



Rochester Hills

Minutes - Draft

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MR-42E Noise Barrier/Sound Wall Technical Review Committee

Members: Paul Davis, Jennifer Lagerbohm, Charles Lam, Michael McGlynn, Doug Walther
Council Members: Greg Hooper, Nathan Klomp
Youth Representative: Trip Brennan

Tuesday, January 12, 2010

6:00 PM

1000 Rochester Hills Drive

CALL TO ORDER

Chairperson Mike McGlynn called the meeting to order at 6:04 p.m., Michigan Time.

ROLL CALL

Present 6 - Greg Hooper, Paul Davis, Nathan Klomp, Jennifer Lagerbohm, Michael McGlynn and Doug Walther
Absent 1 - Charles Lam (*entered 6:08 p.m.*)

Others Present:

Rich Diem
Olaf Nitsche

INTRODUCTIONS

PUBLIC COMMENTS

Member Paul Davis reported that he contacted the Michigan Department of Transportation (MDOT) regarding previous noise study information for the areas along M-59 west of Crooks Road that might exist and noted that MDOT's responded that it would take approximately two weeks to search the archives.

Rich Diem questioned whether any data found would be applicable, as noise measurement techniques have changed substantially.

Member Davis responded that any prior noise studies would most likely be from the Adams Interchange Project and noted that design for the project was completed some time before the actual construction of the interchange.

Member Nathan Klomp reported that the December 14, 2009 Council Meeting included discussion regarding tree removal activities along M-59 and whether the Tree Fund could be used to replant along this area.

Member Davis stated that the landscape plan along M-59 notes some replanting of trees, but not to the extent of what was removed.

(Charles Lam entered at 6:08 p.m.)

Present 7 - Greg Hooper, Paul Davis, Nathan Klomp, Jennifer Lagerbohm, Charles Lam, Michael McGlynn and Doug Walther

APPROVAL OF MEETING MINUTES

2009-0569 Approval of Meeting Minutes - December 8, 2009

Attachments: [120809 Meeting Minutes - Draft.pdf](#)
[Resolution.pdf](#)

A motion was made by Lagerbohm, seconded by Hooper, that the Minutes of the Meeting of December 8, 2009 be Approved as Presented. The motion CARRIED by the following vote:

Aye 7 - Hooper, Davis, Klomp, Lagerbohm, Lam, McGlynn and Walther

Resolved, that the Minutes of the MR-42E Noise Barrier/Sound Wall Technical Review Committee meeting held on December 8, 2009 be approved as presented.

DISCUSSION ITEM

2009-0502 Discussion of handling of areas excluded by the MDOT study

Attachments: [Wall ranking formula v 3 - 010910.pdf](#)
[Rating Form Draft 120809.pdf](#)
[Noise Barrier Rating Form - Draft.pdf](#)
[Table 7 with MDOT updates.pdf](#)
[Masiak abstract.pdf](#)
[Decision Matrix Article 111009.pdf](#)
[McGlynn Category Criteria Draft 111009.pdf](#)
[Noise Impact Info 111009.pdf](#)
[Agenda 101309.pdf](#)

Chairperson Mike McGlynn commented that two items recently distributed by e-mail to Committee members included a ranking form he developed (dated January 9, 2009) based on the last meeting's discussion and additional information prepared by Jim Masiak, who could not attend this evening. Chairperson McGlynn noted that his modified ranking form added the words "without barrier" to ranking item number one. He inquired whether Member Lagerbohm had the opportunity to develop any models for the area west of Crooks near Adams Road.

Member Jennifer Lagerbohm reported that she worked through the Housing and Urban Development (HUD) rating approach in comparison to the Michigan Department of Transportation (MDOT) approach, and commented that the two methods would not yield similar comparisons. She explained that when HUD looks at funding projects along freeways, their approach is to arrive at an LEQ over a 24-hour period which takes lower nighttime traffic counts into account; while the MDOT approach uses an LEQ for one hour during the peak levels.

She noted that the scenarios she ran utilizing the HUD approach projected 2035 numbers at 69 to 70 decibels over a 24-hour period and commented that this did not compare to a one-hour worst-case scenario. She stated that one approach would be to add one or two decibels to the numbers, however, this would not take into account other factors that the MDOT model considers, such as differences in elevations. She noted that the data yielded by this method might not be considered as relevant.

Member Greg Hooper noted that if MDOT cannot locate any prior sound study data, the Committee's only choice might be to make some engineering assumptions utilizing the HUD model.

Member Paul Davis noted that one to two decibels would be within calibration levels for MDOT.

Chairperson McGlynn noted that the Committee would revisit this at the next meeting after MDOT had an opportunity to search its archives. He questioned whether anyone had any additional comments on the January 9th draft ranking form.

Member Hooper recalled that the Committee decided to add the words "first floor" to the ranking Criteria Number Two, referencing the number of attenuated units (per the MDOT updated report). He questioned whether the Committee decided to leave Criteria Number Four, referencing Elevation, at intervals of six or nine feet.

Member Davis stated that he used six feet as an interval after a review of some of the contour elevations from M-59, noting that it was his opinion that nine feet was close to the height of the wall and might be too much.

Member Lagerbohm questioned whether the highest ranking weight would be given to elevations higher or lower than the freeway.

Chairperson McGlynn noted that sound travels upward and stated that lower areas would receive lower ranking.

The Committee then discussed whether to utilize the 500-foot setback range to determine the number of homes affected by elevation and how the ranking would be determined if the elevations differed along each wall area. It was determined by the Committee that this ranking should read "Elevation difference between first homes and M-59 (Plurality)" and that the 500-foot setback range would be kept.

Member Davis noted that the City has contour elevations available and that this data can be interpolated for each home to determine the ground elevation. He commented that measurements would go perpendicular to M-59.

After discussion, it was determined that Member Davis would run scenarios with both six-foot and nine-foot elevation differences based on a 500-foot offset from the nearest lane of M-59, and would then review how the data would fall.

Chairperson McGlynn then questioned whether the Committee wished to discuss the total points available, noting that his January 9th draft rating form arrived at a total maximum point value of 145 for all criteria. He questioned whether the Committee wished to add any additional ranking criteria at this point.

Member Hooper questioned whether the Committee wished to discuss incorporating a criteria for the number of backyards that abut M-59 at this point.

Chairperson McGlynn noted that last meeting's discussion along this line included aesthetics and safety issues. He stated that the Committee opted to remove aesthetics from ranking consideration after the last meeting and he had not given any weight to Category Number Nine on his January 9th draft ranking form.

Rich Diem questioned whether any homes abut the freeway without any fencing.

Olaf Nitsche commented that at a minimum, a fence from MDOT separates lots.

Member Davis noted that MDOT typically installs a permanent wire fence and commented that all fencing along M-59 will be replaced as a part of this project. He stated that although MDOT is not obligated to install fencing, it does so to delineate their right-of-way boundary.

Chairperson McGlynn noted that elevation is important for safety considerations as well, noting that if something crashes through the boundary going upward, it most likely would not be as much of a safety issue as if it fell downward.

Mr. Nitsche commented that a boat that recently ran through the freeway fencing might have gone even further into the adjoining properties had the highway in that area been at a higher elevation.

Upon further discussion, the committee agreed to drop Ranking Category Nine on the January 9, 2009 draft ranking form, Other Considerations.

Chairperson McGlynn noted that one additional change to be made to the Draft Ranking Form, Ranking Criteria Number Five, was to add reference to "number of home sites" as the Committee had discussed that there were several sites in areas that do not have homes on them yet.

Member Hooper suggested that the wording be "first floor home sites".

The Committee then concurred that if any portion of the site fell within the 500-foot range, it would be counted; and further determined that the words "that will in some way be impacted/influenced" be removed from that ranking criteria.

Chairperson McGlynn asked for any final comments on the ranking criteria

and then directed the discussion to the rating and ranking numbers. He explained that his draft computed the highest possible ranking values within each category and arrived at a total maximum point value for all criteria of 145. He then determined for each criteria, what the total percentage of points available would be. He discussed the various rankings and percentages that he could arrive at for each ranking criteria and noted that the Committee would now decide which criteria would be considered ranked with a higher percentage and which criteria would be ranked lower. He commented that he had entered arbitrary weighting numbers on the draft form for discussion purposes and asked for Committee input on how to weight the different criteria categories.

Member Lagerbohm noted that she would like to have the criteria regarding public areas be given a higher ranking and suggested it be given a weight of four instead of three, raising the total maximum points to 150.

The Committee agreed. Discussion followed whether to score a daycare or school higher than a tennis court or other subdivision or public feature. It was suggested to raise School or Daycare to a score of two, while leaving the other public facility/features at a score of one. A question was raised whether to include a registered or licensed home daycare as well. It was noted that information on the number of licensed or registered daycares would be readily available at the County.

Member Davis noted that if information on home daycare facilities was readily available, it should be included.

After further discussion, the Committee opted to combine Pool and Clubhouse to one item, noting that it would read "Clubhouse or Swimming Pool". Additional discussion included whether to count private backyard pools as well as public pools. The Committee determined that private backyard pools would not be included.

Once the final eight ranking categories had been determined and agreed upon by the Committee, **Chairperson McGlynn** requested that the Committee members take a moment and rank each of the criteria from highest priority to low, and noted that Member Davis would then tally the results to determine the order of priority for each criteria.

Member Davis compiled the ranking numbers as each Committee member read off their ranking of the eight criteria.

Chairperson McGlynn then summarized the order of ranking criteria, from highest weight to lowest weight:

1. Predicted peak noise levels without barrier (per updated MDOT report).
2. Number of first floor attenuated units (per updated MDOT report).
3. Cost per benefitting unit (per updated MDOT study).
4. Number of first floor home sites within 500 feet.
5. Public areas within 500 feet of M-59 (multi-count possible, max 5 items)
6. Elevation difference between first homes and M-59 (plurality).

7. *Is a berm or other alternative feasible?*
8. *Maintenance access rating for the proposed wall location.*

The Committee then determined that 1, 2 and 3 should each be weighted as five. The next two criteria, 4 and 5, would each be weighted as four. Elevation (6) would be given a weight of three; and the last two criteria (berm or alternative, and maintenance access) would be given weights of two each.

Further discussion ensued regarding the score range for elevations, and it was mentioned that noise models show that sound reflects from the street upward. The Committee determined that M-59 being lower than the home ground elevations would garner a score of five, within six feet of ground elevations a score of three, and higher than home ground elevations a score of one.

Once the ranking order, score and weight was determined, it was decided that Member Davis would perform the ranking calculations to bring back to the Committee by the next meeting. After additional discussion whether to use six-feet or nine-feet for elevation differences and how that might affect the spread within that ranking category, the Committee consensus was for Member Davis to first use six-feet in his elevation computations.

Chairperson McGlynn announced that the next meeting would be February 9, 2009 at 6:00 p.m.

Discussed.

NEXT MEETING AGENDA

REVIEW TIMELINE

ANY OTHER BUSINESS

None.

NEXT MEETING DATE

Tuesday, February 9, 2010 - 6:00 p.m.

ADJOURNMENT

The meeting was adjourned at 7:51 p.m., Michigan time.

Minutes were approved as (presented/amended) at the (Date) MR-42E Noise Barrier/Sound Wall Technical Review Committee Meeting.

MIKE McGLYNN, Chairperson

*Prepared by Mary Jo Whitbey
Administrative Secretary, City Clerk's Office*