

NORTH CAROLINA
DURHAM COUNTY

**MUNICIPAL OPERATIONS - TRAFFIC CONTROL
DEVICES
TRAFFIC SIGNALS AGREEMENT
SCHEDULE C**

DATE: 02/04/2014

NORTH CAROLINA DEPARTMENT OF
TRANSPORTATION

AND

WBS Element:

36247.5.1

CITY OF DURHAM

THIS AGREEMENT is made and entered into on the last date executed below, by and between the North Carolina Department of Transportation, an agency of the State of North Carolina, hereinafter referred to as the "Department" and the City of Durham, hereinafter referred to as the "Municipality."

WITNESSETH:

WHEREAS, Section 1108 of the Moving Ahead for Progress in the 21st Century (MAP-21) allows Surface Transportation Program (STP) funds to be available for certain specified transportation activities; and,

WHEREAS, the provisions of the North Carolina General Statutes (NCGS) §136-66.1 and §136-18 authorize the Municipality to contract with the Department for the installation, repair, operations, and maintenance of highway signs and markings, electric traffic signals and other traffic control devices on State Highway System streets within the Municipality; and,

WHEREAS, the Department and the Municipality have a mutual interest in the efficient and effective operation of traffic signals within the Municipality; and,

WHEREAS, the Department and the Municipality recognize that each party to this Agreement has an obligation and responsibility to provide for the safe, orderly, and efficient flow of traffic on their respective street systems; and,

WHEREAS, the Municipality finds that it is in the best public interest to operate traffic signals at certain intersections that are on the State's Highway System within or near the Municipality; and,

WHEREAS, the Department finds it desirable and advantageous to reimburse the Municipality for costs incurred when the Municipality operates traffic signals at certain intersections that are on the State Highway System within or near the Municipality;

NOW, THEREFORE, the Department and the Municipality do hereby agree as follows:

1. GENERAL PROVISIONS

FEDERAL FUNDING ACCOUNTABILITY AND TRANSPARENCY ACT

All parties to this Agreement, including contractors, subcontractors, and subsequent workforces associated with any work under the terms of this Agreement, shall provide reports as required by the Federal Funding Accountability and Transparency Act (FFATA) for this Project.

COMPLIANCE WITH STATE/FEDERAL POLICY

The Municipality and/or its agent, including all contractors, subcontractors, or sub-recipients, shall comply with all applicable Federal and State policies and procedures, stated both in this Agreement and in the Department's guidelines and procedures.

FAILURE TO COMPLY - CONSEQUENCES

Failure on the part of the Municipality to comply with any of the provisions of this Agreement will be grounds for the Department to terminate participation in the costs of the Project and, if applicable, seek repayment of any reimbursed funds.

2. SCOPE OF THE PROJECT

The Municipality shall operate the traffic signals as defined in Appendix I and as indicated hereinafter:

- A. The operation of intersections on the State Highway System, both at the hardware and software levels, will be subject to the approval of the Department and will reflect the needs of traffic on both the State Highway System and the Municipal System.
- B. In the event the Department and the Municipality cannot agree on issues affecting the operation of these intersections, the decision of the Department will be final.
- C. The Municipality agrees to an annual audit of the performance of intersection equipment and systems. The audit is to be performed by the Department and the Municipality.
- D. The Municipality shall not install any traffic control devices, nor make any traffic signal phasing changes, on any State Highway System street without the prior approval of the Department, pursuant to NCGS §20-169.
- E. The Municipality shall operate the traffic signals in accordance with North Carolina General Statutes, the Department's current policies and guidelines, and all local codes

and ordinances. If, in the opinion of the Department, the Municipality does not operate the signal system in accordance with the specified criteria, the Department shall have the right to enter into a separate operational agreement with a private contractor and deduct these costs from the Municipality's funds allocated under NCGS §136-41.1 and Appendix I as included in the Agreement.

- F. The Department shall review and concur with any contract entered into by the Municipality for the operation of any traffic signal(s);
- Any contract entered into with another party to perform work associated with the requirements of this Agreement shall contain appropriate provisions regarding the utilization of Disadvantaged Business Enterprises (DBEs), or as required and defined in Title 49 Part 26 of the Code of Federal Regulations and the North Carolina Administrative Code. These provisions are incorporated into this Agreement by reference <https://connect.ncdot.gov/municipalities/Pages/Bid-Proposals-for-LGA.aspx>.
 - The Municipality shall not advertise nor enter into a contract for services performed as part of this Agreement, unless the Department provides written approval of the advertisement or the contents of the contract.
 - If the Municipality fails to comply with these requirements, the Department will withhold funding until these requirements are met.

3. TIME FRAME

This agreement shall be for the current state fiscal year, beginning July 1, 2013 and ending June 30, 2014. At the end of the fiscal year, the provision of services and quality of results may be reviewed by the Department and Municipality. The Agreement may be extended for additional fiscal years, contingent upon the increase of NCDOT maintenance funds by the General Assembly. Extensions may be made in one (1) year increments, incorporating any mutually agreed upon adjustments, with the end of the final fiscal year of service being June 30, 2018. On behalf of the Municipality, extensions may be authorized and executed by the Town/City Manager and/or Mayor without further resolution of the Town/City Council. The agreement may be terminated by either party upon a thirty (30) day written notice.

4. FUNDING

The funding for this Project includes Federal and State funds. The funding for this Project is 77% Federal and 23% State funds for state fiscal year July 1, 2013.

5. REIMBURSEMENT

The Department shall reimburse the Municipality quarterly, based on an annual amount, for the operation of the traffic signals, as included below:

- A. The Municipality shall submit a quarterly itemized invoice to the Department for said costs no later than three (3) months after the scheduled quarterly invoicing date. This invoice will include the appropriate documentation and reflect the amount due for services performed by the Municipality during the quarter. The Department will reimburse the Municipality each quarter for work performed up to a total annual amount not to exceed \$630,427.00, unless additional reimbursements are approved by the Department. All final invoices must be submitted within one (1) year after the work is performed or said work will be considered non-billable and will not be paid for by the Department. The Department, at its option, may elect to increase the reimbursement rates shown in Appendix I of this Agreement up to three percent (3%) each year in consideration of inflation rates and cost increases, subject to the availability of funds and the performance of the Municipality.
- B. The Department shall reimburse the Municipality upon approval by the Department's Division Engineer and the Fiscal Management Section.
- C. Said reimbursement shall be limited to operational costs, which would include tasks associated with insuring the continuous, safe and efficient operation of traffic signals, traffic signal systems, and control facilities. Examples include, but are not limited to, operational performance reviews, emergency repairs to system components, periodic evaluation and adjustment to operational timing parameters, computer system and software upgrades, operational upgrades to maintain or improve safety or efficiency, etc.
- D. The Department will not reimburse operational costs for activities that do not have a direct and immediate effect on the continuous, safe and efficient operation of traffic signals, traffic signal systems, and control facilities including, but not limited to, painting of poles and signal cabinets, vegetation control adjacent to facilities, interior and exterior care of traffic control centers and parking areas, furniture for traffic control centers, etc.
- E. The Municipality agrees that it shall bear all costs for which it is unable to substantiate actual costs.
- F. Any costs incurred by the Municipality prior to written notification by the Department to proceed with the work may not be eligible for reimbursement.

- G. Equipment secured as a non-participating item by the Department (100% Municipality costs) will continue as non-participating items with respect to operations. The Division Engineer will provide the necessary forms for documentation.

6. FORCE ACCOUNT

GENERAL

Work performed by the Municipality's own forces is considered Force Account work. Force account work that is not a part of the operational work included under this Agreement is only allowed when there is a finding of cost effectiveness for the work to be performed by some method other than contract awarded by competitive bidding process. Written approval from the FHWA Division Administrator is required prior to the use of force account by the Municipality. Said invoices for force account work shall show a summary of labor, labor additives, equipment, materials and other qualifying costs in conformance with the standards for allowable costs set forth in Office of Management and Budget (OMB) Circular A-87 (www.whitehouse.gov/omb/circulars/index.html). Reimbursement shall be based on Appendix I as included herein.

EMERGENCY WORK

Under current Department policy, if force account work is necessary and performed by the Municipality during emergency occurrences or occurrences that endanger public safety, additional information shall be submitted, with each quarterly invoice, to document the emergency situation, actions taken during the occurrence and the resolution. Approval must be obtained from the Department and the FHWA-NC Division office, before reimbursement will be made.

7. RECORDS AND REPORTS

- A. In accordance with OMB Circular A-133, "Audits of States, Local Governments and Non-Profit Organizations" (www.whitehouse.gov/omb/circulars/index.html) dated June 27, 2003 and the Federal Single Audit Act Amendment of 1996 and NCGS §159-34, the Municipality shall arrange for an annual independent financial and compliance audit of its fiscal operations. The Municipality shall furnish the Department with a copy of the annual independent audit report within thirty (30) days of completion of the report, but not later than nine (9) months after the Municipality's fiscal year ends.
- B. The Municipality shall adhere to applicable administrative requirements of Title 49 Code of Federal Regulations, Part 18 (www.fhwa.dot.gov/legsregs/directives/fapgtoc.htm) and Office of Management and Budget (OMB) Circulars A-102

www.whitehouse.gov/omb/circulars/index.html) "Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments." Reimbursement to the Municipality shall be subject to the policies and procedures contained in Title 23 Code of Federal Regulations, Part 140 and Part 172, which is being incorporated into this Agreement by reference at www.fhwa.dot.gov/legsregs/directives/fapgtoc.htm and by Office of Management and Budget (OMB) Circular A-87

www.whitehouse.gov/omb/circulars/index.html) "Cost Principles for State, Local, and Indian Tribal Governments." Reimbursement to the Municipality shall be subject to the guidance contained in Title 2 Code of Federal Regulations, Part 170

<http://edocket.access.gpo.gov/2010/pdf/2010-22705.pdf>) and Office of Management and Budget (OMB) "Federal Funding Accountability and Transparency Act" (FFATA). Said reimbursement shall also be subject to the Department being reimbursed by the Federal Highway Administration and subject to compliance by the Municipality with all applicable federal policy and procedures.

- C. The Municipality shall keep and maintain all books, documents, papers, accounting records, other such cost records and supporting documentation and evidence as may be appropriate to substantiate costs incurred under this Agreement. Further, the Municipality shall make such materials available at its office at all reasonable times during the Agreement period, and for five (5) years from the date of the final payment made under this agreement, for inspection and audit by the Department's Financial Management Division and FHWA.

8. ADDITIONAL PROVISIONS

- A. This Agreement does not transfer legal control of, or responsibility, or legal liability for the State Highway System roads described herein to the Municipality, nor does it prohibit the Department from taking any action or undertaking any responsibilities with regard to such roads. This Agreement is solely for the benefit of the Municipality and the Department and not for the benefit of any other persons, including but not limited to, members of the public or users of the State Highway System roads, and no third party rights are created, or intended to be created, by this Agreement.
- B. The Municipality shall comply with Title VI of the Civil Rights Act of 1964, (Title 49 CFR, Subtitle A, Part 21). Title VI prohibits discrimination on the basis of race, color, national origin, disability, gender, and age in all programs or activities of any recipient of Federal assistance.
- C. It is the policy of the Department not to enter into any agreement with another party that has been debarred by any government agency (Federal or State). The Municipality certifies, by

- signature of this agreement, that neither it nor its agents or contractors are presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in this transaction by any Federal or State Department or Agency.
- D. The Municipality shall certify to the Department compliance with all applicable Federal and State laws and regulations and ordinances and shall indemnify the Department against any fines, assessments or other penalties resulting from noncompliance by any entity performing work under contract with the Municipality.
 - E. The Municipality is solely responsible for all agreements, contracts, and work orders entered into or issued by the Municipality for this work. The Department shall not be held liable by the Municipality for any expenses or obligations incurred for the work except those specifically eligible for the federal funds and obligations as approved by the Department under the terms of this Agreement. The Department shall not reimburse the Municipality any costs that exceed the total approved funding at any time.
 - F. The Municipality will indemnify and hold harmless the Department, FHWA, and the State of North Carolina, their respective officers, directors, principals, employees, agents, successors, and assigns from and against any and all claims for damage and/or liability in connection with the work performed pursuant to this Agreement. The Department shall not be responsible for any damages or claims for damages, which may be initiated by third parties.
 - G. The Department must approve any assignment or transfer of the responsibilities of the Municipality set forth in this Agreement to other parties or entities.
 - H. By Executive Order 24, issued by Governor Perdue, and NCGS §133-32, it is unlawful for any vendor or contractor (i.e. architect, bidder, contractor, construction manager, design professional, engineer, landlord, offeror, seller, subcontractor, supplier, or vendor), to make gifts or to give favors to any State employee of the Governor's Cabinet Agencies (i.e., Administration, Commerce, Correction, Crime Control and Public Safety, Cultural Resources, Environment and Natural Resources, Health and Human Services, Juvenile Justice and Delinquency Prevention, Revenue, Transportation, and the Office of the Governor).
 - I. This Agreement contains the entire agreement between the parties and there are no understandings or agreements, verbal or otherwise, regarding this Agreement except as expressly set forth herein.
 - J. The parties hereby acknowledge that the individual executing the Agreement on their behalf is authorized to execute this Agreement on their behalf and to bind the respective entities to

the terms contained herein and that he has read this Agreement, conferred with his attorney, and fully understands its contents.

- K. A copy or facsimile copy of the signature of any party shall be deemed an original with each fully executed copy of this Agreement as binding as an original, and the parties agree that this Agreement can be executed in counterparts, as duplicate originals, with facsimile signatures sufficient to evidence an agreement to be bound by the terms of the Agreement.

- L. Each of the parties covenants that if it enters into any subcontracts in order to perform any of its obligations under this contract, it shall require that the contractors and their subcontractors comply with the requirements of NC Gen. Stat. Article 2 of Chapter 64. In this E-Verify Compliance section, the words contractors, subcontractors, and comply shall have the meanings intended by N.C. Gen. Stat. § 160A-20.1.

IN WITNESS WHEREOF, this Agreement has been executed the day and year heretofore set out, in triplicate, on the part of the Department and the Municipality by authority duly given.

ATTEST: CITY OF DURHAM
BY: _____ BY: _____
TITLE: _____ TITLE: _____
DATE: _____ DATE: _____

NCGS §133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.”

Approved by _____ of the local governing body of the City of Durham as attested to by the signature of Clerk _____ of said governing body on _____ (Date)

This Agreement has been pre-audited in the manner required by the Local Government Budget and Fiscal Control Act.

(SEAL)

BY: _____
(FINANCE OFFICER)

Remittance Address:

City of Durham

DEPARTMENT OF TRANSPORTATION

BY: _____
(CHIEF ENGINEER)

DATE: _____

PRESENTED TO BOARD OF TRANSPORTATION ITEM O: _____

APPENDIX I

TRAFFIC SIGNALS AGREEMENT – SCHEDULE C

Traffic Signal Operations Program

Key Components of a Good Level of Service:

1. Maximum Emergency Response Times
 - Trouble calls – 4 hours
 - Repair Knockdowns – 8 hours
 - Absence of a signal indication – Next working day
 - Repair/replace inoperative loops – 15 calendar days
2. Operational Performance Reviews
 - Perform the required minimum tasks at 6-month, 12-month and two-year intervals
 - Replace LED modules after 5 years of service
3. System Component Repairs
 - Repair equipment in a timely manner to support emergency and operational needs
 - Upgrade equipment firmware as appropriate to address items affecting operational efficiency and safety
 - Certify the proper operation of conflict monitors/malfunction management units on an annual basis

APPENDIX I

TRAFFIC SIGNALS AGREEMENT – SCHEDULE C

Operational Performance Review Checklist Traffic Signals

		Interval		
		6 MO	12 MO	2 YEARS
Cabinet	Lubricate hinges and lock	x		
	Replace Filters	x		
	Check Door Gasket	x		
	Check Anchor Bolts / Extension Bolts	x		
	Check for water seepage, dust accumulation; reseal base if needed	x		
	Check Grounding Resistance and Bonding Connections and Conductors	x		
	Check for current wiring schematics, Signal plans, and Maintenance Records	x		
	Check condition and operation of fan and thermostat	x		
	Check ground fault receptacle and insure no control equipment plugged into receptacle	x		
	Measure service voltage	x		
	Check interior lamps; Replace as required	x		
	Check physical condition of meter / service disconnect	x		
	Clean and vacuum Cabinet	x		
	Visually check Line Filter and surge arrester	x		
	Inspect Foundation and exterior for damage, vandalism, and the presence and condition of signal inventory number	x		
	Test police panel switches		x	
Place insect and/or rodent poison in cabinet if infestation is present	x			
Conflict Monitor	Verify conflict monitor certification date is within 12 months	x		
	Perform field check of operation. Remove load switch to create red fail and observe response of monitor. Ensure stop timing is implemented.		x	
Load Switches / Flashers	Check load switches and flashers for tight and secure fit into the socket	x		
	Check operation of all indicator lights	x		
Auxiliary Logic	Check for operation as per signal plans	x		

APPENDIX I

TRAFFIC SIGNALS AGREEMENT – SCHEDULE C

Operational Performance Review Checklist Traffic Signals

		Interval		
		6 MO	12 MO	2 YEARS
Relays	Visually inspect condition of all relays and replace if necessary	x		
Terminal Connections	Check for discoloration and corrosion	x		
	Tighten all terminal connections	x		
	Check labels and replace as needed	x		
	Check programming of red monitor jumpers if present	x		
	Check condition of all loading resistors	x		
Controllers	Verify date and time, correct any discrepancies (if applicable)	x		
	Verify programming parameters	x		
	Verify proper software version	x		
	Verify operation per signal plan (phasing operation, timings, signal head display, pavement markings, etc.)	x		
	Check all harnesses and connections	x		
	Verify proper operation of any preemption circuits	x		
	Check operation of display and backlight	x		
	Check time clock settings	x		
	Check that Posted Speed Limit matches signal plan	x		
Detection Sensors	Inspect condition of all inductive loops and lead ins; Repair/replace as needed	x		
	Verify proper operation of detection sensors, meg; replace or repair as needed	x		
	Verify loop lead in cable is twisted in cabinet	x		
	Check loop lead-ins for correct labeling and phase assignments	x		
	Check alignment and proper operation of all out of street detection	x		
Detector Units	Check detector for proper operation and sensitivity	x		
	Verify stretch and delay programming and operation	x		

APPENDIX I

TRAFFIC SIGNALS AGREEMENT – SCHEDULE C

Operational Performance Review Checklist Traffic Signals

		Interval		
		6 MO	12 MO	2 YEARS
Pedestrian Push Buttons	Check and actuate push buttons on all approaches of actuated crosswalks and visually verify pedestrian signal operation (Verify operation of all push buttons)	x		
	Check push button lamp (if applicable) for operation	x		
	Check push button alignment and accessibility	x		
	Check audio operation and direction	x		
	Check push button signs; clean or replace if necessary	x		
Pedestrian Heads	Re-lamp incandescent bulbs or replace LEDs if needed		x	
	Check condition, alignment and operation	x		
	Clean lenses and reflectors			x
Signal Heads and Blank Out Signs	Check for proper alignment, operation, and condition	x		
	Check condition of back plates (if used)	x		
	Check for proper height	x		
	Clean lenses, signs and LED modules; replace as needed			x
	Check for wear on the span wire and signal mounting hardware			x
Metal Poles and Mast Arms	Inspect for rust and spot paint as required		x	
	Inspect joints for rust and cracks at arm/upright location and at base plate		x	
	Visually inspect anchor bolts and mast arm bolts for condition and tightness		x	
	Check pole grounding and connections		x	
	Inspect for damage; document and report any damage found.		x	
	Check and secure pole caps and hand hole covers		x	
	Inspect all wiring and conduit in pole		x	
	Visually inspect condition of foundation		x	

APPENDIX I

TRAFFIC SIGNALS AGREEMENT – SCHEDULE C

Operational Performance Review Checklist Traffic Signals

		Interval		
		6 MO	12 MO	2 YEARS
Wood Poles and Span Wire	Check pole for splitting	x		
	Check pole below grade for rot	x		
	Check clamps and all hardware	x		
	Check guy wire, anchors, and guards; repair if needed	x		
	Verify all spans are bonded to pole ground	x		
	Check pole grounding and connections	x		
Pull Boxes	Check the ground rod, clamp connection, and bonding of conduits if applicable		x	
	Check all cables in pull box for pinching by lid, including level of pull box		x	
	Check for abnormal amount of water; verify proper drainage		x	
	Check lid for abnormal condition and fit		x	
Systems Equipment	Ensure the controller operates in mode selected by master		x	
	Check any special equipment (transceivers, etc.) for proper operation		x	
	Disconnect controller from master and check for free or backup operation		x	
Conduit	Visually inspect all conduits; repair as needed		x	
Pavement Markings	Verify that pavement markings match intersection plans	x		
	Inspect condition of pavement markings	x		

**MUNICIPAL OPERATIONS AGREEMENT - TRAFFIC CONTROL DEVICES
SCHEDULE C - SIGNALS - LEVEL C (Page1)**

The Board of Transportation will reimburse the Municipality for operation of traffic signals on the following schedule.

Place a check beside the value for each function(s) the Municipality agrees to perform under any line item if all functions are not selected.

Place a check beside the value under "Total" if the Municipality is to perform all functions for any line item.

<u>Item</u>	<u>Emergency Response</u>	<u>Operational Performance Reviews</u>	<u>System Component Repairs</u>	<u>Total</u>
A. Vehicular Signal Section(Average of 10 heads/int. or 30 section/int.)	<input type="checkbox"/> \$1.26	<input type="checkbox"/> \$10.22	<input type="checkbox"/>	<input type="checkbox"/> \$11.48
B. Pedestrian Signal Head(Average of 4 heads/int.)	<input type="checkbox"/> \$3.15	<input type="checkbox"/> \$20.99	<input type="checkbox"/>	<input type="checkbox"/> \$24.14
C. Fiber-Optic or LED Blank-out Sign	<input type="checkbox"/> \$12.60	<input type="checkbox"/> \$12.60	<input type="checkbox"/>	<input type="checkbox"/> \$24.50
D. Pretimed Electronic Controller/Cabinet	<input type="checkbox"/> \$75.58	<input type="checkbox"/> \$138.56	<input type="checkbox"/> \$228.90	<input type="checkbox"/> \$443.04
E. 2-8 Assigned Phase Actuated Controller/Cabinet	<input type="checkbox"/> \$75.58	<input type="checkbox"/> \$503.84	<input type="checkbox"/> \$272.50	<input type="checkbox"/> \$851.92
F. 2-8 Assigned Phase Actuated Controller/Cabinet with Machine-vision Detection	<input type="checkbox"/> \$75.58	<input type="checkbox"/> \$503.84	<input type="checkbox"/> \$817.50	<input type="checkbox"/> \$1,396.92
G. Flashing Beacon Controller/Cabinet	<input type="checkbox"/> \$12.60	<input type="checkbox"/> \$125.96	<input type="checkbox"/>	<input type="checkbox"/> \$138.56
H. Travel Costs for Operational Performance Reviews at Signalized Intersections(not Flashers)	<input type="checkbox"/>	<input type="checkbox"/> \$62.98	<input type="checkbox"/>	<input type="checkbox"/> \$62.98

<u>Item</u>	<u>Lump Sum Payment</u>
CA. Replace Loop(includes labor, materials, and other costs for sawcutting and sealing) ¹	<input type="checkbox"/> \$7.58 per foot of sawcut
CB. Furnish and install Lead-in Cable	<input type="checkbox"/> \$2.02 per foot installed
CC. Furnish and install Conduit	<input type="checkbox"/> \$7.03 per foot installed
CD. Furnish and install 3/8-inch messenger cable and incidental hardware	<input type="checkbox"/> \$3.19 per foot installed
CE. Furnish and install 4 or 7-conductor signal cable	<input type="checkbox"/> \$3.07 per foot installed

MUNICIPAL OPERATIONS AGREEMENT - TRAFFIC CONTROL DEVICES
SCHEDULE C - SIGNALS - LEVEL C (Page 2)

<u>Item</u>	<input type="checkbox"/>	<u>Lump Sum Payment</u>
CF. Furnish and install Standard size junction box	<input type="checkbox"/>	\$369.32
CG. Furnish and install cover for Standard size junction box	<input type="checkbox"/>	\$59.95
CH. Furnish and install Oversized junction box	<input type="checkbox"/>	\$515.00
CI. Furnish and install cover for Oversized junction box	<input type="checkbox"/>	\$133.90
CJ. Furnish and install Riser	<input type="checkbox"/>	\$544.87
CK. Furnish and install 40-foot Class 3 Wood Pole ²	<input type="checkbox"/>	\$962.02
CL. Remove and dispose of wood pole	<input type="checkbox"/>	\$201.00
CM. Furnish and install Guy/Anchor Assembly	<input type="checkbox"/>	\$353.29
CN. Furnish and install Grounding System	<input type="checkbox"/>	\$245.25
CO. Furnish 12-inch 3-Section Vehicular Signal Head ²	<input type="checkbox"/>	\$149.50
CP. Furnish 12-inch 4-Section Vehicular Signal Head ²	<input type="checkbox"/>	\$199.50
CQ. Furnish 12-inch 5-Section Vehicular Signal Head ²	<input type="checkbox"/>	\$339.50
CR. Furnish 8-inch 3-Section Vehicular Signal Head ²	<input type="checkbox"/>	\$102.20
CS. Furnish Pedestrian Signal Head ²	<input type="checkbox"/>	\$104.04
CT. Furnish LED Indication - 12-inch RED Ball ²	<input type="checkbox"/>	\$22.05
CU. Furnish LED Indication - 12-inch YELLOW Ball ²	<input type="checkbox"/>	\$23.16
CV. Furnish LED Indication - 12-inch GREEN Ball ²	<input type="checkbox"/>	\$22.50
CW. Furnish LED Indication - 12-inch RED Arrow ²	<input type="checkbox"/>	\$23.00

Revised 6-12-13

MUNICIPAL OPERATIONS AGREEMENT - TRAFFIC CONTROL DEVICES
SCHEDULE C - SIGNALS - LEVEL C (Page 3)

<u>Item</u>	<u>Lump Sum Payment</u>
CX. Furnish LED Indication - 12-inch YELLOW Arrow ²	<input type="checkbox"/> \$24.00
CY. Furnish LED Indication - 12-inch GREEN Arrow ²	<input type="checkbox"/> \$24.00
CZ. Furnish LED Indication - 8-inch RED Ball ²	<input type="checkbox"/> \$23.00
DA. Furnish LED Indication - 8-inch YELLOW Ball ²	<input type="checkbox"/> \$23.00
DB. Furnish LED Indication - 8-inch GREEN Ball ²	<input type="checkbox"/> \$21.50
DC. Furnish LED Indication - 12-inch Hand	<input type="checkbox"/> \$46.25
DD. Furnish LED Indication - 12-inch Man	<input type="checkbox"/> \$85.00
DE. Furnish LED Indication - 12-inch Hand/Man Overlay	<input type="checkbox"/> \$70.00
DF. Furnish LED Indication - 16-inch Hand/Man Overlay with Countdown Module	<input type="checkbox"/> \$95.00
DG. Furnish Pretimed/Actuated Controller ²	<input type="checkbox"/> \$1,389.00
DH. Furnish Pole-Mounted Cabinet ²	<input type="checkbox"/> \$3,850.00
DI. Furnish Base-Mounted Cabinet with auxiliary file ²	<input type="checkbox"/> \$4,675.00
DJ. Furnish Base-Mounted Cabinet without auxiliary file ²	<input type="checkbox"/> \$4,375.00
DK. Furnish LED Blank-Out Sign ²	<input type="checkbox"/> \$2,188.00
DL. Furnish 3-channel NEMA-Plus Conflict Monitor ²	<input type="checkbox"/> \$230.00
DM. Furnish 6-channel NEMA-Plus Conflict Monitor ²	<input type="checkbox"/> \$437.80
DN. Furnish 12-channel NEMA-Plus Conflict Monitor ²	<input type="checkbox"/> \$537.40
DO. Furnish NEMA TS-2 Malfunction Management Unit ²	<input type="checkbox"/> \$649.80

Revised 6-12-13

MUNICIPAL OPERATIONS AGREEMENT - TRAFFIC CONTROL DEVICES
SCHEDULE C - SIGNALS - LEVEL C (Page 4)

<u>Item</u>	<u>Lump Sum Payment</u>
DP. Furnish Type 2010 or Type 2018 Conflict Monitor with Absence of Red Monitoring ²	<input type="checkbox"/> \$466.00
DQ. Furnish Detection Camera/Sensor with Enclosure ²	<input type="checkbox"/> \$1,590.00
DR. Furnish Single Channel NEMA TS-1 Loop Detector Unit ²	<input type="checkbox"/> \$90.00
DS. Furnish Two-Channel NEMA TS-1 Loop Detector Unit ²	<input type="checkbox"/> \$160.00
DT. Furnish Two-Channel NEMA TS-2 Loop Detector Unit ²	<input type="checkbox"/> \$78.00
DU. Furnish Two-Channel Type 222 Loop Detector Unit ²	<input type="checkbox"/> \$48.75
DV. Furnish and replace Audible Pedestrian Signal ²	<input type="checkbox"/> \$436.00
DW. Perform Annual Inspection on Railroad-Interconnected Intersections	<input type="checkbox"/> \$197.30

¹ Replacement of **defective** loop with loop of identical or upgraded design requires no prior approval. Upgrading of functional rectangular loops to Quadrupole design requires prior approval from Division Traffic Engineer.

² Requires prior approval from Division Traffic Engineer for reimbursement of non-emergency replacements. If item is covered under warranty, Municipality will not be reimbursed without prior approval from Division Traffic Engineer.

Emergency Response: This function includes all labor and incidental items to bring the operation of the intersection into reasonable conformance with the existing plan of record. Reimbursements for items CA through DV will be given for items utilized in the completion of this work. Sufficient spare equipment must be purchased at the expense of the maintaining agency to insure all intersections are continuously operating according to the plan of record.

Operational Performance Reviews: This function includes the labor and materials as outlined in the attached Operational Performance Checklist. *Reimbursements for items CA through DV will be given for items utilized in the completion of this work only upon prior approval by the Division Traffic Engineer.* Where specialty equipment is not addressed specifically in the attached schedule, manufacturer's recommendations should be followed to insure continued optimum operation. Sufficient spare equipment must be purchased at the expense of the maintaining agency to allow the completion of this work.

System Component Repairs: This function includes labor, parts and materials to repair electronic traffic signal control components. This work typically involves in-house repair of electronic assemblies by troubleshooting and replacing specific integrated circuit chips, repairing damaged printed circuit traces, and making circuit modifications. This work includes making hardware, firmware and software upgrades to equipment to insure optimum operation. This work must be completed in a timely manner to support the emergency response and operational performance review functions.

MUNICIPAL OPERATIONS AGREEMENT - TRAFFIC CONTROL DEVICES
SCHEDULE C - SIGNALS - LEVEL C (Page 5)

Items included on this schedule may be added or deleted to those checked above by a request in letter form signed by the Mayor, Clerk (or Manager). The letter should be sent in quadruplicate to the Division Engineer accompanied by four (4) copies of the SCHEDULE with all appropriate items checked. If the Division Engineer approves the new SCHEDULE he should sign, as approved, all four (4) copies of the Municipality's letter of request. The Division Engineer then forwards one copy of the letter and SCHEDULE to the DOT Controller and the State Traffic Engineer, returns a copy of each to the Municipality, and retains a copy of each for his file. The new SCHEDULE will then become effective at the beginning of the next quarter for reimbursement.

The Board of Transportation reserves the right of verification that all selected functions are being properly performed. If it is determined that any authorized function is not being performed, the reimbursement will be reduced accordingly.

CITY OR TOWN

CLERK DATE

MAYOR OR MANAGER DATE

DEPARTMENT OF TRANSPORTATION

DIVISION ENGINEER DATE