February 15, 2012

A. Fabiola Guillen Urfer
Swinerton Management and Consulting
700 College Avenue, Building PE-8
Kentfield, California 94904

Subject: Supplemental Special Pavement Design Recommendations
College of Marin, Child Study Center
Magnolia Avenue
Larkspur, California
CEL Project No. 84-02678-B

Dear Ms. Urfer:

Per your request, we have prepared this letter to provide recommendations for pavement sections for play areas and for decomposed granite pathways at the subject project. Our comments and recommendations relative to these pavements are as follows:

1) The subgrade preparation for both types should consist of scarifying the subgrade surface to a depth of at least six-inches and then compacting the layer to a minimum of 95% relative compaction. All compaction results are to be based on the results of ASTM D1557 (latest version).

2) For the playground pavement, we recommend the placement of either two-inches of asphaltic concrete (AC) over six-inches of Class 2 Aggregate Baserock (AB) or three-inches of AC over four-inches of AB. The latter section should be used with the AB portion increased to six-inches for areas where a potential for occasional vehicular traffic exists.

3) For the proposed decomposed granite (DG) walkways, we recommend that untreated DG not be used due to potential problems with erosion, saturation issues (it becomes “mushy” when wet), and tracking issues relative to entering buildings. Untreated DG and even some stabilized DG are known to have these issues and should not be utilized near building entrances – it has been known to damage floors.

4) It is our understanding that it is currently planned to use stabilized DG. Stabilized DG is much better than loose DG relative to erosion but, as it is not a standardized material and types vary considerably, some forms may be subject to excessive softening and tracking problems. The relatively high annual precipitation in the Kentfield area (48+ inches per year) may be a factor and if stabilized DG is to be used, then the particular product’s history of performance should be evaluated by the pavement designer (landscape architect or civil engineer).

5) Another alternative is DG with resin – this product performs much better in wet conditions and generally doesn’t have the tracking problems associated with the loose or the stabilized forms of DG. Its’ surface is different, however, and can vary from smooth to rough and will not have the loose surface texture of the other two types.

6) If a stabilized DG with acceptable performance history is chosen, then we recommend that two-inches of DG over four-inches of CL 2 AB be utilized for light foot-traffic areas, with an increase to three-inches DG over four-inches of AB for heavy foot-traffic areas. If DG with resin is chosen, then the section may consist of two-inches of DG over four-inches of AB for both traffic conditions.

7) All materials should be compacted to 95% relative compaction.
8) Finished surfaces should have good drainage with no low spots subject to ponding.
9) Typical weed control fabric applied over the subgrade should not be a problem in the section provided that subgrade gradients are very low.

We trust that this letter provides the information needed at this time. If members of the design team have questions or need additional information, please contact the undersigned at (925) 314-7100; gh@ce-labs.com.

Sincerely,
CONSOLIDATED ENGINEERING LABORATORIES

[Signature]
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