Minnesota Notification Solutions

MNS Notification Solutions LLC
Outdoor Warning Siren Sales & Service 14683 65th Street South, Hastings, Minnesota

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Siren Installation Survey & Quote

Date Created:

7/1/26

Prepared for:

Denmark Township, Minnesota

Jack Wallin
Operations Manager
mnsmassnotification@gmail.com
(612) 599 5693

MNS Notification Solutions LLC
Provider of Federal Signal Products

FEDERAL SIGNAL



Table of Contents:

Pages 1-4

Quote
Information on installation and maintenance of sirens
Information on equipment and cost
Additional information on logistics

Page 5-6

Proposal letter:
Why are warning sirens useful? What are the use cases for warning sirens?
How can Denmark Township benefit from Outdoor Warning Sirens?
Info on MNS Notification Solutions as a company
Information on quote, options, location, and installation

Page 7

Siren Installation/Maintenance Service Agreement & Term Selection

Page 8

Service description / siren maintenance Information

Pages 9-15

MNS Map of all sites
Mentioned in proposal letter map of Washington county coverage gap
Federal Signal sound propagation map ‘SoundPLAN’
Site specific information on each of the 3 locations and options per-site
(chosen by MNS and Federal Signal)

Quotation
MNS Notification Solutions LLC
Outdoor Warning Sirens Sales & Service
14683 65th Street South, Hastings, Minnesota 55033
mnsmassnotification@gmail.com (612) 599 5693

Quote No: #71
Date: 7/1/26
Period valid: 90 days

Info:
Project: **Outdoor Warning Siren Installation**
Company: **Denmark Township**
Address: **14008 90th St S**
City, State, ZIP: **Hastings, MN 55033**

Contact Name: **Jessica Maurer**
Title: **Clerk/Treasurer**
E-Mail: **townclerk@denmarktownship.org**
Telephone: **651-436-1704**

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Item	Quantity	Product	Description	Price	Total
1	1	2001-130	14008 90th St S: 2001-130 warning siren installation at Town hall •Install 1 Federal Signal 2001-130 DC Siren •Install 1 class 2 50' wood pole. •Install 4 deep-cycle AGM batteries •Program, Test and Optimize System.	$8,930.00	$8,930.00
2	1	2001-130 Solar	15201 67th St S: 2001-130 Solar warning siren installation •Install 1 Federal Signal 2001-130 DC Siren •Install 1 class 2 50' wood pole. •Install accessories for solar operation. •Program, Test and Optimize System. •Install Solar Array	$8,985.00	$8,985.00
3	1	2001-130 Solar	12000 St Croix Trl S: 2001-130 Solar warning siren installation •Install 1 Federal Signal 2001-130 DC Siren •Install 1 class 2 50' wood pole. •Install accessories for solar operation. •Program, Test and Optimize System. •Install Solar Array	8,985.00	8,985.00
4	3	OB batt 2	Siren battery replacement (see special notes section)		
5		N/A	Annual outdoor warning siren maintenance and inspection (see special notes section)	$350.00 per siren (not included in total, see special notes)	
6					

Total **$26,900.00**

Message

Siren Installation
We quote Denmark Township a total of $26,900.00 for the installation of all 3 sirens mentioned above (items 1-3)
We quote Denmark Township $8,930 for the installation of 1 siren at the town hall (item 1)

Notes & Disclaimer

MNS Notification Solutions LLC does not assume any liability for damage to equipment that occurs when not present. MNS Notification Solutions can never 100% guarantee that the siren will sound when not present. MNS Notification Solutions LLC can only give recommendations, take corrective action if an issue is found/reported, and state the condition of the system based on the findings on the date that the system was inspected, and or maintained.

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Special Notes

Special Notes for Denmark Township

Information on siren installation

The project would span over two days. The first day crews will begin prepping the new siren site for installation. The siren and equipment will be rigged to its pole. Site prepped for digging and utilities marked by 811 if applicable.
The second day the siren and equipment on its new pole would be installed in the ground, and will be backfilled and compacted with crushed concrete, original dirt spoils hauled out. Electrical hookup will be done either on day two or shortly after at applicable sites (town hall). Electrical hookup and cost of permits/inspection is not included in this quote and will be billed to the village upon completion of the services as outlined below.

Siren Installation Terms and Conditions
In the event that rock or other obstructions are encountered while digging, work at the site will be discontinued until the client can offer an alternate site that will not require unexpected expenses to MNS such as the cost of rock removal. All quotes do not include the costs of electrical service hookup by the local electrical utility or if applicable electrician recommended by MNS. MNS is not responsible for the cost of electrical permits or inspections and will be billed to the customer if said services are required. The site where the equipment is to be installed must be free from obstructions such as trees & power lines. Digging conditions must be free of obstacles for a minimum of eight feet deep to set a utility pole. Any obstacles that change the scope of work that are out of MNS' control may be subject to an additional fee. MNS is not responsible for landscaping restoration that may be necessary as a result of equipment installation. The customer is responsible for any charges to locate utilities on private property.

Information on siren maintenance

We quote $350 for annual maintenance and inspection in the following years after the siren(s) are installed.
The maintenance quote covers labor & recurring annual maintenance, billed each service cycle (annual). Unscheduled service calls/emergency service is not included in the cost above. All replacement parts and components beyond maintenance are billed additionally. MNS Notification Solutions reserves the right to increase costs up to 5% annually due to unforeseen cost elevations or inflation.
Minnesota Notification Solutions additionally charges $1,875 for battery replacement per siren. Our battery replacement costs have recently gone up due to our switch to high quality AGM batteries, which last longer and are more efficient saving the municipality money over time) Each siren has 4 batteries which provide power to the siren and are continuously charged. All 4 batteries are replaced at the same time when/as they reach the end of life and are no longer suitable for siren use. If it is determined that the batteries need to be replaced during our maintenance visit, they will be swapped on site. If we do not have the batteries on hand, we will schedule a follow up visit typically within the week to complete the replacement. The battery replacement cost is not included in the annual total, as it is an infrequent expense occurring every 4-7 years.
The sirens are maintained annually, usually in the spring-summer, depending on schedule and location. Denmark Township sirens will become the first sirens in our maintenance schedule as our operation is based in the township. Upon signature of this packet, the customer will receive a maintenance contract to be signed reflecting the service term selected on Page 4.
Our service outline on Page 5 details maintenance on the siren heads which are the units mounted at the top of each pole. Head maintenance is performed every other year, as annual servicing is not necessary. The per-siren rate remains flat at $350 per siren regardless of whether head maintenance is included in a given cycle. The first year of service after install, all sirens will not receive head maintenance, with subsequent head maintenance alternating every other year thereafter.

We are committed to keeping our services reasonably priced. Upon completion of each annual service, the customer receives a thorough, well-documented service report outlining all findings, changes, and repairs made. Service contracts are available for a set number of years, ensuring consistent, scheduled care for your warning system. Service contract length depends on the selected service term outlined above and on Page 4

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MINNESOTA NOTIFICATION SOLUTIONS

Information on Minnesota Notification Solutions

As a company, MNS Notification Solutions takes pride in offering affordable costs for siren maintenance, installation, replacement of parts/equipment, and service to the Upper Midwest region. Municipalities find it difficult to find another company that is as reliable and affordable as our service.

MNS Notification Solutions is a vendor for Federal Signal Corporation, a leading manufacturer of outdoor warning sirens and public safety equipment across the United States (also the manufacturer of most if not all sirens in Washington County). Through our partnership, we are able to obtain components and parts quickly, direct from the manufacturer, to provide them to the municipality for an affordable cost.
This ensures confidence if there is an issue that it will be fixed promptly and properly.

Proposal Information

Dear township members,

Thank you for your interest in the addition of outdoor warning sirens for Denmark Township. Outdoor warning sirens are a great way to add another layer of safety for citizens in addition to cell phones and TVs. From my experience living in Denmark Township and often partaking in outdoor activities in and around the township, cell service can be spotty. There also can be other difficulties getting news channels on TV for weather updates, unless you have a TV provider, or use a WIFI streaming service where critical weather alerts are not always broadcasted. We have found that outdoor warning sirens are an efficient means of notifying the public, and are a critical layer to warning the public of impending danger. In certain situations, the public may not be aware of a critical alert (ex. tornado warning or severe thunderstorm) if they are away from or are not often on their cell phone or near their TV, which is the common alerting method for municipalities with no sirens- especially if people are enjoying any of the many outdoor recreation activities that are possible in and near Denmark Township. People outdoors away from electronics and radios may rely on sirens (sirens can be their only warning option) to warn them of imminent danger. Examples of this could be people who are walking, camping, in the backyard, riding off road vehicles, at outdoor gatherings etc. which is very popular in the area considering the city's proximity to the St.Croix River, its outdoor parks, state park, and Afton Alps. Other examples, as said, can be individuals who do not have a cell phone, TV, or are not always near it. Additionally there are examples of sirens being a warning option that other alerting methods do not prove, sirens must be in place in municipalities to work together with other alerting methods to provide a complete solution for public safety. **Sirens often serve as a critical layer of warning that other alerting methods may not provide.** In certain severe weather situations or other emergencies, individuals often receive alerts via phone or television, but may underestimate the severity or delay taking action on the situation. The activation of outdoor warning sirens acts as an unmistakable audible cue prompting individuals to seek shelter. In some cases, people may even step outside to observe the storm despite having been alerted by a phone or TV, however, when outdoor warning sirens activate, they serve as an authoritative warning to take shelter and that the situation is dangerous. For many, especially in the midwest, the sound of the sirens serves as a distinct warning, with many growing up and remembering that the sound of a siren means to take shelter. Since these times, sirens have significantly technologically advanced and continue to remain a highly useful asset to municipalities in the path of danger. Overall, we see that sirens serve as a critical layer of warning which is why many areas opt to install outdoor warning sirens. Specifically, in Washington County, almost all larger municipalities have sirens for these reasons listed, however there is a gap in the County without sirens which we are looking to help fill which Denmark is a part of (will provide an image in the packet of the gap). We believe that sirens would be beneficial for Denmark Township considering the amount of people that come to boat on the river, go out to eat at restaurants, participate in outdoor activities and overall for city residents during severe weather season.

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Quote #71 from MNS is to install 3 new Federal Signal 2001-130 directional outdoor warning sirens at strategic locations in Denmark Township. MNS and Federal Signal have utilized their sound mapping program to select sites that would provide the most siren coverage to city residents, as well as people participating in outdoor activity in the area. If the City has other locations in mind for the sirens, or would like to pick them, we can provide coverage mapping for the updated locations of the sirens. The locations chosen by MNS and Federal Signal are as follows: 8998 Oakgreen Ave S (town hall), 15201 67th St S, 12000 St Croix Trl S.
In Washington County, the County handles all siren activation and adding the sirens to the system will be a simple and almost transparent process MNS will handle. Denmark Township will not have to control the sirens unless the city would like to have the ability to control its sirens.
We look forward to the opportunity to serve Denmark Township's public safety.

Thank you,

Jack Wallin

Operations Manager

MNS Notification Solutions LLC

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MINNESOTA NOTIFICATION SOLUTIONS

Siren Installation/Maintenance Service Agreement & Term Selection

Upon signature of this packet, the customer will receive a maintenance contract to be signed reflecting the service term selected below:

Agreement Term (Check one)'

- ☐ 1-year term
- ☐ 3-year term
- ☐ 5-year term
- ☐ Other (please specify below)

Agreement between (xxxx)

2026 & _____

Signing this quote as "Accepted By" comprises an order for the aforementioned services and agreement to the terms, specifications, notes and conditions outlined.

The recipient
Denmark Township
Accepted By:

_____

Date: _____

Specify item/order (N/A if not applicable to quote): _____

The Provider
MNS Notification Solutions LLC:

Jack Wallin

Date:

7/1/26

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MINNESOTA NOTIFICATION SOLUTIONS

Siren maintenance service description

What maintenance includes for Denmark Township Sirens
Our service includes but is not limited to:

General:
Inspect exterior of siren
Inspect all electrical and mechanical connections and equipment
Tighten all fasteners
Inspect the siren pole.
Inspection of grounding system (to earth)
Inspect enclosure, seals and conduit.

Maintain siren head which includes:
Inspect rotator motor
Inspect siren motor
Inspect and reset rotation clutch if needed
Grease and inspect general equipment within the siren head.

Maintain siren controller which includes:
Inspect all connections and components within the control
Test battery voltage and cold crank amps, batt volt under siren run - replace associated batteries if needed
Test battery charger output voltage and operation
Thoroughly cleanse siren and rotation motor contacts
Solar test
Test manual siren activation
Test RX of radio signal to siren radio.
Test activation via radio of site
Ensure antenna condition

Our main goal is to:
Complete work in a timely manner
Identify any issues with the siren, report them, and repair accordingly.
Maintain warning sirens to ensure operation in the event of an emergency
Maintain warning sirens at an affordable cost for the municipality

Responsibility of customer
Provide an authorized contact for scheduling of service and for other coordination
Notify of any special instruction or information prior to visiting the sirens locations.

Notify residents (via social media etc.) and county dispatch/municipality office staff
(if any phone calls about siren activation) of siren maintenance- as **each site is audibly activated for 10-30 seconds**.
This is to test various components, obtain accurate current readings, and diagnose health.

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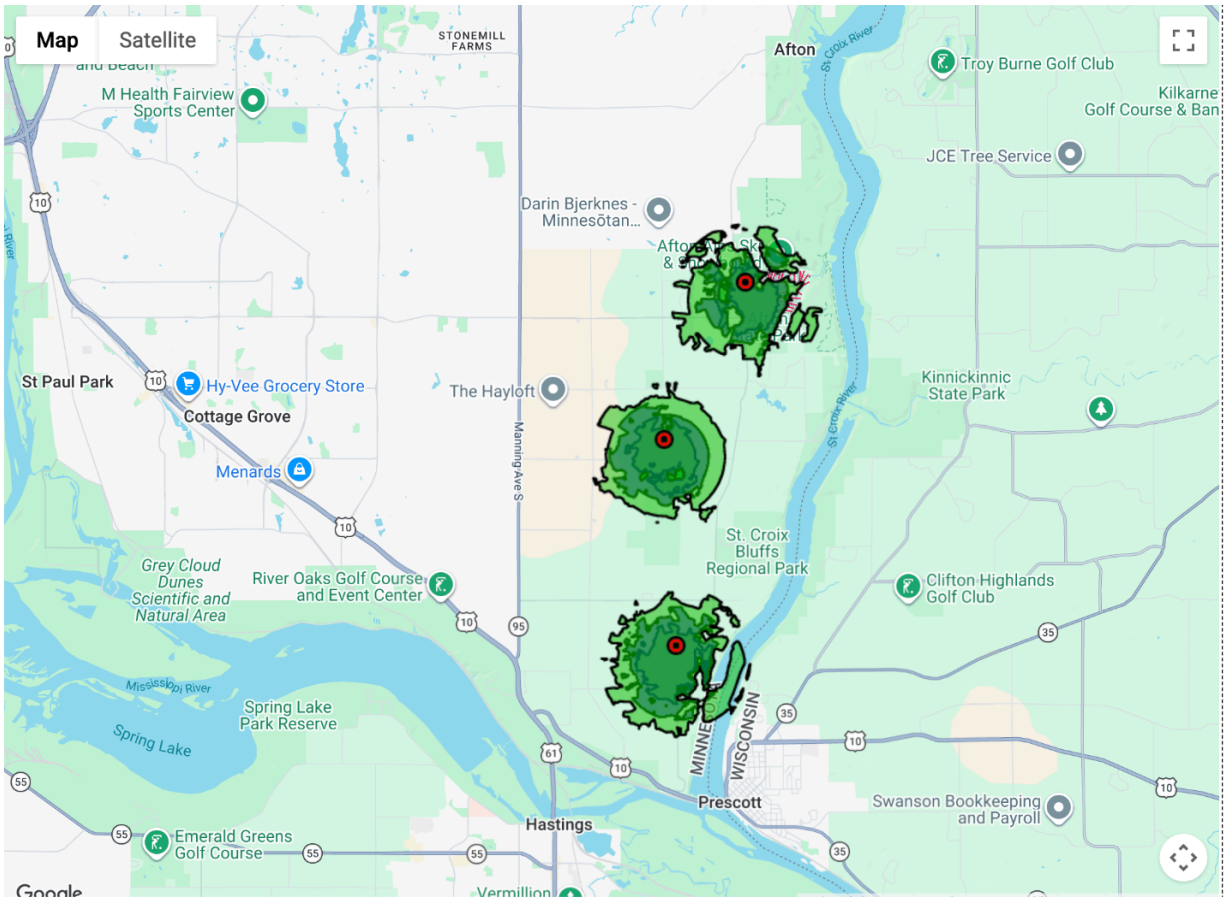
MINNESOTA NOTIFICATION SOLUTIONS

EXL Section

Below are maps from siren site surveys conducted by MNS and Federal Signal in March. The maps were created in May. Also Attached is a Washington County siren map created by the county.

Maps note:
The technical specifications on the enclosed document are only estimates.

Maps are generated by computer simulators which are approximate anticipated coverage for outdoor sirens, that are based on a variety of factors, and do not guarantee coverage. Sirens can be heard miles outside the radius shown however outside the radius is where environmental factors can affect sound travel.



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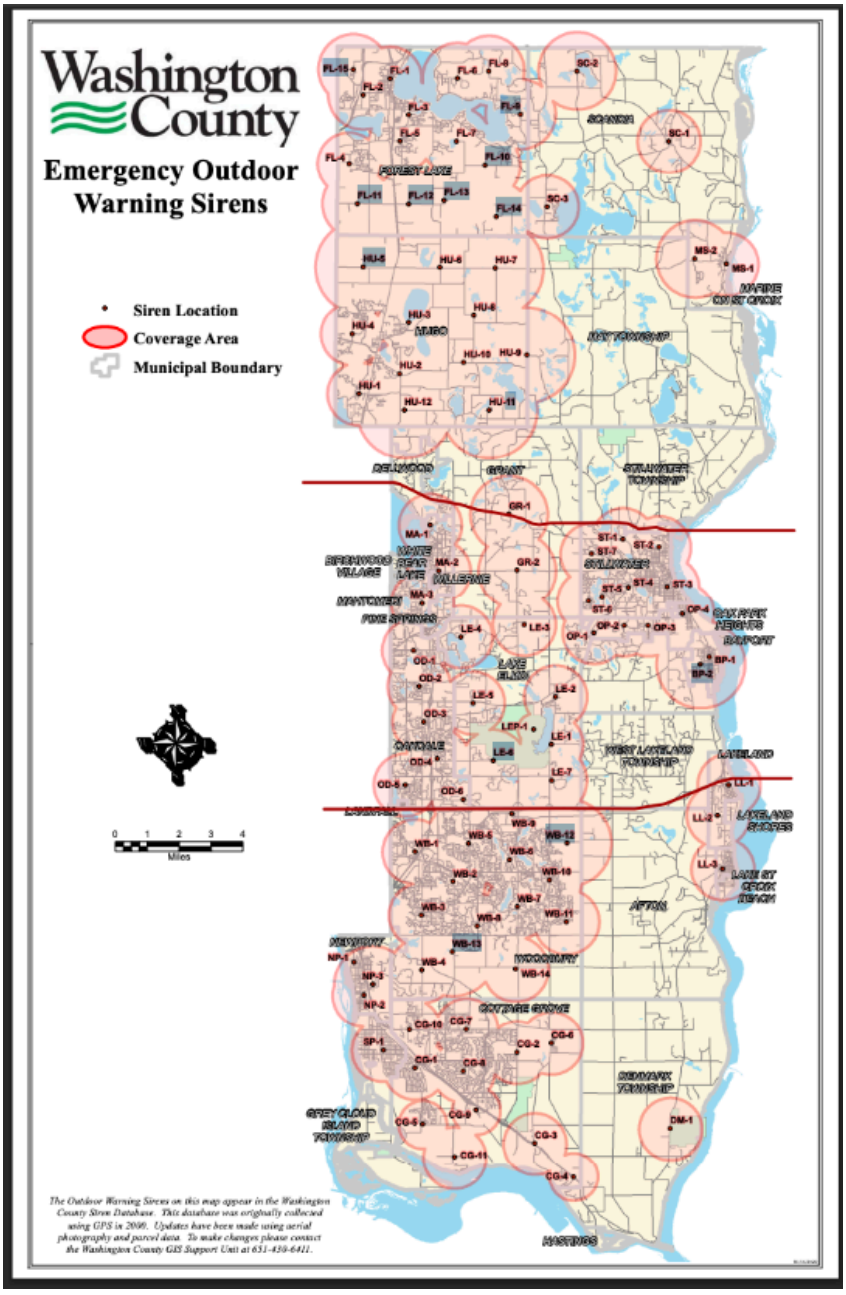
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In Denmark Township there is one county owned siren at St. Croix Bluffs Regional Park marked as “DM-1”. The new sites were picked in Denmark Township to blend/match with existing siren coverage from the park and Cottage Grove accordingly.



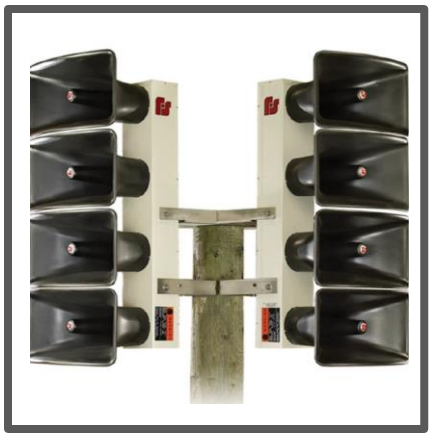
SoundPLAN MAP PRESENTED TO:

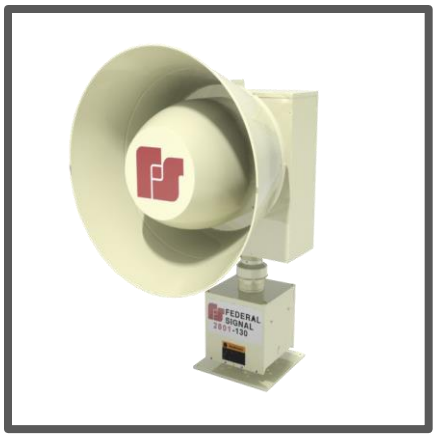
Denmark Township MN

May 5th, 2026









SOUND PROPAGATION COVERAGE PLAN

Submitted By:
Federal Signal Corporation
2645 Federal Signal Drive
University Park, IL 60484
708.534.3400 • www.fedsig.com

Sound Propagation Coverage Model

Federal Signal Corporation utilized 'SoundPLAN', an internationally recognized noise modeling software, to estimate the Siren sound level. The SoundPLAN model is based on the International Standardization ISO 9613 and considers physical effects including geometrical divergence, atmospheric absorption, ground effect, reflection from surfaces, and screening by obstacles.

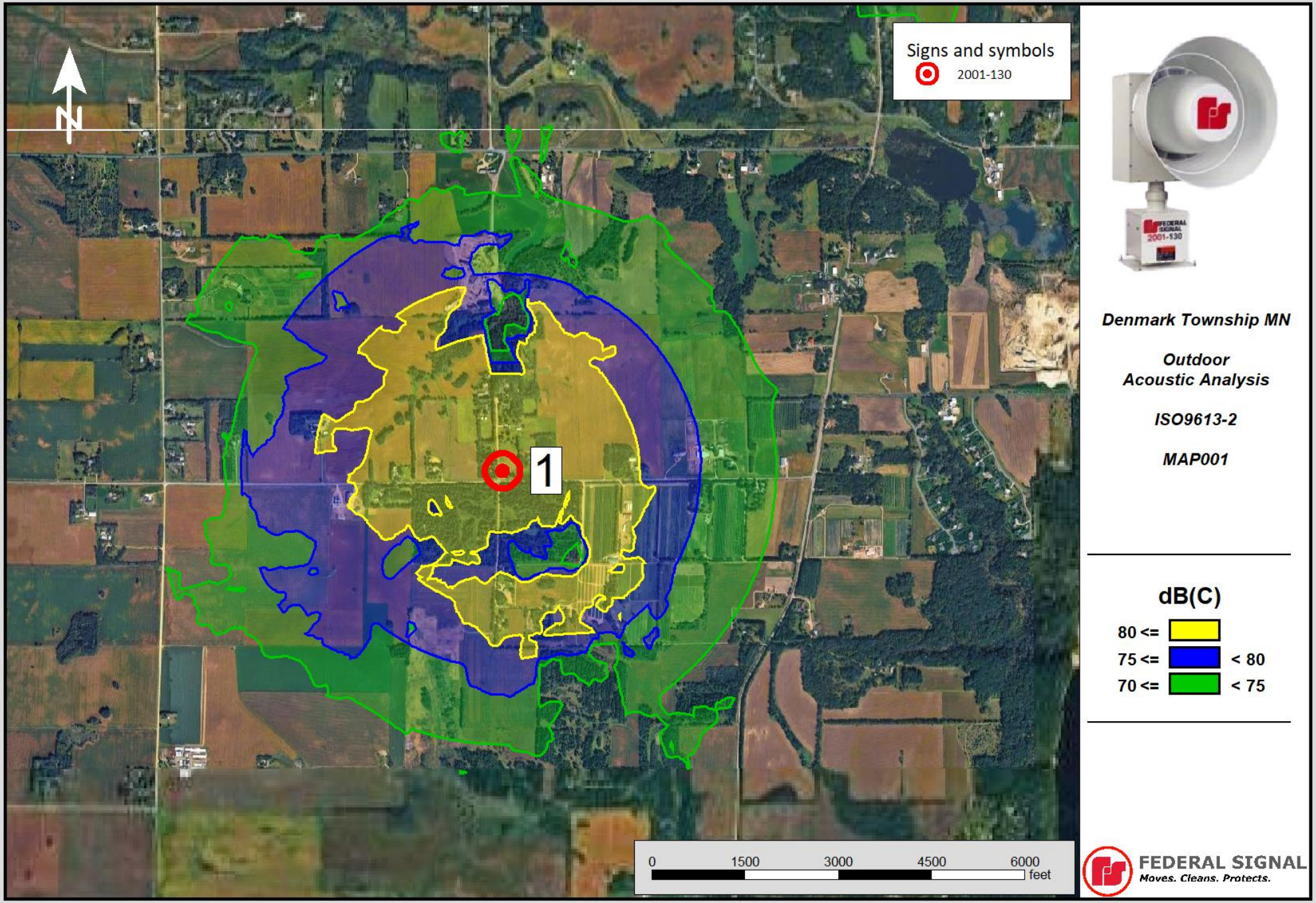
The environmental conditions applied in this noise model, based on the summertime daily averages for the area in interest, include:

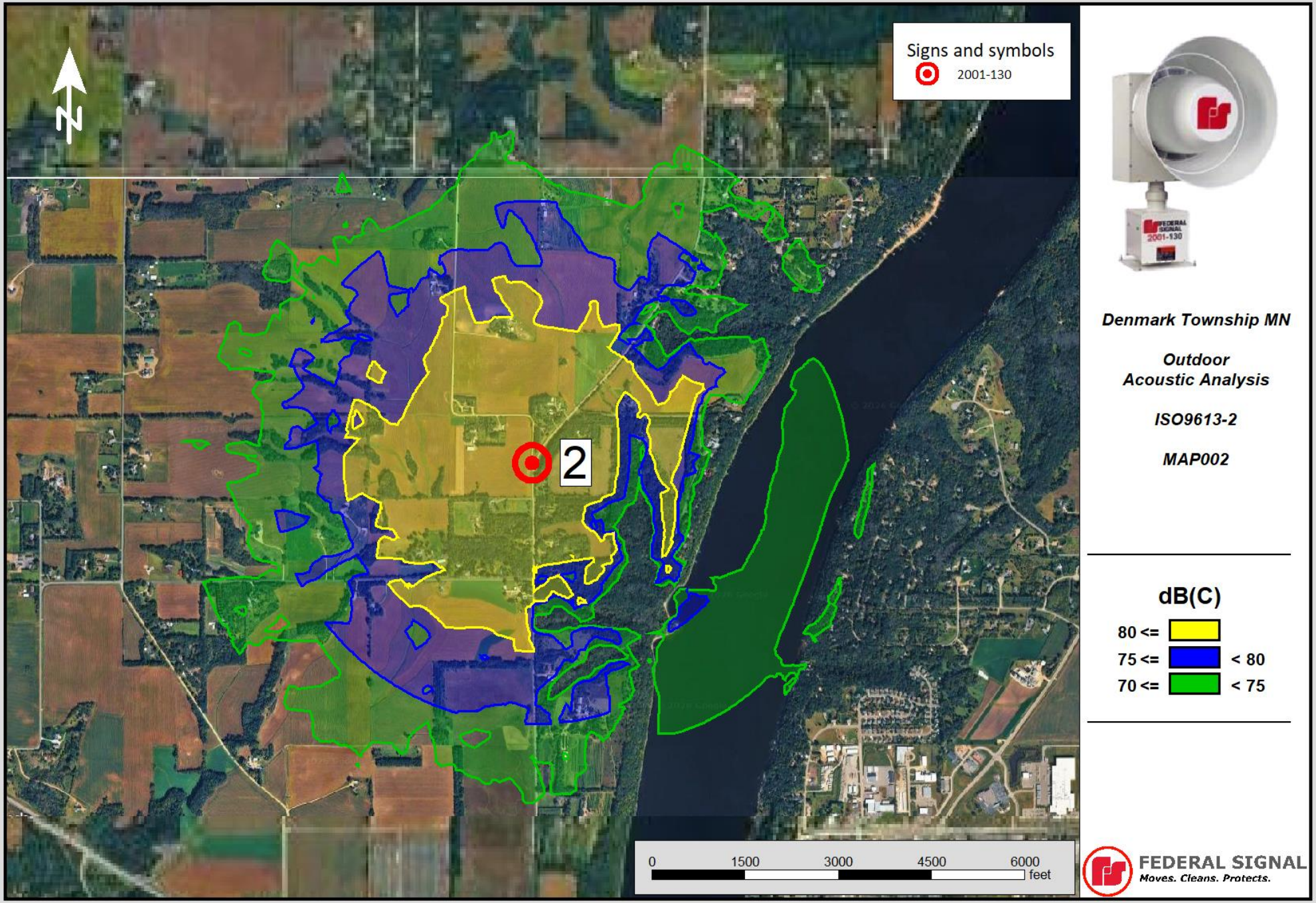
˚C	˚F	Humidity (%)	Air Pressure (mbar)
22.17	71.90	78.17	1015.07

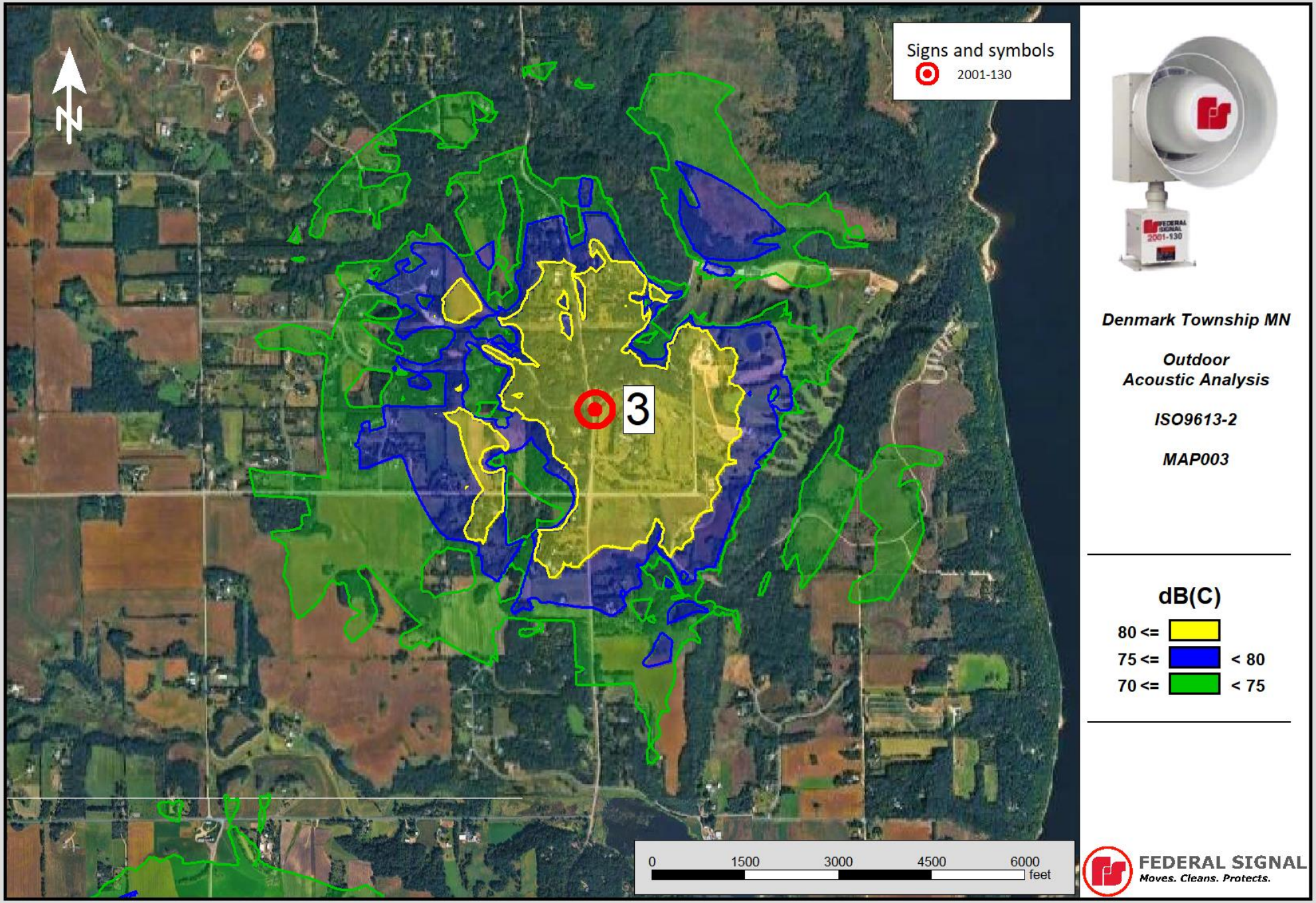
Siren data for this noise model includes:

#	Location	Name	Siren Model	Latitude	Longitude	Height
1	Denmark Township	Township Hall 8998 Oakgreen Ave S:	2001-130	44.819370	-92.820570	45.000000
2	Denmark Township	Odell Avenue 12000 St Croix Trl S:	2001-130	44.777190	-92.817470	45.000000
3	Denmark Township	Golf Course 15201 67th St S:	2001-130	44° 51'05.62	92°47'50.02	45.000000

Note: The technical specifications on the enclosed document are only estimates. This correspondence may contain confidential information intended for the use of the individual. If the reader of this is not the intended recipient, or the employee or agent responsible to deliver it to the intended recipient, you are hereby notified that any dissemination, distribution or copying is strictly prohibited without written authorization from Federal Signal Corporation. Maps are generated by computer simulator which are approximate anticipated coverage for outdoor sirens, that are based on a variety of factors, and do not guarantee coverage.


Signs and symbols
2001-130
N
1
0
1500
3000
4500
6000
feet
Denmark Township MN
Outdoor
Acoustic Analysis
ISO9613-2
MAP001
dB(C)
80 <=
75 <= < 80
70 <= < 75
FEDERAL SIGNAL
Moves. Cleans. Protects.


Signs and symbols
2001-130
2
0
1500
3000
4500
6000
feet
Denmark Township MN
Outdoor
Acoustic Analysis
ISO9613-2
MAP002
dB(C)
80 <=
75 <=
< 80
70 <=
< 75
FEDERAL SIGNAL
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3
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