed, that in consideration of the mutual promises of the parties delineated in the contract documents, the ENGINEER agrees to perform the services and the VILLAGE agrees to pay for the following services as set forth in the contract documents:

Design Engineering Services for the Gatz Pond Outfall

1. This contract shall embrace and include all of the applicable contract documents listed below as if attached hereto or repeated herein:
 - a. VILLAGE'S Request for Qualifications for Short-List for Engineering Services Dated December 13, 2013
 - b. Village's Request for Proposal dated June 10, 2016
 - c. ENGINEER'S Proposal Dated July 19, 2016
 - d. ENGINEER'S Work Effort and Fee submittal Dated August 5, 2016
 - e. ENGINEER'S Revised Proposal dated August 9, 2016
 - f. Required Certificates and Signatures and Certificate of Insurance
2. The VILLAGE agrees to pay, and the ENGINEER agrees to accept as full payment for the services which are the subject matter of this contract in accordance with the General Provisions.
3. This Contract represents the entire agreement between the parties and may not be modified without the written approval of both parties.

IN WITNESS WHEREOF, the Village of Lombard, Illinois by the Village President and the ENGINEER have hereunto set their hands this 18th day of August, 2016.

If an individual or partnership, all individual names of each partner shall be signed or if a corporation, an officer duly authorized shall sign here:

Engineering Resource Associates, Inc.

Accepted this _____ day of _____, 2016.

Individual or Partnership _____ Corporation _____

By _____ Position/Title

By _____ Position/Title

THE VILLAGE OF LOMBARD, ILLINOIS

Accepted this 18th day of August, 2016.

Keith Giagnorio
Village President

Attest: _____
Sharon Kuderna
Village Clerk

VILLAGE OF LOMBARD ENGINEER'S CERTIFICATION

_____, having been first duly sworn depose and states as follows:
(Officer or Owner of Company)

Engineering Resource Associates, Inc., having submitted a proposal for: Gatz Pond
Outfall to the Village of Lombard, hereby certifies that said ENGINEER:

1. has a written sexual harassment policy in place in full compliance with 775 ILCS 5/2-105(A) (4).
2. is not delinquent in the payment of any tax administered by the Illinois Department of Revenue, or if it is:
 - a. it is contesting its liability for the tax or the amount of tax in accordance with procedures established by the approve Revenue Act; or
 - b. it has entered into an agreement with the Department of Revenue for payment of all taxes due and is currently in compliance with that agreement.
3. is in full compliance with the Federal Highway Administration Rules on Controlled Substances and Alcohol Use and Testing, 49 CFR Parts 40 and 382 and that

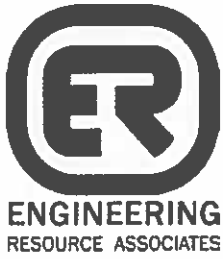
(Name of employee/driver or "all employee drivers")
is/are currently participating in a drug and alcohol testing program pursuant to the
aforementioned rules.

By:

Officer or Owner of Company named above

Subscribed and sworn to
before me this _____
day of _____, 2016.

Notary Public



Scope of Work

August 9, 2016

**SUBJECT: Village of Lombard:
Contract Document Number SS-16-01 for Gatz Pond Outfall
Revised Scope of Work**

ERA will provide engineering services in accordance with the following work plan.

Phase I - Preliminary Engineering

1. **Meetings and Coordination** – We will work closely with staff and other stakeholders to maintain communication throughout the duration of the project including obtaining information, providing progress updates and discussing relevant issues. ERA will provide coordination with key stakeholders such as reviewing agencies and other parties having an interest in the project. This task includes preparation of meeting agendas prepared and distributed 2 working days in advance of meetings and preparation of minutes prepared and distributed within 2 working days following the meeting. The following meetings are anticipated under Phase I.
 - a. **Kickoff Meeting** – ERA will schedule and attend a project kick-off meeting with Village staff to introduce project team members, formalize project, review scope of work, discuss the project schedule and deliverables, review data in possession of the Village and discuss any project issues or concerns.
 - b. **Coordination Meeting** – ERA will schedule and attend a coordination meeting with Village staff to discuss the H&H and Alignment/Routing Analyses. It is anticipated that this meeting will build a consensus for the proposed sewer design and alignment that will set Phase II expectations.
 - c. **Public Meeting** – ERA will attend and present the sewer alignment and preliminary design at a public meeting. The purpose of the meeting is to provide a forum for impacted residents to ask questions and present concerns relating to the project prior to moving into the final design phase.
2. **Data Acquisition** – We will acquire relevant background data from various sources including but not limited to the following items:
 - 1" = 100' aerial photography
 - 1" = 100' topographic maps from the late 1990's
 - Utility maps for water, sewer, street lighting and traffic signals
 - Village standard contract documents
 - Village design details
 - Concept plan for the project
 - Proposed plans from the N. Broadway Street Improvements
 - Proposed plans from the Interim Pump Station & Force Main Improvements
 - Gatz Pond Watershed Sewer Separation Analysis and Prioritization Plan Report
 - Gatz Pond Watershed Sewer Separation Analysis and Prioritization XPSWMM files



ENGINEERING
RESOURCE ASSOCIATES

Scope of Work

- Gatz Pond As-built plans
- Televised sewer runs
- Relevant GIS files
- Other relevant background data as available

3. **Topographic Survey** – We will perform a topographic survey using in-house personnel and equipment. It is anticipated that the survey will include a complete ROW topo from the intersection of North Broadway Street and Chase Avenue north to the intersection of Chase Avenue and Maple Street (approximately 650') and from the intersection of Chase Avenue and Maple Street to the intersection of Maple Street and Westmore-Meyers Road (approximately 1,550'). The ROW survey will extend a minimum of 100-feet in each direction at each of the 5 intersections encountered in order to capture an understanding of design challenges such as drainage, utility invert elevations, site distances, traffic control, etc. If more overlap topo is needed to adequately tie in storm sewers on Westmore-Meyers Road, Ahrens Court, Gatz Park and Highland Avenue it will be completed as part of this task.

Relevant surface features will be surveyed horizontally and vertically. This includes above ground observed public and private utilities, trees of six-inch diameter or greater, fences, established landscaping limits, etc. Public utility structures will also be opened and pipe sizes, invert elevations, directions, materials, etc. will be measured from the surface. JULIE marking, and found property corners will also be referenced.

4. **Utility Coordination** – ERA will perform a design JULIE to acquire contacts from utility companies (telephone, gas, electric, cable). ERA will coordinate with the contacts to verify utility locations and depths. If preliminary sewer routings will disturb utilities ERA will coordinate with the utility companies to determine their scope of work and preliminary construction schedule. This will be included in our routing analysis and will be considered in our routing recommendations.
5. **Base Plans** – Data from the data acquisition, topographic survey, and utility coordination tasks will be downloaded and compiled into our AutoCAD based system to produce base plans of existing conditions for each project site. Profiles along anticipated project alignments will also be produced. Base plan and profile sheets will be plotted (1 inch equals 20 feet) and provided to the Village and utility companies for review and verification of facilities.
6. **Geotechnical Analysis** – Geotechnical soil borings are recommended for the purpose of evaluating soil characteristics relating to the improvements. It is our understanding that the Village will provide the services of a geotechnical engineer.
7. **Hydrologic and Hydraulic Analysis** – ERA will use the XPSWMM hydrologic/hydraulic model prepared for the Gatz Pond Watershed Sewer Separation Analysis and Prioritization Plan as the base model for this project. ERA will update the existing conditions model based on detailed topographic survey information and will add the Vista Pond storage improvements to the model. Based on the Gatz Pond Watershed Plan this model has already been calibrated and has been determined to be accurate.

Using the calibrated model, ERA will analyze the proposed improvements identified in the Gatz Pond Watershed Plan. This includes the proposed 84-inch storm sewer and the separation of the Phase 1



Scope of Work

watershed area. Proposed conditions modeling will be used to verify that plan benefits continue to be met. ERA will utilize the XPSWMM model to value engineer the recommended improvements. We will test potential cost saving design revisions to determine if they continue to meet the watershed goals. This will include determining whether or not a reduction in the proposed sewer size is possible.

8. **Alignment/Routing Analysis** – ERA will evaluate several routing alternatives for the 84-inch storm sewer. The analysis will identify corridor impacts and costs and will be summarized in a brief report. A sewer routing recommendation will be made and approved by the Village prior to moving onto Phase II Final Design.
9. **Alignment/Routing Exhibits** – ERA will prepare exhibits for the routing options discussed in the previous task. It is anticipated that the exhibits will graphically display impacts to the ROW and will be used in the public meeting as visual aids to help impacted residents visualize the proposed corridor.

Phase II - Final Engineering

10. **Meetings and Coordination** – We will work closely with staff and other stakeholders to maintain communication throughout the duration of Phase II obtaining information, providing progress updates and discussing relevant issues. ERA will provide coordination with key stakeholders such as reviewing agencies and other parties having an interest in the project. This task includes preparation of meeting agendas prepared and distributed 2 working days in advance of meetings and preparation of minutes prepared and distributed within 2 working days following the meeting. The following meetings are anticipated under Phase II.
 - a. **Coordination Meeting** – ERA will schedule and attend two coordination meetings with Village staff to discuss review comments following the 65% and 95% submittals.
 - b. **Public Meeting** – ERA will attend and present the 95% design plans at a public meeting. The purpose of the meeting is to provide a forum for impacted residents to ask questions and present concerns relating to the project prior to moving into the construction phase.
11. **65% Plans, Specifications and Estimates (PS&E)** – This task includes the preparation of PS&E (65%) for the storm sewer improvements. It is anticipated that plans will include the following sheets:
 - a. Cover Sheet and Location Map
 - b. General Notes and Typical Sections
 - c. Summary of Quantities and Schedule of Quantities
 - d. Alignment, Ties and Benchmarks
 - e. Traffic Control Plans and Details
 - f. Plan and Profile Sheets
 - g. Utility Plans
 - h. Stormwater Pollution Prevention Plans
 - i. Restoration Plans
 - j. Tree Removal and Preservation Plans
 - k. Construction Details
 - l. Cost Estimate

This task includes the preparation of specifications and an engineer's opinion of probable construction



Scope of Work

cost. In conjunction with the submittal of the plan set ERA will perform value engineering to identify cost saving measures prior to developing the 95% plans.

12. **Utility Coordination** – ERA will submit 65%, 95%, and 100% design plans to the utility companies for review and comment. ERA will coordinate with the utility companies to continually refine their scope of work and construction schedule to help ensure that the project does not get delayed due to relocation of any utilities.
13. **Permitting** – Permitting assistance for the storm sewer improvements are negligible, therefore permitting efforts for the storm sewer improvements have been included as part of our design hours. The following permits are anticipated for the sewer improvements only.
 - Village of Lombard – PS&E review and approvals
 - IEPA (NPDES/NOI) – erosion control and stormwater quality
 - Public and private utility companies – permits and resolution of facility conflicts
 - DuPage County – none anticipated
 - IEPA (Sewer Permit) – none anticipated
14. **Structural Design** – ERA will perform a structural design for a large junction chamber anticipated to be located at the intersection of Chase and Maple Street.
15. **95% Plans, Specifications and Estimates (PS&E)** – This task includes the preparation of PS&E (95%) for the storm sewer improvements. It is anticipated that plans will include the following sheets:
 - a. Cover Sheet and Location Map
 - b. General Notes and Typical Sections
 - c. Summary of Quantities and Schedule of Quantities
 - d. Alignment, Ties and Benchmarks
 - e. Traffic Control Plans and Details
 - f. Plan and Profile Sheets
 - g. Utility Plans
 - h. Stormwater Pollution Prevention Plans
 - i. Restoration Plans
 - j. Tree Removal and Preservation Plans
 - k. Construction Details
 - l. Cost Estimate

This task includes the preparation of specifications and an engineer's opinion of probable construction cost. In conjunction with the submittal of the plan set ERA will perform value engineering to identify cost saving measures prior to developing the 100% plans.

16. **QA/QC Submittal** – ERA will submit to the Village final engineering plans, specs, and estimates for the storm sewer improvements for final QA/QC review. ERA will also perform a final internal QA/QC review prior to issuing the 100% PS&E.



Scope of Work

17. **100% Plans, Specifications and Estimates (PS&E)** – This task includes the preparation of PS&E (100%) for the storm sewer improvements. It is anticipated that plans will include the following sheets:
- a. Cover Sheet and Location Map
 - b. General Notes and Typical Sections
 - c. Summary of Quantities and Schedule of Quantities
 - d. Alignment, Ties and Benchmarks
 - e. Traffic Control Plans and Details
 - f. Plan and Profile Sheets
 - g. Utility Plans
 - h. Stormwater Pollution Prevention Plans
 - i. Restoration Plans
 - j. Tree Removal and Preservation Plans
 - k. Construction Details
 - l. Cost Estimate

This task includes the preparation of specifications and a final engineer's opinion of probable construction cost.

18. **Bidding Assistance** – ERA will provide bidding assistance for the project. This work will include answering bidder questions, attendance at a pre-bid meeting, preparation of addenda as required, tabulation of bids, reference checks and recommendations for award of the construction contract.

