

MEMORANDUM OF UNDERSTANDING
between
Northampton County & the City of Bethlehem
regarding
Transfer of Ownership of a Trunked Radio Network

THIS MEMORANDUM OF UNDERSTANDING (“MOU”) is made by and between Northampton County, a Pennsylvania home-rule county ("County"), and the City of Bethlehem, a third-class Pennsylvania city (“City”). For the purposes of administration of this MOU, the County is vesting its authority in the Northampton County Emergency Management Services (NCEMS), a principal County agency.

WHEREAS, in 2015, the Commonwealth of Pennsylvania adopted Act 12, an amendment to the state's consolidated statutes which govern 9-1-1 emergency communications services and which made clear the Commonwealth’s intent to streamline and make 9-1-1 systems more cost-effective by encouraging shared use of technologies and services and consolidation of public-safety answering points (PSAPs); and,

WHEREAS, Act 12 is scheduled to sunset on June 30, 2019, and the Commonwealth of Pennsylvania will no longer provide 9-1-1 funding to the City; and,

WHEREAS, the County and City immediately began planning future provision of 9-1-1 services to the residents of the City; and,

WHEREAS, the City intends to transfer ownership of its 800MHz Motorola ASTRO P25 radio system to the County for a mutually-agreed sum; and,

WHEREAS, the County will receive all the necessary radio system equipment, including the master access key, required to have a fully operational radio system comprised of six (6) duplex channels (one control channel and five voice channels) operating on Motorola ASTRO software version 7.14; and,

WHEREAS, the City and current users of the system will continue to have access and use the system for operational voice communications;

NOW, THEREFORE, in consideration of the mutual promises made herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

A. Recitals

The Recitals set forth above are hereby incorporated and made a part of this MOU.

B. Equipment

1. The City will provide to the County the radio system equipment and related appurtenances listed in "Attachment A" to this MOU. It is the intent of the Parties to ensure all items, whether specifically listed or not, required to maintain the radio system in its operational condition at the time of the transfer are included.
2. System equipment is primarily located at the following sites:
 - i. City Hall: 10 East Church Street (Master site)
 - ii. Electric Shop: 247 East North (Remote site)
 - iii. Water Tank: 95 Williams Street (Remote site)
 - iv. South Mountain: 1508 East University Avenue (Prime Site)

C. Federal Communications Commission (FCC) System Licensing

1. Because the County will assume responsibility for the radio system, the City will assign the applicable FCC license(s) for system operation to the County in accordance with FCC rules and regulations.
2. Current valid FCC licenses for the radio system are found in "Attachment B."
3. The County shall not assign any FCC license related to the radio system to another entity without the City's written permission.
4. If the County determines to terminate its rights to use and manage the radio system, it shall transfer its license(s) back to the City in accordance with FCC rules and regulations. The County shall be responsible for paying all costs related to the transfer of the FCC license(s), if any.

D. Current Radio System Users

1. The radio system is currently used by the City and by other entities authorized by the City. These include:
 - i. All City of Bethlehem agencies
 - ii. Moravian College Police
 - iii. Lehigh University Police
 - iv. Bethlehem Area School District Public Safety
 - v. Bethlehem Parking Authority
2. It is the intention of the Parties that these users shall be permitted to continue accessing the radio system in substantially the same manner as experienced at the time of transfer and at no cost. In the event state funding or procedures impact the intent of this section, the parties agree to meet and discuss alternatives to provision of service.

E. Reserve Capacity

1. The County shall operate and maintain the radio system in such a manner as to ensure the current radio system users identified in Paragraph D, above, shall experience no degradation in the quality or latency of the system at the time of its transfer to the County and that, in addition, they may collectively expand their usage by up to ten-percent (10%) above that measured over the 12-month period prior to the transfer of the system from the City to the County.
2. Calculation of "reserve capacity" shall be based on the total active call duration as provided on the Motorola ASTRO Site Summary report.
3. System degradation of quality and latency shall be determined by the failure or decommissioning of one or more system channels for any period of time beyond that required for reasonable maintenance purposes. Additionally, the system will be considered to have been degraded if during normal system operation the number of busies recorded by the Motorola ASTRO Network Management System shall exceed the average reported over the preceding 12-months or if the average voice call busy average exceeds two (2) seconds.

F. Radio System Control Network Connectivity:

1. The County shall assume the cost for the fiber optic service connecting the system locations identified in Paragraph B-2, above, and elsewhere as necessary.
2. The City operates a microwave network that includes the locations identified in Paragraph B-2, above, and which provides high-speed connectivity for City purposes, including failover connectivity for the radio system. The City agrees to continue providing capacity on its microwave network to the County to maintain radio system failover capabilities.
3. The City agrees to provide microwave access at no cost to the County for radio system failover connectivity; however, the County agrees to assume the financial liability for any equipment, supplies repairs or other service specific or unique to the radio system failover portion of the microwave network used for that purpose and not any "common" equipment or resources.

G. Talk Groups:

1. The County will retain the talk groups listed in "Attachment C" for the system users listed in Paragraph D, above. No modifications to these talk groups, their functions or extant uses at the time this MOU is executed shall be made by the County without concurrence by the primary talk group user.
2. Current system users may request development of additional talk groups for their agency with permission from the County, such permission to not be unreasonably withheld.
3. The County may add talk groups to the system at its discretion both in accordance with FCC licenses and the restrictions outlined in Paragraph E, above.

H. NCEMS, County, City and Radio System User Obligations:

1. Abide by and act in accordance with the laws of the United States, applicable regulations of the Federal Communications Commission and other legal requirements.
2. Maintain, use and operate the system so as to provide continuous (i.e. 24 hour, 7 days a week for 365 days per year) availability to the greatest extent possible notwithstanding normal maintenance requirements and unforeseen outages.
3. Provide continuous access to help via the NCEMS and contracted service providers to assist radio system users experiencing technical or operational difficulties.
4. Develop operating protocols in concert with all applicable users to facilitate efficient and reliable operations consistent with federal guidelines and/or public safety/service "best practices."

I. City Programming & Upgrade Obligations:

1. The City agrees to use subscriber devices that support the Motorola P-25 Phase 1 compatible mobile and portable radios. The City understands that it will be solely responsible for purchasing the radios it will use to communicate on the system, and that all devices acquired subsequent to the transfer of the system to the County shall be either Phase 2 compatible or capable of being upgraded to Phase 2 operation whenever the County, at its sole discretion, modifies the system for Phase 2 operation.
2. The requirements of this MOU shall extend to all system users identified in Paragraph D, above, and the City shall be solely responsible to ensure these users are made aware of their rights and responsibilities under this MOU.
3. System users shall comply with the applicable laws of the State and the United States of America, as well as the rules of the Federal Communications Commission. System use will be limited to public safety and first responder communications as defined in 47 U.S.C. § 337 (f) (1), the Communications Act of 1934, and all applicable provisions of 47 CFR Part 90, Subpart R.
4. To the extent the City's right to sell, transfer, assign and deliver any part of the System (hardware and software) is limited by the reservation of proprietary rights by any third party manufacturer, supplier or vendor, City and County will cooperate to secure necessary permissions and assignments from such third parties to accomplish the purposes of this Agreement. County shall accept terms, conditions and future financial obligations imposed by equipment and software manufacturers, suppliers and vendors on a buyer, transferee, licensee or assignee as a condition to consenting to the sale, transfer, licensing, assignment and delivery, as the case may be, of System hardware, software and applicable warranties to the County. (See Appendix D - Motorola Transfer Documents)

5. The City will be responsible for the development of the radio codeplugs used to program its radios and for the programming of its subscriber equipment by technicians and engineers either employed or contracted by the City.
6. Maintenance, radio upgrades authorized by NCEMS, and the repair of City subscriber radios and support components such as consoles, network monitors, and other software management tools, if any, used to access the system are the sole responsibility of City. With respect to radio repairs and device programming, the City agrees to utilize the Advanced Key feature of the System and, further, exercise strict control of any system key information provided to the City by NCEMS. Prior to the issuance of an Advanced Key, the City will provide NCEMS a written plan for controlling the security of key information, including “wiping of information” from all equipment prior to reassignment or salvage of equipment. The Advanced Key is a software feature under license to the County upon transfer of the system, and the City is permitted to use the Advanced Key feature for the sole purpose of enabling authorized public safety units to communicate with the system and for programming of radios purchased by the City or the system users listed in Paragraph D, above. Only radios owned or controlled by the City or system users will be programmed with the Advanced Key and will conform to the system’s prescribed configuration, with any features, limitations, control settings or other parameters as established by NCEMS. No copies of the Advanced Key will be made in any form or loaned or furnished to any person other than technicians and engineers either employed or contracted by the City. Any contracted agency must be approved in advance by NCEMS, such approval not unreasonably withheld, prior to the issuance of Advanced Key information.
7. Advanced Keys shall be issued to the City upon the approval of the City’s system key security procedures by NCEMS. If the City is responsible for programming subscriber devices owned by another approved user, such other user shall provide written authority to NCEMS to extend the ID range of the Advanced Key as needed to provided maintenance and programming services.
8. The City shall not share its use of or access to the System without prior written consent of NCEMS.
9. The City shall submit any new and/or existing equipment that it intends to use to access the System to NCEMS for compatibility assessment and logging of equipment serial numbers prior to the use of such equipment. Configuration information for System assets — Subscribers (portables, mobiles, consolettes) and Fixed Network Equipment — must be provided to NCEMS every time an asset is put into service on the County's system by the City.
10. The City shall notify NCEMS if there is any change in its inventory of equipment it uses to access the system, including, but not limited to, decommissioned, lost or stolen devices.

11. The City shall be responsible for the proper use of each device used to access the system. The City shall follow any applicable radio protocol that applies to system use and is established by the FCC and NCEMS (e.g., transmission breaks during lengthy traffic, deferral to emergency traffic, etc.). Frequencies and bandwidth supporting the system are at a premium, and use of the System is for legitimate criminal justice and public safety purposes only. The City will program subscriber devices to employ a time-out-timer that does not exceed 60-seconds in length to prevent radios from locking up systems unnecessarily in a manner determined by NCEMS.
12. The City shall ensure that all subscriber equipment shall be installed and maintained in such a manner as to be fully-compliant with FCC licenses and operating parameters (e.g.: output power, ERP, etc.).
13. The City understands that NCEMS maintains the right to audit its list of system access device users at any time, and will provide necessary information and otherwise reasonably cooperate with the conduct of such audits.

J. Term

This MOU shall extend for a term of five (5) years. Thereafter, the terms of this MOU shall continue for additional one (1) year terms until one party shall provide to the other party at least sixty (60) days notice of their intent to terminate this MOU at the end of the then-current term.

Nothing in this paragraph shall preclude the parties from agreeing to modification of this MOU by mutual consent at any time during the original term or any succeeding term for the life of this MOU.

K. Notices

Any notice to be given or document to be delivered to either the City or the County pursuant to this Agreement will be sufficient if delivered personally or sent by the United States Postal Service or other delivery service, return receipt required, to the addresses specified below. Any written notice or delivery of documents will have been given, made and received on the day of delivery if delivered personally or upon the sender receiving the written return receipt from the delivery service.

City: City of Bethlehem
 Office of the Mayor
 10 East Church Street
 Bethlehem, PA 18018

County: Northampton County Emergency Management Services
 Director of Emergency Management Services
 100 Gracedale Avenue
 Nazareth, PA 18064

I. Effective Date

This agreement shall become effective and binding upon the later of the second party to both fully execute and secure its governing body's approval of this agreement to the extent such approval may be required by the party.

IN WITNESS WHEREOF the parties have executed this Memorandum of Understanding on the dates indicated with their signatures, below.

NORTHAMPTON COUNTY:

ATTEST:

By: _____ (Seal)

Lamont McClure
County Executive

CITY OF BETHLEHEM

ATTEST:

George Yasso, City Controller

By: _____ (Seal)

Robert J. Donchez, Mayor

Date: _____

Date: _____

I certify that the within Agreement is needed, necessary and appropriate.

By: _____

City of Bethlehem Department Head

Print Name: _____

Date: _____

ATTACHMENT A
System Equipment Inventory

Location	Item	Model	Serial #	Quantity
City Hall	- 7.14 Network Management Client	HP	SFUG000E	1
	- Terminal Server	4000T	147CBY0026	1
	- Core Backhaul Switch 01		CN57DRR06N	1
	- Core Backhaul Switch 02		CN57DRR0V3	1
	- Core CWR Interface 01		147IRL0203	1
	- Core CWR Interface 02		147IRW0018	1
	- Core Router 01	S6000	147CRX0031	1
	- Core Router 02	S6000	147CRX0032	1
	- Gateway GPRS Service Node	S6000	147CRX0039	1
	- Gateway Router 01	S6000	147CRX0040	1
	- Gateway Router 02	S6000	147CRX0041	1
	- Core LAN Switch 01	T7856A	147CRX0042	1
	- Core LAN Switch 02	T7856A	147CRX0043	1
	- 7.14 Network Archive Server			1
	- Digital Archive Server		877CRX0005	1
	- 7.14 VMS Core 01	M3	280CRX0001	1
	- 7.14 VMS Core 02	M3	280CRX0000	1
	- Juniper Firewall	SSG20		1
	- Juniper Firewall	SSG140	185102015600049	1
	- UEM DMZ Switch	ProCurve	CN816ZT0J1	1
	- UEM Border Router	S6000	147CND1911	1
	Trak Time Sync			1
	KVM Switch 01			1
	KVM Switch 02			1
	Site Controller 01	GCP8000		1
	Site Controller 02	GCP8000		1
	Gateway Router 01	ST2500B		1
	Gateway Router 02	ST2500B		1
	Gateway Router 03	ST2500B		1
	Gateway Router 04	ST2500B		1
	Gateway Router 05	ST2500B		1
	Gateway Router 06	ST2500B		1
	LAN Switch 01	2610		1
	LAN Switch 02	2610		1
	MOSCAD SDM ADV 01	F4544A	469SJN000X	1
	MOSCAD SDM ADV 02	F4544A	469SJN003R	1
	MOSCAD SDM	SDM3000		1
	Interplexer	Harris		1

Location	Item	Model	Serial #	Quantity
South Mountain	Radios w/ Power Supplies	GTR8000		6
	Tower-top Amplifier			1
	Antenna Combiner			1
	Antenna, cable, connectors, Polyphaser lightning protection			1
	Trak 9100 Time Sync	FQSTD		1
	Site Controller 01	GCP8000	5808000DC	1
	Site Controller 02	GCP8000	5808000DI	1
	Prime Router 01	GGM8000	CA155Z87C	1
	Prime Router 02	GGM8000	CA155Z6RX	1
	Prime LAN Switch 01	ProCurve	CN816ZT0CU	1
	Prime LAN Switch 02	ProCurve	CN817ZT1IU	1
	Prime Site Router 01	S6000	147YJM0502	1
	Site Access Router 01	S6000	147YJM0496	1
	Site Access Router 02	S6000	147YJM0473	1
	Sub-Site Router 01	ST2500B	147YJP0326	1
	Sub-Site LAN Switch 01	ProCurve	CN817ZT1HL	1
	Comparator	GCM8000	580800DE	1
	Comparator	GCM8000	580800DG	1
	Comparator	GCM8000	580800DL	1
	MOSCAD SDM ADV 01	SDM3000	580800004	1
	MOSCAD SDM ADV 02	SDM3000	580800PT	1
	CWR INTF Panel 01		147YJM0117	1
	Site Router- Spare	S6000	147YJP0589	1
	Site Router- Spare	S6000	147YJP0679	1
	Site Router- Spare	S6000	147YJP0587	1
	Site Router- Spare	S6000	147YJM0524	1
Williams Street	Radios w/ Power Supplies	GTR8000		6
	Tower-top amplifier			1
	Antenna Combiner			1
	Antenna, cable, connectors, Polyphaser lightning protection			1
	Comparator	GCM8000		1
	Comparator	GCM8000		1
	Comparator	GCM8000		1
	Trak 9100 Time Sync	FQSTD		1
	Site Router 01	ST2500B	147YJP0377	1
	Site LAN Switch 01	ProCurve	CN8202T0HX	1
	MOSCAD SDM ADV 01	SDM3000	58080000A	1
	Nfinity UPS		NB1250312600	1

Location	Item	Model	Serial #	Quantity
Electric Shop	Radios w/ Power Supplies	GTR8000		6
	Tower-top amplifier			1
	Antenna Combiner		FC30824A07FF	1
	Antenna, cable, connectors, Polyphaser lightning protection			1
	Trak 9100 Time Sync	FQSTD		1
	Site Router	ST2500B	147YJP0327	1
	Site Router 01	ST2500B	147CND2173	1
	Site Router 02	ST2500B	147CND2174	1
	Site LAN Switch	ProCurve	CN816ZT0CV	1
	LAN Switch 01	ProCurve	CN201ZT004	1
	LAN Switch 02	ProCurve	CN147ZT0N9	1
	Site Controller	GCP8000	5DEY0072	1
	Gateway Router 01	ST2500B	147CND2176	1
	Gateway Router 02	ST2500B	147CND2184	1
	Gateway Router 03	ST2500B	147CND2178	1
	Gateway Router 04	ST2500B	147CND2186	1
	Gateway Router 05	ST2500B	147CND2181	1
	MOSCAD SDM ADV01	SDM3000	58080000E	1
	Back-Up Base Station PD Disp 01	Quantar	255CFZ0146	1
	Back-Up Base Station NCIC 02	Quantar	255CFZ0149	1
	Back-Up Base Station Fire 03	Quantar	255CFZ0151	1
	Back-Up Base Station PubWrks 04	Quantar	255CFZ0150	1
	Back-Up Base Station EMS 05	Quantar	255CFZ0152	1
	Back-Up Base Station	Quantar		1
	Back-Up Base Station	Quantar		1
	Interplexer	Harris	712015	1

ATTACHMENT B

Federal Communications Commission Authorizations

REFERENCE COPY

This is not an official FCC license. It is a record of public information contained in the FCC's licensing database on the date that this reference copy was generated. In cases where FCC rules require the presentation, posting, or display of an FCC license, this document may not be used in place of an official FCC license.



Federal Communications Commission Public Safety and Homeland Security Bureau

RADIO STATION AUTHORIZATION

LICENSEE: BETHLEHEM, CITY OF

BETHLEHEM, CITY OF
10 E CHURCH ST
BETHLEHEM, PA 18018

Call Sign WNWQ636	File Number 0006540980
Radio Service YE - PubSaftey/SpeceMer/PubSafteyNtdPlan,806-817/851 -862MHz,Trunked	
Regulatory Status PMRS	
Frequency Coordination Number	

FCC Registration Number (FRN): 0003199726

Grant Date 11-13-2014	Effective Date 11-13-2014	Expiration Date 02-01-2025	Print Date 11-13-2014
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STATION TECHNICAL SPECIFICATIONS

Fixed Location Address or Mobile Area of Operation

- Loc. 1 Address: SO MTN PARK OFF MTN DR W
City: BETHLEHEM County: NORTHAMPTON State: PA
Lat (NAD83): 40-35-40.4 N Long (NAD83): 075-22-36.6 W ASR No.: N/A Ground Elev: 323.0
- Loc. 2 Address: CITY ELECTRIC SHOP E NORTH ST
City: BETHLEHEM County: NORTHAMPTON State: PA
Lat (NAD83): 40-37-30.4 N Long (NAD83): 075-21-58.6 W ASR No.: N/A Ground Elev: 104.0
Location 2 Special Condition
Secondary site subject to the condition that no interference is caused to co-channel users in an adjacent communications area.
- Loc. 3 Area of operation
Land Mobile Control Station meeting the 6.1 Meter Rule: PA
- Loc. 4 Area of operation
Operating within a 16.0 km radius around fixed location 1
- Loc. 5 Address: 95 WILLIAM STREET
City: BETHLEHEM County: NORTHAMPTON State: PA
Lat (NAD83): 40-36-19.0 N Long (NAD83): 075-20-58.0 W ASR No.: Ground Elev: 133.0
- Loc. 6 Area of operation
Land Mobile Control Station meeting the 6.1 Meter Rule: PA
- Loc. 7 Area of operation
Operating within a 16.0 km radius around fixed location 5

Conditions:

Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof nor in any other manner than authorized herein. Neither the license nor the right granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended. See 47 U.S.C. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.

FCC 601-ULSHS1
August 2007

Licensee Name: BETHLEHEM, CITY OF

Call Sign: WNWQ636

File Number: 0006540980

Print Date: 11-13-2014

Antennas

Loc No.	Ant No.	Frequencies (MHz)	Sta. Cls.	No. Units	No. Pagers	Emission Designator	Output Power (watts)	ERP (watts)	Ant. Ht./Tp meters	Ant. AAT meters	Construct Deadline Date
1	1	000851.01250000	FB2	1		16K0F3E 8K10F1D	75.000	155.000	59.0	228.0	11-30-2010
1	1	000851.13750000	FB2	1		16K0F3E 8K10F1D	75.000	155.000	59.0	228.0	11-30-2010
1	1	000851.80000000	FB2	1		16K0F3E 8K10F1D	75.000	155.000	59.0	228.0	11-30-2010
1	1	000852.07500000	FB2	1		16K0F3E 8K10F1D	75.000	155.000	59.0	228.0	11-30-2010
1	1	000852.82500000	FB2	1		16K0F3E 8K10F1D	75.000	155.000	59.0	228.0	11-30-2010
1	1	000853.55000000	FB2	1		16K0F3E 8K10F1D	75.000	155.000	59.0	228.0	11-30-2010
1	1	000853.80000000	FB2	1		16K0F3E 8K10F1D	75.000	155.000	59.0	228.0	11-30-2010
2	1	000854.66250000	FB2	1		16K0F3E 8K10F1D	70.000	164.000	37.0	104.0	02-01-2003
2	1	000854.98750000	FB2	1		16K0F3E 8K10F1D	70.000	164.000	37.0	104.0	02-01-2003
2	1	000855.96250000	FB2	1		16K0F3E 8K10F1D	70.000	164.000	37.0	104.0	02-01-2003
2	1	000855.41250000	FB2	1		16K0F3E 8K10F1D	70.000	164.000	37.0	104.0	04-27-2007
2	1	000858.58750000	FB2	1		16K0F3E 8K10F1D	70.000	164.000	37.0	104.0	04-27-2007
2	1	000851.01250000	FB2	1		16K0F3E 8K10F1D	70.000	164.000	37.0	104.0	11-30-2010
2	1	000851.13750000	FB2	1		16K0F3E 8K10F1D	70.000	164.000	37.0	104.0	11-30-2010
2	1	000851.80000000	FB2	1		16K0F3E 8K10F1D	70.000	164.000	37.0	104.0	11-30-2010

Licensee Name: BETHLEHEM, CITY OF

Call Sign: WNWQ636

File Number: 0006540980

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Antennas

Loc No.	Ant No.	Frequencies (MHz)	Sta. Cts.	No. Units	No. Pagers	Emission Designator	Output Power (watts)	ERP (watts)	Ant. Ht./Tp meters	Ant. AAT meters	Construct Deadline Date
2	1	000852.07500000	FB2	1		16K0F3E 8K10F1D	70.000	164.000	37.0	104.0	11-30-2010
2	1	000852.82500000	FB2	1		16K0F3E 8K10F1D	70.000	164.000	37.0	104.0	11-30-2010
2	1	000853.55000000	FB2	1		16K0F3E 8K10F1D	70.000	164.000	37.0	104.0	11-30-2010
2	1	000853.80000000	FB2	1		16K0F3E 8K10F1D	70.000	164.000	37.0	104.0	11-30-2010
3	1	000809.66250000	FX1	16		16K0F3E 8K10F1D	10.000	35.000			
3	1	000809.98750000	FX1	16		16K0F3E 8K10F1D	10.000	35.000			
3	1	000810.96250000	FX1	16		16K0F3E 8K10F1D	10.000	35.000			
3	1	000810.41250000	FX1	16		16K0F3E 8K10F1D	10.000	35.000			
3	1	000813.58750000	FX1	16		16K0F3E 8K10F1D	10.000	35.000			
3	1	000806.01250000	FX1	16		16K0F3E 8K10F1D	10.000	35.000			
3	1	000806.13750000	FX1	16		16K0F3E 8K10F1D	10.000	35.000			
3	1	000806.51250000	FX1	16		16K0F3E 8K10F1D	10.000	35.000			
3	1	000806.80000000	FX1	16		16K0F3E 8K10F1D	10.000	35.000			
3	1	000807.01250000	FX1	16		16K0F3E 8K10F1D	10.000	35.000			
3	1	000807.07500000	FX1	16		16K0F3E 8K10F1D	10.000	35.000			

Licensee Name: BETHLEHEM, CITY OF

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Loc No.	Ant No.	Frequencies (MHz)	Sta. Cls.	No. Units	No. Pagers	Emission Designator	Output Power (watts)	ERP (watts)	Ant. Ht./Tp meters	Ant. AAT meters	Construct Deadline Date
3	1	000807.51250000	FX1	16		16K0F3E 8K10F1D	10.000	35.000			
3	1	000807.82500000	FX1	16		16K0F3E 8K10F1D	10.000	35.000			
3	1	000808.01250000	FX1	16		16K0F3E 8K10F1D	10.000	35.000			
3	1	000808.55000000	FX1	16		16K0F3E 8K10F1D	10.000	35.000			
3	1	000808.80000000	FX1	16		16K0F3E 8K10F1D	10.000	35.000			
4	1	000809.66250000	MO	1100		16K0F3E 8K10F1D	35.000	35.000			
4	1	000809.98750000	MO	1100		16K0F3E 8K10F1D	35.000	35.000			
4	1	000810.96250000	MO	1100		16K0F3E 8K10F1D	35.000	35.000			
4	1	000810.41250000	MO	1100		16K0F3E 8K10F1D	35.000	35.000			04-27-2007
4	1	000813.58750000	MO	1100		16K0F3E 8K10F1D	35.000	35.000			04-27-2007
4	1	000806.01250000	MO	1100		16K0F3E 8K10F1D	35.000	35.000			11-30-2010
4	1	000806.13750000	MO	1100		16K0F3E 8K10F1D	35.000	35.000			11-30-2010
4	1	000806.51250000	MO	1100		16K0F3E 8K10F1D	35.000	35.000			11-30-2010
4	1	000806.80000000	MO	1100		16K0F3E 8K10F1D	35.000	35.000			11-30-2010
4	1	000807.01250000	MO	1100		16K0F3E 8K10F1D	35.000	35.000			11-30-2010

Licensee Name: BETHLEHEM, CITY OF

Call Sign: WNWQ636

File Number: 0006540980

Print Date: 11-13-2014

Antennas

Loc No.	Ant No.	Frequencies (MHz)	Sta. Cls.	No. Units	No. Pagers	Emission Designator	Output Power (watts)	ERP (watts)	Ant. Ht./Tp meters	Ant. AAT meters	Construct Deadline Date
4	1	000807.07500000	MO	1100		16K0F3E 8K10F1D	35.000	35.000			11-30-2010
4	1	000807.51250000	MO	1100		16K0F3E 8K10F1D	35.000	35.000			11-30-2010
4	1	000807.82500000	MO	1100		16K0F3E 8K10F1D	35.000	35.000			11-30-2010
4	1	000808.01250000	MO	1100		16K0F3E 8K10F1D	35.000	35.000			11-30-2010
4	1	000808.55000000	MO	1100		16K0F3E 8K10F1D	35.000	35.000			11-30-2010
4	1	000808.80000000	MO	1100		16K0F3E 8K10F1D	35.000	35.000			11-30-2010
4	1	000853.80000000	MO	1100		8K10F1D	35.000	35.000			04-22-2011
4	1	000853.55000000	MO	1100		8K10F1D	35.000	35.000			04-22-2011
4	1	000852.82500000	MO	1100		8K10F1D	35.000	35.000			04-22-2011
4	1	000852.07500000	MO	1100		8K10F1D	35.000	35.000			04-22-2011
4	1	000851.80000000	MO	1100		8K10F1D	35.000	35.000			04-22-2011
4	1	000851.13750000	MO	1100		8K10F1D	35.000	35.000			04-22-2011
5	1	000853.80000000	FB2	1		8K10F1D	33.100	145.800	6.1	23.8	04-22-2011
5	1	000853.55000000	FB2	1		8K10F1D	33.100	145.800	6.1	23.8	04-22-2011
5	1	000852.82500000	FB2	1		8K10F1D	33.100	145.800	6.1	23.8	04-22-2011
5	1	000852.07500000	FB2	1		8K10F1D	33.100	145.800	6.1	23.8	04-22-2011
5	1	000851.80000000	FB2	1		8K10F1D	33.100	145.800	6.1	23.8	04-22-2011
5	1	000851.13750000	FB2	1		8K10F1D	33.100	145.800	6.1	23.8	04-22-2011

Licensee Name: BETHLEHEM, CITY OF

Call Sign: WNWQ636

File Number: 0006540980

Print Date: 11-13-2014

Antennas

Loc No.	Ant No.	Frequencies (MHz)	Sta. Cls.	No. Units	No. Pagers	Emission Designator	Output Power (watts)	ERP (watts)	Ant. Ht./Tp meters	Ant. AAT meters	Construct Deadline Date
6	1	000806.80000000	FX1	16		8K10F1D	10.000	35.000			
6	1	000808.55000000	FX1	16		8K10F1D	10.000	35.000			
6	1	000807.82500000	FX1	16		8K10F1D	10.000	35.000			
6	1	000807.07500000	FX1	16		8K10F1D	10.000	35.000			
6	1	000806.13750000	FX1	16		8K10F1D	10.000	35.000			
6	1	000808.80000000	FX1	16		8K10F1D	10.000	35.000			
7	1	000808.55000000	MO	1110		16K0F3E 8K10F1D	35.000	35.000			04-22-2011
7	1	000808.80000000	MO	1110		16K0F3E 8K10F1D	35.000	35.000			04-22-2011
7	1	000807.82500000	MO	1110		16K0F3E 8K10F1D	35.000	35.000			04-22-2011
7	1	000807.07500000	MO	1110		16K0F3E 8K10F1D	35.000	35.000			04-22-2011
7	1	000806.13750000	MO	1110		16K0F3E 8K10F1D	35.000	35.000			04-22-2011
7	1	000806.80000000	MO	1110		16K0F3E 8K10F1D	35.000	35.000			04-22-2011
7	1	000853.80000000	MO	1110		16K0F3E 8K10F1D	35.000	35.000			04-22-2011
7	1	000853.55000000	MO	1110		16K0F3E 8K10F1D	35.000	35.000			04-22-2011
7	1	000852.82500000	MO	1110		16K0F3E 8K10F1D	35.000	35.000			04-22-2011
7	1	000852.07500000	MO	1110		16K0F3E 8K10F1D	35.000	35.000			04-22-2011
7	1	000851.80000000	MO	1110		16K0F3E 8K10F1D	35.000	35.000			04-22-2011

Licensee Name: BETHLEHEM, CITY OF

Call Sign: WNWQ636

File Number: 0006540980

Print Date: 11-13-2014

Antennas

Loc No.	Ant No.	Frequencies (MHz)	Sta. Cls.	No. Units	No. Pagers	Emission Designator	Output Power (watts)	ERP (watts)	Ant. Ht./Tp meters	Ant. AAT meters	Construct Deadline Date
7	1	000851.13750000	MO	1110		16K0F3E 8K10F1D	35.000	35.000			04-22-2011

Control Points

Control Pt. No. 1

Address: 10 E CHURCH ST

City: BETHLEHEM County: State: PA Telephone Number: (610)865-7108

Associated Call Signs

WPFA301

<NA>

Waivers/Conditions:

Authorization on a secondary basis.

REFERENCE COPY

This is not an official FCC license. It is a record of public information contained in the FCC's licensing database on the date that this reference copy was generated. In cases where FCC rules require the presentation, posting, or display of an FCC license, this document may not be used in place of an official FCC license.



**Federal Communications Commission
Public Safety and Homeland Security Bureau**

RADIO STATION AUTHORIZATION

LICENSEE: BETHLEHEM, CITY OF

ATTN: SCOTT THOMPSON
BETHLEHEM, CITY OF
10 E CHURCH ST
BETHLEHEM, PA 18018

Call Sign WPFA301	File Number 0006230088
Radio Service YE - PubSfty/SpecEmer/PubSftyNtlPlan,806-817/851 -862MHz,Trunked	
Regulatory Status PMRS	
Frequency Coordination Number	

FCC Registration Number (FRN): 0003199726

Grant Date 03-19-2014	Effective Date 03-19-2014	Expiration Date 06-03-2024	Print Date 04-08-2014
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STATION TECHNICAL SPECIFICATIONS

Fixed Location Address or Mobile Area of Operation

- Loc. 1** Area of operation
Land Mobile Control Station meeting the 6.1 Meter Rule: PA
- Loc. 2** Address: 10 E CHURCH ST ELECTRICAL SHOP
City: BETHLEHEM County: NORTHAMPTON State: PA
Lat (NAD83): 40-37-30.4 N Long (NAD83): 075-21-58.6 W ASR No.: Ground Elev: 104.0
- Loc. 3** Area of operation
Operating within a 14.0 km radius around fixed location 2
- Loc. 4** Area of operation
Operating within a 14.0 km radius around fixed location 2

Antennas

Loc	Ant	Frequencies	Sta.	No.	No.	Emission	Output	ERP	Ant.	Ant.	Construct
No.	No.	(MHz)	Cls.	Units	Pagers	Designator	Power	(watts)	Ht/Tp	AAT	Deadline
							(watts)		meters	meters	Date
1	1	000809.66250000	FX1	1		8K10F1D	10.000	20.000			
1	1	000809.98750000	FX1	1		8K10F1D	10.000	20.000			
1	1	000810.96250000	FX1	1		8K10F1D	10.000	20.000			

Conditions:

Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof nor in any other manner than authorized herein. Neither the license nor the right granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended. See 47 U.S.C. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.

Licensee Name: BETHLEHEM, CITY OF

Call Sign: WPFA301

File Number: 0006230088

Print Date: 04-08-2014

Antennas

Loc No.	Ant No.	Frequencies (MHz)	Sta. Cls.	No. Units	No. Pagers	Emission Designator	Output Power (watts)	ERP (watts)	Ant. Ht./Tp meters	Ant. AAT meters	Construct Deadline Date
1	1	000810.41250000	FX1	1		8K10F1D	10.000	20.000			
1	1	000813.58750000	FX1	1		8K10F1D	10.000	20.000			
2	1	000854.66250000	FB2	1		8K10F1D	70.000	164.000	37.0	3.0	
2	1	000854.98750000	FB2	1		8K10F1D	70.000	164.000	37.0	3.0	
2	1	000855.96250000	FB2	1		8K10F1D	70.000	164.000	37.0	3.0	
2	1	000855.41250000	FB2	1		8K10F1D	70.000	164.000	37.0	3.0	04-21-2007
2	1	000858.58750000	FB2	1		8K10F1D	70.000	164.000	37.0	3.0	04-21-2007
3	1	000809.66250000	MO	500		8K10F1D	35.000	35.000			
3	1	000809.98750000	MO	500		8K10F1D	35.000	35.000			
3	1	000810.96250000	MO	500		8K10F1D	35.000	35.000			
3	1	000810.41250000	MO	500		8K10F1D	35.000	35.000			04-21-2007
3	1	000813.58750000	MO	500		8K10F1D	35.000	35.000			04-21-2007
3	1	000813.58750000	MO	9		8K10F1D	2.500	3.000			10-01-2010
3	1	000854.66250000	MO	500		8K10F1D	35.000	35.000			10-01-2010
3	1	000854.98750000	MO	500		8K10F1D	35.000	35.000			10-01-2010
3	1	000855.41250000	MO	500		8K10F1D	35.000	35.000			10-01-2010
3	1	000855.96250000	MO	500		8K10F1D	35.000	35.000			10-01-2010
3	1	000858.58750000	MO	500		8K10F1D	35.000	35.000			10-01-2010
3	1	000858.58750000	MO3	9		8K10F1D	3.000	3.000			10-01-2010

Licensee Name: BETHLEHEM, CITY OF

Call Sign: WPFA301

File Number: 0006230088

Print Date: 04-08-2014

Antennas

Loc No.	Ant No.	Frequencies (MHz)	Sta. Cls.	No. Units	No. Pagers	Emission Designator	Output Power (watts)	ERP (watts)	Ant. Ht./Tp meters	Ant. AAT meters	Construct Deadline Date
4	1	000858.58750000	FB2T	1		8K10F1D	35.000	35.000			

Control Points

Control Pt. No. 1

Address: 248 E. GARRISON ST.

City: BETHLEHEM County: State: PA Telephone Number: (610)865-7108

Associated Call Signs

<NA>

Waivers/Conditions:

Antenna structures for land, base and fixed stations authorized for operation at temporary unspecified locations may be erected without specific prior approval of the Commission where such antenna structures do not exceed a height of 60.96 meters (200 feet) above ground level; provided that the overall height of such antennas more than 6.10 meters (20 feet) above ground, including their supporting structures (whether natural formation or man-made), do not exceed any of the slope ratios set forth in Section 17.7(b). Any antenna to be erected in excess of the foregoing limitations requires prior Commission approval. Licensees seeking such approval should file application for modification of license. In addition, notification to the Federal Aviation Administration is required whenever the antenna will exceed 60.96 meters (200 feet) above the ground and whenever notification is otherwise required by Section 17.7 of the Commission's Rules. Such notification should be given by filing FAA Form 7460-1, Notice of Proposed Construction or Alteration, in duplicate, with the nearest office of the Federal Aviation Administration, which form is available from that office.

ATTACHMENT C

System Talk Groups

POLICE ¹	FIRE ²	EMS ³	PUBLIC WORKS ⁴	OTHER ⁵	
PD-DISP	FD-DIS	EMS-DIS	Planning 1	Talkgrp 1	PUBINFO 1
PD-ADM	FD-ADM	EMS-ADM	Planning 2	Talkgrp 2	MSKFEST
PD-ADM 2	FD-EVNT	EMS-OPS1	Planning 3	Talkgrp 3	Logistics 1
PD-ERT	FD-HZMT	EMS-OPS2	PWSPOP1	Talkgrp 4	Logistics 2
PD-INV	FD-INSP	MHLNBRG	PWSPOP2	Talkgrp 5	Logistics 3
PD-NCIC	FD-INSP	STLUKES	PWELEC1	TUWAY	INTERCOM
PD-SP OPS	FD-SP OPS	STLKE ANDER	PW-WWTP	Radio Maint	GOLFCRS
PD-TAC 1	FD-TAC1		PW-WTR	PARKSDIS	C-D-DIS
PD-TAC 2	FD-TAC2		PW-STRTS	PARKSADM	BSDATD1
PD-TRAF	FD-TAC3		PW-SRVC	OPS1	BSDATD2
PDEVNT 1	FD-TAC4		PW-SEWR	OPS2	BSDATD3
PDEVNT 2	FD-TAC5		PW-METER	OPS3	BSD-DIS
PDLUKOT			PW-ELEC	OPS4	BSD-SEC
E-VICE			PW-MECH	OPS5	BPA-DSP
Command 1				CTY-ADM	BPA-ADM
Command 2				COMM CENTER	BPA-MNT
Command 3				COMM CTR ANN	EMERGENCY
				CITYHELP	CTYSPOP
				CDRCYL	CAMPUS PD
				COB-EMA	COB-MUTAID
		MORAVIAN COLLEGE⁶	LEHIGH UNIVERSITY⁷		
		MOR-DIS	LEH-DIS		
		MOR-ADM	LEH-INV		
			LEH-SG		
			LEH-SUP		
			LEHEVNT		

This talkgroup list has been developed from the ASTRO system core provisioning file as of December 5, 2018.

¹ Configuration and use of talk groups in this column must be coordinated with the Bethlehem City Police Chief

² Configuration and use of talk groups in this column must be coordinated with the Bethlehem City Fire Chief

³ Configuration and use of talk groups in this column must be coordinated with the Bethlehem City EMS Director

⁴ Configuration and use of talk groups in this column must be coordinated with the Bethlehem City Public Works Director

⁵ Configuration and use of talk groups in this section must be coordinated with the Bethlehem EMS Coordinator.

⁶ Configuration and use of talk groups in this section must be coordinated with the Moravian College Police Chief

⁷ Configuration and use of talk groups in this section must be coordinated with the Lehigh University Police Chief

ATTACHMENT D
Motorola Transfer Documents



MOTOROLA SOLUTIONS

Motorola Solutions, Inc.
809 Pinnacle Drive, Suite G
Linthicum Heights, MD 21090

Telephone: +1 410 712 8200
Fax: +1 410 712 6501

November 19, 2018

Greg Cryder
Electrical Bureau Chief
City of Bethlehem
10 East Church Street
Bethlehem, PA 18018

RE: Transfer of MSI SLA from City of Bethlehem to Northampton County

Dear Mr. Cryder:

This letter is to be included with the previously provided MSI Transfer License.

All parties agree that all payment and license fees have been paid in full. No additional license fees are required.

Please complete the SLA transfer form. There is no cost to either the City or County for the transfer.

Please return to Motorola a copy of the SLA transfer form.

Thank you,

A handwritten signature in blue ink, appearing to read 'Dominic Ventura'.

Dominic Ventura
Area Sales Manager – Pennsylvania
Motorola Solutions, Inc.

**WRITTEN NOTIFICATION OF TRANSFER OF MOTOROLA PRODUCTS
AND ASSIGNMENT OF LICENSE AGREEMENT**

(See License Agreement [5/18/98] - Section 4)

PRESENT LICENSEE: Name: _____

Address: _____

Telephone: _____

The PRESENT LICENSEE (identified above) hereby transfers the Motorola Products (identified below), and assigns the corresponding license rights under this License Agreement, to the NEW LICENSEE (identified below).

MOTOROLA PRODUCTS: *(here list all products being transferred)*

NEW LICENSEE: Name: _____

Address: _____

Telephone: _____

Agreement by NEW LICENSEE to this License Agreement:

I, _____, hereby agree to the terms and conditions of the License
(enter name of the New Licensee)
Agreement between Motorola and _____, which License Agreement
(enter the name of the Present Licensee)
was signed by _____, on _____
(enter name of Present Licensee) *(enter date of the current Agreement signing)*

Signed _____
(authorized signatory of the New Licensee)

Date: _____
(date of this signing) *(effective date of transfer - if different then signing date)*