



BERNS, CLANCY AND ASSOCIATES

PROFESSIONAL CORPORATION

ENGINEERS • SURVEYORS • PLANNERS

May 3, 2011

THOMAS BERNS
EDWARD CLANCY
CHRISTOPHER BILLING
DONALD WAUTHIER

DAN ROTHERMEL
JOHN LYONS
ROGER MEYER

MICHAEL BERNS
OF COUNSEL

Champaign County Board
c/o Mr. Alan Reinhart
1776 East Washington Street
Urbana, Illinois 61802

**RE: PROPOSAL FOR PROFESSIONAL SITE / CIVIL ENGINEERING
AND SURVEYING SERVICES
STORM SEWER EXTENSION FOR
CHAMPAIGN COUNTY EAST CAMPUS SITE
URBANA, CHAMPAIGN COUNTY, ILLINOIS**

Ladies and Gentlemen of the Champaign County Board;

In accordance with your request and our meetings with the County negotiating committee, we provide this proposal for **Professional Consulting Surveying and Site / Civil Engineering** services with regard to the improvement of drainage and management of stormwater in the northern watershed of the Champaign County East Campus site. A new storm water drainage connection would complete: concept planning for storm water management identified more than 8 years ago; detailed planning of this connection 4 years ago; and an initial stage of construction 3 years ago. A new view of management is also now desired using Best Management Practices to address storm water runoff from this area.

Undertaking the design and construction of new storm water management practices and facilities will address the City of Urbana requirement for storm water detention related to the new Champaign County Storage Building project as well as potential future developments within the northern and eastern portions of the Champaign County East Campus site.

As a part of the New Champaign County Highway Department / Fleet Maintenance project and ILEAS Renovation project, approximately 100 feet of the 6 foot by 4 foot precast concrete "box" culvert was extended easterly past the Fleet Maintenance entrance drive south of Main Street. The continued extension that was previously contemplated would involve roughly another 700 foot extension of this box culvert plus miscellaneous storm sewer connections southward through the area along Art Bartell Drive. Probable construction costs for this project was previously estimated to be in the range of approximately \$400,000.

4605-47

It is now desired by Champaign County that an alternative means of storm water management might also be studied that could address the recent construction projects using Best Management Practices. This proposal provides for three (3) initial tasks of services that will study this alternative methodology and provide comparisons to the previously established procedures.

To provide more precision to this watershed study of storm water management using Best Management Practices, we will include Living Waters Consultants of Oakbrook Terrace, Illinois as a Subconsultant on our team. Brief materials describing Living Waters Consultants including a company overview, a resume for Ted Gray, and a few representative project descriptions are appended to this proposal. In particular, this additional expertise will be applied to the hydrologic modeling of the inclusion of Best Management Practices as well as in the preliminary design and cost estimating of these structural and landscape Best Mangement Practice applications.

SCOPE OF SERVICES

We envision the following three (3) initial professional service tasks will be required which we identify as follows:

**TASK 1 – UPDATE EXISTING SURVEY ALONG ART BARTELL
 DRIVE, AROUND THE EXISTING DETENTION BASINS
 AND NOTE CHANGES IN THE WATERSHED**

1. Update existing survey data along Main Street and from Main Street southerly along Art Bartell Drive corridor for changes in the past 4 + years.
2. Perform topographic surveys at the existing storm water detention basins to determine existing conditions.
3. Update existing survey data throughout the southern portion of the watershed.
4. Re-establish the previous horizontal and vertical survey control systems.
5. Field work to gather topographic and site data.
6. Office reduction of field data obtained.
7. Drafting to update the survey.

Engineer / Surveyor / Principal	4 hours at \$130 per hour.....	\$	520
Surveyor	12 hours at \$102 per hour.....	\$	1,224
2 Person Survey Crew	24 hours at \$118 per hour.....	\$	2,832
Drafter.....	30 hours at \$ 69 per hour.....	\$	2,070
Technician	12 hours at \$ 54 per hour.....	\$	648
		\$	7,300
Miscellaneous Expenses		\$	500
Total Task 1 – Update Existing Survey		\$	7,800

TASK 2 – STORM WATER MANAGEMENT ANALYSIS

1. Communicate with Champaign County staff throughout this task.
2. Reassess and update the previously prepared computer model for the new conditions of the watershed.
3. Starting with the updated prepared model of the watershed, analyze alternative applications of Best Management Practices throughout to reduce runoff rates.
4. Forecast future scenarios and alternatives.
5. Analyze options and impacts from Green techniques and Best Management Practices in an iterative approach.
6. Incorporate expected impacts and reductions to runoff into the model based on experience of previously completed projects.
7. Prepare recommendations to Champaign County staff and adjust for inputs of future watershed development.
8. Prepare comparison of alternative approach model recommendations to the previous approach for analysis.
9. Review revised plan with Champaign County staff.
10. Review of all work by an Engineer / Surveyor / Principal of the firm.

Engineer / Surveyor / Principal	4 hours at \$130 per hour	\$	520
Project Manager / Engineer	16 hours at \$102 per hour	\$	1,632
Hydrologist.....	80 hours at \$ 74 per hour.....	\$	5,920
Drafter.....	10 hours at \$ 69 per hour.....	\$	690
Technician	8 hours at \$ 54 per hour.....	\$	<u>432</u>
		\$	9,200
Miscellaneous Expenses		\$	600
Landscape Architect / Engineer Consultant.....		\$	<u>1,700</u>
Total Task 2 – Storm Water Management Analysis		\$	11,500

TASK 3 – PRELIMINARY DESIGNS AND COST ESTIMATES

Based on the updated topographic survey and a review of the preliminary planning and previous and new storm water management analysis performed, prepare two (2) preliminary concepts for consideration. Advance the preliminary designs to sufficient detail to prepare exhibits and to prepare a preliminary opinion of construction costs for both approaches.

1. Confer with Champaign County staff on level of storm water drainage service to the southern area of the northern watershed on the East Campus.
2. Include impacts from new construction in this area.
3. Propose details of storm water conveyance facilities to serve the area.
4. Propose mix of Green techniques and Best Management Practices to match SWMP assumptions. Propose landscaping for rain garden or bio-swale areas.
5. Perform rough calculations to reflect the probable construction costs.
6. Prepare exhibits to reflect the two (2) alternative plans.
7. Prepare other preliminary design documents for comparison.
8. Review results with Champaign County staff.
9. Review of all work by an Engineer / Surveyor / Principal of the firm.

Engineer / Surveyor / Principal	8 hours at \$130 per hour	\$ 1,040
Project Manager / Engineer	40 hours at \$102 per hour	\$ 4,080
Design Engineer	50 hours at \$ 74 per hour	\$ 3,700
Drafter.....	40 hours at \$ 69 per hour	\$ 2,760
Technician	40 hours at \$ 54 per hour	<u>\$ 2,160</u>
		\$ 13,800
Miscellaneous Expenses		\$ 800
Landscape Architect / Engineer Consultant.....		<u>\$ 2,500</u>
Total Task 3 – Preliminary Designs and Cost Estimates.....		\$ 17,100

SUMMARY

Task 1 – Update Existing Survey	\$ 7,800
Task 2 – Storm Water Management Analysis	\$ 11,500
Task 3 – Preliminary Designs and Cost Estimates	<u>\$ 17,100</u>
	\$ 36,400

PERSONNEL

We propose to provide qualified personnel during all phases of our surveying and engineering work. We further propose that the project will be under the direct personal supervision and control of the Professional Engineer / Land Surveyor / Principals of the firm.

Chris Billing, P.E., will be Project Manager / Engineer and guide the work of engineers and other staff on the team during the design and construction phases of the project.

Edward Clancy, P.E., L.S., will be in charge of the survey update efforts.

Ted Gray, P.E., C.F.M., C.P.E.S.C., of Living Waters Consultants will provide his experience and expertise in storm water Best Management Practice applications to this study. He will provide data during the hydrologic analysis of the study to more accurately forecast runoff reduction and preliminary plan development and construction cost estimating services for the preparation of materials to present to Champaign County.

Thomas Berns, P.E., L.S., will be in charge of the project with regard to Communications, Quality Control and Quality Assurance reviews.

SCHEDULES / SUBMITTALS

Services will commence and be provided to meet your schedule which will be worked out with you at the beginning of this project. We propose to perform the above professional services for the exclusive benefit of and at the specific direction of **Mr. Alan Reinhart** your authorized representative. We understand we will be authorized to proceed by mid-May and materials will be required for County Board distribution by about June 14, 2011.

We appreciate this opportunity to submit this proposal to you and we look forward to hearing from you in the near future. This proposal is valid for thirty (30) days from this date. After that period it is subject to review and renegotiation. **We are prepared to expand or contract the scope of services and the resultant fees and expenses outlined above to suit your requirements.**

If you find the above proposal acceptable, please sign in the space provided below and return a copy of this proposal to us as our formal authorization to proceed. If you have any question or comment, please contact us at any time. Thank you.

- Task 1 – Update Existing Survey
- Task 2 – Storm Water Management Analysis
- Task 3 – Preliminary Design

APPROVED:



Signature

5/19/2011

Date

Sincerely,
BERNS, CLANCY AND ASSOCIATES, P.C.



Thomas B. Berns, P.E., L.S., President



BERNS, CLANCY AND ASSOCIATES

PROFESSIONAL CORPORATION

ENGINEERS • SURVEYORS • PLANNERS

May 1, 2011

THOMAS BERNS
EDWARD CLANCY
CHRISTOPHER BILLING
DONALD WAUTHIER

DAN ROTHERMEL
JOHN LYONS
ROGER MEYER

MICHAEL BERNS
OF COUNSEL

STANDARD FEE SCHEDULE FOR PROFESSIONAL ENGINEERING, SURVEYING, AND PLANNING SERVICES

HOURLY RATE

PRINCIPAL OF FIRM, PREPARATION & TESTIMONY AS EXPERT WITNESS.....	\$200
PRINCIPAL OF FIRM, ENGINEER, SURVEYOR OR PLANNER GRADE 7	130
ENGINEER, SURVEYOR OR PLANNER GRADE 6	102
ENGINEER, SURVEYOR OR PLANNER GRADE 5	86
ENGINEER, SURVEYOR OR PLANNER GRADE 4	74
ENGINEER, SURVEYOR OR PLANNER GRADE 3	64
ENGINEER, SURVEYOR OR PLANNER GRADE 2	58
ENGINEER, SURVEYOR OR PLANNER GRADE 1	50

TECHNICIAN OR CONSTRUCTION OBSERVER GRADE 5.....	\$ 74
TECHNICIAN OR CONSTRUCTION OBSERVER GRADE 4.....	64
TECHNICIAN OR CONSTRUCTION OBSERVER GRADE 3.....	54
TECHNICIAN OR CONSTRUCTION OBSERVER GRADE 2.....	48
TECHNICIAN OR CONSTRUCTION OBSERVER GRADE 1.....	36

FOUR-PERSON SURVEY CREW	\$200
THREE-PERSON SURVEY CREW	164
TWO-PERSON SURVEY CREW.....	118

VEHICLE MILEAGE.....	\$0.70 /	MILE
WOOD GRADE STAKE.....	1.00 /	EACH
STEEL SURVEY MONUMENT WITH ALUMINUM CAP.....	12.00 /	EACH
CONCRETE SURVEY MONUMENT WITH ALUMINUM CAP.....	30.00 /	EACH
STEEL FENCE POST	3.00 /	EACH
PHOTOCOPY	0.25 /	EACH
PLAN SHEET COPY (PER SQUARE FOOT).....	0.50 /	SQ FT
COLOR PLOT COPY (PER SQUARE FOOT).....	1.50 /	SQ FT
COMPUTER AIDED DRAFTING (CAD).....	5.00 /	HOUR

TRAVEL TIME TO AND FROM OUR OFFICE WILL BE CHARGED IN ACCORDANCE WITH THE FOREGOING RATES. ALL SUBCONSULTANTS (SOIL INVESTIGATION, MATERIAL TESTING, AERIAL PHOTOGRAPHY, PHOTOGRAMMETRIC MAPPING, ETC.) ENGAGED BY US WILL BE BILLED AT COST PLUS TEN PERCENT (10%). ALL OTHER OUT-OF-POCKET EXPENSES INCURRED WILL BE BILLED AT COST PLUS TEN PERCENT (10%). THESE EXPENSES MAY INCLUDE TRAVEL, SUBSISTENCE (WHEN APPLICABLE), LONG DISTANCE TELEPHONE OR TELEFAX CHARGES, EXPRESS DELIVERY, REPRODUCTIONS, POSTAGE, SHIPPING CHARGES, RENTAL EQUIPMENT, ETC. REVISIONS TO THIS STANDARD FEE SCHEDULE ARE NOT ANTICIPATED UNTIL MAY OF 2012.

GENERAL CONDITIONS

Item 1. Scope of Work. Berns, Clancy and Associates, P.C. (BCA) shall perform services in accordance with an "agreement" made with the "client". The agreement consists of BCA's proposal, Standard Fee Schedule, and these General Conditions. The "client" is defined as the person or entity requesting and/or authorizing the work, and in doing so, client represents and warrants that he is duly authorized in this role, even if performed on behalf of another party or entity, in which case the other party or entity is also considered as the client. The acceptance of BCA's proposal signifies the acceptance of the terms of this agreement.

The fees for services rendered will be billed in accordance with the accompanying Standard Fee Schedule. Unit rates for services not covered in the fee schedule or elsewhere in the agreement can be provided. The standard prices proposed for the work are predicated upon the client's acceptance of the conditions and allocations of risks and obligations described in the agreement. The client shall impart the terms of this agreement to any third party to whom the client releases any part of BCA's work. BCA shall have no obligations to any party other than those expressed in this agreement.

Item 2. Site Access/Background Data. The client will provide for the right-of-way access to the work site. In the event the work site is not owned by the client, client represents to BCA that all necessary permissions for BCA to enter the site and conduct the work have been obtained. While BCA shall exercise reasonable care to minimize damage to the property, the client understands that some damage may occur during the normal course of the work, that BCA has not included in its fee the cost of restoration of damage, and that the client will pay for such restoration costs. Client shall provide the appropriate land title and/or background information to BCA required for the performance of our work. BCA will not be required to perform an independent search for easements, encumbrances, title evidence and ownership data as BCA will rely upon the materials and representations that client supplies to BCA.

Item 3. Utilities. In the performance of its work, BCA will take all reasonable precautions to avoid damage to underground structures or utilities, and will rely on utility locator services to correctly identify their buried service lines, and on plans, drawings or sketches made available and provided by the client. The client agrees to hold BCA harmless and indemnify BCA from any claims, expenses, or other liabilities, including reasonable attorney fees, incurred by BCA for any damages to underground structures and utilities which were not correctly and clearly shown on the plans provided to BCA or otherwise disclosed by the client or utility locator service. BCA will be responsible for ordering the utility locator or exploratory excavation services only if expressly set forth in the scope of the proposal.

Item 4. Hazardous Materials and Conditions. Prior to the start of services, or at the earliest time such information is learned, it shall be the duty of the client, or other involved or contacted parties, to advise BCA of any known or suspected undocumented fills, hazardous materials, by-products, or constituents, and any known environmental, hydrologic, geologic, and geotechnical conditions, which exist on or near any premises upon which work is to be performed by BCA employees or subcontractors or which in any other way may be pertinent to BCA's proposed services.

Item 5. Confidentiality. BCA shall hold confidential the business and technical information obtained or generated in performance of services under this agreement and identified in writing by the client as "confidential". BCA shall not disclose such "confidential" information except if such disclosure is required by governmental statute, ordinance, or regulation; for compliance with professional standards of conduct for public safety, health, and welfare concerns; or for protection of BCA against claims or liabilities arising from performance of its services.

The technical and pricing information contained in any report or proposal submitted by BCA is to be considered confidential and proprietary, and shall not be released or otherwise made available to any third party without the express written consent of BCA. Client now has no contract with any other professional engineer/surveyor/planner for the performance of the specific services outlined in the agreement and any previous contracts are terminated and copies of all previous work will be provided to BCA for use in this current project.

Item 6. Standard of Care. BCA will perform the services under this agreement in accordance with generally accepted practice, in a manner consistent with the level of care and skill ordinarily exercised by members of this profession under similar circumstances in this locality. No other warranties implied or expressed, in fact or by law, are made or intended.

Item 7. Technical Methodology and Protocol. BCA will select generally accepted methods and procedures it considers appropriate to accomplish the intended and understood purpose of its services within the scope of this agreement, and the client signifies concurrence with these methods and procedures by acceptance of this agreement. In the event other special methods or procedures are preferred by the client or are considered more appropriate, a written description or designation of these must be provided to BCA prior to execution of this agreement.

Item 8. Limitations of Liability. The client agrees to limit BCA's liability to the client and all parties claiming through the client or otherwise claiming reliance on BCA's services, allegedly arising from BCA's professional acts or errors and omissions, to a sum not to exceed BCA's fees for the services performed on the project, or \$100,000, whichever is greater, provided that such claims are not attributable to BCA's gross negligence or intentional misconduct. In this latter event, the Limit of Liability will be increased to \$500,000 less any applicable insurance amount covering alleged damages or claims. In no event shall BCA or any other party to this agreement including parties which may have or claim to have a direct or indirect reliance on BCA's services, be liable to the other parties for incidental indirect, or consequential damages arising from any cause.

Item 9. Insurance and Indemnity. BCA represents that it maintains general liability, property damage, and professional liability insurance coverage considered adequate and comparable with coverage maintained by other similar firms, and that BCA's employees are covered by Workman's Compensation Insurance. Certificates of Insurance can be provided to the client upon request. BCA shall not be responsible for any loss, damage, or liability beyond these insurance limits and conditions. BCA agrees to indemnify the client from and save client harmless against any loss, damage, or liability stemming from acts of gross negligence by BCA. Except as expressly set forth in Items 8 and 9, the client agrees to hold BCA, its officers, directors, agents, and employees, harmless from any claims, suits, or liability including but not limited to attorney fees, costs of settlement, and other incidental costs, for personal injury, death, illness, property damage or any other loss, allegedly arising from or related to BCA's work.

Item 10. Modifications. This agreement and all its attachments represent the entire understanding between the parties, and neither the client nor BCA may amend or modify any aspect of this contract unless such alterations are reduced to writing and properly executed by the parties hereto. These terms and conditions shall supersede all prior or contemporaneous communications, representations, or agreements, and any provisions expressed or implied in requests for proposal, purchase order, authorization to proceed, or other contradictory provisions, whether written or oral.

Item 11. Originals and Reproductions. All original notes, drawings and other working papers are and shall remain the copyrighted property of BCA. Client is entitled to perpetual access to BCA's original files and will be provided reproducible copies of originals, as well as photocopies of all other documents at the actual cost to make such reproductions.

Item 12. Payment. Invoices for performed work will be submitted monthly for services rendered the prior month, payable within 30 days of invoice date. The fees quoted are based upon an expected timely payment. Late payment charges of 1.5% per month will be added to delinquent charges. Client shall be further obligated to pay BCA's cost of collection, including, but not limited to, court costs and attorney's fees, in the event of default in payment under this paragraph. This agreement is entered into in Champaign County, Illinois and the Laws of Illinois are to apply to the agreement. If legal action is required by BCA, to collect fees or expenses advanced or to resolve disputes, then the parties agree that Champaign County shall be the proper venue for that legal action. BCA, at its option, may terminate its services due to client's failure to pay when due. In the event of termination of services prior to completion, client shall compensate BCA for all services performed to and for such termination.



CERTIFICATE OF LIABILITY INSURANCE

OP ID: TQ

DATE (MM/DD/YYYY)

04/22/11

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Brown, Hobbs & McMurray 118 S. Race St., P.O. Box 488 Urbana, IL 61803-0488 Richard L. McMurray	217-367-4011	CONTACT NAME:	
	217-384-4346	PHONE (A/C, No, Ext):	FAX (A/C, No):
		E-MAIL ADDRESS:	
		PRODUCER CUSTOMER ID #: BERNS-C	
		INSURER(S) AFFORDING COVERAGE	NAIC #
INSURED Berns, Clancy & Assoc., P.C. 405 E. Main St. Urbana, IL 61803-0755	INSURER A : Selective Insurance Company		19259
	INSURER B : Hiscox, Inc		
	INSURER C :		
	INSURER D :		
	INSURER E :		
	INSURER F :		

COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	GENERAL LIABILITY			S 1736668	07/20/10	07/20/11	EACH OCCURRENCE \$ 1,000,000
	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000
	<input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR						MED EXP (Any one person) \$ 5,000
							PERSONAL & ADV INJURY \$ 1,000,000
							GENERAL AGGREGATE \$ 2,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						PRODUCTS - COMP/OP AGG \$ 2,000,000
	<input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC						\$
A	AUTOMOBILE LIABILITY			S 1736668	07/20/10	07/20/11	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000
	<input checked="" type="checkbox"/> ANY AUTO						BODILY INJURY (Per person) \$
	<input type="checkbox"/> ALL OWNED AUTOS						BODILY INJURY (Per accident) \$
	<input type="checkbox"/> SCHEDULED AUTOS						PROPERTY DAMAGE (Per accident) \$
	<input type="checkbox"/> HIRED AUTOS						\$
	<input type="checkbox"/> NON-OWNED AUTOS						\$
A	UMBRELLA LIAB	<input checked="" type="checkbox"/>	OCCUR	S 1736668	07/20/10	07/20/11	EACH OCCURRENCE \$ 5,000,000
	EXCESS LIAB		CLAIMS-MADE				AGGREGATE \$
	DEDUCTIBLE						\$
	<input checked="" type="checkbox"/> RETENTION \$						\$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY			WC 7922670	07/20/10	07/20/11	<input checked="" type="checkbox"/> WC STATUTORY LIMITS
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	<input type="checkbox"/> Y/N	N/A				E.L. EACH ACCIDENT \$ 1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE \$ 1,000,000
							E.L. DISEASE - POLICY LIMIT \$ 1,000,000
B	Professional Liab			ANE105856110	04/23/11	04/23/12	Liability 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

CERTIFICATE HOLDER**CANCELLATION**

MASTCOP	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE

© 1988-2009 ACORD CORPORATION. All rights reserved.

LWC COMPANY OVERVIEW



Living Waters Consultants, Inc. (LWC) provides award-winning Engineering and Consulting Services for stream, lake and wetland restoration. Our solutions are environmentally sound, innovative, and cost-effective. Engineering and Consulting Services include Design, Construction, Grant Acquisition, Permitting, Specifications, Planning, Reports, Maintenance, and Monitoring.

OVERVIEW



Stream Restoration
Engineering Services



Park Development / Quarry
Reclamation Engineering



Wetland Engineering
Client Received Lake County
Award - Stormwater
Community of the Year.

Stream Restoration Engineering

- Natural Channel Design Engineering
- Stream Remeandering / Channel Relocation
- Streambank Stabilization Engineering
- Dam Removal / Rock Ramps
- Floodplain Restoration
- Grant Acquisition

Stormwater / Water Quality Engineering

- Best Management Practice (BMP) Design
- Water Quality Controls
- Site Design and Permitting
- Land Surveying
- Hydrologic & Hydraulic (H & H) Modeling

Wetland Engineering and Consulting

- Wetland Restoration
- Wetland Delineations
- Wetland Detention Design
- Off-Shore and Island Wetland Design

Lake and Watershed Management

- Watershed-Based Plans
- Shoreline Stabilization
- Water Quality Monitoring
- Dam Modification / Dam Removal
- Dredging, Nutrient & Sediment Control

Fish / Wildlife Surveys

- Threatened / Endangered Species Recovery
- Habitat Restoration
- Fish Electro-Surveys

CONTACT

Ted Gray, PE, CFM, CPESC, Engineer & Hydrologist
630-261-1133 TGray@LivingWatersConsultants.com

STORMWATER ENGINEERING



Living Waters Consultants, Inc. (LWC) provides award-winning Engineering and Consulting Services for stream, lake and wetland restoration. Our solutions are environmentally sound, innovative, and cost-effective. Engineering and Consulting Services include Design, Modeling, Construction Observation, Grant Acquisition, Permitting, Specifications, Planning, Reports, Maintenance, and Monitoring.

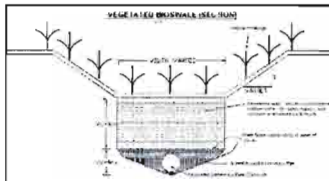
STORMWATER



Flood Engineering Studies Using GIS Technology



Stormwater Wetland Engineering APWA Project of the Year Award and ACEC Engineering Excellence Merit Award



Water Quality BMP Engineering Specifications

Stormwater Engineering

- Environmentally Sound Stormwater Design
- Permitting (IDNR/OWR; USACOE; FEMA)
- Best Management Practice (BMP) Design
- GIS / CADD / GPS / Total Station Technology
- Hydrologic & Hydraulic Modeling (H & H)
- HEC-RAS, HEC-HMS, WSP, FEQ, TR-20
- Low-Impact Development (LID)

Water Quality Engineering

- Pollutant and Nutrient Control
- Stormwater Treatment Technologies
- Dredging / Sediment Control
- BMP Engineering Design
- Carp Management
- TMDL Studies

Floodplain Engineering

- Flood Studies / Flood Control
- Flood Hazard Mitigation
- Permitting (FEMA LOMR, LOMA)
- Hydrologic & Hydraulic Modeling (H & H)
- Grant Acquisition

Wetland Engineering and Consulting

- Wetland Construction
- Wetland Restoration and Delineation
- Wetland Banks
- Hydraulic Modeling
- Permitting

CONTACT

Ted Gray, PE, CFM, CPESC, Engineer & Hydrologist
630-261-1133 TGray@LivingWatersConsultants.com

WETLAND ENGINEERING AND CONSULTING



Living Waters Consultants, Inc. (LWC) provides award-winning Engineering and Consulting Services for stream, lake and wetland restoration. Our solutions are environmentally sound, innovative, and cost-effective. Engineering and Consulting Services include Design, Modeling, Construction Observation, Grant Acquisition, Permitting, Specifications, Planning, Reports, Maintenance, and Monitoring.

WETLANDS



Wetland Engineering & Restoration Services



Wetland Engineering
Client Received Lake County
SMC Award - Stormwater
Community of the Year.



Wetland Engineering / Park
Reclamation

Wetland Engineering and Consulting

- Wetland Restoration Design
- Off-Shore Island Construction
- Breakwaters and Marina Breakwalls
- Shoreline Protection
- Floating Wetland Engineering
- Wetland Assessments
- Dredging for Wetland Construction

Stormwater Engineering

- Wetland Stormwater Detention
- Flood Management Using Wetlands
- Wetland Water Quality and Habitat
- Hydroperiod Studies
- Hydrologic and Hydraulic Modeling
- Permitting

Wetland Surveys and Delineation

- Wetland Delineations
- Wildlife Surveys
- Flora and Fauna Surveys
- Water Quality Studies

CONTACT

Ted Gray, PE, CFM, CPESC, Engineer & Hydrologist
630-261-1133 TGray@LivingWatersConsultants.com



Stream and Lake Restoration • Fluvial Geomorphology
Watershed Management • Stormwater Engineering

THEODORE RICHARD GRAY

SUMMARY OF CAPABILITIES

Environmentally sound, innovative, and cost-effective engineering solutions for stream, wetland, and lake restoration.

EXPERIENCE

Engineer & Eco-Hydrologist, Since March 1996

Living Waters Consultants, Inc., Oakbrook Terrace, IL

- Stormwater BMP engineering design, permitting, and construction for seven 100+ acre sites
- Completed stormwater modeling using HEC-RAS, HEC-HMS, TR-20, TR-55, FEQ
- Performed stream restoration plans and implementation for 39 projects on 30 streams
- Awards from APWA, ACEC, USEPA, ASLA and others for 6 stream and wetland projects
- Designed and/or installed 12 stream miles of bioengineering stabilization and dam removal
- Stream re-meandering design, permitting, and construction observation for 3.6 miles
- Implemented management plans for water quality, erosion control, fisheries
- Acquisition and/or administration for \$3 M+ in grant funding for restoration projects

Environmental Scientist, August 1993 - March 1996

Sheaffer & Roland, Inc., Wheaton, IL

- Co-authored 14 technical reports and six proposals (three funded)
- Co-developed ten stormwater management plans including one with ASLA honors
- Developed three stream restoration plans and three biotic assessments
- Prepared wetland mitigation plans for eight sites, including a 100-ac homesite
- Created two lake design/construction observation plans
- Assessed depth to groundwater and benchmark aquifer transmissivity estimates
- Managed design, implementation and client interaction for six projects

Associate Environmental Planner, March 1993 - August 1993

Assistant Environmental Planner, March 1991 - March 1993

Chicago Metropolitan Agency for Planning, Chicago, IL

- Assisted restoration plan development for three watersheds and four project sites
- Designed and co-authored six water management reports and grant proposals
- Assessed biological and chemical characteristics for four stream sites
- Assessed the severity of nonpoint source impacts for three aquatic studies
- Increased GIS proficiency to become the department's GIS analyst

Education

M.S. in Resource Ecology and Management, February 1991

University of Michigan, School of Natural Resources

Specialization: Fish ecology and water quality

B.A. in Biology cum laude, May 1987

Ripon College, Ripon, WI

Honors: Beta Beta Beta Biological Honor Society; Dean's List

Certifications

Professional Engineer # 062-055335 (PE, IL Dept. of Professional Regulation)
Certified Floodplain Manager # IL-08-00379 (CFM, IL Assn. for Floodplain Management)
Certified Professional in Erosion and Sedimentation Control # 1654 (CPESC)

Awards

ACEC Engineering Excellence Merit Award (Scottswood Wetland Detention Basin)
APWA Project of the Year – Prairie Branch (Scottswood Wetland Detention Basin)
APWA Technical Innovation Award - Chicago Metro Chapter (Atrium Ditch Stabilization)
Lake County SMC Stormwater Community of the Year Award (Received By Client)
National Visionary Award Top 5 Finalist: Indian Creek Re-Meandering at Premium Outlet Mall
U.S. EPA / Chicago Wilderness Conservation Award (Fish Hotel, Indian Creek, GMS School)

Projects and Reports

2010 "Jelkes Creek / Quarry / Wetland Restoration Project." (LWC)
2010 "Silver Creek Stabilization Project, Phase 3." (LWC)
2009 "Dead Dog Creek Stream Restoration Plan." (LWC)
2008 "Dixie Briggs-Fromm Stream Restoration Project." (LWC)
2008 "Seavey Dam Removal and Stream Restoration." (LWC)
2008 "Peck Wetland Restoration Project." (LWC)
2008 "Hobson Creek Riparian Restoration & Stabilization Plan, Phase 3." (LWC)
2007 "Scottswood Wetland Detention Basin." (APWA, ACEC Project of Year; LWC & BCA)
2006 "Lyman Woods Stream Restoration Project, PSA 2." (LWC, Planning Res. & Patrick)
2005 "Wetland Detention Design for Water Quality and Flood Control at Peck Lake." (LWC)
2004 "North Flint Creek Flood Management Plan." (LWC & Aenon Consultants).

Presentations

Illinois Assn. for Floodplain and Stormwater Management, "Scottswood Wetland." March 2011
Illinois Institute of Technology, "Stream Restoration Course (2 day course)." Feb. 2011.
IL-IN Sea Grant, "River Restoration Workshop - Natural Channel Design." September 2005.

Publications

Smith, Gray, Twitchell. March 2005. Re-Hydration of Historic Meanders on Raccoon Creek. 2005 Watershed Management Conference. ASCE Environmental and Water Resources Institute.

Northcutt, G. November / December 2004. Hobson Creek Restoration Project (Gray: Description of Hobson Creek Restoration Project.) Land & Water Magazine.

Wolterstorff, Gray, Belmonte and Milner. June 2003. Holistic Site Development with Floodplain, Stream Habitat, and Wetland Mitigation. (Gray: Re-Meandering Design and Construction Management for 4,200 LF of Indian Creek.) American Society of Civil Engineers – World Water & Environmental Resources Congress June 22-26, 2003.

Living Waters CONSULTANTS

Stream & Lake Restoration • Stormwater Engineering
Watershed Management • Fluvial Geomorphology



BIOSWALE WITH ROCK CHECKS



TERRACED WETLANDS



PARKING LOT BIOFILTRATION



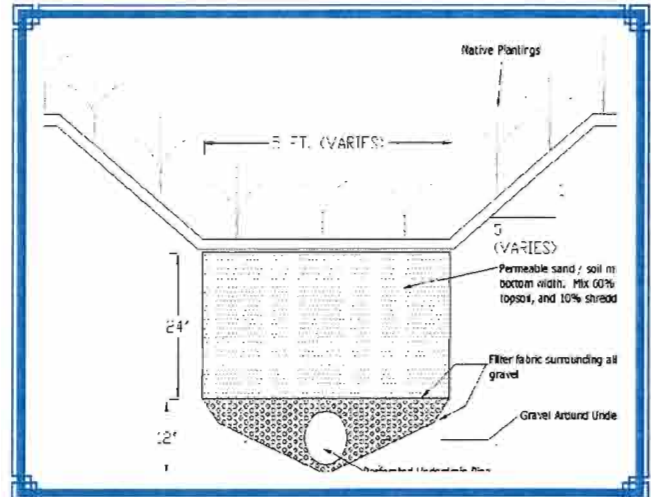
WETLAND RESTORATION

Jelkes Creek Stormwater BMPs / Quarry Restoration Project Dundee Township, Kane County, IL

Dundee Township completed the Jelkes Creek Bird Sanctuary / Quarry Restoration Project with conversion of 150 acres of eroded quarry with chronic flooding and 20-foot tall degraded bluffs into a passive recreational park amenity. Stormwater BMP features include 3,500 LF of natural aggregate bioswales, 5,000 LF of terraced wetlands, 110 acres of native plant seeding, 15 acres of emergent wetland habitat, sediment forebays, reuse of sand and gravel bioswales and infiltration, buffer filtration, rock checks, a 30-stall parking facility, and 275,000 CY of earthwork. Living Waters Consultants provided Engineering Design, Details, Specifications, Project Management, Cost Estimates, Grant Assistance (\$1.3 M grant funding), Permitting, Bidding, Construction Observation, and Monitoring Services. Graded areas retains 100% of stormwater runoff in the 100-year storm event. Runoff is retained and recharged into the regional groundwater supply, protecting Jelkes Creek water quality.

Living Waters CONSULTANTS

Stream and Lake Restoration • Fluvial Geomorphology
Watershed Management • Stormwater Engineering



Upper Left: Watershed Plan and Water Quality Modeling.

Upper Right: Engineering Design Detail Adopted by School.

Bottom Left: Post-Implementation Wetland Detention Basin .

Bottom Right: Parking Lot Bioswale with Native Plantings.



Award-Winning Stormwater Engineering Design / Best Management Practices

Living Waters Consultants prepared Stormwater Engineering Details and Specifications recommendations to the Geneva School District to protect Peck Wetland from the school development plan. Most recommendations were adopted including wetland detention basins, bioswales, innovative rooftop runoff bioretention, native plant swales, parking lot bioswales, native plant species, and sediment forebays for sediment cleanout. Engineering Design was based on water quality modeling to protect 19-acre Peck Wetland from water quality impacts. The Plan implementation resulted in the Geneva School District receiving the Conservation and Native Landscaping Award by U.S. EPA and Chicago Wilderness.



BEFORE



STABILIZATION / CONSTRUCTION



WETLANDS



TRAILS & RECREATION

Jelkes Creek Bird Sanctuary / Quarry Restoration Project Dundee Township, Kane County, IL

Dundee Township teamed with Living Waters Consultants to complete the Jelkes Creek Bird Sanctuary Restoration Project. The Project restored 150 acres of eroded quarry with chronic flooding and 20-foot tall degraded slopes into a recreational park amenity. Features include 4 fishing lakes, 15 acres of emergent wetland habitat, 4 miles of foot paths, scenic overlooks, ADA accessible fishing piers, pavilion, and a 30-stall parking facility with 275,000 CY of earthwork. Living Waters Consultants provided Engineering Design, Details, Specifications, Project Management, Cost Estimates, Grant Assistance (\$1.3 M grant funding), Permitting, Bidding, Construction Observation, and Monitoring Services. Stormwater BMPs include 3500 feet of bioswales, 5000 linear feet of terraced wetlands, 110 acres of native plant seeding, sediment forebays, reuse of sand and gravel bioswales and infiltration, buffer filtration, and rock checks. The site retains 100% of stormwater runoff in the 100-year storm event. Runoff is recharged into the regional groundwater supply, protecting Jelkes Creek water quality. Living Waters Consultants observed construction by G.A. Blocker Construction. Shoreline stabilization included re-use of on-site logs.