

CONTRACT DOCUMENTS
FOR

BARTON DAM CONCRETE TESTING AND ACCESS SYSTEM



JANUARY, 2010

FILE NO. 10003
BID NO. ITB-4066

PUBLIC SERVICES DEPARTMENT

CITY OF ANN ARBOR
100 North Fifth Avenue
Ann Arbor, Michigan 48104

TABLE OF CONTENTS

<u>Section</u>	<u>Pages</u>
Table of Contents.....	TC-1
Advertisement.....	AD-1
Human Rights Division Contract Compliance Forms	AAF-1 to 3
Living Wage Public Notice, Poster and Compliance Forms.....	LW-1 to 2
Notice of Pre-Bid Conference.....	NP-1
Instructions to Bidders	IB-1 to 3
Supplemental Instructions to Bidders	SIB-1
Proposal.....	P-1 to 3
Bid Forms.....	BF-1 to 6
Contract.....	C-1 to 4
Bond Forms.....	B-1 to 2
General Conditions	GC-1 to 19
Standard Specifications.....	SS-1
Detailed Specifications	
Section 01000	General Requirements
Section 01330	Submittal Procedures
Section 02010	Site General Provisions
Section 02020	Testing
Section 02050	Access System

Appendix A – Drawing

Appendix B – Photographs

ADVERTISEMENT FOR
FOR THE
BARTON DAM CONCRETE TESTING AND ACCESS SYSTEM
CITY OF ANN ARBOR, MICHIGAN

BID NO. ITB-4066

Sealed Bids will be received by the, Purchasing Division, Fifth Floor, City Hall, on or before 3:00 PM, Monday, February 22, 2010 for construction of the Barton Dam Concrete Testing and Access System. Bids will be publicly opened and read aloud at this time. A pre-bid conference will be held Tuesday, February 2, 2010 at 10:00 AM beginning at the Barton Dam. Directions are provided in the Contract Documents. Attendance is highly recommended.

Work to be done includes the design and construction of an access system to the downstream face of Barton Dam and the miscellaneous areas, performing concrete cores, testing the cores, grouting the cored openings, and related work. Bid documents may be downloaded from the following websites beginning Monday, January 25, 2010:

<http://www.a2gov.org/government/financeadminservices/procurement/Pages/OpenBidsandProposals.aspx> or www.govbids.com

Each proposal shall be accompanied by a certified check, or Bid Bond by a recognized surety, in the amount of 5% of the total of the bid price. A proposal, once submitted, becomes the property of the City. In the sole discretion of the City, the City reserves the right to allow a bidder to reclaim submitted documents provided the documents are requested and retrieved no later than 48 hours prior to the scheduled bid opening.

The successful Bidder will be required to furnish satisfactory performance and labor and material bonds in the amount of 100% of the bid price and satisfactory insurance coverage.

Precondition for entering into a Contract with the City of Ann Arbor is compliance with Chapter 112 of Title IX of the Code of the City of Ann Arbor. The successful Bidder may also be required to comply with Chapter 23 of Title I of the Code of the City of Ann Arbor. Further information is outlined in the Contract Documents.

After the time of opening, no Bid may be withdrawn for a period of 90 days. The City reserves the right to accept any Bid, to reject any or all Bids, to waive irregularities and/or informalities in any Bid, and to make the award in any manner the City believes to be in its best interest.

Any further information may be obtained from the Purchasing Division, (734) 794-6576.

CITY OF ANN ARBOR, MICHIGAN

**CITY OF ANN ARBOR PROCUREMENT OFFICE
HUMAN RIGHTS CONTRACT COMPLIANCE FORM**
Entire Organization (Totals for All Locations where applicable)

Name of Company/Organization _____ Date Form Completed _____
 Name and Title of Person Completing this Form _____ Name of President _____
 Address (Street address) _____ (City) _____ (State) _____ (Zip) _____ County _____ Phone # _____ (Area Code) _____
 Email Address _____
 Fax# _____ (Area Code) _____

EMPLOYMENT DATA

Job Categories	Number of Employees (Report employees in only one category)											TOTAL COLUMNS A-M					
	Male						Female										
	White A	Black or African American B	Asian C	Hispanic or Latino D	Native Hawaiian or Other Pacific Islander F	American Indian or Alaska Native G	White H	Black or African American I	Asian J	Hispanic Latino K	Native Hawaiian or Other Pacific Islander L		American Indian or Alaskan Native M				
Exec./Sr. Level Officials																	
Supervisors																	
Professionals																	
Technicians																	
Sales																	
Admin. Support																	
Craftspeople																	
Operatives																	
Service Workers																	
Laborers/Helper																	
Apprentices																	
Other																	
TOTAL																	
PREVIOUS YEAR TOTAL																	

**CITY OF ANN ARBOR PROCUREMENT OFFICE
HUMAN RIGHTS CONTRACT COMPLIANCE FORM**
Local Office (Only those employees that will do local or on-site work, if applicable)

Form #2

Name of Company/Organization _____ Date Form Completed _____

Name and Title of Person Completing this Form _____

Fax# _____ (Area Code) _____ Email Address _____

Job Categories	EMPLOYMENT DATA											TOTAL COLUMNS A-M
	Number of Employees (Report employees in only one category)											
	Male					Female						
White	Black or African American	Asian	Hispanic or Latino	Native Hawaiian or Other Pacific Islander	American Indian or Alaska Native	White	Black or African American	Asian	Hispanic or Latino	Native Hawaiian or Other Pacific Islander	American Indian or Alaska Native	
A	B	C	D	F	G	H	I	J	K	L	M	
Exec/Sr. Level Officials												
Supervisors												
Professionals												
Technicians												
Sales												
Admin. Support												
Craftspeople												
Operatives												
Service Workers												
Laborers/Helper												
Apprentices												
Other												
TOTAL												
PREVIOUS YEAR TOTAL												

Questions about this form? Call Procurement Office: (734) 794-6576

Fax: 734-994-1795

AAF-2

City of Ann Arbor Procurement Office

INSTRUCTIONS FOR CONTRACTORS

For Completing CONTRACT COMPLIANCE FORM

City Policy

The “non discrimination in contracts” provision of the City Code, (Chapter 112, Section 9:161) requires contractors/vendors/grantees doing business with the City not to discriminate on the basis of actual or perceived race, color, religion, national origin, sex, age, condition of pregnancy, marital status, physical or mental limitations, source of income, family responsibilities, educational association, sexual orientation, gender identity or HIV status against any of their employees, any City employee working with them, or any applicant for employment. It also requires that the contractors/vendors/grantees include a similar provision in all subcontracts that they execute for City work or programs.

This Ordinance further requires that each prospective contractor/vendor submit employment data to the City showing current total employee breakdown by occupation, race and gender. This allows the Human Rights Office to determine whether or not the contractor/vendor has a workforce that is reflective of the availability of women and under-represented minorities within the contractor's labor recruitment area (the area where they can reasonably be expected to recruit employees). ***This data is provided to the City on the Human Rights Office Contract Compliance Forms (attached).***

To complete the form:

1) If a company has more than one location, then that company must complete 2 versions of the form.

- **Form #1** should contain the employment data for the **entire corporation**.
- **Form #2** should contain the employment data for those employees:
 - who will be working on-site;
 - in the office responsible for completing the contract; or,
 - in the case of non-profit grantees, those employees working on the project funded by the City grant(s).

2) If the company has only one location, fill out Form #1 only.

3) Complete all data in the upper section of the form including the name of the person who completes the form and the name of the company/organization's president.

4) Complete the Employment Data in the remainder of the form. Please be sure to complete all columns including the Total Columns on the far right side of the form, and the Total row and Previous Year Total row at the bottom of the form.

5) Return the completed form(s) to your contact in the City Department for whom you will be conducting the work.

For assistance in completing the form, contact:

Procurement Office of the City of Ann Arbor
734/994-2719

If a contractor is determined to be out of compliance, the Procurement Office will work with them to assist them in coming into compliance.

→ **NEW RATE EFFECTIVE APRIL 30, 2009** ←

LIVING WAGE ORDINANCE – CITY OF ANN ARBOR

\$11.71 per hour **\$13.06 per hour**

if the employer provides health
care benefits*

if the employer does **NOT**
provide health care benefits*

Employers providing services to or for the City of Ann Arbor or recipients of grants or financial assistance from the City of Ann Arbor for a value of more than \$10,000 in a twelve-month period of time **must pay those employees performing work on a City of Ann Arbor contract or grant, the above living wage.**

ENFORCEMENT

The City of Ann Arbor may recover back wages either administratively or through court action for the employees that have been underpaid in violation of the law. Persons denied payment of the living wage have the right to bring a civil action for damages in addition to any action taken by the City.

Violation of this Ordinance is punishable by fines of not more than \$500/violation plus costs, with each day being considered a separate violation. Additionally, the City of Ann Arbor has the right to modify, terminate, cancel or suspend a contract in the event of a violation of the Ordinance.

** Health Care benefits includes those paid for by the employer or making an employer contribution toward the purchase of health care. The employee contribution must not exceed \$.50 an hour for an average work week; and the employer cost or contribution must equal no less than \$1/hr for the average work week.*

**The Law Requires Employers to Display This Poster Where
Employees Can Readily See It.**

***For Additional Information or to File a Complaint
Contact:***

**Dee Lumpkin, Procurement Assistant
734/794-6576 or dlumpkin@a2gov.org LW-1**

City of Ann Arbor

LIVING WAGE ORDINANCE
DECLARATION OF COMPLIANCE

The Ann Arbor Living Wage Ordinance (Section 1:811-1:821 of Chapter 23 of Title I of the Code) requires that employers providing services to the City or recipients of grants for financial assistance (in amounts greater than \$10,000 in a twelve-month period of time) pay their employees who are working on the City project or grant, a minimum level of compensation known as the *Living Wage*. This wage must be paid to the employees for the length of the contract/project.

Companies employing fewer than 5 persons and non-profits employing fewer than 10 persons are exempt from the Ordinance. If this exemption applies to your firm, please check below:

- _____ This company is exempt due to the fact that we employ or contract with fewer than 5 individuals.
- _____ This non-profit agency is exempt due to the fact that we employ or contract with fewer than 10 employees.

The Ordinance requires that all contractors/vendors and/or grantees agree to the following terms:

- a) To pay each of its employees performing work on any covered contract or grant with the City, no less than the living wage, which is defined as \$11.71/hour when health care is provided, or no less than \$13.06/hour for those employers that do *not* provide health care. It is understood that the Living Wage will be adjusted upward each year on April 30, and covered employers will be required to pay the adjusted amount thereafter. The rates stated above include the adjustment for 2009.
- b) Please check the boxes below which apply to your workforce:
- Employees who are assigned to *any covered* City project or grant will be paid at or above the applicable living wage without health benefits Yes _____ No _____
- OR**
- Employees who are assigned to *any covered* City project or grant will be paid at or above the applicable living wage with health benefits Yes _____ No _____
- c) To post a notice approved by the City regarding the Living Wage Ordinance in every work place or other location in which employees or other persons contracting for employment are working.
- d) To provide the City payroll records or other documentation as requested; and,
- e) To permit access to work sites to City representatives for the purposes of monitoring compliance, investigating complaints or non-compliance.

The undersigned authorized representative hereby obligates the contractor/vendor or grantee to the above stated conditions under penalty of perjury and violation of the Ordinance.

Company Name

Address City State Zip

Signature of Authorized Representative

Phone (area code)

Type or Print Name and Title

Email address

Date signed

Questions about this form? Please contact:
Procurement Office City of Ann Arbor
Phone: 734/794-6576 Fax: 734/994-1795

NOTICE OF PRE-BID CONFERENCE

A pre-bid conference for this project will be held on Tuesday, February 2, 2010 at 10:00 AM at the Barton Dam. The site visit will allow potential bidders the opportunity to view the project site and how the site is to be accessed.

Attendance at this conference is optional, but highly recommended. Administrative and technical questions regarding this project will be answered at this time. If any questions arise whose answers constitute modifications to the bid documents, an addendum will be issued.

A location map is provided in Appendix A of these Contract Documents. Once at the site, the following directions are provided:

1. Potential bidders should access the parking lot off of Huron River Drive.
2. Park in the gravel parking lot.
3. Take the pedestrian pathway, which will pass beneath the railroad overpass.
4. The pre-bid conference will begin at the base of the Barton Dam on the west end.

INSTRUCTIONS TO BIDDERS

General

Work to be done under this Contract is generally described through the detailed specifications and must be completed fully in accordance with the Contract Documents. All work to be done under this Contract is located in or near the City of Ann Arbor.

The City shall make available to all prospective Bidders, prior to receipt of the Bids, access to the area in which the work is to be performed. Advance notice should be given to the Administering Service Area/Unit in cases where access to the site must be arranged by the City.

Any proposal which does not conform fully with these instructions may be rejected.

Proposals

Proposals must be submitted on the "Proposal Forms" and "Bid Forms" provided, without removal from the binder, with each blank properly filled in. Sealed proposals will be received by the City of Ann Arbor Purchasing Division, Fifth Floor, City Hall, Ann Arbor, Michigan, at the time stipulated in the Advertisement, promptly after which proposals will be publicly opened and read aloud. Each proposal must be enclosed in a sealed envelope, endorsed across one end:

BID #ITB-4066, Proposal for the Barton Dam Concrete Testing and Access System

The City will evaluate Proposals based on cost as well as experience and proposed designs. Contractors that have not included the required list of similar work experience, associated references in Section 5 of the Bid Form and supplemental information required on page SIB-1, may have their bid rejected.

The City intends to award a Contract(s) to the lowest responsible Bidder(s). On multi-divisional Contracts, separate divisions may be awarded to separate Bidders. The City may also utilize discounts offered in the Bid Forms, if any, to determine the lowest responsible Bidder on each division, and award multiple divisions to a single Bidder, so that the lowest total cost is achieved for the City. For unit price bids, the Contract will be awarded based upon the lump sum and unit prices stated by the bidder for the work items specified in the bid documents, with consideration given to any alternates selected by the City. If the City determines that the unit price for any item is materially different for the work item bid than either other bidders or the general market, the City, in its sole discretion, in addition to any other right it may have, may reject the bid as not responsible or non-conforming.

The acceptability of major subcontractors will be considered in determining if a Bidder is responsible. In comparing proposals, the City will give consideration to alternate proposals for items listed in the forms, or other alternates which the Bidder may wish to submit, but preference will be given to Base Bid Proposals.

The City reserves the right to accept any Bid, to reject any or all Bids, to waive irregularities and/or informalities in any Bid, and to make the award in any manner the City believes to be in its best interest.

Bid Security

Each proposal must be accompanied by a certified check, or Bid Bond by a surety licensed and authorized to do business within the State of Michigan, in the amount of 5% of the total of the bid price.

Withdrawal of Bids

After the time of opening, no Bid may be withdrawn for the period of days specified in the Advertisement.

Contract Time

Time is of the essence in the performance of the work under this Contract. The available time for work under this Contract is indicated on page C-1, Article III of the Contract. Interim milestones are indicated in Section 01000, paragraph 1.07. If these time requirements can not be met, the Bidder must stipulate on Bid Form Section 3 - Time Alternate its schedule for performance of the work. Consideration will be given to time in evaluating bids.

Liquidated Damages

A liquidated damages clause, as given on page C-2, Article III of the Contract, provides that the Contractor shall pay the City as liquidated damages, and not as a penalty, a sum certain per day for each and every day that the Contractor may be in default of completion of the specified work, within the time(s) stated in the Contract, on the Plans, or written extensions. Liquidated damages shall be assessed based on the intermediated deadlines stated in the Contract, on the Plans, or written extensions.

Liquidated damages clauses, as given in the General Conditions, provide further that the City shall be entitled to impose and recover liquidated damages for breach of the obligations under Chapter 112 of the City Code.

The liquidated damages are for the non-quantifiable aspects of any of the previously identified events and do not cover actual damages that can be shown or quantified nor are they intended to preclude recovery of actual damages in addition to the recovery of liquidated damages.

Human Rights Information

Section 5, beginning at page GC-3, outlines the requirements for fair employment practices under City of Ann Arbor Contracts. To establish compliance with this Ordinance, the Bidder must complete and return with its bid completed copies of the white and pink Human Rights Division Contract Compliance Forms (copy attached) or an acceptable equivalent.

Wage Requirements

Section 4, beginning at page GC-1, outlines the requirements for payment of prevailing wages or of a “living wage” to employees providing service to the City under this Contract. The successful bidder must comply with all applicable requirements and may be required to provide documentary proof of compliance.

Major Subcontractors

The Bidder shall identify each major subcontractor it expects to engage for this Contract if the work to be subcontracted is 15% or more of the bid sum or over \$50,000, whichever is less. The Bidder also shall identify the work to be subcontracted to each major subcontractor.

SUPPLEMENTAL INSTRUCTIONS TO BIDDERS

In addition to the requirements defined by the Instruction to Bidders, the Proposal Forms and the Bid Forms, the prospective bidder shall include the following information with his bid:

1. A detailed description of his proposed access system including:
 - a. Materials of construction (wood, aluminum, other).
 - b. Approximate dimensions (i.e. length and width of walkway).
 - c. Method of river access (barge, floating dock, fall restraint, other).
 - d. Proposed method to anchor into the existing concrete.
2. A detailed sketch of his proposed access system showing:
 - a. Layout of the system.
 - b. Access up the face of the spillway.
 - c. Access across each bay and/or to an adjacent bay.
 - d. Working surface to facilitate the coring in the various locations identified in the Contract Documents.
3. A detailed description of this proposed method of access to the miscellaneous areas including:
 - a. Powerhouse intake structure.
 - b. Downstream wingwall.
 - c. Upstream retaining wall.
4. A written proposal from the testing firm detailing the proposed services including:
 - a. Description of tests.
 - b. Core requirements (diameter, length, etc).
 - c. Description of final report.
 - d. Duration of tests and delivery of findings.

The prospective bidders are not required to submit design or fabrication drawings as part of their bid. Rather, they are encouraged to submit as much information to allow the OWNER to evaluate his proposed solution and compare to other bidders. The City will evaluate the Proposals based on cost as well as the various proposed methods to accomplish the objectives described in the Contract.

PROPOSAL

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

Ladies and Gentlemen:

The undersigned, as Bidder, declares that this Bid is made in good faith, without fraud or collusion with any person or persons bidding on the same Contract; that this Bidder has carefully read and examined the bid documents, including Advertisement, Human Rights Division Contract Compliance Forms, Notice of Pre-Bid Conference, Instructions to Bidders, Supplemental Instructions to Bidders, Proposal, Bid Forms, Contract, Bond Forms, General Conditions, Standard Specifications, Detailed Specifications, all Addenda, and the Plans and understands them. The Bidder 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 Bidder also declares that it has extensive experience in successfully completing projects similar to this one.

The Bidder acknowledges that it has not received or relied upon any representations or warranties of any nature whatsoever from the City of Ann Arbor, its agents or employees, and that this Bid is based solely upon the Bidder's own independent business judgment.

The undersigned proposes to perform all work shown on the plans or described in the bid 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 bid documents, and Addenda numbered _____, the undersigned, as Bidder, 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 Bid Forms.

The Bidder 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 Bidder 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. Bidder further agrees that the cited provisions of Chapter 14 and Chapter 23 form a part of this Contract.

The Bidder encloses a certified check or Bid Bond in the amount of 5% of the total of the Bid Price. The Bidder agrees both to Contract for the work and to furnish the necessary Bonds and insurance documentation within 10 days after being notified of the acceptance of the Bid.

If this Bid is accepted by the City and the Bidder fails to Contract and furnish the required Bonds and insurance documentation within 10 days after being notified of the acceptance of this Bid, then the Bidder 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 Bidder 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 Bidder.

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

SIGNED THIS _____ DAY OF _____, 2010.

Bidder's Name

Official Address

Telephone Number

Authorized Signature of Bidder

(Print Name of Signer Above)

LEGAL STATUS OF BIDDER

(The Bidder shall fill out the appropriate form and strike out the other two.)

Bidder declares that it is:

* A corporation organized and doing business under the laws of the state of _____, for whom _____, bearing the office title of _____, whose signature is affixed to this proposal, is authorized to execute Contracts.

* A partnership, list all members and the street and mailing address of each:

Also identify the County and State where partnership papers are filed:

County of _____, State of _____

* An individual, whose signature with address, is affixed to this proposal: _____
(initial here)

BID FORM

Section 1 – Schedule of Prices

Project: Barton Dam Concrete Testing and Access System
 File No.: 10003
 Bid No.: ITB-4066

NOTES:

1. All bidders shall provide a Unit Price and Total Price for all bid items identified (including any Alternate items).
2. Quantities included in bid table represent estimated quantities for different work. Contractor shall be compensated for the actual number of repairs completed using the unit prices provided.
3. The City, at their sole discretion, may elect to delete any portion of the work delineated below, with no change to the unit prices provided.
4. Any item not provided in the following list shall be considered incidental.

Item #	Item	Quantity	Unit	Unit Price	Total Price
Base Bid Items					
General					
1	General Conditions & Mobilization (5% max)	1	LS		
2	Oil Containment Boom	1	LS		
3	Relocate oil containment boom to another location	6	EA		
4	Restoration	1	LS		
Base Bid - Access System - Wood Construction					
1	Construction in place (first two bays)	1	LS		
2	Relocate System to another two bays	3	EA		
Access to other areas					
1	Method of river crossing to the access system. Circle one (floating dock / pontoon boat / other)	1	LS		
2	Intake structure	4	Locations		
3	Downstream wing walls	2	Locations		
4	Upstream retaining wall	1	Location		
Coring					
1	4" dia., 6"-12" deep	20	EA		
2	4" dia., 12"-15" deep	4	EA		
3	2" dia., all depths	6	EA		
4	Grouting of Cores	30	EA		
Testing					
1	Locate existing rebar w/ pachometer	6	locations		
2	Compressive strength test	8	EA		
3	Petrographic analysis	4	EA		
4	Final report	1	LS		
TOTAL BASE BID					\$

BID FORM

Section 1 – Schedule of Prices

Project: Barton Dam Concrete Testing and Access System
 File No.: 10003
 Bid No.: ITB-4066

NOTES:

1. All bidders shall provide a Unit Price and Total Price for all bid items identified (including any Alternate items).
2. Quantities included in bid table represent estimated quantities for different work. Contractor shall be compensated for the actual number of repairs completed using the unit prices provided.
3. The City, at their sole discretion, may elect to delete any portion of the work delineated below, with no change to the unit prices provided.
4. Any item not provided in the following list shall be considered incidental.

Item #	Item	Quantity	Unit	Unit Price	Total Price
Alternates					
Alternate Bid - Access System - Reusable Aluminum System or other (Fill in: _____)					
1	Construction in place (first two bays)	1	LS		
2	Relocate System to another two bays	3	EA		
TOTAL ALTERNATE BID					\$

BID FORM

Section 2 - Material and Equipment Alternates

The Base Bid proposal price shall include materials and equipment selected from the designated items and manufacturers listed in the bidding documents. This is done to establish uniformity in bidding and to establish standards of quality for the items named.

If the Contractor wishes to quote alternate items for consideration by the City, it may do so under this Section. A complete description of the item and the proposed price differential must be provided. Unless approved at the time of award, substitutions where items are specifically named will be considered only as a negotiated change in Contract Sum.

<u>Item Number</u>	<u>Description</u>	<u>Add/Deduct Amount</u>
--------------------	--------------------	--------------------------

If the Bidder does not suggest any material or equipment alternate, the Bidder **MUST** complete the following statement:

For the work outlined in this request for bid, the bidder does NOT propose any material or equipment alternate under the Contract.

Signature of Authorized Representative of Bidder _____

BID FORM

Section 3 - Time Alternate

If the Bidder takes exception to the time stipulated in Article III of the Contract, Time of Completion, page C-1, it is requested to stipulate below its proposed time for performance of the work. Consideration will be given to time in evaluating bids.

If the Bidder does not suggest any time alternate, the Bidder **MUST** complete the following statement:

For the work outlined in this request for bid, the bidder does NOT propose any time alternate under the Contract.

Signature of Authorized Representative of Bidder _____

BID FORM

Section 4 - Major Subcontractors

For purposes of this Contract, a Subcontractor is anyone (other than the Contractor) who performs work (other than or in addition to the furnishing of materials, plans or equipment) at or about the construction site, directly or indirectly for or on behalf of the Contractor (and whether or not in privity of Contract with the Contractor), but shall not include any individual who furnishes merely the individual's own personal labor or services.

For the work outlined in these documents the Bidder expects to engage the following major subcontractors to perform the work identified:

<u>Subcontractor (Name and Address)</u>	<u>Work</u>	<u>Amount</u>
	Access System	
	Concrete Coring	
	Materials Testing	
	Other	

If the Bidder does not expect to engage any major subcontractor, the Bidder **MUST** complete the following statement:

For the work outlined in this request for bid, the bidder does NOT expect to engage any major subcontractor to perform work under the Contract.

Signature of Authorized Representative of Bidder _____

CONTRACT

THIS AGREEMENT is made on the _____ day of _____, 2010, between the CITY OF ANN ARBOR, a Michigan Municipal Corporation, 100 N. Fifth Avenue, Ann Arbor, Michigan 48104 ("City") and _____ ("Contractor")

(An individual/partnership/corporation, include state of incorporation)

(Address)

Based upon the mutual promises below, the Contractor and the City agree as follows:

ARTICLE I - Scope of Work

The Contractor agrees to furnish all of the materials, equipment and labor necessary; and to abide by all the duties and responsibilities applicable to it for the project titled "Barton Dam Concrete Testing and Access System" in accordance with the requirements and provisions of the following documents, including all written modifications incorporated into any of the documents, which are incorporated as part of this Contract:

Human Rights Division Contract
Living Wage Declaration of
Compliance Forms
(if applicable)
Bid Forms
Proposal
Contract and Exhibits
Bonds

General Conditions
Standard Specifications
Detailed Specifications
Plans
Addenda

ARTICLE II - Definitions

Administering Service Area/Unit means Public Services Area.

Supervising Professional or Owner means Senior Utilities Engineer or other persons acting under the authorization of the Administrator/Manager of the Administering Service Area/Unit.

Engineer or Owner's Representative means Consulting Professional acting under the authorization of the Supervising Professional/Owner.

Project means, Barton Dam Concrete Testing and Access System, Bid No. ITB-4066

ARTICLE III - Time of Completion

- (A) The work to be completed under this Contract shall begin immediately after the Contractor's receipt of a fully executed Contract.
- (B) The entire work for this Contract shall be completed within 120 consecutive calendar days. Shorter completion times for certain portions of the work may be specified in the Detailed Specifications or Plans.

- (C) Failure to complete all the work within the time specified above, including any extension granted in writing by the Supervising Professional, shall obligate the Contractor to pay the City, as liquidated damages and not as a penalty, an amount equal to \$250.00 for each calendar day of delay in the completion of all the work. If any liquidated damages are unpaid by the Contractor, the City shall be entitled to deduct these unpaid liquidated damages from the monies due the Contractor.

The liquidated damages are for the non-quantifiable aspects of any of the previously identified events and do not cover actual damages that can be shown or quantified nor are they intended to preclude recovery of actual damages in addition to the recovery of liquidated damages.

Liquidated damages under this section are in addition to any liquidated damages due under Section 5 of the General Conditions.

ARTICLE IV - The Contract Sum

- (A) The City shall pay to the Contractor for the performance of the Contract, the unit prices as given in the Bid Forms for the estimated base bid total of:

_____ Dollars (\$ _____)

- (B) The amount paid shall be equitably adjusted to cover changes in the work ordered by the Supervising Professional but not required by the Contract Documents. Increases or decreases shall be determined only by written agreement between the City and Contractor.

ARTICLE V - Assignment

This Contract may not be assigned or subcontracted without the written consent of the City.

ARTICLE VI - Choice of Law

This Contract shall be construed, governed, and enforced in accordance with the laws of the State of Michigan. By executing this agreement, the Contractor and the City agree to venue in a court of appropriate jurisdiction sitting within Washtenaw County for purposes of any action arising under this Contract.

Whenever possible, each provision of the Contract will be interpreted in a manner as to be effective and valid under applicable law. The prohibition or invalidity, under applicable law, of any provision will not invalidate the remainder of the Contract.

ARTICLE VII - Relationship of the Parties

The parties of the Contract agree that it is not a Contract of employment but is a Contract to accomplish a specific result. Contractor is an independent Contractor performing services for the City. Nothing contained in this Contract shall be deemed to constitute any other relationship between the City and the Contractor.

Contractor certifies that it has no personal or financial interest in the project other than the compensation it is to receive under the Contract. Contractor certifies that it is not, and shall not become, overdue or in default to the City for any Contract, debt, or any other obligation to the City including real or personal property taxes. City shall have the right to set off any such debt against compensation awarded for services under this agreement.

ARTICLE VIII - Notice

All notices given under this Contract shall be in writing, and shall be by personal delivery or by certified mail with return receipt requested to the parties at their respective addresses as specified in the Contract Documents or other address the Contractor may specify in writing.

ARTICLE IX - Indemnification

To the fullest extent permitted by law, for any loss not covered by insurance under this Contract, Contractor shall indemnify, defend and hold harmless the City, its officers, employees and agents harmless from all suits, claims, judgments and expenses including attorney's fees resulting or alleged to result, in whole or in part, from any act or omission, which is in any way connected or associated with this Contract, by the Contractor or anyone acting on the Contractor's behalf under this Contract. Contractor shall not be responsible to indemnify the City for losses or damages caused by or resulting from the City's sole negligence.

ARTICLE X - Entire Agreement

This Contract represents the entire understanding between the City and the Contractor and it supersedes all prior representations or agreements whether written or oral. Neither party has relied on any prior representations in entering into this Contract. This Contract may be altered, amended or modified only by written amendment signed by the City and the Contractor.

FOR CONTRACTOR

By _____
Its: _____

FOR THE CITY OF ANN ARBOR

By _____
John Hieftje, Mayor

By _____
Jacqueline Beaudry, City Clerk

Approved as to substance

By _____
Roger W. Fraser, City Administrator

By _____
Sue F. McCormick, Public Service Area
Administrator

Approved as to form and content

Stephen K. Postema, City Attorney

PERFORMANCE BOND

- (1) _____ (referred to as "Principal"), and _____, a corporation duly authorized to do business in the State of Michigan (referred to as "Surety"), are bound to the City of Ann Arbor, Michigan (referred to as "City"), for \$ _____, the payment of which Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, by this bond.
- (2) The Principal has entered a written Contract with the City dated _____, 2010, for: _____ and this bond is given for that Contract in compliance with Act No. 213 of the Michigan Public Acts of 1963, as amended, being MCL 129.201 *et seq.*
- (3) Whenever the Principal is declared by the City to be in default under the Contract, the Surety may promptly remedy the default or shall promptly:
- (a) complete the Contract in accordance with its terms and conditions; or
 - (b) obtain a bid or bids for submission to the City for completing the Contract in accordance with its terms and conditions, and upon determination by Surety of the lowest responsible bidder, arrange for a Contract between such bidder and the City, and make available, as work progresses, sufficient funds to pay the cost of completion less the balance of the Contract price; but not exceeding, including other costs and damages for which Surety may be liable hereunder, the amount set forth in paragraph 1.
- (4) Surety shall have no obligation to the City if the Principal fully and promptly performs under the Contract.
- (5) Surety agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder, or the specifications accompanying it shall in any way affect its obligations on this bond, and waives notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the work, or to the specifications.

SIGNED AND SEALED this _____ day of _____, 2010.

(Name of Surety Company)
By _____
(Signature)
Its _____
(Title of Office)

(Name of Principal)
By _____
(Signature)
Its _____
(Title of Office)

Approved as to form:

Name and address of agent:

Stephen K. Postema, City Attorney

LABOR AND MATERIAL BOND

- (1) _____
of _____ (referred to as
"Principal"), and _____, a corporation duly authorized to
do business in the State of Michigan, (referred to as "Surety"), are bound to the City of Ann Arbor,
Michigan (referred to as "City"), for the use and benefit of claimants as defined in Act 213 of Michigan
Public Acts of 1963, as amended, being MCL 129.201 et seq., in the amount of
\$ _____, for the payment of which Principal and Surety bind themselves, their heirs,
executors, administrators, successors and assigns, jointly and severally, by this bond.
- (2) The Principal has entered a written Contract with the City, dated _____, 2010, for _____

_____; and this bond is given for that Contract in
compliance with Act No. 213 of the Michigan Public Acts of 1963 as amended;
- (3) If the Principal fails to promptly and fully repay claimants for labor and material reasonably required under
the Contract, the Surety shall pay those claimants.
- (4) Surety's obligations shall not exceed the amount stated in paragraph 1, and Surety shall have no obligation
if the Principal promptly and fully pays the claimants.

SIGNED AND SEALED this _____ day of _____, 2010.

(Name of Surety Company)
By _____
(Signature)
Its _____
(Title of Office)

(Name of Principal)
By _____
(Signature)
Its _____
(Title of Office)

Approved as to form:

Name and address of agent:

Stephen K. Postema, City Attorney

GENERAL CONDITIONS

Section 1 - Execution, Correlation and Intent of Documents

The Contract Documents shall be signed in 2 copies by the City and the Contractor.

The Contract Documents are complementary and what is called for by any one shall be binding. The intention of the documents is to include all labor and materials, equipment and transportation necessary for the proper execution of the work. Materials or work described in words which so applied have a well-known technical or trade meaning have the meaning of those recognized standards.

In case of a conflict among the Contract Documents listed below in any requirement(s), the requirement(s) of the document listed first shall prevail over any conflicting requirement(s) of a document listed later.

- (1) Addenda in reverse chronological order;
- (2) Detailed Specifications;
- (3) Standard Specifications;
- (4) Plans;
- (5) General Conditions;
- (6) Contract;
- (7) Bid Forms;
- (8) Bond Forms;
- (9) Proposal.

Section 2 - Order of Completion

The Contractor shall submit with each invoice, and at other times reasonably requested by the Supervising Professional, schedules showing the order in which the Contractor proposes to carry on the work. They shall include the dates at which the Contractor will start the several parts of the work, the estimated dates of completion of the several parts, and important milestones within the several parts.

Section 3 - Familiarity with Work

The Bidder or its representative shall make personal investigations of the site of the work and of existing structures and shall determine to its own satisfaction the conditions to be encountered, the nature of the ground, the difficulties involved, and all other factors affecting the work proposed under this Contract. The Bidder to whom this Contract is awarded will not be entitled to any additional compensation unless conditions are clearly different from those which could reasonably have been anticipated by a person making diligent and thorough investigation of the site.

The Bidder shall immediately notify the City upon discovery and in every case prior to submitting its Bid, of every error or omission in the bidding documents that would be identified by a reasonably competent, diligent Bidder. In no case will a Bidder be allowed the benefit of extra compensation or time to complete the work under this Contract for extra expenses or time spent as a result of the error or omission.

Section 4 - Wage Requirements

Under this Contract, the Contractor shall conform to Chapter 14 of Title I of the Code of the City of Ann Arbor as amended; which in part states "...that all craftsmen, mechanics and laborers employed directly on the site in connection with said improvements, including said employees of subcontractors, shall receive the prevailing wage for the corresponding classes of craftsmen,

mechanics and laborers, as determined by statistics for the Ann Arbor area compiled by the United States Department of Labor. At the request of the City, any Contractor or subcontractor shall provide satisfactory proof of compliance with the contract provisions required by the Section".

Where the Contract and the Ann Arbor City Ordinance are silent as to definitions of terms required in determining Contract compliance with regard to prevailing wages, the definitions provided in the Davis-Bacon Act as amended (40 U.S.C. 278-a to 276-a-7) for the terms shall be used.

Further, to the extent that any employees of the Contractor providing services under this Contract are not part of the class of craftsmen, mechanics and laborers who receive a prevailing wage in conformance with Section 1:319 of Chapter 14 of Title I of the Code of the City of Ann Arbor, the Contractor agrees to conform to Chapter 23 of Title I of the Code of the City of Ann Arbor, as amended, which in part states:

1:814. Applicability.

- (1) This Chapter shall apply to any person that is a Contractor/vendor or grantee as defined in Section 1:813 that employs or Contracts with five (5) or more individuals; provided, however, that this Chapter shall not apply to a non-profit Contractor/vendor or non-profit grantee unless it employs or Contracts with ten (10) or more individuals.
- (2) This Chapter shall apply to any grant, Contract, or subcontract or other form of financial assistance awarded to or entered into with a Contractor/vendor or grantee after the effective date of this Chapter and to the extension or renewal after the effective date of this Chapter of any grant, Contract, or subcontract or other form of financial assistance with a Contractor/vendor or grantee.

1:815. Living Wages Required.

- (1) Every Contractor/vendor or grantee, as defined in Section 1:813, shall pay its covered employees a living wage as established in this Section.
 - (a) For a covered employer that provides employee health care to its employees, the living wage shall be \$9.42 an hour, or the adjusted amount hereafter established under Section 1:815(3).
 - (b) For a covered employer that does not provide health care to its employees, the living wage shall be \$10.91 an hour, or the adjusted amount hereafter established under Section 1:815(3).
- (2) In order to qualify to pay the living wage rate for covered employers providing employee health care under subsection 1:815(1)(a), a covered employer shall furnish proof of said health care coverage and payment therefore to the City Administrator or his/her designee.
- (3) The amount of the living wage established in this Section shall be adjusted upward no later than April 30, 2002, and every year thereafter by a percentage equal to the percentage increase, if any, in the federal poverty guidelines as published by the United States Department of Health and Human Services for the years 2001 and 2002. Subsequent annual adjustments shall be based upon the percentage increase, if any, in the United States Department of Health and Human Services poverty guidelines when comparing the prior

calendar year's poverty guidelines to the present calendar year's guidelines. The applicable percentage amount will be converted to an amount in cents by multiplying the existing wage under Section 1.815(1)(b) by said percentage, rounding upward to the next cent, and adding this amount of cents to the existing living wage levels established under Sections 1:815(1)(a) and 1:815(1)(b). Prior to April 1 of each calendar year, the City will notify any covered employer of this adjustment by posting a written notice in a prominent place in City Hall, and, in the case of a covered employer that has provided an address of record to the City, by a written letter to each such covered employer.

Section 5 - Non-Discrimination

The Contractor agrees to comply with the nondiscrimination provisions of Chapter 112 of the Ann Arbor City Code and to take affirmative action to assure that applicants are employed and that employees are treated during employment in a manner which provides equal employment opportunity and tends to eliminate any inequality based upon race, national origin or sex. The Contractor agrees to comply with the provisions of Section 9:161 of Chapter 112 of the Ann Arbor City Code and in particular the following excerpts:

9:161 NONDISCRIMINATION BY CITY CONTRACTORS

- (1) All Contractors proposing to do business with the City of Ann Arbor shall satisfy the nondiscrimination administrative policy adopted by the City Administrator in accordance with the guidelines of this section. All Contractors shall receive approval from the Director prior to entering into a Contract with the City, unless specifically exempted by administrative policy. All City Contractors shall take affirmative action to insure that applicants are employed and that employees are treated during employment in a manner which provides equal employment opportunity and tends to eliminate inequality based upon race, national origin or sex.
- (2) Each prospective Contractor shall submit to the City data showing current total employment by occupational category, sex and minority group. If, after verifying this data, the Director concludes that it indicates total minority and female employment commensurate with their availability within the Contractor's labor recruitment area, i.e., the area from which the Contractor can reasonably be expected to recruit, said Contractor shall be accepted by the Director as having fulfilled affirmative action requirements for a period of one year at which time the Director shall conduct another review. Other Contractors shall develop an affirmative action program in conjunction with the Director. Said program shall include specific goals and timetables for the hiring and promotion of minorities and females. Said goals shall reflect the availability of minorities and females within the Contractor's labor recruitment area. In the case of construction Contractors, the Director shall use for employment verification the labor recruitment area of the Ann Arbor-Ypsilanti standard metropolitan statistical area. Construction Contractors determined to be in compliance shall be accepted by the Director as having fulfilled affirmative action requirements for a period of six (6) months at which time the Director shall conduct another review.
- (3) In hiring for construction projects, Contractors shall make good faith efforts to employ local persons, so as to enhance the local economy.
- (4) All Contracts shall include provisions through which the Contractor agrees, in addition to any other applicable Federal or State labor laws:

- (a) To set goals, in conference with the Human Resources Director, for each job category or division of the work force used in the completion of the City work;
 - (b) To provide periodic reports concerning the progress the Contractor has made in meeting the affirmative action goals it has agreed to;
 - (c) To permit the Director access to all books, records and accounts pertaining to its employment practices for the purpose of determining compliance with the affirmative action requirements.
- (5) The Director shall monitor the compliance of each Contractor with the nondiscrimination provisions of each Contract. The Director shall develop procedures and regulations consistent with the administrative policy adopted by the City Administrator for notice and enforcement of non-compliance. Such procedures and regulations shall include a provision for the posting of Contractors not in compliance.
- (6) All City Contracts shall provide further that breach of the obligation not to discriminate shall be a material breach of the Contract for which the City shall be entitled, at its option, to do any or all of the following:
- (a) To cancel, terminate, or suspend the Contract in whole or part and/or refuse to make any required periodic payments under the Contract;
 - (b) Declare the Contractor ineligible for the award of any future Contracts with the City for a specified length of time;
 - (c) To recover liquidated damages of a specified sum, said sum to be that percentage of the labor expenditure for the time period involved which would have accrued to minority group members had the affirmative action not been breached;
 - (d) Impose for each day of non-compliance, liquidated damages of a specified sum, based upon the following schedule:

<u>Contract Amount</u>	<u>Assessed Damages Per Day of Non-Compliance</u>
\$ 10,000 - 24,999	\$ 25.00
25,000 - 99,999	50.00
100,000 - 199,999	100.00
200,000 - 499,999	150.00
500,000 - 1,499,999	200.00
1,500,000 - 2,999,999	250.00
3,000,000 - 4,999,999	300.00
5,000,000 - and above	500.00

- (e) In addition the Contractor shall be liable for any costs or expenses incurred by the City of Ann Arbor in obtaining from other sources the work and services to be rendered or performed or the goods or properties to be furnished or delivered to the City under this Contract.

Section 6 - Materials, Appliances, Employees

Unless otherwise stipulated, the Contractor shall provide and pay for all materials, labor, water, tools, equipment, light, power, transportation, and other facilities necessary or used for the execution and completion of the work. Unless otherwise specified, all materials incorporated in the permanent work shall be new, and both workmanship and materials shall be of the highest quality. The Contractor shall, if required, furnish satisfactory evidence as to the kind and quality of materials.

The Contractor shall at all times enforce strict discipline and good order among its employees, and shall seek to avoid employing on the work any unfit person or anyone not skilled in the work assigned.

Adequate sanitary facilities shall be provided by the Contractor.

Section 7 - Qualifications for Employment

The Contractor shall employ competent laborers and mechanics for the work under this Contract. For work performed under this Contract, employment preference shall be given to qualified local residents.

Section 8 - Royalties and Patents

The Contractor shall pay all royalties and license fees. It shall defend all suits or claims for infringements of any patent rights and shall hold the City harmless from loss on account of infringement except that the City shall be responsible for all infringement loss when a particular process or the product of a particular manufacturer or manufacturers is specified, unless the City has notified the Contractor prior to the signing of the Contract that the particular process or product is patented or is believed to be patented.

Section 9 - Permits and Regulations

The Contractor must secure and pay for all permits, permit or plan review fees and licenses necessary for the prosecution of the work. These include but are not limited to City building permits, right-of-way permits, lane closure permits, right-of-way occupancy permits, and the like. The City shall secure and pay for easements shown on the plans unless otherwise specified.

The Contractor shall give all notices and comply with all laws, ordinances, rules and regulations bearing on the conduct of the work as drawn and specified. If the Contractor observes that the Contract Documents are at variance with those requirements, it shall promptly notify the Supervising Professional in writing, and any necessary changes shall be adjusted as provided in the Contract for changes in the work.

Section 10 - Protection of the Public and of Work and Property

The Contractor is responsible for the means, methods, sequences, techniques and procedures of construction and safety programs associated with the work contemplated by this Contract. The Contractor, its agents or sub-contractors, shall comply with the "General Rules and Regulations for the Construction Industry" as published by the Construction Safety Commission of the State of Michigan and to all other local, State and National laws, ordinances, rules and regulations pertaining to safety of persons and property.

The Contractor shall take all necessary and reasonable precautions to protect the safety of the public. It shall continuously maintain adequate protection of all work from damage, and shall take all necessary and reasonable precautions to adequately protect all public and private property from injury or loss arising in connection with this Contract. It shall make good any damage, injury or loss to its work and to public and private property resulting from lack of reasonable protective precautions, except as may be due to errors in the Contract Documents, or caused by agents or employees of the City. The Contractor shall obtain and maintain sufficient insurance to cover damage to any City property at the site by any cause.

In an emergency affecting the safety of life, or the work, or of adjoining property, the Contractor is, without special instructions or authorization from the Supervising Professional, permitted to act at its discretion to prevent the threatened loss or injury. It shall also so act, without appeal, if authorized or instructed by the Supervising Professional.

Any compensation claimed by the Contractor for emergency work shall be determined by agreement or in accordance with the terms of Claims for Extra Cost - Section 15.

Section 11 - Inspection of Work

The City shall provide sufficient competent personnel for the inspection of the work.

The Supervising Professional shall at all times have access to the work whenever it is in preparation or progress, and the Contractor shall provide proper facilities for access and for inspection.

If the specifications, the Supervising Professional's instructions, laws, ordinances, or any public authority require any work to be specially tested or approved, the Contractor shall give the Supervising Professional timely notice of its readiness for inspection, and if the inspection is by an authority other than the Supervising Professional, of the date fixed for the inspection. Inspections by the Supervising Professional shall be made promptly, and where practicable at the source of supply. If any work should be covered up without approval or consent of the Supervising Professional, it must, if required by the Supervising Professional, be uncovered for examination and properly restored at the Contractor's expense.

Re-examination of any work may be ordered by the Supervising Professional, and, if so ordered, the work must be uncovered by the Contractor. If the work is found to be in accordance with the Contract Documents, the City shall pay the cost of re-examination and replacement. If the work is not in accordance with the Contract Documents, the Contractor shall pay the cost.

Section 12 - Superintendence

The Contractor shall keep on the work site, during its progress, a competent superintendent and any necessary assistants, all satisfactory to the Supervising Professional. The superintendent will be responsible to perform all on-site project management for the Contractor. The superintendent shall be experienced in the work required for this Contract. The superintendent shall represent the Contractor and all direction given to the superintendent shall be binding as if given to the Contractor. Important directions shall immediately be confirmed in writing to the Contractor. Other directions will be confirmed on written request. The Contractor shall give efficient superintendence to the work, using its best skill and attention.

Section 13 - Changes in the Work

The City may make changes to the quantities of work within the general scope of the Contract at any time by a written order and without notice to the sureties. If the changes add to or deduct from the extent of the work, the Contract Sum shall be adjusted accordingly. All the changes shall be executed under the conditions of the original Contract except that any claim for extension of time caused by the change shall be adjusted at the time of ordering the change.

In giving instructions, the Supervising Professional shall have authority to make minor changes in the work not involving extra cost and not inconsistent with the purposes of the work, but otherwise, except in an emergency endangering life or property, no extra work or change shall be made unless in pursuance of a written order by the Supervising Professional, and no claim for an addition to the Contract Sum shall be valid unless the additional work was ordered in writing.

The Contractor shall proceed with the work as changed and the value of the work shall be determined as provided in Claims for Extra Cost - Section 15.

Section 14 - Extension of Time

Extension of time stipulated in the Contract for completion of the work will be made if and as the Supervising Professional may deem proper under any of the following circumstances:

- (1) When work under an extra work order is added to the work under this Contract;
- (2) When the work is suspended as provided in Section 20;
- (3) When the work of the Contractor is delayed on account of conditions which could not have been foreseen, or which were beyond the control of the Contractor, and which were not the result of its fault or negligence;
- (4) Delays in the progress of the work caused by any act or neglect of the City or of its employees or by other Contractors employed by the City;
- (5) Delay due to an act of Government;
- (6) Delay by the Supervising Professional in the furnishing of plans and necessary information;
- (7) Other cause which in the opinion of the Supervising Professional entitles the Contractor to an extension of time.

The Contractor shall notify the Supervising Professional within 7 days of an occurrence or conditions which, in the Contractor's opinion, entitle it to an extension of time. The notice shall be in writing and submitted in ample time to permit full investigation and evaluation of the Contractor's claim. The Supervising Professional shall acknowledge receipt of the Contractor's notice within 7 days of its receipt. Failure to timely provide the written notice shall constitute a waiver by the Contractor of any claim.

In situations where an extension of time in Contract completion is appropriate under this or any other section of the Contract, the Contractor understands and agrees that the only available adjustment for events that cause any delays in Contract completion shall be extension of the required time for Contract completion and that there shall be no adjustments in the money due the Contractor on account of the delay.

Section 15 - Claims for Extra Cost

If the Contractor claims that any instructions by drawings or other media issued after the date of the Contract involved extra cost under this Contract, it shall give the Supervising Professional written notice within 7 days after the receipt of the instructions, and in any event before proceeding to execute the work, except in emergency endangering life or property. The procedure shall then be as provided for Changes in the Work-Section 13. No claim shall be valid unless so made.

If the Supervising Professional orders, in writing, the performance of any work not covered by the Contract Documents, and for which no item of work is provided in the Contract, and for which no unit price or lump sum basis can be agreed upon, then the extra work shall be done on a Cost-Plus-Percentage basis of payment as follows:

- (1) The Contractor shall be reimbursed for all reasonable costs incurred in doing the work, and shall receive an additional payment of 15% of all the reasonable costs to cover both its indirect overhead costs and profit;
- (2) The term "Cost" shall cover all payroll charges for employees and supervision required under the specific order, together with all worker's compensation, Social Security, pension and retirement allowances and social insurance, or other regular payroll charges on same; the cost of all material and supplies required of either temporary or permanent character; rental of all power-driven equipment at agreed upon rates, together with cost of fuel and supply charges for the equipment; and any costs incurred by the Contractor as a direct result of executing the order, if approved by the Supervising Professional;
- (3) If the extra is performed under subcontract, the subcontractor shall be allowed to compute its charges as described above. The Contractor shall be permitted to add an additional charge of 5% percent to that of the subcontractor for the Contractor's supervision and contractual responsibility;
- (4) The quantities and items of work done each day shall be submitted to the Supervising Professional in a satisfactory form on the succeeding day, and shall be approved by the Supervising Professional and the Contractor or adjusted at once;

- (5) Payments of all charges for work under this Section in any one month shall be made along with normal progress payments. Retainage shall be in accordance with Progress Payments-Section 16.

No additional compensation will be provided for additional equipment, materials, personnel, overtime or special charges required to perform the work within the time requirements of the Contract.

When extra work is required and no suitable price for machinery and equipment can be determined in accordance with this Section, the hourly rate paid shall be 1/40 of the basic weekly rate listed in the Rental Rate Blue Book published by Dataquest Incorporated and applicable to the time period the equipment was first used for the extra work. The hourly rate will be deemed to include all costs of operation such as bucket or blade, fuel, maintenance, "regional factors", insurance, taxes, and the like, but not the costs of the operator.

Section 16 - Progress Payments

The Contractor shall submit each month, or at longer intervals, if it so desires, an invoice covering work performed for which it believes payment, under the Contract terms, is due. The submission shall be to the City's Finance Department - Accounting Division. The Supervising Professional will, within 10 days following submission of the invoice, prepare a certificate for payment for the work in an amount to be determined by the Supervising Professional as fairly representing the acceptable work performed during the period covered by the Contractor's invoice. To insure the proper performance of this Contract, the City will retain a percentage of the estimate in accordance with Act 524, Public Acts of 1980. The City will then, following the receipt of the Supervising Professional's Certificate, make payment to the Contractor as soon as feasible, which is anticipated will be within 15 days.

An allowance may be made in progress payments if substantial quantities of permanent material have been delivered to the site but not incorporated in the completed work if the Contractor, in the opinion of the Supervising Professional, is diligently pursuing the work under this Contract. Such materials shall be properly stored and adequately protected. Allowance in the estimate shall be at the invoice price value of the items. Notwithstanding any payment of any allowance, all risk of loss due to vandalism or any damages to the stored materials remains with the Contractor.

In the case of Contracts which include only the Furnishing and Delivering of Equipment, the payments shall be; 60% of the Contract Sum upon the delivery of all equipment to be furnished, or in the case of delivery of a usable portion of the equipment in advance of the total equipment delivery, 60% of the estimated value of the portion of the equipment may be paid upon its delivery in advance of the time of the remainder of the equipment to be furnished; 30% of the Contract Sum upon completion of erection of all equipment furnished, but not later than 60 days after the date of delivery of all of the equipment to be furnished; and payment of the final 10% on final completion of erection, testing and acceptance of all the equipment to be furnished; but not later than 180 days after the date of delivery of all of the equipment to be furnished, unless testing has been completed and shows the equipment to be unacceptable.

With each invoice for periodic payment, the Contractor shall enclose a Contractor's Declaration - Section 43, and an updated project schedule per Order of Completion - Section 2.

Section 17 - Deductions for Uncorrected Work

If the Supervising Professional decides it is inexpedient to correct work that has been damaged or that was not done in accordance with the Contract, an equitable deduction from the Contract price shall be made.

Section 18 - Correction of Work Before Final Payment

The Contractor shall promptly remove from the premises all materials condemned by the Supervising Professional as failing to meet Contract requirements, whether incorporated in the work or not, and the Contractor shall promptly replace and re-execute the work in accordance with the Contract and without expense to the City and shall bear the expense of making good all work of other Contractors destroyed or damaged by the removal or replacement.

If the Contractor does not remove the condemned work and materials within 10 days after written notice, the City may remove them and, if the removed material has value, may store the material at the expense of the Contractor. If the Contractor does not pay the expense of the removal within 10 days thereafter, the City may, upon 10 days written notice, sell the removed materials at auction or private sale and shall pay to the Contractor the net proceeds, after deducting all costs and expenses that should have been borne by the Contractor. If the removed material has no value, the Contractor must pay the City the expenses for disposal within 10 days of invoice for the disposal costs.

The inspection or lack of inspection of any material or work pertaining to this Contract shall not relieve the Contractor of its obligation to fulfill this Contract and defective work shall be made good. Unsuitable materials may be rejected by the Supervising Professional notwithstanding that the work and materials have been previously overlooked by the Supervising Professional and accepted or estimated for payment or paid for. If the work or any part shall be found defective at any time before the final acceptance of the whole work, the Contractor shall forthwith make good the defect in a manner satisfactory to the Supervising Professional. The judgment and the decision of the Supervising Professional as to whether the materials supplied and the work done under this Contract comply with the requirements of the Contract shall be conclusive and final.

Section 19 - Acceptance and Final Payment

Upon receipt of written notice that the work is ready for final inspection and acceptance, the Supervising Professional will promptly make the inspection. When the Supervising Professional finds the work acceptable under the Contract and the Contract fully performed, the Supervising Professional will promptly sign and issue a final certificate stating that the work required by this Contract has been completed and is accepted by the City under the terms and conditions of the Contract. The entire balance found to be due the Contractor, including the retained percentage, shall be paid to the Contractor by the City within 30 days after the date of the final certificate.

Before issuance of final certificates, the Contractor shall file with the City:

- (1) The consent of the surety to payment of the final estimate;
- (2) The Contractor's Affidavit in the form required by Section 44.

In case the Affidavit or consent is not furnished, the City may retain out of any amount due the Contractor, sums sufficient to cover all lienable claims.

The making and acceptance of the final payment shall constitute a waiver of all claims by the City except those arising from:

- (1) unsettled liens;
- (2) faulty work appearing within 12 months after final payment;
- (3) hidden defects in meeting the requirements of the plans and specifications;
- (4) manufacturer's guarantees.

It shall also constitute a waiver of all claims by the Contractor, except those previously made and still unsettled.

Section 20 - Suspension of Work

The City may at any time suspend the work or any part by giving 5 days notice to the Contractor in writing. The work shall be resumed by the Contractor within 10 days after the date fixed in the written notice from the City to the Contractor to do so. The City shall reimburse the Contractor for expense incurred by the Contractor in connection with the work under this Contract as a result of the suspension.

If the work, or any part, shall be stopped by the notice in writing, and if the City does not give notice in writing to the Contractor to resume work at a date within 90 days of the date fixed in the written notice to suspend, then the Contractor may abandon that portion of the work suspended and will be entitled to the estimates and payments for all work done on the portions abandoned, if any, plus 10% of the value of the work abandoned, to compensate for loss of overhead, plant expense, and anticipated profit.

Section 21 - Delays and the City's Right to Terminate Contract

If the Contractor refuses or fails to prosecute the work, or any separate part of it, with the diligence required to insure completion, ready for operation, within the allowable number of consecutive calendar days specified plus extensions, or fails to complete the work within the required time, the City may, by written notice to the Contractor, terminate its right to proceed with the work or any part of the work as to which there has been delay. After providing the notice the City may take over the work and prosecute it to completion, by Contract or otherwise, and the Contractor and its sureties shall be liable to the City for any excess cost to the City. If the Contractor's right to proceed is terminated, the City may take possession of and utilize in completing the work, any materials, appliances and plant as may be on the site of the work and useful for completing the work. The right of the Contractor to proceed shall not be terminated or the Contractor charged with liquidated damages where an extension of time is granted under Extension of Time - Section 14.

If the Contractor is adjudged a bankrupt, or if it makes a general assignment for the benefit of creditors, or if a receiver is appointed on account of its insolvency, or if it persistently or repeatedly refuses or fails except in cases for which extension of time is provided, to supply enough properly skilled workers or proper materials, or if it fails to make prompt payments to subcontractors or for material or labor, or persistently disregards laws, ordinances or the instructions of the Supervising Professional, or otherwise is guilty of a substantial violation of any provision of the Contract, then the City, upon the certificate of the Supervising Professional that sufficient cause exists to justify such action, may, without prejudice to any other right or remedy and after giving the Contractor 3 days written notice, terminate this Contract. The City may then take possession of the premises and of all materials, tools and appliances thereon and without prejudice to any other remedy it may have,

make good the deficiencies or finish the work by whatever method it may deem expedient, and deduct the cost from the payment due the Contractor. The Contractor shall not be entitled to receive any further payment until the work is finished. If the expense of finishing the work, including compensation for additional managerial and administrative services exceeds the unpaid balance of the Contract Sum, the Contractor and its surety are liable to the City for any excess cost incurred. The expense incurred by the City, and the damage incurred through the Contractor's default, shall be certified by the Supervising Professional.

Section 22 - Contractor's Right to Terminate Contract

If the work should be stopped under an order of any court, or other public authority, for a period of 3 months, through no act or fault of the Contractor or of anyone employed by it, then the Contractor may, upon 7 days written notice to the City, terminate this Contract and recover from the City payment for all acceptable work executed plus reasonable profit.

Section 23 - City's Right to Do Work

If the Contractor should neglect to prosecute the work properly or fail to perform any provision of this Contract, the City, 3 days after giving written notice to the Contractor and its surety may, without prejudice to any other remedy the City may have, make good the deficiencies and may deduct the cost from the payment due to the Contractor.

Section 24 - Removal of Equipment and Supplies

In case of termination of this Contract before completion, from any or no cause, the Contractor, if notified to do so by the City, shall promptly remove any part or all of its equipment and supplies from the property of the City, failing which the City shall have the right to remove the equipment and supplies at the expense of the Contractor.

The removed equipment and supplies may be stored by the City and, if all costs of removal and storage are not paid by the Contractor within 10 days of invoicing, the City upon 10 days written notice may sell the equipment and supplies at auction or private sale, and shall pay the Contractor the net proceeds after deducting all costs and expenses that should have been borne by the Contractor and after deducting all amounts claimed due by any lien holder of the equipment or supplies.

Section 25 - Responsibility for Work and Warranties

The Contractor assumes full responsibility for any and all materials and equipment used in the construction of the work and may not make claims against the City for damages to materials and equipment from any cause except negligence or willful act of the City. Until its final acceptance, the Contractor shall be responsible for damage to or destruction of the project (except for any part covered by Partial Completion and Acceptance - Section 26). The Contractor shall make good all work damaged or destroyed before acceptance. All risk of loss remains with the Contractor until final acceptance of the work (Section 19) or partial acceptance (Section 26). The Contractor is advised to investigate obtaining its own builders risk insurance.

The Contractor shall guarantee the quality of the work for a period of one year. The Contractor shall also unconditionally guarantee the quality of all equipment and materials that are furnished and installed under the Contract for a period of one year. At the end of one year after the Contractor's receipt of final payment, the complete work, including equipment and materials furnished and

installed under the Contract, shall be inspected by the Contractor and the Supervising Professional. Any defects shall be corrected by the Contractor at its expense as soon as practicable but in all cases within 60 days. Any defects that are identified prior to the end of one year shall also be inspected by the Contractor and the Supervising Professional and shall be corrected by the Contractor at its expense as soon as practicable but in all cases within 60 days.

The Contractor shall assign all manufacturer or material supplier warranties to the City prior to final payment. The assignment shall not relieve the Contractor of its obligations under this paragraph to correct defects.

Section 26 - Partial Completion and Acceptance

If at any time prior to the issuance of the final certificate referred to in Acceptance and Final Payment - Section 19, any portion of the permanent construction has been satisfactorily completed, and if the Supervising Professional determines that portion of the permanent construction is not required for the operations of the Contractor but is needed by the City, the Supervising Professional shall issue to the Contractor a certificate of partial completion, and immediately the City may take over and use the portion of the permanent construction described in the certificate, and exclude the Contractor from that portion.

The issuance of a certificate of partial completion shall not constitute an extension of the Contractor's time to complete the portion of the permanent construction to which it relates if the Contractor has failed to complete it in accordance with the terms of this Contract. The issuance of the certificate shall not release the Contractor or its sureties from any obligations under this Contract including bonds.

If prior use increases the cost of, or delays the work, the Contractor shall be entitled to extra compensation, or extension of time, or both, as the Supervising Professional may determine.

Section 27 - Payments Withheld Prior to Final Acceptance of Work

The City may withhold or, on account of subsequently discovered evidence, nullify the whole or part of any certificate to the extent reasonably appropriate to protect the City from loss on account of:

- (1) Defective work not remedied;
- (2) Claims filed or reasonable evidence indicating probable filing of claims by other parties against the Contractor;
- (3) Failure of the Contractor to make payments properly to subcontractors or for material or labor;
- (4) Damage to another Contractor.

When the above grounds are removed or the Contractor provides a Surety Bond satisfactory to the City which will protect the City in the amount withheld, payment shall be made for amounts withheld under this section.

Section 28 - Contractor's Insurance

- A. The Contractor shall procure and maintain during the life of this Contract, including the guarantee period and during any warranty work, such insurance policies, including those set forth below, as will protect itself from all claims for bodily injuries, death or property damage which may arise under this Contract; whether the acts were made by the Contractor or by any subcontractor or anyone employed by them directly or indirectly. The following insurance policies are required:
1. Worker's Compensation Insurance in accordance with all applicable state and federal statutes. Further, Employers Liability Coverage shall be obtained in the following minimum amounts:

Bodily Injury by Accident - \$500,000 each accident
Bodily Injury by Disease - \$500,000 each employee
Bodily Injury by Disease - \$500,000 each policy limit
 2. Commercial General Liability Insurance equivalent to, as a minimum, Insurance Services Office form CG 00 01 07 98. The City of Ann Arbor shall be named as an additional insured. There shall be no added exclusions or limiting endorsements including, but not limited to: Products and Completed Operations, Explosion, Collapse and Underground coverage or Pollution. Further, the following minimum limits of liability are required:

\$1,000,000 Each occurrence as respect Bodily Injury Liability or Property Damage Liability, or both combined.

\$2,000,000 Per Job General Aggregate

\$1,000,000 Personal and Advertising Injury

\$2,000,000 Products and Completed Operations Aggregate
 3. Motor Vehicle Liability Insurance, including Michigan No-Fault Coverages, equivalent to, as a minimum, Insurance Services Office form CA 00 01 07 97. The City of Ann Arbor shall be named as an additional insured. There shall be no added exclusions or limiting endorsements. Coverage shall include all owned vehicles, all non-owned vehicles and all hired vehicles. Further, the limits of liability shall be \$1,000,000 for each occurrence as respects Bodily Injury Liability or Property Damage Liability, or both combined.
 4. Umbrella/Excess Liability Insurance shall be provided to apply excess of the Commercial General Liability, Employers Liability and the Motor Vehicle coverage enumerated above, for each occurrence and for aggregate in the amount of \$1,000,000.
- B. Insurance required under Section A.2 and A.3 of this Contract shall be considered primary as respects any other valid or collectible insurance that the City may possess, including any self-insured retentions the City may have; and any other insurance the City does possess shall be considered excess insurance only and shall not be required to contribute with this insurance. Further, the Contractor agrees to waive any right of recovery by its insurer against the City.

- C. In the case of all Contracts involving on-site work, the Contractor shall provide to the City before the commencement of any work under this Contract documentation demonstrating it has obtained the above mentioned policies. Documentation must provide and demonstrate an unconditional 30 day written notice of cancellation in favor of the City of Ann Arbor. Further, the documentation must explicitly state the following: (a) the policy number; name of insurance company; name and address of the agent or authorized representative; name and address of insured; project name; policy expiration date; and specific coverage amounts; (b) any deductibles or self-insured retentions which shall be approved by the City, in its sole discretion; (c) that the policy conforms to the requirements specified. An original certificate of insurance may be provided as an initial indication of the required insurance, provided that no later than 21 calendar days after commencement of any work the Contractor supplies a copy of the endorsements required on the policies. Upon request, the Contractor shall provide within 30 days a copy of the policy(ies) to the City. If any of the above coverages expire by their terms during the term of this Contract, the Contractor shall deliver proof of renewal and/or new policies to the Administering Service Area/Unit at least ten days prior to the expiration date.
- D. Any Insurance provider of Contractor shall be admitted and authorized to do business in the State of Michigan and shall carry and maintain a minimum rating assigned by A.M. Best & Company' s Key Rating Guide of "A-" Overall and a minimum Financial Size Category of "V". Insurance policies and certificates issued by non-admitted insurance companies are not acceptable unless approved in writing by the City.

Section 29 - Surety Bonds

Bonds will be required from the successful bidder as follows:

- (1) A Performance Bond to the City of Ann Arbor for the amount of the bid(s) accepted;
- (2) A Labor and Material Bond to the City of Ann Arbor for the amount of the bid(s) accepted.

Bonds shall be executed on forms supplied by the City in a manner and by a Surety Company satisfactory to the City Attorney.

Section 30 - Damage Claims

The Contractor shall be held responsible for all damages to property of the City or others, caused by or resulting from the negligence of the Contractor, its employees, or agents during the progress of or connected with the prosecution of the work, whether within the limits of the work or elsewhere. The Contractor must restore all property injured including sidewalks, curbing, sodding, pipes, conduit, sewers or other public or private property to not less than its original condition with new work.

Section 31 - Refusal to Obey Instructions

If the Contractor refuses to obey the instructions of the Supervising Professional, the Supervising Professional shall withdraw inspection from the work, and no payments will be made for work performed thereafter nor may work be performed thereafter until the Supervising Professional shall have again authorized the work to proceed.

Section 32 - Assignment

Neither party to the Contract shall assign the Contract without the written consent of the other. The Contractor may assign any monies due to it to a third party acceptable to the City.

Section 33 - Rights of Various Interests

Whenever work being done by the City's forces or by other Contractors is contiguous to work covered by this Contract, the respective rights of the various interests involved shall be established by the Supervising Professional, to secure the completion of the various portions of the work in general harmony.

The Contractor is responsible to coordinate all aspects of the work, including coordination of, and with, utility companies and other Contractors whose work impacts this project.

Section 34 - Subcontracts

The Contractor shall not award any work to any subcontractor without prior written approval of the City. The approval will not be given until the Contractor submits to the City a written statement concerning the proposed award to the subcontractor. The statement shall contain all information the City may require.

The Contractor shall be as fully responsible to the City for the acts and omissions of its subcontractors, and of persons either directly or indirectly employed by them, as it is for the acts and omissions of persons directly employed by it.

The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work to bind subcontractors to the Contractor by the terms of the General Conditions and all other Contract Documents applicable to the work of the subcontractors and to give the Contractor the same power to terminate any subcontract that the City may exercise over the Contractor under any provision of the Contract Documents.

Nothing contained in the Contract Documents shall create any contractual relation between any subcontractor and the City.

Section 35 - Supervising Professional's Status

The Supervising Professional has the right to inspect any or all work. The Supervising Professional has authority to stop the work whenever stoppage may be appropriate to insure the proper execution of the Contract. The Supervising Professional has the authority to reject all work and materials which do not conform to the Contract and to decide questions which arise in the execution of the work.

The Supervising Professional shall make all measurements and determinations of quantities. Those measurements and determinations are final and conclusive between the parties.

Section 36 - Supervising Professional's Decisions

The Supervising Professional shall, within a reasonable time after their presentation to the Supervising Professional, make decisions in writing on all claims of the City or the Contractor and on all other matters relating to the execution and progress of the work or the interpretation of the Contract Documents.

Section 37 - Storing Materials and Supplies

Materials and supplies may be stored at the site of the work at locations agreeable to the City unless specific exception is listed elsewhere in these documents. Ample way for foot traffic and drainage must be provided, and gutters must, at all times, be kept free from obstruction. Traffic on streets shall be interfered with as little as possible. The Contractor may not enter or occupy with agents, employees, tools, or material any private property without first obtaining written permission from its owner. A copy of the permission shall be furnished to the Supervising Professional.

Section 38 - Lands for Work

The Contractor shall provide, at its own expense and without liability to the City, any additional land and access that may be required for temporary construction facilities or for storage of materials.

Section 39 - Cleaning Up

The Contractor shall, as directed by the Supervising Professional, remove at its own expense from the City's property and from all public and private property all temporary structures, rubbish and waste materials resulting from its operations unless otherwise specifically approved, in writing, by the Supervising Professional.

Section 40 - Salvage

The Supervising Professional may designate for salvage any materials from existing structures or underground services. Materials so designated remain City property and shall be transported or stored at a location as the Supervising Professional may direct.

Section 41 - Night, Saturday or Sunday Work

No night or Sunday work (without prior written City approval) will be permitted except in the case of an emergency and then only to the extent absolutely necessary. The City may allow night work which, in the opinion of the Supervising Professional, can be satisfactorily performed at night. Night work is any work between 8:00 p.m. and 7:00 a.m. No Saturday work will be permitted unless the Contractor gives the Supervising Professional at least 48 hours but not more than 5 days notice of the Contractor's intention to work the upcoming Saturday.

Section 42 - Sales Taxes

Under State law the City is exempt from the assessment of State Sales Tax on its direct purchases. Contractors who acquire materials, equipment, supplies, etc. for incorporation in City projects are not likewise exempt. State Law shall prevail. The Bidder shall familiarize itself with the State Law and prepare its Bid accordingly. No extra payment will be allowed under this Contract for failure of the Contractor to make proper allowance in this bid for taxes it must pay.

CONTRACTOR'S DECLARATION

I hereby declare that I have not, during the period _____, 2010, to _____, 2010, performed any work, furnished any materials, sustained any loss, damage or delay, or otherwise done anything in addition to the regular items (or executed change orders) set forth in the Contract titled Barton Dam Concrete Testing and Access System, for which I shall ask, demand, sue for, or claim compensation or extension of time from the City, except as I hereby make claim for additional compensation or extension of time as set forth on the attached itemized statement. I further declare that I have paid all payroll obligations related to this Contract that have become due during the above period and that all invoices related to this Contract received more than 30 days prior to this declaration have been paid in full except as listed below.

There is/is not (Contractor please circle one and strike one as appropriate) an itemized statement attached regarding a request for additional compensation or extension of time.

Contractor

Date

By _____
(Signature)

Its _____
(Title of Office)

Past due invoices, if any, are listed below.

CONTRACTOR'S AFFIDAVIT

The undersigned Contractor, _____, represents that on _____, 20____, it was awarded a Contract by the City of Ann Arbor, Michigan to _____ under the terms and conditions of a Contract titled Barton Dam Concrete Testing and Access System.

The Contractor represents that all work has now been accomplished and the Contract is complete.

The Contractor warrants and certifies that all of its indebtedness arising by reason of the Contract has been fully paid or satisfactorily secured; and that all claims from subcontractors and others for labor and material used in accomplishing the project, as well as all other claims arising from the performance of the Contract, have been fully paid or satisfactorily settled. The Contractor agrees that, if any claim should hereafter arise, it shall assume responsibility for it immediately upon request to do so by the City of Ann Arbor.

The Contractor, for valuable consideration received, does further waive, release and relinquish any and all claims or right of lien which the Contractor now has or may acquire upon the subject premises for labor and material used in the project owned by the City of Ann Arbor.

This affidavit is freely and voluntarily given with full knowledge of the facts.

Contractor
By _____
(Signature)
Its _____
(Title of Office)

Subscribed and sworn to before me, on this _____ day of _____, 2010
_____, _____ County, Michigan

Notary Public
My commission expires on: _____

STANDARD SPECIFICATIONS

All work under this Contract shall be performed in accordance with the Public Services Department Standard Specifications in effect at the date of availability of the Contract Documents stipulated in the Advertisement. All work under this Contract which is not included in these Standard Specifications, or which is performed using modifications to these Standard Specifications, shall be performed in accordance with the Detailed Specifications included in these Contract Documents.

A copy of the Public Services Department Standard Specifications may be purchased from the Engineering Division, (Fourth Floor, City Hall, Ann Arbor, Michigan), for \$35.00 per copy. In addition, a copy of these Standard Specifications is available for public viewing at the Engineering Division office, for review Monday through Friday between the hours of 8:30 a.m. and 4:00 p.m.

1.00 GENERAL**1.01 DESCRIPTION OF WORK**

- A. Work under this contract consists of constructing access to the downstream face of the dam and other miscellaneous areas, performing concrete cores, contracting with a testing company for testing of the cores, and grouting the coring.
- B. A sketch is included which provides general locations for all work under this contract.

1.02 EXISTING FACILITIES ACCESS

- A. The CONTRACTOR shall be responsible for maintaining access to existing facilities, dam and powerhouse, for personnel, operations, supplies and deliveries during the construction period. If access to the existing receiving points for supplies or deliveries must be temporarily disrupted, the CONTRACTOR shall be responsible for coordinating activities with the OWNER.
- B. Access to existing facilities shall not be temporarily disrupted without coordination with and prior approval of the OWNER.

1.03 CONSTRUCTION WATER

- A. Domestic water for construction is not available at the site. The CONTRACTOR shall be responsible for supplying all water required for construction.

1.04 CONSTRUCTION POWER

- A. Electrical power to be used during construction is not available at the site. The CONTRACTOR shall be responsible for providing all necessary generators for construction power.

1.05 MAINTENANCE OF EXISTING RIVER FLOW

- A. Flow through the Huron River will not be restricted at any time during construction.
- B. The water level in the upstream impoundment will not be lowered as part of this project.
- C. The CONTRACTOR shall be responsible for incorporating these restrictions into his design and construction of the access system.
- D. The CONTRACTOR shall submit to the OWNER for his approval written documentation of the proposed plan. No work shall commence until the OWNER has approved this plan.

1.06 WORK SCHEDULE

- A. The CONTRACTOR shall provide a work schedule. The schedule shall be completed and shall show in detail the manner in which he proposes to complete the work under this Contract and approximately monthly billing of the Contract. The purpose of the schedule is to assist the OWNER in notifying the public of inconveniences and to anticipate cash-flow on the job, and to determine if the CONTRACTOR is reasonably proceeding with the work to assure completion within the specified time.

1.07 INTERIM MILESTONES

- A. The available time for work under this Contract is indicated in the Contract forms. However, interim milestones are necessary to ensure that individual tasks are given adequate time.
- B. The following durations of individual tasks shall be met:
 - 1. Initial Construction of access system Up to three (3) weeks
 - 2. Installation of the access system Up to one (1) week per location (i.e. other bays)
 - 3. Coring Up to two (2) days per bay
 - 4. Testing and delivery of preliminary findings:
 - a. Comprehensive strength tests Up to three (3) days per bay
 - b. Petrographic analysis Four (4) weeks sample
 - 5. Final Report Up to two (2) weeks following completion of all coring and testing

1.08 CONSTRUCTION SEQUENCE

- A. The CONTRACTOR shall coordinate and schedule his work with the OWNER when his operation may affect the operation of the existing facilities.
- B. Prior to commencing the work, the CONTRACTOR shall provide the OWNER a detailed schedule of the proposed work. The schedule shall include a list of tasks required to complete the work; their relevancy to each other; expected duration; and completion dates.
- C. As a guide in preparing a construction sequence for the most significant portions of the project, the CONTRACTOR shall use the following. All other proposed improvements may be constructed concurrently in accordance with an approved schedule.
 - 1. Submit to the OWNER final Drawings of the access system.
 - 2. Coordinate with the OWNER for radial gate operation and lock-out.
 - 3. Install oil containment boom around construction activities.
 - 4. Fabricate as needed and construct the access system in place.
 - 5. Locate the rebar with pachometer.
 - 6. OWNER to review locations of proposed cores.
 - 7. Perform cores and grout.
 - 8. Perform testing and submit test report.
 - 9. Allow for OWNER inspection of concrete.

- 10. Disassemble access system and relocate to another bay.
- 11. Repeat steps.
- 12. Perform coring, testing and inspection at other miscellaneous areas, including installation of oil containment boom and coordination with OWNER of lock-out of hydroelectric turbine.

1.09 DUST AND DEBRIS CONTROL

- A. Dust and debris created by the construction activities, including drilling, coring or other, of sawcutting, mechanical removal must be controlled. The CONTRACTOR shall therefore provide dust control in the form of tarps, or other OWNER approved methods. This shall particularly apply to procedures which are adjacent to the facility's mechanical and electrical equipment, including the gate operators, gate chains, gate pins and other rotating parts.
- B. Should the CONTRACTOR be negligent of his duties in providing dust and debris control, the OWNER may, with or without notice, order the CONTRACTOR to stop work, or may cause the same to be done and deduct the cost of such work from any monies due or to become due the CONTRACTOR under this Contract, but the performance of such work by the OWNER, or at his insistence, shall service in no way to release the CONTRACTOR from his liability for dust and debris control.
- C. Following the completion of demolition and repair work, the CONTRACTOR shall be responsible for the cleaning of each bay where work was performed. This shall include, but not limited to removal of debris, construction materials, dust or other construction related matter.
- D. Cost of providing dust and debris control and cleaning of the tanks shall be included as part of the concrete or masonry repairs.

1.10 PROJECT PROGRESS MEETING

- A. It shall be the responsibility of the CONTRACTOR to have a representative present at each meeting. The meetings shall be held at least once a month as directed by the OWNER.

1.11 METHOD OF MEASUREMENT AND BASIS OF PAYMENT

A. General

- 1. The method of measurement and the basis of payment for each item in the Proposal will be as specified in the schedule attached. The items are generally grouped by the section of the Specifications under which the particular unit of work is detailed. There will be no payment allowed for any unit of work not specifically mentioned in the Proposal as a bid item, and any such unit of work not mentioned in the Proposal, but necessary for the completion of the Project, will be considered as incidental to the construction of the Project.

B. Measurement

- 1. Quantities of work completed under the Contract will be measured by the OWNER according to the United States standard measures. Where measurements are specified to be "in place", they will be taken along the actual surface of the completed item to obtain lineal, area, or volume measurements.

C. Payment

1. In each and every instance in the schedule attached, where a Basis of Payment is specified, it shall be understood to be prefaced by the following statement, "The Contract unit price bid in the Proposal will be payment in full for all labor, materials, and equipment necessary to do the following according to the Plans and Specifications". Payment shall be made on the basis of the actual quantity of the item completed and accepted at the unit price for such item named in the Proposal.

END OF SECTION

Schedule of Prices

Project: Barton Dam Concrete Testing and Access System
 File No.: 10003
 Bid No.: ITB-4066

NOTES:

1. All bidders shall provide a Unit Price and Total Price for all bid items identified (including any Alternate items).
2. Quantities included in bid table represent estimated quantities for different work. Contractor shall be compensated for the actual number of repairs completed using the unit prices provided.
3. The City, at their sole discretion, may elect to delete any portion of the work delineated below, with no change to the unit prices provided.
4. Any item not provided in the following list shall be considered incidental.

Item #	Item	Description
Base Bid Items		
General		
1	General Conditions & Mobilization (5% max)	For the complete cost of insurance, bonds, permits, mobilization, including protection of trees, protection of existing concrete sidewalks, sanitary facility, fencing for storage areas, security efforts, signage, coordination with the OWNER, third parties, and subcontractors, shop drawings, bringing equipment to and removing equipment from the site, and all related work.
2	Oil Containment Boom	For the complete furnishing, installation and maintenance of the oil containment boom. Length shall be based on protection of two bays at a time. Install per manufacturers specifications, maintain as required, including clean up of any collected oil, grease, or other construction fluids and all related work.
3	Relocate oil containment boom to another location	For the complete relocation of the oil containment boom to another location, install per manufacturers specifications, maintain as required, including cleanup of any collected oil, grease, or other construction fluids, removal of the system and all related work. Installation shall be based on protection of two bays at a time.
4	Restoration	For the complete restoration of the site including access routes, parking areas, storage and staging areas, to original conditions or better, including 4" top soil, seed, mulch, erosion control blankets, regrading of parking lot and/or access drive, additional gravel, and all related work.
Base Bid - Access System - Wood Construction		
1	Construction in place (first two bays)	For the complete design, field measurements, fabrication, construction and installation of a wood access system up the face of the spillway, a walkway and working surface along the face, access over the piers, including all shop drawings, fabrication drawings, handrail, protection from leaking water, power washing, installation hardware, and all related work. Assume two bays at a time.

Schedule of Prices

Project: Barton Dam Concrete Testing and Access System
 File No.: 10003
 Bid No.: ITB-4066

2	Relocate System to another two bays	For the complete dismantling, relocation and reinstallation of the wood access system to another two bays, including removal of installation hardware, patching with grout, and all related work. Assume two bays at a time.
Access to other areas		
1	Method of river crossing to the access system. Circle one (floating dock / pontoon boat / other)	For the complete furnishing and installation of means to cross the river and provide access to the access system. This method shall be in place for the full duration of the project and shall be used by the OWNER in coordination with the CONTRACTOR.
2	Intake structure	For the complete furnishing and installation of a pontoon boat, barge, or other floating work surface, to facilitate the inspection, evaluation, coring, and core patching of the specified location, including all related work.
3	Downstream wing walls	For the complete furnishing and installation of a pontoon boat, barge, or other floating work surface, to facilitate the inspection, evaluation, coring, and core patching of the specified location, including all related work.
4	Upstream retaining wall	For the complete furnishing and installation of a pontoon boat, barge, or other floating work surface, to facilitate the inspection, evaluation, coring, and core patching of the specified location, including all related work.
Coring		
1	4" dia., 6"-12" deep	For the complete coring of one core as specified and as located by the OWNER and CONTRACTOR, including mounting efforts on vertical or sloped surfaces, mounting hardware installation and removal, patching of drilled holes, and all related work. Access to the coring location paid for under separate items.
2	4" dia., 12"-15" deep	For the complete coring of one core as specified and as located by the OWNER and CONTRACTOR, including mounting efforts on vertical or sloped surfaces, mounting hardware installation and removal, patching of drilled holes, and all related work. Access to the coring location paid for under separate items.
3	2" dia., all depths	For the complete coring of one core as specified and as located by the OWNER and CONTRACTOR, including mounting efforts on vertical or sloped surfaces, mounting hardware installation and removal, patching of drilled holes, and all related work. Access to the coring location paid for under separate items.
4	Grouting of Cores	For the complete grouting of drilled cores, including mechanically roughening the inside surface of the core, applying bonding agent, formwork, grouting, curing, and all related work. Depth and diameter of core is incidental. Repair of an anchor holes, either for coring, access system or other, shall be incidental.

Schedule of Prices

Project: Barton Dam Concrete Testing and Access System

File No.: 10003

Bid No.: ITB-4066

Testing		
1	Locate existing rebar w/ pachometer	Prior to coring, for locating and marking the existing cast-in-place reinforcing steel using a pachometer, and all related work. Access to the locations paid for under separate items. This item will be paid for per visit to the site. Only one location will be accessible per visit.
2	Compressive strength test	For performing a compressive strength test on a supplied concrete core, including providing results to the CONTRACTOR and OWNER.
3	Petrographic analysis	For performing a petrographic analysis on a supplied concrete core, including providing results to the CONTRACTOR and OWNER.
4	Final report	For preparing and furnishing a final report summarizing the data and results from the entire project, including final delivery of four color, bound copies.

Alternates		
Alternate Bid - Access System - Reusable Aluminum System or other		
1	Construction in place (first two bays)	In lieu of the Base Bid Wood Construction Access System, for the complete design, field measurements, fabrication, construction and installation of an aluminum (or other) access system up the face of the spillway, a walkway and working surface along the face, access over the piers, including all shop drawings, fabrication drawings, handrail, protection from leaking water, power washing, installation hardware, and all related work. Assume two bays at a time.
2	Relocate System to another two bays	For the complete dismantling, relocation and reinstallation of the aluminum access system (or other) to another two bays, including removal of installation hardware, patching with grout, and all related work. Assume two bays at a time.

1.00 GENERAL**1.01 SECTION INCLUDES**

- A. Submittal Procedures
- B. Shop Drawings
- C. Product Data
- D. Manufacturers' Instructions
- E. Construction Schedule
- F. Submittal Schedule
- G. Schedule of Values

1.02 SUBMITTAL PROCEDURES

- A. Package each submittal appropriately for shipping and handling. This shall include an index either on the transmittal or within the submittal itself. Transmit each submittal from CONTRACTOR to ENGINEER using a transmittal form. Submittals received from sources other than CONTRACTOR will be returned without action. Use separate transmittals for items from different specification sections. Number each submittal consecutively. Resubmittals should have the same number as the original, plus a letter designation for each Resubmittal (i.e. 7-A, 7-B, etc.)
- B. Indicate on the transmittal relevant information and requests for data. On the form, or separate sheet, record deviations from Contract Document requirements, including minor variations and limitations. Include CONTRACTOR's certification that information complies with Contract Document requirements. On Resubmittal, all changes shall be clearly identified for ease of review. Resubmittals shall be reviewed for the clearly identified changes only. Any changes not clearly identified will not be reviewed and original submittal shall govern.
- C. Include the following information on the label for processing and recording action taken.
 - 1. Project name.
 - 2. Date.
 - 3. Name and address of ENGINEER.
 - 4. Name and address of CONTRACTOR.
 - 5. Name and address of subcontractor.
 - 6. Name and address of supplier.
 - 7. Name of manufacturer.
 - 8. Number and title of appropriate specification sections.
 - 9. Drawing number and detail references, as appropriate.
- D. Schedule submittals to expedite the Project, and deliver to ENGINEER at business address. Coordinate submission of related items. Coordinate related activities that require sequential activity.
- E. Review and approve Shop Drawings, project data, and samples before submitting them.

- F. CONTRACTOR is responsible for taking and verifying field measurements, field construction criteria and conditions. Indicate on the submission exactly what was measured.
- G. Any markings done by CONTRACTOR shall be done in a color other than red. Red is reserved for ENGINEER's marking.
- H. The number of copies to be submitted will be determined at the pre-construction conference. Reproducible may be submitted and will be marked and returned to CONTRACTOR. Blue or black line prints shall be submitted in sufficient quantity for distribution to ENGINEER and OWNER recipients.
- I. Coordinate each submittal with the requirements of the Contract Documents.
- J. Provide space for CONTRACTOR and ENGINEER review stamps.
- K. Apply CONTRACTOR's stamp, signed or initialed certifying that review, approval, verification of products required, field dimensions, adjacent construction Work, and coordination of information, is in accordance with the requirements of the Work and Contract Documents.
- L. Submit the number of copies that the CONTRACTOR requires, plus three (3) copies that will be retained by the OWNER and ENGINEER.
- M. Identify variations from Contract Documents and Product or system limitations that may be detrimental to successful performance of the completed Work.
- N. No claim will be allowed for damages or extension of time because of delays in the work resulting from rejection of material or from revision and resubmittal of Shop Drawings, project data, or samples.
- O. No extension of Contract time will be authorized because of failure to transmit submittals to ENGINEER sufficiently in advance of the work to permit processing.
- P. ENGINEER reserves the right to withhold action on a submittal required coordination with other submittals until related submittals are received.
- Q. Do not install materials or equipment which requires submittals until the submittals are returned with ENGINEER's/OWNER's stamp and initials or signature indicating approval. The OWNER shall have final approval authority.
- R. CONTRACTOR's responsibility of errors, omissions, and deviations from requirements of Contract Documents in submittals is not relieved by the ENGINEER's review.
- S. Distribute copies of reviewed submittals to concerned parties. Instruct parties to promptly report any inability to comply with requirements.
- T. Do not use Shop Drawings without an appropriate final stamp indicating action taken in connection with construction.
- U. Revise and resubmit as required, identify all changes made since the previous submittal.

1.03 CERTIFICATIONS

- A. When specified in individual specification sections, submit certification by the manufacturer, installation/application subcontractor, or the CONTRACTOR to ENGINEER, in quantities specified for Product Data.
- B. Indicate that the material or Product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
- C. Certifications may be recent or previous test results of the material or product, but must be acceptable to ENGINEER.

1.04 SHOP DRAWINGS

- A. Shop Drawings: Submit to ENGINEER for review for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. Produce copies and distribute in accordance with SUBMITTAL PROCEDURES.
- B. Submit Shop Drawings for all materials on the project whether identified in the specifications or not.
- C. Submit newly prepared information, drawn to accurate scale. Highlight, encircle, or otherwise indicate deviations from the Contract Documents. Do not reproduce Contract Documents or copy standard information as the basis of Shop Drawings. Standard information prepared without specific reference to the project is not considered Shop Drawings.
- D. Shop Drawings include fabrication and installation Drawings, setting diagrams, schedules, patterns, templates, and similar Drawings. Include the following information:
 - 1. Dimension.
 - 2. Identification of products and materials included.
 - 3. Compliance with specified standards.
 - 4. Notation of coordination requirements.
 - 5. Notation of dimensions established by field measurements.
- E. Shop Drawings shall indicate shop painting requirements to include type of paint and manufacturer.
- F. Standard manufactured items in the form of catalog work sheets showing illustrated cuts of the items to be furnished, scale details, sizes, dimensions, quantity, and all other pertinent information should be submitted and approved in a similar manner.
- G. Measurements given on Shop Drawings or standard catalog sheets, as established from Contract Drawings and as approved by ENGINEER, shall be followed. When it is necessary to verify field measurements, they shall be checked and established by CONTRACTOR. The field measurements so established shall be followed by CONTRACTOR and by all affected trades.

1.05 PRODUCT DATA

- A. Product Data: Submit to ENGINEER for review for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. Provide copies and distribute in accordance with SUBMITTAL PROCEDURES article.

- B. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.
- C. After review distribute in accordance with the Submittal Procedures article above and provide copies for record documents.

1.06 MANUFACTURER'S INSTRUCTIONS

- A. When specified in individual specification sections, submit printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, to ENGINEER for delivery to OWNER in quantities specified for Product Data.
- B. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.

1.07 CONSTRUCTION SCHEDULE

- A. Bar Chart Schedule:
 - 1. Prepare a fully developed, horizontal bar chart type construction schedule. Submit within 14 days of the Notice to Proceed.
 - 2. Provide a separate item bar for each significant construction activity. Provide a continuous vertical line to identify the first working day of each week. Use the same breakdown of units of the work as indicated on schedule of values.
 - 3. Prepare schedule of sheet, or series of sheets, of stable transparency, or other reproducible media, of sufficient width to show data for entire construction period.
 - 4. Secure time commitments for performing critical elements of the work from parties involved. Coordinate each element on schedule with other construction activities, including the OWNER's operation of the facility and other CONTRACTORS on site; include minor elements involved in the sequence of the work. Show each activity in proper sequence. Indicate graphically sequences necessary for completion of related portions of the work.
 - 5. Coordinate construction schedule with schedule of values, list of subcontracts, submittal schedule, progress reports, payment requests, and other schedules.
 - 6. Indicate completion in advance of the date established for substantial completion. Indicate substantial completion of schedule to allow time for ENGINEER's procedures necessary for certification of substantial completion.
- B. Schedule Updating: Revise schedule after each meeting or activity, where revisions have been recognized or made within two weeks following the meeting or activity.
 - 1. An updated schedule must be submitted with each application for payment.

1.08 SUBMITTAL SCHEDULE

- A. After development and acceptance of the construction schedule, prepare a complete schedule of submittals. Submit schedule within 14 days of the Notice to Proceed.

- B. Coordinate submittal schedule with the list of subcontracts, schedule of values, and the list of products as well as construction schedule.
- C. Prepare schedule in chronological order; include submittals required during the first 90 days of construction. Provide the following information:
 - 1. Scheduled date for the first submittal.
 - 2. Related section number.
 - 3. Submittal category.
 - 4. Name of subcontractor.
 - 5. Description of the part of the work covered.
 - 6. Scheduled date for Resubmittal.
 - 7. Scheduled date ENGINEER's final release or approval.
- D. Following response to initial submittal, print and distribute copies to ENGINEER, OWNER, subcontractors, and other parties required to comply with submittal dates indicated. Post copies in the project meeting room and field office.
- E. When revisions are made, distribute to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the work and are no longer involved in construction activities.
- F. Schedule Updating: Revise schedule after each meeting or activity, where revisions have been recognized or made within two weeks following the meeting or activity.

1.09 SCHEDULE OF VALUES

- A. Schedule of Values
 - 1. Within thirty (30) days after issuance of the Notice to Proceed, the CONTRACTOR shall submit two (2) copies of the proposed schedule of values for the OWNER's review and approval.
 - 2. Schedule of values shall be revised as needed based on OWNER's comments.
 - 3. The schedule of values shall be organized according to specification divisions.
 - 4. Schedule of values shall include sufficient breakdown for tracking all costs.
 - 5. A Lump Sum Payment equal to 1-1/2% of the total Bid Price (to include all bonds, insurance, move-on expenses, etc.) will be allowed for "mobilization" as a progress payment line item. The actual cost of bonds and insurance (up to the maximum payment of 1-1/2%) will be considered in the initial payment request provided that cost documentation suitable to the OWNER is furnished by the CONTRACTOR. Any outstanding balance of the mobilization line item will be payable when the Project work is 10% complete as indicated by the approved progress payments (less cost of mobilization and stored equipment).

2.00 PRODUCTS

Not Applicable

3.00 EXECUTION

3.01 ENGINEER'S ACTION

- A. Except for submittals for record, information or similar purposes, where action and return is required or requested, ENGINEER will review each submittal, mark to indicate action taken, and return promptly.
 - 1. Compliance with specified characteristics is CONTRACTOR's responsibility.
- B. Action Stamp: ENGINEER will stamp each submittal with a uniform, self-explanatory action stamp. The stamp will be appropriately marked, as follows, to indicate the action taken:
 - 1. Final Unrestricted Release: Where submittals are marked "No Exceptions Taken" that part of the work covered by the submittal may proceed provided it complies with the requirements of the Contract Documents; final acceptance will depend upon the compliance.
 - 2. Final-But-Restricted Release: When submittals are marked "Make Corrections Noted" that part of the work covered by the submittal may proceed, provided it complies with notation or correction on the submittal and requirements of the Contract Documents; final acceptance will depend on that compliance.
 - 3. Returned for Resubmittal: When submittal is marked "Rejected" or "Revise and Resubmit" do not proceed with the part of the work covered by the submittal, including purchasing, fabrication, delivery, or other activity. Revise or prepare a new submittal in accordance with the notations; resubmit without delay. Repeat if necessary to obtain a different action mark.
 - a. Do not permit submittals marked "Rejected" or "Revise and Resubmit" to be used at site, or elsewhere where work is in progress.
 - 4. Additional Information Needed: When submittal is marked "Submit Specified Item" CONTRACTOR shall submit requested information.
 - 5. Other Action: Where a submittal is primarily for information or record purposes, special processing or other activity, the submittal will be returned, marked "Acknowledge Receipt".
 - 6. The approval of ENGINEER shall not relieve CONTRACTOR of responsibility for errors on Drawings or submittals as ENGINEER's checking is intended to cover compliance with Drawings and specifications and not enter into every detail of the shop work.

END OF SECTION

1.00 GENERAL**1.01 DESCRIPTION**

- A. The CONTRACTOR shall furnish all labor, materials, tools and equipment necessary to provide access to the face of Barton Dam and other miscellaneous areas.
- B. The water level in the upstream pond will not be lowered as part of this project.

1.02 PROTECTION OF TREES

- A. All trees which might be subject to damage by the CONTRACTOR's operations shall be adequately protected against damage to the bark by 2-inch thick vertical planking securely wired or tied completely around the tree trunk. Such protection shall not be removed until authorized by the OWNER.

1.03 SECURITY

- A. CONTRACTOR shall provide written documentation of the CONTRACTOR's safety plan for the work.
- B. All work shall be performed in accordance with OSHA/MIOSHA.
- C. The site is accessible to the public.
- D. The OWNER's site security requirements shall be met. Requirements are subject to change.
- E. If this access is elected, CONTRACTOR shall daisy chain the access gate on the east side of the dam.
- F. Existing access gates and chains shall remain locked at all times.
- G. All security precautions and measures shall be the responsibility of the CONTRACTOR.
- H. The OWNER shall be responsible for the lock out of the radial gates at the dam. CONTRACTOR shall provide a minimum seven days advanced notice to the OWNER.
- I. The OWNER shall be responsible for the lock out of the hydroelectric turbine. CONTRACTOR shall provide a minimum seven days advanced notice to the OWNER.
- J. Provide proper signage at both ends of the walkway notifying the public of walkway closures and construction activities.
- K. Provide safety fencing around material or equipment storage.

1.04 CONSTRUCTION ACCESS

- A. There is limited access for construction equipment and materials at the site.
 - 1. The west side of the dam can be accessed from the parking lot and access path near the Barton Pump Station off of Huron River Drive. This access path passes beneath the railroad tracks and has limited clearance for large equipment. The existing concrete shall be protected from damaging equipment tracks.
 - 2. The east side of the dam can be accessed via a secured gate. Coordination with the OWNER will be required. Larger pieces of equipment and materials can utilize this route, however access down to the river will be across the steep embankment near the powerhouse.
 - 3. Only limited construction equipment will be permitted near the work site at the dam. Personal vehicles shall remain parked only in the parking lot near Barton Pump Station.

1.05 WORK AREA AND STORAGE OF MATERIALS

- A. The working area shall be organized in an orderly manner with storage and tool sheds, sanitary facilities, parking areas for employees, and all other necessary facilities developed and maintained by the CONTRACTOR. The CONTRACTOR shall keep the work site and all access routes clean and dust free.
- B. CONTRACTOR shall not allow any trash, concrete or other construction debris to enter the river. Any materials that fall into the river shall be retrieved and removed by the CONTRACTOR.
- C. All materials, supplies and equipment, whether furnished by the CONTRACTOR or by the OWNER, shall be delivered, stored and handled as to prevent the inclusion of foreign materials and/or damage by water, freezing, breakage or other causes. Packaged materials shall be delivered in the original unopened containers and shall be stored until ready for use. All materials which have been stored shall meet the requirements of the Specifications at the time they are used in the project.
- D. A CONTRACTOR's field office will not be permitted on the site.

1.06 NOTIFICATION TO UTILITIES

- A. Prior to the start of any operations in the vicinity of any utilities, the CONTRACTOR shall notify the utility companies and request that they stake out the locations of the utilities in question.

1.07 EXISTING PUBLIC UTILITIES

- A. The CONTRACTOR shall conduct his operations so as not to damage any existing utility. The CONTRACTOR shall correct, at his own expense, any injury caused during the operations of his subcontractors or suppliers.

1.08 SANITARY REQUIREMENTS

- A. The CONTRACTOR shall provide adequate sanitary facilities for all persons employed on the project. The sanitary facilities shall conform in every way to the requirements of the "General Safety Rules and Regulations for the Construction Industry".

- B. The sanitary facility shall be located on the east side of the dam near the powerhouse.
- C. The sanitary facility shall be securely fixed to the ground to prevent vandalism.
- D. The sanitary facility shall be locked by the CONTRACTOR during non-working hours.

2.00 PRODUCTS

Not Applicable

3.00 EXECUTION

3.01 CONTROL OF WATER POLLUTION AND SILTATION

A. General Requirements

1. The CONTRACTOR shall conduct his work in a manner to comply with the Soil Erosion and Sedimentation Control Act of 1972, (MICH P.A. 347) that will not cause damaging siltation or pollution of the water in streams, rivers, lakes and reservoirs. All work of water pollution and siltation control is subject to inspection by the Michigan Department of Environmental Quality (MDEQ).
2. Construction operations shall be conducted in such manner as to reduce erosion to the practicable minimum and prevent damaging siltation to streams or lakes. The area of erodible land exposed to the elements by operations shall be subject to approval of the OWNER and the duration of such exposure prior to final trimming and finishing of the areas shall be as short as practical. .
3. The CONTRACTOR shall conduct his work in such manner as to prevent the entry of fuels, oils, bituminous materials, chemicals, sewage or other harmful materials into streams, rivers, lakes or reservoirs.

3.02 RESTORATION

- A. All areas disturbed or damaged as a result of construction activities shall be repaired to original conditions or better.
- B. After work has been completed, the entire disturbed area at the site shall be graded to smooth, even surfaces matching the original surface.
- C. If elected by the OWNER, the CONTRACTOR shall disassemble and store the access system in a place designated by the OWNER. Locations shall be near the powerhouse or the Barton Pump Station. Otherwise, the CONTRACTOR shall dispose of the access system.
- D. All debris and larger stones and sticks and the like shall be removed and disposed of and the entire disturbed area made ready for the addition of top soil and seeding.
- E. After all construction has been completed, the CONTRACTOR shall spread 4 inches of approved top soil over all disturbed areas. The CONTRACTOR shall secure and deliver to the site whatever amount is required at his own expense.

- F. On slopes greater than 3:1 and all slopes on the embankment, CONTRACTOR shall utilize non-woven erosion control mats, fully anchored in place.
- G. The parking lot and gravel access drives shall be maintained free of dirt, silt and construction debris. At the completion of the project, the gravel areas shall be scarified, regraded and stone added as needed. Paved surfaces, such as Huron River Drive, shall be cleaned weekly or at the OWNER'S request.

END OF SECTION

1.00 GENERAL**1.01 DESCRIPTION OF WORK**

- A. The CONTRACTOR shall be responsible for providing and paying for the services of an independent testing firm (acceptable to the OWNER) to perform testing of concrete cores and related tasks.
- B. Work under this contract includes the coordination with the testing firm to provide services as described in this section.
- C. Acceptable testing companies for selection by the CONTRACTOR are:
 - 1. CTI (Brighton, Michigan; Telephone (248) 486-5100).
 - 2. SME (Plymouth, Michigan; Telephone (734) 454-9900).
 - 3. PSI (Plymouth, Michigan; Telephone (734) 453-7900).

1.02 CORING

- A. CONTRACTOR shall perform coring of the existing concrete. Cores shall be used by the testing firm for analysis. Coring shall be coordinated with the requirements of the testing firm.
- B. Once the access system is constructed, CONTRACTOR and OWNER shall visually inspect the face of the dam and determine the final locations of the cores.
- C. Prior to performing the cores, CONTRACTOR shall utilize the services of his testing company to locate the reinforcing steel using a pachometer. All efforts shall be taken to avoid cutting the reinforcing steel during the coring.
- D. It is anticipated that approximately four (4) or five (5) cores shall be performed per bay. Two (2) or three (3) cores shall be taken in the crest beam, one (1) core in the face of the spillway, and one (1) core into the pier between the bays. Please note that two of the cores in the crest beam shall be used to determine the extent of the deterioration while the last core in the crest beam shall be used for petrographic analysis by the testing company.
- E. CONTRACTOR shall include a unit price for additional cores in his proposal.
- F. The depth of the cores shall vary. The cores into the crest beams shall be 4-inch diameter, approximately 12 to 15-inches deep. Cores into the spillway, wingwalls and piers shall likely vary from 6 to 12-inches deep. Final dimensions of the cores shall be coordinated by the CONTRACTOR with his testing company.
- G. The holes left by the coring shall be fully grouted with non-shrink, non-metallic grout. Prior to grouting, the interior of the holes shall be mechanically roughening to create a Surface Profile CSP 6 or 7 (minimum) as established by the International Concrete Repair Institute. The hole shall then be blown clean, removing all debris and dust. A bonding agent shall be applied prior to grouting.
- H. The grout shall be Sika Dur 42 Grout-Pak PT. The grout is pre-extended and flowable. It cannot be hand packed.

- I. As the cores are generally into the vertical faces of the structures, formwork will be required at the face of the core, covering approximately $\frac{3}{4}$ of the opening and allowing the grout to be poured in via a "bird's beak".
- J. All anchoring shall be removed and patched.

1.03 TESTING

- A. At each Bay, it is anticipated that the following tests shall be performed:
 - 1. Locate and mark the reinforcing steel in the field using a pachometer in the immediate vicinities of the proposed cores.
 - 2. Perform two (2) compressive strength tests
 - 3. Perform one (1) petrographic analysis
 - 4. Prepare report of findings
- B. Any additional cores shall be used by the OWNER to visually determine the extent and depth of the deterioration.
- C. The actual amount and/or type of test shall be determined in the field and will be adjusted as the work progresses based upon findings and results.
- D. The intent of the petrographic analysis is to provide information including the water/cement ratio, the approximate mix design and the hardness. Most importantly, petrographic testing is desired to help determine if the concrete has gone through freeze/thaw cycles and if the cement paste is breaking down (carbonation) as a result. The core dimensions required for petrographic testing is approximately 4-inch diameter and 12-inches long, but shall be coordinated with the testing company.
- E. CONTRACTOR shall submit a report of findings from the testing company.
 - 1. Interim results from the compressive strength tests shall be provided as the break tests are performed.
 - 2. Interim results, including analysis and written findings, from the petrographic tests shall be expedited and provided four (4) weeks after the cores are taken.
 - 3. A final report summarizing all tests shall be provided at the completion of the coring.

END OF SECTION

1.00 GENERAL**1.01 DESCRIPTION**

- A. CONTRACTOR shall furnish all labor, materials, tools and equipment necessary to design, fabricate, construct, install, relocate and remove an access system for the downstream face of Barton Dam.
- B. CONTRACTOR shall similarly provide access to other miscellaneous areas at the site identified by the Contract. Access is required to the following areas:
 - 1. Crest beams.
 - 2. Spillway face.
 - 3. Piers.
 - 4. East wing wall downstream of powerhouse.
 - 5. Upstream right retaining wall.
 - 6. Multiple locations of the intake structure.

1.02 ACCESS SYSTEM

- A. CONTRACTOR shall design, fabricate, construct and install an access system for the crest beams, spillway face and piers meeting the minimum requirements described as follows:
 - 1. The access system may be constructed through various means and methods as proposed by the CONTRACTOR. Possible methods could be, but is not limited to, scaffolding, platforms or walkways across the bay, steps, barge or temporary floating dock.
 - a. The Base Bid will be to provide an access system constructed of wood. The design shall allow for the removal and the relocation of the system to another bay. At the completion of the project, the access system shall be removed by the CONTRACTOR and disposed of.
 - b. The Alternate Bid will be to provide an access system constructed of aluminum or other system. The intent of this system will be to allow the OWNER to reuse this system during subsequent phases of this project (i.e. concrete repairs). In the alternate bid, the system will remain the property of the OWNER.
 - 2. It is anticipated that access could be constructed to two adjacent bays simultaneously. Only one stairway would be provided if access over the dividing piers could be accommodated. Only two bays maximum may be accessed at the same time. Only upon completion of the testing and inspection can the access system be relocated to another two bays.
 - 3. The OWNER will require use of the CONTRACTOR's access system for inspection and observation of the concrete deterioration.
 - 4. As an alternate for consideration only, CONTRACTOR can provide a separate cost to utilize fall restraint devices in lieu of portions of the access system.

5. The access system shall include provisions for working beneath the leaking gate seals as there is a continuous flow of water to varying degrees. These provisions will need to be in place for the OWNER and ENGINEER inspection of the dam components. Provisions could include sand bags along the crest beam or other such means to divert the water.
 6. The access system shall conform to all OSHA/MIOSHA safety requirements.
 7. Provide handrail 42-inch high handrail along all walkways and elevated platforms.
 8. Provide slip resistant surfaces, planking, steps and other walking surfaces.
 9. The minimum walking surface width shall be 3'-0" between handrails. CONTRACTOR shall provide wider walking surfaces where necessary for coring/testing activities.
 10. The access system shall be sealed by a registered professional ENGINEER licensed in the State of Michigan.
 11. CONTRACTOR shall coordinate with the core drilling efforts to ensure that the design of the access system will accommodate the needs of the drilling machine.
- B. In addition to the access system for the face of the dam, CONTRACTOR shall provide access across the river to the system. This shall be by means of the following:
1. Floating docks on barrels. CONTRACTOR shall address restricting public access of this walkway.
 2. Pontoon boat, which shall be locked up for security.
 3. As an alternate for consideration only, CONTRACTOR can provide a separate cost to utilize fall restraint devices in lieu of the docks or pontoon to access the system.
- C. CONTRACTOR shall provide access to other miscellaneous areas at the site (i.e. intake, wingwall, retaining wall). It is anticipated that access will be by a floating work surface (pontoon boat or barge). The surface shall be securely tied during all work efforts.

2.00 PRODUCTS

Not Applicable

3.00 EXECUTION

- A. CONTRACTOR shall power wash algae growth in all areas to be inspected.
- B. CONTRACTOR shall provide a cost to disassemble and reinstall in different bays. It is estimated that eight of the ten bays will require that the access system be installed (two bays at a time). The final number of bays shall be determined based upon findings in the field and the availability of funds.
- C. All mounting hardware including bolts, nuts, concrete screws, etc. shall be removed upon completion. All holes shall be repaired with non-shrink non-metallic grout.

- D. Should the CONTRACTOR'S proposed method of access or concrete coring include the use of mechanical equipment, fuels, hydraulic fluids, oils and/or grease, the CONTRACTOR shall install an oil spill boom around such equipment.
1. Oil spill booms shall be provided as necessary around the bays, barges or other means provided by the CONTRACTOR.
 2. The oil spill boom shall be:
 - a. Properly selected for protected water and fast current applications.
 - b. Vinyl coated polyester or nylon.
 - c. Ultraviolet resistant.
 - d. Provided with lead weights for ballast.
 - e. Provided by Boom Environmental Products (800-770-BOOM) or Granite Environmental (1-772-646-0597).

END OF SECTION

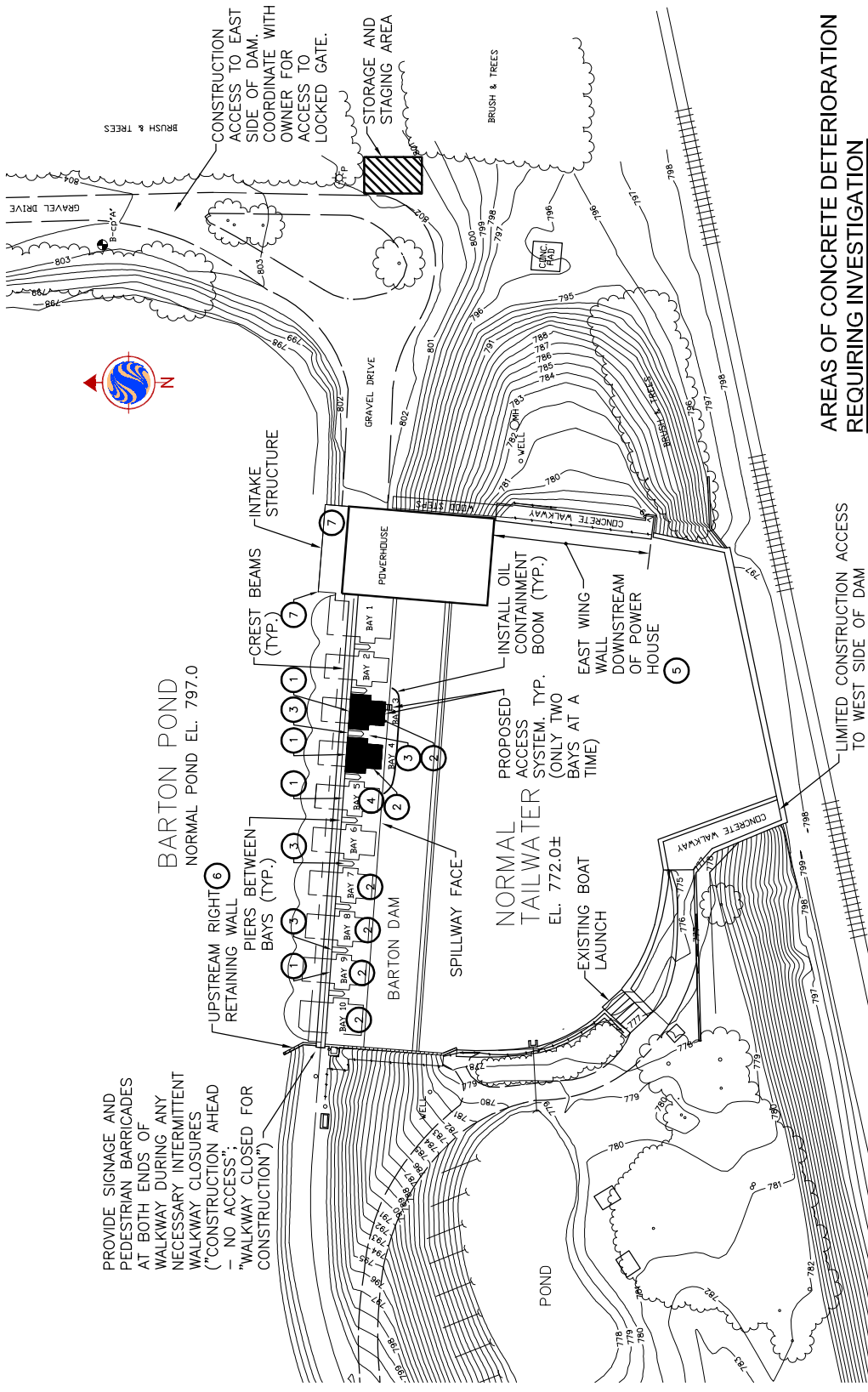
Appendix A
Drawings



Copyright Reserved
 The Contractor shall verify and be responsible for all dimensions, DO NOT SCALE. The Engineer shall not be responsible for any damage or loss of any nature or kind, including but not limited to, the use of any information derived from this drawing in any way, in any part of any project, in any jurisdiction, without the prior written permission of the Engineer. This drawing shall not be used for any purpose other than that intended by the Engineer.

Considerations

Legend



AREAS OF CONCRETE DETERIORATION REQUIRING INVESTIGATION

- 1 SPALLING OF CREST BEAMS – BAYS 3, 4, 5, AND 9.
- 2 SPALLING OF SPILLWAY FACE – BAYS 3, 4, 7, 8, 9, AND 10.
- 3 SPALLING OF PIERS – BETWEEN BAYS 1/4, 6/7 AND 8/9.
- 4 CRACKING OF SPILLWAY FACE – BAY 5.
- 5 SPALLING OF DOWNSTREAM LEFT WING WALL ABOVE WATERLINE.
- 6 DETERIORATION IN NUMEROUS LOCATIONS AT THE INTAKE STRUCTURE (NE CORNER, BEAMS SUPPORTING GRATING).

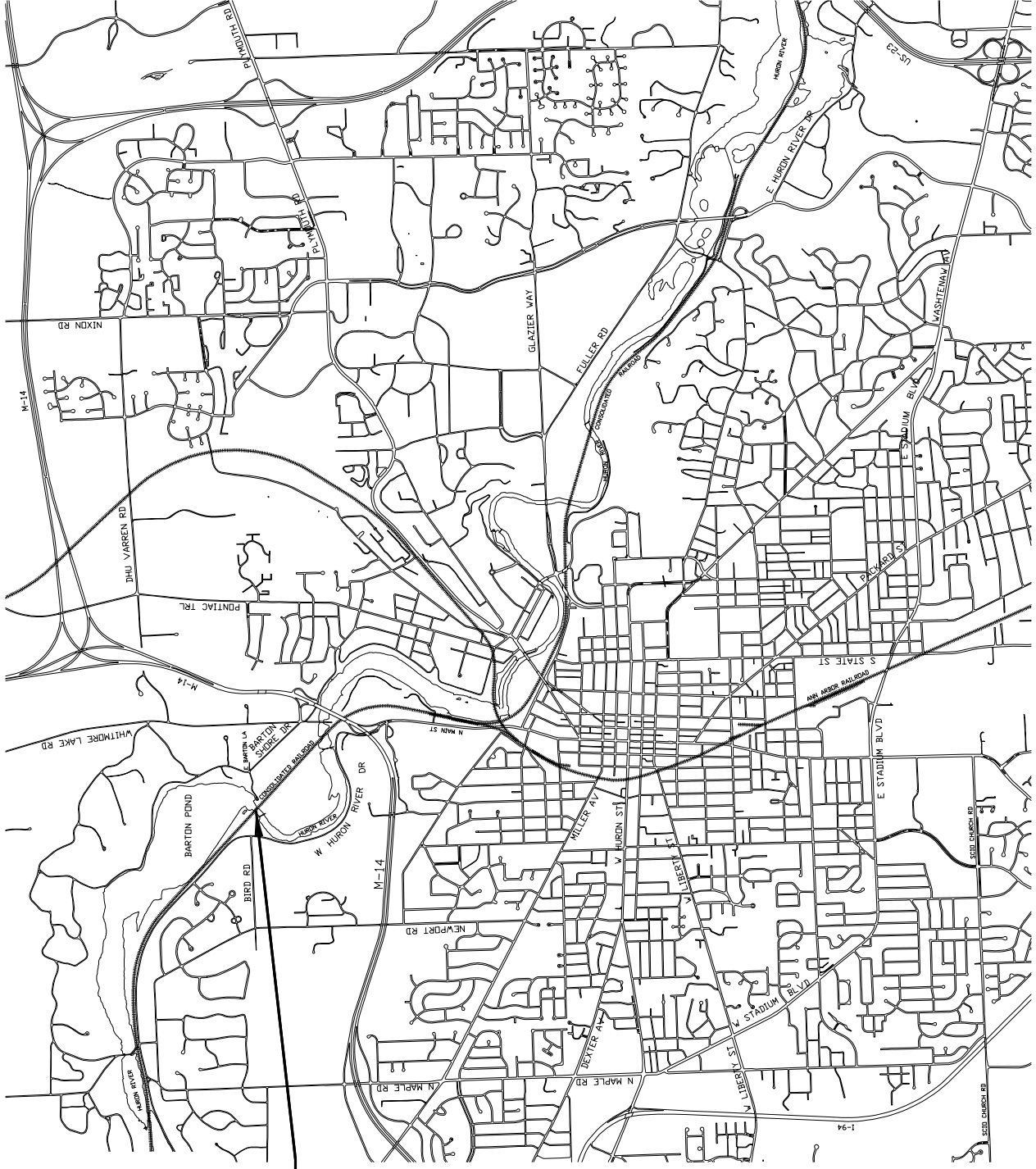
BARTON DAM SITE PLAN

RAIL

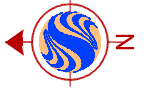
Revision	By	Appd.	Y/M/D

DATE	BY	APPROVED	TITLE

Client/Project	Scale	Sheet	Revisions
CITY OF ANN ARBOR	AS NOTED	1	1 of 1
BARTON DAM CONCRETE TESTING AND ACCESS SYSTEM ANN ARBOR, MICHIGAN			
BARTON DAM SITE PLAN			



BARTON DAM

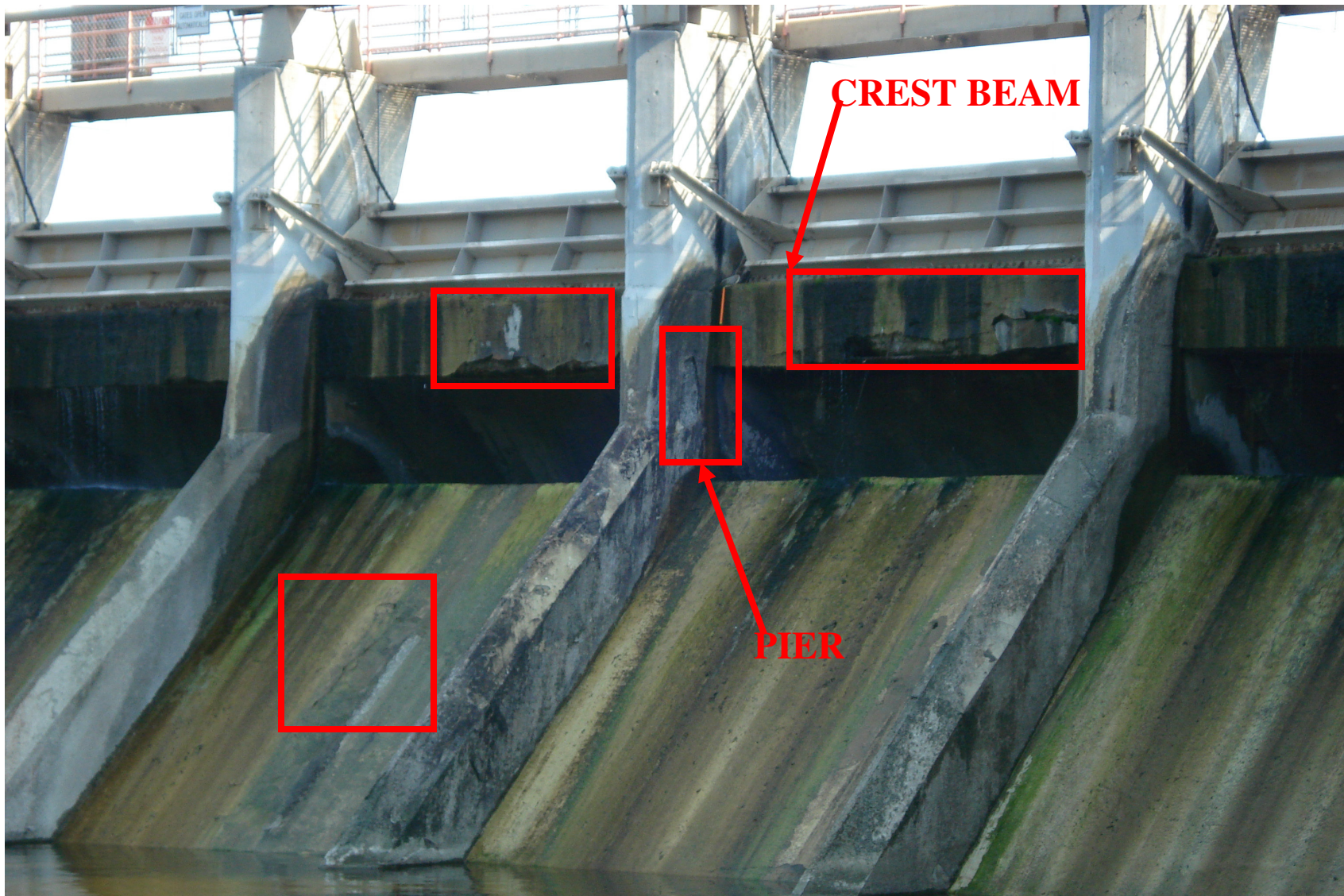


LOCATION MAP - CITY OF ANN ARBOR

SCALE: NONE

Appendix B Photographs

The following photographs are representative of typical locations where concrete coring and testing will be required. Access to these locations will therefore be the responsibility of the CONTRACTOR.



Crest Beams, Piers, Spillway Face – Cores shall be taken into the vertical faces of the crest beams and piers. Cores shall also be taken into the spillway face.



Spillway Face – Cores shall be taken into the spillway face. Shown above is the spillway face looking down from the walkway on top of the dam.



Downstream Left Wing Wall – Cores shall be taken into the vertical face of the downstream left wing wall just above the water line.



Upstream Right Retaining Wall – Cores shall be taken into the vertical face of the upstream right retaining wall just above the water line.



Intake Structure – Cores shall be taken into the vertical faces of the intake structure just above the water line.