February 15, 2001

VIA U. S. MAIL AND FEDERAL EXPRESS

Mr. Michael K. Buckley, P.E., Director
Mr. Doug Bellomo, P.E.
Federal Emergency Management Agency
500 "C" Street, SW
Room 423
Washington, DC 20472

Dear Mike and Doug:

This submittal is made on behalf of appellant, Columbia Venture, LLC, pursuant to FEMA's request for additional, final comments by February 15, 2001.

Columbia Venture's goal, like FEMA's stated goal, is to arrive at the most accurate possible determination of BFEs and floodway for the Congaree River basin in Richland and Lexington Counties based on (i) the applicable FEMA regulations and (ii) the most correct and reliable scientific information available in accord with 44 CFR § 67.6. The attached analyses clearly show that the August 12, 1999 map (the "August 1999 Map") is the most scientifically reliable map produced during this process, which dates back to 1994.

However, as previously stated, the September 26, 2000 map (the "September 2000 Map") is acceptable, provided that (i) FEMA's interpretation of the September 2000 Map accepts the Lexington County and City of Cayce resolutions provided to FEMA on November 21, 2000 (and November 16, 2000) and on December 5, 2000, respectively, and (ii) FEMA confirms, prior to issuance of the LFD, that Columbia Venture has a properly completed, CLOMR-ready HEC-2 model with the opportunity to review it with Lexington County and the City of Cayce prior to the issuance of the LFD by FEMA. FEMA committed this to us in a public meeting on October 18, 2000.

[redacted]

Despite FEMA's representation to the contrary, as reflected in your letter dated February 12, 2000, to Avery Wilkerson, Mayor of Cayce, we believe that, prior to issuance of an LFD, FEMA is required to accept the Cayce and Lexington County resolutions and the floodway delineations contained therein. We enclose a copy of a legal memorandum to that effect from Winston & Strawn of Washington, D.C. (Tab 3).

SCIENTIFIC SUPPORT FOR THE AUGUST 1999 MAP

FEMA introduced the 2-D hydraulic model into the process after the initial public comment period for the August 1999 Map. Assuming that a two-dimensional model is the better method of determining flow patterns, the RMA-2 analysis prepared by FEMA is deficient in a number of respects, including calibration and validation, limited geographic reach and insufficient topographic data.

Columbia Venture has retained [redacted] of E^{x}ponent, Inc., who prepared the two-dimensional flow analysis dated February 12, 2001, found at Tab 4. This study significantly expands and improves the result produced by the 2-D models used by FEMA and the USGS. As more fully set out in E^{x}ponent's analysis, its 2-D hydraulic model is more extensive and more correct than the model FEMA used for the September 2000 Map and the USGS model. E^{x}ponent modeled five cases. In four of the cases a 100-year flow of 292,000 cfs was used. In the fifth case E^{x}ponent used a 100-year flow of 292,000 cfs that is computed in accord with more current information. (See the December 15, 2000 letter from SCANA to FEMA attached to [redacted] report at Tab A.) E^{x}ponent's model is based on existing land use conditions, more accurate topography, extensive field investigation of floodplain physical features, and a more realistic treatment of model boundary conditions and is, therefore, a much more accurate 2-D flow model than the ones developed by FEMA and the USGS. In all five cases the E^{x}ponent 2-D model concludes that it is inappropriate to map any floodway on the Richland County side of the levee.

The E^{x}ponent 2-D model corrects the deficiencies of the FEMA model and USGS model. It confirms and validates that the floodway FEMA determined for the August 1999 Map is the more correct determination of the Richland County floodway. In order that the E^{x}ponent analysis be adopted as the most scientifically accurate study, [redacted] and I will be available to meet with your technical contractors to discuss this analysis.

As noted, FEMA's model did not use the most current and correct hydrology information recently provided by SCANA. As a result of SCANA's letter of December 15, 2000, [redacted] taking the relevant assumptions employed by SCANA and FEMA at face value, computed the 100-year flood flow using the same procedure that [redacted] of Michael Baker & Associates used in his analysis for the September 2000 Map. Based on the more current information, the 100-year flood flow for the Congaree River at Gervais Street is 259,000 cfs, not 292,000 cfs as computed by Michael Baker & Associates without using the more current information. This determination is within 2.4% of the 253,000 cfs FEMA used in the August 1999 Map and is a statistically insignificant difference.

The primary errors in Michael Baker & Associates' analysis were that it did not properly account for physical changes to the Saluda Dam as stated in SCANA's December 15 letter, and

that it attempted to reflect regulated flows prior to Water Year 1926. FEMA has been advised by SCANA that one cannot correctly compute the effect of Saluda Dam on the flow of the Congaree River at Gervais Street prior to Water Year 1926. This position was presented to FEMA prior to issuance of the September 2000 Map by both SCANA and the USGS. In spite of this, [redacted] contends that the Saluda Dam would not provide regulation of flows. This is directly contradicted by SCANA, as is [redacted] contention that he can attach a flow to pre-1891 floods. This is categorically refuted in correspondence previously presented to you from the USGS. There is no known datum or rating curve for the Gervais Street gage prior to 1891.

In short, the data supplied herewith is the most reliable scientific data available and it clearly supports the August 1999 Map as more scientifically correct than the September 2000 Map. Incidentally, the August 1999 Map also provides an immediate solution to the peril in which the City of Columbia Wastewater Treatment Plant and Healthwood Hall School have been placed by the delineation of floodway contained in the present September 2000 Map. Both of these entities currently are protected by the existing levee and will continue to be protected by an improved levee.

ADOPTION OF SEPTEMBER 2000 MAP WITH LEXINGTON BFE HEC-2 MODEL

Although the analyses described above support the August 1999 Map as the more scientifically correct, Columbia Venture is prepared to accept the September 2000 Map, provided that the September 2000 Map incorporates the Lexington BFE HEC-2 model for the Lexington floodway determination, as called for by the unanimous Lexington County and City of Cayce resolutions. In light of the resolutions, we believe that 44 CRF 60.3(d)(2) requires the use of the Lexington BFE HEC-2 model. In addition to the resolutions, the Lexington BFE model should be used for the Lexington floodway because it is scientifically and technically more correct. This is evidenced in the E^{x}ponent analysis, and its depiction that the floodway from the Congaree River is riverward of the levee.

OTHER CONCERNS

In addition to the matters discussed above, we have the following additional concerns:

Only because it appears to be an emotional issue that may have become part of the remapping process, we should briefly address the Congaree National Swamp. We are advised that the volume of floodwaters that could possibly be stored in the areas protected by levees amounts to less than one (1%) percent of the total volume of floodwaters associated with a 100-year event. Because these levees have been in place for nearly a century, any impact to stream morphology or flood behavior at the Congaree National Swamp area would already have been realized. Reinforcing these levees will not create additional impacts.

We are concerned that FEMA has not complied with its own statutory and regulatory guidelines in the recognition of appellants in this process. 42 U.S.C.A. § 4104(b), as well as 44 C.R.F. 67.5(a), limit appellants to (i) an owner or lessee of real property who believes his property rights to be adversely affected by FEMA's proposed determination, and (ii) a "community." [redacted] may meet this requirement because he owns property on the western side of the Congaree River that was not previously covered by a flood map, although he

[redacted]

may fail to qualify as an appellant on other grounds. Columbia Venture is the affected landowner in that the September 2000 Map substantially changed, to its detriment, the location of the floodway and determination of BFEs.

Appellant Columbia Venture objects to the designation and standing of the other Appellants for the following reasons, among others: [redacted] to our knowledge, has not established that he owns or leases any affected property. A search of Richland County and Lexington County real estate records indicates only that [redacted] owns a home in Columbia several miles from, and unaffected by, the Congaree River. FEMA, therefore, by statute cannot recognize [redacted] as an appellant. Also, while [redacted] has provided narrative comments, he generally has not provided supporting scientific computations as required by FEMA regulations.

With respect to the Department of Natural Resources, FEMA has indicated that it conferred appellant standing on DNR as a "community". DNR does not meet the requirements of a "community" as set forth in 44 C.R.F. § 59.1. Further, to the extent DNR asserts that it is a landowner, its interests have not been adversely affected since floodway elevations in the August 1999 Map and the September 2000 Map were reduced from the existing FIRM.

DNR is by statute, and agreement with FEMA, designated as the state coordinating agency for FEMA. DNR thus serves FEMA as its state agent in FEMA's management of flood plains. It may be argued that it is improper for FEMA to allow DNR to serve in such an agency role and also to recognize it as an appellant in this proceeding.

We further note that a number of individuals and agencies have more recently asked to be recognized as appellants between September 26, 2000 and January 2, 2001. These individuals and agencies likewise have failed to establish ownership of land that legitimately could be claimed to be adversely affected by FEMA's determination, have failed to provide technical information as required by FEMA's regulations, and otherwise have failed to satisfy requirements necessary to be considered appellants.

We are aware that some parties opposed to Columbia Venture's project for other than scientific reasons have communicated to FEMA that Richland County Ordinances may prohibit the improvement of the existing levee. Our legal counsel has reviewed the applicable Richland County Ordinances and has advised us that the Ordinances permit improvement of the levee to FEMA's 500-year flood standards. We therefore urge that FEMA's determination be made on the basis of scientific data, and not on a presupposition of the interpretation of the Richland County Ordinances.

Finally, we note once more that the extensive notice and review process undergone by the parties in this case, in accordance with FEMA regulations, was not followed in 1994, to the detriment of Richland County landowners. The Exponent analysis supports the August 1999 Map, which should resolve all parties' concerns surrounding the adoption of the 1994 LOMR as requested by SCDOT, i.e., because it was not necessary to assume floodway on the Richland County side of the Manning levee for FEMA to remove the floodway area for SCDOT in

[redacted]

Lexington County. As a result, this and all other matters surrounding this process should be settled with our proposed final determination.

CONCLUSION:

In summary, we wish to emphasize that Columbia Venture is not requesting a "sixth map" as a result of the enclosed analysis. This process started with the 1994 LOMR for SCDOT, and we are now at the conclusion of that process. The enclosed analysis supports the adoption of the August 1999 Map, and we are requesting that FEMA either revert to the August 1999 Map or adopt the September 2000 Map with Lexington County and City of Cayce resolutions, as discussed above. Given the substantial length of time already devoted to this process, it would be unfair to all parties, and I believe may give rise to a takings argument under 5 USC 601, if FEMA imposes a new map with continued delay. All parties have had more than sufficient time to provide whatever scientific information is available for a final determination. The best science clearly shows no floodway on the Richland County side of the levee. Let's wrap this process up!

As stated earlier, we ask only that FEMA's floodway and BFE determination be made on the basis of the most scientific and technically correct information available, as provided in the studies attached to this letter.

Very truly yours,

[redacted]

cc: (w/encl)

Mr. Bob Coble, Mayor, City of Columbia (Via U. S. Mail)
Mr. Avery Wilkerson, Jr., Mayor, City of Cayce (Via U. S. Mail)
Mr. Wyman M. Rish, Mayor of the City of West Columbia (Via U. S. Mail)
Mr. T. Cary McSwain, Administrator, Richland County (Via U. S. Mail)
Mr. Art Brooks, Administrator, Lexington County (Via U. S. Mail)
Mr. A. Todd Davison, FEMA (Via Federal Express)
[redacted]Dewberry & Davis (Via Federal Express)
[redacted] Columbia Venture, LLC (Via U. S. Mail)
[redacted], Lockwood Greene (Via Hand Delivery)
[redacted] Lockwood Greene (Via Hand Delivery)