



CITY OF  
**BELLE PLAINE**

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*RAILROAD QUIET ZONE DESIGNATION*



# QUIET ZONE

- ❖ Why do we need a Quiet Zone?
- ❖ Because train horn is loud, annoying, disruptive
- ❖ property values are diminishing on west side of town
- ❖ Outdoor coaching is compromised at the school practice fields

# APPLICABLE CRITERIA

(WHY DOES THE TRAIN BLOW THAT HORN?)

- ❖ Federal Railroad Administration (FRA) regulations dictate safety requirements at all crossings (49 CFR Part 222).
- ❖ Sound a 96-110 decibel horn (2 long, 1 short, 1 long) at crossings.
- ❖ The second rail line ***significantly*** increased train traffic, possible to have a train every 7 minutes. A third line is being proposed.

# SUMNER COUNTY



# COMPENSATORY MEASURES

(FOR A QUIET ZONE - EVEN SAFER)

❖ Definitions of FRA-approved safety measures to compensate for loss of locomotive horn.

- Pre-Approved Supplemental Safety Measures (SSMs)
  - Four quadrant gate
  - Raised median or channelization devices
  - One way streets with gates
  - Permanent closure
- Conditionally Approved Alternate Safety Measures (ASMs)
  - Geometric improvements (sight distance)
  - Education and Photo enforcement

A decorative border with intricate scrollwork and floral patterns surrounds the central text. The border is white and set against a dark background.

# PROPOSAL

- ❖ Notice of Intent has been submitted to all applicable parties. KDOT, Federal Railroad Administration, BNSF Railroad.
- ❖ Comments have been received and answered.
- ❖ Three parts of our proposal: Construct a non-traversable median at K-55, channelize 100<sup>th</sup> Avenue, and permanently close the 10th Avenue crossing.
- ❖ Pave Merchant Street between 10<sup>th</sup> Avenue and 100<sup>th</sup> Avenue.

# APPROVAL PROCESS

❖ If the Quiet Zone Risk Index (QZRI) falls below the Risk Index with Horns (RIwH), then a quiet zone may be designated by public authority.

$$\text{QZRI} = 18566.81 \quad \text{RIwH} = 18829.09$$

❖ Belle Plaine's five-crossing quiet zone readily qualifies, as per 49 CFR Part 222 Appendix C and FRA



# BENEFITS TO SCHOOLS

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- ❖ Minimize classroom annoyance.
- ❖ Eliminate disruption to athletic fields.
- ❖ Pave Merchant Street north to accommodate increased traffic when 10<sup>th</sup> Avenue crossing is closed.
- ❖ Of note: the conductor will still blow the horn in cases of emergency.



# BOTTOM LINE

## ❖ PHASE ONE

- Non-traversable median at K-55/ 10th \$13,000
- Channelization at 100<sup>th</sup> Avenue \$4,000
- Signs at Hillside and 8<sup>th</sup> Avenue \$500

❖ Cost \$17,500

## ❖ PHASE TWO

- Merchant Street Improvements
- 8<sup>th</sup> Street Improvements
- 100<sup>th</sup> Street Improvements
- Bus stop at Vernon and Line Streets \$2,000

❖ Cost \$232,172

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# QUALITY OF LIFE

- ❖ Entire Community of Belle Plaine will benefit from this proposal.
- ❖ Improve safety.
- ❖ Quiet Zone will decrease noise level throughout the city.
- ❖ Fewer interruptions to daytime activities and to sleep patterns.
- ❖ Commercial development and associated residential opportunity increases economic viability for Belle Plaine.