

Dexter Township, MI

Proposed By:

Front Line Plus, Inc.



The tone frequency of a warning tone used in rating a siren's SPL is critical in evaluating the performance of an outdoor warning siren, where the siren's warning tones are expected to carry over great distances. It is documented that higher frequency tones attenuate (lose power) more over distance than low frequency tones. For that reason WHELEN High-Power Voice and Tone Siren Systems are designed to optimize the production and projection of low frequency warning tones. A warning siren capable of producing 124 dB at 100' with a 700hz warning tone will be more effective than a siren producing 124 dB at 100' using a 1,000hz warning tone. This factor should be considered in planning a warning system.

When conducting a land survey for proper sound propagation, Front Line Plus, Inc. has proposed three different style systems, each system with different features for your evaluation.

Our first system proposed is the Whelen WPS 2900 series Omni Directional Outdoor Warning Siren with pre-recorded voice for ability to alert *and* inform the community. With an Omni Directional Siren, coverage is continuous 360 degree at all times. There are no mechanical moving parts on the siren head which will provide no mechanical failure in the event of high winds, ice storms or lightning strikes. With the WPS 2900 series sirens, sound is produced by high power speakers assembled in a vertical column. With this unique design, the WPS 2900 series siren can produce powerful and clear warning exceeding once mile.

Our second proposal attached is the Whelen WPS 4000 series Rotating Outdoor Warning Siren with pre-recorded voice for the ability to alert *and* inform. This electronic siren also has the ability to be used as a giant voice system for immediate PA to restore order or direct information to the public in a post-disaster situation. With the WPS 4000 series rotating siren, sound is produced by a vertical stack of high-gain radial horns that enter into a single projector, providing a controlled sound column of unequalled power and clarity. With this design, the WPS 4000 series siren is capable of providing powerful and clear warning at distances exceeding one mile.

Finally, our last proposal is the traditional style Tone-Only Whelen Vortex series Rotating Outdoor Warning Siren. The Whelen Vortex Series Siren encompasses much of the same technology of the WPS 4000 series and sound is produced in the same style vertical stack into a single projector. The Vortex series Outdoor Warning Sirens are the most powerful, economic and efficient tone-only sirens made today. By utilizing many of the same designs of the WPS 4000 series sirens, the Vortex Series provide a level of unmatched power exceeding a one mile coverage radius.

Whelen High-Power electronic sirens are completely battery operated. With this unique feature it allows a siren system to operate in the loss of power. Even if the power grid goes down before the actual emergency reaches an area, Whelen Sirens are designed to operate in stand-by mode for up to 30 days on battery power alone. Once activated, Whelen Sirens can sound off for up to 30 minutes on battery power alone also. All of our systems also have a temperature compensated charging system meaning that as temperatures fall, our chargers sense the change and react by increasing the charging voltage to essentially "warm" the batteries. There is no use of powered battery blankets in our systems which have increased costs and maintenance issues. All of Whelen's Outdoor Warning Sirens are also rated for "Continuous Duty". By that meaning in the event of multiple activations like back to back storm threats, there is no need for a cool down time like a mechanical siren would require so as to not have a meltdown.

Each system proposed will continue in the same activation schedule by the county. Whelen's unique two-way activation and monitoring system will provide Dexter Township complete system diagnosis and siren reporting at any time without even sounding the siren. This allows the Township to have control in monitoring and ensuring system reliability. The Siren Encoding system proposed uses a Quick-Call Key feature to activate the Townships sirens individually, in a specific area, or all at once for any emergency.

All of our Outdoor Warning Siren Systems come with a Five-Year Manufacturers Warranty. The first Two Years after Installation if a component fails, Front Line Plus, Inc will repair or replace the component at no cost to the Township. After the first Two Years, an Additional Three Year Warranty Continues that covers All Components with labor being additional. We also provide our users a Two-Year Annual Service Contract at no cost. With this service contract, Front Line Plus, Inc. will conduct manufacturers preventative maintenance as outlined by the service manuals. A full report will be provided annually to the Township for its records.

Established in 1990, Frontline Plus, Inc. is incorporated under the laws of the State of Minnesota and we perform work in Minnesota, Iowa, Illinois, Indiana, Wisconsin, North Dakota, South Dakota, and Michigan as the Midwest's largest Authorized Master Distributor for Whelen Engineering, we specialize in system design, equipment specifications, installation, service, maintenance, training and technical support of outdoor siren warning systems as we have since our inception.

Our goal is to provide communities with the service that they deserve and products that are second to none. Please review our proposals and do not hesitate to contact us with any questions.

Thank you,

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Design-Installation-Service



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All products designed and manufactured in the USA