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November 7, 2003

Ms. Victoria Rutson
Chief, Section of Environmental Analysis
Surface Transportation Board
Washington, DC 20423**SUBJECT: Docket # 34284: Response to Preliminary Section 106 Cultural Resources Report of the Surface Transportation Board**

Dear Ms. Rutson:

As we have discussed during a previous telephone call, I am working closely with the Medina County Environmental Action Association (MCEAA) to assist the members in understanding and addressing technical issues involving the environmental impacts of the construction of a railroad by Vulcan Materials under the name of the Southwest Gulf Railroad Company. I sincerely appreciate you sending me the preliminary cultural resources assessment and vibration study for this project. After review of these documents, I would like to present for your consideration the following comments:

SPECIFIC COMMENTS:

1. **Figure 1:** This figure could be greatly improved if each alternative was shown in a different color. It is very difficult to differentiate between Alternative 1 and Alternative 2 once they have combined with the proposed route. It is evident from this figure that the exact location of these routes has not been refined to a scale that would allow for an accurate determination of impacts to historic structures and archeological features. Thus, the distances of these alternatives from various historical structures were apparently estimated rather than determined using definitive data and field observations. MCEAA would not only appreciate a more definitive layout and detailed location of each alternative, but would also like to have this in electronic format to allow for our own determination of impacts, allowing us to provide a second opinion on proximity to historic and natural features that may have been missed during the analyses. A thorough analysis of the impacts should use higher resolution maps and aeriels.
2. **Page 7:** In determining direct impacts to historic and archeological features, it would seem appropriate that location for cut, fill, and bridges or trestles should be marked on each route. The entire study shows that these routes have not been surveyed or studied in the field, which makes all data concerning proximity to structures questionable. MCEAA realizes that surveying centerlines would be an expensive task, but proper and accurate cultural resource impact studies require accurate location of centerlines in the field.
3. **Page 8:** Under the No-Build Alternative, it is assumed that gravel would be moved by truck rather than by rail. However, it is my understanding that Vulcan

Materials has stated on several occasions that the quarry will not be built if a rail is not provided. Therefore, the No-Build Alternative should actually include two potential alternatives: one involving

- a. No quarry
- b. Movement or transport of materials by truck.

Throughout the assessment, these no-build alternatives are not addressed in sufficient detail to accurately estimate impacts to historic structures. Obviously, not constructing the quarry would have the least impact to the area and should be considered for this cultural resource study. Again, leaving this alternative out of the analyses biases the report towards the Preferred Action.

4. **Page 10, Paragraph 2:** This paragraph indicates that a dependable year-round water supply is not present in the area of the railroad. This statement is not true. The City of Quihi was established because of a perennial supply of water from Quihi Lake as well as shallow groundwater wells (10 to 20 feet deep). In fact, even today several perennial sources of water in the form of seeps and springs are found throughout the Quihi watershed. These sources of water attracted native American Indians as well as settlers to northern Medina County.
5. **Page 18, Figure 2:** The scale of this figure makes it virtually impossible to compare impacts by each alternative. I recommend that this figure be divided into several figures, each showing the location of historic features on a larger scale, such as 1 in = 250 ft. In addition, the same information could easily be transposed onto current and historical aerial photographs, providing even more definitive information as to the location of the alternatives with respect to historic and current structures, etc. The title box on the lower right-hand corner of the figure should be removed because it covers the Proposed Route and Alternative Route 3.
6. **Page 20:** The discussion on the Proposed Action does not provide information as to the number of creek crossings. According to the USGS topographic map, the Proposed Route will cross intermittent and ephemeral streams at least six times. It is well known that archeological resources are commonly found adjacent to creeks and these crossing areas should at the very least be considered for potential areas for impacts. All of these crossings will require coordination with the U.S. Army Corps of Engineers probably under Nationwide Permit 14, and extensive archeological studies will be required for that process.
7. **Page 27:** The description for the No-Build Alternative is written in a manner to lead the reader to believe that that is not a viable alternative. However, in a document such as this, it should be listed as a viable alternative. As previously mentioned, it should include not constructing the quarry and leaving all historic structures in their current condition. Thus, the Trucking Alternative should specifically cite which historic properties and cemeteries will be impacted by truck traffic and whether those impacts will be significant. In addition, the nature of those impacts should be identified. The No-Build Alternative should also include an in-depth discussion of potential changes or impacts to structures and archeological features if the quarry was not constructed and truck traffic was not present. This discussion could include impacts caused by potential development in the area, if any development plans are known at this time.
8. **Page 30:** I agree that the proposed route would affect the least number of known 19th century cultural resources. However, the report does not point out that it is

the second-worst route in terms of affecting 19th and 20th century cultural resources. The true differences between the Proposed Action and Alternatives 2 and 3 are relatively minor. The paragraph on this page is written in a manner to bias the reader toward the proposed route. It is not the intent of a cultural resource assessment to show bias towards any alternative in the study.

9. **Page 30, Table 6:** This table is somewhat confusing due to the fact that it does not break out 19th and 20th century structures. I suggest adding a new column, which would provide that information.

GENERAL COMMENTS:

1. I understand that this report is a preliminary cultural resource study and does not involve onsite surveys. However, because of the extensive occurrence of historic structures and archeological features in the area, I feel that a full onsite Phase I/II survey for all alternatives should be made for proper comparison of the alternatives for the environmental assessment. Without question, construction of a railroad in this portion of the country is going to impact many landowners and private citizens. Comparison of the alternatives will result in a final decision for the location of the rail. It seems only fair that each alternative be treated equally in the archeological and historic studies being conducted. Delaying intensive studies until the decision is made for the best alternative without using good, accurate data would be a grave error and would not be fair to the citizens of Medina County impacted by the rail.
2. This particular cultural resource assessment did not address archeological or paleontological studies. This should be completed for each alternative for proper comparison of alternatives in the environmental assessment. Shovel tests and even trench tests should be performed prior to a final determination for the EA and cultural resource assessment. These studies should be site-specific and intensive to ensure that archeological and paleontological sites are not missed. To conduct these studies, the centerlines for all alternatives should be surveyed and marked to a resolution of plus-or-minus 10-20 feet. This can be easily done using GPS equipment. This will also allow citizens in the area to observe where each alternative would be located with respect to their properties. Changes in routes can be made after it is determined that avoidance is a viable form of mitigation for that alternative. It also allows the impacted property owner to be a part of determining mitigation measures.
3. It is somewhat unsettling that the tone of the report is skewed toward the Proposed Action. The report should not show a bias towards the proposed action, especially since several alternatives are available. At the present time, the public is not aware how these alternatives were derived. Other alternatives could be used in the analyses, for example, the abandoned rail bed used for construction of Medina Dam.
4. Throughout the report, 20th century structures were ignored or considered unimportant without sufficient explanation. Ignoring those structures makes the proposed action the action having the least impacts. However, if 20th century structures are included, the proposed action would not be considered the best action for the project. Again, whether it is intentional or not, this appears to be a

- manipulation of numbers to bias the report towards the proposed or preferred action.
5. References to Vulcan Materials should be removed from this report. At the very least, reference should also be made to actions of Vulcan that might not be beneficial to landowners in the area. Vulcan's involvement in preserving some of the historical structures was not done to preserve houses and show kindness to the community. This action was actually done to mitigate for losses caused by construction of the railroad and to increase political support for the railroad construction. Was it not for the rail project, Vulcan would have no concern for these structures. Information involving protection of historic structures should be included in the report without reference to Vulcan. This seems only fair since no reference is made to any of the actions of citizens and local historic societies to preserve structures.
 6. Quihi Creek is a nearly perennial stream and would be considered to have high potential for archeological and paleontological features.
 7. Most of the historic structures located in this area were built at or near the 100-year floodplain of various streams. The current design of the railroad includes crossings of streams using trestles and berms. This type of construction can cause obstruction to flood flows and a significant increase the extent of the 100-year floodplain. The final design of stream crossings should be determined and HEC studies conducted to determine if these structures will impede flood flows and cause an increase in the size and extent of the 100-year floodplain. An increase in the size of the 100-year floodplain would cause direct impacts to many historic structures much further than 1000 feet from the railroad. These structures should be considered in this analysis. In addition, other homes and properties could be damaged by flood action. The ultimate mitigation for the increase in floodplain size would be to either avoid stream crossings or to use bridges rather than trestles and berms at stream crossings.
 8. This cultural resource assessment has not considered indirect impacts as a result of the railroad construction. According to Vulcan, construction of this railroad will cause a significant increase in commercial and industrial development along the railroad. In fact, the common carrier status that has been approved for this rail is based on the fact that industrial development will occur in the area, and the railroad will be used by other private interests. Such activities will result in significant negative impacts to historic and archeological structures along the route and will impact structures further than 1000 feet from the right-of-way. The entire historic vernacular of the area will be changed by this type of development and should be addressed in the report.
 9. The cultural resource assessment fails to address the fact that this project will significantly impact the visual aesthetics of the area. Private citizens living in the area take a great deal of pride in preserving the historic rural landscape of the area. Construction of the railroad will significantly change the vernacular of the area, changing it from a rural historic landscape to an urban commercial development.
 10. The vibration study conducted for this cultural resource report is an excellent review of work conducted in other locations. However, it is well known that environmental conditions, especially soil characteristics, soil moisture, and subsoil structure, have far-reaching impacts on the magnitude and conductance

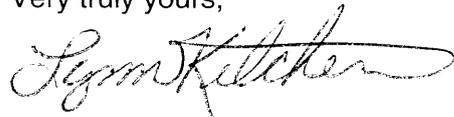
of vibration caused by large sources such as trains. The report makes the assumption that the environmental and soil conditions in Medina County are similar to those at other locations. Site-specific field tests to confirm the hypothesis offered in the vibration study should be performed to ensure that historic structures will not be impacted by the railroad. It is especially important to conduct these tests for historic structures located within 1000 feet of the preferred action and all alternatives.

11. Other archeologists in the area should be contacted to obtain their views concerning the impacts of this project and the value of historic and archeological features in the area. These archeologists should at least include Dr. Steve Tomka at the University of Texas at San Antonio and Dr. Thomas R. Hester, Professor of Anthropology at the University of Texas at Austin.
12. The report omitted any reference to the Gerde Ranch which is registered with the Department of Agriculture in the Texas Family Land Heritage Program. This program was established to protect the cultural heritage of historic ranches and farms in Texas. The proposed rail route will cross this ranch and significantly impact the overall rural landscape and historic vernacular of the ranch and its surrounding environment.
13. Several Indian sites have been discovered by citizens in the project area. MCEAA has provided you with a map showing the location of known Indian sites.

In conclusion, it is my opinion that the cultural resource study is an appropriate starting point for proper analysis of the impacts of the proposed rail on historic, archeological, and paleontological features in the area. However, this area is rich in these features, which warrants much more intensive studies. More in-depth, site-specific studies should be conducted to properly weigh and compare impacts caused by the preferred action and all alternatives being considered.

Please feel free to contact me if you have any questions or comments concerning this letter. I appreciate your time and consideration.

Very truly yours,



Lynn M. Kitchen, Ph.D.
Principal Scientist

Copy: Dr. Robert Fitzgerald, President, MCEAA