**TRANSPORTATION COMMITTEE AGENDA**
**Room 400, Government Center**
**115 E. Washington Street, Bloomington, IL**
**Tuesday, September 5, 2006**
**8:00 A.M.**

1. **Roll Call**
2. **Approval of Minutes from August 15, 2006 Meeting**
3. **Recommend Payment of Bills to County Board**
4. **Appearance by Members of the Public and County Employees**
5. **Items to be Presented for Action**

| | | |
|---|---|---|
| A. | Traffic Signals – Towanda Barnes Rd & Oakland Avenue | |
| | 1. Intergovernmental Agreement – City of Bloomington | 1 – 3 |
| | 2. Engineering Agreement – Farnsworth Group | 4 – 14 |
| B. | Altered Speed Zone Resolution | 15 – 16 |
| | 1. Village of Colfax | 17 – 20 |
| | 2. Village of Stanford | 21 – 24 |

6. **Items to be Presented for Information**

| | | |
|---|---|---|
| A. | Project Summary | |
| | 1. Ellsworth Wind Farm Box Culverts – Sec 06-00134-05-BR & 06-00134-06-BR – (CH 17) | 25 |
| | 2. Horizon Wind Farm Resurfacing – Sec 06-00044-10-SM, 06-00134-07-SM & 06-00140-03-SM | 26 |
| | 3. Old Route 150 – White Oak Road – Sec 03-00182-00-RS | 27 |
| | 4. Old Route 150 – Bridge Replacement – Sec 00-00182-01-BR | 28 |
| | 5. Stanford / McLean Road – Peacock Bridge – Sec 05-00047-10-BR | 29 |
| | 6. City of Chenoa – Letcher St (Jt Culvert) – Sec 02-00024-00-DR | 30 |
| | 7. Fairfield Culvert – 05-00040-05-BR | 31 |
| B. | East Side Highway Study | 32 |
| C. | Other | |

7. **Adjournment**

**INTERGOVERNMENTAL AGREEMENT**
**BETWEEN THE CITY OF BLOOMINGTON AND THE COUNTY OF MCLEAN**
**FOR TRAFFIC SIGNALS AT**
**TOWANDA BARNES ROAD AND OAKLAND AVENUE**

**WHEREAS,** Article VII, Section 10 of the Illinois Constitution and the Illinois Intergovernmental Cooperation Act, 5 ILCS 220\1 *et.seq.*, permit and encourage local governments to enter in Intergovernmental Agreements to obtain or share services or to exercise combine or transfer powers and functions, and;

**WHEREAS,** the City of Bloomington, hereinafter called "City", is a municipal corporation and the County of McLean, hereinafter called "County", is a body corporate and politic, and;

**WHEREAS,** it is in the best interest of the public health, safety and welfare that traffic studies are performed at intersections of high volume, and;

**WHEREAS,** the City and County Engineering Departments have performed an Engineering Study at the intersection of Towanda Barnes Road and Oakland Avenue, and;

**WHEREAS,** Traffic Control Signals are now warranted at the intersection of Towanda Barnes Road and Oakland Avenue, and;

**WHEREAS,** THE City and County agree that the cost of construction and maintenance for the Traffic Control Signals at the intersection of Towanda Barnes Road and Oakland Avenue should be shared equally, and, now:

**THEREFORE,** be it hereby mutually agreed as follows:

1. The City and the County agree to have the necessary preliminary engineering performed.

2. To proceed with the construction of the traffic control signals and associated necessary work.

3. The construction shall be budgeted for the summer of 2007, and shall be performed as soon as all approvals are complete after May 1, 2007.

4. The County shall be the lead agency, and shall enter into the Engineering Agreement for an Intersection Design Study (IDS), the Traffic Signal Design, and Intersection Design, take bids, enter into the Contract with the concurrence of the City, and supervise the construction of the project.

5. The City shall reimburse the County for Fifty percent (50%) of all costs associated with the project as work progresses, including all engineering, construction, and right-of-way (ROW) costs as incurred.

6. It is also hereby mutually agreed to amend "Exhibit A" of the Intergovernmental Agreement for Maintenance of Traffic Control Devices of September 2002, as hereby attached.

APPROVED:

ATTEST:

Mayor Steve Stockton (date)
City of Bloomington

Tracy Covert
City of Bloomington Clerk

Chairman Michael F. Sweeney (date)
McLean County Board

Peggy Ann Milton
McLean County Clerk

THE LIST OF SIGNALIZED INTERSECTIONS WITHIN THE CORPORATION

THE LEVEL OF MAINTENANCE REFERS TO THE
TRAFFIC SIGNAL MAINTENANCE PROVISIONS IN EXHIBIT B.

EXHIBIT A
MASTER AGREEMENT TABLE
BLOOMINGTON

| | | MAINTENANCE | | ENERGY | | |
|---|---|---|---|---|---|---|
| Loc No | Intersection | County% | City% | County% | City% | Level |
| 141 | Towanda Barnes Road<br>Ireland Grove Road | 50 | 50 | 50 | 50 | 1 |
| 142 | Towanda Barnes Road<br>General Electric Road | 50 | 50 | 50 | 50 | 1 |
| 143 | Towanda Barnes Road<br>Fort Jesse Road | 50 | 50 | 50 | 50 | 1 |
| 144 | Towanda Barnes Road<br>Oakland Avenue | 50 | 50 | 50 | 50 | 1 |

Approved: September, 2002

Revised: September, 2006

| LOCAL AGENCY | | CONSULTANT | |
|---|---|---|---|
| Municipality | Illinois Department of Transportation | | Name<br>Farnsworth Group, Inc. |
| Township | Preliminary Engineering Services Agreement For Motor Fuel Tax Funds | | Address<br>2709 McGraw Drive |
| County<br>McLean | | | City<br>Bloomington |
| Section<br>06-00168-01-TL | | | State<br>Illinois 61704 |

THIS AGREEMENT is made and entered into this _____ day of September , 2006 between the above Local Agency (LA) and Consultant (ENGINEER) and covers certain professional engineering services in connection with the improvement of the above SECTION. Motor Fuel Tax Funds, allotted to the LA by the State of Illinois under the general supervision of the State Department of Transportation, hereinafter called the "DEPARTMENT", will be used entirely or in part to finance ENGINEERING services as described under AGREEMENT PROVISIONS.

**Section Description**

Name Towanda-Barnes Road at Oakland Avenue

Route C.H. 29 Length _____ Mi. _____ FT (Structure No. _____ )

Termini At Oakland Avenue

Description:
Plans, Specifications and Estimate for a southbound right turn lane, eastbound right turn lane and traffic signals with necessary incidentals. See attached Scope of Services.

**Agreement Provisions**

**The Engineer Agrees,**

1. To perform or be responsible for the performance of the following engineering services for the LA, in connection with the proposed improvements herein before described, and checked below:
   a. ☒ Make such pick-up surveys as are necessary for the preparation of detailed roadway and traffic signal plans.
   b. ☐ Make stream and flood plain hydraulic surveys and gather high water data, and flood histories for the preparation of detailed bridge plans.
   c. ☐ Make or cause to be made such soil surveys or subsurface investigations including borings and soil profiles an analyses thereof as may be required to furnish sufficient data for the design of the proposed improvement. Such investigations are to be made in accordance with the current requirements of the DEPARTMENT.
   d. ☒ Make or cause to be made such traffic studies ~~and counts~~ and special intersection studies as may be required to furnish sufficient data for the design of the proposed improvement.
   e. ☐ Prepare Army Corps of Engineers Permit, Department of Natural Resources-Office of Water Resources Permit, Bridge waterway sketch, and/or Channel Change sketch, Utility plan and locations, and Railroad Crossing work agreements.
   f. ☐ Prepare Preliminary Bridge design and Hydraulic Report, (including economic analysis of bridge or culvert types) and high water effects on roadway overflows and bridge approaches.
   g. ☒ Make complete general and detailed plans, special provisions, proposals and estimates of cost and furnish the LA with five (5) copies of the plans, special provisions, proposals and estimates. Additional copies of any or all documents, if required, shall be furnished to the LA by the ENGINEER at his actual cost for reproduction.
   h. ☐ Furnish the LA with survey and drafts in quadruplicate of all necessary right-of-way dedications, construction easement and borrow pit and channel change agreements including prints of the corresponding plats and staking as required.

Note: Four copies to be submitted to the Regional Engineer

i. ☒ Assist the LA in the tabulation and interpretation of the contractors' proposals

j. ☒ Prepare the necessary environmental documents in accordance with the procedures adopted by the DEPARTMENT's Bureau of Local Roads & Streets.

k. ☐ Prepare the Project Development Report when required by the DEPARTMENT.

(2) That all reports, plans, plats and special provisions to be furnished by the ENGINEER pursuant to the AGREEMENT, will be in accordance with current standard specifications and policies of the DEPARTMENT. It is being understood that all such reports, plats, plans and drafts shall, before being finally accepted, be subject to approval by the LA and the DEPARTMENT.

(3) To attend conferences at any reasonable time when requested to do so by representatives of the LA or the Department.

(4) In the event plans or surveys are found to be in error during construction of the SECTION and revisions of the plans or survey corrections are necessary, the ENGINEER agrees that he will perform such work without expense to the LA, even though final payment has been received by him. He shall give immediate attention to these changes so there will be a minimum delay to the Contractor.

(5) That basic survey notes and sketches, charts, computations and other data prepared or obtained by the Engineer pursuant to this AGREEMENT will be made available, upon request, to the LA or the DEPARTMENT without cost and without restriction or limitations as to their use.

(6) That all plans and other documents furnished by the ENGINEER pursuant to this AGREEMENT will be endorsed by him and will show his professional seal where such is required by law.

**The LA Agrees,**

1. To pay the ENGINEER as compensation for all services performed as stipulated in paragraphs 1a, 1g, 1i, 2, 3, 5 and 6 in accordance with one of the following methods indicated by a check mark:

   a. ☐ A sum of money equal to _____ percent of the awarded contract cost of the proposed improvement as approved by the DEPARTMENT.

   b. ☒ A sum of money on the basis of the stated maximum not to exceed as approved by the DEPARTMENT based on the attached rate schedule:

~~Schedule for Percentages Based on Awarded Contract Cost~~

| | Percentage Fees | |
|---|---|---|
| Maximum Not to Exceed | $47,300 | (see note) |
| | _____ | % |
| | _____ | % |
| | _____ | % |
| | _____ | % |
| | _____ | % |

Note: Not necessarily a percentage. Could use per diem, cost-plus or lump sum.

2. To pay for services stipulated in paragraphs 1b, 1c, 1d, 1e, 1f, 1h, 1j & 1k of the ENGINEER AGREES at actual cost of Performing such work plus N/A percent to cover profit, overhead and readiness to serve - "actual cost" being defined as material cost plus payrolls, insurance, social security and retirement deductions. Traveling and other out-of-pocket expenses will be reimbursed to the ENGINEER at his actual cost. Subject to the approval of the LA, the ENGINEER may sublet all or part of the services provided under the paragraph 1b, 1c, 1d, 1e, 1f, 1h, 1j & 1k. If the ENGINEER sublets all or part of this work, the LA will pay the cost to the ENGINEER plus a five (5) percent service charge.

   "Cost to Engineer" to be verified by furnishing the LA and the DEPARTMENT copies of invoices from the party doing the work. The classifications of the employees used in the work should be consistent with the employee classifications for the services performed. If the personnel of the firm, including the Principal Engineer, perform routine services that should normally be performed by lesser-salaried personnel, the wage rate billed for such services shall be commensurate with the work performed.

3. That payments due the ENGINEER for services rendered in accordance with this AGREEMENT will be made as soon as practicable after the services have been performed in accordance with the following schedule:

   a. Upon completion of detailed plans, special provisions, proposals and estimate of cost - being the work required by paragraphs 1a through 1g under THE ENGINEER AGREES - to the satisfaction of the LA and their approval by the DEPARTMENT, 90 percent of the total fee due under this AGREEMENT based on the approved estimate of cost.

   b. Upon award of the contract for the improvement by the LA and its approval by the DEPARTMENT, 100 percent of the total fee due under the AGREEMENT based on the awarded contract cost, less any amounts paid under "a" above.

   By Mutual agreement, partial payments, not to exceed 90 percent of the amount earned, may be made from time to time as the work progresses.

4. That, should the improvement be abandoned at any time after the ENGINEER has performed any part of the services provided for in paragraphs 1a, through 1h and prior to the completion of such services, the LA shall reimburse the ENGINEER for his time and direct costs incurred up to the time he is notified in writing of such abandonment on the basis of the attached rate schedule.

5. That, should the LA require changes in any of the detailed plans, specifications or estimates except for those required pursuant to paragraph 4 of THE ENGINEER AGREEs, after they have been approved by the DEPARTMENT, the LA will pay the ENGINEER for such changes on the basis of the attached rate schedule. It is understood that "changes" as used in this paragraph shall in no way relieve the ENGINEER of his responsibility to prepare a complete and adequate set of plans and specifications.

---

**It is Mutually Agreed,**

1. That any difference between the ENGINEER and the LA concerning their interpretation of the provisions of this Agreement shall be referred to a committee of disinterested parties consisting of one member appointed by the ENGINEER, one member appointed by the LA and a third member appointed by the two other members for disposition and that the committee's decision shall be final.

2. This AGREEMENT may be terminated by the LA upon giving notice in writing to the ENGINEER at his last known post office address. Upon such termination, the ENGINEER shall cause to be delivered to the LA all surveys, permits, agreements, preliminary bridge design & hydraulic report, drawings, specifications, partial and completed estimates and data, if any from traffic studies and soil survey and subsurface investigations with the understanding that all such material becomes the property of the LA. The ENGINEER shall be paid for any services completed and any services partially completed in accordance with Section 4 of THE LA AGREES.

3. That if the contract for construction has not been awarded one year after the acceptance of the plans by the LA and their approval by the DEPARTMENT, the LA will pay the ENGINEER the balance of the engineering fee due to make 100 percent of the total fees due under this AGREEMENT, based on the estimate of cost as prepared by the ENGINEER and approved by the LA and the DEPARTMENT.

4. That the ENGINEER warrants that he/she has not employed or retained any company or person, other than a bona fide employee working solely for the ENGINEER, to solicit or secure this contract, and that he/she has not paid or agreed to pay any company or person, other than a bona fide employee working solely for the ENGINEER, any fee, commission, percentage, brokerage fee, gifts or any other consideration, contingent upon or resulting from the award or making of this contract. For Breach or violation of this warranty the LA shall have the right to annul this contract without liability.

N WITNESS WHEREOF, the parties have caused the AGREEMENT to be executed in quadruplicate counterparts, each of vhich shall be considered as an original by their duly authorized officers.

Executed by the LA:

McLean County of the
(Municipality/Township/County)

ATTEST:

By _____

County Clerk

(Seal)

State of Illinois, acting by and through its

Chairman and County Board

By _____

Title Chairman

Executed by the ENGINEER:

Farnsworth Group, Inc.

2709 McGraw Drive

Bloomington, IL 61704

ATTEST:

By _____

Title Principal

By Donald K. Rutledge

Title Secretary

**Authorized MFT Expenditure**

_____
Date
Department of Transportation

_____
Regional Engineer

# SCOPE OF SERVICES
## McLean County
## MFT Section 06-00168-01-TL
## Towanda-Barnes Road at Oakland Avenue Traffic Signals

Intersection Design Study shall be completed and delivered to McLean County, City of Bloomington, and IDOT for review within six weeks from receiving Notice to Proceed. Preliminary plans, specifications, and estimate shall be completed and delivered to McLean County, City of Bloomigton, and IDOT for review within ten weeks from receiving IDS approval.

1. Pick up Field Survey
   - Project length: Towanda-Barnes Road (C.H. 29) - 800 LF
     Oakland Avenue - 600 LF
     1,400 LF

2. Permits
   - IHPA Historical/Archaeological Sign-off, does not include a Level 1 Study
   - IDNR Endangered Species Sign-off, does not include a Detailed Action Report

3. Intersection Design Study – Towanda-Barnes Road at Oakland Avenue
   - AM and PM peak hour traffic counts at Towanda-Barnes Road and Oakland Avenue to be provided by County.
   - Trip generation and traffic distribution using ITE Trip Generation Manual distribution based on the land use from the approved site plans using ITE Trip Generation Manual for: Towanda-Barnes Business Park and Deneen East.
   - Prepare 20-year traffic projections and corresponding lane usages.
   - Determine AM and PM peak hour volumes.
   - Perform Capacity Analysis.
   - Prepare and submit Traffic Volume Projections and Intersection Design Study to the County, City and IDOT for review and comments.
   - Address comments and finalize the Traffic Volume Projections and Intersection Design Study.
   - Submit the final Intersection Design Study to the County, City and IDOT.
   - Geometrics for the Intersection Design study are to be completed according to IDOT Bureau of Design and Environment standards.
   - Design vehicle shall be WB-55.
   - Design speed shall be 55 mph on Towanda-Barnes Road.
   - Design speed shall be 35 mph on Oakland Avenue.
   - Pavement marking will be done as part of the construction plans.

4. Traffic Signals
   - Use 8 Phase NEMA Controller
   - Install detection loops (including advance loops) on all four approaches
   - Install Emergency Pre-emption Interconnect for City/CIRA Fire Station on Oakland Avenue (west).
   - All finishes to be galvanized
   - Include street lights on mast arms
   - Isolated intersection - no interconnections
   - Prepare traffic signal plan sheet
   - Prepare cable plan sheet
   - Prepare mast arm loading detail sheet

5. Roadway Widening Plans, Specifications and Estimate
   - Project length: Towanda-Barnes Road (C.H. 29) – 1800 LF
     Oakland Avenue – 1200 LF
   - Design Speed: Towanda-Barnes Road (C.H. 29) – 55 mph
     Oakland Avenue – 30 mph
   - Widen north and west approach for southbound and eastbound right turn lanes

- Pavement cross slope – match existing cross slope on Towanda-Barnes Road and Oakland Avenue
- Include pavement marking plan
- Soil Survey not required
- Provide Pavement Design for widening
- Prepare IHPA and IDNR sign-off permits
- Provide MicroStation CAD data files in accordance with IDOT Standard Policy DES-13
- Funding Type – Motor Fuel Tax Funding

Note: 1) Not included in this Scope of Services - Any project report requirements, culvert extensions, easement plats or descriptions, temporary use permits, any purchase of title commitments, any IHPA Historical/Archeological Level 1 Studies, IDNR Endangered Species Detailed Action Reports, soil borings or report, traffic counts. This work will be done on a time and material basis if requested.

SCOPE OF SERVICES
McLean Conty
MFT Section 06-00168-01-TL
Towanda-Barnes at Oakland Avenue Traffic Signals

## INDEX OF SHEETS

| No. | Title |
|---|---|
| 1 | Cover Sheet, Index to Sheets, Summary of Quantities |
| 1 | Typical Cross Sections Legend & Details |
| 3 | Towanda-Barnes Road Plan and Profiles |
| 2 | Oakland Avenue Plan and Profiles |
| 1 | Pavement Marking Plan |
| 1 | Traffic Signal Plan |
| 1 | Cable Plan |
| 1 | Mast Arm Loading Plan |
| 2 | Towanda-Barnes Road Cross Sections |
| 2 | Oakland Avenue Cross Sections |
| 5 | State Standard Details |
| 20 | Total |

McLean County
MFT Section 06-00168-01-TL
Towanda-Barnes Road at Oakland Avenue Traffic Signals

## PICK-UP SURVEY/FIELD CHECK

Survey Length - 0.15 mile - Towanda-Barnes Road
0.11 mile - Oakland Avenue

Review Information, Brief Field Crew, Re-establish TL/CL Control Points
Establish CL Stationing, Run Level Circuit, Topographic and Contour Survey with
Total Station/Data Collector

| | | | | | | |
|---|---|---|---|---|---|---|
| Engineer Manager | 3 | Hrs. | @ | $125.00 | /Hr. = | $375.00 |
| Engineer | 4 | Hrs. | @ | $91.00 | /Hr. = | $364.00 |
| Senior Technician | 28 | Hrs. | @ | $72.00 | /Hr. = | $2,016.00 |
| Technician 1 | 34 | Hrs. | @ | $50.00 | /Hr. = | $1,700.00 |
| Field Car & Equipment | 26 | Hrs. | @ | $9.00 | /Hr. = | $234.00 |
| Misc. Survey Supplies | | | | | | $11.00 |
| | | | | | | $4,700.00 |

## WORK SHEETS

Project Length - 0.34 mile - Towanda-Barnes Road
0.22 mile - Oakland Avenue

Data Dumps and Processing of Data, Plot Updated Existing Plan and Profiles,
Plot Existing Cross Sections, Plot Traffic Signal Base Sheets (4)

| | | | | | | |
|---|---|---|---|---|---|---|
| Senior Technician | 18 | Hrs. | @ | $72.00 | /Hr. = | $1,296.00 |
| Computer - CAD | 18 | Hrs. | @ | $10.00 | /Hr. = | $180.00 |
| Miscellaneous | | | | | | $124.00 |
| | | | | | | $1,600.00 |

## TRAFFIC VOLUME PROJECTION

Review information, including AM and PM peak hour counts by County, Trip Generation, and Traffic Distribution for Towanda-Barnes Business Park and Deneen East Developments, Capacity Analysis, Generate and Submit Traffic Volumes to the County, City and IDOT.

| | | | | | | |
|---|---|---|---|---|---|---|
| Principal | 2 | Hrs. | @ | $145.00 | /Hr. = | $290.00 |
| Senior Project Engineer | 6 | Hrs. | @ | $115.00 | /Hr. = | $690.00 |
| Engineer | 24 | Hrs. | @ | $91.00 | /Hr. = | $2,184.00 |
| Miscellaneous | | | | | | $36.00 |
| | | | | | | $3,200.00 |

## INTERSECTION DESIGN STUDIES

Proposed Southbound and Eastbound Right Turn Lanes, IDS for IDOT approval.

| | | | | | | |
|---|---|---|---|---|---|---|
| Principal | 2 | Hrs. | @ | $145.00 | /Hr. = | $290.00 |
| Senior Project Engineer | 7 | Hrs. | @ | $115.00 | /Hr. = | $805.00 |
| Engineer | 34 | Hrs. | @ | $91.00 | /Hr. = | $3,094.00 |
| Senior Technician | 28 | Hrs. | @ | $72.00 | /Hr. = | $2,016.00 |
| Computer - CAD | 28 | Hrs. | @ | $10.00 | /Hr. = | $280.00 |
| Miscellaneous | | | | | | $15.00 |
| | | | | | | $6,500.00 |

McLean County
MFT Section 06-00168-01-TL
Towanda-Barnes Road at Oakland Avenue Traffic Signals

## PRELIMINARY WIDENING AND TRAFFIC SIGNAL PLANS

Design of the widening of Towanda-Barnes and Oakland Avenue Road, including Proposed Plan and Profiles, Proposed Cross Sections, Drainage, Quantities, Special Details, Pavement Markings, Traffic Signals, Special Provisions, Estimate of Time, Estimate of Cost, and Internal Review

Estimated Construction Cost = $300,000

| | | | | | | |
|---|---|---|---|---|---|---|
| Principal | 4 Hrs. | @ | $145.00 | /Hr. = | $580.00 | |
| Senior Project Engineer | 22 Hrs. | @ | $115.00 | /Hr. = | $2,530.00 | |
| Engineer | 98 Hrs. | @ | $91.00 | /Hr. = | $8,918.00 | |
| Chief Technician | 16 Hrs. | @ | $82.00 | /Hr. = | $1,312.00 | |
| Senior Technician | 84 Hrs. | @ | $72.00 | /Hr. = | $6,048.00 | |
| Admin | 8 Hrs. | @ | $49.00 | /Hr. = | $392.00 | |
| Computer - CAD | 84 Hrs. | @ | $10.00 | /Hr. = | $840.00 | |
| Mylars, Prints, Etc. | | | | | $180.00 | |
| | | | | | | $20,800.00 |

## FINAL WIDENING AND TRAFFIC SIGNAL PLANS

Revisions to Preliminary Traffic Signal Plans after Review by County, City, and State.
Provide IntergraphCAD Data Files in Accordance with IDOT Standard Policy DES-13

| | | | | | | |
|---|---|---|---|---|---|---|
| Principal | 4 Hrs. | @ | $145.00 | /Hr. = | $580.00 | |
| Senior Project Engineer | 16 Hrs. | @ | $115.00 | /Hr. = | $1,840.00 | |
| Engineer | 24 Hrs. | @ | $91.00 | /Hr. = | $2,184.00 | |
| Senior Technician | 24 Hrs. | @ | $72.00 | /Hr. = | $1,728.00 | |
| Admin | 4 Hrs. | @ | $49.00 | /Hr. = | $196.00 | |
| Computer - CAD | 24 Hrs. | @ | $10.00 | /Hr. = | $240.00 | |
| Mylars, Prints, Etc. | | | | | $132.00 | |
| | | | | | | $6,900.00 |

## PERMITS - IHPA/IDNR SIGN-OFFS

| | | | | | | |
|---|---|---|---|---|---|---|
| Project Planner | 6 Hrs. | @ | $95.00 | /Hr. = | $570.00 | |
| Engineer | 2 Hrs. | @ | $91.00 | /Hr. = | $182.00 | |
| Mylars, Prints, Etc. | | | | | $48.00 | |
| | | | | | | $800.00 |

## PROJECT MANAGEMENT/ADMINISTRATION

Proposal, Contract Preparation, Project Management, Billing, Client Meetings, Coordination

| | | | | | | |
|---|---|---|---|---|---|---|
| Principal | 11 Hrs. | @ | $145.00 | /Hr. = | $1,595.00 | |
| Engineering Manager | 8 Hrs. | @ | $125.00 | /Hr. = | $1,000.00 | |
| Engineer | 1 Hrs. | @ | $91.00 | /Hr. = | $91.00 | |
| Admin. | 2 Hrs. | @ | $49.00 | /Hr. = | $98.00 | |
| Misc. | | | | | $16.00 | |
| | | | | | | $2,800.00 |

**TOTAL PROJECT = $47,300.00**

Farnsworth Group, Inc.
Engineers, Architects, Surveyors & Scientists
Schedule of Charges - January 1, 2006

| Professional Staff – Engineering/Surveying | Per Hour |
|---|---|
| Engineering Intern I | $ 75.00 |
| Engineering Intern II | $ 82.00 |
| Engineer & Land Surveyor | $ 91.00 |
| Senior Engineer & Senior Land Surveyor | $ 96.00 |
| Project Engineer & Project Land Surveyor | $103.00 |
| Senior Project Engineer & Senior Project Land Surveyor | $115.00 |
| Engineering Manager & Land Surveying Manager | $125.00 |
| Principal | $145.00 |

| Technical Staff – Engineering/Surveying | |
|---|---|
| Technician I | $ 50.00 |
| Technician II | $ 66.00 |
| Senior Technician | $ 72.00 |
| Chief Technician | $ 82.00 |
| Computer Specialist | $ 89.00 |
| Designer and Surveyor | $ 90.00 |
| Senior Designer and Senior Surveyor | $ 95.00 |
| Project Designer and Project Surveyor | $100.00 |
| Senior Project Designer | $112.00 |
| Administrative Support | $ 49.00 |

| Specialists | |
|---|---|
| Project Planner | $ 95.00 |
| Systems Integration Intern I | $ 75.00 |
| Systems Integration Specialist II | $100.00 |
| Systems Integration Manager | $120.00 |

| Professional Staff - Architecture | |
|---|---|
| Architectural Intern I | $ 70.00 |
| Architectural Intern II | $ 78.00 |
| Architect | $ 87.00 |
| Senior Architect & Senior Landscape Architect | $ 92.00 |
| Project Architect | $102.00 |
| Senior Project Architect | $110.00 |
| Architectural Manager | $118.00 |
| Principal-Architecture | $135.00 |

| Technical Staff - Architecture | |
|---|---|
| Architectural Technician | $ 60.00 |
| Senior Architectural Technician | $ 72.00 |
| Chief Architectural Technician | $ 78.00 |
| Architectural Designer | $ 82.00 |
| Project Architectural Designer | $ 97.00 |
| Senior Project Architectural Designer | $107.00 |
| Computer Specialist | $ 89.00 |
| Senior Architectural Designer | $ 90.00 |
| Administrative Support | $ 49.00 |

**Miscellaneous – Engineering/Architecture/Surveying**

| | |
|---|---|
| Overtime Requested by Client | Negotiated |
| Expert Testimony | 2 x billing rate |
| Field Vehicle & Equipment | $ 9.00 |
| Automobile (per mile) | $ 0.47 |
| CADD Computer (per hour) | $ 10.00 |
| Consultants & Reimbursable Expenses Related to Project * | Cost + 10% |
| 2 Unit GPS (Maximum $440/Day) | $44.00/hour |
| 3 Unit GPS (Maximum $660/Day) | $66.00/hour |
| Robotic Total Station | $22.00/hour |

* Includes the actual cost of blueprints, supplies, toll charges, testing services, personnel subsistence, and other costs directly incidental to the performance of the above services.

RATES EFFECTIVE UNTIL JANUARY 1, 2007 UNLESS NOTIFIED

# Resolution
# Of The County Board
# McLean County, Illinois

**AN ORDINANCE AND RESOLUTION FOR THE ESTABLISHMENT OF AN ALTERED SPEED ZONE**

IT IS HEREBY DECLARED, ORDAINED AND RESOLVED by the County Board of McLean County, Illinois, that the statutory maximum vehicular speed limits established by Section 11-601 of the Illinois Vehicle Code are greater, or less, respectively, than that considered reasonable and proper on the street or highway, respectively, listed in the Schedule on the reverse side for which McLean County has maintenance responsibility and which is not under the jurisdiction of the Illinois Department of Transportation or the Illinois State Toll Highway Authority; and,

BE IT FURTHER DECLARED, ORDAINED AND RESOLVED that this Board has caused to be made an engineering and traffic investigation upon the respective streets or highways listed in the Schedule; and,

BE IT FURTHER DECLARED, ORDAINED AND RESOLVED that, by virtue of Section 11-604 of the above Code, this Board determines and declares that reasonable and proper absolute maximum speed limits upon those respective streets and highways described in the Schedule shall be as stated therein; and,

BE IT FURTHER DECLARED, ORDAINED AND RESOLVED that this ordinance shall take effect immediately after the erection of signs giving notice of the maximum speed limits. Said signs shall be erected in conformance with the standards and specifications contained in the Illinois Manual on Uniform Traffic Control Devices for Streets and Highways.

Adopted and passed this 19th day of September, 2006.

_____
Michael F. Sweeney, Chairman
McLean County Board

ATTEST:

_____
Peggy Ann Milton, McLean County Clerk

**(SEAL)**

## SCHEDULE OF ALTERED SPEED ZONES

| Name of Street Or Highway | Exact Limits of Zone(s) From | To | Maximum Speed Limits |
|---|---|---|---|
| CH 13 & Martin Twp 1900 North Road | 3375 East Rd | 200' E of 3425 East Rd | 40 mph |
| CH 59 – Stanford Rd | 200' S of CH 32 | 1,005' N of CH 32 | 30 mph |

McLEAN COUNTY HIGHWAY DEPARTMENT

ROUTE County Highway 13 (CH 13) & Martin Twp 1900 North Road FROM 3375 East Road

TO 200' East of 3425 East Road A DISTANCE OF 0.45 MILES

IN Colfax , Martin TOWNSHIP, McLEAN COUNTY

I. SPOT SPEED STUDIES (ATTACHED)

| CHECK NO. | 85th % | 10 MPH PACE UPPER LIMIT |
|---|---|---|
| 1 | 50.8 | 49 |
| 2 | 49.6 | 44 |
| | | |
| | | |

II.

III. PREVAILING SPEED

| | |
|---|---|
| 85th PERCENTILE AVG. | 50.2 MPH |
| UPPER LIMIT AVG. | 46.5 MPH |
| PREVAILING SPEED: | 48.4 MPH |

IV. EXISTING SPEED LIMITS

| | |
|---|---|
| ZONE BEING STUDIED | 55 MPH |
| VIOLATION RATE | 5 % |
| ADJACENT ZONES [N] OR W | 30 MPH |
| LENGTH | 1.0 MILES |
| [W] & [E] | 55 MPH |
| LENGTH | 2 MILES |

V. DRIVEWAY CONFLICTS

| | | | |
|---|---|---|---|
| RESIDENTIAL DRIVES | 7 | X 1.0 = | 7 |
| SMALL BUSINESS DRIVES | 1 | X 5.0 = | 5 |
| LARGE BUSINESS DRIVES | 2 | X 10.0 = | 20 |
| DRIVEWAY CONFLICTS NUMBER TOTAL | | | 32 |

32 (D.C.N) = 71.1
.45 MILES CONFLICT NO. / MILE

VI. MISC. FACTORS

PEDESTRIAN VOLUME

ACCIDENT RATE RATIO:
COUNTY / ROUTE AVG. =

PARKING PERMITTED ■ YES □ NO

VII. PREVAILING SPEED ADJUSTMENT

| | |
|---|---|
| DRIVEWAY ADJUSTMENT | 10 % |
| PEDESTRIAN ADJUSTMENT | n/a % |
| ACCIDENT ADJUSTMENT | n/a % |
| PARKING ADJUSTMENT | 5 % |
| TOTAL (MAX 20%) | 15 % |

48.4 MPH (PREVAILING SPEED) X .15 (ADJUSTMENT) % = 7.3 MPH (MAX 10 MPH)

ADJUSTED PREVAILING SPEED 41.1 MPH

VIII. REVISED SPEED LIMIT

RECOMMENDED SPEED LIMIT 40 MPH

ANTICIPATED VIOLATION RATE 10 %

RECOMMEND BY JOHN E. MITCHELL
McLEAN COUNTY ENGINEER

ORGANIZATION HIGHWAY DEPARTMENT

DATE AUGUST 14, 2006

# McLean County Highway Department

## APPLICATION FOR THE ESTABLISHMENT OF AN ALTERED SPEED ZONE

An ALTERED SPEED ZONE as referred to in this application is a length of roadway on which a uniform speed limit at variance with the Statewide statutory limit is posted.

---

To the COUNTY BOARD

In accordance with the Manual on Uniform Traffic Control Devices for Streets and Highways, the Highway Department has completed an engineering and traffic investigation report concerning the street or highway listed below and requests that an altered speed zone be approved. This application if for the:

■ Establishment of of new zone ☐ Revision of existing zone ☐ Extension of existing zone

Street or roadway to be zoned: County Highway 59 (CH 13) & Martin Twp 1900 North Road

From: 3375 East Road

To: 200' East of 3425 East Road

County: McLean In or near Colfax Length .45 Miles Proposed Speed 40 mph

The Statements contained in this APPLICATION FOR THE ESTABLISHMENT OF AN ALTERED SPEED ZONE and the data submitted obtained from an engineering and traffic investigation are true and correct, and in conformance with the Highway Department's POLICY FOR THE ESTABLISHMENT AND POSTING OF SPEED LIMITS ON COUNTY AND TOWNSHIP HIGHWAYS.

Date: August 14, 2006

Submitted by: _____
John E. Mitchell
McLean County Engineer

Enclosures:
- ■ Copy of Ordinance
- ■ Establishment of Speed Zone
- ■ Spot Speed study
- ☐ Condition Diagram

# Nu-Metrics Traffic Analyzer Study
# Computer Generated Summary Report
# City: Colfax
# Street: CH 13

---

A study of vehicle traffic was conducted with HI-STAR unit number 1828. The study was done in the EB lane on CH 13 in Colfax, Il in Mclean county. The study began on 08/04/2006 at 08:00 AM and concluded on 08/04/2006 at 11:00 AM, lasting a total of 3 hours. Data was recorded in 15 minute time periods. The total recorded volume of traffic showed 40 vehicles passed through the location with a peak volume of 7 on 08/04/2006 at 08:00 AM and a minimum volume of 1 on 08/04/2006 at 08:45 AM. The AADT Count for this study was 320.

## SPEED

Chart 1 lists the values of the speed bins and the total traffic volume for each bin.

**Chart 1**

| 0 to 9 | 10 to 14 | 15 to 19 | 20 to 24 | 25 to 29 | 30 to 34 | 35 to 39 | 40 to 44 | 45 to 49 | 50 to 54 | 55 to 59 | 60 to 64 | 65 to 69 | 70 to 74 | 75 > |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 1 | 1 | 1 | 1 | 3 | 7 | 10 | 9 | 6 | 0 | 0 | 0 | 0 | 1 |

At least half of the vehicles were traveling in the 40 - 44 mph range or a lower speed. The average speed for all classified vehicles was 42 mph with 2.50 percent exceeding the posted speed of 55 mph. The HI-STAR found 2.50 percent of the total vehicles were traveling in excess of 55 mph. The mode speed for this traffic study was 40 mph and the 85th percentile was 50.00 mph.

## CLASSIFICATION

Chart 2 lists the values of the eight classification bins and the total traffic volume accumulated for each bin.

**Chart 2**

| 0 to 20 | 21 to 27 | 28 to 39 | 40 to 49 | 50 to 59 | 60 to 69 | 70 to 79 | 80 > |
|---|---|---|---|---|---|---|---|
| 37 | 1 | 2 | 0 | 0 | 0 | 0 | 0 |

Most of the vehicles classified during the study were Passenger Cars. The number of Passenger Cars in the study was 38 which represents 95.00 percent of the total classified vehicles. The number of Small Trucks in the study was 2 which represents 5.00 percent of the total classified vehicles. The number of Trucks/Buses in the study was 0 which represents 0.00 percent of the total classified vehicles. The number of Tractor Trailers in the study was 0 which represents 0.00 percent of the total classified vehicles.

## HEADWAY

During the peak time period, on 08/04/2006 at 08:00 AM the average headway between the vehicles was 112.5 seconds. The slowest traffic period was on 08/04/2006 at 08:45 AM. During this slowest period, the average headway was 450.0 seconds.

## WEATHER

The roadway surface temperature over the period of the study varied between 80 and 115 degrees Fahrenheit. The HI-STAR determined that the roadway surface was Dry 100.00 percent of the time.

# Nu-Metrics Traffic Analyzer Study
# Computer Generated Summary Report
# City: Colfax
# Street: CH 13

A study of vehicle traffic was conducted with HI-STAR unit number 1727. The study was done in the WB lane on CH 13 in Colfax, Il in Mclean county. The study began on 08/04/2006 at 08:00 AM and concluded on 08/04/2006 at 11:00 AM, lasting a total of 3 hours. Data was recorded in 15 minute time periods. The total recorded volume of traffic showed 49 vehicles passed through the location with a peak volume of 8 on 08/04/2006 at 09:45 AM and a minimum volume of 0 on 08/04/2006 at 08:45 AM. The AADT Count for this study was 392.

## SPEED

Chart 1 lists the values of the speed bins and the total traffic volume for each bin.

**Chart 1**

| 0 to 9 | 10 to 14 | 15 to 19 | 20 to 24 | 25 to 29 | 30 to 34 | 35 to 39 | 40 to 44 | 45 to 49 | 50 to 54 | 55 to 59 | 60 to 64 | 65 to 69 | 70 to 74 | 75 > |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 0 | 0 | 3 | 2 | 9 | 12 | 12 | 4 | 2 | 2 | 1 | 2 | 0 | 0 |

At least half of the vehicles were traveling in the 35 - 39 mph range or a lower speed. The average speed for all classified vehicles was 40 mph with 6.12 percent exceeding the posted speed of 55 mph. The HI-STAR found 6.12 percent of the total vehicles were traveling in excess of 55 mph. The mode speed for this traffic study was 35 mph and the 85th percentile was 49.56 mph.

## CLASSIFICATION

Chart 2 lists the values of the eight classification bins and the total traffic volume accumulated for each bin.

**Chart 2**

| 0 to 20 | 21 to 27 | 28 to 39 | 40 to 49 | 50 to 59 | 60 to 69 | 70 to 79 | 80 > |
|---|---|---|---|---|---|---|---|
| 46 | 2 | 0 | 1 | 0 | 0 | 0 | 0 |

Most of the vehicles classified during the study were Passenger Cars. The number of Passenger Cars in the study was 48 which represents 98.00 percent of the total classified vehicles. The number of Small Trucks in the study was 0 which represents 0.00 percent of the total classified vehicles. The number of Trucks/Buses in the study was 1 which represents 2.00 percent of the total classified vehicles. The number of Tractor Trailers in the study was 0 which represents 0.00 percent of the total classified vehicles.

## HEADWAY

During the peak time period, on 08/04/2006 at 09:45 AM the average headway between the vehicles was 100.0 seconds. The slowest traffic period was on 08/04/2006 at 08:45 AM. During this slowest period, the average headway was 900.0 seconds.

## WEATHER

The roadway surface temperature over the period of the study varied between 80 and 113 degrees Fahrenheit. The HI-STAR determined that the roadway surface was Dry 100.00 percent of the time.

McLEAN COUNTY HIGHWAY DEPARTMENT

ROUTE County Highway 59 (CH 59) – Stanford Road FROM 1005' North of Stringtown Road

TO 200' South of Stringtown Road A DISTANCE OF 1205' (.23) MILES

IN Stanford , Allin TOWNSHIP, McLEAN COUNTY

I. SPOT SPEED STUDIES (ATTACHED)

| CHECK NO. | 85th % | 10 MPH PACE UPPER LIMIT |
|---|---|---|
| 1 | 50.5 | 29 |
| 2 | 51.3 | 35 |
| | | |
| | | |

II.

*NOTE: Lowered to 30 mph as 35 mph would Require a change to the existing 30 mph in less that ¼ mile, which would add to confusion & violation in existing 30 mph limit through town. City limits have extended through this area*

III. PREVAILING SPEED

| | |
|---|---|
| 85th PERCENTILE AVG. | 50.9 MPH |
| UPPER LIMIT AVG. | 32 MPH |
| PREVAILING SPEED: | 41.5 MPH |

IV. EXISTING SPEED LIMITS

| | |
|---|---|
| ZONE BEING STUDIED | 55 MPH |
| VIOLATION RATE | 7.2 % |
| ADJACENT ZONES [N] OR W | 30 MPH |
| LENGTH | .75 MILES |
| [S] OR E | 55 MPH |
| LENGTH | 2.25 MILES |

V. DRIVEWAY CONFLICTS

| | | | |
|---|---|---|---|
| RESIDENTIAL DRIVES | 4 | X 1.0 = | 4 |
| SMALL BUSINESS DRIVES | | X 5.0 = | |
| LARGE BUSINESS DRIVES | 3 | X 10.0 = | 30 |
| DRIVEWAY CONFLICTS NUMBER TOTAL | | | 34 |

34 (D.C.N) = 147.8

.23 MILES CONFLICT NO. / MILE

VI. MISC. FACTORS

PEDESTRIAN VOLUME

ACCIDENT RATE RATIO:

COUNTY / ROUTE AVG. =

PARKING PERMITTED ■ YES □ NO

VII. PREVAILING SPEED ADJUSTMENT

| | |
|---|---|
| DRIVEWAY ADJUSTMENT | 10 % |
| PEDESTRIAN ADJUSTMENT | n/a % |
| ACCIDENT ADJUSTMENT | n/a % |
| PARKING ADJUSTMENT | 5 % |
| TOTAL (MAX 20%) | 15 % |

41.5 MPH X .15 % = 6.2 MPH

PREVAILING SPEED ADJUSTMENT (MAX 10 MPH)

ADJUSTED PREVAILING SPEED 35.3 MPH

VIII. REVISED SPEED LIMIT

RECOMMENDED SPEED LIMIT 30 MPH

ANTICIPATED VIOLATION RATE 15 %

RECOMMEND BY JOHN E. MITCHELL
McLEAN COUNTY ENGINEER

ORGANIZATION HIGHWAY DEPARTMENT

DATE AUGUST 14, 2006

# McLean County Highway Department

## APPLICATION FOR THE ESTABLISHMENT OF AN ALTERED SPEED ZONE

An ALTERED SPEED ZONE as referred to in this application is a length of roadway on which a uniform speed limit at variance with the Statewide statutory limit is posted.

To the COUNTY BOARD

In accordance with the Manual on Uniform Traffic Control Devices for Streets and Highways, the Highway Department has completed an engineering and traffic investigation report concerning the street or highway listed below and requests that an altered speed zone be approved. This application if for the:

☐ Establishment of of new zone ☐ Revision of existing zone ■ Extension of existing zone

Street or roadway to be zoned: County Highway 59 (CH 59) – Stanford Road

From: 1,005' North of Stringtown Road – County Highway 32 (CH 32)

To: 200' South of Stringtown Road – County Highway 32 (CH 32)

County: McLean In or near Stanford Length 1,205' Proposed Speed 30 mph

The Statements contained in this APPLICATION FOR THE ESTABLISHMENT OF AN ALTERED SPEED ZONE and the data submitted obtained from an engineering and traffic investigation are true and correct, and in conformance with the Highway Department's POLICY FOR THE ESTABLISHMENT AND POSTING OF SPEED LIMITS ON COUNTY AND TOWNSHIP HIGHWAYS.

Date: August 14, 2006

Submitted by: John E. Mitchell
McLean County Engineer

Enclosures:
- ■ Copy of Ordinance
- ■ Establishment of Speed Zone
- ■ Spot Speed study
- ☐ Condition Diagram

# Nu-Metrics Traffic Analyzer Study
# Computer Generated Summary Report
# City: Stanford
# Street: CH 59

---

A study of vehicle traffic was conducted with HI-STAR unit number 1751. The study was done in the NB lane on CH 59 in Stanford, Il in Mclean county. The study began on 08/04/2006 at 08:00 AM and concluded on 08/04/2006 at 11:00 AM, lasting a total of 3 hours. Data was recorded in 15 minute time periods. The total recorded volume of traffic showed 44 vehicles passed through the location with a peak volume of 9 on 08/04/2006 at 10:00 AM and a minimum volume of 1 on 08/04/2006 at 10:15 AM. The AADT Count for this study was 352.

## SPEED

Chart 1 lists the values of the speed bins and the total traffic volume for each bin.

**Chart 1**

| 0 to 9 | 10 to 14 | 15 to 19 | 20 to 24 | 25 to 29 | 30 to 34 | 35 to 39 | 40 to 44 | 45 to 49 | 50 to 54 | 55 to 59 | 60 to 64 | 65 to 69 | 70 to 74 | 75 > |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 1 | 4 | 7 | 6 | 4 | 6 | 3 | 6 | 4 | 3 | 0 | 0 | 0 | 0 |

At least half of the vehicles were traveling in the 30 - 34 mph range or a lower speed. The average speed for all classified vehicles was 35 mph with 0.00 percent exceeding the posted speed of 55 mph. The HI-STAR found 0.00 percent of the total vehicles were traveling in excess of 55 mph. The mode speed for this traffic study was 20 mph and the 85th percentile was 50.50 mph.

## CLASSIFICATION

Chart 2 lists the values of the eight classification bins and the total traffic volume accumulated for each bin.

**Chart 2**

| 0 to 20 | 21 to 27 | 28 to 39 | 40 to 49 | 50 to 59 | 60 to 69 | 70 to 79 | 80 > |
|---|---|---|---|---|---|---|---|
| 42 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |

Most of the vehicles classified during the study were Passenger Cars. The number of Passenger Cars in the study was 43 which represents 97.70 percent of the total classified vehicles. The number of Small Trucks in the study was 1 which represents 2.30 percent of the total classified vehicles. The number of Trucks/Buses in the study was 0 which represents 0.00 percent of the total classified vehicles. The number of Tractor Trailers in the study was 0 which represents 0.00 percent of the total classified vehicles.

## HEADWAY

During the peak time period, on 08/04/2006 at 10:00 AM the average headway between the vehicles was 90.0 seconds. The slowest traffic period was on 08/04/2006 at 10:15 AM. During this slowest period, the average headway was 450.0 seconds.

## WEATHER

The roadway surface temperature over the period of the study varied between 85 and 115 degrees Fahrenheit. The HI-STAR determined that the roadway surface was Dry 100.00 percent of the time.

# Nu-Metrics Traffic Analyzer Study
# Computer Generated Summary Report
# City: Stanford
# Street: CH 59

---

A study of vehicle traffic was conducted with HI-STAR unit number 6860. The study was done in the SB lane on CH 59 in Stanford, Il in Mclean county. The study began on 08/04/2006 at 08:00 AM and concluded on 08/04/2006 at 11:00 AM, lasting a total of 3 hours. Data was recorded in 15 minute time periods. The total recorded volume of traffic showed 40 vehicles passed through the location with a peak volume of 6 on 08/04/2006 at 10:15 AM and a minimum volume of 0 on 08/04/2006 at 10:30 AM. The AADT Count for this study was 320.

## SPEED

Chart 1 lists the values of the speed bins and the total traffic volume for each bin.

**Chart 1**

| 0 to 9 | 10 to 14 | 15 to 19 | 20 to 24 | 25 to 29 | 30 to 34 | 35 to 39 | 40 to 44 | 45 to 49 | 50 to 54 | 55 to 59 | 60 to 64 | 65 to 69 | 70 to 74 | 75 > |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 0 | 4 | 2 | 11 | 6 | 3 | 4 | 3 | 4 | 2 | 1 | 0 | 0 | 0 |

At least half of the vehicles were traveling in the 30 - 34 mph range or a lower speed. The average speed for all classified vehicles was 36 mph with 2.50 percent exceeding the posted speed of 55 mph. The HI-STAR found 2.50 percent of the total vehicles were traveling in excess of 55 mph. The mode speed for this traffic study was 25 mph and the 85th percentile was 51.25 mph.

## CLASSIFICATION

Chart 2 lists the values of the eight classification bins and the total traffic volume accumulated for each bin.

**Chart 2**

| 0 to 20 | 21 to 27 | 28 to 39 | 40 to 49 | 50 to 59 | 60 to 69 | 70 to 79 | 80 > |
|---|---|---|---|---|---|---|---|
| 34 | 4 | 1 | 0 | 1 | 0 | 0 | 0 |

Most of the vehicles classified during the study were Passenger Cars. The number of Passenger Cars in the study was 38 which represents 95.00 percent of the total classified vehicles. The number of Small Trucks in the study was 1 which represents 2.50 percent of the total classified vehicles. The number of Trucks/Buses in the study was 0 which represents 0.00 percent of the total classified vehicles. The number of Tractor Trailers in the study was 1 which represents 2.50 percent of the total classified vehicles.

## HEADWAY

During the peak time period, on 08/04/2006 at 10:15 AM the average headway between the vehicles was 128.57 seconds. The slowest traffic period was on 08/04/2006 at 10:30 AM. During this slowest period, the average headway was 900.0 seconds.

## WEATHER

The roadway surface temperature over the period of the study varied between 83 and 115 degrees Fahrenheit. The HI-STAR determined that the roadway surface was Dry 100.00 percent of the time.