

February 9, 2016

Mr. Dan Gaillet, P.E.
 Road Manager & County Engineer
 Madison County Board of Supervisors
 3137 S. Liberty Street
 Canton, MS 39046

Re: Work Assignment #1 - Professional Services for
 Traffic Analysis of Selected Arterial Roads in Madison County

Dear Mr. Gaillet:

This letter will serve as **Work Assignment #1** between the Madison County Board of Supervisors, and Neel-Schaffer, Inc. (**Engineer**) to provide professional services for a *Traffic Analysis* of selected arterial roads. The *Traffic Analysis* will include a planning level study of traffic circulation to help prioritize infrastructure improvements where the traffic demands are highest. This work assignment is based on discussions with Madison County regarding this project.

Neel-Schaffer proposes to provide **Madison County Board of Supervisors** a study that prioritizes roadway improvements based on current and projected traffic volumes and anticipated congestion levels. The study will be divided into four Tasks: 1) Documentation of existing conditions, 2) Horizon year traffic volumes, 3) Planning level capacity analysis of future year volumes, and 4) Prioritization of geometric improvements.

Task 1– Documentation of Existing Conditions:

Upon receipt of an executed work assignment, Neel-Schaffer will initiate the planning study. Neel-Schaffer will collect existing geometric information on the arterial roadways within the study area. Historical traffic counts will be obtained from MDOT, Madison County, CMPDD and Madison identifying current year traffic circulation and patterns. Arterial roadways are planned to include segments identified in Table 1.

Table 1 – Arterial Roadway Segments

Roadway	From	To	Distance (miles)
MS Highway 463	US Hwy 51	Stribling Road	8.0
Stribling Road	MS Hwy 463	Catlett Road	3.4
Gluckstadt Road	MS Hwy 463	Parkway East	5.8
Weisenberger Rd	Parkway East	US Hwy 51	0.5
Yandell Road	US Hwy 51	N Old Canton Rd	3.0
Reunion Parkway	MS Hwy 463	Bozeman Rd	2.6
Reunion Parkway*	Bozeman Rd	US Hwy 51	2.7
Bozeman Road	MS Hwy 463	Gluckstadt Rd	3.2
Catlett Road	Gluckstadt Rd	Stribling Road	1.6
Parkway East	MS Hwy 463	Gluckstadt Rd	4.6
*Future roadway			35.4

A field inventory of the arterial roadways will be conducted to document the existing conditions of the roadways and traffic control within the project limits. Existing (general) roadway geometrics will be obtained, along with posted speed limits and locations of auxiliary turn lanes and existing traffic signals. Historical traffic counts will be obtained at significant intersections. Some current year traffic counts will be conducted to validate the link volumes on the arterial roadways. Study intersections may include up to 20 locations, listed in Table 2.

Table 2 – Study Intersections

Location	Intersection		Existing Control
1	MS Hwy 463	Stribling Road	minor st stop
2	MS Hwy 463	Gluckstadt Road	minor st stop
3	MS Hwy 463	Reunion Pkwy/Annandale	signal
4	MS Hwy 463	Robinson Springs Rd	minor st stop
5	MS Hwy 463	Livingston Rd	minor st stop
6	MS Hwy 463	Park Place Blvd	signal
7	MS Hwy 463	Bozeman Rd/HCP	signal
8	MS Hwy 463	I-55 Ramps	signal
9	MS Hwy 463	Parkway East/Grandview	signal
10	MS Hwy 463	US Hwy 51	signal
11	Reunion Pkwy	Bozeman Rd	signal
12	US Hwy 51	Green Oak Ln	minor st stop
13	Gluckstadt Rd	Bozeman Rd	signal
14	Gluckstadt Rd	I-55 SB Ramps	signal
15	Gluckstadt Rd	I-55 NB Ramps	signal
16	Gluckstadt Rd	Parkway East	signal
17	Stribling Rd	Catlett Rd	minor st stop
18	Parkway East	Weisenberger Rd	signal
19	Yandell Rd	US Hwy 51	signal
20	Yandell Rd	Old Canton Rd	all-way stop

The traffic counts will be used to document the existing traffic volumes in the study area and used for analysis of future conditions. The operational characteristics of the traffic volumes will be evaluated using the information provided in the Highway Capacity Manual (HCM). The project study area is shown in Attachment 1 – Study Area Map.

Task 2– Horizon Year Traffic Volumes:

Future year traffic volumes will be developed from the Urban Transportation Model (Year 2040) and base year volumes to determine the anticipated congestion levels on the study area’s arterial roadways. The traffic volume forecast will include a base year with growth percentage, as well as evaluation of the impacts of the proposed Reunion Parkway roadway construction and interchange with I-55. Existing capacity limitations will be used to identify roadways that cannot process more peak hour traffic volumes based on geometric and corresponding volume constraints.

Task 3 - Capacity analysis of future year volumes:

Roadway segments will be evaluated based on current and projected congestion levels. Study intersections will be evaluated to identify if signalization is currently or projected to be warranted per the Manual on Uniform Traffic Control Devices (MUTCD). Capacity analysis will be conducted to identify intersection delays at major study intersections based on the Highway Capacity Manual, 2010. Analyses will include recommendations for short term and long term improvements that could help to improve the traffic operations along these corridors.

Task 4 – Prioritization of geometric improvements:

Based on the volume/capacity projections along the study corridors, the proposed improvements of roadway widening or intersection improvements will be prioritized as short-term or long-term improvements. The movement of traffic within the study area is concentrated toward I-55 and south in the mornings and then reverse (north) in the afternoons. The interaction of intersecting arterial roadways channeling this traffic to and from the south is the primary basis for capacity limitations, outside of localized impacts related to schools or concentrated retail development. Recommendations will be developed that will help to improve the capacity of these roadways particularly during peak hours, to reduce delays and congestion levels at study intersections.

Documentation of the traffic analyses and recommended improvements will be provided to **Madison County Board of Supervisors** in a report documenting the *Traffic Analysis* for prioritizing roadway improvements within the study area. Recommendations will be included in the document identifying short-term and long-term improvements. Comments from the Client, City or MDOT, that change the circulation patterns, identify additional intersections for study, or development intensity changes may be considered as additional services if modification to the *Traffic Analysis* is required.

Fee, Schedule & Billing

Neel-Schaffer proposes to provide these services on a time-and-materials basis, per the approved rates as part of the **General Services Agreement** between the **Owner** and **Engineer** for a not-to-exceed fee of \$31,500. The *Traffic Analysis* will be completed within **10 weeks** of receipt of an executed Work Assignment.

Neel-Schaffer will bill you monthly as outlined in the **General Services Agreement**. Payment for our services will be due within 30 days of the invoice date and is not dependent on any factor except our ability to provide services in accordance with generally accepted standards of our profession.

If additional services outside this scope of services, as identified above, are required (and authorized by you in writing), the cost will be based on the **General Services Agreement** rates.



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Additional Services

If other engineering services are requested by the Client, not included in **Tasks 1-4**, these services will be considered additional services and will be provided (if authorized by you, in writing) based on the **General Services Agreement** rates. Attending Public Hearings, Board meetings or Planning & Zoning meetings will be considered as additional services. Additional Services would include Environmental Studies and/or assessments including wetland surveys/mitigation, cultural resource assessments, endangered species research, studies related to the natural environment, or other environmental studies that may be required. Construction phase services are not part of this work assignment.

General Terms and Conditions

These services will be provided in accordance with the *General Terms and Conditions* as provided in the **General Services Agreement**. This proposal (**Work Assignment #1**), and the General Services Agreement between the **Owner** and **Engineer**, represent the entire understanding between **Madison County Board of Supervisors** and Neel-Schaffer with respect to the services to be provided and may only be modified in writing by both parties.

If the Scope of this **Work Assignment #1** is acceptable, please execute both originals and return one of them to us. We appreciate the opportunity to provide these services for you and look forward to working with you.

If you have any questions or comments regarding this work assignment, please call me at (601) 948-3071.

Sincerely,

NEEL-SCHAFFER, INC.

Jonathan A. Kiser, P.E., PTOE, PTP
Professional Traffic Engineer &
Transportation Planner

Attachments: Study Area Map

ACCEPTED: _____

DATE: _____

TITLE: _____

