TSP
Environmental

September 15, 2010
Project #10180

City of Ann Arbor
Guy C. Larcom Municipal Building
Ann Arbor, Michigan 48107

Re: RFP #778 - Request for Proposal to Design and Construct a By-ass Channel in the Argo Dam Headrace

Ladies and Gentlemen:

The undersigned, as Proposer, declares that this Proposal is made in good faith, without fraud or collusion with any person or persons proposing on the same Contract; that this Proposer has carefully read and examined the proposal documents, including Advertisement, Human Rights Division Contract Compliance Forms, CUB Agreement, Notice of Pre-Proposal Conference, Instructions to Proposers, Proposal, Bid Forms, Contract, Bond Forms, General Conditions, Standard Specifications, Detailed Specifications, and all Addenda and understands them. The Proposer declares that it conducted a full investigation at the site and of the work proposed and is fully informed as to the nature of the work and the conditions relating to the work's performance. The Proposer also declares that it has extensive experience in successfully completing projects similar to this one.

The Proposer acknowledges that it has not received or relied upon any representations or warrants of any nature whatsoever from the City of Ann Arbor, its agents or employees, and that this Proposal is based solely upon the Proposer's own independent business judgment. The undersigned proposes to perform all work described in the RFP documents, including any addenda issued, and to furnish all necessary machinery, tools, apparatus, and other means of construction to do all the work, furnish all the materials, and complete the work in strict accordance with all terms of the Contract of which this proposal is one part. In accordance with these RFP documents, and Addenda numbered 1 and 2, the undersigned, as Proposer, proposes to perform at the sites in and/or around Ann Arbor, Michigan, all the work included herein for the amounts set forth in the Proposal.

The Proposer declares that it has become fully familiar with the provisions of Ann Arbor City Council Resolution R-09-459, and that it understands and agrees that any labor used on this Proposal to be awarded by the City shall be governed by the current collective bargaining agreement of the appropriate Local Unions of the Washtenaw County Skilled Building Trades Council (SBTC). The Proposer further acknowledges and agrees that if awarded the bid Proposer, and any and all subcontractors employed by it in performance of the Construction Services under the contract shall as a condition of award be required to execute a CUB Agreement with SBTC. Proposer further agrees that the cited City Council Resolution forms a part of this Contract.

12411 Stark Road, Livonia, MI 48150
Phone (734) 838-0426 • Fax (734) 838-0428 • www.tspenvironmental.com

The Proposer declares that it has become fully familiar with the liquidated damage clauses for completion times and for compliance with City Code Chapter 112, understands and agrees that the liquidated damages are for the non-quantifiable aspects of non-compliance and do not cover actual damages that may be shown and agrees that if awarded the Contract, all liquidated damage clauses form part of the Contract.

The Proposer declares that it has become fully familiar with the provisions of Chapter 14, Section 1:319 (Prevailing wages) and Chapter 23 (Living Wage) of the Code of the City of Ann Arbor and that it understands and agrees to comply, to the extent applicable to employees providing services to the City under this Contract, with the wage and reporting requirements stated in the City Code provisions cited. Proposer further agrees that the cited provisions of Chapter 14 and Chapter 23 form a part of this Contract.

The Proposer encloses a certified check or Bid Bond in the amount of 5% of the total of the Proposal Price. The Proposer agrees to furnish the necessary Bonds and insurance documentation within 10 days after being notified of the acceptance of the Proposal. If this Proposal is accepted by the City and the Proposer fails to contract and furnish the required Bonds and insurance documentation within 10 days after being notified of the acceptance of this Proposal, then the Proposer shall be considered to have abandoned the Contract and the certified check or Bid Bond accompanying this Proposal shall become due and payable to the City.

If the Proposer enters into the Contract in accordance with this Proposal, or if this Proposal is rejected, then the accompanying check or Bid Bond shall be returned to the Proposer.

In submitting this Proposal, it is understood that the right is reserved by the City to accept any Proposal, to reject any or all Proposals, to waive irregularities and/or informalities in any Proposal, and to make the award in any manner the City believes to be in its best interest.

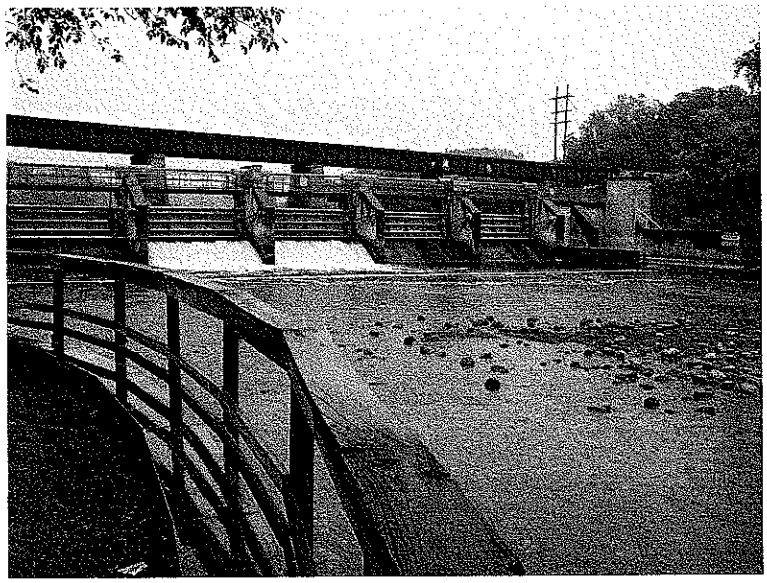
Sincerely,

TSP Environmental

Ronald E. Swan, Jr., CHMM, CP, P.E.
President

Proposal to Design and Construct a By-Pass Channel in the Argo Dam Headrace

Ann Arbor, Michigan



September, 2010

Prepared For:
City of Ann Arbor
100 North 5th Ave.
Ann Arbor, MI
48107

Prepared By:
Ronald Swan, Jr., PE
TSP Environmental
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TSP Environmental

B R ⓘ Beckett&Raeder

Recreation Engineering and Planning
wwparks.com

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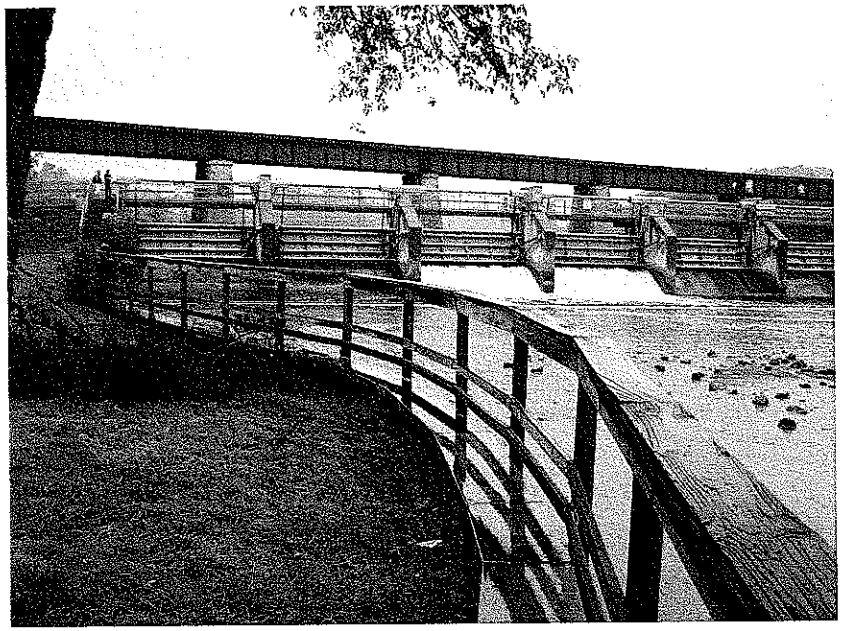

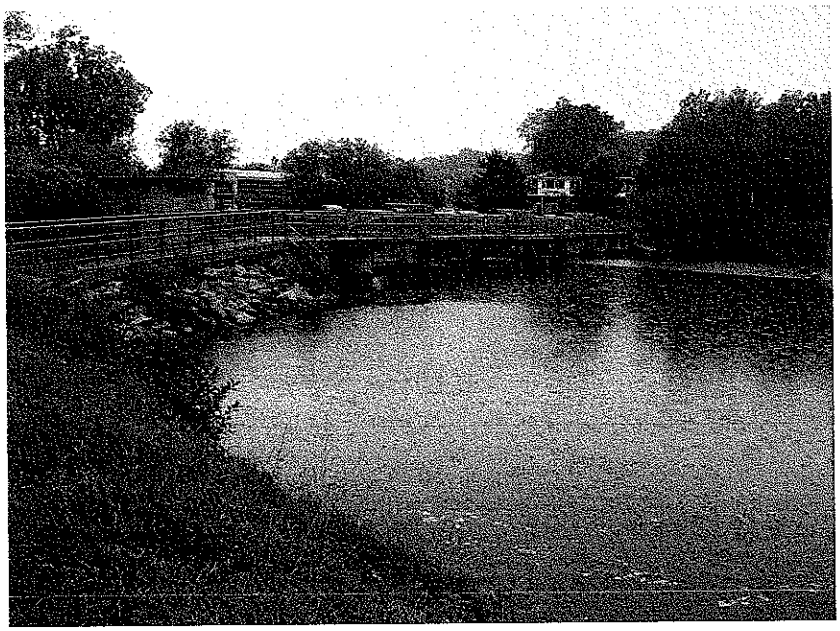

INTRODUCTION

TSP Environmental
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Introduction

The Argo Dam is located on the Huron River that flows through the City of Ann Arbor, Michigan. The original dam was built by Detroit Edison (DTE) for hydropower. DTE decommissioned the dam in 1963 and sold it to the city of Ann Arbor. Currently the Argo Dam is a recreational dam regulated by Michigan Department of Environmental Quality (MDEQ). While Argo Dam no longer produces hydropower, its impoundment provides a recreational amenity for rowing, canoeing, kayaking and fishing. The dam serves as the foundation for an important pedestrian walkway across the river.

The City of Ann Arbor operates two canoe liveries, one of which is located on Argo Pond and the other on Geddes Pond in Gallup Park. In 2007, more than 30,000 people paddled on the Huron River, and an additional 40,000 people used Gallup and Argo Parks for other activities such as special events and meetings. Canoe livery patrons, along with visitors to riverside parks, make up a significant portion of Huron River users in Ann Arbor. Modifying the Argo dam for boat passage would create an un-interrupted five mile stretch from below the Barton Dam to the Gallup Livery, while maintaining the existing impoundment and its associated uses. Currently recreational users wishing to pass downstream of the Argo Dam have to bypass the Dam by paddling through the mill race and portaging boats down a steep ramp.

Recreation Engineering and Planning was previously contracted to create a conceptual design that balances the existing use at the site, while considering the opportunities for providing upstream fish passage and paddling opportunities downstream of the dam. The purpose of this project is to modify the current configuration of the dam, build a canoe bypass that facilitates reasonable fish passage, and provide a whitewater paddling amenity. Similar dams, in cities across the country, have been converted to provide attractive recreational amenities while improving safety and the riparian environment at the site. These projects create a unique recreational amenity that appeal to a wide cross section of the community. The net effect of these improvements transforms impediments to fish passage and safety hazards into popular community attractions that create an un-interrupted stretch of the river.

This site contains the physical characteristics necessary to provide the proposed recreational improvements due to gradient, flow, and its park-like location with existing associated infrastructure; including parking, restrooms and access.

Background

Many communities across North America are looking to their river corridors, historically centers of industry, as the heart of urban renewal plans. Rivers can serve as the catalyst

for economic development, and as the dominant natural feature of communities. Whitewater Parks and Courses are increasingly being explored and built by communities looking to create a unique attraction and recreational opportunity of national importance.

The term "whitewater park" is analogous to a brand name that has been generally applied to river access improvement projects all over the US. These projects are located in diverse communities, with diverse goals. The common thread among all of these projects is that elements of a public river corridor had become a liability. Whitewater parks convert river corridors and failing dams from liabilities, to amenities that provide recreational opportunities and economic stimulus.

Whitewater parks are an emerging trend in North America that provides river related recreation near a population center. Whitewater parks vary in length from the longest, 1 mile, to the shortest, 1 single feature, but all meet the same goal: attracting diverse users to a single destination where they can recreate without the logistical issues involved in more traditional, point A to point B river trips.

These parks can be constructed in all types of rivers and can be designed to achieve a range of different outcomes. In-stream modification, as seen in the Golden, Colorado, Whitewater Park, consists of a features created with carefully placed, native boulders within the existing channel. The appropriateness of this type of improvement is based on the availability of flow, the gradient of the stream in the immediate vicinity of the drop structure, and the geotechnical makeup of the substrata of the river.

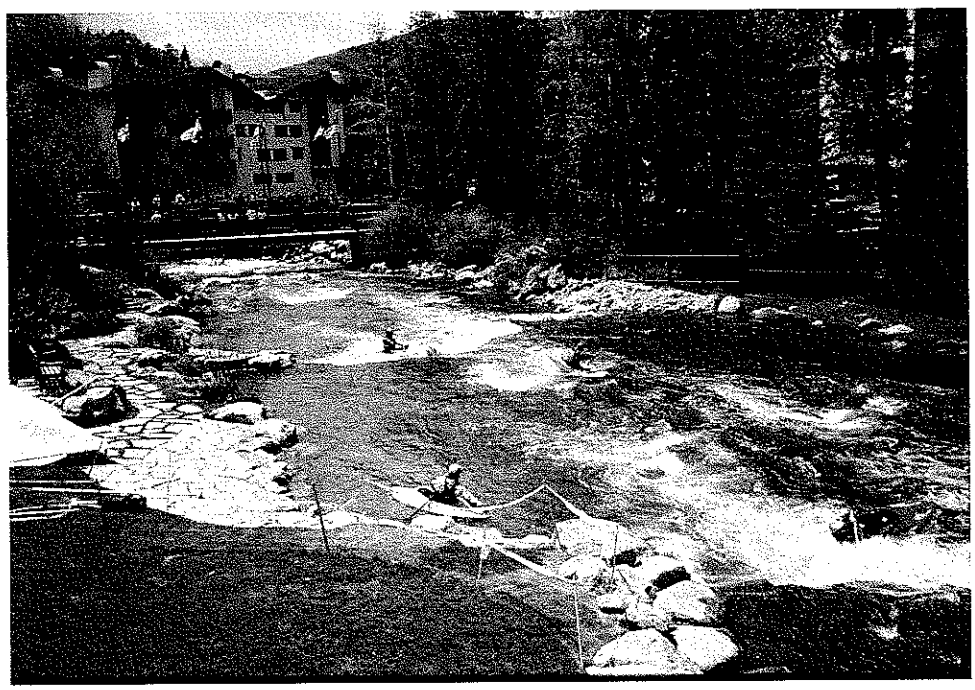
Dam modification whitewater parks are also a commonly pursued option, whereby an existing dam is retrofitted with drop structures to create a whitewater course on the backside of a dam. Dam modifications, like the Rio Vista Dam shown in the photo below, serve to eliminate structural stability issues and mitigate existing navigability hazards while maintaining the existing use of the dam and not negatively impacting the floodplain. These projects are appropriate when a dam's function needs to be maintained but the downstream edge of the dam can be modified for navigation, recreation and fish passage, or when the crest of a dam can be lowered and the vertical fall of the dam can be redistributed through a longer reach.

Diverse communities ranging in population and geographic characteristics are turning to their rivers as a source of recreation, education, and local pride. Whitewater parks attract citizens of all ages and socio-economic backgrounds. The operation of these parks across the country has shown that these types of projects provide a number of benefits including

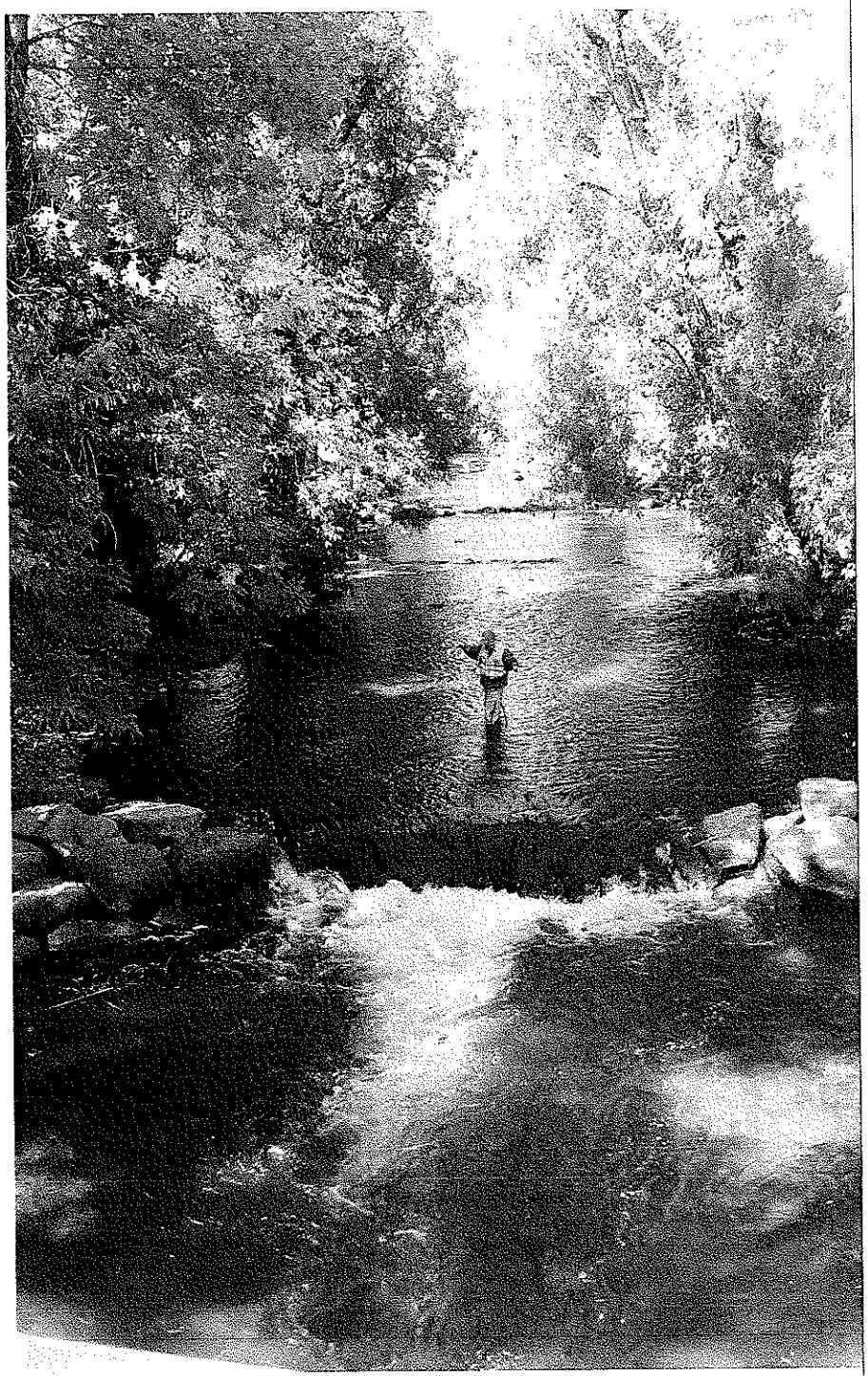
new recreational opportunities, economic stimulus, enhanced aquatic habitat and environmental education opportunities.

Economic Benefit

There is substantial, empirical evidence that river access improvements can have significant, positive, economic benefits, for a local community. Whitewater Parks attract a desirable demographic of users, from outside of a community, between the ages of 25-45 with disposable income and the willingness to travel in pursuit of this specific recreational activity. Golden, Colorado commissioned an economic impact study in the year 2000 for a whitewater park that was built in 1996. At the time of the study, the project was shown to have an annual economic impact of between $1.4million-$2million to the local community. This study was for a stream which has a usable season of three months. The whitewater park in Reno, Nevada has a projected economic impact of $18million over the first decade and contributes to a $9million economic impact of the, annual, three day, Reno River Festival. Vail Colorado hosts the Teva Mountain Games on Gore Creek, a national level event that has a large economic impact during a critical shoulder season.



The Vail, Colorado Whitewater Park.



SECTION 2:

PROFESSIONAL QUALIFICATION AND EXPERIENCE

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believed and that the condition of the tanks presented a threat to the health and safety of the repair team. The Coast Guard evaluated the stated concerns and elected to replace the tanks under a separate scope of work rather than continue repairs.

Key Individuals

Table 3: Key Individuals

Name	Company	Title	Time on Project
Ronald E. Swan, Jr.	TSP Environmental	Principal	40%
Gary Lacy	Recreational Engineering and Planning, Inc.	Designer of Record	33%
Christy Summers	Beckett and Raeder, Inc.	Principal Landscape Architect	33%
Heath Hartt	Beckett and Raeder, Inc.	Lead Civil Engineer	25%
Tim Knutsen	Beckett and Raeder, Inc.	Project Professional	20%
Katherine Roebuck	Beckett and Raeder, Inc.	Project Professional	20%
Christopher Grobbel	Recreational Engineering and Planning, Inc.	Ecological Services	10%
Michael Greene	Technical Service Professionals, LLC	Construction Project Manager	33%
Robert Sherby	TSP Environmental	Project Administrator	25%
Rahman Alugaili	TSP Environmental	Construction Supervisor	100%

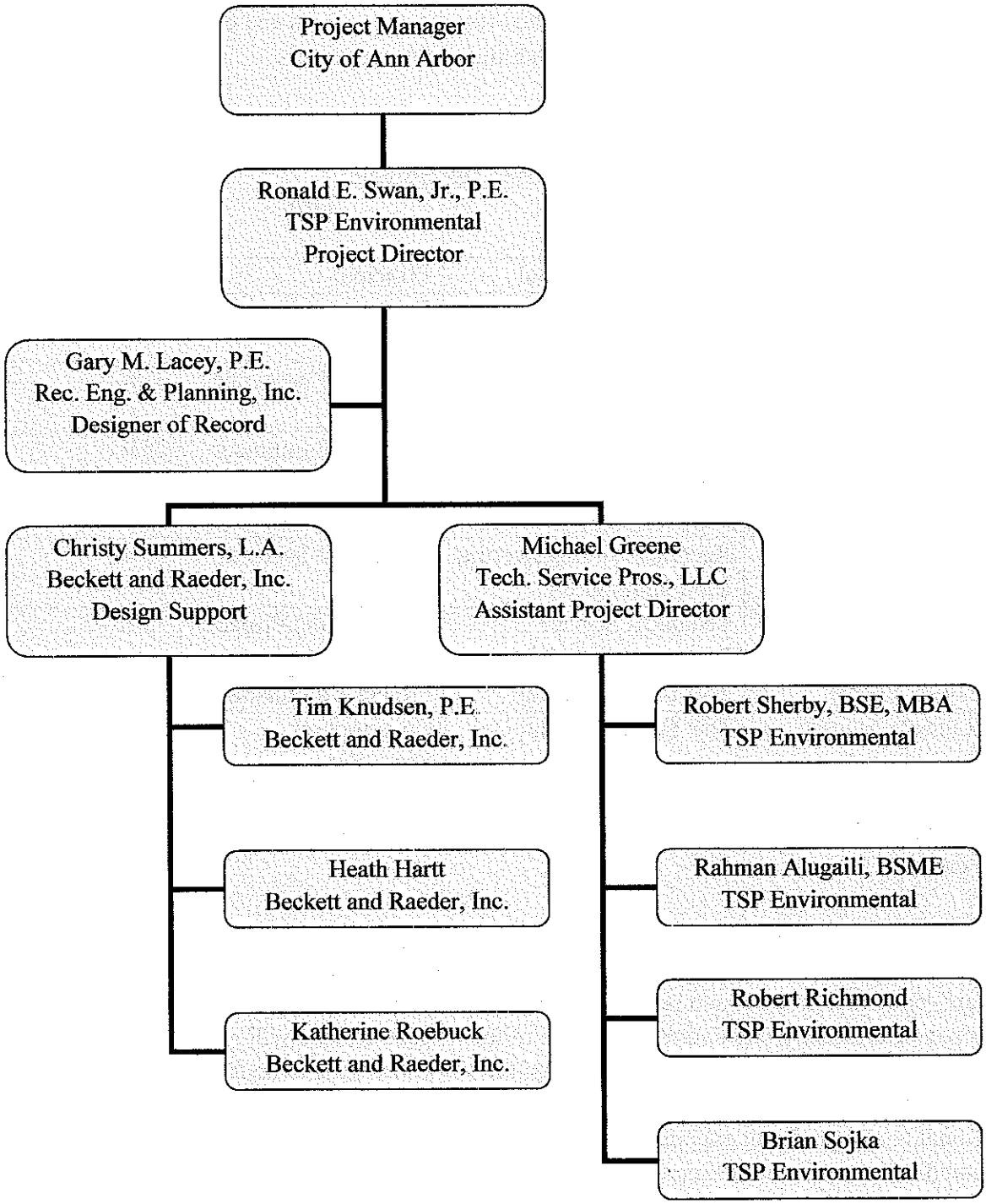
Resumes for the above named individuals are included in Appendix C – Resumes of Key Personnel.

Ronald E. Swan, JR., P.E. – Principal

Ronald Swan has over 28 years of experience with construction, engineering and environmental projects and serve as the Project Director, responsible for finance, resource allocation and overall execution of the project. Ronald will provide management of key aspects of the construction phase of the work including oversight of sheet piling, excavating and demolition activities that could potentially impact existing structures. Ronald has significant experience with streambank stabilization projects and with slope stabilization and maintenance at numerous MDNRE sites. Ronald is known for "out of the box" thinking that results in more cost effective solutions to Client needs.

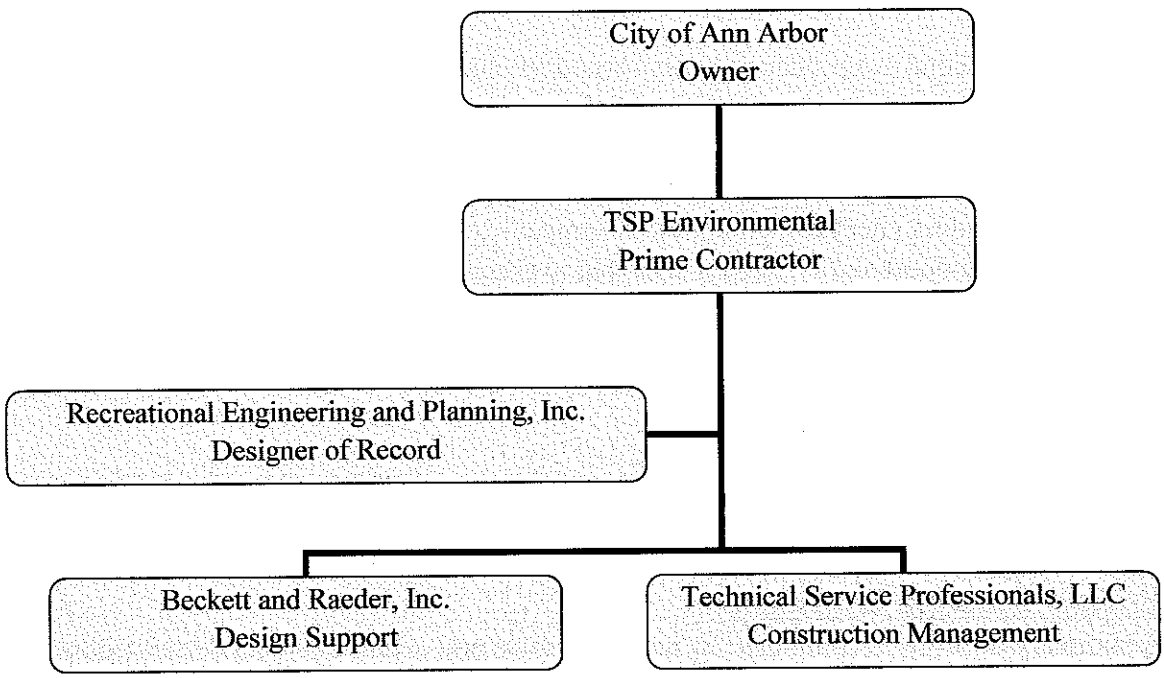
Gary Lacy, P.E. – Designer of Record

Figure 2: Organization Chart for Key Individuals



Project Organization

Figure 1: Organization Chart for Proposed Project Team



support staff. BRI has staff which maintain registrations in the States of Michigan, Ohio, Pennsylvania, Wisconsin and certification at the national level.

Recreational Engineering and Planning, Inc. is an independently owned Colorado Corporation headquartered in Boulder, Colorado. The firm was founded in 1983 and has become the country's leader in dam modification, whitewater parks and riverside design. REP has full time staff including civil engineers, planners, hydrologists and support staff. REP has staff which maintain professional registrations in the States of Colorado, Michigan, and other states.

TSP Environmental is an independently owned Michigan Corporation established in 2001 and currently headquartered in Livonia, Michigan. TSP provides a diverse set of environmental contracting services including soil and earthwork, demolition, construction, and environmental system operation and maintenance. The firm has full time staff including chemical, computer, chemical and mechanical engineers, equipment operators and support staff. TSP has staff that maintain professional registrations in the State of Michigan and Wisconsin as well as various professional accreditations at the national level.

Team Member Experience

A summary of projects completed by team members and detailed project descriptions are provided in Appendix A - Team Member Experience.

Project Teaming Experience

A summary of projects completed by team members and detailed project descriptions are provided in Appendix B - Project Teaming Experience.

Project Performance

Team members have no current or historical conditions which would hinder performance on this project.

Termination for Convenience
Project: Repair JP-8 tanks
Contractor: TSP Environmental
Client: US Coast Guard
Client Contact: Ms. Lesia Moyer, Contracting Officer. (305) 278-6725
TSP Environmental had been contracted to perform repairs to JP-8 fuel tanks located in Mobile, Alabama. During performance of the contract, TSP Environmental discovered that the tanks were significantly more damaged than the Coast Guard had previously

Table 1: Performance of Major Work Elements

	TSP Environmental	Recreation Engineering and Planning	Beckett and Raeder
Project Management	50%	15%	35%
Engineering	5%	70%	25%
Landscape Architecture		10%	90%
Permitting	25%		75%
Construction	100%		
Demolition	100%		
Testing	50%	25%	25%
System Start-Up	25%	50%	25%
Training	20%	60%	20%
Operations	60%	20%	20%
Equipment Operation	100%		
Maintenance	100%		

Table 2: Work to be Subcontracted

Subcontracted Firm	Work to be Subcontracted
Midtown Aggregates	Aggregates supplier
Fairlane Plumbing	Toe drain repairs
Excel Bridge Manufacturing Company	Pedestrian bridge supplier
Hutch Paving	Hot mix asphalt paving
Veolia Arbor Hills Landfill	Disposal services
(vendor to be determined)	Materials testing

Designer of Record

The Designer of Record nominated for this project is Mr. Gary M. Lacey, P.E., of Recreation Engineering and Planning, Inc.

Licensed Project Engineers

- Mr. Ronald E. Swan, Jr., P.E. (TSP Environmental)
- Mr. Gary M. Lacy, P.E. (Recreation Engineering and Planning, Inc.)
- Mr. Heath Hartt, P.E. (Beckett and Raeder, Inc.)

Company Overview

Beckett & Raeder, Inc. is an independently owned Michigan Corporation established in 1966 and currently headquartered in Ann Arbor, Michigan with additional offices in Petosky and Traverse City, Michigan. The firm has a full time staff including landscape architects, planners, civil engineers, ecologists, LEED accredited professionals and

Gary Lacy has over thirty years of whitewater feature design and construction experience. Gary will be the Designer of Record and as such will be responsible for all technical design aspects of the project. Gary will also direct the efforts of hydrology and civil engineering staff responsible for determining hydrologic and hydrogeologic modeling associated with the headrace modification and embankment toe drain repairs. Gary is well known for his elegant, cost-effective solutions for dam modification projects.

Christy Summers, LLA, ASLA, LEED® AP – Principal

Christy Summers has over 17 years of landscape architecture, design and project implementation experience and will be the project manager and lead planner/designer, having complete responsibility for execution of the work plan. Christy will also schedule and coordinate Beckett & Raeder, Inc. personnel assigned to the project. She has recent past recreation experience with the MDNRE and Washtenaw County Parks and Recreation Commission. Christy is sensitive to project funding constraints and seeks methods for her clients to realize their projects with the most efficient use of the dollars available.

Heath Hartt, P.E. – Lead Civil Engineer

Heath Hartt has over 19 years of engineering experience and will be the lead civil engineer on the project, coordinating all technical aspects of the design. He has been involved with the design and construction of public facilities in a variety of locations including parks, public schools, universities, and other recreation facilities. Heath will be the lead technical designer and resource for the project, directing the work of junior engineers and ensuring quality control on the project. Heath will facilitate the technical aspects of the project, working with the white-water specialist and geotechnical subconsultant, synthesizing the soil boring and proposed recommendations with his on-site evaluation to ascertain the appropriate design detailing. Heath will also coordinate with the necessary permitting agencies to ensure that the design is in conformance with their ultimate permitting requirements.

Tim Knusten – Project Professional

Tim Knutsen will assist on the project in his capacity as Project Professional. Tim has approximately fifteen years of experience in the landscape architecture discipline and is currently performing construction administration on the Bear River Whitewater project in the City of Petoskey. Having been involved in that project since its inception, Tim will be an important resource on this project for the design, detailing and implementation of the Argo Head Race modifications. Tim will also be instrumental in the permitting

process, again bringing his recent experience with the Bear River Whitewater project to the overall project team.

Katherine Roebuck, ASLA – Project Professional

Katherine Roebuck will assist on the project in her capacity as Project Professional. Kate has approximately six years of experience in public and private sector projects, from schematic design through construction administration. She will participate in development of design recommendations, and will be responsible for preparation of presentation materials and construction documents. Kate has recently worked on Access to Recreation projects for the MDNRE at Rifle River, Brighton and JW Wells, including trail design and implementation at all three parks.

Christopher Grobbel, Ph.D. – Ecological Services

With graduate and doctoral-level education in environmental science and policy, Chris Grobbel leads the ecological services offered by the Design Team. Providing ecological and environmental consultation to the project, Chris will be instrumental in the selection of naturalizing plant material for the embankment, and the detailing for its installation to ensure prompt establishment. Chris will also lead the permitting effort, drawing from his recent experience of the same effort on the Bear River Whitewater project in Petoskey.

Michael J. Greene – Construction Project Manager

Michael Green has over ten years of construction project management experience within the environmental contracting field. Michael will serve as the Construction Project Manager and will work closely with the Project Director to assure that scope, schedule and budget are maintained through the project duration. Michael has significant experience with public construction projects ranging up to $2.5 million. Michael has recently managed the Water Street Brownfield Redevelopment project, a $700,000 demolition, remediation and site restoration project for the City of Ypsilanti, Michigan.

Robert R. Sherby – Project Administrator

Robert Sherby is a graduate computer scientist and holds a Master's in Business Administration degree. Robert has over five years experience with project administration at the corporate level. Robert is expert in numerous hardware platforms and software programs including Microsoft programs and Quick Books. Robert will provide daily administrative support to management and field supervision over the duration of the project. Robert is also responsible for accounts payable and certified payroll of the construction phase of the project.

Rahman Alugaili – Construction Supervisor

Rahman Alugaili has over fifteen years of construction project supervision experience within the public utility and environmental fields. Rahman will serve as the Construction Project Supervisor and will work closely with the Project Manager and Contractor staff to maintain production schedule and costs during the project. Rahman is a graduate mechanical engineer and has significant experience with heavy equipment operation / maintenance and project supervision on projects up to and exceeding $1 million. Rahman has recently supervised field operations of the Water Street Brownfield Redevelopment project, a $700,000 demolition, remediation and site restoration project for the City of Ypsilanti, Michigan.

Proof of Financial Capability

Financial reports for TSP Environmental in 2007, 2008, and 2009 are provided in Appendix D – Financial Statements. All of the attached reports have been audited by Mr. Don Yaske, CPA, of Yaske & Associated, PLLC. Please note that the financial records are certified under the name Technical Service Professionals, LLC, which is the direct lineal ancestor of TSP Environmental.

Legal Status of Proposer

TSP Environmental declares that it is a corporation organized and doing business under the laws of the State of Michigan, for whom Ronald E. Swan, Jr., bearing the office title of President, whose signature is affixed to this proposal, is authorized to execute contracts.

Living Wage Compliance and Contract Compliance

The Living Wage Compliance statement is included in Appendix E - Living Wage Compliance. The Contract Compliance forms are included in Appendix F - Contract Compliance. In addition, TSP Environmental is a current signatory to a CUB Agreement and is a member in good standing with Laborers Local 499, Asbestos Workers Local 207, and Operating Engineers Local 324.

Authorized Negotiators

Primary Negotiator:
Ronald E. Swan, Jr., P.E.
TSP Environmental
Phone: (734) 838-0426
rswan@tspenvironmental.com

Secondary Negotiator:
Gary Lacy, P.E.
REP, Inc.
Phone: (303) 808-4522
gary@boaterparks.com

Secondary Negotiator:
Christy Summers, L.A.
Beckett and Raeder, Inc.
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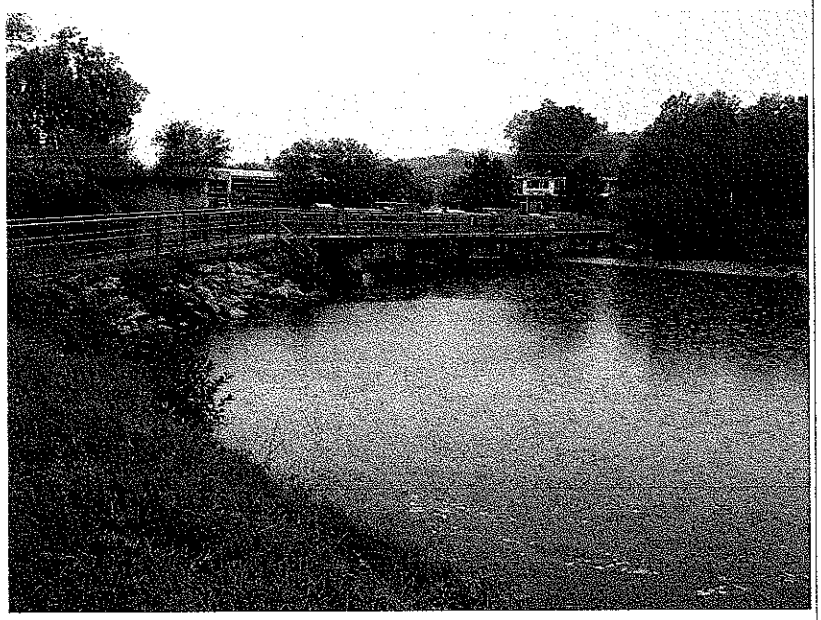

SECTION 3:

PROPOSED WORK PLAN

TSP Environmental
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Statement of the Problem

The City of Ann Arbor seeks Design/Build Proposals to reconstruct the existing Argo Dam headrace embankment in a manner that will allow novice paddlers to navigate from upstream of Argo Dam directly to the river downstream of the dam with no portage. In so doing, the City of Ann Arbor will concurrently resolve the headrace embankment deficiencies identified in the Consent Agreement between the City of Ann Arbor and the Michigan Department of Natural Resources and Environment (MDNRE). The reconstructed 1500 lineal feet (LF) of embankment shall result in approximately 1% gradient in the channel and utilize natural materials that complement the scenic nature of the site. These materials shall provide a sustainable, stabilized shoreline, while minimizing water infiltration into the earthen embankment that separates the headrace from the Huron River. Such minimization of water infiltration may reduce, or eliminate, the need to repair or replace the existing toe drains in the embankment ditch.

The embankment modifications must include a short and long term vegetation management plan that addresses tree and brush removal and establishment of a permanent, low-maintenance best management practice for erosion control and slope stabilization. The restored vegetation shall not exceed 12 inches in height in order to allow continual visual inspection of the entire slope. Further, the vegetation removal and re-establishment shall avoid impact to the endangered Purple Turtlehead plant species identified at the west end of the embankment, by precluding woody vegetation removal within 10 feet of the plant during the growing season.

In addition to the headrace and embankment modifications, a minimum of eight feet wide asphalt pavement shall enhance the existing dirt walking/biking path, which is an essential connection of the Huron River Greenway Border-to-Border trail between Argo Pond and the Broadway Bridge. The paved trail shall maintain or replace the pedestrian bridge over the connection between the headrace and the river. Finally, construction activities should minimize disruption to the Canoe Livery activities, which runs from April through October.

Preliminary Design (Pre-Notice to Proceed Services)

Given this project is being handled as a Design/Build proposal process, much of the preliminary design services have been undertaken prior to the Design/Build Team's proposal submission and selection as the preferred contractor. As such, the Work Plan depicts the process anticipated to be undertaken after Design/Build Team selection (Pre-Notice to Proceed through Construction). A proposed schedule is included in Appendix G – Proposed Schedule.

1. The Design Team will meet with representatives of the City of Ann Arbor to discuss the proposed design plan and any special considerations in the design and implementation process. This meeting will also serve to establish basic attitudes and priorities relative to the plan development, and to identify the final process and schedule for meeting with the other pertinent City commissions, council and staff, as well as outside agencies. The meeting will also serve as a forum for identify the city's requirements for management of changes and for communicating with project stakeholders how such changes may impact scope, schedule, and budget.

2. The Design Team will present the proposed design plan, as submitted in the Argo Dam Headrace Embankment Reconstruction proposal to the Planning Commission, the Parks Advisory Commission (PAC), the Environmental Commission (EC), City Council, and at a single meeting of other City service units. The Design Team will summarize comments and prepare minutes pertaining to our presentation at each meeting. The Design Team anticipates that the Client will synthesize and clarify any conflicting comments to provide clear direction as to any modifications that should be made to the proposed design plan.

3. The Design Team will meet with the MDNRE to discuss the proposed concept and design plan, as submitted in the Argo Dam Headrace Embankment Reconstruction proposal. The Design Team will also describe any pending changes to the design plan that have come to light as a result of meetings held with various City commissions, council and staff. The Design Team will seek input from the MDNRE and ascertain whether or not the permitting agency looks upon the proposed design favorably. Should it be determined that the MDNRE believes aspects of the design to be objectionable, the Design Team will work with the City to find reasonable compromises that will be conducive to a streamlined permitting process, while adhering to the overall goals and general cost parameters of the project.

4. The Design Team will identify changes to the project costs resulting from modifications to the proposed design identified in Tasks 1-3 above.

Final Design (Post-Notice to Proceed Services)

1. Subsequent to City Council action that selects the headrace reconstruction project over the toe drain repair only project, the Design Team will embark on preparation of permitting drawings, utilizing base topographic survey, floodplain, floodway and wetland delineation information provided by the City in AutoCAD format, and portraying design solutions and strategies that are consistent with the synthesized

input received from the City commissions, council and staff. Permits that will be sought include

- Joint MDNRE/USACE Permit
- City of Ann Arbor Grading/Soil Erosion and Sedimentation Control Permit

2. The Design Team will submit a preliminary permit submittal package to the Client two weeks prior to the planned permit submittal date of February 1, 2011. The Design Team requests comments from the Client one week prior to the submittal date for incorporation of said comments into the permit application package. The completed permit application will include HEC-RAS modeling as necessary to depict hydraulic modifications to the flood stage, if any, as a result of the proposed design.

3. Subsequent to the submission of the Joint MDNRE/USACE Permit Application, the Design Team will track the permit receipt and review process and promptly respond to comments from the MDNRE.

4. The Design Team will continue with preparation of construction documents and other permit applications to achieve a start of construction date no later than June 1, 2011. To this end, the Design Team proposes to make a 50% construction document submittal on or before March 15, 2011, with review comments returned by April 1, 2011. During this early review and comment period, the Owner will have the opportunity to revise the design. A 90% construction document submittal on or before May 1, 2011, with comments returned by May 15, 2011. At this time the Owner will have an opportunity to "fine tune" the design prior to completion of the final design.

5. By or before June 1, 2011, the Design Team will produce complete the final design, consisting of engineering drawings, calculations, and schedules, etc. for the work depicted in the proposed Design Plan. The complete set of drawings will include, but not necessarily be limited to the following:
   - Cover Sheet
   - Topographic Survey and Natural Features Survey
   - Demolition Plan
   - Layout & Materials Plan
   - Grading Plan and Vertical Controls
   - Soil Erosion and Sedimentation Control Plan
   - Site Restoration and Landscape Plan
   - Construction Details

6. The Design Team will produce complete technical specifications for the construction of the project, utilizing CSI format.

7. The Design Team will reconfirm the construction cost estimate prior to commencement of construction. If the scope of work has changed during the Final Design process, the Design Team will negotiate as necessary to adjust the cost of construction or value engineer scope elements to maintain the construction budget.

Construction Administration

1. The Design Team will conduct a pre-construction meeting and biweekly progress meetings throughout the construction period. The Design Team will prepare meeting minutes for distribution.

2. During the construction period, the Design Team will make periodic visits to the site to observe key stages of the work and to assist the Owner and Contractor in interpreting the intent of the Contract Documents. These observations will include trips to the site at the start of each new operation by the construction contractor. After the work is in progress, the frequency and type of observations will be in accordance with prudent professional practice.

3. The Design Team will assist with the preparation of a punch list of items to be corrected prior to final approval.

4. The Design Team will make a final inspection and make recommendations relative to acceptance of the work.

Construction

1. The Contractor will attend a pre-construction meeting and biweekly progress meetings throughout the construction period.

2. Prior to construction activities, the Contractor will prepare and provide submittals to the Owner. At present submittals are presumed to include: Product cut sheets; engineering data for materials and pre-engineered bridge; Health and Safety Plan; Soil Erosion and Sedimentation Control Plan; Schedule of Values; Construction Schedule; Short- and Long-term Vegetative Management Plans; Management of Proposal Change Plan (to address how proposed project modifications will be coordinated with operations of the dam); and, a Existing Facilities Monitoring Plan (for protection of existing structures and monitor/control soil movement, structural

movement, water movement and vibrations that could damage existing facilities). All submittals will be provided to the Owner allowing one week for review and comment. The Contractor will make required modifications and return the finalized submittals to the Owner within a week of receipt.

3. Prior to commencement of field activities, the Contractor will prepare and submit on behalf of the Owner a Notice Of Intent To Renovate Or Demolish to the State of Michigan Department of Natural Resources and Environment – Air Quality Division as required. The Notice will be provided at least ten business days prior to any demolition activities, in accordance with MDNRE requirements.

4. Upon authorization, the Contractor will mobilize personnel, equipment and materials to the Site. During this phase of the project the Contractor will work closely with the Owner, including staff at the Canoe Livery and Water Treatment Plant, to identify and occupy portions of the Canoe Livery and former Power Plant Site for equipment and material lay-down areas. Specific efforts will be made by the Contractor to develop and implement minimally invasive operations to the Canoe Livery and Power Plant Site. It is anticipated that the Canoe Passage and Portage will be closed throughout construction activities to avoid risks to public safety.

5. Construction activities are expected to take place during normal business hours, Monday through Friday, 8 hours per day. In general, work crews will arrive on site at 7:00am. Delays due to weather or other unforeseen circumstances may be made up through a combination of overtime or Saturday work as dictated by project needs and Owner's consent. Work may continue until 6:00pm during weekdays.

6. During the mobilization phase the Contractor will also implement Site controls. These are anticipated to consist of signage, barricades and temporary safety fencing to prevent un-authorized access to the work area. The Contractor will also meet with and discuss the work activities with the Public Safety Department (PSD) and request input from the PSD regarding public safety and security at the Site. The Contractor will modify/amend its plans, within reasonable measure, as requested by the PSD as long as substantial cost modifications are not required.

7. Upon closure and securing the Site, the Contractor will provide a minimum of 24 hour advance notice of commencement of construction activities. At that time the Contractor anticipates the Owner to close the inlet of the canoe passage and canoe portage. Once the canoe passage and portage are closed, initial construction activities, consisting of dewatering the headrace, will commence.

8. Upon completion of dewatering, the Contractor will implement the Existing Facilities Monitoring Plan for protection of existing structures and monitor/control soil movement, structural movement, water movement and vibrations that could damage existing facilities. The Contractor will work closely with the Owner and Designer to develop communication requirements in the event the monitoring detects adverse results that may endanger existing facilities.

9. Immediately following the Existing Facilities Monitoring Plan, preliminary excavation activities at the headrace embankment will commence. These activities will consist of excavating a portion of the eastern embankment. The embankment will be re-shaped to establish new elevations at the walking path, to drain any residual water from the headrace, and perform rough shaping of the proposed canoe passage to the Huron River. For cost considerations, we presume that the materials removed from the embankment will be suitable for re-use in the construction of the modified canoe channel. Note that for cost estimating purposes we presume that the Owner will waive planting requirements due to removal of all trees from the embankment reconstruction, due to the obvious benefits provided.

10. Upon completion of dewatering and initial excavation, demolition activities will commence. Demolition activities will consist of removal of all vegetation and stumps remaining on the embankment, demolition of the pedestrian bridge and abutments and removal (for future re-placement) of signage and benches located within the work area. The Contractor will coordinate with the Owner regarding temporary storage of Owner's fixtures removed for re-placement upon completion of site work. For cost considerations, we presume that vegetation near the Purple Turtlehead colony, in and across the ditch will not require removal.

11. To structurally support and accommodate widening of the trail at the canoe passage and placement of heavy rip rap left and right of the existing box culvert, we propose to install approximately 100 lineal feet of 15-20 feet long steel sheet piling. The sheet piling will be installed using track-mounted vibratory equipment operated in conformance with the Existing Facilities Monitoring Plan. Once the sheet piling is installed, the Contractor will backfill to grade the voids between the piling and the existing ground surface with granular fill, compacted to 95% maximum dry density. The subgrade will then have heavy rip rap, as specified in the RFP, installed to final grade.

12. Embankment excavation will then be conducted to design elevations by the Contractor. The embankment will be cut starting approximately 200 feet from the western path terminus proceeding to design grade at the eastern terminus of the path. During this phase of work approximately 6,500 cubic yards (in place [CIP]) will be excavated from the embankment and used for fill in the headrace at the new drop locations.

13. New drop structures will then be formed in the modified headrace by the Contractor using fill from the embankment and heavy rip rap. Approximately 2,800 cubic yards of heavy rip rap will be placed per design in the modified headrace. For cost consideration, 10% of the heavy rip rap will be grouted for permanency during all anticipated weather conditions.

14. After embankment excavation and concurrent with new structure construction, the Contractor will install new footings and foundations for the pre-engineered pedestrian bridge called for by the design. For costing purposes we have assumed that a 10-foot wide pedestrian bridge capable of operation with H10 loads will be adequate for the Owner's purposes. In addition, we have presumed that a maximum span of 50 feet will be required and simple reinforced concrete spread footing and foundations will be sufficient for the proposed pedestrian bridge.

15. Once the pedestrian bridge has been installed and the walking path rough graded, the Contractor will restore the Site. Restoration activities include: Any required toe drain repairs at the western end of the ditch; clearing and grubbing of vegetation not previously removed; disposal of removed vegetation; placement of fabric and placement of rip-rap in the ditch; tilling of the top four inches of topsoil on the embankment; placement of seed mix to accommodate Owner's maintenance requirements; and, placement of erosion control mat and stakes.

16. Upon completion of bridge installation, the Contractor will prepare the modified path base using up to 333 tons of 23A limestone (or approved alternate). The aggregate will be placed, graded and compacted to 95% maximum dry density with a smooth-drum vibratory roller compactor operated in conformance with the Contractor's Existing Facilities Monitoring Plan.

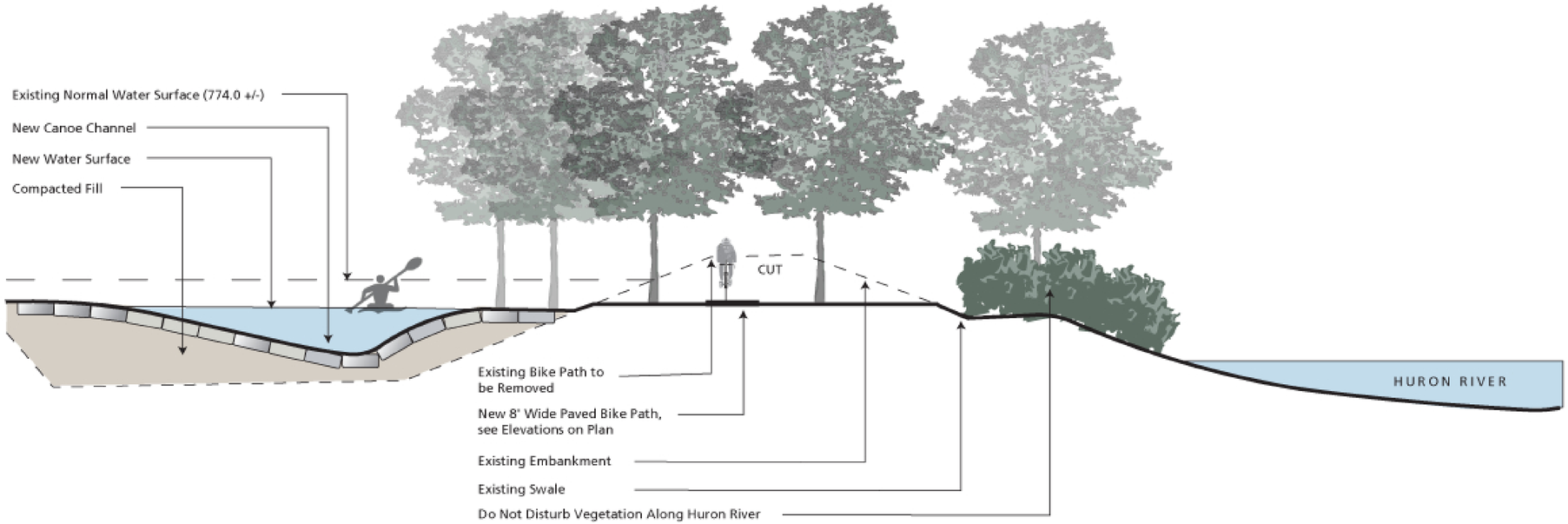
17. Once the path base has been prepared, the path will be paved using hot mix asphalt (HMA) paving mix. The Contractor will arrange for pavement of the path in accordance with the design base and wear coarse. The path will be paved by a sub-contractor that meets all project requirements including, but not limited to,

Washtenaw County Utility Board, applicable trade union agreement signatory / wage requirements and environmental, health and safety and project-specific insurance requirements.

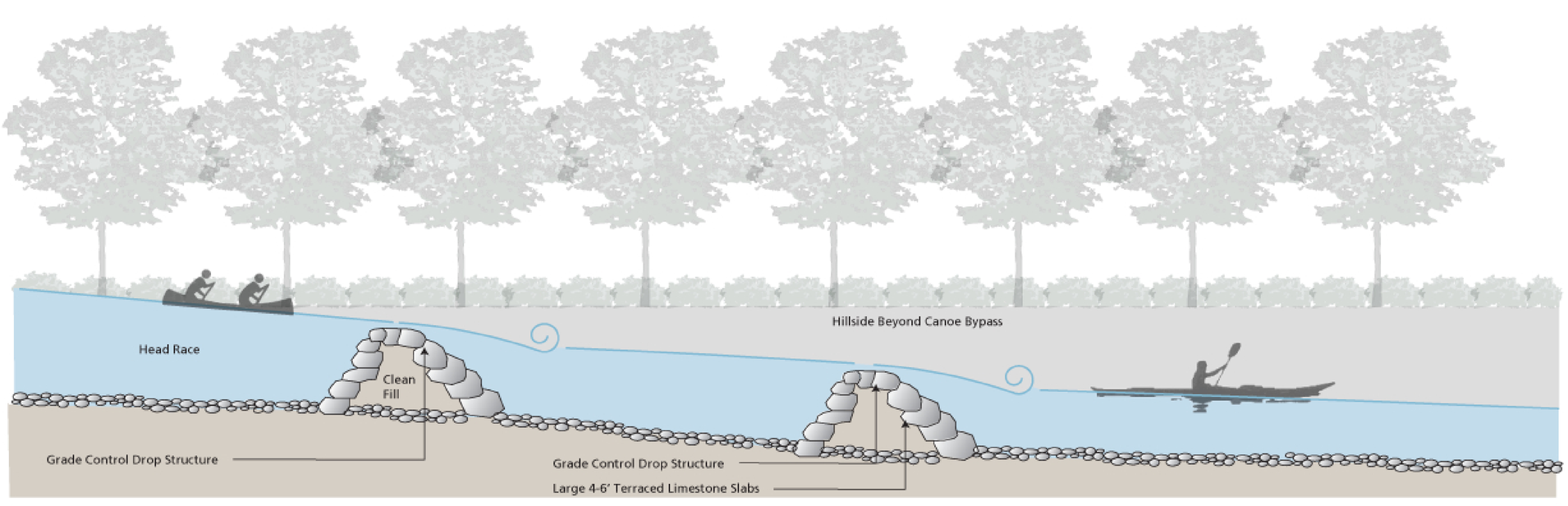
18. Upon completion of the above scope of work, the Contractor anticipates participating in a substantial completion meeting with the Owner and Engineer for the purpose of developing a punch list and punch list completion schedule.

19. Upon completion of the punch list scope of work, the Contractor anticipates participating in a punch list completion meeting with the Owner and Engineer for the purpose verifying construction completion. At this time the Contractor anticipates approval to furnish the Owner with final invoicing for the construction phase of the project.

20. After completing construction activities, the Contractor will implement maintenance activities. These are anticipated to consist of routine inspections, fertilizing, watering and mowing of the embankment as specified in the RFP. The Contractor presumes that it will utilize the slope mowers and procedures it uses to maintain closed landfill cap and covers it maintains for the MDNRE. Contractor project summaries for these projects are also included Appendix A – Team Member Experience.



Canoe Bypass/ Fish Passage Channel Cross Section
View Looking Downstream



Canoe Bypass/ Fish Passage Channel Section/Elevation
Portion of the Bypass

Whitewater Recreation Improvements

Argo Dam Area

Ann Arbor, Michigan

September 2010

0 4 8 16

ARGO POND

Maintain approximate water surface (possibly lower 1-2') for existing recreation uses such as rowing, canoeing & fishing. Normal water surface el. approx. 774.0 =/- ft.

Existing Canoe Livery and Lake Access

Existing Bike Path

New Steel Sheet Piling Cut-off Wall 100'

Existing Railroad Bridge Do Not Disturb Bridge Piers

Existing Canoe Underpass Do Not Disturb

Existing Argo Dam

Contractor shall not make improvements within the area of the purple turtlehead colony

Existing Park

Match existing grade 777'+/-

+772.0'

770.0'+

+768.0'

767.0'+

+766.0'

+765.0'

+764.0'

775.0'+

773.0'+

772.0'+

770.0'+

768.0'+

766.0'+

763.0'+

762.0'+

+761.0'

765.0'+

+761.0'

764.0'+

760.0'+

H U R O N R I V E R

SWIFT STREET

BROADWAY STREET

New clear-span Pedestrian Bridge over new channel 12'x50'

Remove existing embankment & match to existing river channel invert

Tie into existing trail 768.0'+/-

Existing Bike Path Replace with 8' wide paved trail at new grades shown

Possible new whitewater features Not in base bid

Whitewater Recreation Improvements

Argo Dam Area

Ann Arbor, Michigan

September 2010

25 50 100 150 200

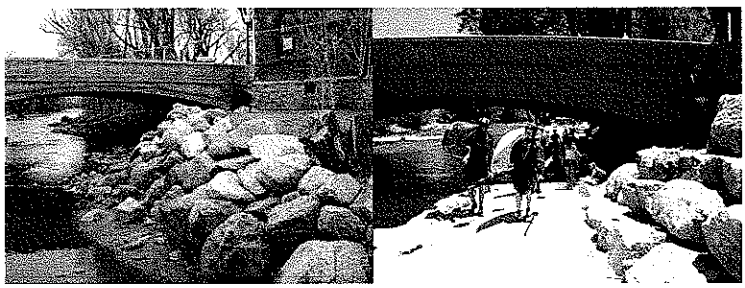
TSP Environmental

Beckett&Raeder Landscape Architecture Planning, Engineering & Environmental Services

Recreation Engineering and Planning wwparks.com

SECTION 4:

The fee schedule for this project is included under separate sealed cover.



Before and After in the Salida, Colorado Whitewater Park

FEE SCHEDULE

TSP Environmental
12411 Stark Road | Livonia | MI | 48150
(734) 838-0426

BID FORM

COPY

SECTION 1-SCHEDULE OF PRICES

ARGO HEADRACE EMBANKMENT RECONSTRUCTION

CONSTRUCTION

ITEM	DESCRIPTION	UNIT	QTY	UNIT PRICE	TOTAL PRICE
1	Mobilization-Staging, access from hydro plant only, ped. traffic control, close/ re-route bike path, demobilize.	LS	1	$37,500	$37,500
2	Mill race dewatering-Close inlet to canoe passage, excavate embankment, drain mill race into Huron River, detour canoe portage.	LS	1	$50,000	$50,000
3	Demolition-Removal of all vegetation on embankment, remove light poles, remove pedestrian bridge, abutments and approaches, do not disturb vegetation in swale along Huron River or near purple turtle heads.	LS	1	$231,100	$231,100
4	Install 20' sheet pilings at locations identified in drawings.	LF	100	$600	$60,000
5	Cut embankment to elevations shown, fill in mill race for new drop locations.	CY	6500	$13.00	$84,500
6	Install rock structure and terracity in canoe passage (grouted stone)	CY	2800	$100	$280,000
7	Install one bike/pedestrian bridge (12'x50') for H10 Loads.	LS	1	$60,000	$60,000
8	Install 10' wide paved trail.	LF	1500	$35	$52,500
9	Landscape vegetation and restoration on embankment along trail.	LS	1	$25,000	$25,000
	CONSTRUCTION ONLY TOTAL				**$880,600**

DESIGN

ITEM	DESCRIPTION	UNIT	QNTY	UNIT PRICE	TOTAL PRCE
10	Preliminary design/quantities/costs.	LS	1	$16,460	$16,460
11	Meetings/approvals (3city,2 state).	LS	1	$7,000	$7,000
12	Permits	LS	1	$4,000	$4,000
13	Final design/details, specifications, construction schedule, schedule.	LS	1	$45,500	$45,500
14	Construction phase services, staking, surveying, quantities, quality control, pay requests	LS	1	$34,610	$34,610
	DESIGN ONLY TOTAL				**$107,570**

DESIGN AND CONSTRUCTION TOTAL	**$988,170**

ADDITIONAL DROP FEATURES

ITEM	DESCRIPTION	UNIT	QNTY	UNIT PRICE	TOTAL PRICE
15	Mobilize/demobilize portable dam structures	LS	1	$15,000	$15,000
16	Dewatering and pumping (cofferdams)	LS	1	$7,000	$7,000
17	Grouted Rock Placement	CY	1400	$100	$140,000
18	Channel shaping, pool excavation, cofferdam removal	LS	1	$18,000	$18,000
	ADDITIONAL DROP FEATURES				**$180,000**

THE AMERICAN INSTITUTE OF ARCHITECTS

AIA Document A310

Bid Bond

KNOW ALL MEN BY THESE PRESENTS, that we
(Here insert full name and address or legal title of Contractor)
Technical Service Professionals, L.L.C.
12411 Stark Road, Livonia, Michigan 48150
as Principal, hereinafter called the Principal, and
(Here insert full name and address or legal title of Surety)
International Fidelity Insurance Company
One Newark Center, 20th Floor, Newark, New Jersey 07102
a corporation duly organized under the laws of the State of **New Jersey**
as Surety, hereinafter called the Surety, are held and firmly bound unto
(Here insert full name and address or legal title of Owner)
City of Ann Arbor
100 North Fifth Ave., Ann Arbor, Michigan 48104
as Obligee, hereinafter called the Obligee, in the sum of

Five Percent (5%) of Amount of Bid Dollars (5%),

for the payment of which sum well and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a bid for

Argo Dam Headrace Embankment Reconstruction

NOW, THEREFORE, if the Obligee shall accept the bid of the Principal and the Principal shall enter into a Contract with the Obligee in accordance with the terms of such bid, and give such bond or bonds as may be specified in the bidding or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter such Contract and give such bond or bonds, if the Principal shall pay to the Obligee the difference not to exceed the penalty hereof between the amount specified in said bid and such larger amount for which the Obligee may in good faith contract with another party to perform the Work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

Signed and sealed this **15th** day of **September, 2010**

(Witness)

Technical Service Professionals, L.L.C.
(Principal) (Seal)
(Title) President

(Witness)

International Fidelity Insurance Company
(Surety) (Seal)
Kathleen M. Irelan (Title) **Attorney-In-Fact**