



Hamburg Township Public Safety Department

PO BOX 157 • HAMBURG, MICHIGAN 48139
PHONE: (810) 231-9391 • FAX: (810) 231-9401

EMAIL: HATP@hamburg.mi.us

RICHARD DUFFANY, DIRECTOR OF PUBLIC SAFETY



TO: Hamburg Township Board
FROM: Chief Richard Duffany
DATE: August 3, 2026
RE: Failing VHF Fire Alerting System

The fire department has been experiencing an increase in issues involving the county's antiquated VHF alerting system for calls. Deputy Fire Chief Zernick is recommending that the department purchase the Bryx Alerting System to fix these issues (See DC Zernick's attached memo and quote). As this is an important public safety matter as well as a large financial investment that is not included in the adopted FY 26/27 budget, I am respectfully requesting that this topic be placed on the work study session agenda for discussion.

Respectfully,

A handwritten signature in blue ink, appearing to read "Richard Duffany".

Chief Richard Duffany
Director of Public Safety



Hamburg Township Public Safety Department

PO BOX 157 • HAMBURG, MICHIGAN 48139
PHONE: (810) 231-9391 • FAX: (810) 231-9401

EMAIL: HATP@hamburg.mi.us

RICHARD DUFFANY, DIRECTOR OF PUBLIC SAFETY



Date: 8/03/2026

To: Director Richard Duffany

From: Deputy Chief Jordan Zernick

Re: Bryx Station Alerting

The Hamburg Township Fire Department currently relies on a legacy Very High Frequency (VHF) radio paging system as its primary mechanism for alerting personnel to emergency incidents. Due to aging physical infrastructure, increasing radio frequency interference, signal attenuation, and hardware obsolescence, the existing VHF system suffers from severe, documented unreliability. To eliminate single-point failures, reduce dispatch-to-turnout times, and protect firefighter health, it is strongly recommended that HTFD transition to or integrate Bryx Station Alerting. Bryx provides a sub-second, IP-driven alerting solution that bypasses legacy radio infrastructure, integrates directly with computer-aided dispatch (CAD), and delivers automated building controls and mobile notifications across all HTFD stations.

The necessity for an independent station alerting solution has been made urgent by recent policy shifts at the county level. The Livingston County Board of Commissioners has publicly stated its intent to cease long-term support for the failing VHF paging system, signaling a full transition to an 800 MHz paging architecture. While intended to modernize communications, this transition creates a dangerous operational gap for Hamburg Township. The multi-million-dollar 800 MHz tower expansion project previously approved by the county has yet to break ground and is projected to take up to two years to complete. Relying on an unmaintained VHF network during this protracted multi-year window leaves the department exposed to catastrophic notification failures.

Compounding this timeline delay is the fact that 800 MHz frequencies carry severe physical limitations regarding in-building signal penetration. HTFD already experiences significant 800 MHz coverage dead zones inside both Station 11 and Station 12 on primary portable radios, which operate on the exact same trunked network. Transitioning paging to 800 MHz without solving station attenuation guarantees that firefighters inside the stations will suffer missed pages even after the new towers are constructed. Station alerting cannot depend on higher-frequency radio signals that fail to pierce concrete and steel structures. The only solution to increase the probability of reliable 800 MHz with both fire stations is the costly installation of a bidirectional amplifiers which when quoted would cost upwards of \$40,000 per station.

Beyond mitigating network failures, Bryx Station Alerting delivers a dramatic reduction in turnout times while fundamentally safeguarding firefighter cardiovascular health—particularly during after-hours responses. Traditional radio paging triggers alerts at high, static decibels while firefighters are in deep sleep, causing a sudden, massive spike in heart rate and blood pressure known as "alarm-induced



Hamburg Township Public Safety Department

PO BOX 157 • HAMBURG, MICHIGAN 48139
PHONE: (810) 231-9391 • FAX: (810) 231-9401

EMAIL: HATP@hamburg.mi.us

RICHARD DUFFANY, DIRECTOR OF PUBLIC SAFETY



shock," a leading contributor to firefighter cardiac events. Bryx mitigates this occupational stress through heart-smart "ramped" audio tones that gradually build in volume alongside night-vision-friendly red lighting. Furthermore, zoned alerting targets only the dormitories of the crew assigned to the call, allowing off-duty or non-assigned personnel to sleep undisturbed, preserving critical recovery cycles. These health-focused innovations work in tandem with station automation to significantly compress dispatch-to-door times. Upon receiving a call, Bryx triggers sub-second alerts, instantly turns on apparatus bay lights and broadcasts crisp Neural Text-to-Speech audio over the PA system. High-visibility display boards simultaneously present maps, hydrant locations, and call details as crews walk to the rig, eliminating the critical seconds normally wasted waiting for dispatchers to repeat audio over the radio. On-duty and paid-on-call personnel receive the same instant, sub-second alerts on their personal devices via the Bryx 911 mobile app, complete with turn-by-turn navigation and live response tracking.

Financially and logistically, Bryx utilizes standard, off-the-shelf hardware modules that keep initial installation and maintenance costs low. The architecture can be deployed rapidly without interrupting active dispatch operations, allowing HTFD to bridge the county's multi-year 800 MHz gap immediately while permanently solving in-building coverage deficiencies at Stations 11 and 12. Quotes for similar systems were obtained by Deputy Director Newton a year ago. For a similar system costs were nearly double nearing \$100,000 Per building. To assist with the financial impacts of this system and largely because the dispatch center truly believes there is value with decreased call to turnout times which has been statically documented as Livingston County EMS has placed this system in their EMS buildings, Livingston County Dispatch Director Kecia Williams has committed to fund a single control module for Hamburg Fire at a cost of \$26,000. This cost sharing is NOT reflected in the attached quote.

A handwritten signature in blue ink, appearing to read "J Zernick".

Jordan Zernick
Deputy Fire Chief



BRYX

Emergency Response, Simplified.®

Hamburg Twp FD, MI

Hamburg Township

10405 Merrill Road
Hamburg, Michigan 48139
United States

Jeffrey Newton

jnewton@hamburg.mi.us
7345642812

Reference: 20260128-091230003

Quote created: January 28, 2026

Quote expires: September 30, 2026

Quote created by: Brian Bush

Vice President

brian.bush@bryx.com

Comments from Brian Bush

Products & Services

Item & Description	Quantity	Unit Price	Total
240W Amplifier	3	\$1,000.00	\$3,000.00
Bryx Station Board Kiosk (for Existing Monitor)	5	\$500.00	\$2,500.00
Recessed LED Ceiling Light	24	\$175.00	\$4,200.00
Volume Attenuator with Override	4	\$250.00	\$1,000.00
12U Rack Mount Enclosure	1	\$750.00	\$750.00
Bay Pendant Speaker	5	\$300.00	\$1,500.00
2x2 Ceiling Speaker	10	\$200.00	\$2,000.00

Item & Description	Quantity	Unit Price	Total
Box / Wall Speaker	3	\$135.00	\$405.00
Annual Service and Maintenance Includes 24/7/365 phone and email support. All future software upgrades and enhancements and a lifetime warranty on the Bryx Station Control Unit.	2	\$3,000.00 / year	\$6,000.00 / year
Bryx Fire Station Alerting System Comes complete with the Bryx Station Control Unit, UPS, LED Light Bridge and Audio Cable from Amp to Bryx Control Unit	2	\$26,000.00	\$52,000.00
Bryx 911 Mobile Application With industry-leading speed, content, and ease of use, Bryx 911 is a free, no-obligation mobile alerting application for first responders.	1	\$0.00	\$0.00
Installation	2	\$10,000.00	\$20,000.00
Annual subtotal			\$6,000.00
One-time subtotal			\$87,355.00
Total			\$93,355.00

Purchase terms

Questions? Contact me



Brian Bush
Vice President
brian.bush@bryx.com

Bryx Inc.
59 Halstead St
Rochester, NY 14610
United States