Town of Yorktown Town Council 9312 W. Smith Street Yorktown, IN 47396

**RE: Tiger Drive Area Traffic Study** 

**Dear Council Members:** 

Butler Fairman & Seufert (BF&S) appreciates the opportunity to assist the Town of Yorktown with a traffic study of the Tiger Drive area. The Tiger Drive Area Traffic Study will study traffic operations along Tiger Drive and West River Road adjacent to the schools in the area. The purpose of this study is to assess current traffic operations and safety issues at the enumerated study locations below and provide recommendations for future roadway and intersection improvements in the study area.

The approximate study area for this project is shown on Exhibit A, which is bounded as follows: Northern Limit: W. Division Road Southern Limit: W CR 100 S Western Limit: S CR 600 W Road Eastern Limit: S Westchester Park Drive

The study will focus on the following corridors:

- 1. Tiger Drive From W River Road to W CR 100 S
- Tiger Drive
  W River Road
  W River Road From S CR 600 W to Tiger Drive
- 3. W River Road From Tiger Drive to S Westchester Park Drive

The study will focus on the following intersections:

- 1. S CR 600 W and River Road
- 2. River Road and Tiger Drive
- 3. W River Road and Pleasant View Elementary Driveways
- 4. Tiger Drive and Yorktown High School Driveways

#### SCOPE

#### **Funding Application Assistance**

The **ENGINEER** shall provide services to assist the Town with the coordination and submission of documentation to the Muncie MPO for funding assistance and request. This work will include the following.

- 1. Preliminary submittal of the INDOT Project Programming Request Form
- 2. Up to 2 meetings with the Muncie MPO for preliminary planning and resubmittal of funding application request.
- Resubmittal of Programming Request Form with updated values after completion of Traffic Study.

## **Traffic Study and Analysis**

The **ENGINEER** shall provide traffic engineering services for the Tiger Drive Area Traffic Study described above. The purpose of the Tiger Drive Area Traffic Study is to understand current deficiencies of the roadway as it relates to school traffic. In addition, the study will forecast future 10-year and 20-year traffic volumes along the study corridors to plan for needed future roadway improvements. Tasks to be performed are as follows:

- 1. Collect up to six turning movement counts on a typical weekday (school day) from 6:00am to 9:00am and 3:00pm to 6:00pm at the selected intersections.
- 2. Obtain any available intersection or roadway segment traffic volumes from Yorktown or INDOT for all roadways within the study area. The **ENGINEER** will collect tube count traffic volumes as necessary (up to 5 locations) when existing counts are unavailable and required.
- 3. Attend up to four meetings with Yorktown and/or Yorktown Community Schools to discuss the traffic forecasting and redistribution assumptions such as:
  - Anticipated land uses and development sizes for each of the vacant land parcels bounded by the study area.
  - Anticipated time of development for each of the vacant land parcels bounded by the study area.
  - School growth projections.
  - Known roadway improvements and anticipated cross-sections for the study area roadways.
  - The impact on traffic redistribution of the potential new roadways within the study area.
- 4. Forecast and redistribute traffic volumes based on the assumptions agreed upon in item #3.
- 5. Perform a capacity analysis, queue length analysis, micro-simulation modeling and future turn lane needs for the selected intersections under the below listed traffic volume scenarios:

## Traffic Volume Scenarios:

- Existing Traffic
- 10-Year Traffic With Surrounding Development
- o 20-Year Traffic With Surrounding Development
- 6. Perform a traffic signal warrant analysis for the selected intersections. The warrant analyses will be based on the traffic volume scenarios listed above and the following warrants as listed in the Indiana MUTCD.
  - o Warrant 1, Eight-Hour Vehicular Volume
  - Warrant 2, Four-Hour Vehicular Volume
  - Warrant 3, Peak Hour

If a warrant is met for a traffic scenario, analysis will be performed to determine the lane configuration required to achieve an acceptable minimum Level-Of-Service D.

- 7. Perform assessments of the selected corridors and intersections, to include:
  - Identify potential safety issues at the selected intersections and corridors and recommend improvements to address them.

- Identify typical pedestrian routes and crossings and recommend improvements to those facilities.
- o On-street queueing evaluation and appropriate mitigation measures.
- Alternative intersection treatments, such as signalized intersections, roundabout intersections, passing blisters or signage updates.
- Roadway typical cross section evaluation related to thru movements and queueing for school pickup and drop-off.
- Accommodation of emergency vehicle access to and thru the corridors during peak times.

## Utility Coordination – Red Flag Study

The **ENGINEER** shall perform utility coordination which shall include the following:

- 1. Utility Coordination Project Management, project meetings, and monthly reports
- 2. Perform IUPPS 811 Design Ticket(s), pipeline review(s), and area research to determine utilities in the area of the project(s).
- 3. Send out requests for information for preliminary contact to all utilities, both public and private, to establish: a point of contact, the location of the utilities facilities within the field survey limits, and documentation of reimbursable property interests if any.
- 4. Continue follow-up with non-responders to the requests for information.
- 5. Compare request for information utility information with proposed improvements to evaluate conflicts and concerns.
- 6. Complete a site visit to areas where utilities are highly impacted.
- 7. Contact high risk utilities for potential relocation costs, or construction requirements over/across/under their facilities.
- 8. Provide information gathered to design teams for considerations to reduce time & cost impacts due to utility relocations for the project(s).
- 9. Provide utility figure(s) noting existing facilities within the study area.
- 10. Prepare utility section of report.

## **Right-of-Way**

Prepare a report documenting potential right-of-way impacts for the four corridors defined herein. This assessment will be based off owner information linework provided on Delaware County's GIS site and limited deed and plat research as no on-ground survey will be completed. Research will include last deeds of record for non-platted lands and subdivision plats. The report shall include a tabulated summary for each of the focus corridors, including:

- 1. Impacted owners
- 2. Area of anticipated acquisition [permanent and temporary]
- 3. Estimated cost of professional services for land acquisition
- 4. General, non-appraised values for comparison between alternates

## Deliverables

Prepare a report documenting the results and recommendations of the Tiger Drive Area Traffic Study. Deliverables for the report shall include at a minimum:

- Aerial exhibits documenting the anticipated land uses for the study area vacant land parcels.
- Aerial exhibits listing the average daily traffic (ADT) volumes along the study area roadway corridors for the traffic volume scenarios.
- Aerial exhibits listing the turning movement counts(TMCs) at all studied intersections for the traffic volume scenarios.
- Planning level recommendations for the study area roadway corridors that will accommodate the horizon year traffic.
- Summary of assessments for the selected corridors and intersections.
- Selected intersection and corridor safety assessment summary and recommendations.
- Planning level construction cost estimates for identified projects.
- In collaboration with the Owner, a prioritized list of improvement projects.

# <u>SCHEDULE</u>

All work by the **ENGINEER** under this Agreement shall be completed and delivered to the **OWNER** for review and approval within the approximate time periods shown in the following schedule:

Assumed NTP	February 10, 2025
Preliminary Funding Application	February 14, 2025
Traffic Data Collection Complete	May 1, 2025
Draft Report Submittal	August 31, 2025
Town Review Comments Received	September 30, 2025
Final Report Submittal	November 1, 2025

# <u>FEE</u>

We propose to perform the noted engineering services for a total amount that will not exceed \$88,620.00 based on the fee schedule below. Our work will be subject to the terms of the General Services Contract dated August 15, 2022.

The Engineer will be paid for the following work on a lump sum basis:

Funding Application Assistance	\$ 3,770.00
Traffic Study and Analysis Traffic Data Collection Traffic Projections and Modeling Project Management & Meetings Corridor and Intersection Assessments Project Priority & Estimates Report, Figure and Exhibits Preparations	\$ 8,000.00 \$ 17,080.00 \$ 5,910.00 \$ 4,880.00 \$ 5,280.00 \$ 19,800.00
Traffic Subtotal =	\$ 60,950.00
Utility Coordination – Red Flag Study Preliminary Right-of-Way	\$    8,000.00 \$  15,900.00

## TOTAL FEE

# \$ 88,620.00

We appreciate the opportunity to work with you on this important endeavor. Should there be any questions, please contact the undersigned.

Sincerely,

BUTLER, FAIRMAN & SEUFERT, INC.

Eichwann Ticharl W

Michael D. Eichenauer, PE Executive Vice President

# AGREEMENT AND AUTHORIZATION TO PROCEED

Approval Date\_\_\_\_\_

TOWN OF YORKTOWN

Tiger Drive Area Traffic Study

Approved By: