

# CITY OF WARRENVILLE

## MEMO

TO: Mayor, City Council, and City Administrator Coakley  
 FROM: Senior Civil Engineer Hocking *KH* and Public Works Director Kuchler *DK*  
 SUBJECT: ROUTE 59 MULTI-USE PATHS PRELIMINARY ENGINEERING AGREEMENT  
 DATE: February 8, 2022

### Purpose of Memo

The purpose of this memo is to (i) provide a brief description of the project, (ii) summarize the selection of the consulting engineering firm and (iii) recommend the execution of a contract with that firm.

### Route 59 Multi-Use Paths Project

In January 2016, City Council adopted Addendum No. 1 to the Bikeway Implementation Plan which was originally adopted by City Council in November 2010. The segment of Route 59 from Batavia Road to Continental/Meadow is the highest priority identified in the addendum due to multiple factors such as: vehicle speed limit, traffic volume, accidents and accessibility. This project will benefit residents by allowing a safe, ADA accessible path to commercial areas, and existing pedestrian routes along Continental and Batavia Road. It will consist of adding paths/sidewalk on both sides of Route 59 from Batavia to Continental/Meadow, installation of handicapped accessible ramps, replacement of existing sidewalk, new storm sewers and the relocation of signs and utility poles. A small portion of the project segment could require the acquisition of easement.

In May 2017, City Council directed staff to apply for grant funding for this segment. In August 2020, the City was awarded Surface Transportation Program (STP) funding that will cover 75% of construction and construction engineering costs. Estimate project costs are identified in the table below.

| PHASE                                | FEDERAL   | CITY      | TOTAL       | CITY BUDGET ACCOUNT     | CITY FISCAL YEAR |
|--------------------------------------|-----------|-----------|-------------|-------------------------|------------------|
| Preliminary Engineering (Phase I)    | \$0.00    | \$120,000 | \$120,000   | General – Street-Maint  | FY23             |
| Final Engineering (Phase II)         | \$0.00    | \$120,000 | \$120,000   | General – Streets-Maint | FY24             |
| Easement Acq (Phase II)              | \$0.00    | \$120,000 | \$120,000   | General – Streets-Maint | FY24             |
| Construction (Phase III)             | \$700,800 | \$233,600 | \$934,400   | MFT                     | FY25             |
| Construction Engineering (Phase III) | \$70,100  | \$23,400  | \$93,500    | General – Streets-Eng   | FY25             |
| <b>TOTAL</b>                         | \$770,900 | \$617,000 | \$1,387,900 |                         |                  |

Staff was notified in June 2021 by DuPage Mayors and Managers Conference staff that a kickoff meeting with IDOT would need to be performed before March 14, 2022 in order to keep the STP funding. Staff included a decision package in the proposed FY2023 budget to hire a consultant to perform preliminary engineering (Phase I) for the City. However, because of the STP grant requirements, approximately \$10,000 will be spent in FY2022. This amount was included in the FY22 budget. The project will be three phases, with this preliminary engineering contract (Phase I) consisting of the preliminary engineering design, environmental studies, preliminary plans and public coordination. Final Engineering, or phase II, includes final design, final plans and construction documents, utility relocations, easement acquisition and agency agreements. Phase III includes construction and construction inspection.

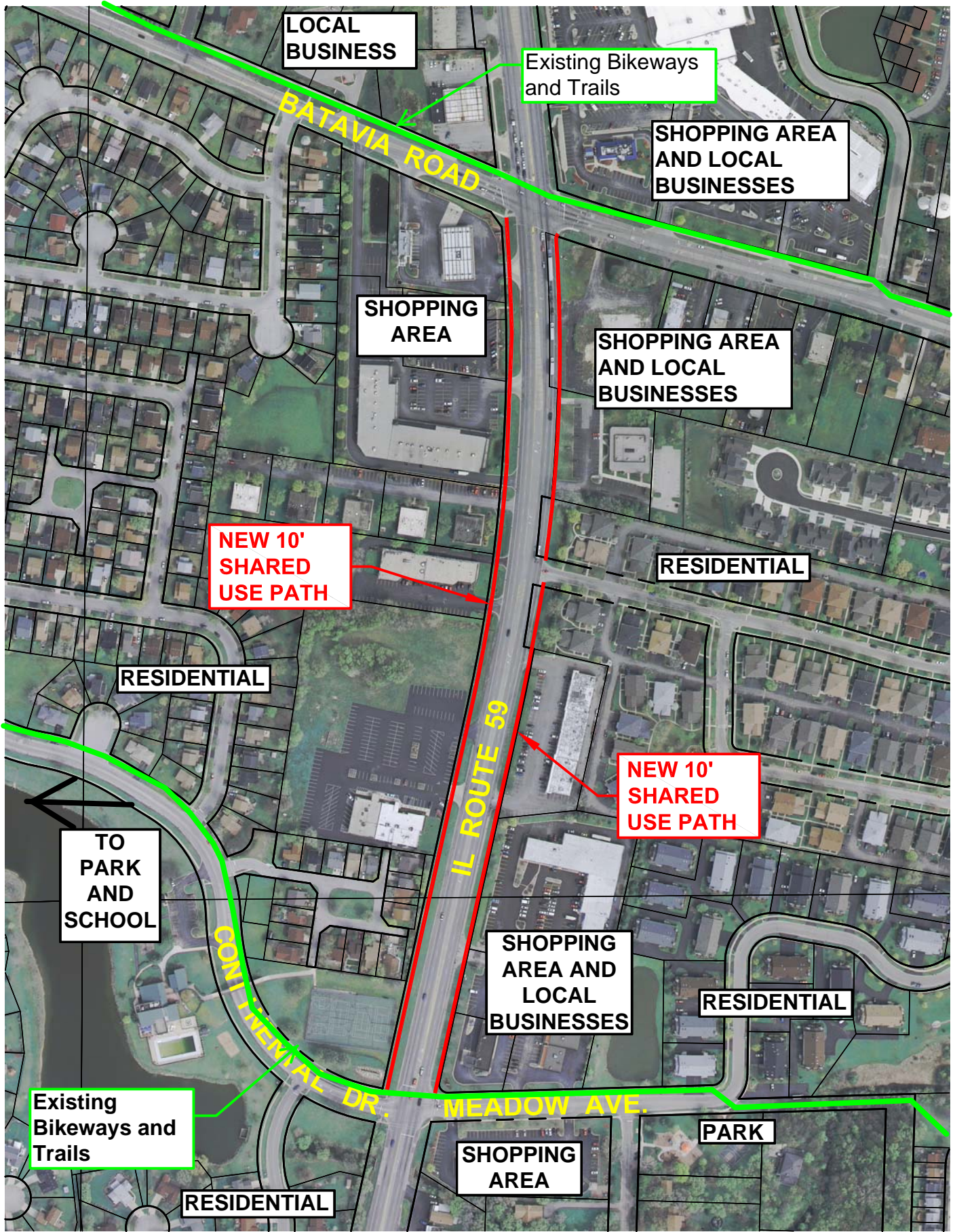
### **Selection of Consultant**

Engineering services for this study cannot be performed in-house as City staff does not possess the necessary expertise and computer software required to properly perform this analysis. Staff distributed a request for proposals to three consultants whom have extensive experience with IDOT, path projects, and have submitted qualifications packages for other City project.

Public Works Director Kuchler and Senior Civil Engineer Hocking reviewed each technical proposal which included a company profile, staff profiles, relevant experience, sub-consultant profiles, project understanding, project approach, schedule and availability. Baxter and Woodman clearly emerged as the firm with the most capable project team, experience, and approach with no reservations or concerns.

***Public Works Director Kuchler and Senior Civil Engineer Hocking have reviewed the attached proposal and find the scope and costs reasonable for the work associated with this project and recommend approval of the contract for \$104,833 with Baxter and Woodman for the Route 59 Multi-Use Path Preliminary Engineering project.***





LOCAL BUSINESS

Existing Bikeways and Trails

SHOPPING AREA AND LOCAL BUSINESSES

BATAVIA ROAD

SHOPPING AREA

SHOPPING AREA AND LOCAL BUSINESSES

NEW 10' SHARED USE PATH

RESIDENTIAL

RESIDENTIAL

TO PARK AND SCHOOL

NEW 10' SHARED USE PATH

IL ROUTE 59

SHOPPING AREA AND LOCAL BUSINESSES

RESIDENTIAL

Existing Bikeways and Trails

RESIDENTIAL

MEADOW AVE.

SHOPPING AREA

PARK

CONTINENTAL DR.

CONTINENTAL DR. / MEADOW AVE. TO BATAVIA ROAD



ROUTE 59 MULTI-USE PATHS PROJECT

CITY OF WARRENVILLE

SCALE: 1" = 300'

## ILLINOIS ROUTE 59 MULTI-USE PATH IMPROVEMENTS PHASE I ENGINEERING SERVICES

### EXHIBIT A SCOPE OF SERVICES

#### **LOCATION:**

This project is located on Illinois Route 59 between Contential Drive/Meadow Avenue and Batavia Road within the City of Warrenville. The limits of the proposed bicycle path are between West Lake Avenue and Willow Road.

#### **PROJECT UNDERSTANDING:**

The work included in the PROJECT shall consist of completing Phase I engineering for the Illinois Route 59 Multi-Use Path Improvements.

Improvements will consist of construction of a new multi-use paths between Contential Drive/Meadow Avenue and Batavia Road, within the east and west parkways. Improved driveways, curb and gutter at ADA ramps, and landscaping will be included along the length of the project. Drainage system improvements will be made as needed to facilitate this work.

The proposed paths will connect to existing paths and crosswalks at the Contential Drive/Meadow Avenue and Batavia Road intersections, and roadway and intersection improvements are not anticipated as part of these improvements.

The need for land acquisitions (right of way or easement) will be evaluated during Phase I. Right-of-way plats, appraisals, and negotiations are not included within this scope of work. If necessary, this work will be added under separate contract.

The project has received federal funding (STP) for construction and construction engineering. Phase I and II engineering will use City funds. This project will follow federal project development procedures to ensure eligibility for federal funding. The project will be coordinated with IDOT's Bureau of Local Roads and Streets and the Federal Highway Administration for reviews and Phase 1 Design Approval. It is anticipated that this project will be processed as a Federal Approved Categorical Exclusion.

#### **SCOPE OF SERVICES:**

##### **PROJECT COORDINATION AND DATA COLLECTION**

##### **1. PROJECT INITIATION AND DATA COLLECTION**

- 1.1 *Data Collection:* Obtain, review and evaluate the following information provided by the LPA for use in design:
  - A. Existing Roadway Plans
  - B. GIS Shape files surrounding the project limits

- C. Aerial Photography
  - D. Maintenance and flooding records
  - E. Crash Data (5 years)
- 1.2 *Field evaluation:* Perform a field evaluation of the condition of existing pavements, drainage structures, sidewalk ramps, and curb and gutter. Observe and photograph the project area and immediate surroundings.
- 1.3 *Funding Administrator Coordination:* Prepare and maintain the Project Program Information (PPI) and Project Update forms, and coordinate the status of the Project with the DuPage Mayors & Managers Conference.
- 1.4 *Utility Locates & Coordination:* Contact J.U.L.I.E. to identify utilities that have facilities along the project limits. Request utility atlas maps and plot locations and sizes of existing utilities in electronic drawings. Submit preliminary and final plans to utility companies so conflicts and relocation efforts can be identified. Provide ongoing reviews of permitting and utility relocation efforts as requested by the LA.
2. TOPOGRAPHIC SURVEY
- 2.1 *Topographic Survey:*
- A. Perform topographic survey within the project limits and at 50-foot intervals including driveways and cross streets. The limits of the survey will be from 50' feet to the south of Contential Drive/Meadow Avenue to 50' north of Batavia Road and will include 50' along adjacent side streets (2400-feet total). Cross section width shall be taken 25' feet outside the estimated proposed right-of-way and utility corridor. State plane coordinates and NAVD 88 will be used for horizontal and vertical controls.
  - B. *Structures:* Collect drainage structure condition, inverts, size, and flow direction.
  - C. *Terrain Model:* Download and develop digital terrain model for use in design and plan preparation.
  - D. *Right of Way:* Field-locate existing property corners and utilize available tax parcel information to establish an approximate right-of-way. Conduct research at the County Recorder to obtain recorded documents for determining the limits of existing right of way and easements. Work to complete Plat of Easement or Plat of Dedication is not included.
3. TRAFFIC ANALYSIS
- 3.1 *Traffic Forecasting:* Coordinate with the LPA and Chicago Metropolitan Agency for Planning (CMAP) for concurrence on 2050 traffic projections for the proposed multi-use path.
- 3.2 *Crash Analysis:* Obtain crash data from IDOT and the City and compile for review. Complete an accident diagram for the intersections using the last 5 years of crash data and summarize findings. Complete a crash analysis to evaluate the frequency, severity, and recommended countermeasures.



4. ALTERNATIVES ANALYSIS - Analyze and schematically develop alternative alignments, configurations, and geometrics for the multi-use paths to establish the preferred alternative. Review right-of-way, impacts, and design constraints. Compile alternatives and summarize findings of the analysis with recommendations. A maximum of 2 alternatives for each path (east and west) will be developed further for evaluation. Develop concept sketches of each alternative and analyze conceptual development of the alternative.
5. PRELIMINARY DESIGN OF PREFERRED ALTERNATIVE
  - 5.1. *Preliminary Plan and Profile:* Prepare plan and profile sheets for the horizontal and vertical alignment of the preferred alternative at 1" = 20' scale. Identify design constraints including clear zone, obstructions, drainage limitations, and potential design exceptions. Plan and profile sheets will include improvement limits, stations and offset callouts, define paving limits, label construction limit locations and right-of-way boundaries, utility adjustments, guardrail locations, and wetland locations and impacts.
  - 5.2. *Typical Sections:* Prepare typical sections for the existing and proposed improvements, showing dimensions for roadway surfaces, bases, subbases, subgrade treatments, gutters, curb and gutters, medians, sidewalks, bike paths, ditches, backslopes, and right of way.
  - 5.3. *Preliminary Cross Section Design:* Design roadway cross sections at 50-foot intervals and all cross streets, driveways and cross-road culverts.
  - 5.4. *Preliminary Estimate of Cost and Schedule:* Develop preliminary cost estimates for the preferred improvement and anticipated schedule for construction.
  - 5.5. *Illustrated Renderings:* Develop and provide rendered images of the preferred alternative to the LPA.
  - 5.6. *Traffic Management Plan* – Prepare and submit a Traffic Management Plan (Form D1 OP0042) and required attachments for review and approval by IDOT-Bureau of Traffic.
6. DRAINAGE ANALYSIS
  - 6.1. *Location Drainage Study:* Prepare a the Location Drainage Study (LDS) for review and approval by IDOT Hydraulics. Work under this task includes an analysis of the existing drainage system, an analysis of existing outlets, an evaluation of the need for stormwater detention and compensatory storage, and design of proposed drainage improvements. Identify sensitive outfalls and provide the drainage report in accordance with the 2014 ACEC/IDOT Drainage Seminar requirements and the IDOT Drainage Manual.
    - A. Existing Drainage System: Work assumed and deliverables under this task includes the following:
      - 1) General Location Drainage Map - This task involves the preparation of the General Location Drainage Map to show the project with respect to the overall drainage features.

- 2) Existing Drainage Plans (EDP) - This task describes the requirements of a detailed Existing Drainage Plan (EDP). Section 2-202 of the IDOT Drainage Manual provides additional detail on requirements for the EDP. Hydrologic and Hydraulic modeling of the existing storm sewer and minor crossings are not included.
  - 3) Identified Drainage Problems - This task involves the documentation of identified drainage problems throughout the project limits.
  - 4) Identification and documentation of Base Floodplains - This task involves the identification and documentation of existing floodplains and floodways within the project limits. An exhibit will be prepared to show the project with respect to the existing floodplains and floodways.
- B. Proposed Drainage System: Work assumed and deliverables under this task includes the following:
- 1) Documentation of Design Criteria - This task involves documentation that the highway system meets certain design criteria as specified in Section 2-01 of the Location Drainage Study and providing justification for those cases in which it does not.
  - 2) Evaluation of existing outlets - This task involves the evaluation of existing outlets to determine their suitability for continued use and sensitivity to increases in rate and volume of runoff. The outlets to be evaluated are identified in Existing Drainage System, Section 1-00 of the Location Drainage Study.
  - 3) Stormwater Detention Analysis - This task involves the evaluation of detention requirements in accordance with Section 1-304.03 of the Drainage Manual Storm Water Storage. Justification should be included to support the findings of either providing detention or omitting it.
  - 4) Right of Way Analysis - This task involves a determination of the drainage right of way and easement requirements. The proposed drainage improvements should be evaluated to see if additional right of way or drainage easements are needed.
  - 5) Proposed Drainage Plans (PDP) - This task involves the preparation of a Proposed Drainage Plan (PDP), with drainage symbols and notes on exhibit(s), and appropriate wording in the Location Drainage Study text, which fully describes the proposed drainage concept. Both aerial imagery and contour mapping should be used as the PDP base map, along with existing CADD topography and proposed geometric plan superimposed. The PDP should be prepared in a digital format. Design of lateral storm sewers, driveway culverts and inlet spacing is not included. Proposed trunk storm sewer design is included.
  - 6) Water Quality Best Management Practices (BMPs) Permanent Measures - This task involves documentation that the designer has considered options for water quality Best Management Practices (BMPs) and incorporated these practices into the Proposed Drainage Plans as specified in Section 2-08 of the Location Drainage Study. The section also provides opportunity to provide justification for those cases in which the incorporation of BMPs is limited. Detailed design for water quality features is not included.
  - 7) Floodplain Encroachment Evaluation - This task involves the evaluation of encroachments on Regulatory Floodways and unstudied Zone A floodplains. Regulatory Floodplains are those 100-year frequency floodplains which are mapped by the Illinois Department of Natural Resources – Office of Water

Resources (IDNR-OWR) and/or the Federal Emergency Management Agency (FEMA).

- C. Study Assembly: This task involves the organization, preparation and assembly of the completed Location Drainage Study. This task follows completion of previous tasks.

## 7. ENVIRONMENTAL COORDINATION AND PERMITTING

- 7.1. *Environmental Survey Request*: Prepare the Environmental Survey Request Form and related exhibits. Submit to IDOT to determine potential environmental impacts. Biological, Archeological, and Historical surveys will be performed by the State. Wetland delineation will be performed by Baxter & Woodman as described below. It is anticipated that IDOT will complete the PESA and PSI, if necessary, as part of improvements along the state highway.
- 7.2. *Permit Agency Early Coordination*: Initiate coordination with the following regulatory agencies to obtain preliminary design comments:
- A. DuPage County Stormwater Management
  - B. US Army Corps of Engineers (ACOE)
- 7.3. *Wetland Delineation and Report*: Perform wetland delineation in the project corridor during the growing season; including documentation of baseline vegetation, hydrology, and soils information. Prepare a Wetland Delineation Report and Exhibits that summarize the methodology used, site description, and results of survey.
- 7.4. *Wetland Impact Evaluation*: Prepare a wetland report detailing the work within a regulatory wetland, including a description of the wetlands being impacted, avoidance, minimization, and mitigation efforts. Submit to IDOT for review and approval.
- 7.5. *Wetland Mitigation*: Complete an alternatives analysis to determine if there are any feasible alternatives to minimize impacts to wetlands. Coordinate with US Army Corps of Engineers (ACOE) for development of any alternative strategies. Potential alternatives include on-site wetland mitigation, wetland mitigation bank, and a combination thereof.

*Fees*: Agency review fees, wetland banking, and processing through the stormwater variance procedures are not included in this agreement and shall be paid for separately by the LPA.

## 8. MEETINGS AND PUBLIC INVOLVEMENT

- 8.1. *Stakeholder Meetings*: The following meetings are anticipated for this project:
- City (2) (Kickoff, Pre-final)
  - IDOT BLRS Kickoff (1)
  - IDOT Hydraulics (1)
  - IDOT/FHWA Coordination Meetings (1)
  - Individual Property Meetings (3 total)
  - Field Meeting with City staff (1)



- 8.2 *Public Meeting*: Prepare advertisement, exhibits, handouts, and attend one Public Information Meeting (open house format). Prepare meeting minutes to document public comments. Prepare mailings to property owners identified with land acquisition, if applicable. This work will be performed in accordance with City and IDOT guidelines.
9. PROJECT DEVELOPMENT REPORT - Prepare a Local Project Development Report for Group I Categorical Exclusion and submit the report to the DEPARTMENT and the Federal Highway Administration for review and approval. Pre-final, and Final submittals are anticipated.
10. QA/QC - Perform in-house peer and milestone reviews by senior staff during project initiation, conceptual review, preliminary, pre-final, and final submittals. Provide ongoing reviews of permitting and utility coordination efforts. Conduct milestone reviews of subconsultants and provide feedback throughout the progress of work.
11. MANAGE PROJECT - Plan, schedule, and control the activities that must be performed to complete the project including budget, schedule, and scope. Coordinate with LPA and project team to ensure the goals of the project are achieved. Prepare and submit monthly invoices, coordinate invoices from sub-consultants.

## PROJECT DELIVERABLES

The following is a list of anticipated final deliverables to the LPA for this project:

- A. *Electronic DGN, Geopak, Digital Photos, and GIS files used in project development including Plan, Profiles, Cross Sections, Survey, and Exhibits.*
- B. *Electronic Record of Design files including agency correspondence, Project Development Report content, Drainage Reports and Models, Environmental Reports, Estimates, Exhibits, and related electronic submittals (pdf or as appropriate). Baxter & Woodman utilizes an electronic filing system in lieu of hard copies.*

*Not Included*: The following items are not included within the scope of this project, but can be provided as additional services to the contract:

- A. Permit Review fees
- B. ROW Acquisition services including title commitments, Plats, Legals, Appraisals, Negotiations
- C. Environmental Studies (PESA, PSI, etc.)
- D. Wetland Banking Fees
- E. Newspaper Publication Fees
- F. Intersection Design Studies
- G. Geotechnical Investion



COST ESTIMATE OF CONSULTANT SERVICES WORKSHEET

FIXED RAISE

**Local Public Agency**

City of Warrenville

**County**

DuPage

**Section Number**

22-00042-00-BT

**Consultant (Firm) Name**

Baxter & Woodman, Inc.

**Prepared By**

Jay Coleman

**Date**

2/3/2022

**PAYROLL ESCALATION TABLE**

|               |           |
|---------------|-----------|
| CONTRACT TERM | 12        |
| START DATE    | 4/1/2022  |
| RAISE DATE    | 1/1/2023  |
| END DATE      | 3/31/2023 |

MONTHS

|                   |         |
|-------------------|---------|
| OVERHEAD RATE     | 142.57% |
| COMPLEXITY FACTOR | 0       |
| % OF RAISE        | 2.00%   |

**ESCALATION PER YEAR**

| Year | First Date | Last Date | Months | % of Contract |
|------|------------|-----------|--------|---------------|
| 0    | 4/1/2022   | 1/1/2023  | 9      | 75.00%        |
| 1    | 1/2/2023   | 4/1/2023  | 3      | 25.50%        |

The total escalation = 0.50%

**EXHIBIT B**

|                            |               |                       |
|----------------------------|---------------|-----------------------|
| <b>Local Public Agency</b> | <b>County</b> | <b>Section Number</b> |
| City of Warrenville        | DuPage        | 22-00042-00-BT        |

|                             |              |
|-----------------------------|--------------|
| <b>MAXIMUM PAYROLL RATE</b> | <b>78.00</b> |
| <b>ESCALATION FACTOR</b>    | <b>0.50%</b> |

**PAYROLL RATES**

Exhibit B Cost Estimate of Consultant Services Worksheet Fixed Raise

| <b>CLASSIFICATION</b>    | <b>IDOT<br/>PAYROLL RATES<br/>ON FILE</b> | <b>CALCULATED RATE</b> |
|--------------------------|---|------------------------|
| Executive Vice President | \$85.60                                   | \$78.00                |
| Vice President           | \$73.36                                   | \$73.73                |
| Engineer VII             | \$65.71                                   | \$66.04                |
| Engineer VI              | \$66.42                                   | \$66.75                |
| Engineer V               | \$60.73                                   | \$61.03                |
| Engineer IV              | \$50.10                                   | \$50.35                |
| Engineer III             | \$41.02                                   | \$41.23                |
| Engineer II              | \$36.38                                   | \$36.56                |
| Engineer I               | \$31.93                                   | \$32.09                |
| Environ. Scientist V     | \$56.63                                   | \$56.91                |
| Natural Resources Mngr.  | \$48.50                                   | \$48.74                |
| Engineer Tech V          | \$51.72                                   | \$51.98                |
| Engineer Tech IV         | \$45.28                                   | \$45.51                |
| Engineer Tech III        | \$36.95                                   | \$37.13                |
| Engineer Tech II         | \$29.13                                   | \$29.28                |
| Engineer Tech I          | \$24.67                                   | \$24.79                |
| Spatial Tech. Manager    | \$58.25                                   | \$58.54                |
| Spatial Tech. Prof. III  | \$42.00                                   | \$42.21                |
| Spatial Tech. Prof. II   | \$32.58                                   | \$32.74                |
| Survey Manager           | \$44.00                                   | \$44.22                |
| Project Surveyor         | \$37.00                                   | \$37.19                |
| Survey Tech.             | \$22.50                                   | \$22.61                |
| CADD Technician III      | \$43.88                                   | \$44.10                |
| Marketing Prof. IV       | \$43.00                                   | \$43.22                |
| Marketing Prof. III      | \$33.35                                   | \$33.52                |
| Admin. Support IV        | \$40.00                                   | \$40.20                |
| Admin. Support III       | \$29.75                                   | \$29.90                |

**EXHIBIT B**

**Local Public Agency**

City of Warrentville

**County**

DuPage

**Section Number**

22-00042-00-BT

**COST ESTIMATE WORKSHEET**

Exhibit B Cost Estimate of Consultant Services Worksheet Fixed Raise

**OVERHEAD RATE** 142.57%

**COMPLEXITY FACTOR** 0

| TASK  | STAFF HOURS | PAYROLL | OVERHEAD & FRINGE BENEFITS | DIRECT COSTS | FIXED FEE | SERVICES BY OTHERS | TOTAL   | % OF GRAND TOTAL |
|---|-------------|---------|----------------------------|--------------|-----------|--------------------|---------|------------------|
| Project Initiation and Data Collection      | 38          | 1,645   | 2,346                      | 54           | 543       |                    | 4,588   | 4.38%            |
| Topographic Survey                          | 112         | 4,506   | 6,424                      | 390          | 1,487     |                    | 12,807  | 12.22%           |
| Traffic Analysis                            | 24          | 988     | 1,408                      |              | 326       |                    | 2,722   | 2.60%            |
| Alternative Analysis                        | 68          | 3,098   | 4,417                      |              | 1,022     |                    | 8,537   | 8.14%            |
| Preliminary Design of Preferred Alternative | 160         | 6,524   | 9,302                      |              | 2,153     |                    | 17,979  | 17.15%           |
| Drainage Analysis                           | 152         | 6,461   | 9,211                      | 54           | 2,132     |                    | 17,858  | 17.03%           |
| Environmental Coordination and Permitting   | 70          | 2,333   | 3,326                      | 125          | 770       |                    | 6,554   | 6.25%            |
| Meetings and Public Involvement             | 132         | 6,688   | 9,534                      | 1,182        | 2,207     |                    | 19,611  | 18.71%           |
| Project Development Report                  | 32          | 1,391   | 1,983                      | 50           | 459       |                    | 3,883   | 3.70%            |
| QA/QC                                       | 32          | 1,953   | 2,785                      |              | 645       |                    | 5,383   | 5.13%            |
| Project Management                          | 32          | 1,782   | 2,541                      |              | 588       |                    | 4,911   | 4.68%            |
|   |             | -       | -                          |              | -         |                    | -       |                  |
|   |             | -       | -                          |              | -         |                    | -       |                  |
|   |             | -       | -                          |              | -         |                    | -       |                  |
|   |             | -       | -                          |              | -         |                    | -       |                  |
|   |             | -       | -                          |              | -         |                    | -       |                  |
|   |             | -       | -                          |              | -         |                    | -       |                  |
|   |             | -       | -                          |              | -         |                    | -       |                  |
|   |             | -       | -                          |              | -         |                    | -       |                  |
|   |             | -       | -                          |              | -         |                    | -       |                  |
|   |             | -       | -                          |              | -         |                    | -       |                  |
|   |             | -       | -                          |              | -         |                    | -       |                  |
|   |             | -       | -                          |              | -         |                    | -       |                  |
|   |             | -       | -                          |              | -         |                    | -       |                  |
|   |             | -       | -                          |              | -         |                    | -       |                  |
|   |             | -       | -                          |              | -         |                    | -       |                  |
|   |             | -       | -                          |              | -         |                    | -       |                  |
|   |             | -       | -                          |              | -         |                    | -       |                  |
|   |             | -       | -                          |              | -         |                    | -       |                  |
|   |             | -       | -                          |              | -         |                    | -       |                  |
|   |             | -       | -                          |              | -         |                    | -       |                  |
|   |             | -       | -                          |              | -         |                    | -       |                  |
|   |             | -       | -                          |              | -         |                    | -       |                  |
|   |             | -       | -                          |              | -         |                    | -       |                  |
| <b>Subconsultant DL</b>                     |             |         |                            |              | 0         |                    | -       |                  |
| <b>TOTALS</b>                               | 852         | 37,369  | 53,277                     | 1,855        | 12,332    | -                  | 104,833 | 100.00%          |

90,646

BLR 05514 (Rev. 04/30/21)  
Avg Hourly 3

**EXHIBIT B**

**Local Public Agency**

**County**

**Section Number**

City of Warrenville

DuPage

22-00042-00-BT

**AVERAGE HOURLY PROJECT RATES**

Exhibit B Cost Estimate of Consultants Services Worksheet Fixed Raise

SHEET 1 OF 2

| PAYROLL<br>CLASSIFICATION | AVG<br>HOURLY<br>RATES | TOTAL PROJ. RATES |            |             | Project Initiation and Data<br>Collection |            |             | Topographic Survey |            |             | Traffic Analysis |            |             | Alternative Analysis |            |             | Preliminary Design of<br>Preferred Alternative |            |             |
|---------------------------|------------------------|-------------------|------------|-------------|---|------------|-------------|--------------------|------------|-------------|------------------|------------|-------------|----------------------|------------|-------------|--|------------|-------------|
|                           |                        | Hours             | %<br>Part. | Wgtd<br>Avg | Hours                                     | %<br>Part. | Wgtd<br>Avg | Hours              | %<br>Part. | Wgtd<br>Avg | Hours            | %<br>Part. | Wgtd<br>Avg | Hours                | %<br>Part. | Wgtd<br>Avg | Hours  | %<br>Part. | Wgtd<br>Avg |
| Executive Vice President  | 78.00                  | 0.0               |            |             |   |            |             |                    |            |             |                  |            |             |                      |            |             |  |            |             |
| Vice President            | 73.73                  | 0.0               |            |             |   |            |             |                    |            |             |                  |            |             |                      |            |             |  |            |             |
| Engineer VII              | 66.04                  | 0.0               |            |             |   |            |             |                    |            |             |                  |            |             |                      |            |             |  |            |             |
| Engineer VI               | 66.75                  | 0.0               |            |             |   |            |             |                    |            |             |                  |            |             |                      |            |             |  |            |             |
| Engineer V                | 61.03                  | 112.0             | 13.15%     | 8.02        |   |            |             |                    |            |             |                  |            |             | 16                   | 23.53%     | 14.36       |  |            |             |
| Engineer IV               | 50.35                  | 222.0             | 26.06%     | 13.12       | 12  | 31.58%     | 15.90       | 16                 | 14.29%     | 7.19        | 8                | 33.33%     | 16.78       | 16                   | 23.53%     | 11.85       | 40   | 25.00%     | 12.59       |
| Engineer III              | 41.23                  | 0.0               |            |             |   |            |             |                    |            |             |                  |            |             |                      |            |             |  |            |             |
| Engineer II               | 36.56                  | 309.0             | 36.27%     | 13.26       | 14  | 36.84%     | 13.47       | 16                 | 14.29%     | 5.22        | 16               | 66.67%     | 24.37       | 36                   | 52.94%     | 19.36       | 70   | 43.75%     | 16.00       |
| Engineer I                | 32.09                  | 0.0               |            |             |   |            |             |                    |            |             |                  |            |             |                      |            |             |  |            |             |
| Environ. Scientist V      | 56.91                  | 0.0               |            |             |   |            |             |                    |            |             |                  |            |             |                      |            |             |  |            |             |
| Natural Resources Mngr.   | 48.74                  | 2.0               | 0.23%      | 0.11        |   |            |             |                    |            |             |                  |            |             |                      |            |             |  |            |             |
| Engineer Tech V           | 51.98                  | 0.0               |            |             |   |            |             |                    |            |             |                  |            |             |                      |            |             |  |            |             |
| Engineer Tech IV          | 45.51                  | 0.0               |            |             |   |            |             |                    |            |             |                  |            |             |                      |            |             |  |            |             |
| Engineer Tech III         | 37.13                  | 0.0               |            |             |   |            |             |                    |            |             |                  |            |             |                      |            |             |  |            |             |
| Engineer Tech II          | 29.28                  | 0.0               |            |             |   |            |             |                    |            |             |                  |            |             |                      |            |             |  |            |             |
| Engineer Tech I           | 24.79                  | 26.0              | 3.05%      | 0.76        |   |            |             |                    |            |             |                  |            |             |                      |            |             |  |            |             |
| Spatial Tech. Manager     | 58.54                  | 0.0               |            |             |   |            |             |                    |            |             |                  |            |             |                      |            |             |  |            |             |
| Spatial Tech. Prof. III   | 42.21                  | 0.0               |            |             |   |            |             |                    |            |             |                  |            |             |                      |            |             |  |            |             |
| Spatial Tech. Prof. II    | 32.74                  | 0.0               |            |             |   |            |             |                    |            |             |                  |            |             |                      |            |             |  |            |             |
| Survey Manager            | 44.22                  | 20.0              | 2.35%      | 1.04        |   |            |             | 20                 | 17.86%     | 7.90        |                  |            |             |                      |            |             |  |            |             |
| Project Surveyor          | 37.19                  | 60.0              | 7.04%      | 2.62        |   |            |             | 60                 | 53.57%     | 19.92       |                  |            |             |                      |            |             |  |            |             |
| Survey Tech.              | 22.61                  | 0.0               |            |             |   |            |             |                    |            |             |                  |            |             |                      |            |             |  |            |             |
| CADD Technician III       | 44.10                  | 77.0              | 9.04%      | 3.99        | 12  | 31.58%     | 13.93       |                    |            |             |                  |            |             |                      |            |             | 26   | 16.25%     | 7.17        |
| Marketing Prof. IV        | 43.22                  | 0.0               |            |             |   |            |             |                    |            |             |                  |            |             |                      |            |             |  |            |             |
| Marketing Prof. III       | 33.52                  | 24.0              | 2.82%      | 0.94        |   |            |             |                    |            |             |                  |            |             |                      |            |             | 24   | 15.00%     | 5.03        |
| Admin. Support IV         | 40.20                  | 0.0               |            |             |   |            |             |                    |            |             |                  |            |             |                      |            |             |  |            |             |
| Admin. Support III        | 29.90                  | 0.0               |            |             |   |            |             |                    |            |             |                  |            |             |                      |            |             |  |            |             |
| <b>TOTALS</b>             |                        | 852.0             | 100%       | \$43.86     | 38.0                                      | 100.00%    | \$43.30     | 112.0              | 100%       | \$40.23     | 24.0             | 100%       | \$41.16     | 68.0                 | 100%       | \$45.56     | 160.0  | 100%       | \$40.78     |

EXHIBIT B

Local Public Agency

County

Section Number

City of Warrenville

DuPage

22-00042-00-BT

AVERAGE HOURLY PROJECT RATES

Exhibit B Cost Estimate of Consultant Services Worksheet Fixed Raise

SHEET 2 OF 2

| PAYROLL<br>CLASSIFICATION | AVG<br>HOURLY<br>RATES | Drainage Analysis |            |             | Environmental<br>Coordination and<br>Permitting |            |             | Meetings and Public<br>Involvement |            |             | Project Development<br>Report |            |             | QA/QC |            |             | Project Management |            |             |
|---------------------------|------------------------|-------------------|------------|-------------|---|------------|-------------|------------------------------------|------------|-------------|-------------------------------|------------|-------------|-------|------------|-------------|--------------------|------------|-------------|
|                           |                        | Hours             | %<br>Part. | Wgtd<br>Avg | Hours   | %<br>Part. | Wgtd<br>Avg | Hours                              | %<br>Part. | Wgtd<br>Avg | Hours                         | %<br>Part. | Wgtd<br>Avg | Hours | %<br>Part. | Wgtd<br>Avg | Hours              | %<br>Part. | Wgtd<br>Avg |
| Executive Vice President  | 78.00                  |                   |            |             |   |            |             |                                    |            |             |                               |            |             |       |            |             |                    |            |             |
| Vice President            | 73.73                  |                   |            |             |   |            |             |                                    |            |             |                               |            |             |       |            |             |                    |            |             |
| Engineer VII              | 66.04                  |                   |            |             |   |            |             |                                    |            |             |                               |            |             |       |            |             |                    |            |             |
| Engineer VI               | 66.75                  |                   |            |             |   |            |             |                                    |            |             |                               |            |             |       |            |             |                    |            |             |
| Engineer V                | 61.03                  | 8                 | 5.26%      | 3.21        |   |            |             | 40                                 | 30.30%     | 18.50       |                               |            |             | 32    | 100.00%    | 61.03       | 16                 | 50.00%     | 30.52       |
| Engineer IV               | 50.35                  | 30                | 19.74%     | 9.94        | 4   | 5.71%      | 2.88        | 64                                 | 48.48%     | 24.41       | 16                            | 50.00%     | 25.18       |       |            |             | 16                 | 50.00%     | 25.18       |
| Engineer III              | 41.23                  |                   |            |             |   |            |             |                                    |            |             |                               |            |             |       |            |             |                    |            |             |
| Engineer II               | 36.56                  | 75                | 49.34%     | 18.04       | 38  | 54.29%     | 19.85       | 28                                 | 21.21%     | 7.76        | 16                            | 50.00%     | 18.28       |       |            |             |                    |            |             |
| Engineer I                | 32.09                  |                   |            |             |   |            |             |                                    |            |             |                               |            |             |       |            |             |                    |            |             |
| Environ. Scientist V      | 56.91                  |                   |            |             |   |            |             |                                    |            |             |                               |            |             |       |            |             |                    |            |             |
| Natural Resources Mngr.   | 48.74                  |                   |            |             | 2   | 2.86%      | 1.39        |                                    |            |             |                               |            |             |       |            |             |                    |            |             |
| Engineer Tech V           | 51.98                  |                   |            |             |   |            |             |                                    |            |             |                               |            |             |       |            |             |                    |            |             |
| Engineer Tech IV          | 45.51                  |                   |            |             |   |            |             |                                    |            |             |                               |            |             |       |            |             |                    |            |             |
| Engineer Tech III         | 37.13                  |                   |            |             |   |            |             |                                    |            |             |                               |            |             |       |            |             |                    |            |             |
| Engineer Tech II          | 29.28                  |                   |            |             |   |            |             |                                    |            |             |                               |            |             |       |            |             |                    |            |             |
| Engineer Tech I           | 24.79                  |                   |            |             | 26  | 37.14%     | 9.21        |                                    |            |             |                               |            |             |       |            |             |                    |            |             |
| Spatial Tech. Manager     | 58.54                  |                   |            |             |   |            |             |                                    |            |             |                               |            |             |       |            |             |                    |            |             |
| Spatial Tech. Prof. III   | 42.21                  |                   |            |             |   |            |             |                                    |            |             |                               |            |             |       |            |             |                    |            |             |
| Spatial Tech. Prof. II    | 32.74                  |                   |            |             |   |            |             |                                    |            |             |                               |            |             |       |            |             |                    |            |             |
| Survey Manager            | 44.22                  |                   |            |             |   |            |             |                                    |            |             |                               |            |             |       |            |             |                    |            |             |
| Project Surveyor          | 37.19                  |                   |            |             |   |            |             |                                    |            |             |                               |            |             |       |            |             |                    |            |             |
| Survey Tech.              | 22.61                  |                   |            |             |   |            |             |                                    |            |             |                               |            |             |       |            |             |                    |            |             |
| CADD Technician III       | 44.10                  | 39                | 25.66%     | 11.31       |   |            |             |                                    |            |             |                               |            |             |       |            |             |                    |            |             |
| Marketing Prof. IV        | 43.22                  |                   |            |             |   |            |             |                                    |            |             |                               |            |             |       |            |             |                    |            |             |
| Marketing Prof. III       | 33.52                  |                   |            |             |   |            |             |                                    |            |             |                               |            |             |       |            |             |                    |            |             |
| Admin. Support IV         | 40.20                  |                   |            |             |   |            |             |                                    |            |             |                               |            |             |       |            |             |                    |            |             |
| Admin. Support III        | 29.90                  |                   |            |             |   |            |             |                                    |            |             |                               |            |             |       |            |             |                    |            |             |
| <b>TOTALS</b>             |                        | 152.0             | 100%       | \$42.51     | 70.0  | 100%       | \$33.33     | 132.0                              | 100%       | \$50.66     | 32.0                          | 100%       | \$43.46     | 32.0  | 100%       | \$61.03     | 32.0               | 100%       | \$55.69     |



# STAFF HOUR SUMMARY

## ILLINOIS ROUTE 59 MULTI-USE PATH IMPROVEMENTS

City of Warrenville

### Phase I Engineering Services - Staff Hour Summary

|   | Task<br>Staff Hours | Total<br>Staff Hours |
|---|---------------------|----------------------|
| <b>1 - PROJECT INITIATION AND DATA COLLECTION</b>                 |                     |                      |
| Data Collection:  |                     |                      |
| Existing Roadway Plans  | 2                   |                      |
| GIS Shape Files   | 4                   |                      |
| Aerial Photography  | 4                   |                      |
| Maintenance and Flooding Records                                  | 4                   |                      |
| Crash Data (5 years)  | 4                   |                      |
| Field Evaluation  | 8                   |                      |
| Funding Administrator Coordination                                | 4                   |                      |
| Utility Locates and Coordination                                  | 8                   |                      |
| <b>Total task staff hours</b>                                     |                     | <b>38</b>            |
| <b>2 - TOPOGRAPHIC SURVEY</b>                                     |                     |                      |
| Topographic Survey  |                     |                      |
| Field Work  | 70                  |                      |
| Structures  | 10                  |                      |
| Terrain Model   | 16                  |                      |
| Right-of-Way  | 16                  |                      |
| <b>Total task staff hours</b>                                     |                     | <b>112</b>           |
| <b>3 - TRAFFIC ANALYSIS</b>                                       |                     |                      |
| Traffic Forecasting   | 8                   |                      |
| Crash Analysis  | 16                  |                      |
| <b>Total task staff hours</b>                                     |                     | <b>24</b>            |
| <b>4 - ALTERNATIVE ANALYSIS</b>                                   |                     |                      |
| Alternative Geometric Development                                 |                     |                      |
| Develop Design Criteria   | 4                   |                      |
| 2 alternatives x 16hrs/alternative x 2 alignments (east and west) | 64                  |                      |
| <b>Total task staff hours</b>                                     |                     | <b>68</b>            |

## STAFF HOUR SUMMARY

### ILLINOIS ROUTE 59 MULTI-USE PATH IMPROVEMENTS

#### City of Warrenville

#### Phase I Engineering Services - Staff Hour Summary

|   | Task<br>Staff Hours | Total<br>Staff Hours |
|---|---------------------|----------------------|
| <b>5 - PRELIMINARY DESIGN OF PREFERRED ALTERNATIVE</b>        |                     |                      |
| Plan and Profile (4 @ 16 hrs/sheet)                           | 64                  |                      |
| Typical Sections (2 typical sections @ 4 hrs/section)         | 8                   |                      |
| Preliminary Cross Sections (40 cross sections @ 1 hr/section) | 40                  |                      |
| Preliminary Estimate of Cost and Schedule                     | 8                   |                      |
| Illustrated Renderings  | 24                  |                      |
| Traffic Management Plan                                       | 16                  |                      |
| <b>Total task staff hours</b>                                 |                     | <b>160</b>           |
| <b>6 - DRAINAGE ANALYSIS</b>                                  |                     |                      |
| Drainage Report (LDS)   |                     |                      |
| Existing Drainage System                                      |                     |                      |
| Site Visit Drainage Engineer                                  | 7                   |                      |
| Existing Drainage Plan  | 26                  |                      |
| Identified Drainage Problems                                  | 2                   |                      |
| Outlet Evaluation   | 8                   |                      |
| Hydrologic Analysis   | 12                  |                      |
| Proposed Drainage System                                      |                     |                      |
| Preliminary Drainage Design                                   | 20                  |                      |
| Storm Sewer, Culvert, and Ditch Sizing                        | 14                  |                      |
| Stormwater Detention  | 26                  |                      |
| Proposed Drainage Plan an Profile                             | 20                  |                      |
| Narrative/Exhibits  | 17                  |                      |
| <b>Total task staff hours</b>                                 |                     | <b>152</b>           |
| <b>7 - ENVIRONMENTAL COORDINATION AND PERMITTING</b>          |                     |                      |
| Environmental Survey Request                                  | 16                  |                      |
| Permit Agency Early Coordination (does not include meetings)  |                     |                      |
| DuPage Stormwater Management                                  | 6                   |                      |
| ACOE  | 8                   |                      |
| Wetland Delineation and Report                                | 28                  |                      |
| Wetland Impact Evaluation                                     | 8                   |                      |
| Wetland Mitigation  | 4                   |                      |
| <b>Total task staff hours</b>                                 |                     | <b>70</b>            |

## STAFF HOUR SUMMARY

**ILLINOIS ROUTE 59 MULTI-USE PATH IMPROVEMENTS**  
**City of Warrenville**  
**Phase I Engineering Services - Staff Hour Summary**

|   | Task<br>Staff Hours | Total<br>Staff Hours |
|---|---------------------|----------------------|
| <b>8 - MEETINGS AND PUBLIC INVOLVEMENT</b>              |                     |                      |
| Stakeholder Meetings (2 staff members @ 4 hrs/meeting)  |                     |                      |
| City (2)  | 16                  |                      |
| IDOT BLRS (1)   | 8                   |                      |
| IDOT Hydraulics (1)                                     | 8                   |                      |
| IDOT/FHWA Coordination Meetings (1)                     | 8                   |                      |
| Individual Property Meetings (3 - single staff member)  | 12                  |                      |
| Field Meeting with City Staff (1 - Single staff member) | 4                   |                      |
| Public Meetings (1)                                     |                     |                      |
| Exhibit Preparation Public Meeting Setup                | 40                  |                      |
| Notification letters & Supporting Exhibits              |                     |                      |
| Staff Attendance at Dry Run (2 staff @ 4hrs/staff)      | 8                   |                      |
| Staff Attendance at Meetings (2 staff @ 6 hrs/staff)    | 12                  |                      |
| Prepare Meeting Summary and Follow Up Correspondence    | 16                  |                      |
| <b>Total task staff hours</b>                           |                     | <b>132</b>           |
| <b>9 - PROJECT DEVELOPMENT REPORT</b>                   |                     |                      |
| Prepare Draft PDR                                       | 32                  |                      |
| <b>Total task staff hours</b>                           |                     | <b>32</b>            |
| <b>10 - QA/QC</b>                                       |                     |                      |
| Review of milestone Submittals                          | 32                  |                      |
| <b>Total task staff hours</b>                           |                     | <b>32</b>            |
| <b>11 - MANAGE PROJECT</b>                              |                     |                      |
| Resource planning/internal meetings                     | 8                   |                      |
| Administration - 2 hrs/month at 12 months               | 24                  |                      |
| <b>Total task staff hours</b>                           |                     | <b>32</b>            |
| <b>TOTAL PHASE I</b>                                    | <b>852</b>          | <b>852</b>           |