



**Meeting:** Village Board  
**Meeting Date:** 11/25/2013  
**Agenda Item:** 6c

**Mission Statement**  
Delivering quality services in a courteous, cost-effective and efficient manner.

## VILLAGE BOARD MEETING STAFF REPORT

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**REPORT TO:** Burt R. McIntyre, President  
Village Board of Trustees

**REPORTED BY:** Michael J Kaster, PE, Director of Engineering

**REVIEWED BY:**

**AGENDA ITEM:** Review and take action on a proposal for a traffic study, and utility and roadway design for the Village Center project.

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### **POLICY ISSUE**

Should the Village Board approve the proposal for professional engineering services to Graef-USA Inc. for a fee of Time and Material not to exceed \$96,200.00?

### **BACKGROUND INFORMATION**

Village staff requested a proposal from Graef for the engineering investigation and design work required to construct the first phase of public improvements for the Village Center project. They were selected as they have performed work for the Village in the past with good results, and therefore we have a good working relationship with them, they know our process, and they have the ability to complete the required work in a timely fashion. Time is of the essence as some development is looking at getting underway in the spring, so the Village needs to provide public improvements for the proposed facilities.

The proposal includes:

- Traffic Engineering to provide traffic projections, intersection designs, and roadway recommendations for the entire Village Center area.
- Concept layout and typical road section review and recommendations by Graef planners.
- Preliminary design of all roadways and utilities in the entire Village Center development area. This will provide assurances that the first phase will work in concert with subsequent phases.
- Final Design and permitting for the first phase of public improvements.

The project permit process needs to begin in December to ensure the construction can begin by early May.

The Proposal was reviewed by staff was found to be reasonable for the size and scope of the project. It is not a requirement to bid for professional services.

### **PRIOR ACTION/REVIEW**

None

**FISCAL IMPACT:**

- |                              |                    |
|------------------------------|--------------------|
| 1. Is There A Fiscal Impact? | <u>Yes</u>         |
| 2. Is it Currently Budgeted? | <u>No</u>          |
| 3. If Budgeted, Which Line?  | <u>TIF Funding</u> |
| 4. Amount?                   | <u>\$96,200.00</u> |

**RECOMMENDED ACTION**

Village staff recommends that the Village Board approve the proposal for professional engineering services.

If the Village Board agrees with this action, the following motion could be used, ***“Motion to approve the proposal for professional engineering services to Graef-USA, Inc. a fee of Time and Material not to exceed \$96,200.00.”***

**POLICY ALTERNATIVE(S)**

The Village Board could take the following actions:

- Approve proposal for professional engineering services
- Approve the proposal for professional engineering services with modifications
- Deny the proposal for professional engineering services and decide how to proceed
- Table the proposal for professional engineering services and request additional information

**ATTACHED INFORMATION**

- I. Proposal
- II. Project Area Map

**COPIES FORWARDED TO:**

- I. None



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November 19, 2013

Mr. Mike Kaster, P.E.  
Director of Engineering  
Village of Howard  
1336 Cornell Road  
Green Bay, WI 54313

Subject: Amendment to Master Contract for  
Professional Engineering Services  
Village Center Project

Dear Mike:

Per your request, Graef-USA Inc. (GRAEF) is pleased to provide this proposal to amend our services to the Village of Howard (Client). An executed copy of this proposal will amend our Agreement dated November 17, 2010 with subsequent revised hourly rate schedules for 2013 submitted on April 10, 2013. This proposal is for professional services for the Village Center development (Project). This proposal is subject to GRAEF's Standard Terms and Conditions, which were attached to our original proposal.

It is our understanding that the nature of the Project is to provide Planning Phase Services and Design Phase Services as outlined in your Proposed Scope of Service for Village Center Designs dated Oct. 31, 2013 and attached to this proposal. More specifically, the Planning Phase Services will include the Traffic Study for the immediate and full-build out scenarios and also a planning level review of the modified development layout and roadways sections. The Design Phase Services will include the preliminary layout and design of all roadways and utilities for the full build-out condition, detailed design and preparation of bidding/construction documents for Phase I 2014 construction, and permit coordination and application for the Phase I 2014 construction scope.

For this Project, GRAEF proposes to provide the following Basic Services:

### **PLANNING PHASE**

#### **Traffic Engineering**

The Traffic Impact Analysis (TIA) for the Village Center development will include the following tasks:

- The study area will include the following intersections:
  1. Cardinal Lane (CTH EB) & Landler Street/Proposed Development Access
  2. Cardinal Lane (CTH EB) & Proposed Development Access Near Green Bay Community Church Access
  3. Cardinal Lane (CTH EB) & Riverview Drive (CTH J) – Traffic Signal
  4. Riverview Drive (CTH J) & Riverwood Lane
  5. Riverview Drive (CTH J) & Rhine Street/Proposed Development Access
  6. Riverview Drive (CTH J) & Shawano Avenue (CTH C/CTH J) – Traffic Signal

7. Shawano Avenue (CTH C) & Preservation Way
  8. Shawano Avenue (CTH C) & Hillcrest Heights
- Conduct turning movement traffic counts during the weekday evening (3:00 to 6:00pm) peak period at the following study area intersections:
    1. Cardinal Lane (CTH EB) & Landler Street
    2. Cardinal Lane (CTH EB) & Riverview Drive (CTH J)
    3. Riverview Drive (CTH J) & Riverwood Lane
    4. Riverview Drive (CTH J) & Rhine Street
    5. Riverview Drive (CTH J) & Shawano Avenue (CTH C/CTH J)
    6. Shawano Avenue (CTH C) & Preservation Way
    7. Shawano Avenue (CTH C) & Hillcrest Heights
  - Obtain the WisDOT AADT count data for the study area roadways.
  - Review previous traffic counts and adjust the peak hour traffic volumes to account for the USH 41 construction project.
  - Identify the volume of traffic expected to be generated by the proposed development during the weekday evening peak hour based on trip data published in the ITE Trip Generation 9<sup>th</sup> Edition and on information provided by the Client regarding the specific types of land use and size (building square footage, number of units, number of attendees, etc.). Trip generation will be developed for Phase 1 and full buildout of the development.
  - Obtain information for any off-site developments in the vicinity of the study area from the Village. Develop peak hour trip generation for the off-site developments based on the type of land use and size.
  - Develop directional trip distribution for the on-site and off-site developments based on expected travel patterns. The traffic generated by the on-site and off-site developments will be assigned to the study area intersections.
  - Phase 1 is anticipated to be occupied in the Year 2015 (or year provided by Client) and full buildout of the development is anticipated by the Year 2025 (or future year provided by Client). Therefore the analysis years are anticipated to be Year 2015 and 2025. Project the existing traffic to the Year 2015 and 2025 based on historic traffic growth to represent the background traffic.
  - Complete traffic operational analysis for the study area intersections with the Year 2015 and 2025 background traffic to determine the traffic operations without the development traffic. GRAEF will identify improvements to accommodate the Year 2015 and 2025 background traffic conditions.
  - The new traffic generated by Phase 1 of the development will be added to the Year 2015 background traffic to identify the Year 2015 build traffic volumes. The new traffic generated by the full buildout of the development will be added to the Year 2025 background traffic to identify the Year 2025 build traffic volumes. GRAEF will identify improvements to accommodate the Year 2015 and 2025 build traffic conditions.
  - The new traffic generated by the off-site development(s) will be added to the Year 2015 and 2025 build traffic to identify the Year 2015 and 2025 total traffic volumes. GRAEF will identify improvements to accommodate the Year 2015 and 2025 total traffic conditions.

- Improvement options will evaluate traffic signals, roundabouts and access management (restrict specific movement).
- Prepare a planning level signal warrant analysis for intersections that are considered for a future traffic signal to determine when the traffic signals are expected to be warranted.
- Coordination with the Client and County regarding trip generation, trip distribution, proposed access locations, traffic forecasts and recommendations.
- Attend up to two meetings with the Client and the County regarding the TIA if needed.
- A Draft TIA Report summarizing the procedures and findings of the traffic impact study will be prepared and submitted to the Client for review.
- A Final TIA Report will be prepared to address any comments received.

#### Concept Plan/Layout Review and Roadway Section Review

- Site visit and meetings with pertinent Village staff to review revised roadway system layout and consistency with Concept Master Plan intent (Larry Witzling)
- Planning and landscaping review of preliminary streetscape sections.
- Provide a civil engineering review of the streetscape roadway sections and provide recommendations.
- Prepare a memo report of findings and recommendations.

#### **DESIGN PHASE**

This Phase of work encompasses the entire Village Center area roughly 80 acres in size, including the anticipated immediate infrastructure improvements for 2014 in the central Village Square area.

The preliminary design will include review of available site information such as traffic and soils, investigate and layout the roadway and utility corridors based on current conceptual roadway layout, develop grading concepts and prepare a Design Report and Conceptual Plan deliverables. Total roadway length for the full build-out is approximately 8,000 feet with four (4) exterior intersections, four (4) interior traditional intersections, and one interior roundabout intersection.

The final design will include detailed design of the central Village Square area roadway and utilities and preparation of Bidding Documents. The total roadway length for the Phase I 2014 Construction is approximately 2,700 feet with one (1) exterior intersections, and two (2) interior traditional intersections. Utility extension design will include sanitary sewer, water main, and storm sewer. Dry utility will be designed by others. At this time traffic signal/roundabout design is not included but can be added as needed upon completion of the TIA.

The Village has had a full topographic survey recently completed. Wetland areas have been delineated on conjunction with the survey, and the Village has held preliminary discussions with the WDNR regarding potential impacts and associated permitting. For this Phase, GRAEF proposes to provide the following Basic Services:

#### Preliminary Design – Full Build-out

- Attend a kickoff meeting with the Village.
- Review available site information, including but not limited to: topographic survey, geotechnical investigations, traffic data and utility information. Pertinent reports to be provided by the Village or other public agency.
- Complete utility coordination.
- Complete agency coordination (WDNR, USACOE, WisDOT, Brown County).
- Prepare preliminary infrastructure development drawings/maps to include
  - Preliminary Roadway Layout Plan
  - Preliminary Utility Layout Plan
- Develop preliminary Engineer's Opinion of Probable Construction Cost
- Coordinate with Wisconsin DNR on Chapter 30 Wetland Permit and submit permit application and supporting documentation.
- Prepare Preliminary Design Report with infrastructure analysis and phasing recommendations.

#### Final Design – Phase I 2014 Construction

- Coordinate with gas, telephone, electric, and communication service utility owners. Extensions of these utilities shall be designed by the local utility for GRAEF to include on the utility drawings
- Finalize infrastructure design, including roadway and utility alignments; utility sizes, slopes and services; and stormwater management design.
- Agency coordination and preparation of applicable permits and associated reports including:
  - Sanitary Sewer Extension Permits
  - Water Main Extension Permits
  - Notice of Intent for Land Disturbing Construction Activity, along with Erosion Control Narrative, Post-Construction Stormwater Management Plan, and Stormwater Maintenance Plan
- Prepare plan set appropriate for the Work. Assumes development of 65% and 95% draft versions, as well as the final version for bidding. The plan set will include:
  - Cover Sheet and General Note/Symbols/Abbreviation Sheet
  - Erosion Control Plan
  - Overall Site Grading Plan
  - Roadway Plan and Profile (5 sheets anticipated)
  - Utilities Plan and Profile (5 sheets anticipated)
  - Paving, Pavement Marking and Signing Plan (2 sheets anticipated)
  - Construction Details
  - Roadway Cross-Section sheets
  - Other plan sheets as determined necessary during design
- Preparation of plans and modifications to pertinent technical specification sections of the Village's Master Construction Specifications for separate bidding of utility and roadway construction items.
- Update cost estimate based on final design documents

- Meet with Village for final Bid Document review
- Assist the Village with bidding process

GRAEF will endeavor to perform the proposed additional Basic Services per the following schedule:

Planning Phase:

- TIA counts – Dec. 2<sup>nd</sup> through Dec. 13<sup>th</sup>, 2013
- Draft TIA – Mid/End Jan, 2014
- Final TIA – Early Feb, 2014
- Planning review and typical section review – by Dec. 13<sup>th</sup>, 2013

Design Phase

- Preliminary Design: Nov.18<sup>th</sup>, 2013 – End of Jan. 2014
- Final Design: Feb. 2013 – March 2014
- Permitting:
  - Dec. 4 (meeting with WDNR)
  - WRAPP (Ch. 30/NOI) Permit Submittal: Mid/End Jan 2014
- Bidding:
  - April 4 – Publish Advertisement for Bids
  - April 11<sup>th</sup> – Publish Advertisement for Bids
  - April 22<sup>nd</sup> – Bid Opening
- Construction: Anticipated for May 5<sup>th</sup>, 2014 – End of July/Mid Aug. 2014

At your written request, GRAEF will provide the following Additional Services for additional compensation as detailed below:

- Public Informational Meeting
  - Prepare exhibits for PIM display
  - Assist the Village with PIM notification mailings
  - Attend PIM – assumed to be 4 hrs in length
- Project Coordination Meetings
  - Attend project coordination meetings at the Village of Howard Department of Public Works. Assumed to include 3 meetings at 2 hours each. 6 total hours.

At your written request, GRAEF will provide a scope and fee for other Additional Services. Other Additional Services we can provide include:

- Additional traffic counts or analysis for the weekday morning or Saturday peak periods
- Sunday peak period traffic counts and analysis for the Green Bay Community Church Access on Cardinal Lane (CTH EB)
- Traffic forecasts and analysis of Village Center internal site intersections.
- Intersection sight distance.
- Safety study.

- Additional off-site roadway or utility improvements/extensions.
- Design or selection of irrigation system, water feature or other unique elements.
- Street Lighting Electrical plans and photometrics.
- Hazardous Materials Assessment.
- Traffic Signal Design.
- Roundabout Design
- Traffic Control Plans.
- Landscape Design.
- Specialty Paving Design

For this Project, it is our understanding Client will provide the following services, items and/or information:

- Village Center Development information including specific type of land use and size (building size, number of units, etc.) for each phase.
- Identify development access planned with Phase 1
- Site plan to show buildings and proposed access
- Off-site development information (land use, size and anticipated completion year)
- Previous traffic counts, traffic studies or TIAs for the study area
- Level of service requirements (LOS C or D)
- Traffic signal timings and plans for the Riverview Drive (CTH J) intersections with Cardinal Lane (CTH EB) & Shawano Avenue (CTH C)
- Topographic Survey in AutoCAD format.
- Subdivision Plat/Right-of-Way Plat for the development including layout in AutoCAD format.
- Geotechnical Investigations.
- Archeological and/or Historical Studies.
- Digital versions of the Village Master Specifications for editing.
- Bidding document distribution. The Project Manual for bidding will be prepared by the Village including Division 0 and Division 1 sections. We will modify appropriate Village technical specification sections for inclusion in that Project Manual.
- Day to day oversight and inspection of the construction.
- Construction staking.



For all Basic Services, Client agrees to compensate GRAEF as follows:

Hourly basis per the 2013 hourly rate schedule, with a cost Not to Exceed as noted below, plus incurred reimbursable expenses:

Planning Phase:

- Traffic Engineering: \$27,000 NTE
- Concept Layout and Typical Section Review: \$4,900 NTE

Design Phase:

- Preliminary Design: \$18,500 NTE
- Final Design (includes permitting): \$43,500 NTE

Reimbursable expenses anticipated to be approximately \$2,300 (includes mileage, permit review fees etc).

For all Additional Basic Services, Client agrees to compensate GRAEF as follows:

Additional Basic Services:

- Public Informational Meetings: \$1,100 per PIM
- Project Coordination Meetings: \$800 total for 3 – 2 hr meetings

To accept this proposal for additional Basic Services, please sign and date both enclosed copies and return one to us. Upon receipt of an executed copy, GRAEF will commence work on the additional Basic Services for the Project.

Graef-USA Inc. looks forward to providing additional services to the Village of Howard.

Sincerely,

**Graef-USA Inc.**

**Accepted by: Village of Howard**

Patrick J. Skalecki, P.E., LEED AP  
Principal

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Name Printed)

\_\_\_\_\_  
(Title)

Date: \_\_\_\_\_

