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TECHNICAL MEMORANDUM

Date: April 27, 2010

To: Mr. Murray Fredlund, PhD, PEng
President/CEO
SoilVision Systems Ltd.
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From: Rebecca Money, PE, GE

**Subject: SVFlux 3D Testimonial
Levee Evaluation Project
Northern California, USA**

Kleinfelder Inc. utilized Soil Vision software program SVFlux 3D to evaluate sections of levee located in Northern California. The existing levee section contained numerous features including a landside irrigation ditch, and pumping plant sump at the landside toe of the levee, a highway embankment intersecting the levee, and/or existing pipes extending through the levee embankment. Due to the importance of these features, continuous construction of a slurry cutoff wall was not feasible to mitigate potential underseepage and through seepage. Therefore, small windows in the slurry cutoff wall were proposed to be left open during construction to allow continuous use of these facilities. Seepage analysis at these locations was performed to evaluate the three dimensional effects including end effects of seepage through these proposed cutoff wall windows. SVFlux 3D provided a platform capable of analyzing the difficult features present at this project location. Another three-dimensional seepage modeling program was previously used for this project and results calculated with SVFlux 3D confirmed those previous results. The SVFlux modeling program is a great tool to evaluate difficult situations involving levee geometry, topographical features, existing construction, and proposed construction. Kleinfelder would recommend this program to other consultants who may need additional tools to understand seepage conditions which may affect project design and construction.