



CITY OF BETHLEHEM
OFFICE OF THE CITY SOLICITOR

INTEROFFICE MEMORANDUM

To: Louise M. Kelchner, City Clerk


From: William P. Leeson, Esq., City Solicitor

Re: Cooperative Memorandum of Agreement SR 2020 (Easton Avenue) Multi-Jurisdictional Signal System
City of Bethlehem and Township of Bethlehem

Date: October 10, 2018

Attached for Council's consideration is a proposed Ordinance and associated intergovernmental agreement known as the "Cooperative Memorandum of Agreement SR 2020 (Easton Avenue) Multi-Jurisdictional Signal System".

Please place this matter on City Council's agenda for review and appropriate action.



William P. Leeson, Esq., Solicitor

Cc: Robert J. Donchez, Mayor
Michael Alkhal, P.E.
Tiffany Wells

BILL NO. ____ - 2018

ORDINANCE NO. 2018-____

AN ORDINANCE OF THE CITY OF BETHLEHEM, COUNTIES
OF LEHIGH AND NORTHAMPTON, COMMONWEALTH OF
PENNSYLVANIA, AUTHORIZING AN INTERMUNICIPAL COOPERATIVE
MEMORANDUM OF AGREEMENT BETWEEN THE CITY OF BETHLEHEM
AND THE TOWNSHIP OF BETHLEHEM RELATED TO INSTALLATION,
OPERATION AND MAINTENANCE OF A MULTI-JURISDICTIONAL
SIGNAL SYSTEM ALONG SR 2020 (EASTON AVENUE).

THE COUNCIL OF THE CITY OF BETHLEHEM HEREBY ORDAINS AS FOLLOWS:

Section 1. There is hereby adopted and ratified an agreement for intergovernmental cooperation known as the “Cooperative Memorandum of Agreement SR 2020 (Easton Avenue) Multi-Jurisdictional Signal System” between the City of Bethlehem and the Township of Bethlehem. A copy of the Agreement is attached hereto and incorporated by reference herein. The Mayor and Controller are hereby authorized to execute the Agreement on behalf of the City of Bethlehem.

Section 2. This Agreement is entered into pursuant to the provisions of 53 Pa.C.S.A. §2303-2307.

Section 3. The purposes and objectives of the Agreement are as follows:

- A. Subject to confirmation of funding by the Federal Highway Administration, the Commonwealth of Pennsylvania intends to upgrade certain traffic signals along SR 2020 (Easton Avenue) through the City of Bethlehem and Township of Bethlehem as part of the Easton Avenue Corridor Improvements Project, which will include interconnecting the traffic signals to become one multi-jurisdictional signal system (“MJSS”).
- B. Once the Commonwealth’s project construction is complete and the included testing and operational support periods end, the City of Bethlehem and Township of Bethlehem will establish a collaborative maintenance support and operational oversight program to be directed and funded by Township of Bethlehem.
- C. The Agreement sets forth terms and conditions for MJSS oversight requirements, communications and signal control system maintenance requirements, traffic signal maintenance requirements, system housing responsibilities, supporting the interoperability and compatibility of MJSS, developer or other transportation enhancement project funding

requirements under certain circumstances, coordinating to maximize safe and efficient MJSS operations for the life of the system, and dispute resolution.

Section 4. The Agreement shall be subject to all the conditions and terms specified and set forth in the Agreement which is attached hereto, and incorporated by reference herein.

Section 5. The duration of the Agreement shall be for the life of the multi-jurisdictional signal system unless jointly discontinued by the parties.

Section 6. Upon proof of execution of the Agreement by all parties thereto, all City officials and employees are authorized to take such actions as are necessary and appropriate to implement the terms and conditions of the said Agreement.

Section 7. The invalidity of any section or provision of this ordinance herein adopted shall not invalidate other sections or provisions thereof.

Section 8. All Ordinances and parts of Ordinances inconsistent herewith be, and the same are hereby repealed.

Sponsored by _____

Passed finally in Council on the _____ day of _____, 2018.

President of Council

ATTEST:

City Clerk

This Ordinance approved this _____ day of _____, 2018.

Mayor

**COOPERATIVE MEMORANDUM OF AGREEMENT SR 2020 (EASTON AVENUE)
MULTI-JURISDICTIONAL SIGNAL SYSTEM**

THIS COOPERATIVE MEMORANDUM OF AGREEMENT, made this _____ day of _____, 20____, by and between

The Township of Bethlehem, located at 4225 Easton Avenue Bethlehem, PA 18020, hereinafter called "Party #1",

and

The City of Bethlehem, located at 10 East Church Street, Bethlehem, PA 18018, hereinafter called "Party #2" (Party #1 and Party #2 sometimes referred to as "Party" or "Parties").

WITNESSETH:

WHEREAS, the Commonwealth of Pennsylvania hereinafter called the "Commonwealth", is about to upgrade traffic signals along SR 2020 (Easton Avenue) through the municipalities Party #1 and Party #2, specifically including the signalized intersections at East Boulevard and Easton Avenue, Stefko Boulevard and Easton Avenue, Giant Shopping Plaza and Easton Avenue, Willow Park Shopping Plaza and Easton Avenue and Willow Park Road (SR 3007) and Easton Avenue, as part of the Easton Avenue Corridor Improvements Project hereinafter called the "Project"; and,

WHEREAS, the Project includes the installation of light emitting diode traffic signals, countdown pedestrian indications, emergency preemption, video and radar detection, and signal controllers as well as select replacement of traffic signal supports, hereinafter called the "Traffic Signal Enhancements". The Project also includes the installation of a Spread Spectrum Radio Communications system to interconnect traffic signals, the installation of a system-wide computer system and associated software, hereinafter called the "Communications and Signal Control System".

WHEREAS, the previous Traffic Signal Enhancements and the Communications and Signal Control System will become one multi-jurisdictional signal system, hereinafter called "MJSS".

NOW, THEREFORE, in consideration of the foregoing premises and the mutual covenants hereinafter contained, the Parties, with intent to be legally bound, agree as follows:

1. The Commonwealth has made application to the Federal Highway Administration for certain federal funds to enable the Commonwealth to construct and implement the MJSS and to make operational refinements to the MJSS and associated signal timings during a contractually designated test period. The Commonwealth shall undertake such Project, only, if it receives Federal Highway Administration funding. The obligations of the Parties set forth below are contingent upon the Commonwealth obtaining Federal Highway Administration funding and proceeding with the construction and implementation of the MJSS. If the Commonwealth determines that it shall not proceed with the MJSS, the Parties shall have no further obligations under this Agreement, and the Agreement will be terminated.
2. Project construction will include a testing and operational support period. Construction documents will require the Contractor to provide operational oversight and Communications and Signal Control System maintenance during that period. Maintenance of specific traffic signals will be the responsibility of the permit holder as defined on each signal installation's current "*Application for Permit to Install and Operate Traffic Signals*" and will remain in effect until construction begins and the construction operational support period ends. Upon completion of the testing and operational support period, the Parties will establish a collaborative maintenance support and operational oversight program which will be directed and funded by Party #1. Requirements to be covered in this agreement include:
 - a. MJSS Oversight Requirements (Party #1 will provide):
 - i. Monthly confirmation to Party #2 noting the system is functioning. This includes verification there is active two-way communication to all traffic signals, verification the system software and traffic responsive software is operational, and confirmation all detection zones are functioning.
 - ii. Monthly review of event logs and notification to Party #2 and PennDOT District 5-0 Signal Unit if the system is malfunctioning. Notification does not include authority to authorize repairs.
 - iii. The implementation and coordination of timing plan revisions in areas covered by the MJSS due to other projects of the Commonwealth, any of the Parties, or due to upgrades associated with approved highway occupancy permits.
 1. Timing modifications are to be reviewed and approved by the Commonwealth consistent with existing signal timing modification procedures.

2. Approved timing plan modifications will be implemented within two weeks from time of notification.
 - iv. The implementation of the special events timing plan at the discretion of the Parties and with input agreement from the Commonwealth.
 - v. Monthly status report to all parties and their traffic signal maintenance providers detailing system operations, timing modifications, and system maintenance activities.
 - vi. Participation in MJSS status meetings as noted in paragraph 6 below.
- b. Communications and Signal Control System Maintenance Requirements. Party #1 and Party #2 are each responsible for signal equipment and communications located at their permitted traffic signal. Party #1 is responsible for communications from Willow Park Road west to the Stefko Boulevard. Party #2 is responsible for communication between Stefko Boulevard and East Boulevard. With respect to the foregoing, each of the Parties shall undertake or perform:
- i. Biannual preventive maintenance of system-wide communications systems, master controllers, central computers and system software in accordance with PennDOT Publication 191, Guidelines for the Maintenance of Traffic Signal Systems and manufacturer maintenance guidance.
 - ii. Response maintenance activities of system-wide communications systems, master controllers, central computers and system software within 24 hours of notification and in accordance with PennDOT Publication 191, Guidelines for the Maintenance of Traffic Signal Systems.
 - iii. Record keeping in accordance with PennDOT Publication 191, Guidelines for the Maintenance of Traffic Signal Systems.
 - iv. Provide and implement system-wide software updates as well as traffic signal controller and detection system software updates.
- c. Traffic Signal Maintenance Requirements. The individual traffic signals and the responsible Party include the Easton Avenue intersections with:
- Willow Park Road (Party #1)
 - Willow Park Plaza Driveway (Party #1)
 - Giant Plaza Driveway (Party #1)
 - Stefko Boulevard (Party #2)
 - East Boulevard (Party #2)

With respect to the foregoing, each of the Parties shall undertake or perform:

- i. Biannual preventive maintenance of permitted traffic signals in accordance with *PennDOT Publication 191, Guidelines for the Maintenance of Traffic Signal Systems* and per manufacturer maintenance guidance.
- ii. Response maintenance of permitted traffic signals within 24 hours of notification and in accordance with *PennDOT Publication 191, Guidelines for the Maintenance of Traffic Signal Systems*.
- iii. Record keeping in accordance with *PennDOT Publication 191, Guidelines for the Maintenance of Traffic Signal Systems*.
- iv. Other maintenance requirements to be agreed upon by the Parties.

Electric utility fees will be the responsibility of each municipality. Communication fees will be the responsibility of the collaborative maintenance support and operational oversight program directed and funded by Party #1.

3. Party # 1 will house the master controller, the system-wide computer system and associated software as well as an antenna and other communications equipment required to provide communication to field controllers. Party #2 is required to coordinate with Party #1 to temporarily adjust any timing of signals in this Agreement within the jurisdiction of Party #2. Housing responsibilities will include:
 - a. Providing minimal office table-top space for the master controller and system computer.
 - b. Permitting an antenna to be mounted at the office.
 - c. Incidental costs associated with providing power to the master controller and system computer to be located in the office.
4. The Parties agree to support the interoperability and compatibility of MJSS by requiring future enhancements and upgrades to the MJSS to use emergency preemption systems, video and radar detection equipment, signal controllers and other equipment compatible with the existing MJSS. For all signal projects (Developer-led, Municipality-led, State-led), plans, specifications and estimates shall be provided to the Commonwealth and to each Party for review.
5. The Parties agree to require developers or other transportation enhancement projects to fund the following items at the discretion and direction of the Commonwealth and Party #1 and Party #2, for the area in which each Party has jurisdiction:
 - a. Furnish and install signal control and communication equipment at the approval of the Commonwealth and the Parties for all new signals installed within one-half mile of the MJSS or all new signals installed within one mile of the MJSS, if the proposed development will impact the intersection.

- b. Maintain system timing plan cycle lengths in traffic impact analysis, if the “impact” (defined below) of the development does not extend beyond four intersections within the MJSS coverage area.
 - c. Analyze the impact on the entire MJSS, if the proposed development has an “impact” (defined below) on more than four intersections within the MJSS coverage area. Data collection would be required at only those intersections impacted and analysis for all other intersections would be conducted using historic traffic volumes and approved adjustments.
 - d. Provide materials and equipment necessary to meet operational compatibility as defined in paragraph 4 above.
 - e. Impact will be determined in accordance with the TIS guidelines as provided in the PennDOT Highway Occupancy Permit Operations Manual (Publication 282.)
6. The Parties agree to coordinate as needed to maximize safe and efficient MJSS operations for the life of the system. Key coordination activities include:
- a. Implementation of timing plans.
 - b. Implementation of a maintenance plan in accordance with paragraph 2 above. Party #1 will coordinate the implementation of this agreement.
 - c. Agreement to support the interoperability and compatibility of MJSS as detailed in paragraphs 4 and 5 above.
 - d. Agreement to have a MJSS status meeting on a quarterly (as needed) basis to be initiated by Party #1.
 - e. Agreement to meet annually (as needed) to review MJSS operations and discuss future enhancements. Party #1 will coordinate these meetings.
 - f. Agreement to address dispute resolution as detailed in paragraph 7 below.
 - g. Coordination with any County Traffic Signal Program.
7. Disputes arising between the parties should be resolved in the following manner:
- a. The Parties shall meet within 30 days of a written request to meet and discuss any issues arising under this Agreement and attempt to identify a resolution for those issues.
 - b. If the matter is not resolved, the Parties agree to meet with a mediator within 30 days of the meet and discuss meeting to resolve the dispute. If such mediation fails to produce an agreement accepted by the Parties within 60 days of such initial mediation meeting, then either Party may file a claim with the Court of Common Pleas of Northampton County.

8. This Agreement is contingent upon the governing body of each Party granting approval at a public meeting pursuant to and in accordance with the Intergovernmental Cooperation Act, 53 Pa. C.S. §2301 et seq. This Agreement is also contingent upon its execution by the Parties to this Agreement along with PennDOT moving forward with the Project and receipts of funds. This Agreement shall remain in place for the life of the MJSS unless discontinued by the Parties. Removal by an individual Party will be coordinated with the County such that adjustments to remaining MJSS elements can be made.

Technical issues regarding this Agreement and the proposed MJSS maintenance and operations should be forwarded to:

Richard Grube, Director of Public Works
Township of Bethlehem
4225 Easton Avenue
Bethlehem, Pa. 18020

Tiffany Wells, Traffic Coordinator
City of Bethlehem
10 East Church Street
Bethlehem, PA 18018

9. This Agreement may be executed in any number of counterparts, each of which shall be an original, but such counterparts together shall constitute but one and the same instrument.

IN WITNESS WHEREOF, PARTY #1 has caused this Agreement to be duly executed, ensealed and attested by their proper officials, pursuant to due and legal action authorizing the same to be done, the day and year first above written.

ATTEST:

THE TOWNSHIP OF BETHLEHEM

By: _____

By: _____

Print Name: _____

Print Name: _____

Title: _____

Title: _____

Date: _____

Date: _____

IN WITNESS WHEREOF, PARTY #2 has caused this Agreement to be duly executed, ensealed and attested by their proper officials, pursuant to due and legal action authorizing the same to be done, the day and year first above written.

ATTEST:

THE CITY OF BETHLEHEM

By:_____

By:_____

Print Name:_____

Print Name:_____

Title:_____

Title:_____

Date:_____

Date:_____