Jan. 27, 2017: Joint noise update to neighbors

Dear Medina City Council Committee of the Whole and interested neighbors,

We wanted to provide a brief update on our recent coordination with Mageba. As noted in the Dec. 21 email update, Mageba was originally planning to send a proposal in late December or early January. Mageba’s proposal has been delayed, but on Wednesday, Jan. 18, we received a brief update from Mageba. The update from Mageba did not include all the information that we had hoped for, but it did include photos of the Robo®Foam installation in Japan and photos of the materials they are currently testing. This information is attached for your reference.

As you will note in the attached, the latest update is that Mageba intends to share a commercial proposal and timelines for a potential on-site project in the next couple of weeks. Once we receive the proposal and timelines, we will share the information with this group. While the Committee of the Whole (COW) will have the opportunity to review the materials for this proposed option, WSDOT’s technical staff, along with program and executive leadership, will conduct internal reviews on the feasibility of this proposal. As part of this process, WSDOT will discuss cost, safety, maintainability and contract considerations, and assess potential impacts to the travelling public to evaluate if this test project is financially and technically viable.

Assuming we receive the proposal and timelines from Mageba in early February, we expect to be ready in late February to schedule the next Tech Team and COW meetings.

We will continue to keep you updated on our coordination with Mageba and confirm whether it is realistic to host the COW and Tech Team meetings in late February.

Please feel free to let us know if you have any questions.

Sincerely,

Stacey Howery
Communications
SR 520 Bridge Replacement and HOV Program
Washington State Department of Transportation
I apologize for the delayed reply on this matter, but I want to let you know that we have been working on the solutions to mitigate the noise on these joints.

First, we have created a new rubber profile with a “U” shape geometry and “ribs” to help the bond the foam. This seal will be able to accommodate the foam much better than the standard “V” shape seal.

Second, we have been testing 6 different foam materials and adhesives (including the Japanese foam) in order to provide a solution that can perform well and be durable. For your reference please find attached a picture report of foam the foam solution installed in Japan.

Based on the tests results, we would like to select the 3 best options and do an on-site test on the LR16-WN joint, as shown in below snapshot. Basically each traffic lane will have a different foam material. The test joint with all 3 foam types can then be opened to traffic for a period of time (6 months would be recommended) allowing us to do visual inspections and to finally determine which one performs best.
Proposal with 3 solutions for evaluation:

Our tests should be done by next week. Thereafter we should be able to provide you with a commercial proposal and timelines for the on-site testing.

Hope that our course of action is acceptable for you.
両面テープ仕様間詰め材施工：平成28年4月14〜16日にて実施
新大乗寺橋（A1側）mageba-Joint 遊間間詰材の調査

調査日：平成28年9月26日（月） 天候：雨時々くもり 気温：27℃
※ 接着も良好で間詰材の剥がれ脱落など全く無く良好な状態を維持している。

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新大乗寺橋(A1側) ジョイント 部分の調査  調査日:平成28年9月26日(月) 天候:雨時々くもり 気温:27℃

05—A1側:地覆部
06—A1側:Interval材の接着の様子
07—A1側:Interval材の接着の様子
08—A1側:側面からの様子
両面テープ仕様間詰め材施工：平成28年4月14〜16日にて実施
新大乗寺橋（A2側）mageba-Joint 遊間間詰材の調査

調査日：平成28年9月26日（月） 天候：雨時々くもり 気温：27℃
※ 接着も良好で間詰材の剥がれ脱落など全く無く良好な状態を維持している。
新大乗寺橋(A2側)mageba-Joint 遊間間詰材の調査  調査日:平成28年9月26日(月) 天候:雨時々くもり 気温:27℃