

WIS 35 Noise Analysis

High Ridge Drive/Hanley Road Interchange to Stageline Road

Public Involvement Meeting

Fall 2023





Meeting Agenda

- Project Location
- Project Background and Overview
- Noise Analysis Process
- Proposed Abatement
- Next Steps
- Public Input



Project Location

- WIS 35
 - St. Croix County city of Hudson
 - South of I-94
 - High Ridge Drive/Hanley Road interchange to Stageline Road



Project Existing Features

WIS 35 from High Ridge Drive/Hanley Road interchange to Stageline Road





Project Purpose

- Protect the public's health, welfare and livability on WIS 35 between the High Ridge Drive/Hanley Road interchange and Stageline Road



Project Need

• Noise

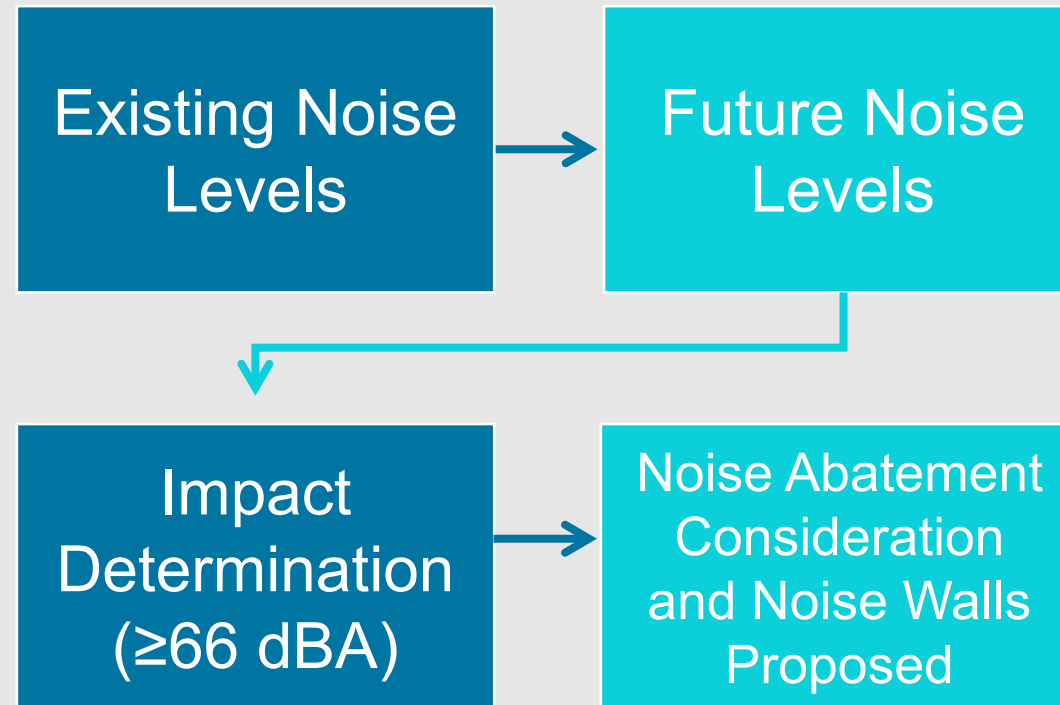
- WisDOT heard concerns and opened study
- Federal regulations and state policy require abatement for noise levels approaching specific criteria
- Noise levels of 66 A-weighted decibels (dBA) or more require abatement consideration
 - Noise-sensitive locations known as receptors (residences and park) expected to meet or exceed in 2037

Environmental Noise	dBA
Jet engine at 100'	140
	125
Pain Begins	
Pneumatic chipper at ear	120
Chain saw at 3'	110
Power mower	107
Subway train at 200'	95
Walkman on 5/10	94
<i>Level at which sustained exposure may result in hearing loss</i>	80-90
City Traffic	85
Telephone dial tone	80
Chamber music, in a small auditorium	75-85
Vacuum cleaner	75
Normal conversation	60-70
Business Office	60-65
Household refrigerator	55
Suburban area at night	40
Whisper	25
Quiet natural area with no wind	20
Threshold of hearing	0

Source: Yale Environmental Health & Safety



Noise Analysis Process



Noise Analysis Process

- **Abatement considered:**

- Feasible: If at least one receptor has a 5-dBA noise reduction
- Reasonable: If the cost of abatement doesn't exceed \$50,000 per receptor
- Benefited receptor: If receptor receives a minimum of 8-dBA noise reduction





Common Noise Environment

- Group of receptors within same land use category
- Cost averaging of walls considered within common noise environment for reasonableness determination
- Proposed abatement must cost $< \$100,000$ per benefited receptor to be included
 - In WIS 35 analysis, abatement considered reasonable if total cost divided by number of receptors $< \$50,000$

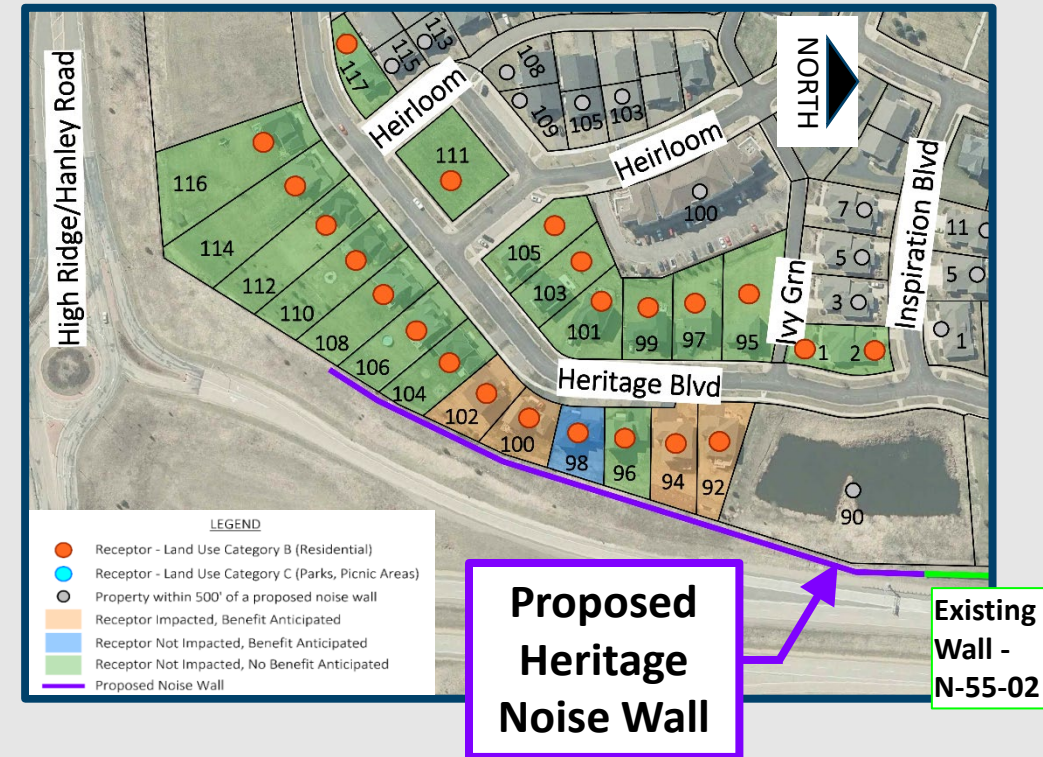


Proposed Noise Walls



Proposed Heritage Noise Wall

- West side of WIS 35
- 10- to 14-foot absorptive noise wall
- Seven receptors receive 5-decibel noise reduction = FEASIBLE
- Five benefited receptors receive an 8-decibel noise reduction
- Cost per benefited receptor >\$50,000 = NOT REASONABLE

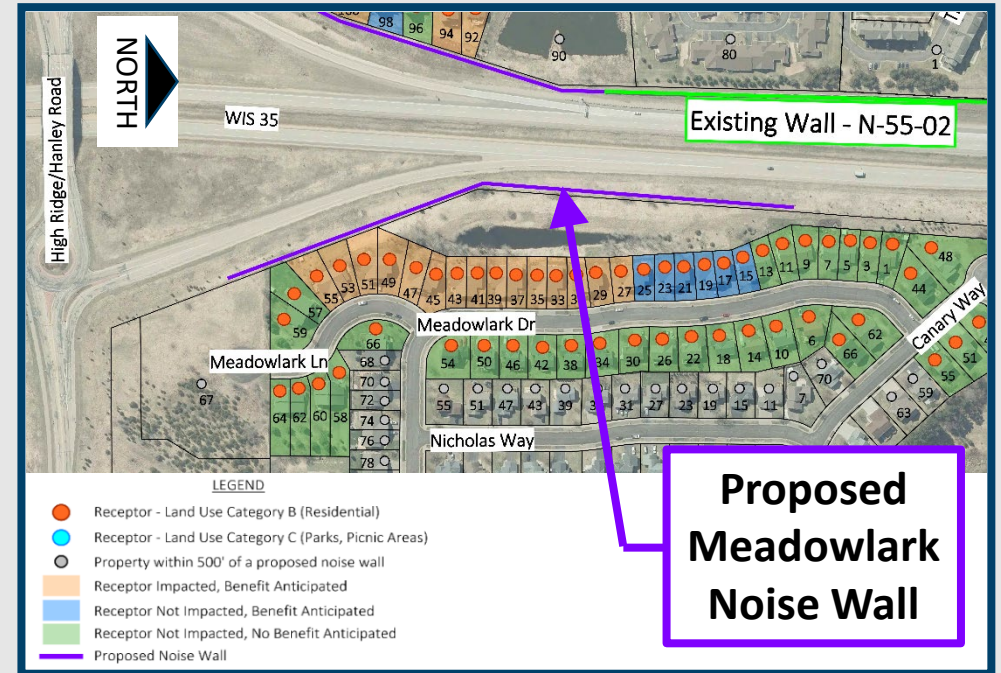


■ However, included in common noise environment cost analysis



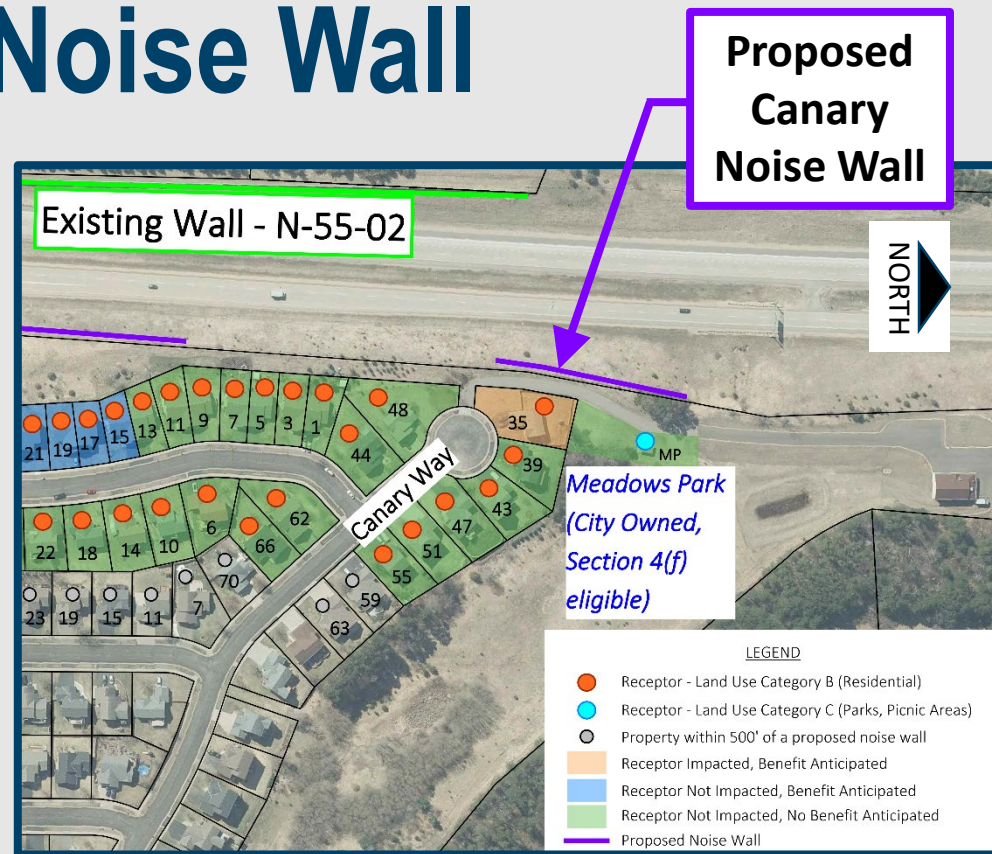
Proposed Meadowlark Noise Wall

- East side of WIS 35
- 16- to 18-foot absorptive noise wall
- 41 receptors receive 5-decibel noise reduction = FEASIBLE
- 21 benefited receptors receive an 8-decibel noise reduction
- Cost per benefited receptor <\$50,000 = REASONABLE
 - Included in common noise environment cost analysis



Proposed Canary Noise Wall

- East side of WIS 35
- 8-foot absorptive noise wall
- One receptor receives 5-decibel noise reduction = FEASIBLE
- One receptor receives an 8-decibel noise reduction
- Cost per benefited receptor >\$50,000 = NOT REASONABLE
 - However, included in common noise environment cost analysis



Common Noise Environment Analysis

- Heritage, Meadowlark and Canary walls:
 - 27 benefited receptors total
 - Cost per benefited receptor <\$50,000 = REASONABLE
 - Move forward for consideration



Proposed Wall Characteristics

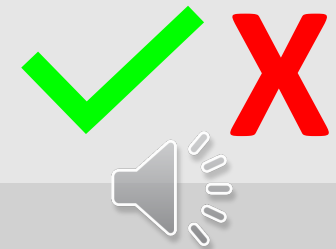
- Double-sided sound absorptive
- Natural stone texture (match existing noise wall N-55-02)
- No staining





Next Steps

- Determine if proposed walls are likely to be incorporated into the project
 - Reasonable/feasible noise walls must receive simple majority vote of support before a wall is constructed.
 - Property owners and residents of benefited receptors get to vote.
 - Owner-occupied receptors: Owners receive one vote.
 - Receptors not owner-occupied: Owners receive one vote, and each non-owner-occupied unit receives one vote.
 - Ballots provided with eligible voter meeting invites.



Noise Wall Voting

- Ballots must be received by **Nov. 13, 2023.**
 - Mail in postage paid envelope.
 - Send via email to daniel.rambo@dot.wi.gov.
 - Drop in box at meeting sign-in table.
- Benefited receptors will be notified of results by mail.
- Earliest potential construction: Spring 2025

NOISE WALL VOTING BALLOT

For a noise barrier to be constructed, WisDOT must receive a vote of support for the noise barrier from a simple majority of all votes cast by the owners or residents of the benefited receptors as follows:

- For each benefited receptor that is owner-occupied, the owner will have one vote.
- For each benefited receptor that is not owner-occupied, the owner will have one vote and one resident of each non-owner occupied unit will have one vote.

Proposed <<NOISE WALL>> Noise Wall

<<OWNERS_NAME1>>

<<OWNERS_NAME2>>

<<Associated Receptor Location>>

Hudson, WI 54016

check one:

OWNER (I am the Owner of the property listed above)

RENTER (I am a Renter in the property listed above)

check one:

I SUPPORT Construction of the Eligible Noise Barrier

I DO NOT SUPPORT Construction of the Eligible Noise Barrier

Please return this ballot with your vote using either of the following options:

1. USPS mail in the enclosed postage-paid envelope
2. Email: daniel.rambo@dot.wi.gov
3. Return it at the public involvement meeting on October 12, 2023

The ballot is due to the Wisconsin Department of Transportation
by **November 13, 2023**

If you have any questions on the voting process please visit the project website:
<https://wisconsin.dot.gov/Pages/projects/by-region/nw/wis35noise/default.aspx>

Or contact:

Daniel Rambo, P.E.
Wisconsin Department of Transportation—Northwest Region
718 W. Clairemont Ave.
Eau Claire, WI 54701
(715) 514-7255
Daniel.Rambo@dot.wi.gov



Feedback

- Comments are welcome by Nov. 13 by:
 - Dropping comment form at meeting into comment box
 - Sending it via email to daniel.rambo@dot.wi.gov
 - Mailing it to Wisconsin Department of Transportation
718 W. Clairemont Ave.
Eau Claire, WI 54701
Attn.: Daniel Rambo

Public Involvement Meeting Comment Form

Project ID 1020-00-15/85
Hudson – Baldwin
WIS 35 South Interchange
I-94
St. Croix County
Oct. 12, 2023

Please place this form in the comment box or mail by Nov. 13, 2023, to the address on the back of this sheet. Comments can also be emailed to daniel.rambo@dot.wi.gov. Your comments assist us in developing a project that will serve the needs of the traveling public as well as the needs of the local community. Your input is welcome and appreciated throughout the design process.

Name: _____

Address: _____

Daytime Phone Number (optional): _____

Email Address (optional): _____

Please Print Comments (attach additional sheets if necessary):

The information in this document including names, addresses, phone numbers, email addresses and signatures is not confidential and may be subject to disclosure upon request, pursuant to the requirements of the Wisconsin open records law, sections 19.31 - 19.39 of the Wisconsin statutes.





Project Information

- **Project staff:**

Daniel Rambo, P.E.
WisDOT Project Manager
(715) 514-7255
Daniel.Rambo@dot.wi.gov

Elizabeth Garfoot, P.E.
Consultant Noise Engineer
(608) 251-4843
elizabeth.garfoot@strand.com

- **Project website:**

- <https://wisconsindot.gov/Pages/projects/by-region/nw/wis35noise/default.aspx>

