

Winnetka Village Council
STUDY SESSION
Village Hall
510 Green Bay Road
Tuesday, May 12, 2015
7:00 PM

Emails regarding any agenda item are welcomed. Please email contactcouncil@winnetka.org, and your email will be relayed to the Council. Emails for a Tuesday Council meeting must be received by Monday at 4 p.m. Any email may be subject to disclosure under the Freedom of Information Act.

AGENDA

- 1) Call to Order
- 2) Willow Road Stormwater Tunnel and Area Drainage Improvements Project: Review Point #2 Follow-Up.....2
- 3) Public Comment
- 4) Executive Session
- 5) Adjournment

NOTICE

All agenda materials are available at villageofwinnetka.org (Government > Council Information > Agenda Packets & Minutes); the Reference Desk at the Winnetka Library; or in the Manager’s Office at Village Hall (2nd floor).

Broadcasts of the Village Council meetings are televised on Channel 10 and AT&T Uverse Channel 99 every night at 7 PM. Webcasts of the meeting may also be viewed on the Internet via a link on the Village’s web site: <http://winn-media.com/videos/>

The Village of Winnetka, in compliance with the Americans with Disabilities Act, requests that all persons with disabilities who require certain accommodations to allow them to observe and/or participate in this meeting or have questions about the accessibility of the meeting or facilities, contact the Village ADA Coordinator – Megan Pierce, at 510 Green Bay Road, Winnetka, Illinois 60093, 847-716-3543; T.D.D. 847-501-6041.



Agenda Item Executive Summary

Title: Willow Road STADI Project: Review Point #2 Follow-Up

Presenter: Steven M. Saunders, Director of Public Works/Village Engineer

Agenda Date: 05/12/2015

Consent: YES NO

Ordinance
 Resolution
 Bid Authorization/Award
 Policy Direction
 Informational Only

Item History:

On April 28, 2015, the Village Council held a Special Meeting for the presentation of Review Point #2, related to the Willow Road STADI project, to review the design process undertaken to date. The review focused on the preliminary design tasks, including site-specific data collection, 30% design, water quality management, estimated construction costs, and draft permit applications. Staff also briefly reviewed some potential next steps for the Council. Following MWH's presentation, there was a period of public questions and comments. Due to the complexity of the project and the increase in cost estimates, the Council elected to conduct a follow-up discussion at the May 12 Study Session.

Executive Summary:

As briefly discussed at the conclusion of Review Point #2, there are several potential next steps that the Village Council could take to continue working towards providing stormwater flood-risk reduction to the Village.

Independent Engineering Review

A third-party project review would focus on two project aspects: 1) the accuracy and reliability of the cost estimate and 2) whether there are other more cost effective ways to design and implement the project. There are significant benefits to this review. The cost review would provide the community with an additional level of certainty and confidence in MWH's opinion of probable construction costs (OPCC), to inform future decision-making on the project. The value engineering process would creatively evaluate the STADI project and identify potential changes to the project that might better accomplish the desired level of structural flood risk-reduction at a lower capital cost, while providing better overall value and confidence in the effectiveness of the design.

Permitting

MWH's contract timeline anticipates that the next key step is to complete the draft permit applications and submit them to the respective review agencies, while concurrently advancing engineering from the current 30% stage. The time schedule associated with the permit application, review, and approval, is approximately 12 months. The Village could consider submitting the permit applications so that the respective agencies can commence their reviews, but not proceed with additional design services at this time. The Village could concurrently undertake independent cost and value engineering review of the project work to date.

Staff recommends proceeding with requesting fee proposals for a two-phase third-party cost review and value engineering study. The cost review would provide the community with an additional level of certainty and confidence in the estimated project cost, to inform future decision-making on the project. The value engineering process would creatively evaluate the STADI project and identify potential changes to the project that might better accomplish the desired level of structural flood risk-reduction at a lower capital cost, while providing better overall value and confidence in the effectiveness of the design.

Recommendation:

1. Consider authorizing staff to issue an RFP to solicit fee proposals to complete a two-phase cost and value engineering review of the Willow Road STADI project.
2. Consider whether to direct staff to obtain a cost and scope of work from MWH to complete a final joint permit applications and submit it to the US Army Corps of Engineers, Illinois Environmental Protection Agency, and the Illinois Department of natural Resources.

Attachments:

Agenda Report

Attachment #1: Draft Request for Proposals (RFP)

Agenda Report

Subject: **Willow Road Stormwater Tunnel and Area Drainage Improvements: Review Point #2 Follow-Up**

Prepared By: Steven M. Saunders, Director of Public Works/Village Engineer

Date: May 7, 2015

Background

On April 28, 2015, the Village Council held a Special Meeting for the presentation of Review Point #2, related to the Willow Road Stormwater Tunnel and Area Drainage Improvements (STADI) project. Staff reviewed the design process undertaken over the last nine months, and then Joe Johnson, with the professional engineering firm of MWH, recapped the findings of Review Point #1, which occurred in June, 2014, including: the STADI project is viable to reduce severe flooding; western discharge options are not feasible given the amount of storage required; water quality management objectives are a high priority and need to be addressed early in the process; and the preliminary design tasks serve as a reasonable basis to provide project detail required for permit submittal.

The preliminary design tasks (site-specific data collection, 30% design, preliminary opinion of probable construction cost, and draft permit applications) were each individually reviewed. MWH performed field investigations throughout the Village, gathering information about soil conditions and existing utility structures. Mr. Johnson described the detailed stormwater quality monitoring program and also illustrated the numerous water quality parameters and stringent standards that MWH employed in their evaluation. Levels for 11 pollutants/bacteria exceeded current Lake Michigan standards; however, stormwater quality in Winnetka is generally consistent with runoff in other suburban areas and Mr. Johnson reviewed some of the potential pollutant sources the Village will be able to review and address.

Next, Mr. Johnson focused on the STADI project concept, detailing several design constraints which have impacted the development of plans, including conflicts with very deep interceptors that are part of the Metropolitan Water Reclamation District (MWRD) system, significant construction disruption along Willow Road and neighboring streets, as well as capacity and functionality of a Tunnel outfall treatment structure at Lake Michigan. MWH's STADI water quality management strategy is equipped with four key components: source control, distributed treatment, flow management, and discharge management. Mr. Johnson described the various approaches within each area, and also showed in more depth the amount of runoff that would be treated by the proposed outfall structure.

The Village's cost estimates for the STADI project originated in 2011/2012, based on conceptual design, broad field data, and typical unit construction costs. Mr. Johnson explained that MWH's work has further detailed the Tunnel's initial design and therefore allowed for an updated preliminary opinion of probable construction cost (OPCC). MWH used additional information about quantities of materials, site-specific considerations, as well as utility and field data to update the cost estimate. He showed that MWH's current STADI design results in an OPCC of \$58.5 million. In addition to the more detailed data at MWH's disposal, he explained that cost increases were also driven by a greater length of deep sewer tunnel, increased underground construction costs, and outfall/water quality management requirements.

Due to the significant increase in estimated cost, Mr. Johnson presented the Council with potential cost reduction options, including 1) reduction in the design storm (currently 1% annual chance design); 2) increased storage for peak reduction; and 3) reduced project scope or phasing. He noted, however, none of these would reduce the OPCC to the previous estimate of \$34.5 million. Finally, Mr. Johnson relayed the permits required for the Willow Road STADI project and the status of this work.

Potential Next Steps

As briefly discussed at the conclusion of Review Point #2, there are several potential next steps that the Village Council could take to continue working towards providing stormwater flood-risk reduction to the Village.

Independent Engineering Review

One of the items discussed at the April 28 meeting was the possibility of obtaining an independent, third-party engineering review of the project. The third-party project review would focus on two project aspects: 1) the accuracy and reliability of the cost estimate and 2) whether there are other more cost effective ways to design and implement the project. There are significant benefits to this review. The cost review would provide the community with an additional level of certainty and confidence in MWH's OPCC, to inform future decision-making on the project. The value engineering process would creatively evaluate the STADI project and identify potential changes to the project that might better accomplish the desired level of structural flood risk-reduction at a lower capital cost, while providing better overall value and confidence in the effectiveness of the design.

Based on the Council's discussion at the April 28 meeting, staff has prepared a draft Request for Proposals (RFP), shown as Attachment #1, outlining the scope of a third-party cost and value engineering review. The RFP seeks work to be completed in two sequential phases as follows:

Phase I: An expert third-party could be employed to complete a detailed, thorough review of the current project cost estimate consisting of the following activities:

1. Review initial flood risk reduction studies to develop an understanding of and to become familiar with the work studies that were completed and which formed the starting point for MWH's contractual scope of work.
2. Review MWH's data, assumptions, methods, calculations, designs, drawings, estimates, and conclusions, including surveying and geotechnical information, plan sheets, and other details used to develop and prepare the Opinion of Probable Construction Cost.
3. Prepare a written, detailed, independent review of the estimate of probable construction cost, based on the current project design, draft reports and underlying detailed data, documenting all assumptions, calculations, productivity rates, material prices, labor rates, etc. with the final cost estimate.

Phase II: An expert third party could lead a value-engineering process consisting of the following activities:

1. Organize an independent value engineering team consisting of experts in stormwater management, hydraulics/hydrology, storm sewer design/construction, tunnel design/construction, and cost estimating, to evaluate the project.
2. Review all relevant preliminary and design documents to thoroughly understand the Village's goals and previous work.
3. Conduct a value engineering process to identify an alternate strategy or strategies to achieve the project mission, namely to provide significant risk reduction against structure flooding for five drainage areas in the Village, for a 100-year design event. The workshop will be performed using a job plan that is generally consistent with value engineering practices and principles employed by the U.S. EPA, US Army Corps of Engineers, and Society of American Value Engineers International. The workshop will include an Information Phase, a Function Analysis Phase, a Creative Phase, an Evaluation Phase, a Development Phase, and a Presentation Phase.
4. Compile outcomes and assist the Village in evaluation of the individual value proposals. Submit a report in electronic and hard copy format, consisting of the work products, that documents the entire value engineering study, including the value recommendations and evaluations.

Permitting

MWH's contract timeline anticipates that the next key step is to complete the draft permit applications and submit them to the respective review agencies, while concurrently advancing engineering from the current 30% stage. The time schedule associated with the permit application, review, and approval, is approximately 12 months. The Village could consider submitting the permit applications so that the respective agencies can commence their reviews, but not proceed with additional design services at this time. The Village

could concurrently undertake independent cost and value engineering review of the project work to date.

There are several benefits to this approach. Despite several discussions with the Illinois EPA, permitting and water quality aspects are still key feasibility aspects of the project. While the EPA has helpfully engaged in these discussions, they have also been very clear that they will need a full permit application with all necessary details before they will be able to begin officially reviewing the project. Feasibility will ultimately rest on permitability, and there is no way to ascertain this feasibility until the completion of the permit process is reached. This process is estimated to take 12 or more months from time of submittal, so submitting at this time will begin that process and allow the project to move forward, without significant additional expenditure for engineering. MWH has estimated a cost of \$100,000 to \$125,000 for advancing the project through permitting in this manner. This scope of work could also be accomplished under the existing contract with MWH.

While there are benefits to this approach, there is one concern. The estimated cost to advance the permit applications through submittal and review is not insignificant, and the permit submittal will include a significant level of plan detail. If the value engineering exercise results in significant changes to the project scope and concept, plans would have to be re-drawn, and the permit applications may require significant revision or even re-submittal if the changes are significant enough. This could involve additional expenditure and add review time. If this possibility raises concerns, it might be prudent to wait until the cost review and value engineering are complete and then submit permit applications, although waiting to submit permit applications will also extend the date at which a final permitting decision could be rendered.

Timeline and Recommended Actions

Staff recommends proceeding with requesting fee proposals for a two-phase third-party cost review and value engineering study. The cost review would provide the community with an additional level of certainty and confidence in the estimated project cost, to inform future decision-making on the project. The value engineering process would creatively evaluate the STADI project and identify potential changes to the project that might better accomplish the desired level of structural flood risk-reduction at a lower capital cost, while providing better overall value and confidence in the effectiveness of the design.

Staff has identified two firms qualified and capable to perform both the cost review and the value engineering review, and it is expected that the entire two-phase project would cost approximately \$80,000 to \$100,000. An approximate timeline follows:

Action	Date
Authorize staff to distribute RFP	May 12, 2015
Responses due	May 22, 2015
Council discussion and award	June 2, 2015
Completion of Phase I Cost Review	June 29, 2015
Council Review of Phase I Cost Review	July 7, 2015
Authorization to Proceed with Phase I Value Engineering*	July 7, 2015
Value Engineering Complete*	September 15, 2015
Council Review of Phase II Value Engineering*	October 6, 2015

* If authorized by Village Council

Recommendation:

1. Consider authorizing staff to issue an RFP to solicit fee proposals to complete a two-phase cost and value engineering review of the Willow Road STADI project.
2. Consider whether to direct staff to obtain a cost and scope of work from MWH to complete a final joint permit applications and submit it to the US Army Corps of Engineers, Illinois Environmental Protection Agency, and the Illinois Department of natural Resources.

Attachments:

1. Draft Request for Proposals (RFP)

DRAFT REQUEST FOR PROPOSALS

VILLAGE OF WINNETKA



**INDEPENDENT COST AND
VALUE ENGINEERING REVIEW
OF
STORMWATER IMPROVEMENT PROGRAM
WILLOW ROAD STORMWATER TUNNEL
AND
AREA DRAINAGE IMPROVEMENT PROJECT**

ISSUED: May **, 2015

RESPONSES DUE: May **, 2015

PREPARED BY:
Steven M. Saunders, Director of Public Works
Village of Winnetka
1390 Willow Road
Winnetka, IL 60093
Telephone: 847-716-3534
ssaunders@winnetka.org

I. INTRODUCTION

On January 21, 2014, the Village awarded a contract to MWH Americas, Inc. to provide engineering services for the proposed Willow Road Stormwater Tunnel and Area Drainage Improvements (STADI) project. When MWH's contract was awarded, the project was at the preliminary, conceptual engineering stage, and a significant amount of engineering was required to bring the project to the stage where construction contracts can be executed. Importantly, there were and are also many questions about the project to be answered, permits to be acquired, and decisions to be made by the Village, before construction contracts can be awarded. MWH has completed the scope of work associated with preliminary design and produced a 2-volume Preliminary Design Report. The current project cost estimate is at \$58,500,000, which is significantly higher than the preliminary conceptual estimate of \$34,597,000, prepared in September of 2012. The Village desires to design and implement a cost-effective and feasible flood-risk reduction project for drainage areas susceptible to flooding, and is seeking qualified engineering firm(s) to provide an independent detailed review of the project cost estimate, and a detailed value-engineering review of the project methodology, assumptions, designs, estimates, and conclusions prepared by MWH to determine if there are other designs or approaches that could meet the project objectives at a lower cost.

II. PROJECT DESCRIPTION

The Willow Road STADI project would combine improvements for 5 drainage areas into a single project, providing benefits to the North Willow Road, South Willow Road, Provident Avenue, Cherry Street Outlet, and the Winnetka Avenue Underpass Study areas for the 100-year design storm event. The proposed improvement consists of an 8-foot diameter storm sewer underneath Willow Road running from approximately Glendale Avenue to Lake Michigan. The project includes construction of additional storm sewers connected to the tunnel to provide relief to 5 drainage basins affected by frequent and/or severe stormwater flooding, and construction of a below ground outlet structure to manage water quality, control water velocity and prevent erosion. The project concept also includes possible implementation of distributed water quality measures in the form of structural and non-structural Best Management Practices (BMPs) such as rain gardens, bio-swales, permeable pavements, catch basin inserts, oil & grit separators, etc. to control water quality impairments as close to their sources as possible.

MWH's contract was structured so that at the completion of preliminary engineering activities, MWH was to provide a Preliminary Design Report that documents the results of their activities and allows the Village to discuss the project at a further level of detail not previously developed.

Structuring the contract in this way allowed the Village to advance the project on a step-by-step basis, with intermediate review points for Council approval before advancing to the next phase. Review Point #1 occurred in June, 2014, upon completion of Concept Review, Permit Plan, and Hydrologic/Hydraulic Model Verification. At Review Point #1, MWH focused on four key points: 1) the project is viable and models have been verified;

2) other options were considered, but they do not provide 100-year flood protection; 3) protection of natural assets and water quality management; and 4) next steps required to further 30% engineering design and permit applications. MWH confirmed that the Village's flood protection criterion is 100-year level protection and that modeling demonstrated that the Tunnel is a reasonable approach, and is also the only option available to meet this level of performance. An overview of alternatives was provided that addressed the constraints the Village faces in terms of storing, conveying, and discharging stormwater runoff. MWH reviewed an analysis of "westward" options which revealed that none of these choices offers sufficient storage capacity, even with the use of aggressive green infrastructure. MWH determined that a multi-tiered process will be necessary to manage water quality, including source control (local Best Management Practices and public education), low flow management (existing infrastructure and flow diversions), distributed treatment, and discharge management at the Lake Michigan outfall. MWH has confirmed the Tunnel will require a combination of green and grey infrastructure to manage both the flow and quality of water for the Village.

In conclusion, MWH stated the Willow Road STADI project can achieve the desired flood risk reduction. The Council authorized MWH to proceed with the preliminary engineering and permitting tasks in Phase 1 as outlined in the original scope of services. In addition, the Council authorized MWH to proceed with development and implementation of a supplemental water quality sampling and analysis.

Subsequent to this direction from the Council, MWH initiated the scope of work associated with Preliminary Engineering, including Phase I field investigations, a water quality monitoring program, completion of design plans and documents to the 30% stage, preparation of draft regulatory permit applications, and an updated Opinion of Probable Construction Cost (OPCC).

- *Phase 1 Field Investigations.* MWH obtained supplemental data needed to support critical permitting and preliminary engineering activities, including field surveys required to document conditions and locate critical utilities along the proposed sewer alignments and geotechnical investigations required to provide subsurface and soil data for the evaluation of construction methods for individual sewer segments. Specific work activities included field planimetric and utility survey; creating base mapping sheets; performing shallow and deep soil borings, with standard boring logs; collecting soil samples for environmental screening; and preparing a generalized geotechnical profile along the proposed tunnel and open cut sewer alignments.
- *Water Quality Monitoring Program.* MWH implemented a program to gather flow and water quality data at four locations in the Village's separate storm sewer system. Results from the water quality monitoring program are being used to develop a water quality management plan for the project. Specific activities included procuring and installing automated water sampling equipment, temporary flow monitoring equipment, and rain gauges needed to gather water quality at four locations in the Village; obtaining wet-weather and dry-weather sample sets during September, October and November of 2014; obtaining grab-

samples during Spring 2015 to analyze the effect of snowmelt on stormwater quality; contracting with a testing laboratory to perform analysis of the samples and provide written results; and compiling sampling results to document water quality.

- *Preliminary (30%) Design.* MWH prepared preliminary design drawings for the proposed outfall and storm sewer improvements to advance critical permitting activities and provide a refined basis for overall planning of design and construction activities associated with the proposed stormwater tunnel and area drainage improvements. Specific activities included preparation of a set of 30% preliminary design drawings and a list of special provisions expected to be required in the final bidding packages for the projects; Preparation of preliminary plan and profile drawings showing the proposed configuration and horizontal and vertical alignment of the proposed storm sewer improvements; conducting a hydraulic design analysis of the proposed outfall structure and major junction/diversion structures using Computational Fluid Dynamics (CFD) modeling to analyze flow rates and velocities through the structure; development of basic structural design criteria and preliminary type, size, and location layouts for the proposed outfall structure and major junction or diversion structures; preparing a Class 4 Opinion of Probable Construction Costs (OPCC) using the preliminary drawing set as the basis for the preparation of an Association for the Advancement of Cost Engineering (AACE) Class 4 OPCC.
- *Permitting.* MWH has advanced permitting efforts to the point of preparing draft permit applications for several agencies:
 - Joint Permit Application to the Illinois Environmental Protection Agency (IEPA), Illinois Department of Natural Resources (IDNR), and US Army Corps of Engineers (USACOE) for the proposed new stormwater outfall to Lake Michigan. Steps involved in this process are as follows:
 - Compile, document and review available water quality data for stormwater discharges from Winnetka and for Lake Michigan. The IEPA 401 Water Quality Certification will be a key regulatory hurdle in the permit process;
 - Prepare the initial Joint Permit Application to IEPA, IDNR, and USACOE for the construction of a new stormwater outfall to Lake Michigan;
 - Prepare a Water Quality Management Plan to document the measures that Village will incorporate into its stormwater system to meet the water quality standards and anti-degradation criteria that will apply to the new discharge;
 - Estimate pollutant loadings at the existing discharge points from the project area for specific design storm events and use the results to project peak and average loadings under current conditions;
 - Document the likely water quality discharge standards for both the Lake Michigan and the Skokie River;
 - Assess available technologies for meeting the discharge standards;
 - Develop a water quality management strategy for the project that includes consideration of private stormwater best management

practices (BMPs), BMPs or stormwater treatment facilities constructed at distributed locations within the storm sewer system and within the public right-of-way, and/or end-of-pipe treatment measures;

- Estimate pollutant loadings at existing and proposed discharge points within the proposed new storm sewer system with and without consideration of the water quality management measures proposed;
 - Document the estimated impact of the proposed storm sewer improvements on pollutant loadings to Lake Michigan with and without the proposed water quality management measures;
 - Compile results from the analyses into a project-specific Water Quality Management Plan for submittal with the Joint Permit Application.
- Initial application to the Metropolitan Water Reclamation District (MWRDGC) requesting approval for the proposed new stormwater outfall to Lake Michigan. It is assumed that the materials contained in the Joint Permit Application will be suitable for submittal to the MWRDGC with minimal modification;
 - Initial application to the Union Pacific Railroad (UPRR) for the construction of a 96-inch diameter storm sewer across the railroad right-of-way at Willow Road. The application to the railroad will consist of the completed forms and preliminary (30%) design drawings for the portion of the new sewer crossing the railroad right-of-way.

Documents Available for Review

The selected Consultant shall provide professional design review services to evaluate previously completed work studies prepared by MWH Americas, Inc. The following documents are provided for use by the Consultant in performing the cost estimate and value engineering reviews:

- Attachment #1: Winnetka Flood Risk Reduction Study for 25-, 50-, and 100-year Flood Protection, by Christopher B. Burke Engineering, Ltd., October, 2011
- Attachment #2: Willow Road Tunnel Feasibility Study Report, by Village of Winnetka, September, 2012
- Attachment #3: MWH Contract Willow Road STADI Project, January, 2014
- Attachment #4: Concept Review and Permitting Plan, by MWH Americas, Inc., June, 2014
 - Summary Memo
 - Concept Review Memo
 - Alternative Sizing Memo
 - Permitting Action Plan
 - Water Quality Sampling Plan
- Attachment #5: MWH Contract Change Order #1, August, 2014
- Attachment #6: Preliminary Design Report, vol. 1, by MWH Americas, Inc., April, 2015

- Preliminary Design Report
- Hydraulic Basis of Design
- 2014 Water Quality Monitoring Report
- Phase I Field Investigation Summary
- Water Quality Management Plant
- Attachment #7: Preliminary Design Report, vol. 2, by MWH Americas, Inc., April, 2015
 - Draft Joint Permit Application to Army Corps, EPA, and Dept. of Natural Resources
 - Draft MWRD Watershed Management Ordinance Permit Application
 - Draft Union Pacific Railroad Crossing Permit Application
 - Preliminary Design Drawings
 - Water Quality Sampling Results
- Attachment #8: Supplemental Technical Memoranda, by MWH Americas, Inc., April, 2015
 - Cost Estimate Comparison
 - Peak Shaving
 - Alternate design to 50-year standard

III. SCOPE OF WORK

PHASE I Cost Review: Tasks to be Performed by Consultant

Phase I consists of a thorough, detailed, independent review of the project cost estimates to provide the Village with additional understanding and certainty concerning the current and prior cost estimates.

Task 1: Review of Previous Engineering and Supporting Data (Attachment #1, 2 & 4)

The Consultant shall review the initial Flood Risk Reduction Study, prepared by Christopher B. Burke Engineering, and the Willow Road Tunnel Feasibility Study Report, prepared by Village staff, to develop an understanding of and to become familiar with the work studies that were completed and which formed the starting point for MWH's contractual scope of work. The Consultant shall also review all documents in Attachment #4, to develop an understanding of MWH's current project approach.

Task 2: Review of Preliminary Design Report and Technical Memoranda (Attachment #6, 7 & 8)

The Consultant shall review all documents in Attachment #6, #7, and #8, including the data, assumptions, methods, calculations, designs, drawings, estimates, and conclusions, to understand MWH's current project approach as well as the level surveying and geotechnical information, plan sheets, and other details available for use in the current cost estimates. Particular attention shall be given to methods, assumptions, and calculations used to develop and prepare the Opinion of Probable Construction Cost contained in Attachment #6.

Task 3: Cost Estimate, Analysis, and Conclusions

The Consultant shall prepare a written, detailed, independent review of the estimate of probable construction cost, based on the current project design, draft reports and underlying detailed data. The Consultant shall document all assumptions, calculations, productivity rates, material prices, labor rates, etc. with the final cost estimate. The Consultant shall comment on the need for refinement of data, study or design assumptions, or other factors that would bear on the development, design, and cost of the STADI Project.

PHASE II Value Engineering Study: Tasks to be Performed by Consultant

Phase II consists of a Value Engineering study and workshop. The purpose of this Value Engineering study and workshop is to creatively evaluate the STADI project and identify potential changes to the project that would provide the desired level of structural flood risk-reduction at a lower capital. This study also aims to identify potential changes to the project that might better accomplish the STADI project goals while providing better overall value and improve confidence in the effectiveness of the design.

Task 1: Pre-Workshop Activities

The CONSULTANT shall organize an independent Value Engineering (VE) Team to review the Preliminary Engineering Report and/or Design of the project components. The Consultant will provide the study team members identified below:

Name/Discipline	Qualifications (to be provided)
Team Leader	
Team Administrative Assistant	
Trenched/trenchless sewer design/construction expert	
Hydrology/hydraulic expert	
Tunnel design/construction expert	
Cost Estimator	

All other team members will be provided by the Village, at no cost to the Consultant. The Consultant will communicate directly with all study team members as needed relative to scheduling, pre-workshop, workshop and post-workshop activities.

The Consultant will perform pre-workshop activities to include those tasks which must be accomplished in order for the study team to be able to efficiently and effectively perform in the workshop, such as scheduling study tasks, scheduling and coordination with study team members, assisting the Village with scheduling study participants, and coordination of the necessary documentation on the project for distribution by the Village to the study team members.

The Village will distribute the project documents and materials to be studied to the study team members at least five working days prior to the workshop start. Documents to be reviewed are listed in Item #4. All team members except the cost estimator are expected to spend at least 10-12 hours reviewing the project documents and materials prior to the

start of the workshop. The cost is expected to spend 20-24 hours reviewing the documents and validating the cost estimate provided by the Village. The study team members shall perform the necessary review of the documents provided to develop an understanding of and to become familiar with the work and studies that were completed. The review shall include all of the data, assumptions, methods, calculations, and conclusions. **It may be necessary that the review exceed the timeframes listed above.**

Task 2: Value Engineering Workshop

After reviewing all of the above information, the Consultant shall endeavor to identify an alternate strategy or strategies to achieve the project mission, namely to provide significant risk reduction against structure flooding for five drainage areas in the Village, for a 100-year design event. The Consultant will conduct a 5-day value engineering workshop using a job plan that is generally consistent with value engineering practices and principles employed by the U.S. EPA, US Army Corps of Engineers, and S.A.V.E. International. The workshop will include an Information Phase, a Function Analysis Phase, a Creative Phase, an Evaluation Phase, a Development Phase, and a Presentation Phase.

The workshop will be initiated by presentations from the Village, who will describe the objectives of the Assignment and any constraints that will be placed on the study team. The designers will explain specifically how the design accomplishes the Village's objectives and the details of that design. The workshop will include a detailed function analysis of the major project elements. The team will generate a list of ideas for project improvement followed by an evaluation of those ideas. This evaluation will include input from key Village decision makers before proceeding with development of recommendations. On the last day of the workshop, a presentation of the recommendations will be provided to the Village decision makers and key representatives of the design team.

The cost of providing the workshop refreshments and all other costs associated with the meeting facilities, including data, telephone, photocopying, etc. will be borne by the Consultant. To ensure that the study team has complete information about the project criteria, the Village will provide at a minimum, the Village Assignment Manager and appropriate key members of the design team for the first day and last day presentations as well as the mid-point review meeting.

Task 3: Post-Workshop

The Consultant will conduct a four-hour post-workshop study Decision/Implementation Meeting area following receipt by the study team leader of the written designer responses to the Preliminary Report. The purpose of this Decision/Implementation Meeting is to assist the Village in making decisions regarding acceptance or rejection of the individual value proposals. Attendees will consist of key Village staff, key designer staff and the study team leader.

Task 4: Summary Value Engineering Analysis and Conclusions

The Consultant shall:

- Submit a preliminary value report in electronic and hard copy format, consisting of the workshop work products within fourteen (14) days of the completion of the value workshop;
- Review the design team written responses to the preliminary value report, consult with the value team members as necessary, and prepare for a decision-making meeting;
- Attend the decision-making meeting and provide information to the decision-makers at the meeting relative to the pros and cons of each value recommendation. Respond to the concerns raised by the design team and others, and assist the designer, design project manager and the Village project manager in reaching decisions about whether to incorporate each value recommendation into the project design;
- Prepare a draft final report within fourteen (14) days following the decision-making meeting that documents the entire VE study, including the decisions made;
- Make appropriate revisions to the draft final report based on comments from the Village project manager, and provide an electronic and 10 hard copies within fourteen (14) days following receipt of comments from the Village project manager.

Deliverables

The Consultant shall produce and provide the following deliverables:

PHASE I

- Detailed Estimate of Cost
- Hard copies of any newly developed data and work prepared by the Consultant
- Digital data/electronic copies to be provided on DVD, including source files. Include the final Detailed Estimate of Costs report in PDF format.

PHASE II

- Preliminary Value Engineering report in electronic and hard copy format, consisting of the workshop work products;
- Draft final report that documents the entire VE study, including the decisions made;
- Make appropriate revisions to the draft final report based on comments from the Village project manager, and provide an electronic and 10 hard copies within fourteen (14) days following receipt of comments from the Village project manager.
- Hard copies of any newly developed data and work prepared by the Consultant
- Digital data/electronic copies to be provided on DVD, including source files. Include the final Value Engineering Report in PDF format.

Schedule

The schedule outlined below represents the desired duration of Phase I and shall begin after the Village has awarded a contract and issued a Notice to Proceed (NTP).

CONTRACT SCHEDULE FOR PHASE I

Description	Calendar Days
Task 1: Review of Previous Engineering and Supporting Data	5
Task 2: Review of Preliminary Design Report and Technical Memoranda	5
Task 3: Cost Estimate, Analysis, Conclusions, and Report	10
Total Contract Duration (days)	20

The schedule outlined below represents the desired duration of Phase II and shall begin after completion of the Phase I cost review and after the Village authorizes the Consultant to proceed with Phase II.

CONTRACT SCHEDULE FOR PHASE II

Description	Calendar Days
Task 1: Pre-workshop activities	10
Task 2: Value Engineering workshop	10
Task 3: Post Workshop Activities	10
Task 4: Summary Value Engineering Analysis and Conclusions	20
Total Contract Duration (days)	50

IV. SUBMITTAL REQUIREMENTS

The deadline for submittals is **4:00 p.m. on May **, 2015**. One (1) paper copy and one (1) electronic copy of the submittal should be delivered to:

Nicholas Mostardo, Financial Services Coordinator
 Village of Winnetka
 510 Green Bay Road
 Winnetka, IL 60093
 (847) 716-3504
 (847) 446-1139 (fax)
 nmostardo@winnetka.org

To be considered for this project, the Consultant must submit an informative statement of interest to the Village, which also includes the following information, organized in the following manner to facilitate review:

A. Consultant Information

1. Company offices from which the project will be staffed.
2. Identify the staff members who will be assigned to this project, the roles they will fill, and the qualifications of each individual, including resumes.
3. Related experience of project personnel.

4. List similar projects completed within the last five years, by the staff members that will be assigned to this project. Include a project description, date of project completion, and the name and telephone number of a representative of the contracting jurisdiction.

5. A completed compliance affidavit (Attachment 1)

B. Approach to Project

The Consultant will propose a scope of work based upon the preliminary scope contained herein, and describe its approach in performing the proposed scope.

C. Schedule

A preliminary schedule for completing the project is required. This schedule should address all work and meetings recommended by the Consultant and which clearly corresponds to the Consultant's approach to the project.

D. Budget

An itemized, not-to-exceed budget to complete all outlined work items is required. The budget should include the hourly rates of the staff members assigned to the project, any direct costs, and a breakdown of project hours by task to complete the project. **The budget shall be submitted in a separate, sealed envelope clearly marked "Project Budget".**

V. QUALIFICATION EVALUATION

Statements of qualifications will be evaluated by the Village according to the following criteria:

Proposals will be evaluated based on the following criteria:

- Project understanding. Understanding of the purpose and goals of the project, critical success factors and potential obstacles to success.
- Project approach. Technical approach, management approach, innovative approaches to stormwater management and regulatory understanding, and the ability to present technical data in a user-friendly format with appropriate use of graphics.
- Firm experience and workload. Experience of the firm in similar stormwater management planning and regulatory work and record of successful results of that work, the firm's ability to take on additional work, demonstration that the firm's organizational structure has sufficient depth for its present workload, and firm's ability to offer the breadth and quality of services required for the project.

- Project team structure and personnel experience. Project team member's individual experience and qualifications, project manager's experience, sub-consultant's individual experience and qualifications. Proposals will be evaluated primarily on the demonstrated ability of the project team members who will actually perform substantial amounts of the work on this project.
- Schedule. Proposed schedule for performing the work for the project and how the firm proposes to achieve the project's time goals. Once a contract is awarded, the selected firm must be in a position to begin work immediately and move promptly towards completion.
- Fee. The Village of Winnetka will consider cost in overall evaluation of the proposals. This project will not necessarily be awarded to the firm with the lowest prices, but cost is one criterion and will be considered among the other factors.

Each submittal will be evaluated upon a scale of 1 to 10 for each of the above factors. The Village President and Board of Trustees reserve the right to reject any and all submittals.

VI. INDEMNIFICATION

Respondents to this RFP shall understand that the successful proposer shall indemnify and hold harmless the Village of Winnetka, its agents, and its employees against any and all lawsuits, claims, demands, liabilities, losses or expenses, including court costs, and attorney's fees, for or on account of any injury to any person or any death at any time resulting from such injury, or any damaged property, which may be alleged to have arisen out of the negligent acts, errors, or omissions of the Consultant. It is further understood that this indemnification shall not be construed to cover the negligent acts or omissions of the Village of Winnetka, its agents, or its employees. It is additionally understood that this indemnification shall not be construed to cover the negligent acts or omissions of parties unrelated to this contract.

VII. ATTACHMENTS

- 1) Compliance Affidavit

ATTACHMENT 1

COMPLIANCE AFFIDAVIT

As a condition of entering into a contract with the Village of Winnetka, and under oath and penalty of perjury and possible termination of contract rights and debarment, the undersigned deposes and states that he has the authority to make any certifications required by this Affidavit on behalf of the bidder, and that all information contained in this Affidavit is true and correct in both substance and fact.

Section 1: BID RIGGING AND ROTATING

1. This bid is not made in the interest of, or on behalf of an undisclosed person, partnership, company, association, organization or corporation;
2. The bidder has not in any manner directly or indirectly sought by communication, consultation or agreement with anyone to fix the bid price of any bidder, or to fix any overhead profit or cost element of their bid price or that of any other bidder, or to secure any advantage against the Village of Winnetka or anyone interested in the proper contract;
3. This bid is genuine and not collusive or sham;
4. The prices, breakdowns of prices and all the contents quoted in this bid have not knowingly been disclosed by the bidder directly or indirectly to any other bidder or any competitor prior to the bid opening;
5. All statements contained in this bid are true;
6. No attempt has been or will be made by the bidder to induce any other person or firm to submit a false or sham bid;
7. No attempt has been or will be made by the bidder to induce any other person or firm to submit or not submit a bid for the purpose of restricting competition;
8. The undersigned on behalf of the entity making this proposal or bid certifies the bidder has never been convicted for a violation of State laws prohibiting bid rigging or rotating.

Section 2: TAX COMPLIANCE

1. The undersigned on behalf of the entity making this proposal or bid certifies that neither the undersigned nor the entity is barred from contracting with the Village of Winnetka because of any delinquency in the payment of any tax administered by the State of Illinois, Department of Revenue, unless the undersigned or the entity is contesting, in accordance with the procedures established by the appropriate revenue

act, liability of the tax or the amount of tax;

2. The undersigned or the entity making this proposal or bid understands that making a false statement regarding delinquency of taxes is a Class A Misdemeanor and in addition voids the contract and allows the municipality to recover all amounts paid to the entity under the contract in civil action.

Section 3: EQUAL EMPLOYMENT OPPORTUNITY

This EQUAL OPPORTUNITY CLAUSE is required by the Illinois Human Rights Act, 775 ILCS 5/101 et seq.

In the event of the contractor's non-compliance with any provision of the Equal Employment Opportunity Clause, the Illinois Human Rights Act, or the Rules and Regulations for Public Contracts of the Department of Human Rights, the contractor may be declared non-responsive and therefore ineligible for future contractor subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations, and the contract may be canceled or voided in whole or in part, and such other sanctions or penalties may be imposed or remedies involved as provided by statute or regulations.

During the performance of this contract, the contractor agrees:

1. That it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin or ancestry; and further that it will examine all job classifications to determine if minority persons or woman are underutilized and will take appropriate action to rectify any such underutilization;
2. That, if it hires additional employees in order to perform this contract, or any portion hereof, it will determine the availability (in accordance with the Department's Rules and Regulations for Public Contract's) of minorities and women in the area(s) from which it may reasonably recruit and it will hire for each job classification for which employees are hired in such a way that minorities and women are not underutilized;
3. That, in all solicitations or advertisements for employees placed by it or on its behalf, it will state all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, marital status, national origin or ancestry, age, physical or mental handicap unrelated to ability, or an unfavorable discharge from military service.
4. That it will send to each labor organization or representative of workers with which it has or is bound by a collective bargaining or other such agreement or understanding, a notice advising such labor organization or representative of the contractor's obligation under the Illinois Human Rights Act and the Department's Rules and Regulations for Public Contract. If any such labor organization or representative fails or refuses to cooperate with the contractor in its efforts to comply with such Act and Rules and Regulations, the contractor will promptly so notify the Department and

contracting agency will recruit employees from other sources when needed to fulfill its obligation hereunder.

5. That it will submit reports as required by the Department's Rules and Regulations for Public Contracts, furnish all relevant information as may from time to time be requested by the Department or contracting agency, and in all respects comply with the Illinois Human Rights Act and the Department's Rules and Regulations for Public Contracts.
6. That it will permit access to all relevant books, records, accounts, and work sites by personnel of the contracting agency and the Department for purposes of investigation to ascertain compliance with the Illinois Human Rights Act and the Departments Rules and Regulations for Public Contracts.
7. That it will include verbatim or by reference the provisions of this Equal Opportunity Clause in every subcontract it awards under which any portion of the contract obligations are undertaken or assumed, so such provisions will be binding upon such subcontractor. In the same manner as the other provisions of this contract, the contractor will be liable for compliance with applicable provisions of this clause by such subcontractors; and further it will promptly notify the Department in the event any subcontractor fails or refuses to comply therewith. In addition, the contractor will not utilize any subcontractor declared by the Illinois Human Rights Department to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations.

Section 4: ILLINOIS DRUG FREE WORK PLACE ACT

The undersigned will publish a statement:

1. Notifying employees that the unlawful manufacture, distribution, dispensation, possession, or a use of a controlled substance is prohibited in the work place;
2. Specifying the actions that will be taken against employees for violating this provision;
3. Notifying the employees that, as a condition of their employment to do work under the contract with the Village of Winnetka, the employee will:
 - A. Abide by the terms of the statement;
 - B. Notify the undersigned of any criminal drug statute conviction for a violation occurring in the work place not later than five (5) days after such a conviction.
4. Establishing a drug free awareness program to inform employees about:
 - A. The dangers of drug abuse in the work place;

- B. The policy of maintaining a drug-free work place;
 - C. Any available drug counseling, rehabilitation or employee assistance programs;
 - D. The penalties that may be imposed upon an employee for drug violations.
5. The undersigned shall provide a copy of the required statement to each employee engaged in the performance of the contract with the Village of Winnetka, and shall post the statement in a prominent place in the work place.
 6. The undersigned will notify the Village of Winnetka within ten (10) days of receiving notice of an employee's conviction.
 7. Make a good faith effort to maintain a drug free work place through the implementation of these policies.
 8. The undersigned further affirms that within thirty (30) days after receiving notice of a conviction of a violation of the criminal drug statute occurring in the work place he shall:
 - A. Take appropriate action against such employee up to and including termination; or
 - B. Require the employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a federal, state, or local health, law enforcement, or other appropriate agency.

Section 5: SEXUAL HARRASSMENT POLICY

The undersigned on behalf of the entity making this proposal or bid certifies that a written sexual harassment policy is in place pursuant to Public Act 87-1257, effective July 1, 1993, 775 ILCS 5/2-105 (A).

This Act has been amended to provide that every party to a public contract must have written sexual harassment policies that include, at a minimum, the following information:

1. The illegality of sexual harassment;
2. The definition of sexual harassment under State law;
3. A description of sexual harassment, utilizing examples;
4. The vendor's internal complaint process, including penalties;

5. The legal recourse, investigative and complaint process available through the Department of Human Rights, and the Human Rights Commission;
6. Directions on how to contact the Department and Commission;
7. Protection against retaliation as provided by 6-101 of the Act.

Section 6: VENDOR INFORMATION

1. Is the bidder a publicly traded company? (yes or no) _____
If the answer is yes, state the number of outstanding shares in each class of stock.
Provide the name of the market or exchange on which the company's stock is traded.

2. Is the bidder 50% or more owned by a publicly traded company? (yes or no) _____

If the answer to the above question is yes, name the publicly traded company or companies owning 50% or more of your stock, state the number of outstanding shares in each class of stock and provide the name of the market or exchange on which the stock of such company or companies is traded.

IT IS EXPRESSLY UNDERSTOOD THAT THE FOREGOING STATEMENTS AND REPRESENTATIONS AND PROMISES ARE MADE AS A CONDITION TO THE RIGHT OF THE BIDDER TO RECEIVE PAYMENT UNDER ANY AWARD MADE UNDER THE TERMS AND PROVISIONS OF THIS BID.

SIGNATURE: _____

NAME: _____ TITLE: _____
(print or type)

Subscribed and sworn to me this _____ day of _____, 2012, A.D.

By:
(Notary Public)

-Seal-