ZENTNER
Planning & Ecology

December 12, 2017

Deborah Haldeman
CEMEX Construction Materials Pacific, LLC.
2365 Iron Point Road, Suite 120
Folsom, CA 95630

RE: Cache Creek Riparian Depressions
Grading and Hydrology

Dear Ms. Haldeman:

I wanted to follow-up with you regarding our recent discussion on the riparian depressions that are located within the 200-foot setback from Cache Creek. The riparian depressions are old creek meanders that are now cut off from the channel, and as such, have high infiltration rates. The only current source of water for the depressions is almost exclusively direct rainfall into the depressions themselves. This combination of high infiltration rates and small watersheds is not enough to sustain the habitat or the vegetation in the long-term, which is why a number of trees died within the depressions during the recent extended drought.

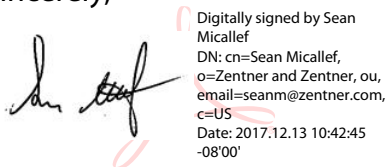
Given the high level of infiltration, the depressions would greatly benefit from a larger watershed that would contribute to these areas. The habitats within the depressions, which are dominated by riparian trees and shrubs, are adapted to periodic high flows of water, which would be mimicked by enlarging the watershed to provide additional precipitation runoff into these areas. As well, our Restoration Plan Amendment includes enhancing these depression with additional riparian vegetation to provide better diversity and wildlife habitat.

Therefore, we recommend that, to the extent feasible, the surrounding 200-foot buffer areas be graded to drain into these depressions as part of the proposed Reclamation Plan Amendment, in order to enhance the hydrology of these areas. One or two swales should be graded that lead to the perimeter of each riparian depression. The swales should be protected with coir erosion control mat and the slope into the basin with mat and rock. As part of the Restoration Plan Amendment, the surrounding uplands and slopes leading into the depressions would be restored to oak savanna habitat including a native perennial grassland understory. This vegetation would serve to filter the water prior to draining into the depressions.

In short, we recommend draining as much of the 200-foot buffer into these riparian depressions as practicable.

Please let me know if you have any questions.

Sincerely,



Sean Micallef

Partner-Chief Ecologist

Enclosure

CC: Steve Greenfield, Cunningham Engineering

Yasha Saber; Compass Land Group

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