

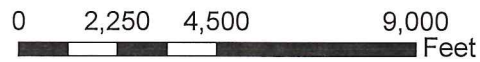
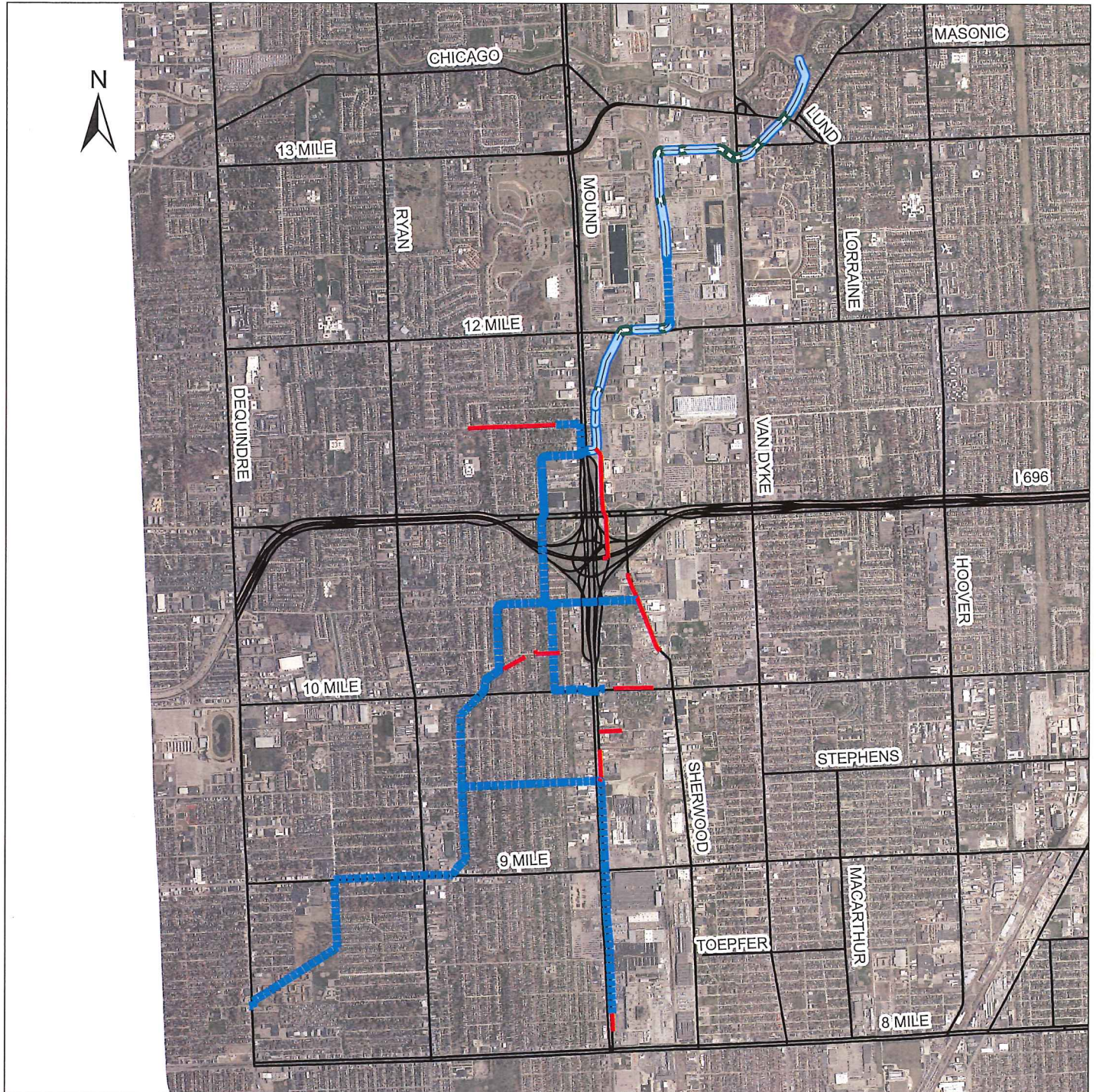
Gregg
Miller
Nash

BEAR CREEK
INTER-COUNTY DRAINAGE BOARD
FEBRUARY 28, 2018
10:00 A.M.
AGENDA

	<u>Page</u>
1. Call meeting to order and roll call	
2. Approval of Agenda	
3. Public participation	
4. Approval of minutes of meeting of January 24, 2018	3
5. Progress Report Update – Jeff Bednar/Sydney Kanan, Anderson, Eckstein & Westrick	6
6. Consideration of approval of invoices:	15
See attached spreadsheet	
7. Financial Update – Bruce Manning	16
8. Old Business	
9. New Business	
10. Adjourn	

BEAR CREEK DRAIN (INTER COUNTY) & BRANCHES

CENTERLINE/WARREN/OAKLAND COUNTY



Drain Length (Feet/Miles):
87,023.47 / 16.48

Legend

- | Enclosed Gravity | Open Channel |
|--|--------------|
| — < 60" Dia | Ditch |
| ≥ 60" Dia | Pond |
| Culvert | |

A meeting of the Inter-County Drainage Board for the **BEAR CREEK DRAIN** was held in the Office of the Macomb County Public Works Commissioner, 21777 Dunham Road, Clinton Township, Michigan on January 24, 2018.

PRESENT: Michael Gregg, Chairman
Michigan Department of Agriculture & Rural Development

Candice Miller, Secretary
Macomb County Public Works Commissioner

Jim Nash, Member
Oakland County Water Resources Commissioner

ALSO PRESENT: Karen Czernel, Deputy, Bruce Manning, Financial Manager, Evans Bantios, P.E., Construction and Maintenance Manager Tom Stockel, Construction Manager, Tamara Keskeny, Property Manager, Jeff Bednar, P.E., CFM, Environmental Engineer, Dan Heaton, Public Relations Manager, Claudette Wizniuk, Environmental Educator, Barbara Delecke, Administrative Services, Office of Macomb County Public Works Commissioner; Anne Vaara, Chief Deputy, Steve Korth, P.E., Manager, Office of Oakland County Water Resources Commissioner; Louis Urban, P.E., Sydney Kanan, Graduate Engineer, Anderson, Eckstein & Westrick, Inc. (AEW)

The Chairman called the meeting to order at 11:24 a.m.

A motion was made by Mr. Nash, supported by Ms. Miller to approve the agenda as presented.

Adopted: YEAS: 3
NAYS: 0

The minutes of the meeting of December 19, 2017 were presented. A motion was made by Ms. Miller, supported by Mr. Nash to approve the minutes as presented.

Adopted: YEAS: 3
NAYS: 0

AEW prepared and submitted three proposals to staff. However, staff has not yet reviewed the proposals in their entirety. Mr. Bednar asked that the Board receive and file the proposals pending further review by staff. However, Mr. Bednar felt that action should be taken on Proposal 2 which pertains to the condition assessment for the Warren Branches by Doetsch. Any work that would need to be done could then be part of the overall rehabilitation/repair proposal.

A motion was made by Ms. Miller, supported by Mr. Nash to approve a not-to-exceed budget of \$75,000 for Doetsch for CCTV inspections and a not-to-exceed budget of \$25,000 for AEW for construction oversight and to allow the secretary of the Board to sign the initial proposal. AEW will provide the full proposal for work at the February meeting.

Adopted: YEAS: 3
NAYS: 0

Mr. Bednar suggested putting the other two proposals on-hold until the condition assessment is complete.

Mr. Korth stated that due to inclement weather Oakland County Water Resources has not been able to field verify the physical existence of the Bear Creek Extension.

A motion was made by Mr. Nash, supported by Ms. Miller to receive and file the project update given by Mr. Bednar and Ms. Kanan.

Adopted: YEAS: 3
NAYS: 0

A proposal was submitted by Urban Land Consultants to perform a boundary survey, proposed splits and combinations and easement drawing and description for a total cost of \$3,600 on the surplus property on Marcy Street on the Bear Creek Drain. The property will be split between homeowners who property abuts the land. The Drainage District will maintain an easement on the property for access to the drain.

A motion was made by Ms. Miller, supported by Mr. Nash to authorize the Chair to sign the proposal agreement as submitted by Urban Land Consultants and proceed with aforementioned work.

Adopted: YEAS: 3
NAYS: 0

The Chairman presented the invoices totaling \$27,334.85 as provided to the board for review and approval.

Motion was made by Ms. Miller, supported by Mr. Nash to approve the invoices as presented.

Adopted: YEAS: 3
NAYS: 0

A motion was made by Mr. Nash, supported by Ms. Miller to receive and file the financial report given by Mr. Manning.

Adopted: YEAS: 3
NAYS: 0

There being no further business, it was moved by Mr. Nash, supported by Ms. Miller, that the meeting of the Bear Creek Inter-County Drainage Board be adjourned.

Adopted: YEAS: 3
NAYS: 0

The meeting was adjourned at approximately 11:39 a.m.



Candice S. Miller, Secretary
Bear Creek Inter-County Drainage Board

STATE OF MICHIGAN
COUNTY OF MACOMB

I certify that the foregoing is a true and correct copy of proceedings taken by the Inter-County Drainage Board for the Drainage District shown on the attached set of Minutes, on January 24, 2018, the original of which is on file in the Public Works Commissioner's Office. Public notice of the meeting was given pursuant to Act No. 267, Public Acts of Michigan, 1975, including, in the case of a special or rescheduled meeting or a meeting secured for more than 36 hours, notice by posting at least 18 hours prior to the time set for the meeting.



Candice S. Miller, Secretary
Bear Creek Inter-County Drainage Board

DATED: 1/29/18

9114.bd

PROGRESS UPDATE

PROJECT: Bear Creek Infrastructure Rehabilitation **DATE:** February 21, 2018
Bear Creek District Delineation
Bear Creek Green Infrastructure

UPDATE BY: Sydney Kanan

BEAR CREEK INFRASTRUCTURE REHABILITATION

Tasks accomplished:

- a. Provided preliminary estimate for rehabilitation and replacement repairs. (\$785,330.00)
- b. AEW, MCPWO and OCWRC conducted a meeting to discuss prioritization of rehabilitation locations.
 - a. Based on this meeting a revised estimate was provided (\$601,260).

Anticipated tasks:

- a. AEW to postpone until the condition assessment, review and recommendation are complete for the Bear Creek Branches.

Requested Information/Actions from MCPWO or OCWRC:

- a. MCPWO to look into cutting down the tree over structure 016C088.

BEAR CREEK DISTRICT DELINEATION

Tasks accomplished:

- a. District delineation is complete and has determined the Bear Creek Warren Branches and Bear Creek Warren Branch No. 2 are a part of the Bear Creek and that the Bear Creek Extension is its own drain.
- b. AEW has compiled three (3) proposals for professional services as follows;
 - Proposal 1 – Route and Course Certificate (Main Line and Branches) – **ON HOLD**
 - Proposal 2 – Condition Assessment (Branches) - **ATTACHED**
 - Proposal 3 – Easement Inventory (Main Line and Branches) – **ON HOLD**

Anticipated tasks:

Bear Creek Extension

- a. Oakland County WRC to field verify physical existence of the Bear Creek Extension and report findings at the January meeting.
 - Depending on the results of the field investigation, potential coordination with Fahey, Schultz, Burzych, Rhodes may be needed to execute petition.

Route and Course Certificate

- a. On hold.

Condition Assessment

- a. Pending Proposal 2 approval.

Easements

- a. On hold.

Accounting/Apportionments

- a. MCPWO to discuss consolidating tributary drains with the Warren Branches to be transferred to a Chapter 20 drain.
- b. Apportionments will be discussed further pending ownership discussion.

Tributary Drains

- a. AEW to perform a district delineation on the Sharkey Relief Drain.

Requested Information/Actions from MCPWO or OCWRC:

- a. MCPWO to locate historical plans relating to the "East Route"

BEAR CREEK GREEN INFRASTRUCTURE

Tasks accomplished:

- a. N/A

Anticipated tasks:

- a. Determine framework for introducing green infrastructure to communities within the Bear Creek Drainage District.

Requested Information/Actions from MCPWO or OCWRC:

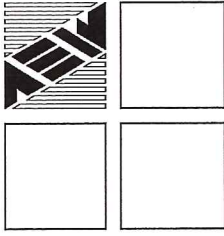
- a. N/A

ANDERSON, ECKSTEIN & WESTRICK, INC. SHELBY TOWNSHIP, MICHIGAN ENGINEERS COST ESTIMATE Bear Creek Infrastructure Rehabilitation - Prioritized Locations AEW PROJECT NO. 0211-0187	PROJECT :	BEAR CREEK INFRASTRUCTURE REHABILITATION
	OWNER:	INTER-COUNTY DRAINAGE BOARD FOR BEAR CREEK
	PREPARED BY:	Sydney A. Kanan 02/15/18
	CHECKED BY:	Lou Urban, PE 02/15/18

WORK ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
Mobilization, Max 3%	1.00	Ea	\$ 17,500.00	\$ 17,500.00
Deep Concrete Repair	16.00	Sf	\$ 1,200.00	\$ 19,200.00
Deep Concrete Repair, Tap, 8 inch Location 1, 016M065-016M063	8.00	Sf	\$ 600.00	\$ 4,800.00
Deep Concrete Repair, Tap, 12 inch Location 1, 016M065-016M063	9.00	Sf	\$ 600.00	\$ 5,400.00
Location 2, 016M065-016M063	9.00	Sf	\$ 600.00	\$ 5,400.00
Location 3, 016S001-016M065	9.00	Sf	\$ 600.00	\$ 5,400.00
Location 4, 016S001-016M065	9.00	Sf	\$ 600.00	\$ 5,400.00
Location 5, 016S001-016M065	9.00	Sf	\$ 600.00	\$ 5,400.00
Deep Concrete Repair, Tap, 36 inch Location 1, 016M022-016M020B	25.00	Sf	\$ 600.00	\$ 15,000.00
Deep Concrete Repair, Tap, 60 inch Location 1, 016M022-016M020A	49.00	Sf	\$ 600.00	\$ 29,400.00
Cleaning, 12 inch	68.00	Ft	\$ 30.00	\$ 2,040.00
Cleaning, 54 inch	1,437.00	Ft	\$ 50.00	\$ 71,850.00
Mechanical Removal of Debris				
Location 1, 016I004-016I003B	1.00	Ea	\$ 1,500.00	\$ 1,500.00
Location 2, 016I004-016I003B	1.00	Ea	\$ 3,000.00	\$ 3,000.00
Location 3, 016I020-016I019	1.00	Ea	\$ 3,000.00	\$ 3,000.00
Location 4, 016M027-016M024B	1.00	Ea	\$ 2,500.00	\$ 2,500.00
Location 5, 016M027	1.00	Ea	\$ 1,500.00	\$ 1,500.00
Location 6, 016M071-016S001	1.00	Ea	\$ 2,000.00	\$ 2,000.00
Location 7, 016M071-016S001	1.00	Ea	\$ 2,000.00	\$ 2,000.00
Location 8, 016M072-016M071	1.00	Ea	\$ 1,000.00	\$ 1,000.00
Location 9, 016M072-016M071	1.00	Ea	\$ 1,000.00	\$ 1,000.00
Location 10, 016M072-016M071	1.00	Ea	\$ 1,500.00	\$ 1,500.00
Location 11, 016M075-016M074	1.00	Ea	\$ 2,000.00	\$ 2,000.00
Location 12, 016M074-016M072	1.00	Ea	\$ 1,000.00	\$ 1,000.00
Location 13, 016M074-016M072	1.00	Ea	\$ 1,500.00	\$ 1,500.00
Location 14, 016M074-016M072	1.00	Ea	\$ 2,000.00	\$ 2,000.00
Location 15, 016M076	1.00	Ea	\$ 1,000.00	\$ 1,000.00
Mineral Deposit Removal				
Location 1, 016M076-016M075	1.00	Ea	\$ 500.00	\$ 500.00
Location 2, 016M076-016M075	1.00	Ea	\$ 500.00	\$ 500.00
Infiltration Seal	126.00	Ea	\$ 800.00	\$ 100,800.00
Cementitious Lining	275.00	Ft	\$ 200.00	\$ 55,000.00
Clean and Seal Joints, Manhole	2.00	Ea	\$ 3,000.00	\$ 6,000.00
Dr Structure, Rem	9.00	Ea	\$ 1,150.00	\$ 10,350.00
Curb and Gutter, Rem	26.00	Ft	\$ 30.00	\$ 780.00
Pavt Rem	69.00	Syd	\$ 20.00	\$ 1,380.00
Sewer, Rem, Less than 24 inch	15.00	Ft	\$ 15.00	\$ 225.00
Sewer, Rem, 24 inch to 48 inch	78.00	Ft	\$ 30.00	\$ 2,340.00
Dr Structure Cover	9.00	Ea	\$ 600.00	\$ 5,400.00
Dr Structure, 36 inch	2.00	Ea	\$ 4,000.00	\$ 8,000.00
Dr Structure, 36 inch, with 2' Sump	7.00	Ea	\$ 4,500.00	\$ 31,500.00
Sewer, CI A, 12 inch	15.00	Ft	\$ 50.00	\$ 750.00
Sewer, CI A, 30 inch	78.00	Ft	\$ 75.00	\$ 5,850.00
End Sect, Conc, 30 inch	1.00	Ea	\$ 1,200.00	\$ 1,200.00
Aggregate Base, 8 inch	69.00	Syd	\$ 25.00	\$ 1,725.00
Curb and Gutter, Conc, Misc	26.00	Ft	\$ 50.00	\$ 1,300.00
Conc Pavt, Nonreinf, 8 inch	28.00	Syd	\$ 75.00	\$ 2,100.00
HMA, 2C	11.00	Ton	\$ 300.00	\$ 3,300.00
HMA, 3C	11.00	Ton	\$ 300.00	\$ 3,300.00

ANDERSON, ECKSTEIN & WESTRICK, INC. SHELBY TOWNSHIP, MICHIGAN ENGINEERS COST ESTIMATE Bear Creek Infrastructure Rehabilitation - Prioritized Locations AEW PROJECT NO. 0211-0187	PROJECT :	BEAR CREEK INFRASTRUCTURE REHABILITATION
	OWNER:	INTER-COUNTY DRAINAGE BOARD FOR BEAR CREEK
	PREPARED BY:	Sydney A. Kanan 02/15/18
	CHECKED BY:	Lou Urban, PE 02/15/18

WORK ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
Tree Removal and Clearing	1.00	LS	\$ 5,000.00	\$ 5,000.00
Riprap, Heavy	15.00	Syd	\$ 60.00	\$ 900.00
Final Cleanup and Restoration, Open Channel	1.00	LS	\$ 1,000.00	\$ 1,000.00
TOTAL ESTIMATED CONSTRUCTION COST				\$ 462,500.00
CONTINGENCIES (10%)				\$ 46,250.00
ENGINEERING (7%)				\$ 32,380.00
CONSTRUCTION SURVEYING AND LAYOUT (2%)				\$ 9,250.00
CONSTRUCTION ADMINISTRATION (3%)				\$ 13,880.00
CONSTRUCTION OBSERVATION (6%)				\$ 27,750.00
AS-BUILT & GIS RECORDS (2%)				\$ 9,250.00
TOTAL ESTIMATED COST				\$601,260.00



ANDERSON, ECKSTEIN AND WESTRICK, INC.

51301 Schoenherr Road, Shelby Township, Michigan 48315
Civil Engineers • Surveyors • Architects 586-726-1234

February 28, 2018

Mr. Michael Gregg
Chair, Inter-County Drain Board for Bear Creek
21777 Dunham Road
Clinton Township, Michigan 48036

Reference: **Proposal for Professional Services**
Bear Creek Drain Condition Assessment

Dear Mr. Gregg:

Thank you for considering our firm for providing professional engineering and surveying services on the project referenced above.

Understanding of the Project

It is our understanding that you have requested a proposal for the preparation, execution and overseeing of CCTV investigation of the following parts of the Bear Creek Drain:

1. Warren Branches of Bear Creek Drain (North Segment): Approximately 4,171 lineal feet of 36 inch to 60 inch storm sewer.
2. Warren Branches of Bear Creek Drain (South Segment): Approximately 11,159 lineal feet of 42 inch to 180 inch storm sewer.
3. Warren Branch No 2 of Bear Creek Drain: Approximately 12,815 lineal feet of 24 inch to 96 inch storm sewer.

NOTE: Storm sewer sizes and lengths were taken from record plan provided by the City of Warren.

Services to be Provided:

AEW will provide the following services:

A. Preparation of Plans and Specifications

We will utilize GIS mapping to prepare a set of plans that show the location, size, length and structure numbers of the storm sewer lines proposed for CCTV investigation. From the GIS data will prepare a work schedule that indicates the map number, pipe id's, structure numbers, size and length.



Mr. Gregg
February 28, 2018
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We will prepare contract documents and specifications utilizing our standard EJCDC front end specifications or the standard front end specifications preferred by the Inter-County Drain Board for Bear Creek (ICDBBC).

B. General Project Oversight

During the CCTV investigation phase of the project we will be available on an as-needed basis to answer any questions that may come up. We will also prepare and submit monthly pay estimates to the ICDBBC based upon the work completed to date by the contractor.

C. Structure Location

AEW will provide a two-man survey crew to locate and GPS all structure located along the main line of the branches as well as the first structure upstream of the main line of the branches.

D. Structure Inspection

AEW will provide two MACP certified inspectors to perform a condition assessment on all structure located along the main line of the branches as well as the first structure upstream of the main line of the branches.

E. Construction Observation

Macomb County Public Works Office will provide as-needed construction observation.

F. QC of the CCTV Video and Repair Recommendations

Upon completion of the CCTV investigation, AEW staff will review the video of all segments, assign a PACP rating, develop recommendations for any rehabilitation required and prepare engineers estimates for the recommended repairs.

G. As-Builts

Upon completion of the CCTV investigation, AEW staff will review the CCTV reports and incorporate location, size, length and material into an as-built set of plans for the ICDBBC.



Mr. Gregg
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H. Meetings

AEW will attend monthly Inter-County Drain Board meetings to provide progress updates and general background knowledge for a period of one year (12 meetings total). This work will be performed on an hourly rate basis per the attached hourly Rate Table not to exceed \$13,000. This proposal does not include attendance at Inter-County Drainage Board meetings which will take place more than one year after this proposal is effective, should AEW be required to attend monthly Inter-County Drainage Board meetings which will take place after one year a separate proposal will be negotiated.

Fee for Professional Services

The following fees will be on a lump sum (fixed fee) basis, not to exceed without prior authorization:

Preparation of Plans and Specifications	\$6,500
General Project Oversight	\$4,200
Structure Location	\$4,000
Structure Inspection	\$24,000
QC of the CCTV Video and Repair Recommendations	\$12,800
As-Builts	\$3,800
Meetings	<u>\$13,000</u>
Total	\$68,300

Any additional services will be provided on an hourly basis according to our rate schedule effective for the period in which the work is performed. We have attached our current hourly rate schedule as part of this proposal; this schedule is revised effective January 1 of each year and is considered an amendment to the proposal at that time.

This proposal does not include revisions to the plans due to changes in the project presented by the Client or his representative once engineering work has begun.



Mr. Gregg
February 28, 2018
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Execution of the Agreement

We trust that this proposal meets your needs. Please advise if any modifications or clarifications are required. When you are prepared to authorize us to proceed, please sign, date, and return one copy of this agreement with original signatures for our use.

We thank you once again for the opportunity to work with you on this project.

Sincerely,

Anderson, Eckstein and Westrick, Inc.

Accepted By

Sydney A. Kanan
Graduate Engineer

Signature

Printed Name, Title

Louis J. Urban, PE
Senior Project Manager

Date

Enclosure: Current Hourly Rate Schedule
cc:

EXHIBIT "A"

HOURLY-BASE FEE SCHEDULE

PROFESSIONAL SERVICES

Where it is agreed that fees for services will be based upon the time worked on the project, such fees will be computed at the following rates:

<u>Classification Hourly Rate</u>	<u>2018 Rates</u>
Principal Engineer/Surveyor/Architect	\$166.00
Project Manager	\$162.50
Senior Project Engineer	\$152.50
Project Engineer/Project Surveyor/ Resident Project Representative	\$138.00
Operation and Maintenance Specialist	\$132.50
Graduate Engineer/Surveyor/Architect	\$114.50
Team Leader/Designer	\$114.50
Drafter/Technician	\$ 94.50
Clerical	\$ 45.50
One-person Survey Crew (Crew Chief) w/Truck and Equipment	\$162.50
Two-person Survey Crew (Crew Chief and Instrument Man w/Truck and Equipment)	\$223.00
Three-person Survey Crew (Crew Chief and Instrument Man and Assistant w/Truck and Equipment)	\$275.00
Three Person Sewer Crew	\$333.00
Four Person Sewer Crew	\$409.00
Construction Observer	\$ 94.50

If necessary, the Consultant would serve on litigation or as an expert witness at a rate of 1.5 times the current hourly rate.

These rates are inclusive of all overhead items that are normal business operations. No reimbursable for normal business operations will be allowed, i.e., mileage, faxes, phone bills, etc.

Hourly-Basis Fee Schedule to be adjusted beginning January 1, 2019.

Effective January 1, 2018

BEAR CREEK - 2/28/18

<u>Funding Source</u>	<u>Apportionment</u>	<u>Manager</u>	<u>Vendor</u>	<u>Amount</u>	<u>Invoice Detail</u>	<u>Project Summary</u>	<u>Project Balance</u>
Bear Creek	Chapter 21	Bednar	Anderson, Eckstein & Westrick, Inc.	\$ 13,307.00	Invoice #0116681 - 1/31/18 Engineering Services - 12/11/17 - 1/7/18	Infrastructure Rehabilitation	\$ 693.00
		Bednar	Anderson, Eckstein & Westrick, Inc.	\$ 5,474.50	Invoice #0116682 - 1/31/18 Engineering Services - 12/11/17 - 1/7/18	District Delineation	
		Keskeny	Urban Land Consultants, LLC	\$ 1,800.00	Boundary Survey, Splits & Combinations, Easement Drawing & Description		

Total \$ 20,581.50

YTD Trial Balance

Fund: Bear Creek Combined

As of Fiscal Period: Oct 1, 2017-Jan 31, 2018

	O&M Balance 9/30/2017	O&M	Total 1/31/2018
Cash - Operating	1,572,258	(41,509)	1,530,749
Accounts Receivable			0
Assets			0
Liabilities⁽¹⁾		23,788	23,788
Revenues		3,312	3,312
Expenditures		68,609	68,609
Equity	1,572,258		1,506,961
	0		

NOTES

1) Net amount of \$23,394 due to AEW for final invoices relating to SAW 1407.
Final request is going under MS4 review at state level