

AGREEMENT BETWEEN  
THE CITY OF ANN ARBOR AND WASHTENAW COUNTY, BY THE WASHTENAW  
COUNTY PARKS AND RECREATION COMMISSION, REGARDING RESPONSIBILITIES  
AND COST ALLOCATION FOR THE TUNNEL CONSTRUCTION PHASE OF THE  
BANDEMER-BARTON TRAIL AND UNDERPASS PROJECT

This Agreement (“Agreement”) is made and entered into by and between the City of Ann Arbor, a Michigan municipal corporation with its principal offices at 301 E. Huron Street, Ann Arbor, Michigan 48104 (the “City”), and Washtenaw County, a Michigan municipal corporation with its principal offices at 220 N. Main Street, Ann Arbor, Michigan 48104 (the “County”), by the Washtenaw County Parks and Recreation Commission, existing pursuant to Public Act 261 of 1965 (“WCPARC”), for the purpose of establishing the rights and obligations of the parties relative to the Tunnel Construction Phase of the Bandemer-Barton Trail and Underpass Project (the “Tunnel Construction Phase”). Relevant costs for the Tunnel Construction Phase work are set forth in Exhibit A, and the details and scope of engineering and project management services and construction work are set forth in Exhibits B and C, all of which are attached hereto and incorporated herein by reference.

- A. Whereas, the County, Huron Waterloo Pathway Initiative, and the City previously signed a Letter of Intent dated May 2, 2018 (“LOI”) to collaborate on an update to the Bandemer-Barton Pedestrian Tunnel 2005 Feasibility Study, which update was completed in 2020 (Bandemer-Barton Trail and Underpass Study dated November 13, 2020 prepared by Bergmann and OHM Advisors) and sets forth preferred design options for use in the Design Phase for the project;
- B. Whereas, on October 29, 2021, the County and City entered into a Cost Sharing Agreement for the Design Phase of the Bandemer-Barton Trail and Underpass Project;
- C. Whereas, on January 27, 2023, the County and City entered into a Memorandum of Understanding (“MOU”) for the purposes of setting forth their mutual objectives, understandings regarding and desire to cooperate to advance the Bandemer-Barton Trail and Underpass Project;
- D. Whereas, the MOU contemplates the parties entering into other agreements for each phase of the Project as necessary;
- E. Whereas, on January 22, 2024, the City entered into a contract with Erie Construction, LLC for construction of the trail construction phase of the Project and concurrently entered into a Cost Allocation Agreement with the County for sharing the costs of that phase, and the trail construction is nearing completion;
- F. Whereas, the County and City desire to continue to work cooperatively to complete the Tunnel Construction Phase of the Bandemer-Barton Trail and Underpass Project and share the costs thereof;

- G. Whereas, the City has obtained or is in the process of obtaining all needed approvals, permits, and contracts from the Michigan Department of Transportation Office of Rail and the National Railroad Passenger Corporation (Amtrak) for the Tunnel Construction Phase.
- H. Whereas, in consultation with the County and WCPARC, the City has solicited, received, and evaluated proposals for the engineering and project management and administration of the Tunnel Construction Phase work, and having shared and discussed the proposals with the County and WCPARC, the parties agree the City should award a professional services agreement for the engineering and project management and administration of the Tunnel Construction Phase to Wade Trim Associates, Inc., (the “Project Management Consultant”) in the amount of \$475,838.44.
- I. Whereas, in consultation with the County and WCPARC, the City has solicited, received, and evaluated proposals for the construction of the Tunnel Construction Phase, and having shared and discussed the proposals with the County and WCPARC, the parties agree the City should award a contract for the Tunnel Construction Phase work to Davis Construction, Inc. (the “Contractor”), which submitted the best value proposal in the amount of \$4,823,840.25; with a 10% construction contingency of \$482,384.00, for a total contract and contingency amount of \$4,306,224.25.
- J. Whereas, in consultation with the County and WCPARC, the City has estimated additional costs for the construction of the Tunnel Construction Phase, including a force account with Amtrak for its estimated costs, a force account for fiber optic relocation, and other Project costs in an estimated amount of \$236,912.00, and having shared and discussed these additional costs with the County and WCPARC, the parties agree these necessary Tunnel Construction Phase costs will be shared by the parties;
- K. Whereas, the total estimated cost of the Tunnel Construction Phase includes the costs for the Project Management Consultant services, the Contractor’s work per its proposal, and the additional Project cost which is \$5,536,590.69, and the total with the construction contingency is \$6,018,974.69, see Exhibit A;
- L. Whereas, the City intends to enter into a professional services agreement with the Project Management Consultant and a construction contract with the Contractor and administer the completion of the Tunnel Construction Phase work with the costs of same to be shared between the City and County in accordance with this Agreement and its exhibits and attachments;
- M. Whereas, the City and County will each be responsible for funding and paying for a share of the Tunnel Construction Phase work and Project engineering and administration costs as established in the Contractor’s cost proposal contained in Exhibit A (City share 1/3 and County share 2/3); and
- N. Whereas, the County and City have reached an understanding regarding the performance of and payment for the Tunnel Construction Phase work and desire to enter into this Agreement to memorialize their understanding.

Therefore, in consideration of the mutual promises and undertakings of the parties and in conformity with applicable law, County and City agree:

1. The County and the City shall undertake and complete the Tunnel Construction Phase of the Bandemer-Barton Trail and Underpass Project in accordance with the approved Project plans, other applicable permits and agreements, all applicable requirements of agencies with jurisdiction, and the terms of this Agreement. Exhibit A to this Agreement sets forth the total estimated costs for the Tunnel Construction Phase and includes the cost proposals for the Project Management Consultant and Contractor which are set forth in Exhibits B and C respectively and additional costs all of which are incorporated into this Agreement by reference. As set forth in Exhibit A, the total Tunnel Construction Phase project cost estimate is \$5,536,590.69, and the of County's estimated share of the Tunnel Construction Phase cost is \$3,691,060.46 and City's estimated share is \$1,845,530.23 provided these amounts may change as provided for elsewhere in this Agreement.
2. The City will enter into a professional services agreement with the Project Management Consultant and a construction contract with the Contractor for the Tunnel Construction Phase. The City will administer the professional services agreement and construction contract and related work necessary for the completion of the Tunnel Construction Phase. In the professional services agreement and the construction contract, the City must require that the Project Management Consultant and Contractor indemnify the City and County for any claims or lawsuits by third parties arising from their respective activities relating to the Project, and must require the them to name the City and County as additional insureds on their general liability insurance policies. The professional services agreement and construction contract must also recognize the County as a third-party beneficiary. The City will pay the additional costs to complete the Tunnel Construction Phase work, including, without limitation, amounts for the Amtrak force account, permit fees, and other necessary project costs, all of which shall be included in the total Tunnel Construction Phase costs and shared according to the terms of this Agreement.
3. The County is responsible for funding its 2/3 share of the Tunnel Construction Phase costs.
4. For payment of the Tunnel Construction Phase costs, the City will contract directly with the Project Management Consultant and Contractor and pay each of them the complete cost of the work, including the County's share of these costs. The County will reimburse the City for the County's share of amounts paid by the City.
5. As the City pays the Project Management Consultant and Contractor for services and work completed and incurs costs for the Tunnel Construction Phase, the City will invoice the County no more frequently than on a monthly basis. The County shall reimburse the City for the County's share of incurred costs within 30 days of receipt of an invoice from the City.
6. Notwithstanding the County's obligation to pay its share of the Tunnel Construction Phase costs, the parties agree the City may consult with the County regarding the Project and its management, but that responsibility for management of the Tunnel Construction Phase, including all aspects of the professional services agreement with the Project Management Consultant and construction contract with the Contractor, rests with the City.

7. The parties understand and agree that actual Tunnel Construction Phase costs may differ from the amounts in Exhibit A. However, the parties agree the County is responsible for its 2/3 share and the City is responsible for its 1/3 share of the Tunnel Construction Phase costs, and those shares cannot be changed except by written amendment to this Agreement. The County's obligation to fund its share of the Tunnel Construction Phase includes the obligation to pay its share of change orders, contract modifications, and amendments approved by the City. The City will make reasonable attempts to consult with the County before approving change orders, contract modifications, or amendments, but given the project time constraints, particularly for the railroad outage, the County's prior consent to same is not required. The parties agree that any change orders, contract modifications, amendments, or additional necessary project costs will be shared according to the respective shares set forth herein and agreed to by the County and the City, including both increases and decreases in Tunnel Construction Phase costs. Any remaining funds at project completion, in force accounts or otherwise, shall be reimbursed to each according to their shares of contribution.

8. In the event any claims are brought by the Project Management Consultant or Contractor, or a subcontractor, vendor or supplier for the Tunnel Construction Phase work and arising therefrom against the City and/or County or WCPARC, costs incurred by the City in defending or resolving such claims shall be considered Trail Construction Phase costs and will be funded in the same manner and proportion as the work to which the claims pertain, or as otherwise agreed to by the parties. Any change order that results from a claim shall be funded as provided in Paragraph 7, or as otherwise agreed to by the parties.

9. Each person signing this Agreement represents and warrants that he or she has authority to sign this Agreement on behalf of the County and WCPARC or City, respectively.

WASHTENAW COUNTY,  
a Michigan municipal corporation,

CITY OF ANN ARBOR,  
a Michigan municipal corporation

By Washtenaw County Parks  
and Recreation Commission,

By: \_\_\_\_\_  
Christopher Taylor, Mayor

By: \_\_\_\_\_  
Coy Vaughn, Director

By: \_\_\_\_\_  
Jacqueline Beaudry, City Clerk

Dated: \_\_\_\_\_

Dated: \_\_\_\_\_

Approved as to form:

Approved as to substance:

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Michelle Billard, Corporation Counsel

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Milton Dohoney Jr., City Administrator

Attested to:

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Lawrence Kestenbaum, Washtenaw County  
Clerk/Register

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Derek Delacourt, Community Services Area  
Administrator

Approved as to form:

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Atleen Kaur, City Attorney

## EXHIBIT A

Attached as Exhibit A is the estimated total cost for the Tunnel Construction Phase of the Bandemer-Barton Trail and Underpass Project:

### Estimated Project Cost

Construction Contract	\$4,823,840.25
10% Construction Contingency	\$482,384.00
Construction Engineering	\$475,838.44
Estimated Amtrak Force Account	\$136,912.00
<u>Estimated Fiber Optic Force Account Costs</u>	<u>\$100,000.00</u>
Total with contingency:	\$6,018,974.69
Total without contingency:	\$5,536,590.69

<u>Estimated Cost Sharing</u>	<u>Total Project Costs</u>	<u>Total + Contingency</u>
City of Ann Arbor (1/3rd)	\$1,845,530.23	\$2,006,324.90
Washtenaw County (1/3rd)	\$1,845,530.23	\$2,006,324.90
<u>Huron Waterloo Pathways Initiative (1/3rd)</u>	<u>\$1,845,530.23</u>	<u>\$2,006,324.89</u>
Total:	\$5,536,590.69	\$6,018,974.69

**EXHIBIT B**  
**Project Management Consultant cost proposal**



**RFP NO. 24-22**

# Construction Engineering for Barton/ Bandemer Park Pedestrian Tunnel Project

**CITY OF ANN ARBOR**

**REVISED FEE PROPOSAL**

JULY 3, 2024







Wade Trim Associates, Inc.  
25251 Northline Road • Taylor, MI 48180  
734.947.9700 • [www.wadetrim.com](http://www.wadetrim.com)

July 3, 2024

City of Ann Arbor  
c/o Customer Service  
301 East Huron Street  
Ann Arbor, MI 48104

Re: RFP No. 24-22 Construction Engineering for Barton/Bandemer Park Pedestrian Tunnel Project

Dear Selection Committee:

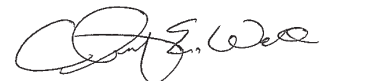
Wade Trim has provided the attached revised fee proposal.

We look forward to the opportunity to provide services to the City of Ann Arbor. If you have questions, please call us at 734.947.9700.

Yours truly,  
Wade Trim Associates, Inc.



Chris Brinks, PE  
Project Manager



Christopher E. Wall, PE, PTOE  
Vice President/Client Manager

# FEE PROPOSAL

## Fee Schedule

Detailed fee schedules are provided on the following pages. A summary appears below. The rate schedule from the ongoing City of Ann Arbor Project Manager & Civil Engineering Services contract was used in this fee derivation.

CONSTRUCTION ENGINEERING FOR BARTON/BANDEMER PARK PEDESTRIAN TUNNEL PROJECT	FEE
Wade Trim	\$425,873.44
Materials Testing Consultants	\$49,965.00
TOTAL FEE PROPOSAL	<b>\$475,838.44</b>

City of Ann Arbor File Number: 2022-032  
Project Name: RFP No. 24-22 Construction Engineering for Barton/Bandemer Park Pedestrian Tunnel Project  
Contract Location: City of Ann Arbor  
Rate Schedule: Wade Trim - City of Ann Arbor Project Management Fee Schedule  
Date: 5/1/2024 (Revised July 3, 2024)



Based on August 5, 2024 Start, December 20, 2024 Completion

TASK DESCRIPTION					Regular Hours per week		Overtime Hours per week		Estimated Task Duration (weeks)		KEY PERSONNEL																												TOTAL HOURS		TOTAL FEE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
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Notes:	Construction Engineering-Support - Pat Shupert, Mike Bywalec and Greg Stanely-included in other staff hours for 36 hour closure (14 hours each)
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## FEES AND RATES

Our fees are based on actual quantities and rates in the attached table. These rates are consistent with our current City of Ann Arbor Professional Services Agreement. The actual quantity will largely be a function of the methods applied and as scheduled by Contractor or project representative on-site. Our fee estimate is based on regular work hours and no required additional visits for retesting of failing work. Based on the previously described work plan and scope of work, we are projecting the following trips for this project:

### *Trail:*

- Density testing on storm sewer backfill: 2 trips
- Density testing on embankment: 1 trip
- Proof-roll observations on parking lot and trail: 3 trips
- Density testing on pathway agg base: 4 trips
- Concrete testing for shared use path: 6 trips
- Density testing on agg base under asphalt parking lot: 1 trip
- Density testing on HMA parking lot: 1 trip
- Concrete testing for curb: 3 trips
- Subgrade under modular block walls: 3 trips
- Density Testing on agg Shoulders: 1 trip
- Concrete Cylinder Pickups: 6 trips
- Material Sampling: 2 trips

### *Box Culvert:*

- Fabrication Inspection: 20 trips

### *Railroad Crossing:*

- Senior Engineering Technician: 40 hours
- Material Sampling: 1 trip

### *Project Management:*

- Attend Pre-Con Meeting
- Host Concrete Pre-Production Meeting
- Attend 6 Weekly Progress Meetings



Rates				
Description of Service Item	Quantity	Unit	Unit Price	Total
Technician I Including Nuclear Gauge – Straight Time	158	Hour	\$75.00	\$12,900.00
Technician I Including Nuclear Gauge – Overtime	30	Hour	\$95.00	\$3,800.00
Technician II/III Including Nuclear Gauge – Straight Time	168	Day	\$85.00	\$19,040.00
Technician II/III Including Nuclear Gauge – Overtime	52	Hour	\$105.00	\$5,985.00
Technician Daily Mobilization (includes travel time to and from the project site)	56	Each	\$80.00	\$5,520.00
Professional Engineering Services	65	Each	\$140.00	\$17,640.00
Concrete Cylinder Mold, Cure, Pickup, and Compressive Strength Test	50	Each	\$20.00	\$1,000.00
Sieve Analysis	3	Each	\$80.00	\$480.00
Modified Proctor Test	3	Each	\$160.00	\$960.00
HMA Extraction and Gradation Test	/	Each	\$350.00	\$700.00
Review Concrete or Asphalt Mix Design	3	Each	\$75.00	\$225.00
			<b>TOTAL:</b>	<b>\$49,965.00</b>

We've considered that fabrication inspection for the tunnel will be within a 100-mile radius of Ann Arbor. Based on the projected trips and using rates in the attached fee schedule we have estimated a budget of \$49,965. This estimate includes all equipment, mileage, and travel with supporting laboratory testing and project engineering supervision.

**Fee Proposal  
City of Ann Arbor  
Project Management & Civil Engineering Services RFP No. 22-17  
Effective December 1, 2022**

Please note the previously City-approved rates on Wade Trim's Project Management Services contract will be apply on this contract and remain in effect until November 30, 2022. This new rate schedule will become effective on December 1, 2022.

The rates in this schedule include overhead and profit and are charged on an hourly basis and include classifications representing a wide range of technical specializations. The individuals listed below may move between categories as they advance in their careers.

Wade Trim proposes to hold rates for two years. Per the RFP, after two years, the fees will be increased based on the Consumer Price Index. As well, as a good-faith gesture, our City Project Manager's rate has also been placed at a reduced rate.

Senior Professional – Rate = \$209.38

Christopher Brinks, PE  
Mark Pribak, PE  
Gregory Stanley, PE

Engineer I – Rate = \$96.21

Courtney Bagnall  
Nolan Mullett  
Ryan Brown

Engineer II – Rate = \$113.18

Matt L Clark, EIT  
Martin Hoemke  
Steven Meyer

Engineer III – Rate = \$130.16

Mike Bywalec  
John Hopp

Engineer IV – Rate = \$141.47

Jill Bosserd  
Johnny Leverette

Professional Engineer I – Rate = \$135.82

Professional Engineer II – Rate = \$152.79

Breanna Anderson, PE  
Bridget Bienkowski, PE  
Brian Frisk, PE  
Thomas Wheeler, PE  
Carmelle Tremblay, PE  
Brian O'Hara, PE  
Michael Nicholls, PE

Professional Engineer III – Rate = \$175.43

Felipe Uribe, PE

Professional Engineer IV – Rate = \$198.06

Brad Lund, PE  
Vaughn Martin, PE  
Leon Solowjow, PE  
Chris Wall, PE, PTOE  
Aimee Giacherio, PE

Professional Engineer V – Rate = \$215.03

Tiffany Harrison, PE  
Lori Pawlik, PE  
Martin Parker, PE  
Robert Breen, PE

Principal – Rate = \$237.67

Shawn Keough, PE  
Rebecca Smith, PE

Senior Principal – Rate = \$248.99

Landscape Architect I – Rate = \$79.22

Landscape Architect II – Rate = \$96.21

Landscape Architect III – Rate = \$101.86

CADD Tech I – Rate = \$56.59

CADD Tech II – Rate = \$79.22

CADD Tech III – Rate = \$90.55

CADD Tech IV – Rate = \$101.86

CADD Tech V – Rate = \$113.18  
Amanda Spence

CADD Tech VI – Rate = \$124.50  
Jason Caruso  
Martin Flanagan  
Robert Taylor

Survey Technician I – Rate = \$62.24

Survey Technician II – Rate = \$73.56

Survey Technician III – Rate = \$84.88  
James Holt  
Jeff Emery

Survey Technician IV – Rate = \$107.52

Survey Technician V – Rate = \$124.50  
Matthew Dudzik

Survey Technician VI – Rate = \$135.82  
Ian Campbell

Professional Surveyor II – Rate = \$124.50  
Scott Bliss, PS

Professional Surveyor III – Rate = \$152.79

Professional Surveyor IV – Rate = \$177.50

Construction Tech I – Rate = \$73.56

Construction Tech II – Rate = \$84.88

Construction Tech III – Rate = \$101.86

Construction Tech IV – Rate = \$113.18

Construction Tech V – Rate = \$118.84

Construction Tech VI – Rate = \$147.13  
Brian Scherdt  
Patrick Shupert  
Jason Yoscovits

Prof Landscape Architect I – Rate = \$107.52  
Catherine Dennis, PLA  
David Richards, PLA

Prof Landscape Architect II – Rate = \$124.50

Prof Landscape Architect III – Rate = \$158.45  
Matthew D Clark, PLA  
Scot Lautzenheiser, PLA

Engineering Technician I – Rate = \$56.59

Engineering Technician II – Rate = \$84.88

Engineering Technician III – Rate = \$107.52

Engineering Technician IV – Rate = \$124.50

Engineering Specialist I – Rate = \$152.79

Engineering Specialist II – Rate = \$169.77  
Robert Marker, CCS

Project Specialist I – Rate = \$113.18

Project Specialist II – Rate = \$130.16  
Wendy Sherrill  
Kimberly Addison

Project Specialist III - Rate = \$186.74  
Trude Noble  
Wayne Hofmann

Project Aide II – Rate = \$96.21

Project Aide III – Rate = \$124.50

Professional Planner I – Rate = \$113.18

Professional Planner II – Rate = \$124.50

Professional Planner III – Rate = \$141.47  
Arthur Mullen

Professional Planner IV – Rate = \$175.43  
Adam Young, AICP

Notes:

1. Inspection time starts when the Project Inspector arrives at the project each day.
2. Mileage will only be charged by Project Inspectors for mileage on the project.
3. Expenses such as surveying equipment and vehicles may be added as negotiated with City.

**EXHIBIT C**  
**Construction Contractor cost proposal**



**E. Schedule of Pricing/Cost – 20 Points**

Company: \_\_\_\_\_

**Unit Price Bid –**Item Description \_\_\_\_\_UnitPriceTotal Price

Estimated Quantity Certified Payroll Compliance and Reporting	1	LSUM	110,000.00	110,000.00
Mobilization, Max	1	LSUM	480,000.00	480,000.00
Clearing, Modified	0.25	Acre	40,000.00	10,000.00
Tree, Rem, 19 inch to 36 inch	6	Ea	2,775.00	16,650.00
Tree, Rem, 37 inch or Larger	2	Ea	3,500.00	7,000.00
Tree, Rem, 6 inch to 18 inch	10	Ea	775.00	7,750.00
Fence, Rem	117	Ft	15.00	1,755.00
Exploratory Investigation, Vertical	150	Ft	30.00	4,500.00
Embankment, CIP	20	Cyd	195.00	3,900.00
Excavation, Earth	2360	Cyd	48.00	113,280.00
Non Haz Contaminated Material Handling and Disposal, LM	7060	Cyd	77.00	543,620.00
Subgrade Undercutting, Type I	100	Cyd	150.00	15,000.00
Subgrade Undercutting, Type II	100	Cyd	150.00	15,000.00
Subgrade Undercutting, Type IV	100	Cyd	150.00	15,000.00
Backfill, Structure, CIP	5050	Cyd	37.00	186,850.00
Excavation, Fdn	5850	Cyd	24.50	143,325.00
Aggregate, 6A	16	Cyd	175.00	2,800.00
Dewatering System, Excavation	1	LSUM	60,000.00	60,000.00
Erosion Control, Filter Bag	2	Ea	1,000.00	2,000.00
Erosion Control, Gravel Access Approach	2	Ea	2,875.00	5,750.00
Erosion Control, Inlet Protection, Fabric Drop	5	Ea	225.00	1,125.00
Erosion Control, Silt Fence	1739	Ft	4.25	7,390.75
Subbase, CIP	3	Cyd	1,500.00	4,500.00
Aggregate Base, 8 inch, Modified	365	Syd	58.00	21,170.00
Maintenance Gravel	100	Ton	87.00	8,700.00
Geotextile, Separator, Non-Woven	245	Syd	32.00	7,840.00
Culv End Sect, Conc, 12 inch	3	Ea	1,500.00	4,500.00
Sewer, CI E, 12 inch, Tr Det B	95	Ft	210.00	19,950.00

Slotted Drain, Galv, 6 inch	42	Ft	310.00	13,020.00
Sewer, PVC, 6 inch, Tr Det B	153	Ft	46.00	7,038.00
Dr Structure Cover, Type C	1	Ea	1,400.00	1,400.00
Dr Structure, 24 inch dia	1	Ea	5,500.00	5,500.00
Clean Out	4	Ea	850.00	3,400.00
Underdrain, Fdn, 6 inch	286	Ft	15.00	4,290.00
Culv Bedding, Box Culv	81	Cyd	215.00	17,415.00
Culv, Precast Conc Box, 16 foot by 12 foot	60	Ft	11,500.00	690,000.00
HMA Surface, Rem	225	Syd	25.00	5,625.00
Hand Patching	17	Ton	450.00	7,650.00
HMA, 4EML	33	Ton	400.00	13,200.00
HMA, 5EML	33	Ton	400.00	13,200.00
Joint, Expansion, E3	39	Ft	26.00	1,014.00
Steel Sheet Piling, Permanent	2940	Sft	46.50	136,710.00
Elec Grounding System	1	Ea	3,955.00	3,955.00
Reinforcement, Steel, Epoxy Coated	2852	Lb	5.00	14,260.00
Substructure Conc, High Performance	39	Cyd	1,775.00	69,225.00
Liner, PVC, 30 mil	415	Syd	17.50	7,262.50
Timber Bridge	1	LSUM	123,500.00	123,500.00
Joint Waterproofing	160	Sft	10.00	1,600.00
Modular Block Wall, Cap	254	Ft	105.00	26,670.00
Modular Block Wall	857	Sft	85.00	72,845.00
Railroad Protection, Amtrak	20000	Dlr	1.00	20,000.00
Curb, Conc, Det E1	735	Ft	48.00	35,280.00
Curb and Gutter, Conc, Det D2	207	Ft	43.00	8,901.00
Detectable Warning Surface	13	Ft	80.00	1,040.00
Sidewalk, Conc, 4 inch	157	Sft	27.00	4,239.00
Shared use Path, Grading, Modified	1039	Ft	65.00	67,535.00
Shared use Path, Aggregate, 8 inch, Modified	1591	Syd	37.00	58,867.00
Shared use Path, Concrete, 6 inch	1353	Syd	95.00	128,535.00
Shared use Path, Concrete, 6 inch, Decorative	148	Syd	165.00	24,420.00
Shared use Path, Aggregate, Tunnel	66	Cyd	156.00	10,296.00
Fence, Protective	1000	Ft	8.50	8,500.00

Fence, Rustic Split Rail	309	Ft	40.00	12,360.00
Ornamental Aluminum Fence, 72 inch	152	Ft	135.00	20,520.00
Fence Gate, 12 foot, for 72 inch Chain Link Fence, Special	14	Ft	2,750.00	38,500.00
Fence, Chain Link, 72 Inch, Special	206	Ft	57.00	11,742.00
Ornamental Aluminum Fence, 48 inch	124	Ft	130.00	16,120.00
Fence, Protective, Special	800	Sft	13.00	10,400.00
Post, Steel, 3 pound	177	Ft	22.00	3,894.00
Sign, Type IIIB	19	Sft	35.00	665.00
Pavt Mrkg, Polyurea, 4 inch, Yellow	278	Ft	4.00	1,112.00
Pavt Mrkg, Polyurea, 12 inch, Cross Hatching, Yellow	270	Ft	12.00	3,240.00
Pavt Mrkg, Preformed Thermopl, Accessible Sym	1	Ea	500.00	500.00
Pavt Mrkg, Waterborne, for Rest Areas, Parks, and Lots, 4 inch, Blue	75	Ft	5.00	375.00
Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	10	Ea	95.00	950.00
Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	10	Ea	10.00	100.00
Pedestrian Type II Barricade, Temp	10	Ea	30.00	300.00
Pedestrian Type II Channelizer, Temp	50	Ft	64.00	3,200.00
Lighted Arrow, Type C, Furn	2	Ea	475.00	950.00
Lighted Arrow, Type C, Oper	2	Ea	25.00	50.00
Ltg for Night Work	1	LSUM	20,000.00	20,000.00
Minor Traf Devices	1	LSUM	25,000.00	25,000.00
Plastic Drum, Fluorescent, Furn	35	Ea	14.00	490.00
Plastic Drum, Fluorescent, Oper	35	Ea	1.00	35.00
Sign Cover	5	Ea	30.00	150.00
Sign, Type B, Temp, Prismatic, Furn	316	Sft	4.05	1,279.80
Sign, Type B, Temp, Prismatic, Oper	316	Sft	0.60	189.60
Sign, Type B, Temp, Prismatic, Spec, Furn	96	Sft	4.10	393.60
Sign, Type B, Temp, Prismatic, Spec, Oper	96	Sft	2.00	192.00
Traf Regulator Control	1	LSUM	20,000.00	20,000.00
Check Dam, Cobblestone	20	Ft	150.00	3,000.00

Riprap, Cobblestone	21	Syd	250.00	5,250.00
Site Preparation, Max	1	LSUM	18,000.00	18,000.00
Watering and Cultivating, First Season, Min	1	LSUM	1,000.00	1,000.00
Watering and Cultivating, 2nd Season, Min	1	LSUM	15,000.00	15,000.00
Aronia melanocarpa, #5 cont.	10	Ea	65.00	650.00
Hamamelis virginiana, #5 cont.	10	Ea	75.00	750.00
Viburnum acerifolium, #5 cont.	5	Ea	80.00	400.00
Viburnum lentago, #5 cont.	10	Ea	70.00	700.00
Platanus occidentalis, 3 inch	5	Ea	550.00	2,750.00
Tilia americana, 3 inch	5	Ea	800.00	4,000.00
Acer saccharum 'Bailsta' FALL FIESTA, 3 inch	5	Ea	900.00	4,500.00
Nyssa sylvatica, 3 inch	3	Ea	800.00	2,400.00
Quercus bicolor, 3 inch	3	Ea	750.00	2,250.00
Cercis canadensis, 2 1/2 inch, multi- stem	8	Ea	800.00	6,400.00
Cornus florida, 2 1/2 inch	8	Ea	600.00	4,800.00
Amelanchier x grandiflora 'Autumn Brilliance', 8 foot	6	Ea	1,100.00	6,600.00
Cephalanthus occidentalis, #5 cont.	5	Ea	80.00	400.00
Cornus stolonifera 'Farrow', #5 cont.	30	Ea	110.00	3,300.00
Lindera benzoin, #5 cont.	10	Ea	70.00	700.00
Calamagrostis x acutiflora 'Karl Foerster', #3 cont.	15	Ea	65.00	975.00
Panicum virgatum 'Shenandoah', #3 cont.	15	Ea	50.00	750.00
Schizachyrium scoparium, #3 cont.	15	Ea	65.00	975.00
Live Staking	250	Syd	35.00	8,750.00
Turf Establishment, Turf Grass, Performance	734	Syd	5.00	3,670.00
Turf Establishment, Native Seed Mix, Mesic Woodland Mix, Performance	6404	Syd	3.00	19,212.00
Conduit, PVC Schedule 80, 2 inch, Structure	150	Ft	100.00	15,000.00
Hh, Square	4	Ea	3,263.00	13,052.00
Conduit, DB, 1, 2 inch	550	Ft	35.45	19,497.50
Conduit, DB, 1, 1 inch	750	Ft	33.00	24,750.00
Cable, 600V, 1, 2/C#12	1525	Ft	2.00	3,050.00
Cable, Grounding Wire, 1/C#12	770	Ft	1.25	962.50

13"x24" Pull Box	2	Ea	1,800.00	3,600.00
Lighting Control Panel	1	Ea	25,000.00	25,000.00
Luminaire, Wall Mount, Type A	2	Ea	3,000.00	6,000.00
Luminaire, Linear, Type B	28	Ea	2,060.00	57,680.00
Luminaire, Linear, Type C	28	Ea	2,000.00	56,000.00
Luminaire, Pole Mount, Type D	13	Ea	750.00	9,750.00
Light Pole Foundation	13	Ea	3,000.00	39,000.00
Light Pole, Type D Pole	13	Ea	4,500.00	58,500.00
Electrical Utility Service	20000	Dlr	1.00	20,000.00
Gate Valve and Box, 6 inch	1	Ea	6,500.00	6,500.00
Contractor Staking	1	LSUM	55,000.00	55,000.00
Railroad Track Monitoring	1	LSUM	75,000.00	75,000.00
Utility Work, Amtrak	1	LSUM	45,000.00	45,000.00
Utility Work, Lumen	1	LSUM	75,000.00	75,000.00
Limestone Cap	117	Ft	245.00	28,665.00
Limestone Block	132	Sft	425.00	56,100.00
Split Field Stone	637	Sft	85.00	54,145.00
Limestone Sign, "Bandemer"	1	Ea	18,750.00	18,750.00
Limestone Sign, "Barton"	1	Ea	18,750.00	18,750.00
Limestone Sign, "2025"	2	Ea	10,000.00	20,000.00
Decorative Panel, Install	1	LSUM	62,000.00	62,000.00
Dewatering System for Contaminated Groundwater, Site	100000	Dlr	1.00	100,000.00
Decorative Panel, Furn	100000	Dlr	1.00	100,000.00
Dr Structure, Tap, 6 inch	2	Ea	250.00	500.00
Sign, Type III, Rem	1	Ea	50.00	50.00
Ground Mtd Sign Support, Rem	1	Ea	1,500.00	1,500.00
Sign, Type IIIA	4	Sft	50.00	200.00
Corrugated Steel Pipe, Galv, 6 inch	48	Ft	30.00	1,440.00
Aggregate Base, 12 inch	370	Syd	48.00	17,760.00

**ESTIMATED TOTAL**

**\$ 4,823,840.25**