



Noise Analysis and Abatement Guidelines

COLORADO DEPARTMENT OF TRANSPORTATION NOISE ABATEMENT DETERMINATION WORKSHEET

Instructions: To complete this form refer to CDOT Noise Analysis Guidelines

STIP # _____

Date of Analysis: JANUARY 2014

Project Name & Location: GRAND AVE 14 (STARLIGHT LODGE) EAST OF 6th STREET
BARRE

A. FEASIBILITY:

1. Can a 5dBA noise reduction be achieved by constructing a noise barrier or berm?
 YES NO
2. Are there any fatal flaw drainage, terrain, safety, or maintenance issues involving the proposed noise barrier or berm?
 YES NO
3. Can a noise barrier or berm less than 20 feet tall be constructed?
 YES NO

B. REASONABLENESS:

1. Has the Design goal of 7 dBA noise reduction for abatement measure been met for at least one impacted receptor?
 YES NO
2. Is the Cost Benefit Index below \$6800 per receptor per dBA?
 YES NO
3. Are more than 50% of benefited resident/owners in favor of the recommended noise abatement measure?
 YES NO

C. INSULATION CONSIDERATION:

1. Are normal noise abatement measures physically infeasible or economically unreasonable?
 YES NO
If the answer to 1 is YES, then:
2. a. Does this project have noise impacts to NAC Activity Category D?
 YES NO
- b. If yes, is it reasonable and feasible to provide insulation for these buildings?
 YES NO

D. ADDITIONAL CONSIDERATIONS:

E. STATEMENT OF LIKELIHOOD:

- | | |
|--|---|
| 1. Are noise mitigation measures feasible?
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO | 2. Are noise mitigation measures reasonable?
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO |
| 3. Is insulation of buildings both feasible and reasonable?
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO | 4. Shall noise abatement measures be provided?
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO |

F. ABATEMENT DECISION DESCRIPTION AND JUSTIFICATION:

NOISE BARRIERS ARE FEASIBLE, BUT NOT REASONABLE. THE COST PER BENEFITED RECEPTOR EXCEEDS THE THRESHOLD. THEREFORE, A NOISE BARRIER IS NOT RECOMMENDED.

Completed by: DANA RAGUSA Date: 1-3-14



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Instructions: To complete this form refer to CDOT Noise Analysis Guidelines

STIP # _____

Date of Analysis: JANUARY 2014

Project Name & Location: GRAND AVE (I7) (RESIDENT) + I223 (GLENWOOD HOT SPRINGS)
ADJACENT TO NEW GRAND AVE BRIDGE ALIGNMENT
BARILLO'S 2A + 2B

A. FEASIBILITY:

- Can a 5dBA noise reduction be achieved by constructing a noise barrier or berm?
 YES NO
- Are there any fatal flaw drainage, terrain, safety, or maintenance issues involving the proposed noise barrier or berm?
 YES NO
- Can a noise barrier or berm less than 20 feet tall be constructed?
 YES NO

B. REASONABLENESS:

- Has the Design goal of 7 dBA noise reduction for abatement measure been met for at least one impacted receptor?
 YES NO
- Is the Cost Benefit Index below \$6800 per receptor per dBA?
 YES NO
- Are more than 50% of benefited resident/owners in favor of the recommended noise abatement measure?
 YES NO

C. INSULATION CONSIDERATION:

- Are normal noise abatement measures physically infeasible or economically unreasonable?
 YES NO
If the answer to 1 is YES, then:
- a. Does this project have noise impacts to NAC Activity Category D?
 YES NO
- b. If yes, is it reasonable and feasible to provide insulation for these buildings?
 YES NO

D. ADDITIONAL CONSIDERATIONS:

E. STATEMENT OF LIKELIHOOD:

- | | |
|---|---|
| 1. Are noise mitigation measures feasible?
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO | 2. Are noise mitigation measures reasonable?
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO |
| 3. Is insulation of buildings both feasible and reasonable?
<input type="checkbox"/> YES <input type="checkbox"/> NO | 4. Shall noise abatement measures be provided?
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO |

F. ABATEMENT DECISION DESCRIPTION AND JUSTIFICATION:

THE MODELED NOISE BARRIERS DO NOT MEET THE FEASIBLE OR REASONABLE CRITERIA. A MINIMUM 5 dBA NOISE REDUCTION CAN NOT BE ACHIEVED & THE COST PER BENEFITED RECEPTOR EXCEEDS CDOT'S CRITERIA. THEREFORE, A NOISE BARRIER IS NOT RECOMMENDED.

Completed by: DANA PARUSA Date: 1-3-14



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COLORADO DEPARTMENT OF TRANSPORTATION NOISE ABATEMENT DETERMINATION WORKSHEET

Instructions: To complete this form refer to CDOT Noise Analysis Guidelines

STIP # _____ Date of Analysis: JANUARY 2014

Project Name & Location: GRAND AVE R294R30 (RESTAURANTS) WEST OF GRAND
& NORTH OF 8th BARBERS

A. FEASIBILITY:

1. Can a 5dBA noise reduction be achieved by constructing a noise barrier or berm?
 YES NO
2. Are there any fatal flaw drainage, terrain, safety, or maintenance issues involving the proposed noise barrier or berm?
 YES NO
3. Can a noise barrier or berm less than 20 feet tall be constructed?
 YES NO

B. REASONABLENESS:

1. Has the Design goal of 7 dBA noise reduction for abatement measure been met for at least one impacted receptor?
 YES NO
2. Is the Cost Benefit Index below \$6800 per receptor per dBA?
 YES NO
3. Are more than 50% of benefited resident/owners in favor of the recommended noise abatement measure?
 YES NO

C. INSULATION CONSIDERATION:

1. Are normal noise abatement measures physically infeasible or economically unreasonable?
 YES NO
If the answer to 1 is YES, then:
 - a. Does this project have noise impacts to NAC Activity Category D?
 YES NO
 - b. If yes, is it reasonable and feasible to provide insulation for these buildings?
 YES NO

D. ADDITIONAL CONSIDERATIONS:

E. STATEMENT OF LIKELIHOOD:

- | | |
|---|---|
| 1. Are noise mitigation measures feasible?
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO | 2. Are noise mitigation measures reasonable?
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO |
| 3. Is insulation of buildings both feasible and reasonable?
<input type="checkbox"/> YES <input type="checkbox"/> NO | 4. Shall noise abatement measures be provided?
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO |

F. ABATEMENT DECISION DESCRIPTION AND JUSTIFICATION:

THE PROPOSED NOISE BARRIERS DO NOT MEET THE FEASIBLE OR REASONABLE CRITERIA. A FURTHER 5dBA NOISE REDUCTION CAN NOT BE ACHIEVED & THE COST PER BENEFITED RECEPTOR EXCEEDS CDOT'S CRITERIA. THEREFORE, A NOISE BARRIER IS NOT RECOMMENDED.

Completed by: DANA RAGUSA Date: 1-3-14



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Instructions: To complete this form refer to CDOT Noise Analysis Guidelines

STIP # _____

Date of Analysis: JANUARY 2014

Project Name & Location: GRAND AVE I28/BLUESMID CAFE (COFFEE SHOP) EAST OF GRAND
4 NORTH OF 8th STREET 4

A. FEASIBILITY:

- Can a 5dBA noise reduction be achieved by constructing a noise barrier or berm?
 YES NO
- Are there any fatal flaw drainage, terrain, safety, or maintenance issues involving the proposed noise barrier or berm?
 YES NO
- Can a noise barrier or berm less than 20 feet tall be constructed?
 YES NO

B. REASONABLENESS:

- Has the Design goal of 7 dBA noise reduction for abatement measure been met for at least one impacted receptor?
 YES NO
- Is the Cost Benefit Index below \$6800 per receptor per dBA?
 YES NO
- Are more than 50% of benefited resident/owners in favor of the recommended noise abatement measure?
 YES NO

C. INSULATION CONSIDERATION:

- Are normal noise abatement measures physically infeasible or economically unreasonable?
 YES NO
If the answer to 1 is YES, then:
 - Does this project have noise impacts to NAC Activity Category D?
 YES NO
 - If yes, is it reasonable and feasible to provide insulation for these buildings?
 YES NO

D. ADDITIONAL CONSIDERATIONS:

E. STATEMENT OF LIKELIHOOD:

- | | |
|---|---|
| 1. Are noise mitigation measures feasible?
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO | 2. Are noise mitigation measures reasonable?
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO |
| 3. Is insulation of buildings both feasible and reasonable?
<input type="checkbox"/> YES <input type="checkbox"/> NO | 4. Shall noise abatement measures be provided?
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO |

F. ABATEMENT DECISION DESCRIPTION AND JUSTIFICATION:

THE PROPOSED NOISE BARRIERS DO NOT MEET THE FEASIBLE OR REASONABLE CRITERIA, A MINIMUM 5dBA NOISE REDUCTION CAN NOT BE ACHIEVED & THE COST PER BENEFITED RECEPTOR EXCEEDS CDOT'S CRITERIA. THEREFORE, A NOISE BARRIER IS NOT RECOMMENDED.

Completed by: DANA RAJUSA Date: 1-3-14



Noise Analysis and Abatement Guidelines

COLORADO DEPARTMENT OF TRANSPORTATION NOISE ABATEMENT DETERMINATION WORKSHEET

Instructions: To complete this form refer to CDOT Noise Analysis Guidelines

STIP # _____

Date of Analysis: SEPTEMBER 2014

Project Name & Location: GRAND AVE R32A-R32C (SFC) ADJACENT TO 7TH STREET

A. FEASIBILITY:

1. Can a 5dBA noise reduction be achieved by constructing a noise barrier or berm?
 YES NO
2. Are there any fatal flaw drainage, terrain, safety, or maintenance issues involving the proposed noise barrier or berm?
 YES NO
3. Can a noise barrier or berm less than 20 feet tall be constructed?
 YES NO

B. REASONABLENESS:

1. Has the Design goal of 7 dBA noise reduction for abatement measure been met for at least one impacted receptor?
 YES NO
2. Is the Cost Benefit Index below \$6800 per receptor per dBA?
 YES NO
3. Are more than 50% of benefited resident/owners in favor of the recommended noise abatement measure?
 YES NO

C. INSULATION CONSIDERATION:

1. Are normal noise abatement measures physically infeasible or economically unreasonable?
 YES NO
If the answer to 1 is YES, then:
2. a. Does this project have noise impacts to NAC Activity Category D?
 YES NO
- b. If yes, is it reasonable and feasible to provide insulation for these buildings?
 YES NO

D. ADDITIONAL CONSIDERATIONS:

E. STATEMENT OF LIKELIHOOD:

- | | |
|--|---|
| 1. Are noise mitigation measures feasible?
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO | 2. Are noise mitigation measures reasonable?
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO |
| 3. Is insulation of buildings both feasible and reasonable?
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO | 4. Shall noise abatement measures be provided?
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO |

F. ABATEMENT DECISION DESCRIPTION AND JUSTIFICATION:

THE PROPOSED NOISE BARRIER DOES NOT MEET THE FEASIBLE AND REASONABLE CRITERIA. A 5 dBA NOISE REDUCTION CAN NOT BE ACHIEVED AND THE COST PER BENEFITED RECEPTOR EXCEEDS CDOT'S CRITERIA. THEREFORE, A NOISE BARRIER IS NOT RECOMMENDED.

Completed by: DANA RAGUSA

Date: 9-12-14