

**VILLAGE OF DOWNERS GROVE**  
**REPORT FOR THE VILLAGE COUNCIL MEETING**  
**FEBRUARY 6, 2007 AGENDA**

<b>SUBJECT:</b>	<b>TYPE:</b>	<b>SUBMITTED BY:</b>
Resolutions to Hire Four Engineering firms to Complete a Storm Sewer Watershed Improvement Plan	✓ Resolution Ordinance Motion Discussion Only	David H. Barber, PE Director of Public Works

**SYNOPSIS**

Four resolutions have been prepared to hire four consulting engineering firms to complete a Storm Sewer Watershed Improvement Plan in an estimated amount of \$423,192. The firms recommended for this project are:

- Christopher B. Burke Engineering, Ltd – Rosemont, Illinois
- V3 Companies of Illinois – Woodridge, Illinois
- Engineering Resource Associates, Inc. – Warrenville, Illinois
- Clark Dietz, Inc. – Chicago, Illinois

**STRATEGIC PLAN ALIGNMENT**

The Village Goals for 2011 include *top Quality Infrastructure and Facilities* and *Preservation of our Residential and Neighborhood Character*.

**FISCAL IMPACT**

The FY07 budget includes a total \$335,000 for this project under both the Capital Improvement Fund (CIP Project SW-026 which includes \$300,000) and the General Fund which includes \$35,000 to assist with determining Base Flood Elevations for Localized Poor Drainage Areas (LPDAs) and is a necessary part of the development of the improvement plan. The remaining \$88,192 necessary for the recommended contracts above budgeted amounts are proposed to be funded through a reduction in the Roadway Improvement Program for 2007 included in CIP Project S-006 (also part of the Capital Improvement Fund.) This adjustment will reduce the 2007 Roadway Improvement Program to a total of \$2,623,608.

**UPDATE & RECOMMENDATION**

This item was discussed at the January 23, 2007 Village Council Workshop with waiver of the tradition one week waiting period. Approval is recommended on the February 6, 2007 Active Agenda.

**BACKGROUND**

A report was provided to Village Council dated November 7, 2006 summarizing the storm event of October 2, 2007 and identified several of the causes of flooding that occurred as result of this storm. In November, 2006 the Village Council approved a plan to identify proposed improvements and to develop estimated costs to the Village's Storm Sewer System.

The tasks identified were:

1. Create a complete GIS map of the Village's Stormwater system.
2. Complete a preliminary review of stream systems.
3. Develop design parameters for improvements to the stormwater system.
4. Identify specific improvements to the stormwater system.

5. Complete the recommended improvements as part of the Community Investment Program (CIP).
6. Identify a long-range funding strategy.

The Action Plan included in the November 7, 2007 report indicated the following actions:

1. Hire an additional engineer no later than December 2006.
2. Hire 3 to 5 engineering consulting firms no later than December 2006.
3. Present the recommended improvements plan to the Village Council no later than July 2007.
4. Prepare a detailed construction schedule and funding strategy no later than September 2007.
5. Construct improvements (beginning in 2008)

Staff has hired the additional engineer identified as action step #1. The new engineer started on January 2, 2007. The action being requested herein is the completion of action step #2.

Staff reviewed the firms that submitted proposals for stormwater consulting services and considered qualifications and availability of firms knowledgeable in the required work. The four firms identified are qualified to complete the work and capable of completing the required work in the limited time between January and July 2007. The firms have also worked in this area and have knowledge of the areas of assignment. These firms also have knowledge and experience with system modeling techniques used by DuPage County and are familiar with these programs. The proposed work has some common elements that will be completed by the four firms as a team while the majority of the work is assigned based on the watersheds draining the Village. All four firms have also worked for the Village of Downers Grove and have all performed well for the Village.

The Lacey Creek Watershed, generally north of Ogden Avenue, is assigned to V3 Companies of Illinois. The Prentiss Creek Watershed, generally south of 63<sup>rd</sup> Street is assigned to Clark Dietz, Inc. The Saint Joseph Creek Watershed is the largest and most complicated area of the Village and is being split between Christopher B. Burke Engineering, Ltd. and Engineering Resource Associates.

Attached is the Scope of Work for each of the four firms as well as the identified labor distribution for each firm and their cost to complete the work. The proposed contract amounts are as follows:

Christopher B. Burke Engineering	\$143,284
Engineering Resource Associates	\$ 93,702
Clark Dietz, Inc.	\$ 98,885
V3 Companies of Illinois	<u>\$ 87,321</u>
Total Costs for Project	\$423,192

Each contract is based on a cost not-to-exceed format based on the scope of work attached hereto for each firm.

**VILLAGE OF DOWNERS GROVE**  
**COUNCIL ACTION SUMMARY**

**INITIATED:** Director of Public Works **DATE:** February 6, 2007  
(Name)

**RECOMMENDATION FROM:** \_\_\_\_\_ **FILE REF:** \_\_\_\_\_  
(Board or Department)

**NATURE OF ACTION:**

- Ordinance
- Resolution
- Motion
- Other

**STEPS NEEDED TO IMPLEMENT ACTION:**

Motion to Adopt "A RESOLUTION AUTHORIZING EXECUTION OF A PROFESSIONAL SERVICES AGREEMENT FOR CONSULTING SERVICES BETWEEN THE VILLAGE OF DOWNERS GROVE AND ENGINEERING RESOURCE ASSOCIATES, INC.", as presented.

**SUMMARY OF ITEM:**

Adoption of the attached resolution will authorize an agreement between the Village of Downers Grove and Engineering Resource Associates, Inc. for consulting services related to Stormwater Sewer Watershed Improvement Plans.

**RECORD OF ACTION TAKEN:**

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**RESOLUTION NO. \_\_\_\_\_**

**A RESOLUTION AUTHORIZING EXECUTION OF A PROFESSIONAL SERVICES  
AGREEMENT FOR CONSULTING SERVICES  
BETWEEN THE VILLAGE OF DOWNERS GROVE  
AND ENGINEERING RESOURCE ASSOCIATES, INC.**

BE IT RESOLVED by the Village Council of the Village of Downers Grove, DuPage County, Illinois, as follows:

1. That the form and substance of a certain Professional Services Agreement (the “Agreement”), between the Village of Downers Grove (the “Village”) and Engineering Resource Associates, Inc. (the “Consultant”), for professional consulting services related to Stormwater Sewer Watershed Improvement Plans, as set forth in the form of the Agreement submitted to this meeting with the recommendation of the Village Manager, is hereby approved.

2. That the Village Manager and Village Clerk are hereby respectively authorized and directed for and on behalf of the Village to execute, attest, seal and deliver the Agreement, substantially in the form approved in the foregoing paragraph of this Resolution, together with such changes as the Manager shall deem necessary.

3. That the proper officials, agents and employees of the Village are hereby authorized and directed to take such further action as they may deem necessary or appropriate to perform all obligations and commitments of the Village in accordance with the provisions of the Agreement.

4. That all resolutions or parts of resolutions in conflict with the provisions of this Resolution are hereby repealed.

5. That this Resolution shall be in full force and effect from and after its passage as provided by law.

\_\_\_\_\_  
Mayor

Passed:

Attest: \_\_\_\_\_  
Village Clerk

## AGREEMENT

This Agreement is made this \_\_\_\_ day of \_\_\_\_\_, 2007 by and between **Engineering Resource Associates, Inc. (or "Consultant")** and the Village of Downers Grove, Illinois, an Illinois municipal corporation with offices at 801 Burlington Avenue, Downers Grove, Illinois 60515, ("Village").

WHEREAS, the Village wishes to retain the services of the Consultant professional engineering services; and

WHEREAS, the Consultant is willing to perform these services for the compensation and in accordance with the terms and conditions described in this Agreement,

NOW, THEREFORE, in consideration of the mutual benefits that will result to the parties in carrying out the terms of this Agreement, it is agreed as follows:

### **I. Scope of Services**

See attached Project Work Plan dated January 17, 2007.

### **II. Term of Agreement**

- A. The term of this Agreement will be from the date of this Agreement until July 31, 2007.
- B. The Consultant has developed a preliminary progress schedule which will be revised as the project progresses. As a condition of tender and receipt of a proper invoice, the Village of Downers Grove will pay the fee as defined in the Project Work Plan dated January 17, 2007. Without such attached invoice, payments will not be made.

### **III. Compensation**

#### **A. Basic Fees:**

The Village will pay the Consultant an amount not to exceed \$93,702. This amount is based upon the services listed in the attached Project Work Plan dated January 17, 2007. The Village will only be billed for services actually performed. This shall include reimbursable non-direct expenses. Any additional work performed in excess of the attached Project Work Plan dated January 17, 2007 that would increase the contract amount must be approved in writing by the Village of Downers Grove prior to commencement.

#### **B. Reimbursable Non-Direct Expenses:**

These may include support services required to execute the scope of services such as photocopying, messenger/mail and exhibit preparation, etc.

#### **C. Consultant Invoices:**

The Consultant shall prepare invoices that contain a reference number, the billing period, the classifications and/or names of staff, numbers of hours billed to the project, all reimbursable expenses including reproduction, mailing, and equipment and a total reimbursable amount for the billing period, the original contract amount, the currently approved contract amount, amounts billed to date, amounts received to date, and the contract amount remaining in the contract to date.

**D. Prompt Payment Act:**

The Village of Downers Grove will comply with the Local Government Prompt Payment Act, 50 ILCS 505/1 et seq., in that any bill approved for payment must be paid or the payment issued to the Consultant within 60 days of receipt of a proper bill or invoice. If payment is not issued to the Consultant within this 60 day period, an interest penalty of 1.0% of any amount approved and unpaid shall be added for each month or fraction thereof after the end of this 60 day period, until final payment is made.

The Village of Downers Grove shall review in a timely manner each bill or invoice after its receipt. If the Village of Downers Grove determines that the bill or invoice contains a defect making it unable to process the payment request, the Village shall notify the Consultant requesting payment as soon as possible after discovering the defect pursuant to rules promulgated under 50 ILCS 505/1 et seq. The notice shall identify the defect and any additional information necessary to correct the defect.

**IV. Insurance and Indemnification of the Village**

- A.** The Consultant shall be required to obtain, from a company or companies lawfully authorized to do business in the jurisdiction in which the project is located, such general liability insurance as will protect the Consultant from claims, at a minimum set forth below which may arise out of or result from the Consultants operations under this agreement and for which the Consultant may legally liable:
1. Claims under workers compensation, disability benefit and other similar employee benefit acts which are applicable to the operation to be performed;
  2. Claims for damages because of bodily injury, occupational sickness or disease, or death of the Consultants employees;
  3. Claims for damages because of bodily injury, sickness or disease, or death of any person other than the Consultants employees;
  4. Claims for damages insured by the usual personal injury liability coverage which are sustained: 1) by a person as a result of an offense directly or indirectly related to employment of such person by the Consultant, or 2) by another person;
  5. Claims for damages, other than to the work itself, because of injury to or destruction of tangible property, including loss of use resulting there from;
  6. Claims for damages because of bodily injury, death of a person or property damage arising out of ownership, maintenance or use of a motor vehicle;
  7. Claims for damages as a result of professional or any other type of negligent action by the Consultant or failure to properly perform services under the scope of the agreement between the Consultant and the Village.
- B.** The Consultant shall demonstrate having such insurance coverage for a minimum of \$2 million for professional liability (errors and omissions).
- C.** As evidence of said coverages, Consultant shall provide the Village with certificates of insurance naming the Village of Downers Grove as an additional insured and include a provision for cancellation only upon at least 30 days prior notice to the Village of Downers Grove. In addition, the Consultant shall indemnify and hold harmless the Village and its officers, employees and agents from any and all liability, losses or damages the Village may suffer as a result of claims, demands, suits, actions or proceedings of any kind or nature in any way resulting from or arising out of negligent action on the part

of the Consultant or any sub-consultant to the Consultant under the Consultant's agreement with the Village.

## **V. General Terms and Conditions**

### **A. Relationship Between the Consultant and the Village**

The relationship between the Village and the Consultant is that of a buyer and seller of professional services and it is understood that the parties have not entered into any joint venture or partnership with the other.

### **B. Equal Employment Opportunity**

In the event of the Consultant's non-compliance with the provisions of this Equal Employment Opportunity Clause, the Illinois Human Rights Act or the Rules and Regulations of the Illinois Department of Human Rights ("Department"), the consultant may be declared ineligible for future contracts or 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 invoked as provided by statute or regulation. During the performance of this contract, the consultant agrees as follows:

1. That it will not discriminate against any employee or applicant for employment 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; and further that it will examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any such underutilization.
2. That, if it hires additional employees in order to perform this contract or any portion thereof, it will determine the availability (in accordance with the Department's Rules and Regulations) 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 that 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 agreement or understanding, a notice advising such labor organization or representative of the consultant's obligations under the Illinois Human Rights Act and the Department's Rules and Regulations. If any such labor organization or representative fails or refuses to cooperate with the consultant in its efforts to comply with such Act and Rules and Regulations, the consultant will promptly so notify the Department and the contracting agency and will recruit employees from other sources when necessary to fulfill its obligations thereunder.
5. That it will submit reports as required by the Department's Rules and Regulations, furnish all relevant information as may from time to time be requested by the Department or the contracting agency, and in all respects comply with the Illinois Human Rights Act and the Department's Rules and Regulations.

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 Department's Rules and Regulations.
7. That it will include verbatim or by reference the provisions of this clause in every subcontract it awards under which any portion of the contract obligations are undertaken or assumed, so that such provisions will be binding upon such subconsultant. In the same manner as with other provisions of this contract, the consultant will be liable for compliance with applicable provisions of this clause by such subconsultants; and further it will promptly notify the contracting agency and the Department in the event any subconsultant fails or refuses to comply therewith. In addition, the consultant will not utilize any subconsultant declared by the Illinois Human Rights Commission to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivision or municipal corporations.

### **C. Sexual Harassment**

Consultant, as a party to a public contract, has a project specific written sexual harassment policy amended so that it:

1. Notes the illegality of sexual harassment;
2. Sets forth the State law definition of sexual harassment;
3. Describes sexual harassment utilizing examples;
4. Describes the Consultant or supplier's internal complaint process including penalties;
5. Describes the legal recourse, investigative and complaint process available through the Illinois Department of Human Rights and the Human Rights Commission and how to contact these entities, and;
6. Describes the protection against retaliation afforded under the Illinois Human Rights Act.

### **D. Drug Free Work Place**

Consultant as party to a public contract, certifies and agrees that it will provide a drug free workplace by:

1. Publishing a statement: (1) Notifying employees that the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance, including cannabis, is prohibited in the grantee's or consultant's workplace. (2) Specifying the actions that will be taken against employees for violations of such prohibition. (3) Notifying the employee that, as a condition of employment on such contract or grant, the employee will: abide by the terms of the statement; and notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such conviction.
2. Establishing a drug free awareness program to inform employees about: (1) the dangers of drug abuse in the workplace; (2) the grantee's or consultant's policy of maintaining a drug free workplace; (3) any available drug counseling, rehabilitation, and employee assistance programs; (4) the penalties that may be imposed upon employees for drug violations.
3. Providing a copy of the statement required by subparagraph (a) to each employee engaged in the performance of the contract or grant and to post the statement in a prominent place in the workplace.

4. Notifying the contracting or granting agency within ten (10) days after receiving notice under part (B) of paragraph (3) of subsection (a) above from an employee or otherwise receiving actual notice of such conviction.
5. Imposing a sanction on, or requiring the satisfactory participation in a drug abuse assistance or rehabilitation program by, any employee who is so convicted as required by section 5 of the Drug Free Workplace Act.
6. Assisting employees in selecting a course of action in the event drug counseling, treatment, and rehabilitation is required and indicating that a trained referral team is in place.
7. Making a good faith effort to continue to maintain a drug free workplace through implementation of the Drug Free Workplace Act.

#### **E. Discrimination**

Consultant, its employees and subconsultants, agree not to commit unlawful discrimination and agree to comply with applicable provisions of the Illinois Human Rights Act, the Public Works Employment Discrimination Act, the U.S. Civil Rights Act and Section 504 of the Federal Rehabilitation Act, and rules applicable to each. The equal opportunity clause of the Department of Human Rights rules is specifically incorporated herein.

The Americans with Disabilities Act (42 U.S.C. 12101) and the regulations thereunder (28 CFR 35.130)(ADA) prohibit discrimination against persons with disabilities by the State, whether directly or through contractual arrangements, in the provision of any aid, benefit or service. As a condition of receiving this contract, the undersigned vendor certifies that services, programs and activities provided under this contract are and will continue to be in compliance with the ADA.

#### **F. Standard of Care**

Services performed by the Consultant under this Agreement will be conducted in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions. No other representations express or implied, and no warranty or guarantee is included or intended in this Agreement or in any report, opinions, and documents or otherwise.

If the Consultant fails to meet the foregoing standard, Consultant will perform at its own cost, and without reimbursement from the Village, the professional services necessary to correct errors and omissions caused by Consultant's failure to comply with the above standard and reported to Consultant within one (1) year from the completion of Consultant's services for the Project.

#### **G. Limitation of Professional Liability**

Village agrees to limit the Consultant's liability to Village arising from the Consultant's professional acts, errors or omissions in performing this Agreement, such that the total aggregate liability of the Consultant to all those named shall not exceed \$2,000,000 or total fee for the services rendered on this project, whichever is greater.

**H. Termination**

In the event of the Consultant's nonperformance, breach of the terms of the Agreement, or for any other reason, the Agreement may be canceled, in whole or in part, upon the Village's written notice of default and the Consultant's failure to cure such default within ten days of the notice. The Village will pay the Consultant's costs actually incurred as of the date of receipt of notice of default. Upon termination, the Consultant will deliver all documents and products of whatever kind, and their reproducible originals related to the project, which have been produced to the date of the notice of default.

**I. Compliance with Laws**

All work under the Agreement must be executed in accordance with all applicable federal, state and local laws, ordinances, rules and regulations.

**J. Governing Law**

This Agreement will be governed by and construed in accordance with the laws of the State of Illinois. Venue is proper only in the County of DuPage.

**K. Successors and Assigns**

The terms of this Agreement will be binding upon and inure to the benefit of the parties and their respective successors and assigns; provided, however, that neither party will assign this Agreement in whole or in part without the prior written approval of the other.

**L. Waiver of Contract Breach**

The waiver by one party of any breach of this Agreement or the failure of one party to enforce at any time, or for any period of time, any of the provisions hereof will be limited to the particular instance and will not operate or be deemed to waive any future breaches of this Agreement and will not be construed to be a waiver of any provision except for the particular instance.

**M. Amendment**

This Agreement will not be subject to amendment unless made in writing and signed by all parties.

**N. Indemnification**

The Consultant will indemnify and hold harmless the Village and its officers, employees and agents from any and all liability, losses or damages the Village may suffer as a result of claims, demands, suits, actions or proceedings of any kind or nature in any way resulting from or arising out of negligent action on the part of the Consultant or any sub-consultants under this Agreement. This indemnification does not apply to liability caused by the Village's own negligence.

**P. Severability of Invalid Provisions**

If any provisions of this Agreement are held to contravene or be invalid under the laws of any state, country or jurisdiction, contravention will not invalidate the entire Agreement, but it will be construed as if not containing the invalid provision and the rights or obligations of the parties will be construed and enforced accordingly.

**Q. Assignment**

The Consultant will not assign or subcontract any portion of this Agreement, unless the Village agrees to the assignment or subcontract in writing. Any assignment will not relieve the Consultant from its obligations or change the terms of this Agreement.

The Consultant will provide a list of key staff, titles, responsibilities, and contact information to include all expected sub consultants.

**R. Notice**

Any notice will be in writing and will be deemed to be effectively served when deposited in the mail with sufficient first class postage affixed, and addressed to the party at the party's place of business. Notices shall be addressed to designated representatives of both parties as follows:

**Village Manager  
Village of Downers Grove  
801 Burlington Avenue  
Downers Grove, IL 60515**

**Engineering Resource Associates, Inc.  
3S701 West Avenue, Suite 150  
Warrenville, IL 60555**

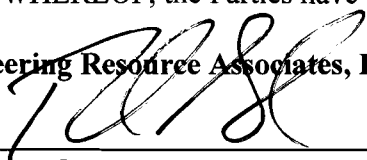
**S. Conflict of Provisions**

In the event there is a conflict between the provisions contained herein and the Project Work Plan dated January 17, 2007, the terms herein shall prevail.

IN WITNESS WHEREOF, the Parties have executed this Agreement on the date indicated above.

**Engineering Resource Associates, Inc.**

**Village of Downers Grove**

By: 

By: \_\_\_\_\_

Title: President

Title: **Village Manager**

Date: 1-18-07

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

**CONSULTANT'S CERTIFICATION**

Consultant, **Engineering Resource Associates, Inc.** hereby certifies that

It is not barred from agreeing to this contract for:

Stormwater Watershed Improvement Plan

as a result of a violation of either Section 720 ILCS 5/33E-3 and 720 ILCS 5/33E-4 of Article 33E of Chapter 38 of the Illinois Compiled Statutes.

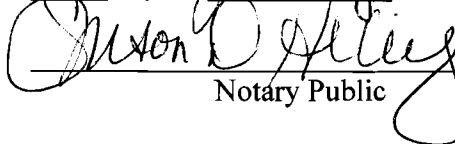
Consultant further certifies that it is not delinquent in the payment of any tax administered by the Department of Revenue, or that consultant is contesting its liability for the tax delinquency or the amount of a tax delinquency in accordance with the procedures established by the appropriate Revenue Act. Consultant further certifies that if it owes any tax payment(s) to the Department of Revenue, Consultant has entered into an agreement with the Department of Revenue for the payment of all such taxes that are due, and Consultant is in compliance with the agreement.

By:   
Consultant's Authorized Agent

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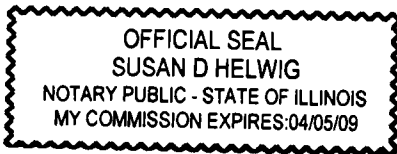
  
FEDERAL TAXPAYER IDENTIFICATION NUMBER

Subscribed and sworn to before me this  
18<sup>th</sup> day of January, 2007

  
Notary Public

or \_\_\_\_\_  
NAME

\_\_\_\_\_  
Social Security Number



**Village of Downers Grove Stormwater Infrastructure Improvement Plan  
Project Work Plan  
St. Joseph Creek Tributary  
Engineering Resource Associates, Inc.  
January 17, 2007**

**Background Information**

The Village has updated its stormwater master plan to provide a comprehensive program for improving the Village's stormwater management capabilities. The plan focused on the three main watersheds within the Village: St. Joseph Creek Watershed, Prentiss Creek Watershed, and Lacey Creek Watershed. The plan identified major flooding sources as well as stormwater infrastructure inadequacies.

On October 2, 2006, the Village experienced a significant rain event which produced 3.77 inches of rain during a one hour period. This rain event was just below the 3.95 inches in one hour for a 100 year storm event. The impact of this storm extended to home flooding, street flooding, widespread power outages and ponding of water. Subsequent to this event significant rain events also occurred on November 28, 2006 and December 22, 2006 and additional problems were identified during these events.

Due to this storm and previous historical flooding in the Village, the Village has decided to develop a stormwater infrastructure improvement plan to identify the problem areas, assess the cause of the problem, and recommend future improvement alternatives and implementation procedures to mitigate flooding problems. The following strategy plan outlines the action steps that shall be taken by the Village's selected project team to develop the stormwater infrastructure improvement plan.

Minimal budget has been provided for direct costs in the consultant agreements. Deliverable products will be delivered ONLY in digital format. Hard copies of review drafts, reports or exhibits will be only be provided by the consultants when requested by the Village. The Village will print, plot and copy all hard copy documents that are needed for meetings, reviews and Village files.

**Stormwater Improvement Plan Tasks**

**Task 1 –Resident Feedback:** A review of the information compiled by the Village concerning resident feedback and flooding concerns will be completed. It may be necessary to supplement this review by contacting individual residents to further investigate drainage problems with particular attention to problems reported after the October 2, 2006 storm event. Telephone numbers and contact information for affected residents shall be provided by the Village, if needed. In addition neighborhood meetings may be held in the watershed to gather additional information and the appropriate team members will need to be present for the neighborhood meeting held for the watershed to which they are assigned. The level of effort associated with the potential neighborhood meeting/open house is limited to

attendance by Consultant. All meeting preparation, handouts, literature and presentation (if any) shall be prepared by and provided by the Village.

**Task 2 - Review of Existing Information:** The Village will provide existing stormwater information for review. This information will include, but not be limited to, the October 2, 2006 rainfall event flood map, a current GIS map with drainage information, storm sewer atlases, roadway information, existing depressional storage analysis, detention pond information, existing drainage studies, DuPage County 2-foot topographic mapping, historical flooding information, storage facility location map, resident survey database and existing wetland delineation information. Recent survey shall also be provided.

**Task 3 - Field Reconnaissance:** Field visits will be completed to evaluate locations where survey data may be required. The field visits will also assist in evaluating depressional storage area overflow and outlet conditions, detention pond outlet conditions, overland flow routes, subbasin drainage divides, storm sewer locations, existing streambank conditions, and identify properties that may be impacted by stormwater flooding.

**Task 4 - Field Survey:** After a thorough review of existing information, a crew will be sent out to survey any missing data that will be critical in completing hydrologic and hydraulic modeling of the stormwater infrastructure, including storm sewers, depressional storage areas, stream crossings, overland flow, roadway cross-section and detention pond information. The survey will be completed based on the DuPage County benchmark system so it can be tied into the DuPage County 2-foot topography.

The areas that require detailed survey will be determined during Task 3. For the purpose of this proposal, the fee for Task 4 (Field Survey) assumes fifteen days of field survey effort. If additional data is required beyond that which can be collected in fifteen days, the information shall be collected and provided by the Village or shall be performed as an Additional Service.

**Task 5 - Existing Hydrologic/Hydraulic Modeling:** Detailed hydrologic/hydraulic calculations and modeling for the St. Joseph Creek Tributary watershed will be prepared. Using the mapping from the GIS database, DuPage County 2-foot topography and supporting field survey, hydrologic and hydraulic models will be developed. Water surface elevations for depressional storage areas will be determined in this task.

FEQ modeling shall not be performed; however review of existing FEQ modeling may be necessary.

Hydraulic modeling will be performed at a sufficient level of detail to represent and quantify the problem on a planning-level scale. If problem areas are spread out over the watershed, separate models may be developed for each problem area. There may not be a single contiguous model for the entire watershed.

Conveyance systems shall be surveyed (in Task 4) and modeled (in Task 5) on a planning level scale at logical break points in the system. Break points shall be identified on a watershed-by-watershed and a problem-area-by-problem-area basis. Break points may

include changes in pipe diameter, major intersections, or locations with major point inflows. This effort will not include a survey of every structure and length of pipe. The effort will not include a model for every structure and pipe segment.

**Task 6 - Calibrate Hydrologic/Hydraulic Modeling:** The existing conditions models will be calibrated to the October 2, 2006 rainfall event. High water mark information will be collected, surveyed, and provided by the Village.

**Task 7 - Existing Conditions Exhibits:** Exhibits will be prepared to summarize the existing depressional storage analysis results, locate major overland flow routes, subbasin drainage divides, and stormwater facilities. Exhibits will also be prepared that show the locations of existing drainage concerns. This task is limited to preparation and delivery of a deliverable product as described. Analysis of the items described in Task 7 is performed under a separate task.

**Task 8 – Depressional Storage Area Summary:** The depressional storage area base flood elevations from the hydrologic/hydraulic modeling will be summarized for the Village to incorporate into the Village GIS map. This task is limited to preparation and delivery of a deliverable product as described. Analysis of the items described in Task 8 is performed under a separate task.

**Task 9 – Rural Roadway Cross-section Investigation:** The rural cross-section roadways in the watershed will be reviewed to determine their existing drainage condition. The roadways with a rural cross-section will be evaluated and categorized into areas to remain a rural cross-section or those proposed to be converted to curb and gutter or to ribbon pavement with concrete shoulder and swales. A tabular summary of the results will be prepared.

**Task 10 - Prioritize Areas of Study:** The results of the existing conditions hydrologic and hydraulic modeling, historical data and other supporting information will be evaluated to determine the hierarchy of locations to be studied for future improvement projects.

**Task 11 - Field Reconnaissance Prior to Future Improvement Modeling:** Field visits may be required to obtain data necessary to evaluate and model future improvement alternatives. For the purpose of this proposal, the fee for Task 11 (Field Reconnaissance Prior to Future Improvement Modeling) assumes 24 hours of field visit by engineers and no field survey. If additional data is required beyond that which can be collected in the time specified, the information shall be collected and provided by the Village or shall be performed as an Additional Service.

**Task 12 - Develop Future Improvements:** Based on the engineering protocol established by the project team, the Village's Stormwater Ordinance, and by evaluating the existing conditions modeling results, proposed improvements will be selected for analysis. The proposed improvements will likely include a combination of structural improvements such as additional storm sewers and detention storage locations, revised overland flow routes, installation of curb and gutter, stream restructuring, and storage reshaping.

**Task 13 - Future Improvement Hydrologic/Hydraulic Modeling:** The existing hydrologic and hydraulic modeling will be updated to reflect future improvement alternatives. Detailed modeling for each alternative within the St. Joseph Creek Tributary will be provided. Modeling assumptions and limits are as described in Task 5 and will be set by the project team in the first coordination meeting. Proposed projects for some identified problem areas may be developed on a qualitative basis without modeling or computational analysis. For example, areas where an overland flow path could be constructed to alleviate drainage problems may be identified and recommended without detailed modeling.

The existing hydrologic models shall use 2006 land use as the “existing” condition. A future land use model may be created to reflect higher levels of imperviousness in areas where significant redevelopment is expected. The areas of expected redevelopment and the percent increase in imperviousness shall be determined in conjunction with the Village and Consultant Team during the Engineering Protocol meeting defined in Task T2.

**Task 14 - Engineer’s Estimate of Probable Cost for Improvements:** An engineer’s estimate of probable cost will be prepared for each future improvement. The estimates will include design, permitting, material costs, and may include land costs if necessary. The Village will provide recent bid information to develop uniform unit costs for estimating purposes.

**Task 15 - Identify Potential Wetland Impacts:** All future improvement alternatives and project locations will be inspected and reviewed for wetland presence and potential wetland impacts will be identified. This task will be completed by an environmental specialist. This task will be based on the Wetland Verification Technical Memo prepared by Clark Dietz/Huff & Huff, which includes a data review of published wetland maps, a review of the threatened and endangered species database, as well as wetland field verification within the Village limits. The field verification assessed the location, type, and quality of each wetland as well as the wetland function. This Task shall provide a preliminary opinion on the probability of the presence or absence of wetlands at each project site based on the memo; if wetlands may be present, permit requirements will also be identified.

**Task 16 - Permit Procedures:** Regulatory constraints and necessary permits will be identified for each future improvement alternative. Appropriate procedures will be identified for the permitting of all projects.

**Task 17 - Construction Schedule Estimate:** The total length of time to implement each future improvement will be estimated. This time will include allotments for modeling if required, design preparation, permitting (including outside agencies) and construction.

**Task 18 - Future Improvements Exhibits:** Exhibits will be prepared to show the location of the future improvements and show their benefits compared to existing conditions. This task is limited to preparation and delivery of a deliverable product as described. Analysis of the items described in Task 18 is performed under a separate task.

**Task 19 - Alternative Prioritization:** A prioritization process to categorize each alternative will be developed. The projects will be rated as high, medium and low. Possible methods

for prioritization will include number of residents benefited, cost benefit ratios, the Village's Master Plan, and possibility for outside funding. A consensus on prioritization methods will be developed by the Project Team for consistency between watersheds. For roadway improvements alternatives, prioritization will also include a review of the Village's and Sanitary District's improvement plans and current project schedules. This task will be coordinated closely with Village staff.

**Task 20 - Research Easements:** The possibility of providing easements for storage areas, storm sewers and future improvements will be researched. Actual easements will not be prepared, but an easement priority list will be completed. The project team will coordinate this task closely with Village staff.

**Task 21 - Summary Report:** A report will be prepared that summarizes findings and results from all tasks including the existing and future improvement alternatives, all supporting calculations and a strategy for the Village to complete chosen alternatives.

## **Management Tasks**

**Task M1 – Process Documentation:** A summary will be prepared by the Village after each coordination meeting and project team decision. This will include the establishment of engineering protocol and determination of design standards. A copy of the summary will be provided to the project team. This task will be performed by the Village. No additional Consultant fee/hours are shown here.

**Task M2 - Coordination Activities:** The management team will correspond with project team members to stay informed of their progress and needs and assist in questions that will arise. This task will consist of phone conversations between the Village and the Project Team.

**Task M3 – Correspondence Organization and Storage:** A copy of all relevant correspondence from the project team will be submitted to the Village to be organized in a main project file.

**Task M4 - Meetings:** Meetings will be held as necessary with Village staff to discuss the Strategy Plan and Project Team Tasks. This task will be primarily performed by the Village. No additional Consultant fee/hours are shown here.

## **Project Team Tasks**

**Task T1 - Coordination Meetings:** Monthly coordination meetings will be held with all firms involved and Village staff to discuss the development and progress of the Stormwater Infrastructure Improvement Plan. As each task is completed, results will be presented and discussed at these meetings. For the purpose of this proposal, it is assumed that one half-day meeting/workshop will be held each month for a total of seven meetings.

**Task T2 - Establish Engineering Protocol:** Prior to the first meeting, each Consultant will research methodologies for each task. The coordination of methodologies, record keeping and communication protocol will be completed during the first meeting.

**Task T3 - Design Standards Determination:** The project team will discuss and determine design standards for all infrastructure selected for future improvements, including major and minor drainage paths, storm sewers, overland flow paths, roadway cross sections, streambank stabilization methods, detention placement and regrading. This task may include providing recommendations for changes to the Village Code as appropriate to implement the recommended program.

**Task T4 - Funding Strategy:** A long term funding strategy will be identified by Village staff for the recommended future improvements. This will involve an in-depth review of existing Village funding capabilities, and identify alternative methods for funding stormwater improvement projects. No consultant hours will be allocated to this task although staff may review findings with the Consulting team at Coordination meetings.

**Task T5 - Public Presentation of Findings:** Two open meetings will be held with Village staff and some members of the project team to discuss project findings in a public format. Appropriate timing, setting, audience and attendance at the meetings will be determined as the work proceeds. In addition a presentation of the findings and recommendations will be provided to the Village Council at a workshop meeting for a total of three meetings per watershed.

**Deliverables:**

- Conceptual Plan of the proposed improvements including:
  - Proposed improvements to open channels
  - Proposed improvements to the pipe system
  - Proposed major structures, if any
  - Proposed stormwater storage facilities
  - Proposed improvements to other facilities (roads, ditches, etc)
- Schedule of implementation of proposed improvements
- Priority for implementation of proposed improvements
- Estimated project costs of each project proposed for implementation

**Schedule:**

- Commence work in February 2007
- Complete work in July 2007

**Extent of Agreement**

This agreement is for professional services in the St. Joseph Creek Tributary Watershed in Downers Grove, Illinois. Should additional analyses be required beyond the boundaries of the study area, the services associated with these analyses will be the subject of a separate agreement. Furthermore, this agreement does **not** include services for:

1. Formal wetland delineation or permitting.
2. Services associated with preparation for, and attendance at public meetings with applicable public agencies in excess of the number of meetings specifically included in the above scope of services, or services required in connection with obtaining zoning approvals..
3. Site development design and permitting services (Preliminary Engineering, Final Engineering, etc.) or Construction Documents of any kind.
4. Task 4 (Field Survey) assumes fifteen days of field survey effort. If additional data is required beyond that which can be collected by in seventeen days, the information shall be collected and provided by the Village or shall be performed as an Additional Service. Survey Services such as Boundary, Tree Location, Construction Staking, Record Drawing preparation, Preliminary and Final Plats, Plats of vacation, or Plats of easement dedication are not included herein.
5. Structural engineering services of any kind.
6. Environmental consulting or geotechnical services.
7. FEQ modeling.
8. Permitting associated with work within any existing floodplain, floodway, or wetlands.
9. Pump Station design for water, stormwater, or wastewater.
10. Traffic Impact Study, Traffic Signal design services, or off-site roadway design services.
11. Landscaping, irrigation, or geotechnical design or consulting services.

**Downers Grove Infrastructure Improvement Plan  
Probable Cost Estimate**

Task Number	Task	Staff hour Estimate By Staff Title											Total By Task		Subtotals	
		Project Director	Project Manager	Senior Project Engineer	Project Engineer	Cadd Technician	Survey Coordinator/Draftsperson	Crew Chief	Field Surveyor	Senior Environmental Scientist	Environmental Scientist	Clerical	Staffhours	Cost		
<b>Stormwater Improvement Plan Tasks</b>																
1	Review of Resident Feedback		1	3	6								10	\$995		
2	Review of Existing Information	1	2	6	12								21	\$2,185		
3	Field Reconnaissance		2	12	12								26	\$2,650		
4	Field Survey		2	4	6		60	120	120				312	\$20,460		
5	Existing Hydrologic/Hydraulic Modeling	2	6	12	24								44	\$4,680		
5a	Depression Storage BFE Analysis (175)	2	6	12	24								44	\$4,680		
6	Calibrate Hydrologic/Hydraulic Modeling	1	4	6	16								27	\$2,835		
7	Existing Conditions Exhibits	1	2	3	6	18							30	\$2,911		
8	Depressional storage Summary			1	4								5	\$450		
9	Rural Roadway Cross-Section Investigation		1	3	6								10	\$995		
10	Prioritize Areas of Study	1	2	4	4								11	\$1,285		
11	Field Reconnaissance Prior to Modeling			12	12								24	\$2,340		
12	Develop Future Improvement Alternatives	2	4	8	4								18	\$2,230		
13	Future Improvement Hydrologic/Hydraulic Modeling	2	6	40	40								88	\$9,120		
14	Engineer's Estimate of Probable Cost for Alternatives	2	4	12	18	8							44	\$4,556		
15	Identify Potential Wetland Impacts		2							10	12		24	\$2,084		
16	Permit Procedures		1	4	6								11	\$1,105		
17	Construction Schedule Estimate	1	2	6	12								21	\$2,185		
18	Future Improvement Alternatives Exhibits	1	2	4	8	24							39	\$3,713		
19	Alternative Prioritization	1	2	4	6								13	\$1,455		
20	Research Easements		1	2	4		8						15	\$1,275		
21	Summary Report (s)	2	4	16	24							6	52	\$5,176	\$79,365	
<b>Management Tasks</b>																
M1	Process Documentation												0	\$0		
M2	Coordination Activities	2	4	8	8							2	24	\$2,692		
M3	Correspondence Organization and Storage		1	1	2							8	12	\$923		
M4	Meetings												0	\$0	\$3,615	
<b>Project Team Tasks</b>																
T1	Coordination Meetings (1 per month)	4	8	16	12								40	\$4,800		
T2	Establish Engineering Protocol	1	2	4	2								9	\$1,115		
T3	Design Standards Determination	1	2	4	2								9	\$1,115		
T4	Funding Strategy (task by Village Staff)													\$0		
T5	Presentation of Findings	2	4	8	8							2	24	\$2,692	\$9,722	
<b>Subtotal</b>																
		(Hr)	29	77	215	288	50	68	120	120	10	12	18			\$92,702
		(\$/hr)	\$195	\$155	\$110	\$85	\$87	\$70	\$65	\$60	\$85	\$77	\$61			
	<b>Total</b>		\$5,655	\$11,935	\$23,650	\$24,480	\$4,350	\$4,760	\$7,800	\$7,200	\$850	\$924	\$1,098			

Footnote: The Village will be retaining multiple consultants to develop stormwater products simultaneously. The collection of data will be coordinated to avoid duplication of efforts.

Salary Cost	1,007	\$92,702
Direct Cost		\$1,000
<b>Total Cost</b>		<b>\$93,702</b>