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THE STATE OF SOUTH CAROLINA
In The Supreme Court

APPEAL FROM RICHLAND COUNTY
Court of Common Pleas

John Hamilton Smith, Special Referee

Case No. 2010-CP-40-8943R
Appellate Case No. 2013-001067

Columbia Venture, LLC, Appellant,

v.

Richland County, Respondent.

REVISED RECORD ON APPEAL
VOLUME 8 OF 13
PAGES 3323 - 3802

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CERTIFICATE BY APPELLANT

Certificate by Appellant.....6061

Richland County Government

County Administration Building
20 Hampton Street
.O. Box 192
Columbia, SC 29202

Phone (803) 748-4616
Fax (803) 748-4644
TDD (803) 748-4999

Office of the County Administrator

February 2, 1999

To: Mr. McSwain
Larry Smith

From: David Chambers

RE: **Liability Insurance for Levee Maintenance**

I have talked with Planning and with the County's insurance broker, Arthur J. Gallagher & Co. However, there is not enough information for the broker to submit the risk to an insurer. The broker stated he had obtained liability coverage for a dam but not for a levee. The cost was $40,000. He simply can't even obtain a ballpark figure with so little information. Please note the below information on some levee problems in the Midlands.

I tried calling some SC risk managers, but I had no luck in obtaining information. John Henderson of the SC Association of Counties talked with Clif Scott, an Association attorney. John then suggested talking with the City of Columbia attorney. He said the City had a very substantial liability from a dam break, because the "contractual agreement with others" took it out of the State Tort Claims Act limitation. Ken Gaines, an attorney with the City of Columbia, said to the best of his memory a judgement of $4.8 million was obtained by Burwell Manning because of a breach in the levee. The liability was based on a condition in a deed.

Jackie Spears of Kershaw County said the City of Camden had an earthen dam to burst which caused damage to a highway and some deaths.

I expect the liability insurance, if available, to be expensive. I strongly recommend against accepting any liability related to levees. Floods will occur, and levees will fail. Just the litigation expense will be considerable.



COMPARE/FEMA FILE

CV014265

PLTF TRIAL EXH 146

RICHLAND COUNTY COUNCIL
REGULAR SESSION
FEBRUARY 2, 1999
6:00 P.M.

Members: Paul Livingston, Chair; Joseph McEachern, Co-Vice Chair; J.D. "Buddy" Meetze, Co-Vice Chair; Susan Brill; Anthony Mizzell; Stephen Morris; L. Gregory Pearce Jr.; Bernice G. Scott; Kit Smith; Thelma Tillis; James Tuten

Others Present: Mayor Bob Coble, Michielle Cannon-Finch, Marsheika Washington, Sherry Wright, Chief Harrell, Ash Miller, Tony McDonald, Larry Smith, Mike Gillespie, Ronaldo Myers, Dwight Hannah, Judy Carter, Jocelyn Jennings

CALL TO ORDER

The meeting was called to order at approximately 6:10 p.m.

INVOCATION

The Invocation was given by the Honorable James Tuten.

PRESENTATION: City of Columbia - Empowerment Zone

Mayor Bob Coble was present and introduced staff members from Congressman Clyburn's office and Ms. Shirley Gossett and Joe Grant who were involved in the Empowerment Zone planning. A film presentation was given which gave a brief synopsis of the plans for the City of Columbia, the Sumter area, and some areas of Eastover.

CITIZEN'S INPUT

Mr. Horace Jackson spoke about concerns of the levee system, item 3-b.

APPROVAL OF MINUTES

Regular Session: January 19, 1999

Mr. Morris moved, seconded by Mr. Tuten, to approve the minutes of January 19, 1999. The vote in favor was unanimous.

Zoning Public Hearing: January 26, 1999

Mr. Morris moved, seconded by Mr. Pearce, to approve the minutes of January 26, 1999. The vote in favor was unanimous.



REPORT OF COUNTY ATTORNEY FOR EXECUTIVE SESSION MATTERS

Mr. Larry Smith, County Attorney, stated Item 6-c, Discussion of impact of FEMA flood maps on development in the Congaree Area, might be an Executive Session Item and it could be decided once we get to that item.

ADOPTION OF AGENDA

Ms. Michielle Cannon-Finch stated Item 2-a, 99-004MA, and item 3-c, Request to reopen a dirt road in Gadsden, needed to be removed from the agenda. Ms. Finch further stated that a request for input into any changes to the County's contract for solid waste haulers needed to be added to the agenda under Development and Services Committee.

Mr. Livingston stated that at some point the Report of the County Administrator needs to be moved up on the agenda, possibly before the Committee Reports.

Ms. Smith moved to refer Mr. Livingston's request to the Rules and Appointments Committee for guidance.

Mr. McEachern moved, seconded by Ms. Brill, to adopt the agenda as amended.

THIRD READING ITEMS

Approval of conveyance of water lines serving American Koyo to the City of Columbia - PUBLIC HEARING

Mr. Livingston stated that no one signed up to speak "for" or "against" this item.

Mr. Morris moved, seconded by Mr. McEachern, to approve this item for Third Reading. The vote in favor was unanimous.

SECOND READING ITEMS

99-005MA, John Wright, From RG-1 to C-3, TMS 17010-05-02(P), Chatsworth Road

Mr. Morris moved, seconded by Ms. Smith, to approve this item for Second Reading. The vote in favor was unanimous.

99-006MA, Carolyn McLeod, From D-1 to RS-2, TMS 22707-03-03, 209 Beaver Dam Road

Mr. Morris moved, seconded by Ms. Smith, to approve this item for Second Reading. The vote in favor was unanimous.

REPORT OF DEVELOPMENT AND SERVICES COMMITTEE

Presentation by Soil and Water Conservation District

Ms. Brill stated that the committee received this as information.

Consideration of accepting maintenance of levee system along the Congaree River

Ms. Brill stated that the committee recommended approval of authorizing the Council Chairman to begin first steps of acceptance of responsibility and maintenance contingent upon engineering certification, certification by the Corps of Engineers and approval and acceptance by FEMA.

Ms. Smith made a substitute motion, seconded by Mr. Pearce, to accept responsibility for local inspection and enforcement of the levee system, and if required by FEMA, to accept operation and maintenance responsibility for the system contingent upon the following:

1) The property owners upgrade the levee system to meet FEMA standards;
2) the property owners prepare all required documentation, including operation and maintenance plans;
3) certification that the levee system, as upgraded, meets FEMA standards;
4) The parties, including Richland County, the City of Columbia and the developers, resolve the issues of the performance and funding of the operation and maintenance responsibility;
5) The County's acceptance of responsibility terminates if the developers of the area do not invest at least $30,000,000.00 within ten years of the date of the adoption of this motion.

Mr. Morris made an amendment to delete the paragraph that states the termination of responsibility if the developers of the area do not invest at least $30,000,000.00.

A discussion took place regarding the acceptance responsibility, maintenance of the levee system, and the effect on the taxpayers.

Mr. McEachern moved, seconded by Ms. Scott, to call for the question. The call for the question was approved unanimously.

The vote in favor of the substitute motion was unanimous.

Request for Input into any changes to the County's Contract for Solid Waste Haulers

Ms. Brill stated that the committee recommended that Council schedule a work session to discuss this item. The vote in favor was unanimous.

Mr. T. Cary McSwain, County Administrator, stated that a work session will be scheduled during the month of March or April to discuss this issue.

Approval of transfer of control of Genesis Cable to Benchmark, Inc.

Mr. Morris moved, seconded by Ms. Smith, to approve the transfer of control of Genesis Cable to Benchmark, Inc.

Ms. Smith requested staff to determine whether the County's cable franchise agreements allow cable companies to use their lines to provide other services, such as phone service.

The vote in favor of the motion was unanimous.

REPORT OF ADMINISTRATION AND FINANCE COMMITTEE

Consideration of waiving building permit fee for Harvest Hope Food Bank

Mr. McEachern stated that the committee recommended approval to waive the building permit fee of $3,050.00 for the new Shop Road location of the Harvest Hope Food Bank. The vote in favor was unanimous.

Approval of budget amendment for additional funds for the Unsafe Housing Program

Mr. McEachern stated that the committee recommended First Reading approval of a budget amendment adding $95,000.00 to the Planning Department's budget to provide for continued operation of the Unsafe Housing Program. The vote in favor was unanimous.

Approval of budget amendment for additional funds for Probate Court

Mr. McEachern stated that the committee recommended First Reading approval of a budget amendment adding $20,790.00 to the Probate Court budget for the purpose of reimbursing outgoing Judge Coleman Catoe for unused sick and annual leave as required by the County Ordinance. The vote in favor was unanimous.

Approval of budget amendment for $100,000.00 for railroad improvements for Schmalbach-Lubeca

Mr. McEachern stated that the committee recommended First Reading approval of a budget amendment allocating $100,000.00 from the General Fund Balance for Economic Development for railroad improvements for Schmalbach-lubeca, based on a previous commitment from the County Council. The vote in favor was unanimous.

Approval for purchase of Detention Center officers' uniforms

Mr. McEachern stated that the committee approved the purchase of Detention Center officers' uniforms from Wright-Johnson, Inc., in an amount not to exceed $66,869.00. The vote in favor was unanimous.

Approval of award of contract for replacement of roof for the Richland County Public Works Administration Building

Mr. McEachern stated that the committee recommended approval of an award of contract to Stanick Sheet Metal and Roofing Company, in the amount of $65,914.00, for the replacement of the roof on the Public Works Administration Building. The vote in favor was unanimous.

Approval of by-laws for Convention Center

Mr. McEachern stated the committee forwarded this item to Council with no recommendation.

Ms. Smith moved, seconded by Ms. Scott, to adopt the approval of the Convention Center By-Laws. The vote in favor was unanimous.

Mr. McSwain stated Council also needed to approve expenditure from funds generated by the Tourism Development Fee.

Mr. McEachern moved to approve the expenditure from funds on the contingency of approval by the Legal Department.

Ms. Smith moved, seconded by Mr. Mizzell, to adopt the resolution and give First Reading approval of an expenditure from funds generated by the Tourism Development Fee.

Approval of Comprehensive Annual Financial Report for FY 98/99

Mr. Morris moved, seconded by Mr. Mizzell, to accept the report as information. The vote in favor was unanimous.

10-minute presentation of Richland County Home ownership program

Ms. Jocelyn Jennings and Ms. Sherry Wright presented to Council a brief overview of the planning and development of the Richland County Home ownership Program. They encouraged Council to spread the word throughout the County about the program.

The Council received this as information.

REPORT OF ADMINISTRATION AND FINANCE COMMITTEE (Deferred item)

Report by the County Administrator regarding proposal for office space for Central Court and the Eastover Magistrate

Central Court

Mr. Morris moved, seconded by Ms. Scott, to move forward with renovation plans for the space on the first floor of the Central Court Building on Huger Street for the Columbia Magistrate's Office at an estimated cost of $81,020.00. The vote in favor was unanimous.

Eastover Magistrate

Mr. Milton Pope, Assistant County Administrator, provided Council with information concerning new office space for the Eastover Magistrate's office:

1) Curt Davis and Associates provided a cost estimate of $80 per square foot for new construction.
2) The "up fit" cost of the "Drug Store" property in Eastover was based on a plan provided by Judge Simons.
3) Mr. Al Scott submitted and offered to sell to Richland County the existing Eastover Magistrate's office for $35,000.00.

4) Ms. Inez Hinson called the County Administrator regarding the possible purchase of the "Byrd House".
5) Mr. Melvin E. Lanham is asking for $140,000-160,000.00 for this particular property.

Mr. Morris requested more information on the 5 acres given to the government by a paper company and information on the cost of putting a modular office unit on that particular site.

A discussion took place regarding the different options.

Ms. Scott moved, seconded by Ms. Tillis, to approve Option 1 with the property to be located on Henry Street.

Further discussion took place regarding different options.

Ms. Smith spoke in favor of Option 2, expressing that this would help the downtown area of Eastover.

Ms. Scott withdrew her motion.

Ms. Smith moved, seconded by Ms. Scott, to approve Option 2, not to exceed $320,000.00.

A discussion took place regarding the estimates of the "up fit" cost of the drug store.

Judge D. Jeffrey Simons stated accurate estimates were not given on the drug store and that he would prefer to stay on Main Street, but he would support either Option 1 or Option 2.

Ms. Smith amended her motion, seconded by Ms. Scott, so that the package would not exceed $250,000.00.

A discussion took place about the estimated cost on the "up fitting" of the drug store property and the different options.

Mr. Tuten made a substitute motion, seconded by Mr. Pearce, to move forward with the option to accept the donation of the property from the Housing Authority, perform a space need study, do a preliminary design, consider the Housing Authority's option to construct a building or lease, look at the possibility of the County constructing a building, and then come back with recommendations.

Ms. Scott called for the question. The vote in favor was unanimous.

The vote for the substitute motion went as follows:

In favor	Oppose
Mr. Morris	Ms. Smith
Mr. Mizzell	Mr. Livingston
Mr. Pearce	Mr. McEachern
Ms. Brill	Ms. Scott
Mr. Tuten	Ms. Tillis

The motion failed on a tie vote.

The vote for the main motion went as follows:

In favor	Oppose
Ms. Smith	Mr. Morris
Mr. Livingston	Mr. Mizzell
Mr. McEachern	Mr. Pearce
Ms. Scott	Ms. Brill
Ms. Tillis	Mr. Tuten

The motion failed on a tie vote.

Ms. Smith moved, seconded by Ms. Scott, to adopt Option 2, not to exceed $240,000.00.

A discussion took place regarding the different options.

The vote went as follows:

In favor	Oppose
Ms. Smith	Mr. Morris
Mr. Livingston	Mr. Mizzell
Mr. McEachern	Mr. Pearce
Ms. Scott	Ms. Brill
Ms. Tillis	Mr. Tuten

The motion failed on a tie vote.

Mr. McEachern moved, seconded by Mr. Tuten, to go forward with the agenda and come back to this particular item. The vote in favor was unanimous.

REPORT OF ECONOMIC DEVELOPMENT COMMITTEE

Approval of MOU, Inducement Resolution, and Millage Rate Agreement for SCT Utilities

Ms. Smith stated that the committee recommended approval of a Memorandum of Understanding, Inducement Resolution and Millage Rate Agreement which offer incentives to SCT Utilities in return for a $47 million expansion by the company and creation of 700 additional jobs. The vote in favor was unanimous. Mr. Pearce was away during the vote.

Follow-up discussion of incentives for unannounced company

Ms. Smith stated that the committee received this item as information. Mr. Pearce was away during the vote.

Discussion of impact of FEMA flood maps on development in the Congaree area

Ms. Smith stated that the committee received this item as information.
Mr. Pearce was away during the vote.

REPORT OF ECONOMIC DEVELOPMENT COMMITTEE

Approval of a Resolution consenting to assignment of ownership and control of Holopack to H.I. Corporation

Ms. Smith stated that the committee approved the Resolution consenting to the assignment, with an amendment to the Resolution that H.I. Corporation abide by the County's economic development reporting requirements. The vote in favor was unanimous.

REPORT OF COUNTY ADMINISTRATOR

Council Work Session

Mr. McSwain advised the Council that three issues needed to be added to the Council's list of work session issues:
1) the role that Benchmark, Inc., will play in overseeing the City and County Planning Departments on a temporary basis; 2) the proposed co-location of the City and County Planning Departments; and 3) follow-up on the Council's goals established at the Council Retreat.

Council agreed to discuss these issues at a work session to be held on Thursday, February 11, 1999, at 4:00 p.m.

Legislative Alert

Mr. McSwain advised the Council that the House Environmental Affairs Committee will meet on Wednesday, February 3, 1999, to discuss proposed legislation governing solid waste collection by local governments.

The Eastover Magistrate, continued

Ms. Smith moved, seconded by Mr. Mizzell, to ask that Mr. Ben Boozer of the Downtown Development Association give the Council a 15-minute assessment of the available options during the Council work session of February 11, 1999. The vote in favor was unanimous.

CITIZEN'S INPUT

Mr. Glen Campbell, County employee, requested an update from the administrator and Council on the progress of the Compensation Longevity Pay.

MOTION PERIOD

Mr. Mizzell requested to have the State's Adjutant General make a presentation to the Council as to the economic impact of the National Guard.

Ms. Smith moved, seconded by Mr. McEachern, to cancel the March 2, 1999, Regular Session Council Meeting since the National Association of Counties Annual Conference in Washington, D.C., does not end until March 2 and have a Special Called Meeting on February 23, 1999, following the A&F and D&S Committee meetings to address those items that would normally have been addressed at the March 2nd Council meeting. The vote in favor was unanimous.

ADJOURNMENT
The meeting was adjourned at approximately 8:35 p.m.

Paul Livingston, Chair	Stephen Morris
Joseph McEachern, Co-Vice Chair	James Tuten
J.D. "Buddy" Meetze, Co-Vice Chair	Susan Brill
Bernice Scott	Thelma Tillis
Kit Smith	Tony Mizzell
Gregory Pearce	

Minutes transcribed by Marsheika Washington.

RICHLAND COUNTY COUNCIL
COUNCIL CHAMBERS
REGULAR SESSION
JANUARY 3, 2006
6:00 P.M.

CALL TO ORDER — Honorable Anthony G. Mizzell, Chairman

INVOCATION — Honorable Bernice G. Scott

PLEDGE OF ALLEGIANCE — Honorable Bernice G. Scott

ELECTION OF CHAIRPERSON [Page 5]

ELECTION OF VICE-CHAIRMAN [Page 5]

SELECTION OF SEATS [Page 5]

ADOPTION OF AGENDA

CITIZEN'S INPUT

APPROVAL OF MINUTES

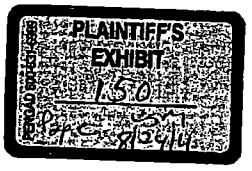
Special Called Meeting: December 20, 2005 [Pages 6-11]

Zoning Public Hearing: December 20, 2005 [Pages 12-14]

REPORT OF COUNTY ATTORNEY FOR EXECUTIVE SESSION ITEMS

REPORT OF THE COUNTY ADMINISTRATOR

REPORT OF THE CLERK OF COUNCIL



CVCounty000288

REPORT OF THE CHAIRMAN

OPEN/CLOSE PUBLIC HEARINGS

APPROVAL OF CONSENT ITEMS
1.a., 2.a., 2b., 2.c.,2.d., 2.e., 3.a., 4.a, 4.b,

1. THIRD READING ITEMS

   a. Ordinance prohibiting through truck traffic on Olympia Avenue Between Heyward Street and Bluff Road in Richland County
   [CONSENT] [Pages 15-16]

2. SECOND READING ITEMS

   a. 05-106MA
   City of Columbia
   RU to HI (120 acres)
   Wastewater Treatment Plant
   11000-01-03
   NW Quadrant of I-77 and Congaree River
   [CONSENT] [Pages 17-19]

   b. 05-107MA
   Nick Leventis
   RU to RS-E
   Single Family Subdivision
   17800-04-39
   Rimer Pond Road
   [CONSENT] [Pages 20-23]

   c. 05-86MA
   Seamon Hunter
   RU to GC
   Non-identified use
   15000-05-06
   West Side of Farrow Road
   [CONSENT] [Pages 24-26]

CVCounty000289

PLTF TRIAL EXH 150

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d. Ordinance authorizing a Quit-Claim Deed to William P. Vinson [CONSENT] [Pages 27-28]

e. Ordinance authorizing General Obligation Bond Anticipation Notes for Innovista Garage [CONSENT] [Pages 29-43]

3. REPORT OF DEVELOPMENT AND SERVICES COMMITTEE [Page 44]

a. Emergency Ordinance establishing a temporary moratorium and Approval of Floodplain Management Permits for Development or Construction within a portion of the Congaree River Floodplain [CONSENT] [Pages 45-47]

4. REPORT OF ADMINISTRATON AND FINANCE COMMITTEE [Page 48]

a. Award of Waste Tire Hauling and Recycling Contract to Whitaker Container Service [CONSENT]

b. Disposal Contract Award to Loveless & Loveless Inc. for Construction, Demolition and Land Clearing Debris [CONSENT]

5. Acceptance of Hopkins Property (Administrative Recommendation to defer to Committee on January 24th to allow compilation of additional information).

6. Eau Claire Letter of Support (Livingston, Scott, Jeter)

7. CITIZEN'S INPUT

8. MOTION PERIOD

CVCounty000290

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9. ADJOURNMENT

CVCounty000291

PLTF TRIAL EXH 150

2.6 ELECTION OF CHAIR

The Chair shall be elected at the first regular meeting of the Council in January, or as soon as practical, by the membership of the Council. The Chair shall serve continuously until the following January unless removed by a two-thirds majority vote of the full Council.

2.7 ELECTION OF VICE-CHAIR

The Vice-Chair shall be elected either at the first regular Council meeting in January or as soon thereafter as may be practical. The Vice-Chair shall preside in the absence of the Chair. In the absence of the Chair, the Vice-Chair or the senior member of Council shall preside.

3.1 SEATING

At the first meeting in January after the election and seating of the Chair and Vice-Chair, Council members shall select their seats based first on seniority in years of continuous service and then in alphabetical order.

SCOTT
LIVINGSTON
SMITH
MCEACHERN
MIZZELL
PEARCE
CORLEY
DICKERSON
HUTCHINSON
JETER
MONTGOMERY

CVCounty000292

PLTF TRIAL EXH 150

STATE OF SOUTH CAROLINA
COUNTY COUNCIL FOR RICHLAND COUNTY
ORDINANCE NO. ___-06HR

AN EMERGENCY ORDINANCE ESTABLISHING A TEMPORARY MORATORIUM ON APPROVAL OF FLOODPLAIN MANAGEMENT PERMITS FOR DEVELOPMENT OR CONSTRUCTION WITHIN A PORTION OF THE CONGAREE RIVER FLOODPLAIN.

WHEREAS, Richland County is a participating community in the National Flood Insurance Program ("NFIP") administered by the Federal Emergency Management Agency ("FEMA"). Pursuant to 44 C.F.R. § 60.3, FEMA must provide a participating community with data upon which floodplain management regulations shall be based. To be a participating community, Richland County is required by 44 C.F.R. § 60.2(h), to adopt and apply this data for enforcement of floodplain management regulations in unincorporated Richland County; and

WHEREAS, on November 18, 2005, the United States District Court, South Carolina Division, in the case of *Columbia Venture v. Federal Emergency Management Agency*, Case Number 3:01-4100-MBS, entered a written Order vacating the Congaree River base flood elevations as revised by the Federal Emergency Management Agency ("FEMA") on August 20, 2001 and effective on February 20, 2002; and

WHEREAS, the Court's Order rendered null and void the Congaree River base flood elevations as promulgated by FEMA on August 20, 2001 and effective February 20, 2002. Consequently, pursuant to 44 C.F.R. § 60.3, FEMA must provide sufficient data upon which Richland County's floodplain regulations are to be based as they apply to the Congaree River Floodplain. To date, FEMA has not provided the required data; and

WHEREAS, the absence of sufficient data from FEMA concerning the Congaree River Floodplain constitutes an emergency; and

WHEREAS, an emergency moratorium on construction and development in flood-prone areas of the Congaree River Floodplain is needed to protect public health, safety and welfare, and to allow the County time to determine what actions may be needed to maintain compliance with the NFIP.

THEREFORE, BE IT ENACTED THAT:

SECTION I. Richland County Council hereby declares a moratorium on the approval or denial of any permit submitted to Richland County for construction, development, zoning, building, disturbance of land, or for stormwater management purposes, as defined within Chapter 26 of the Richland County Code of Ordinances, on property located in a flood-prone area within the Congaree River Floodplain; provided, however, this moratorium does not apply to permit applications for maintenance of existing structures, levees or buildings, or to bring existing levies into compliance with Richland County ordinances and/or U.S. Army Corps of Engineers' standards.

CVCounty000332

PLTF TRIAL EXH 150

3340

Congaree River Floodplain means the geographic area shown on Flood Insurance Rate Map panels 0091, 0092, 0094, 0160, 0178 and 0190 for Unincorporated Richland County.

Flood-prone means any land area susceptible to being inundated by water from the overflow of inland waters, or the unusual and rapid accumulation or runoff of surface waters from any source.

~~This moratorium does not apply to permit applications for maintenance of existing structures, levees or buildings.~~

SECTION II. The Richland County Attorney and Interim Administrator, and/or their designees or agents, shall, before this Ordinance expires, make reasonable efforts to determine from FEMA or by other reasonable and necessary means, how Richland County will maintain compliance with the NFIP in light of the Order entered by the United States District Court, South Carolina Division, on November 18, 2005, in the case of *Columbia Venture v. Federal Emergency Management Agency*. The Richland County Attorney and Interim County Administrator shall report their findings to Richland County Council as soon as practicable before the expiration of this Ordinance.

SECTION III. If any section, subsection, or clause of this Ordinance shall be deemed to be unconstitutional or otherwise invalid, the validity of the remaining sections, subsections, and clauses shall not be affected thereby.

SECTION IV. All ordinances or parts of ordinances in conflict with the provisions of this Ordinance are superseded during the time this Ordinance is effective.

SECTION V. This Ordinance shall be effective immediately upon adoption by Richland County Council.

SECTION VI. This Ordinance shall expire ~~sixty-one (61)~~ sixty (60) days following the date of adoption of this Ordinance, or until rescinded by Richland County Council, whichever is earlier.

RICHLAND COUNTY COUNCIL

BY:_____
Anthony G. Mizzell, Chair

Attest this the _____ day of

_____, 2006

_____
Michielle R. Cannon-Finch
Clerk of Council

CVCounty000333

PLTF TRIAL EXH 150

3341

RICHLAND COUNTY ATTORNEY'S OFFICE

_____
Approved As To LEGAL Form Only
No Opinion Rendered As To Content

Adopted at a meeting duly assembled by the Richland County Council on this ____ day of _____, 2006, by a [2/3majority] OR [unanimous] vote of those members present.

CVCounty000334

PLTF TRIAL EXH 150

3342

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K. CHAD BURGESS
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TELEPHONE 252-3300
TELECOPIER 256-8062

August 26, 2005

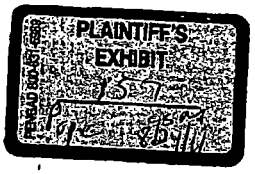
VIA HAND DELIVERY
William C. Boyd, Esq.
Haynsworth Sinkler Boyd, P.A.
1201 Main Street
Post Office Box 11889
Columbia, South Carolina 29211-1889

RE: Columbia Venture, LLC

Dear Bill:

Thank you for your letter of June 10, 2005 regarding Columbia Venture's ("CV") proposed maintenance of Levee Section 1. In your letter of June 10th, you set forth CV's interpretation of § 26-203(b) and (d), § 26-104(h), and § 26-104(d) of the Richland County Land Development Code ("Development Code"), which CV asserts authorizes and mandates maintenance of the entire levee system owned by CV to a 500-year design standard.

Richland County ("County") respectfully disagrees with CV's assertion that, as part of its obligation to maintain its levees, it must also "maintain" them to a 500-year flood design standard. Subsection 26-203(b)(2)(f) states that levees "protecting residential structures or non-residential structures which are not floodproofed shall be designed, constructed and maintained to provide protection against the 500-year flood plus three (3) feet of freeboard." By isolating "maintain" from the phrase "designed, constructed and maintained," CV claims that it must maintain the existing levee to a 500-year standard. CV's construction of this subsection is inconsistent with the intent of the Development Code and the plain meaning of the language quoted. Further, the County believes CV's construction would lead to an unreasonable and absurd result. Basic rules of statutory construction require one to construct words used in statutes in accordance with their plain, everyday meaning if unambiguous, to interpret words consistent with the intent of the legislation, and to construe statutory language so as to avoid absurd results. *See, e.g., Charleston County Parks & Recreation Comm. v. Somers*, 459 S.E.2d 841 (S.C. 1995); *State ex rel. McLeod v. Montgomery*, 136 S.E.2d 778 (S.C. 1964).



A fair reading of the Development Code reveals that the 500-year level of flood protection cited in the Development Code is not a maintenance standard, but rather a design standard. It is also clear that neither § 26-203(b)(2)(f) nor § 26-104(h)(1) mandates that levees in existence prior to the Development Code's adoption be upgraded to provide protection against the 500-year flood. Finally, CV misconstrues § 26-203(b)(2)(f) and § 26-104(h)(1) in concluding that a mandate to upgrade Levee Section 1 is triggered by the existing structures of Heathwood Hall or the City of Columbia wastewater treatment plant.

As we recommended in our letter of June 2, 2005, we ask that CV submit to the County a levee inspection report describing the current condition of Levee Section 1 and the maintenance activities it plans to undertake so that the County can determine what permits may be required for such activity. Please note that maintenance and repair of CV's levees are expressly authorized in the Development Code, provided that the maintenance or repair does not "result in a structure that would be higher or wider than it was before the need arose for such repair or maintenance." RICHLAND COUNTY CODE OF ORDINANCES § 26-203(b)(2)(g).

I trust this letter provides you with the guidance that Columbia Venture seeks. Richland County looks forward to working with you once the levee inspection report, as described in my letter dated June 2, 2005, is completed and submitted.

Yours truly,

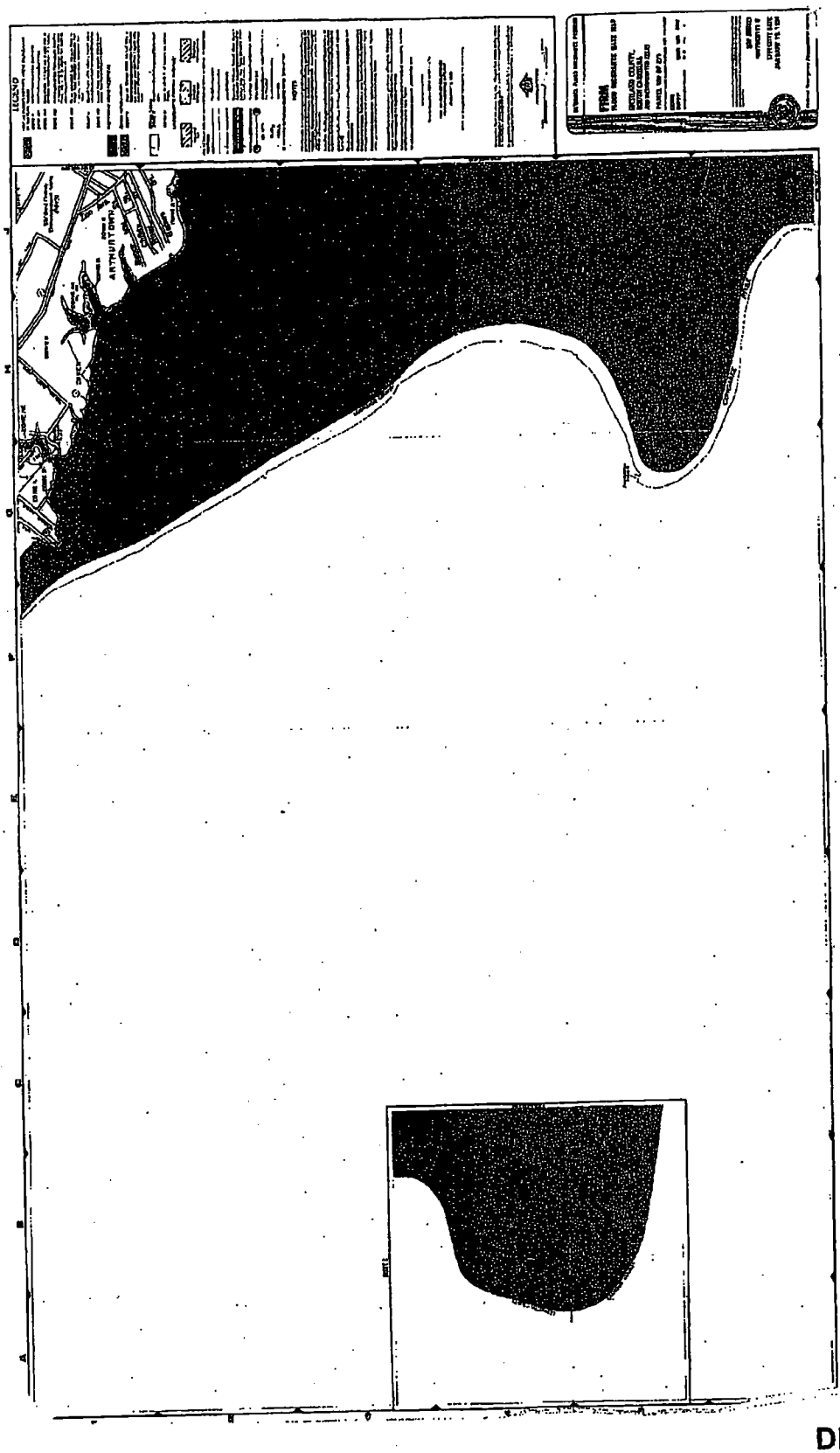
WILLOUGHBY & HOEFER, P.A.

Mitchell Willoughby

Mitchell Willoughby

MW/kef

cc: Larry Smith, Esq. (via first-class U.S. mail)
Mr. Cary McSwain (via first-class U.S. mail)



PLAINTIFF'S EXHIBIT 162

DEF-00006645

PLTF TRIAL EXH 162

RICHLAND COUNTY COUNCIL
PROPOSED ACTION

Brief Description of Proposal and Requested Action:

The purpose of this report is to request County Council's consideration of authorizing the Council Chairman or his Designee to act on the County's behalf to communicate to FEMA the agreement by Richland County to accept the right-of-way to the levee system and responsibility to review, monitor and maintain the levee system contingent upon proper certification.

PLANNING — JANUARY 20, 1999

Action Recommended by: W. E. KNUDSEN, AICP Department — Date

Recommendation of County Administrator: ☐ Approval ☐ Disapproval ☐ Advisory

Comments:

We are expecting to receive additional information on Monday regarding this issue. Therefore, a recommendation will be provided at the Committee Meeting.

County Administrator — Date 1-28-99

Legal: Approved as to form and within the powers and authority granted under the laws of the State of South Carolina to Richland County Council.

☐ Attachment ☐ Public Hearing required ☐ Ordinance required

County Attorney — Date 1-21-99

Financial: ☐ Expenditure: ☐ General Fund ☐ _____ Fund ☐ Grant ☐ Budgeted ☐ Budget Amendment ☐ Transfer

☐ Revenue: ☐ General Fund ☐ _____ Fund ☐ Grant ☐ Budgeted ☐ Budget Amendment ☐ Transfer

☐ Attachment

$ _____	_____	_____	B M Gallagher	1/21/99
Total	Expenditure Account	Revenue Source	Financial Officer	Date

Financial Impact:

PLAINTIFF'S EXHIBIT 166

Procurement: This action was issued, evaluated and completed in compliance with the Richland County Procurement Code.

☐ Competitive Sealed Bid ☐ RFP ☐ Statement of Qualifications ☐ Negotiations ☐ Emergency ☐ Sole Source ☐ Exempt

Procurement Officer — Date — Control Number: _____

Other: ☐ Attachment	Other: Control Number: _____ ☐ Attachment
Recommended by — Date	Recommended by — Date 13

DEF-00000054

PLTF TRIAL EXH 166

COUNTY COUNCIL REPORT

SUBJECT: Requesting FEMA action on Levee System, Congaree River

A. PURPOSE AND RECOMMENDATION:

The purpose of this report is to request County Council's consideration of authorizing the Council Chairman or his Designee to act on the County's behalf to communicate to FEMA the agreement by Richland County to accept the right-of-way to the levee system and responsibility to review, monitor and maintain the levee system contingent upon proper certification.

B. BACKGROUND:

The general area of concern is approximately 5700 acres south of the City Limits of the City of Columbia, bounded on the east by Bluff Road, the west by the Congaree River and south of I-77 as constructed. This area contains the existing City of Columbia Sewer Treatment Plant, the East Richland Sewer Treatment Plant, Heathwood Hall School, a grain plant, pasture land and residential and commercial/industrial development fronting on or accessed by Bluff Road. The area is generally protected from flooding by an existing levee system that has be in place since the early sixties.

In 1998, FEMA in conjunction with a flood study done for Lexington County, reclassified this area from a Floodplain to a Floodway status. The main difference is that you can place structures within a Floodplain with certain restrictions, you cannot place any structures within the Floodway. This difference is shown on our attachments as Series "G" and Series "H". The "H" being the new FEMA map showing this area as Floodway. This has and will continue to have a direct impact on the existing structures within these areas including the Sewer Treatment Plants and Heathwood Hall, none of which can expand or enlarge. According to FEMA we must use the "H" series for issuance of building permits and "G" series for insurance purposes.

Immediately after meeting with FEMA officials concerning the finalization of this study, Mr. McSwain acting in his capacity of both County Administrator and Chief Flood Official requested that FEMA place this revised study on hold

C. DISCUSSION:

One of the affected property owners, Congaree Farms/Mainning, has retained a Consulting firm, Lockwood-Greene to assist them in reviewing, reconstruction and ultimate certification and acceptance of the existing levee system. Due to FEMA regulations any reconstruction or creation of a levee system must be done under the auspices of the governmental body having jurisdiction in the area. This necessitates that the County agrees in principal to accepting responsibility of the levee system once completed and acceptable to FEMA. This has been detailed in a letter to Mr. McSwain from Lockwood-Greene dated December 11, 1998. Our comments are as follows;

1- *Property owners intend to upgrade the levee system*....the approximate cost of this is in excess of six million dollars.

14

DEF-0000055

PLTF TRIAL EXH 166

2- *County agrees to accept responsibility for operation and maintenance*.....this is shown as a preliminary cost estimate of approximately $174,500 annually. (see attachment)
3- *Request the relocation of the proposed Floodway*.....this will bring the entire area back to the "G" series map (the original FEMA map)
4- *Upon certification*.....the County must be the one requesting the map revision.
5- *Certification of levee system*.....self explanatory.
6- *We request FEMA confirmation*.....prior to acceptance of any responsibility the County must have the assurance of FEMA that once all the steps outlined on the levee system are completed, the levee system will be acceptable.

D. ALTERNATIVES:

The alternatives available are;

1- Do nothing, area will stay as is and any expansion or development within the affected area will be prohibited.
2- Authorize the Council Chairman or his Designee to begin first steps of acceptance of responsibility and maintenance contingent upon engineering certification, certification by the Corps of Engineers and approval and acceptance by FEMA.
3- Defer action, this would mean the County awaits whatever action FEMA imposes upon Richland County.

E. FINANCIAL IMPACT:

The financial impact on the County is estimated at $174,500 per year. This estimate according to Lockwood-Greene is on the "high side" and assumes everything must be done yearly. Some items such as repair and replacement of equipment will not occur on a yearly basis. These costs should be offset by the rezoning and development of these properties and the accompanying increase in the County's tax base.

F. RECOMMENDATION:

In view of the above, alternative 2 is recommended.

Kenneth C. Knudsen, AICP
Land Development Administrator

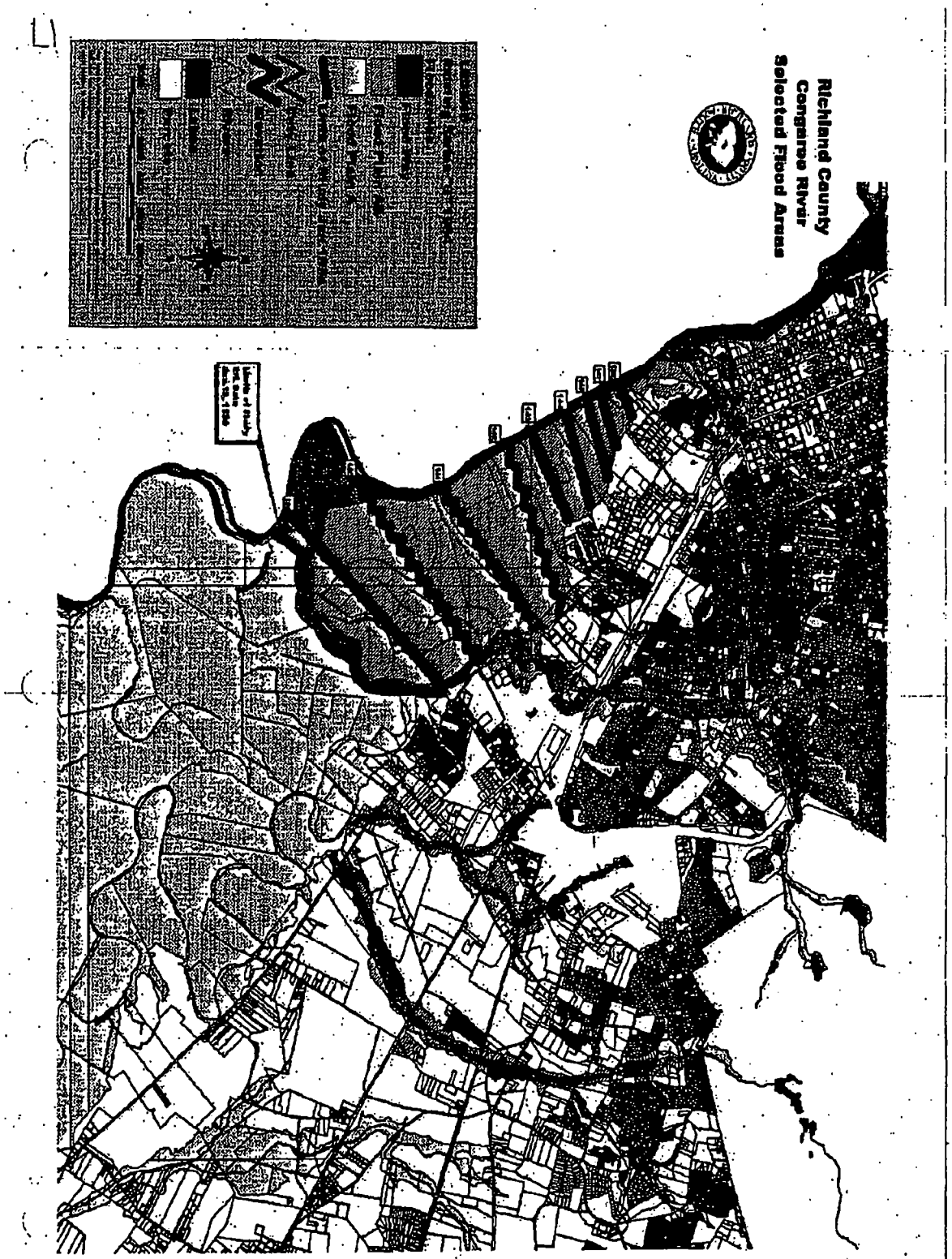
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DEF-00000056

PLTF TRIAL EXH 166

DEF-00000057

PLTF TRIAL EXH 166



DEF-00000058

PLTF TRIAL EXH 166



DEF-00000059

PLTF TRIAL EXH 166



DEF-00000060

PLTF TRIAL EXH 166

12-Jan-99

Congaree Properties

DRAFT

Levee System Operation and Maintanance Cost Estimate (1999 Costs)

Annual Maintenance Activity	Number		Frequency		Estimated Cost		Estimated Total Annual Cost
Ground Maintenance							
Mowing grass on levee top	1	ls	2	times/year	$ 12,500	each	$ 25,000
Tree (woody growth) removal on levee sides	1	ls	1	times/year	$ 10,000	each	$ 10,000
Levee Repair							
Repair levee erosion	1	allowance	1	times/year	$ 20,000	each	$ 20,000
Repair levee settlement	1	ls	0.25	times/year	$ 20,000	each	$ 5,000
Seed and Fertilize	1	ls	1	times/year	$ 10,000	each	$ 10,000
Pumping System							
Pump Testing	5	pump sta	12	times/year	$ 200	each	$ 12,000
Pump Replacement	1	pumps	0.5	times/year	$ 5,000	each	$ 2,500
Pump Operation	1	ls	0.2	times/year	$ 100,000	each	$ 20,000
Closure Devices							
Levee penetration backflow repair	5	ea	1	times/year	$ 4,000	each	$ 20,000
Levee penetration backflow replacement	1	ea	1	times/year	$ 10,000	each	$ 10,000
Inspections/Evaluations							
Levee and penetration inspection	1	ls	1	times/year	$ 25,000	each	$ 25,000
Certification	1	ls	1	times/year	$ 5,000	each	$ 5,000
Stormwater Quality Monitoring	1	ls	2	times/year	$ 5,000	each	$ 10,000
					Estimate Total		$174,500

This is a preliminary cost estimate for the purpose of establishing an order of magnitude estimate.

LOCKWOOD GREENE
Consulting·Design·Construction

006217.90
P:\35\doc\tmaintenance estimate.xls

DEF-0000061

PLTF TRIAL EXH 166

3353

Motion for Levee Matter:

I move that the county accept responsibility for local inspection and enforcement of the operations and maintenance plan as submitted by the owner and approved by FEMA, and if required by FEMA regulation 44 CFR 65.10, to accept operation and maintenance responsibility for the levee system contingent upon:

(1) property owners upgrading the levee system to meet FEMA standards as contained in 44 CFR 65.10;
(2) property owners preparing all required documentation including operation and maintenance plans as provided in 44 CFR 65.10;
(3) certification that the levee system, as upgraded, meets FEMA standards; and
(4) the parties, which include Richland County, the City of Columbia, and the developers, resolving to the satisfaction of the County, the issues of the performance and funding of the operation and maintenance responsibility.

The County's acceptance of responsibility as provided herein terminates if the developers of the area do not invest at least $30,000,000 within 10 years of the date of the adoption of this motion. For purposes of this action, "developers" are those persons or entities, including their successors and assigns, who own or invest in the improvements to the levee.

The Council Chairperson or the Chairperson's designee is authorized to take such action necessary and proper to accomplish the purposes of this motion including signing documents and sending correspondence to appropriate officials.

The County reserves its right to inform any person building, constructing, renovating or otherwise changing the land surfaces in the area protected by the levee as to the risk of flooding in the area and opportunities to reduce, eliminate or insure such risk.





The State
www.thestate.com
Columbia TODAY
KNIGHT RIDDER NETWORK

Published Tuesday, February 2, 1999, in The State.

Richland asked to take levees



By AMANDA MAYS
Staff Writer



Richland County is being asked to assume maintenance of 20-plus miles of levees along the Congaree River once they have been brought up to federal standards.

The estimated annual cost to the county is $174,500, which some council members say is a small investment for an area that is ripe for development.

However, at least one councilmember is concerned about the county's potential liability should the earthen dams along the Southeastern Beltway fail.

The County Council will consider the matter during its meeting tonight at 6 in Council Chambers at the County Administration Building, 2020 Hampton St.

Last summer, the Federal Emergency Management Agency released proposed new flood maps, which transferred 5,300 acres along the Congaree River from a flood plain to a flood way. Land in a flood plain can be developed with certain restrictions, while land in a flood way cannot be developed.

Along with thousands of acres of prime farming land that could be developed into commercial and residential property, the affected acreage included the city of Columbia's $150 million sewer plant, the East Richland Public Service District sewer plant and Heathwood Hall Episcopal School.

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PLAINTIFF'S EXHIBIT
DATE ENTERED

FEMA did not consider a system of earthen dikes that had been upgraded 40 years ago. After an outcry from the city and the county, along with nudging from the offices of Senators Fritz Hollings and Strom Thurmond, FEMA agreed to inspect the levees and reconsider its designation.

Lisa Holland with the S.C. Department of Natural Resources said the new maps are expected to be available for review by the end of this month.

Burwell Manning, who owns 4,200 acres of the land, said plans are under way to spend at least $6 million to upgrade the levees. He declined to discuss potential development or developers. He said he is asking the county to take the maintenance because FEMA requires that a public entity maintain the levy system.

"That's done all over the country," Manning said Monday.

Councilwoman Kit Smith has expressed concerns about the county's liability should the levees fail.

"I want to see development go forward, but you can't fool Mother Nature," she said.

County Attorney Larry Smith said he had looked into certain aspects of the liability issue but declined further comment until he gives a legal opinion to council tonight.

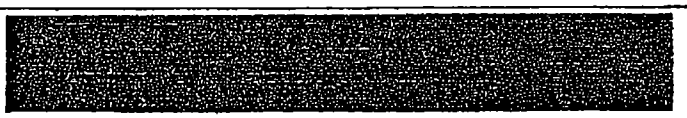
"I'm not quite sure I have all the answers," he said. "I've talked to people and reviewed information, but I haven't had the opportunity to talk to FEMA."

Councilman Steve Morris said the county would show good economic sense if it accepted the maintenance of the levees. Protecting and expansion of the two sewer plants is key to future growth of the city and the county.

"Richland County has a large investment out

there," Morris said. "I suggest we take a close look and protect the investment we have."

Amanda Mays covers Richland County Council and southern Richland County. She can be reached at (803) 771-8385 or by e-mail at amays@thestate.com.



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SOUTHERN ENVIRONMENTAL LAW CENTER

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Telephone 919-967-1450
Facsimile 919-929-9421
selcnc@selcnc.org

Charlottesville, VA
Chapel Hill, NC
Atlanta, GA

March 16, 2001

VIA FACSIMILE AND U.S. MAIL

Members of Council
Richland County Council
PO Box 192
Columbia, S.C. 29202



Re: Amendments to Chapter 8, Richland County Code of Ordinances (Drainage, Erosion and Sediment Control).

Dear Ladies and Gentlemen:

As you know, the City of Columbia and Heathwood Hall School are concerned that Richland County's stormwater ordinance could limit their ability to improve and protect existing facilities near the Congaree River. As you also know, however, their concerns do not arise from any new restrictions proposed by Richland County – Richland County's *existing* stormwater ordinance prohibits structures in the regulatory floodway that interfere with or slow the free flow of water during times of flooding.[1]

What is prompting the new concerns is FEMA's proposed reclassification of the areas containing the Wastewater Treatment Plant ("WWTP") and Heathwood Hall as regulatory floodway, which would trigger the already existing ban on floodway impediments. Because of that possibility, Richland County is considering modification of the ban on floodway impediments to allow for protection and expansion of the WWTP and Heathwood Hall.

While we support exceptions to that limited end, Richland County must be careful not to eviscerate the existing high level of flood protection enjoyed by its citizens. An open-ended variance procedure could result in Richland County having its participation in

[1] See January 2, 2001 letter from George Wolfe, Esq. to Richland County Development and Services Committee, at 4. It should be noted that this standard is in fact clearer than a "no rise" standard.

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the National Flood Insurance Program challenged and revoked.[2] Furthermore, reducing the existing level of flood protection in Richland County could cost the County at least $16,650 every year in flood insurance premium reductions.

We propose the attached language to maintain the existing high level of protection for the people of Richland County while meeting the concerns of the City of Columbia WWTP and Heathwood Hall. The limited exception would recognize the obvious existing value of the School and WWTP to the community and the high costs of relocating these already constructed pieces of civic infrastructure. Further, by limiting the exemption to those existing facilities, Richland County would not be opening itself up to new development in areas of known flood hazard and the substantial costs – fiscal, environmental and human – that such development entails.

We therefore urge you to not weaken Richland County's existing prohibition on floodway encroachments, but to add appropriate exceptions for existing, already constructed schools and publicly owned treatment works. Properly limited, those exceptions would meet all FEMA standards, protect important existing infrastructure and maintain a responsible level of protection for the citizens of Richland County.

Thank you for the opportunity to comment on this important matter.

Very truly yours,

J. Blanding Holman

encl.

cc: Mr. George Wolfe, Esq.
Ms. Mullen Taylor
Mr. Frank Ellerbe, Esq.

[2] FEMA regulations require that communities participating in the NFIP must prohibit encroachments, including substantial improvements, within the adopted regulatory floodway that would cause any increase in flood levels within the community during the base flood discharge. 44 C.F.R. § 60.3(d)(3). Because this ban on flood-increasing encroachments is contained in the "minimum standards" for community participation in the National Flood Insurance Program, a community must abide by them to establish "flood insurance eligibility." See 44 C.F.R. § 60.2(a), 60.3. A community that permits such construction through a pattern of variances risks having its participation in the National Flood Insurance Program challenged and revoked. See 44 C.F.R. § 60.6(a) (providing for review of community variance procedures and suspension of eligibility under 44 C.F.R. § 59.24).

Sec. 8-27 Primary Drainage Channel Requirements

(h) Notwithstanding any other provisions of this ordinance including those relating to exceptions and variances, no levees, dikes, fill materials, structures or obstructions that will impede the free flow of water during times of flood will be permitted in the regulatory floodway, unless:

(1) such impediment is an integral feature of any public or private school that was constructed and operated before January 1, 2001 on property subsequently classified as a special flood hazard area; or

(2) such impediment is an integral feature of a publicly owned wastewater treatment facility that that was constructed and operated before January 1, 2001 on property subsequently classified as a special flood hazard area;

provided, however, that any activities permitted under subsections (1) or (2) must comply with all otherwise applicable federal state and local requirements and shall require certification by a professional engineer demonstrating that the encroachment will not result in any increase in flood levels during the base flood discharge.

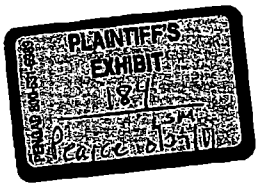
ADMINISTRATION
(Hullen Taylor)

ROBINSON, MCFADDEN & MOORE, P.C.

March 20, 2001

HAND DELIVER

The Honorable Kit Smith
Richland County Council Chairperson
2020 Hampton Street
Post Office Box 192
Columbia, SC 29202



Re: Proposed Amendments to Richland County Ordinances

Dear Kit:

I am writing in my capacity as Chairman of the Board of Trustees of Heathwood Hall Episcopal School to address the County's restrictions on development in the floodway. I appreciate your agreeing to meet with me and other Heathwood representatives on two occasions over the last several weeks. As we have explained in those meetings, Heathwood has been placed in a very awkward position by FEMA's process of revising the Richland County Flood Maps. Since 1998 when this process began Heathwood has been unable to move forward with any building projects to address our need to expand our facilities.

As you know, we have closely followed the process by which the floodway issues have been addressed. I have become convinced that a final resolution is not likely for some time to come. When I reported this conclusion to our board we made the decision that the school needed to move forward as soon as we can do it. In order to do that we have prepared plans for enlarging and expanding our facilities in ways that would meet the FEMA standards for construction in a floodway. The school would like to move forward immediately with those plans but in order to do so we would have to obtain building permits from Richland County. As we understand the current interpretation of Richland County's stormwater and zoning provisions the County would not issue a building permit despite the fact that our planned construction would meet the FEMA standards for construction in a floodway.

For these reasons we are asking County Council to amend its stormwater and zoning ordinances to clarify the existing ambiguity and to adopt the FEMA minimum standards for construction in a regulatory floodway. As we understand it, adoption of the FEMA requirements would bring Richland County in line with most jurisdictions around the country and would provide a clearly understood standard for permitting construction in a floodway. Adoption of that standard throughout the county would treat all county landowners equally and would not single Heathwood out for special treatment. It would also provide us an enormous benefit in that we would be able to move forward with our expansion plans while the FEMA mapping process drags on.

Mc&M

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John S. Taylor, Jr.
Daniel T. Brailsford
Frank R. Ellerbe, III
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PLTF TRIAL EXH 184

I appreciate your consideration of our position and would be pleased to provide any additional information to you, other council members or Richland County staff.

Yours truly,

ROBINSON, McFADDEN & MOORE, P.C.

Frank R. Ellerbe, III

FRE/bs

c: County Council Members (via hand delivery)
Stephen D. Hickman
Mullen Taylor (via hand delivery)

DEF-00002248

Congaree Task Force
1501 RICHLAND STREET29201
POST OFFICE BOX 291
COLUMBIA, SOUTH CAROLINA 29202

TELEPHONE NUMBER
803-254-1675
FACSIMILE NUMBER
803-799-3141

March 20, 2001

Mullen Taylor
Office of the Richland County Administrator
P.O. Box 192
Columbia, SC 29202

RE: Proposed Stormwater Ordinance Amendment

Dear Ms. Taylor,

I am writing on behalf of the Congaree Task Force to express its endorsement of the enclosed version of section 8-26 of the county's proposed Stormwater Ordinance. Please submit this proposal to all members of County Council. We believe that this proposal is appropriate because it keeps in place the county's general prohibition on construction in a floodway, while at the same time the proposal specifically allows both Heathwood Hall Episcopal School and the City of Columbia Waste Water Treatment Plant to go ahead with any construction plans they may have in the future.

We recommend the enclosed language because it equitably protects the existing entities in the floodway, while at the same time maintaining the county's long-standing prohibition on construction in the floodway. We believe it should be Richland County's policy to continue to discourage new construction in the floodway because of the perils to human life and to property that are presented by development in such an area. I remain,

Yours very truly,

Weston Adams, III,
Chairman, Congaree Task Force
WAIII/mc

enclosures

F:\congaree task force.wpd



PLTF TRIAL EXH 185

Sec. 8-26 Primary Drainage Channel Requirements

(h) Notwithstanding any other provisions of this ordinance including those relating to exemptions and variances, no levees, dikes, fill materials, structures or obstructions that will impede the free flow of water during times of flood will be permitted in the regulatory floodway, unless:

(1) such impediment is or would be an integral feature of any public or private school that was constructed and operated before January 1, 2001 on property subsequently classified as a special flood hazard area; or

(2) such impediment is or would be an integral feature of a publicly owned wastewater treatment facility that that was constructed and operated before January 1, 2001 on property subsequently classified as a special flood hazard area;

provided, however, that any activities permitted under subsections (1) or (2) must comply with all otherwise applicable federal, state and local requirements and must comply with 44 C.F.R. 60.3 (d)(3), which prohibits any encroachments, including fill, new construction, substantial improvements and other development within the adopted regulatory floodway unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge.

RICHLAND COUNTY COUNCIL
REGULAR SESSION
MARCH 20, 2001
6:00 P.M.

MEMBERS PRESENT: Kit Smith, Chair; L. Gregory Pearce, Jr., Vice-Chair; Joan B. Brady, Susan Brill, Paul Livingston, Joseph McEachern, J.D. "Buddy" Meetze, Anthony Mizzell, Bernice G. Scott, Thelma M. Tillis, James Tuten

OTHERS PRESENT: Michielle Cannon-Finch, T. Cary McSwain, Darren Gore, Larry Smith, Amelia Linder, Milton Pope, Tony McDonald, Randy Jorgenson, Monique Walters, Mullen Taylor, Pam Davis, Ash Miller, Ralph Pearson, Marshelka Martin

CALL TO ORDER

The meeting was called to order at approximately 6:04 p.m.

PRESENTATION OF RESOLUTION (Bob Pulliam; Douglas Oates, Bernie McGuire)

On behalf of Council, Mr. Pearce presented a Resolution of commendation to Mr. Bob Pulliam. Ms. Brill presented a Resolution of commendation to Mr. Bernie McGuire.

ADOPTION OF AGENDA

Mr. Livingston stated he needed to add the following two items to the Report of the Rule and Appointments Committee:

- Council Rules as item 4-b.
- A report of the Central Midlands Regional Transit Authority Board as 4-c.

Ms. Scott moved, seconded by Mr. Mizzell, to adopt the agenda as amended. The vote in favor was unanimous.

CITIZEN'S INPUT

The following persons spoke during Citizen's Input:

- Mr. Chip Carter spoke of concerns regarding 2.d.
- Mr. Robin White spoke in favor of items 1-a and 1-b.
- Mr. Kirkman Finly III spoke of concerns regarding item 3.a.
- Mr. John Foster spoke of concerns regarding item 3.a.
- Ms. Sally Crane spoke of concerns regarding item 3.a.
- Mr. John Finnal spoke of concerns regarding item 3.a.
- Ms. Ruth Johnson spoke of concerns regarding item 3.a.
- Mr. Jim Wiseman spoke of concerns regarding item 3.a.
- Mr. Bill Boyd spoke of concerns regarding item 3.a.



APPROVAL OF MINUTES

Regular Session: March 7, 2001

Ms. Scott moved, seconded by Ms. Brady, to approve the minutes. The vote in favor was unanimous.

REPORT OF COUNTY ATTORNEY FOR EXECUTIVE SESSION MATTERS

Mr. Larry Smith, County Attorney, stated there were no items on the agenda to be discussed in Executive Session.

REPORT OF COUNTY ADMINISTRATOR

Detention Center Renaming Ceremony

Mr. McSwain commented that the ceremony was well received and thanked staff for their successful efforts.

Budget Process

Mr. McSwain stated that 60% of Department/Agency budget requests have been reviewed and the process is moving smoothly.

City-County Planning Co-Location

Mr. McSwain stated that the City-County Planning Committee met this week to discuss co-location. The City recognized the need for joint planning efforts and both the City and County are continuing to look at available options.

Governor's Summit on Growth

Mr. McSwain announced that several County Council Members and staff members attended the conference held last week.

Southeastern Economic Alliance

Mr. McSwain attended a Southeastern Economic Alliance meeting to discuss high-speed rail for the southeast region. He stated he would continue to participate in these meetings and will keep Council informed of the progress made.

OPEN/CLOSE PUBLIC HEARING ITEM

2.c. Schmalbach Lubeca

The floor was open for a public hearing.

Ms. Smith stated no one signed up to speak to the public hearing.

The public hearing was closed.

APPROVAL OF CONSENT ITEMS

1.a Approval of an ordinance authorizing a Development Agreement between Richland County, South Carolina and Village at Sandhill, LLC, and other matters related thereto – Third Reading approval given to this ordinance authorizing the execution of a Development Agreement.

2. SECOND READING ITEMS

2.a. 01-23MA, Wendy Luce, First Commercial Company, From D-1 to C-3, 17112-01-01(P), South Side Rabon Road Just East of Farrow Road – Second reading given to this rezoning request.

2.b. Ordinance Amendment: Increase In County Code Violation – Second reading approval given to an ordinance amendment that increases the maximum penalty for code violations from $200.00 to $500.00.

2.c. Schmalbach Lubeca – Second reading approval given to an ordinance consenting to revisions to the lease agreement between Richland County and Schmalbach Lubeca and the lease agreement between Richland County and Wilmington Trust Company to provide for a sale-leaseback arrangement between Schmalbach Lubeca and its affiliates.

2.d. Business Directory Signs – Second reading given to this ordinance amendment that provides for regulations permitting business and/or industrial development directory signs.

1. THIRD READING ITEMS

a. 01-26MA, Alan B. Kahn, Clemson University, From C-1 to RG-2 and C-3, 23000-02-02 (P), (deferred from Council meeting of 3/7/01)

Ms. Scott moved, seconded by Mr. Mizzell, to approve this item for Third Reading. The vote was in favor. Ms. Brill opposed.

3. FIRST READING ITEMS

a. Storm Water Management Ordinance

Mr. Meetze moved, seconded by Ms. Scott, to adopt the minimum FEMA standards and leave the impediment out.

A discussion took place.

Mr. Meetze called for the question, seconded by Ms. Scott. The vote was as follows:

In favor	Oppose
Mizzell	Brady
Meetze	Livingston
Scott	Pearce
	Smith
	McEachern
	Brill
	Tuten
	Tillis

The call for the question failed.

Ms. Brill made a substitute motion, seconded by Mr. McEachern, to adopt the storm water management ordinance draft of 3.15.01 as amended with the incorporation of new amendments, Section 8-269(h) strike and insert. (The amendments are attached to the minutes).

Mr. Pearce offered an amendment to the motion requesting the Chair to write a letter to FEMA noting that the vote by Council today in no way reflects Council's position on any development in this area. Ms. Brill and Mr. McEachern accepted the motion.

A discussion took place.

Ms. Scott wanted the record to reflect "that this motion is definitely against any development in that area. We have had landowners on top of landowners that came before us today to tell us to take out just those two entities. What we are doing to landowners is saying we don't need you there, but we are going to take care of the school, the City and the Wastewater Treatment Plant."

The vote on the substitute motion was as follows:

In favor	Oppose
Brady	Livingston
Pearce	Mizzell
Smith	Meetze
McEachern	Scott
Brill	Tillis
Tuten	

The substitute motion passes.

Ms. Scott wanted the record to reflect "that this is a first step for a lawsuit because this is definitely wrong."

Council recessed at 7:25 p.m. and reconvened at approximately 7:27 p.m.

b. Conservation Commission Ordinance

Mr. Pearce moved, seconded by Ms. Brill, to give First Reading approval to an ordinance that moves provisions of the Richland County Code that establishes the Conservation Commission from the Stormwater Managements Chapter to Chapter 2, Administration, Article VII, Boards, Commissions, and Committees. The vote in favor was unanimous (Ms. Scott was away during the vote).

c. Littering Penalty Ordinance

Mr. Mizzell moved, seconded by Ms. Brady, to give First Reading to an ordinance amendment that corrects an inconsistency between the littering fine found in the Stormwater Management Ordinance and the Garbage, Trash and Refuse Ordinance. The vote in favor was unanimous.

4. REPORT OF RULES AND APPOINTMENTS COMMITTEE

a. Notification of Vacancy on the Building Board of Adjustment and Appeal

Mr. Livingston gave notification of three vacancies on this board. He stated an engineer, contractor and a plumber are needed.

b. Council Rules

Mr. Livingston announced that revised Rules would be ready for Council action at the next Council Meeting.

c. Appointments to Regional Transit Authority

Mr. Livingston reminded Council there are eight appointments to that board. He stated there is a combination of council members and citizens on the board and asked Council for their input regarding this.

It was decided to appoint Mr. Meetze, Mr. Livingston, Mr. McEachem and Ms. Brady to serve as Council representatives, with four citizens appointed as well. Mr. Livingston requested for staff to start advertising for citizens to serve on the board.

5. MOTION PERIOD

- Ms. Scott requested Mr. McSwain to investigate allegations of misuse of County personal computers and laptops, and to produce an inventory of computers accounting for all hardware and software.
- Mr. McEachem/Ms. Tillis moved to adopt a Resolution commending Keenan High School for winning 3A basketball championship. Ms. Smith stated this will not go through committee, but would come back to Council.
- Mr. Mizzell/Mr. Pearce/Ms. Smith moved to adopt a Resolution commending Dreher High School for winning the women's 3A-varsity basketball championship. Ms. Smith stated this will not go through committee, but would come back to Council.
- Ms. Brill requested that Council read the S.C. Highway Beautification Act in preparation for billboard work session scheduled for March 27th at 4:00 p.m.
- Mr. Pearce moved to adopt a Resolution recognizing Mr. Walter Todd upon his retirement from the Midlands Technical School Board of Directors.
- Mr. Pearce moved to adopt a Resolution recognizing Ms. Jean Stiglebower for receiving the award of S.C. Middle School Administrator of the Year.
- Ms. Brady encouraged Council to attend the Gang Awareness Workshop on tomorrow, March 21st.
- Mr. McSwain announced that discounted passes for the Three Rivers Music Festival are available if Council is interested.

6. CITIZEN'S INPUT

- Mr. Fred Cunningham spoke of issues concerning the Sheriff's Department.

7. ADJOURNMENT

The meeting adjourned at approximately 7:41 p.m.

Kit Smith, Chair

L. Gregory Pearce, Jr., Vice-Chair

Joan Brady

Susan Brill

Paul Livingston

Joseph McEachern

J.D. "Buddy" Meetze

Anthony G. Mizzell

Bernice G. Scott

Thelma M. Tillis

James Tuten

The minutes were transcribed by Marshelka G. Martin

RICHLAND COUNTY COUNCIL
REGULAR SESSION
APRIL 17, 2001
6:00 P.M.

MEMBERS PRESENT: Kit Smith, Chair; L. Gregory Pearce, Jr.; Joan Brady; Susan Brill; Paul Livingston; Joseph McEachern; J.D. "Buddy" Meetze; Anthony G. Mizzell; Bernice G. Scott; Thelma M. Tillis; James Tuten

OTHERS PRESENT: T. Cary McSwain, Tony McDonald, Milton Pope, Larry Smith, Michielle Cannon-Finch, Amelia Linder, Monique Walters, Stephany Snowden, Jocelyn Jennings, Mullen Taylor, Ash Miller, Marsheika Martin, Randy Jorgenson

CALL TO ORDER

The meeting was called to order at approximately 6:05 p.m.

INVOCATION

The Invocation was given by the Honorable Jim Tuten.

REPORT OF COUNTY ATTORNEY FOR EXECUTIVE SESSION MATTERS

Mr. Larry Smith, County Attorney, stated there are possible items under the Report of Economic Development that might need to be discussed in Executive Session.

ADOPTION OF AGENDA

Mr. Mizzell moved, seconded by Mr. Pearce, to adopt the agenda as submitted. The vote in favor was unanimous.

PRESENTATION OF RESOLUTIONS:

A. Walter B. Todd, Midlands Technical College Commission

Mr. Pearce presented this resolution to Mr. Todd for his services at the Midlands Technical College.

B. Keenan High School Basketball Team

Mr. McEachern and Ms. Tillis presented Resolutions to each member of the team for winning the 3A Basketball championship.

POINT OF PERSONAL PRIVILEDGE

Mr. McEachern recognized his wife, Penny McEachern, at the meeting.

CITIZEN'S INPUT

(Council consented to Mr. Henry Burke speaking to an item not on the agenda at this time.)



- Mr. Henry Burke spoke of a personal problem in Woodfield Park regarding garbage cans.
- Mr. Bill McClanahan spoke in reference to public hearings being held at Third Reading.

APPROVAL OF MINUTES

Zoning Public Hearing: March 27, 2001

Regular Session: April 3, 2001

The minutes were approved as submitted.

REPORT OF COUNTY ADMINISTRATOR

FEMA Training

Mr. T. Cary McSwain, County Administrator, commended council members and staff in attendance at the Disaster Preparedness Training held in Virginia last week.

Reception for Boards and Committees

Mr. McSwain reminded Council that a reception would be held on Wednesday, April 18th at 5:15 p.m. honoring those who serve on Richland County boards and commissions.

Budget Calendar

Mr. McSwain asked Council to consider recommended revisions to the budget calendar. Ms. Smith suggested that this issue be discussed during the weekly management meeting.

Sewer Spill Update

Mr. McSwain informed Council that the sewer spill reported to Council last week has been contained and cleaned.

OPEN/CLOSE PUBLIC HEARING ITEMS

Ms. Smith opened the floor to a public hearing.

Storm Water Management Ordinance

The following persons signed up to speak "in favor" of this item:

- Ms. Cynthia Flynn
- Mr. Yancy McLeod
- Ms. Carol Kososki

DEF-00012111

PLTF TRIAL EXH 190

No one signed up to speak "against" this item.

Conservation Commission Ordinance

The following persons signed up to speak "against" this item:

- Ms. Evelyn Bush
- Minister Abraham Bebinger
- Ms. Lillie Bates
- Ms. Helen Taylor
- Ms. Anne Terreni
- Ms. Laverne Neal
- Mr. Marcus Neal
- Mr. Lawrence Moore
- Ms. Jessica Nates
- Ms. Kay McClanahan
- Mr. Bill McClanahan
- Ms. Ann Kiaby
- Ms. Shawanda J. Neal

No one signed up to speak "in favor" of this item.

Littering Penalty Ordinance

Ms. Smith stated no one signed up to speak to this item.

Ms. Smith closed the public hearings.

APPROVAL OF CONSENT ITEMS

Ms. Brill moved, seconded by Mr. Mizzell, to approve the following consent items:

1-d. Littering Penalty Ordinance – Third reading given to this ordinance amendment that corrects an inconsistency between the littering fine found in the Storm Water Management Ordinance and the Garbage, Trash and Refuse Ordinance.

1-e. 01-15MA, Thomas McGee, From RU to C-2, 20200-03-34, 4114 Hard Scrabble Road - Third reading given to this rezoning request.

1-f. 01-44MA, Roy W. Derrick, From D-1 to C-3, 06110-03-07, 3517 Broad River Road – Third reading given to this rezoning request.

1-g. 01-45MA, Stan Mack, From D-1 to C-3, 11704-03-08, Buckner Road – Third reading given to this rezoning request.

DEF-00012112

PLTF TRIAL EXH 190

1-h. **01-46MA, Chip Carter, Very Small Properties, From RG-2 to C-3, 25600-03-05, Percival Road** – Third reading given to this rezoning request.

1-i. **Sexually Oriented Businesses** – Third reading given to this zoning ordinance amendment that deletes the section "injunction" from the Sexually Oriented Businesses Article due to fines being stated in another ordinance.

1-j. **Landscape Ordinance** – Third reading approval given to this ordinance amendment that increases the maximum fine amount for violations.

2-a. **Easement for SCE&G Pressure Release Station** – Second reading approval of an ordinance authorizing the County to grant this easement for the installation of a gas regulation station on the Public Works Compound in Ballentine.

2-b. **Quit Claim Deed for Woodcreek Development and the Ridge** – Second reading approval given to an ordinance authorizing execution of quit-claim deeds for a road right-of-way located on the east side of Spears Creek Road in return for payment of $3,145.00.

2-c. **Appearance Commission: Voting Members** – Second reading approval of this ordinance amendment that provides two additional voting members to the Appearance Commission.

2-d. **Detention Center: Pilot Project for House Arrest** – Second reading approval given to an ordinance authorizing the Detention Center to offer electronic monitoring, or house arrest, for inmates, with participating defendants bearing all associated costs.

2-e. **Airport Commission: Lease Agreement for Curtiss Wright Hanger** – Second reading approval given to an ordinance authorizing a lease agreement with the Curtiss-Wright Hanger Association, a division of the Celebrate Freedom Foundation, for $1.00 a year for 20 years in order to raise private funds for renovation of the Hangar

1. **THIRD READING ITEMS**

a. **Business Directory Signs (Deferred from 4/3/01 mtg)**

Mr. Pearce offered an amendment to the ordinance. (See attachment to the minutes). He stated the amendment allows the developer to assign up to 20% of the available sign space to a tenant. He stated it does not increase the size of the sign, it is not an advertising sign nor is it a billboard. Mr. Pearce stated it is simply a business directory sign.

Mr. Pearce moved, seconded by Ms. Brady, to amend the Business Directory Sign Ordinance. The vote in favor was unanimous.

The vote in favor of the business directory sign ordinance was unanimous.

b. Storm Water Management Ordinance

Ms. Brill moved, seconded by Ms. Brady, to adopt the storm water management ordinance.

Mr. Meetze offered a friendly amendment, seconded by Ms. Scott, to delete the word "impede" from the ordinance or defined by an engineering calculation.

Ms. Brill did not accept the amendment.

Mr. Meetze withdrew his amendment.

Mr. Meetze made a substitute motion, seconded by Ms. Scott, to define the word "impede" with an engineering calculation.

A discussion took place.

The vote in favor of the substitute motion was as follows:

In Favor	Oppose
Meetze	Brady
Scott	Livingston
	Mizzell
	Pearce
	Smith
	McEachern
	Brill
	Tuten
	Tillis

The motion failed.

The vote in favor of the main motion was as follows:

In favor	Oppose
Brady	Livingston
Mizzell	Meetze
Pearce	Scott
Smith	
McEachern	
Brill	
Tuten	
Tillis	

The motion passed.

c. Conservation Commission Ordinance

Ms. Scott moved, seconded by Ms. Tillis, to defer this item for more clarification and hold a work session.

The vote was as follows:

In favor	Oppose
Livingston	Brill
Scott	Brady
Tillis	Smith
Meetze	
Pearce	
McEachern	
Tuten	
Mizzell	

The motion passed.

3. REPORT OF ECONOMIC DEVELOPMENT COMMITTEE

a. Consideration of incentives for an unannounced company expansion

Mr. Livingston stated the committee deferred this item for additional information.

b. Consideration of incentives for an unannounced company

Mr. Livingston stated the committee recommended denial of incentives of the unannounced company. The vote in favor was unanimous.

c. Approval of deeds to water line relocation SCE&G right-of-way for Blue Cross/Blue Shield

Mr. Livingston stated the Committee recommended first reading approval of an ordinance authorizing a deed to the City of Columbia for water line relocation and first reading approval given to an ordinance authorizing a right-of-way to SCE&G for gas lines. The vote in favor was unanimous.

d. Identification of preliminary issues pertaining to Columbia Venture's economic proposal

This item was received for information only.

e. Approval of ordinance confirming Council's policy on Multi-County Business Park fee distribution

Mr. Livingston stated the Committee recommended first reading approval of an ordinance confirming the County's distribution of fees derived from a Multi-County Business Park in the following manner:

1. To first reimburse itself for any County funds expended to provide an incentive to an economic development project locating in the Park;
2. To share such portion of the Park revenues with Fairfield County as required by the agreement establishing a particular phase of the Park;
3. To distribute the remaining Park revenues among the tax entities within the County that would otherwise be entitled to a share of the Park revenues if such revenues were regular ad valorum taxes instead of a fee;
4. And to make such distribution in the same proportion as ad valorum taxes would be distributed.

The vote in favor was unanimous. (Ms. Scott was away during the vote).

f. **Right-of-Entry Agreement for Lots in Industrial Park**

Mr. Livingston stated the Committee recommended approval of an execution of an agreement between the County and Crown Castle South, a telecommunications company, that allows Crown Castle South entry onto lots 19 and 33 of the Richland Northeast Industrial Park for the purpose of assessing the feasibility of leasing or purchasing these lots to locate a communications tower on the property. The vote in favor was unanimous.

4. **REPORT OF RULES AND APPOINTMENTS COMMITTEE**

Notification of Vacancies to Boards, Commissions, and Committees

a. **Appointments to the Building Board of Adjustment and Appeal-3**

Mr. Livingston stated there are three appointments to be made to this board. He stated persons appointed to this board must represent the contracting, engineering and plumbing industry. This was received as information.

b. **Central Midlands Regional Transit Authority-3**

Mr. Livingston stated there are three appointments to be made to this board. He stated the Committee recommended re-advertising for this board. The vote in favor was unanimous.

Ms. Brill moved, seconded by Ms. Brady, to appoint four (4) citizens to the board and four (4) Council members instead of three citizens and five council members. The vote in favor was unanimous.

Mr. Livingston, Ms. Brady, Mr. McEachern, Mr. Meetze had agreed to serve on this board.

c. **Amendment to County Council Rules**

Ms. Smith recommended amending the following language in the Council's rules:

- "Input must pertain to items on the agenda for which there is no public input hearing", be changed to: "for which no public hearing is required or has been scheduled."

A discussion took place regarding this issue.

- 2.2, Preservation of Order: Ms. Smith stated there is no mention in Council's rules of the citizen's conduct which would give the Chair the authority to rule them out of order. She recommended the following: **The members of Council and the public who participate in the meetings agree to adhere to the following code of conduct:** (The Code of Conduct is printed on all Citizen Sign-Up Sheets and placed before each Council member's seat.

- 4.1.c, Rules and Appointments: She recommended striking the language that states "often on short notice."

- Ms. Smith stated Council needed to decide how many members are wanted on the Economic Development Committee. She recommended having three (3) members on the Rules and Appointments Committee and the Economic Development Committee having three (3) members, except for this year as there are presently four (4) Council members on that board. The Economic Development Committee will have three (3) members effective January 1, 2002.

- She recommended that Council require two-thirds majority vote in order to suspend the rules with notice or in order to amend the rules with notice; e.g. eight of the eleven Council members.

Ms. Brill moved, seconded by Ms. Brady, to adopt amendments. The vote in favor was unanimous.

It was moved and seconded to adopt the rules as amended. The vote in favor was unanimous.

Mr. Pearce requested a clean copy of the rules as adopted to every member of Council.

Mr. Livingston and Ms. Smith commended the legal staff and the Clerk's office for their assistance in this matter.

5. **APPROVAL OF RESOLUTIONS**

a. **Richard Vershawn Seymour** – Ms. Scott stated Mr. Richard Seymour will be signing with the Georgia Bulldogs on Saturday, April 21st at 3:00 p.m. in Gadsden. She will present the Resolution to him at that time on behalf of Council.

b. **Appointment and Commissioning of Code Enforcement Officer Harry L. Reed**

It was moved and seconded to approve the above Resolutions. The vote in favor was unanimous.

6. **CITIZEN'S INPUT**

No one signed up to speak at this time.

7. MOTION PERIOD/ANNOUNCEMENTS

- Ms. Tillis moved to forward to Council without Committee consideration the adoption of a Resolution commending Ms. Marie Frierson for recognition as Foster Parent of the Year.
- Ms. Scott stated that it has been requested that there be a Special Called Meeting on April 26th at 6:00 p.m. regarding a proposal from Columbia Venture. Ms. Smith suggested that the presentation take place on May 1st at 5:30 p.m. before full Council.
- Ms. Smith announced that a task force would lead the negotiation process with Columbia Venture. The task force included Ms. Smith, Mr. Pearce, Ms. Scott, Mr. McEachern and Mr. Livingston.
- Mr. Tuten requested for the Sheriff's Department to make a presentation before Council regarding gang activity.
- Ms. Brill announced that Mr. Tuten's birthday is April 19th and wished him a happy birthday. It was also noted that Mr. McEachern's birthday is in April as well.
- Mr. McEachern moved to approve the adoption of a Proclamation recognizing April 18th as Volunteer Appreciation Day.
- Mr. Meetze moved to forward to Council without Committee consideration the adoption of a Resolution commending County staff who participated in the Disaster Preparedness training held last week.
- Mr. Livingston moved to forward to Council without Committee consideration the adoption of a Resolution commending Ms. Tracy Cooper for her award as Teacher of the Year.
- Ms. Tillis congratulated Jocelyn Jennings on her recent marriage.

8. ADJOURNMENT

The meeting adjourned at approximately 7:45 p.m.

Kit Smith, Chair	L. Gregory Pearce, Jr., Vice-Chair
Joan Brady	Susan Brill
Paul Livingston	Joseph McEachern
J.D. "Buddy" Meetze	Anthony G. Mizzell
Bernice G. Scott	Thelma M. Tillis

James Tuten

The minutes were taken by Marsheika G. Martin

DEF-00012119

PLTF TRIAL EXH 190

RICHLAND COUNTY COUNCIL
REGULAR SESSION
APRIL 3, 2001
6:00 P.M.

MEMBERS PRESENT: Kit Smith, Chair; L. Gregory Pearce, Jr., Vice-Chair; Joan B. Brady; Susan Brill; Paul Livingston; Joseph McEachern; J.D. "Buddy" Meetze; Anthony G. Mizzell; Bernice G. Scott; Thelma M. Tillis; James Tuten

OTHERS PRESENT: T. Cary McSwain, Michielle Cannon-Finch, Darren Gore, Michael Byrd, Darren Gore, Monique Walters, Milton Pope, Tony McDonald, Pam Davis, Chief Harrell, Ralph Pearson, Stephany Snowden, Larry Smith, Amelia Linder, Mullen Taylor, Randy Jorgenson, Jim Prater, Members of the EMS Department, Marsheika Martin

CALL TO ORDER

The meeting was called to order at approximately 6:00 p.m.

INVOCATION

The Invocation was given by the Honorable Jim Tuten.

ADOPTION OF AGENDA

Mr. McSwain stated a Presentation by Martha Bogle of the National Park Service would be presented under the Report of the County Administrator.

Ms. Smith stated the City of Columbia has requested a zoning change to be added to the agenda regarding the water plant. She stated it could be added to the agenda with unanimous consent. Mr. Meetze objected.

Ms. Smith stated the Storm Water Management Ordinance would be moved to the end of the agenda as item 6.

Mr. Mizzell moved, seconded by Mr. Pearce, to adopt the agenda as amended. The vote in favor was unanimous.

POINT OF PERSONAL PRIVILEGE

Mr. Pearce recognized Bob Russell, Bruce Rippeteau and C.V. Smith and thanked them for coming out to support the Lease Agreement for the Curtiss Wright Hangar that was on the consent agenda.

PRESENTATION OF RESOLUTIONS

Emergency Services Department – Mr. McSwain presented a Resolution commending EMS employees.

Miss Austin Newman, S.C. Volunteer of the Year – Mr. Pearce presented a Resolution to Miss Newman for her outstanding volunteer work.

CITIZEN'S INPUT

- Ms. Susanne Jordan spoke in opposition of the Storm Water Management Ordinance.



DEF-00012103

PLTF TRIAL EXH 191

- Mr. Michael Letts spoke of concerns regarding the Storm Water Management Ordinance.
- Ms. Kay Powell Rushe spoke in opposition of the Storm Water Management Ordinance.
- Ms. Cathy Novinger spoke in opposition of the Storm Water Management Ordinance.
- Ms. Virginia Sanders spoke in opposition of the Storm Water Management Ordinance.
- Mr. Patrick Palmer spoke in opposition of the Storm Water Management Ordinance.
- Mr. Robert Fitzsimons spoke in favor of the Storm Water Management Ordinance.
- Mr. Jim Prater presented two recommendations to Council regarding the Military Forest Funds.
- Ms. Lillie Bates spoke in favor of the Storm Water Management Ordinance and in opposition of the Conservation Commission Ordinances.
- Ms. Kay McClanahan spoke in opposition to the Conservation Commission Ordinance.
- L.S. Alexander spoke in favor of the Storm Water Management Ordinance.
- Mr. Bill McClanahan spoke in opposition of the Conservation Commission Ordinance.
- Mr. Richard Scharf spoke in favor of the Storm Water Management Ordinance.
- Ms. Evelyn Bush spoke in opposition of the Conservation Commission Ordinance.
- Mr. Bland Holman spoke in favor of the Storm Water Ordinance.

APPROVAL OF MINUTES - Regular Session: March 20, 2001

Mr. Pearce moved, seconded by Ms. Brady, to approve the minutes. The vote in favor was unanimous.

REPORT OF COUNTY ATTORNEY FOR EXECUTIVE SESSION MATTERS

Mr. Larry Smith, County Attorney, stated Council needed to receive a legal briefing on item 2-a (Storm Water Management Ordinance) in Executive Session.

REPORT OF COUNTY ADMINISTRATOR

Congaree National Monument
Ms. Martha Bogle, Park Director, announced that the Visitor's Center and Access Road Project won the Park Service's National Partnership Award, and thanked the County for their partnership in the project. She stated an awards ceremony will be held in Washington, DC, and the County is invited to attend.

DHEC Public Hearing
Mr. McSwain announced that a DHEC public hearing concerning Lucent Technologies is scheduled for tonight at 7:00 p.m.

OPEN/CLOSE PUBLIC HEARING ITEMS

Ms. Smith stated no one signed up to speak to any public hearings.

APPROVAL OF CONSENT ITEMS

Ms. Brill moved, seconded by Ms. Brady, to approve the following Consent Items as amended:

- **01-23MA, Wendy Luce, First Commercial Company, from D-1 to C-3, South Side Rabon Road East of Farrow Road** – Third Reading given to this rezoning request.
- **Schmalbach Lubeca** – Third reading approval given to an ordinance consenting to revisions to the lease agreement between Richland County and Schmalbach Lubeca and the lease agreement between Richland County and Wilmington Trust Company to provide for a sale-leaseback arrangement between Schmalbach Lubeca and its affiliates.
- **01-37MA, Dibble Manning, from M-2 to M-1, 475 Killian Road** – Third reading given to this rezoning request.
- **Billboard Moratorium** – Third reading given to an ordinance amendment extending the billboard moratorium to July 31, 2001.
- **Littering Penalty Ordinance** – Second reading given to this ordinance amendment that corrects an inconsistency between the littering fine found in the Storm Water Management Ordinance and the Garbage, Trash and Refuse Ordinance.
- **01-15MA, Thomas McGee, from RU to C-2, 4114 Hard Scrabble Road** – Second reading given to this rezoning request.
- **01-44MA, Roy W. Derrick, from D-1 to C-3, 3515 Broad River Road** – Second reading given to this rezoning request.
- **01-45MA, Stan Mack and Thomas Burkett, from D-1 to C-3, Buckner Road** – Second reading given to this rezoning request.
- **01-46MA, Chip Carter, from RG-2 to C-3, Percival Road** – Second reading given to this rezoning request.
- **Change Order: Wiley Easton Construction** – Approved a $97,377.00 increase in this construction contract to relocate sewer lines at the intersection of US 176 and I-26.
- **Easement for SCE&G Pressure Release Station** – First Reading approval of an ordinance authorizing the County to grant this easement for the installation of a gas regulation station on the Public Works Compound in Ballentine.
- **Quitclaim Deeds for Woodcreek Development and the Ridge** – First reading approval given to an ordinance authorizing execution of quit-claim deeds for a road right-of-way located on the east side of Spears Creek Road in return for payment of $3,145.00.
- **Appearance Commission: Voting Members** – First reading approval of this ordinance amendment that provides two additional voting members to the Appearance Commission.
- **Election Commission: Voting Machine Preventative Maintenance** – approved the expenditure of up to $45,000.00 to perform maintenance and upgrades to the County electronic voting machines.
- **Finance: Spending Resolution for the Township and Detention Center** – approved a Resolution authorizing the expenditure of general fund monies in an amount not to exceed $13,030.00 to move forward with renovation of the Township and expansion of the Detention Center which will be reimbursed by the proceeds of general obligation bonds or other identified revenue sources.
- **Detention Center: Pilot Project for House Arrest** – First reading approval given to an ordinance authorizing the Detention Center to offer electronic monitoring, or house arrest, for inmates, with participating defendants bearing all associated costs.
- **Sheriff's Department Vehicles** – Approved the purchase of six replacement vehicles for $129,289.00

- **Airport Commission: Lease Agreement for Curtiss Wright Hangar** – First Reading approval given to an ordinance authorizing a lease agreement with for $1.00 a year for 20 years in order to raise private funds for renovation of the Hangar.
- **Resolution: Dreher High School 3A State Girls Basketball Championship** – approved.
- **Resolution: Keenan High School 3A State Boys Basketaball Championship** – approved.

1. THIRD READING ITEMS

b. Ordinance Amendment: Increase in County Code Violation

Ms. Scott moved, seconded by Ms. Brill, to give Third Reading approval to an ordinance amendment that increases the maximum penalty for code violations from $200.00 to $500.00. The vote in favor was unanimous.

c. Business Directory Signs

Mr. Pearce moved, seconded by Ms. Scott, to defer this item to the next meeting. The vote in favor was unanimous.

2. SECOND READING ITEMS

b. Conservation Commission Ordinance

Ms. Scott moved, seconded by Mr. Meetze, to defer this item.

The vote was as follows:

In Favor	Oppose
Livingston	Brady
Mizzell	Pearce
Meetze	Smith
Scott	McEachern
Tillis	Brill
	Tuten

The motion failed.

Ms. Brill moved, seconded by Ms. Brady, to give Second Reading approval to an ordinance that moves provisions of the Richland County Code that establishes the Conservation Commission from the Storm Water Management Chapter to Chapter 2, Administration, Article VII, Boards, Commissions and Committees.

The vote was as follows:

In favor	Oppose
Brady	Mizzell
Livingston	Meetze
Pearce	Scott
Smith	

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McEachern
Brill
Tuten
Tillis

The motion passes.

h. Sexually Oriented Businesses

Mr. Meetze moved, seconded by Mr. Tuten, to give Second Reading approval to this zoning ordinance amendment that deletes the section "injunction" from the Sexually Oriented Businesses Article due to item 1-a making it unnecessary to state fines in this section. The vote in favor was unanimous.

i. Landscape Ordinance

Ms. Brill moved, seconded by Ms. Brady, to give Second Reading approval to an ordinance amendment that increases the maximum fine amount for violations to $500.00. The vote in favor was unanimous.

4. REPORT OF ADMINISTRATION AND FINANCE COMMITTEE

d. Treasurer's Office: Military Forest Funds

Mr. McSwain stated it was initially recommended that $41,596.92 be applied to the road that would benefit the public from Garners Ferry Road to the Sysco. He stated that $1,000.00 each could be given to School Districts I, II and V.

A discussion took place.

Mr. Livingston moved, seconded by Ms. Scott, to approve the distribution of $44,596.92 in the following manner: 30% to the County and 70% to the three school districts, to be divided in proportion to student population.

Mr. McSwain was directed to bring back a recommendation for spending the County's portion.

The vote in favor was the motion was unanimous.

5. APPROVAL OF RESOLUTION

Ms. Jeanne Stiglbauer and Mr. Walter Todd

Mr. Pearce moved, seconded by Ms. Brill, to approve Resolutions for Ms. Stiglbauer and Mr. Todd. The vote in favor was unanimous.

6. STORM WATER MANAGEMENT ORDINANCE

Ms. Scott moved, seconded by Mr. Meetze, to go into Executive Session. The vote in favor was unanimous.

Council went into Executive Session at approximately 7:10 p.m. and came out at approximately 8:10 p.m.

Mr. Pearce moved, seconded by Mr. McEachern, to come out of Executive Session. The vote in favor was unanimous.

Ms. Brady moved, seconded by Mr. McEachern, to give Second Reading approval to the County Attorney's recommended revisions to Council's amendment made during first reading.

Ms. Smith read into the minutes the revised portion of the ordinance that Council would be adopting.

A discussion took place.

Ms. Scott wanted the record to reflect that the ordinance is against Burroughs and Chapin.

The vote for the motion was as follows:

In favor	Oppose
Brady	Livingston
Mizzell	Meetze
Pearce	Scott
Smith	
McEachern	
Brill	
Tuten	
Tillis	

The motion passes.

7. MOTION PERIOD/ANNOUNCEMENTS

- Ms. Scott moved to adopt a Resolution commended Richard Seymore, a graduate of Lower Richland High School and University of Georgia, for signing with the NFL.
- Ms. Smith stated that new guidelines for the accommodations tax distribution are ready to be used by the Accommodations Tax Advisory Committee this fiscal year.
- Mr. Livingston announced that the Council Rules are completed and will be on the next Council Agenda for approval.

8. CITIZEN'S INPUT

Ms. Smith stated no one signed up to speak at this time.

9. ADJOURNMENT

The meeting adjourned at approximately 8:35 p.m.

Kit Smith, Chair	L. Gregory Pearce, Jr., Vice-Chair
Joan Brady	Susan Brill
Paul Livingston	Joseph McEachern
J.D. "Buddy" Meetze	Anthony G. Mizzell
Bernice G. Scott	Thelma M. Tillis
James Tuten	

The minutes were transcribed by Marsheika G. Martin

SUMMARY REPORT OF
APPROXIMATELY 4,400 ACRES OF LAND
LOCATED WEST OF BLUFF ROAD AND EAST OF THE CONGAREE RIVER,
COLUMBIA, RICHLAND COUNTY, SOUTH CAROLINA



AS OF
FEBRUARY 20, 2002

FOR

LARRY C. SMITH, ESQUIRE
RICHLAND COUNTY ATTORNEY
POST OFFICE BOX 192
COLUMBIA, SOUTH CAROLINA 29202

BY

GEORGE E. KNIGHT, JR., MAI
SOUTH CAROLINA STATE CERTIFIED GENERAL
REAL ESTATE APPRAISER NO. CG 1531

Real Estate Appraisers and Consultants, LLC
R·E·A·C
"We're on point with you"

PLAINTIFF'S EXHIBIT
Identified
Admitted

DEF-00012293

PLTF TRIAL EXH 195

Real Estate Appraisers and Consultants, LLC

R·E·A·C

"We're on point with value"

May 21, 2010

Larry C. Smith, Esquire
Richland County Attorney
Post Office Box 192
Columbia, South Carolina 29202

RE: The appraisal of approximately 4,400 acres of land, Columbia, Richland County, South Carolina. Property now or formerly of Columbia Venture, LLC, identified as TMS# 10900-01-02, 11000-01-02 and 06, 11000-02-01, 11100-01-07, 08, 09 and 10, 13300-01-01, 04, and 05, 13400-01-01, 02, and 03, 13400-02-01, 10, 16, and 17, 13415-01-10, 13500-01-01, 13500-05-01, and 13513-01-27.
My File No. 10-026K

Dear Mr. Smith:

At your request, I have inspected and appraised the property located west of Bluff Road and east of the Congaree River, Columbia, Richland County, South Carolina. The property is identified in the Richland County Tax Map System, on Map 10900, in block 01, as parcel 02; on Map 11000, in block 01, as parcel 01; on Map 11000, in block 02, as parcels 01 and 06; on Map 11100, in block 01, as parcels 07, 08, 09 and 10; on Map 13300, in block 01, as parcels 01, 04 and 05; on Map 13400, in block 01, as parcels 01, 02 and 03; on Map 13400, in block 02, as parcels 01, 10, 16 and 17; on Map 13415, in block 01, as parcel 10; on Map 13500, in block 01, as parcel 01; on Map 13500, in block 05, and parcel 01; and on Map 13513, in block 01, as parcel 27. The property contains approximately 4,400 acres.

The results of my inspection and analyses are combined in this letter along with the attached summary appraisal report which are intended to comply with the minimum requirements, as set forth in Standards Rule 2-2(b) of the *Uniform Standards of Professional Appraisal Practice* (USPAP), 2010-2011 Edition, published by The Appraisal Foundation.

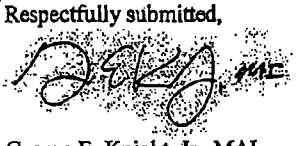
This letter and the attached appraisal report have been prepared in accordance with the Code of Professional Ethics and Uniform Standards of Professional Appraisal Practice, as approved and adopted by the Appraisal Standards Board of the Appraisal Foundation and the Appraisal Institute. The use of this letter and the attached report are subject to the requirements of the Appraisal Institute relating to their review by its duly authorized representatives.

17 Calendar Court, Suite 1 • Columbia, SC 29206
Telephone: 803.787.0092 • Fax: 803.787.0802 • Toll Free: 800.452.0694 • www.reacllc.com

Therefore, based upon the data outlined in the attached summary report, and the conclusions I have drawn from the analysis of the data, it is my opinion that the extent of loss in economic use and value arising from an assumed regulatory taking of the property without just compensation, as of the effective date of February 20, 2002, is:

FIVE MILLION SIX HUNDRED THOUSAND DOLLARS
($5,600,000)

Respectfully submitted,



George E. Knight, Jr., MAI
S.C. State Certified General
Real Estate Appraiser No. CG 1531

GEKjr:kdw
Attachments:
111 Page Appraisal Report and Addenda

DEF-00012295

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I, the undersigned appraiser, do hereby certify that, except as otherwise noted in this appraisal:

The statements of fact contained in this report are true and correct.

The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions and are my personal, impartial, unbiased professional analyses, opinions, and conclusions.

I have no present or prospective interest in the property that is the subject of this report and I have no personal interest with respect to the parties involved.

I have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.

My compensation and engagement of this assignment is not contingent upon the developing or reporting of a predetermined result, value or direction in value that favors the cause of the client, the amount of the value estimate, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.

The reported analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the requirements of the Code of Professional Ethics & Standards of Professional Practice of the Appraisal Institute, which include the Uniform Standards of Professional Appraisal Practice.

I have made a personal inspection of the property that is the subject of this report unless otherwise noted below.

Joseph B. Woods, SRA, SC State Certified General Appraiser No. CG 983, provided significant real property appraisal assistance in the confirmation of comparable sales information.

I have provided services regarding the subject property within the prior three years, as an appraiser.

The use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.

That as of the date of this report, George E. Knight, Jr., MAI, has completed the requirements of the continuing education program of the Appraisal Institute.

SIGNED:



George E. Knight, Jr., MAI
South Carolina State Certified General
Real Estate Appraiser No. CG 1531
Inspecting Appraiser

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Property Description:	Approximately 4,400 unimproved acres known as Green Diamond Project located west of Bluff Road and east of the Congaree River, Columbia, Richland County, South Carolina. Property now or formerly of Columbia Venture, LLC
Tax Map Identification:	10900-01-02, 11000-01-02 and 06, 11000-02-01, 11100-01-07, 08, 09 and 10, 13300-01-01, 04, and 05, 13400-01-01, 02, and 03, 13400-02-01, 10, 16, and 17, 13415-01-10, 13500-01-01, 13500-05-01, and 13513-01-27.
Site Description:	A parcel of land, irregular in shape, which contains approximately 4,400 acres. A copy of the Plat is contained in the **Subject Photographs and Exhibits** section of the report.
Improvements Appraised:	As of the effective date of the appraisal no improvements have been completed.
Property Rights Appraised:	Fee Simple
Date of Value Opinion:	February 20, 2002
Highest and Best Use as Vacant Before Assumed Taking:	Mixed Use Development
Highest and Best Use as Vacant Before Assumed Taking:	Mixed Use Development
Zoning:	RU, Rural District; M-1, Light Industrial District; RS-HD, Residential, Single-Family High Density District
Marketing / Exposure Time:	12 to 36 months (total tract)
Value Opinions:	
Market Value Before Assumed Taking:	$33,800,000
Market Value After Assumed Taking:	$28,200,000
Loss In Value Due To Assumed Taking:	**$5,600,000**

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Client and Intended User

The client is Richland County. Intended user is Richland County as well as agents identified by Richland County. There are no other intended users. Possession of this report does not constitute an intended user.

Purpose and Intended Use

The purpose of this appraisal is to determine the extent of loss in economic use and value arising from an assumed regulatory taking of the property without just compensation. The report has an effective date of February 20, 2002, the date the county adopted the new Flood Insurance Rate Map and Flood Insurance Study dated August 20, 2001. The function of this report is to aid in determining the assumed loss regarding the subject property in Columbia Venture, LLC, Plaintiff vs. Richland County, Defendant, Civil Action No. 2004-CP-40-3929.

Appraisal Reporting

Based upon the client's intended use of the appraisal, I have prepared a summary report of the property. This appraisal report is intended to comply with the minimum requirements of Standards Rule 2-2(b) of the Uniform Standards of Professional Appraisal Practice.

Property Rights Appraised

In order to determine the extent of loss in economic use and value arising from an assumed regulatory taking of the property without just compensation, I have appraised the fee simple interest of the subject property both before and after the assumed taking on February 20, 2002. The property is appraised assuming it is free and clear of all liens and encumbrances that may render the title to the subject property unmarketable.

Type and Definition of Value

Market value is defined in *The Dictionary of Real Estate Appraisal*, Fourth Edition, published by the Appraisal Institute, as *"The most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and passing of title from seller to buyer under conditions whereby: 1) buyer and seller are typically motivated; 2) both parties are well informed or well advised, and each acting in what they consider their best interest; 3) a reasonable time is allowed for exposure in the open market; 4) payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto; and 5) the price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale."*

Effective Date

The effective date of the appraisal is February 20, 2002 and the date of the report is May 17, 2010. I invited the property owner, by phone, to meet with me and inspect the property. The subject property was inspected on May 13, 2010, accompanied by Mr. Deas Manning, one of the property owners and managers of the property.

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Subject of the Assignment and its Relevant Characteristics

The scope is to estimate the market value of the property by appraising the fee simple interest of the subject property both before and after the assumed taking. The subject property is located east by Bluff Road and south by I-77, within Richland County, South Carolina. Richland County Tax Map System, on 10900, in block 01, as parcel 02; on Map 11000, in block 01, as parcels 01 and 06; on Map 11000, in block 02, as parcel 01; on Map 11100, in block 01, as parcels 07, 08, 09 and 10; on Map 13300, in block 01, as parcels 01, 04 and 05; on Map 13400, in block 01, as parcels 01, 02 and 03; on Map 13400, in block 02, as parcels 01, 10, 16 and 17; on Map 13415, in block 01, as parcel 01; on Map 13500, in block 01, as parcel 01; on Map 13500, in block 05, and parcel 01; and on Map 13513, in block 01, as parcel 27. The property contains approximately 4,400 acres and is currently vacant land with a development plan in process but not complete.

Ownership History

The subject property was conveyed to Columbia Venture, LLC by six (6) deeds, in total consideration of the sum of $7,944,075, dated between February 10, 1999 and February 19, 1999, and recorded on February 22, 1999, in Deed Book 281 at Pages 1826, 1827, 1855, 1865, 1871 and 1877. Subsequently, a seventh deed was also recorded on February 22, 1999, in Deed Book 281 at Page 1882 to better understand the exact amount of acreage (4,410.917 acres) conveyed to Columbia Venture, LLC by the said prior six (6) deeds. On February 20, 2001, 2.160 acres was conveyed to Chapel A.M.E. Church, as South Carolina eleemosynary corporation, in consideration of the sum of $5.00, recorded in Deed Book 518 at Page 2972.

According to records provided by Columbia Venture and confirmation of the transaction with Deas Manning, a review of the closing statement shows the actual cash paid for the property was $10,806,538.58. This amount is shown on tax returns as $10,932,991. Burwell Manning retained an interest in the property for shares in Columbia Venture. This was assigned a value of $7,460,977 as shown on historical income and expense documents. Deas Manning confirms the total sales price in February of 1999 as $18,000,000 in round numbers. From the records, the cash and Manning purchase total $18,393,968

As of the effective date of appraisal, February 20, 2002, Columbia Venture appears to own approximately 4,408.757 acres of land. This tract is referred to in the closing documents as approximately 4,400 acres. I have utilized 4,400 acres for the size of the subject within the report.

Listing and Contracts of Sale

I am not aware of any listings or contracts for sale on the effective date of appraisal, February 20, 2002.

As a part of this appraisal, I have made a number of independent investigations and analyses. I relied upon data retained in my office files, which I update regularly. The investigations undertaken and the major data sources used are outlined as follows: I obtained copies of county census data and spoke with county officials. I reviewed the local economic and demographic trends for Richland County on the *Site To Do Business* website. I studied the available market data and economic trends for the subject neighborhood. I inspected the subject property and the subject neighborhood. I conducted interviews with local owners and investors in the area. I interviewed real estate professionals who are active in the area. I examined the records of the Richland County Tax Assessor's Office and reviewed the methods of taxation and the specific tax data including assessment percentages and millage rates. I examined the public records for deeds and plats relating to the subject property. I obtained information on vacant property transfers occurring in the immediate area of the subject and in locations considered being comparable to the location of the subject property. The sales information was verified by public records, inspections, and where possible with brokers, grantors, grantees or from files of other real estate appraisers.

The purpose of this appraisal is to determine the extent of loss in economic use and value arising from an assumed regulatory taking of the property without just compensation. The report has an effective date of February 20, 2002, the date the county adopted the new Flood Insurance Rate Map and Flood Insurance Study dated August 20, 2001. Conventional appraisal theory dictates that market value may be determined by the use of one of more of the three accepted approaches to value. These approaches to value are the cost approach, the sales comparison approach and the income capitalization approach. In order to estimate the market value of the property, I have appraised the fee simple interest of the subject property both before and after the assumed taking. The property is appraised as if free and clear of all liens and encumbrances which may render the title to the subject property unmarketable.

The cost approach is a set of procedures by which an indication of the value of the subject is obtained by estimating the depreciated value of the subject improvements, to which is added the value of the subject site, valued at its highest and best use.

The sales comparison approach is a set of procedures by which an indication of the value of the subject property is estimated by comparing it to similar properties which have sold recently. Appropriate units of comparison are used and adjustments, based upon various elements of comparison, are made to the sales.

The income capitalization approach is a set of procedures by which an indication of the value of the subject is estimated based upon converting anticipated income into value. The conversion of income into value is accomplished by capitalizing (discounting) a single year's income or several year's income into value.

As outlined in this report, the subject property is a vacant tract of land with a development plan in process but not completed. Therefore, in the valuation of the subject property, the sales comparison approach will be utilized to value the land as if vacant. The value attributable to the land for all of the engineering and planning that has been completed for the entitlement process is valued using the cost approach to value. Since the entitlement phase of development has never been completed on the property, it is my opinion, based on recognized methodologies, that the sales comparison and cost approach to value are the best indicators of the value of the undeveloped land with no completed entitlements or improvements. The information upon which the approaches to value are based is from the market and is the best information available for the application of the approaches to value and will lead to a credible value conclusion.

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Assumptions and Limiting Conditions

The legal description, or other property identification furnished by others, is assumed to be correct, and no responsibility is assumed for matters legal in nature. No opinion is rendered as to title, which is assumed to be marketable. Any existing liens or encumbrances have been disregarded, and the property is appraised as if free and clear, unless otherwise noted in the body of the report.

No current survey of the property was made, and the improvements are assumed to be within the lot lines, in accordance with local building codes. Drawings, sketches, or maps are included in this report for the sole purpose of assisting the reader in visualizing the property. Unless otherwise indicated, they are not engineering drawings.

There is a full compliance with all applicable federal, state, and local environmental regulations and laws unless noncompliance is stated, defined and considered in this appraisal report.

All applicable zoning and use regulations and restrictions have been complied with, unless a nonconformity has been stated, defined and considered in the appraisal report.

All required licenses, certificates of occupancy, consents, or other legislative or administrative authority from any local, state or national government or private entity or organization have been or can be obtained or renewed for any use on which the value estimate contained in this report is based.

In cases of proposed projects, all permits and governmental regulations are assumed to be secured and/or complied with.

All major improvements on the property being appraised appear to be structurally sound, unless otherwise noted within the body of the appraisal. However, the appraiser is not an engineer and has not been instructed to secure a qualified engineer's certification of the structural soundness of the said improvements or functional utility of major appliances or mechanical failures which would not be reasonably obvious in the scope of an appraiser's normal inspection of the specified improvements, or to a prudent purchaser.

Certain information used in this report has been furnished by others. The sources and the information are considered to be reliable, but cannot be guaranteed.

The subject property is assumed to be under responsible ownership and reasonable and competent management.

No responsibility is assumed for service or operating inspections of equipment in the buildings covered by the appraisal report.

No responsibility is assumed for an inspection of weather tightness of the exterior or interior surfaces of this building.

No testings of material or equipment were made.

Acceptance of, and/or use of, this appraisal report by client or any third party constitutes acceptance of the above conditions. Appraiser liability extends only to stated client, not subsequent parties or users of any type, and the total liability of appraiser and firm is limited to the amount of the fee received by appraiser. This appraisal report is an economic study for value, it is not an engineering, structural, mechanical, feasibility or architectural study.

The appraiser is not required to give testimony or to appear in court with reference to this property by reason of this report unless prior arrangements have been made.

Distribution of the value reported between land and buildings applies only under the existing program of utilization, and separate valuations for land and improvements must not be used in conjunction with any report and are invalid if so used.

DEF-00012302

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Possession of this report, or a copy thereof, does not carry with it the right of publication, either in whole or in part, nor may it be used for any purpose by any except the party for whom it was prepared without the consent of the appraiser, and then only with proper qualifications.

Neither all nor any part of the contents of this report shall be conveyed to the public through advertising, public relations, news media, sales, or other media without written consent and approval of the author, particularly as to value conclusions, the identity of the appraiser or firm with which he is connected, or by reference to any professional societies or designations conferred upon the appraiser.

Users of this appraisal report are directed to obtain the services of a professional engineer to determine the presence and/or absence of hazardous materials including, but not limited to: asbestos and/or radon gas and/or urea formaldehyde foam insulation, as well as the structural integrity of the building and the present condition of its mechanical systems, since the appraiser(s) has made no such inspection expressly or implied and accept no responsibility. The presence of such substances or other potentially hazardous materials may affect the value of the property. The value estimate is predicated on the assumption that there is no such materials on or in the property that would cause a loss in value.

This appraisal is specifically contingent upon, and the appraiser's understanding that, there has been, or will be, a removal of any underground storage tanks which exist or which may have existed on the subject site; also, that there has been no contamination of soils. If contamination has occurred, the contaminated soils and the source of contamination will be removed and the contamination remedied on the subject site in accordance with all federal and state regulations.

The Americans with Disabilities Act (ADA) became effective January 26, 1992. Noncompliance with this Act may have a negative effect upon the property. Since a compliance survey is outside the realm of expertise of a real estate appraiser, a possible noncompliance with the requirement of ADA was not considered in this report. An expert in this field should be consulted.

Substantial volatility in the capital markets has increased uncertainty in the real property marketplace. It is difficult to predict what may happen in the capital markets going forward. As a result, it is difficult to predict what may happen to real property values over time. My valuation of the subject property considered the best information that was available at the time of my analysis. Due to on-going volatility in the marketplace, users of this appraisal should consider the current market uncertainty. Reliance on an appraisal may be affected by the scope of work. Users are reminded that the appraisal conclusions in this report are effective as of the stated date(s) of valuation.

Extraordinary Assumptions - An assumption, directly related to a specific assignment, which, if found to be false, could alter the appraiser's opinions or conclusions. (USPAP, 2010-2011 ed.)
There are no extraordinary assumptions in the appraisal of the subject property.

Hypothetical Conditions – That which is contrary to what exists but is supposed for the purposes of analysis. (USPAP, 2010-2011 ed.)
I have assumed a regulatory taking of the property without just compensation has occurred to determine the extent of loss in economic use and value arising from assumed regulatory taking.

Jurisdictional Exceptions – An assignment condition established by applicable law or regulation, which precludes an appraiser from complying with a part of USPAP. (USPAP, 2010-2011 ed.)
No jurisdictional exceptions have been taken in the appraisal of the subject.

Other Conditions that Affect the Scope of Work
There are no specific conditions that affect the scope of work that have not been outlined within the body of this report.

Signature(s) / Electronic Signature(s)
The signature(s) contained within this report are personalized evidence indicating authentication of the work performed by the appraiser(s) and the acceptance of the responsibility for content, analyses, and the conclusions in the report. The signature(s) were applied by the original appraiser and represent the facts, opinions and conclusions found in the report. The appraiser applied signature(s) electronically using a password encrypted method. Hence, the signature(s) have more safeguards and carry the same validity as the individual's hand applied signature.

DEF-00012303

PLTF TRIAL EXH 195

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Glossary of Appraisal Terms

Appraisal[1]: (noun) the act or process of developing an opinion of value; an opinion of value. (adjective) of or pertaining to appraising and related functions – e.g., appraisal practice appraisal services.

Appraiser's Peers: Other appraisers who have expertise and competency in a similar type assignment.

Assignment: (1) an agreement between an appraiser and client to provide a valuation service; (2) the valuation service that is provided as a consequence of such an agreement.

Cost Approach: A set of procedures through which a value indication is derived for the fee simple interest in a property by estimating the current cost to construct a reproduction of (or replacement for) the existing structure; including an entrepreneurial incentive, deducting depreciation from the total cost, and adding the estimated land value. Adjustments may then be made to the indicated fee simple value of the subject property to reflect the value of the property interest being appraised.

Credible: Worthy of belief.

Discounted Cash Flow (DCF) Analysis: The procedure in which a discount rate is applied to a set of projected income streams and a reversion. The analyst specifies the quantity, variability, timing, and duration of the income streams as well as the quantity and timing of the reversion and discounts each to its present value at a specified yield rate. DCF analysis can be applied with any yield capitalization technique and may be performed on either a lease-by-ease or aggregate basis.

Easement: An interest in real property that conveys use, but not ownership, of a portion of an owner's property. Access or right-of-way easements may be acquired by private parties or public utilities. Governments dedicate conservation, open space, and preservation easements.

Fee Simple Title: A title that signifies ownership of all the rights in a parcel or real property, subject only to limitations of the four powers of government.

Highest and Best Use: That reasonably probably and legal use of vacant land or an improved property, which is physically possible, appropriately supported, financially feasible, and that results in the highest value. The four criteria the highest and best use must meet are legal permissibility, physical possibility, financial feasibility, and maximum productivity.

Highest and Best Use of Land or a Site as Though Vacant: Among all reasonable, alternative uses, the use that yields the highest present land value, after payments are made for labor, capital, and coordination. The use of a property based on the assumption the parcel of land is vacant or can be made vacant by demolishing any improvements.

Highest and Best Use of Property as Improved: The use that should be made of a property as it exists. An existing improvement should be renovated or retained as is so long as it continues to contribute to the total market value of the property, or until the return from a new improvement would more than offset the cost of demolishing the existing building and constructing a new one.

Income Approach (income capitalization approach): A set of procedures through which an appraiser derives a value indication for an income-producing property by converting its anticipated benefits (cash flows and reversion) into property value. This conversion can be accomplished in two ways. One year's income expectancy can be capitalized at a market-derived capitalization rate or at a capitalization rate that reflects a specified income pattern, return on investment, and change

[1] Uniform Standards of Professional Appraisal Practice, 2010-2011 Edition

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in the value of the investment. Alternatively, the annual cash flows for the holding period and the reversion can be discounted at a specified yield rate.

Leased Fee (leased fee interest): An ownership interest held by a landlord with the rights of use and occupancy conveyed by lease to others. The rights of the lessor (the leased fee owner) and the lessee are specified by contract terms contained within the lease.

Leasehold Interest: The interest held by the lessee (the tenant or renter) through a lease transferring the rights of use and occupancy for a state term under certain conditions.

Report[2]: Any communication, written or oral, of an appraisal, appraisal review, or appraisal consulting service that is transmitted to the client upon completion of an assignment. (USPAP, 2010-2011 ed.)

Self-Contained Appraisal Report: a written report prepared under Standards Rule 2-2(a) or 8-2(a).

Summary Appraisal Report: a written reported prepared under Standards Rule 2-2(b) or 8-2(b).

Restricted Use Appraisal Report: a written report prepared under Standards Rule 2-2(c), 8-2(c), or 10-2(b).

Sales Comparison Approach: A set of procedures in which a value indication is derived by comparing the property being appraised to similar properties that have been sold recently, then applying appropriate units of comparison and making adjustments to the sale prices of the comparables based on the elements of comparison. The sales comparison approach may be used to value improved properties, vacant land, or land being considered as though vacant; it is the most common and preferred method of land valuation when an adequate supply of comparable sales are available.

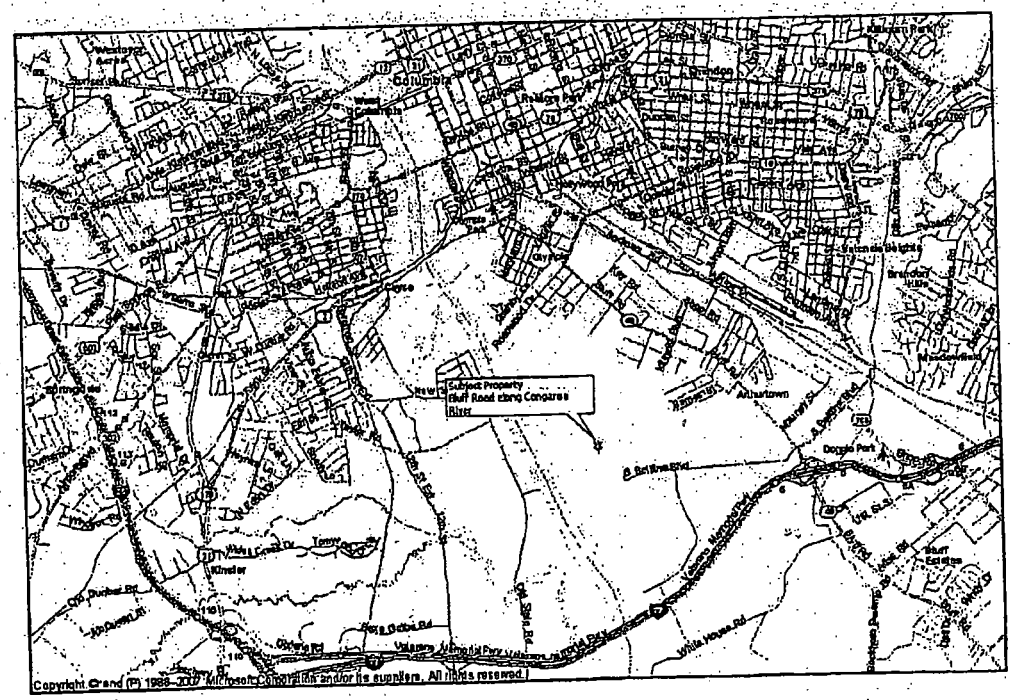
Scope of Work: The type and extent of research and analyses in an assignment.

SOURCE: The Dictionary of Real Estate Appraisal, Fourth Edition, published by The Appraisal Institute, 2002

[2] Uniform Standards of Professional Appraisal Practice, 2010-2011 Edition

Location

The subject property is located approximately 6 miles southeast of the Central Business District of Columbia within Richland County. The general subject neighborhood boundaries include Rosewood Drive to the north; the Congaree River to the west; Longwood Road to the south; and Garners Ferry Road to the east. The subject neighborhood has excellent access from both interstate highways and secondary highways and roads. Interstate 77 (Southeastern Beltway) bisects the neighborhood from west to east. The I-77 corridor connects with and provides access to I-20 to the north and I-26 to the west. Interstate 77 also connects with Charlotte to the north. The primary thoroughfares in the immediate subject neighborhood include Bluff Road, Shop Road, Rosewood Drive, Pineview Road, and Atlas Road. Shop Road is a 4-lane county-maintained road with direct access to I-77. The Shop Road corridor has been developed with office/flex space and industrial uses between Pineview Road and George Rogers Blvd. Bluff Road is a 4-lane asphalt paved county-maintained road and has direct access to I-77. The Bluff Road corridor is an industrial corridor that has been developed with industrial uses from Pineview Road (to the south) to Rosewood Drive (to the north). Overall, the neighborhood has excellent interstate access and access from secondary highways and roads.



Uses

The land use patterns within the neighborhood consist of light and heavy industrial with some scattered residential. Prior to the light industrial development, three residential developments were constructed with access off of Bluff Road. These include Bluff Estates, Starlight, and Eastway Park. With the exception of the scattered residential, the remainder of the immediate neighborhood land has been developed with office/flex space and industrial uses. The overall characteristics of the neighborhood are industrial. Just north of Atlas Road along Bluff Road is the Columbia Industrial Park which is the

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only named industrial park in the neighborhood. The development trends within the neighborhood have been small cul-de-sac developments off of the primary thoroughfares throughout the neighborhood with industrial manufacturing facilities, distribution warehouses, office/warehouses, and multi-tenant flex space building. In 2002, no residential development was occurring along this corridor of Bluff Road. However, as the University of South Carolina continued to expand, off campus student housing opportunities were developed along the Bluff Road Corridor. Currently, an upscale student oriented detached home development, The Retreat, is located adjacent to Columbia Venture property and the retreat has purchased some land from Columbia Venture for the expansion of their development. The research and development growth has been limited. Currently, the University of South Carolina has a development plan called Inovista that is in the early stages with several large speculative buildings designed to attract research and development companies. The market appeal for these buildings has been slow. The majority of the speculative space remaining vacant. The overall characteristics of the neighborhood have been for industrial uses. Heathwood Hall School and the City of Columbia Sewer treatment facility is located adjacent to the Congaree River along Beltline Blvd and Metro Blvd. The immediate neighborhood has limited retail development and scattered residential development which is outlined. Overall, land use patterns have been consistently office/flex and industrial within the neighborhood.

Utilities

Public water, telephone service, electricity and natural gas are available to the general subject neighborhood. Sewer service is available in most of the neighborhood. The areas which are not served by public sewer use septic tank systems. All available public utilities appear to be in adequate supply for development within the area.

Government

Governmental considerations generally include zoning and building codes, real estate tax burdens, any special assessments for fire and police protection, schools, and other governmental services. The majority of the properties in the subject neighborhood are restricted to building improvements under the jurisdiction of the Richland County Zoning Ordinance and/or the City of Columbia Zoning Ordinance. The majority of land within the neighborhood is zoned M-1, Light Industrial, or M-2, Heavy Industrial District.

Richland County is the taxing authority for real estate within the subject neighborhood. Assessments and millage rates are comparable to other similar neighborhoods in Richland County. It is expected that millage rates will continue to increase based on historical figures with no additional special assessments anticipated. The millage rates should not create an adverse effect on the market value of properties in the neighborhood due to real estate tax burden.

Social Considerations

The Columbia MSA has a well-educated population base which has seen a steady increase in population. In addition, the available education within the area provides the area with a well-educated workforce. With the majority of land uses in the immediate neighborhood being used for industrial developments, the available workforce is one of the primary considerations for new industrial developments. Additional growth in the demand for flex space is evident in the area. The historical stability of the neighborhood, with continued new development to the south in the Columbia Industrial Park and the Shop Road/Atlas Road corridor, indicates a positive social environment which should allow the neighborhood to remain in a growth period.

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Economic Considerations

As stated previously, the majority of the immediate neighborhood is characterized by office/warehouse, flex space and industrial development or vacant land which is zoned for industrial development. The neighborhood has been an industrial corridor within the southeastern area of Columbia for the last 30 years. A large percentage of the land within the immediate neighborhood has been developed to the north with industrial uses. This has pushed the new industrial development to the south along the Shop Road extension and Bluff Road, south of I-77 and the Pineview Road connector. The developed properties in the neighborhood are split with a mixture of owner-occupied and tenant-occupied buildings. Properties that are in the immediate vicinity of the University of South Carolina football stadium (Williams Brice) have seen a recent change in use from older warehouse properties that are now being re-developed with condominium units that include game day parking spaces. Rent levels and property values have been increasing at a moderate pace in recent years. Land use patterns have remained consistent with new construction of industrial properties in the areas outlined. New construction in the neighborhood is a mixture of owner-occupied properties and tenant-occupied buildings. Overall, property uses have been very consistent within the neighborhood.

Recent trends in the subject neighborhood indicate slow but steady growth for office/warehouse use. The available vacant land in the southeastern section of the neighborhood coupled with the infrastructure in place and the overall zoning and land use plans for industrial development uses should provide for stability within the neighborhood for compatible properties. Older facilities are suffering from obsolescence in the market and redevelopment appears to be a new trend. The active resale market and tenant market provides stability in the area and should continue within the foreseeable future.

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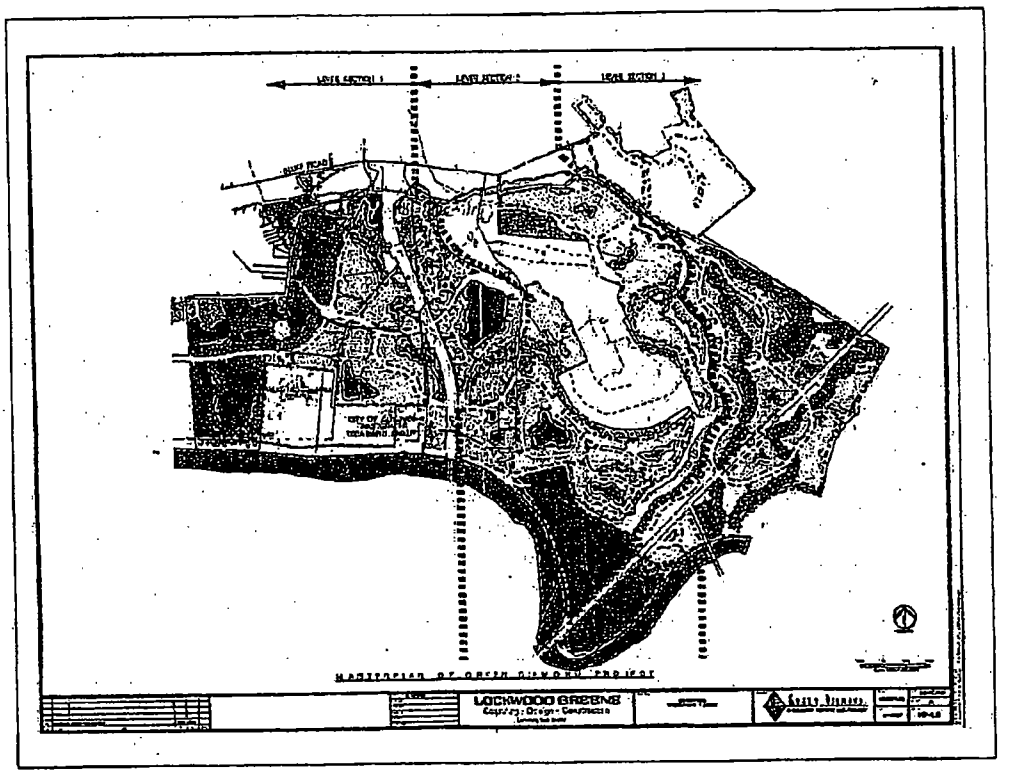
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Location/Description

The subject is approximately 4,400 acres of land located along the south side of Bluff Road divided by I-77 with frontage on the east and west sides of I-77, within Columbia, Richland County, South Carolina.

Size and Shape

The subject property contains approximately 4,400 acres of land and is irregular in shape. The property is a part of the Green Diamond Project, a large scale development currently in the planning and entitlement phase. A copy of the Masterplan of Green Diamond Project of the subject property is shown below to provide the reader a better understanding as to the size and shape of the property. It should be noted that the direction of the North Arrow is incorrectly positioned.



Road Frontage/Access

The site has extensive frontage along Bluff Road, White House Road, Beckham Swamp Road, South Beltline Blvd., and Metro Lane. The site is located adjacent to the Bluff Road Exit along I-77. The site has good access points and frontage to facilitate some type of development.

Topography, Drainage and Soils

The topography of the site is sloping with the higher elevations to the northwest and the lower elevations east of I-77. The western property line is bordered by the Congaree River. Copies of the soils

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map and topographic map are contained in the **Subject Photographs & Exhibits** section of this report to provide the reader a better understanding as to the location of soil type(s).

Easements/Encroachments

The property has several utility easements as indicated on the plat. A SCE&G transmission line located on the southern boundary of the property near the river; a SCE&G power line easement running parallel to Beckham Swamp Road; a SCE&G power line easement running across the middle portion of the property east of I-77 and crossing the property underneath I-77 and continuing across the middle portion of the property located south of South Beltline Blvd.; and a SCE&G power line easement running to the north from Beckham Swamp Road crossing I-77 and South Beltline Blvd. and continuing to the north of South Beltline Blvd. across a portion of the property. There are also several sanitary sewer line easements crossing the property as well as several water line easements with water lines indicated at the northern boundary of the property. There also is a gas line easement running parallel to the City of Columbia Wastewater Treatment Plant. The areas within the existing easements have diminished utility prior to any development; however, the exact acreages of these easements are not calculated and have not been deducted from the total acreage. These easements are typical for a tract of this size. The areas within the easements cannot be developed; however, the development plan has been layed out with consideration to the locations of these easements.

Zoning

The subject property is split zoned RU, Rural District; M-1, Light Industrial District; and RS-HD, Residential, Single-Family High Density District. According to the zoning ordinance, the RU, Rural District, is "intended to provide areas for low intensity agricultural uses and very-low density single-family, detached residential home construction. RU zoning is intended to provide for the preservation of open space, farmland and rural areas, and to protect and encourage the integrity of existing rural communities; The M-1 District is intended to accommodate wholesaling, distribution, storage, processing, light manufacturing, and general commercial or agricultural uses. Certain related structures and uses required to serve the needs of such uses are permitted outright or are permitted with special requirements and/or special exceptions; and the RS-HD District is intended as a predominately single-family, detached residential district, and the requirements for this district that has higher densities and smaller permitted lot sizes are designed to maintain a suitable environment for single- family living. In addition to detached single-family development, the RS-HD District also permits attached single-family dwellings and nonresidential development typically found in residential areas."

Deed Restrictions

No recorded deed restrictions on the use of the property were located.

Tax Assessment Data

The tax data for the subject property was obtained from the tax records of Richland County with the property identified on Map 10900, in block 01, as parcel 02; on Map 11000, in block 01, as parcel 01; on Map 11000, in block 02, as parcels 01 and 06; on Map 11100, in block 01, as parcels 07, 08, 09 and 10; on Map 13300, in block 01, as parcels 01, 04 and 05; on Map 13400, in block 01, as parcels 01, 02 and 03; on Map 13400, in block 02, as parcels 01, 10, 16 and 17; on Map 13415, in block 01, as parcel 01; on Map 13500, in block 01, as parcel 10; on Map 13500, in block 05, and parcel 01; and on Map 13513, in block 01, as parcel 27. The 2002 appraisal for tax purposes indicates a total fair market value

of $6,946,900, with a total agriculture value of $1,080,000. Property taxes for 2002 in the total amount of $15,925 have been paid as shown on the chart below.

Tax Summary

Tax Map ID	Appraised Value (land)	Agriculture Value	2002 Taxes	Paid
10900-01-02	$684,400	$158,700	$2,183.88	Yes
11000-01-02	$621,700	$78,900	$1,019.10	Yes
11000-01-06	$611,500	$69,700	$899.78	Yes
11000-02-01	$1,318,700	$112,600	$1,812.45	Yes
11100-01-07	$13,600	$2,900	$38.70	Yes
11100-01-08	$214,600	$39,300	$506.33	Yes
11100-01-09	$574,600	$20,700	$267.68	Yes
11100-01-10	$652,600	$62,600	$806.25	Yes
13300-01-01	$238,600	$76,800	$990.08	Yes
13300-01-04	$90,000	$53,400	$690.15	Yes
13300-0105	$326,400	$89,400	$1,154.55	Yes
13400-01-01	$33,300	$18,100	$232.20	Yes
13400-01-02	$30,000	$18,900	$245.10	Yes
13400-01-03	$309,600	$156,200	$2,015.63	Yes
13400-02-01	$48,900	$6,000	$77.40	Yes
13400-02-10	$494,000	$15,800	$1,695.33	Yes
13400-02-16	$244,900	$79,800	$1,028.78	Yes
13400-02-17	$251,400	$4,300	$54.83	Yes
13415-01-10	$15,200	$2,400	$32.25	Yes
13500-01-01	$17,900	$3,800	$48.38	Yes
13500-05-01	$42,000	$8,000	$103.20	Yes
13513-01-27	$113,000	$1,700	$22.58	Yes
Total	**$6,946,900**	**$1,080,000**	**$15,925**	

Source: Richland County Assessor and Richland County Treasurer

Flood Insurance Rate Map (FIRM)

As outlined, this report is to determine the extent of loss in economic use in value arising from the assumption that a regulatory taking of the property without just compensation has occurred as a result of actions taken by Richland County. As further outlined, these alleged actions are related to the Flood Insurance Rate Maps (FIRM) issued by the Federal Emergency Management Agency (FEMA) for the Congree flood plain in Richland County. The effective date of the value is February 20, 2002, the date the county adopted the new Flood Insurance Rate Maps and Flood Insurance Study dated August 20, 2001. I have been provided a brief chronology of the FEMA Restudy of the Congaree River Floodplain in Richland County covering the dates 1998 to 2001, which states the following:

> 1994 The Congaree River serves as the jurisdictional boundary between Richland County and Lexington County. On the Richland County FIS, the floodway boundary stopped at the river side toe of an existing levee on floodplain property owned by the Manning family.

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January 21, 1998 Due to Lexington County Study along Congaree River, FEMA commences restudy of Congaree in Richland County.

July 5, 1998 FEMA issues preliminary revised FIS. The floodway is reduced on Lexington side of Congaree, and extended on Richland side all the way to Bluff Road, encompassing almost the entire Manning tract. FEMA's study does not recognize Manning levees as a flood control structure.

Feb. 18, 1999 Columbia Venture, LLC buys Manning property.

Feb. 25, 1999 FEMA releases preliminary revised Richland County FIS and FIRM. FIS concludes that levee would affect flood hazard potential. Two analyses were computed for Congaree – one with levee and one without – to determine BFE. Floodway extends halfway between levee and Bluff Rd on Columbia Venture's property.

Feb. 26, 1999 County asks FEMA to delay processing of Richland County FIS and FIRM until County has time to review data used.

May 5, 1999 FEMA schedules public meeting to present FIS on May 28, 1999.

May 7, 1999 FEMA holds meeting with Lockwood Greene (engineers for Columbia Venture) to discuss delineation of floodway and geotechnical analysis of levees. Lockwood Greene advocated for a FIRM that would not change the floodway in Lexington County and would accommodate development on Richland side of Congaree.

May 19, 1999 FEMA postpones public meeting to issue FIS to allow FEMA time to review additional data to be submitted by Lockwood Greene.

June 3, 1999 Lockwood Greene submits additional technical data to FEMA supporting revision of revised preliminary FIRM.

Aug. 12-19, 1999 FEMA releases revised preliminary FIS and FIRMs for Richland County showing floodway stopping at the land side of levee (levee in floodway). 90-day appeal period begins after second public notice published in State Newspaper. Columbia Venture satisfied with map.

Nov. 29, 1999 SC Department of Natural Resources (SCDNR) questions data supporting FEMA's released FIS and FIRM.

November 30, 1999 Richland County Council holds Citizen's Forum to hear public input concerning the FEMA FIS and FIRMs.

Dec. 6, 1999 Lexington County comments to FEMA that revised preliminary study incorporates levees when FEMA regulations do not allow uncertified levees to be used as flood protection. Also, FEMA regulations require floodway widths to be calculated without the levee as if levees didn't exist.

Dec. 6, 1999 FEMA responds to DNR comments submitted on Nov. 29, 1999, noting that comments do not constitute a formal appeal. FEMA also notes that DNR has the authority as an impacted community to file an appeal independent of Richland County.

Dec. 7, 1999 Richland County Council adopts a Resolution resolving that the County "officially appeals the findings of the study in the name of the community of Richland County;" and further resolved that "Richland County expresses its willingness to designate SCDNR to appeal on behalf of Richland County or jointly with Richland County."

Dec. 10, 1999 DNR files official appeal of FIS and FIRM.

Dec. 13, 1999 Richland County submits appeal of FIS and FIRM.

March 17, 2000 FEMA acknowledges receipt of appeals of proposed FIRMS for Lexington and Richland Counties and establishes a 30-day time period in which appellants may submit additional technical data.

April 4, 2000 FEMA schedules meeting with community and appellants on April 26, 2000.

April 13, 2000 SCDNR submits to FEMA additional technical data as part of DNR's appeal.

April 26 & 27, 2000 FEMA holds meetings with appellants as well as mapping contributors, identified by FEMA as: Columbia Venture, USGS, SCDOT, and USACE.

Sept. 26, 2000 FEMA announces appeal resolution. The FIRM puts the floodway over the levee, extending across 70% of CV property. FEMA sets a 30 day deadline for further technical comment.

Oct. 4, 2000 FEMA holds meeting with Richland County, Lexington County, City of Columbia and Columbia Venture to answer questions about revised preliminary FIRM released Sept. 26, 2000.

Oct. 26, 2000 In response to FEMA's 30-day comment period, Columbia Venture submits comments and objections, and requests that FEMA recognize Columbia Venture as an appellant and additional time to submit additional data.

Nov. 22, 2000 FEMA agrees to recognize Columbia Venture as an appellant and extended time for Columbia Venture and any other appellant to submit new data to Jan. 2, 2001.

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Jan. 29, 2001 FEMA holds meeting with local communities and appellants. FEMA extends deadline to receive technical comments to Feb. 15, 2001.

April 27, 2001 FEMA holds meeting with appellants and communities to hear presentations from appellants to clarify their positions and answer questions.

June 14, 2001 FEMA announces a meeting to be held on June 20, 2001 to release its final determination.

June 19, 2001 FEMA meeting scheduled for June 20, 2001 to announce final determination of Congaree FIRM is cancelled.

June 26, 2001 FEMA announces that it is allowing appellants another opportunity to present their scientific and technical data to FEMA. Michael Brown, FEMA's General Counsel, will mediate the process. Appellants asked to submit written summary of their case by July 5, 2001, and on July 24, FEMA will meet with appellants.

July 24, 2001 FEMA hears presentations and holds meetings with appellants.

July 25, 2001 FEMA meets with local community to provide update on process.

Aug. 20, 2001 FEMA announces its final determination which is essentially the same as the appeal resolution, putting approximately 70% of Columbia Venture's property within a floodway.

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I have also been provided with an additional document dated February 17, 1999, CV002274, from H. W. Tillotson, Jr., P.E., Division Manager with Lockwood Green, to George Gregory with Burroughs and Chapin. This document outlines the understanding of Columbia Venture from their due diligence process prior to closing on the property. This document further outlines a summary of FEMA flood issues that existed at the time of purchase as well as the maps that were being proposed from July 1998 showing the special flood hazard area on the majority of the property. Throughout the documents provided it appears that most of the property would be in the floodway if the preliminary revised maps are adopted.

An understanding of the FEMA issues at the time of purchase are important in order to lead to a value conclusion of the property prior to any regulatory action that has been assumed for the purposes of this report. This document dated February 17, 1999 from H. W. Tillotson, Jr, P.E., Division Manager with Lockwood Green, to George Gregory with Burroughs and Chapin clearly indicates variances in their proposed upgrade to the levees, with uncertainties associated with regulatory permitting. Based on the summary within the document, Lockwood Greene felt it was reasonable to upgrade the levees system for $12,000,000 and receive a levee certification within 12 to 24 months.

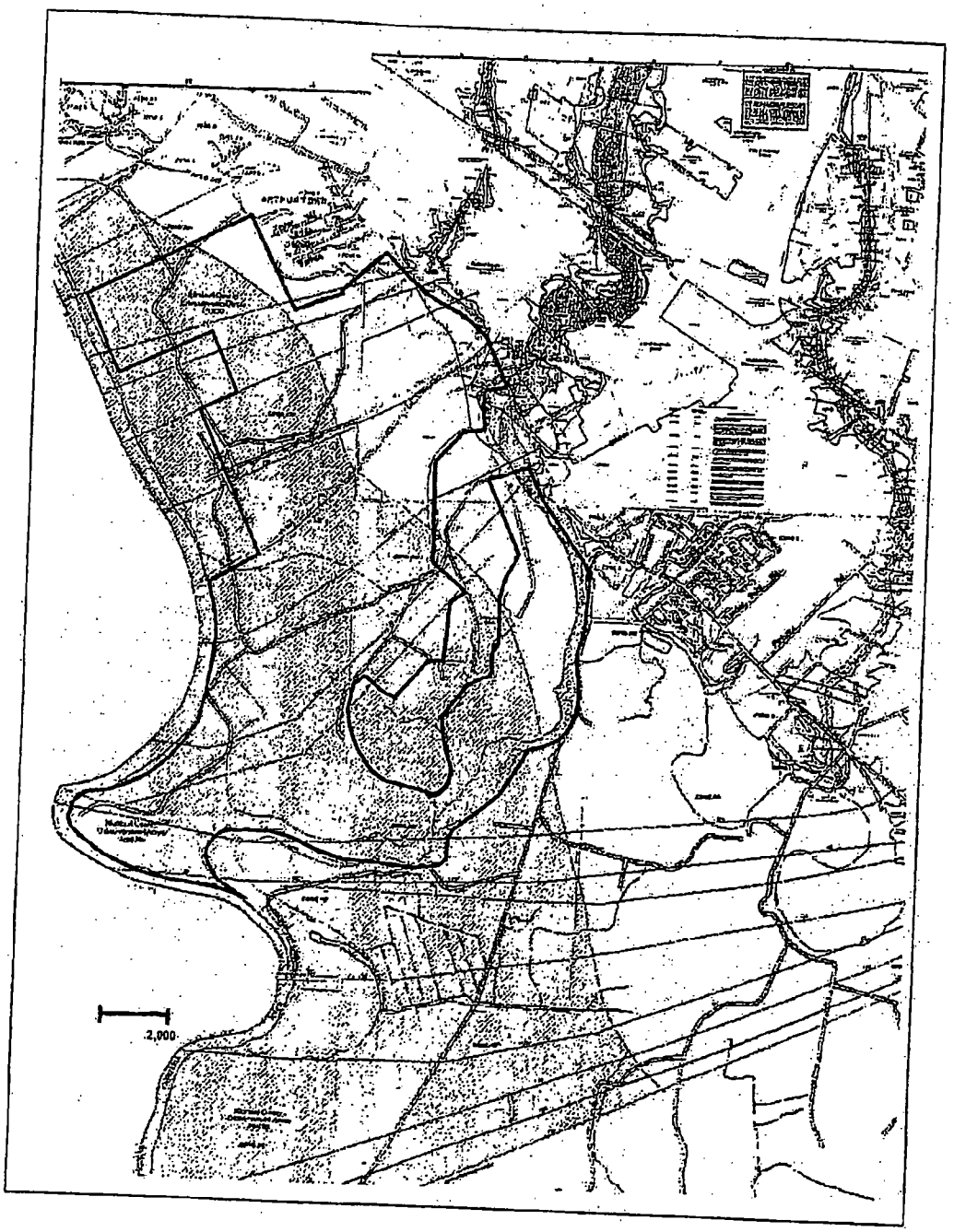
At the time of purchase, the property owners contemplated an upgrade of the levee system to meet the certification requirements set out in 44 CFR § 65.10. Columbia Venture's plan was to seek levee certification pursuant to 44 CFR § 65.10, through a Conditional Letter of Map Revision (CLOMR) (followed by a Letter of Map Revision), in which the levee system would be upgraded to meet FEMA's levee certification requirements. Once approved, FEMA would then revise the Congaree River FIRMs to remove the AE flood hazard zones and floodway designation. Columbia Venture asked for confirmation of this path forward in a letter from H. Wilson Tillotson, Jr., P.E., to Ms. Lisa Holland, State Coordinator, National Flood Insurance Program, dated January 20, 1999. This letter was subsequently forwarded from Ms. Holland to Michael Buckley of Federal Emergency Management Agency, with response dated January 26, 1999, from Mathew B. Miller, P.E., Chief Hazard Study Branch Mitigation Director with FEMA. This letter clearly indicates that if they can comply with 44 CFR § 65.10, FEMA would revise the applicable FIRM to remove the special flood hazard area designated as a floodway, but FEMA's letter also cautions that this action cannot result in any increase is base flood elevations as a result of construction within the existing regulatory floodway of the Congaree River, or the requirements of 44 CFR § 65.12 would have to be met. In addition, any change in the configuration of the floodway as a result of levee certification would have to be done with the approval of impacted communities.

As outlined within the previous information, the flood map that was in effect as of the effective date of the appraisal is February 20, 2002. As outlined, it was always the intent of Columbia Venture to go through the regulatory process of levee certification which would have resulted in a revision of FEMA's effective FIRMs of 2002 to eliminate the floodway and floodplain designations behind the levee system. While it is clear that Columbia Venture had, and continues to have, the option of submitting a CLOMR as a means of reaching their development goals, it is also clear that the uncertainties involved in accomplishing this goal were made aware to them at the time of purchase of the property. From the date of purchase to the date of value, there has never been a guarantee that the necessary permitting process would be accomplished to revise the FEMA maps. A copy of the FEMA FIRM is shown on the following page to provide the reader a better understanding of the subject's proximity to the Congaree River area located on the western portion of the subject property.

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Potential Environmental Hazards

I am not aware of any negative environment conditions. I am not an expert in environmental conditions; however, I recommend that any potential purchaser of the site have an environmental site assessment performed. If an environmental site assessment is performed and negative environmental conditions are present, a re-appraisal may be required.

Wetlands

The property owner representative, Deas Manning, showed me a development plan. The existing plats make no reference to wetlands. I have not been provided a specific wetlands delineation for the site. The proposed development plan references between 350 and 400 acres of wetlands. No specific allocation of wetlands is included within the valuation. Given the location of the Congaree River bordering the subject property and its flood hazard areas, wetlands are highly probable and should be expected within the flood hazard areas of the Congaree River.

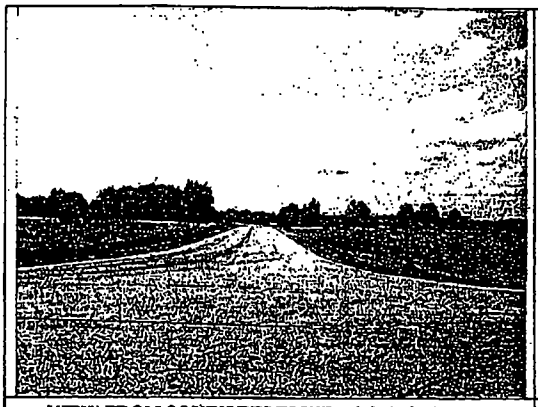
Utilities

Utilities available to the site include electricity provided by South Carolina Electric & Gas Company and local electric cooperatives. Water and sewer is located in the immediate neighborhood and along portions of the property with access points directly adjacent to or on the subject property. Telephone service is provided by a number of independent phone companies within the area including AT&T. It appears utilities are available to support development.

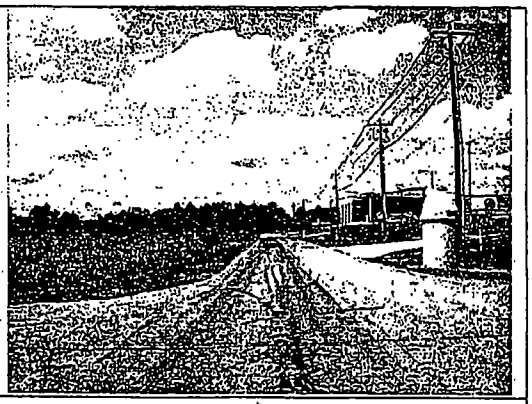
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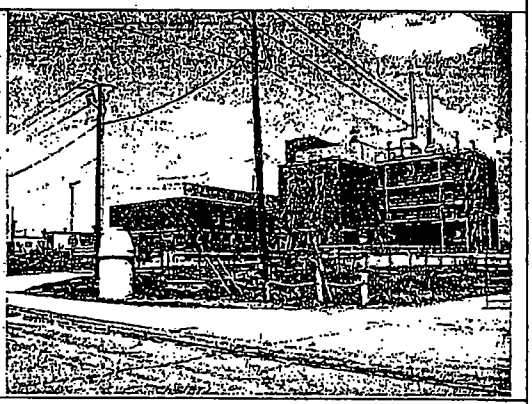
VIEW FROM SOUTH BELTLINE LOOKING DOWN NORTHERN DRIVE



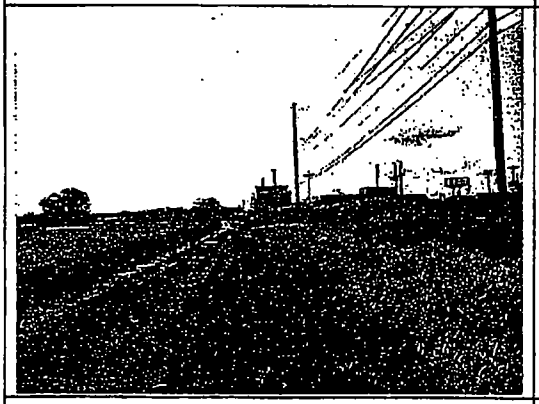
LOOKING NORTHWEST DOWN SIMMON TREE LN.



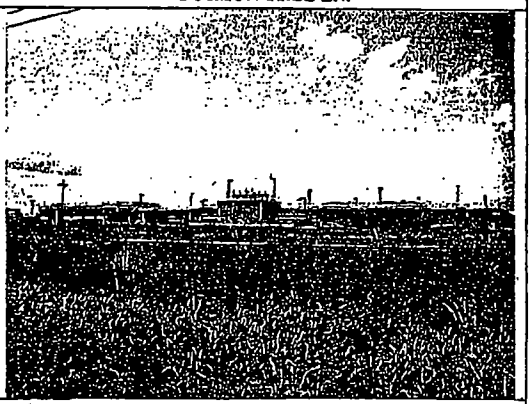
LOOKING NORTH ACROSS PROPERTY FROM SIMMON TREE LN.



VIEW OF WATER TREATMENT FACILITY FROM SIMMON TREE LN.



LOOKING SOUTHEAST TOWARD SIMMON TREE LN.

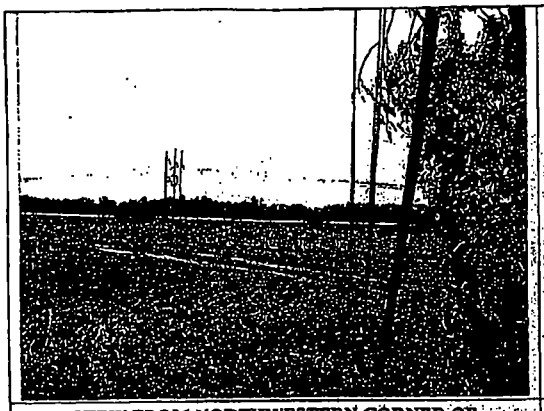


VIEW OF WATER TREATMENT FACILITY LOOKING SOUTHWEST FROM CITY RIGHT OF WAY

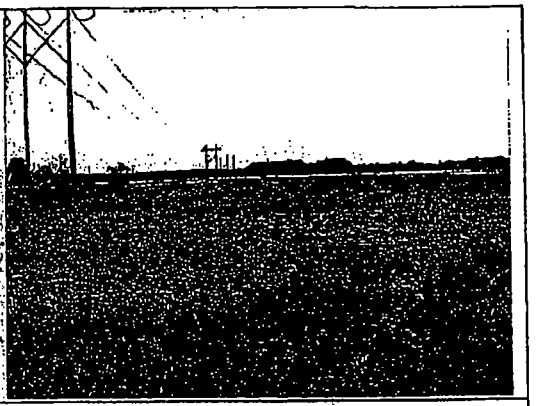
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VIEW FROM NORTHWESTERN CORNER OF PROPERTY LOOKING EAST



VIEW OF POWERLINES LOOKING NORTHEAST ACROSS PROPERTY



VIEW LOOKING SOUTHEAST FROM CENTER OF PROPERTY

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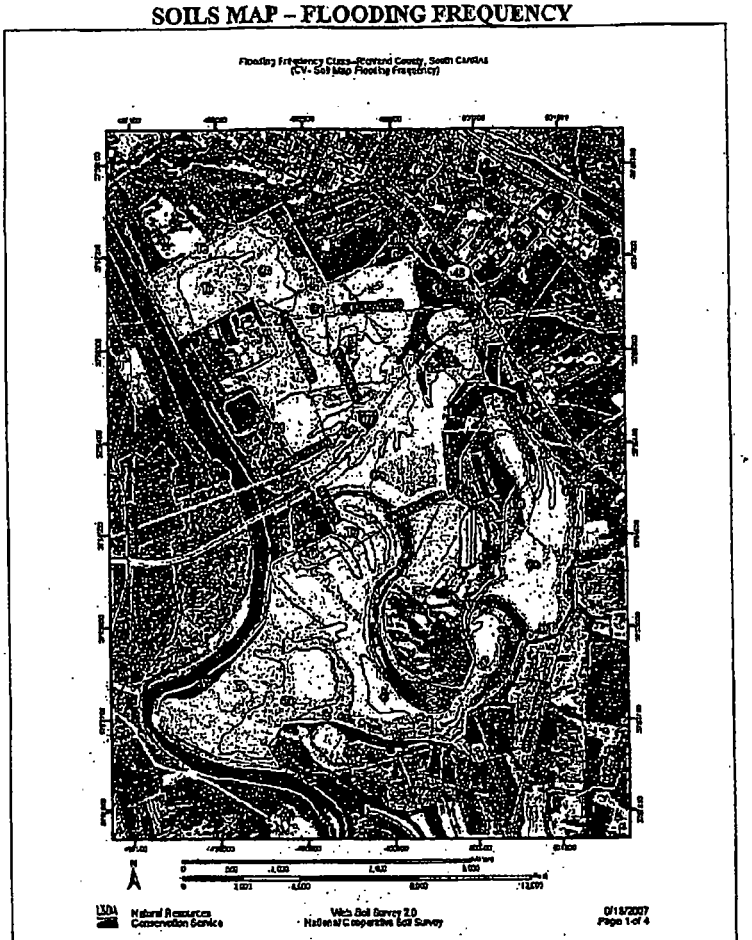
SOILS MAP



DEF-00012320

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SOILS MAP – FLOODING FREQUENCY



MAP LEGEND

MAP INFORMATION

Originated soil survey map sheets were prepared at publication scale. Viewing scale and printing scale, however, may vary from the original. Please rely on the bar scale on each map sheet for proper area map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: UTM Zone 17N

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Richland County, South Carolina
Survey Area Data: Version 11, Jun 16, 2007

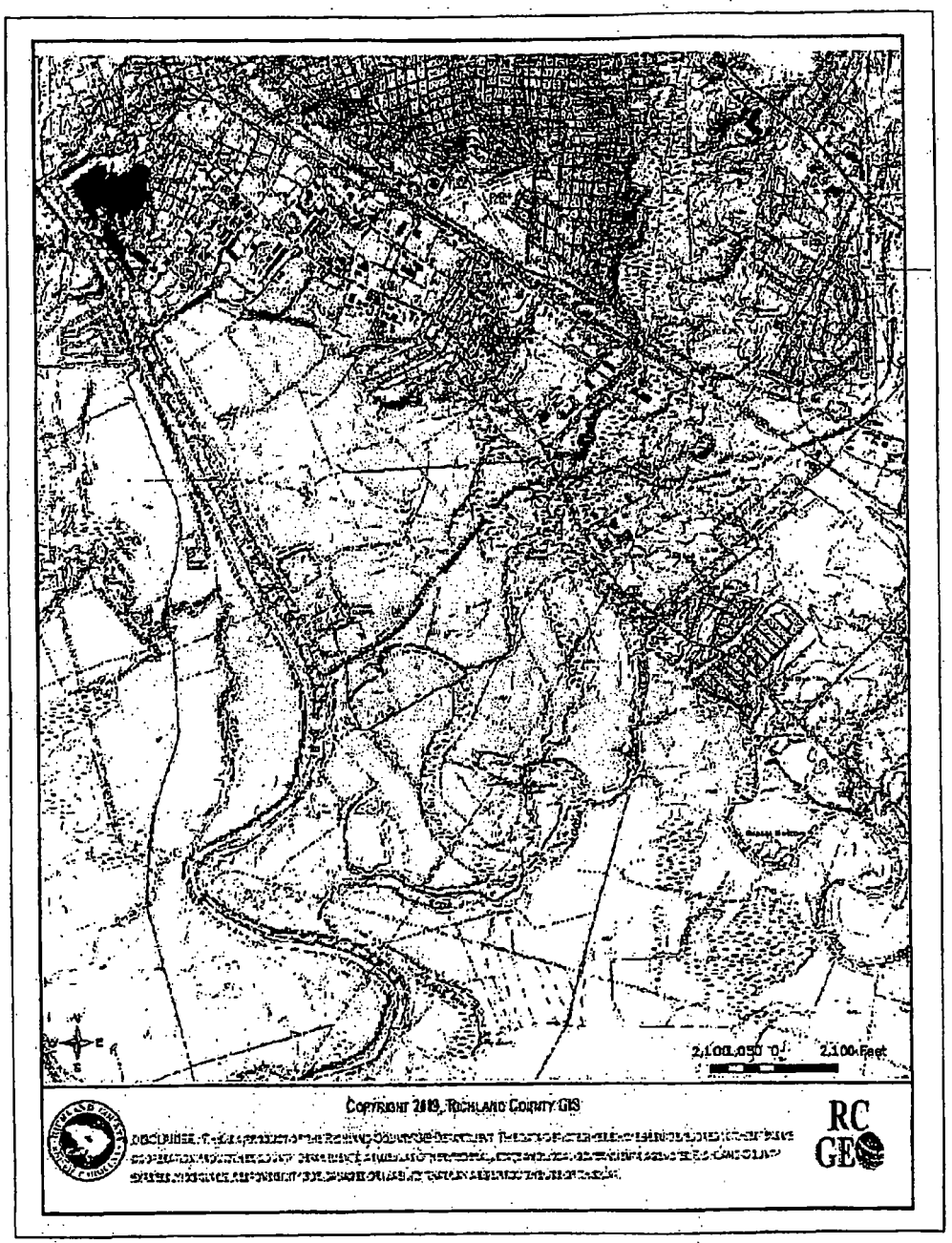
Date(s) aerial images were photographed: 12/31/1994; 9/22/1994; 2/28/1994

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

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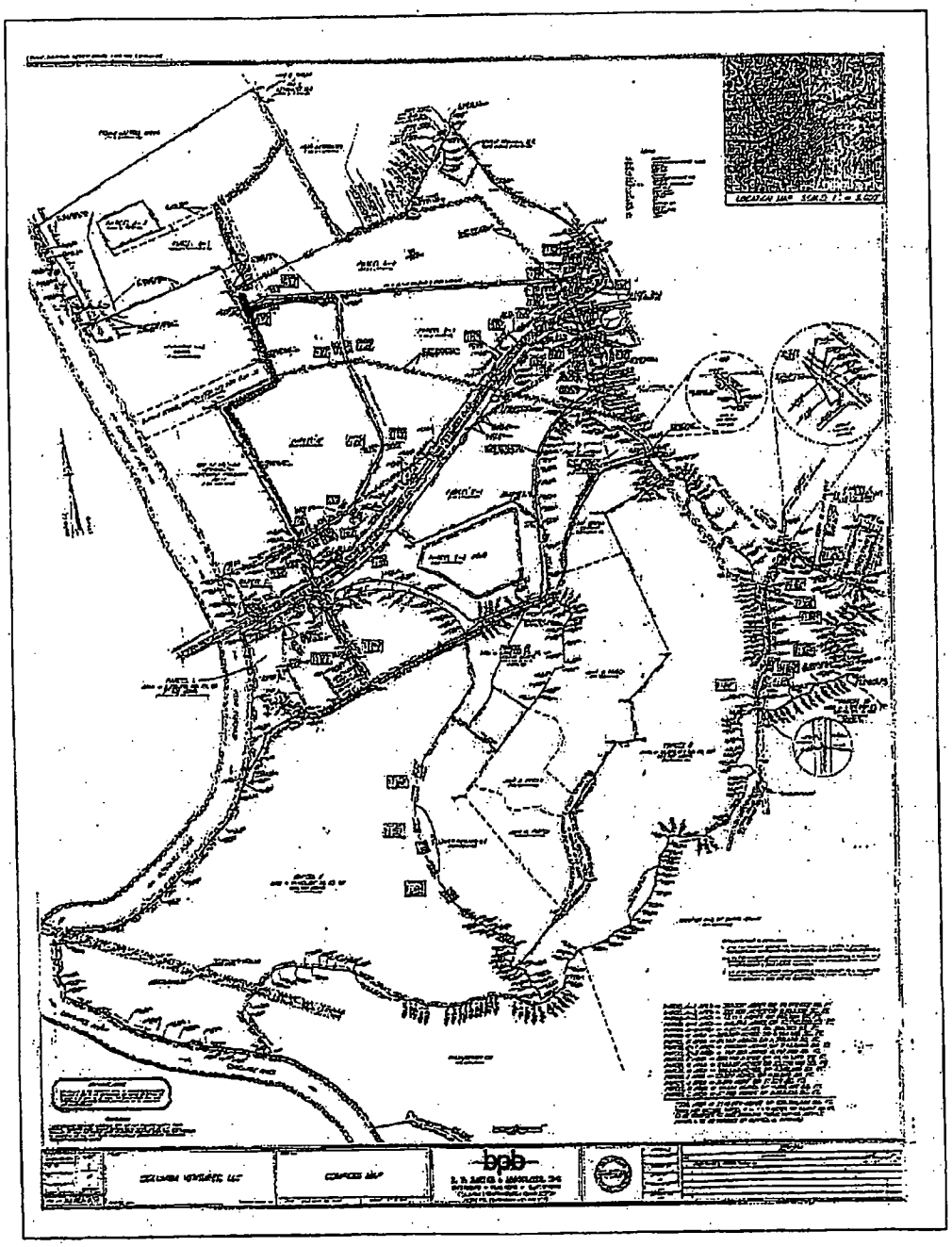
TOPOGRAPHIC MAP



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PLAT OF SUBJECT PROPERTY



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Highest and best use is defined in The Dictionary of Real Estate Appraisal, Fourth Edition, published by the Appraisal Institute as "that reasonable probable and legal use of vacant land or an improved property, which is physically possible, appropriately supported, financially feasible, and that results in the highest value. The four criteria the highest and best use must meet are legal permissibility, physical possibility, financial feasibility, and maximum profitability."

As outlined in this report, the subject property is a vacant tract of land currently with a development plan in process. Therefore, the highest and best use as improved will not be applicable in this appraisal.

Legal Permissibility

As indicated, the property has multiple zonings as of the effective date of the appraisal. No entitlements have been granted and a zoning change has not been granted. It is clear from the development plans that have been formulated and discussions the developers had with Richland County, that the likelihood of some type of development plan being approved is probable. The issues with the approval of the development plan include multiple regulatory issues including the floodplain issue. However, additional issues must be considered which include the adaption of the proposed plan to include the property in a multi-county business park and subsequent authorization for issuance of special source revenue bonds for the infrastructure on the property. As of the date of the appraisal, none of these factors have been approved or are certain to occur. Therefore, the legal permissibility of the property as of the date of the appraisal is for some type of development. However, the final development cannot be determined until all regulatory approvals have been obtained to move forward with a final development plan.

Physical Possibility

As outlined extensively within the report, the property contains 4,400 acres of land located along the Congaree River with excellent access from I-77 and Bluff Road along with interior road access. The property is physically suited for some type of development. In addition, extensive work has been done by the developer, Columbia Venture, to show the physical adaptation of some type of development plan. Clearly these development plans appear to have some physical possibility of being instituted. Again, as indicated within the legal permissibility section, the ultimate development plan will depend on the legal approvals. Any final adoption of a development plan would be hypothetical and speculative until all the permits are in place. As of the effective date of the appraisal before the final adoption of the FEMA flood maps on February 20, 2002, the physically possible use of the property is for the institution of some type of development plan with a mixed use development.

Financial Feasibility

Again, as outlined in the documents provided by Columbia Venture, the financial feasibility of a multi-county business park plan has not been tested. Extensive highest and best use studies have been done and have been reviewed by outside consultants. Columbia Venture has also prepared a tax analysis of the property assuming a multi-county business park designation is granted, infrastructure bonds are put in place and a mixed use development is completed. The tax analysis indicated a 30 year sellout of the property. It is clear at this point that the financial feasibility of some type of large scale development does appear to be a feasible use of the property. However, the financial feasibility of these development plans can only be tested if the assumptions are made that all permits in place, the property is entitled, and they have received anywhere from $50,000,000 to $80,000,000 from the multi-county business park incentive. None of these things have occurred as of the effective date of the appraisal. It is reasonable for the

developer to continue to invest in having the property entitlements obtained. However, the subject property remains a vacant tract of land with capital expenditures that have been made in the entitlement process in order to create a development plan but this development plan is not complete. Therefore, the financial feasibility of the property would be to continue to invest in achieving the entitlements on the property as of the effective date of the appraisal or sell the property in its current state to another developer to allow them to continue with the entitlement process and ultimate development.

Maximum Profitability

Therefore, as outlined, the maximally productive use of the property, as of the effective date of the appraisal, is to continue with the entitlement phase of the process to ultimately develop the property with some type of mixed use development or sell the property in the "as is" state with the due diligence in place as of the date of appraisal to allow a market participant to develop the property with a mixed use development.

Exposure Time/Marketing Period

The estimated exposure time and marketing period for the subject property, at the estimated market value shown in this report, is 12 to 36 months for total tract. Should economic conditions change, these times could be extended or shortened.

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Introduction

The cost approach is based on market comparison and principle substitution. The principle substitution affirms that a prudent buyer would pay no more for a property than the cost to acquire a similar site and construct subdivision improvements of equivalent desirability and utility without undue delay. A key issue in the valuation of the subject property is the land has been acquired "as is" with the needed entitlements not in place. The cost approach is used to estimate the total investment value or cost of development that has taken place as of the effective of appraisal. The cost of the property and improvements as of the effective of appraisal plus the accompanying land value provides a measure against which prices for similar improved properties may be judged. The difficulty with estimating the value of the subject property relates to the fact that the property has never been completely entitled for the development of a mixed use development.

Profit and timeline concepts are discussed within the Subdivision Valuation by Don M. Emerson, Jr., MAI, SRA, published by the Appraisal Institute. Within this book, a discussion of the timeline concepts involved in subdivision valuation and when profit is earned at each stage of the process is covered. Emerson further discusses that "*profit can be earned at several points in the timeline. Different levels of profit must be considered depending on the date of value and the where the project is along the development timeline.*" Emerson goes on to discuss that "*profit can be earned at all three phases of development: the permitting phase, the construction phase, and the absorption phase. Allocating dollar profit along the timeline is one of the most difficult aspects of subdivision valuation. Part of the problem is assigning risk. To do this, the appraiser must consider when risk is encountered in the completion of a subdivision and when the profit is earned. The earning of profit depends on general market and property-specific characteristics, but it can generally be earned anywhere along the timeline.*

Permitting Phase

Profit is typically earned during the permitting phase by successfully permitting a project and achieving the necessary approvals for construction when there is a market demand to support new development. Markets in which entitlements are difficult to obtain or long-term time frames are required typically support a higher profit upon approval.

Construction Phase

Profit may be earned in the construction phase when there is significant risk in construction (i.e. cost or timing). Typically, the construction phase produces minimal profit in comparison to the permitting or absorption phases. The final phase is the absorption phase.

Absorption Phase

The profit earned in the absorption phase is directly related to the successful marketing and sale of the entire lot inventory. This profit is the typical amount of money necessary to attract a developer or investor to purchase a group of lots, recognizing the time needed to market the lot inventory as well as the holding and sales costs over the absorption period."

As indicated, typical value reference points include the raw land value stage, the land value with entitlements after permitting is achieved but before subdivision construction, construction completed no lot sales, and remaining lot inventory. When using the subject raw land plus cost to date for permitting analysis, the suggested methodology is the use of the sales comparison approach at the time point in development and the value indication will be valid at the start of permitting and entitlement phase. Appraisal assignments undertaken at the raw land value point in time are usually very difficult because

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actual use density and stipulations required by local authorities for future development may be unknown which may add variability to value conclusions. Further, the income capitalization approach can be used to estimate raw land value. However, the value conclusion for raw land is usually subject to a higher degree of variability than would be associated with the results of a sales comparison approach because relatively small changes in estimates of absorption, retail lot values, and timeframes involved in permitting construction and absorption can have a significant impact on raw land value in a discounted cash flow analysis. Land value is derived as a residual in the subdivision valuation technique. Typically, the income capitalization approach is only used to value vacant land when sales of similar vacant tracts are not available or the unique characteristics of the property require subdivision analysis. As indicated within the analysis, a raw land sales and value is available. In addition, the cost of permitting to date is known fact along with a reasonable expectation of profit for the cost associated to the project to date.

A key distinction in the appraisal of the subject property is that the permitting phase has not been completed. As outlined extensively within the report, the developers had several challenges in order to permit the property which included the uncertainty with the FEMA flood maps. In order to allocate the value of the property, as of the effective date of the appraisal, I have developed the cost approach to value which is based upon the current value of the land "as is" plus the cost that has been expended, as of the effective of the appraisal, in capital expenditures in order to develop the property. The profit and timeline concepts indicate that it is reasonable for the developer to anticipate a profit on the expenditures made to date.

An alternative method would be to find comparable land sales that have been exchanged in the marketplace with a similar level of permitting and development. Due to the unique nature of the property and the challenges with gaining permits, I was not able to locate a similar sale. Therefore, I followed the premise that the current investment in a development along with anticipated profit earned at this stage of the development phase, would accurately estimate the value of the property at this stage of development.

Land Value "As-Is"

A search of the neighborhood was made in order to determine what sales of similar sites had occurred in the recent past to compare to the subject property. A sales study of the area was performed and the results are contained in my files. After a search of the market, four (4) comparable land sales have been included in the report.

The unit of comparison used in this approach is the price per acre. This is the accepted unit of comparison/measure in the market for properties similar to the subject. Detailed information about each sale follows.

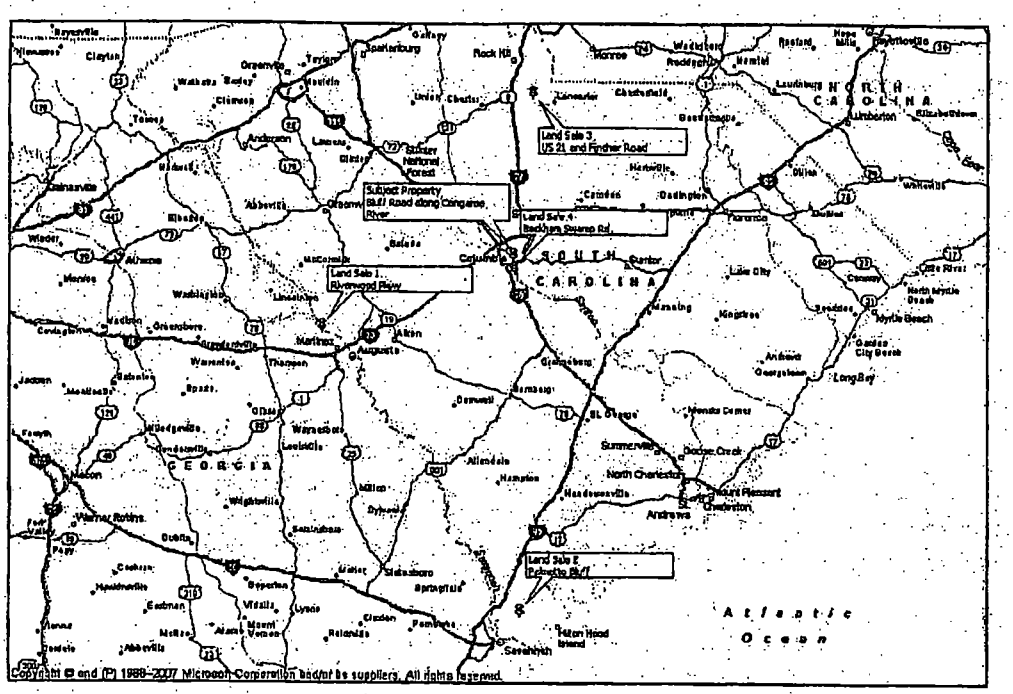
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COMPARABLE LAND SALES SUMMARY TABLE

No.	Location	Sale Date	Price	Size in Acres	Price/ Acre
1.	Riverwood Plantation	08/28/2000	$8,775,000	2,349.670	$3,735
2.	Palmetto Bluff	07/28/2000	$100,000,000	20,622.000	$4,849
3.	US 21 and Fincher Road	03/31/2001	$3,316,593	1,020.490	$3,250
4.	Beckham Swamp Road	05/20/2003	$3,600,000	1,145.600	$3,142



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COMPARABLE LAND SALES CHART

	Subject	1	2	3	4
Record ID	N/A	3079	2125	3320	4507
Property Rights	Fee Simple	Fee Simple	Fee Simple	Fee Simple	Fee Simple
Financing	N/A	Cash to Seller	Cash to Seller	Cash to Seller	Cash to Seller
Conditions of Sale	N/A	Arm's Length	Arm's Length	Arm's Length	Arm's Length
Date of Sale	02/10/99	08/28/00	07/28/00	03/31/01	05/20/03
Address	Bluff Road	Riverwood Plantation	Palmetto Bluff	US 21 and Fincher Road	Beckham Swamp Rd.
Location	Bluff Road along Congaree River	B/S Riverwood Parkway	S/S of State Hwy 46	East side of US 21 and Fincher Road (SSR 334)	Congaree River / Beckham Swamp Rd.
State	South Carolina	Georgia	South Carolina	South Carolina	South Carolina
County	Richland	Columbia	Beaufort	Chester	Richland
Tax Map Number	10900-01-02; Multiple Map #s	061-003	R610-044-000-0001-0000	163-000-00-003	10700-01-01
Sales Price	$18,393,968	$8,775,000	P/O $100,000,000	$3,316,593	$3,600,000
Physical Characteristics					
Size: Acres	4,400.000	2,349.67	20,622.00	1,020.49	1,145.60
Shape	Irregular	Irregular	Irregular	Irregular	Irregular
Topography	Mostly Level	Sloping to river	Mostly Level	Sloping	Level
Floodplain/Floodway	Portion in floodplain and floodway	Portion in floodplain and floodway	Flood plain along river and wetlands	Flood plain along river and wetlands	Flood Hazard Area of the Congaree River
Wetlands	Approx. 350	Not calculated	11,395	Not calculated	Not calculated
Zoning	Development Zone	Planned Unit Development - Residential	Planned Unit Development	Agricultural	Rural District
Zoning Code	D-1	PUD	PUD	AG	RU
Gen Prop Type	09 Mixed Used Development	09 Mixed Used Development	09 Mixed Use Development	07 Residential	01 Agricultural
Utilities	All Available	All Available	Electricity, Water at sale. Water and Sewer brought for development	Electricity and Phone	Electricity, Telephone Overhead electrical easement
Easements	Power line easements	No Adverse	No Adverse	Powerline	As Is at Purchase
Development Plan	As Is at Purchase	As Is at Purchase	As Is at Purchase	As Is at Purchase	
Sales Price/Acre		$3,735	$4,849	$3,250	$3,142
ADJUSTMENTS					
Property Rights	0%	0%	0%	0%	0%
Financing	0%	0%	0%	0%	0%
Conditions of Sale	0%	0%	0%	0%	0%
Market Conditions (Time)	0.00%	0.00%	0.00%	0.00%	0.00%
Adjusted Price/Acre		$3,735	$4,849	$3,250	$3,142
Physical Characteristics					
Location		0%	0%	0%	0%
Size		0%	0%	0%	0%
Shape		0%	0%	0%	0%
Topography		0%	0%	0%	0%
Zoning		0%	0%	0%	0%
Utilities		0%	0%	0%	0%
Easements		0%	0%	0%	0%
Adjusted Price/Acre		$3,735	$4,849	$3,250	$3,142
High Price/Acre	$4,849				
Low Price/Acre	$3,142				
Median Price/Acre	$3,735				
Mean Price/Acre	$3,744				
Effective Date		2/20/02			
Market Conditions		0%			

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Analysis

As outlined within the report, the subject property was purchased in February 1999, for $18,393,968 based on confirmation with the purchaser. This equates to $4,180 per acre for the approximately 4,400 acre tract. At that time, the sale of the subject was a purchase of a raw land tract with the speculative intention of developing the property with some type of master plan development. The sales considered bracket the market between the time of purchase and just after the purchase with the agricultural tract (Beckham Swamp Road) indicating the low end of the value at $3,142 an acre and the Palmetto Bluff tract indicating a high end of value at $4,849 per acre. Clearly, Palmetto Bluff had extensive undeveloped land and the actual price per acre was considerably higher than the $4,849. In an article by Mark R. Rattermann, MAI, SRA, The Market History of the Subject: Analytical Tool or Fourth Approach to Value?, a discussion of the value of the property at the time of purchase is outlined. As indicated within Uniform Standards of Professional Appraisal Practices (USPAP), appraisers are required to supply the sales history of the subject property. The process of reporting the history of the subject is designed to make the appraiser reconcile his or her value opinion with the prior market history of the subject. In many appraisals, the market history of the subject is the most significant data available. Mr. Rattermann goes on to discuss the gross sale price and closing date of the property.

"The gross sale price and closing date are often significant data in an appraisal. The price paid shows the report reader the amount a buyer agreed to pay and the price at which a seller agreed to sell as of that date. This historical information can be the first and most significant piece of data in the appraisal process. The gross sale price is usually (but not always) the market value of the property at that time. If the sale of the property meets the criteria in the definition of market value (knowledgeable seller and buyer, arm's-length transaction, etc.) then the sale price is a good reflection of the market value of the property as of that date. This sale price can be an indication of market value as of another date if adjustments for improvements or deferred maintenance, appreciation or depreciation in the market, and other facts are considered. Many appraisers consider the sale price to be a very significant piece of data in their analysis, and the final opinion of value is greatly affected by this information. If a sale price does not reflect market value, an appraiser must so state and explain this in the analysis. In the absence of an explanation, an appraiser must show how the prices correlate with the value opinion."

Therefore, in reconciling the current value of the property, I have considered the sale of the subject property as an arm's length sale. In order to reach a conclusion of value of the property as of the current date, I have considered the additional monies spent on the development potential of the property. As outlined, this is the capitalized investment in the property to date. In the final indication of value, the gross profit potential reflects profit for any appreciation in the property since the time of purchase along with profit on the capitalized investment. Therefore, in reconciling a land value in the analysis, I have utilized the sale price of the subject property or $18,399,968.

The next step in the cost approach is to consider the total capitalizing investment to date in order to develop the property. As outlined, this is the money spent by developer after purchase in order to attempt to entitle the property for development. At all times, the proposed maps were a possibility so monies expended on a development plan should always consider the option of the final maps that were adopted on February 20, 2002. It is further indicated these costs were spent for the development plan as well as regulatory issues including the floodplain/floodway issue. I have included a Historical Summary of Income and Expense and Work in Progress provided by Columbia Venture outlined in CV001119. Within this document, Columbia Venture outlines all of the capital investment for 1999, 2000, and 2001. This spreadsheet also continues to show the value of the Manning purchases as other uses and sources at $7,469,077. As indicated, this is already been reflected in the market value purchase of the property as

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vacant. A copy of the Historical Summary of Income and Expense and Work in Progress spreadsheet is shown below.

CV001119

Columbia Venture LLC
Historical Summary Income Statement and Work In Progress

	1999	2000	2001	Actual Sep	Actual Oct	Actual Nov	YTD 2002	Project To Date
CASH FLOW FROM OPERATIONS								
Net Income (Loss)	(21,951)	(92,711)	(122,184)	(766)	(1,125)	(2,504)	(28,564)	(258,300)
Adjustments:								
Depreciation	-	6,397	7,844	-	-	-	1,911	15,947
Basis & Development Cost	-	-	-	-	-	-	-	-
NET CASH PROVIDED (USED)	(21,951)	(86,324)	(114,620)	(766)	(1,125)	(2,504)	(27,653)	(250,449)
CAPITAL INVESTMENT								
Work in Progress								
Management								
Onsite		10,846	122,693	3,500	3,500	3,500	38,500	270,833
Offsite	70,416	106,246	107,658	3,500	3,500	3,500	38,500	322,816
Environmental & Permitting								
Paul Booth	352,786	259,135	12,109				-	624,031
Brockington & Associates		81,469	-				-	81,469
Survey & Mapping	144,970	3,460	-				-	148,430
Taylor Brothers	23,914	-	-				-	23,914
Engineering								
Lockwood Green	669,671	919,428	894,343				16,172	2,159,612
Experient Fabre Archaia Assoc			25,389				-	25,389
Golf Course Lease/Sale							-	10,292
McNair Law Firm	786	9,506	-					
Public Relations							-	69,002
Bundas Enterprise of Columbia		27,853	41,605				-	130,044
Krane/Fowler	29,229	47,722	56,491				14,252	804,592
Chemonti Silver	13,488	182,385	436,880				-	339,108
Richard Quinn		47,506	232,988	6,000	10,000	6,000	28,750	54,600
Grant Group		7,600	47,000				-	24,620
Mazlin			24,920				-	700
Recognition			700				-	
Master Planning								
Computer Design		2,938	-				-	2,938
EDSA		171,155	6,939				-	178,093
WEEG Golf Course Design		7,381	-				-	7,381
ECG Plan South		16,219	31,138				-	46,345
Meadow Real Estate Consultants	53,659		-				-	53,659
Wilbur Smith (I-77 Interchange)			23,000				-	23,000
John Kosnold & Associates		4,290	-				-	4,290
Dunlop By Grove		2,313	-				-	2,313
Vrtra 3-D	35,000		35,000				-	70,000
Hendrix & Dandy			13,413				-	13,413
Lowell Butch Bates			16,000				-	16,000
Computer Applications			1,813				-	1,813
Interactive Data Visualization			7,500				-	7,500
McMillan and Associates			10,625				-	10,625
Jerry R Adkins-Appraisal			600				-	600
Zungel Consulting			11,662				-	11,662
Linda Gilmore			3,000				-	3,000
East Bluff Community Org			4,300				-	4,300
Green Stripe - Exit Strategy			45,000				-	45,000
Beyond The Door			1,000				-	1,000
Miscellaneous		1,129	46				-	1,175
Legal & Lobbying								
McNair Law Firm	26,484	248,643	46,276	123	95		6,068	326,373
Austin Lewis & Rogers		118,648	365,976		4,813	5,125	45,026	530,240
Bill Boyd			523,726				20,508	544,234
Bill Boyd - Exit Strategy			19,435				38,117	57,552
Conservation Advisors - Exit Strategy			5,481	1,990			14,411	19,892
Appraisal - Exit Strategy			23,000		75,000	74,701	224,701	244,701
Winston & Strawn		34,137	289,644	23,580			36,500	353,280
Consultants								
Gary Dykeuse		28,947	8,525				-	32,472
Martin Becker			-				-	-
Tommy H Wimsor		1,276	-				-	1,276
Martin D Gerber			6,888				-	6,888
Property Taxes	11,811	13,369	14,118				10	39,303
Interest Expense			-					
Carolina First-Manning Note		440,829	631,078	34,142	30,257	25,918	328,491	1,360,386
Burroughs & Chapin-Manning		6,818	-				-	6,818
Member Loans			89,290	13,310	14,599	13,211	142,530	283,470
Carolina First- Line of Credit		121,700	169,381	11,310	12,058	10,767	123,474	484,035
Loan Fees			214,959		23,000		365,316	610,315
Total Work in Progress	1,432,048	2,895,126	4,245,486	96,854	176,819	149,722	1,734,351	10,888,888
Other Uses/(Sources)								
Treasury Shares			-				-	-
Manning Purchase		7,460,977	-				-	7,460,977

CV001119

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As discussed in the subdivision valuation text, the subject property remains in the permitting phase. At this time the subject is not an entitled piece of land. Further, it indicates the appraiser must use raw land value and include permitting costs and profit as a separate line item cost estimates in the cost approach. Alternatively, a cost approach using land value with full entitlements would exclude the cost needed to achieve permitting profit over the permitting period because the elements are already considered in the "as is" land value estimate. Either method is acceptable. However, when reporting current "as is" value for lending clients, the full land value with any entitlements in place must be stated. The text is discussing what is appropriate for determining the future value of a project after entitlements are in place. If the market typically buys and sells entitled land and 100% of the entitlements are in place, it would be appropriate to consider the sales comparison approach for similar tracts of land with entitlements in place as well as an income approach for future lot potential. However, it would be misleading to consider the value of a property as entitled when, in fact, the entitlements are not in place. Therefore, I have utilized the premise that the cost to date is a reasonable investment along with an expected profit on the expenditures or cost to date.

As outlined, the total investment is at the end of 2001, which is between the date of the August 20, 2001 release of flood insurance map study and the effective date of the new maps February 20, 2002. The total investment at that time was $27,066,640.

Allocating the market expectation of profit is also difficult at this phase but can be accomplished by several methods. One method is the interviewing of developers prior to embarking on a development project. Another method is extraction from the market. Depending on the risk associated with property and the timeline for the earning of the profit, these ranges of profit anticipation can have a wide range at the beginning of the project. These anticipated profits can largely be dependent upon the degree of risk in the point in time the profit is considered. Several examples in the Subdivision Valuation book are outlined indicating how to extract profit and showing internal rate returns along the timeline project. Even in these examples for the text book, profit examples indicating that developers will consider profit as a straight line percentage as well as gross sellout with these numbers varying from 27% at gross sellout to as much as 37% on straight line basis. Again, the higher profit on a straight line basis would be for a fully developed project.

Another indication of desired profit can be based on discussions with a developer. I was able to extract the anticipated profit for the Columbia Venture project based on information contained in a confidential memorandum outlined in the Operating and Development Activities Financing Plan for Columbia Venture, LLC, dated December 7, 2000 (CV010679). Again, confirming my further discussions, the plan does confirm the round number of $18,000,000 paid for the property. At that time, their anticipated value of the property was $30,000,000 based upon an appraisal of the fully developed property by Jerry Adkins, dated February 8, 1999. Again, this was a hypothetical appraisal assuming completion and build out of the development, discounted to the present value. As indicated, this is not the current state of the property. At this time, the development was ongoing and the developer could anticipate a profit for expenditures to date. In addition to a $2,000,000 operating line of credit, Columbia Venture owed $7,800,000 to finance the purchase of the Manning Shares which included the purchase of the shares plus interest to date. At that time, they were anticipating a current note maturity on March 30, 2001. With additional interest, the value of the note was to be $8,040,000. In order to create cash for ongoing development operations, Columbia Venture considered the sale of the Manning Shares and Manning Interests to an entity called Top Box. As of the date of this memo, Top Box had informed Columbia Venture they were ready to purchase these shares for $10,000,000. The analysis of this potential sale shows what they were willing to accept as profit for the sale of an interest in the land and due diligence obtained to date. Although the sale was not finalized, this shows their anticipated profit

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expectations in this transaction scenario. Based upon the cost to date for the Manning shares of $8,040,000 and a proposed sale price of $10,000,000, the implied gross profit would be $1,960,000 on this sale. That equates to a gross profit expectation of 24.38%.

BEFORE ASSUMED TAKING		
Tract Size - Acres	4,400	
Acquisition Cost	$8,040,000	From owners records, CV 10679-10683
Proposed Sale Price	$10,000,000	Anticipated sale of Manning portion at current phase of entitlement
Implied Profit	$1,960,000	
Gross Profit Expectation	24.38%	as a % of total investment

Based upon the discussion of anticipated profit along with the evidence of expected profit from the developer outlined in the analysis of the potential sale of the Manning Shares, I have utilized a gross profit percentage of 25%. The following chart indicates the value of the property as of February 20, 2002, based upon the reasonable investment back expectations of the total investment to date. As indicated, the total investment is $27,066,604 with a market gross profit expectation of 25% for a total gross profit expectation of $6,766,651. This represents the value of the investment as of the effective date of appraisal of $33,833,255 which is rounded to $33,800,000.

BEFORE ASSUMED TAKING		
Tract Size - Acres	4,400	
		Notes to Audited Finacial Statements CV 005438, conflicts slightly with closing statement
Land Purchases	$10,932,991	
Manning Purchase	$7,460,977	CV01119-Historical Income Expense and work in progress
Capital Investment - 1999	$1,432,045	
Capital Investment - 2000	$2,995,126	
Capital Investment - 2001	$4,245,465	$18,393,968
Total Value of Investment	$27,066,604	
Gross Profit % Expectation	25.00%	
Gross Profit Expectation	$6,766,651	as a % of total investment
Value of Investment with Profit Earned	$33,833,255	
Rounded	$33,800,000	

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Description of the Assumed Regulatory Taking

The assumed taking arises from a change in the Flood Insurance Rate maps that effects the location of the floodway and floodplain on the property. The maps have an effective date of February 20, 2002, the date the county adopted the new Flood Insurance Rate Map, and Flood Insurance Study dated August 20, 2001. If the flood map remains in place, approximately 3,175 acres of land will remain inside the floodway and approximately 1,225 acres of the property will be outside the floodway. The acreage inside and outside of the floodway relied upon have been reported. The history of the FEMA flood maps has been outlined extensively within the Site Data section of the report.

In the valuation of the property after the assumed regulatory taking, I have considered the highest and best use of the property based upon the FEMA flood maps which have been adopted as of February 20, 2002. Based upon the land value of the property with the FEMA flood maps in place, I have prepared a valuation of the property based upon this scenario. Several documents produced by Columbia Venture indicate they had an exit strategy that considered the physical and legal characteristics of the property in this state. This is further outlined in a confidential memo dated December 7, 2000. In addition, they had analyzed the total area outside of the floodway and inside the floodway in a document entitled Columbia Venture Project Breakdown of Area Inside and Outside of Floodway November 20, 2001, CV003683. Within this document, they indicate approximately 1,225 acres located outside the floodway and 3,175 acres located within the floodway for the total of 4,400 acres. They also referenced this fallback strategy in the December 7, 2000 memo as the property outside of the floodway containing 1,135 acres. They also reference 3,465 acres being located within the floodway at that time, which totals 4,600 acres which is 200 acres more than they currently own.

For the after analysis I have utilized the more recent document of November 20, 2001 indicating 3,175 acres located within the floodway and 1,225 acres located outside the floodway.

CV003683

Columbia Venture Project
Breakdown of Area Inside and Outside of Floodwa
20 November 2001

Location	Outside Floodway	Inside Floodway
North of I-77	450	675
Gills to I-77	360	1510
South of Gills	415	990
Total	1225	3175
North of Intermediate levee-Levee Section 1	590	840
South of Intermediate to Gills-Levee Section 2	220	1345
South of Gills-Levee Section 3	415	990
Total	1225	3175

CV003683

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My final analysis is based both upon the gross acreage of 4,400 at a blended value per acre. Columbia Venture has produced extensive documentation about their awareness of the potential for the February 20, 2002 FEMA maps to be in place. In addition, in the December 7, 2000 memo, they established an indicated value of the property for their fallback strategy. Within this document, they have estimated the fallback strategy for the sale of the property outside of the floodway being parceled up and sold for residential, commercial and compatible industrial uses at an estimated value of $16,550,000. The balance of the property within the floodway could be sold for agricultural, recreational, conservation uses at an estimated value of $9,600,000 for a total of $26,150,000.

Owners Fall Back Strategy, CV 010683			
Acres Outside Floodway	1,135	$14,581	$16,550,000
Acres Inside Floodway *	3,265	$2,940	$9,600,000
Tract Size - Acres	4,400	5,943	$26,150,000

Acreage total is 4,600 with 3,465 floodway in meeting minutes

Therefore, the valuation in the property after the final determination of FEMA flood maps as of February 20, 2002, takes into consideration the highest and best use of the property, the ability of the current developer to sell the property in this state, and the expected return they could receive. This will be established to determine the after value of the property.

Highest and Best Use After the Regulatory Taking

As outlined, the developer's intention for the property after the assumed taking is to parcel up the floodway property and property outside of the floodway and sell off the tracts. The property outside of the floodway/floodplain would be parceled up and sold for residential, commercial, and compatible industrial use. Based upon the due diligence done to date and the anticipated opportunity to receive some type of zoning change based upon an approved development plan, this remains a feasible option that appears to be both legally permissible, physically possible, and financially feasible. The financial feasibility has been tested in the market with comparison to comparable sales for similar uses. In addition, this is further supported by the Columbia Venture analysis of the potential for the property. As outlined in the comparable sales, this appears to be both a profitable and feasible use of the property outside of the floodway. These uses could include all of the stated uses with consideration given to a single large industrial uses to multiple tracts sold for residential, commercial, and potential use within the technology research sector being considered.

In addition, the agricultural land needs to be considered in the after. Although these sales occurred after the effective date of the appraisal, Columbia Venture, in fact, did institute a sale of the agricultural land within the floodway at a later date. These sales began occurring in July 2006 through July 2009. They instituted a sale of these tracts at a stepped up basis with Kirkman Finlay buying these tracts for the continuation of agricultural uses including farming. Also, one of the comparable sales considered both before and after is the sale of Big Lake in May 2003 for $3,142 per acre. Clearly, the exit strategy for highest and best use of agricultural land within the floodway/floodplain area is a financially feasible option.

Therefore, it is my option that the maximum productive use of the property, assuming the FEMA flood maps in place as of February 20, 2002, would be to parcel up the 1,225 acres outside the floodway for development tracts to include residential, commercial, or industrial uses. The area within the floodway (3,175 acres) should be parceled up and sold for agricultural and recreational uses.

Valuation After – Outside the Floodway (1,225 Acres)

The market value of the vacant land will be determined using the sales comparison approach to value. This is an appraisal procedure in which the market value estimate for the subject property is predicated upon prices in actual real estate transactions and considering current offerings, if any, with the former fixing the lower limit of value in a static or advancing market (pricewise) and fixing the higher limit of value in a declining market; and the latter fixing the higher limit of value in any market. It is a process of analyzing the sales of similar properties recently sold in order to derive an indication of the most probable sales price of the property being appraised. The reliability of this technique is dependent upon the availability of comparable sales data, the verification of the sales data, the degree of comparability or extent of adjustment necessary for factors such as time of sale, size, physical characteristics and motivation of the purchaser, and the presence or absence of any non-typical conditions affecting the sales price.

This approach is based upon the principles of supply and demand, substitution, balance and external conditions. The application of these principles in this approach to value will lead to a reasonable and supported conclusion for the value of the property being appraised.

A search of the neighborhood was made in order to determine what sales of similar sites had occurred in the recent past to compare to the subject property. A sales study of the area was performed and the results are contained in my files. After a search of the market, five (5) comparable land sales have been included in the report. These five (5) sales were tracts of land that were purchased for development. Where available I was able to extract the wetlands or recreational portions of the property to determine the value of the usable or development area within a tract.

The unit of comparison used in this approach is the price per acre. This is the accepted unit of comparison/measure in the market for properties similar to the subject. Price per lot or unit is also considered in the analysis based on the allowed density for development. Detailed information about each sale follows.

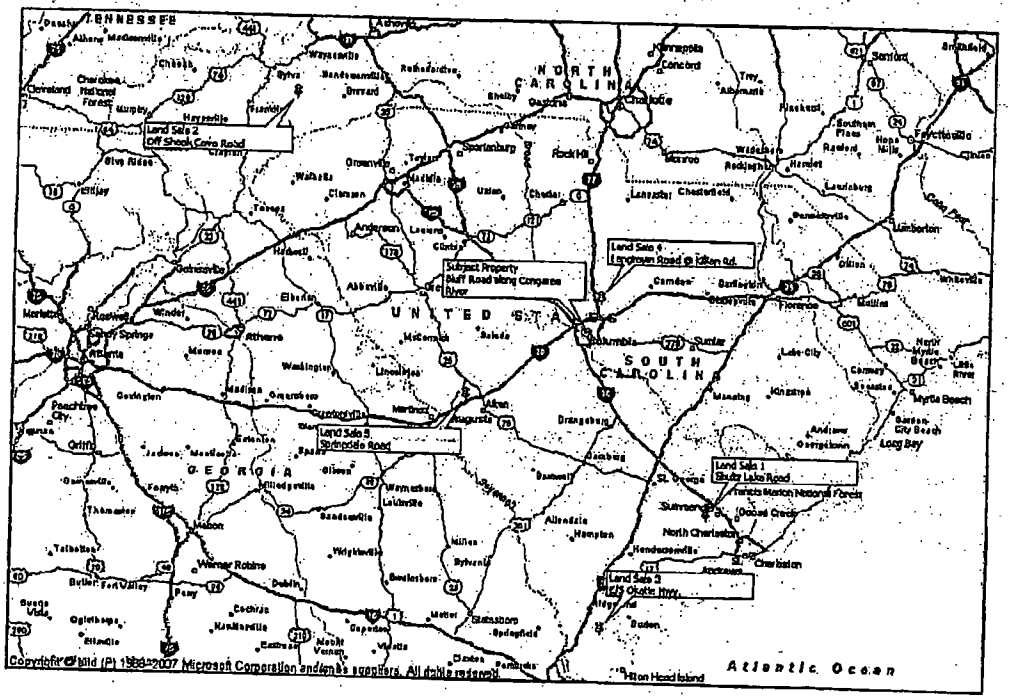
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COMPARABLE LAND SALES SUMMARY TABLE

No.	Location	Sale Date	Price	Size in Acres	Price/ Acre
1.	Shultz Lake Rd.	05/10/2005	$20,600,000	1,985.720	$10,374
2.	Off Shook Cove Rd	04/20/2003	$11,000,000	769.200	$14,301
3.	E/S Okatie Hwy	06/29/2000	$11,500,000	926.250	$12,416
4.	Longtown Road at Killian Road	01/08/2003	$7,500,000	1,000.000	$7,500
5.	Springdale Drive	09/05/1997	$7,177,574	535.400	$13,406



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COMPARABLE LAND SALES CHART

Record ID	N/A	4493	5168	2715	2820	3123
Property Rights	Fee Simple	Fee Simple	Fee Simple	Fee Simple	Fee Simple	Fee Simple
Financing	N/A	Conventional	Market	Cash To Seller	Cash to Seller	Cash to Seller
Conditions of Sale	N/A	Arm's Length		Arms length	Arms Length	Arms Length
Date of Sale	N/A	05/10/05	04/2003	06/29/00	01/08/03	09/03/07
Address	Bluff Road	Shultz Lake Rd.	Off Shook Cove Rd	Olanta Hwy.	Longtown Rd. at Killian Rd.	Springdale Drive
	Bluff Road along		Between Cahlers and Sylva,			North of I-20 & west of
Location	Congaree River	S/S & N/S Shultz Lake Rd,	NC	Olanta	Northeast Columbia	Bettis Academy Road
County	Richland	Dorchester	Jackson, NC	Dewallett	Richland	Alken
	10900-01-02					
Tax Map Number	Multiple Map #s	151-00-00-046, -067	7566-25-2334	R603-008-000-0003-0000	17400-02-04	00-130.01-001 & A
Sales Price	N/A	$26,600,000	$11,000,000	$11,500,000	$7,500,000	$7,177,574
Physical Characteristics						
Size: Acres	4,400,000	1,915.72	769.20	926.25	1,040.00	535.40
Less- Wetlands/Floodway	3,175,000	1,015.72	0.00	0.00	107.00	0.00
Usable Land Size	1,225.00	900.00	769.20	926.25	933.00	535.40
Current/Intended Use	Mixed Use	Single Family Residential	Single Family Residential	Single Family Residential	Mixed Use	Industrial
Planned Units	No approved plan only conceptual	1,950			3,980	N/A
Commercial	No approved plan only conceptual	None	None	Town center	52.00 acres	N/A
Shape	Irregular	Irregular	Irregular	Irregular	Irregular	Irregular
Topography	Mostly Level	Mostly Level, Large Pond	Rolling to steep	Mostly level	Sloping	Sloping
Floodplain/Floodway	Portion in floodplain and floodway	Portion in floodplain area with/n wetlands	Unknown	Portion in floodplain area with/n wetlands	Portion in floodplain area with/n wetlands	None
Wetlands/Floodway	72%	53%		12%	20%	0%
Zoning	Development Zone	General Commercial	Residential	Planned Unit Development	Light Industrial	General Industrial
Zoning Code	D-1	GC	PUD	PUD	M-1	
Gen Prop Type	09 Mixed Used Development	09 Mixed Use Development	Residential	09 Mixed Use Development	09 Mixed Use Development	03 Industrial
Utilities	All Available	All Available	None	All Available	All Available	All Available Including Rail
Easements	Power Line	No Adverse	Powerline on boundary	No Adverse	Power Line	
Development Plan	Concept plan, Due Diligence in Process	Vacant Land	Approved block in PUD	Vacant Land	Vacant Land	Vacant Land
Sales Price/Gross Acre	$3,636	$13,877	$14,301	$12,414	$7,500	$13,406
Sales Price/Usable Acre	$3,636	$29,556	$14,301	$12,414	$8,039	$13,406
ADJUSTMENTS						
Property Rights		0%	0%	0%	0%	0%
Financing		0%	0%	0%	0%	0%
Conditions of Sale		0%	0%	0%	0%	0%
Market Conditions (Time)		-9.00%	-3.00%	-6.00%	-3.00%	13.00%
Adjusted Price/Gross Acre		$12,626	$13,873	$11,669	$7,275	$15,139
Adjusted Price/Usable Acre		$26,888	$13,873	$11,669	$7,800	$15,139
Physical Characteristics						
Location		Superior	Superior	Superior	Superior	Similar
Size		Smaller	Smaller	Similar	Similar	Similar
Shape		Similar	Similar	Similar	Similar	Similar
Topography		Similar	Similar	Similar	Similar	Similar
Floodplain/Floodway		Superior	Superior	Superior	Superior	Superior
Wetlands		Inferior	Similar	Inferior	Inferior	Similar
Zoning		Superior	Superior	Superior	Superior	Similar
Utilities		Similar	Similar	Similar	Similar	Similar
Easements		Similar	Similar	Similar	Similar	Similar
Development Plan		Inferior	Inferior	Inferior	Inferior	Inferior
Adjusted Price/Acre		$12,626	$13,873	$11,669	$7,275	$15,139
Adjusted Price/Acre		$26,888	$13,873	$11,669	$7,800	$15,139
High Price/Gross Acre	$15,139		High Price/Usable Acre	$15,139		
Low Price/Gross Acre	$7,275		Low Price/Usable Acre	$7,800		
Median Price/Gross Acre	$13,873		Median Price/Usable Acre	$13,873		
Mean Price/Gross Acre	$11,777		Mean Price/Usable Acre	$14,412		

Effective Date: 2/2007
Market Conditions: 3%

Analysis

Sale 1 was purchased for a large scale development in Dorchester County and has been analyzed based upon usable land size. This is a mixed use development tract that includes commercial and residential components. The sale price per acre for the usable acreage is $22,889. Sale 2 is for an entitled section of a residential development in Jackson, North Carolina. This is a sale of 769 acres included within an approved PUD for residential use with an indicated price per acre of $14,301. Sale 3 is the sale of a residential tract in Beaufort County at an indicated price per acre of $12,416. Sale 4 is a mixed use tract purchased in Richland County that is being developed with a large residential component with a town center including some commercial. The sales price per acre for the usable acreage is $9,340. Sale 5 is a large industrial tract of land in Aiken County. This property was purchased for single user industrial development of the Bridgetown Firestone facility indicating a price per acre of $13,406. All of the sales indicate values for property that could be put to similar uses as the subject property's area outside of the floodway.

The only adjustment considered for the sales is the market conditions (time adjustment). Based upon a 3% per year positive market conditions adjustment I have adjusted the sales to the effective date of the appraisal of February 20, 2002. Therefore, the sales that have occurred after the effective date of the appraisal have a negative market conditions adjustment. Sale 1 is adjusted a negative 9% for market conditions and the adjusted price per acre is $20,829 for the usable land. Sale 2 is adjusted a negative 3% for market conditions and the adjusted price per acre is $13,872. Sale 3 is adjusted a positive 6% for market conditions and the adjusted price per acre is $13,161. Sale 4 is adjusted a negative 3% for market conditions and the adjusted price per acre is $9,060 for the usable land. Sale 5 is adjusted a positive 15% for market conditions and the adjusted price per acre is $15,417.

After the adjustments are made, the sales indicate a high price for usable acre of $20,829, a low price per acre for usable acre of $9,060, a median price per acre for usable acre of $13,872, and a mean price per acre for usable acre of $14,468.

For the 1,225 acres outside of the floodway I have reconciled on a value of $15,000 per acre.

Valuation After – Inside the Floodway (3,175 Acres)

A search of the neighborhood was made in order to determine what sales of similar sites had occurred in the recent past to compare to the subject property. A sales study of the area was performed and the results are contained in my files. After a search of the market, five (5) comparable land sales and one (1) pending sale have been included in the report. These five (5) sales and one (1) pending sale were tracts of land that were/are purchased for development. Where available I was able to extract the wetlands or recreational portions of the property to determine the value of the usable or development area within a tract.

The unit of comparison used in this approach is the price per acre. This is the accepted unit of comparison/measure in the market for properties similar to the subject. Price per lot or unit is also considered in the analysis based on the allowed density for development. Detailed information about each sale follows.

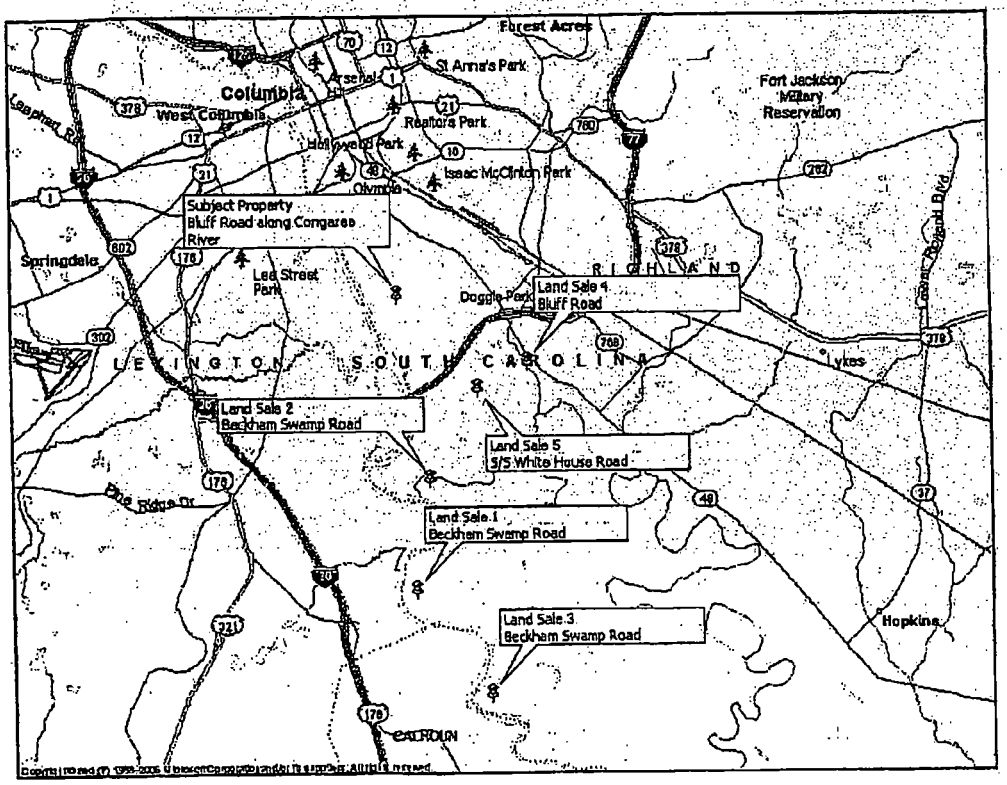
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COMPARABLE LAND SALES SUMMARY TABLE

No.	Location	Sale Date	Price	Size in Acres	Price/ Acre
1.	Beckham Swamp Road	05/20/2003	$2,354,400	1,145.600	$2,055
2.	Beckham Swamp Road	07/25/2006	$1,665,000	590.169	$2,821
3.	Beckham Swamp Rd. and Bluff Rd.	04/12/2006	$2,035,000	719.489	$2,828
4.	Bluff Road	03/20/2009	$1,532,811	510.937	$3,000
5.	White House Road	06/18/2009	$355,817	101.662	$3,500



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COMPARABLE LAND SALES CHART

	Subject	Land Sale #1	Land Sale #2	Land Sale #3	Land Sale #4	Land Sale #5
Record ID	N/A	4507	3021	5111	6407	6463
Property Rights	Fee Simple	Fee Simple	Fee Simple	Fee Simple	Fee Simple	Fee Simple
Financing	N/A	Cash to Seller	Conventional	Cash to Seller	Cash to seller	Cash to Seller
Conditions of Sale	N/A	Arm's Length	Arm's Length	Arm's Length	Arms Length	Arm's Length
Date of Sale	N/A	03/20/03	07/21/06	04/12/06	09/20/09	06/18/09
Address	Bluff Road Bluff Road along	Beckham Swamp Rd. Congaree River/Beckham	Beckham Swamp Rd. Congaree River/Beckham	Beckham Swamp Rd. and Bluff Rd. Congaree River/Beckham	Bluff Road Congaree River	Whitehouse Road
Location	Congaree River	Swamp Rd.	Swamp Rd.	Swamp Rd.	south of I-77	S/S Whitehouse Road
County	Richland	Richland	Richland	Richland	Richland	Richland
Tax Map Number	10900-01-02 Multiple Map #s	10700-01-01	13400-02-10 & 16	13400-02-10 & 16; 13300-01-01 & 04	13400-01-03 13500-01-01	13400-01-01 & 02 (p/o)
Sales Price		$3,600,000	$1,661,000	$2,033,000	$1,532,811	$355,817
Physical Characteristics						
Size: Acres	4,400.000	1,145.600	590.169	719.489	510.937	101.662
Less: Wetland/Floodway	3,175.000	1,145.600	590.169	539.489	300.000	101.662
Area outside Floodway	1,225.00	0.00	0.00	180.00	210.937	0.00
Current/Intended Use	Mixed Use	Agriculture/Recreation	Agriculture/Recreation	Agriculture/Recreation	Agriculture/Recreation	Agriculture/Recreation
Shape	Irregular	Irregular	Irregular	Irregular	Irregular	Irregular
Topography	Mostly Level	Mostly Level	Mostly Level	Mostly Level	Mostly Level	Mostly Level
Floodplain/Floodway	Portion in floodplain and floodway	Floodway	Floodway	Portion in floodplain and floodway	Portion in floodplain and floodway	Floodway
Wetlands		Not delineated	Not delineated	Not delineated	Not delineated	Not delineated
Zoning	Development Zone	Rural District	Rural District	Rural District	Rural District	Rural District
Zoning Code	D-1	RU	RU	RU	RU	RU
Gen Prop Type	09 Mixed Used Development	01 Agricultural	01 Agricultural	01 Agricultural	Agricultural/Recreational	Agricultural/Recreational
Utilities	All Available	Electricity,Telephone	All Available	All Available	None	None
Easements	Power line easements	Power line easements	Power line easements	Power line easements	None	Power line easements
Development Plan	Concept plan; Due Diligence in Process	N/A - Not development tract	N/A - Not development tract	N/A - Not development tract	N/A - Not development tract	N/A - Not development tract
Sales Price/Acre		$3,141	$2,813	$2,826	$3,000	$3,500
ADJUSTMENTS						
Property Rights		0%	0%	0%	0%	0%
Financing		0%	0%	0%	0%	0%
Conditions of Sale		0%	0%	0%	0%	0%
Market Conditions (Time)		0.00%	0.00%	0.00%	0.00%	0.00%
Adjusted Price/Acre		$3,141	$2,813	$2,826	$3,000	$3,500
Physical Characteristics						
Location		Similar	Similar	Similar	Similar	Similar
Size		Similar	Similar	Similar	Similar	Similar
Shape		Similar	Similar	Similar	Similar	Similar
Topography		Similar	Similar	Similar	Similar	Similar
Floodplain/Floodway		Similar	Similar	Similar	Similar	Similar
Wetlands		Similar	Similar	Similar	Similar	Similar
Zoning		Similar	Similar	Similar	Similar	Similar
Utilities		Similar	Similar	Similar	Similar	Similar
Easements		Similar	Similar	Similar	Similar	Similar
Development Plan		Similar	Similar	Similar	Similar	Similar
Adjusted Price/Acre		$3,141	$2,813	$2,826	$3,000	$3,500

High Price/Acre	$3,500
Low Price/Acre	$2,813
Median Price/Acre	$3,000
Mean Price/Acre	$3,056

Effective Date	2/10/02
Market Conditions	0%

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Analysis

The only adjustment considered for the sales is the market conditions (time adjustment). The 2009 sales are at similar prices as the 2003 Sale. The sales indicate a high price per acre of $3,500, a low price per acre of $2,821, a median price per acre of $3,000, and a mean price per acre of $3,058.

Therefore, I have concluded a value of $3,100 per acre for the 3,175 acres within the floodway area based upon the most recent sale of Beckham Swamp Road – Big Lake at a price of $3,142. This outlines the value of the agricultural property of the effective date and shows the future sales potential of the property for agricultural use with the plan that was actually put in place by Columbia Venture.

Final Reconciled Value

Based upon the values outlined, the following chart indicates the value for the property based upon the two property types.

AFTER ASSUMED TAKING			
Description	Size	Value/Acre	Total
Acres Outside Floodway	1,225	$15,000	$18,375,000
Acres Inside Floodway	3,175	$3,100	$9,842,500
Tract Size - Acres	4,400	$6,413.07	$28,217,500
FINAL VALUE AFTER			
Tract Size - Acres	4,400	$6,400	$28,160,000
Rounded			**$28,200,000**

Therefore, based upon the data outlined, it is my opinion that the 4,400 acres has an indicated value of $6,400 per acre or $28,160,000, rounded to $28,200,000.

As outlined within the valuation of the property before the assumed regulatory taking, the 4,400 acres is a tract of land that is in the process of being entitled for development. Based upon the methodologies applied for the valuation of a vacant tract of land in the entire process I have utilized the cost approach to value. This recognizes the acquisition value of the subject property along with all capital expenditures to date along with a reasonable expectation of profit to arrive at a value of the property in its current state with capital expenditures expended to date. The data relied upon is confirmed throughout by data provided by Columbia Venture and is an excellent indication of the current value of the property with expected anticipated profit in its current state of development. As indicated, the only expenditures are for soft costs and the land remains a vacant tract of land with no actual infrastructure to date. Therefore, it is my opinion that the market value of the fee simple interest of the property before the assumed taking as of the effective date of February 20, 2002, is:

THIRTY THREE MILLION EIGHT HUNDRED THOUSAND DOLLARS
($33,800,000)

In the valuation of the property after the assumed regulatory taking, I have again utilized data provided by Columbia Venture with their own internal valuation of the property along with comparable sales to consider the value of the property in its state after the FEMA flood maps were approved February 20, 2002. The comparable sales provide excellent indication of the value of the property outside of the floodway at $15,000 per acre. In addition, the agricultural land value of $3,000 per acre is well supported by comparable sales as well as the actual sales Columbia Venture has made out of the property at a future date. In addition this is consistent with the exit strategy plan as indicated within their documents.

The reconciled value per acre of $6,400 after the adoption of the flood maps, assuming a regulatory taking has occurred is well supported. Therefore it is my opinion that the market value of the property after the assumed regulatory taking as of the effective date of February 20, 2002, is:

TWENTY EIGHT MILLION TWO HUNDRED THOUSAND DOLLARS
($28,200,000)

Based upon the above, it is my opinion that the market value of the extent of loss in economic use and value arising from an assumed regulatory taking of the property without just compensation, as of the effective date of February 20, 2002, is:

FIVE MILLION SIX HUNDRED THOUSAND DOLLARS
($5,600,000)

Respectfully submitted,



George E. Knight, Jr., MAI
S.C. State Certified General
Real Estate Appraiser No. CG 1531

GEKjr/kdw

DEF-00012386

PLTF TRIAL EXH 195

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Professional Credentials
Member, Appraisal Institute, (MAI Certificate No. 12097

Education
Bachelor of Science Degree-Business Administration, Real Estate and Finance,
University of South Carolina, May 1987

Appraisal Education
Core Courses
Appraisal Institute
Course 101, Real Estate Appraisal Principles, February 1988
Course 310, Standards of Professional Practice, Parts A & B, September 1991 & March 1995
Course 120, Basic Valuation Procedures, May 1992
Course 320, Capitalization Theory and Techniques, Part A, May 1992
Course 330, Capitalization Theory and Techniques, Part B, November 1992
Course 520, Highest & Best Use and Market Analysis, October 1993
Course 510, Advanced Applications, October 1999
Course 420C, Standards of Professional Practice, May 2001
Course 530, Advanced Sales Comparison and Cost Approaches, January 2002
Course 540, Report Writing and Valuation Analysis, June 2002
Course 410, 7-Hour Update USPAP, March 2006
Course 520, Computer-Enhanced Cash Flow Modeling, November 2006
Course 440, 7-Hour Update USPAP, May 2010

Growth Seminars
Appraisal Institute
Improving Appraisals, July 2003
"The Emerging Shift to Market Valuation for Financial Reporting Purposes", October 2003
Scope of Work: Expanding Your Range of Services, January 2004
The Status of the Real Estate Profession, July 2004
Reappraisals, Readdressing, Reassigning, Course 001-CB 1060, October 2004
Market Analysis: Using the Skills Of Business, October 2005
Real Estate Development and Development, January 2006
"Loss Prevention," April 2005
Subdivision Valuation, June 2006
Summary Report Writing Applied, July 2006
AI Reports – AE105 Summary Report Residential July 2006
Forecasting Revenue, March 2007
The Real Estate Economy: Where is Stone Up 2006? July 2007
The Valuation of Wetlands, July 2007
Analyzing Distressed Real Estate, January 2008
Analyzing Commercial Construction, March 2008
Spotlight on USPAP: Common Errors and Issues, July 2008
Business Practices and Ethics, November 2008
Appraising Distressed Commercial Real Estate: Here We Go Again, November 2008
Highest & Best Use and USPAP 2008 – Its Effect on Market Value, January 2009
A Lender's Perspective: The Role of the Appraiser in the Lending Process, July 2009
Appraising Distressed Commercial Real Estate: January 2010
Spotlight on USPAP: Appraisal Review: April 2010

U.S. Government
Eminent Domain: The Nuts and Bolts of Public Takings, February-March, 1994

American Society of Farm Managers and Rural Appraisers
Timber and Timberland Valuation, Course 03-C-S-170, February 1999

Professional Associations
Appraisal Institute
Leadership Development Advisory Council (LDAC), March 2004- March 2005, May 2006
Leadership Development Advisory Council (LDAC), May 2007 Discussion Leader, April 2008, Vice Chair, April 2009- Chair
Appraisal Institute Education Trust, Committee Member, 2008, 2010
Appraisal Institute Government Relations Committee Member, 2010

Appraisal Institute – SC Chapter
Chairman, Association Guidance Committee (2004-2007)
Co-Chairman, Government Relations Committee (2004-2005)
Chairman, Government Relations Committee (2007, 2008, 2009)
Chapter Secretary (1997), Chapter Treasurer (2008), 2nd Vice President (2005), Vice President (2010),

International Right of Way Association – Atlantic and South Carolina Chapter 31
Member Columbus Chapter (2006, 2007, 2008, 2009, 2010)

Greater Columbia Association of Realtors

Other Associations
Leadership Columbia, Class of 2005
Leadership Columbia Committee (2006, 2007, 2008)
Leadership Columbia Alumni Association Board (2006, 2007, 2008, President – 2008)
Columbia Rotary Club (2008 to present)
Share Our Strength (SOS), Board of Directors (2006 to present)
LLR - Real Estate Appraisers Board, Internal Review Committee (2006 to present)

Professional Experience
Real Estate Broker for self Capacity, June 1987 – June 1996
Research Assistant & Associate Appraiser for Jeffery Wyman & Associates, Inc., February 1991 - June 1991
Appraiser and Partner – Real Estate Appraisers and Consultants LLC (REAC) Real Estate Appraisal Firm, July 1996 to Present
Broker in Charge and Owner – The Knight Company, LLC. Real Estate Brokerage Firm, 1999 to Present
Qualified as an expert witness in Circuit Court for South Carolina and North Carolina

Licensing
South Carolina State Licensed Real Estate Broker
South Carolina State Certified General Real Estate Appraiser, Certificate No. CG 1511
Georgia Certified General Real Property Appraiser No. 316031
North Carolina State Certified General Real Estate Appraiser No. A4485

DEF-00012407

PLTF TRIAL EXH 195

COLUMBIA VENTURE, LLC
(A Developmental Stage Company)
COLUMBIA, SOUTH CAROLINA

FINANCIAL STATEMENTS
For the Year Ended December 31, 2001 and the
Period From February 17, 1999 (Date of Inception)
to December 31, 2001

and

INDEPENDENT AUDITORS' REPORT



CV003730

PLTF TRIAL EXH 199

COLUMBIA VENTURE, LLC
(A Developmental Stage Company)
COLUMBIA, SOUTH CAROLINA

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PLTF TRIAL EXH 199

SMITH SAPP BOOKHOUT CRUMPLER & CALLIHAM

A Professional Association Of
Certified Public Accountants & Consultants

INDEPENDENT AUDITORS' REPORT

To the Members
Columbia Venture, LLC
Columbia, South Carolina

We have audited the accompanying balance sheet of Columbia Venture, LLC (a limited liability company) as of December 31, 2001, and the related statements of income and members' equity and cash flows for the year ended December 31, 2001 and the period from February 17, 1999 (date of inception) to December 31, 2001. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Columbia Venture, LLC as of December 31, 2001, and the results of its operations and its cash flows for the year ended December 31, 2001 and the period from February 17, 1999 (date of inception) to December 31, 2001 in conformity with auditing standards generally accepted in the United States of America.

Smith, Sapp, Bookhout, Crumpler & Calliham, P.A.

SMITH, SAPP, BOOKHOUT, CRUMPLER & CALLIHAM, P.A.
Certified Public Accountants

Myrtle Beach, South Carolina
February 1, 2002

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D. Richard Crumpler, CPA, CFP
J. Robert Calliham, CPA
Willis E. Haselden III, CPA
Peter J. Fitzpatrick, LLM., CPA
Larry G. Tuttle, CPA
Christopher S. Huggins, CPA

Associates
David C. DeKleva, CPA
Michael L. Gamble, CPA
John F. Moore Jr., CPA
Mark A. Haugh, CPA
E. Dawn Smith, CPA
Gregory L. Ackerman, CPA
Leigh Ann Marks, CPA
Christine J. Lambert, CPA

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American Institute of CPA's
Partnering for CPA Practice Success
The AICPA Alliance for CPA Firms

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PLTF TRIAL EXH 199

COLUMBIA VENTURE, LLC
(A Developmental Stage Company)
COLUMBIA, SOUTH CAROLINA

BALANCE SHEET
December 31, 2001

ASSETS

Cash	$ 81,625
Prepaid Insurance	825
Furniture and Equipment (Net)	14,258
Land and Development Costs	35,214,971
TOTAL ASSETS	$ 35,311,679

LIABILITIES AND MEMBERS' EQUITY

Liabilities	
Accounts Payable and Accrued Expenses	$ 207,685
Due to Members and Option Holders	777,388
Notes Payable	10,500,000
Notes Payable - Members and Option Holders	2,788,612
Total Liabilities	$ 14,273,685
Members' Equity	
Class A Units	$ 10,428,380
Class B Units	9,028,694
Class C Units	1,817,745
Deficit Accumulated During Developmental Stage	(236,825)
Total Members' Equity	$ 21,037,994
TOTAL LIABILITIES AND MEMBERS' EQUITY	$ 35,311,679

The accompanying notes are an integral part of the financial statements.

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PLTF TRIAL EXH 199

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COLUMBIA VENTURE, LLC
(A Developmental Stage Company)
COLUMBIA, SOUTH CAROLINA

STATEMENTS OF INCOME AND MEMBERS' EQUITY
For the Year Ended December 31, 2001 and the
Period From February 17, 1999 (Date of Inception) to December 31, 2001

	Year Ended December 31, 2001	February 17, 1999 (Inception) to December 31, 2001
Operating Expenses		
Advertising and Marketing	$ 22,501	$ 38,751
Contributions	150	21,650
Professional and Consulting	16,919	40,213
Office Expenses	16,014	35,270
Travel and Entertainment	43,890	59,392
Rent	10,543	19,260
Depreciation	7,644	14,031
Insurance	4,128	9,155
Repairs and Maintenance	365	1,660
Licenses	10	1,103
Total Operating Expenses	$ 122,164	$ 240,485
Operating Loss	$ (122,164)	$ (240,485)
Other Income & Expense		
Interest Income	$	$ 8,035
Interest Expense		(4,375)
Total Other Operating Income & Expense	$	$ 3,660
Net Loss	$ (122,164)	$ (236,825)
Members' Equity - Beginning	21,160,158	
Step-Up in Basis for Purchase of Membership Interest		3,042,970
Purchase of Membership Interest		(7,418,151)
Member Contributions		25,650,000
Members' Equity - Ending	$ 21,037,994	$ 21,037,994

The accompanying notes are an integral part of the financial statements.

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PLTF TRIAL EXH 199

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COLUMBIA VENTURE, LLC
(A Developmental Stage Company)
COLUMBIA, SOUTH CAROLINA

STATEMENTS OF CASH FLOWS
For the Year Ended December 31, 2001 and the
Period From February 17, 1999 (Date of Inception) to December 31, 2001

	Year Ended December 31, 2001	February 17, 1999 (Inception) to December 31, 2001
Cash Flows of Operating Activities		
Net Loss	$ (122,164)	$ (236,825)
Adjustments to Reconcile Net Loss to Net Cash Provided by Operating Activities		
Depreciation	7,644	14,031
(Increase) in Prepaid Insurance	(825)	(825)
Increase (Decrease) in Accounts Payable and Accrued Expenses	(134,177)	231,377
Increase in Due to Members and Option Holders	753,696	753,696
Net Cash Provided By Operating Activities	$ 504,174	$ 761,454
Cash Flows of Investing Activities		
Purchase of Property	$	$ (10,932,991)
Purchase of Equipment		(28,289)
Payment of Land Development Costs	(3,834,561)	(6,589,010)
Net Cash Used By Investing Activities	$ (3,834,561)	$ (17,550,290)
Cash Flows of Financing Activities		
Proceeds From Notes Payable	$ 1,846,583	$ 14,749,726
Repayments of Notes Payable	(1,241,000)	(4,249,726)
Proceeds From Notes Payable - Members and Option Holders	3,788,612	3,788,612
Repayments of Notes Payable - Members and Option Holders	(1,000,000)	(1,000,000)
Purchase of Membership Interest		(7,418,151)
Member Contributions		11,000,000
Net Cash Provided By Financing Activities	$ 3,394,195	$ 16,870,461
Net Increase in Cash	$ 63,808	$ 81,625
Cash - Beginning	17,817	
Cash - Ending	$ 81,625	$ 81,625

The accompanying notes are an integral part of the financial statements.

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PLTF TRIAL EXH 199

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COLUMBIA VENTURE, LLC
(A Developmental Stage Company)
COLUMBIA, SOUTH CAROLINA

STATEMENTS OF CASH FLOWS
For the Year Ended December 31, 2001 and the
Period From February 17, 1999 (Date of Inception) to December 31, 2001

	Year Ended December 31, 2001	February 17, 1999 (Inception) to December 31, 2001
Noncash Investing and Financing Activites		
Land and Development Costs	$ 410,903	$ 17,692,970
Due From Member	(410,903)	
Member Contributions		(14,650,000)
Step-Up in Basis for Purchase of Membership Interest		(3,042,970)
	$	$
Supplemental Cash Flow Disclosures		
Interest Paid	$	$ 3,129

The accompanying notes are an integral part of the financial statements.

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COLUMBIA VENTURE, LLC
(A Developmental Stage Company)
COLUMBIA, SOUTH CAROLINA

NOTES TO FINANCIAL STATEMENTS
For the Year Ended December 31, 2001 and the
Period From February 17, 1999 (Date of Inception) to December 31, 2001

Note 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Nature of Operations: Columbia Venture, LLC is a limited liability company and continues to be in the developmental stage, but ultimately expects to have operations primarily concentrating with the development and sale of real estate. The Company owns real estate in the Richland County area of Columbia, South Carolina. Columbia Venture, LLC acquired a tract of land consisting of approximately 4,400 acres in February 1999; environmental surveys and various permitting processes are underway, but primary development and sale operations have not yet commenced, and will not commence, as planned, until various environmental and other issues are further clarified. Alternative disposition issues are also being explored and evaluated.

Estimates: The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Depreciation: Assets are recorded on the books at cost. Depreciation for the assets is calculated using the straight-line method over their estimated useful lives. Estimated useful lives are as follows:

Office Furniture and Equipment	4 years
Computer Equipment	3 years

Land Development Costs: The Company capitalizes development costs, permanent improvements, interest and property taxes related to the Richland County parcel. Development costs include the costs of services of land planners, architects, and engineers.

Advertising Costs: The Company expenses advertising costs in the period in which the advertising occurs. During the year ended December 31, 2001 and the period from February 17, 1999 to December 31, 2001, advertising costs amounted to $22,501 and $38,751, respectively.

Income Taxes: The Company was established during 1999 as a limited liability company. As such, the Company is treated as a partnership for federal and state tax purposes. Therefore, the Company does not incur income taxes; instead, each of the members of the LLC are taxed on their proportionate share of the Company's income. Accordingly, no provision for income taxes has been included in the financial statements.

Note 2 - CASH

Cash as shown in the statements consisted of an investment checking account with a financial institution. At December 31, 2001, the Company's cash balance amounted to $81,625. At December 31, 2001, $100,000 of the Company's cash deposits were insured by the Federal Deposit Insurance Corporation and $67,554 was uninsured. The difference in the bank's balance of $167,554 and the recorded balance of $81,625 is a result of outstanding checks.

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Note 3 - FURNITURE AND EQUIPMENT

Furniture and equipment classifications and changes therein during the period from February 17, 1999 to December 31, 2001 were as follows:

	Balance 2/17/99	Additions	Disposals	Balance 12/31/01
Office Furniture and Equipment	$	$ 21,428	$	$ 21,428
Computer Equipment		6,861		6,861
	$	$ 28,289	$	$ 28,289
Accumulated Depreciation		(14,031)		(14,031)
	$	$ 14,258	$	$ 14,258

Note 4 - REAL ESTATE

The Company's real estate holdings consist of approximately 4,400 acres held for development in Richland County, South Carolina. The following is a summary of the Company's real estate holdings and capitalized development costs at December 31, 2001:

Beginning Balance	$
Amounts Paid in Cash	
Land Purchases	10,932,991
Land Development Costs	6,589,010
	$ 17,522,001
Land and Development Costs Contributed	14,650,000
Step-Up in Basis for Purchase of Membership Interest	3,042,970
Ending Balance	$ 35,214,971

Note 5 - ACCOUNTS PAYABLE AND ACCRUED EXPENSES

Accounts payable and accrued expenses consist of the following at December 31, 2001:

Trade Accounts Payable	$ 22,422
Accrued Property Taxes	14,116
Accrued Interest	171,147
	$ 207,685

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Note 6 - NOTES PAYABLE

The Company's outstanding debt at December 31, 2001 consisted of the following:

Working capital line of credit for $3,000,000 with Carolina First. Line of credit matures on April 5, 2002. Interest is payable monthly at the annual rate of prime floating. The line of credit is secured by real estate located off Bluff Road, Columbia, South Carolina.	$ 3,000,000
Real estate mortgage is secured by property located off Bluff Road, Columbia, South Carolina. Interest and principal are payable at maturity on April 5, 2002. Interest accrues at the annual rate of prime floating.	7,500,000
	$ 10,500,000

All of the Company's outstanding debt is due during the year ended December 31, 2002.

Note 7 - NOTES PAYABLE - MEMBERS AND OPTION HOLDERS

The Company's loans from members and option holders at December 31, 2001 consisted of the following:

Member and option holder loans dated September 7, 2001 with all outstanding principal and accrued interest due and payable September 6, 2002. Interest shall accrue on the unpaid principal balance of the loans at an annual rate of prime floating until the maturity date. Creditors have the option to convert all unpaid principal and accrued interest on the loans into Class A and/or Class C Membership Units at any time during the term of the loans.	$ 2,029,612
Member and option holder loans dated December 21, 2001 with all outstanding principal and accrued interest due and payable December 20, 2002. Interest shall accrue on the unpaid principal balance of the loans at an annual rate of prime floating until the maturity date. Creditors have the option to convert all unpaid principal and accrued interest on the loans into Class A and/or Class C Membership Units at any time during the term of the loans.	759,000
	$ 2,788,612

All of the Company's loans from members and option holders are due during the year ended December 31, 2002. At December 31, 2001, Carolina First (a member) has committed to a provide a member loan in the amount of $241,000.

Note 8 - MEMBERS' EQUITY

The Company has three classes of membership units (Class A, Class B, Class C). There are 9,375 Class A membership units issued, 10,000 Class B membership units and 1,625 Class C membership units for a total of 21,000 membership units issued.

Class A membership units have voting rights and share in profits, losses and distributions according to the total number of profit and loss units. Each Class A membership units counts as one profit and loss unit.

Class B membership units have voting rights. Each Class B membership unit participates in profits, losses and distributions as follows:

- During the first four years of existence (2/19/99-2/19/03), each Class B unit will count as one-half (1/2) of a profit and loss unit, unless the cumulative net profits allocated to Class A and Class C units is equal to or greater than their initial capital contributions of $11,000,000, at which time, Class B units will be counted as one profit and loss unit.

- Thereafter, if the cumulative net profits allocated to Class A and Class C units is less than their initial capital contributions, then Class B units will not share in profits, losses, and distributions until the date at which the cumulative net profits allocated to Class A and Class C units is equal to or greater than their initial capital contributions, at that point, Class B units will be counted as one profit and loss unit.

Class C membership units have no voting rights. Class C membership units share in profits, losses, and distributions according to the total number of profit and loss units. Each Class C membership unit counts as one profit and loss unit.

Changes in each class of membership unit for the period from February 17, 1999 to December 31, 2001 is summarized as follows:

	Class A	Class B	Class C	Total
Members' Equity - Beginning	$	$	$	$
Member Contributions	16,025,000	8,000,000	1,625,000	25,650,000
Purchase of Membership Interest	(6,650,000)			(6,650,000)
	$ 9,375,000	$ 8,000,000	$ 1,625,000	$ 19,000,000
Step-Up in Basis	1,821,531	1,028,694	192,745	3,042,970
Purchase of Membership Interest	(768,151)			(768,151)
	$ 10,428,380	$ 9,028,694	$ 1,817,745	$ 21,274,819
Deficit Accumulated During Developmental Stage	(145,482)	(69,347)	(21,996)	(236,825)
Members' Equity - Ending	$ 10,282,898	$ 8,959,347	$ 1,795,749	$ 21,037,994

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Note 9 - DEVELOPMENTAL STAGE OPERATIONS

The Company was formed on February 17, 1999. Operations during the period from February 17, 1999 to December 31, 2001 were devoted primarily to raising capital, obtaining financing and administrative functions, including seeking permitting and environmental clearance necessary for developing the property as planned. The Company has five (5) members. Company transactions with the members are described in other notes to the financial statements.

Note 10 - RELATED PARTY AGREEMENTS

In the normal course of business, the Company has transactions with members and option holders of the LLC. At December 31, 2001, the Company owes $777,388 to members and option holders. Of that amount, $183,440 is due to a member for engineering services provided, $368,949 is due to a member for payment of operating expenses and fees of $224,999 are due to members and option holders for guaranteeing loans made to the Company.

Note 11 - PURCHASE OF MEMBERSHIP INTEREST

During 2000, the Company purchased Green Diamond, LLC's 8,550 Class A membership units with a book value of $6,629,746 for $7,418,151 in cash. The transaction resulted in a step-up in basis of membership interests of $3,042,970.

Note 12 - CAPITALIZED INTEREST

In accordance with Statement of Financial Accounting Standards #34 the Company follows the policy of capitalizing interest as a component of land development costs.

Interest costs incurred, capitalized and expensed for the year ended December 31, 2001 and the period from February 17, 1999 to December 31, 2001, were as follows:

	December 31, 2001	February 17, 1999 to December 31, 2001
Interest Costs Incurred	$ 669,667	$ 1,158,717
Interest Capitalized	(669,667)	(1,155,588)
Interest Expense	$	$ 3,129

Note 13 - COMMITMENTS

At December 31, 2001, Green Diamond, LLC (an option holder) has committed to contribute approximately 60 acres of land to the Company for 450 Class A Membership Units valued at $350,000.

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PLTF TRIAL EXH 199

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COLUMBIA VENTURE, LLC
(A Development Stage Company)
COLUMBIA, SOUTH CAROLINA

FINANCIAL STATEMENTS
For the Period From February 17, 1999
(Date of Inception) To December 31, 1999

and

INDEPENDENT AUDITORS' REPORT



CV008976

PLTF TRIAL EXH 203

COLUMBIA VENTURE, LLC
(A Development Stage Company)
COLUMBIA, SOUTH CAROLINA

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INDEPENDENT AUDITOR'S REPORT

To the Members
Columbia Venture, LLC
Columbia, South Carolina

We have audited the accompanying balance sheet of Columbia Venture, LLC (a limited liability company) as of December 31, 1999, and the related statements of income and members' equity and cash flows for the period February 17, 1999 (date of inception) to December 31, 1999. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Columbia Venture, LLC as of December 31, 1999, and the results of its operations and its cash flows for the period February 17, 1999 (date of inception) to December 31, 1999 in conformity with generally accepted accounting principles.

Smith, Sapp, Bookhout, Crumpler & Calliham, P.A.

SMITH, SAPP, BOOKHOUT, CRUMPLER & CALLIHAM, P.A.
Certified Public Accountants

Myrtle Beach, South Carolina
June 26, 2000

CV008978

PLTF TRIAL EXH 203

COLUMBIA VENTURE, LLC
(A Development Stage Company)
COLUMBIA, SOUTH CAROLINA

BALANCE SHEET
December 31, 1999

Assets	
Cash and Cash Equivalents	$ 26,595
Due From Members	1,397,645
Land and Development Costs - Richland County	24,887,775
Total Assets	$ 26,312,015
Liabilities and Members' Equity	
Accounts Payable and Accrued Expenses	$ 358,965
Note Payable	325,000
Members' Equity (including deficit of $21,950 accumulated during development stage)	25,628,050
Total Liabilities and Members' Equity	$ 26,312,015

The accompanying notes are an integral part of the financial statements.

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COLUMBIA VENTURE, LLC
(A Development Stage Company)
COLUMBIA, SOUTH CAROLINA

STATEMENT OF INCOME AND MEMBERS' EQUITY
For The Period From February 17, 1999 (Date of Inception) to December 31, 1999

Revenue	$	
Operating Expenses		
Advertising	$	10,000
Contributions		3,500
Legal & Accounting		9,177
Office Expenses		1,709
Total Operating Expenses	$	24,386
Operating (Loss)	$	(24,386)
Other Income & Expenses		
Interest Income	$	6,811
Interest Expense		(4,375)
Total Other Operating Income & Expenses	$	2,436
Net (Loss)	$	(21,950)
Beginning Members' Equity		
Contributions		25,650,000
Ending Members' Equity	$	25,628,050

The accompanying notes are an integral part of the financial statements.

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COLUMBIA VENTURE, LLC
(A Development Stage Company)
COLUMBIA, SOUTH CAROLINA

STATEMENT OF CASH FLOWS
For The Period From February 17, 1999 (Date of Inception) to December 31, 1999

Cash Flows of Operating Activities	
Net (Loss)	$ (21,950)
Adjustments to Reconcile Net (Loss) to Net Cash and	
Cash Equivalents Provided by Operating Activities	
Increase in Accounts Payable and Accrued Expenses	358,965
Net Cash and Cash Equivalents Provided By Operating Activities	$ 337,015
Cash Flows of Investing Activities	
Purchase of Property	$ (23,582,991)
Land Development Costs	(1,304,784)
Net Cash and Cash Equivalents (Used) By Investing Activities	$ (24,887,775)
Cash Flows of Financing Activities	
Line of Credit	$ 325,000
Capital Contributions Due From Members	(1,397,645)
Capital Contributions	25,650,000
Net Cash and Cash Equivalents Provided By Financing Activities	$ 24,577,355
Net Increase in Cash and Cash Equivalents	$ 26,595
Cash and Cash Equivalents - Beginning	
Cash and Cash Equivalents - Ending	$ 26,595

Supplemental Cash Flow Disclosures

Interest Paid	$ 3,129

The accompanying notes are an integral part of the financial statements.

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COLUMBIA VENTURE, LLC
(A Development Stage Company)
COLUMBIA, SOUTH CAROLINA

NOTES TO FINANCIAL STATEMENTS
For the Period From February 17, 1999 to December 31, 1999

Note 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Nature of Operations: Columbia Venture, LLC is a limited liability company in the development stage dealing in the development and sale of real estate. The Company owns real estate in the Richland County area of Columbia, South Carolina. The Company acquired a tract of land consisting of approximately 4,400 acres in February of 1999; environmental surveys and various permitting processes are underway, but primary development and sale operations have not yet commenced.

Estimates: The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Cash Equivalents: For purposes of the statement of cash flows, the Company considers all highly liquid debt instruments with original maturities of 90 days or less to be cash equivalents. Cash equivalents are stated at cost, which approximates market value. See Note 2 for a detailed listing of cash and cash equivalents held at year end.

Land Development Costs: The Company capitalizes development costs, permanent improvements and property taxes related to the Richland County parcel. Such costs include the costs of services of land planners, architects, and engineers.

Advertising Costs: The Company expenses advertising costs in the period in which the advertising occurs. During the period from February 17, 1999 to December 31, 1999, advertising costs amounted to $10,000.

Note 2 – CASH AND CASH EQUIVALENTS

Cash and cash equivalents as shown in the statements consisted of an investment checking account with a financial institution in the amount of $26,595. At December 31, 1999, all of the Company's cash deposits were insured by the Federal Deposit Insurance Corporation.

Note 3 – REAL ESTATE

The Company's real estate holdings consist of approximately 4,400 acres held for development in Richland County, South Carolina. The following is a summary of the Company's real estate holdings and capitalized development costs:

Book Value – Beginning	$
Land Purchased/Contributed – Richland County Parcel	23,456,539
Land Development Costs	1,431,236
Book Value - Ending	$ 24,887,775

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Note 4 – ACCOUNTS PAYABLE AND ACCRUED EXPENSES

Accounts payable and accrued expenses consist of the following:

Development Trade Accounts Payable	$ 345,908
Accrued Property Taxes	11,811
Accrued Interest	1,246
	$ 358,965

Note 5 – NOTE PAYABLE

The note payable is a line of credit to a financial institution of $3,000,000 with an outstanding balance of $325,000 at December 31, 1999. The line of credit bears interest at rates ranging from 8.5% to 9.0%.

Note 6 – MEMBERS' EQUITY

The Company has three classes of membership units (Class A, Class B, Class C). There are 17,925 Class A membership units issued, 10,000 Class B membership units, and 1,625 Class C membership units for a total of 29,550 membership units issued.

Class A membership units have voting rights and share in profits, losses, and distributions according to the total number of profit and loss units. Each Class A membership units counts as one profit and loss unit.

Class B membership units have voting rights. Each Class B membership unit participates in profits, losses, and distributions as follows:

- During the first four years of existence (2/19/99-2/19/03), each Class B unit will count as one-half (1/2) of a profit and loss unit, unless the cumulative net profits allocated to Class A and Class C units is equal to or greater than their initial capital contributions of $17,650,000. At which time, Class B units will be counted as one profit and loss unit.

- Thereafter, if the cumulative net profits allocated to Class A and Class C units is less than their initial capital contributions, then Class B units will not share in profits, losses, and distributions until the date at which the cumulative net profits allocated to Class A and Class C units is equal to or greater than their initial capital contributions. At that point, Class B units will be counted as one profit and loss unit.

Class C membership units have no voting rights. Class C membership units share in profits, losses, and distributions according to the total number of profit and loss units. Each Class C membership unit counts as one profit and loss unit.

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Note 6 – MEMBERS' EQUITY (continued)

Each class of membership unit is summarized as follows:

	Class A	Class B	Class C	Total
Beginning Members' Equity	$	$	$	$
Net Loss	(16,027)	(4,470)	(1,453)	(21,950)
Contributions	16,025,000	8,000,000	1,625,000	25,650,000
Ending Members' Equity	$ 16,008,973	$ 7,995,530	$ 1,623,547	$ 25,628,050

Note 7 – DEVELOPMENT STAGE OPERATIONS

The limited liability company was formed on February 17, 1999. Operations in the period from February 17, 1999 to December 31, 1999 were devoted primarily to raising capital, obtaining financing, and administrative functions. The Company has six (6) members. Company transactions with the members are described in other notes to the financial statements.

Note 8 – RELATED PARTY AGREEMENTS

The Company has a services agreement with Lockwood Greene Engineers, Inc. (a member) under which it receives consulting and engineering services. The agreement is for $2,000,000 of which $603,164 of services have been provided. The remaining $1,396,836 is included in Due From Member along with a receivable of $809 from Burroughs and Chapin Company, Inc. (a member) for overpayment of tax.

Note 9 – INCOME TAXES

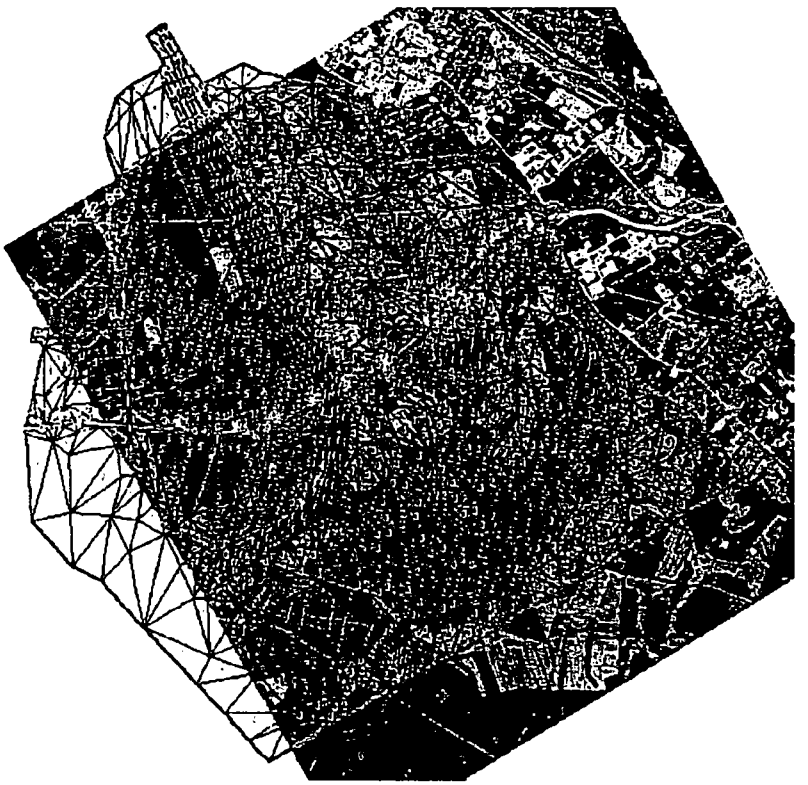
The Company is not a taxpaying entity for federal or state income tax purposes, and thus no income tax expense has been recorded in the statements. Income of the Company is taxed to the members in their respective returns.

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Appeal Resolution for Congaree River in Richland and Lexington Counties, South Carolina



September 26, 2000

PLAINTIFF'S EXHIBIT
204-Hester
2/9/12 VH

Executive Summary

On August 12, 1999, the Federal Emergency Management Agency (FEMA) issued revised preliminary Flood Insurance Studies (FISs) and Flood Insurance Rate Maps (FIRMs) for Lexington County, South Carolina and Incorporated Areas, and for Richland County, South Carolina and Incorporated Areas to reflect a revised study of the Congaree River. FEMA received a large quantity of correspondence on these draft FISs and FIRMs, and in a letter dated March 17, 2000, FEMA officially recognized three parties as appellants under Part 67 of the NFIP regulations. Please note that Part 67 of the NFIP regulations applies only to Base Flood Elevations (BFEs); the floodway cannot be appealed. Each of these three parties provided detailed technical data and alternative analyses of the Congaree River floodplain. These parties are: Dr. John Grego, University of South Carolina; Dr. Paul A. Sandifer, South Carolina Department of Natural Resources; and Ms. Deborah A. Hottel, McNair Law Firm, P.A.

Dr. Grego and the SCDNR appealed the assumptions and methods used to determine the 1% annual chance (100-year) discharge, which in turn is used to determine the BFEs. Both appellants asserted that the entire record for the USGS gage for the Congaree River at Columbia from 1892 to the present should be used, and each provided an alternative statistical analysis of the data.

The SCDNR also appealed assumptions made in the HEC-2 hydraulic model of the Congaree River, which affect both BFEs and the floodway delineation. Specifically, the SCDNR appealed the assumption that no conveyance would occur landward of Manning's dike.

The report prepared by Braswell Engineering, Inc., submitted by Ms. Hottel, appealed roughness coefficients used in the HEC-2 hydraulic model of the Congaree River, which affect both BFEs and the floodway delineation.

Due to the complexity of the technical issues involved and the amount of data received, it was necessary for FEMA to perform additional analyses and develop a new HEC-2 hydraulic model of the Congaree River to resolve the appeals.

Discharge

The 1% annual chance (100-year) discharge for the Congaree River at the Columbia gage has been revised from 253,000 cfs to 292,000 cfs. The revised discharge is based on a weighted frequency curve that combines analyses based on two different methods and data sets. The first method was based on a Bulletin 17B analysis that used the Maintenance of Variance Extension (MOVE.2) to estimate regulated peak flows for 1926-29 and used the observed regulated peak flows from 1930 to 1998. The second method was also based on a Bulletin 17B analysis that used MOVE.2 to estimate regulated peak flows from 1892 to 1929 and used the observed regulated peak flows from 1930 to 1998. The two frequency curves were combined by weighting the flood discharges of the two methods inversely proportional to their variances. This approach is consistent with Equation 8-1 of Appendix 8 of Bulletin 17B.

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In the determination of the revised discharge, FEMA performed flood frequency analyses for the Congaree River using four different methods and summarized these results in a July 21, 2000 report. This report was reviewed by the U.S. Geological Survey (USGS) and their recommendation was to weight the results from the two methods described above. FEMA provided the results of the weighted frequency computation to the USGS and they concurred that 292,000 cfs is a valid estimate of the 1-percent annual chance discharge for the Congaree River at Columbia, South Carolina.

BFEs

Due to the width of the floodplain, the presence of uncertified dikes and multiple openings in Interstate 77, the lower Congaree River floodplain is difficult to model. These complexities were addressed by using a two-dimensional steady flow model, which can determine water-surface elevation and velocity at any point in the floodplain. The two-dimensional steady flow model used in this appeal resolution is based on earlier models created by the U.S. Geological Survey and the South Carolina Department of Transportation to design Interstate 77 and the 12th Street Extension. This two-dimensional model was used to analyze flow patterns and conveyance landward of Manning's. This tool allowed us to model a variety of likely dike failure scenarios during the base flood. The results showed that a significant amount of flow could be expected behind the breached dike during a 100-year flood.

In this situation, our guidelines require that we show different BFEs landward of the breached dike than riverward of the dike. This is because the highest water-surface elevations in Lexington County will occur before the dike breaches, while water-surface elevations across the floodplain will be lowered after the dike breaches. The highest water-surface elevations in Richland County will occur after the dike breaches. BFEs landward of the dike are 1 to 2 feet lower than those riverward of the dike.

Based on these new hydraulic analyses and the discharge of 292,000 cfs, BFEs were computed using a one-dimensional hydraulic model. The one-dimensional model was calibrated to reproduce two-dimensional results. BFEs on the landward side of the dike are 1 to 2 feet lower than those shown on the August 12, 1999 preliminary FIRMs. BFEs on the riverward side of the dike are 1 to 2 feet higher than those shown on the August 12, 1999 preliminary FIRMs.

Floodway

Using the computed discharge of 292,000 cfs and the two-dimensional model previously mentioned, it was determined that significant conveyance of flow behind Manning's dike is likely. As such, FEMA guidelines require that the floodway be computed using the equal conveyance reduction method. The results show the floodway both widening and narrowing in Lexington County when compared to the August 12, 1999 preliminary FIRMs. The widening in Lexington County is approximately 1,000 feet, and the maximum narrowing is approximately 500 feet. On the Richland side, the floodway

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primarily widens; the average widening is on the order of 4,500 feet, and the maximum increase in width is approximately 7,200 feet.

Conclusion

Based on the revised hydrologic and hydraulic analyses for the Congaree River, the FISs and FIRMs have been revised to show a generally wider floodway, decreased BFEs in Richland County, and increased BFEs in Lexington County.

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Introduction

On August 12, 1999, the Federal Emergency Management Agency (FEMA) issued revised preliminary Flood Insurance Studies (FISs) and Flood Insurance Rate Maps (FIRMs) for Lexington County, South Carolina and Incorporated Areas, and for Richland County, South Carolina and Incorporated Areas. These FISs and FIRMs reflect a revised study of the Congaree River. Following the issuance of these FISs and FIRMs, the affected counties and communities were provided 30 days in which to comment on their FISs and FIRMs, which was followed by a 90-day appeal period. This was done in accordance with Section 67.5 of the National Flood Insurance Program (NFIP) regulations. The appeal period ended on December 13, 1999.

FEMA received a large quantity of correspondence following the issuance of the revised preliminary FISs and FIRMs on August 12, 1999. In a letter dated March 17, 2000, FEMA officially recognized three parties as appellants under Part 67 of the NFIP regulations. Each of these three parties provided detailed technical data and alternative analyses of the Congaree River floodplain. These parties are Dr. John Grego, University of South Carolina; Dr. Paul A. Sandifer, South Carolina Department of Natural Resources (SCDNR); and Ms. Deborah A. Hottel, McNair Law Firm, P.A. While only these three parties were formally recognized as appellants, all of the comments received were taken into consideration in resolving the recognized appeals. Please note that under Part 67 of the NFIP regulations, only flood elevations may be appealed. Therefore, FEMA has considered concerns with the floodway delineation as "protests." The floodway is provided as a tool for floodplain management.

FEMA received the following information, which was used in resolving the appeals:

- a report, dated December 3, 1999, revised on December 13, 1999, and January 28, 2000, prepared by Dr. Grego, titled Appeal of FEMA's Draft Flood Insurance Study for Richland County, providing an alternative statistical analysis of the Congaree River gage at Columbia;

- a report, dated November 30, 1999, prepared by Braswell Engineering, Inc., titled Proposed Revision to the Congaree River Floodway, including a HEC-2 hydraulic model modified to reflect field-observed Manning's "n" values;

- a report, dated December 10, 1999, prepared by the SCDNR, titled SCDNR Appeal of Preliminary Flood Insurance Study-Richland/Lexington Counties, South Carolina, including a Bulletin 17B frequency analysis (computer program PEAKFQ) of the Congaree River gage at Columbia;

- a letter and untitled report, dated April 13, 2000, prepared by SCDNR, including a Bulletin 17B frequency analysis (computer program PEAKFQ) of the Congaree River gage at Columbia and a HEC-2 hydraulic model of the Congaree River that allows conveyance landward of Manning's levee;

- a trial transcript dated 1987 for Burwell Manning, Jr., et. al., v. City of Columbia, describing a levee failure and flood damage that occurred in 1976;

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- a report, dated December 9, 1976, by Law Engineering Testing Company, titled Report of Geotechnical Investigation of Dike Failure – Metropolitan Wastewater Treatment Plant, City of Columbia, SC, investigating the dike failure that occurred in 1976;

- an undated videocassette of flooding on the Congaree River in April 1964;

- copies of articles from The State newspaper, dated August 26, 1908; August 30, 1908; July 17, 1916; August 18, 1928; August 19, 1928; and October 4, 1929; reporting the stages of major floods on the Congaree River between 1840 and 1888;

- a copy of the data sheet from SCANA's Federal Energy Regulatory Commission license, showing the storage capacity of Lake Murray Reservoir;

- printouts of RMA-2 two-dimensional hydraulic models of the Congaree River, prepared by the U.S. Geological Survey (USGS) and the South Carolina Department of Transportation (SCDOT) as part of USGS Open-File Report 81-1194; and

- digital copies of FESWMS two-dimensional hydraulic models of the Congaree River, prepared by the USGS and SCDOT as part of USGS Water Resources Investigations Report 90-4056.

Dr. Grego and the SCDNR appealed the assumptions and methods used to determine the 1% annual chance (100-year) discharge, which in turn is used to determine the Base (1% annual chance) Flood Elevations (BFEs). Both appellants asserted that the entire record for the USGS gage for the Congaree River at Columbia from 1892 to the present should be used, and each provided an alternative statistical analysis of the data. In addition, Dr. Grego provided historical flood information dating back to 1840 from newspaper articles and asserted that the upper 95% confidence limit of the statistical analysis of the Congaree River gage should be used as the discharge in hydraulic calculations rather than the point estimate from the same statistical analysis.

The SCDNR also appealed assumptions made in the HEC-2 hydraulic model of the Congaree River, which affect both BFEs and the floodway delineation. Specifically, the SCDNR appealed the assumption that no conveyance would occur landward of Manning's dike.

The report, prepared by Braswell Engineering, Inc., submitted by Ms. Hottel, appealed roughness coefficients used in the HEC-2 hydraulic model of the Congaree River, which affect both BFEs and the floodway delineation.

Due to the complexity of the technical issues involved and the amount of data received, it was necessary for FEMA to perform additional analyses and develop a new HEC-2 hydraulic model of the Congaree River to resolve the appeals. This report describes these additional analyses, development of the new HEC-2 model, and summarizes FEMA's appeal resolution.

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Background

The Congaree River originates at the confluence of the Broad River (drainage area = 5,240 square miles) and the Saluda River (drainage area = 2,520 square miles), flows southeast for 51.5 miles, and joins the Wateree River near the head of Lake Marion to form the Santee River. Numerous dams on the Saluda and Broad Rivers influence flow in the Congaree River. The largest of these structures, Lake Murray Dam, was completed in 1930 and is located 12 miles above the mouth of the Saluda River. Congaree Creek (drainage area = 136 square miles) and Gills Creek (drainage area ≈ 5 square miles) join the Congaree River in Lexington and Richland Counties. River mile zero for the Congaree is at the mouth of the Santee River. The Congaree River also forms much of the corporate boundary between Lexington and Richland Counties.

The Congaree River floodplain expands from a width of approximately 1,000 feet in the upper reach (from its origin to river mile 173.1) to a width of nearly four miles in its lower reach (between river miles 173.1 to 166.9). The channel bed generally consists of alluvial sands blanketed with finer soils. The floodplain is generally covered with a combination of dense timber with underbrush, mature pine forests, and cultivated fields interspersed among wooded areas.

The following topographic features define the lower Congaree floodplain:

1. Residential and Industrial buildings:
   - River Bluff Estates, a residential subdivision in the City of Cayce, Lexington County, is at the location where the Congaree River floodplain begins to become flat and wide (River Mile 173).
   - Developments between river miles 170.5 and 171.5.
     - Caycee wastewater treatment plant in Lexington County.
     - Heathwood Hall Episcopal school in Richland County.
     - City of Columbia wastewater treatment plant and sewage lagoon in Richland County.

2. Pine Forests:
   The Congaree River floodplain in Lexington County has pine forests. These pine trees were planted in the mid-1970s and are now mature.

3. Quarry Operation:
   A large depression just upstream of the River Bluff Estates in Lexington County and adjoining high grounds exist on either side of the floodplain. A comparison with the 1966 topographic data indicates that these high grounds have grown in both area and height since 1966.

4. Earth-Fill Dikes:
   Although the floodplain of the lower reach has limited residential and commercial development, the Richland County side of the floodplain is partially protected by an earth-fill dike near the Congaree River bank (Manning's dike) and along Gills

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Creek (ring dike). These dikes do not satisfy the minimum structural and safety requirements of Subparagraph 65.10 of the NFIP regulations needed to provide 100-year floodplain protection for the landward side of the levees.

5. Road Embankments:
Road embankments for Interstate 77, Route 48, Seaboard Coast Railroad, and 12th Street Extension cross the lower Congaree River floodplain. Interstate 77, a six-lane divided highway and a part of the Southeastern Beltway system, crosses the Congaree River floodplain between river miles 170 and 171. In addition to the main bridges over the Congaree River and Congaree Creek, I-77 consists of five flood relief bridges and a reinforced concrete culvert to discharge the Congaree River flood. In the lower reaches, the Congaree River floodplain is contained in the eastern (Richland County) side by the Route 48 road embankment and on the western (Lexington County) side by the Seaboard Coast Railroad. The recent addition to the western side of the floodplain is the road embankment for the 12th Street extension, which runs in a north-south direction parallel to the direction of flow for the Congaree River.

Approximately 9.3 miles of the Congaree River, from the Richland County boundary to its origin is studied for the FIS. The Congaree River RMA-2 model developed during this study covered approximately 6.2 miles of the lower Congaree River floodplain.

The Congaree River has a USGS gage station near Columbia at river mile 174.8 (station number 02169500) and a staff gage near the City of Cayce (station number 02169603) at the Carolina Eastman Kodak Company, at river mile 164.5. The Columbia gage is within the study reach and the Cayce staff gage is approximately 2.5 miles downstream.

Annual peak flow records at the Columbia gage location (drainage area = 7,850 square miles) are available from 1892 to present. In addition, the USGS has published a discharge-rating table that relates Congaree River discharge to the stage measured at this gaging station. The discharge rating was established using current meter measurements and, more recently, with an Acoustic Doppler Current Profiler.

The highest recorded peak flow occurred at the Columbia gage location in 1908. The recorded peak flow was 364,000 cfs. Nine major flood events have been recorded in 1908, 1912, 1916, 1928, 1929, 1936, 1964, 1976, and 1990, with peak discharges varying between 135,000 cfs and 364,000 cfs.

High-water marks have been established at seven locations along the lower study reach for the 1976 flood event with a peak flow discharge of 155,000 cfs. These data are published in the USGS Open File Report 81-1194 titled A finite-element model study of the impact of the proposed I-326 crossing on flood stages of the Congaree River near Columbia, South Carolina. In addition, one high-water mark is observed at the eastern boundary of the Congaree River flooding at the Route 48 Crossing of the Gills Creek. Manning's dike failed during this flood; this failure is described in a 1976 report by Law Engineering.

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The USGS has published three reports documenting a steady-state, two-dimensional, depth-averaged, finite-element model study of the lower reach of the Congaree River (from river mile 166.9 to 173.1). They are USGS Open File Report 81-1194, USGS Water-Resources Investigation Report 84-4280, titled Impact of the proposed I-326 crossing on the 500-year flood stages of Congaree River near Columbia, South Carolina, and USGS Water-Resources Investigation Report 90-4056, titled Simulation of the effects of proposed construction of Twelfth Street extension and floodplain reforestation on flood elevations, Congaree River near Columbia, South Carolina. These studies were conducted to evaluate the effects of highway embankments for I-77 and the 12th Street extension on the 100-year and 500-year flood elevations of the Congaree River. The finite element model RMA-2 was used in the 1981 and 1984 USGS analyses to model the floodplain. The 1990 analysis was developed using the RMA-2 data; however, the USGS 2-dimensional model FESWMS was used in the analysis. The study results were used to model the flow through the I-77 bridge across the Congaree River floodplain. These models were calibrated to the 1976 flood event and used a 100-year peak flow discharge of 364,000 cfs and a 500-year peak flow discharge of 630,000 cfs.

The U.S. Army Corps of Engineers (USACE) prepared the effective FIS for the Congaree River floodplain using the HEC-2 backwater program. FEMA contracted Hayes, Seay, Mattern and Mattern to update the FIS for the Congaree River, and issued a preliminary FIS and FIRM for Lexington County on September 26, 1997. A revised preliminary FIS and FIRM were issued for Lexington County on February 12, 1998, to reflect a SCDOT interchange project. A preliminary FIS and FIRM were issued for Richland County to reflect the updated studies on June 5, 1998. Based on comments received from the counties, revised preliminary FISs and FIRMs were issued for both counties on February 25, 1999, and August 12, 1999, respectively.

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Hydrologic Analysis

Resolution of the appeals of the hydrologic analysis was accomplished by close coordination and consultation with the USGS. The exchange between FEMA and USGS is documented on the enclosed compact disc.

Bulletin 17B guidelines (Interagency Advisory Committee on Water Data, 1982) were used to estimate flood discharges for the Congaree River; however, there is some regulation in the watershed. The annual peak flows are regulated to some degree, but the Pearson Type III distribution fits the logarithms of the regulated data reasonably well. Issues related to the flood frequency analysis are:

- the appropriate length of record or database to use;
- the effect of Lake Murray on peak flows;
- the utility or applicability of historical peak flows;
- use of weighted or station skew; and
- appropriate record extension techniques.

Another issue that complicates the frequency analysis is time sampling error as more major floods occurred prior to 1930 than after this date. The paucity of major floods since 1930 makes it more difficult to estimate the effect of regulation from Lake Murray using observed data.

Flood frequency analyses were performed for the Congaree River using various analysis methods and data sets to define the 1-percent annual chance (base) flood discharge for floodplain mapping.

Based on data submitted by the appellants, FEMA initially developed four different methods to analyzing Congaree River gage data. These methods are summarized below, and results are shown in Table 1.

Method 1 with weighted skew uses linear regression to estimate the regulated record for 1926-30. While technically accurate, this method for record extension may be less appropriate than MOVE.2. The use of weighted skew is considered less appropriate than the station skew for the Congaree River due to the size of the watershed (greater than 3,000 square miles) and the regulated nature of peak flows.

Method 2 estimates the extended record (1926-29) using MOVE.2 and the unregulated peak flows for the Broad River at Richtex. The correlation coefficient between the concurrent Congaree and Broad River peak flows is 0.960. This provides confidence that the estimated peak flows are reasonable from a statistical perspective. Also, the use of station skew is considered more appropriate for the Congaree River analysis because of the size of the watershed and the regulated nature of the peak flows. One weakness with this method is that it does not use the entire period of record (1892 to 1998).

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Method 3 uses data from 1892 to 1998, including the adjusted systematic data prior to construction of Lake Murray. This makes this method very attractive, but the weakness of this method is that the method for adjusting the peak flows from 1892 to 1925 may underestimate the effect of Lake Murray. In other words, the adjusted peak flows may be too high. Methods 3a and 3b differ only in the number of major floods for which the historical adjustment was applied. For Method 3a, the historical adjustment was applied to the 1908, 1928, and 1930 floods. For Method 3b, the historical adjustment was only applied to the 1908 flood. The latter method may be slightly superior because it is more certain that the 1908 flood is higher than any flood that occurred in the 1840 to 1892 period.

Method 4 uses data from the Tar River at Tarboro, North Carolina, and MOVE.2 to estimate regulated peak flows for the Congaree River back to 1897. The weakness of this method is that the correlation between the Congaree and Tar Rivers is only 0.455. While this is sufficiently high to acquire improved estimates over using the shorter record, the low correlation coefficient lessens our confidence in the results.

Table 1. Summary of Base Flood Discharges for the Congaree River using Different Data Sets

Analysis Method	Base Flood Discharge (cfs) (Weighted skew)	Base Flood Discharge (cfs) (Station skew)
1. August 1999 Analysis Regression for 1926-30 Observed data 1931-96	253,000 (0.299)	265,000 (0.430)
2. MOVE.2 for 1926-29 Observed data 1930-98	262,000 (0.328)	275,000 (0.471)
3a. MOVE.2 for 1926-29 Adjusted data for 1892-1925 Observed data 1930-98 Hist. adj. 1908, 1928, 1930	285,000 (0.289)	292,000 (0.355)
3b. MOVE.2 for 1926-29 Adjusted data for 1892-1925 Observed data 1930-98 Hist. adj. for 1908 flood	296,000 (0.317)	304,000 (0.390)
4. Tar River extension MOVE.2 1897-1929 Observed data 1930-98	269,000 (0.471)	285,000 (0.643)

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These initial analyses are summarized in a FEMA report dated July 21, 2000, titled Flood Frequency Analysis for the Congaree River at Columbia, South Carolina. This report was transmitted to the USGS, which provided comments on July 30, 2000. The USGS comments provided suggestions for improving the analysis, including the use of gage data from Broad River at Alston (station 02161000). The USGS also suggested that "...it may be appropriate to weight the more defensible method and less complete data of Method 2 and the more questionable and more comprehensive data of Method 3B."

The method was to develop a combined frequency curve by weighting the flood discharges of Methods 2 and 3B inversely proportional to their variances. This method is consistent with Equation 8-1 of Appendix 8 of Bulletin 17B, Guidelines For Determining Flood Flow Frequency (Interagency Advisory Committee on Water Data, 1982). The flood discharges for various percent chance exceedances for Methods 2 and 3B are given in the following table.

Table 2. Summary of Flood Discharges for Methods 2 and 3B and the Weighted Flood Discharges

Percent chance exceedance	Method 2 (cfs)	Method 2 Variance (log units^2)	Method 3B (cfs)	Method 3B Variance (log units^2)	Weighted frequency curve (cfs)
50 (2-year)	70,060	0.000771	72,960	0.000560	71,700
20 (5-year)	109,100	0.001103	116,900	0.000835	114,000
10 (10-year)	140,700	0.001781	152,600	0.001316	148,000
4 (25-year)	187,900	0.003550	206,000	0.002551	198,000
2 (50-year)	228,800	0.005673	252,200	0.004017	242,000
1 (100-year)	274,900	0.008550	304,400	0.005988	292,000
0.5 (200-year)	327,200	0.012236	363,400	0.008500	349,000
0.2 (500-year)	406,900	0.018433	453,400	0.012695	434,000

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The variances in the above tabulation were estimated using procedures in Kite (1988). The equation for the variance of a flood discharge for a given percent chance exceedance has the following form:

$$Var\,(p) = [Var / N] / R_p^2 \qquad (1)$$

where

Var (p) is the variance in log units squared of the flood discharge with p-percent chance of exceedance in any given year,

Var is the variance of the annual peak flows in log units squared [0.046829 log units^2 $(0.2164)^2$ for Method 2 and 0.053870 log units^2 $(0.2321)^2$ for Method 3B,

N is the length of record or sample size in years, and

R_p^2 is a Pearson Type III frequency factor for a given skew coefficient [0.417 for Method 2 and 0.390 for Method 3B; and p-percent chance flood.

The frequency curve for Method 2 was based on 73 years of record (1926-98); so N in Equation 1 was 73. The frequency curve for Method 3B was based on 107 years of record (1892 to 1998), with the 1908 flood considered the highest since 1852 (highest in 146 years). Although an historical adjustment was applied to the 1908 flood, 107 years was used for N in computing the variance in Equation 1.

The weighted flood discharges in Table 1 were computed from the following equation also given in Appendix 8 of Bulletin 17B.

$$Q_w = [Q_{m2} * Var_{m3B} + Q_{m3B} * Var_{m2}] / Var_{m2} + Var_{m3B} \qquad (2)$$

where

Q_w is the weighted flood discharge in cubic feet per second (cfs);

Q_{m2} is the flood discharge from Method 2 in cfs;

Q_{m3B} is the flood discharge from Method 3B in cfs;

Var_{m2} is the variance of Method 2 in log units^2; and

Var_{m3B} is the variance of Method 3B in log unit^2.

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Equation 2 was applied for each p-percent chance flood in the above tabulation. A weighted frequency curve was also obtained by converting the flood discharges for Methods 2 and 3B to log units before weighting them according to Equation 2. The same weighted frequency curve was obtained when flood discharges were rounded to three significant figures. The weighting in log units is actually more logical since the flood discharges and variances are computed in log units. However, since the same frequency curve resulted, Equation 2 is shown in cfs units.

Figure 1 shows the weighted frequency curve by weighting flood discharges from Methods 2 and 3B.

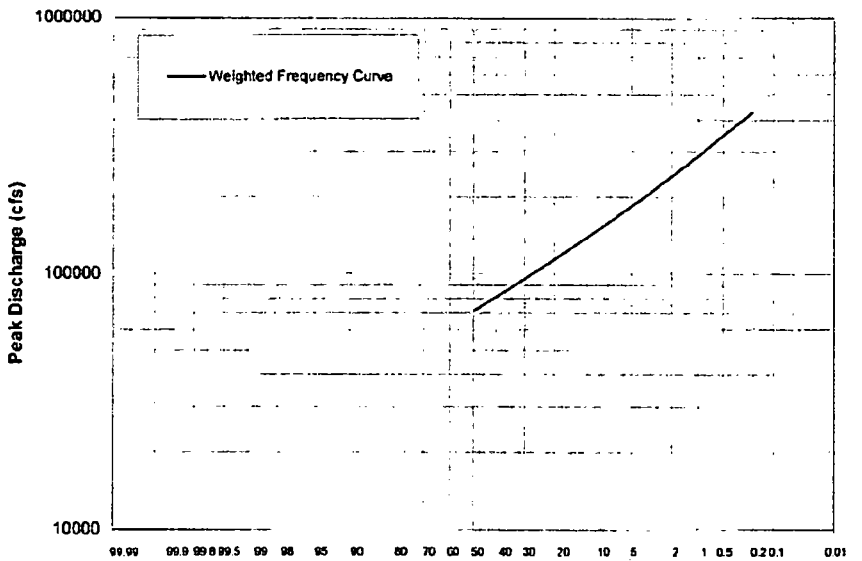


Figure 1. Weighted Frequency Curve

The 1-percent annual chance flood discharge for the weighted frequency curve in Figure 1 and in Table 1 is 292,000 cfs. The standard error of this discharge was not estimated because we do not know the equivalent years of record of the weighted flood frequency curve. However, it is likely that the standard error of the weighted 1-percent annual chance discharge is in the range 18-22 percent, the standard errors for Methods 3B and 2, respectively.

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The weighted frequency computations were transmitted to the USGS, which concurred with FEMA's approach for weighting two different methods for determining the base flood discharge. In a letter dated August 17, 2000, USGS agreed that 292,000 cfs is a valid estimate of the base flood discharge for the Congaree River at Columbia.

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Geotechnical Investigation

In all FIRMs which FEMA has put forth for Richland County, FEMA has always maintained that Manning's dike and Gill's Creek ring dike are not certified to meet the standards of Section 65.10 of the NFIP regulations. Therefore, land behind these dikes is shown in the floodplain.

When preparing the August 12, 1999, FIRMs, FEMA considered Manning's and Gill's Creek dikes to have an effect on flow conveyance. At that time, FEMA assumed that while these dikes would partially fail, they would still block conveyance through the Richland County floodplain. The appeals received argued for reconsideration of the dikes' effect on flow conveyance. A significant portion of this assumption lies with geotechnical evaluation of the dikes' stability.

The data which FEMA had to consider in geotechnical evaluation include a report dated August 10, 1999, prepared by S&ME, Inc., titled Report of Geotechnical Exploration, Congaree Levee Sections 1 and 2, and a report dated December 9, 1976, prepared by Law Engineering Testing Company, titled Geotechnical Investigation of Dike Failure, Metropolitan Wastewater Treatment Plant, Columbia, South Carolina.

FEMA had these reports while preparing the August 12, 1999 FIRMs, and at that time used them to conclude that the dikes would likely fail in a 100-year flood. Since receiving appeals, FEMA decided to take a more detailed approach, asking the following three main questions:

1. Where are the dikes most likely to breach?
2. What width of breach is likely to occur?
3. How many breaches are likely to occur during a 100-year flood?

The first question was answered by investigating the potential for failure by piping. Piping is the most likely mode of failure, as demonstrated by the two areas that failed in 1976. Shear failure itself is not a likely cause of breaching because of the relatively low height of the levees to the ground, and the fact that they have gained some degree of stability through consolidation over many years. It is possible that there could be some sloughing and sliding of the steeper landside slopes, but this would probably be due to the effect of seepage causing piping and removal of some landside toe support, as is suspected in the south failure during the 1976 flood. Dike sections that had conditions conducive to piping failure were identified; these are shown in Figure 2.

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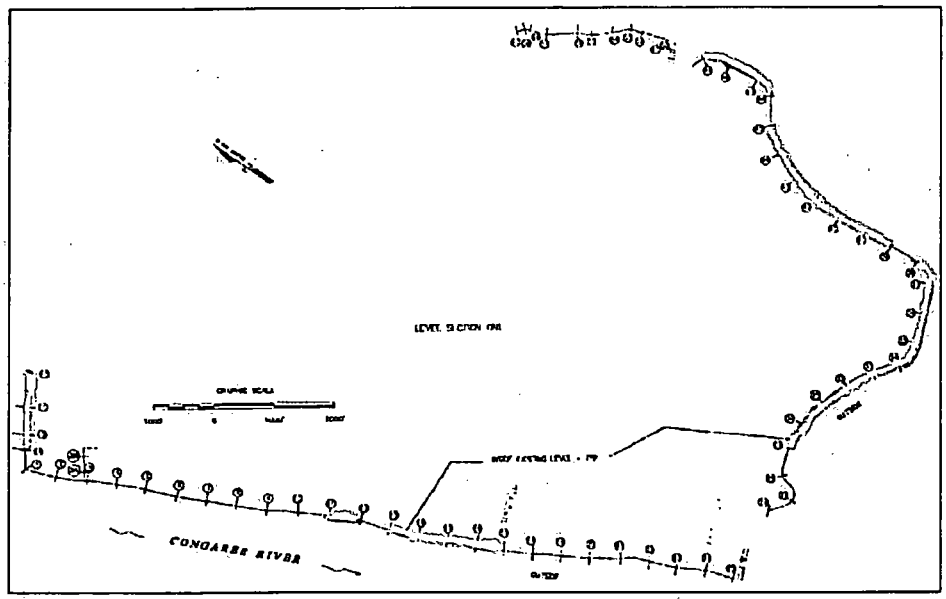


Figure 2. Dike Sections Conducive to Piping Failure

The second question was answered by considering the breaches that occurred in 1976, and considering the ratio of hydraulic head across the levee to the base width of the levee, H/L. In 1976, one breach had a width of 110 feet, while another had a width of 95 feet. The H/L ratios for a 100-year flood would be greater than those experienced in 1976. Based on the relative H/L ratio and extensive engineering experience, it was determined that a breach would likely be about 120 feet wide.

The third question was answered by analogy to the 1976 flood. Based on the experience of the two failures in 1976, it would be reasonable to assume that the levee could fail by piping at two or possibly three weak locations during a single occurrence of the 100-year flood.

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Two-Dimensional Model Investigations (RMA-2)

Background

A lack of detailed topographic data and historic flood information for the Congaree River floodplain in Richland County, South Carolina, has led to the use of various hydraulic modeling assumptions regarding the effective flow path in the floodplain. New topographical and geotechnical data available for the floodplain in Richland County and two-dimensional model simulations of the flow have provided the opportunity to examine different flow scenarios and determine the most appropriate effective flow path for Congaree River flow in this area.

Hard copies of the RMA-2 model simulations originally prepared by the USGS and SCDOT, with and without the I-77 road embankment, were used to generate the finite element mesh that covered the entire lower Congaree River floodplain in Richland and Lexington Counties. The 1981 USGS models simulated flow in the Congaree River channel and assumed flow in either Richland-side floodplain to be active or Lexington-side floodplain to be active. Separate finite element meshes were used in the 1981 study due to limitations in computers of that time. The graphical interface program Surface-Water Modeling System (SMS) was used to merge the Richland-side and Lexington-side meshes used by the USGS. However, both the Richland-side mesh and the Lexington-side mesh were retained and the latter was used for calibration purposes. As in the USGS analysis, steady-state flow simulations were used in this study.

Mesh Development

The finite element mesh of the Congaree River floodplain was generated using the data available in the output files of the RMA-2's mesh generation program GFGEN. The finite element mesh used six-noded isoparametric triangular elements. The topographic information coded into the USGS finite element mesh was checked and updated using the following topographic data.

- Spot elevation and 1-foot contour data for the Richland-side floodplain provided by Lockwood & Greene. This data was dated, March 22, 1999.
- Spot elevation and 2-foot contour data for the Lexington-side floodplain prepared by HSM&M for FEMA.
- Cross section data coded into the HEC-2 model used to generate the August 12, 1999, revised preliminary FIS.

The high grounds, road embankments, and the dikes within the floodplain were modeled using the internal boundary option available in the RMA-2 program. The 12th Street extension and the wastewater treatment plant in Richland County are two high-ground internal boundaries that were also added to the mesh. The 12th Street data were taken from the USGS 1990 model. Figure 3 illustrates the finite element mesh of the Congaree River floodplain without the dikes.

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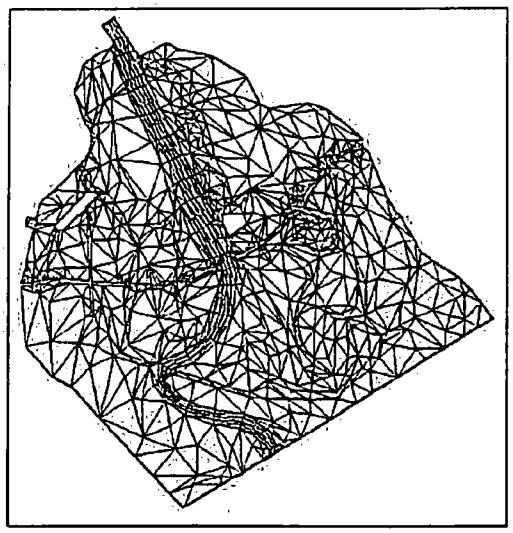


Figure 3. The Finite Mesh Element without Dikes

The levee configuration on the Richland side floodplain is shown in Figure 4. The sensitivity tests conducted with various levee breach scenarios were modeled by modifying the geometry of the internal boundary to reflect the levee breach.

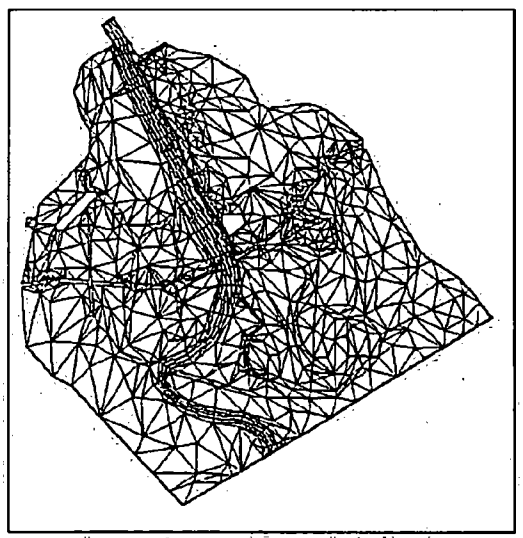


Figure 4: The Finite Element Mesh with Manning's Dike

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Congaree Creek and Gills Creek flow through the floodplain were not considered for the RMA-2 analysis, and the channel geometry of these streams is not reflected in the finite element mesh. Since the Congaree River drains a much larger watershed than Gills Creek or Congaree Creek, it is reasonable to assume that the flow carrying capacity of these streams will have an insignificant effect in passing the Congaree River flood.

Roughness Coefficients and Calibration

The roughness coefficients were assigned as Manning's roughness coefficients. Because the 1981 USGS analysis assigned roughness coefficients as Chezy coefficients, the following equation was used to transform the set of Chezy coefficients used in the 1981 USGS analysis to Manning's roughness coefficients.

$$n = \frac{1.49R^{1/6}}{c}$$

where: n = the Manning's roughness coefficient
c = corresponding Chezy coefficient
R = Hydraulic radius
(Source: USGS Water Resources Investigation Report 90-4056)

This initial estimate was modified during the calibration of the RMA-2 model to high-water marks obtained during the 1976 flood event. The roughness coefficients were reviewed and updated using a current aerial photograph (flown on March 22, 1999) of the lower Congaree River floodplain. Major changes to the roughness coefficients occurred in the areas of the planted pine forest in Lexington County. The Manning's roughness coefficients were revised to reflect the mature pine trees existing in this area.

The final set of roughness coefficients used in the RMA-2 model are provided in Table 3. Figure 5 illustrates the distribution of the different roughness coefficients within the finite element mesh superimposed on an aerial photo of the lower floodplain.

Table 3. Roughness Coefficients Used in the Existing Conditions Model

Number	Type	Manning's Roughness Coefficient	Remarks
1	River Channel and Open Water	.038	Congaree River, ponds in Richland side
2	Vegetation	.12	dense hard wood
3	Grass land	.06	cleared areas
4	Structures	.175	River Bluff Development
5	Vegetation	.12	dense pine trees

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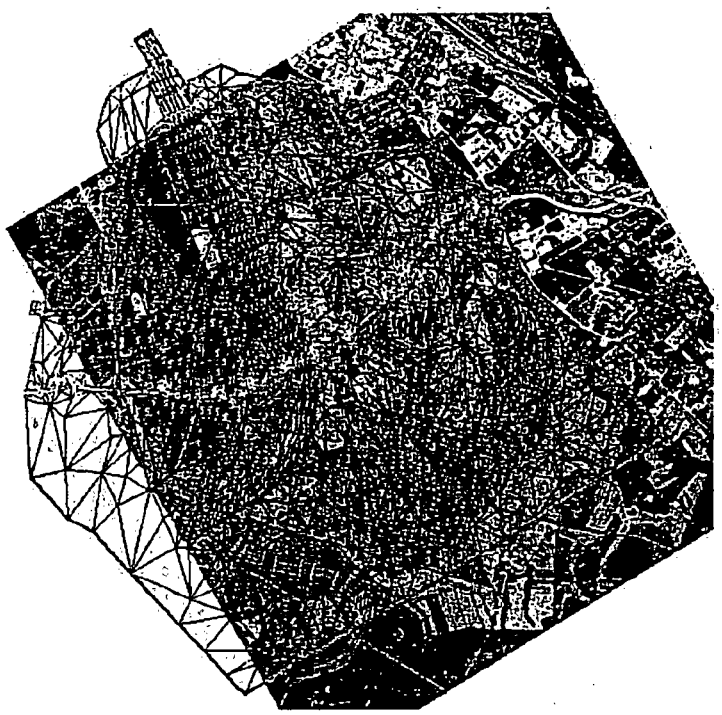


Figure 5. Roughness Coefficients – Material Properties

The model was calibrated and verified to the flood of 1976. This is the only flood on record that has good flood elevation data throughout the study area, but only in Lexington County; therefore, the Lexington grid duplicated from the USGS data was used for the calibration. Since the I-77 bridge did not exist in 1976, the grid was modified for the verification and calibration runs to exclude the I-77 bridge. The calibration results of the RMA-2 model are presented in Table 4. The results of the USGS simulation are given in this table for comparison. The downstream water-surface elevation observed during the 1976 flood was 127 feet. The USGS used a downstream water-surface elevation of 129 feet because it was not possible for the model to converge on a solution using 127 feet. Due to improvements in the RMA-2 model, it is now possible to use the 127 feet downstream water-surface elevation in the calibration to the 1976 flood.

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Table 4. Congaree River - Calibration Results of the RMA-2 Model to the 1976 Flood

Location No.	Location	HEC-2 Cross Section	Lexington Mesh Node Number	Observed Elevation ft. NGVD	2000 RMA-2* Model ft. NGVD	2000 HEC-2* Model ft. NGVD	1981 USGS Model ft. NGVD
1	River Bluff Estates- right channel bank	254500	160	138.0-139.6	138.09	137.48	139.0
2	Cayce Waste water treatment plant-right channel bank	246700	418	135.4	134.97	134.46	135.9
3	Old State Road bridge. Congaree Creek-right over bank	245800	544	133.2-133.4	133.68	134.30	133.2
4	Left Channel bank where I-77 crosses now	242440	1239	134.0-134.2	133.88	133.58	134.6
5	Old State Road-right over bank.	241500	1177	130.5-130.6	133.10	133.27	133.1
6	Old state road - right over bank	239370	631	130.2-130.8	133.02	133.04	133.1
7	Power line -right over bank	215700	1027	129.7	129.15	130.70	130.1
8	Columbia gage 2169500	266750	-	142.72		142.72	-
9	Gage 2169603 down stream study limit	212950	-	127.0		128.51	-

*No conveyance is assumed in Richland County and the I-77 bridge was removed from the model.

As demonstrated in Table 4, the model verified fairly well with the observed water-surface elevations except at locations 5 and 6. The USGS suggested that the storage at these two locations is not accurately accounted for by the steady state analysis, hence the under-estimation of the water-surface elevations. This explanation appears to be accurate when considering that these two observations are located a good distance from the Congaree River and that the effects of Congaree Creek that flows through the area are not accounted for in this analysis.

Ineffective Flow Areas

While the flow in the lower Congaree floodplain has an overall flow direction along the Congaree River's main channel, the flow is two-dimensional in the vicinity of the I-77 bridge and embankment. Therefore, in order to model the two-dimensional flow phenomenon using the one-dimensional HEC-2 model, it was necessary to make assumptions regarding the effective flow areas in the vicinity of the I-77 road. This study used RMA-2 model simulations to determine the ineffective flow areas of the floodplain.

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Areas with water velocity below 1 foot/second in a simulation with no dikes and Q=364,000 cfs, were considered to be ineffective flow areas. Figure 6 shows a sample plot of the entire floodplain without Manning's levee of the areas with a velocity below 1 foot/second.

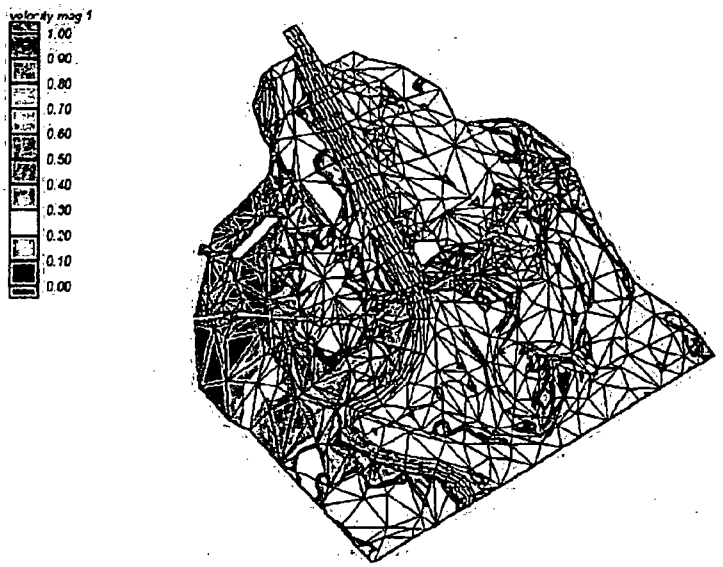


Figure 6. Areas of Velocity below 1 foot/second (Q=364,000 cfs)

Two Breach Scenario

The geotechnical evaluation previously discussed above identified two locations as having the highest likelihood of breach by piping. One location is on the northernmost end of the levee where it runs in an east-west direction just before the levee turns south. The other location is approximately 3,000 feet upstream of the I-77 crossing. Both breaches would have a width of approximately 120 feet. The grid was adjusted by inserting elements in the location of the breaches along the levee and refining the grid around these locations. An area of high ground on the Richland County side that would be dry with the levee in place was taken out of the model in order to get better convergence of the model in the area of the breach. The model was run assuming both breaches would occur simultaneously. The results can by seem in Figures 7 and 8.

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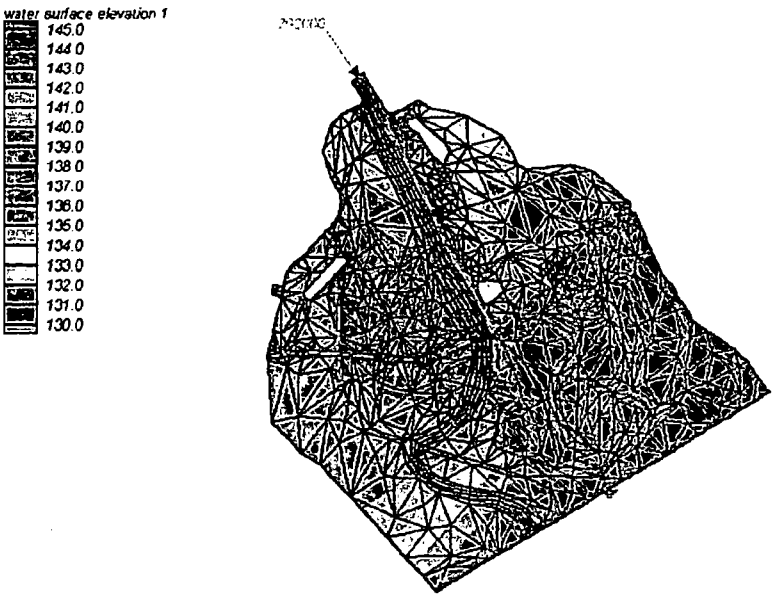


Figure 7. Water Surface Elevation; Manning's Levee with Two Piping Breaches

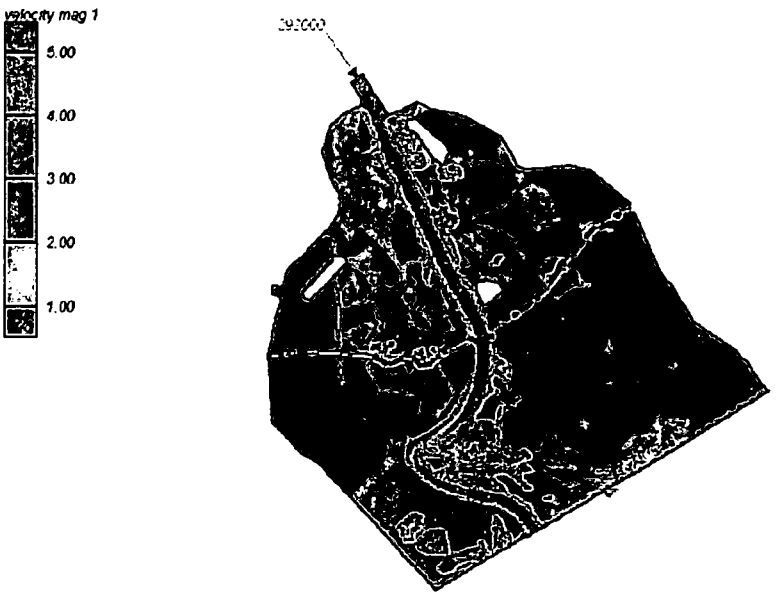


Figure 8. Velocities; Manning's Levee with Two Piping Breaches

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The results show that approximately 9.6 percent of the total Congaree River discharge will enter the Richland County side of the floodplain through the two breaches.

One Breach/Varying Width Scenario

In addition to the breach scenario determined by geotechnical evaluation, Manning's dike was also breached at a low point of the levee just upstream of the City of Columbia wastewater treatment plant in Richland County in order to investigate the relationship between breach width and percentage of total Congaree River flow through the Richland County floodplain. Figure 9 is an example of the unbreached levee, and Figure 10 is an example of a 600 foot breach in the Manning's dike.

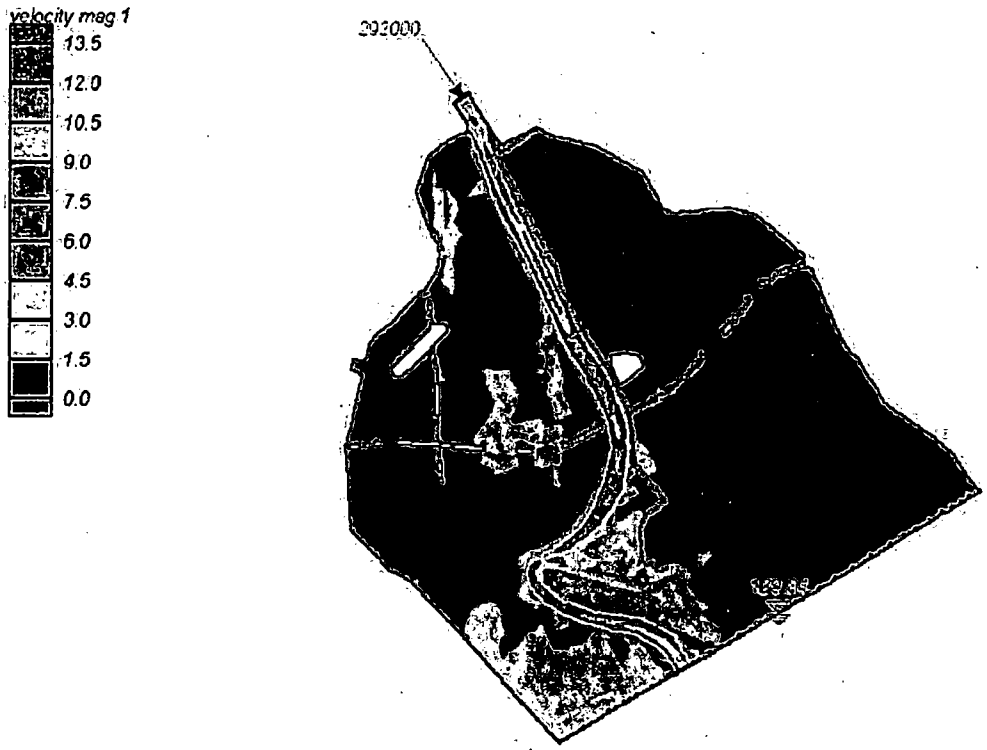


Figure 9. Flow in Richland County without Gills Creek Ring Levee

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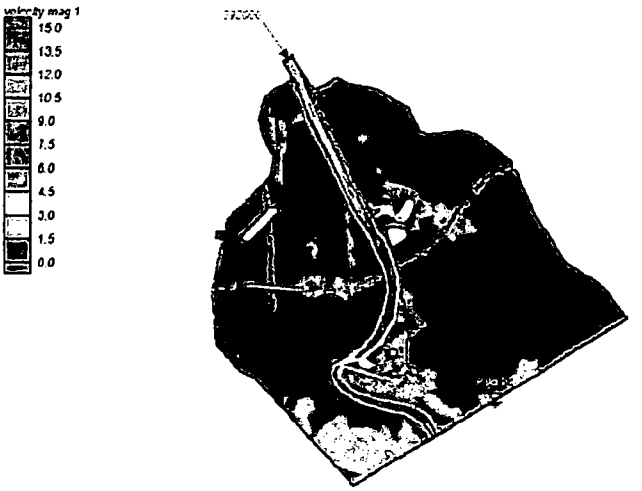


Figure 10. Flow in Richland County with Breached Manning's Levee

A range of breach widths was simulated with RMA-2 to determine the percentage of flow that would enter the Richland County floodplain with each different breach width. The results are shown on Figure 11.

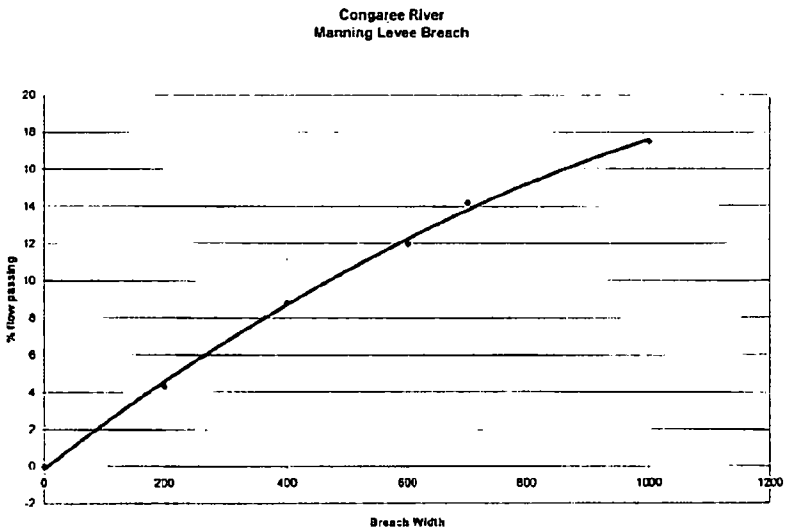


Figure 11. Percent Flow Passing versus Single Breach Width

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Using the HEC-2 model with the Manning's dike in place, it was determined that allowing 5.5 percent of the total flow to enter the Richland County floodplain would decrease water-surface elevations in the Lexington County floodplain by approximately 1 foot. Using Figure 11, the 5.5 percent flow in Richland County floodplain would correspond to a breach width of approximately 250 feet. This means that if Manning's dike were considered to restrict flow in Lexington County, a breach greater than 250 feet wide would lower water-surface elevations by more than 1 foot in Lexington County.

Based on these investigations with the RMA-2 model, it was concluded that the Richland County floodplain would convey a significant amount of flow in a 100-year flood. Specifically, it was determined that the large (1,320 feet wide) relief bridge is critical to conveying the Congaree River flow during a 100-year flood. Therefore, based on the two-dimensional model investigation, it was determined that the floodway should extend landward of Manning's dike in Richland County, and should allow for flow through the large relief bridge.

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Hydraulic Modeling (HEC-2)

The two-dimensional flow model (RMA-2) was used as a decision-making tool, however, the BFEs shown on the FIRMs are based on a one-dimensional flow model (HEC-2). This was done because HEC-2 is the most common hydraulic program used in FISs nationwide. HEC-2 is available free of charge, and a large number of engineers are familiar with it, facilitating future revisions. While RMA-2 provides more detail about flow on a wide floodplain, HEC-2 can be calibrated to closely match these results. Most significantly, HEC-2 has established, equitable methods for determining a floodway, while RMA-2 has no floodway determination tools.

The Congaree River HEC-2 hydraulic model was calibrated to the RMA-2 model for the 1976 flood (peak flow of 155,000 cfs at Columbia gage) and ineffective flow areas for the Richland County floodplain were determined using an RMA-2 simulation for the largest flood of record, the 1908 flood with a peak discharge of 364,000 cfs. (Figure 6) Areas where RMA-2 indicated velocities less than 1 foot per second were coded as ineffective in the HEC-2 model.

During the 1976 flood, Manning's dike was breached near the City of Columbia wastewater treatment plant. Even though the floodplain in Richland County was flooded during this event, observations indicate that a significant portion of the Congaree River floodwaters were conveyed by the Lexington County-side floodplain. Therefore, the HEC-2 model used to model the 1976 flood event assumed no conveyance in Richland County. Sensitivity tests with the HEC-2 backwater model indicated that the Manning's levee along the left overbank of the Congaree River was overtopped for peak flow discharges of more than 200,000 cfs. Therefore, it was assumed that for the higher flood events that occurred prior to 1936, the flood will also be conveyed by the Congaree River floodplain in Richland County. The HEC-2 model that was used to model high flood events reflects this condition.

In addition, this HEC-2 backwater model reflected the floodplain conditions that existed prior to and in 1976 by not having the cross sections associated with the I-77 bridge model. It was evident from a 1966 topographic map that the high grounds that currently exist on the floodplain between the River Bluff Estates and the Railroad Bridge upstream (near the quarry) were lower in 1966 than they are today. The effective FIS HEC-2 model prepared by the USACE in 1978 reflected lower high grounds for this area. Therefore, both HEC-2 models that were used for calibration used cross sections taken from the effective FIS HEC-2 model.

The flood levels computed by the hydraulic model (1976 conditions) compared well to five of the high-water marks published and the water level measured at the Columbia gage. The large differences between the observed and computed water-surface elevations at two locations may have been due to the steady flow assumption used in the hydraulic model.

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Table 5. Congaree River Model: 1908 Flood RMA-2 Simulations Compared with HEC-2 Model Results

Location	HEC-2 cross section	2000 HEC-2* Results	2000 RMA-2 Results	Remarks
FIS A	226700	133.12	134.36	Downstream RMA-2 study limit
FIS B	234100	135.22	136.48	Downstream of Congaree Creek
	238900	136.72	136.51	
	239800	136.83	136.54	
	241500	136.81	136.67	
	247000	137.32	138.67	
FIS D	249300	139.67	139.35	
	249590	139.59	139.57	Columbia sewage lagoon
	250770	139.84	140.30	Upstream of Heathwood Hall School
FIS E	253400	142.48	141.72	
	254500	143.15	142.58	Downstream of River Bluff Estates
	254600	143.32	143.05	
	255100	144.10	144.13	
FIS F	256100	145.42	145.14	Upstream of River Bluff Estates

*Results were from Finalhgh.018. This model assumed conveyance in Richland (2000 feet), no I-77 bridge or 12th street extension, and used effective FIS cross sections for upstream of River Bluff Estates up to the USGS gage (254500 to 266750).

The calibrated hydraulic model results were verified for the high-water marks available at the Route 48 crossing historic floods of 1908, 1930 and 1936. In addition, the flood elevations computed for all of the historic flood events at the USGS Columbia stream gage location matched closely with those published by the USGS. The flood elevations computed by the HEC-2 model at the Columbia USGS stream gage are summarized in Table 6 below. In addition, the flood elevations computed by the RMA-2 and HEC-2 models for the 1908 flood event compared well. These results are presented in Table 5 above.

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Table 6. HEC-2 Model Results at Columbia Gage

Discharge Cfs	Year	From rating curve at Gage	2000 HEC-2*
364,000	1908	152.82	152.35
256,000	1912	148.32	147.49
272,000	1916	149.12	148.47
311,000	1928	150.72	150.39
303,000	1929	150.42	150.01
231,000	1936	147.22	146.21
142,000	1964	141.62	141.32
155,000	1976	142.72	142.51
135,000	1990	140.92	140.65

*Finalhgh.018 model was used to calibrate the flood events with peak flow discharges higher than 200,000 cfs. For lower flooding events (1964, 1976 and 1990 and 10-year) Finallow.018 model was used.

The I-77 bridge was removed from both of these calibration models. Both models used effective FIS cross sections (1978) upstream of the River Bluff Estates up to the USGS gage (254500 to 266750). The model (Finalhgh.dat) assumes conveyance on the landward side of Manning's dike in Richland County. The model (Finallow.dat) assumes no conveyance landward of Manning's dike. Both these models used cross section 258400 from the effective FIS model.

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Base Flood Elevations

The highest water-surface elevations will occur at different times for a floodplain with a dike that does not withstand a 100-year flood. Manning's dike and the Gill's Creek ring dike are both expected to breach in a 100-year flood. Manning's dike will constrict flow along the Congaree River, increasing water-surface elevations above what they would be without a dike or levee in place. When Manning's dike breaches, a large volume of water will leave the Congaree riverbed area and enter the Richland County floodplain. Two-dimensional models indicate that roughly 10 percent of the total flow through the Congaree River will be conveyed through Richland County following a breach of Manning's dike. As water flows through the breaches, it will fill the Richland County floodplain, and eventually the water level on both sides of the dike will equalize. Hydraulic analyses indicate that water-surface elevations are expected to decrease 2- to 4-feet in Lexington County after a breach occurs. Therefore, the worst flooding in the riverbed area and in Lexington County will occur before the dike breaches, while the worst flooding in Richland County will occur after the dike breaches.

The existing conditions HEC-2 model, which was used to determine BFEs, was developed by reflecting the following features of the floodplain that were added to the floodplain after 1976:

- I-77 road bridge and embankment;
- 12th Street extension; and
- Pine reforestation in Lexington County.

The Manning's dike along the Congaree River does not meet the minimum NFIP requirements to consider it to provide 100-year flood protection. Furthermore, breach scenarios using RMA-2 indicate a likelihood of conveyance behind the dike. Therefore, the effective HEC-2 model assumed flow to exist behind the Manning's dike on the floodplain in Richland County. The ineffective flow areas for the floodplain were developed using the RMA-2 model simulation.

The existing conditions model assumes that the Gills Creek ring levee does not have the structural strength to hold the 100-year flood waters that enter the Richland-side floodplain. The available geotechnical exploration results and the fact that the flood events in the Congaree River watershed last for 3 to 4 days adds credibility to this assumption.

The Manning's dike has not met the minimum NFIP requirements to provide protection from the 100-year flood event, and it is evident that the maximum flood elevations for the Congaree River floodplain in Lexington County will occur prior to the breach of Manning's dike. In order to simulate this scenario, the existing conditions model for Lexington County considered no conveyance behind the Manning's dike in Richland County.

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Floodway

The floodway analysis is based on the model for the landward side of Manning's dike, which assumes conveyance behind Manning's dike. This floodway was computed in accordance with the general guidelines adopted by FEMA nationally. (FEMA 37) The national guidelines require the retention of the effective floodway, wherever possible. In addition, the definition of new floodway boundaries satisfies the following general criteria:

- maintaining equal conveyance reduction on both sides of the flooding source;
- maintaining the resulting flood elevation increase to be less than the maximum allowable, 1.0 foot for South Carolina; and
- obtaining a final floodway configuration that is hydraulically smooth.

The dike configuration was not removed from the cross section geometry in this floodway model. The Method 4 floodway option available in the HEC-2 program was used to determine the floodway boundaries for the remaining portion of the Congaree River floodplain. The Method 4 floodway option reduces the conveyance of the natural floodplain equally on either side of the river to establish floodway stations that assure flood elevation surcharges are held to less than the maximum allowable (in this case, 1 foot).

The floodway computed by the HEC-2 Method 4 option was modified in two locations (in the vicinity of the I-77 bridge and just downstream of the River Bluff Estates) to obtain a hydraulically smooth floodway configuration. The final floodway configuration for the Lexington side generally matches that shown on the August 12, 1999 preliminary FIS. However, the floodway boundary in the Richland side has been widened to include the largest I-77 relief bridge opening on the Richland side.

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Conclusions

Based on the information submitted and the additional analyses described above, FEMA concluded that revisions to the August 12, 1999, revised preliminary FISs and FIRMs for Lexington County and Incorporated Areas and Richland County and Incorporated Areas were warranted. The peak 1% annual chance flood discharge for the Congaree River at the gage has been revised to 292,000 cfs. BFEs for the area landward of Manning's dike are now computed by a HEC-2 hydraulic model using the revised discharges and assuming flow conveyance landward of Manning's dike.

Subsequently, BFEs are 1 to 2 feet lower than those shown on the August 12, 1999, revised preliminary FIRM in Richland County. BFEs riverward of Manning's dike are based on a hydraulic model that assumes no conveyance landward of Manning's dike. This assumption, coupled with the increase in discharge has resulted in BFEs which are 1 to 2 feet higher than those shown on the August 12, 1999, revised preliminary FIRM for Lexington County.

Furthermore, the floodway in Richland County is wider than that shown on the August 12, 1999 revised preliminary FIRM. The floodway in Lexington County shows both widening and narrowing when compared to the August 12, 1999, revised preliminary FIRM.

The report prepared by Braswell Engineering, Inc., submitted by Ms. Hottel, appealed roughness coefficients used in the HEC-2 hydraulic model of the Congaree River, which affect both BFEs and the floodway delineation. The HEC-2 hydraulic model submitted in support of this appeal changed Manning's "n" values at cross-section 226700, which is located on property owned by Blanchard Investments, Inc., who is represented by McNair Law Firm. The apparent intent of this appeal was to narrow the floodway on Blanchard Investments, Inc.'s property.

Review of the data indicates that the Manning's "n" values submitted may accurately reflect field conditions at the indicated cross section. No photographs supporting data were provided, other than the statement of a registered Professional Engineer. However, the Manning's "n" values submitted were inconsistent with those used in the rest of the study, and they cause upstream water-surface elevations to increase by as much as 1.5 feet. These water-surface elevations do not compare well with the calibration data discussed previously. Therefore, the proposed Manning's "n" values were not used.

While FEMA seeks to use caution when determining flood hazards, we must disagree with Dr. Grego's assertion that the upper 95% confidence limit of the statistical analysis of the Congaree River gage should be used as the discharge in hydraulic calculations rather than the point estimate from the same statistical analysis. The NFIP is based upon the 100-year flood as the standard level of risk. Using the upper 95% confidence limit rather than the point estimate is the same as using a less probable flood as the standard for flood insurance rates and floodplain management. Mapping flood hazards based on a flood less probable than the 100-year event would contradict the NFIP's statutory mandate and be inconsistent with decades of nationwide practice.

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Resources

NFIP Regulations are available at:
http://www.access.gpo.gov/nara/cfr/waisidx_99/44cfr67_99.html

Guidelines and Specifications for Study Contractors (FEMA 37) area available at:
http://www.fema.gov/mit/tsd/DL_SCg.htm

The following digital files used in formulating the appeal resolution are provided on the included compact disc:

- 🗀 **HEC-2 Models:** One-dimensional hydraulic models
  - 🗀**Calibration HEC-2:** Models used to calibrate to 1976 flood
    - Finalhgh.* Calibration model for Q>200,000 cfs
    - Finallow.* Calibration model for Q<200,000 cfs
  - 🗀**Final HEC-2:** Models used to determine BFEs
    - CongFW2K.* Model used to determine floodway
    - CongLx2K.* Model used to determine Lexington County BFEs
    - CongRc2K.* Model used to determine Richland County BFEs
  - 🗀**Sensitivity HEC-2:** Models used to show sensitivity to assumptions
    - Conglexs.* Model used to determine sensitivity to assumptions
- 🗀**Hydrology Reports:** Reports and correspondence between FEMA and USGS
  - FEMA Report 7-21-00.doc
  - FEMA Report 8-10-00.doc
  - USGS Comments 7-30-00.doc
- 🗀**RMA-2 Models:** Two-dimensional hydraulic models
  - 🗀 **1908 Flood:** Old topo with no Interstate bridge
  - 🗀**Existing:** Existing conditions model of 100-year flooding with updated topo and 12th street included
    - 🗀**Manning Levee:** Existing conditions model of 100-year flood with Manning's dike
      - 🗀**Breach widths:** Existing conditions model of 100-year flood with breach at low area of Manning's dike
        - 🗀**200br:** 200 foot breach
        - 🗀**400br:** 400 foot breach
        - 🗀**600br:** 600 foot breach
        - 🗀**700br:** 700 foot breach
        - 🗀**1000br:**1000 ft breach
      - 🗀**Piping Breach**
  - 🗀**Lexington:** Reproduction of USGS grid and simulation
    - 🗀**Verification:** Simulation of 1976 Flood
  - 🗀**Richland:** Reproduction of USGS grid and simulation

Congaree-Smallerfile.tif: Aerial photograph of study area
existing.img: SMS input file for superimposing aerial photo with mesh

PLTF TRIAL EXH 204

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[illegible]

December 11, 1998

Mr. T. Cary McSwain
County Administrator
County of Richland
P. O. Box 192
2020 Hampton Street
Columbia, SC 29202

Dear Cary:

Thanks for meeting with us yesterday to discuss the levee system at the Manning property. I think the meeting was very informative and productive.

Attached is a list of "bullets" for the suggested letter to FEMA. I will call you later today to discuss this.

Thanks for all your help.

Yours very truly,

LOCKWOOD GREENE

Wilson

H. W. Tillotson, P.E.

cc: Mr. Burwell Manning
Mr. George Gregory
Mr. Carroll Walker

PLAINTIFF'S EXHIBIT
3-12-12 207 was Tillotson

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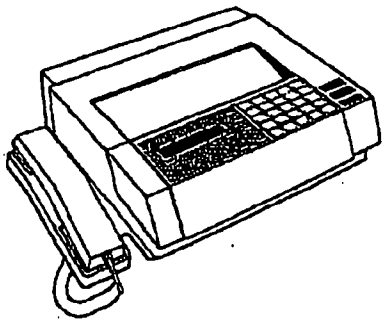
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PLTF TRIAL EXH 207

Proposed Contents of Letter to FEMA from Richland County:

- Property owners intend to upgrade the levee system to meet the structural requirements as specified in 44 CFR65.10.
- At the completion of the upgrade, Richland County agrees to accept responsibility for operation and maintenance of the levee system in accordance with 44 CFR65.10.
- Based on the above, and the existing levee system being in place, we request relocation of the proposed floodway on the Richland County side of the Congaree River to the current map located which is the line of the dike.
- Upon certification of the levee system as protective structure, Richland County will request letter of map revision of the current FIRM.
- It is our understanding that certification of the levee system will remove the area protected by the system from designation as flood prone area or as any floodway.
- We request FEMA confirmation of the above plan and understanding.

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BURROUGHS & CHAPIN COMPANY, INC.

Family Values Since 1895

FAX TRANSMITTAL

DATE: 2/18/99

TO: George Gregory

COMPANY:

FAX NUMBER: (803) 376-2277

NO. OF PAGES (INCLUDING COVER): 14

FROM: Sherry Pettengaro FAX NUMBER: (843) 916-9142

RE:

SPECIAL INSTRUCTIONS: FYI, the following came via FedEx this morning.

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PLAINTIFF'S EXHIBIT 208 Wells 3-12-12 Tillotson

IF YOU HAVE ANY QUESTIONS OR IF YOU DO NOT RECEIVE ALL PAGES WITH GOOD COPY, PLEASE CALL (843) 448-5123.

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Received By: DB

Date: 2/18/99

Time: 11:45

CORPORATE OFFICE: Founders Centre 2411 Oak Street Suite 402 Myrtle Beach, SC 29577 / P.O. Box 2093 Myrtle Beach, SC 29578-2093 / (843) 448-5123 FAX (843) 448-9838
BRANCH OFFICE: 314 Main Street Conway, SC 29526 / P.O. Box 260 Conway, SC 29526-0260 / (843) 248-4237 FAX (843) 248-6570

CV002273

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received
2/18/99

Lockwood Greene Engineers, Inc.
1500 International Drive
P.O. Box 491, Spartanburg, SC 29304
Main (864) 578-2000 Fax (864) 599-0436

17 February 1999

Mr. George Gregory
Burroughs & Chapin
P. O. Box 2095
Myrtle Beach, SC 29578-2095

Dear George:

Attached is summary of the FEMA and floodway issues relating to the property located in Columbia. Also attached are some of the relevant documentation.

We have estimated a cost range and a completion date range for the upgrade and remapping activities. The primary reasons for the variations in the estimated costs and time are:

- Length of time required to obtain wetlands regulation permits
- Review times by agencies including FEMA
- Preliminary status of soils and topographic survey information on which to base the preliminary design used for estimates

Other than the uncertainties noted above, we have discovered no barriers that would prevent us from removing the property within the existing levees from the Special Flood Hazard area or the floodway.

We will continue to update this report as additional information is received. If you have any questions, please contact me at 864-599-4481.

Sincere regards,

LOCKWOOD GREENE

H. W. Tillotson, Jr., P.E.
Division Manager

cc: Mr. Lane Fowler
Mr. Carroll Walker

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PLTF TRIAL EXH 208

DRAFT

2-16-99

FEMA/Flood Area Issues

Summary

1. Property is currently Classified as Zone A Special Flood Hazard Areas inundated by 100-year flood. This is primarily due to the fact that the levee system is not certified as "protective structure".

2. Classification can be changed to Zone X by upgrading and certification of levee system. Confirmed in writing by FEMA through SC Department of Natural Resources, State Coordinator, National Floor Insurance Program.

3. Cost to upgrade levee system is approximately $12,000,000.

4. Schedule for reclassification is 12-24 months.

Current Status

Property is currently zoned Special Flood Hazard Classification "AE" and "A" (Exhibit C-1).

Floodway is currently the toe of the levee along the Congaree River.

Maps proposed in July, 1998 show Special Flood Hazard Classification "AE" for the majority of the property. It is also classified as "Floodway" on the proposed map. The acceptance of these maps as final is currently on hold by FEMA. See attached map labeled Exhibit C-2.

Based on the FEMA regulations, if the levee system is classified as a protective structure, the Special Flood Hazard Classification can be removed. The area would be reclassified as Zone X on the basis of being protected by levees from 100 year flood.

The reclassification process has been confirmed by FEMA in writing through State Coordinator of the National Flood Insurance Program.

Zone X allows construction with no restrictions.

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PLTF TRIAL EXH 208

Floodway Modifications

FEMA requires that if the structural modifications to the levee system result in any increase in base flood elevations, the municipality must provide remapping of the flood prone area. Also, any change from the floodway configuration as a result of the structural modifications must have approval of the impacted communities. During meetings held on July, 1998, consulting company for the FEMA indicated that the levee system along the Congaree River ignored in the calculations for determining the Richland County side of the Congaree River. However, in order to provide conservative engineering for Lexington County, the levee system on the Richland County side of the study was included in the engineering analysis for Lexington County. The study results for Lexington County on the map that was proposed in July, 1998, indicate the following:

- Floodway area remained relatively unchanged from the previous limits.
- The base flood elevation was higher than on the Richland County side because the levee system was considered to be in tact as part the study.
- The study interpretation implies that if the levee height modifications were made on the Richland County side of the Congaree River the base flood elevation/floodway in Lexington County would not be changed. If alignment changes were made then the base flood elevation/floodway would be altered in Lexington County. It is our intent to maintain the alignment of the levee system along the current limit of the floodway (the toe of the levee). Further, it is our interpretation that no impact on the direction of the floodway or on the base flood elevations would result in the proposed levee modifications.
- The floodway elevation is currently being re-done by FEMA. The results of this are not known as of yet. Preliminary indications that a large portion of the property in Richland County will be removed from the floodway. No indication as to what the impact will be on the Lexington County side.

Cost Estimate

We have performed a preliminary evaluation of the levee system and developed a preliminary plan for upgrade based on a levee system conforming to the FEMA requirements for protection from a "1% probability occurrence" (100-year flood) flood elevations for the Congaree River.

Current estimates are shown on the attachment. We have shown a high and low estimate. The variable is due to the preliminary status of the information on the

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3504

site topography and soils characteristics. The most probable cost is approximately $12,000,000, with a range of approximately $10-$15 million.

A phased approach could lower the initial cost, but may have some impact on the total developed cost. This can be studied and evaluated by LG at a later date.

Schedule

We would propose the project be done in Phases. Levee Section 1 and 2 could be completed and the remapping done in approximately 18 months. Variables that are not in control of Lockwood Greene are the review times necessary for FEMA and time to obtain wetlands disturbance permits. We have allowed reasonable times for these items in our estimates.

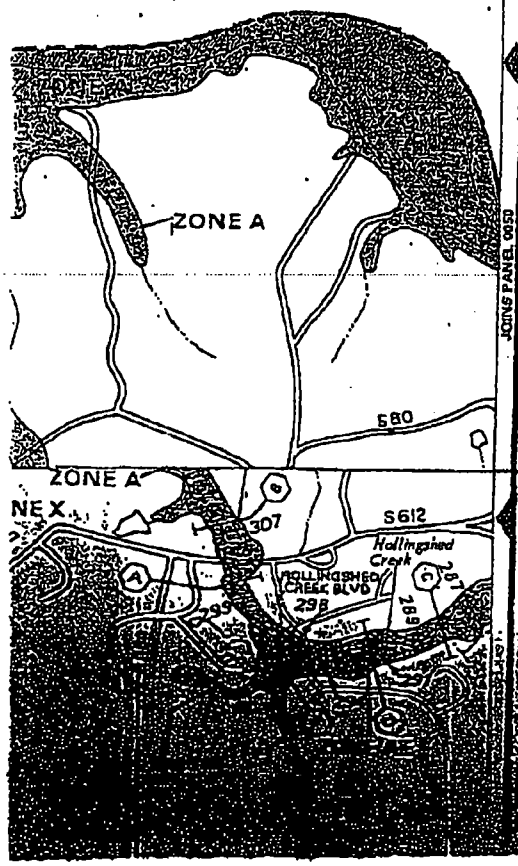
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EXHIBIT "A"

J



LEGEND

SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD

- ZONE A — No base flood elevations determined.
- ZONE AE — Base flood elevations determined.
- ZONE AH — Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.
- ZONE AO — Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE A99 — To be protected from 100-year flood by Federal flood protection system under construction; no base flood elevations determined.
- ZONE V — Coastal flood with velocity hazard (wave action); no base flood elevations determined.
- ZONE VE — Coastal flood with velocity hazard (wave action); base flood elevations determined.

FLOODWAY AREAS IN ZONE AE

OTHER FLOOD AREAS

- ZONE X — Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood.

OTHER AREAS

- ZONE X — Areas determined to be outside 500-year floodplain.
- ZONE D — Areas in which flood hazards are undetermined.

UNDEVELOPED COASTAL BARRIERS†

Identified 1990 — Identified 1990 or Later — Otherwise Protected Areas Identified 1991 or Later

†Coastal barrier areas are normally located within or adjacent to special flood hazard areas.

Floodplain Boundary

Floodway Boundary

Zone D Boundary

For adjoining map panels see separately printed Map Index.

MAP REPOSITORY

Refer to Repository Listing on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP

JANUARY 19, 1994

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

CV002278

PLTF TRIAL EXH 208

LOCKWOOD GREENE
Consulting·Design·Construction

Lockwood Greene Engineers, Inc.
1500 International Drive
P.O. Box 491, Spartanburg, SC 29304
Main (864)578-2000 Fax (864)599-0436

21 January 1999

Mr. George Gregory
Burroughs and Chapin
P. O. Box 2095
Myrtle Beach, SC 29578-2095

Dear George:

Subject: Congaree Property

Attached are estimates for the levee upgrade. Because our survey data is incomplete, we have included a high and low range based on the information in hand and on preliminary design for the dike system. I have also included some additional information using a median number. This median estimate is the low estimate with approximately 20% contingency included.

It is my recommendation that this median number represents our best estimate of cost.

Give me a call when you have had a chance to review this and we will discuss.

Sincere regards,

LOCKWOOD GREENE

H. Wilson Tillotson

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PLTF TRIAL EXH 208

21-Jan-99 **Congaree Properties** DRAFT

Levee System Preliminary to Upgrade to FEMA Standards Cost Estimate (1999 Costs)

Item		Levee Section 1	2	3	Total
Levee, incl earthwork,riprap,cdcg, grassing		$ 1,907,000	$ 2,324,800	$ 3,843,800	$ 8,075,600
Survey		$ 20,000	$ 20,000	$ 10,000	$ 50,000
Geotechnical investigation		$ 30,000	$ 30,000	$ 40,000	$ 100,000
Wetland survey		$ 20,000	$ 40,000	$ 40,000	$ 100,000
Design Engineering		$ 120,000	$ 120,000	$ 60,000	$ 300,000
Wetland Mitigation		$ 40,000	$ 80,000	$ 80,000	$ 200,000
Pumping Station/Outfalls		$ 275,000	$ 275,000	$ 200,000	$ 750,000
Contingency	25%	$ 603,000	$ 722,450	$ 1,068,450	$ 2,393,900
TOTAL (Estimated)		$ 3,015,000	$ 3,612,250	$ 5,342,250	$ 11,969,500
Total Area		1587 Acres	1580 Acres	1294 Acres	4461 Acres
Are outside levee		0	380	123	503
Area of levee		39	52	64	155
Area of levee borrow area		50	68	82	200
Wetlands-Inside Levees		397	300	293	990
Wetlands-Outside Levees		0	152	49	201
Infrastructure Development	0.15	179	135	132	446
Net Area-Manning property		922	645	600	2167
Area owned by others		522	511		1033
Cost Data		0			
Cost per linear foot of dike		$ 144	$ 127	$ 154	$ 142
Cost per Net Acre		$ 3,270	$ 5,600	$ 8,904	$ 5,524
Length of dike		21000 Ft	28400 Ft	34600 FT	84000 Ft

DRAFT

Levee Repair/Upgrade Cost Estimate (1999 Costs)

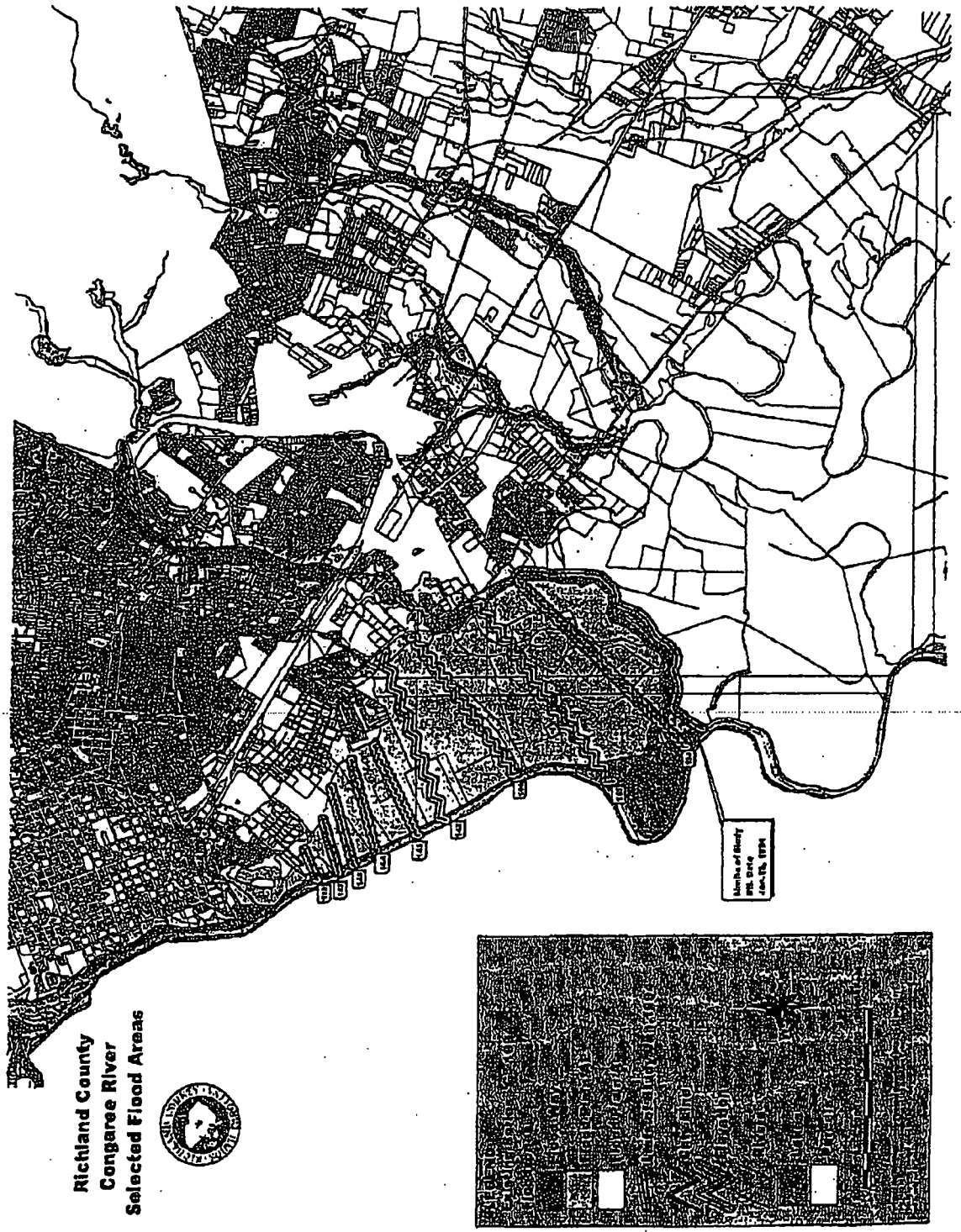
Item	Number		Low Estimated Cost	High Estimated Cost		Estimated Cost Range Low	High
Preliminary Engineering							
Surveying of levee and potential borrow areas	1	allowance	50,000 $ each	50,000 $ each		$ 50,000	$ 50,000
Geotechnical investigation of levee and borrow area (Corps requires borings at 200-1,500 feet)	1	allowance	100,000 $ each	100,000 $ each		$ 100,000	$ 100,000
Wetlands Delineation and survey	1	allowance	100,000 $ each	100,000 $ each		$ 100,000	$ 100,000
Design Engineering							
Prepare Plans and Specifications	1	allowance	300,000 $ each	300,000 $ each		$ 300,000	$ 300,000
Wetland Mitigation							
Construction of mitigation area	1	allowance	200,000 $ each	500,000 $ each		$ 200,000	$ 500,000
Levee Repair/Upgrade							
Levee Section 1							
Clear and grub	21,000	lf	3 $/lf	5 $/lf		$ 63,000	$ 105,000
Earthen Fill	21,000	lf	60 $/lf	100 $/lf		$ 1,260,000	$ 2,100,000
Rip Rap	12,500	lf	40 $/lf	60 $/lf		$ 500,000	$ 750,000
Grassing	21,000	lf	4 $/lf	4 $/lf		$ 84,000	$ 84,000
Levee Section 2							
Clear and grub	28,400	lf	3 $/lf	5 $/lf		$ 85,200	$ 142,000
Earthen Fill	28,400	lf	65 $/lf	120 $/lf		$ 1,846,000	$ 3,408,000
Rip Rap	7,000	lf	40 $/lf	60 $/lf		$ 280,000	$ 420,000
Grassing	28,400	lf	4 $/lf	4 $/lf		$ 113,600	$ 113,600
Levee Section 3							
Clear and grub	34,600	lf	3 $/lf	5 $/lf		$ 103,800	$ 173,000
Earthen Fill	34,600	lf	96 $/lf	125 $/lf		$ 3,321,600	$ 4,325,000
Rip Rap	7,000	lf	40 $/lf	60 $/lf		$ 280,000	$ 420,000
Grassing	34,600	lf	4 $/lf	4 $/lf		$ 138,400	$ 138,400
Storm Drain Lift Stations							
Lift station including electrical connection	5	ea	$ 150,000 ea	$ 200,000 ea		$ 750,000	$ 1,000,000
						Low	High

This is a preliminary estimate for the purpose of establishing an order of magnitude cost.

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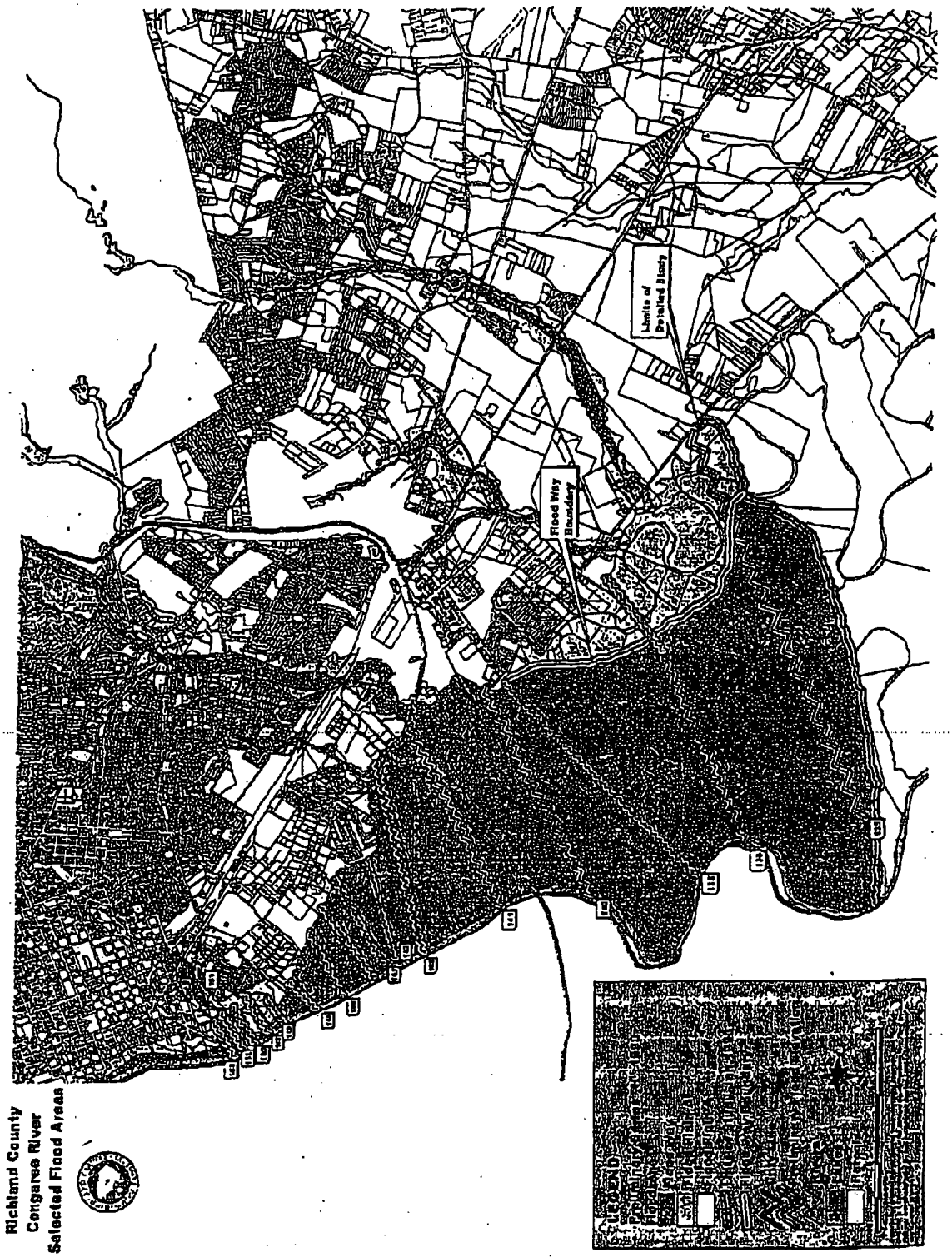
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CV002282

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Lockwood Greene Engineers, Inc.
1500 International Drive
P.O. Box 491, Spartanburg, SC 29304
Main (864) 578-2000 Fax (864) 599-0496

20 January 1999

Ms. Lisa Holland
State Coordinator National Flood Insurance Program
2221 Devine Street
Suite 222
Columbia, SC 29205

Dear Ms. Holland:

Lockwood Greene is representing the property owners of the Manning property adjacent to the Congaree River in lower Richland County. As you are aware, this property is within the area being proposed as floodway by the preliminary (June 5, 1998) Flood Insurance Rate Maps. We have had several meetings with Richland County and the City of Columbia and have been asked to represent them as well in any clarifications of the FEMA regulations particularly 44 CFR 65.10.

The area protected by the levee system currently protects some existing development. Most notable of these are the Heathwood Hall Episcopal School and the City of Columbia Metropolitan Waste Treatment Plant. The owners of the majority of the remaining property are considering additional development on the property. At present, the proposed designation as floodway limits expansion of the existing development and prevents further development within the levee system.

The property owners intend to take the following steps:

1. The property owners intend to upgrade the levee system to meet structural requirements set out in 44 CFR 65.10. Property owners will also have all required documentation prepared as required by 44 CFR 65.10, including operation and maintenance plans.

2. The property owners intend to request Richland County to accept the responsibility for operation and maintenance of the levee system in accordance with 44 CFR 65.10. Upon completion of the required structural modification to the levee system

3. Upon certification of the levee system as a protective structure, the property owners will request, through Richland County, a letter of map revision of the current FIRM considering the levee system. It is our understanding that certification of the levee system will remove the area protected by the system from designation as a flood

prone area or designation as any floodway. It will also remove the requirement for mandatory flood insurance on development.

We would request confirmation of the above plan and of our interpretation of the requirements.

Thank you for your assistance. If you have any additional questions, you may reach me at 864-599-4481.

Sincere regards,

LOCKWOOD GREENE

H. W. Tillotson, Jr.

H. Wilson Tillotson, Jr., P.E.

CC: Mr. Burwell Manning
Mr. Deas Manning
Mr. Cary McSwain

FILE:\\sp0002\0062175\19\hwtlt001.doc
006217.90 FN:20.09

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PLTF TRIAL EXH 208

Federal Emergency Management Agency
Washington, D.C. 20472

January 26, 1999

Ms. Lisa Holland
State Coordinator, Flood Mitigation Program
South Carolina Department of Natural Resources
2221 Devine Street, Suite 222
Columbia, South Carolina 29205

Dear Lisa:

This is in response to your letter dated January 22, 1999, to Michael Buckley of the Federal Emergency Management Agency (FEMA). Your letter transmitted a letter dated January 20, 1999, from Mr. H. Wilson Tillotson, Jr., P.E., requesting confirmation from you that if certain actions were taken by the owners of the levee on the Manning property adjacent to the Congaree River in lower Richland County, that FEMA would revise the applicable Flood Insurance Rate Map to remove the Special Flood Hazard Area designation and floodway.

If the aforementioned levee is upgraded to meet in total the applicable portions of 44CFR, Part 65.10, and the construction necessary for it to meet said requirement is in compliance with State and local floodplain management requirements, then FEMA would revise the applicable FIRM to remove the Special Flood Hazard Area designation and floodway. As you are aware, should the structural modifications necessary to bring the levee into compliance with 44CFR, Part 65.10 result in any increase in base flood elevations as a result of construction within the existing regulatory floodway of the Congaree River, the requirements at 44CFR, Part 65.12 would also have to be met. In addition, any change in the configuration of the floodway as a result of the levee modifications will have to be done with the approval of the impacted communities.

Please call me at 202/646-3461 if you have any questions or comments.

Sincerely,

Matthew B. Miller

Matthew B. Miller, P.E., Chief
Hazards Study Branch
Mitigation Directorate

TOTAL P.14

CV002286

PLTF TRIAL EXH 208

S&ME

August 10, 1999

Lockwood Greene Engineers, Inc.
Post Office Box 491
Spartanburg, South Carolina 29304
Attn: Mr. Wilson Tillotson, P.E.

Reference: REPORT OF GEOTECHNICAL EXPLORATION
Congaree Levee Sections 1 and 2
Burroughs & Chapin Development
Columbia, South Carolina
S&ME Project No. 1611-99-474

Dear Sir:

S&ME, Inc. has completed the authorized investigation of Levee Section 1 and Section 2 of the proposed approximately 5000-acre Congaree Venture, L.L.C. project, in Richland County, three miles south of Columbia, South Carolina. The purpose of the investigation was to evaluate existing agricultural land protection levees to determine required remediation, rehabilitation, and modification design per USACE Standards, and construction necessary for levee protection of commercial/residential development.

The site is within the floodplain of the Congaree River and is generally bounded on the eastward side by the "Fall Line" and on the westward side by the Congaree River. The surficial soils of the site are typically Congaree Loam and Toccoa Loam which are comprised of silty clays, sandy silts, and silty sands. Levees in this area are thought to have initially been constructed by the U.S.D.A. in the early 1900's. The existing levee system was improved in the period of about 1960 to 1970 by dragline and crawler tractor/dozer fill placement techniques. As such the levee embankments typically consist of a mixture of silty clays, sandy silts and silty sand which are typically of similar consistency (density) as the natural soils.

PLAINTIFF'S EXHIBIT
209 wels
3-12-12 Tillotson

In 1970, the existing Levee Section 1 was deemed adequate for protection of agricultural lands by the U.S. Army Corps of Engineers (USACE). The existing levee system remains in a similar condition and would likely still be considered adequate for protection of agricultural lands by the USACE. However, in order to meet current Federal Emergency Management Agency (FEMA) requirements for protection of commercial/residential developments, the levees must be remediated, rehabilitated, and modified to be compatible with geotechnical engineering stability analyses/ considerations.

S&ME, Inc.
400 Northeast Drive, Suite A
Columbia, South Carolina 29203

(803) 7140006
(803) 7140016 fax
www.smeinc.com

FILE: CONGAREE FIS FEMA

Based upon investigations, analyses, and evaluations, the following remediation and modification of the existing levees will be required to meet current USACE guidelines.

1) On Levee Section 1, remedial work will consist of flattening the river side embankment slopes to 2H:1V (horizontal to vertical), providing a minimum ten-foot crest width, flattening the land side embankment slope to 2H:1V (horizontal to vertical), and installing a pervious drainage system at the toe of the inside embankment slope. A 4H:1V land side slope constructed as a homogenous embankment without specially constructed toe drains is also feasible.

2) Along major portions of the South Intermediate Levee embankments, the existing crest elevation is substantially above the design crest elevation of three feet above the maximum anticipated 100-year base flood elevation. As such, the design and construction recommendations typically consist of excavation, cutting the south side slope and filling the north slope with a comparable volume of material.

3) In Levee Section 2, remedial work will consist of construction of a riverside enlargement between White House Road and I-77 along the western leg of the levee, a straddle enlargement south of White House Road along the western leg of the levee, and land side enlargements in most other areas. Due to the generally higher hydrostatic head and seepage along Gills Creek, land side levee enlargements will need to be sloped at least 2.5H:1V in many areas. A pervious toe drainage system will be necessary at the bottom of the inside slope to accommodate flooding of abandoned borrow pits and resulting submergence of the toe of the slope. A 4H:1V inside slope constructed as a homogenous embankment without special toe drainage is also feasible.

4) On-site soils are expected to be suitable for use in flattening the existing slopes. An on-site source of clean sands suitable for use in toe drains has been identified in Borrow Areas 4 and 5.

5) Significant remedial repairs will be required at penetration locations. All existing drainage structures, pipes, and conduits must be removed and replaced with engineered structures to reduce the potential for internal erosion (soil piping) along the levee penetration structures.

The attached summary table indicates the major design and construction requirements by reach.

The recommended remedial, rehabilitation, and modification design and construction measures for the levee are relatively minor when considering upgrade of the existing levee system from protection of agricultural land to protection of residential/commercial development. The change in category from low-level of protection to high level of protection structure is of such significance that recommended design and construction details for remediation, rehabilitation, and modification are warranted.

DEF-00000331

PLTF TRIAL EXH 209

3516

We appreciate working with Lockwood Greene Engineers on this project and look forward to continuing our association in subsequent phases of this project. Please do not hesitate to contact us if you have questions or if we may be of any assistance in any way.

Sincerely,

S&ME, Inc.

John C. Lessley, P.E.
Chief Engineer
South Carolina Registration No.

Dan Marks/LLB

B. Dan Marks Ph.D., P.E.
Chief Geotechnical Consultant/ Vice President

Ronald L. Calsing, P.E.
President

October 14, 1999

Mr. Mark Hester
Lockwood-Greene Engineers
Post Office Box 491
1500 International Drive
Spartanburg, South Carolina, 29304

Re: Levee Sections 1 and 2, 500 Year Analysis Information Request
Cayce, South Carolina
S&ME Project Number 1611-99-611

Dear Mr. Hester:

This letter is pursuant to our meeting at the site of the above referenced project on October 13, 1999. During our meeting there were several issues discussed regarding the analysis of the the levees for the 500 year flood event. This letter is intended to summarize these discussions present our understanding and request the corresponding information that will allow S&ME to best address the issues.

We are reviewing our previous analyses and beginning to make the changes necessary to provide a report which addresses the 500 year flood. As we discussed, on report of August 10, 1999 which addresses the 100 year flood will not be modified at this time. We will issue a new report which addresses the 500 year flood as a stand alone document.

As discussed there are several pieces of available data that will help us in the analysis:

1. Please forward a copy of the latest alignment plan. We will use this plan for adjusting cross sections as necessary in locations where the alignment may be moved from its current position. Our initial analysis assumed all construction will be on the existing alignment. An electronic copy in Auto Cad format would be beneficial.

2. Please forward a relevant flood profile inclusive of elevations at stations and/or borings for the 500 year storm. For the moment we are assuming that the 500 year flood elevation is 4 feet higher than the profile you gave us for 100 year flood.

3. When analyzing the 500 year flood do we want to include 3 feet of free board or would a lesser free board be acceptable.

4. Please provide any information you have on wetlands that will restrict the footprint of the proposed levee.

5. We understand the floodway of the Congaree River is now defined as the toe of the existing levee, and all improvements on levee that faces the river must be on the land side.

We thank you in advance for your assistance with this information request and we look forward to working with you on this project.

Sincerely,
S&ME, Inc.

John W. Bale, P.E.
Senior Project Manager

John Lessley, P.E.
Chief Engineer

Attachments

JWB/mrr

November 16, 1999

Lockwood Greene Engineers, Inc.
Post Office Box 491
Spartanburg, South Carolina 29304
Attn: Mr. Wilson Tillotson, P.E.

Reference: **REPORT OF GEOTECHNICAL EXPLORATION**
Congaree Levee Improvements
Burroughs & Chapin Development
Columbia, South Carolina
S&ME Project No. 1611-99-611

Dear Sir:

S&ME, Inc. has completed the authorized investigation of Levee Section 1 and Section 2 of the proposed approximately 5000-acre Congaree Venture, L.L.C. project, in Richland County, three miles south of Columbia, South Carolina. The purpose of the investigation was to evaluate existing agricultural land protection levees to determine required remediation, rehabilitation, and modification design per USACE Standards and the requirement by Richland County that the levees withstand the 500 year recurrence flood level.

The site is within the floodplain of the Congaree River and is generally bounded on the eastward side by the "Fall Line" and on the westward side by the Congaree River. The surficial soils of the site are typically Congaree Loam and Toccoa Loam which are comprised of silty clays, sandy silts, and silty sands. Levees in this area are thought to have initially been constructed by the U.S.D.A. in the early 1900's. The existing levee system was improved in the period of about 1960 to 1970 by dragline and crawler tractor/dozer fill placement techniques. As such the levee embankments typically consist of a mixture of silty clays, sandy silts and silty sand which are typically of similar consistency (density) as the natural soils.

In 1970, the existing Levee Section 1 was deemed adequate for protection of agricultural lands by the U.S. Army Corps of Engineers (USACE). The existing levee system remains in a similar condition and would likely still be considered adequate for protection of agricultural lands by the USACE. However, in order to meet current Federal

Emergency Management Agency (FEMA) requirements for protection of commercial/residential developments, the levees must be remediated, rehabilitated, and modified to be compatible with geotechnical engineering stability analyses/considerations.

Based upon investigations, analyses, and evaluations, the following remediation and modifications of the existing levees will be required to meet current USACE guidelines:

1. On Levee Section 1, remedial work will consist of flattening the river side and land side embankment slopes to 2H:1V (horizontal to vertical) to an elevation 8 feet below the crest, providing a minimum ten-foot crest width and improving the resulting river site slope in selected areas and resist erosion or sloughing, and installing a 5 foot wide bench at the toe of the upper inside embankment slope. A 4H:1V land side slope constructed as a homogenous embankment without specially constructed toe drains would extend to the ground surface below the bench.

2. In Levee Section 2, remedial work will consist of construction of land side enlargement in most areas. Land side levee enlargements will need to be sloped as described above. A 4H:1V land side slope constructed as a homogenous embankment without special toe drainage is feasible on the lower slope of the landside enlargement, but below elevation 113 feet should consist of relatively sandy soils where the toe will be submerged in old borrow pits.

3. On-site soils are expected to be suitable for use in flattening the existing slopes. Fills would be considered as unclassified, though engineering judgement would need to be exercised during frilling operations to prevent placing excessively fine-grained soils on the lower portion of the land side embankment.

4. Significant remedial repairs will be required at penetration locations. All existing drainage structures, pipes, and conduits must be removed and replaced with engineered structures to reduce the potential for internal erosion (soil piping) along the levee penetration structures.

The attached summary table indicates the major designed and construction requirements by reach.

The recommended remedial, rehabilitation, and modifications design and construction measures for the levee are relatively minor when considering upgrade of the existing levee system from protection of agricultural land to protection of residential/commercial development. The change in category from low-level of protection to high level of protection structure is of such significance that recommended design and construction details for remediation, rehabilitation, and modifications are warranted.

PLTF TRIAL EXH 211

We appreciate working with Lockwood Greene Engineers on this project and look forward to continuing our association in subsequent phases of this project. Please do not hesitate to contact us if you have questions or if we may be of any assistance in anyway.

Sincerely,

S&ME, Inc.

John C. Lessley, P.E.
Chief Engineer
South Carolina Registration No. 14133

B. Dan Marks, Ph.D., P.E.
Chief Geotechnical Consultant / Vice President

Reviewed by: Ron L. Calsing P.E.
President

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1.0 INTRODUCTION

1.1 Authorization

Conditions of existing levees and requirements for improvements to existing levees adjacent to the Congaree River south of Columbia, South Carolina were first discussed with S&ME, Inc. by Mr. Carroll Walker of Lockwood Greene Engineers, Inc. on March 10, 1999. In a meeting at the Lockwood Greene Engineers, Inc. offices in Spartanburg, South Carolina on March 14, 1999, maps of the boundaries and cross sections of the existing levee were made available to S&ME, Inc. for preparation of a proposal for a complete investigation of the levee area designated as Levee Section 1.

On March 13 and 15, 1999, Mr. John C. Lessley of the S&ME Columbia office inspected the condition of Levee 1 from accessible locations. Recommendations for a proposed subsurface exploration program were presented with the comprehensive Levee 1 evaluation investigation on March 23, 1999. This proposal was accepted by Lockwood Greene Engineers, Inc. on March 26, 1999.

In a meeting at the S&ME, Inc. offices in Columbia, South Carolina on April 14, 1999, Mr. Carroll Walker requested S&ME, Inc. to provide a technical and cost proposal for Levee Section 2. An electronic topographic map of Levee sections 1 and 2 was made available at that time.

On May 3, 1999, Mr. John W. Bale of the S&ME Columbia office inspected the condition of Levee 2 from accessible locations. Recommendations for a proposed subsurface exploration program were presented to Lockwood Greene Engineers, Inc. on May 5, 1999, S&ME Proposal No. 1611-1016-99. This proposal was verbally accepted by Lockwood Greene Engineers, Inc. on May 13, 1999.

S&ME was requested to explore a section of levee north of I-77 facing Bluff Road under a separate purchase order dated October 12, 1999. This area was viewed by Mr. Bale on October 10 through 12 from accessible locations along Old Bluff Road and the Beltline extension.

1.2 Purpose

The purpose of this investigation is to present an overall evaluation of the existing Congaree River Levee Sections 1 and 2 relative to potential flood protection and impact upon flood routing on the associated reach of the Congaree River. Specific attention has been directed to conditions affecting freeboard, levee protection, levee stability, and settlement as outlined in 44CFR65.10 "Mapping of Areas Protected by Levee Systems". S&ME, Inc. initially concentrated evaluation efforts on reaches facing the Congaree River north of I-77 and the South Intermediate Levee south of I-77 which forms the south margin of Levee Section 1 region later studies addressed reaches of Levee Section 2 facing the Congaree River and along Gills Creek from I-77 to Gills Creek confluence with the Congaree River, and the South Intermediate levee was dropped from the study.

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Chapter 4.1 of this report presents a brief description of the procedures used in visual inspection of the Congaree River Levee Sections 1 and 2. Findings of the initial inspection relative to condition of the levee, significance to flood protection and flood routing, and conclusions relative to evidence of breaching and potential breaching of the earthfilled levees are discussed for each levee segment or reach in Chapter 6.1. Chapter 6.2 presents a description of the subsurface exploration and laboratory testing conducted on the principal soil layers subsequent to the visual inspection. Chapter 8 describes conditions encountered in each reach, along with recommended remedial actions.

1.3 Scope of Exploration

Accomplishment of the purpose of this investigation was achieved by the following phases of work.

1. A thorough visual inspection of the Congaree River Levee Section 1 embankment was performed. Geometry, visual stability and current conditions of the levee were evaluated by established inspection criteria. Inspection criteria data were tabulated for representative reaches of the levee identified by surveyed cross sections.

   During evaluation of Levee Section 2 a preliminary visual inspection of the Congaree River Levee embankment was performed initially due to heavy overgrowth. General geometry, visual stability and current conditions of the levee were evaluated. Due to heavy underbrush and growth the initial inspection was limited in scope.

2. Comprehensive subsurface exploration and laboratory testing programs were developed and conducted on both sections of the levee to obtain critical geotechnical engineering data. The subsurface exploration program field operations were conducted under the direction of Mr. Thomas Tank, P.E during Levee Section 1 and Mr. Ron Forest, E.I.T. during Levee Section 2.

3. Subsequent to clearing the levee for the field exploration, a thorough visual inspection of Levee Section 2 was performed. Detailed geometry, visual stability, current conditions and construction methodology (location of borrow areas) were evaluated by established inspection criteria. Inspection criteria data were tabulated for each reach of levee identified by sections generated from topographic maps.

4. A preliminary investigation of potential borrow source areas was performed during the Levee Section 1 field work. A more complete investigation of potential borrow source areas was performed during the field investigation of Levee Section 2. A major objective of this investigation was to locate and define engineering characteristics of clean sands. Therefore, test pit locations were identified based on surficial features that may be conducive to sand deposits.

5. Identification, classification and correlation tests on samples recovered from soil test borings were performed. Results of the subsurface exploration program and characterization laboratory testing have been utilized to define subsurface conditions at boring locations.

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6. Laboratory tests to determine the physical and engineering properties of representative soil strata have been performed. Results of these tests have been utilized in geotechnical engineering analyses of levee seepage, stability, and settlement. Recommendations for remediation and modification of existing levee sections have been based upon results of the geotechnical engineering analyses.

7. This report presents findings of the subsurface and laboratory testing programs, results of geotechnical engineering analyses, visual inspection observations, and provides recommendations for remediation and rehabilitation of Levee Sections 1 and 2.

1.4 Limitation of Investigation

The geotechnical investigation is intended to provide information for use in remedial work on Levee Sections 1 and 2. During the investigation, soil test borings were performed at intervals of approximately 500 feet. Though an effort was made to define as closely as reasonably possible the range of conditions present in the levee, subsurface conditions may vary somewhat between boring locations. Specific recommendations for detailed design purposes will be formulated or modified as necessary on the basis of soil conditions exposed during remedial work which is to be performed at a later date.

The proposed alignment crosses or borders areas that may be designated as wetlands by the U.S. Army Corps of Engineers (USACE). This report addresses remediation and rehabilitation of Levee Sections 1 and 2 relative to geotechnical engineering considerations and does not attempt to address wetlands and other environmentally related issues, except where specifically required in relevant sections of this report.

Borrow pit exploration consisted of a limited number of test pits and borings within areas determined to be suitable on the basis of geographic location within the site, past use as borrow pits, or surface features. Further investigations will be required to identify lateral and vertical extents of borrow materials outside of these areas.

The assessment of site environmental conditions and/or the presence of potential contaminants in the soil, rock, surface water or groundwater of the site is beyond the scope of this investigation. Furthermore, the impact of recommended remedial repairs on wetlands will require further evaluation once the wetlands delineation effort is completed by others.

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2.0 REGIONAL AND SITE SETTING

Levee Section 1 encloses approximately 2,300 acres on the east side of the Congaree River approximately three miles south of Columbia, South Carolina. It is bounded on the west by the Congaree River, to the south by White House Road, on the north by the State Farmers Market and the Rosewood Industrial Park, and on the east by Gills Creek and Bluff Road (South Carolina Highway 48) north of Interstate I-77. The approximate boundaries of the areas designated as Levee Section 1 are indicated in Figure 1. The North Tributary Levee forms the north end of the protected area of Section 1 near the Rosewood Industrial Park.

Levee Section 2 encloses approximately 1,200 acres on the east side of the Congaree River. It is bounded on the west by the Congaree River, to the south by Gills Creek, on the north by Interstate 77 and the intermediate section of Levee Section 1, and on the east by Gills Creek. The approximate boundaries of the areas designated as Levee Section 2 are indicated in Figure 1.

2.1 Physiographic Setting and Topography

Surveys of the site to develop detailed topographic maps have been made by Surveying and Mapping, Inc. of West Columbia, South Carolina, under contract with Lockwood Greene Engineers, Inc. Under the terms of this contract, Surveying and Mapping, Inc. staked locations for cross sections along Levee Section 1 in the field and provided ground surface elevations at the locations of the cross sections. The surveyed cross section locations are approximately 500 feet on center along the crest of the levee embankment along Levee Section 1. Aerial photography surveyed by Independent Mapping Consultants, Inc. of Matthews, North Carolina were used for generation of contours for both Levee Sections 1 and 2. These contours were used by S&ME to develop cross sections along Levee Section 2 at representative locations.

The site lies within the upper Congaree River Flood Plain section of the Atlantic Coastal Plain Physiographic Province of South Carolina. The coastal plain lies adjacent to the Fall Line and is evidenced by rapids in major streams or rivers flowing in an easterly direction. At the Congaree River "Fall Line" located immediately northwest of the site near downtown Columbia, the Congaree River Valley is narrow. Proceeding southwest from the "Fall Line" the valley widens rapidly to a flood plain width of over four miles. Within the flood plain, the Congaree River maintains a meandering course generally along the southwest side. South of the site, bluffs overlooking the river on the southwest side of the valley rise several hundred feet above the flood plain.

The northeast side of the valley, including the site, exhibits relatively little topographic relief by comparison to the southwest side, and does not attain the same elevation as the southwest side for several miles from the river. The ground surface in this area is marked by gently inclined coastal plain terraces incised by beach erosion during at least three periods of relatively high ocean levels which inundated the valley. While the terraces are eroded in many areas to an almost unrecognizable form due to subsequent fluvial or erosional processes, they are correlated by elevation throughout the Congaree and Wateree River Valleys. The terraces are separated by low scarps twenty to thirty feet in height.

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Surficial geology in the site area is shown in Figure 2. The central portion of the site, enclosed by the levee, lies entirely within the flood plain of the Congaree River. Ground surface elevations typically range from about elevation 120 feet to about elevation 130 feet. Topographic features on the site are common to a meander flood plain formed by streams with full sediment loads that do not commonly overflow their banks during floods. The meandering form indicates a low stream gradient. The primary zone of erosion is along outer edges of the meanders and the most active deposition zone is along the inside of the meanders where sand or gravel bars are formed. Soils are generally coarse textured and have bright tones when viewed in aerial photographs. Surface features such as meander cutoffs, scrolls, abandoned channels, and oxbow lakes are visible on topographic maps and aerial photographs of the area. There is a general tendency for the ground surface to slope downward gently to the east from the central portion of the site to swamps forming the site perimeter on the east and southeast along Gills Creek.

2.2 Regional Geology

The site is located just south of the "Fall Line" zone at the northwestern contact of the Atlantic Coastal Plain Province and the Piedmont Physiographic Province of South Carolina. As such, the site is located within and adjacent to two distinctively different physiographic and geologic regions.

To the northwest is the Piedmont Physiographic and Geologic Province of South Carolina which is a region underlain by crystalline bedrock material approximately 400 to 600 million years old. Soils in this region are weathered in-place from parent bedrock without undergoing subsequent erosion or redeposition. Consequently, these residual soils retain much of the relict rock structure and texture even in the fully weathered state.

To the southeast, and extending to the Atlantic Ocean, are coastal plain marine deposited sediments overlying deep bedrock formations. Coastal Plain sediments consist of well to poorly consolidated sands, clays and silts which are largely comprised of materials eroded from the Piedmont and redeposited below the "Fall Line" over geologic time. The age of these materials ranges from about 20,000 to 350 million years. Coastal plain soils typically have been extensively reworked by erosion and redeposited in flood plains and marshes along rivers and streams.

2.3 Site Geology

Basement rocks in the Columbia area are mapped as the Carolina Slate Group, part of an extensive group of metamorphosed volcanic and sedimentary rocks occurring along the southeast edge of the Piedmont Province from Virginia to Georgia. The Carolina Slate Group rocks consist of moderately to gently folded, laminated granites, schists, and gneisses with thin, localized intrusions of phyllite and tuffaceous materials. Outcropping extensively on hillsides north and west of Columbia, these rocks slope to the southeast at an average inclination of about nine to ten feet per mile and are blanketed with younger sediments of progressively greater thickness to the south and east.

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Surficial geologic formations are indicated on the Geologic Map presented as Figure 2. Crystalline rocks do not have surface expression in the site area, but are exposed in the Olympia Quarry north of the site where overlying sediments have been excavated. Crystalline bedrock is unconformably overlain by Cretaceous Age coastal plain sediments over much of downtown Columbia and to the southwest, locally mapped as the Middendorf Formation. Soils of the Middendorf Formation typically consist of kaolinitic sandy clays, sands, and silts of varying composition, formed in a deltaic or outwash environment 100 to 300 million years ago. Due to their considerable geologic age, most layers are well consolidated and individual strata often exhibit a high degree of strength and corresponding low compressibility. Perched groundwater within these strata are common. The Middendorf Formation comprises a major aquifer to the southeast. In low lying areas of Columbia, these sediments have been partially or entirely eroded, exposing the underlying crystalline bedrock.

Fluvial sands, clays and cobbles deposited along the Congaree River Valley obscure the underlying crystalline or Cretaceous materials within the site area. Sediments consist of cross-bedded, coarse-grained sands and gravels usually overlain by firm sands and clays. These sediments were deposited by different geologic events in at least four distinct terraces which correspond to existing sea level during periods when the Congaree River Valley was inundated by the Atlantic Ocean. The lowest and youngest of these terraces, mapped as the Okeefenokee Terrace, exists at an elevation of about 140 to 150 feet and borders the Congaree River floodplain approximately parallel to Bluff Road.

Soils of the Congaree River floodplain and the floodplains of lesser streams consist of recent alluvial deposits of loose sands, silts and soft clays containing varying amounts of organic material. These soils have replaced the Cretaceous coastal plain material within the flood plain to depths of up to about 70 feet. A wide variety of soils of almost all textures can be found in flood plain deposits, and their distribution may vary on a small scale, both horizontally and vertically. The well-defined meander flood plain at the site area coupled with the generally bright soil tones indicate that soils along the levee alignment and landward are generally coarse textured soils. Approximately five to ten percent of the total site area is covered by swamps or sloughs lying below about elevation 125 feet, where these break through the natural levees. From inspection of aerial photographs and site observation, the existing levees typically follow natural levees formed along the flood way boundaries of Gills Creek or abandoned channels of the Congaree River.

2.4 Land Use and Surface Cover

The meander flood plain of the Congaree River is distinguished from the surrounding terrain by the many meander features, scrolls, and abandoned channels which indicate lateral channel erosion and deposition. There are many complex variations in soil tone which indicate differences in soil moisture content. In most areas near the Congaree River the water table is several feet below the surface. A significant portion of the area is in cultivation. Further from the river, ditching and other means of surface drainage is extensive as a result of attempts to lower the high water table prevalent along the foot of the bluff.

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Swamps and associated hardwood forest form much of the east end of the intermediate levee area of Levee Section 1 and much of Section 2 along Gills Creek. Swampy terrain extends along the base of the bluff. Low lying borrow pits and swamps form much of the interior and exterior of the levee along Gills Creek.

There are two principal non-agricultural facilities in the Levee Section 1 area, both located in the western portion of the site near the river. The City of Columbia Wastewater Treatment Plant lies along the Congaree River with about 3,140 feet of the river frontage. The facility consists of several large circular thickeners, clarifiers and digesters, along with earthen sedimentation and decant ponds. Most of the facility is elevated ten to fifteen feet above the surrounding terrain. There are numerous buried sanitary sewer pipes running to this facility from the north and east. Sewer manholes are elevated above surrounding ground surface to provide protection from stormwater in flow. Heathwood Hall, a privately-owned elementary and high school, occupies 132 acres in the central part of the Levee Section 1 area. The school complex consists of five classroom, administrative, or special-use buildings and appurtenant facilities in a small campus set back approximately 2000 feet from the river.

There are also two principal non-agricultural facilities in the Levee Section 2 area. An east Richland sewer district Wastewater Treatment Plant (WWTP) lies along Gills Creek just north of White House Road in the northeastern section of Levee Section 2. Approximately 500 linear feet of levee adjacent to this facility could not be accessed for visual inspection and was not cleared during the investigation. The WWTP consists of several small circular thickeners, clarifiers and digesters. The facility is not elevated above adjacent ground level. There are potentially buried sanitary sewer pipes running to this facility from the north and east, however locations were not decernable. The second facility is a small grain handling facility located in the northwestern part of Levee Section 2.

2.5 Local Soil Map Units

The U. S. Department of Agriculture, Natural Resources Conservation Service formerly the (Soil Conservation Service) maps for Richland County covering the site area were issued September, 1978. Map plates covering the site area indicate four principal soil associations underlying the Levee Sections 1 and 2 alignments. These soil associations are described below.

- Congaree Loam (Co) – This unit underlies virtually all of the Levee Section 1 alignment except for a small portion at the north end of the river levee near the State Farmers Market. This unit underlies the western reaches of Levee Section 2. The Congaree Loam is a nearly level, deep, well-drained to moderately well-drained dark brown silty clay to silty sand, grading to a dark grayish sandy loam with depth. Fines percentage (percent by weight passing a Standard U.S. No. 200 sieve) reported for this soil association ranges from 40 to 90 percent. Fines are generally nonplastic to low plasticity and soil shrink-swell potential is low. The soil profile below a depth of approximately thirty inches is variable. The soils are somewhat erodable. Limitations to site development in these soils are potential for seepage, internal erosion or soil piping, moderate compressibility, and low strength in comparison with upland soil series.

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- Toccoa Loam (To) – This unit underlies approximately 3000 feet of levee extending south from the northwest corner of the site along the Congaree River. This unit underlies short segments of Levee Section 2 near Gills Creek. The Toccoa Loam is a deep, level, well-drained flood plain soil, typically yellow-brown to brown with depth. The percentage of fines reported for this soil association ranges from 25 to 60 percent. Fines are low plasticity and shrink-swell potential is low. The soils are somewhat erodable, and limitations to site development include excessive seepage and soil piping or internal erosion.

- Chastain Silty Clay Loam (Cd) - This unit underlies a large portion of the Levee Section 2 along Gills Creek in the eastern and southern reaches of the Levee. This unit does not underlie Levee Section 1. The Chastain loam is a deep, poorly drained nearly level deposit. This loam is generally deposited in sloughs on flood plains in the Congaree River valley. The soils range in color from grayish brown to greenish gray. The percentage fines reported for this soil association ranges from 70 to 95 percent. Fines are moderate to highly plastic with shrink swell potential considered moderate. The soils are somewhat erodable. Limitations to site development include seepage potential, erosion or soil piping, moderate compressibility and low shear strength in comparison with upland soil series.

- Chewacla Loam (Ce) - This unit underlies two segments of Levee Section 2 near the southwest corner and is not present under Levee Section 1. The Chewacla loam is a deep, poorly drained, nearly level soil located mostly in flood plains. Color ranges from brown to yellowish brown with black mottling. The percentage fines of soil association ranges from 50 to 98 percent. Fines are low to moderately plastic, shrink swell potential considered low. The soils are somewhat erodible. Limitations to site development for these soils include seepage potential, erosion or soil piping, moderate compressibility and low shear strength in comparison with upland soil series.

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3.0 PROJECT DESCRIPTION

3.1 Location and General Description of Levee Section 1 and Levee Section 2

Levee Section 1 consists of approximately 13,600 lineal feet of levee located in southwestern Richland County south of Columbia, South Carolina. The general configuration of Levee Section 1 is shown in Figure 1. The levee is roughly L-shaped and is bordered on the south by Interstate 77 (I-77). Beginning with the north section of Levee Section 1, the North Tributary Levee begins approximately 2,000 feet east of the Congaree River and extends approximately 1800 feet towards the river. The levee then turns southward and generally parallels the Congaree River for approximately 12,000 feet, where it intersects the north side of the I-77 embankment near the Sanders Bridge over the Congaree River. This segment of levee includes approximately 3000 feet of levee owned and maintained by the City of Columbia at the waste water treatment plant.

Levee Section 2 consists of approximately 32,000 lineal feet of levee located immediately south of Levee Section 1. The general configuration of Levee Section 2 is shown in Figure 1. The levee is roughly horseshoe-shaped with the southern and eastern edges bordered by Gills Creek and the Congaree River bordering the western edge. White House Road bisects the northern portion of the Levee Section 2, with approximately 2,000 feet and 1,500 feet of levee north of White House Road on the west and east sides, respectively. Approximately 2,000 feet of levee parallels the Congaree River at the northwest corner of the protected area, while approximately 24,600 feet of levee borders Gills Creek, or its tributaries. Section 2 continues north from I-77 near Bluff Road approximately 2000 feet to terminate on high ground against the bluff along Old Bluff Road.

3.2 History of Levee Construction

Based upon available literature and maps, portions of the levee system were likely constructed in the early 1900's by the USDA. Construction of Levee Section 1 was initiated in approximately 1965 and completed around 1970 by Mr. Burrell Manning, who owned most of the farmland in the protected area. The levee was constructed by use of a dragline, which borrowed material from shallow excavations adjacent to either the inside or outside levee toe. The heaped levee fill was densified and shaped into the approximate existing configuration using crawler tractors with dozer attachments. Rubber tired scrapers were also utilized. In general, the levee is believed to have been constructed in horizontal lifts by use of this construction procedure. In 1970, the Corps of Engineers performed an inspection of the levee system for the purpose of evaluating its integrity regarding protection of agricultural land. At that time, the system was considered adequate for agricultural levee, as distinct from urban levee, a classification no longer recognized by the USACE. There are no known available design or construction records or drawings that indicate methods of construction or whether there was engineering control during construction.

S&ME, Inc. was provided an unsigned, undated report describing observed geometry of two breached levee sections on the grounds of the City of Columbia WWTP in October, 1976. This report did not include figures or boring logs. The breaches were reported to have occurred after approximately one to two days of high water in the Congaree River following a 10-year return

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frequency storm event. The two breaches were described separately in the report as occurring 300 feet and 800 feet south of the north boundary of the City property. At that time, the levee was outside the plant fence line and had not been upgraded from its original construction configuration. The treatment plant was constructed in 1970 during which time no maintenance or inspection of the levee had been performed except for clearing of brush and trees from the interior slope of the levee.

The south breach was located 800 feet south of the north property line of the plant. At this location, inside levee embankment slopes as steep as 1.3H:1V were noted and the overall levee height was thirteen feet (elevation 141.4 feet at crest and elevation 128.4 feet at the outside toe). However, the base of the breached area appeared to be at an elevation lower (elevation 126 feet) than natural ground elevation and the breach was about 95 feet in width. At the time of failure, the Congaree River was at elevation 136 feet, eight feet above the outside toe and about five feet below the crest of the levee.

Several embedded stumps and logs were observed in the breach section. Soft clays were present in soil test borings adjacent to the breach just below the bottom of the breach section. Large horizontal cracks were observed on each side of the breach section. Compaction and density test data for levee fill material indicate relatively low compaction of the levee soils (84 percent to 90 percent of standard Proctor maximum dry density) in some areas.

The second breach which occurred at the same time was located approximately 300 feet south of the north property line. This breach occurred by internal erosion along a 42-inch diameter reinforced concrete outlet pipe which had an invert elevation of approximately 114 feet. No pipe bedding or seepage collars around the pipe were observed. The levee in this section was twelve to sixteen feet high and constructed of silt which stood vertically for a short period at the sides of the breached section.

Construction of Levee Section 2 was initiated in approximately 1960 and completed around 1965 by Mr. Burrell Manning, who owned most of the farmland in the protected area. The levee was constructed by use of a dragline, which borrowed material from shallow excavations adjacent to either the inside or outside levee toe. This work is believed to have enlarged or replaced earlier levees in this area, which likely dated back to the early 1900's. In several areas, portions of older levee have been abandoned or have been bypassed by the newer levee. There are several different levee profiles and crest heights on Section 2, reflecting possibly several stages of construction of this area. As in Levee Section 1, the heaped levee fill was densified and shaped into the existing configuration using crawler tractors with dozer attachments and rubber tired scrapers. In general, the levee is believed to have been constructed in horizontal lifts by use of this construction procedure. There are no known available design or construction records or drawings that indicate methods of construction or whether there was engineering control during construction. There are no known historical breaches or failures of Levee Section 2. The majority of this section was constructed with a rounded crest and is not typically vehicle accessible as is Levee Section 1. As a result of the lack of maintenance, Levee Section 2 supports significant tree growth along the entire length of the levee. The levee crest was cleared and leveled to allow access for subsurface exploration drilling equipment.

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3.3 Existing Configuration and Profiles

Surveyed cross sections for Levee Section 1 were performed by Surveying and Mapping, Inc. Cross sections were obtained at approximately 500-foot intervals for the entire length of river levee north of I-77. A total of 64 cross sections were surveyed. Cross section locations were marked in the field by a small plastic card on a stake with the Cross-Section number (#1A-#1D and #1 through #60) shown. Surveyed cross sections included the City of Columbia segment of the levee. Cross sections performed on the North Tributary Levee at the north end of the river section near the State Farmers Market were designated #1A – #1D. The surveyed cross sections extended approximately 100 feet from the levee crest in both inside and outside directions. Locations of surveyed cross sections are shown in Figure 3 of this report for Levee Section 1.

Surveyed cross sections for Levee Section 2 were not provided. Cross sections were determined along Levee Section 2 from topographic maps generated by aerial photography. A total of 19 Cross Sections were generated by S&ME along Levee Section 2 (#58-$58, #61-#77) by measurement from the topographic maps. The cross sections generally extend at least 100 feet from the crest in both the inside and outside directions. Locations of Levee Section 2 cross sections are shown on Figure 4 of this report.

3.3.1 Levee Section 1 Cross Sections

The existing levee is believed to have been constructed with soils originally located adjacent to the levee location. The crest of Levee Section 1 varies in elevation along the Congaree River (Cross-Section #1 - #25) from approximately elevation 140 feet to 151 feet, and varies in width from about ten feet to about twenty feet. The levee height above original grade in this reach ranges from approximately ten feet to fourteen feet. Side slopes along this segment range from about 1.4H:1V to about 4.5H:1V on inside slopes and from about 1.25H:1V to about 1.7H:1V on outside slopes.

3.3.2 Levee Section 2 Cross Sections

The crest elevation of Levee Section 2 immediately south of I-77 is approximately 149 feet. Crest elevations of the length of levee represented by Cross-Section #61 range from approximately 142 to 136 feet. Crest widths typically range from two feet to ten feet with inside embankment slopes approximately 1H:1V to 4H:1V and outside embankment slopes approximately 1.5H:1V and steeper.

The crest elevation of Levee Section 2 represented by Cross-Section #62 is approximately 131 to 142 with inside and outside slopes on the order of 1:5H:11V to flatter than 2H:1V and a crest that is rounded prior to clearing.

The length of Levee Section 2 represented by Cross-Section #63 ranges in elevation from 145 to 138 with inside embankment slopes approximately 1.7H:1V to 2H:1V and outside embankment slopes approximately 1.75 to 2H:1V. The original crest width before clearing varied from five to ten feet.

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Levee Section 2 crest elevations from Cross-Sections #64 through #71 along Gills Creek range from elevation 132 feet to 140 feet and in general have variable inside and outside slopes ranging from 1.75H:1V to flatter than 2H:1V with occasional steeper slopes. The crest width varied before clearing but in general was somewhat rounded and not readily discernable.

Levee Section 2 crest elevations from Cross-Sections #72 through #77 adjacent to Gills Creek range from 132 feet to 137 feet with the crest gently rounded to sharply rounded. The side slopes ranged from approximately 1.7H:1V to flatter than 2H:1V on the inside to 1.5H:1V to 2H:1V on the outside.

The northeastern leg of the Levee 2 south of I-77 (cross sections #47 - #49) has a crest elevation of approximately 134-143 feet and a crest width of approximately fifteen feet. Inside slopes are approximately 1.8H:1V to 2H:1V with outside embankment slopes ranging from about 1.75H:1V to about 2H:1V.

The eastern leg of the levee north of I-77 has a crest elevation ranging from about 129 feet to 132 feet with a width of approximately five feet. This segment is a very small, low levee with only four to six feet of height above the surrounding ground surface.

3.4 Flood Elevations

Lockwood Greene, Engineers, Inc. performed HEC-2 analyses of the Congaree River basin along the reach of river from Cross-Sections #1 to #25. From this analysis the 500-year base flood elevation varies from about elevation 146.5 feet at Cross-Section #1 to about elevation of 137.74 feet at the mouth of Gills Creek. The maximum flood elevation for back water elevations in Gills Creek were assumed to be at elevation 137.74 feet all the way to Bluff Road. Based upon these design 500-year base flood elevations, there are numerous sections of Levee Section 2 that are below the anticipated maximum flood elevation. There are also measured sections of Levee Section 1 below anticipated maximum flood elevation, but most sections are within 1 or 2 feet of the design flood.

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4.0 LEVEE INVESTIGATIONS

The first part of this chapter presents brief descriptions of the visual inspection procedure used in assessment of the condition of different segments of the earthfilled embankment levees. The second part of this chapter presents a description of the subsurface exploration procedures used to investigate in-place levee and foundation soils and to recover representative disturbed and undisturbed soil samples.

4.1 Visual Inspections of Levee Slopes and Crests

Visual inspection of all segments of Levee Sections 1 and 2 were conducted in general accordance with procedures set forth in the Corps of Engineers Non-Federal Flood Control Works Inspection Guide. These guidelines are extracted from Engineering Regulations 500-1-1 (Natural Disaster Procedures), dated March 11, 1991.

Field data developed in accordance with these performance criteria guidelines were reduced to provide ten categories of existing condition/performance criteria. These categories of condition criteria were established to more nearly represent required remediation, modification, and remedial repair. These categories include the following:

1. Freeboard of crest above the design 100-year, base flood elevation (minimum three feet).
2. Capability and coverage of erosion protection measures on the slope faces.
3. Uniformity and compaction of fill soils forming the levee embankment.
4. Formation of circular depressions or drop-outs on the slope faces or crest.
5. Presence and severity of erosion gullies on slope faces.
6. Presence and severity of sloughing or slope instability in excess of four inches in depth on levee embankment slopes.
7. Longitudinal or transverse cracking of the soils forming the crest or slopes of the levee embankment.
8. Presence and severity of animal burrows.
9. Unwanted vegetation on the levee embankment crest and side slope faces.
10. Presence and condition of penetrations through the levee embankment such as pipes or gates.

4.2 Sampling and Recovery of Levee and Foundation Materials

S&ME, Inc. performed 43 soil test borings to an average depth of 30 feet along the crest of Levee Section 1. Eight additional borings were performed by Bunnell-Lammons Engineering, Inc. between March 15 and 16, 1999, making a total of 51 soil test borings totaling approximately 1700 linear feet along Levee Section 1. Bunnell-Lammons Engineering, Inc's borings are numbered B-1 through B-8 and are included in Appendix B-1A in their original form. S&ME, Inc. borings were performed between March 30 and April 9, 1999 and numbered B-101 through B-143 to distinguish them from earlier borings.

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S&ME performed 57 soil test borings to an average depth of 30 feet along the crest of Levee Section 2. The total footage of drilling in Levee Section 2 soils and underlying foundation soils was 1,650 linear feet. The drilling was performed between May 17 and June 10, 1999. The borings are numbered B-201 through B-257 to distinguish them as borings along Levee Section 2.

The levee section north of I-77 was explored by six borings (B-258 to B-263 between November 3 and 4, 1999. Borings were advanced to depths ranging from 15 to 35 feet.

Additional exploration performed 200 to 500 feet landward of the levee in all sections to identify potential borrow pits had the secondary function of characterizing the subsurface profile and potential seepage flow require landward of the levees.

Subsurface exploration procedures utilized by S&ME, Inc. generally follow recommended practices set forth by ASTM D-420, "Recommended Practice for Investigating and Sampling Soils and Rocks for Engineering Purposes". This recommended practice lists recognized methods for determining soil and rock distribution and groundwater conditions.

Soil test borings were located approximately as indicated on the Boring and Test Pit Location Plans for Levee Sections 1 and 2 included as Figures 5 and 6 of this report. Boring locations were selected by S&ME, Inc. on the basis of the visual inspection and at surveyed cross sections established by Surveying and Mapping, Inc. Borings were laid out by S&ME, Inc. personnel by taping distances and estimating right angles from existing roadways or from staked cross section or survey markers along the levee crest. Boring elevations were estimated using surveyed crest elevations by Surveying and Mapping, Inc or by interpolating from the topographic map generated from aerial photography. Where boring locations did not exactly correspond to surveyed cross sections or in locations the levee was cleared (Levee Section 2), elevations were estimated by straight line interpolation between adjacent cross section stations and approximating the thickness of soil removed during clearing.

Due to the size of the site and the scale of the drawings, boring locations and elevations shown on the attached location plans and subsurface profiles should be considered approximate and not exact. Borings were typically advanced through the levee fill and into the underlying natural soil to a depth approximately equal to the anticipated levee height.

Subsurface conditions encountered during drilling were reported on a Field Test Boring Records by the chief driller. Field records contain information concerning drilling technique, sampling methods and recovery, presence of various materials such as coarse gravel, cobbles, etc., and observations between collected samples. As such, Field Test Boring Records contain both factual and interpretive information and are maintained on file in the Columbia Office of S&ME, Inc.

Borings were drilled using a 2.75 inch I.D hollow stem auger. At each sample interval in the borings, a penetration test was performed by driving the sampler a set depth using a standard 140

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pound hammer falling 30 inches. The purpose of the penetration test is to provide an estimated soil shear strength and soil consistency or density at each sample point. In accordance with USACE guidelines, borings were not advanced by rotary drilling techniques. Thus standard penetration resistance data in sands below the groundwater might not reflect the actual soil density and strength.

Split-barrel, or split-spoon samples obtained from standard penetration tests (ASTM D-1586) are suitable for visual examination and classification testing but are too disturbed to allow quantitative laboratory strength testing. For quantitative laboratory testing, relatively undisturbed (Shelby) tube samples were obtained by pushing sections of 76 mm (OD) 16-guage, steel tubing into the soil at the desired sampling levels as described by ASTM D 1587.

Sample tubes were advanced into the soil in one continuous penetration for the specified sample interval, but no more than 24 inches. The penetration rate during this process did not exceed six inches per second. After the push, the sample was allowed to remain in place and undisturbed for not less than ten minutes. The drill rods were then rotated one full turn to shear the end of the sample, and then slowly withdrawn from the borehole and carefully removed from the drill string. All disturbed materials were removed from the top of the tube and the length of the recovered sample measured. Both ends of the samples were sealed with microcrystalline wax (non-shrinking). The ends were wrapped with duct tape or capped. Each undisturbed sample was transported to our laboratory in a special carrier in the upright position.

Stabilized groundwater levels in the auger borings were measured 24 to 48 hours after drilling except where the boring caved upon removal of augers. Stabilized groundwater levels shown on the test boring records represent the conditions only at the time of the exploration and may fluctuate with seasonal variations in rainfall. Normally the highest seasonal groundwater levels occur in late winter and early spring and lowest levels in late summer and fall. Surficial soils penetrated by borings at shallow depth at some locations will allow significant infiltration of surface water during rainfall events. As such, groundwater conditions in some localized areas may be significantly influenced by rainfall events.

4.3 Sampling and Recovery of Potential Borrow Soils

S&ME, Inc. performed 29 soil test pits to an average depth of approximately fifteen feet in ten potential borrow areas located throughout Levee Sections 1 and 2. The test pits are distinguished TP-1 through TP-29. Potential borrow areas were identified using several different approaches. Since a major objective of the borrow investigation was to identify sources of clean sand for use as drainage material, levee borings which encountered relatively clean sands at shallow depths were first identified. Next, we identified surface features in aerial photographs consistent with the presence of surficial sands (evident point bars, light ground reflectivity, etc). Surficial soil conditions and past excavations on the property were also discussed with the landowner, Mr. Burrell Manning, who had opened extensive borrow pits during reconstruction of the existing levees in 1960-1970, and had supplied much of the borrow material used in construction of I-77.

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Small bulk samples were obtained from each distinguishable soil stratification break and placed in small plastic bags for later examination and testing in the laboratory. Large bulk samples (50 to 100 lbs.) were obtained from soils to be analyzed for gradation and permeability tests.

Groundwater levels when encountered were indicated on the field test pit logs. Test pits were backfilled immediately upon completion.

4.4 Examination and Archiving of Recovered Samples

Approximately 240 split-spoon and undisturbed samples of the levee embankment soils and 380 samples of the levee foundation soils were obtained in the subsurface exploration program of Levee Section 1. Approximately 250 split-spoon and undisturbed samples of the levee embankment soils and 280 split-spoon and undisturbed samples of the foundation soils were obtained during the subsurface exploration program of Levee Section 2. A professional engineer examined each sample and assigned Unified Soil Classification System classification to each sample as described below.

The engineer classified the samples in general accordance with ASTM 2488 – "Visual-Manual Procedure for Classification of Soil and Rock Samples", and prepared Test Boring Records which are the basis for the recommendations in this report. Test Boring Records attached in Appendix B graphically present soil descriptions and standard penetration resistance values. Soil test Boring data combined with cross-sectional survey data have been utilized to develop representative levee embankment profiles. These were developed by interpolation of subsurface data between adjacent borings and are included in Appendix A.

Although the developed profiles are based upon interpretation of soil test boring data, variations in the subsurface conditions between borings can be expected. Strata breaks on the Soil Test Boring Records and on the profiles represent interpreted delineations in the soils and are intended as approximate boundaries. However, actual transitions between soil strata are typically more gradual than indicated by Soil Test Boring Record strata break lines.

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5.0 LABORATORY TESTING PROGRAM

After examining all the samples, laboratory tests were assigned to further evaluate grain size distribution, plasticity, unit weight and shear strength of the soils samples. The laboratory testing program consisted of 59 grain size distribution analyses, 39 Atterberg limits tests, eight triaxial shear strength tests, and twelve unit weight determinations on soils obtained during the Levee 1 subsurface exploration. Approximately one-third of these tests were conducted on the levee embankment materials and half on the embankment foundation soils immediately below the levee embankment. Laboratory testing performed on samples obtained from soils in Levee Section 2 included 51 grain size distribution analyses, 21 Atterberg limits, four triaxial shear strength tests and fifteen unit weight determinations. Approximately half of the characterization tests and all of the strength tests were performed on the levee embankment soils. Testing on soils obtained from potential borrow source areas included fifteen grain size distribution analyses, four Atterberg limits, two Standard Proctor compaction tests, and two remolded constant head permeability tests.

The laboratory testing program was conducted to provide data on representative engineering properties of the soils encountered in the borings for assessment of levee seepage and stability and to evaluate potential borrow source materials for use during remediation. These tests were performed on representative split-spoon and undisturbed samples obtained in the borings and on bulk samples obtained from test pits during the borrow source exploration. The testing was conducted in general accordance with applicable ASTM procedures. The results of individual tests are presented in Appendix C-1 and summarized on the "Soil Data Summary" tables presented at the front of Appendix C for Levee Section 1, Appendix C-2 for Levee Section 2 and Appendix C-3 for the borrow source areas.

5.1 Grain Size Distribution Analyses and Atterberg Limits Tests

Grain size analyses were performed to determine the particle size distribution of selected samples. The percentage of soils coarser than 0.074mm was determined by washing the samples through a standard U.S. number 200 sieve as described by ASTM D-1140. Soil weight retained on the sieve was recorded. On selected samples, the grain size distribution of soils coarser than the No. 200 sieve size was determined by passing the samples through a standard set of nested sieves. These tests were similar to those described by ASTM D 421. The results are shown on the Grain Size Distribution Sheets presented in Appendix C.

Liquid limit and plastic limit tests aid in the classification of the soils and provide an indication of the soil behavior with moisture changes. Plasticity properties also provide some empirical indication of the strength of fine grained soils. The Liquid Limit is the moisture content at which the soil will flow as a heavy viscous liquid, as determined in accordance with ASTM D-423. The Plastic Limit is the moisture content at which the soil begins to lose its plasticity, as determined in accordance with ASTM D 424. The Plasticity Index is bracketed by the Liquid Limit (LL) and the Plastic Limit (PL) and indicates the moisture content range of plastic soil behavior. The Liquidity Index is determined by comparing the natural moisture content of the soils to the Plastic Limit and Plastic Index, and is a measure of the state of soil moisture relative to the range of plastic soil behavior.

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5.2 Relative Density and Consistency

Soil consistency of disturbed split-spoon samples obtained in the borings was estimated by comparison of standard penetration resistance to relative density. Moisture content and unit weight determinations of the retrieved undisturbed samples was determined by cutting portions of undisturbed samples into sections approximately six inches long and then trimming the ends. Each section was measured, weighed and placed in an oven (maintained at 1 degrees C.) to dry for at least sixteen hours. Moisture content and unit dry weight were then calculated.

5.3 Measurement of In-Place Shear Strength

The shear strength properties of selected undisturbed samples recovered at the site were evaluated using consolidated-undrained triaxial shear tests with pore water pressure measurement to develop both effective stress and total stress parameters. Cylindrical test specimens were extruded from the Shelby tubes for each test. Each extruded specimen was trimmed to the appropriate size, then encased in a thin rubber membrane. Samples were then subjected to a uniform confining pressure and loaded axially until failure occurred, with the confining pressure held constant throughout the loading.

Although the triaxial test used is basically a simple compression test with uniform constant confining pressure, there are three basic combinations of loading and drainage: unconsolidated-undrained ("quick," or Q-test); consolidated-undrained ("rapid", or R-test); and consolidated-drained ("slow" or S-test). For modeling the steady state seepage stability of the levee, samples were tested using the consolidated - undrained test with pore pressure measurement or the R-test method.

The consolidated-undrained test, sometimes termed "consolidated-rapid" or "R", allows the soil to consolidate fully under the confining stress by allowing drainage of pore water. The axial load is then rapidly applied until failure occurs while the confining stress is held constant and drainage of pore water is not permitted. This condition simulates full consolidation of embankment under its own weight and the water load. Because this test represents the steady state seepage loading condition, all tests were performed after full saturation of the samples.

"Back pressuring" was used to saturate the samples. "Back pressuring" is a method by which air in the voids of the soil structure is forced into solution, allowing the water to fill the pores resulting in a saturated sample. Since the confining pressure is also increased as the pore water pressure is increased, the soil structure is unaffected by the back-pressuring procedures. During undrained tests, the pressure in the water in the sample (the pore pressure) can be measured, and effective stresses computed throughout the tests and effective stress parameters determined.

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5.4 Measurement and Estimation of Soil Permeability

Permeability tests are used to determine the ease with which water will flow through the soil such as for seepage under dams and levees.

Permeability rates used in the seepage analysis for soil strata encountered along the levee were determined by a combination of constant head permeability testing and estimation.

Recovered samples were remolded in a fixed wall permeameter cell to the approximate in place density of the soil. The sample was then saturated. As water flowed through the sample after saturation, the time and loss in head was recorded and the permeability calculated.

The permeability of granular soils was also estimated using grain size analysis. The diameter of which 10 percent of the soil was finer was determined or approximated from grain size analyses results. Figure 3.5 of EM 1110-2-1913 was then used to estimate the permeability of the soil.

The permeability of fine grained soils was estimated using data presented by Lambe and Whitman, 1969 based on visual and laboratory soil classifications and characteristic testing.

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6.0 SELECTION OF CRITICAL SECTIONS

Using the observations and site notes generated from visual inspections described in Chapter 4.1 and the data generated by field and laboratory tests of the subsurface materials, profiles of the subsurface conditions along the length of the levee were developed and are presented as Figure 7 through Figure 11 for Levee Section 1 and Figure 12 through Figure 26 for Levee Section 2. The entire levee was then divided into segments or reaches of similar height, geometry and soil conditions for analysis of seepage, stability and settlement, and evaluation of trial cross sections for remedial measures where necessary. These segments or reaches are described in Table 1.

6.1 Geometric Considerations

Geometric considerations in selection of critical cross sections for analysis were described in Chapter 4.1. Visual observations and surveyed cross sections either provided by Surveying and Mapping, Inc. or generated from topographic maps were reviewed to determine sections of the levee having similar crest elevation, width, inclination of inside and outside slopes, topography of surrounding terrain, and other observable conditions.

6.1.1 Crest Elevation and Width

Crest widths observed along Levee Section 1 vary from approximately twelve to sixteen feet on unimproved levee sections. Measured levee crest sections exceed the minimum width of ten feet set forth in USACE Engineer Manual EM 1110-2-1913, "Design and Construction of Levees" (1978, rev. Mar, 1996) in all locations viewed along levee section. Along Levee Section 2, the majority of the levee was less than five feet in width at the crest with much of the levee constructed with a rounded crest. Portions of the levee met the minimum width guidelines. In general, these reaches are near Cross-Sections #67 through #70 and the length of levee north of White House Road on the eastern leg. Levee section 2 north of I77 limited width. The purpose of specifying a minimum crest width is to provide an access road for maintenance and inspection. There is no stated minimum width in 44CFR65.10.

The elevation of the crest of the levee varies to some extent from cross section to cross section. Soil conditions in the levee and foundation soils are discussed below, but based on the profile revealed by the borings, variations in crest elevation likely reflects variations in as constructed heights as opposed to settlement of the levee over time.

Crest elevations were compared to the 500-year base flood elevations provided by Lockwood Greene described in Chapter 3.4, and adding a three foot freeboard as required by section 65.10(b)(1). Along the Congaree River north of I-77 cross-sections along the North Tributary Levee and on the River Levee south of section #10 exhibit crest elevations 2 to 3 feet below the required freeboard elevation. At these locations the current crest is about 1 foot below to 1 foot above the 500-year base flood elevation. Remaining sections facing the river north of I-77 have three to four feet of freeboard.

Out of the seventeen cross sections determined for Levee Section 2 south of I-77 (Cross-Sections #61 through #77) only Cross-Section #63 had sufficient freeboard. This section, however, did

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not have a sufficient crest width. In general, Levee Section 2 crest elevations are 6 to 9 feet lower than required freeboard elevations based on the design storm flood elevations. Most of the boring locations (44 of 57 locations) are below design flood elevations. The entire length of Levee Section 2 had crest widths less than about ten feet. North of I-77 the crest of the levee is as much as 10 to 11 feet below the required crest.

6.1.2 Inclination of Inside and Outside Slopes

Existing inside and outside embankment slopes along Levee Section 1 commonly vary from as steep as 1.3H:1V to as flat as 3.5H:1V. Levee Section 2 in general has inside and outside slopes less steep than those encountered in Levee Section 1. Slopes range from approximately 1H:1V to flatter than 4H:1V with typical slopes of 1.5H:1V to 2H:1V on nearly all the cross sections determined by topographic maps.

Embankment slopes are generally steeper than the maximum 2H:1V side slopes set forth under Section 6-2 of USACE Manual 1110-2-1913 for the standard levee section for moderate height (less than 25 feet) levees with no serious underseepage or stability problems. Individual cross sections exhibit inside slope sections as steep or steeper than 1H:1V, notably the upper slope of the levee between Cross-Sections #13 and #17 and the inner and outer slopes in various locations along Levee Section 2. Sections built or rebuilt by the SCDOT are 1.7H:1V to 2.1H:1V on both inside and outside faces.

S&ME, Inc. was provided with as-built drawings on the repaired levee on the grounds of the City of Columbia Wastewater Treatment Plant, prepared in 1989 (Cross-Sections #18 - #22). The drawings show the profile of the original levee and the repaired cross section by station for 3140 feet of reconstruction. In this segment the levee finished grades indicate a 3H:1V slope on the river side face and 2H:1V on the land side face.

6.1.3 Surrounding Terrain

Locations of borrow pits, drainage ditches or similar structures near the inside or outside toe of a levee will significantly affect levee underseepage. From visual examination and cross sections surveyed by Surveying and Mapping, Inc. and determined from topographic maps, inside and outside toe elevations were compared to the 100-year base flood elevation.

From an examination of the USGS topographic map of the area, surface elevations in the vicinity of the levee appear to range from 130 to 135 feet along the natural levee fronting the Congaree River. Along Gills Creek inside surface elevations range from about 122 feet to 127 feet. The existing levee was constructed by borrowing material immediately adjacent to the levees using a dragline to cast material in the levee area to a height of five to fifteen feet. Consequently, a shallow borrow pit has been excavated at the inside and/or outside toe of the levee. These borrow pits range in depth from nondecernable to more than ten feet below the original ground surface, typically to elevations between 113 and 118 feet. The levee appears to have been constructed immediately outside of the pit in most areas, with no intervening barrier of undisturbed ground.

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Marshes or swamps lie outside of the levee along Gills Creek and its tributaries. In these area it appears levee material was borrowed from outside the levee, forming a poorly drained borrow pit four to six feet deep and approximately 50 to 100 feet in width. This borrow area is filled with water and in places the outside edge of the levee has been eroded to a scarp two to four feet in height at the waters edge.

Nearly half of the river side slope of Levee Section 1 consists of the cut forming the river side of the borrow pit between Cross-Sections #5 - #17. The total height of the inside slope measured from the crest to the floor of the pit varies from twenty to 25 feet. Borrow pits have less apparent topographical expression in other areas. This section of borrow area is approximately five feet lower than the adjacent field. The levee depicted by Cross-Section #61 was constructed utilizing borrow from outside of the levee.

Much of the Levee Section 2 was constructed by borrowing materials from both sides of the levee, giving it the appearance of being constructed much higher than actual fill depths penetrated by borings drilled at the crest indicate. The length of levee between Cross-Sections #62 & #63 were constructed from material borrowed on both sides of the levee. Borrow pits range in depth from three feet to over ten feet. The length of levee from Cross-Sections #64 through #68 adjacent to Gills Creek appears to have had material borrowed on both sides. From Cross-Sections #69 through #76 the borrow material generally came from pits excavated on the inside of the levee only.

The portion of Levee Section 2 north of White House Road (Cross-Section #77 on the eastern leg) appears to have a borrow pit cut as a drainage channel at the outside toe. This channel currently holds water. Borrow pits in Levee Section 2 appear to have been excavated to just above the water table at approximately elevations 113 to 115 feet.

6.1.4 Observed Condition of Embankment

Visual inspections of all reaches are summarized in Table 1. Observations revealed no evidence of embankment breaching. Representative conditions are illustrated in photographs in Appendix D. The majority of the Levee Section 1 embankment was evaluated to be in good condition relative to anticipated performance during significant flood events. As a comparative analysis, the next higher rating for overall levee embankment condition was the category of excellent, which was assigned to segments constructed in association with the construction of I-77. Clearing and grubbing of the interior embankment slopes has produced a condition which appears undesirable in some instances, but has actually been beneficial for revegetation ground cover.

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Table 1 – Summary of Visual Observations along Levee 1 (Photographs in Appendix D-1)

Profile Sections	Photographs	Summary of Observed Conditions
#1A - #1D	1 – 3	Portions of inside and outside slopes heavily vegetated. Crest and portions of the inner and outer slopes have been recently cleared with dozer, leaving ruts, craters, and loosened soils which are beginning to erode.
#1 - #3	4	Mostly outer slope heavily wooded. Inner slope and crest partially cleared and felled trees remain at toe of slope. Where cleaning has been performed slopes are heavily eroded and erosion has progressed to the inner crest. In a few locations an erosion scarp is formed and sloughing is evident at the crest. Soils appear very sandy. Crest of this section is typically 6 to 10 feet above 500 year flood.
#4 - #10	5 – 8	Levee cleared of large trees. Kudzu growth heavy in sections. Portions of levee grassed. Land surface inside of levee several feet lower in elevation than outside. Little evidence of erosion of crest or slopes.
#11 - #12	9	Heavy tree growth on outside slope. Inside slope and crest cleared but moderately eroded. RCP outlet near section #11. Inner and outer slopes oversteepened.
#13 - #17	10 – 11	Levee is 10 – 12 feet high with 5 to 6 foot borrow pit adjacent to interior toe. Outer slope is heavily eroded. Inner slope and crest is cleared and sparsely grassed. Some evidence of erosion gullying at individual locations.
#23 -#26	12 – 14	This section originally part of Levee 2 but incorporated into Levee 1 when I-77 constructed. Old Levee 1 demolished and material apparently incorporated into present section. This segment forms section of Levee between I-77 and City of Columbia WWTP grounds. Outer slope heavily wooded and inner slope has been badly tracked up by dozer used to clear vegetation. Borrow area for this section appears to have been on outside of levee.

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Value of Subject Property before the taking

Based upon a comparative market analysis made by George Knight (see page 69 of Knight appraisal report) the per acre market value of the subject property, assuming Richland County lived up to its' commitment to maintain the levees, which would have been the equivalent of moving all of the 4,400 acres out of the flood way and flood plain, is calculated as follows:

4,400 acres X $ 15,000 per acre	=	$ 66,000,000

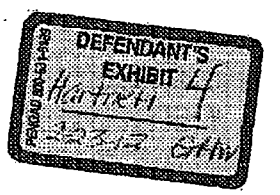
Value of the Subject Property after the taking

Based upon a comparative analysis made by Thomas F. Wingard in his appraisal report, the per acre market value of the subject property, after Richland County failed to meet its' commitment, which was the equivalent of leaving all 4,400 acres in a flood way and flood plain is calculated as follows:

4,400 acres X $ 3,200 per acre	=	$ 14,100,000

Loss in Value as a Result of the Taking

Before value of Subject Property	=	$ 66,000,000
After value of Subject Property	=	$ 14,100,000
Value Difference	=	$ 51,900,000
Less amount spent to bring levees Up to FEMA Standards		- 12,000,000
Loss in value as a result of taking		$ 39,900,000
Rounded To:		**$ 40,000,000**



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99-006MA, Carolyn McLeod, From D-1 to RS-2, TMS 22707-03-03, 209 Beaver Dam Road

Mr. Morris moved, seconded by Ms. Smith, to approve this item for Second Reading. The vote in favor was unanimous.

REPORT OF DEVELOPMENT AND SERVICES COMMITTEE

Presentation by Soil and Water Conservation District

Ms. Brill stated that the committee received this as information.

Consideration of accepting maintenance of levee system along the Congaree River

Ms. Brill stated that the committee recommended approval of authorizing the Council Chairman to begin first steps of acceptance of responsibility and maintenance contingent upon engineering certification, certification by the Corps of Engineers and approval and acceptance by FEMA.

Ms. Smith made a substitute motion, seconded by Mr. Pearce, to accept responsibility for local inspection and enforcement of the levee system, and if required by FEMA, to accept operation and maintenance responsibility for the system contingent upon the following:

1) The property owners upgrade the levee system to meet FEMA standards;
2) the property owners prepare all required documentation, including operation and maintenance plans;
3) certification that the levee system, as upgraded, meets FEMA standards;
4) The parties, including Richland County, the City of Columbia and the developers, resolve the issues of the performance and funding of the operation and maintenance responsibility;
5) The County's acceptance of responsibility terminates if the developers of the area do not invest at least $30,000,000.00 within ten years of the date of the adoption of this motion.

Mr. Morris made an amendment to delete the paragraph that states the termination of responsibility if the developers of the area do not invest at least $30,000,000.00.

A discussion took place regarding the acceptance responsibility, maintenance of the levee system, and the effect on the taxpayers.

Mr. McEachern moved seconded by Ms. Scott, to call for the question. The call for the question was approved unanimously.

The vote in favor of the substitute motion was unanimous.

Request for input into any changes to the County's Contract for Solid Waste Haulers

Ms. Brill stated that the committee recommended that Council schedule a work session to discuss this item. The vote in favor was unanimous.

Mr. T. Cary McSwain, County Administrator, stated that a work session will be scheduled during the month of March or April to discuss this issue.

Approval of transfer of control of Genesis Cable to Benchmark, Inc.

Mr. Morris moved, seconded by Ms. Smith, to approve the transfer of control of Genesis Cable to Benchmark, Inc.

Ms. Smith requested staff to determine whether the County's cable franchise agreements allow cable companies to use their lines to provide other services, such as phone service.

The vote in favor of the motion was unanimous.

REPORT OF ADMINISTRATION AND FINANCE COMMITTEE

Consideration of waiving building permit fee for Harvest Hope Food Bank

Mr. McEachern stated that the committee recommended approval to waive the building permit fee of $3,050.00 for the new Shop Road location of the Harvest Hope Food Bank. The vote in favor was unanimous.

Approval of budget amendment for additional funds for the Unsafe Housing Program

Mr. McEachern stated that the committee recommended First Reading approval of a budget amendment adding $95,000.00 to the Planning Department's budget to provide for continued operation of the Unsafe Housing Program. The vote in favor was unanimous.

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PLTF TRIAL EXH 222



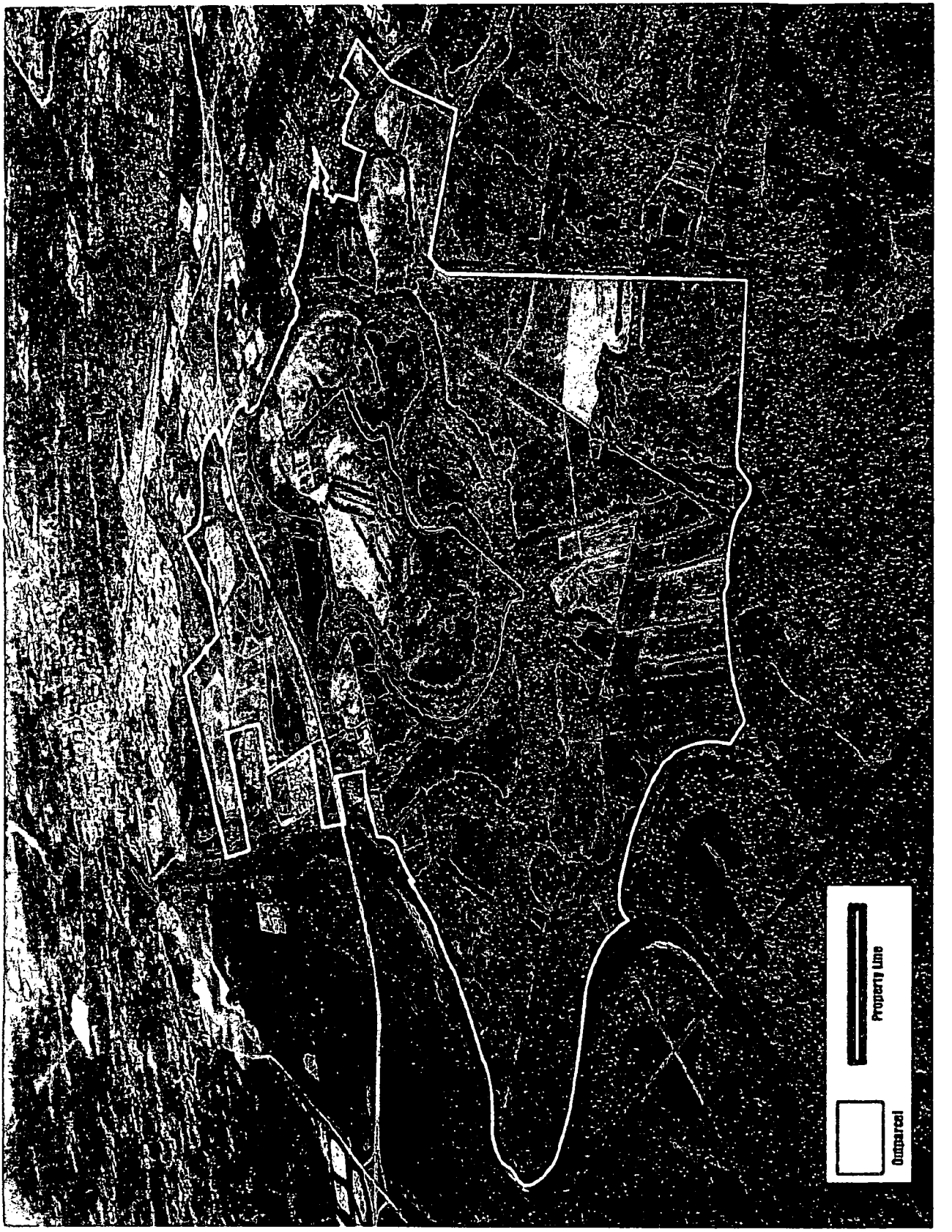
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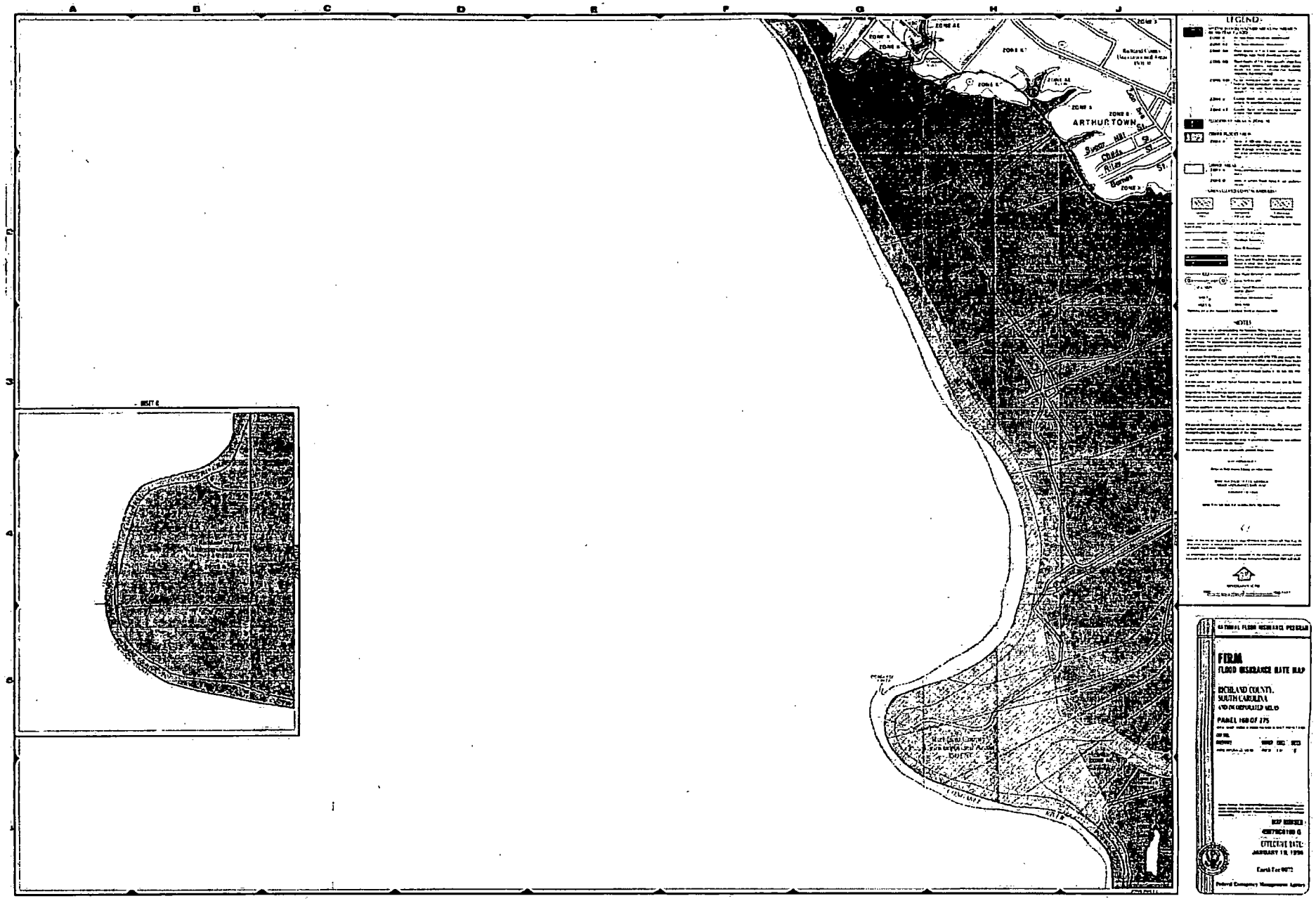
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I hereby certify that this is a true and correct copy of the original document.
Certified By: Michelle Onley
Title: Interim Clerk of Council
Date: 8/30/12

STATE OF SOUTH CAROLINA BOOK 005 PAGE 585
COUNTY COUNCIL FOR RICHLAND COUNTY
ORDINANCE NO. 064-94HR

AN ORDINANCE AMENDING THE RICHLAND COUNTY CODE OF ORDINANCES, **CHAPTER 6, DRAINAGE, EROSION, AND SEDIMENT CONTROL** BY THE DELETION OF THE LANGUAGE CONTAINED THEREIN AND THE SUBSTITUTION OF THE FOLLOWING LANGUAGE.

Pursuant to the authority granted by the Constitution of the State of South Carolina and the General Assembly of the State of South Carolina, BE IT ENACTED BY THE COUNTY COUNCIL FOR RICHLAND COUNTY:

SECTION I. The Richland County Code of Ordinances, **Chapter 6, Drainage, Erosion, and Sediment Control** is hereby amended by the deletion of the language contained therein and the substitution of the following language:

ARTICLE I. IN GENERAL

(RESERVED)

ARTICLE II. SEDIMENT AND EROSION CONTROL

DIVISION 1. PURPOSE, AUTHORITY, AND JURISDICTION

8-10	Contents	
(code section)		(* state regulation)
Division 1	**PURPOSE, AUTHORITY, AND JURISDICTION**	
8-11	Purpose	72-304
8-12	Authority	72-304
8-13	Jurisdiction	72-307
Division 2	**DEFINITIONS**	
8-14	Rules of Language and interpretation	72-301
8-15	Definitions	72-301
Division 3	**PROCEDURE**	
8-16	Approved plan and permit required for land disturbance	72-305
8-17	Exemptions	72-302
8-18	Application for Plan Approval and Permit	72-305
8-19	Application Fee	72-306
8-20	Approval or Disapproval of Application	72-305
8-21	Variances and Exceptions	72-302
8-22	Appeals	72-302
8-23	Other Authorizations and Requirements	72-302
8-24	Extension of Time	72-305
8-25	Responsibility of Applicant	72-305
8-26	Supplemental Regulations	72-307

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Division 4 PLAN AND ACTION REQUIREMENTS

8-27	Guidelines for Preparation of Erosion and Sediment Control Plans.	72-307
8-28	Contents of Plan and Application	72-307

Division 5 ADMINISTRATION AND ENFORCEMENT

8-29	Inspection	72-312
8-30	Enforcement	72-312
8-31	Violations and Penalties	72-315

Division 6 LEGAL STATUS

8-32	Relationship With Other Laws, Regulations and Ordinances	n/a
8-33	Repeal of Conflicting Regulations	n/a
8-34	Separability	72-316
8-35	Amendments	n/a

* Applicable section of Standards for Storm Water Management and Sediment Reduction adopted by the South Carolina Land Resources Conservation Commission pursuant to the South Carolina Stormwater Management and Sediment Reduction Act of 1991.

8-11 Purpose

In order to protect the general health, safety and welfare of the people of Richland County, South Carolina, and to protect the natural assets and resources of Richland County for posterity, this Sediment Control Ordinance is enacted to protect the lands and waters from the effects of excessive soil erosion and sedimentation, to prevent siltation of streams and lakes, to prevent clogging of drainage channels, and to prevent damages to the property of adjacent landowners.

8-12 Authority

This Ordinance is adopted under the authorities and powers conferred to local governments by the General Assembly of South Carolina.

8-13 Jurisdiction

The provisions of the Ordinance shall apply to all lands within the jurisdiction of Richland County, South Carolina, and within the jurisdiction of those municipalities which, by written agreement executed, contract to have these provisions administered within their corporate limits.

DIVISION 2. DEFINITIONS

8-14 Rules of Language and Interpretation

(a) The word "shall" is mandatory and not merely discretionary; the word "may" is permissive.

(b) The particular shall control the general.

(c) Words used in the present tense shall include the future.

(d) Words used in the singular shall include the plural, and the plural the singular, unless the extent clearly indicates the contrary.

(e) All public officials, bodies and agencies referred to herein are those of Richland County, South Carolina, unless otherwise indicated.

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8-15 Definitions

The following definitions apply to words and terms used in this Ordinance. All other words shall have their customary meanings.

(a) Construction -- Any building or erection of a structure or any preparation for same.

(b) Developer – Any person acting in his own behalf as a property owner, or as an agent for a property owner, who makes application for plan approval and a grading permit under the provisions of this Ordinance.

(c) Drainage -- A general term applied to the removal of surface or subsurface water from a given area either by gravity via natural means or by systems constructed to so remove water, commonly applied herein to surface water.

(d) Drainage System -- The surface and subsurface system for removal of water from the land, including both the natural elements of streams, marshes, shales, and ponds, whether of an intermittent or continuous nature; and the manmade elements such as improved open channels, culverts, retention facilities, and enclosed storm sewers.

(e) Embankment or Fill -- A deposit of soil, rock, or other material placed by man.

(f) Erosion -- The general process by which soil and rock fragments are detached and moved by the action of wind, water, ice, and gravity, either naturally or induced.

(g) Flood -- A temporary rise in the level of water which results in inundation of areas not ordinarily covered by water. For the purpose of this Ordinance, a flood shall be constructed to be any inundation which has a return frequency of one hundred (100) years or less.

(h) Grading -- Any displacement of soil by stripping, excavating, filling, stockpiling, or any combination thereof; and shall include the land in its excavated or filled state.

(i) Land -- Any ground, soil, or earth, including marshes, swamps, drainage-ways, and areas not permanently covered by water.

(j) Land Disturbance -- Any activity involving the clearing, grading, transporting, filling, and any other activity which causes the land to be exposed to the danger of erosion.

(k) Grading Permit -- A certificate issued to perform work pursuant to an approved erosion and Sediment Control Plan prepared under the provisions of this Ordinance.

(l) Runoff – The portion of the precipitation on the land which reaches the drainage system.

(m) Sedimentation -- The process which operates at or near the surfaces of the ground, to deposit soil, debris and other materials either on other ground surfaces or in water channels.

(n) Erosion and Sediment Control Plan -- A plan which adequately describes necessary land management practices and control measures, including a timetable or schedule for their installation, which will effectively minimize soil erosion and sedimentation; prepared and approved as provided herein for application to a particular land area.

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(o) Soil and Water Conservation District – The Soil and Water Conservation District for Richland County, as established by State Statute.

(p) Structure -- Anything constructed or erected, the use of which requires a location on the ground, or attached to something having a location on the ground including, but not limited to; tennis courts, swimming pools, fences, and buildings.

(q) Vegetation – All plant growth, including trees, shrubs, grasses, and mosses.

DIVISION 3. PROCEDURE

8-16 Approved Plan and Permit Required for Land Disturbance

Unless otherwise provided in this Ordinance, the surface of land in Richland County Shall not be disturbed or changed for any purposes, whatsoever - but not including those exemptions outlined in Section 8-17, except in accordance with a plan for Control of Erosion and Sedimentation approved by Soil and Water Conservation District and County Engineer. A grading permit issued by the Planning Commission shall be issued prior to any grading, construction, or land disturbances of any nature, stating the period for which the permit is valid.

8-17 Exemptions

The provisions of this Ordinance shall not apply to:

(a) Agricultural and silvacultural land management and cultural practices, or to the construction of on-farm buildings and structures used in a farming operation.

(b) Construction or land improvement of a single-family residence or its accessory buildings. A single-family residence property owner may make land improvement on his single lot without an approved erosion and sediment control plan and without obtaining a grading permit provided that such construction or land improvement does not impede the runoff capacity of existing major drainage channels and is not located in an area of special flood hazard.

(c) Mining and mineral resource extraction operations conducted in accordance with a valid mining permit issued by the Mining and Reclamation Division of the South Carolina Land Resources Commission.

(d) Emergency repairs or maintenance of existing structures and facilities which require ground to be broken. The responsible person shall notify the County Engineer in writing within five working days of such emergency repairs and maintenance actions.

(e) Construction or land improvement by a State or Federal agency conducted in accordance with a State or Federal land management program.

(f) Construction of transmission lines for electricity, water, telephone, gas sanitary sewers, storm sewers and other utility construction which require a land disturbance of less than two (2) acres.

(g) Construction by Public Service Districts, School Districts, Counties and Municipalities.

(h) Any site, not otherwise exempted, being one half acre or less and the maximum fall per 100 feet does not exceed six feet anywhere on the site. Slopes may be determined by contour maps available and soil maps, however, actual field measurements may be required and in such cases shall be binding.

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8-18 Application for Plan Approval and Permit

(a) The developer shall apply in writing to the Richland County Planning Commission for a grading permit to disturb or change land in Richland County (excluding incorporated areas when no contractual agreement has been made). Such application shall be accompanied by three (3) copies of an Erosion and Sediment Control Plan prepared in accordance with Division 4 of this Ordinance. The plan shall be certified by the applicant and by a registered professional Civil Engineer, or a registered Landscape Architect.

(b) A landowner may develop and certify his Sediment and Erosion Control Plan for a tract of land containing two (2) acres or less provided: 1) the areas to be distributed will not flow water in any one direction for over two hundred (200) feet; 2) the cuts and fills established will not exceed a height or depth of over five (5) feet; and 3) there will be no concentrated off site water to be controlled on the site. The plan so developed must meet the objective of Section 8-26 of this Ordinance.

8-19 Application Fee

The application and grading permit fees are included in the fees assessed under the subdivision regulations and Zoning Ordinance.

8-20 Approval or Disapproval of Application

(a) The Richland County Planning Commission shall forward a copy of the Erosion and Sediment Control Plan to the Soil and Water Conservation District and a copy to the County Engineer. If the plan conforms with the requirements of this Ordinance, the Planning Commission shall issue the grading permit to the applicant, with a copy of the approved plan, upon receipt of written approval of the plan from the Soil and Water Conservation District and the County Engineer.

(b) If the erosion and sediment control plan does not conform with the requirements of this Ordinance, the plan shall be disapproved. The County Engineer shall deny issuance of the grading permit. Written notification of denial of the permit, indicating the reason or reasons for plan disapproval, shall be forwarded to the applicant.

(c) Review of the Erosion and Sediment Control Plan shall require twenty (20) working days or less from the date of submittal until the time of decision is rendered, either approving or disapproving the plan. If, at the end of the twenty (20) working day period, a decision has not been reached, the plan shall be deemed approved and a grading permit issued on demand provided that approval has been received from the Soil and Water Conservation District.

(d) If an erosion and sediment control plan is disapproved and the grading permit denied, the applicant may elect to correct the indicated deficiencies in conformity with the provisions of this Ordinance and resubmit the application and plan. No additional application fee shall be assessed for such resubmissions.

8-21 Variances and Exceptions

The Richland County Planning Commission may, upon application to it and showing of undue hardship, grant variances and exceptions to any of the provisions of this Ordinance, provided such variance or exception is, in the judgement of the Planning Commission, in harmony with the general purpose and intent of this Ordinance. The Planning Commission shall consider the opinions of the Soil and Water Conservation District and the Richland County Engineer before deciding upon any variance or exception.

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8-22 Appeals

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(a) Any person aggrieved by any decision of the Richland County Engineer or the Soil and Water Conservation District under this Ordinance may appeal to the Planning Commission within sixty (60) days upon written notice to the Secretary of the Planning Commission.

(b) Any person aggrieved by any decision on an appeal to the Planning Commission may appeal to the court of competent jurisdiction, which shall hear the same do novo. Such an appeal shall be filed within thirty (30) days after the Planning Commission's decision.

8-23 Other Authorizations and Requirements

Where any other authorization, bonds, or other sureties are required by applicable laws, regulations, ordinances, or decisions of the Planning Commission pertaining to any part of the proposed work to be done under the Erosion and Sediment Control Plan, the applicant shall, upon request, furnish the Richland County Planning Commission with satisfactory evidence that such requirements have been met before the commencement of work under an approved plan and grading permit.

8-24 Extension of Time

If the applicant is unable to complete the work within the time specified in the approved plan and grading permit, he may, prior to the expiration of such time, present in writing a request to the County Engineer with copy to Richland County Planning Commission for an extension of time, setting forth reasons for the requested extension. The Richland County Engineer shall approve or deny the request for an extension of time subject to such additional erosion and sediment control measures as may be reasonably required.

8-25 Responsibility of Applicant

The applicant shall be responsible for carrying out the proposed work in accordance with the approved Erosion and Sediment Control Plan and grading permit, and in compliance with the requirements of this Ordinance.

The applicant shall be responsible for filing a Notice of Intent with the S.C. Department of Health and Environmental Control a minimum of 48 hours prior to the start of construction.

The applicant shall be responsible for compliance with all applicable regulations pertaining the protection of wetlands.

The applicant shall be responsible for notifying the Richland County Engineering Division a maximum of 24 hours after the start of construction.

8-26 Supplemental Regulations

All applicable provisions for the Standards for Stormwater Management and Sediment Reduction (Sections 72-301, 302, 305, 307, 308, 312, 313, 314, 315 and 316) adopted by the S.C. Land Resources Conservation Commission pursuant to the S.C. Stormwater Management and Sediment Reduction Act of 1991 are incorporated by reference herein.

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DIVISION 4. PLAN AND ACTION REQUIREMENTS

8-27 Guidelines for Preparation of Erosion and Sediment Control Plans

Erosion and Sediment Control Plans shall be prepared according to the following guidelines, as applicable, prior to submission to Richland County Planning Commission. Plans shall include appropriate measures and practices for erosion and sediment control, installed in a timely sequence during the development process, and maintained to insure their proper functions.

(a) Select land where the drainage pattern, topography, and soils are favorable for the intended use. Tracts of land vary in suitability for different uses. Consider the major characteristics of the land area and the kinds of soil in identifying and evaluating potential erosion and sediment problems, and in selecting appropriate control measures and practices.

(b) Expose the smallest practical area of land for the least possible time during development.

(c) When feasible, retain and protect natural vegetation. Save topsoil, where practical, for replacing on graded areas.

(d) Use temporary plant cover, mulching, and/or structures to control runoff and protect area subject to erosion during construction.

(e) Provide for handling the increased runoff caused by changed soil and surface conditions. Emphasis should be placed on conservation of existing on-site soil. Effective means include the use of diversion ditches, grassed or surfaced waterways and outlets, enlarged and protected drainage channels, grade control structures, and effective use of street gutters and storm sewers.

(f) Use sediment basins or other forms of silt traps, where practical, to remove heavy sediment loads from runoff waters leaving the disturbed area.

(g) Install the permanent vegetative cover and the long-term erosion protection measures or structures as soon as practical in the development process.

8-28 Contents of Plan and Application

The Erosion and Sediment Control Plan and application for grading permit shall include, but not be limited to, the following data as applicable:

(a) A vicinity map sufficient to locate the site and to show the relationship of the site to its general surroundings at a scale of not less than one (1) mile to one (1) inch.

(b) A site plan, drawn to a scale of not less than two hundred (200) feet to one (1) inch, and supporting specifications and schedules showing:

(1) The boundary lines of the site of which the work is to be performed, including the approximate acreage of the site.

(2) Existing contours with intervals of not more than five (5) feet.

(3) Proposed physical improvements on the site, including present development and future utilization, if known.

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(4) All drainage provisions, flood protection provisions, erosion and sediment control measures, vegetative practices, or other protective devices to be utilized in connection with, or as a part of, the proposed work.

(5) Provisions for erosion control during construction (temporary) and during the life of the facility (permanent). Such provisions shall include a timing schedule and sequence of operations indicating the anticipated starting and completion dates of the particular development sequence, and the estimated time of exposure of each disturbed area prior to completion of effective erosion and sediment control measures. Specifications accompanying the plan shall include, as appropriate, seeding mixes and application rates, type of sod, seedbed preparation, lime and fertilizer application, mulching and other related data.

(6) A complete and adequate grading plan for on-site borrow pits and material processing facilities, where applicable, including provisions for adequate drainage in such areas.

(7) A general description of the predominant soil types on the site.

(8) The name and address of the owner, developer, and petitioner, and the individual responsible for satisfactory completion of the work described in the plan, if different from the above.

(9) Title, scale, north arrow, date and name of the individual or organization preparing the plan, with seal when applicable.

(10) The plan and application shall be supported by such supplemental reports, specifications, data, and additional information as the County Engineer may reasonably require, including but not limited to finished contours, elevations, dimensions, locations, slopes, storm drainage computations, and field investigation reports on soils, drainage and flooding.

(11) Evidence of compliance with all applicable regulations pertaining to the protection of wetlands.

(c) Applicant's certification statement:

"I hereby certify that this plan is designed to contain silt or the property concerned to the maximum extent feasible. Provisions for erosion and sediment control are in accordance with the Richland County Sediment Control Ordinance."

_____ _____

Date Registered Professional Civil Engineer, or Registered Landscape Architect

DIVISION 5. ADMINISTRATION AND ENFORCEMENT

8-29 Inspection

The County Engineer or his authorized representative shall periodically inspect the work done under the approved plan and grading permit, as deemed advisable. Upon completion of such work, he shall make a final inspection and, if the work has been completed in accordance with the plan and permit, he shall issue a letter of satisfactory completion.

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8-30 Enforcement

(a) When the County Engineer or authorized representative finds that the work done or not done under any grading permit issued under the provisions of this Ordinance fails to conform to the approved plan, he may, as he deems necessary, by written order direct conformity to the plan, to include the issuance of a written order to comply, to suspend work, or to revoke the permit issued; or to seek redress through legal action; or to withhold the release of permanent electric power to the site.

8-31 Violations and Penalties

(a) Any person who willfully violates the provisions of this Ordinance shall be deemed guilty of a misdemeanor and, upon conviction, shall be imprisoned for not more than six (6) months or fined not more than one thousand dollars ($1,000.00), or both.

(b) The governing body of Richland County or its appointed agent may obtain injunctive relief to enjoin violations of the provisions of this Ordinance, and any person damaged as a result of such violations may, upon a proper showing of such damages, obtain payment therefore by a civil action.

(c) The governing body of Richland County or its appointed agent may implement corrective measures on property containing a land disturbance found to be in violation of this Ordinance and may place a lien against that property pending Richland County's reimbursement for the costs incurred.

DIVISION 6. ADMINISTRATION AND ENFORCEMENT

8-32 Relationship With Other Laws, Regulations, and Ordinances

Whenever the provisions of this Ordinance impose more restrictive standards than are required in or under any other law, regulation or ordinance, the requirements herein contained shall prevail. Whenever the provisions of any other law, regulation, or ordinance require more restrictive standards than are required herein, the requirements of such law, regulation, or ordinance shall prevail.

8-33 Repeal of Conflicting Regulations

All ordinances and resolutions regulating storm drainage adopted prior to this Ordinance are hereby repealed.

8-34 Separability

If any section, clause or portion of this Ordinance shall be held by a court of competent jurisdiction to be invalid or unconstitutional, such finding shall not affect any other section, clause, or portion of this Ordinance.

8-35 Amendments

This Ordinance may be amended in the same manner as prescribed by law for its original adoption.

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ARTICLE III. STORM DRAINAGE

8-40 Contents

(code section)		(* state regulation)
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* Applicable section of Standards for Storm Water Management and Sediment Reduction adopted by the South Carolina Land Resources Conservation Commission pursuant to the South Carolina Stormwater Management and Sediment Reduction Act of 1991.

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DIVISION 1. PURPOSE, AUTHORITY, AND JURISDICTION

8-50 Purpose

In order to protect the general health, safety and welfare of the people of Richland County, South Carolina, this Storm Drainage and Flood Protection Ordinance is enacted to provide proper drainage channels, clear of obstruction, for stormwater runoff; to control pollution of streams and drainage channels by urban storm water runoff; and, to prevent encroachment into natural drainage channels by buildings or other land improvements.

8-51 Authority

This Ordinance is adopted under the authorities and powers conferred to local governments by the General Assembly of South Carolina.

8-52 Jurisdiction

The provisions of this Ordinance shall apply to all lands within the jurisdiction of Richland County, South Carolina, and within the jurisdiction of those municipalities which, by written agreement executed, contract to have these provisions administered within their corporate limits.

DIVISION 2. DEFINITIONS

8-53 Rules of Language and Interpretation

(a) The word "shall" is mandatory and not merely discretionary; the word "may" is permissive.

(b) The particular shall control the general.

(c) Words used in the present tense shall include the future.

(d) Words used in the singular shall include the plural, and the plural the singular, unless the extent clearly indicates the contrary.

(e) All public officials, bodies and agencies referred to herein are those of Richland County, South Carolina, unless otherwise indicated.

8-54 Definitions

The following definitions apply to words and terms used in this Ordinance. All other words shall have their customary meanings.

(a) Applicant -- Any person acting in his own behalf as a property owner, or as an agent for a property owner, who makes application for Storm Drainage Plan approval under the provisions of this Ordinance.

(b) Area of Special Flood Hazard – Any land area susceptible of being inundated by the base flood (100-Year Flood) as determined on an official Flood Hazard Boundary Maps Flood Insurance Rate Maps, or other available information.

(c) 10-Year Flood -- The flood having a 10 percent chance of being equaled or exceeded in any given year.

(d) 25-Year Flood -- The flood having a 4 percent chance of being equaled or exceeded in any given year.

(e) 50-Year Flood -- The flood having a 2 percent chance of being equaled or exceeded in any given year.

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(f) 100-Year Flood/Base Flood -- The flood having a 1 percent chance of being equaled or exceeded in any given year.

(g) 500-Year Flood -- The Flood having a 0.2 percent chance of being equaled or exceeded in any given year.

(h) Construction -- Any building or erection of a structure, or any physical site preparation for same.

(i) Development – Any man-made change to improved or unimproved real estate, including, but not limited to buildings or other structures mining, dredging, filling, grading, paving, excavation, or drilling operations.

(j) Drainage Channel – Any natural or man-made conveyance for surface water, including open channels, enclosed storm sewers, streams, rivers, lakes, ponds, or marshes.

(k) Flood -- A general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of a watercourse or the unusual and rapid accumulation of runoff of surface waters from any source.

(l) Floodproofing -- Design and construction or nonresidential structures and attendant utility and sanitary facilities so that the structure is watertight to at least two (1) feet above the base level with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.

(m) Flood Insurance Rate Map (FIRM) – An official map of Richland County of which FEMA has delineated both the areas of special flood hazards and the risk premium zones applicable to Richland County, with accompanying reports.

(n) Flood Prone Area -- The area of land susceptible to being inundated by a flood (see definition of "flood")

(o) Group Development -- Any development covered under the "Group Developments" Section of Richland County Subdivision Regulations: shopping centers, industrial parks, mobile home parks, apartment complexes, and condominium complexes.

(p) Habitable Floor -- Any floor useable for living purposes, which include working, sleeping, eating, cooking or recreation, or a combination thereof. A floor elevation is to be measured as follows: For slab-on-grade type buildings or buildings with basements, the top surface of the slab or basement floor would constitute the lowest floor. For footing, foundation walls, or pile type buildings with crawl spaces under the building without basements, the top surface of the finished flooring above the horizontal joist, beam, or other supporting member would constitute the lowest floor.

(q) New Construction -- Structures for which the first placement of permanent construction commenced on or after the effective date of this Ordinance.

(r) Primary Drainage Channel -- A drainage channel, stream or creek which drains an area of 300 acres or more.

(s) Regulatory Floodway – The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one (1) foot, as identified on an official Flood Insurance Rate Map or other available information.

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(t) Secondary Drainage Channel -- A drainage channel, stream, or creek which drains an area of less than 300 acres.

(u) Structures – Anything constructed or erected, the use of which requires a location on the ground, or attached to something having a location on the ground, including, but not limited to buildings, mobile homes, gas or liquid storage tanks, fences, tennis courts, and swimming pools.

(v) Substantial Improvement -- Any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds fifty (50) percent of the market value of the structure prior to the improvement.

DIVISION 3. PROCEDURE

8-55 Approved Storm Drainage Plan Required for Construction and Other Development

Unless otherwise provided in this Ordinance, any construction or other development affecting drainage or located in an area of special flood hazard shall be in accordance with a storm drainage plan approved by the County Engineer. Approval of the Storm Drainage Plan shall be obtained prior to the issuance of a building permit.

8-56 Exemptions

The provisions of this Ordinance shall not apply to:

(a) Agricultural and silvacultural land management and cultural practices, or to the construction of on-farm nonresidential buildings and structures used in a farming operation, provided that such practices or structures shall not impede the flood-carrying capacity of a regulatory floodway.

(b) Construction or land improvement of a single-family residence or its accessory building(s). A single-family residence property owner may make land improvements on his single lot without an approved storm drainage plan, provided that such construction or land improvement does not impede the runoff capability of the existing major drainage channels or is not located in an area of special flood hazard.

(c) Mining and mineral resource extraction operations conducted in accordance with a valid mining permit issued by the Mining and Reclamation Division of the South Carolina Land Resources Commission, provided that such operations shall not impede the flood-carrying capacity of a regulatory floodway.

(d) Construction or land improvement by a State or Federal agency conducted in accordance with a State or Federal land management program, provided that such improvements shall not impede the flood-carrying capacity of a regulatory floodway.

(e) Construction or land improvement on tracts two (2) acres or less which may be exempted by the County Engineer upon a showing by the owner or applicant that no special drainage structures are required because of the particular topographical characteristics of the tract.

8-57 Application for Plan Approval

The applicant shall submit two (2) copies of a Storm Drainage Plan prepared in accordance with Divisions 4 and 5 of this Ordinance to the County Engineer. The Storm Drainage Plan shall include such streams flow and storm runoff calculations and other information as may be reasonably required by the County Engineer under the terms of this Ordinance, and shall be certified by the applicant and a S.C. registered professional Engineer or registered Landscape Architect in

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accordance with the requirements of Section 8-66.

8-58 Approval or Disapproval of Storm Drainage Plan

(a) If the plan conforms with the requirements of this Ordinance, the County Engineer shall approve the plan and notify the applicant.

(b) If the Storm Drainage Plan does not conform with the requirements of this Ordinance, the County Engineer shall disapprove the plan and forward a written notification, indicating the reason or reasons for plan disapproval, to the applicant.

(c) Review of the Storm Drainage Plan shall require not more than twenty working (20) days from the date of submittal until the time of decision is rendered, either approving or disapproving the plan. If, at the end of the twenty (20) working day period, a decision has not been reached, the plan shall be deemed approved.

(d) If a Storm Drainage Plan is disapproved, the applicant may elect to correct the indicated deficiencies in conformity with the provisions of this Ordinance and resubmit the plan.

8-59 Appeals

(a) The Planning Commission shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the County Engineer in the enforcement or administration of this Ordinance.

8-60 Engineer's Responsibility

Approval of plans by the County Engineer in no way relieves the Engineer from his responsibility for the correctness of the plans or the accuracy of his calculations not does it relieve the owner from his obligation to comply with any applicable laws.

DIVISION 4. REQUIREMENTS AND STANDARDS

8-61 Methods of Calculating Stream Flow and Runoff

(a) The following formula and values shall be used for calculating all stream flow and runoff for the regulations established herein:

(1) The following rainfall frequencies shall be used in the calculations for storm water runoff and facility design depending upon the size of the watershed.

Size Acres	*Frequency-Years*
300 - +	50
40 - 299	25
0 - 39	10

(2) Runoff from watersheds greater than twenty (20) acres shall be computed by accepted hydrograph modeling techniques utilizing the SCS, 24 hour, Type II rainfall distribution.

(3) Runoff from watersheds of twenty (20) acres or less may be determined by the Rational Formula or by accepted hydrograph modeling techniques utilizing the SCS, 24 hour, Type II rainfall distribution.

(4) Runoff coefficients or SCS curve numbers used in the design of proposed drainage improvements shall reflect the anticipated future development of the entire watershed.

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(5) The size of closed storm sewers, open channels, culverts, and bridges shall be determined by using the Manning Formula:

$$Q = \frac{1.486\ R^{2/3}S^{1/2}A}{N} \text{ where}$$

Q = discharge in cubic feet per second.
A = cross-sectional area of water in conduit in square feet.
R = hydraulic radius of water in conduit.
S = mean slope of hydraulic gradient in feet of vertical rise per foot of horizontal distance.
N = roughness coefficient.

(b) Appropriate inlet control and outlet control curves shall be used to determine headwater depths where applicable.

8-62 Primary Drainage Channel Requirements

All primary drainage channels which are located within or immediately adjacent to an improvements, development or subdivision shall be protected or improved by the applicant as follows:

(a) *Responsibility of Applicant*

(1) The applicant shall be responsible for carrying out the proposed work in accordance with the approved Storm Drainage Plan, and in compliance with the requirements of this Ordinance.

(2) The applicant shall plan and carry out his developments in a manner that will not interfere with or restrict the flow of water nor increase the 100-Year flood level by more than one (1) foot. The developer shall be responsible for any improvements to such channels needed to handle increased runoff or other changes resulting from his development, in accordance with the provisions of this Ordinance.

(b) All land adjacent to a primary drainage channel not protected by levees, dikes or fill shall be dedicated for the purpose of providing a drainage right-of-way as follows:

(1) In commercial or residential subdivision, drainage easements of satisfactory width to provide working room for construction and maintenance shall be deeded to the County for all drainage improvements, to include stormwater detention facilities, and shall be separate and apart from adjoining lots.

(2) In group developments or planned unit developments, the property owner(s) or home owners' association shall be responsible for maintenance of drainage channels and easements. The final plat approved to be recorded shall indicate the available public easements for drainage channels. The County shall have the right to encroach onto these public easements or permit others to encroach for any purpose deemed appropriate by the County Engineer. In no way does this right of encroachment lessen the obligation of the property owner(s) or home owner's association's responsibility for maintenance of the drainage channels and easements.

(c) The existing channel lying within or contiguous to the subdivision or parcel of land proposed for development or redevelopment may be cleaned to provide for free flow of water, and the channel straightened, widened, and improved to the extent required to prevent overflow, resulting from fifty (50) year frequency rainfall,

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beyond the limits of the dedicated drainage easement provided for in Section 4-2(a).

(d) Final grading of all lots or building sites for new construction or substantial improvement of residential structures in ares of special flood hazard shall provide for elevation on fill, pilings or earth filled curtain walls of the lowest habitable floor to at least two (2) feet above the 100-Year flood level. Where fill is used to meet this requirement, the area two feet above the 100-Year flood level shall extend at least ten (10) feet from each side of the building pad. Certain types of non-residential structures are permitted within the flood plain if properly "floodproofed" in compliance with the Zoning Ordinance and building codes.

(e) Whenever channel improvements are carried out, sodding, backsloping, cribbing, and other bank protection shall be designed and constructed to control erosion for the anticipated conditions and flow resulting from a fifty (50) year rainfall.

(f) Drainage channels located within street easements shall be placed in an enclosed storm sewer except under the following conditions:

(1) Where a paved street surface at least two (2) lanes wide is provided on both sides of an improved channel so as to provide access to abutting properties, or

(2) For lots with a double-street-frontage, an open drainage channel is permitted between the rearlot line and the paved streets; provided that access from the street to the lot is prohibited both at the time of construction and in the future.

(3) When a condition outlined in either (1) or (2) above is present, adequate space shall be dedicated as right-of-way to provide for the maintenance of an improved drainage channel and its bank.

(g) All levees protecting residential structures or non-residential structures which are not floodproofed shall be designed, constructed and maintained to provide protection against the 500-Year flood plus three (3) feet of freeboard. Flood elevations shall be as shown on the latest flood insurance rate maps or determined by appropriate hydrologic methods.

(h) No levees, dikes, fill materials, structures or obstructions that will impede the free flow of water during times of flood will be permitted in the regulatory floodway.

(i) *National Flood Insurance Program*
All applicable regulations of the National Flood Insurance Program are incorporated by reference herein.

8-63 Secondary Drainage Channel and Surface Requirements

All secondary drainage channels which are within or immediately adjacent to an improvement, development or subdivision shall be protected and improved by the applicant as follows:

(a) Drainage easements of satisfactory width to provide working room for construction and maintenance shall be dedicated to the County for all drainage improvements in subdivision developments, to include stormwater detention facilities. Drainage improvements for group developments, commercial buildings, or planned unit developments shall be the maintenance responsibility of the property owner(s) or home owner's association.

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(b) Secondary drainage channels which have a primary function of collecting surface water from adjacent properties or intercepting and diverting side hill drainage shall be improved open channels.

(c) Secondary drainage channels which have a primary function of transporting stormwater through a block or development or of collecting water from cross channels shall be improved as follows:

(1) Those drainage channels having drainage basins of forty (40) acres or more shall be improved with either a closed storm sewer or improved open channel designed to carry the runoff resulting from a 25-Year frequency rainfall. A natural stream may be approved by the County Engineer for environmental or aesthetic purposes provided that it has the capacity to carry the runoff resulting from a 25-Year frequency rainfall and flood protection requirements are met.

(2) Those drainage channels having drainage basins of less than forty(40) acres shall be improved with closed storm sewers. Variation from the requirement may be permitted, however, under the following conditions:

(a) When the required storm sewer pipe size is calculated to exceed thirty inches, the County Engineer may authorize the substitution of a concrete lined opened channel.

(b) A natural stream or improved open channel may be approved by the County Engineer for environmental or aesthetic purposes provided it has the capacity to carry the runoff resulting from a ten-year frequency rainfall and flood protection requirements are met.

(d) Final grading of all lots or building sites for new construction or substantial improvement of residential structures in areas of special flood hazard shall provide for elevation on fill pilings or earth filled curtain walls of the lowest habitable floor to at least one (1) foot above the 100-Year flood level. Where fill is added to meet this requirement, the area one (1) foot above the 100-Year flood level shall extend at least ten (10) feet from each side of the building pad. Certain type structures are permitted within the flood plain if properly "floodproofed" in conformity with the Zoning Ordinance and building code.

(e) Drainage channels located within street easements shall be placed in an enclosed storm sewer except under the following conditions:

(1) Where a paved street surface at least two (2) lanes wide is provided on both sides of an improved channel so as to provide access to abutting properties; or,

(2) For lots with a double-street-frontage, an open drainage channel is permitted between the rear lot line and the paved street; provided that access from the street to the lot is prohibited at the time of construction and in the future

(3) When a condition outlined in either (1) or (2) above is present, adequate width shall be dedicated as street right-of-way to provide for the maintenance of an improved drainage channel and its bank.

(f) Off-site discharges of closed storm sewers or improved open channels will be permitted only at natural streams or man-made drainage channels acceptable to the County Engineer unless a drainage easement is obtained from the adjoining land owner. When off-site drainage channels are not adequate to accept the

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additional runoff resulting from development, the County Engineer shall have the authority to require the developer to install on-site facilities for the detention/storage and controlled release of storm water runoff designed to limit the runoff rate to predevelopment levels during the design storm and the two year storm.

(g) Developments:

Single-family residential, duplex or mobile home development:

(1) Site grading shall be carried out in such a manner that surface water form each dwelling lot will flow directly to a storm sewer, improved channel, sodded swale, or paved street without running more than two-hundred (200) feet.

Commercial, industrial multi-family and institutional development:

(2) Roofs, paved areas, yards, courts, courtyards and other impervious surfaces shall be drained into a storm sewer system. Exception: Such drainage may flow directly into a street, curb and gutter system or improved channel when of small area and approved by the County Engineer. Construction of buildings over storm drainage improvements will not be permitted.

(h) Surface water collected on streets shall be diverted to enclosed storm sewers or other drainage channels at satisfactory intervals to prevent overflow of the street and its curbs and gutters, where provided, during a ten (10) year frequency rainfall.

8-64 Design Criteria for Improvements

(a) Open Channels:

Open channels shall be provided with an improved section that will carry the runoff from the appropriate design rainfall and preclude the creation of backwater inundating any areas outside of dedicated drainage easements. The channel shall be designed and protected against erosion in accordance with standards adopted by the County Engineer.

(b) Closed Storm Sewers and Culverts:

Closed storm sewers and culverts shall be constructed of precast or prefabricated pipe or box culvert or built in place, of closed box design, in conformity with County Specifications. They shall be sized to carry the runoff from the appropriate design rainfall and to preclude the backup of headwater inundating any areas outside of dedicated drainage easements.

(c) Bridges:

Bridges shall be designed to span the full width of the channel or regulatory floodway as determined under the provisions of this Ordinance. The design shall be in accordance with standards adopted by the County Engineer. Construction shall be in accordance with South Carolina Department of Highways and Public Transportation Specifications.

(d) Levees:

Levees shall be designed and constructed and maintained as follows:

(1) Design and Construction shall be in accordance with U.S. Army Corps of Engineers Manual EM 1110-2-1913 (31 March 1978) *Design and Construction of Levees*. The design and construction of drainage systems within levees shall be in

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accordance with the U.S. Army Corp of Engineer's Manual Em 1110-2-1410 (03 May 1965) *Interior Drainage of Levees Urban Areas.* A South Carolina registered professional Engineer shall certify that he has been involved in the design, construction, and inspection phases and has certified that the construction meets requirements of the Corps of Engineers.

(2) Owners of levy will perform necessary required maintenance of levees and provide appropriate records to the County Engineer. These records will include:

(i) Signed agreements of perpetual operation and maintenance between the constructor and/or owner and Richland County;

(ii) As-built construction plans certified by a South Carolina registered professional Engineer.

(iii) Levee maintenance program in accordance with the Levee Maintenance Standards and Procedures of Richland County (See Appendix 1); and

(iv) Periodic maintenance reports as required by the County Engineer.

(e) Storm Water Detention Facilities:

Storm Water Detention Facilities shall be designed to restrict the peak runoff rate from a development during its design rainfall to the peak runoff rate that existed prior to development during the same rainfall. The design rainfall shall be 10, 25, or 50 years depending on the size of the drainage basin. Overflow structures and emergency spillways however, shall be deigned to accommodate a one hundred (100) year rainfall.

8-65 Supplemental Regulations

All applicable provisions of the standards for Stormwater Management and Sediment Reduction (Section 72-301,302,305,307,308,312,313,314,315 and 316) adopted by the S.C. Land Resources Conservation Commission Pursuant to the S.C. Stormwater Management and Sediment Reduction Act of 1991 are incorporated by reference herein.

DIVISION 5. STORM DRAINAGE PLAN REQUIREMENTS

8-66 Contents of Plan

The Storm Drainage Plan shall include, but not be limited to the following data as applicable. The County Engineer may require other calculations made, formula used, or data supplied as he deems necessary.

(a) A vicinity map sufficient to locate the site and drainage area and to show the relationship of the site to its general surroundings at a scale of not less than one (1) inch = 1000 feet.

(b) A site plan for the site(s) where drainage improvements are proposed, drawn to a scale of not less than two hundred (200) feet to one (1) inch, and supporting specifications and computations showing:

(1) The boundary lines of the sit(s) on which the work is to be performed, including the acreage of the site and the drainage area, and the boundary of any special flood hazard and regulatory floodway.

(2) Existing and proposed contours at intervals of not more than five (5) feet based on mean seal level. Contours shall extend one hundred (100) feet outside the site boundary lines, unless waived by the County Engineer.

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(3) Proposed physical improvements on the site, including present development and future utilization, if know.

(4) All drainage and flood protection provisions and improvements to be utilized in connection with, or as part of, the proposed work. such provisions shall include a time schedule and sequence of operations indicating the anticipated starting and completion dates of the particular development sequence.

(5) A general description of the predominant soil types on the site.

(6) The name and address of the applicant, and petitioner, and the individual responsible for satisfactory completion of the work described in the plan, if different from the above.

(7) Title, scale, north arrow, date and name of the individual or organization preparing the plan, with seal when applicable.

(8) The plan shall be supported by such supplemental reports, specifications, data, and additional information as the County Engineer may require, including, but not limited to elevation, dimensions, locations, slopes, storm drainage computations, and field investigation reports on soils, drainage, and flooding.

(c) Applicant's certification statement:

"I (We) hereby certify that all clearing, grading, construction and/or development will be done pursuant to this plan."

_____ Date _____ Applicant

_____ Date _____ Registered Professional Engineer or Registered Landscape Architect

DIVISION 6. ADMINISTRATION AND ENFORCEMENT

8-67 Inspection

The County Engineer or his authorized representative shall periodically inspect the work done under the approved storm drainage plan, as deemed advisable. Upon completion of such work, he shall make a final inspection and, if the work has been completed in accordance with the plan, he shall issue a letter of satisfactory completion.

8-68 Enforcement

(a) No building permit shall be issued until the required drainage improvements are installed or an acceptable bond, as determined by the County Engineer, is provided in lieu of completion of the improvements, in which case the improvements must be completed prior to occupancy.

(b) When the County Engineer or his authorized representative finds that the work done or not done under any approved Storm Drainage Plan under the provisions of this Ordinance fails to conform to the approved plan, he may, as he deems necessary, by written order to comply, to suspend work, or to revoke the plan approval; or to seek redress through legal action; or to withhold the

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release of permanent electric power to the site.

8-69 Violations and Penalties

(a) Any person who willfully violates the provisions of this Ordinance shall be deemed guilty of a misdemeanor and, upon conviction, shall be imprisoned for not more than three (3) months or fined not more than two hundred dollars ($200.00), or both.

(b) The governing body of Richland County may obtain injunctive relief to enjoin violations of the provisions of this Ordinance, and any person damaged as a result of such violations may, upon a proper showing of such damages, obtain payment therefore by a civil action.

DIVISION 7. LEGAL STATUS

8-70 Relationship With Other Laws, Regulations, and Ordinances

Whenever the provisions of this Ordinance impose more restrictive standards than are required in or under law, regulation or ordinance, the requirements herein contained shall prevail. Whenever the provisions of any other law, regulation, or ordinance require more restrictive standards than are required herein, the requirements of such law, regulation, or ordinance shall prevail.

8-71 Repeal of Conflicting Regulations

All ordinances and resolutions regulating storm drainage adopted prior to this Ordinance are hereby repealed.

DIVISION 8. LEVEES

8-72 Maintenance Standards and Procedures

1. *Purpose and Scope.* This regulation establishes standards and procedures for levee maintenance through Richland County. The term "levee" as used herein also includes seepage and stability berms.

2. *General.* Adequate levee maintenance is essential and cannot be over emphasized. Failure to maintain levees properly may render the levees inoperative during periods when their protection is needed. For safety in times of high water or floods, levee maintenance will be thorough and continuous. This requires a balance maintenance program based on defined standards and procedures.

3. *Maintenance Standards and Procedures.* The levees will be maintained as necessary to insure serviceability against floods at all times.

(a) *Sod Growth.* Maintenance of a sturdy sod growth on levee embankments is highly important as sod is one of the most effective means of protecting the levee against erosion from rain, current and wavewash. Periodic mowing with tractor operated equipment is essential to maintaining a good sod growth, and should be done at such intervals as necessary to keep down weeds and other noxious growth and to prevent the grass height from exceeding 12". The grass should be mowed to a height of 2" or more. The number of mowings required each season will depend on local conditions. The last mowing of the season will be accomplished under conditions which will allow the grass to obtain a height of approximately 8" to 10" going into the winter season. Mowing will be performed to a distance of at least 5' beyond the tow of the levee o~ berm. Burning grass and weeds will not be permitted din the levee maintenance program, except during appropriate seasons when it will not be detrimental to the growth of sod.

Spraying with herbicides as needed during the growing season is permissible and desireable for weed and brush control on the levees and

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berms.

Reseeding and fertilizing is to be at rate necessary to sustain sod growth on levee embankments for control of erosion.

(b) *Earth Embankments.* Levee embankments will be maintained to not less than the design grade and section by replacing any loss of material from the crown or slopes. Ruts, washes, slides and subsidences should be promptly repaired and the entire embankment maintained sufficiently smooth for power mowing. Levee crowns should be graded as necessary to drain freely and prevent impoundment of rain water.
All brush, trees, and other undesirable wild growth will be removed from the levee embankment.

(c) *Animal Burrows.* Levees and adjacent landward areas will be maintained free of all types of animal burrows. Animal burrows, when found, will be backfilled with compacted material and sodded. To prevent reoccurrences, efforts will be made to exterminate the burrowing animals.

(d) *Prevention of Encroachment.* Care will be taken to assure that levees are not encroached upon. Buildings, structures, and storage of miscellaneous materials or equipment will not be permitted on the levee. Refuse dumps are an item of frequent concern and will not be permitted. following each high water, any draft of debris which has been deposited on the riverside slope of the levee will be removed promptly.

(e) *Roads and Ramps.* Access roads to and on the levees, including ramps, will be bladed as necessary to keep the roadway shaped properly and free of ruts, pockets, and washes. Ramp embankments should be maintained to their design section and design grade. Maintenance as necessary will be performed to correct any encroachment into the levee crown where roads cross levees. Road surfacing material will be replaced as necessary to maintain the road surface in good condition.

(f) *Miscellaneous Levee Facilities and Appurtenances.* Miscellaneous levee facilities and appurtenances which are constructed on, over or through the levee will be maintained in good state of repair and/or in inspected at least annually and these items which are operative only during high river states will be checked carefully and repaired as necessary immediately prior to thigh water season. Relief walls should be checked during periods of high water. Wells which do not flow for an extended period of time may have to be tested by pumping to determine the extended deterioration. Where wells are found to be critically deteriorated, they will be rehabilitated by cleaning, surging and pumping. Check valves will be inspected to insure that they open freely and that the gaskets are in good condition. The most common of the facilities and appurtenances referred to herein are:

1. Drainage structures through the levee
2. Toe drainage systems
3. Relief wells
4. Levee slope protection and protection on dike ends
5. Gates, cattle guards and fences
6. Siphons and pipe crossings.

(4) *Inspection.* Frequent inspections are essential to a good levee maintenance program. In addition to the formal inspections as required by the Richland County Engineer, inspections will be made prior to the beginning of the flood season, during and immediately following each high water period, and at such intermediate times as necessary to insure satisfactory care of the levee.

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SECTION II. Severability. If any section, subsection, or clause of this ordinance shall be deemed to be unconstitutional or otherwise invalid, the validity of the remaining sections, subsections, and clauses shall not be affected thereby.

SECTION III. Conflicting Ordinances Repealed. All ordinances or parts of ordinances in conflict with the provisions of this ordinance are hereby repealed.

SECTION IV. Effective Date. This ordinance shall be enforced from and after July 19, 1994.

FILED
94 DEC 22 PM 2:48
BARBARA A. SKELTON
C.C.C. & S.C.

RICHLAND COUNTY COUNCIL

BY: Harriet Gardin Fields
Harriet Gardin Fields, Chair

ATTEST this the 11th day of

August, 1994.

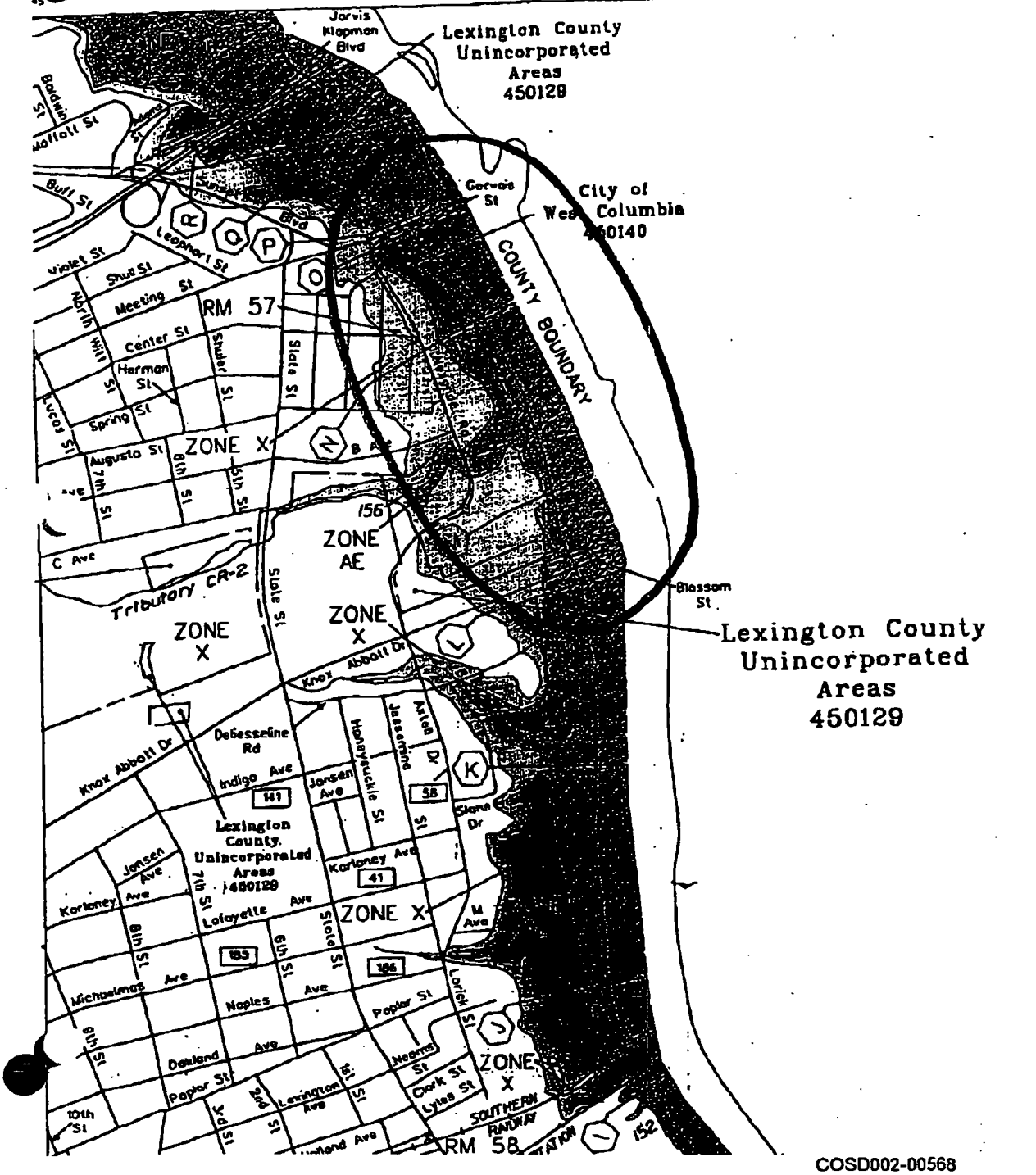
Brenda Fuller
Brenda Fuller, Clerk of Council

Third reading: July 19, 1994

plh: c\ord92\94-001wa

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PANEL 450630285 F
7/17/95



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ADDENDUM TO AGREEMENT

This Addendum to Agreement is executed on this the 16 day of July, 1997, by and between Burwell D. Manning, Jr., Eastern Corn & Grain Company, Inc. and Overlook, Inc. (hereinafter, collectively "Manning") and Congaree Farms, LLC ("Congaree") to incorporate the provisions stated hereinbelow into the Agreement executed by Manning and Congaree on June 25, 1997, which Agreement states the terms by which Congaree will make payment to Farm Service Agency, USDA ("FSA") for the release of mortgages and liens held by FSA on real estate owned by Manning, and terms by which Congaree will acquire title to such property (except for property which is the home of Burwell D. Manning, Jr. located at 4801 Kilbourne Road, Columbia, South Carolina) subject to provisions by which Manning may reacquire and sell the property. The following provisions are added to and made a part of the Agreement:

1. Paragraph 5(d) of the Agreement states that Manning has the right to negotiate with the City of Columbia ("City") regarding lands that it may wish to purchase from the Property, and concerning claims against the City relating to the Property. Furthermore, Manning is reserved and given all causes of action, rights to damages and any other claims against the City, its officials, its employees, or its agents (including consultants and professionals engaged by the City) regarding damages to the Property, as well as damages to Manning for his inability to obtain conventional or other financing; provided, however, that this reservation and grant of rights and claims is subject to the provisions stated in paragraphs 2 through 4 of this Addendum to Agreement.

2. The reservation and grant of rights to Manning described in the preceding paragraph number 1 of this Addendum to Agreement shall be limited to the 300 acres, more or less, of the Property that Manning may designate and reserve pursuant to paragraph 5(e) of the Agreement.

3. The reservation and grant of rights in paragraph 1 hereinabove applies only to causes of action and rights against the City which may be deemed to run with the Property, and shall not be construed as a limitation of Manning's rights with regard to causes of action which Manning may personally hold against the City.

4. The reservation and grant of rights in paragraph 1 hereinabove shall be effective only for the period for which the Agreement is effective. The reservation and grant of rights in paragraph 1 hereinabove shall not limit Congaree's right to sell any portion of the Property in the event that Manning's rights to reacquire and sell the Property are terminated or expire under the Agreement as provided in Paragraphs 5(a), 5(b), 5(c), 6, and 8 of the Agreement.

5. The second sentence of Paragraph 7 of the Agreement is amended to read as follows: "If Manning wants to reacquire or sell tracts of the property in Levy Sections I, II or III with configurations different from current platting, those tracts will be considered in parcels of 100 acres or more, subject to approval by Congaree (which will not be unreasonably withheld)."

6. As long as the Agreement is in effect, Manning shall pay the ad valorem taxes on or relating to the Property.

7. Congaree shall not be responsible for insuring the Property to protect any interest of Manning in or on the Property.

Burwell D. Manning, Jr., Individually, and on behalf of Eastern Corn & Grain, Inc., and Overlook, Inc.

CONGAREE FARMS, LLC

By: _____
Don M. Houck

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AGREEMENT

This Agreement is made on this the 25th day of June, 1997, by and between Burwell D. Manning, Jr., Eastern Corn & Grain Company, Inc., and Overlook, Inc. (hereinafter, collectively "Manning") and Congaree Farms, LLC ("Congaree") to state the terms upon which Congaree will make payment to Farm Service Agency; USDA ("FSA") for the release of the mortgages and liens now held by FSA on real estate owned by Manning. At the time of its payment for the FSA release, Congaree will acquire title to such property (except for the property which is the home of Burwell D. Manning, Jr.), subject to provisions by which Manning may reacquire and sell the property. The terms are as follows:

1. Purpose of the Agreement. This Agreement is intended to enable Manning to obtain a release of the FSA mortgages and liens on real estate Manning now owns. Congaree will make the required payment to FSA for the release of the FSA mortgages and liens, and hold title to the property (except for Manning's home) unless and until Manning has made payments or sales of the property in accordance with the provisions stated hereinbelow.

2. Property. The real property and improvements which are the subject of this Agreement (hereinafter, the "Property") comprise approximately 4,460 acres, which are described in Exhibit A to this Agreement.

3. Release of FSA Mortgages. Congaree will pay $4,359,000 to FSA on or before July 10, 1997, for the release of FSA's mortgages and liens on the Property. This payment is in addition to the two $100,000 non-refundable deposits previously paid to FSA, and will complete the $4,559,000 payment required by FSA for the release of its mortgages and liens on the Property (the "FSA Release Payment"). Upon Congaree's completion of the FSA Release Payment, title to the Property shall be transferred to and placed in the name of Congaree.

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4. The Home. FSA also has agreed to release the house and lots owned by Burwell D. Manning, Jr. and Elizabeth K. Manning, located at 4801 Kilbourne Road, Columbia, South Carolina, which are Mr. and Mrs. Manning's residence (the "Home"), at the time it receives the FSA Release Payment. Although FSA will release the Home from its mortgages and liens, Congaree agrees that the Home shall not be included in the Property, that Congaree shall not acquire title to the Home, and that the Home may be titled in the name of Elizabeth K. Manning.

5. Manning's Interest in the Property After FSA Release. Following the FSA Release Payment and the transfer of the Property to Congaree, Manning shall have the following rights and interests in the Property:

(a) Manning shall have the right to reacquire or sell all or a part of any tract of the Property for a period of one (1) year from the date of the FSA Release Payment (the "One Year Period"), upon the terms more fully stated in paragraphs 6, 7 and 8 below; provided, however, that if Manning has paid, or caused to be paid by sales of the Property, the amount of $3,300,000 to Congaree (net of any closing costs) within the One Year Period, Manning shall have an additional year in which to reacquire or sell the remaining Property, upon the same terms applicable during the One Year Period, and with no other extensions.

(b) If Manning fails to pay Congaree $3,300,000.00 (net of any closing costs) within the One Year Period, Manning's right to reacquire and sell the Property shall be automatically terminated upon the expiration of the One Year Period, and Manning shall have no further interest in the unsold Property. In the event that Manning is granted the one year extension of time for Manning to reacquire or sell the Property (by payment of the $3,300,000.00 during the One Year Period), if Manning fails to pay by the end of the second year the balance of the $6,660,800.00 total payment required for Manning to reacquire or sell

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all of the Property, Manning's right to reacquire or sell the Property shall be automatically terminated upon the expiration of the second year, and Manning shall have no further interest in the unsold Property.

(c) Manning shall have the exclusive right to market and sell the Property for a period of nine (9) months after the date of the FSA Release Payment. During the final three months of the One Year Period, Congaree may sell such amount of the Property as may be necessary to assure that it will receive net sale proceeds of $3,300,000 by the end of the One Year Period; provided, however, that Congaree may make such a sale only if Manning has no proposed sale of such property under contract which is reasonably likely to close within the One Year Period. If Manning is granted the second year extension (by payment of $3,300,000.00 to Congaree during the One Year Period), Manning shall have the exclusive right to market and sell the property for the first eight (8) months of the second year.

(d) Manning shall have the right to negotiate with the City of Columbia ("City") regarding lands that it may wish to purchase from the Property, and concerning claims against the City relating to the Property. See Addend

(e) Congaree will reserve up to 300 acres, more or less, for Manning to negotiate with the City on land that the City may be interested in purchasing. This reservation is not intended to postpone sales on other properties. Manning may designate portions of the 300 acres at one time. This reservation will be effective as long as Manning's right to reacquire or sell the property remains in effect.

6. Required Payment for Reacquisition or Sale by Manning. The total payment required from Manning to reacquire and/or sell all of the Property is $6,660,800.00. (However, Manning is not required to reacquire or sell all of the Property.) The Property is classified into five (5) sections, consistent with the manner in which the Property has been discussed and

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reviewed by Manning and Congaree. Manning may reacquire the Property or sell the Property to other parties upon payment of the following minimum net proceeds per acre to Congaree:

Levy Section I - Approximately 1,418 acres; $1,800 per acre net.
This portion of the Property includes the tracts described in Exhibit A as the Overlook, Arthur and Ehrlich tracts.

Levy Section II - Approximately 1,640 acres; $1,400 per acre net.
This portion of the Property includes the tracts described in Exhibit A as the Whitehouse, Tokunaga, Martin, Truesdale, and Rutledge tracts.

Levy Section III - Approximately 1,352 acres; $1,200 per acre net.
This portion of the Property includes the tracts described in Exhibit A as the Barron, Mae Kirkland, Kirkland Spangler, Lux, Chappell, Drucilla Chappel, Shull & Miller and Guignard tracts.

Section IV - Approximately 30 acres (high ground) (formerly part of Levy Section III); $3,000 per acre net.

Section V - Approximately 10 acres along Bluff Road and Beltline Extension; (formerly part of Levy Section I); $7,000 per acre net.

Bluff Estates - Approximately 10 acres along Bluff Road (formerly part of Levy Section III); $3,000.00 per acre net.

"Net sales" and "net prices" refer to the minimum amount due to Congaree at the closing of the transaction. Costs such as customary closing costs, real estate commissions (if any), outstanding ad valorem taxes on the property sold, roll back taxes on the property sold (if any), documentary stamps, survey costs, and attorneys' fees relating to the proposed sale will be paid by Manning.

If any judgments or liens exist on the Property at the time Congaree acquires title to the Property (except for the FSA mortgages and liens which are to be released hereby), the payment due to Congaree in the One Year period shall be increased by the amount(s) of the judgments and liens, and the total payment amount for all of the Property shall be increased by such amount(s).

7. Sale of Parcels of Property. Manning will buy or sell the Property based on existing tracts in Levy Sections I, II and III as currently platted. If Manning wants to reacquire See Addendum

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or sell tracts of the property in Levy Sections I, II or III with configurations different from current platting, those tracts will be considered in parcels of 100 acres or more. Any other division of property in Levy Sections I, II and III must be made upon the approval of Congaree. Furthermore, any sales of property shall include rights of reasonable access to the Property not sold.

8. Time Required for Closings. Time is of the essence in Manning's making payments to Congaree. Manning must close all proposed sales of the Property prior to expiration of the One Year Period unless (a) Congaree has received net payment of $3,300,000 prior to such proposed sale, or (b) Congaree consents to the extension of time to allow the sale to close. Furthermore, if Manning is granted the one year extension of the time for Manning to reacquire or sell the Property (by payment of the $3,300,000 during the One Year Period), all sales must close on or before the end of the second year unless Congaree has received net sale proceeds of $6,660,800.00, representing payment in full under the terms of this Agreement.

9. Manning's Right to Use of the Unsold Property. During the period under this Agreement in which Manning may reacquire or sell the property, Manning shall have the right to farm, hunt and fish on the unsold portions of the Property, rent free; provided, however, that Manning shall maintain all unsold portions of the Property in a reasonable manner. Manning may keep any income that he derives from the farming, hunting and fishing uses of the Property. Congaree reserves the right for its shareholders and officers to hunt and fish on the Property for recreational and social purposes, and each of Congaree's shareholders and officers may bring three guests with him.

10. Third Party Sales Originating from Congaree. During the time in which Manning has the exclusive right to sell the Property to third parties, if Congaree presents a prospective buyer of a portion of the Property to Manning and a sale of the Property results from

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Congaree's presenting the buyer to Manning, Congaree may retain an amount equal to eight percent (8%) of the sale price paid by such buyer. This 8% retention of sale proceeds shall not be deemed payable to Congaree if a real estate commission or broker's fee is due to another person or company on the sale, unless such commission or fee is paid by Congaree from its 8% retention amount. As a means of avoiding potential questions relating to the person or party responsible for producing a buyer of the property, Congaree and Manning will each present to the other a list of prospective buyers with whom they have been in contact, with a brief description of the status of the buyer discussions, by July 31, 1997.

11. Date for Closing on this Agreement. The payment to FSA and the conveyance of title of the property to Congaree shall be closed no later than July 10, 1997, unless an extension to the time for the FSA Release Payment is granted in writing by FSA.

Burwell D. Manning, Jr., Individually, and on behalf of Eastern Corn and Grain, Inc., and Overlook, Inc.

CONGAREE FARMS, LLC

By: _____
Don M. Houck

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EXHIBIT A

PROPERTY OF OVERLOOK

All those certain pieces, parcels, or tracts of land, together with any improvements thereon, situate, lying and being in the County of Richland, State of South Carolina, containing 331.1 acres, more or less, shown and delineated as Tracts D and E on a plat of property prepared for OVERLOOK, INC. by W. Frank McAulay, Jr., R.L.S., dated March 19, 1977, and revised June 20, 1977, which tracts are more specifically described as follows:

PARCEL E having the following metes and bounds:

Beginning at a point on the western boundary of the Congaree River at the northwestern boundary of property now of the Foundation for Heathwood Hall; from that point running N. 66° 14' East for a distance of 2,996.6 feet to a point, thence turning N. 23° 46' West for a distance of 3,200 feet, more or less, to a point; thence turning and running S. 57° 37' West for a distance of 3,170 feet, more or less to a point on the western bank of the Congaree River, and thence turning in a southerly direction for a distance of 2,210 feet, more or less, to the point of beginning.

Less: Certain 15 acre tract shown and delineated as A-1 as shown on the aforesaid plat.

PARCEL D having the following metes and bounds:

Beginning at a point on the northeastern side of the property now of the Foundation of Heathwood Hall, approximately 500 feet from the northeastern boundary of Parcel E, from that point running N. 23° 46' West for a distance of 3,200 feet, more or less, to a point, thence turning N. 57° 37' East for a distance of 2,120 feet to a point, and turning and running S. 38° 51' East for a distance of 351.77 feet, more or less, to a point, and thence turning S. 29° 52' East for a distance of 3,201 feet more or less to a point; thence turning and running S. 66° 14' West for a distance of 2,530 feet, more or less, to the point of beginning.

ALSO, a non-exclusive perpetual easement of right-of-way for access, ingress and egress, to Tracts D and E and other property of Overlook, given to Mortgagor by deed of Bluff Industrial Development Corporation, dated September 30, 1977, and recorded in Deed Book D-438 at Page 302, in the R.M.C. Office for Richland County.

ALSO, an agreement for a perpetual non-exclusive easement of right-of-way for ingress and egress given to Overlook, Inc. by Merc Associates, over the property of Merc Associates from Bluff Road to the property of Overlook, said agreement recorded in Deed Book D-438 at Page 321 on September 30, 1977, in the RMC Office for Richland County.

Being the identical property conveyed to Overlook, Inc., by deed of Bluff Industrial Development Corp., dated September 16, 1965, and recorded in the R.M.C. Office for Richland County, South Carolina, in Deed Book D-58 at Page 611.

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PLTF TRIAL EXH 233

/ ARTHUR TRACT

All that certain piece, parcel, or tract of land, together with the improvements thereon, situate, lying and being in the County of Richland, State of South Carolina, containing 1,343 acres, more or less, as shown and delineated on plat of property surveyed for Ruth P. Forsythe by William Wingfield, Reg. Surv. dated March 31, 1958 and recorded in the Office of the Clerk of Court for said County in Plat Book "S" at Pages 38 and 39, and which tract of land is more specifically described, bounded and shown on such plat as follows: COMMENCING at a stone marker, which stone marker is located at a distance of 146 feet, more or less, in a Northwesterly direction, from a point at the Northeastern intersection of Blair Road, formerly Ott Road, and the Old Bluff Road, and thence running from such stone marker over and across Blair Road, formerly Ott Road, along the Northern side of the Old Bluff Road, S. 37 deg. 44 min. E., 1,083 feet, more or less, to a R.R. iron; thence running S. 41 deg. 18 min. E., along the northern side of the Old Bluff Road for a distance of 300 feet, more or less, to an iron; thence running S. 51 deg. 17 min. E. along the northern side of the Old Bluff Road 200 feet, more or less, to an iron; thence running S. 61 deg. 17 min. E., along the northern side of the Old Bluff Road 300 feet, more or less, to an iron; thence running S. 66 deg. 17 min. E. along the northern side of the Old Bluff Road, 865.2 feet, more or less, to an iron; then running S. 56 deg. 12 min. E., along the northern side of the Old Bluff Road, 567.2 feet, more or less, to a R.R. iron; then running S. 51 deg. 33 min. E. along the northern side of the Old Bluff Road, 413.3 feet, more or less, to an iron; thence running S. 33 deg. 47 min. E., along S.C. Highway #48 (Bluff Road) as shown on the above plat, 100 feet, more or less, to an iron; thence running S. 28 deg. 53 min. E. along S.C. Highway #48 as shown on the above plat, 392.8 feet more or less, to an iron; thence running S. 24 deg. 17 min. E., along S.C. Highway #48, 992.5 feet, more or less, to an iron; and there coming and thence running N. 89 deg. 53 min. W. along lands now or formerly of Truesdale, 53.5 feet, more or less to an oak tree; thence turning and running S. 19 deg. 01 min. W. along lands now or formerly of Truesdale, 228 feet more or less to an iron; thence running S. 06 deg. 28 min. W. along lands now or formerly of Truesdale, 1,056 feet, more or less, to a point in the center line of the creek, as shown on the above plat; thence running in an irregular curved line in a southerly direction, 700 feet, more or less, to a point in such creek: thence turning and running along the bed of a lagoon, in an irregular curved line in a westerly and southerly direction, 2,800 feet, more or less, to an iron where the lagoon and an old ditch intersect; thence, turning and running S. 68 deg. 5 min. W., along lands now or formerly of E & G Cattle Farm - Ehrlich, 3,426.3 feet, more or less, to an iron; thence turning S. 68 deg. 31 min. W. along lands now or formerly of E & G Cattle Farm - Ehrlich, 1,971.5 feet more or less, to a fence post corner; thence running S. 68 deg. 00 min. W., along lands now or formerly of Manning, 1,514.4 feet, more or less, to an iron; thence running in a southwesterly direction along lands now or formerly of Manning 20 feet, more or less to a point on the eastern bank of the Congaree River; thence turning and running in an irregular line in a northwesterly direction along the eastern bank of the Congaree River, for a distance of 6,616.1 feet, more or less to a point on the eastern bank of the Congaree River; thence turning and running in a northeasterly direction along lands of Ruth P. Forsythe, formerly Taylor lands, 20 feet, more or less, to an iron and cottonwood snag; thence running N. 66 deg. 28 min. E., along lands of Ruth P. Forsythe, formerly Taylor, 6,003.5 feet, more or less, to a concrete monument; thence running N. 68 deg. 33 min. E., along lands now or formerly of Tolliver, 721 feet, more

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or less, to an iron; thence running N. 64 deg. 47 min. E., along lands now or formerly of Tolliver, 131 feet, more or less, to a granite stone marker; thence turning and running N. 30 deg. 38 min. E. along lands now or formerly of Tolliver, 1,867.7 feet, more or less, to an iron, thence running N. 28 deg. 17 min. E., along lands now or formerly of Tolliver, 218.3 feet more or less, to an iron on the southern side of the Old Bluff Road; thence running N. 22 deg. 52 min. E. over and across the Old Bluff Road, 31.5 feet, more or less, to the point of commencement all as shown by reference to the abovementioned plat.

LESS: 120 acres delineated as Parcel "A" on a plat of property of Burwell D. Manning, Jr. by B. P. Barber & Assoc. dated May 3, 1967, recorded in the Office of the Clerk of Court for said County in Plat Book X at Page 261, heretofore conveyed to the City of Columbia.

LESS: The southern 1,500 feet containing 99.7 acres of a conveyance of 133 acres to the Foundation of Heathwood Hall by deed dated January 16, 1974, and recorded in Deed Book D-305 at Page 989.

LESS: A tract containing 33.3 acres lying between the Heathwood Hall property on the north and the City of Columbia, S.C. Wastewater Treatment Plant on the south, being the parcel conveyed to Overlook, Inc. by deed dated January 15, 1974, and recorded in Deed Book D-305 at Page 682.

RESERVING: To mortgagor, his or its heirs, successors and assigns, an easement 100 feet in width over and upon the roadway from Beltline Blvd. extended to the Heathwood Hall property and intersecting paved roads in existence for access, ingress and egress.

This is a portion of the property containing 1,343 acres, more or less conveyed to Burwell D. Manning, Jr. by deed of Ruth P. Forsythe dated July 13, 1961, and recorded in the Office of the R.M.C. for Richland County, S.C., in Deed Book 304 at Page 96, Burwell D. Manning, Jr. having conveyed a 15% interest to Eastern Corn and Grain Company, Inc. by deed dated November 15, 1971, and recorded December 29, 1971, in Deed Book D-229 at Page 396 in said R.M.C. Office, as to which a corrected deed was filed February 7, 1972, in said R.M.C. Office in Deed Book D-232 at Page 960.

✓ WHITEHOUSE FARMS
a/k/a Childs Tract, adjoins Arthur
Tract on a portion of its Southern Boundary

All that piece, parcel, or tract of land, together with the improvements thereon, situate, lying and being about 6 miles from the City of Columbia, in School District No. 5 in the County of Richland, State of South Carolina, containing 1,024 acres, more or less, as more particularly shown and delineated on a plat of the property of the estate of Mrs. M. E. Childs, made by Tomlinson Engineering Co. dated January 16, 1924, said plat being filed for record in the Office of the Clerk of Court for Richland County, and bounded as follows: On the North by land now or formerly of Edward Ehrlich; East by land now or formerly of T. M. Livingston and land now or formerly of C. M. Livingston; South by the Congaree River and Gills Creek; and on the West by the Congaree River.

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This being a portion of the same property conveyed to Burwell D. Manning, Jr., by deed of Katherine H. Manning dated December 6, 1961, and recorded December 7, 1961, in the Office of the R.M.C. for Richland County in Deed Book 314 at Page 565, and including the property conveyed to Burwell D. Manning, Jr. by deed of Palmetto State Construction Company dated May 15, 1964, and recorded in the Office of the R.M.C. for Richland County in Deed Book 389 at Page 79 on June 10, 1964.

LESS: That certain piece, parcel or lot of land containing 10 acres located on the northern side of Road S40-51 (Whitehouse Road) and conveyed to Coker's Pedigreed Seed Company by deed dated April 1976, and recorded in Deed Book 380 at Page 583 in the RMC Office for Richland County, South Carolina.

RESERVING to mortgagor, his heirs and assigns an easement 66 feet in width over and upon the road now in existence designated as Road S40-51 (Whitehouse Road) for access, in-tress and egress.

EHRLICH TRACT

Adjoining Arthur Tract and a portion of Southern Laundry.

All that certain piece, parcel or tract of land situate, lying and being in the County of Richland, State of South Carolina, south of the City of Columbia near the Congaree River, containing 142.9 acres, more or less,,being irregular in shape and being bounded on the North side by lands of B. D. Manning; East by lands now or formerly of Truesdale; South by lands of Rice, Tokunago and Manning, and on the West by lands of Manning.

Being the identical tract heretofore conveyed to Edward Ehrlich and G. C. Romans tine by Alice G. Childs by deed dated October 28, 1890, recorded in Deed Book "V" at Page 21, and being the same tract subsequently conveyed by G. C. Romanstine to Edward Ehrlich by deed recorded in Deed Book "V" at Page 236 in the Office of the Clerk of Court for Richland County, excluding, however, the 3.2 acres non-contiguous tract west of Bluff Road, described in said deed, and conveyed to Burwell D. Manning, Jr. by deed of Ruth Ehrlich Ralston, et al., dated May 2, 1966, and recorded June 30, 1966, in Deed Book D 47 at Page 701 in the RMC Office for Richland County, South Carolina, and by deed of Harry M. Lightsey, Master, dated June 30, 1966, and recorded June 30, 1966, in said RMC Office in Deed Book D-47 at Page 698.

TOKUNAGA TRACT

Adjoins Ehrlich Tract on its Southern Boundary

All that certain piece, parcel or lot of land situate, lying and being in the County of Richland, State of South Carolina, beginning at an iron stake in a ditch on Ehrlich's South line, 410 feet Southwest of the intersection of this ditch and another ditch; running thence Southwest 1,665 feet to a stake in the center of a lagoon; thence running along the center of said lagoon in a Southwesterly direction 1,750 feet; thence running S. 54 deg. E., 1,200 feet to a stake; thence

running N. 38-3/4 deg. E., 1,079 feet to an iron stake; thence running N. 58 deg. W. 953 feet to a stake; thence running N. 26-1/4 deg. E., 1,864 feet to the point of beginning. Said tract of land containing 55-1/2 acres, more or less, being shown on a plat of survey prepared by William Wingfield dated May 18, 1964, recorded in the Office of the Clerk of Court for Richland County in Plat Book "X" at Pages 43, 43a, 43b, 43c.

This being the identical property conveyed to Burwell D. Manning, Jr. by deed of Shandon Greenhouses, et al., dated February 17, 1967, and recorded on February 17, 1967, in the Office of the R.M.C. in Deed Book D-65 at Page 636.

MARTIN FARM

Adjoins Tokunaga Tract on its Eastern Boundary

All that tract of land situate, lying and being in School District No. Five in the County of Richland, State of South Carolina, in a general southeasterly direction from the City of Columbia, S.C., and not far from the Bluff Road, containing 50 acres, more or less, and more particularly described as follows: BEGINNING at an iron stake 184 feet southwest of the heart of a ditch, it being the eastern corner of a tract of land heretofore conveyed by The Federal Land Bank of Columbia to Mitsou Tokunaga, and running thence N. 58 deg. W., 953 feet with said Tokunaga's line to an iron stake; thence N. 26 1/4 deg. E., along said line now or formerly of Tokunaga 1,864 feet to corner in ditch on line now or formerly of Ehrlich; thence in a northeasterly direction with said line now or formerly of Ehrlich 410 feet to intersection of two ditches; thence in a southeasterly direction along ditch 544 feet to intersection of two ditches; thence in a southeasterly direction along ditch 544 feet to intersection of two ditches; thence along old ditch in a southerly direction 1,084 feet to the intersection of two ditches; thence in a southwesterly direction along ditch 1,004 feet to heart of ditch; thence S. 38-3/4 deg. W. 184 feet to the point of beginning, with improvements thereon. Said property being designated as "Martin Farm" on composite plat prepared for Burwell D. Manning, Jr. by William Wingfield, Reg. Surveyor dated May 18, 1964, recorded in the Office of the Clerk of Court for Richland County in Plat Book X at Pages 43, 43A, 43B, 43C.

This being the same property heretofore conveyed to Burwell D. Manning, Jr. by James H. Martin by deed dated May 19, 1962, recorded in the Office of the R.M.C. for Richland County, South Carolina, on May 24, 1962, in Deed Book 327 at Page 153.

TRUESDALE TRACTS

Adjoins Arthur and Rutledge Tracts

Tract #1: All that certain piece, parcel or tract of land, situate, lying and being about 5 miles south of the City of Columbia, in School District #5 in the County of Richland, State of South Carolina, on Gills Creek, being composed of and embracing Parcel "A", containing 2.57 acres as shown on plat embracing the same surveyed for B. D. Manning, Jr. by B. P. Barber & Assocs., Engrs., dated May 27, 1964, recorded in the Office of the Clerk of Court for Richland

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County in Plat Book U at Page 189, and having such courses, distances and boundaries as shown on said plat.

Being a portion of the premises conveyed to Burwell D. Manning, Jr. by deed of L. C. Truesdale, Inc. dated June 15, 1964, and recorded June 15, 1964, in the Office of the R.M.C. for Richland County in Deed Book 389 at Page 329.

Tract #2: All that certain piece, parcel or tract of land, situate, lying and being about 5 miles south of the City of Columbia in School District #5 in the County of Richland and State of South Carolina, near Gills Creek, being composed of and embracing Tract "C", containing 5.65 acres, as shown on plat embracing the same made for B. D. Manning, Jr. by B. P. Barber & Assocs., Engrs., dated May 27, 1964, recorded in said Clerk's Office in Plat Book U at Page 189, and having such courses, distances and boundaries as shown on said Plat.

Being a portion of the premises heretofore conveyed to Burwell D. Manning, Jr. by deed of L. C. Truesdale, Inc. dated June 15, 1964, and recorded June 15, 1964, in the Office of the R.M.C. for Richland County in Deed Book 389 at Page 329.

Tract #3: All that certain piece, parcel or tract of land, situate, lying and being about 5 miles south of the City of Columbia in School District #5 in the County of Richland, State of South Carolina, on Gills Creek, being composed of and embracing Tract "B", containing 3.22 acres, as shown on plat embracing the same and made for Jackson Gills Creek Public Service District by B. P. Barber and Assocs., Engrs., dated March 31, 1964, recorded in said Clerk's Office in Plat Book 23 at Page 534, and having such courses, distances and boundaries as shown on said plat.

Being the same premises conveyed to Burwell D. Manning, Jr., by deed of Jackson-Gills Creek Public Service Commission dated June 11, 1964, and recorded June 15, 1964, in the Office of the R.M.C. for Richland County in Deed Book 389 at Page 331; subject, however, to an easement and right-of-way in perpetuity in Jackson-Gills Creek Public Service Commission over and along a 50-foot strip of land along the southern boundary of said tract adjacent to Whitehouse Road for the installation, construction and maintenance of sanitary sewerage lines or other facilities used in connection with sewerage treatment plant.

RUTLEDGE FARM

Adjoins Whitehouse Farm on Southern Tip

All that certain piece, parcel or tract of land situate, lying and being in Lower Township, in the County of Richland, State of South Carolina, about 4-1/2 miles from the City of Columbia, consisting of 516 acres, more or less, as shown on plat prepared for Burwell D. Manning, Jr. by William Wingfield, Reg. Surv. dated August 24, 1966, and recorded in the Office of the Clerk of Court for Richland County in Plat Book "X" at Page 38, being more fully described as follows: Beginning at a point in the center line of Gills Creek 416 feet, more or less, Southwest of Bluff Road, S.C. Highway #48, running thence in a Southerly direction along the center line of Gills Creek, 10,550 feet, more or less; thence turning and running along the center

line of a gut in a Westerly direction, 840 feet, more or less, to a point; thence turning and running N. 35 deg. 30 min. E., 2,400 feet to a point; thence turning and running N. 12 deg. 15 min. W., 1,360 feet to a point; thence turning and running N. 34 deg 30 min. E., 1,720 feet to a point; thence turning and running N. 81 deg. 30 min. E., 505-feet to a point) thence N. 07 deg. 40 min. W., 825 feet to a point; thence N. 42 deg. 00 min. E., 1,285 feet to a point; thence N. 25 deg. 30 min. W., 3,150 feet to a point; thence N. 61 deg. 40 min E., 937.5 feet to a point thence S. 26 deg. 26 min. E., 59.2 feet to a point; thence N. 61 deg. 33 min. E., 253.4 feet to a point; thence N. 27 deg. 29 min. W., 59.3 feet to a point; thence N. 61 deg. 40 min. E., 611 feet, more or less, to a point; thence N. 61 deg. 40 min. E., 611 feet, more or less, to a point of beginning. Said property being bounded on the North by property now or formerly of Truesdale; East by property now or formerly of B. D. Manning Trust, Shirley Wilson and Manning Development Co.; South by B. D. Manning, Jr.

LESS: Lot conveyed out of Northern boundary by Burwell D. Manning, Jr. to L. C. Truesdale, adjoining property owner by deed dated January 1962, and recorded in Deed Book 340 at Page 314 in said RMC Office.

This being the identical property conveyed to Burwell D. Manning, Jr. by deed of C. Heath Manning dated January 13, 1954, and recorded in the Office of the R.M.C. for Richland County, South Carolina, in Deed Book 125 at Page 558 on January 15, 1954.

GUIGNARD FARM

Adjoins Whitehouse and Rutledge Farms on Gill Creek

All that certain piece, parcel or tract of land situate, lying and being in Lower Township, Richland County, South Carolina, approximately 7 miles South of the City of Columbia, containing 544 acres, more or less, as shown on a plat prepared for Manning Development Co. by Wingfield, Reg. Surv., dated June 10, 1964, recorded in the Office of the Clerk of Court for Richland County in Plat Book "X" at Page 42, and being more full described as follows: BEGINNING at a point in the center line of Beckham Road approximately 2.5 miles south of South Carolina Highway #48, known as Bluff Road, thence running along the center line of said road S. 16 deg. 50 min. W., 1,119.7 feet to a point; thence turning and running in a Westerly direction along the center line of an old ditch 2,840.0 feet, more or less, to a point at the junction of the ditch and center line of Big Lake; thence turning and running a Northwesterly direction along the center line of Big Lake 2,800 feet, more or less, to a point; thence turning and running S. 81 deg. W., 860 feet, more or less to a point on the Eastern boundary of Congaree River; thence turning and running in a Northwesterly direction along the Eastern boundary of Congaree River, 2,763 feet to the intersection of Gills Creek and the Congaree River; running thence along the center line of Gills Creek, 9,150 feet, more or less, to a point; thence turning and running S. 19 deg. E., 4,188 feet to the point of beginning.

This being a portion of the same property conveyed to Manning Development Company by deed of Sanders Guignard dated July 6, 1959, and recorded in the Office of the R.M.C. for Richland County in Deed Book 254 at Page 18 and by deed of Susan G. Maye dated July 6, 1959, and recorded in Deed Book 254 at Page 20.

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This being the identical property conveyed to Burwell D. Manning, Jr. by deed of Manning Development Company dated February 20, 1976, and recorded February 23, 1976, in the Office of the R.M.C. for Richland County, South Carolina, in Deed Book D-374 at Page 305.

McRAE KIRKLAND TRACT

All that certain piece, parcel or tract of land, together with improvements thereon, situate, lying and being on the Northern side of Bluff Road, South Carolina Highway #48, near the City of Columbia, Richland County, South Carolina, containing 10.0 acres, more or less, being shown and delineated as Tract A on plat of property surveyed for William M. Kirkland and McRae Kirkland, by B. P. Barber & Assocs., Inc., Engineers, dated February 2, 1966, and recorded in the Office of the Clerk of Court for Richland County in Plat Book W at Page 212, reference thereto being craved for more complete description being rectangular in shape and having the following boundaries and measurements, all as shown on said plat, to wit: On the North by Tract B, whereon it measures 400 feet, more or less, East by a portion of Tract C and by Tract D, whereon it measures 1,089 feet, more or less; South by Bluff Road, S.C. Highway #48, whereon it fronts 400 feet, more or less, on the West by Tract B, whereon it measures 1,089 feet, more or less. This property is subject to a life estate in McRae Kirkland, reserved by deed unto Manning Development Company dated June 30, 1966, and recorded in Book D-45 at Page 733 in the RMC Office for Richland County, S.C. and being the same property conveyed by Manning Development Company to Whirlabout, Inc. by deed dated August 19, 1966. and recorded in Book D 54 at Page 438 in said office.

This being a portion of the property conveyed to Burwell D. Manning, Jr. by deed of Whirlabout, Inc., recorded in the Office of the R.M.C. for Richland County, South Carolina, on June 27, 1979, in Deed Book D-506 at Page 50.

BARRON TRACTS

Tract #1: All that certain piece, parcel or tract of land with improvements thereon, situate, lying and being on the West side of Bluff Road about 4 miles South of the City of Columbia, Richland County, South Carolina, measuring and containing 40 acres, more or less, according to a plat thereof by Tomlinson Eng. Co. dated April 29, 1935, shown as property of Estate of Annie Naomi McC. Shirley and recorded in the Office of the Clerk of Court for Richland County in Plat Book "H" at Page 54, said property being lands now or formerly of Washington, and lands formerly of the Estate of Shirley, and on the West by Gills Creek, separating this property from lands now or formerly of Childs, and by the Old Bluff Road, less all property heretofore conveyed to the South Carolina Highway Department, and also less a lot containing .005 acres on the Southwestern side of the Bluff Road heretofore conveyed to the S.C. Electric & Gas Company.

Tract #2: All that certain piece, parcel or tract of land situate, lying and being on the Eastern side of a paved state highway known as "Swamp Road" South of its intersection with Bluff Road, South of the City of Columbia, Richland County, South Carolina, being shown and delineated as 29 acres, more or less, on a plat prepared for J. T. McAlister & Co. by McMillan

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Eng. Co. dated January 6, 1965, and recorded in the Office of the Clerk of Court for said County in Plat Book "V" at Page 110; said tract being irregular in shape and bounded as follows: On the North by property known as Eastway Park No. 2, whereon it measures 1,540.5 feet, more or less; East by Eastway Park Subdivision tract, whereon it measures 304 feet, more or less; South by run of the lagoon which separates it from property now or formerly of W. L. Caughman; and on the West by paved state highway, all as shown on the abovementioned plat.

This is a portion of the property conveyed to Burwell D. Manning, Jr. by deed of Whirlabout, Inc. and recorded on June 27, 1979, in the Office of the R.M.C. for Richland County, South Carolina, in Deed Book D-506 at Page 50.

KIRKLAND SPANGLER TRACT

Adjoins Barron Tract on its Eastern Boundary

All that certain piece, parcel and tract of land with all improvements thereon, situate, lying and being on the south side of Bluff Road, and on the eastern side of a paved road sometimes known as "Swamp Road" south of the City of Columbia, County of Richland, State of South Carolina, being shown and delineated as 40 acres on a plat of Eastway Park No. 2 prepared in the Office of the Clerk of Court for Richland County in Plat Book "V" at Pages 108-109. Said tract being irregular in shape and having such metes and bounds as shown on said recorded plat except such slight variation in distances and bearings as may occur; said tract being generally bounded on the North by Bluff Road, whereon it measures 1,013 feet; East by property now or formerly of Josh Young (the branch being the line) and by property of Block H, Eastway Park; on the South by other property of W. M. Kirkland and McRae Kirkland, previously conveyed to J. T. McAlister, whereon it measures 1,540.5 feet; West by paved road for a distance of 303 feet, and on the Northwest by property now or formerly of Alyward; whereon it measures in a broken line for a total distance of 1,986 feet, all measurements being more or less.

LESS: All that piece, parcel or lot of land situate, lying and being in the County of Richland, State of South Carolina south of Columbia on Bluff Road (S.C. Highway #48) shown and delineated as Parcel 2, containing 2.75 acres on plat prepared for Manning Development Company by B. P. Barber & Assoc. dated June 10, 1969, recorded in the Office of the Clerk of Court for said County in Plat Book 37 at Page 83, said Parcel being bounded on the East by property of the Grantor designated as Parcel 1, whereon it measures 400 feet; on the South by property of the Grantor, whereon it measures 300 feet; on the West by property of the Grantor, whereon it measures 400 feet; and on the North by Bluff Road, whereon it measures 300 feet, same being a portion of Eastway Park #2 heretofore conveyed to the Grantor by deed of Eastway Park #2 recorded in said Clerk's Office in Deed Book D-35 at Page 565.

LESS: All that certain piece, parcel or lot of land, situate, lying and being in the County of Richland, State of South Carolina, containing 1.29 acres, more or less, and being shown as Parcel 1 on a plat of property surveyed for B. D. Manning, Jr. by B. P. Barber & Associates, Inc., dated June 10, 1969, and recorded in Plat Book 37 at Page 88 in the Office of the Clerk of Court for Richland County, S.C., and being more fully described as follows: Beginning at a point 1,994.4 feet southeast of the intersections of Bluff Road (S.C. Highway #48) and Swamp

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Road (S-519), thence S. 67 deg. 14 min. E. 194.1 feet to an iron in the centerline of a branch; then along the centerline of branch 470 feet more or less to an iron in the centerline of branch; thence N. 22 deg. 46 min. E. 400 feet to the point of beginning; being a portion of the property conveyed to Manning Development Company by deed of Eastway Park, Inc. dated January 12, 1966, recorded in Deed Book D-33 at Page 565 on January 21, 1966.

LESS: Easement for operation maintenance and repair of sewer out fall line running along northwestern side of branch which forms the boundary between this parcel and property now or formerly of Josh Young .

The above described Kirkland Spangler Tract was conveyed to Manning Development Company by deed of Eastway Park, Inc. by deed dated January 12, 1966, and recorded in Book D-33 at Page 565 in the RMC Office for Richland County, South Carolina, and conveyed by Manning Development Company to Burwell D. Manning, Jr. by deed dated February 20, 1976, and recorded in Book D-374 at Page 305 in the RMC Office for Richland County, South Carolina.

LUX TRACT

Adjoins Barron Tract on its Southern Boundary

All that certain piece, parcel or tract of land with improvements thereon situate, lying and being about 6 miles south of the City of Columbia, west of Bluff Road, Richland County, South Carolina, containing 254.8 acres, more or less, shown and delineated on plat prepared for Burwell D. Manning, Jr. by W. Frank McAulay, Jr. (R.L.S.) dated October 22, 1973, said property being more fully described as follows: Beginning at a point on the western side of the middle of bridge on county road approximately 3/4 of a mile from Bluff Road -S.C. Highway #48 and running thence along the eastern boundary of said county road in a southerly direction 1,520 feet, more or less, to a point; thence running S. 26 deg. 00 min. W. 1,030 feet, more or less, to a point; thence S. 19 deg. 00 min. W. for 2,204 feet, more or less to a point; thence S. 75 deg. E. for 15 feet, more or less, to a point; thence S. 26 deg. E. for 37 feet, more or less, to a point; thence S. 54 deg. E. for 58 feet, more or less, to a point; thence S. 57 deg. 30 min. E. for 100 feet, more or less, to a point; thence S. 52 deg. E. for 98 feet, more or less, to a point; thence S. 38 deg. E. for 47 feet, more or less, to a point; thence S. 17 deg. 30 min. E. for 16 feet, more or less, to a point; thence S. 30 deg. 30 min. E. for 79 feet, more or less, to a point; thence S. 55 deg. E. for 215 feet, more or less, to a point; thence N. 71 deg. E. for 30 feet, more or less, to a point; thence S. 58 deg. E. for 138 feet, more or less, to a point; thence S. 67 deg. E. for 500 feet, more or less, to a point; thence S. 68 deg. 30 min. E. for 165 feet, more or less, to a point; thence S. 78 deg. E. for 130 feet, more or less, to a point; thence N. 2 deg. 00 min. E. for 3,002.6 feet, more or less, to a point; thence S. 68 deg. E. for 663 feet, more or less, to a point; thence S. 68 deg. E. for 1,866 feet, more or less, to a point; thence N. 20 deg. 55 min. E. for 1,488 feet, more or less, to a point; thence N. 56 deg. 45 min. W. for 1,331 feet, more or less, to a point; thence turning and running initially in a northeasterly direction in a curved line shaped in a semi-circle curing to the west along the run of the lagoon to the point of beginning. This tract is comprised of two tracts formerly of H. B. Lux, containing 174.3 acres and 80.5 acres respectively as shown on said plat, being the same property conveyed to Manning Development Company by deed of H. B. Lux dated February

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1, 1966, and recorded in the Office of the R.M.C. for Richland County in Deed Book D-36 at Page 721.

This being a portion of the property conveyed to Burwell D. Manning, Jr. by deed of Manning Development Company dated February 20, 1976, and recorded February 23, 1976, in the Office of the R.M.C. for Richland County in Deed Book D-374 at Page 305.

/CHAPPELL TRACT

Adjoins Lux Tract on the East Boundary of Lux

All that certain piece, parcel or lot of land together with the improvements thereon, situate, lying and being on the southern side of S.C. Highway #48, known as Bluff Road, in the County of Richland, State of South Carolina, being approximately 6 miles southeast of the City of Columbia, containing 1.07 acres and being more particularly shown and designated as Parcel No. 2 on that certain plat prepared for Jesse Chappell made by W. O. Cullum, Reg. L. S., dated October 28, 1957, and recorded in the Office of the Clerk of Court for Richland County, said property fronting and measuring on the said Bluff Road a distance of 140 feet and running back therefrom in substantially parallel lines for a distances of 342 feet, all of which will more fully appear by reference to said plat. The above described property is the identical property heretofore devised to Lewis Chappell under the will of Jesse Chappell, probated and of record in the Office of the Judge of Probate for Richland County, South Carolina

Also: All that certain piece, parcel or lot of land, together with the improvements thereon, situate, lying and being about 6 miles southeast of the City of Columbia, in the County of Richland, in the State of South Carolina, and being located about 342 feet south of S.C. Highway #48, known as Bluff Road, and being more particularly shown and designated as Parcel No. 3 on a certain plat prepared for Jesse Chappell by W. O. Cullum, Reg. L.S., dated October 28, 1957, and recorded in the Office of the Clerk of Court for Richland County in Plat Book X at Page 1501, containing 1.07 acres and having such shape, measurements and boundaries as will more fully appear by reference to said plat. The above described property is the identical property heretofore devised to John Chappell under the will of Jesse Chappell probated and of record in the Office of the Judge of Probate for Richland County, South Carolina.

Also: All that certain piece, parcel or tract of land, together with the improvements thereon, situate, lying and being about 6 miles southeast of the City of Columbia on the southern side of S.C. Highway #48, known as Bluff Road, in the County of Richland, in the State of South Carolina, said tract containing 49 acres, more or less, and being the remainder, after excluding Parcels 1, 2 and 3, as shown on plat prepared by W. O. Cullum, Reg. L.S., for Jesse Chappell, dated October 28, 1957, of tract of land containing 53 acres +/- as shown on a certain plat showing property of Jesse Chappell prepared by W. O. Cullum and R. B. Gandy, dated January 1953, and recorded in Plat Book 3 at Page 205 in said Clerk's Office. The above described property is the identical property heretofore devised to John Chappell and Lewis Chappell under the will of Jesse Chappell probated and of record in the Office of the Judge of Probate for Richland County, South Carolina.

Also: All that certain piece, parcel or tract of land, together with the improvements thereon, situate, lying and being near S.C. Highway #48, known as Bluff Road, about 6.5 miles southeast of the City of Columbia, in the County of Richland, State of South Carolina, containing 45 acres, more or less, and being bounded on the north by other property of Burwell D. Manning, Jr.; on the east by property of Adcock, Madden & Pitts; on the south by property of John P. Chappell, Lewis G. Chappell and McElree Tuttle, Jr. (being conveyed simultaneously with this conveyance to Burwell D. Manning, Jr.); and on the west by the center line of SC Road 40-519; and being shown as the "Caughman Tract" a portion of Parcel "B" on plat of property surveyed for Burwell D. Manning by William Wingfield, Reg. Surveyor, dated April 30, 1971, and recorded in the Office of the Clerk of Court for Richland County in Plat Book X at Page 1500. The above described is the identical property heretofore conveyed to John P. Chappell and Lewis G. Chappell, the grantors herein, by Corinne Eugenia Caughman, et al., by deed dated November 6, 1946, and recorded in the Office of the Clerk of Court for Richland County in Deed Book GO at Page 213.

This being the identical property conveyed to W. Grady Jordan by deed of Jasper M. Cureton, Master, dated November 22, 1976, and recorded in Deed Book D-404 at Page 469 and conveyed to Burwell D. Manning, Jr. by deed of W. Grady Jordan dated April 4, 1977, and recorded April 14, 1977, in Deed Book D-419 at Page 53 in the RMC Office for Richland County, S.C.

DRUCILLA CHAPPELL TRACT

Adjoins Chappell Tract

All that certain piece, parcel or lot of land, together with the improvements thereon, situate, lying and being on the southern side of S.C. Highway #48, known as Bluff Road, in the County of Richland, in the State of South Carolina, being approximately six miles southeast of the City of Columbia, containing 1.04 acres and being more particularly shown and delineated as Parcel No. 1 on that certain plat prepared for Jesse Chappell made by W. O. Cullum, Reg. L.S., dated October 28, 1957, said property fronting and measuring on the said Bluff Road a distance of 140 feet and running back therefrom in substantially parallel lines for a distance of 342 feet, all of which will more fully appear by reference to said plat.

Being the identical tract conveyed to Burwell D. Manning, Jr. by deed of Owens T. Cobb, Master, dated August 13, 1971, and recorded August 20, 1971, in Deed Book D-216 at Page 236 in the RMC Office for Richland County, South Carolina.

SHULL AND MILLER CHAPPELL TRACTS

Adjoins Lux Tract on its Southern Boundary

All that certain piece, parcel or tract of land together with the improvements thereon, situate, lying and being near S.C. Highway #48, known as Bluff Road, about 6.5 miles southeast of the City of Columbia, in the County of Richland, State of South Carolina, containing 249 acres, more or less, and being shown in outline as the Miller Tract on plat of property surveyed for

Burwell D. Manning by William Wingfield, Registered Surveyor, dated April 30, 1971, and recorded in Plat Book X at Page 1500, in the Office of the Clerk of Court for Richland County, S.C. The above described property is the identical property heretofore conveyed to John P. Chappell, Lewis G. Chappell and McElree Tuttle, Jr., the grantors herein, by Jesse Chappell by deed dated March 15, 1951, and recorded in the Office of the Clerk of Court for Richland County, S.C. in Deed Book "70" at Page 426.

Also: All that certain piece, parcel or tract of land, together with the improvements thereon, situate, lying and being near S.C. Highway #48, known as Bluff Road, about 6.5 miles southeast of the City of Columbia, County of Richland, State of South Carolina, containing 125 acres, more or less, and being shown in outline as the Shull Tract on plat of property surveyed for Burwell D. Manning by William Wingfield, Registered Surveyor, dated April 30, 1971, and recorded in Plat Book X at Page 1500 in the Office of the Clerk of Court for Richland County, S.C. The above described property is the identical property heretofore conveyed to the grantors herein by B. P. Shull and D. J. Shull by deed dated December 15, 1953, and recorded in said Clerk's Office in Deed Book 124 at Page 343.

Also: All that certain piece, parcel or tract of land, together with the improvements thereon, situate, lying and being near S.C. Highway #48, known as Bluff Road, about 6.5 miles southeast of the City of Columbia, in the County of Richland, in the State of South Carolina, containing 10 acres, more or less, and being shown in outline as the Manning Tract on plat of property surveyed for Burwell D. Manning by William Wingfield, Registered Surveyor, dated April 30, 1971 and recorded in Plat Book X at Page 1500 in the Office of the Clerk of Court for Richland County, S.C. The above described property is the identical property heretofore conveyed to the grantors herein by Manning Development Company by deed dated September 25, 1962, and recorded in said Clerk's Office in Deed Book 350 at Page 228. The conveyance of the above described parcel is made subject to the condition relating to the drainage of surface water set forth in the deed above referred to.

This conveyance is made subject to easements for public roads, existing public utility easements, and power line easements, if any.

This is the identical property conveyed to Burwell D. Manning, Jr. by deed of John T. Chappell, et al., dated May 14, 1971, and recorded on May 14, 1971, in the Office of the R.M.C. for Richland County, South Carolina, in Deed Book 206 at Page 721.

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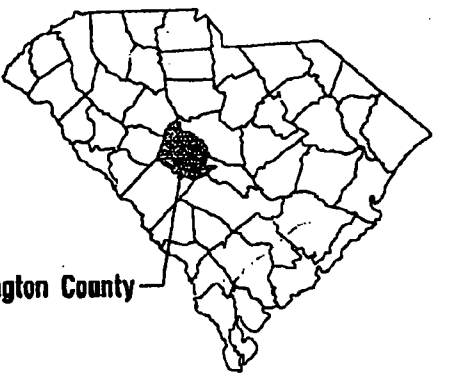
FLOOD INSURANCE STUDY



LEXINGTON COUNTY, SOUTH CAROLINA AND INCORPORATED AREAS

GPO CALL SHEETS

COMMUNITY NAME	COMMUNITY NUMBER
BATESBURG LEESVILLE, TOWN OF	450130
CAYCE, CITY OF	450131
COLUMBIA, CITY OF	450172
GILBERT, TOWN OF	450132
IRMO, TOWN OF	450133
LEXINGTON, TOWN OF	450134
LEXINGTON COUNTY, (UNINCORPORATED AREAS)	450129
PELION, TOWN OF	450135
PINE RIDGE, TOWN OF	450136
SOUTH CONGAREE, TOWN OF	450137
SPRINGDALE, TOWN OF	450138
SWANSEA, TOWN OF	450139
WEST COLUMBIA, CITY OF	450140



REVISED:

1 ST REVISED PRELIM.

Federal Emergency Management Agency

FEB 12 1998

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The areas studied by detailed methods were selected with priority given to all known flood hazard areas and areas of projected development and proposed construction.

All or portions of numerous flooding sources in the county were studied by approximate methods. Approximate analyses were used to study those areas having a low development potential or minimal flood hazards. The scope and methods of study were proposed to, and agreed upon by, FEMA and Lexington County.

2.2 Community Description

Lexington County, located in central South Carolina, is bordered by Newberry County to the northwest, Saluda County to the west, Aiken County to the southwest, Orangeburg County to the south, Calhoun County to the southeast, and Richland County to the northeast.

Most of the urbanized area of Lexington County is located on the east side of the county in the vicinity of the Cities of Columbia, West Columbia, and Cayce and the Towns of Springdale, South Congaree, Pine Ridge, and Irmo. Except for a few small urban areas in the vicinity of the Town of Batesburg Leesville near the western county boundaries, the remainder of the land is wooded or used for agricultural purposes. Within the floodplains studied, development is limited to a few scattered residences and commercial buildings. There are no large concentrations of floodplain development in the unincorporated areas of the county.

The climate of central South Carolina is temperate, with average monthly temperatures ranging from 84 degrees Fahrenheit (°F) in the summer to 39°F in the winter. Average annual precipitation for the region is 46.4 inches. The precipitation is evenly distributed throughout the year, but approximately 40 percent of the annual rainfall occurs during the period of June through September (Reference 3).

Generally, soils in Lexington County are excessively drained silty sands and loams, with local deposits of rock and gravel. In the creek bottoms, soils generally consist of alluvial sands and silts blanketed with finer (clay) soils, with local deposits of sands and gravel.

2.3 Principal Flood Problems

Past flooding on the streams in Lexington County indicates that flooding may occur during any season of the year. However, floods on the larger streams, including the Saluda, Congaree, and North Fork Edisto Rivers, are more likely to occur from June through October as a result of tropical hurricanes.

The three worst floods on the Congaree and Saluda Rivers occurred in August 1908, August 1928, and October 1929. Peak discharges for these events at the Congaree River USGS gage below Gervais Street at Columbia were 364,000 cubic feet per second (cfs), 311,000 cfs, and 303,000 cfs, respectively. The estimated return periods for floods of these magnitudes are 75, 45, and 40 years, respectively (Reference 4).

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The maximum stage recorded on the Congaree River, at the Gervais Street USGS gage at Columbia, was 152.8 feet, which occurred during the flood in August 1908. A 100-year flood under existing conditions would reach an elevation of 155.8 feet at the gage.

The 1928 flood was caused by two tropical storms which passed over the Santee Basin. The first storm, which occurred August 10 and 11, was centered across the middle of the Carolinas, and did not raise the rivers to excessive heights. The second storm, which took place on August 15 and 16, resulted in major flooding throughout the basin. The Congaree River at Columbia reached 37.5 feet on August 18, which was 2.3 feet below the high-water mark on August 27, 1908.

The two tropical storms of September 22 and 27, and October 1 and 2, 1929, produced floods of exceptional severity over the Saluda and Broad River watersheds, establishing new high-water marks on some of the tributaries. At Blair Station on the Broad River, a gage height of 38.5 feet was reached, 7.5 feet above the recorded stage of August 1908. The Congaree River at Columbia reached a stage of 37.1 feet, 2.7 feet below the high-water mark of August 1908. The Saluda Dam was near completion and Lake Murray was in the process of being filled when the 1929 flood occurred. The storage provided by the partially filled lake resulted in considerable reduction of the flood peak in the Saluda River below the Saluda Dam. If the lake storage had not been available, the 1929 flood stage at Columbia would probably have exceeded the previous high-water mark of August 1908. A number of bridges on tributaries of the Broad and Saluda Rivers were washed out, some state and county highways were closed to traffic for several days, and a number of mills and small hydro-electric plants were put out of commission for short periods. The peak discharges reached by the floods of 1908, 1928, and 1929 would have 75-, 45-, and 40-year return frequencies, respectively, under existing conditions.

The October 1929 flood was the maximum known flood on the Saluda River. At the USGS gaging station located approximately 2 miles above the mouth, the river reached an elevation of 164.7 feet, and the estimated peak discharge was 67,000 cfs. The Saluda Dam Project was near completion and Lake Murray was in the process of being filled when the 1929 flood occurred. The storage provided by the partially filled lake resulted in considerable reduction of the flood peak on the Saluda River below the dam. If the same flood occurred under existing conditions, the peak stage and discharge would be much higher. For this reason, a meaningful comparison between the 1929 flood and computer flood frequency-discharge relationships for the Saluda River cannot be made. The computed 100-year frequency stage and discharge at the gaging station (River Mile 2.1) are 168.9 feet and 105,000 cfs, respectively.

Stream gage data have been collected at the USGS Congaree Creek gage below U.S. Highway 321 at the City of Cayce since 1959 (Reference 5). During the period of record, the maximum flood (October 1959) reached a peak discharge of 1,840 cfs and crested at 134.9 feet. This flood had an approximate return frequency of 18 years. The estimated 100-year flood at the same location has a peak discharge of 14,800 cfs and a crest stage of 143.5 feet. The October 1959 flood caused only a small amount of

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damage in Lexington County because there was little development in the floodplain at that time.

The most recent flood of record occurred in October 1976. The peak discharge at the Congaree River USGS gage below Gervais Street at Columbia was 155,000 cfs and approximated a 10-year flood.

There is no information available on past flood history for Six Mile Creek and its tributaries in Springdale. Since the drainage areas are small and there is a considerable amount of urban development in the basin, it is reasonable to assume that floods can occur at any time during the year from local thunderstorms. Following intense rainfall over the basin, floods will rise and fall swiftly.

There is very little historic flood data available on Twelve Mile Creek. Interviews with local residents indicated that the dams forming Gibson Pond and Lexington Mill Pond failed during a flood in April 1936. There was no development in the reach between the ponds, but a store and several cabins located below Lexington Mill Pond were washed away. Both dams were reconstructed and no failures have occurred for the past 40 years. Reconstruction of Lexington Mill Pond Dam included a manually operated emergency spillway, a feature which the original structure did not have. These gates can be opened to lower the pond when flood warnings are received. Stage-discharge data on other streams in the study area were not available.

2.4 Flood Protection Measures

Floods in Lexington County may be affected by operation of two large reservoirs on the Saluda River. Lake Greenwood, which was formed by Buzzards Roost Dam and completed in 1940, is operated by Duke Power Company. Saluda Dam, completed in 1930 by South Carolina Electric and Gas Company, forms Lake Murray, located approximately 12 miles above the mouth of the Saluda River. It has a surface area of approximately 51,000 acres at maximum power pool. Lake Greenwood, located at River Mile 60, has a surface area of approximately 11,400 acres at maximum power pool.

Both reservoirs are operated for hydroelectric power generation and are subject to regulations prescribed by the Federal Power Commission. When inflow during major floods requires temporary storage above maximum operating pool levels, releases are made through spillway gates to augment discharges through power turbines in order to lower the reservoirs to required maximum pool levels as soon as possible. Both of these dams are operated to produce hydroelectric power, and any flood control that occurs as a result of the operation is coincidental.

An existing levee system located along the east bank of the Congaree River south of Columbia, affects flood elevations upstream of and adjacent to the structure. The increase in flood elevations at West Columbia due to the existing levee is insignificant; however, future levee projects should be carefully monitored to prevent increased flood hazards.

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TABLE 3 - SUMMARY OF DISCHARGES - continued

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. miles)	PEAK DISCHARGES (cfs) 10-YEAR	50-YEAR	100-YEAR	500-YEAR
YOST CREEK					
At mouth	1.21	533	775	886	1,104
At a point approximately 1,300 feet upstream of Coldstream Drive	0.75	467	683	783	975
At a point approximately 115 feet downstream of Lincreek Road	0.38	427	636	732	894

3.2 Hydraulic Analyses

Analyses of the hydraulic characteristics of flooding from the sources studied were carried out to provide estimates of the elevations of floods of the selected recurrence intervals.

Precountywide Analyses

Each community within Lexington County, except for the Towns of Batesburg Leesville, Gilbert, Pelion, and Swansea, has a previously printed FIS report. The hydraulic analyses described in those reports has been compiled and is summarized below.

Cross section data for the backwater analyses were field surveyed. Cross sections were located at close intervals above or below bridges and culverts in order to compute the significant backwater effects of these structures. All bridges, dams, and culverts were surveyed to obtain elevation data and structural geometry. Additional cross section information for the Towns of Irmo, Lexington, Pine Ridge, South Congaree, and Springdale was obtained by field surveys and topographic maps at a scale of 1"=200', with a contour interval of 5 feet (Reference 18). Cross section information for a portion of Rawls Creek in the Town of Irmo was obtained from a topographic map at a scale of 1:600 with a contour interval of 1 foot (Reference 25).

Water-surface elevations of floods of the selected recurrence intervals were computed using the USACE HEC-2 step-backwater computer program (Reference 26).

Starting water-surface elevations were computed using the slope/area method for Twelve Mile Creek, within the Town of Lexington. In the Town of Irmo, starting water-surface elevations for Rawls Creek and Koon Branch were obtained from hydraulic studies conducted on the lower reaches of these streams. The starting water-surface elevations for all other streams studied by detailed methods were determined by coincident peak.

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Channel and overbank roughness factors (Manning's "n") used in the hydraulic computations were chosen by engineering judgment and were based on field observations of the stream and floodplain. In the City of Cayce, the Towns of Pine Ridge and South Congaree, and the unincorporated areas, the acceptability of assumed hydraulic factors, cross sections, and hydraulic structure data was checked by computations which duplicated historic floodwater profiles on streams for which historic data were available. For the Towns of Irmo, Lexington, and Springdale, no past flood information was available; therefore, hydraulic models could not be calibrated with actual stage-discharge data. However, the coefficients used and the results obtained compared favorably with calibrated hydraulic model results on other streams in the same area.

For the unincorporated areas, elevations for approximately studied areas were determined based on drainage area, streambed slope, normal depth calculations, topographic maps, and comparisons with similar streams studied by detailed methods (Reference 20, 27, and 28).

The hydraulic analyses for the unincorporated areas considered possible failure of the dams at Gibson Pond and Lexington Mill Pond on Twelve Mile Creek. Interviews with local residents produced information indicating that both of these structures failed during a flood in April 1936. Several structures located in the floodplain below Lexington Mill Pond were washed away by the surge. No frequency-discharge or elevation data are available on the 1936 flood. Both dams were rebuilt, and the Lexington Mill Pond Dam reconstruction included a gated spillway which can be manually operated to lower the pond level in the event of a flood. The Lexington Mill Pond Dam, with a head differential of 22 feet, appears to be in good condition, and gates appear to be operable. Gibson Pond Dam is not in good condition, but it has a head differential of only 9.5 feet. Since reconstruction following the 1936 flood, neither dam has failed.

Approximate methods based on empirical model study results were used to obtain estimates of the effect of total instantaneous failure of both dams at the time of the 100-year flood peak. The results indicated that the additional surge from Gibson Pond would raise the natural 100-year flood peak approximately 4 feet between Gibson Pond and Lexington Mill Pond. The surge from Lexington Mill Pond would raise the natural 100-year flood crest immediately below the dam by approximately 10 feet. These calculations were designed to determine the worst situation that could occur during a 100-year flood to provide upper limits for engineering judgment decisions. On the other hand, if ample flood warnings were received in time for the Lexington Mill Pond gate to be opened and the pond drawn down, the natural 100-year flood crest below Lexington Mill Pond could be reduced significantly.

If one or both of the dams break during a major flood, the break is likely to be partial and occur in several stages. The break or breaks may occur before, during, or after the flood crest, or in various stages during the entire flood. The flood gate at Lexington Mill Pond may or may not be opened in time to provide relief. If the gate is not opened, and the Lexington Mill Pond does not fail, the flood below the dam will be equivalent to a flood under natural conditions (with no dam). These factors, and the fact that no failures have occurred since 1936, were considered in formulating a reasonable

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basis for floodplain management and flood insurance rates in the floodplain of Twelve Mile Creek.

For determination of flood elevations on Twelve Mile Creek, it was assumed that neither Gibson Pond Dam nor Lexington Mill Pond Dam will fail, and that there will be no reduction in flood elevations as a result of natural attenuation or manipulation of the spillway gate at Lexington Mill Pond. Inflow into the system will be equal to outflow.

July 17, 1995, Countywide FIS Analyses

Information on the methods used to determine cross sections, water-surface elevations, and roughness factors for the streams revised or restudied as part of the July 17, 1995, countywide FIS is shown below.

Cross sections for the backwater analyses of all detailed study reaches were obtained by field surveys and information obtained from topographic maps at a scale of 1"=200' with a contour interval of 5 feet (Reference 29). Updated information was obtained from orthophoto/topographic maps, dated March 1989, at a scale of 1"=200', with a 2-foot contour interval. Bridges, dams, and culverts were field checked to obtain elevation data and structural geometry.

Additional cross sections for Stoop Creek were determined using information obtained from topographic maps at a scale of 1"=200', with a contour interval of 5 feet (Reference 18).

Water-surface elevations of floods of the selected recurrence intervals were computed using the USACE HEC-2 step-backwater computer program (Reference 30). Starting water-surface elevations for each stream restudied or revised by detailed methods were determined using the slope/area method.

Channel and overbank roughness factors (Manning's "n") used in the revised hydraulic computations were chosen based on field observations, experience with similar streams, and engineering judgment.

This Revision

Cross sections for the flooding sources studied by detailed methods were obtained from field surveys. All bridges, dams, and culverts were field surveyed to obtain elevation data and structural geometry.

Water-surface elevations of floods of the selected recurrence intervals were computed using the USACE HEC-2 step-backwater computer program (Reference 31). Starting water-surface elevations were calculated using the slope/area method. Flood profiles were drawn showing computed water-surface elevations for floods of the selected recurrence intervals.

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Roughness factors (Manning's "n") used in the hydraulic computations were chosen by engineering judgment and were based on field observation of the stream and overbank areas. Channel and overbank roughness factors used in the hydraulic computations for all streams studied by detailed methods are listed in Table 4, "Summary of Roughness Coefficients."

TABLE 4 - SUMMARY OF ROUGHNESS COEFFICIENTS

Stream	Channel "n"	Overbank "n"
Big Branch	0.100	0.100-0.120
Congaree Creek	0.028-0.045	0.088-0.160
Congaree River	0.030-0.095	0.030-0.200
First Creek	0.035-0.060	0.110-0.150
Fourteen Mile Creek	0.044-0.047	0.110-0.160
Kinley Creek	0.030-0.120	0.040-0.150
Koon Branch	0.040-0.120	0.040-0.150
Lick Fork Branch	0.035-0.048	0.110-0.160
Rawls Creek	0.040-0.120	0.040-0.150
Red Bank Creek	0.035-0.049	0.110-0.160
Saluda River	0.040-0.120	0.040-0.150
Savana Branch	0.035-0.055	0.110-0.150
Second Creek	0.035-0.046	0.110-0.150
Bear Creek	0.035-0.046	0.110-0.150
Hunt Branch	0.035-0.046	0.110-0.150
Senn Branch	0.030-0.120	0.040-0.150
Six Mile Creek	0.040-0.080	0.040-0.150
Stoop Creek	0.025-0.100	0.060-0.180
Tributary CR-1	0.040-0.120	0.040-0.150
Tributary CR-1-1	0.040-0.120	0.040-0.150
Tributary K-2	0.025-0.100	0.060-0.180
Tributary R-2	0.040-0.120	0.040-0.150
Tributary SM-2	0.025-0.100	0.060-0.180
Tributary SM-3	0.030-0.120	0.040-0.150
Tributary SM-5	0.050-0.110	0.050-0.110
Tributary to Fourteen Mile Creek	0.060-0.080	0.080-0.120
Twelve Mile Creek	0.035-0.048	0.100-0.160
Yost Creek	0.025-0.100	0.060-0.180

The calculations for Twelve Mile Creek were based on Corley Mill dam not failing and operating at maximum capacity level. According to the owner of the dam, the dam is maintained at full level annually from the months of November through April to flood the region upstream of Corley Mill Road. During this time the two 24-inch diameter pipes remain open. It is possible to release additional amounts of water when necessary through a series of gates.

The hydraulic effects of elevated ground along the east bank of the Congaree River, located in the unincorporated areas of Richland County, were included in the analysis of flood elevations. However, because this ground does not provide protection from the 1-percent annual chance flood, it was not considered in the floodway analysis for the Congaree River. Both conditions were analyzed in accordance with FEMA guidelines.

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Locations of selected cross sections used in the hydraulic analyses are shown on the Flood Profiles (Exhibit 1). For stream segments for which a floodway was computed (Section 4.2), selected cross-section locations are also shown on the FIRM (Exhibit 2).

Flood profiles were drawn showing computed water-surface elevations for floods of the selected recurrence intervals.

The hydraulic analyses for this study were based on unobstructed flow. The flood elevations shown on the profiles are thus considered valid only if hydraulic structures, such as Gibson Pond Dam, Lexington Mill Pond Dam, and Corley Mill Dam, remain unobstructed, operate properly, and do not fail.

All elevations are referenced to the National Geodetic Vertical Datum of 1929. Elevation reference marks used in this study, and their descriptions, are shown on the FIRM.

4.0 FLOODPLAIN MANAGEMENT APPLICATIONS

The NFIP encourages State and local governments to adopt sound floodplain management programs. Therefore, each FIS provides 100-year flood elevations and delineations of the 100- and 500-year floodplain boundaries and 100-year floodway to assist in developing floodplain management measures.

4.1 Floodplain Boundaries

To provide a national standard without regional discrimination, the 1-percent annual chance (100-year) flood has been adopted by FEMA as the base flood for floodplain management purposes. The 0.2-percent annual chance (500-year) flood is employed to indicate additional areas of flood risk in the community. For the streams studied in detail, the 100- and 500-year floodplain boundaries have been delineated using the flood elevations determined at each cross section. Additionally, floodplain boundaries for streams that were not restudied in detail as part of this restudy were modified to reflect updated topographic information.

In the Cities of Cayce and West Columbia and the Towns of Irmo, Lexington, Pine Ridge, South Congaree, and Springdale, the boundaries were interpolated between cross sections using topographic maps at a scale of 1"=200' with a contour interval of 5 feet (Reference 18).

For Congaree Creek in the Town of Pine Ridge, and portions of Congaree Creek in the unincorporated areas of Lexington County, the boundaries were interpolated between cross sections using USGS topographic maps at a scale of 1:24,000 with a contour interval of 10 feet, and "Richland and Lexington Counties Joint Planning Commission" topographic maps at a scale of 1:2,400 with a contour interval of 5 feet (References 20 and 29). For the Congaree Creek in the Town of South Congaree, the boundaries were interpolated between cross sections using USGS topographic maps at a scale of 1:24,000 with a contour interval of 10 feet (Reference 20).

COSD001-00669

PLTF TRIAL EXH 235

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EASTERN CORN & GRAIN CO., INC.

P. O. BOX 13501, MARKET CENTER BRANCH
COLUMBIA, SOUTH CAROLINA 29201
(803) 776-6190

May 26, 1998

BURWELL D. MANNING, JR.
President

B. DEAS MANNING
Vice President and Treasurer

ELIZABETH K. MANNING
Secretary

Richland County Council
Columbia, South Carolina

Dear Councilmembers:

Re: 4500 acre new town development and proposed floodway changes by S.C. DOT and FEMA

The subject 4500 acres south of Bluff Road near the U.S.C. stadium was originally part of an area of 9,000 to 10,000 acres that was diked in the 1800's. From 1960 to 1970 these dikes were converted to levees by using the "Levee Plan of 1908" by the U. S. Department of Agriculture as a guide for location and elevations of levees. This property represents a large part of the Southeastern Quadrant of the City of Columbia and is 3½ miles from the State House.

This property is being sold for a total new town development which will have 20± uses - 3 golf courses, parks, shopping mall, recreational facilities, etc. To date over 100 users have been contacted and the total investment could reach one billion dollars (an estimate by Lockwood Greene Engineering and Consultants).

The present flood way line has been in place since 1974. Why change it after 24 years. How can the floodway in Lexington County be reduced approximately 365 acres and then show a need to increase the floodway by 4500 acres in Richland County? Has Richland County Council seen the study done by FEMA as suggested by S.C. DOT?

The problem is the S.C. DOT and the design and construction costs of the 12th Street Extention. More bridges and fewer embankments should be used. Also a levee agreement between S.C. DOT and me should be studied. The transcript and Order from Judge Clyde Hamilton concerning the above must be obtained and analyzed.

Last week Mayor Coble, the River Alliance and Heathwood Hall School agreed to fight and oppose any change of the flood way. When the facts and motives are known, I feel that the East Richland Public Service Authority, all land owners and Richland County will oppose this outrageous, damaging study and plan by S.C. DOT and FEMA. If the city cannot expand its sewer plant and Heathwood Hall School cannot continue to build,the same for East Richland and all land values go to zero, I would like to suggest that you have a long list of inverse condemnation takings and Richland County will be the loser by having nothing to tax.

EASTERN CORN & GRAIN CO., INC.

P. O. BOX 13501, MARKET CENTER BRANCH
COLUMBIA, SOUTH CAROLINA 29201
(803) 776-6190

BURWELL D. MANNING, JR.
President

B. DEAS MANNING
Vice President and Treasurer

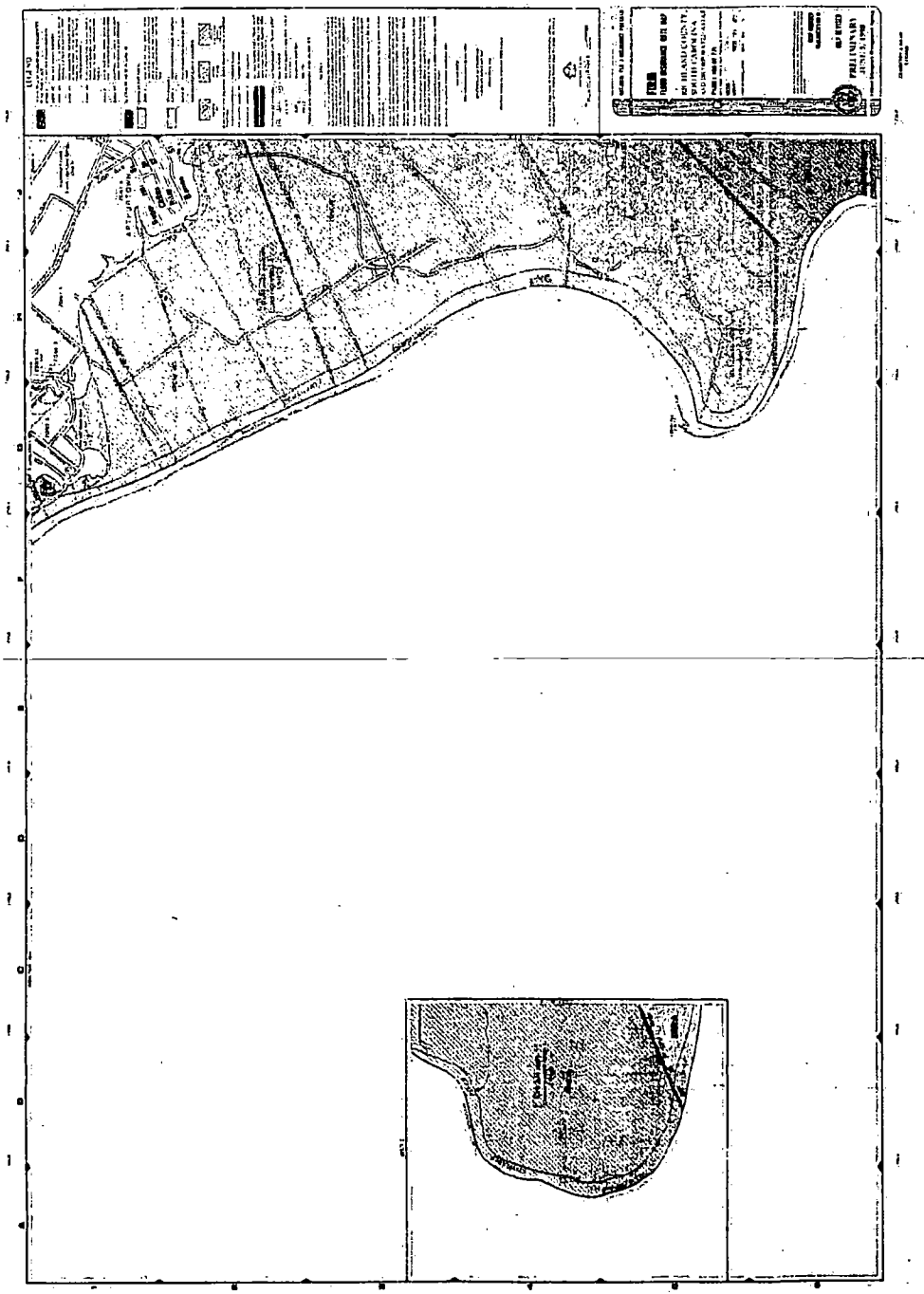
ELIZABETH K. MANNING
Secretary

Please record your opposition to the proposed floodway change by issuing me and my investors from Ohio, Kentucky and Arkansas permits to design and upgrade my levees at once.

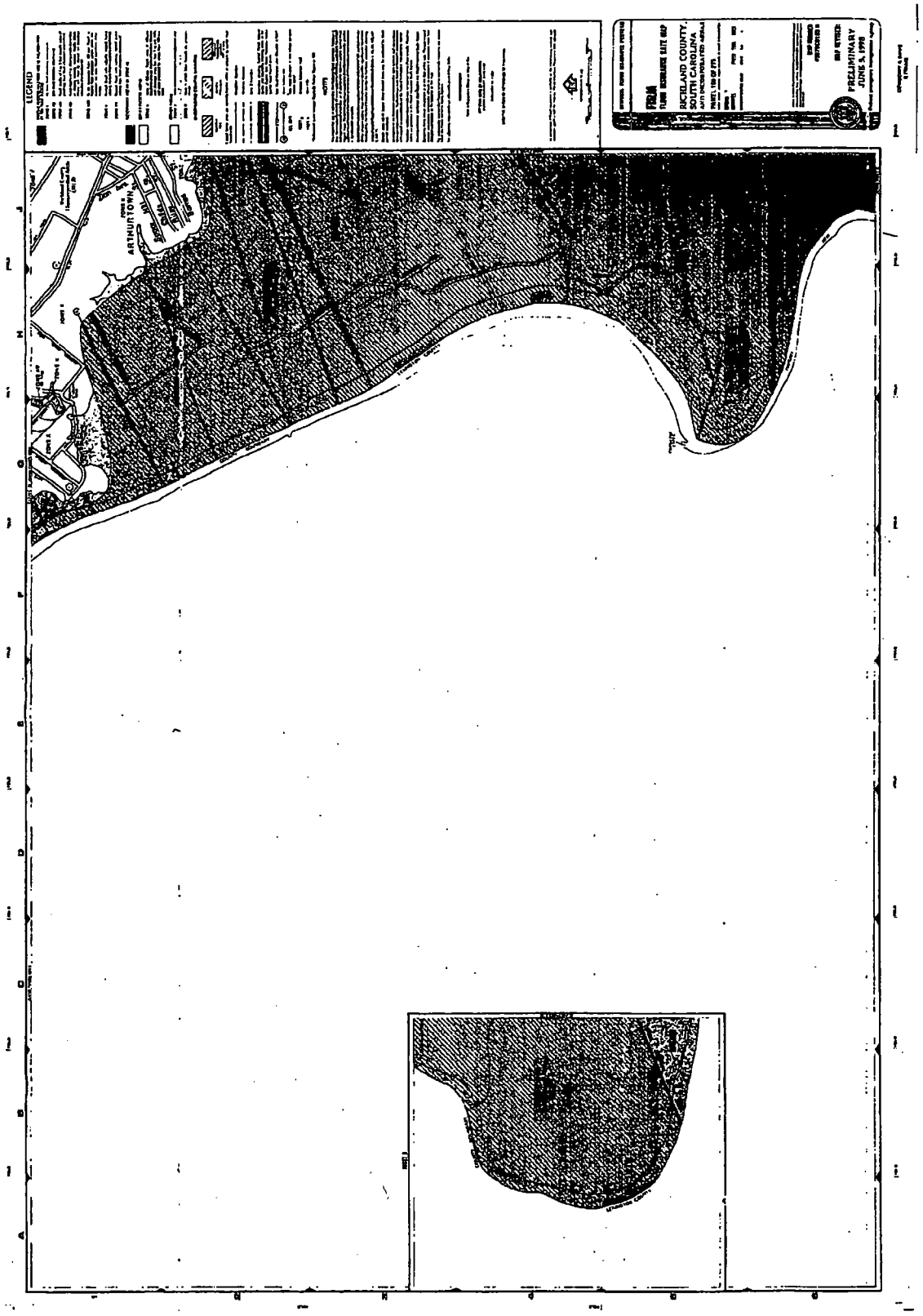
Sincerely,

Burwell D. Manning, Jr.

BDMjr/bkm



PLTF TRIAL EXH 237



PLTF TRIAL EXH 238

PLTF TRIAL EXH 239

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State, The (Columbia, SC)
July 16, 1998
Section: FRONT
Edition: FINAL
Page: A1
Memo: Related story, page A14

Correction: *PUBLISHED WEDNESDAY, JULY 22, 1998*

An evaluation of the flood-risk designation for 5,300 acres near I-77 in Richland County is on hold while the Federal Emergency Management Agency studies levees in the area. A headline in Thursday's editions incorrectly said the flood-risk designation had been changed.

FLOODWAY: FEDERAL AGENCY DESIGNATES 5,300 ACRES IN RICHLAND CO. AS FLOOD-PRONE, WORRYING DEVELOPERS ALONG THE CONGAREE RIVER

AMANDA MAYS
and JEFF WILKINSON
Staff Writers

Richland County officials are howling over a federal study that says 5,300 acres along the Congaree River are at a greater risk of flooding, a decision that jeopardizes the land's development.

Changing the flood-risk designation near Interstate 77 would put two sewage treatment plants, Heathwood Hall Episcopal School and 4,200 acres of a farmer's land in a "floodway."

Nothing has changed with those pieces of land - they're certainly not under water. Government officials simply want to label them differently because they're worried about the safety of levees near the river designed to hold back floodwaters.

The designation would prevent property owners from expanding - or even rebuilding if their structures were destroyed by fire or some other disaster.

The land is in a "floodplain," a designation that means the risk of flooding is smaller than in a floodway.

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PLTF TRIAL EXH 239

The city of Cayce, meanwhile, emerges as a big winner under the proposed flood-risk designations. The federal government says 360 acres should no longer be considered at great risk for flooding, putting the land back into use. That's a potential boon for the city's southern side.

Richland and Columbia both stand to lose millions of tax dollars if their mostly prime acreage is shackled from future development.

How much?

"You can't count that high," said Richland County Councilman Steve Morris, a commercial real-estate broker. "Fifty-three hundred acres on the edge of the city with water and sewer . . . the industrial development, the housing, the commercial development, all of that. It's a terrific amount of taxes."

U.S. Sen. Fritz Hollings said Wednesday that the Federal Emergency Management Agency had agreed to delay a final designation.

"There will be ongoing discussion on how to proceed with this issue," said Hollings, D-S.C.

The **FEMA** study was requested by **Lexington** County after officials there learned Cayce would not be able to develop land around the interchange nearing completion at I-77 and 12th Street. **Lexington** officials argued that earlier flood assessments are out of date. Some of them included information gathered before the Lake Murray Dam was built upstream nearly 70 years ago.

FEMA agreed, so now Cayce can count on adding millions of dollars of development to its tax rolls.

But **FEMA**'s new analysis pushed more of the potential flooding burden onto the Richland County side of the Congaree River.

Federal officials say they don't know if the area's levees are up to standard. But Richland County leaders point to a **FEMA** study that says the levees are considered a flood protection system.

"The levees don't protect the land from the 100-year flood - they have never met our levee criteria," said Bel Marguez, senior engineer for the **FEMA** regional office in Atlanta. "It has always been in the floodplain. But as a result of the review, we looked at that area again and determined that the floodway needed to be re-delineated."

A "100-year flood" is the most severe flood that can be expected over 100 years.

A 1994 **FEMA** flood insurance study says a levee built along the east side of the Congaree River between Gills Creek and the city of Columbia is higher than the 100-year flood level .

The 5,300 acres are now in a "floodplain," a designation that says the property is not as prone to flooding as a floodway. Land in a floodplain can be developed with proper preparations, such as using dirt to raise the property level, according to Ken Knudsen, Richland County's planning administrator. If land is designated as being in a floodway, severe restrictions apply, making large-scale development such as shopping centers impossible.

The restrictions are in place to give floodwater a place to go, Knudsen said.

But if the property was filled in for development, "it's like putting an ice cube in a glass," Knudsen said. "Of course it's going to raise the water level."

Should the floodway designation stick, the land could be developed if Richland County relaxes its

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PLTF TRIAL EXH 239

restrictions for building in a floodway.

Richland County's regulations are more stringent than FEMA's. If the county changed those regulations to allow development in a floodway, the cost of flood insurance could increase for all county residents who have it.

'Hopefully they'll reconsider.' The majority of the land affected by the new study - 4,200 acres - is owned by longtime farmer Burwell Manning and is considered prime for retail development. Manning refused to speculate Wednesday about development on his land.

He built the levees nearly 40 years ago. During construction of I-77, the state Transportation Department built levees within its right of way and some outside its right of way with Manning's permission.

Manning drove a visitor Tuesday over miles of the earthen levees that rise 15 to 20 feet above the ground. One levee sits 37 feet above the edge of the Congaree River. Manning pointed out that even with all the heavy rain last year, the river never rose to that levee's base.

Manning isn't the only one who would be affected by the change.

The floodway designation would prevent any substantial improvement to the city of Columbia's sewage treatment plant in the area, and that puts a big dent in the city's plans, City Manager Mike Bierman said.

"We have a $150 million plant we want to expand in the future," he said. "If we're in the floodway, we'd have trouble expanding."

John Dooley, director of utilities, said the city owns 150 acres at the site and operates three 20 million-gallon tanks with room for one more.

Bierman said the evaluation process "does not make sense at all."

"We're concerned at how they arrived at what they did," he said. "The explanation was, 'We discounted the levees there.' FEMA acted as if they did not exist for us."

The East Richland County Public Service District, which serves 55,000 residents, including WildeWood and Spring Valley, would also be affected. East Richland's plant, located on 10 acres on Gills Creek, serves a 38-square-mile area in the northeast.

"We're very much in opposition to it," said engineer Gene Edwards. "Hopefully, they'll reconsider it and the dikes will be re-evaluated."

Edwards noted that East Richland was looking to purchase additional acreage for expansion. But if the plant location were to be designated in a floodway, there could be no expansion.

Heathwood Hall Episcopal School would also be in the proposed floodway. The 780-student school, which moved to the Bluff Road site in 1974, was not even in the current floodplain until 1976, when the levee west of the sewage plant was breached in two places and the area flooded. The city was responsible for that levee's upkeep.

Heathwood Headmaster Bob Shirley doesn't see any red flags for his school's $20 million, 130-acre campus.

"It's all very premature," he said. "I have very little understanding of it because I'm not an engineer. I'm waiting to hear more about it."

PLTF TRIAL EXH 239

Frank Ellerbe, chairman of Heathwood's board, wants a little breathing room.

"We think **FEMA** needs to slow down and give the people who would be affected by **FEMA's** proposed changes time to study them and respond to them," he said.

Amanda Mays can be reached at (803) 771-8385, Jeff Wilkinson at (803) 771-8495.

Illustration:PHOTO: Color; MAP/CHART: Color

1. This aerial view shows part of the 5,300 acres along the Congaree River that are now designated a floodway. The zone covers areas of southern Richland and **Lexington** counties. Pictured here on the Richland side is Heathwood Hall School at bottom left, the Columbia Sewage Treatment Plant at right and I-77. LINDA STELTER/THE STATE 2. CHART/MAP: Proposed floodways. Under recently suggested new flood designations Cayce would have 360 acres taken out of the floodway while Richland would have 5,300 put in. SCOTT FARRAND/THE STATE (map not available in this database.)

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1500 International Drive
P.O. Box 491, Spartanburg, SC 29304
Main (864) 578-2000 FAX (864) 599-6400

FAX LEAD SHEET

006217.90 / Congaree Property	20-Jan-1999
PROJECT NUMBER/ PROJECT NAME	DATE

TO:

Ms. Lisa Holland	803-734-9200
PERSON'S NAME	FAX NUMBER
State Coordinator National Flood Insurance Program	2221 Devine Street, Suite 222, Columbia, SC 29205
COMPANY NAME	LOCATION

FROM:

Wilson Tillotson	864-599-4481
SENDER'S NAME	SENDER'S PHONE NUMBER
3	864-599-6400
TOTAL NUMBER OF PAGES (INCLUDING COVER SHEET)	SENDER'S FAX NUMBER

COMMENTS:

Lisa,

We would like to have a response by 26 January 1999. Thanks

Wilson

Post-it™ Fax Note 7671 | Date 1-11-99 | # of pages ▶ 3
To George Gregory | From Tillotson
Co./Dept. | Co.
Phone # | Phone #
Fax # 843-448-7838 | Fax #

CVMcNair002222

PLTF TRIAL EXH 246

3632

LOCKWOOD GREENE
Consulting·Design·Construction

Lockwood Greene Engineers, Inc.
1500 International Drive
P.O. Box 491, Spartanburg, SC 29304
Main (864) 578-2000 Fax (864) 599-0436

20 January 1999

Ms. Lisa Holland
State Coordinator National Flood Insurance Program
2221 Devine Street
Suite 222
Columbia, SC 29205

Dear Ms. Holland:

Lockwood Greene is representing the property owners of the Manning property adjacent to the Congaree River in lower Richland County. As you are aware, this property is within the area being proposed as floodway by the preliminary (June 5, 1998) Flood Insurance Rate Maps. We have had several meetings with Richland County and the City of Columbia and have been asked to represent them as well in any clarifications of the FEMA regulations particularly 44 CFR 65.10.

The area protected by the levee system currently protects some existing development. Most notable of these are the Heathwood Hall Episcopal School and the City of Columbia Metropolitan Waste Treatment Plant. The owners of the majority of the remaining property are considering additional development on the property. At present, the proposed designation as floodway limits expansion of the existing development and prevents further development within the levee system.

The property owners intend to take the following steps:

1. The property owners intend to upgrade the levee system to meet structural requirements set out in 44 CFR 65.10. Property owners will also have all required documentation prepared as required by 44 CFR 65.10, including operation and maintenance plans.

2. The property owners intend to request Richland County to accept the responsibility for operation and maintenance of the levee system in accordance with 44 CFR 65.10. Upon completion of the required structural modification to the levee system

3. Upon certification of the levee system as a protective structure, the property owners will request, through Richland County, a letter of map revision of the current FIRM considering the levee system. It is our understanding that certification of the levee system will remove the area protected by the system from designation as a flood

prone area or designation as any floodway. It will also remove the requirement for mandatory flood insurance on development.

We would request confirmation of the above plan and of our interpretation of the requirements.

Thank you for your assistance. If you have any additional questions, you may reach me at 864-599-4481.

Sincere regards,

LOCKWOOD GREENE

H. W. Tillotson, Jr.

H. Wilson Tillotson, Jr., P.E.

CC: Mr. Burwell Manning
Mr. Deas Manning
Mr. Cary McSwain

FER:\\sp0002\0062175\19\hwt0001.doc
006217.90 FN:20.09

LOCKWOOD GREENE
Consulting·Design·Construction

received
1-25-99

Lockwood Greene Engineers, Inc.
1500 International Drive
P.O. Box 491, Spartanburg, SC 29304
Main (864) 578-2000 Fax (864) 599-0436

21 January 1999

Mr. George Gregory
Burroughs and Chapin
P. O. Box 2095
Myrtle Beach, SC 29578-2095

Dear George:

Subject: Congaree Property

Attached are estimates for the levee upgrade. Because our survey data is incomplete, we have included a high and low range based on the information in hand and on preliminary design for the dike system. I have also included some additional information using a median number. This median estimate is the low estimate with approximately 20% contingency included.

It is my recommendation that this median number represents our best estimate of cost.

Give me a call when you have had a chance to review this and we will discuss.

Sincere regards,

LOCKWOOD GREENE

Wilson

H. Wilson Tillotson

FER:\\sp0002\006217S\19\hwtlt002.doc
006217.90 FN:20.09

CVMcNair002515

PLTF TRIAL EXH 247

3635

21-Jan-99

Congaree Properties

DRAFT

Levee System Preliminary to Upgrade to FEMA Standards Cost Estimate (1999 Costs)

Item		Levee Section 1	Levee Section 2	Levee Section 3	Total
Levee, incl earthwork,riprap,c&g, grassing		$ 1,907,000	$ 2,324,800	$ 3,843,800	$ 8,075,600
Survey		$ 20,000	$ 20,000	$ 10,000	$ 50,000
Geotechnical investigation		$ 30,000	$ 30,000	$ 40,000	$ 100,000
Wetland survey		$ 20,000	$ 40,000	$ 40,000	$ 100,000
Design Engineering		$ 120,000	$ 120,000	$ 60,000	$ 300,000
Wetland Mitigation		$ 40,000	$ 80,000	$ 80,000	$ 200,000
Pumping Station/Outfalls		$ 275,000	$ 275,000	$ 200,000	$ 750,000
Contingency	25%	$ 603,000	$ 722,450	$ 1,068,450	$ 2,393,900
TOTAL (Estimated)		$ 3,015,000	$ 3,612,250	$ 5,342,250	$ 11,969,500
Total Area		1587 Acres	1580 Acres	1294 Acres	4461 Acres
Are outside levee		0	380	123	503
Area of levee		39	52	64	155
Area of levee borrow area		50	68	82	200
Wetlands-Inside Levees		397	300	293	990
Wetlands-Outside Levees		0	152	49	201
Infrastructure Development	0.15	179	135	132	446
Net Area-Manning property		922	645	600	2167
Area owned by others		522	511		1033
Cost Data		0			
Cost per linear foot of dike		$ 144	$ 127	$ 154	$ 142
Cost per Net Acre		$ 3,270	$ 5,600	$ 8,904	$ 5,524
Length of dike		21000 Ft	28400 Ft	34600 FT	84000 Ft

PLTF TRIAL EXH 247
3636
CVMcNair002516

21-Jan-99 **Congaree Properties** DRAFT

Levee System Preliminary to Upgrade to FEMA Standards Cost Estimate (1999 Costs)

Item	Number		Low Estimated Cost	High Estimated Cost	Estimated Cost Range Low	Estimated Cost Range High
Preliminary Engineering						
Surveying of levee and potential borrow areas	1	allowance	50,000 $ each	50,000 $ each	$ 50,000	$ 50,000
Geotechnical investigation of levee and borrow area (Corps requires borings at 200-2,500 feet)	1	allowance	100,000 $ each	100,000 $ each	$ 100,000	$ 100,000
Wetlands Delination and survey	1	allowance	100,000 $ each	100,000 $ each	$ 100,000	$ 100,000
Design Engineering						
Prepare Plans and Specifications	1	allowance	300,000 $ each	300,000 $ each	$ 300,000	$ 300,000
Wetland Mitigation						
Construction of mitigation area	1	allowance	200,000 $ each	500,000 $ each	$ 200,000	$ 500,000
Levee Repair/Upgrade						
Levee Section 1						
Clear and grub	21,000	lf	3 $/lf	5 $/lf	$ 63,000	$ 105,000
Earthen Fill	21,000	lf	60 $/lf	100 $/lf	$ 1,260,000	$ 2,100,000
Rip Rap	12,500	lf	40 $/lf	60 $/lf	$ 500,000	$ 750,000
Grassing	21,000	lf	4 $/lf	4 $/lf	$ 84,000	$ 84,000
Levee Section 2						
Clear and grub	28,400	lf	3 $/lf	5 $/lf	$ 85,200	$ 142,000
Earthen Fill	28,400	lf	65 $/lf	120 $/lf	$ 1,846,000	$ 3,408,000
Rip Rap	7,000	lf	40 $/lf	60 $/lf	$ 280,000	$ 420,000
Grassing	28,400	lf	4 $/lf	4 $/lf	$ 113,600	$ 113,600
Levee Section 3						
Clear and grub	34,600	lf	3 $/lf	5 $/lf	$ 103,800	$ 173,000
Earthen Fill	34,600	lf	96 $/lf	125 $/lf	$ 3,321,600	$ 4,325,000
Rip Rap	7,000	lf	40 $/lf	60 $/lf	$ 280,000	$ 420,000
Grassing	34,600	lf	4 $/lf	4 $/lf	$ 138,400	$ 138,400
Storm Drain Lift Stations						
Lift station including electrical connection	5	ea	$ 150,000 ea	$ 200,000 ea	$ 750,000	$ 1,000,000
				Estimate Total	Low $ 9,575,600	High $14,229,000

This is a preliminary estimate for the purpose of establishing an order of magnitude cost.

LOCKWOOD GREENE
Consulting · Design · Construction

006217.90
P:\35\doc\Levee estimate-wt

PLTF TRIAL EXH 247
3637
CVMcNair002517

I hereby certify that this is a true and correct copy of the original document.
Certified By: Michelle Onley
Title: Interim Clerk
Date: 7-16-12

RICHLAND COUNTY

ZONING ORDINANCE



Adopted September 7, 1977
By Richland County Council
Amended through January 1999

DEF-00012743.002

the original document.
Certified By: Michelle Gray
Title: Interim Clerk C.O.
Date: 7-16-12

CHAPTER 26: ZONING

Art. 1. Enactment and Jurisdiction, §§ 26-11–26-13
Art. 2. Definitions and Interpretations of Words and Phrases Used in This Ordinance, §§ 26-21, 26-22
Art. 3. Establishment of Districts and Zoning Maps, §§ 26-31–26-34
Art. 4. Application of Regulations, §§ 26-41–26-45
Art. 5. General Regulations, §§ 26-51–26-59
Art. 6. District Regulations, §§ 26-60–26-77
Art. 7. Supplementary District Regulations, §§ 26-78–26-94A
Art. 8. Regulations of Signs, §§ 26-95–26-106
Art. 8A. Sexually Oriented Businesses, §§ 26-201–26-216
Art. 9. Locational Standards for Assisted Housing, §§ 26-301–26-309
Art. 10. Amendments, §§ 26-401–26-407
Art. 11. Administration, Enforcement and Penalties, §§ 26-501–26-510
Art. 12. Board of Adjustment, §§ 26-601–26-604
Art. 13. Legal Status, §§ 26-701–26-704

Editor's note—This chapter contains the city's zoning ordinance, adopted September 7, 1977. The ordinance is set out as enacted and set out in the county's zoning ordinance pamphlet updated through December 30, 1981, with subsequent ordinances having been worked in and indicated in history notes following amended sections. Material inserted in brackets has been added to correct obvious errors or to clarify the meaning where the same was ambiguous. Obviously misspelled words have been corrected without notation.

Cross reference(s)—Department of public works and utilities, § 2-192 et seq.; department of planning management, § 2-216 et seq.; buildings and building regulations, Ch. 6; drainage, erosion and sediment control, Ch. 8; garbage, trash and refuse, Ch. 12; parks and recreation, Ch. 19; planning, Ch. 20; roads, highways and bridges, Ch. 21; land development regulations, Ch. 22.

DEF-00012745.002

ARTICLE 1. ENACTMENT AND JURISDICTION

Sec. 26-11. Authority.

Pursuant to authority conferred by the South Carolina Code of Laws and to guide development in accordance with existing and future needs, to protect, promote, and improve the public health, safety, morals, convenience, order, appearance, prosperity, and general welfare, to lessen congestion in the streets, to secure safety from fire, panic, and other dangers, to provide adequate light and air, to prevent the overcrowding of land, to avoid undue concentration of population, to protect scenic areas, to facilitate the adequate provision of transportation, water, sewerage, schools, parks, and other public requirements; in accordance with a comprehensive plan and with reasonable consideration of the character of each area and its peculiar suitability for particular uses, and with a view to promoting desirable living conditions and the sustained stability of neighborhoods, protecting property against blight and depreciation, securing economy in governmental expenditures, conserving the value of land and buildings, and encouraging the most appropriate use of land, buildings, and structures; county council does ordain and enact into law the following regulations upon the location, height, bulk, number of stories and size of buildings and other structures, the percentage of lot which may be occupied, the sizes of yards, courts, and other open spaces, the density and distribution of population, uses of buildings, structures, and land for trade, industry, residence, recreation, agriculture, forestry, conservation, airports, and approaches thereto, water supply, sanitation, protection against floods, public activities; and furthermore provides for the method of administration and amendment of these regulations, defines the powers and duties of the board of adjustment with respect to these regulations, defines certain terms used herein, and provides penalties for violation of these regulations.

Sec. 26-12. Title.

These regulations shall be known and may be cited as the "Zoning Ordinance for Richland County, South Carolina."

Sec. 26-13. Jurisdiction.

The regulations set forth herein shall apply to all land and improvements thereon in the unincorporated portion of Richland County, South Carolina.

ARTICLE 2. DEFINITIONS AND INTERPRETATIONS OF WORDS AND PHRASES USED IN THIS ORDINANCE

Cross reference(s): Definitions pertaining to sexually oriented businesses, § 26-8A2.

Sec. 26-21. Interpretation of certain words and phrases.

26-21.1 *Words to have customary meanings:* The words and phrases used in this ordinance shall have their customary meanings or as defined in a standard dictionary, except for specific words and phrases as defined below.

26-21.2 *Tense:* The present tense includes the future tense.

26-21.3 *Number:* The singular number includes the plural number and the plural number includes the singular number.

26-21.4 *Person:* The word "person" includes a firm, association, partnership, trust, company, corporation, or any other entity usually defined in legal usage as a person.

26-21.5 *Shall and may:* The word "shall" is mandatory, the word "may" is permissive.

26-21.6 *Used or occupied.* The words "used" and "occupied" include the words "intended, designed or arranged to be used or occupied."

26-21.7 *Lot:* The word "lot" includes the words "plot" and "parcel."

DEF-00012747.002

sited on lot lines to allow more flexibility in site design and to increase the amount of usable open space on the lot.

26-22.64 *Zone:* Same as "District."

(Ord. No. 1131-84, § 1, 3-20-84; Ord. No. 1146-84, § III, 4-17-84; Ord. No. 1282-85, § 5, 4-2-85; Ord. No. 1283-85, § 2, 4-2-85; Ord. No. 1284-85, §§ 1, 2, 4-2-85; Ord. No. 1285-85, § 1, 4-2-85; Ord. No. 1394-85, §§ 1, 2, 11-19-85; Ord. No. 1790-88, § I, 9-20-88; Ord. No. 1866-89, § I, 5-2-89; Ord. No. 1945-89, § I, 12-5-89; Ord. No. 2064-90, § I, 12-27-90; Ord. No. 048-95HR, § I, 9-5-95)

ARTICLE 3. ESTABLISHMENT OF DISTRICTS AND ZONING MAPS

Sec. 26-31. District boundaries established by zoning map.

The boundaries of the zoning districts established by Article 6 of this ordinance are hereby established on a map entitled "Zoning Map of Unincorporated Richland County, South Carolina," which map is declared to be a part of this ordinance.

Sec. 26-32. Maintenance of official copy of zoning map.

At least one official copy of the zoning map shall be maintained in the office of the zoning administrator, upon which shall be recorded, after the passage thereof, every amendment to this ordinance which effects a change in any zoning district boundary. Such official copy of the zoning map shall be available at all times for inspection by the general public.

Sec. 26-33. Zoning maps other than official copy.

The zoning administrator may distribute copies of the zoning map to the general public for reference purposes. However, the official copy of the zoning map maintained in the office of the zoning administrator plus official records of the clerk of court regarding actions of the county council to amend district boundaries shall constitute the only official description of the location of zoning district boundaries, and persons having recourse to this ordinance for any purpose are hereby so notified.

Sec. 26-34. Interpretation of district boundaries.

Where uncertainty exists as to the boundaries of any zoning district, the following general rules of interpretation shall apply. It is the duty of the zoning administrator to interpret the location of zoning district boundaries. An appeal from an interpretation or finding of the zoning administrator may be taken to the zoning board of adjustment as specified in Article 11.

26-34.1 *Where boundaries approximately follow streets, highways or alleys:* District boundaries indicated as approximately following the center lines of streets, highways or alleys shall be construed to follow such center lines.

26-34.2 *Where boundaries approximately follow platted lot lines:* District boundaries indicated as approximately following platted lot lines shall be construed as following such lot lines.

26-34.3 *Where boundaries approximately follow city or county limits:* District boundaries indicated as approximately following city or county limits shall be construed as following such city or county limits.

26-34.4 *Where boundaries follow railroad lines:* District boundaries indicated as following railroad lines shall be construed to be midway between the main tracks.

26-34.5 *Where boundaries follow stream beds or other bodies of water:* District boundaries indicated as following center lines of stream beds or other bodies of water shall be constructed to follow such center lines.

26-34.6 *Where boundaries approximately parallel or are extensions of above features:* District boundaries indicated as approximately parallel to or extensions of features indicated in subsections above shall be so construed and at such distance

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therefrom as indicated on the official copy of the zoning map. Distances not specifically indicated on the official copy of the zoning map shall be determined by the scale of the map.

ARTICLE 4. APPLICATION OF REGULATIONS

Sec. 26-41. Regulations regarded as minimum.

Within each district, the regulations set forth by this ordinance shall apply uniformly to each class or kind of structure or land. In their interpretation and application, the provisions of this ordinance shall be held to be minimum requirements, adopted for the promotion of the public health, safety, morals or general welfare. Whenever the requirements of this ordinance are at variance with the requirements of any other lawfully adopted rules, regulations, or ordinances, the most restrictive, or that imposing the higher standards shall govern.

Sec. 26-42. Zoning affects all land, building and structures.

No building, structure, or land shall hereafter be used or occupied and no building structure or part thereof shall hereafter be erected, constructed, reconstructed, moved or structurally altered unless in conformity with the regulations specified in this ordinance for the district in which it is located.

Sec. 26-43. Zoning affects height of buildings and/or structures, population density, lot coverage, yards and open spaces.

No building or other structure shall hereafter be erected or altered,

a. to exceed the height;

b. to accommodate or house a greater number of families;

c. to occupy a greater percentage of lot area;

d. to leave narrower or smaller rear yards, front yards, side yards, or other open spaces

than herein required, or in any other manner contrary to the provisions of this ordinance.

Cross reference(s)—Additional height restrictions in airport overlay district, § 26-74.

Sec. 26-44. Yard or open space, off-street parking or loading space requirements for one building not to be included as such requirements for any other building.

No part of a yard, or other open space or off-street parking or loading space required about or in connection with any building for the purpose of complying with this ordinance shall be included as a part of a yard, open space, or off-street parking or loading space similarly required of any other building or use.

Sec. 26-45. Reduction of lot area prohibited.

No yard or lot existing at the time of passage of these regulations shall be reduced in dimension or area below the minimum requirements set forth herein. Yards or lots created after the effective date of these regulations shall meet at least the minimum requirements established by these regulations.

ARTICLE 5. GENERAL REGULATIONS

Sec. 26-51. Nonconforming uses.

26-51.1 *Intent.*

Within the districts established by this ordinance, or by amendments which may later be adopted, there exist lots, structures, uses of land and structures, and activities which were lawful before this ordinance was passed or amended, but which would be prohibited or regulated and restricted under the terms of this ordinance or future amendment. It is the intent of this ordinance to permit these nonconformities to continue until they are removed, but not to

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harmless agreement for individual parcels of land not fronting on a public road is recorded with the plat. The creation of contiguous or successive landlocked lots forming a similarity to a subdivision is prohibited and is a violation of the Land Development Regulations.
(Ord. No. 1014-83, § 1, 1-19-83; Ord. No. 1680-87, § 2, 9-1-87)

Sec. 26-59. Reserved.

Editor's note—Section I of Ord. No. 1180-84 added § 5-8 to this article, which the editor has redesignated § 26-59 since Ord. No. 1014-83 had previously enacted § 26-58. Section 26-59, concerning hardship cases of mobile home placement, Code was repealed by § 3, of Ord. No. 1680-87, adopted Sept. 1, 1987.

ARTICLE 6. DISTRICT REGULATIONS

Sec. 26-60. Purpose of dividing the county into districts.

For the purpose of promoting the health, safety, morals and general welfare of Richland County, and for other purposes as enumerated in section 26-11 hereof, Richland County is hereby divided into districts as enumerated in this article within which are regulated and restricted the erection, construction, reconstruction, alteration, repair or use of buildings and other structures, the percentage of lot that may be occupied, the size of yards, courts and other open spaces, the density of population and the location and use of buildings, structures and land for trade, industry, residence or other purposes.

Such regulations have been made with reasonable consideration, among other things, to the character of each district and its peculiar suitability for particular uses and with a view to encouraging the most appropriate use of land throughout the county.

The regulations of this article shall apply uniformly to each class or kind of structure or land located within any of the following district classifications respectively.

RU	Rural District
RR	Rural Residential District
D-1	Development District
RS-1	Single Family Residential
RS-2	Single Family Residential
RS-3	Single Family Residential
MH-1	Mobile Home District
MH-2	Mobile Home District
MH-3	Mobile Home District
RG-1	General Residential District
RG-2	General Residential District
C-1	Office and Institutional District
C-2	Neighborhood Commercial District
C-3	General Commercial District
LIRP	Light Industrial and Research Park District
M-1	Light Industrial District
M-2	Heavy Industrial District
PUD-1R	Residential Planned Unit Development-1 District
PUD-1C	Commercial Planned Unit Development-1 District
PUD-2	Planned Unit Development-2 District
-FW	Floodway Area
-FP	Flood Plain Area
-APZ	Airport Zone
P-1	Parks and Recreation District

Sec. 26-61. RU-Rural District.

26-61.1 *Intent.*

This district is intended to (1) protect and encourage agricultural endeavors and promote the wise use of prime agricultural and forest lands, (2) protect and encourage the integrity of existing rural communities, (3) protect valuable natural and cultural resources, (4) maintain open space and scenic areas contiguous to development area.

26-61.2 *Permitted principal uses and structures.*

(1) All farm type enterprises, either in conjunction with or separate from dwellings.

(2) Public building and utilities.

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26-61.7 *Minimum lot width.*

The minimum lot width of any lot is one hundred twenty (120) feet.

26-61.8 *Maximum height of structures.*

Except as provided in section 26-54, no portion of any building shall exceed forty (40) feet in height. Structures associated with farming operations (i.e. silos, barns, windmills, etc.) are excluded from the height requirements.

26-61.9 *Minimum off-street parking and loading requirements.*

Off-street parking and loading requirements as set forth in Article 7 must be met.

26-61.10 *Signs.*

Signs are permitted in a rural district only in accordance with the provisions of Article 8, "Regulation of Signs."

(Ord. No. 1026-83, § 1, 4-5-83; Ord. No. 1268-85, § 1, 11-20-84; Ord. No. 1735-88, § 1, 4-5-88; Ord. No. 1962-90, §§ I, II, 3-20-90; Ord. No. 2316-93, § I, 6-15-93; Ord. No. 0014-94, § I, 2-15-94; Ord. No. 026-94, § I, 3-15-94; Ord. No. 048-95HR, § I, 9-5-95)

Sec. 26-61.5 Reserved.

Editor's note—Section 1 of Ord. No. 1681-87, adopted Sept. 1, 1987, repealed § 26-61.5, concerning the rural residential zone.

Sec. 26-62. D-1 Development District.

26-62.1 *Intent.*

This district is intended to provide for large tracts of land located primarily on the fringe of urban growth where the predominant character of urban development has not yet been fully established, but where the current characteristics of use are predominantly residential, agricultural, or semideveloped, with scattered related uses. Certain structures and uses required to serve governmental, educational, religious, recreational, and other needs of such areas are permitted outright or are permissible as special exceptions subject to restrictions and requirements intended to assure compatibility of uses within the district and adjacent thereto. It is further recognized that future demand for developable land will generate requests for amendments in zone designations to remove land from the D-1 classification and place it into other more intensely developed classifications as a natural consequence of urban expansion.

26-62.2 *Permitted principal uses and structures.*

(1) Agriculture, horticulture, animal husbandry, forestry, and similar agriculturally related uses.

(2) Single family detached dwellings or modular building units located on individual lots.

(3) Parks, playgrounds, playfields.

(4) Community service structures and uses such as community service centers, libraries, fire stations, civic, cultural or recreational uses.

(5) Churches and other places of worship, including educational buildings related thereto.

(6) Elementary schools and high schools.

(7) Kindergartens and day nurseries.

(8) Cemeteries.

(9) Single family mobile home located on individual lots.

26-62.3 *Permitted accessory uses and structures.*

(1) Dwellings, barns, sheds, maintenance buildings, storage buildings and similar

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be approved by the planning commission only upon findings that such changes will not increase the density of the project, amount of traffic generated, reduce screening or off-street parking requirements, or substantially alter the composition of the project. Any such change to the contrary shall be approved subject to further study by the planning commission and amendatory action by county council.

(Ord. No. 1679-87, § 2, 9-1-87)

Sec. 26-73. --FW and --FP Flood protective areas.

26-73.1 *Flood protective areas established as supplementary.*

The "--FW" and "--FP" designations are not intended to be utilized as district classifications, but as designations which identify areas subject to regulations which are supplementary to the regulations of the district to which such designations are attached, appended or "overlaid." Regulations which apply to areas designated on the zoning map as being within such appended or overlaid designations must be determined by joint reference to the regulations of both the basic district classification and the appended or overlay classification.

26-73.2 *Intent.*

Certain areas within the county are subject to periodic inundation by flood waters which results or may reasonably be foreseen to result in loss of life and property, health and safety hazards, disruption of commerce and governmental services and extraordinary public expenditures for flood protection and relief, all of which adversely affect the public health, safety and general welfare. These hazards are caused or extended in part by the occupancy of flood hazard areas by uses which increase flood damage upon other lands or uses which are vulnerable to floods because they are inadequately elevated or not otherwise protected from flood damages. It is therefore the intent of this section to lessen such hazards and losses by restricting or prohibiting uses which are dangerous to health, safety or property in times of flood or which cause excessive increases in flood heights or velocities; by requiring that uses vulnerable to floods be protected against flood hazards at the time of initial construction; and by controlling filling, grading, mineral extraction, placing of obstructions within flood channels and other activities, uses, or characteristics of uses which may increase flood damage.

26-73.2a *Administration.*

The county council hereby designates the county planning management department as having primary responsibility for administering and enforcing this ordinance and appointment of a county flood coordinator and utilization of the county engineer as required by this ordinance.

26-73.3 *Definition.*

(1) *Flood:* An overflow of lands not normally covered by water. A flood is considered as any temporary rise in stream flow or stage, but not the ponding of surface water, that results in significant adverse effects in the vicinity. Adverse effects may include damages from overflow of land areas, temporary backwater effects in sewer and local drainage channels, creation of unsanitary conditions or other unfavorable situations by deposition of materials in stream channels during flood recessions, rise of ground water coincident with increased stream flow, and other problems.

(2) *Floodplain:* The areas adjoining a river, stream, watercourse, lake, or other body of standing water that have been or may be covered by floodwater. For purposes of this ordinance the floodplain is considered to be that area designated by the notation "--FP" appended to a basic district classification. This district classification is based on the floodplain as shown on the official Flood Boundary Floodway Maps, and Flood Insurance Rate Maps (Dated January 19, 1994), the accompanying Flood Insurance

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Study (Dated January 19, 1994), and any revisions thereto. Other floodplain information available from local, state or federal sources can be used if the official maps do not cover that area.

(3) *Floodway:* The channel of a watercourse and that portion of the adjoining floodplain required to provide for the passage of a 100-year flood with an insignificant increase in flood stage above that of natural conditions. For the purposes of this ordinance the floodway is considered to be that area designated by the notation "-FW" appended to the district classification. The district classification is based upon the floodway as shown on the official Flood Boundary Floodway Maps (Dated January 19, 1994), the accompanying Flood Insurance Study (Dated January 19, 1994), and any revisions thereto. Other floodway information available from local, state or federal sources can be used if the official maps do not designate a floodway.

(4) *Flood frequency:* Frequency of flooding is expressed either in forms of "recurrence interval" or "probability." A 100-year flood is a flood that would be equaled or exceeded on an average of once in 100 years. This implies no regularity in time of occurrence. Another way of expressing the frequency would be in terms of percent of probability. A 100-year flood would have a one (1) percent chance of occurrence in any given year.

(5) *Regulatory flood:* A flood which is representative of large floods known to have occurred generally in the area or reasonably characteristic of floods which may be expected to occur, having a specified flood frequency, and which may reasonably be expected to cause damage or hazard of damage sufficient to justify protection therefrom.

(6) *Regulatory flood protection elevation:* The elevation of the regulatory flood at any point, which may vary from place to place depending on topography, anticipated hydraulic conveyance capacity, encroachments into areas subject to flood, and other factors.

(7) *Substantial improvement:* Any combination of repairs, reconstruction, alteration, or improvements to a structure, taking place during the life of a structure, in which the cumulative cost equals or exceeds fifty (50) percent of the market value of the structure. The market value of the structure should be (1) the appraised value of the structure prior to the start of the initial repair or improvement, or (2) in the case of damage, the value of the structure prior to the damage occurring. For the purposes of this definition, "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. The term does not, however, include any project for improvement of a structure required to comply with existing health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions.

(8) *Existing manufactured home park or subdivision:* A manufactured home for which the construction of facilities for servicing the lot on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, either final site grading or the pouring of concrete pads, and the construction of streets) are completed before the effective date of floodplain management regulations adopted by the county.

(9) *Expansion to an existing manufactured home parks or subdivision:* The preparation of additional sites by the construction of facilities for servicing the lots on which the

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manufactured homes are to be affixed (including the installation of utilities, either final site grading or pouring of concrete pads or the construction of streets).

26-73.4 *Regulation of floodway areas.*

(1) *Designation:*

Areas classified as "Floodway" areas are designated by the notation "–FW" appended to a district classification on the zoning map.

(2) *Filling:*

Filling of floodway areas, dumping of salvaged or scrap material, or the placing of material or obstruction within a floodway area in such a manner as to impede free flow of water during a time of flood or in such a manner that the elevation of flood waters will be increased is prohibited.

(3) *Permitted uses:*

The following uses shall be permitted in areas designated –FW, but only if such uses are permitted within the basic district to which such a designation is appended, and excluding buildings in connection with such uses:

a. Agricultural and horticultural uses, and plant nurseries.

b. Parking and loading areas.

c. Open-air uses generally accessory to residential uses such as lawns, gardens, play areas, and parking areas.

d. Recreational uses which are primarily open-air uses and which do not offer a substantial impediment to water flow, such as swimming areas, fishing areas, beaches, boat launching ramps, lifeguard stations, parks, playgrounds, playfields, picnic grounds, wildlife or nature preserves, hiking trails, horseback riding trails, golf courses, driving ranges, archery ranges, and tennis courts.

e. Airport runways and landing strips.

f. Streets, bridges, overhead utility lines, storm drainage facilities, sewerage lines, waste treatment plant outlets, and water supply intake structures.

(4) *Permissible special exceptions:*

After public notice and hearing, and subject to appropriate conditions and safeguards, the board of adjustment may permit certain special exceptions as enumerated below. However, prior to granting such special exceptions, application for such special exceptions shall be reviewed by the county engineer as set forth in section 26-73.6 and he shall make appropriate recommendations to the board of adjustment. It is further provided that the following uses shall be permitted as special exceptions only if such uses are permitted outright or as special exceptions in the basic district to which the –FW designation is appended, and that buildings in connection with such uses shall be prohibited:

a. Circuses, carnivals, and other similar transient amusement enterprises.

b. Parking areas for drive-in theaters.

c. New and used car sales lots.

d. Strip mining, extraction of sand, clay, gravel, minerals, ores, and the like.

e. Marinas, boat rentals.

f. Railroads.

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g. Utilities transmission lines not permitted under "Permitted Uses" above.

h. Docks, piers, wharves, bulkheads, and similar structures not connected with or in addition to uses permitted under "Permitted Uses" above.

i. Eating, drinking, amusement, and recreational uses located in floating structures.

(5) *Other dimensional and uses regulations:*

a. Permitted accessory structures, prohibited uses and structures, minimum lot area, minimum lot width, minimum yard requirements, maximum lot coverage, maximum height of structures, minimum off-street parking and loading, and regulation of signs shall be as provided for the basic district to which the –FW designation is appended, unless a greater requirement is placed upon such dimensions and characteristics of use by this section.

b. The construction of any portion of a new mobile home park, the expansion of an existing mobile home park, or the placement of an individual mobile home not in an existing mobile home park is prohibited in a designated –FW district.

26-73.5 Regulation of flood plain areas.

(1) *Designation:*

Areas classified "flood plain" areas are designated by the notation "–FP" appended to a district classification on the zoning map.

(2) *Filling, Elevation on Pilings, or Floodproofing Required:* All new

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construction and substantial improvement of residential and nonresidential structures hereafter erected within areas designated as flood plain areas shall be protected from flood hazards as follows:

a. Filling: Acceptable protection may be accomplished by filling of building sites to an elevation of not less than two (2) feet above the regulatory flood level as established by the county engineer, with such elevation extending not less than twenty-five (25) feet outward from the base of the structure. This method of protection as described herein is referred to below as "filling" or "on fill" and such terms include the specifications given above.

b. Elevation on Pilings: Acceptable protection may be accomplished by erecting structures on pilings or other structural members such that the floor level of the structure is not less than two (2) feet above the regulatory flood protection elevation as established by the county engineer, and such that service facilities such as electrical, heating, and cooling equipment is not less than two (2) feet above the regulatory flood level as established by the county engineer.

c. Floodproofing: Acceptable protection may be accomplished by floodproofing all new construction and substantial improvements of nonresidential structures provided they are approved by the county flood coordinator and meet the requirements set forth in section 26-73.6(7) and (8) below.

(3) *Review by County Flood Coordinator:*

All applications for zoning permits for uses permitted within –FP areas shall be reviewed by the county flood coordinator in accordance with section 26-73.6 below

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before the zoning administrator may issue zoning permits or before the board of adjustment may grant a special exception. The findings and recommendations of the county flood coordinator shall be binding upon the zoning administrator unless overruled by the board of adjustment.

(4) *Permitted Uses:*

a. Any use permitted outright or permitted as an accessory use in the basic district to which the –FP designation is appended, provided that such uses are located on fill or are elevated on pilings.

b. Reserved.

c. Agricultural and horticultural uses, and plant nurseries, subject to the following conditions:

(1) Pens or structures for farm animals shall not be located closer than 300 feet to any property line.

(2) Temporary or permanent stands for the sale of farm products are prohibited unless otherwise permitted in the zoning district.

(5) *Permissible Special Exceptions:*

a. After public notice and hearing, and subject to appropriate conditions and safeguards, the board of adjustment may permit certain special exceptions as enumerated in section 26-73.4(4) a. through i. However, prior to granting such special exceptions, applications for such special exceptions shall be reviewed by the county engineer as set forth in section 26-73.6 and he shall make appropriate recommendations to the board of adjustment.

b. Any use which is permitted outright or permitted as an accessory use in the basic district to which –FP designation is appended, such uses are not located on fill and area not elevated on pilings, but provided that such uses shall be floodproofed or protected by other adequate flood prevention mechanism such as levees.

(6) *Manufactured Home Park or Subdivision:*

All manufactured homes to be placed or substantially improved on sites in a existing manufactured home park or subdivision within the floodplain shall be elevated so that:

1. The lowest floor of the manufactured home is at or above the base flood elevation; and,

2. All manufactured homes shall be anchored to resist flotation, collapse and lateral movement by providing over-the top and frame ties to ground anchors. Specific requirements shall be that:

a. Over-the-top ties be provided at each of the four (4) corners of the manufactured home, with two (2) additional ties per side at intermediate locations except that manufactured homes less than fifty (50) feet in length shall only require one (1) additional tie per side;

b. Frame ties provided at each corner of the manufactured home with five (5) additional ties per side at intermediate points except that manufactured homes less that fifty (50) feet in length shall only require four (4) additional ties per side;

c. All components of the

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anchoring system shall be capable of carrying a force of four thousand eight hundred (4,800) pounds.

3. Adequate surface drainage and access for a hauler shall be provided.

4. In the instance of elevation on pilings for lots that are large enough to permit steps, piling foundations shall be placed in stable soil no more than ten (10) feet apart and reinforcement shall be provided for pilings more than six (6) feet above the ground elevation.

26-73.6 *Review by county engineer.*

(1) *Review Required:*

As provided above, the following require review by the county engineer and certification by the county engineer of findings to either the county flood coordinator or the board of adjustment as appropriate:

a. Filling in –FW areas in connection with permissible uses or as a use in itself.

b. All special exceptions within –FW areas.

c. All uses permissible in –FP areas.

d. All special exceptions in –FP areas.

(2) *General Considerations of Review:*

When reviewing applications for filling permits, zoning permits, and special exceptions, the county engineer should take into account the following considerations, and review the following factors:

a. No structure, storage of materials or equipment, filling, diking or leveeing or other use should be approved which, acting alone or in combination with existing or future uses will significantly increase the hazard of flood damage to other land or property.

b. The danger to life and property due to increased flood heights or velocities, or erosion damage, should be considered.

c. The danger that materials may be swept onto other lands causing injury to others should be considered.

d. New and replaced water supply and sanitary systems and on-site systems shall be designed as follows:

1. Water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.

2. Sanitary sewer system shall be designed to minimize or eliminate infiltration of flood waters into the system and discharges from the systems into flood waters.

3. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

e. The relationship of the proposed use to the flood plain management program for the area should be considered.

f. The safety of access to the property in times of flood for ordinary and emergency vehicles should be considered.

g. The expected heights, velocity, duration, rate of rise and sediment transport of the flood waters expected at the site should be considered.

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h. That all necessary permits have been obtained from governmental agencies from which approval is required by federal and state law.

i. In the absence of base flood elevation (BFE) data, the lowest floor, including basement, must be elevated no less than three (3) feet above the highest adjacent grade at the building corners. The structure must be set back from the top of the stream bank, a distance of twenty-five (25) feet or the width of the stream whichever is greater.

j. Assure that the flood carrying capacity within any altered or relocated water course is maintained. The county engineer shall notify adjacent communities and the State Flood Management Coordinating Office prior to any alteration or relocation of the water course. Copies of such notification shall be sent to the Federal Emergency Management Agency.

(3) *Filling, Grading, Excavating, or Dredging:*

When reviewing applications for actions including filling, grading, excavating or dredging, the following considerations should be reviewed:

a. The proposed activity should be permitted only if it will not seriously disturb or interfere with natural drainage, and will not significantly increase the elevation of flood waters.

b. The county engineer may require information for review relating to topographic, engineering, geologic, or hydrologic features to determine the natured strength and distribution of existing and proposed soils, and the adequacy of design criteria.

c. The county engineer may recommend or attach conditions to the approval of applications pertaining to final slope and grade, period of ground cover removal, bulkheading, construction of retaining walls, rip-rapping, landscaping, drainage facilities, reconstruction of natural storm drainage features, and other matters.

d. Fill used for building sites should consist of sand, gravel, or other sand foundation materials which will retain its structural bearing capacity under saturated conditions. Silts, very fine sands, clays, peat and other high organic soils subject to compaction or erosion should not be used. Where mud, peat or silt is not removed before placement of fill, additional fill should be required to protect against settlement. Where water erosion is likely to occur, fill should be protected by bulkheads, riprap, planting of vegetation, or other protective measures.

(4) *Flood Control Works:*

When reviewing applications for actions relating to the construction of flood control or erosion control structures, the county engineer should consider the following factors, among others:

a. All works should be designed to provide a degree of protection consistent with the intended use of the property.

b. The Soil Conservation Service Field Engineering Manual: Soil Conservation Practice, 1969 Edition (with current changes) shall be used as the basic guide for design criteria (a reference copy may be reviewed at the county public works department, for securing additional copies, contact the National

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c. Design criteria to be considered shall include but not be limited to:

1. Construction height

2. Character of embankment and foundation material

3. Cross section geometry

4. Location of ditches and borrow pits

5. Drainage—Both of the flood control work and the protected area

6. Antiseep protection for pipes and conduits

7. Erosion and scour control.

d. "Erosion and Sediment Control: Planning Guidelines and Design Aids," July 4, 1974 (USDA-SCS South Carolina) shall be used as basic guides for the preparation of plans and specifications for flood control works. (Copies of this information is available at the county public works department).

e. Specifications and plans shall adequately set forth all operation and maintenance procedures, and shall contain a signed agreement of perpetual operation and maintenance between the constructor and the governmental entity having jurisdiction over the protected area.

f. Adjacent upstream and downstream communities and property owners shall be notified before any work is permitted.

(5) *Buildings:*

When reviewing applications for actions relating to the new construction of and substantial improvements to buildings, the county engineer should consider the following factors, among others:

a. Buildings should be designed with low flood damage potential.

b. Buildings should be constructed and placed on the building site so as to offer minimum resistance to the flow of flood waters.

c. Structures should be firmly anchored to prevent flotation which may result in damage to other structures.

d. Elevated buildings: New construction or substantial improvements of elevated buildings that include fully enclosed areas formed by foundation and other exterior walls below the base flood elevation shall be designed to preclude finished living space and designed to allow for the entry and exit of floodwaters to automatically equalize hydrostatic flood forces on exterior walls.

1. Designs for complying with this requirement must either be certified by a professional engineer or architect or meet the following minimum criteria:

(a) Provide a minimum of two (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding;

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(b) The bottom of all openings shall be no higher than one (1) foot above grade; and,

(c) Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwaters in both directions.

2. Electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities must be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

3. Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment used in connection with the premises (standard exterior door) or entry to the living area (stairway or elevator).

4. The interior portion of such enclosed area shall not be partitioned or finished into separate rooms.

(6) *Storage of Materials and Equipment:*

When reviewing applications for action relating to the storage of materials or equipment, the county engineer should consider the following factors, among others:

a. The storage or processing of materials that in time of flooding are flammable, explosive, or similarly hazardous or injurious should be prohibited.

b. Other materials or equipment stored in areas subject to flooding should not be subject to major damage by flooding, and should be firmly anchored to prevent flotation or readily movable from the area within the time normally available after flood.

(7) *Application of Flood-Proofing Measures:*

When reviewing applications for actions relating to the flood-proofing of structures, the county engineer should consider the following factors, among others:

a. Structural flood-proofing is not allowed for residential structures.

b. Structural flood-proofing of nonresidential structures should be considered as acceptable flood protection only when it appears that construction of buildings on fill or elevation of buildings on pilings is impractical.

(8) *Enumeration of Flood-Proofing Measures:*

The following measures are considered as appropriate to flood-proofing and these and other measures should be considered by the county engineer when reviewing applications for actions related to floodproofing. These measures should be designed to be consistent with the regulatory flood protection elevation for the particular area, flood velocities, durations, rate of rise, hydrostatic and hydrodynamic forces and other factors associated with the regulatory flood:

a. Anchorage to resist flotation and lateral movement.

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b. Installation of watertight doors, bulkheads, and shutters, or similar methods of construction to protect against water damage so that the structure is watertight with walls designed to be substantially impermeable to the passage of water.

c. Reinforcement of walls to resist water pressures.

d. Use of paints, membranes, or mortars to reduce seepage of water through walls.

e. Addition of mass or weight to structures to resist flotation.

f. Installation of pumps to lower water levels in structures.

g. Construction of water supply and waste treatment systems so as to prevent the entrance of flood waters.

h. Pumping facilities or comparable practices for subsurface drainage systems for buildings to relieve external foundation wall and basement flood pressures.

i. Construction to resist rupture or collapse caused by water pressure on floating debris.

j. Installation of valves of controls on sanitary and storm drains which will permit the drains to be closed to prevent back-up of sewage and storm waters into the buildings or structures. Gravity drainage of basements may be eliminated by mechanical devices.

k. Location of all electrical equipment, circuits and installed electrical appliances in a manner which will assure they are not subject to flooding and to provide protection from inundation by the regulatory flood.

l. Location of any structural storage facilities for chemicals, explosives, buoyant materials, flammable liquids or other toxic materials which could be hazardous to public health, safety, and welfare in a manner which will assure that the facilities are situated at elevations above the height associated with the regulatory protection elevation or are adequately flood-proofed to prevent flotation to storage containers, or damage to storage containers which could result in the escape of toxic materials into flood waters.

m. A registered professional engineer or architect shall certify that floodproofing methods are adequately designed and constructed to withstand the flood depths, pressures, velocities, impact and uplift forces and factors associated by the regulatory base flood. A record of such certification indicating the specific elevation shall be maintained by the county engineer.

(9) *Report of the county engineer to the zoning administrator or board of adjustment:*

a. Upon completion of review of applications for zoning permits or special exceptions, the county engineer shall certify his findings to the zoning administrator or board of adjustment as appropriate, and such certification shall be made within thirty (30) days of receipt of all required review materials. The findings of the county engineer shall be binding upon the zoning administrator unless overruled by the board of adjustment.

b. The determination of the applicable flood insurance premiums shall abe provided by the homeowner furnishing a NFIP elevation certificate to the building inspection division. The NFIP elevation certificate must reflect that all new construction including manufactured home placements and

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substantial improvements of existing structures have been elevated so that the lowest floor of the lowest enclosed area is compliant with the elevation requirement of the building permit issued for the structure as well as the provisions of this ordinance. Where flood proofing a commercial structure has occurred, a flood proofing certificate must be submitted indicating the level of flood protection accomplished relative to mean sea level. These certificates shall be made a permanent part of the building permit file. The chief building official shall verify that the structure is compliant with the elevation requirements of the building permit and this ordinance by reviewing and approving the elevation certificate. Any structure found not to be compliant with the elevation requirement must be made compliant prior to final inspection approval of the issuance of a certificate of occupancy.

(Ord. No. 898-82, §§ VIII—XXI, 2-3-82; Ord. No. 919-82, § I, 5-19-82; Ord. No. 1592-87, §§ 2—4, 3-17-87; Ord. No. 1790-88, §§ II—IV, 9-20-88; Ord. No. 1810-88, § I, 11-1-88; Ord. No. 2263-92, § I, 10-20-92; Ord. No. 087-94HR, § I, 4-14-94)

Sec. 26-74. AP airport height restrictive areas.

26-74.1 *Airport height restrictive areas established as supplementary.*

The "-AP" designation is not intended to be utilized as a district classification, but as a designation which identifies areas subject to regulations which are supplementary to the regulations of the district to which such designation is attached, appended, or "overlaid." Regulations which apply to areas designated on the zoning map as being within such appended or overlaid designation must be determined by joint reference to the regulations of both the basic district classification and the appended or overlay classification.

26-74.2 *Overlaid districts established by maps.*

The boundaries of the airport height restrictive areas established in this section are hereby established on maps entitled "Columbia Owens Downtown Airport Height Restrictive Areas" and "McEntire Air National Guard Base Height Restrictive Areas," which maps are declared to be a part of this section and shall be maintained in the office of the zoning administrator.

26-74.3 *Intent.*

It is the intent of this ordinance to restrain influences which are adverse to the property and safe conduct of aircraft operations in the vicinity of Columbia Owens Downtown Airport and McEntire Air National Guard Base, to prevent creation of conditions hazardous to aircraft operation, to prevent conflict with land development which may result in loss of life and property, and to encourage development which is compatible with airport use characteristics within the intent and purpose of zoning. To this end, the "-AP" designation, when appended to a basic district classification, is intended to coordinate the purpose and intent of this ordinance with other regulations duly established by the county whose primary intent is to further the purposes set out above.

26-74.4 *Definitions*

1. *Airport:* Columbia Owens Downtown Airport and McEntire Air National Guard Base.

2. *Airport Elevation:* The highest point of an airport's usable landing area measured in feet above mean sea level.

   a. *Columbia Owens Downtown Airport:* The airport elevation is 194.0 feet.

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amendment affecting the same parcel of property more than once every twelve months from the date of final determination of the prior request unless the planning commission has found that either (a) there has been a substantial change in the character of the area or (b) evidence or factors or conditions exist which were not considered by the planning commission of the county council in previous deliberations which might substantially alter the basis upon which the previous determination was reached.

Sec. 26-407. Minimum area for new districts.

No request from any individual, corporation or agency other than the county council, the planning commission, the zoning administrator, or any department or agency of the county, for a change in zoning classification or creation of a separate district shall be considered which involves an area of less than two (2) acres, except that the following changes may be made to apply to areas of less than two (2) acres:

a. The extension of existing district boundaries;

b. The addition of C-1 zoning contiguous to existing commercial or industrial zones; or

c. The addition of C-2 zoning contiguous to existing commercial or industrial zones other than a C-1 zone.

d. The addition of RG-1 zoning contiguous to existing high density (RG-2) residential zones.

e. The addition of C-3 zoning contiguous to existing industrial zones.

f. Contiguous to compatible zoning in another county or jurisdiction or compatible with permitted uses within unzoned areas of another county or jurisdiction so long as the total land area covered by the zoning or uses is a minimum of two (2) acres.

(Ord. No. 1190-84, § I, 9-4-84; Ord. No. 1458-86, § 2, 5-6-86; Ord. No. 1610-87, § 1, 5-5-87)

ARTICLE 11. ADMINISTRATION, ENFORCEMENT AND PENALTIES

Sec. 26-501. Responsibility for administration.

A zoning administrator designated by the county administrator shall administer and enforce this ordinance. The zoning administrator may be provided with the assistance of such other persons as the county administrator may direct. It is the intent of this ordinance that all questions of administration and enforcement shall first be presented to the zoning administrator and that such questions shall be presented to the board of adjustment only upon reference by, or appeal from, the zoning administrator, and that recourse from the decisions of the board of adjustment shall be to the courts as provided by law.

It is further the intent of this ordinance that the function of the county council under this ordinance shall not include hearing and deciding questions of interpretation and enforcement which may arise, but that the county council shall have only the responsibility for acting on proposals for amendment or repeal of this ordinance, and for establishing a schedule of fees and charges as herein provided.

Sec. 26-502. Duties of the zoning administrator.

The duties of the zoning administrator shall include:

a. Interpretation of the terms and provisions of this ordinance;

b. Administration of the provisions of this ordinance relating to zoning permits and certificates of zoning compliance;

c. Administration of the provisions of this ordinance relating to applications for special exceptions, variances, appeals from an administrative decision and other actions before the zoning board of adjustment;

d. Administration of the provisions of this

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ordinance relating to applications for zoning amendments, the presentation of same to the planning commission and county council, and giving notice of hearings on such amendment requests as specified herein;

e. The receipt of complaints from persons who allege that violations of this ordinance have occurred, to properly investigate or cause to be investigated such complaints, and to initiate or cause to be initiated action to prevent, enjoin, abate, or remove such violations;

f. The maintenance of the official copy of the zoning map and other such records and official materials as may relate to the adoption, amendment, enforcement or administration of this ordinance;

g. Other such duties as may properly relate to the accomplishment of the spirit and intent of this ordinance.

Sec. 26-503. Zoning permits.

26-503.1 *Zoning permits required.* No building or other structure shall be erected, moved, added to or structurally altered without a zoning permit therefore issued by the zoning administrator. A zoning permit shall not be issued by the zoning administrator except in conformity with the provisions of this ordinance, unless he receives a written order from the board of adjustment in the form of an interpretation involving error or a special exception or variance as provided in section 11. If the permit is denied, reasons shall be stated for the denial.

26-503.2 *Applications for zoning permits.* All applications for zoning permits shall be accompanied by plans drawn to scale, showing the actual dimensions and shape of the lot to be built upon; the exact sizes and locations on the lot of all buildings already existing, if any; and the location and dimensions of the proposed building or alteration. The application or plans shall include such other information as lawfully may be required by the zoning administrator, including existing or proposed uses of the building and land; the number of families, housekeeping units, or rental units the building is designed to accommodate; conditions existing on the lot and on nearby lots; and such other matters as may be necessary to determine conformance with and provide for the enforcement of this ordinance. One (1) copy of the plans shall be returned to the applicant by the administrative official, after he shall have marked such copy either as approved or disapproved and attested to same by his signature on such copy.

26-503.3 *Zoning permits to be posted.* The zoning permit shall be posted in a conspicuous place upon the premises to which the permit applies within five (5) days of the date of issuance of the permit, and shall remain posted until completion of the action for which the permit was issued.

26-503.4 *Expiration of zoning permit.* If the work described in any zoning permit has not begun within six (6) months from the date of issuance thereof, or in the case of a special exception, within the time limit established therefore, the permit shall expire and be cancelled by the zoning administrator. Written notice thereof shall be given to the persons affected. If the work described in any zoning permit has not been substantially completed within one year of the date of issuance thereof, said permit shall expire and be cancelled by the zoning administrator, except as follows:

a. In the case of a special exception, work shall be substantially completed within the time limit established therefore by the zoning board of adjustment, or

b. In the case of work which may reasonably be expected to require more than one (1) year for completion, the zoning administrator may specify a time limit in excess of one (1) year at the time of original issuance of the zoning permit.

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Written notice of the expiration of any zoning permit shall be given to the persons affected, including notice that further work as described in the cancelled permit shall not proceed unless and until a special zoning permit has been obtained.

Sec. 26-504. Certificates of zoning compliance.

26-504.1 *Certificates of zoning compliance to be issued.* It shall be unlawful to use or occupy or permit the use or occupancy of any building or premises, or both, or part thereof, hereafter created, erected, changed, converted, or wholly or partially altered or enlarged in its use or structure until a certificate of zoning compliance shall have been issued therefore by the zoning administrator stating that the building or proposed use of the building or land conforms to the requirements of this ordinance.

26-504.2 *Certificates may be issued for nonconforming uses.* Upon enactment or amendment of this ordinance, owners or occupants of uses made nonconforming may apply for certificates of zoning compliance for the purpose of establishment of vested interest in such nonconforming uses, and the zoning administrator may issue such certificates upon acceptance of reasonable proof that the nonconformity was in existence at the time of such enactment or amendment, and certificates of zoning compliance issued upon such applications shall state specifically wherein the nonconforming use differs from the requirements of this ordinance.

26-504.3 *Temporary certificates of zoning compliance.* A temporary certificate of zoning compliance may be issued by the zoning administrator for a period not exceeding six (6) months during alterations or partial occupancy of a building pending completion, provided that such temporary certificates may include such conditions and safeguards as will protect the safety of occupants and the public.

Sec. 26-505. Construction and use to be as approved.

Zoning permits or certificates of zoning compliance issued on the basis of plans and applications approved by the zoning administrator and other officials or agencies where additional approval is required authorize only the use, arrangement, and location set forth in such approved plans and applications, and no other use, arrangement, location or construction. Use, arrangement, location or construction at variance with that authorized shall be deemed violations of this ordinance, punishable as provided herein.

Sec. 26-506. Schedule of fees and charges.

26-506.1 When an amendment to the ordinance is requested by an individual or parties other than the county council, planning commission, or board of adjustments and appeals a fee as indicated below shall be paid by the applicant or his representative for each application at the time application is filed to cover administrative and advertising expenses.

a. For all requests for zoning amendments, except when requesting a planned unit development (PUD), a fee of $20 will be paid for the first lot of record of 2 acres or less, and $5.00 for each additional lot or acre, whichever is greater, not to exceed $50.00.

b. Fees for requesting PUD districts will be $100 or actual cost of the public notice and posting of the property, whichever is greater.

c. No fee shall be charged for requested text amendments.

d. No fees whatsoever will be charged by the county for any requested change prior to February 1, 1980.

26-506.2 When a special exception (administrative) review or variance is requested, a fee as

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indicated below shall be paid by the applicant or his representative for each application at the time application is filed to cover administrative and advertising expenses:

a. A fee of $10.00 shall be paid to the zoning administrator for each application for special exception (administrative) review or variance.

b. When a transcript of a public hearing held by the board of adjustment and appeals or county council is requested, the actual cost of producing said transcript shall be charged.

c. No fees whatsoever will be charged by the county for any request change prior to February 1, 1980.

Sec. 26-507. Violation.

If the zoning administrator shall find that any of the provisions of this ordinance are being violated, he shall in writing notify the owner or tenant of the property, indicating the nature of the violations and ordering the action necessary to correct it. He shall order discontinuance of illegal use of land, buildings or structures; removal of illegal buildings or structures or of additions, alterations, or structural change thereto; discontinuance of any illegal work being done; or shall take any other action authorized by this ordinance to insure compliance with, or to prevent violation of, its provisions.

Sec. 26-508. Complaints regarding violations.

Wherever a violation of this ordinance occurs, or is alleged to have occurred, any person may file a written complaint. Such complaint shall state fully the causes and basis thereof, and shall be filed with the zoning administrator. He shall record the complaint properly, investigate promptly, and take action thereon as provided by this ordinance.

Sec. 26-509. Remedies.

In case any building or structure is erected, constructed, reconstructed, altered, maintained or used in violation of this ordinance, the county council, county attorney, zoning administrator, or any person aggrieved may, in addition to other remedies provided by law, institute injunction, abatement, or any other appropriate action or proceeding to prevent, enjoin, abate or remove such unlawful erection, construction, reconstruction, alteration, maintenance or use.

Sec. 26-510. Penalties.

In case any building or structure is erected, constructed, reconstructed, altered, repaired, converted or maintained; or any structure or land is used in violation of this ordinance; or there is violation of any condition or requirement in connection with special exceptions, variances, or rezonings under the terms of this ordinance, such violation shall constitute a misdemeanor. Violation of this ordinance or failure to comply with any of the requirements hereof shall be a misdemeanor. Each day such violation continues after due notice to discontinue such violation shall be considered a separate offense. The owner or tenant of any building, structure, premises, or part thereof, and any architect, surveyor, builder, engineer, contractor, agent, or other person who commits, participates in, assists in, or maintains such violation may each be found guilty of a separate offense and suffer the penalties herein provided. Nothing herein contained shall prevent the county from taking such other lawful action as is necessary to prevent or remedy any violation.

ARTICLE 12. BOARD OF ADJUSTMENT

26-601. Procedures of the board of adjustment.

26-601.1. *Establishment and membership.* A board of adjustment is hereby established which shall consist of five (5) members appointed by county council. The term of office of the members of the board shall be for three (3) years, until their respective successors are appointed and qualified. Members may be removed for cause by county council upon written charges and after a public

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hearing. Vacancies shall be filled for the unexpired term of any member whose term becomes vacant. The board shall elect one (1) of its members chairman for a one-year term.

26-601.2 *Proceedings.* The board shall adopt rules necessary to the conduct of its affairs in accordance with the provisions of this ordinance. Meetings of the board shall be held at the call of the chairman and at such other times as the board may determine. The chairman, or in his absence, the acting chairman, may administer oaths and compel the attendance of witnesses. All meetings shall be open to the public.

The board shall keep minutes of its proceedings, showing the vote of each member upon each question or, if absent or failing to vote, indicating such fact, and shall keep records of its examinations and other official actions, all of which shall be immediately filed in the office of the zoning administrator and shall be a public record.

26-601.3 *Appeals and notices.* Appeals to the board of adjustment may be taken by any person aggrieved or by an officer, department, board or bureau of the county affected by any decision of the zoning administrator. Such an appeal shall be taken within thirty (30) days by filing with the zoning administrator from whom the appeal is taken and with the board of adjustment a notice of appeal specifying the grounds thereof. The zoning administrator shall forthwith transmit to the board all the papers constituting the record upon which the action appealed from was taken. The board of adjustment shall fix a reasonable time for hearing the appeal, give public notice thereof as well as due notice to the parties in interest, and decide the same within a reasonable time. At the hearing, any party may appear in person or by agent or attorney.

26-601.4 *Stay of proceedings.* An appeal stays all proceedings in furtherance of the action appealed from, unless the zoning administrator from whom the appeal is taken certifies to the board of adjustment, after notice of appeal is filed with him, that by reason of facts stated in the certificate, a stay would, in his opinion, cause imminent peril to life of [or] property. In such case, proceedings shall not be stayed otherwise than by a restraining order which may be granted by the board of adjustment or by a court of record on application, on notice to the zoning administrator from whom the appeal is taken and on due cause shown.

(Ord. No. 1707-88, § 1, 1-5-88)

Sec. 26-602. Powers and duties of the board of adjustment.

The board of adjustment shall have the following powers and duties:

26-602.1 *Administrative review.* The board of adjustment shall hear and decide appeals when it is alleged that there is error in any order, requirement, decision or determination made by the zoning administrator in the enforcement of this ordinance, provided that such appeals must be taken within thirty (30) days after the order, requirement, decision, determination which is alleged to be in error is made.

26-602.2 *Special exceptions.*

a. Duties of the board:

(1) To hear and decide only such applications for special exceptions as the board of adjustment is specifically authorized to pass upon by the terms of this ordinance;

(2) To decide such questions as are involved in determining whether special exceptions should be granted;

(3) To prescribe appropriate conditions and safeguards in conformity with this ordinance; or

(4) To deny special exceptions when not in harmony with the intent and purpose of this ordinance.

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b. Procedures in consideration of special exception applications:

(1) A written application for a special exception shall be submitted indicating the section of this ordinance under which the special exception is sought and stating the grounds on which it is requested;

(2) Notice of public hearing shall be posted on the property for which special exception is sought and shall be published at least fifteen (15) days prior to the public hearing in a newspaper of general circulation in the county;

(3) The public hearing shall be held. Any party may appear in person, or by agent or attorney;

(4) The board of adjustment shall make a finding that it is empowered under the section of this ordinance described in the application to grant the special exception, and that the granting of the special exception will not adversely affect the public interest;

(5) The regulations of this ordinance setting forth specific standards to be met prior to the establishment of any special exception shall be binding upon the board of adjustment and no variance to such requirements shall be granted;

(6) Reserved;

(7) The board of adjustment may prescribe a time limit within which the action for which the special exception is required shall be begun or completed, or both.

c. Criteria for special exceptions: In addition to definitive standards in this ordinance, the board of adjustment shall consider the following:

(1) Traffic impact;

(2) Vehicle and pedestrian safety;

(3) Potential impact of noise, lights, fumes or obstruction of air flow on adjoining property;

(4) Adverse impact of the proposed use on the aesthetic character of the environs, to include possible need for screening from view; and

(5) Orientation and spacing of improvement or buildings.

d. Effect of failure to meet conditions:

(1) Violation of conditions and safeguards prescribed in conformity with this ordinance, when made a part of the terms under which the special exception is granted shall be deemed a violation of this ordinance, punishable under penalties established herein;

(2) Failure to begin or complete, or begin and complete, an action for which a special exception is required, within the time limit specified when such time limit is made a part of the terms under which the special exception is granted shall void the special exception.

26-602.3 *Variances.*

a. Duties of the board:

(1) The board of adjustment shall have the power to authorize upon appeal in specific cases such variance from the terms of this ordinance as will not be contrary to the public interest where,

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owing to special conditions, a literal enforcement of the provisions of this ordinance would result in unnecessary hardship.

(2) With respect to uses of land, buildings and other structures, this ordinance is declared to be a definition of the public interest by county council, and the spirit of this ordinance will not be observed by any variance which permits a use not generally or by special exception permitted in the district involved or any use expressly or by implication prohibited by the terms of this ordinance in said district. Therefore, under no circumstances shall the board of adjustment grant a variance to permit a use not generally or by special exception permitted in the district involved, or any use expressly or by implication prohibited by the terms of this ordinance in said district.

(3) No nonconforming use of neighboring lands, structures, or buildings in the same district, and no permitted use of lands, structures, or buildings in other districts shall be considered grounds for the issuance of a variance.

(4) Reserved.

(5) In granting any variance, the board may prescribe conditions and safeguards in conformity with this ordinance.

(6) With respect to uses of land, buildings and other structures, this ordinance is declared to be a definition of the public interest by county council, and the spirit of this ordinance will not be observed by any variance which permits creation of a lot or increase in density expressly or by implication prohibited by the terms of this ordinance in said district. Therefore, under no circumstances shall the board of adjustment grant a variance to permit a decrease in minimum lot size, minimum lot width or in any other manner create a nonconforming lot or grant a variance to permit an increase in density allowing more units on a lot than that permitted under minimum lot area requirements.

b. Procedures in consideration of request for variance:

(1) A written application for a variance shall be submitted demonstrating:

(a) That special conditions and circumstances exist which are peculiar to the land, structure, or building involved and which are not applicable to other lands, structures, or buildings in the same district;

(b) That literal interpretation of the provisions of this ordinance would deprive the applicant of rights commonly enjoyed by other properties in the same district under the terms of this ordinance;

(c) That the special conditions and circumstances do not result from the actions of the applicant; and

(d) That granting the variance requested will not confer on the applicant any special privilege that is denied by this ordinance to owners of other lands, structures, or buildings in the same district.

(2) Notice of public hearing shall be given as in section 26-602.2b(2) above;

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(3) The hearing shall be held. Any party may appear in person, or by agent or by attorney;

(4) The board of adjustment shall make findings that the requirements of section 26-602.3b(1) above have been met by the applicant for a variance;

(5) The board of adjustment shall further make a finding that the reasons set forth in the application justify the granting of the variance, and that the variance is the minimum variance that will make possible the reasonable use of the land, building, or structure;

(6) The board of adjustment shall further make a finding that the granting of the variance will be in harmony with the general purpose and intent of this ordinance, and will not be injurious to the neighborhood, or otherwise detriment to the public welfare;

(7) The board of adjustment may prescribe a time limit within which the action for which the variance is requested shall be begun or completed, or both.

c. Effect of failure to meet conditions:

(1) Violation of conditions and safeguards prescribed in conformity with this ordinance when made a part of the terms under which the variance is granted shall be deemed a violation of this ordinance, punishable under penalties established herein.

(2) Failure to begin or complete, or begin and complete, an action to which a variance is granted, within the time limit specified, when such time limit is made a part of the terms under which the variance is granted shall void the variance.

(Ord. No. 1286-85, § 1, 4-2-85; Ord. No. 1707-88, § 2, 1-5-88; Ord. No. 1786-88, §§ I, II, 7-28-88)

Sec. 26-603. Actions of the board in favor of applicant.

26-603.1 *Reversal of decision of zoning administrator.* In exercising the powers set forth in sections 26-602.1 and 26-602.3 above, the board may, in conformity with the provisions of this ordinance, reverse or affirm, wholly or partly, or may modify the order, requirement, decision or determination appealed from and may make such order, requirement, decision or determination as ought to be made, and to that end shall have the powers of the zoning administrator from whom the appeal is taken.

26-603.2 *Concurring vote of three members required.* The concurring vote of three members of the board shall be necessary to reverse any order, requirement, decision or determination of the zoning administrator or to decide in favor of the applicant in any matter upon which it is required to pass under section 26-602.1 and 26-602.3, or to grant any special exception in accordance with section 26-602.2, except that in the event of a tie vote, such vote shall be considered as a decision in favor of the applicant for applications for special exceptions and variances only.

(Ord. No. 1707-88, § 3, 1-5-88; Ord. No. 026-98HR, 6-10-98)

Sec. 26-604. Appeals from the board of adjustment.

Any person or person[s], jointly or severally aggrieved by any decision of the board of adjustment, or any taxpayer or any officer, department, board or bureau of the county may present to a court of record a petition, duly verified, setting forth that a decision of the board of adjustment is illegal, in whole or in part, and specifying the grounds of the illegality. Such petition shall be presented to the court within thirty (30) days after the filing of the decision.

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I hereby certify that this is a true and correct copy of the original document.
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Date: 1-10-12

An appeal stays all proceedings in furtherance of the action appealed from, pending a decision by the court.

Nothing in this section shall be construed so as to prevent the pursuit of injunctive relief pursuant to Appendix A "Zoning," Article 8A Sexually Oriented Businesses," Section 8A-16 "Injunction;" and/or Appendix A "Zoning," Article 10 "Administration, Enforcement and Penalties," Section 9 "Remedies." (Ord. No. 1973-90, § II, 5-1-90; Ord. No. 027-98HR, 5-24-99)

ARTICLE 13. LEGAL STATUS

Sec. 26-701. Separability.

Should any section or provision of this ordinance be declared by the courts to be unconstitutional or invalid, such declaration shall not affect the validity of this ordinance as a whole or any part thereof other than the part so declared to be unconstitutional or invalid.

Sec. 26-702. Conflicting ordinances repealed.

Any other ordinances, regulations, or resolutions, or any portions thereof, which are inconsistent with the provisions herein contained, are hereby repealed.

Sec. 26-703. Effective date.

This ordinance shall take effect and be in force immediately upon its passage.

Sec. 26-704. Adoption clause.

The foregoing zoning regulations were duly adopted by the County Council of Richland County, South Carolina, in meeting duly assembled, this 7th day of September, 1977.

What is the County Council asked to do?

Accept operation and maintenance responsibility for the levee system pursuant to federal regulation contingent upon: (1) property owners upgrading the levee system to meet FEMA standards (presently estimated to cost $6-$8 million); (2) property owners preparing all required documentation including operation and maintenance plans; and (3) certification that the levee system, as upgraded, meets FEMA standards. The Council Chairman or his designee would be authorized to take such action necessary and proper to accomplish the acceptance of operation and maintenance responsibility including signing documents and sending correspondence to appropriate officials.

Why must the County do this?

FEMA recognizes in its flood hazard and risk mapping effort only those levee systems that meet, and continue to meet, minimum design, operation, and maintenance standards. The standards include a requirement that "all operations must be under the jurisdiction of . . . an agency of a community participating in the NFIP" and "all maintenance activities must be under the jurisdiction of . . . an agency of a community participating in the NFIP that must assume ultimate responsibility for maintenance." This means that if the levee system is to be recognized for FEMA purposes then operation and maintenance responsibility must be under the jurisdiction of the county.

Why must the Council act tonight?

Transactions involving a substantial portion of the property are set to close within the next seven to ten days. Development of the property is dependent upon how it is treated for FEMA purposes. Without county action to begin the first steps in changing the FEMA status of the property, the investors will have to evaluate whether they desire to proceed without a resolution of the FEMA issue. The proposed development is estimated as high as $1.0 billion. * see economic development incentives 18K to 14MM

Is the County being asked to approve any development on the property?

No. Although the purchasers of the property envision a substantial residential and commercial development in the area, Council is not being asked to approve it now. As the developers move forward in their plans, they will work with the County as any other developer would on the appropriate zoning and land use approvals.

If the County accepts responsibility for operation and maintenance, does it have any options for fulfilling the responsibilities?

Yes. The County appears to have a full range of options available to satisfy the requirement for operation and maintenance of the levee system. The County could fulfill the responsibility in whole or in part with in-house resources or by contract with private vendors. The County could consider the creation of a special entity (such as a special tax

district, a levee district, or a county agency, board or commission) for fulfilling the responsibilities.

How is the County going to pay for the operation and maintenance costs?

Annual cost for operating and maintaining the levee system is estimated at $174,500. Revenue from expected development would more than offset this cost. Whether from general or special levies, ample revenue could be generated.

If the County accepts operation and maintenance responsibility, isn't the County also accepting any associated liability?

The federal regulation does not state that a jurisdiction accepting operation and maintenance responsibility also accepts certain liabilities. Even if there is liability associated with the acceptance, under the South Carolina Tort Claims Act, a governmental body's liability is limited ($300,000 single occurrence; $600,000 aggregate). Moreover, there are a number of ways for the County to minimize any potential liability, for example, purchase insurance (state law requires political subdivisions to procure tort liability insurance) and operate and maintain the levee system in accordance with FEMA standards.

- FEMA mapping
- effect on Adjoining property
- previous discussions w/ City Staff.

DNR - Landowners

PLTF TRIAL EXH 251 CV014045

What is the County Council asked to do?

Accept operation and maintenance responsibility for the levee system pursuant to federal regulation contingent upon: (1) property owners upgrading the levee system to meet FEMA standards (presently estimated to cost $6-$8 million); (2) property owners preparing all required documentation including operation and maintenance plans; and (3) certification that the levee system, as upgraded, meets FEMA standards. The Council Chairman or his designee would be authorized to take such action necessary and proper to accomplish the acceptance of operation and maintenance responsibility including signing documents and sending correspondence to appropriate officials.

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Why must the Council act tonight?

Transactions involving a substantial portion of the property are set to close within the next seven to ten days. Development of the property is dependent upon how it is treated for FEMA purposes. Without county action to begin the first steps in changing the FEMA status of the property, the investors will have to evaluate whether they desire to proceed without a resolution of the FEMA issue.

The proposed development of the property is on hold until the FEMA issue can be resolved. If the county will commit to the acceptance of the operation and maintenance of the levees, then the transaction can be closed and the investors can start the process of up-grading the levees as required by FEMA and the next steps for the development of the property can begin.

Can't this problem be solved with FEMA remapping?

No. FEMA is currently remapping the area and the remap is expected to be released within the next four to six weeks. At that time, the process of public review and appeal is triggered. Even if the investors could wait for this process to occur and be completed, the investors would be faced with the same issue then – the county must accept operation and maintenance responsibility if the area is to be removed from a designation as either a floodway or floodplain.

What is the projected impact of the development of this property?

The proposed investment in the area is estimated as high as $1.0 billion. After development is completed, preliminary projections indicate approximately 3,125 direct new jobs with a direct payroll of approximately $65 million. Projections on property taxes from the investment exceed $14 million. The development would consist of multiple land uses including retail, commercial, residential and recreational.

Is the County being asked to approve any development on the property?

No. Although the purchasers of the property envision a substantial residential and commercial development in the area, Council is not being asked to approve it now. As the developers move forward in their plans, they will work with the County as any other developer would on the appropriate zoning and land use approvals.

If the County accepts responsibility for operation and maintenance, does it have any options for fulfilling the responsibilities?

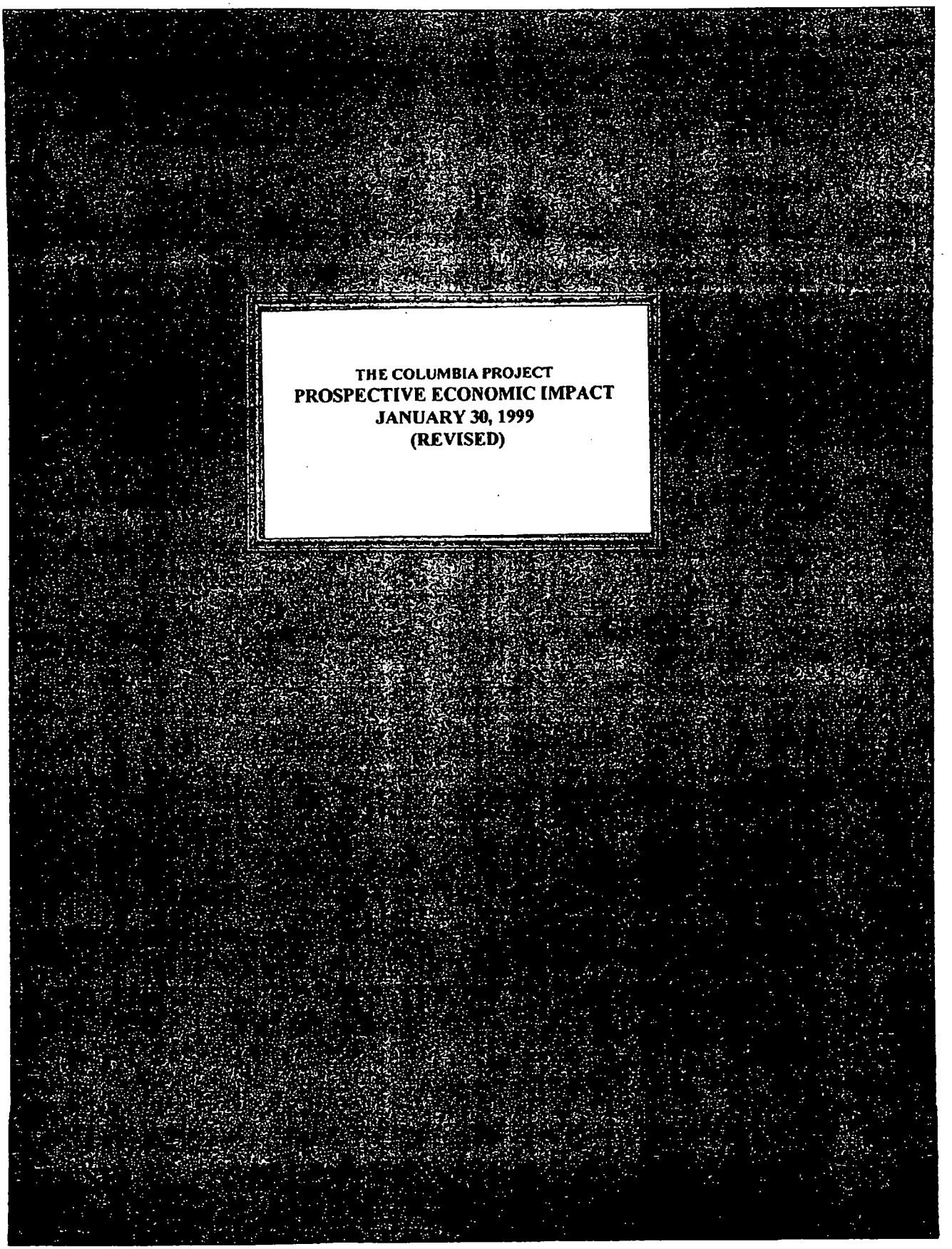
Yes. The County appears to have a full range of options available to satisfy the requirement for operation and maintenance of the levee system. The County could fulfill the responsibility in whole or in part with in-house resources or by contract with private vendors. The County could consider the creation of a special entity (such as a special tax district, a levee district, or a county agency, board or commission) for fulfilling the responsibilities.

How is the County going to pay for the operation and maintenance costs?

Annual cost for operating and maintaining the levee system is estimated at $174,500. Revenue from expected development would more than offset this cost. Whether from general or special levies, ample revenue could be generated.

If the County accepts operation and maintenance responsibility, isn't the County also accepting any associated liability?

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PLTF TRIAL EXH 254 CV010850

R H K & G

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February 8, 1999

To: Mr. Doug Wendel

From: Ron E. Hendrix

Subj: Columbia Project – Prospective Economic Impact (Revised 2-08-98)

Changes to Page 11 include the following:

1. Infrastructure costs reduce by 50% based on expected tax incentive bond package.
2. The discount on JV Member purchases is reduced from 15% to 10% as per the LLC agreement.
3. If additional changes are required, please notify me at one of the following numbers:

Office – 449-9293
Home – 497-2621
Mobile – 457-5730

Best regards,

Ron E. Hendrix

THE COLUMBIA PROJECT

PROSPECTIVE ECONOMIC IMPACT

JANUARY 30, 1999

INDEX

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3. Projected Tax Impacts (Schedule 2)	5 & 6
4. Twelve (12) Year Annual Impact (Schedule 3)	7 & 8
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The Prospective Economic Impact
Of The Development of the Congaree Properties
Located in Richland County between Bluff Road
And The Congaree River and Along the East and West Sides
Of Interstate 77

The property that is currently involved in the planning phases for development includes a total of 4,800 acres of land in Richland County south and east of downtown Columbia, S. C. The property is bound on the north by Bluff Road and/or property adjoining Bluff Road and on the south by the Congaree River. Interstate 77 intersects the center of the property at the approximate centerline. The property is protected from flooding by three sets of levees that require some upgrading to meet proscribed guidelines.

The attached Schedule 1 reflects the preliminary projected uses of the land and the related expenditures that will be utilized in developing the various sections of the property. We anticipate approximately 650 acres of commercial development, 400 acres for two golf courses, 200 acres for office and/or research related space, 200 acres for student housing, 100 acres for a marina and condo development, 415 acres for a gated residential development, 450 acres of roads and other infrastructure, and approximately 200 acres for the various levees associated with the property. Also, approximately 2000 acres consisting of Levee Section III and areas outside the Levees will be used for outdoor recreational businesses with very few improvements being made to the this portion of the property.

The projections found on Schedule 1 and Schedule 2 are based on information that was provided in part by the South Carolina Department of Commerce, The National Chamber of Commerce and The International Council of Shopping Centers:

Sales Revenue for the project are based on the following sales/square foot of commercial space:

$400/Sq Ft	Mall Leased Space
$425/Sq Ft	Outlet Malls
$550/Sq Ft	Specialty Commercial
$550/Sq Ft	Food & Beverage
$1000/Sq Ft	Convience Store
$500/Sq Ft	Grocery

Hotel revenues we computed using the following formula:

Number of rooms Times 80% Occupancy Times $80 Average Room Rate

Rental Revenues on Student housing and office/research park space is based on 10% of the total cost of each structure.

Total golf course revenues are based of revenues generated by similar facilities and are estimated to be $4,500,000 per annum.

The Outdoor Recreation revenues are estimated to be $5,000,000 per annum.

Utilizing the above information coupled with the preliminary development plans and preliminary development costs as per Schedule 1, the total investment in the site is expected to reach approximately $922,013,000. As per Schedule 2, this level of investment in the property over twelve (12) years will produce total sales and admissions revenue of approximately $3,052,500,000 per annum after project completion. This level of revenue will produce $1,093,000 in admissions tax revenues and approximately $151,271,000 in sales tax revenues per annum.

In the property tax area using a tax factor for commercial property of .017 and a tax factor for non-commercial property of .010 as per the South Carolina Department of Commerce, the property tax revenues at completion of the development would be approximately $15,075,000 annually. Schedule 3 represents approximate tax revenue increases on an annual basis through the development/construction period.

In addition to the direct tax revenue impact, the project would have a profound impact on the job market in the Columbia area.

In the construction job market, the project would add 300 construction jobs per annum. After development is completed, the site will provide approximate 3,125 new jobs for the area in the retail, hotel, restaurant, office/research park and various service areas. The total annual direct payroll impact will be approximately $65,000,000. According to the South Carolina Department of Commerce, you create .56 related area jobs in the community for each job you create on site. Therefore, the related job impact amounts to approximately $36,400,000 per annum. The total annual payroll impact in the Columbia area would be approximately $101,400,000.

In summary, the proposed project would have an economic impact on The Greater Columbia Area in the following approximate ranges during and after completion:

INVESTED DOLLARS	$922,013,000
GROSS ANNUAL REVENUES	$3,052,056,000 per annum
CONSTRUTION JOBS	300 per year for five (5) years
ON SITE JOBS	3,125 new jobs at $65,000,000 per annum
OFF SITE JOBS	1,750 new jobs at $36,400,000 per annum
ADMISSIONS TAX REVENUE	$1,093,000 per annum
SALES TAX REVENUE	$151,271,000 per annum
PROPERTY TAX REVENUE	$15,075,000 per annum

Columbia, B.C. Project
Projected Property Values
January 30, 1998

Assumptions: Schedule 1

Description	Year	Section-Location	Type of Property	Average Sales	Market Value	Square Footage	Cost Per Sq Foot	Improvement Value	Personal Property	Total Tax Value	TOT SALES or Absorptions	ADJUSTMENTS	SALES	PROPERTY	YEAR
					120,000				10.0%						
COMMERCIAL AREA:															
100 ACRES - BLUFF RD	yr 2	20 BLUFF RD	COMMERCIAL	$200,000	$4,000,000	261,360	$125	$32,670,000	$3,267,000	$35,937,000	$104,844,000	$0	$0	$1,277,200	yr1
BLUFF RD	yr 3	20 BLUFF RD	COMMERCIAL	$200,000	$4,100,000	261,360	$126	$33,323,400	$3,332,340	$36,655,740	$104,844,000	$0	$0	$5,277,200	yr2
BLUFF RD	yr 4	10 BLUFF RD	COMMERCIAL	$210,370	$2,103,700	130,680	$130	$16,988,034	$1,698,803	$18,686,837	$52,422,000	$0	$0	$7,415,900	yr3
BLUFF RD	yr 5	10 BLUFF RD	COMMERCIAL	$221,973	$2,219,773	130,680	$133	$17,394,033	$1,739,403	$19,133,437	$52,422,000	$0	$0	$9,813,600	yr4
BLUFF RD	yr 6	10 BLUFF RD	COMMERCIAL	$233,972	$2,339,717	130,680	$136	$17,801,529	$1,780,153	$19,581,682	$52,422,000	$0	$0	$9,813,600	yr5
BLUFF RD	yr 7	10 BLUFF RD	COMMERCIAL	$246,331	$2,463,306	130,680	$139	$18,209,519	$1,820,952	$20,030,471	$52,422,000	$0	$0	$9,813,600	yr6
BLUFF RD	yr 8	10 BLUFF RD	COMMERCIAL	$259,084	$2,590,838	130,680	$141	$18,618,004	$1,861,800	$20,479,804	$52,422,000	$0	$0	$9,813,600	yr7
BLUFF RD	yr 9	10 BLUFF RD	COMMERCIAL	$272,264	$2,722,641	130,680	$144	$19,026,984	$1,902,698	$20,929,682	$52,422,000	$0	$0	$9,813,600	yr8
BLUFF RD	yr 10	0 BLUFF RD	COMMERCIAL	$285,188	$2,851,884	130,680	$144	$19,793,760	$1,979,376	$21,773,136	$52,422,000	$0	$0	$9,813,600	yr9
BLUFF RD	yr 10	0 BLUFF RD	COMMERCIAL	$0	$0	0	$0	$0	$0	$0	$0	$0	$0	$0	yr10
BLUFF RD	yr 11	0 BLUFF RD	COMMERCIAL	$0	$0	0	$0	$0	$0	$0	$0	$0	$0	$0	yr11
BLUFF RD	yr 12	0 BLUFF RD	COMMERCIAL	$0	$0	0	$0	$0	$0	$0	$0	$0	$0	$0	yr12
UNDERPASS - WEST Outside	yr 1	73	COMMERCIAL	$100,000	$7,500,000	986,189	$125	$123,273,600	$12,327,360	$143,783,760	$116,547,600	$0	$20,827,123	$2,443,944	yr2
HOTEL SITES	yr 2	10 I-77	HOTELS	$200,000	$2,000,000	261,360	$130	$33,976,800	$3,397,680	$39,374,480	$10,512,000	$0	$325,600	$770,315	yr2
HOTEL SITES	yr 3	10 I-77	HOTELS	$208,000	$2,080,000	261,360	$133	$34,756,080	$3,475,608	$40,311,688	$10,512,000	$0	$325,600	$786,837	yr3
HOTEL SITES	yr 4	10 I-77	HOTELS	$216,320	$2,163,200	130,680	$135	$17,638,800	$1,763,880	$20,564,680	$7,008,000	$0	$350,400	$401,414	yr4
HOTEL SITES	yr 5	I-77	HOTELS	$224,973	$1,124,864	130,680	$139	$18,184,520	$1,818,452	$21,127,836	$7,008,000	$0	$350,400	$409,818	yr5
HOTEL SITES	yr 6	5 I-77	HOTELS	$233,972	$1,169,859	130,680	$142	$18,730,240	$1,873,024	$21,773,123	$7,008,000	$0	$350,400	$418,311	yr6
HOTEL SITES	yr 7	5 I-77	HOTELS	$243,331	$1,216,653	130,680	$146	$19,275,960	$1,927,596	$22,420,209	$7,008,000	$0	$350,400	$427,092	yr7
HOTEL SITES	yr 8	5 I-77	HOTELS	$253,084	$1,265,319	130,680	$149	$19,821,680	$1,982,168	$23,068,847	$7,008,000	$0	$350,400	$436,014	yr8
HOTEL SITES	yr 9	5 I-77	HOTELS	$263,188	$1,315,938	130,680	$153	$20,367,400	$2,036,740	$23,720,078	$7,008,000	$0	$350,400	$445,110	yr9
HOTEL SITES	yr 10	0 I-77	HOTELS	$0	$0	0	$0	$0	$0	$0	$0	$0	$0	$0	yr10
SPECIALTY & RESTAUR	yr 2	5 I-77	COMMERCIAL	$150,000	$750,000	$150,000	65,340	$125	$8,167,500	$816,750	$9,834,250	$0	$15,937,000	$187,182	yr 2
SPECIALTY & RESTAUR	yr 3	5 I-77	COMMERCIAL	$156,000	$780,000	$156,000	65,340	$128	$8,350,860	$835,086	$10,041,946	$0	$15,937,000	$191,747	yr2
SPECIALTY & RESTAUR	yr 4	5 I-77	COMMERCIAL	$162,240	$811,200	$162,240	65,340	$130	$8,497,487	$849,747	$10,258,414	$0	$15,937,000	$174,550	yr3
SPECIALTY & RESTAUR	yr 5	5 I-77	COMMERCIAL	$168,730	$843,648	$168,730	65,340	$133	$8,687,118	$868,712	$10,477,866	$0	$15,937,000	$178,125	yr4
SPECIALTY & RESTAUR	yr 6	5 I-77	COMMERCIAL	$175,479	$877,394	$175,479	65,340	$135	$8,840,765	$884,076	$10,702,235	$0	$15,937,000	$181,688	yr5
SPECIALTY & RESTAUR	yr 7	5 I-77	COMMERCIAL	$182,498	$912,490	$182,498	65,340	$139	$9,017,390	$901,739	$10,831,819	$0	$15,937,000	$185,341	yr6
SPECIALTY & RESTAUR	yr 8	5 I-77	COMMERCIAL	$189,798	$948,989	$189,798	65,340	$141	$9,197,533	$919,753	$11,066,714	$0	$15,937,000	$189,034	yr7
SPECIALTY & RESTAUR	yr 9	5 I-77	COMMERCIAL	$197,390	$986,949	$197,390	65,340	$144	$9,381,680	$938,168	$11,407,078	$0	$15,937,000	$193,910	yr8
SPECIALTY & RESTAUR	yr 10	0 I-77	COMMERCIAL	$205,285	$0	$0	0	$0	$0	$0	$0	$0	$0	$0	yr 10
UNDERPASS - EAST: LAKE (60 ACRES)	yr 2	60 I-77	WATER	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$16,536	yr 2
I-77 COMMERCIAL FRONT	yr 2	5 I-77	OFFICE PARK	$100,000	$500,000	$100,000	65,340	$100	$334,560	$33,456	$868,016	$0	$0	$16,536	yr 2
I-77 COMMERCIAL FRONT	yr 3	5 I-77	OFFICE PARK	$104,000	$520,000	$104,000	65,340	$103	$354,554	$35,456	$910,010	$0	$0	$17,179	yr 3
I-77 COMMERCIAL FRONT	yr 4	5 I-77	OFFICE PARK	$108,160	$540,800	$108,160	65,340	$104	$375,336	$37,536	$953,832	$0	$0	$17,813	yr 4
I-77 COMMERCIAL FRONT	yr 5	5 I-77	OFFICE PARK	$112,486	$562,432	$112,486	65,340	$106	$396,896	$39,690	$1,089,118	$0	$0	$18,465	yr 5
I-77 COMMERCIAL FRONT	yr 6	5 I-77	OFFICE PARK	$116,986	$584,929	$116,986	65,340	$108	$418,461	$41,846	$1,141,308	$0	$0	$19,136	yr 6
I-77 COMMERCIAL FRONT	yr 7	5 I-77	OFFICE PARK	$121,665	$0	$0	0	$110	$0	$0	$0	$0	$0	$0	yr 7
I-77 COMMERCIAL FRONT	yr 8	5 I-77	OFFICE PARK	$126,532	$632,660	$126,532	65,340	$113	$497,207	$49,721	$1,240,567	$0	$0	$21,102	yr 8
I-77 COMMERCIAL FRONT	yr 9	5 I-77	OFFICE PARK	$131,593	$657,966	$131,593	65,340	$115	$482,511	$48,251	$1,288,728	$0	$0	$22,025	yr 9
I-77 COMMERCIAL FRONT	yr 10	0 I-77	OFFICE PARK	$136,857	$0	$0	0	$117	$0	$0	$0	$0	$0	$0	yr 10
I-77 COMMERCIAL FRONT	yr 11	5 I-77	OFFICE PARK	$142,331	$711,656	$100,000	65,340	$120	$546,196	$54,620	$1,412,472	$0	$0	$24,072	yr 11
I-77 COMMERCIAL FRONT	yr 12	5 I-77	OFFICE PARK	$148,024	$740,122	$100,000	65,340	$122	$574,860	$57,486	$1,477,246	$0	$0	$25,038	yr 12
LAKE RETAIL	yr 2	0 I-77	COMMERCIAL	$100,000	$0	$0	0	$100	$0	$0	$0	$0	$0	$0	yr2
LAKE RETAIL	yr 3	40 I-77	COMMERCIAL	$104,000	$4,160,000	$800,000	372,720	$102	$2,837,178	$283,718	$8,080,896	$0	$787,680	$137,375	yr3
LAKE RETAIL	yr 4	0 I-77	COMMERCIAL	$108,160	$0	$0	0	$104	$0	$0	$0	$0	$0	$0	yr4
LAKE RETAIL	yr 5	50 I-78	COMMERCIAL	$112,486	$5,624,320	$1,000,000	853,000	$106	$3,070,814	$307,081	$10,002,215	$0	$1,338,370,000	$188,688	yr5
LAKE RETAIL	yr 6	0 I-78	COMMERCIAL	$116,986	$0	$0	0	$108	$0	$0	$0	$0	$0	$0	yr6
LAKE RETAIL	yr 7	50 I-80	COMMERCIAL	$121,665	$6,083,265	$1,000,000	853,000	$110	$4,428,754	$442,875	$11,954,894	$0	$1,338,370,000	$203,252	yr7
LAKE RETAIL	yr 8	0 I-81	COMMERCIAL	$126,532	$0	$0	0	$113	$0	$0	$0	$0	$0	$0	yr8
LAKE RETAIL	yr 9	50 I-82	COMMERCIAL	$131,593	$6,579,639	$1,000,000	853,000	$115	$4,626,144	$462,614	$12,668,397	$1,338,370,000	$0	$220,073	yr9
LAKE RETAIL	yr 10	0 I-83	COMMERCIAL	$136,857	$0	$0	0	$117	$0	$0	$0	$0	$0	$0	yr10
LAKE RETAIL	yr 11	0 I-84	COMMERCIAL	$142,331	$0	$0	0	$120	$0	$0	$0	$0	$0	$0	yr11
LAKE RETAIL	yr 12	50 I-85	COMMERCIAL	$148,024	$7,401,221	$1,000,000	833,000	$122	$5,747,700	$574,770	$14,723,691	$1,338,370,000	$0	$1,338,370,000	$238,503	yr12
WEST CENTRAL & SOUTH PRIVATE GOLF COURSE	yr 3	200	SOUTH CENTR	$5,000	$1,000,000	$0		$17,000,000	$1,700,000	$20,700,000	$2,500,000	$2,500,000	$0	$147,600	yr3
PUBLIC GOLF COURSE	yr 2	200	WEST CENTR	$5,000	$1,000,000	$0		$0,000,000	$800,000	$7,800,000	$7,800,000	$75,000	$125,000	$128,100	yr2
CAMPUS OFFICE PARK	yr 3	20	PUBLIC GOLF	OFFICE	$50,000	$1,000,000	$200,000	392,040	$100	$407,480	$40,748	$1,448,228	$194,885	$0	$0	$16,027	yr3
CAMPUS OFFICE PARK	yr 4	20	PUBLIC GOLF	OFFICE	$52,000	$1,040,000	$208,000	392,040	$102	$447,536	$44,754	$1,732,290	$173,291	$0	$0	$16,491	yr4
CAMPUS OFFICE PARK	yr 5	20	PUBLIC GOLF	OFFICE	$54,080	$1,081,600	$200,000	392,040	$104	$489,136	$48,914	$1,820,002	$182,000	$0	$0	$16,970	yr5
CAMPUS OFFICE PARK	yr 6	20	PUBLIC GOLF	OFFICE	$56,243	$1,124,864	$200,000	392,040	$106	$533,718	$53,372	$1,911,953	$191,195	$0	$0	$17,459	yr6
CAMPUS OFFICE PARK	yr 7	20	PUBLIC GOLF	OFFICE	$58,493	$1,169,459	$200,000	392,040	$108	$577,710	$57,771	$2,009,340	$200,934	$0	$0	$17,961	yr7
CAMPUS OFFICE PARK	yr 8	20	PUBLIC GOLF	OFFICE	$60,833	$1,216,633	$200,000	392,040	$110	$624,452	$62,445	$2,103,626	$210,363	$0	$0	$18,481	yr8

CAMPUS OFFICE PARK	yr 9	20	PUBLIC GOLF	OFFICE	$80,266	$1,265,319	$200,000	392,040	$113	$873,169	$87,317	$2,705,807	$220,580	$0	$0	$37,498	yr 9
CAMPUS OFFICE PARK	yr 10	20	PUBLIC GOLF	OFFICE	$85,797	$1,315,932	$200,000	392,040	$116	$728,777	$72,378	$2,312,086	$231,209	$0	$0	$39,305	yr 10
CAMPUS OFFICE PARK	yr 11	20	PUBLIC GOLF	OFFICE	$68,428	$1,368,569	$200,000	392,040	$117	$778,112	$77,841	$2,422,822	$242,282	$0	$0	$41,185	yr 11
CAMPUS OFFICE PARK	yr 12	20	PUBLIC GOLF	OFFICE	$71,168	$1,423,312	$200,000	392,040	$120	$831,152	$83,115	$2,537,579	$253,758	$0	$0	$43,139	yr 12
STUDENT HOUSING	yr2	20	PUBLIC GOLF	Condos	$50,000	$1,000,000	$200,000	392,040	$90	$407,870	$40,787	$1,846,687	$184,668	$0	$0	$16,487	yr2
STUDENT HOUSING	yr3	20	PUBLIC GOLF	Condos	$52,000	$1,040,000	$200,000	392,040	$92	$447,656	$44,787	$1,732,655	$173,266	$0	$0	$17,327	yr3
STUDENT HOUSING	yr4	20	PUBLIC GOLF	Condos	$54,080	$1,081,600	$200,000	392,040	$94	$489,106	$48,947	$1,870,013	$187,001	$0	$0	$19,106	yr4
STUDENT HOUSING	yr 5	20	PUBLIC GOLF	Condos	$56,243	$1,124,864	$200,000	392,040	$96	$532,726	$53,273	$1,910,865	$191,087	$0	$0	$20,054	yr 5
STUDENT HOUSING	yr 6	20	PUBLIC GOLF	Condos	$58,493	$1,169,859	$200,000	392,040	$97	$577,721	$57,772	$2,005,357	$200,535	$0	$0	$21,056	yr 6
STUDENT HOUSING	yr 7	20	PUBLIC GOLF	Condos	$60,833	$1,216,653	$200,000	392,040	$99	$624,514	$62,451	$2,103,818	$210,382	$0	$0	$22,058	yr 7
STUDENT HOUSING	yr 8	20	PUBLIC GOLF	Condos	$63,266	$1,265,319	$200,000	392,040	$101	$673,176	$67,318	$2,205,814	$220,581	$0	$0	$23,121	yr 8
STUDENT HOUSING	yr 9	20	PUBLIC GOLF	Condos	$65,797	$1,315,932	$200,000	392,040	$103	$723,788	$72,379	$2,312,099	$231,210	$0	$0	$24,226	yr 9
STUDENT HOUSING	yr 10	20	PUBLIC GOLF	Condos	$68,428	$1,368,569	$200,000	392,040	$105	$778,124	$77,842	$2,422,854	$242,284	$0	$0	$25,376	yr 10
STUDENT HOUSING	yr 11	20	PUBLIC GOLF	Condos	$71,168	$1,423,312	$200,000	392,040	$108	$831,164	$83,116	$2,537,582	$253,758	$0	$0	$26,576	yr 11
THEME PARK	yr 3	30	THEME PK	COMMERCIAL	$100,000	$3,000,000	$600,000			$7,500,000	$750,000	$11,850,000	$2,370,000	$84,675	$59,625	$201,450	yr 3
THEME PARK	yr 4	30	THEME PK	COMMERCIAL	$104,000	$3,120,000	$600,000			$7,500,000	$750,000	$11,970,000	$2,394,000	$89,775	$79,625	$203,490	yr 4
THEME PARK	yr 5	40	THEME PK	COMMERCIAL	$108,160	$4,326,400	$600,000			$10,000,000	$1,000,000	$16,126,400	$3,225,280	$120,946	$40,316	$274,149	yr 5
MARINA & CONDOS	yr 4	15	MULTI	MIXED	$100,000	$1,500,000	$300,000	294,030	$100	$905,870	$90,587	$2,798,457	$0	$0	$0	$27,985	yr 4
MARINA & CONDOS	yr 5	15	MULTI	MIXED	$104,000	$1,560,000	$300,000	294,030	$102	$986,806	$98,587	$2,827,456	$0	$0	$0	$28,275	yr 5
MARINA & CONDOS	yr 6	15	MULTI	MIXED	$108,160	$1,622,400	$300,000	294,030	$104	$1,026,298	$102,627	$2,953,495	$0	$0	$0	$30,535	yr 6
MARINA & CONDOS	yr 7	15	MULTI	MIXED	$112,486	$1,687,296	$300,000	294,030	$106	$1,093,190	$109,319	$3,189,772	$0	$0	$0	$31,898	yr 7
MARINA & CONDOS	yr 8	20	MULTI	MIXED	$116,986	$2,339,717	$400,000	392,040	$108	$1,547,569	$154,757	$4,442,043	$0	$0	$0	$44,420	yr 8
MARINA & CONDOS	yr 9	10	MULTI	MIXED	$121,665	$1,216,653	$200,000	196,020	$110	$820,522	$82,052	$2,319,226	$0	$0	$0	$23,192	yr 9
MARINA & CONDOS	yr 10	10	MULTI	MIXED	$126,532	$1,265,319	$200,000	196,020	$113	$869,188	$86,919	$2,421,424	$0	$0	$0	$24,214	yr 10
RESIDENTIAL - GATED	yr3	50	GOLF-RESID	RESIDENTIAL	$50,000	$2,500,000	$500,000	762,300	$110	$1,237,360	$123,736	$4,361,349	$0	$0	$0	$43,613	yr3
RESIDENTIAL - GATED	yr4	50	GOLF-RESID	RESIDENTIAL	$52,000	$2,600,000	$500,000	762,300	$112	$1,337,565	$133,756	$4,571,347	$0	$0	$0	$45,713	yr4
RESIDENTIAL - GATED	yr 5	50	GOLF-RESID	RESIDENTIAL	$54,080	$2,704,000	$500,000	762,300	$114	$1,441,566	$144,156	$4,769,744	$0	$0	$0	$47,697	yr 5
RESIDENTIAL - GATED	yr 6	50	GOLF-RESID	RESIDENTIAL	$56,243	$2,812,160	$500,000	762,300	$117	$1,548,743	$154,874	$5,018,878	$0	$0	$0	$50,189	yr 6
RESIDENTIAL - GATED	yr 7	40	GOLF-RESID	RESIDENTIAL	$58,493	$2,339,717	$400,000	609,840	$119	$1,329,756	$132,976	$4,202,451	$0	$0	$0	$42,025	yr 7
RESIDENTIAL - GATED	yr 8	40	GOLF-RESID	RESIDENTIAL	$60,833	$2,433,306	$400,000	609,840	$121	$1,423,344	$142,334	$4,398,985	$0	$0	$0	$43,990	yr 8
RESIDENTIAL - GATED	yr 9	40	GOLF-RESID	RESIDENTIAL	$63,266	$2,530,638	$400,000	609,840	$124	$1,520,674	$152,067	$4,603,380	$0	$0	$0	$46,034	yr 9
RESIDENTIAL - GATED	yr 10	40	GOLF-RESID	RESIDENTIAL	$65,797	$2,631,864	$400,000	609,840	$126	$1,621,097	$162,100	$4,815,950	$0	$0	$0	$48,160	yr 10
RESIDENTIAL - GATED	yr 11	40	GOLF-RESID	RESIDENTIAL	$68,428	$2,737,138	$400,000	609,840	$129	$1,727,189	$172,717	$5,037,024	$0	$0	$0	$50,370	yr 11
RESIDENTIAL - GATED	yr 12	15	GOLF-RESID	RESIDENTIAL	$71,168	$1,067,464	$150,000	228,690	$131	$666,862	$66,686	$1,075,013	$0	$0	$0	$10,750	yr 12
WATER TREATMENT	yr2	25	WATER TREA	COMMERCIAL	$50,000	$0	$0	0	$0	$0	$0	$0	$0	$0	$0	$0	yr2
USC PROSPECTIVE	yr2	100	Entertainment	DONATION	$0	$0	$0	0		$0	$0	$0	$15,000,000	$375,000	$375,000	$0	yr2
USC - OTHER	yr3	20	VARIOUS	FACILITIES	$50,000	$1,000,000	$400,000	0		$500,000	$0	$0	$0	$0	$0	$0	yr3
USC - OTHER	yr4	30	VARIOUS	FACILITIES	$52,000	$1,560,000	$408,000	0		$1,157,000	$0	$0	$0	$0	$0	$0	yr4
USC - OTHER	yr 5	30	VARIOUS	FACILITIES	$54,080	$1,622,400	$416,160	0		$1,206,240	$0	$0	$0	$0	$0	$0	yr 5
USC - OTHER	yr 6	20	VARIOUS	FACILITIES	$56,243	$1,124,864	$424,483	0		$799,381	$0	$0	$0	$0	$0	$0	yr 6
USC - OTHER	yr 7	20	VARIOUS	FACILITIES	$58,493	$1,169,859	$432,973	0		$736,886	$0	$0	$0	$0	$0	$0	yr 7
USC - OTHER	yr 8	30	VARIOUS	FACILITIES	$60,833	$1,824,978	$441,632	0		$1,383,347	$0	$0	$0	$0	$0	$0	yr 8
USC - OTHER	yr 9	30	VARIOUS	FACILITIES	$63,266	$1,897,978	$450,465	0		$1,447,514	$0	$0	$0	$0	$0	$0	yr 9
USC - OTHER	yr 10	20	VARIOUS	FACILITIES	$65,797	$1,315,932	$459,474	0		$856,458	$0	$0	$0	$0	$0	$0	yr 10
ROADS & RIGHTAWAYS	yr1	450	ROADS, ETC	MIXED	$0	$0	$0	0		$0	$0	$0	$0	$0	$0	$0	yr1
LEVY SECTION 3 PLUS	yr 3	2000	LEVY 3	OUTDOOR REC		$5,000,000	$0	0	$0	$5,000,000	$500,000	$5,500,000	$5,000,000	$250,000	$0	$93,500	yr 3
12-YEAR TOTALS		4,600				$171,984,696	$26,883,188	23,968,890	$10,020	$663,846,515	$47,580,369	$922,012,744	$53,052,508,451	$1,093,384	$151,771,441	$15,074,903	

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	Columbia, S.C. Project				
	Projected Property Values at Completion				
		30-Jan-99			
	Schedule 3				
Total Tax Value	TOT SALES or Admissions	ADMISSIONS	SALES	PROPERTY	YEAR
$40,337,000	$104,544,000	$0	$5,227,200	$685,729	yr2
$41,215,740	$104,544,000	$0	$5,227,200	$700,686	yr3
$21,057,627	$52,272,000	$0	$2,613,600	$357,980	yr4
$21,518,044	$52,272,000	$0	$2,613,600	$365,807	yr 5
$21,989,399	$52,272,000	$0	$2,613,600	$373,820	yr 6
$22,471,882	$52,272,000	$0	$2,613,600	$382,024	yr 7
$22,966,087	$52,272,000	$0	$2,613,600	$390,423	yr 8
$23,472,022	$52,272,000	$0	$2,613,600	$399,024	yr 9
$0	$0	$0	$0	$0	yr 10
$0	$0	$0	$0	$0	yr 11
$0	$0	$0	$0	$0	yr 12
$143,783,750	$416,542,500	$0	$20,827,125	$2,443,884	yr 2
$45,324,400	$10,512,000	$0	$525,600	$770,516	yr2
$46,266,888	$10,512,000	$0	$525,600	$786,537	yr3
$23,614,913	$7,008,000	$0	$350,400	$401,454	yr4
$24,106,843	$7,008,000	$0	$350,400	$409,816	yr 5
$24,609,477	$7,008,000	$0	$350,400	$418,381	yr 6
$26,123,064	$7,008,000	$0	$350,400	$427,092	yr 7
$25,647,858	$7,008,000	$0	$350,400	$436,014	yr 8
$26,184,122	$7,008,000	$0	$350,400	$445,130	yr 9
$0	$0	$0	$0	$0	yr 10
$9,834,250	$35,937,000	$0	$1,796,850	$167,182	yr 3
$10,043,935	$35,937,000	$0	$1,796,850	$170,747	yr3
$10,258,414	$35,937,000	$0	$1,796,850	$174,393	yr 4
$10,477,806	$35,937,000	$0	$1,796,850	$178,123	yr 5
$10,702,235	$35,937,000	$0	$1,796,850	$181,938	yr 6
$10,931,826	$35,937,000	$0	$1,796,850	$185,841	yr 7
$11,166,714	$35,937,000	$0	$1,796,850	$189,834	yr 8
$11,407,028	$35,937,000	$0	$1,796,850	$193,919	yr 9
$0	$0	$0	$0	$0	yr 10
$0	$0	$0	$0	$0	yr 2
$964,018	$96,802	$0	$0	$16,456	yr 2
$1,010,014	$101,001	$0	$0	$17,170	yr 3
$1,053,692	$105,369	$0	$0	$17,913	yr 4
$1,089,116	$109,812	$0	$0	$18,685	yr 5
$1,148,356	$114,836	$0	$0	$19,466	yr 6
$0	$0	$0	$0	$0	yr 7
$1,248,987	$124,859	$0	$0	$21,182	yr 8
$1,299,728	$129,973	$0	$0	$22,095	yr 9
$0	$0	$0	$0	$0	yr 10
$1,412,472	$141,247	$0	$0	$24,012	yr 11
$1,472,248	$147,225	$0	$0	$25,028	yr 12
$0	$0	$0	$0	$0	yr2
$8,080,888	$287,496,000	$0	$14,374,800	$137,375	yr3
$0	$0	$0	$0	$0	yr4
$10,992,215	$359,370,000	$1	$17,968,500	$188,888	yr 5
$0	$0	$2	$0	$0	yr 6
$11,956,994	$359,370,000	$3	$17,968,500	$203,252	yr 7
$0	$0	$4	$0	$0	yr 8
$12,968,417	$359,370,000	$5	$17,968,500	$220,973	yr 9
$0	$0	$6	$0	$0	yr 10
$0	$0	$7	$0	$0	yr 11
$14,723,591	$359,370,000	$8	$17,968,500	$250,303	yr 12

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$8,700,000	$2,500,000	$83,750	$31,250	$147,800	yr3
$7,000,000	$2,000,000	$75,000	$25,000	$128,200	yr2
$1,648,648	$184,866	$0	$0	$28,027	yr3
$1,732,644	$173,264	$0	$0	$29,495	yr 4
$1,826,002	$182,600	$0	$0	$30,940	yr 5
$1,919,884	$191,988	$0	$0	$32,485	yr 6
$2,005,340	$200,534	$0	$0	$34,091	yr 7
$2,100,606	$210,061	$0	$0	$35,761	yr 8
$2,205,602	$220,560	$0	$0	$37,499	yr 9
$2,312,088	$231,209	$0	$0	$39,305	yr 10
$2,422,022	$242,202	$0	$0	$41,185	yr 11
$2,537,579	$253,758	$0	$0	$43,139	yr 12
$1,648,657	$184,866	$0	$0	$16,487	yr2
$1,732,665	$173,266	$0	$0	$17,337	yr3
$1,820,013	$182,001	$0	$0	$18,200	yr4
$1,910,668	$191,067	$0	$0	$19,106	yr 5
$2,005,333	$200,533	$0	$0	$20,064	yr 6
$2,103,818	$210,382	$0	$0	$21,038	yr 7
$2,205,814	$220,581	$0	$0	$22,058	yr 8
$2,312,099	$231,210	$0	$0	$23,121	yr 9
$2,422,634	$242,264	$0	$0	$24,226	yr 10
$2,537,592	$253,759	$0	$0	$25,376	yr 11
$11,850,000	$2,370,000	$88,875	$29,625	$201,450	yr 3
$11,970,000	$2,394,000	$89,775	$29,925	$203,490	yr 4
$18,126,400	$3,225,280	$120,948	$40,316	$274,149	yr 5
$2,766,497	$0	$0	$0	$27,665	yr 4
$2,922,455	$0	$0	$0	$29,225	yr 5
$3,083,483	$0	$0	$0	$30,835	yr 6
$3,168,772	$0	$0	$0	$31,688	yr 7
$4,442,043	$0	$0	$0	$44,420	yr 8
$4,319,228	$0	$0	$0	$43,192	yr 9
$4,421,424	$0	$0	$0	$24,214	yr 10
$4,381,349	$0	$0	$0	$43,813	yr3
$4,571,347	$0	$0	$0	$45,713	yr4
$4,768,744	$0	$0	$0	$47,887	yr 5
$5,016,678	$0	$0	$0	$50,168	yr 6
$4,202,451	$0	$0	$0	$42,025	yr 7
$4,398,985	$0	$0	$0	$43,990	yr 8
$4,803,380	$0	$0	$0	$46,034	yr 9
$4,818,850	$0	$0	$0	$48,180	yr 10
$5,037,024	$0	$0	$0	$50,370	yr 11
$1,975,012	$0	$0	$0	$19,750	yr 12
$0	$0	$0	$0	$0	yr2
$0	$15,000,000	$375,000	$0	$0	yr3
$0	$0	$0	$0	$0	yr3
$0	$0	$0	$0	$0	yr4
$0	$0	$0	$0	$0	yr 5
$0	$0	$0	$0	$0	yr 6
$0	$0	$0	$0	$0	yr 7
$0	$0	$0	$0	$0	yr 8
$0	$0	$0	$0	$0	yr 9
$0	$0	$0	$0	$0	yr 10
$0	$0	$0	$0	$0	yr1
$6,500,000	$5,000,000	$250,000	$0	$65,000	yr 2
$977,012,744	$3,059,608,751	$1,098,384	$151,271,441	$15,074,803	

COLUMBIA AC 25688

COLUMBIA PROJECT
12 YEAR ANNUAL IMPACT
OF PROJECTED PROPERTY VALUES,
SALES & ADMISSION REVENUES AND
TAX BASE IMPACTS
January 30, 1999

(SCHEDULE 3)

YEAR	# ACRES	Section Location	Type of Property	Average Sales	Land Market Value	Infrastru Dev	Square Footage	Cost Per Sq foot	Improvement Value	Personal Property	Total Tax Value
YEAR 1	450	ROADS, ETC.			$0						
YEAR 2	2520	VARIOUS	VARIOUS	VARIOUS	$21,750,000	$2,500,000			$214,298,430	$21,429,643	$254,976,073
YEAR 3	420	VARIOUS	VARIOUS	VARIOUS	$21,240,000	$3,500,000			$102,027,364	$10,142,758	$134,910,123
YEAR 4	190	VARIOUS	VARIOUS	VARIOUS	$15,498,400	$2,708,000			$58,094,460	$5,884,246	$78,875,106
YEAR 5	250	VARIOUS	VARIOUS	VARIOUS	$22,924,256	$3,816,160			$65,807,726	$6,460,149	$95,763,491
YEAR 6	150	VARIOUS	VARIOUS	VARIOUS	$12,825,045	$2,124,483			$52,548,439	$5,184,808	$70,434,046
YEAR 7	185	VARIOUS	VARIOUS	VARIOUS	$18,228,096	$2,932,973			$57,486,713	$5,674,883	$81,984,048
YEAR 8	155	VARIOUS	VARIOUS	VARIOUS	$14,457,580	$2,141,632			$55,787,978	$5,440,463	$74,177,694
YEAR 9	195	VARIOUS	VARIOUS	VARIOUS	$20,398,689	$2,950,465			$61,266,527	$5,981,901	$86,801,826
YEAR 10	110	VARIOUS	VARIOUS	VARIOUS	$7,897,615	$1,459,474			$4,847,742	$399,128	$11,972,099
YEAR 11	85	VARIOUS	VARIOUS	VARIOUS	$6,240,675	$900,000			$3,580,942	$388,094	$11,409,711
YEAR 12	90	VARIOUS	VARIOUS	VARIOUS	$10,632,139	$1,450,000			$7,842,174	$784,217	$20,708,531
TOTAL 12 YEAR IMPACT	4800	VARIOUS	VARIOUS	VARIOUS	$171,994,696	$26,583,188			$683,886,515	$67,580,369	$922,012,744

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	COLUMBIA PROJECT 12 YEAR ANNUAL IMPACT OF PROJECTED PROPERTY VALUES, SALES & ADMISSION REVENUES AND TAX BASE IMPACTS 30-Jan-99			(SCHDUULE 3)	
Total Tax Value	TOT SALES or Admissions	ADMISSIONS	SALES	PROPERTY	YEAR
					YEAR 1
$254,976,073	$588,787,187	$700,000	$26,776,775	$4,323,053	YEAR 2
$134,910,123	$443,798,131	$182,625	$21,985,325	$2,250,814	YEAR 3
$78,875,108	$98,071,635	$89,775	$4,790,775	$1,276,562	YEAR 4
$95,783,491	$456,295,278	$120,949	$22,769,666	$1,560,816	YEAR 5
$70,434,046	$95,723,258	$0	$4,760,850	$1,126,849	YEAR 6
$61,884,048	$454,987,896	$0	$22,729,350	$1,327,256	YEAR 7
$74,177,694	$95,772,801	$0	$4,760,850	$1,183,693	YEAR 8
$88,801,828	$455,188,763	$0	$22,729,350	$1,410,988	YEAR 9
$11,972,096	$473,472	$0	$0	$135,906	YEAR 10
$11,409,711	$637,289	$0	$0	$140,943	YEAR 11
$20,708,531	$359,770,983	$0	$17,988,500	$338,220	YEAR 12
$922,012,744	$3,052,506,451	$1,093,349	$151,271,441	$15,074,903	TOTALS

PLTF TRIAL EXH 254
3680
CV010860

COLUMBIA S. C. PROJECT
NOTES TO PROJECTED VALUES AT COMPLETION
January 30, 1999

ASSUMPTIONS:

1. Various assumptions have been made with respect to the squared footage of improvements to be made on acreage estimated to be available for various types of property.

   a. Commercial – 30% at $125 per square foot.
   b. Hotel - 60% at $150 per square foot.
   c. Office – 35% at $100 per square foot.
   d. Student Housing – 35% at $90 per square foot.
   e. Condos – 45% at $100 per square foot.
   f. Residential – 35% at $110 per square foot.

2. Personal property associated with land improvements is estimated to be 10% of the improvement cost.

3. Total Tax Value is assumed to be the sum of estimated land, infrastructure, improvement and personal property values.

4. Projected revenues are base on dollars per square foot of commercial space. The computations are based in part on information provided by The South Carolina Department of Commerce, The National Chamber of Commerce and the International Council of Shipping Centers.

$400/Sq Ft	Mall Leased Space
$425/Sq Ft	Outlet Malls
$550/Sq Ft	Specialty Commercial
$550/Sq Ft	Food & Beverage
$1000/Sq Ft	C-Store
$500/Sq Ft	Grocery

   Hotel revenues we computed using the following formula:

   Number of rooms times 80% Occupancy times $80 Average Room Rate

5. Admissions and Sales Tax rates are computed at 5% and no accommodation tax is calculated.

6. Property taxes are estimated to be assessed at .017% of total tax value for commercial property and 1% of total value on non-commercial property.

7. Coliseum admissions revenues are estimated to be approximately $8,000,000 and are assessed at 5%.

THE COLUMBIA PROJECT

TWELVE YEAR JV REVENUE

AND EXPENDITURE PROJECTIONS

JANUARY 30, 1999

COLUMBIA PROJECT
REVENUE AND EXPENDITURE PROJECTIONS
January 30, 1999

DESCRIPTION	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10	YEAR 11	YEAR 12	TOTALS
SALES	$0	$21,750,000	$21,240,000	$15,498,400	$22,824,256	$12,829,045	$18,229,098	$14,457,580	$20,398,889	$7,697,615	$6,240,675	$10,632,139	$171,994,696
LAND COST	$0	$7,414,360	$1,950,080	$882,170	$1,160,750	$898,450	$858,955	$719,685	$905,385	$510,730	$394,685	$417,870	$15,911,050
INFRASTRUCTURE COST	$8,000,000	$2,400,000	$8,400,000	$3,800,000	$5,000,000	$3,000,000	$3,700,000	$3,100,000	$3,900,000	$2,200,000	$1,700,000	$1,800,000	$47,000,000
LESS REIMBURSEMENT- BONDS	($4,000,000)	($1,200,000)	($4,200,000)	($1,900,000)	($2,500,000)	($1,500,000)	($1,850,000)	($1,550,000)	($1,950,000)	($1,100,000)	($850,000)	($900,000)	($23,500,000)
NET INFRASTRUCTURE COST	$4,000,000	$1,200,000	$4,200,000	$1,900,000	$2,500,000	$1,500,000	$1,850,000	$1,550,000	$1,950,000	$1,100,000	$850,000	$900,000	$23,500,000
GROSS PROFIT	-$4,000,000	$13,135,640	$15,089,840	$12,716,230	$19,163,506	$10,629,595	$15,520,141	$12,187,915	$17,543,504	$6,286,885	$4,996,020	$9,314,269	$132,583,646
COMMISSIONS	$0	$543,750	$531,000	$387,460	$570,606	$320,651	$455,727	$361,440	$509,972	$197,440	$156,017	$265,803	$4,299,867
ADVERTISING COST													
OTHER COSTS													
TOTAL OPERATING EXPENSES	$0	$543,750	$531,000	$387,460	$570,606	$320,651	$455,727	$361,440	$509,972	$197,440	$156,017	$265,803	$4,299,867
OPERATING PROFITS	-$4,000,000	$12,591,890	$14,558,840	$12,328,770	$18,592,900	$10,308,944	$15,064,414	$11,826,478	$17,033,532	$6,089,445	$4,840,003	$9,048,466	$128,283,779
OVERHEAD(6%)	$0	$1,740,000	$1,699,200	$1,239,872	$1,825,940	$1,026,084	$1,458,328	$1,156,606	$1,631,911	$631,809	$499,254	$850,571	$13,759,576
DISCOUNT OF JV MEMBERS	$0	$2,175,000	$2,124,000	$1,549,840	$2,282,426	$1,282,605	$1,822,910	$1,445,758	$2,039,889	$789,762	$624,067	$1,063,214	$17,199,470
PROFIT AFTER OVERHEAD	-$4,000,000	$8,676,890	$10,735,740	$9,539,058	$14,484,534	$8,000,258	$11,783,176	$9,224,111	$13,361,732	$4,667,874	$3,716,682	$7,134,681	$97,324,733

PLTF TRIAL EXH 254
CV010863
3683

Columbia, S. C. Project
Notes and Assumptions for
Sales and Expenditure Projections
January 30, 1999

1. The revenue assumptions are based on preliminary information using land use assumptions accumulated from Bill Sermon and the preliminary land plan developed by Lockwood Greene. These assumptions are not intended to produce results that represent the actual use and value of each parcel of property. The purpose of these projections is to provide the various equity participants with an overview of the projects potential and to solicit input from the various participants in order to produce reliable projections.

   The timing of various sales of tracts is allocated over twelve (12) years. The projected land uses for various years are preliminary and are subject to change.

   The projected land sales that year 2 is the base year and that sales prices will increase at a 4% compounded per annum rate and that development costs will increase at a 2% compounded per annum rate.

2. The actual land costs have yet to be determined and the $18,000,000 is an estimate of the potential cost of the 4500-acre tract. Cost associated with the additional 300 acres has not yet been determined.

3. The infrastructure cost is estimated to be a cost for the equity group and is estimated to be approximately $20,000 per acre. No infrastructure costs are assigned to the golf course tracts, the USC Prospective tract, the Water Treatment tract and 50% of standard on residential. Infrastructure costs estimates are reduced 50% based on expected minimum concessions from various governmental entities under tax incentive programs.

4. The marketing and/or commission cost associated with the sell of land is estimated to average 6% of the projected sales value of the various tracts.

5. An overhead allowance is included and is estimated to be approximately 3% of gross sales.

6. Discount of JV members is based on a 10% reduction in sales price from fair market value on all projects by JV partners inside the development tract.

6. Changes in the land use assumptions or the average price per acre assumptions could have a material impact on the projected results contained in the attached projections.

PLTF TRIAL EXH 254 CV010864

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e-mail: AdkinsJR@msn.com

February 8, 1999

Burroughs and Chapin Company, Inc.
P. O. Box 2095, 2411 North Oak Street
Myrtle Beach, SC 29578-2095

RE: 4,461± acre Manning Property, Richland County, South Carolina
Complete Appraisal/Summary Appraisal Report Update

Ladies and Gentlemen:

At the request of Mr. Burwell D. Manning, we have updated our March, 1998 appraisal of the Market Value of the Fee Simple interest of the above-captioned real estate. The users of this update should have our original report at hand to fully understand this update. We understand the intended users of this report are the investors and their prospective lenders. Our updated market value estimate reconfirms a minimum value of $30,000,000.

Significant governmental actions have occurred during the past 12 months affecting the property. Shortly after our first appraisal, FEMA revised the Richland County Flood Insurance maps reclassifying most of the property from flood plain to floodway. Thus prohibiting any development on the property. On February 2, 1999, the Richland County Council agreed to assume maintenance of 20± miles of upgraded levees protecting the property. The revised FEMA maps will remove most of the appraised property from the 100 year flood plain, permitting full development. The revised flood maps and county levee maintenance increase the desirability of the property for development. The rate of absorption should increase because engineering, insurance, construction, legal, and surveying costs should significantly decline.

A permit in accordance with Section 404 and/or Section 10 of the Clean Water Act will be required prior to any soil disturbance and/or dredging. A Phase II ESA with remediation of the UST's near the White House farm site area is now underway.

The property falls in Richland County Development District (D-1) according to zoning officials. "This district is intended to provide for large tracts of land located primarily on the fringe of urban growth and ... further recognized that future demand for developable land will generate requests for amendments in zone designations to remove land from D-1 and place it into other more intensively developed classifications as a natural consequence of urban expansion."

In estimating the value of the property, a development approach was utilized. This involves elements of all the traditional valuation approaches. Cost Approach techniques were utilized to estimate the cost of obtaining approvals, engineering, construction of roads, etc., and other sales costs during the estimated sellout of the parcels. Sales Comparison Approach techniques were utilized in estimating the market prices for typical commercial and residential development parcels.

CV005993

PLTF TRIAL EXH 255

Income Capitalization Approach techniques were used to discount the net sales proceeds to a present value indication after deductions for sales costs and developers profit.

We analyzed historical building permits and inventories for each major type of development such as single family homes, multi-family housing (apartments, condominiums), office, industrial, motel, restaurant, education, and recreation. The modified average for each type of use was then utilized to estimate the amount of new construction the Columbia MSA will reasonably absorb over the next 7 years. This demand was converted into an acreage amount and we estimated the subject's capture rate of the market. We tried to take a middle of the road reasonable absorption rate to produce the best value for the project.

We then utilized historical land sales and listings to project the fair sales price and size for each type of land parcel. This calculation when summed yields the annual acreage absorbed and a gross income from sales. We added a 20% loss factor to the acreage for dikes, levees, roads, wet land avoidance and mitigation, and water courses.

The next step was to estimate all the costs associated with obtaining the necessary approvals from local, city, county, state, and federal officials. Based on discussions with government regulators and knowledgeable developers we projected no sales during the first 12 months, with the first sales during the second year and continuing at a level pace until the end of the project. The sales pace can be increased with higher marketing costs, sales commissions, and lower land prices. There is a trade-off required to produce a quality development. The following costs are based on our best judgment after discussions with knowledgeable, experienced experts in the area. The property presents many challenges due the flood plain classification and amount of wetlands; while offering a unique opportunity to provide convenient residential, recreational and commercial development near the city center with upscale residences, student housing, office parks, factory outlet/shopping centers, and golf. This also blends with the cities objectives and plans by the River Alliance to provide parks, etc. near the rivers to enhance the city life style.

We estimated annual engineering costs at $200,000. Wetlands will have to be surveyed and each residential structure will require an individual above flood level certification. Architecture and land planning costs are estimated at $75,000 each year, Surveying at $200 per acre, legal at $200 per acre, annual construction of roads, utilities, and dikes is estimated at $1,000,000. This is hard to estimate without an approved plan showing the amount of elevated road way that is more costly (subdivision streets run about $100/lf and bridges $1,000/lf.. Sales commissions were estimated at 9%, permits at $5 per $1,000 of lots sold, Real estate taxes based on discussions with the assessors office, overhead at 2% of gross sales income, Management at $100,000 per year, Developers' profit at 15% of gross sales income, and miscellaneous expenses at $50,000 per year. Based on current investor return criteria we discounted the net sales income at 12% and 15%. The indicated profit and discount ranges from about 27% to 30%. We consider this adequate for a high risk development project with no engineering or approvals in place.

Ordinarily a direct sales comparison approach is the primary approach utilized in estimating the value of vacant land. There are no 4,461± acre parcels possessing similar value characteristics such as the subject with 2 miles of Interstate frontage, 4 miles of river frontage, a full interchange with additional arterial frontage and access, all utilities readily available, and less than two miles from the center of the capital city and the largest university in the state (The University of South Carolina).

The appraised property is under contract of sale at a cash price of $18,000,000, with closing scheduled for February 10, 1999. That is the reason for this summary update appraisal.

The value conclusion and analysis are contingent on the following special assumption and limiting condition: timely receipt of all approvals and permits required to fully develop the property similar to the procedure outlined within the analysis and valuation sections of this report.

The value estimated in this appraisal does not include any personalty items such as farm equipment, deer stands, tractors, or inventory.

As a result of the inspection of the property and investigation of the market, it is our opinion that the market value of the fee simple interest, as of February 7, 1999 was:

THIRTY MILLION ($30,000,000) DOLLARS

We certify to the best of our knowledge and belief that: the statements of fact contained in this report are true and correct; the reported analyses and opinions are our personal, unbiased, professional conclusions; the analyses and opinions were developed and the report prepared in conformance with and subject to the requirements of the Code of Professional Ethics and Standards of Professional Practice of the Appraisal Institute and the Uniform Standards of Professional Appraisal Practice; we have no present or prospective interest in the property; the fee for our services is not contingent upon the conclusions reached; no limitations on the full development of the appraisal process were preconditions of this assignment; the appraisal assignment was not based on a requested minimum valuation, a specific valuation, or the approval of a loan; Jerry R. Adkins has completed the continuing education requirements of the Appraisal Institute; and we personally inspected the subject property.

Cordially,

Jerry R. Adkins, MAI

Certified General Appraiser State of South Carolina # 2806

Attachments

Appraisal Scope - In the course of preparing this appraisal report, we have made an interior and exterior physical inspection of the property. The land records of the subject and neighboring counties were examined for physical and legal information about the subject and comparables. We examined multiple listing services and other historical data sources; and interviewed real estate brokers, property owners and developers to gather information to help us accurately reflect the impact of current market conditions on the appraised property. We discussed the challenging development obstacles facing this property with local, county, state, federal officials, the DNR, ACE, county zoning, flood, and development officials.

Market value is defined as (OCC Rule 12 CFR 34.42(f)): "the most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

(1) buyer and seller are typically motivated;

(2) both parties are well informed or well advised, and acting in what they consider their best interests;

(3) a reasonable time is allowed for exposure in the open market;

(4) payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto; and

(5) the price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale." (USPAP, 1997 edition) (The Dictionary of Real Estate Appraisal, Page 222)

Fee Simple Estate - is defined as: "Absolute ownership unencumbered by any other interest or estate, subject only to the limitations imposed by the governmental powers of taxation, eminent domain, police power and escheat." (The Dictionary of Real Estate Appraisal, Page 140)

Leased Fee - is defined as: "An ownership interest held by a landlord with the rights of use and occupancy conveyed by lease to others. The rights of the lessor (the leased fee owner) and the leased fee are specified by contract terms contained within the lease." (The Dictionary of Real Estate Appraisal, Page 204)

Type of Appraisal and Report - This is a Complete Appraisal presented in a Summary Appraisal Report as defined in the Uniform Standards of Professional Appraisal Practice. A Summary Report presents in summary format the appraiser's reasoning and value conclusion in a more brief format than the Self-Contained Appraisal Report, but more thoroughly than the Restricted Report.

STATEMENT AND AGREEMENT AS TO LIMITING CONDITIONS AND ASSUMPTIONS

The use of this appraisal report for any purpose signifies the reading and acceptance of all assumptions, attachments and limiting conditions. These conditions are a part of the appraisal report, they are a preface to any certification, definition fact or analysis, and are intended to establish as a matter of record that the appraiser's function is to provide a present market value indication for the subject property based upon the appraiser's observations as to the subject property and real estate market. This appraisal report is an economic study to estimate value as defined in the report. It is not an engineering, construction, environmental, legal or architectural study nor survey and no such expertise is implied. No testings of material, equipment, soils, water, air or vegetation were made on or off site.

The limiting conditions and assumptions which follow apply to each and every property identified for valuation in this report, unless otherwise indicated.

Assumptions relevant to the acceptance and completion of this appraisal assignment:

1. That the legal description as given is correct.

2. That the title to the property is good and marketable.

3. That certain opinions, data, and estimates furnished by others in the course of this investigation are correct.

4. That the property is under responsible ownership and competent management.

5. That no recorded restriction or zoning ordinance would prohibit the use of the property for any purpose indicated to be the Highest and Best Use unless cited in the report.

6. That any legal instrument or engineering document, plat or report affecting or indicating an effect upon the use and utility of the property has been furnished to the appraiser(s) by the orderer or property owner and that if no such documents are presented (in original form or a copy) prior to or by the date of inspection of the property, it is a representation that no such documents exist.

Limiting conditions which apply to the acceptance and completion of this appraisal assignment:

1. The property is appraised as though owned in fee simple and free and clear of any existing lien or encumbrance, unless specifically noted in this report.

2. The appraiser(s) has (have) no responsibility for matters of a technical or legal nature, especially those affecting title to the property.

3. No obligation for court testimony with regard to this appraisal report exists, unless arrangements have been previously made therefore.

4. Value distributions as outlined in this report serve as a basis for distribution of total valuation and shall not be separately quoted or utilized.

5. Drawings, sketches, or maps as included in this report are for the sole purpose of assisting the reader in visualizing the property. Unless otherwise indicated, they are not engineering drawings.

6. The appraisal is based on there being no hidden or unapparent conditions of the property, subsoil, or structures, which would render it more or less valuable. The appraiser(s) has (have) no responsibility for such conditions, or for engineering studies which might be required to discover such factors.

7. Unless otherwise discussed in the body of this report, we assume that appropriate waste disposal facilities are either available from public or private sewer.

8. Users of this appraisal report are directed to obtain the services of a professional engineer to determine the presence and/or absence of hazardous materials including but not limited to: asbestos and/or radon gas and/or urea formaldehyde foam insulation.

9. The appraiser(s) has (have) not made any form of an environmental study, nor has any such studies been made available to the appraiser(s). The value reported herein assumes that the subject site is free and clear of any and all contamination, either on or underground, above ground, air borne, water borne, or within any improvements thereon. The appraiser(s) cannot assume liability for off site environmental problems, either unrevealed, unidentified, or in no way provided to the appraiser(s).

10. This appraisal report is an economic study for value, it is not an engineering, structural, mechanical, feasibility, or architectural study.

11. The liability of the appraisal firm and its employees is limited to the client only.

12. Possession of this report or any copy thereof does not carry with it right of publication, nor may it be used for other than its intended use; the physical report(s) remain the property of the appraiser(s) for the use of the client, the fee being for the analytical services only. Use of this report is limited to the person, persons, agency or firm for whom it is prepared, and to the appraiser(s). The Bylaws and Regulations of the Appraisal Institute require each Member and Candidate to control the use and distribution of each appraisal report signed by such Member or Candidate, except as hereinafter provided. The client may distribute copies of this appraisal report in its entirety to third parties, however, selected portions of this appraisal report shall not be given to third parties without the prior written consent of the signatories of this appraisal report. Further, there is no accountability, obligation, or liability to any third party. It is, however, the third parties' responsibility to assure itself that the information contained herein is accurate and complete. Any reliance on the contents shall be solely at the third parties' risk. This document when provided to third parties is without any warranty or representation, expressed or implied, as to its content, its suitability for any purpose, its accuracy or completeness. Neither all nor any part of this appraisal report shall be disseminated to the general public by the use of advertising media, public relations, news, sales or other media for public communication without the prior written consent of the appraiser(s).

13. This appraisal is to be used only in its entirety and no part is to be used without the whole report. All conclusions and opinions concerning the analyses as set forth in the report were prepared by the appraiser so indicated no the individual certifications, and as discussed in the Scope of the Appraisal Section. No change of any item in the report shall be made by anyone other than the appraiser(s) and/or officer of the firm. The appraiser(s) and firm shall have no responsibility if any such unauthorized change is made.

14. Disclosure of the contents of the appraisal report is governed by the Bylaws and Regulations of the professional appraisal organizations with which the appraiser(s) is (are) affiliated.

15. This appraisal was obtained from Adkins Counseling & Valuation or related companies and/or its individuals or related independent contractors and consists of "trade secrets and commercial or financial information" which is privileged and confidential and exempted from disclosure under 5 U.S.C. 522(b)(4). Notify the appraiser(s) signing the report or an officer of Adkins Counseling & Valuation of any request to reproduce this appraisal in whole or part.

16. An abundance of research and analysis was conducted in the preparation of this appraisal and/or appraisal report. All file data, research, and analysis, is incorporated herein by reference.

17. Appraisals are maintained in our office for five years or five years after final disposition in court.

The subject is identified on the assessment records of the County of Richland as the following tax maps (TMS).

Levee Area	Tract	Acreage	Sub-Total	TMS	Highest and Best Use
I	Ehrlich	141.80		11000-02-01	Commercial
I	Bee-Judy	15.00		11100-01-07	Residential
I	Overlook	255.49		11100-01-08	Residential
I	Overlook	76.61		11100-01-09	Residential
I	Arthur	954.84	1443.74	11000-01-02	Mixed
II	White House	1008.50		10900-01-02	Mixed
II	Tokunaga	55.30		13400-01-01	
II	Martin-Rice	50.00		13400-01-02	Residential
II	Rutledge	516.00		13400-01-03	Residential
II	Truesdale	11.26	1641.06	13500-01-01	Support
III	Chappell	45.00		13300-01-01	Residential
III	Shull-Chappell	394.00		13300-01-04	Residential
III	Guignard	502.50		13300-01-05	
III	Kirkland	35.96		13400-02-01	
III	Chappell	52.18		13400-02-10	
III	Lux	254.80		13400-02-16	
III	Baron #2	29.00		13400-02-17	
III	Baron #1	40.00	1353.44	13500-05-01	
N/A	Bluff Estates	10.00		13513-01-27	Residential
		13.47		13415-01-10	
		4461.71		Total Acres	

Our analysis is summarized in the following tables and charts. In the first table we summarize some of the sales data that was analyzed. Additional data showing more recent sales in 1997 and 1998 were also consulted along with current listings or vacant development parcels. These are available for inspection in our files.

The next table is the result of our analysis of building permits in Columbia MSA for the past 20 years, different types of commercial space construction and absorption, rental rates, housing sales, lot sales competition from active subdivisions, apartment construction and rentals.

Based on that analysis we projected the average aggregate construction for the Columbia market over the next 7 years. Next we estimated the amount of the market the subject project will capture given its location, timing, and target market. Since the project has generated interest prior to any approvals or construction, some pent-up demand and rapid early absorption may take place. Sales momentum will increase after the initial phase of construction takes place due to the high visibility from the I-77 corridor.

We next put forth our best estimate as to the cost of moving the project thru preliminary engineering and approvals to construction and sales. These are shown in the cash flow analysis in the third table. These cost projections were estimated from discussions with experienced developers and contractors.

We estimated annual engineering costs at $200,000.

Street Name	Sale Date	Sale Price	Size	$/AC	Grantor	Grantee	Proposed Use
Columbiana Drive	17-Jul-98	$504,865	1.97	$256,287	Harbison Group	Thompson Hospitality	Hotel
Columbiana & Crossbow	20-Mar-96	$64,074	1.3	$49,288	Columbia Lakes, LLC	RCI Assisted Living, LLC	Assisted Living Facility
Woodcross Dr & Fairforest	4-Mar-97	$150,000	2.32	$64,914	Harbison Group	Sterling Homes Corp	64 bed Assisted Living
College St. & Columbia Ave., Irmo	27-Jan-97	$229,000	3.514	$65,168	Harbison Group	Clare Bridge of Columbia	38-bed Assisted Living
Woodcross Dr. & Fairforest	31-Aug-95	$331,110	5.094	$65,000	Harbison Group	Emeritt Place	66-bed Assisted Living
Jamil Rd. & Harbison	08-Jun-98	$600,000	2.80	$214,286	Wal-Mart Stores	Harbison Country, LLC	84-room Hotel
Lake Murray Blvd & I-26	18-Feb-98	$1,589,753	9.297	$171,000	Harbison Group	Hendon Columbia, LLC	2 hotels, retail, office, mixed
Forest Dr & I-77	11-Oct-96	$601,800	3.208	$187,594	I/C of Columbia, Inc.	ESA 0131, Inc	Hotel
Franconia Rd	24-Feb-98	$5440,000	3.52	$154,400		Century Columbia, LLC	Northern Hydraulics 20,000
Columbiana Drive & I-26	27-Sep-95	$149,179	0.761	$196,010	Harbison Group	James R. Davis, Jr.	Insurance Office
Fernandina Road @ Harbison Blvd	21-Jul-94	$513,393	1.120	$458,387	Liberty Life Insurance Co.	Apple South, Inc.	Restaurant
Fernandina Road @ Harbison Blvd & I-26	21-Jul-94	$575,000	1.310	$438,931	Liberty Life Insurance Co.	Apple South, Inc.	Restaurant
Lake Murray Blvd (SC 60) @ Columbiana Dr & I-26	12-Oct-95	$252,000	1.400	$180,000	Harbison Group	Discover Columbia/Harbison	
NEC Us 21 and Jenkins Bros. Road 1/2 mi N I-77	17-Dec-96	$233,750	1.800	$129,861	Sallie C. Kelly	Blythewood Oil Company, Inc.	
SEC Brookwood Dr, Duvall St & Vine St	01-Jun-94	$84,115	1.810	$46,636	Vantone Supply Co	FSC, Limited Partnership	
Fernandina Road & I-26	01-Nov-93	$200,000	2.140	$93,458	North Bay Dev. Corp	Metro Mobile Centers of Columbia	
Fernandina Road, Stone Mark Lane & I-26	08-Jan-95	$235,980	2.400	$98,325	Summerton Insurance	Bell South Carolina, LP	Antenna Site
S/S Lake Murray Blvd bet. College & Eastview	12-Dec-94	$452,400	2.950	$153,356	Irmo Joint Venture	MOPA Associates	Commercial
S/S Harbison Blvd @ Fernandina Road	06-Apr-95	$985,691	3.323	$296,627	Harbison Group	Quality Oil Company	Motel
SWC Bluff Industrial Blvd & Old Dairy Drive	01-May-94	$250,000	5.570	$44,883	Mem Associates	Paper Stock Dealers	Distribution Warehouse
Cross Bow Drive on Pond	18-Jul-96	$531,000	7.420	$71,563	Harpeco, LLC	Center Real Estate Corp	Residential Subdivision
Cross Bow Drive on Pond	06-Feb-95	$287,500	7.420	$38,747	P. W. Tracts	Harpeco, LLC	Residential Subdivision
Lake Murray Blvd opposite Columbiana Dr.	01-May-03	$834,592	7.590	$109,950	Harbison Group	Ronald M. Asbill	Shopping Center
NEC Harbison Blvd and I-26	01-Oct-91	$2,178,000	12.100	$180,050	Harbison Group	LCI Funding (Lowes)	Lowes Store
S/S Bbop Road Bet. Atlas and Pineview Rds	01-Sep-90	$325,000	12.600	$25,794	L. J. Shannon, et ux	Dillard Paper Co	Timber/Future Industri
I-26 and Club Road N of Harbison	01-Sep-93	$1,330,000	14.000	$95,000	Harbison Group	Godley,GRP Limited	Trailer Fun Park
5901 Fairfield Road at I-20	14-Dec-93	$875,000	15.179	$57,643	Heath Manning, et al	CRJ Properties, a Utah Partnership	
Cross Bow Drive on Pond	11-Apr-94	$1,261,735	18.720	$66,866	Harbison Group	Columbiana Lakes, LP	Apartments
Devega Road 1/2 mile E of I-20 and US 378	12-Jul-95	$1,050,000	22.680	$45,296	Southeastern Freight Lines	Southern Farm Bureau Casualty Ins. Co.	
Northpointe Blvd 1/2 mile N I-77 and US 21	01-Dec-95	$629,520	26.230	$24,000	Liberty Life Insurance Co.	Husek Fails LLC	Industrial Building
Two Notch opposite Alpine Rd	04-Jun-97	$1,125,000	41.380	$27,187	Two Notch LP	Manning Kirk	Mixed Apartment/Retail
Longwood Rd @ Southern RR Crossing	01-Oct-94	$720,000	60.000	$12,000	Carners Ferry Development	Hallas Pizza Co.	Mixed Ind. Residential
NWC Farrow Rd & Hard Scrabble 1/2 mile N of I-77	27-Sep-94	$1,781,220	84.850	$21,000	Margaret P. Smith	Bi-Lo, Inc.	Distribution Warehouse
1/2 mi E of I-77, NWC Farrow & Marthan Rds	01-Nov-94	$1,161,189	105	$11,071	Carolina Land Group, et al	Bose Corporation	Distribution Warehouse
Santee River Rd. N of Bloomville Rd (Rd. 48)	16-Feb-95	$350,000	528			Charles Ingram Lumber Co., Inc.	
Rear Land N of Rd.48 and W of Rd SC, 30' access	16-Feb-95	$350,000	543	$644	James G. Brannan	Charles Ingram Lumber Co., Inc.	
Black River Swamp N of CR 40	23-Mar-95	$360,000	2,586	$139	Edward B. Mabry, Jr., et. al.	Jerry A. Meehan, Trustee	
Rd. 8-14-50 N of CR 40 & Black River Swamp	01-Jul-94	$300,000	2,586	$116	Southern Pine Plantations	Edward B. Mabry, Jr., et al	

PROJECTED USE	UNITS/ YEAR		UNITS/ ACRE	COLA MSA ACRES ABSORBED	PRICE/ ACRE	COLA TOTAL ANNUAL SALES	SUBJECT SHARE OF MARKET	SUBJECT GROSS SALES	SUBJECT ACRES ABSORBED	NUMBER OF UNITS
Single Family	3,500	units	4	875	$12,000	$10,500,000	20%	$2,100,000	175	700
Apartment	1,500	units	10	150	$35,000	$5,250,000	50%	$2,625,000	75	750
Office	300,000	sq. ft.	34.43525	35	$100,000	$2,500,000	50%	$1,750,000	17.5	
Retail	480,000	sq. ft.	60.60606	60	$120,000	$7,200,000	30%	$2,160,000	18	
Recreation	500	acres		500	$4,000	$2,000,000	50%	$1,000,000	250	
Motels	300	rooms		10	$300,000	$3,000,000	40%	$1,200,000	4	
Institutional	17	units		50	$25,000	$1,250,000	50%	$625,000	25	
Education	25	units		100	$15,000	$1,500,000	20%	$300,000	20	
R&D	78,000	sq. ft.		15	$25,000	$375,000	50%	$187,500	7.5	
Pads/year	5	pads		5	$400,000	$2,000,000	100%	$2,000,000	5	
				1,800				$13,947,500	597	Acres
					Dikes, Levies, Roads, Flood Way, Easements, Wetland Mitigation			20%	119.4	Acres
									716	Acres
								$19,469		

CV006002

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	Year	1999	2000	2001	2002	2003	2004	2005
DEVELOPMENT								
INCOME								
Acres Absorbed		0	716	716	716	716	716	868
Cumulative acres Sold			716	1433	2149	2866	3582	4450
Unsold Acres		4450	3734	3017	2301	1584	868	0
Annual Gross Sales Income		0	$13,947,500	$13,947,500	$13,947,500	$13,947,500	$13,947,500	$16,898,981
DEVELOPMENT								
COSTS								
Engineering	$200,000 per year	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$0
Architect	$75,000 per year	$75,000	$75,000	$75,000	$75,000	$75,000	$75,000	$75,000
Surveying	$200 per acre	$143,280	$143,280	$143,280	$143,280	$143,280	$173,600	$890,000
Legal	$200 per acre	$0	$143,280	$143,280	$143,280	$143,280	$143,280	$173,600
Construction	1000000 per year	$1,000,000	$1,000,000	$1,000,000	$1,000,000	$1,000,000	$0	$0
Commissions	9% of sales		$1,255,275	$1,255,275	$1,255,275	$1,255,275	$1,255,275	$1,255,275
Permits	$5 per 1000	$6,276	$6,276	$6,276	$6,276	$6,276	$0	$0
Real Estate Tax	roll back first year	$650,000	$170,000	$142,632	$115,264	$87,896	$60,528	$33,160
Overhead	0.02 sales	$278,950	$278,950	$278,950	$278,950	$278,950	$278,950	$278,950
Management	100000 per year	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000
Developer Profit	0.15 sales		$2,092,125	$2,092,125	$2,092,125	$2,092,125	$2,092,125	$2,092,125
Miscellaneous	50000 per year	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000
Total Costs		$2,503,506	$5,514,186	$5,486,818	$5,459,450	$5,432,082	$4,428,758	$4,948,110
Net Proceeds		($2,503,506)	$8,433,314	$8,460,682	$8,488,050	$8,515,418	$9,518,742	$11,950,871
Reversion Factor @	12.0%	0.8929	0.7972	0.7118	0.6355	0.5674	0.5066	0.4523
Present Value This Year		($2,235,274)	$6,722,986	$6,022,146	$5,394,509	$4,831,877	$4,822,491	$5,405,967
Cumulative Present Value		($2,235,274)	$4,487,712	$10,509,859	$15,904,168	$20,736,044	$25,558,536	$30,964,503
Reversion Factor @	15.0%	0.8696	0.7561	0.6575	0.5718	0.4972	0.4323	0.3759
Present Value This Year		($2,176,962)	$6,376,797	$5,563,036	$4,853,070	$4,233,668	$4,115,215	$4,492,775
Cumulative Present Value		($2,176,962)	$4,199,835	$9,762,870	$14,615,940	$18,849,608	$22,964,823	$27,457,598
							(say)	$30,000,000

APPRAISAL AND CONSULTING QUALIFICATIONS: JERRY R. ADKINS, MAI

EDUCATION	MBA, Business Administration B. S., Economics Midwestern State University
PROFESSIONAL DESIGNATIONS AND ORGANIZATIONS	Member, (MAI Designation) Appraisal Institute (AI Member No. 7966) Continuing Education Completed

Qualified Expert Witness in Connecticut Superior Court, Federal Bankruptcy Ct. United States District Court, Hartford, Ct. Connecticut General Appraiser Certificate No. 000015. South Carolina General Certified Appraiser No. 2806.

Approved Appraiser: Connecticut National Bank, Fleet Bank, FDIC, CIGNA, Aetna Life, CM Alliance, The Hartford, HRA, MetLife Capital Credit, New Haven Savings, Union Trust, Savings Bank of Manchester, Liberty Bank, Connecticut Development Authority, People's Bank, Glastonbury Bank & Trust, Department of Transportation, Department of Environmental Protection, Resolution Trust Corporation, Bank of Boston, Tenenbaum Assoc., Maryland National Corp. Branch Bank and Trust [BB&T]

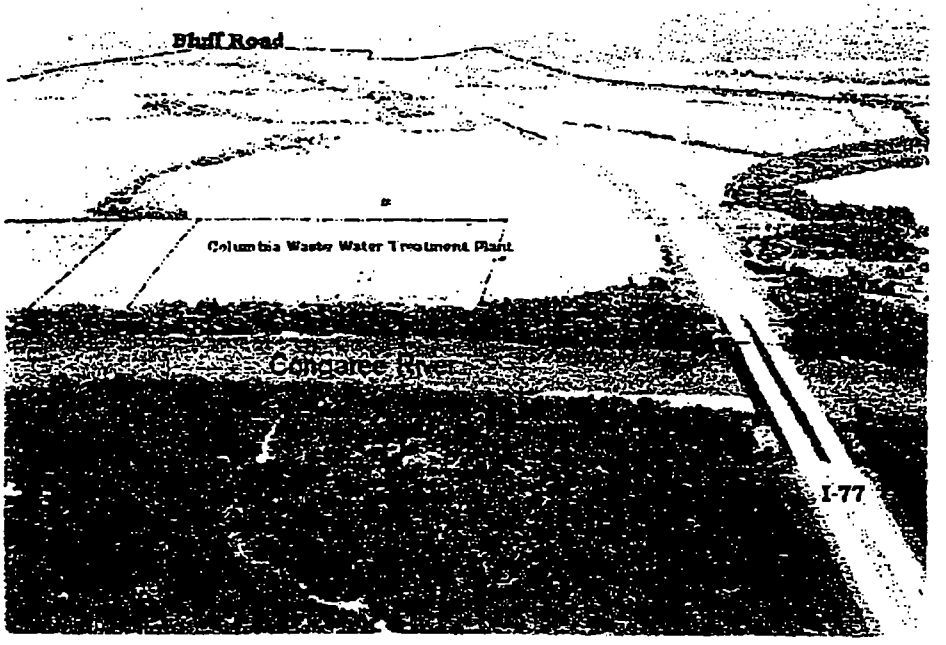
PROFESSIONAL EXPERIENCE

Adkins Counseling & Valuation, 4 Adare Court, Irmo, SC 29063. (803) 749-9988 Residential and Commercial counseling and valuation. Contract review appraiser and complaint investigator for South Carolina Appraisers Board. 1996 to present.
President, Jerry R. Adkins Co., Inc., PO Box 1178, 36 Welles Street, Glastonbury, Ct. 06033, 1985 - 1996. Real Estate Consulting and Appraisal of all types of income producing property throughout CT.
Consulting Appraiser, John J. Leary Company, Inc. 1988-1990, Meriden.
Consulting Appraiser, Phillip A. Goodsell, Inc. 1985-1988, Rocky Hill.

State of Connecticut, Department of Transportation, 1986-1987, Staff Appraiser and Reviewer.
General Services Administration, Fort Worth, Texas, 1979-1984, Staff appraiser and Contracting officer.
Bureau of Land Management, Santa Fe, New Mexico, 1978-1979, Real Estate Specialist.
Gillentine & Keever, Santa Fe, New Mexico, 1977-1978, Appraiser.
Federal Highway Administration, Baltimore, Maryland, 1973-1976, Real Estate Specialist.

Property types appraised include most commercial, residential, industrial, and recreational uses such as major office buildings, industrial facilities, retail centers, multi-family residential properties, mixed use buildings, residential subdivisions, condominium developments, time shares and raw land. Additional assignments include highest and best use studies, feasibility/marketability analysis and absorption studies.

REAL PROPERTY APPRAISAL
(Complete Appraisal/Summary Report)
Fee Simple Interest of Congaree Farms, LLC
Proposed 4,461 acre River Pointe South Development
Richland County, South Carolina
Reflecting Market Conditions
as of March 26, 1998 for
First Republic Mortgage



Aerial Photo #4
Looking Northeast across Congaree River along Interstate 77 highway frontage toward Bluff Road interchang

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- Building Permits
- Average Daily Traffic
- Resource and Infrastructure Inventory
- Commercial Construction Absorption

Jerry R. Adkins, MAI
Adkins Counseling & Valuation
4 Adare Court, Irmo, SC 29063 Voice (803) 749-9988 Fax (803) 749-0205
e-mail jadkin01@sprynet.com

March 27, 1998

Bob Martin
First Republic Mortgage
The Pavilion
Columbia, SC 29201

RE: River Pointe South, Richland County, South Carolina
Complete Appraisal/Summary Appraisal Report

Dear Mr. Martin:

At your request, we have inspected the above-captioned real estate and investigated the market for the purpose of estimating the market value of the fee simple interest of the property described as the following TMS numbers in the County Assessor's office.

Levee Area	Tract	Acreage	Sub-Total	TMS	Highest and Best Use
I	Ehrlich	141.80		11000-02-01	Commercial
I	Bee-Judy	15.00		11100-01-07	Residential
I	Overlook	255.49		11100-01-08	Residential
I	Overlook	76.61		11100-01-09	Residential
I	Arthur	954.84	1443.74	11000-01-02	Mixed
II	White House	1008.50		10900-01-02	Mixed
II	Tokunaga	55.30		13400-01-01	
II	Martin-Rice	50.00		13400-01-02	Residential
II	Rutledge	516.00		13400-01-03	Residential
II	Truesdale	11.26	1641.06	13500-01-01	Support
III	Chappell	45.00		13300-01-01	Residential
III	Shull-Chappell	394.00		13300-01-04	Residential
III	Guignard	502.50		13300-01-05	
III	Kirkland	35.96		13400-02-01	
III	Chappell	52.18		13400-02-10	
III	Lux	254.80		13400-02-16	
III	Baron #2	29.00		13400-02-17	
III	Baron #1	40.00	1353.44	13500-05-01	
N/A	Bluff Estates	10.00		13513-01-27	Residential
		13.47		13415-01-10	
		4461.71		**Total Acres**	

The property is located in Richland County outside the city of Columbia, and about 2.5 miles from the center of the city. Most of the subject is located in the 100 year flood plain of the Congaree River. Large portions of the property have been diked over the years to control flooding. The approximate elevations of the levees is 145 feet along the upper part of the river in levee section I property has not flooded since 1976 when the City of Columbia failed to maintain a portion to the levee system for which they were responsible (resulting in a $4.000,000± settlement to the property owner). We were told that water was about one foot deep at some of the foundations of the school buildings, but there was no damage.

The floodway is presently shown outside the levees on the Flood Insurance Rate Maps (FIRM maps). Federal Emergency Management Agency (FEMA) is now updating the Flood Insurance Study and the Flood Insurance Rate Maps for both Lexington and Richland Counties. The preliminary maps for Lexington are available for comment and public hearings are in progress. Richland revisions are eminent. The Lexington revisions resulted in a significantly larger area of the SCANNA property across the river from the subject being reclassified as floodway—effectively eliminating any future development without extensive, expensive engineering studies (DHEC-II or DHEC- RAS).

"New residential construction and substantial improvements in the flood plain on the subject will have to be elevated at least one foot above the 100 year flood elevations in areas where base flood elevations have been determined or at least 2 feet above adjacent grade in other areas." (44 CFR Part 60 and 6-12.5, Appendix A Richland County Code) This can be done on fill or structure. Non-residential construction may be elevated or completely flood proofed to the flood elevation level. Base flood elevations vary from 144 feet on the north end near Arthurtown to 135 feet around Beckam Swamp Road on the south end of the site. The property elevations range from 130 feet to 120 feet. The normal river level is near 120 feet. New construction will generally need to be elevated about 15 feet.

A permit in accordance with Section 404 and/or Section 10 of the Clean Water Act will be required prior to any soil disturbance and/or dredging.

A phase I environmental assessment is being prepared, but was not available prior to completion of the appraisal. During our inspection of the property we observed 10 petroleum pumps with associated under ground storage tanks in the vicinity of the White House farms barns and sheds. There was also petroleum stained soil and storage containers in that vicinity. These are typical of farming operations and we assume no significant ground or water contamination.

The property falls in Richland County Development District (D-1) according to zoning officials. "This district is intended to provide for large tracts of land located primarily on the fringe of urban growth and ... further recognized that future demand for developable land will generate requests for amendments in zone designations to remove land from D-1 and place it into other more intensively developed classifications as a natural consequence of urban expansion." Permitted principal uses include single family detached dwellings on individual lots, agriculture uses, parks and play fields, libraries and fire stations, churches, schools, day nurseries, and cemeteries.

In estimating the value of the property, a development approach was utilized. This involves elements of all the traditional valuation approaches. Cost Approach techniques were utilized to estimate the cost of obtaining approvals, engineering, construction of roads, etc, and other sales costs during the estimated sellout of the parcels. Sales Comparison Approach techniques were utilized in estimating the market prices for typical commercial and residential development parcels. Income Capitalization Approach techniques were used to discount the net sales proceeds to a present value indication after deductions for sales costs and developers profit.

We analyzed historical building permits and inventories for each major type of development such as single family homes, multi-family housing (apartments, condominiums), office, industrial, motel, restaurant, education, and recreation. The modified average for each type of use was then utilized to estimate the amount of new construction the Columbia MSA will reasonably absorb over the next 7 years. This demand was converted into an acreage amount and we estimated the subject's capture rate of the market. We tried to take a middle of the road reasonable absorption rate to produce the best value for the project.

We then utilized historical land sales and listings to project the fair sales price and size for each type of land parcel. This calculation when summed yields the annual acreage absorbed and a gross income from sales. We added a 20% loss factor to the acreage for dikes, levees, roads, wet land avoidance and mitigation, and water courses.

The next step was to estimate all the costs associated with obtaining the necessary approvals from local, city, county, state, and federal officials. Based on discussions with government regulators and knowledgeable developers we projected no sales during the first 12 months, with the first sales during the second year and continuing at a level pace until the end of the project. The sales pace can be increased with higher marketing costs, sales commissions, and lower land prices. There is a trade-off required to produce a quality development. The following costs are based on our best judgment after discussions with knowledgeable, experienced experts in the area. The property presents many challenges due the flood plain classification and amount of wetlands; while offering a unique opportunity to provide convenient residential, recreational and commercial development near the city center with upscale residences, student housing, office parks, factory outlet/shopping centers, and golf. This also blends with the cities objectives and plans by the River Alliance to provide parks, etc. near the rivers to enhance the city life style.

We estimated annual engineering costs at $200,000. Wetlands will have to be surveyed and each residential structure will require an individual above flood level certification. Architecture and land planning costs are estimated at $75,000 each year, Surveying at $200 per acre, legal at $200 per acre, annual construction of roads, utilities, and dikes is estimated at $1,000,000. This is hard to estimate without an approved plan showing the amount of elevated road way that is more costly (subdivision streets run about $100/lf and bridges $1,000/lf... Sales commissions were estimated at 9%, permits at $5 per $1,000 of lots sold, Real estate taxes based on discussions with the assessors office, overhead at 2% of gross sales income, Management at $100,000 per year, Developers' profit at 15% of gross sales income, and miscellaneous expenses at $50,000 per year. Based on current investor return criteria we discounted

the net sales income at 12% and 15%. The indicated profit and discount ranges from about 27% to 30%. We consider this adequate for a high risk development project with no engineering or approvals in place.

Ordinarily a direct sales comparison approach is the primary approach utilized in estimating the value of vacant land. There are no 4,461± acre parcels possessing similar value characteristics such as the subject with 2 miles of Interstate frontage, 4 miles of river frontage, a full interchange with additional arterial frontage and access, all utilities readily available, and less than two miles from the center of the capital city and the largest university in the state (The University of South Carolina).

A deed recorded in volume 1395, pages 738, et. seq. at a purchase price of $4,559,000 was described to me by Mr. B. D. Manning, II as a loan and not a sale of the property July 16, 1997. We have a copy of an unsigned offer to purchase the property at $30,000,000 contingent on special owner financing to an LLC in which the seller has a 50% interest. The net present value of that offer may be considerably more or less than the face amount.

The value conclusion and analysis are contingent on the following special assumption and limiting condition: timely receipt of all approvals and permits required to fully develop the property similar to the procedure outlined within the analysis and valuation sections of this report.

The value estimated in this appraisal does not include any personalty items such as farm equipment, deer stands, tractors, or inventory.

As a result of the inspection of the property and investigation of the market, it is our opinion that the market value of the fee simple interest, as of March 26, 1998 was:

THIRTY MILLION ($30,000,000) DOLLARS

We certify to the best of our knowledge and belief that: the statements of fact contained in this report are true and correct; the reported analyses and opinions are our personal, unbiased, professional conclusions; the analyses and opinions were developed and the report prepared in conformance with and subject to the requirements of the Code of Professional Ethics and Standards of Professional Practice of the Appraisal Institute and the Uniform Standards of Professional Appraisal Practice; we have no present or prospective interest in the property; the fee for our services is not contingent upon the conclusions reached; no limitations on the full development of the appraisal process were preconditions of this assignment; the appraisal assignment was not based on a requested minimum valuation, a specific valuation, or the approval of a loan; Jerry R. Adkins has completed the continuing education requirements of the Appraisal Institute; and we personally inspected the subject property.

Cordially,

Jerry R. Adkins, MAI

Certified General Appraiser State of South Carolina # 2806

Attachments

OBJECTIVE AND VALUE DEFINITION

The objective of this assignment includes a purpose and function.

Purpose of Appraisal - is to estimate the market value of the fee simple interest in the real estate known as proposed 4,461 acre River Pointe South, Richland County, South Carolina

Appraisal Function - The function is to inform First Republic Mortgage of this value for use in a mortgage loan application with the appraised property serving as part of the collateral.

Appraisal Scope - In the course of preparing this appraisal report, we have made an interior and exterior physical inspection of the property. The land records of the subject and neighboring counties were examined for physical and legal information about the subject and comparables. We examined multiple listing services and other historical data sources; and interviewed real estate brokers, property owners and developers to gather information to help us accurately reflect the impact of current market conditions on the appraised property. We discussed the challenging development obstacles facing this property with local, county, state, federal officials, the DNR, ACE, county zoning, flood, and development officials.

DESCRIPTION OF THE PROCESS

The estimation of a real property's market value involves a systematic process in which the appraiser defines the problem; plans the work necessary to solve the problem; and collects, analyzes and interprets the data relevant to the value estimate. Three traditional approaches to value are normally used in the appraisal process and are discussed in the Approaches to Value section of this report.

The subject property is a 4,461. It was inspected on several dates in March 1998. Detailed data was collected and confirmed for similar properties through the use of public records and recorded deeds, grantors, grantees, and/or real estate brokers and appraisers involved in the transactions. Rental rates were also obtained from property owners and property managers. Market data was researched from 1991 to the present date.

Jerry R. Adkins, MAI, is a State Certified General Real Estate Appraiser having 24 years of appraisal experience. He inspected the subject property on several dates in March 1998, completed the research and analysis, and prepared the appraisal report. Jerry R. Adkins, MAI, takes full responsibility for the contents of the appraisal report.

Market value is defined as (OCC Rule 12 CFR 34.42(f)): "the most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

(1) buyer and seller are typically motivated;

(2) both parties are well informed or well advised, and acting in what they consider their best interests;

(3) a reasonable time is allowed for exposure in the open market;

arrangements comparable thereto; and

(5) the price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale." (USPAP, 1997 edition) (The Dictionary of Real Estate Appraisal, Page 222)

Fee Simple Estate - is defined as: "Absolute ownership unencumbered by any other interest or estate, subject only to the limitations imposed by the governmental powers of taxation, eminent domain, police power and escheat." (The Dictionary of Real Estate Appraisal, Page 140)

Leased Fee - is defined as: "An ownership interest held by a landlord with the rights of use and occupancy conveyed by lease to others. The rights of the lessor (the leased fee owner) and the leased fee are specified by contract terms contained within the lease." (The Dictionary of Real Estate Appraisal, Page 204)

Type of Appraisal and Report - This is a Complete Appraisal presented in a Summary Appraisal Report as defined in the Uniform Standards of Professional Appraisal Practice. A Summary Report presents in summary format the appraiser's reasoning and value conclusion in a more brief format than the Self-Contained Appraisal Report, but more thoroughly than the Restricted Report.

SPECIAL ASSUMPTIONS AND LIMITING CONDITIONS

The value conclusion and analysis are contingent on timely granting of all approvals and permits required to fully develop the property similar to the procedure outlined within the analysis and valuation sections of this report.

STATEMENT AND AGREEMENT AS TO LIMITING CONDITIONS AND ASSUMPTIONS

The use of this appraisal report for any purpose signifies the reading and acceptance of all assumptions, attachments and limiting conditions. These conditions are a part of the appraisal report, they are a preface to any certification, definition fact or analysis, and are intended to establish as a matter of record that the appraiser's function is to provide a present market value indication for the subject property based upon the appraiser's observations as to the subject property and real estate market. This appraisal report is an economic study to estimate value as defined in the report. It is not an engineering, construction, environmental, legal or architectural study nor survey and no such expertise is implied. No testings of material, equipment, soils, water, air or vegetation were made on or off site.

The limiting conditions and assumptions which follow apply to each and every property identified for valuation in this report, unless otherwise indicated.

Assumptions relevant to the acceptance and completion of this appraisal assignment:

1. That the legal description as given is correct.
2. That the title to the property is good and marketable.
3. That certain opinions, data, and estimates furnished by others in the course of this investigation are correct.
4. That the property is under responsible ownership and competent management.
5. That no recorded restriction or zoning ordinance would prohibit the use of the property for any purpose indicated to be the Highest and Best Use unless cited in the report.
6. That any legal instrument or engineering document, plat or report affecting or indicating an effect upon the use and utility of the property has been furnished to the appraiser(s) by the orderer or property owner and that if no such documents are presented (in original form or a copy) prior to or by the date of inspection of the property, it is a representation that no such documents exist.

Limiting conditions which apply to the acceptance and completion of this appraisal assignment:

1. The property is appraised as though owned in fee simple and free and clear of any existing lien or encumbrance, unless specifically noted in this report.
2. The appraiser(s) has (have) no responsibility for matters of a technical or legal nature, especially those affecting title to the property.
3. No obligation for court testimony with regard to this appraisal report

exists, unless arrangements have been previously made therefore.

4. Value distributions as outlined in this report serve as a basis for distribution of total valuation and shall not be separately quoted or utilized.

5. Drawings, sketches, or maps as included in this report are for the sole purpose of assisting the reader in visualizing the property. Unless otherwise indicated, they are not engineering drawings.

6. The appraisal is based on there being no hidden or unapparent conditions of the property, subsoil, or structures, which would render it more or less valuable. The appraiser(s) has (have) no responsibility for such conditions, or for engineering studies which might be required to discover such factors.

7. Unless otherwise discussed in the body of this report, we assume that appropriate waste disposal facilities are either available from public or private sewer.

8. Users of this appraisal report are directed to obtain the services of a professional engineer to determine the presence and/or absence of hazardous materials including but not limited to: asbestos and/or radon gas and/or urea formaldehyde foam insulation.

9. The appraiser(s) has (have) not made any form of an environmental study, nor has any such studies been made available to the appraiser(s). The value reported herein assumes that the subject site is free and clear of any and all contamination, either on or underground, above ground, air borne, water borne, or within any improvements thereon. The appraiser(s) cannot assume liability for off site environmental problems, either unrevealed, unidentified, or in no way provided to the appraiser(s).

10. This appraisal report is an economic study for value, it is not an engineering, structural, mechanical, feasibility, or architectural study.

11. The liability of the appraisal firm and its employees is limited to the client only.

12. Possession of this report or any copy thereof does not carry with it right of publication, nor may it be used for other than its intended use; the physical report(s) remain the property of the appraiser(s) for the use of the client, the fee being for the analytical services only. Use of this report is limited to the person, persons, agency or firm for whom it is prepared, and to the appraiser(s). The Bylaws and Regulations of the Appraisal Institute require each Member and Candidate to control the use and distribution of each appraisal report signed by such Member or Candidate, except as hereinafter provided. The client may distribute copies of this appraisal report in its entirety to third parties, however, selected portions of this appraisal report shall not be given to third parties without the prior written consent of the signatories of this appraisal report. Further, there is no accountability, obligation, or liability to any third party. It is, however, the third parties' responsibility to assure itself that the information contained herein is accurate and complete. Any reliance on the contents shall be solely at the third parties' risk. This document when provided to third parties is without any warranty or

representation, expressed or implied, as to its content, its suitability for any purpose, its accuracy or completeness. Neither all nor any part of this appraisal report shall be disseminated to the general public by the use of advertising media, public relations, news, sales or other media for public communication without the prior written consent of the appraiser(s).

13. This appraisal is to be used only in its entirety and no part is to be used without the whole report. All conclusions and opinions concerning the analyses as set forth in the report were prepared by the appraiser so indicated no the individual certifications, and as discussed in the Scope of the Appraisal Section. No change of any item in the report shall be made by anyone other than the appraiser(s) and/or officer of the firm. The appraiser(s) and firm shall have no responsibility if any such unauthorized change is made.

14. Disclosure of the contents of the appraisal report is governed by the Bylaws and Regulations of the professional appraisal organizations with which the appraiser(s) is (are) affiliated.

15. This appraisal was obtained from Adkins Counseling & Valuation or related companies and/or its individuals or related independent contractors and consists of "trade secrets and commercial or financial information" which is privileged and confidential and exempted from disclosure under 5 U.S.C. 522(b)(4). Notify the appraiser(s) signing the report or an officer of Adkins Counseling & Valuation of any request to reproduce this appraisal in whole or part.

16. An abundance of research and analysis was conducted in the preparation of this appraisal and/or appraisal report. All file data, research, and analysis, is incorporated herein by reference.

17. Appraisals are maintained in our office for five years or five years after final disposition in court.

The subject is identified on the assessment records of the County of Richland as the following tax maps (TMS).

Levee Area	Tract	Acreage	Sub-Total	TMS	Highest and Best Use
I	Ehrlich	141.80		11000-02-01	Commercial
I	Bee-Judy	15.00		11100-01-07	Residential
I	Overlook	255.49		11100-01-08	Residential
I	Overlook	76.61		11100-01-09	Residential
I	Arthur	954.84	1443.74	11000-01-02	Mixed
II	White House	1008.50		10900-01-02	Mixed
II	Tokunaga	55.30		13400-01-01	
II	Martin-Rice	50.00		13400-01-02	Residential
II	Rutledge	516.00		13400-01-03	Residential
II	Truesdale	11.26	1641.06	13500-01-01	Support
III	Chappell	45.00		13300-01-01	Residential
III	Shull-Chappell	394.00		13300-01-04	Residential
III	Guignard	502.50		13300-01-05	
III	Kirkland	35.96		13400-02-01	
III	Chappell	52.18		13400-02-10	
III	Lux	254.80		13400-02-16	
III	Baron #2	29.00		13400-02-17	
III	Baron #1	40.00	1353.44	13500-05-01	
N/A	Bluff Estates	10.00		13513-01-27	Residential
		13.47		13415-01-10	
		4461.71		**Total Acres**	

The legal descriptions shown on the following pages are recorded in Volume 1395, Page 738 of the Land Records and look like a sale to Congaree Farms, LLC. Mr. B. D. Manning, Jr. Explained this was only a financing arrangement and not a sale.

Legal Description

EXHIBIT A

PROPERTY OF OVERLOOK

All those certain pieces, parcels, or tracts of land, together with any improvements thereon, situate, lying and being in the County of Richland, State of South Carolina, containing 331.1 acres, more or less, shown and delineated as Tracts D and E on a plat of property prepared for OVERLOOK, INC. by W. Frank McAulay, Jr., R.L.S., dated March 19, 1977, and revised June 20, 1977, which tracts are more specifically described as follows:

PARCEL E having the following metes and bounds:

Beginning at a point on the western boundary of the Congaree River at the northwestern boundary of property now of the Foundation for Heathwood Hall; from that point running N. 66° 14' East for a distance of 2,996.6 feet to a point, thence turning N. 23° 46' West for a distance of 3,200 feet, more or less, to a point; thence turning and running S. 57° 37' West for a distance of 3,170 feet, more or less to a point on the western bank of the Congaree River, and thence turning in a southerly direction for a distance of 2,210 feet, more or less, to the point of beginning.

Less: Certain 15 acre tract shown and delineated as A-1 as shown on the aforesaid plat.

PARCEL D having the following metes and bounds:

Beginning at a point on the northeastern side of the property now of the Foundation of Heathwood Hall, approximately 500 feet from the northeastern boundary of Parcel E, from that point running N. 23° 46' West for a distance of 3,200 feet, more or less, to a point, thence turning N. 57° 37' East for a distance of 2,120 feet to a point, and turning and running S. 38° 51' East for a distance of 351.77 feet, more or less, to a point, and thence turning S. 29° 52' East for a distance of 3,201 feet more or less to a point; thence turning and running S. 66° 14' West for a distance of 2,530 feet, more or less, to the point of beginning.

ALSO, a non-exclusive perpetual easement of right-of-way for access, ingress and egress, to Tracts D and E and other property of Overlook, given to Mortgagor by deed of Bluff Industrial Development Corporation, dated September 30, 1977, and recorded in Deed Book D-438 at Page 302, in the R.M.C. Office for Richland County.

ALSO, an agreement for a perpetual non-exclusive easement of right-of-way for ingress and egress given to Overlook, Inc. by Merc Associates, over the property of Merc Associates from Bluff Road to the property of Overlook, said agreement recorded in Deed Book D-438 at Page 321 on September 30, 1977, in the RMC Office for Richland County.

Being the identical property conveyed to Overlook, Inc., by deed of Bluff Industrial Development Corp., dated September 16, 1965, and recorded in the R.M.C. Office for Richland County, South Carolina, in Deed Book D-58 at Page 611.

332134.1-EX (JDH) 020674-1

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Legal Description (continued)

ARTHUR TRACT

All that certain piece, parcel, or tract of land, together with the improvements thereon, situate, lying and being in the County of Richland, State of South Carolina, containing 1.343 acres, more or less, as shown and delineated on plat of property surveyed for Ruth P. Forsythe by William Wingfield, Reg. Surv. dated March 31, 1958 and recorded in the Office of the Clerk of Court for said County in Plat Book "S" at Pages 38 and 39, and which tract of land is more specifically described, bounded and shown on such plat as follows: COMMENCING at a stone marker, which stone marker is located at a distance of 146 feet, more or less, in a Northwesterly direction, from a point at the Northeastern intersection of Blair Road, formerly Ott Road, and the Old Bluff Road, and thence running from such stone marker over and across Blair Road, formerly Ott Road, along the Northern side of the Old Bluff Road, S. 37 deg. 44 min. E., 1,083 feet, more or less, to a R.R. iron; thence running S. 41 deg. 18 min. E., along the northern side of the Old Bluff Road for a distance of 300 feet, more or less, to an iron; thence running S. 51 deg. 17 min. E. along the northern side of the Old Bluff Road 200 feet, more or less, to an iron; thence running S. 61 deg. 17 min. E., along the northern side of the Old Bluff Road 300 feet, more or less, to an iron; thence running S. 66 deg. 17 min. E. along the northern side of the Old Bluff Road, 865.2 feet, more or less, to an iron; then running S. 56 deg. 12 min. E., along the northern side of the Old Bluff Road, 567.2 feet, more or less, to a R.R. iron; then running S. 51 deg. 33 min. E. along the northern side of the Old Bluff Road, 413.3 feet, more or less, to an iron; thence running S. 33 deg. 47 min. E., along S.C. Highway #48 (Bluff Road) as shown on the above plat, 100 feet, more or less, to an iron; thence running S. 28 deg. 53 min. E. along S.C. Highway #48 as shown on the above plat, 392.8 feet more or less, to an iron; thence running S. 24 deg. 17 min. E., along S.C. Highway #48, 992.5 feet, more or less, to an iron; and there coming and thence running N. 89 deg. 53 min. W. along lands now or formerly of Truesdale, 53.5 feet, more or less to an oak tree; thence turning and running S. 19 deg. 01 min. W. along lands now or formerly of Truesdale, 228 feet more or less to an iron; thence running S. 06 deg. 28 min. W. along lands now or formerly of Truesdale, 1,056 feet, more or less, to a point in the center line of the creek, as shown on the above plat; thence running in an irregular curved line in a southerly direction, 700 feet, more or less, to a point in such creek; thence turning and running along the bed of a lagoon, in an irregular curved line in a westerly and southerly direction, 2,800 feet, more or less, to an iron where the lagoon and an old ditch intersect; thence, turning and running S. 68 deg. 5 min. W., along lands now or formerly of E & G Cattle Farm - Ehrlich, 3,426.3 feet, more or less, to an iron; thence turning S. 68 deg. 31 min. W. along lands now or formerly of E & G Cattle Farm - Ehrlich, 1,971.5 feet more or less, to a fence post corner; thence running S. 68 deg. 00 min. W., along lands now or formerly of Manning, 1,514.4 feet, more or less, to an iron; thence running in a southwesterly direction along lands now or formerly of Manning 20 feet, more or less to a point on the eastern bank of the Congaree River; thence turning and running in an irregular line in a northwesterly direction along the eastern bank of the Congaree River, for a distance of 6,616.1 feet, more or less to a point on the eastern bank of the Congaree River; thence turning and running in a northeasterly direction along lands of Ruth P. Forsythe, formerly Taylor lands, 20 feet, more or less, to an iron and cottonwood snag; thence running N. 66 deg. 28 min. E., along lands of Ruth P. Forsythe, formerly Taylor, 6,003.5 feet, more or less, to a concrete monument; thence running N. 68 deg. 33 min. E., along lands now or formerly of Tolliver, 721 feet, more

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or less, to an iron; thence running N. 64 deg. 47 min. E., along lands now or formerly of Tolliver, 131 feet, more or less, to a granite stone marker; thence turning and running N. 30 deg. 38 min. E. along lands now or formerly of Tolliver, 1,867.7 feet, more or less, to an iron, thence running N. 28 deg. 17 min. E., along lands now or formerly of Tolliver, 218.3 feet more or less, to an iron on the southern side of the Old Bluff Road; thence running N. 22 deg. 52 min. E. over and across the Old Bluff Road, 31.5 feet, more or less, to the point of commencement all as shown by reference to the abovementioned plat.

LESS: 120 acres delineated as Parcel "A" on a plat of property of Burwell D. Manning, Jr. by B. P. Barber & Assoc. dated May 3, 1967, recorded in the Office of the Clerk of Court for said County in Plat Book X at Page 261, heretofore conveyed to the City of Columbia.

LESS: The southern 1,500 feet containing 99.7 acres of a conveyance of 133 acres to the Foundation of Heathwood Hall by deed dated January 16, 1974, and recorded in Deed Book D-305 at Page 989.

LESS: A tract containing 33.3 acres lying between the Heathwood Hall property on the north and the City of Columbia, S.C. Wastewater Treatment Plant on the south, being the parcel conveyed to Overlook, Inc. by deed dated January 15, 1974, and recorded in Deed Book D-305 at Page 682.

RESERVING: To mortgagor, his or its heirs, successors and assigns, an easement 100 feet in width over and upon the roadway from Beltline Blvd. extended to the Heathwood Hall property and intersecting paved roads in existence for access, ingress and egress.

This is a portion of the property containing 1,343 acres, more or less conveyed to Burwell D. Manning, Jr. by deed of Ruth P. Forsythe dated July 13, 1961, and recorded in the Office of the R.M.C. for Richland County, S.C., in Deed Book 304 at Page 96, Burwell D. Manning, Jr. having conveyed a 15% interest to Eastern Corn and Grain Company, Inc. by deed dated November 15, 1971, and recorded December 29, 1971, in Deed Book D-229 at Page 396 in said R.M.C. Office, as to which a corrected deed was filed February 7, 1972, in said R.M.C. Office in Deed Book D-232 at Page 960.

WHITEHOUSE FARMS
a/k/a Childs Tract, adjoins Arthur
Tract on a portion of its Southern Boundary

All that piece, parcel, or tract of land, together with the improvements thereon, situate, lying and being about 6 miles from the City of Columbia, in School District No. 5 in the County of Richland, State of South Carolina, containing 1,024 acres, more or less, as more particularly shown and delineated on a plat of the property of the estate of Mrs. M. E. Childs, made by Tomlinson Engineering Co. dated January 16, 1924, said plat being filed for record in the Office of the Clerk of Court for Richland County, and bounded as follows: On the North by land now or formerly of Edward Ehrlich; East by land now or formerly of T. M. Livingston and land now or formerly of C. M. Livingston; South by the Congaree River and Gills Creek; and on the West by the Congaree River.

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Legal Description (continued)

This being a portion of the same property conveyed to Burwell D. Manning, Jr., by deed of Katherine H. Manning dated December 6, 1961, and recorded December 7, 1961, in the Office of the R.M.C. for Richland County in Deed Book 314 at Page 565, and including the property conveyed to Burwell D. Manning, Jr. by deed of Palmetto State Construction Company dated May 15, 1964, and recorded in the Office of the R.M.C. for Richland County in Deed Book 389 at Page 79 on June 10, 1964.

LESS: That certain piece, parcel or lot of land containing 10 acres located on the northern side of Road S40-51 (Whitehouse Road) and conveyed to Coker's Pedigreed Seed Company by deed dated April 1976, and recorded in Deed Book 380 at Page 583 in the RMC Office for Richland County, South Carolina.

RESERVING to mortgagor, his heirs and assigns an easement 66 feet in width over and upon the road now in existence designated as Road S40-51 (Whitehouse Road) for access, in-tress and egress.

EHRLICH TRACT

Adjoining Arthur Tract and a portion of Southern Laundry.

All that certain piece, parcel or tract of land situate, lying and being in the County of Richland, State of South Carolina, south of the City of Columbia near the Congaree River, containing 142.9 acres, more or less,,being irregular in shape and being bounded on the North side by lands of B. D. Manning; East by lands now or formerly of Truesdale; South by lands of Rice, Tokunago and Manning, and on the West by lands of Manning.

Being the identical tract heretofore conveyed to Edward Ehrlich and G. C. Romans tine by Alice G. Childs by deed dated October 28, 1890, recorded in Deed Book "V" at Page 21, and being the same tract subsequently conveyed by G. C. Romanstine to Edward Ehrlich by deed recorded in Deed Book "V" at Page 236 in the Office of the Clerk of Court for Richland County, excluding, however, the 3.2 acres non-contiguous tract west of Bluff Road, described in said deed, and conveyed to Burwell D. Manning, Jr. by deed of Ruth Ehrlich Ralston, et al., dated May 2, 1966, and recorded June 30, 1966, in Deed Book D 47 at Page 701 in the RMC Office for Richland County, South Carolina, and by deed of Harry M. Lightsey, Master, dated June 30, 1966, and recorded June 30, 1966, in said RMC Office in Deed Book D-47 at Page 698.

TOKUNAGA TRACT

Adjoins Ehrlich Tract on its Southern Boundary

All that certain piece, parcel or lot of land situate, lying and being in the County of Richland, State of South Carolina, beginning at an iron stake in a ditch on Ehrlich's South line, 410 feet Southwest of the intersection of this ditch and another ditch; running thence Southwest 1,665 feet to a stake in the center of a lagoon; thence running along the center of said lagoon in a Southwesterly direction 1,750 feet; thence running S. 54 deg. E., 1,200 feet to a stake; thence

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Legal Description (continued)

running N. 38-3/4 deg. E., 1,079 feet to an iron stake; thence running N. 58 deg. W. 953 feet to a stake; thence running N. 26-1/4 deg. E., 1,864 feet to the point of beginning. Said tract of land containing 55-1/2 acres, more or less, being shown on a plat of survey prepared by William Wingfield dated May 18, 1964, recorded in the Office of the Clerk of Court for Richland County in Plat Book "X" at Pages 43, 43a, 43b, 43c.

This being the identical property conveyed to Burwell D. Manning, Jr. by deed of Shandon Greenhouses, et al., dated February 17, 1967, and recorded on February 17, 1967, in the Office of the R.M.C. in Deed Book D-65 at Page 636.

MARTIN FARM

Adjoins Tokunaga Tract on its Eastern Boundary

All that tract of land situate, lying and being in School District No. Five in the County of Richland, State of South Carolina, in a general southeasterly direction from the City of Columbia, S.C., and not far from the Bluff Road, containing 50 acres, more or less, and more particularly described as follows: BEGINNING at an iron stake 184 feet southwest of the heart of a ditch, it being the eastern corner of a tract of land heretofore conveyed by The Federal Land Bank of Columbia to Mitsou Tokunaga, and running thence N. 58 deg. W., 953 feet with said Tokunaga's line to an iron stake; thence N. 26 1/4 deg. E., along said line now or formerly of Tokunaga 1,864 feet to corner in ditch on line now or formerly of Ehrlich; thence in a northeasterly direction with said line now or formerly of Ehrlich 410 feet to intersection of two ditches; thence in a southeasterly direction along ditch 544 feet to intersection of two ditches; thence in a southeasterly direction along ditch 544 feet to intersection of two ditches; thence along old ditch in a southerly direction 1,084 feet to the intersection of two ditches; thence in a southwesterly direction along ditch 1,004 feet to heart of ditch; thence S. 38-3/4 deg. W. 184 feet to the point of beginning, with improvements thereon. Said property being designated as "Martin Farm" on composite plat prepared for Burwell D. Manning, Jr. by William Wingfield, Reg. Surveyor dated May 18, 1964, recorded in the Office of the Clerk of Court for Richland County in Plat Book X at Pages 43, 43A, 43B, 43C.

This being the same property heretofore conveyed to Burwell D. Manning, Jr. by James H. Martin by deed dated May 19, 1962, recorded in the Office of the R.M.C. for Richland County, South Carolina, on May 24, 1962, in Deed Book 327 at Page 153.

TRUESDALE TRACTS

Adjoins Arthur and Rutledge Tracts

Tract #1: All that certain piece, parcel or tract of land, situate, lying and being about 5 miles south of the City of Columbia, in School District #5 in the County of Richland, State of South Carolina, on Gills Creek, being composed of and embracing Parcel "A", containing 2.57 acres as shown on plat embracing the same surveyed for B. D. Manning, Jr. by B. P. Barber & Assocs., Engrs., dated May 27, 1964, recorded in the Office of the Clerk of Court for Richland

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County in Plat Book U at Page 189, and having such courses, distances and boundaries as shown on said plat.

Being a portion of the premises conveyed to Burwell D. Manning, Jr. by deed of L. C. Truesdale, Inc. dated June 15, 1964, and recorded June 15, 1964, in the Office of the R.M.C. for Richland County in Deed Book 389 at Page 329.

Tract #2: All that certain piece, parcel or tract of land, situate, lying and being about 5 miles south of the City of Columbia in School District #5 in the County of Richland and State of South Carolina, near Gills Creek, being composed of and embracing Tract "C", containing 5.65 acres, as shown on plat embracing the same made for B. D. Manning, Jr. by B. P. Barber & Assocs., Engrs., dated May 27, 1964, recorded in said Clerk's Office in Plat Book U at Page 189, and having such courses, distances and boundaries as shown on said Plat.

Being a portion of the premises heretofore conveyed to Burwell D. Manning, Jr. by deed of L. C. Truesdale, Inc. dated June 15, 1964, and recorded June 15, 1964, in the Office of the R.M.C. for Richland County in Deed Book 389 at Page 329.

Tract #3: All that certain piece, parcel or tract of land, situate, lying and being about 5 miles south of the City of Columbia in School District #5 in the County of Richland, State of South Carolina, on Gills Creek, being composed of and embracing Tract "B", containing 3.22 acres, as shown on plat embracing the same and made for Jackson Gills Creek Public Service District by B. P. Barber and Assocs., Engrs., dated March 31, 1964, recorded in said Clerk's Office in Plat Book 23 at Page 534, and having such courses, distances and boundaries as shown on said plat.

Being the same premises conveyed to Burwell D. Manning, Jr., by deed of Jackson-Gills Creek Public Service Commission dated June 11, 1964, and recorded June 15, 1964, in the Office of the R.M.C. for Richland County in Deed Book 389 at Page 331; subject, however, to an easement and right-of-way in perpetuity in Jackson-Gills Creek Public Service Commission over and along a 50-foot strip of land along the southern boundary of said tract adjacent to Whitehouse Road for the installation, construction and maintenance of sanitary sewerage lines or other facilities used in connection with sewerage treatment plant.

RUTLEDGE FARM

Adjoins Whitehouse Farm on Southern Tip

All that certain piece, parcel or tract of land situate, lying and being in Lower Township, in the County of Richland, State of South Carolina, about 4-1/2 miles from the City of Columbia, consisting of 516 acres, more or less, as shown on plat prepared for Burwell D. Manning, Jr. by William Wingfield, Reg. Surv. dated August 24, 1966, and recorded in the Office of the Clerk of Court for Richland County in Plat Book "X" at Page 38, being more fully described as follows: Beginning at a point in the center line of Gills Creek 416 feet, more or less, Southwest of Bluff Road, S.C. Highway #48, running thence in a Southerly direction along the center line of Gills Creek, 10,550 feet, more or less; thence turning and running along the center

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Legal Description (continued)

line of a gut in a Westerly direction, 840 feet, more or less, to a point; thence turning and running N. 35 deg. 30 min. E., 2,400 feet to a point; thence turning and running N. 12 deg. 15 min. W., 1,360 feet to a point; thence turning and running N. 34 deg 30 min. E., 1,720 feet to a point; thence turning and running N. 81 deg. 30 min. E., 505-feet to a point) thence N. 07 deg. 40 min. W., 825 feet to a point; thence N. 42 deg. 00 min. E., 1,285 feet to a point; thence N. 25 deg. 30 min. W., 3,150 feet to a point; thence N. 61 deg. 40 min E., 937.5 feet to a point thence S. 26 deg. 26 min. E., 59.2 feet to a point; thence N. 61 deg. 33 min. E., 253.4 feet to a point; thence N. 27 deg. 29 min. W., 59.3 feet to a point; thence N. 61 deg. 40 min. E., 611 feet, more or less, to a point; thence N. 61 deg. 40 min. E., 611 feet, more or less, to a point of beginning. Said property being bounded on the North by property now or formerly of Truesdale; East by property now or formerly of B. D. Manning Trust, Shirley Wilson and Manning Development Co.; South by B. D. Manning, Jr.

LESS: Lot conveyed out of Northern boundary by Burwell D. Manning, Jr. to L. C. Truesdale, adjoining property owner by deed dated January 1962, and recorded in Deed Book 340 at Page 314 in said RMC Office.

This being the identical property conveyed to Burwell D. Manning, Jr. by deed of C. Heath Manning dated January 13, 1954, and recorded in the Office of the R.M.C. for Richland County, South Carolina, in Deed Book 125 at Page 558 on January 15, 1954.

GUIGNARD FARM

Adjoins Whitehouse and Rutledge Farms on Gill Creek

All that certain piece, parcel or tract of land situate, lying and being in Lower Township, Richland County, South Carolina, approximately 7 miles South of the City of Columbia, containing 544 acres, more or less, as shown on a plat prepared for Manning Development Co. by Wingfield, Reg. Surv., dated June 10, 1964, recorded in the Office of the Clerk of Court for Richland County in Plat Book "X" at Page 42, and being more full described as follows: BEGINNING at a point in the center line of Beckham Road approximately 2.5 miles south of South Carolina Highway #48, known as Bluff Road, thence running along the center line of said road S. 16 deg. 50 min. W., 1,119.7 feet to a point; thence turning and running in a Westerly direction along the center line of an old ditch 2,840.0 feet, more or less, to a point at the junction of the ditch and center line of Big Lake; thence turning and running a Northwesterly direction along the center line of Big Lake 2,800 feet, more or less, to a point; thence turning and running S. 81 deg. W., 860 feet, more or less to a point on the Eastern boundary of Congaree River; thence turning and running in a Northwesterly direction along the Eastern boundary of Congaree River, 2,763 feet to the intersection of Gills Creek and the Congaree River; running thence along the center line of Gills Creek, 9,150 feet, more or less, to a point; thence turning and running S. 19 deg. E., 4,188 feet to the point of beginning.

This being a portion of the same property conveyed to Manning Development Company by deed of Sanders Guignard dated July 6, 1959, and recorded in the Office of the R.M.C. for Richland County in Deed Book 254 at Page 18 and by deed of Susan G. Maye dated July 6, 1959, and recorded in Deed Book 254 at Page 20.

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Legal Description (continued)

This being the identical property conveyed to Burwell D. Manning, Jr. by deed of Manning Development Company dated February 20, 1976, and recorded February 23, 1976, in the Office of the R.M.C. for Richland County, South Carolina, in Deed Book D-374 at Page 305.

McRAE KIRKLAND TRACT

All that certain piece, parcel or tract of land, together with improvements thereon, situate, lying and being on the Northern side of Bluff Road, South Carolina Highway #48, near the City of Columbia, Richland County, South Carolina, containing 10.0 acres, more or less, being shown and delineated as Tract A on plat of property surveyed for William M. Kirkland and McRae Kirkland, by B. P. Barber & Assocs., Inc., Engineers, dated February 2, 1966, and recorded in the Office of the Clerk of Court for Richland County in Plat Book W at Page 212, reference thereto being craved for more complete description being rectangular in shape and having the following boundaries and measurements, all as shown on said plat, to wit: On the North by Tract B, whereon it measures 400 feet, more or less, East by a portion of Tract C and by Tract D, whereon it measures 1,089 feet, more or less; South by Bluff Road, S.C. Highway #48, whereon it fronts 400 feet, more or less, on the West by Tract B, whereon it measures 1,089 feet, more or less. This property is subject to a life estate in McRae Kirkland, reserved by deed unto Manning Development Company dated June 30, 1966, and recorded in Book D-45 at Page 733 in the RMC Office for Richland County, S.C. and being the same property conveyed by Manning Development Company to Whirlabout, Inc. by deed dated August 19, 1966, and recorded in Book D 54 at Page 438 in said office.

This being a portion of the property conveyed to Burwell D. Manning, Jr. by deed of Whirlabout, Inc., recorded in the Office of the R.M.C. for Richland County, South Carolina, on June 27, 1979, in Deed Book D-506 at Page 50.

BARRON TRACTS

Tract #1: All that certain piece, parcel or tract of land with improvements thereon, situate, lying and being on the West side of Bluff Road about 4 miles South of the City of Columbia, Richland County, South Carolina, measuring and containing 40 acres, more or less, according to a plat thereof by Tomlinson Eng. Co. dated April 29, 1935, shown as property of Estate of Annie Naomi McC. Shirley and recorded in the Office of the Clerk of Court for Richland County in Plat Book "H" at Page 54, said property being lands now or formerly of Washington, and lands formerly of the Estate of Shirley, and on the West by Gills Creek, separating this property from lands now or formerly of Childs, and by the Old Bluff Road, less all property heretofore conveyed to the South Carolina Highway Department, and also less a lot containing .005 acres on the Southwestern side of the Bluff Road heretofore conveyed to the S.C. Electric & Gas Company.

Tract #2: All that certain piece, parcel or tract of land situate, lying and being on the Eastern side of a paved state highway known as "Swamp Road" South of its intersection with Bluff Road, South of the City of Columbia, Richland County, South Carolina, being shown and delineated as 29 acres, more or less, on a plat prepared for J. T. McAlister & Co. by McMillan

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Eng. Co. dated January 6, 1965, and recorded in the Office of the Clerk of Court for said County in Plat Book "V" at Page 110; said tract being irregular in shape and bounded as follows: On the North by property known as Eastway Park No. 2, whereon it measures 1,540.5 feet, more or less; East by Eastway Park Subdivision tract, whereon it measures 304 feet, more or less; South by run of the lagoon which separates it from property now or formerly of W. L. Caughman; and on the West by paved state highway, all as shown on the abovementioned plat.

This is a portion of the property conveyed to Burwell D. Manning, Jr. by deed of Whirlabout, Inc. and recorded on June 27, 1979, in the Office of the R.M.C. for Richland County, South Carolina, in Deed Book D-506 at Page 50.

KIRKLAND SPANGLER TRACT

Adjoins Barron Tract on its Eastern Boundary

All that certain piece, parcel and tract of land with all improvements thereon, situate, lying and being on the south side of Bluff Road, and on the eastern side of a paved road sometimes known as "Swamp Road" south of the City of Columbia, County of Richland, State of South Carolina, being shown and delineated as 40 acres on a plat of Eastway Park No. 2 prepared in the Office of the Clerk of Court for Richland County in Plat Book "V" at Pages 108-109. Said tract being irregular in shape and having such metes and bounds as shown on said recorded plat except such slight variation in distances and bearings as may occur; said tract being generally bounded on the North by Bluff Road, whereon it measures 1,013 feet; East by property now or formerly of Josh Young (the branch being the line) and by property of Block H, Eastway Park; on the South by other property of W. M. Kirkland and McRae Kirkland, previously conveyed to J. T. McAlister, whereon it measures 1,540.5 feet; West by paved road for a distance of 303 feet, and on the Northwest by property now or formerly of Alyward; whereon it measures in a broken line for a total distance of 1,986 feet, all measurements being more or less.

LESS: All that piece, parcel or lot of land situate, lying and being in the County of Richland, State of South Carolina south of Columbia on Bluff Road (S.C. Highway #48) shown and delineated as Parcel 2, containing 2.75 acres on plat prepared for Manning Development Company by B. P. Barber & Assoc. dated June 10, 1969, recorded in the Office of the Clerk of Court for said County in Plat Book 37 at Page 83, said Parcel being bounded on the East by property of the Grantor designated as Parcel 1, whereon it measures 400 feet; on the South by property of the Grantor, whereon it measures 300 feet; on the West by property of the Grantor, whereon it measures 400 feet; and on the North by Bluff Road, whereon it measures 300 feet, same being a portion of Eastway Park #2 heretofore conveyed to the Grantor by deed of Eastway Park #2 recorded in said Clerk's Office in Deed Book D-35 at Page 565.

LESS: All that certain piece, parcel or lot of land, situate, lying and being in the County of Richland, State of South Carolina, containing 1.29 acres, more or less, and being shown as Parcel 1 on a plat of property surveyed for B. D. Manning, Jr. by B. P. Barber & Associates, Inc., dated June 10, 1969, and recorded in Plat Book 37 at Page 88 in the Office of the Clerk of Court for Richland County, S.C., and being more fully described as follows: Beginning at a point 1,994.4 feet southeast of the intersections of Bluff Road (S.C. Highway #48) and Swamp

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Legal Description (continued)

Road (S-519), thence S. 67 deg. 14 min. E. 194.1 feet to an iron in the centerline of a branch; then along the centerline of branch 470 feet more or less to an iron in the centerline of branch; thence N. 22 deg. 46 min. E. 400 feet to the point of beginning; being a portion of the property conveyed to Manning Development Company by deed of Eastway Park, Inc. dated January 12, 1966, recorded in Deed Book D-33 at Page 565 on January 21, 1966.

LESS: Easement for operation maintenance and repair of sewer out fall line running along northwestern side of branch which forms the boundary between this parcel and property now or formerly of Josh Young .

The above described Kirkland Spangler Tract was conveyed to Manning Development Company by deed of Eastway Park, Inc. by deed dated January 12, 1966, and recorded in Book D-33 at Page 565 in the RMC Office for Richland County, South Carolina, and conveyed by Manning Development Company to Burwell D. Manning, Jr. by deed dated February 20, 1976, and recorded in Book D-374 at Page 305 in the RMC Office for Richland County, South Carolina.

LUX TRACT

Adjoins Barron Tract on its Southern Boundary

All that certain piece, parcel or tract of land with improvements thereon situate, lying and being about 6 miles south of the City of Columbia, west of Bluff Road, Richland County, South Carolina, containing 254.8 acres, more or less, shown and delineated on plat prepared for Burwell D. Manning, Jr. by W. Frank McAulay, Jr. (R.L.S.) dated October 22, 1973, said property being more fully described as follows: Beginning at a point on the western side of the middle of bridge on county road approximately 3/4 of a mile from Bluff Road -S.C. Highway #48 and running thence along the eastern boundary of said county road in a southerly direction 1,520 feet, more or less, to a point; thence running S. 26 deg. 00 min. W. 1,030 feet, more or less, to a point; thence S. 19 deg. 00 min. W. for 2,204 feet, more or less to a point; thence S. 75 deg. E. for 15 feet, more or less, to a point; thence S. 26 deg. E. for 37 feet, more or less, to a point; thence S. 54 deg. E. for 58 feet, more or less, to a point; thence S. 57 deg. 30 min. E. for 100 feet, more or less, to a point; thence S. 52 deg. E. for 98 feet, more or less, to a point; thence S. 38 deg. E. for 47 feet, more or less, to a point; thence S. 17 deg. 30 min. E. for 16 feet, more or less, to a point; thence S. 30 deg. 30 min. E. for 79 feet, more or less, to a point; thence S. 55 deg. E. for 215 feet, more or less, to a point; thence N. 71 deg. E. for 30 feet, more or less, to a point; thence S. 58 deg. E. for 138 feet, more or less, to a point; thence S. 67 deg. E. for 500 feet, more or less, to a point; thence S. 68 deg. 30 min. E. for 165 feet, more or less, to a point; thence S. 78 deg. E. for 130 feet, more or less, to a point; thence N. 2 deg. 00 min. E. for 3,002.6 feet, more or less, to a point; thence S. 68 deg. E. for 663 feet, more or less, to a point; thence S. 68 deg. E. for 1,866 feet, more or less, to a point; thence N. 20 deg. 55 min. E. for 1,488 feet, more or less, to a point; thence N. 56 deg. 45 min. W. for 1,331 feet, more or less, to a point; thence turning and running initially in a northeasterly direction in a curved line shaped in a semi-circle curing to the west along the run of the lagoon to the point of beginning. This tract is comprised of two tracts formerly of H. B. Lux, containing 174.3 acres and 80.5 acres respectively as shown on said plat, being the same property conveyed to Manning Development Company by deed of H. B. Lux dated February

222134.1-EX LTEXU 020676-1

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3718

Legal Description (continued)

1, 1966, and recorded in the Office of the R.M.C. for Richland County in Deed Book D-36 at Page 721.

This being a portion of the property conveyed to Burwell D. Manning, Jr. by deed of Manning Development Company dated February 20, 1976, and recorded February 23, 1976, in the Office of the R.M.C. for Richland County in Deed Book D-374 at Page 305.

CHAPPELL TRACT

Adjoins Lux Tract on the East Boundary of Lux

All that certain piece, parcel or lot of land together with the improvements thereon, situate, lying and being on the southern side of S.C. Highway #48, known as Bluff Road, in the County of Richland, State of South Carolina, being approximately 6 miles southeast of the City of Columbia, containing 1.07 acres and being more particularly shown and designated as Parcel No. 2 on that certain plat prepared for Jesse Chappell made by W. O. Cullum, Reg. L. S., dated October 28, 1957, and recorded in the Office of the Clerk of Court for Richland County, said property fronting and measuring on the said Bluff Road a distance of 140 feet and running back therefrom in substantially parallel lines for a distances of 342 feet, all of which will more fully appear by reference to said plat. The above described property is the identical property heretofore devised to Lewis Chappell under the will of Jesse Chappell, probated and of record in the Office of the Judge of Probate for Richland County, South Carolina

Also: All that certain piece, parcel or lot of land, together with the improvements thereon, situate, lying and being about 6 miles southeast of the City of Columbia, in the County of Richland, in the State of South Carolina, and being located about 342 feet south of S.C. Highway #48, known as Bluff Road, and being more particularly shown and designated as Parcel No. 3 on a certain plat prepared for Jesse Chappell by W. O. Cullum, Reg. L.S., dated October 28, 1957, and recorded in the Office of the Clerk of Court for Richland County in Plat Book X at Page 1501, containing 1.07 acres and having such shape, measurements and boundaries as will more fully appear by reference to said plat. The above described property is the identical property heretofore devised to John Chappell under the will of Jesse Chappell probated and of record in the Office of the Judge of Probate for Richland County, South Carolina.

Also: All that certain piece, parcel or tract of land, together with the improvements thereon, situate, lying and being about 6 miles southeast of the City of Columbia on the southern side of S.C. Highway #48, known as Bluff Road, in the County of Richland, in the State of South Carolina, said tract containing 49 acres, more or less, and being the remainder, after excluding Parcels 1, 2 and 3, as shown on plat prepared by W. O. Cullum, Reg. L.S., for Jesse Chappell, dated October 28, 1957, of tract of land containing 53 acres +/- as shown on a certain plat showing property of Jesse Chappell prepared by W. O. Cullum and R. B. Gandy, dated January 1953; and recorded in Plat Book 3 at Page 205 in said Clerk's Office. The above described property is the identical property heretofore devised to John Chappell and Lewis Chappell under the will of Jesse Chappell probated and of record in the Office of the Judge of Probate for Richland County, South Carolina.

332130.1-EX LTDQ 020076-1

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PLTF TRIAL EXH 255

Legal Description (continued)

Also: All that certain piece, parcel or tract of land, together with the improvements thereon, situate, lying and being near S.C. Highway #48, known as Bluff Road, about 6.5 miles southeast of the City of Columbia, in the County of Richland, State of South Carolina, containing 45 acres, more or less, and being bounded on the north by other property of Burwell D. Manning, Jr.; on the east by property of Adcock, Madden & Pitts; on the south by property of John P. Chappell, Lewis G. Chappell and McElree Tuttle, Jr. (being conveyed simultaneously with this conveyance to Burwell D. Manning, Jr.); and on the west by the center line of SC Road 40-519; and being shown as the "Caughman Tract" a portion of Parcel "B" on plat of property surveyed for Burwell D. Manning by William Wingfield, Reg. Surveyor, dated April 30, 1971, and recorded in the Office of the Clerk of Court for Richland County in Plat Book X at Page 1500. The above described is the identical property heretofore conveyed to John P. Chappell and Lewis G. Chappell, the grantors herein, by Corinne Eugenia Caughman, et al., by deed dated November 6, 1946, and recorded in the Office of the Clerk of Court for Richland County in Deed Book GO at Page 213.

This being the identical property conveyed to W. Grady Jordan by deed of Jasper M. Cureton, Master, dated November 22, 1976, and recorded in Deed Book D-404 at Page 469 and conveyed to Burwell D. Manning, Jr. by deed of W. Grady Jordan dated April 4, 1977, and recorded April 14, 1977, in Deed Book D-419 at Page 53 in the RMC Office for Richland County, S.C.

DRUCILLA CHAPPELL TRACT

Adjoins Chappell Tract

All that certain piece, parcel or lot of land, together with the improvements thereon, situate, lying and being on the southern side of S.C. Highway #48, known as Bluff Road, in the County of Richland, in the State of South Carolina, being approximately six miles southeast of the City of Columbia, containing 1.04 acres and being more particularly shown and delineated as Parcel No. 1 on that certain plat prepared for Jesse Chappell made by W. O. Cullum, Reg. L.S., dated October 28, 1957, said property fronting and measuring on the said Bluff Road a distance of 140 feet and running back therefrom in substantially parallel lines for a distance of 342 feet, all of which will more fully appear by reference to said plat.

Being the identical tract conveyed to Burwell D. Manning, Jr. by deed of Owens T. Cobb, Master, dated August 13, 1971, and recorded August 20, 1971, in Deed Book D-216 at Page 236 in the RMC Office for Richland County, South Carolina.

SHULL AND MILLER CHAPPELL TRACTS

Adjoins Lux Tract on its Southern Boundary

All that certain piece, parcel or tract of land together with the improvements thereon, situate, lying and being near S.C. Highway #48, known as Bluff Road, about 6.5 miles southeast of the City of Columbia, in the County of Richland, State of South Carolina, containing 249 acres, more or less, and being shown in outline as the Miller Tract on plat of property surveyed for

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Legal Description (continued)

Burwell D. Manning by William Wingfield, Registered Surveyor, dated April 30, 1971, and recorded in Plat Book X at Page 1500, in the Office of the Clerk of Court for Richland County, S.C. The above described property is the identical property heretofore conveyed to John P. Chappell, Lewis G. Chappell and McElree Tuttle, Jr., the grantors herein, by Jesse Chappell by deed dated March 15, 1951, and recorded in the Office of the Clerk of Court for Richland County, S.C. in Deed Book "70" at Page 426.

Also: All that certain piece, parcel or tract of land, together with the improvements thereon, situate, lying and being near S.C. Highway #48, known as Bluff Road, about 6.5 miles southeast of the City of Columbia, County of Richland, State of South Carolina, containing 125 acres, more or less, and being shown in outline as the Shull Tract on plat of property surveyed for Burwell D. Manning by William Wingfield, Registered Surveyor, dated April 30, 1971, and recorded in Plat Book X at Page 1500 in the Office of the Clerk of Court for Richland County, S.C. The above described property is the identical property heretofore conveyed to the grantors herein by B. P. Shull and D. J. Shull by deed dated December 15, 1953, and recorded in said Clerk's Office in Deed Book 124 at Page 343.

Also: All that certain piece, parcel or tract of land, together with the improvements thereon, situate, lying and being near S.C. Highway #48, known as Bluff Road, about 6.5 miles southeast of the City of Columbia, in the County of Richland, in the State of South Carolina, containing 10 acres, more or less, and being shown in outline as the Manning Tract on plat of property surveyed for Burwell D. Manning by William Wingfield, Registered Surveyor, dated April 30, 1971 and recorded in Plat Book X at Page 1500 in the Office of the Clerk of Court for Richland County, S.C. The above described property is the identical property heretofore conveyed to the grantors herein by Manning Development Company by deed dated September 25, 1962, and recorded in said Clerk's Office in Deed Book 350 at Page 228. The conveyance of the above described parcel is made subject to the condition relating to the drainage of surface water set forth in the deed above referred to.

This conveyance is made subject to easements for public roads, existing public utility easements, and power line easements, if any.

This is the identical property conveyed to Burwell D. Manning, Jr. by deed of John T. Chappell, et al., dated May 14, 1971, and recorded on May 14, 1971, in the Office of the R.M.C. for Richland County, South Carolina, in Deed Book 206 at Page 721.

13 [illegible]

CV006029

PLTF TRIAL EXH 255

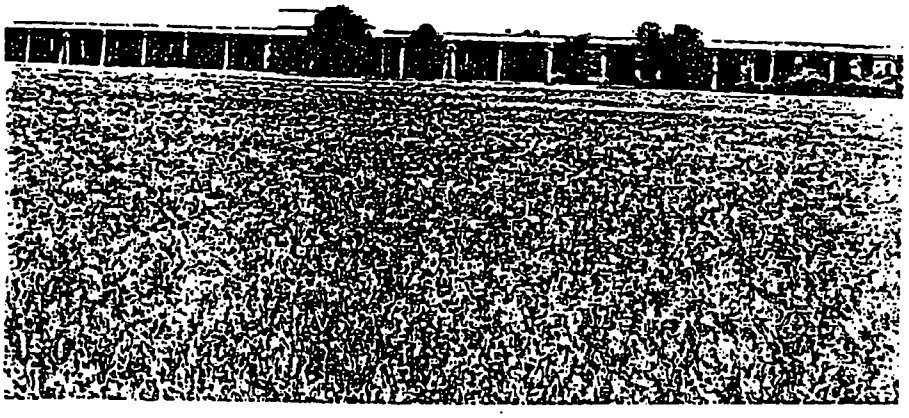
3721



Looking northerly toward Columbia and Carolina Stadium from Idlewilde and proposed North-South road. (S-1)

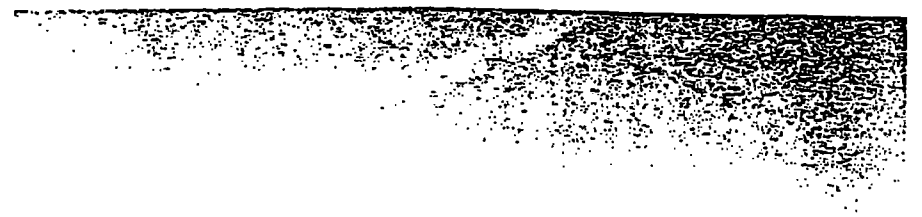


Looking Northerly from White House Road gate vicinity across 55 acre pond with I-77 in distance and Capitol Hunting Club hunt/fish lodge in foreground. (S-2)



Typical view looking southerly from Metro Lane toward I-77. Land usually dries out within 2 days following heavy rains. Water at right is less than 1 foot deep...except in wet lands near bridge.

(S-2.5)

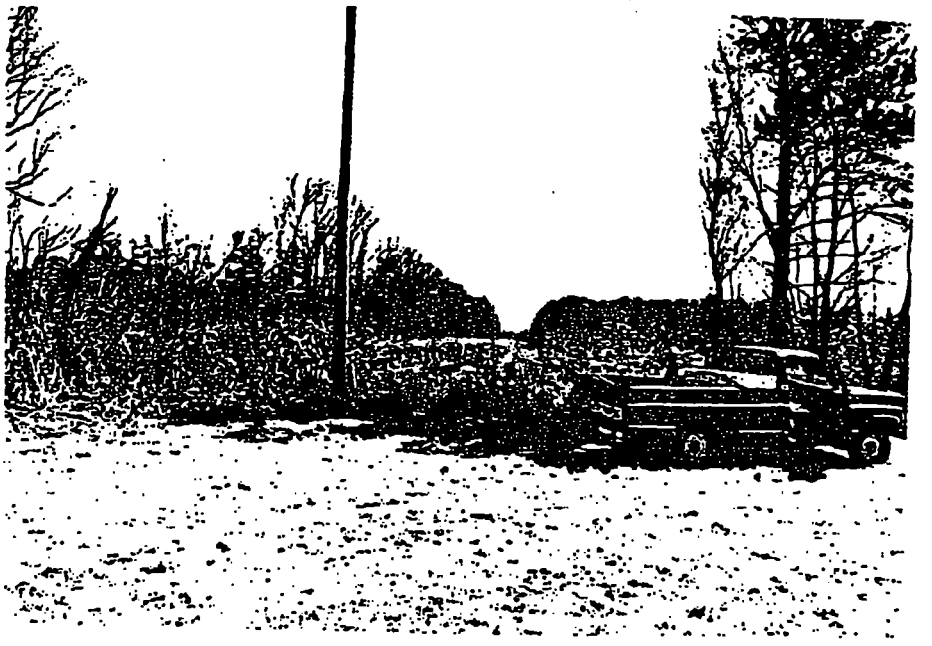




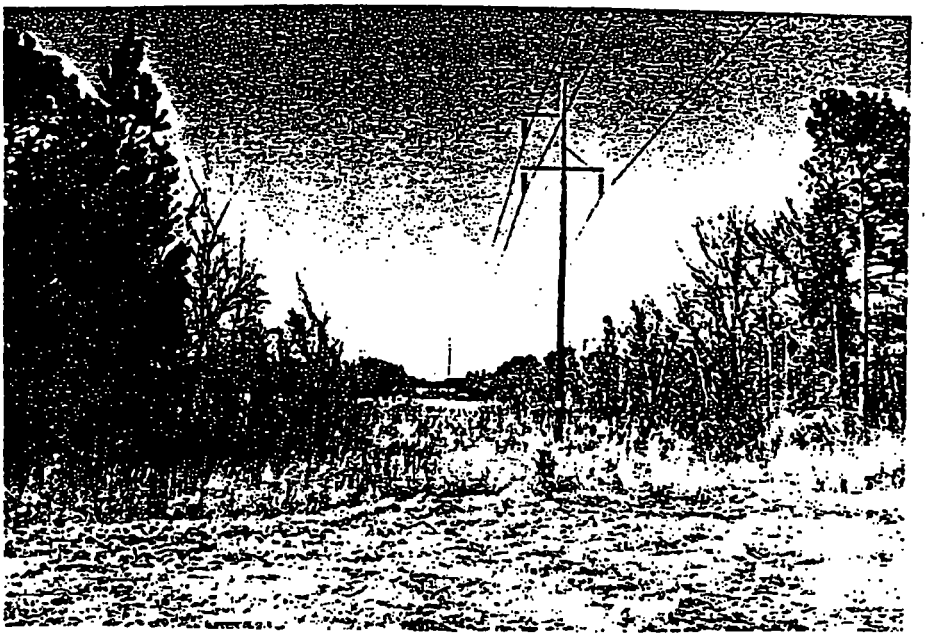
Looking southerly from Metro Lane toward I-77 the morning after a 3" rain. (S-3)



Looking easterly from Metro Lane toward I-77 at left and levee at right. (S-4)



Looking south from Idlewilde Boulevard R/W and electric distribution easement. (S-5)



Looking north from Idlewilde Blvd. R/W (S-6)



Looking north along old levee behind Heathwood Hall School (S-9)



Looking westerly at new levee from same location as above with sewer manhole at left of photo. (S-10)

CV006034

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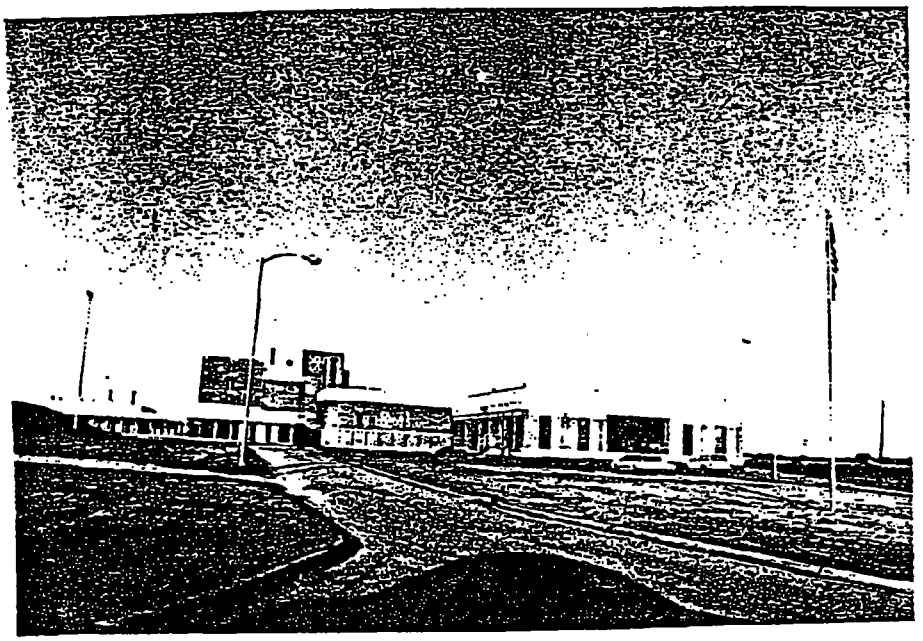
3726



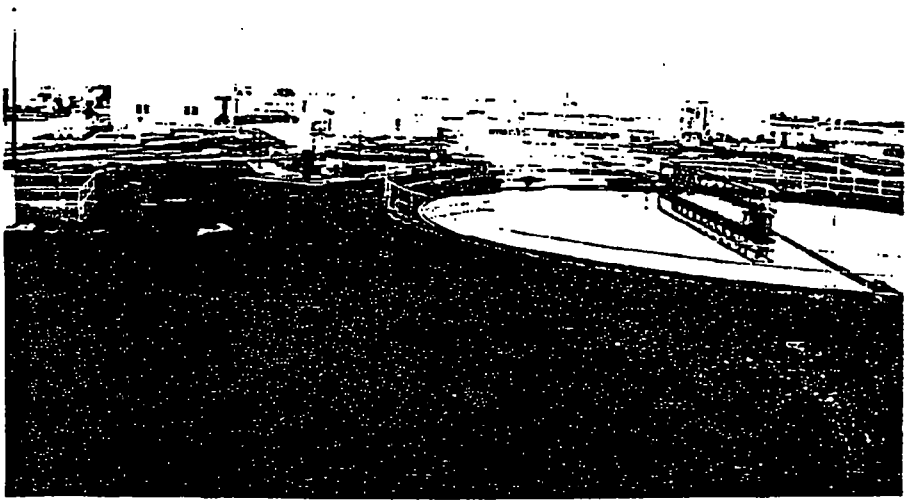
Looking west at river discharge from City waste water treatment plant. (S-11)



Looking south at dike behind city sewer plant. (S-12)



Looking east at city sewer plant main buildings. (S-13)



Looking east at city sewer facility (S-14)

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Same view as opposite photo (S-15) a few days later. This area is off the subject property. Two local residents told me Gills Creek gets this high across the road about two or three times each year for a couple of days. Mr. Manning told me this flooding was caused by his draining Lake Katherine and the failure of the back flow flaps on two pipes through the levees. I understand the bridge was rebuilt to this elevation about 3 years ago and now the road needs to be elevated. That would potentially cause additional flooding back up stream if the normal water flow were restricted.



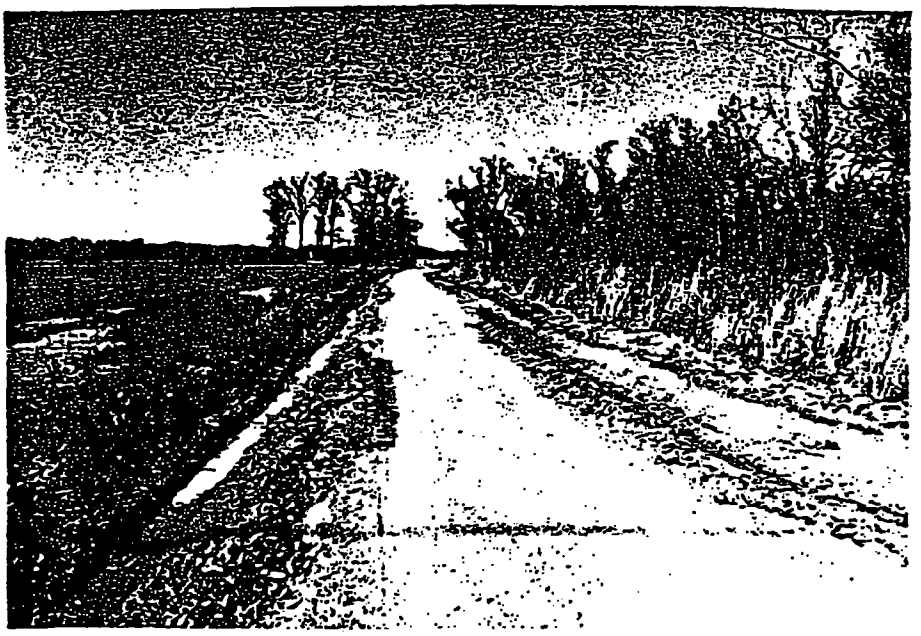
Looking east toward Bluff Rd along White House Rd. from Gills Creek bridge after 3" rain. This area is outside the levee system. (S-15)



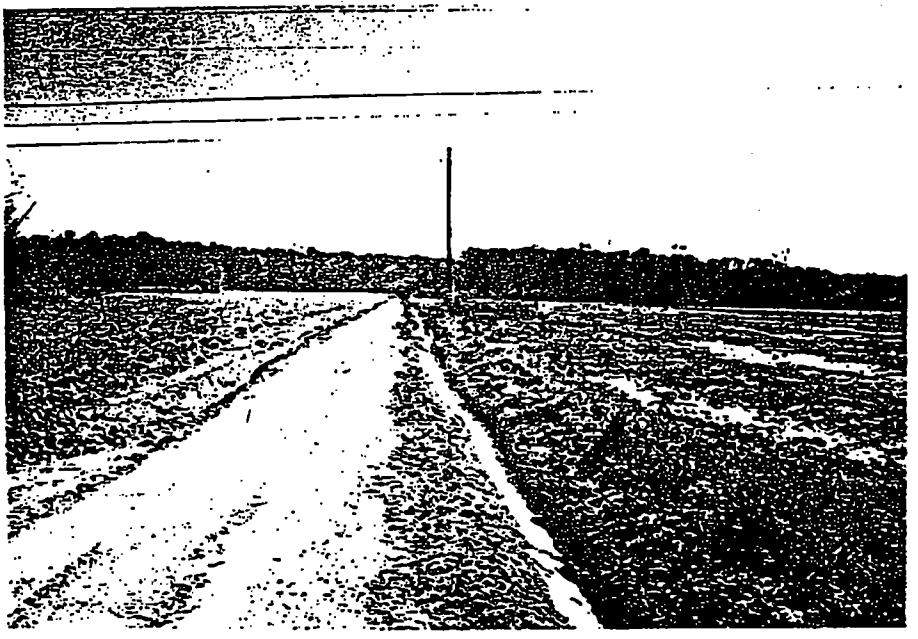
Looking west from same location as above. East Richland sewer plant at right. (S-16)

CV006038

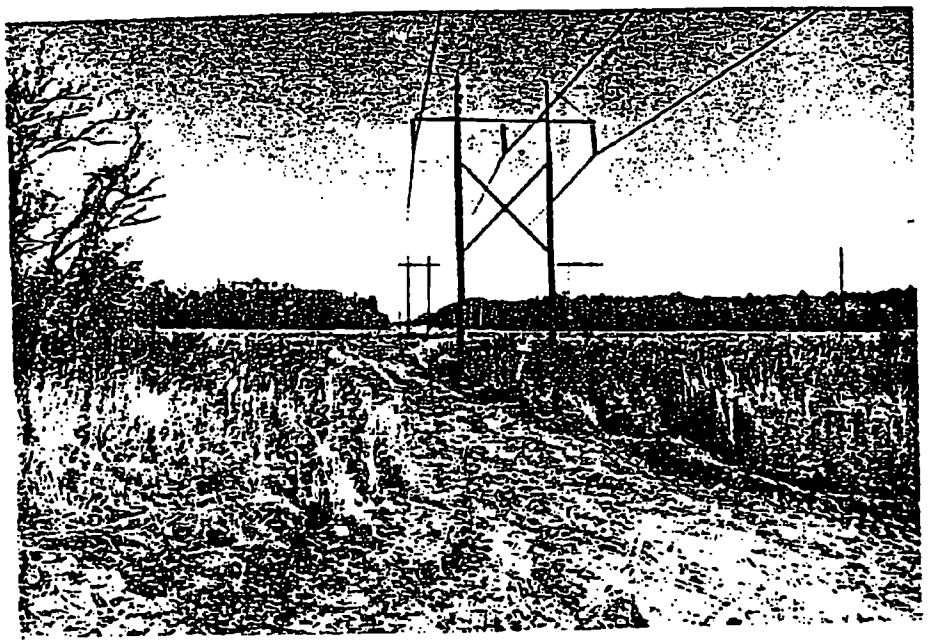
PLTF TRIAL EXH 255



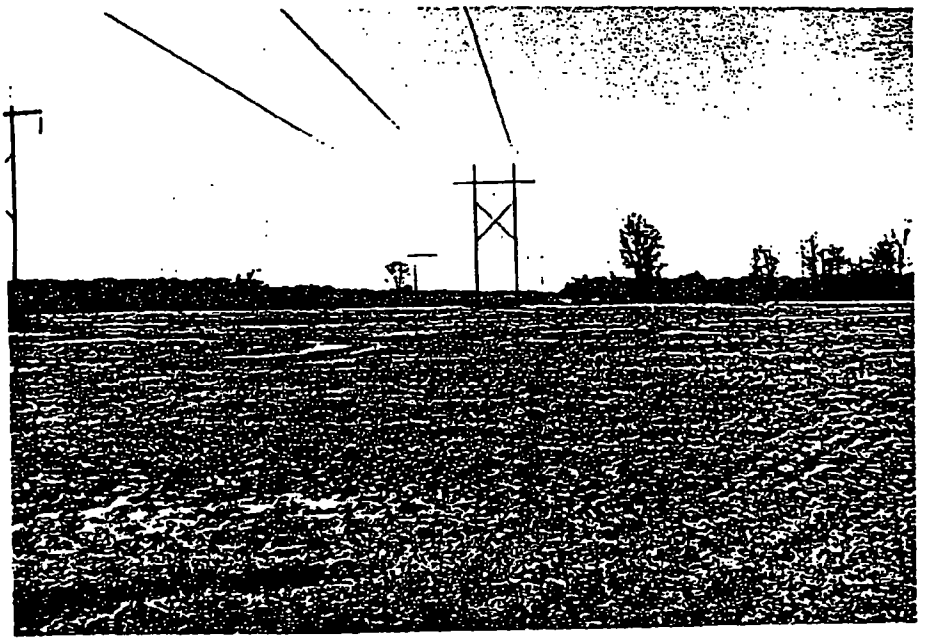
Looking east along Becham Swamp Rd. under SCE&G transmission line. (S-17)



Looking west along Becham Swamp Rd. toward Big Lake. (S-18)



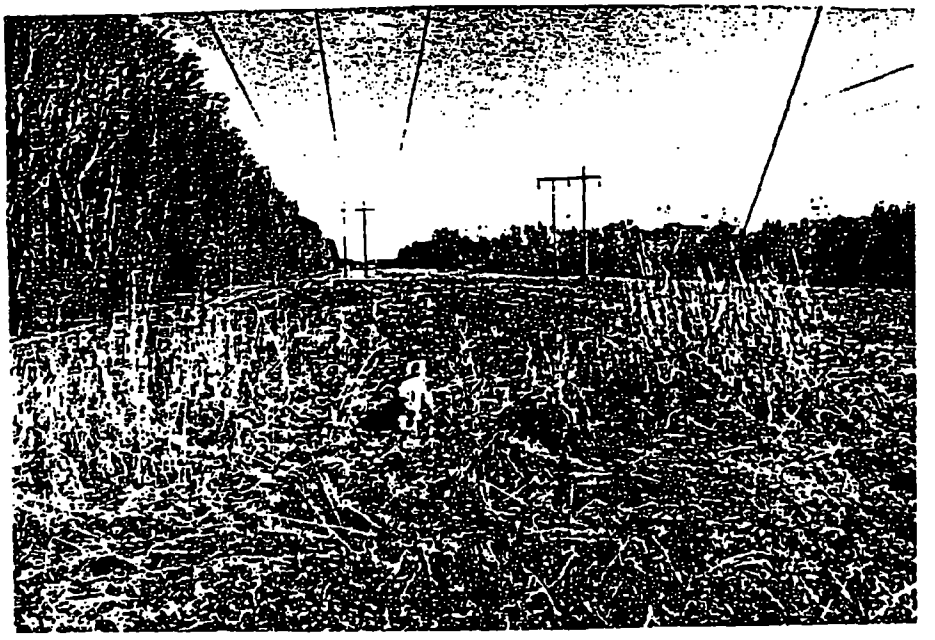
Looking south from Becham Swamp Rd. along SCE&G electric/gas right of way. (S-19)



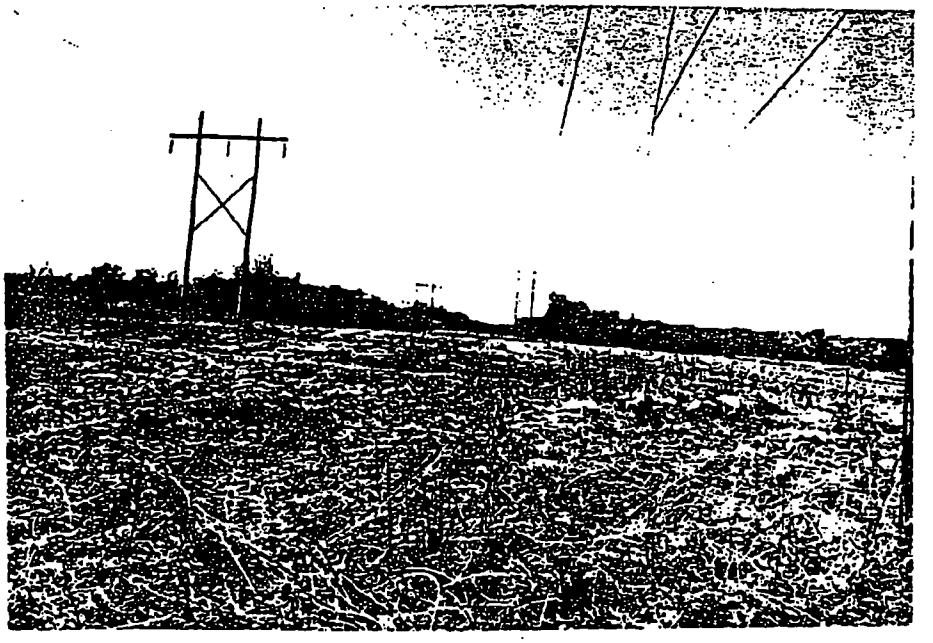
Looking northwest along easement from Beckam Swamp Rd. (S-20)

CV006040

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Looking southeast from White House extension along SCE&G toward Guinard farm(S-21)



Looking northwest toward river. (S-22)



Looking northeast along river toward I-77 bridge from old stables. (S-23)



Same view as above with telephoto lens. (S-24)

CV006042

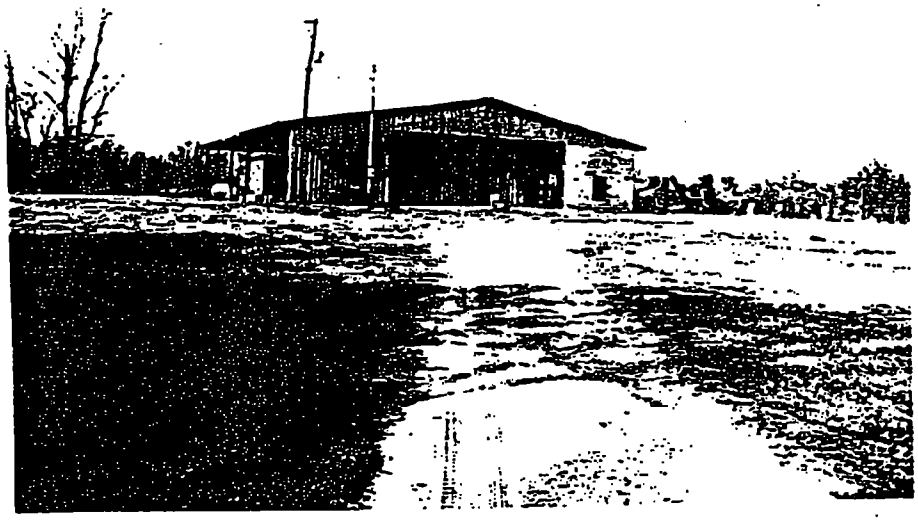
PLTF TRIAL EXH 255



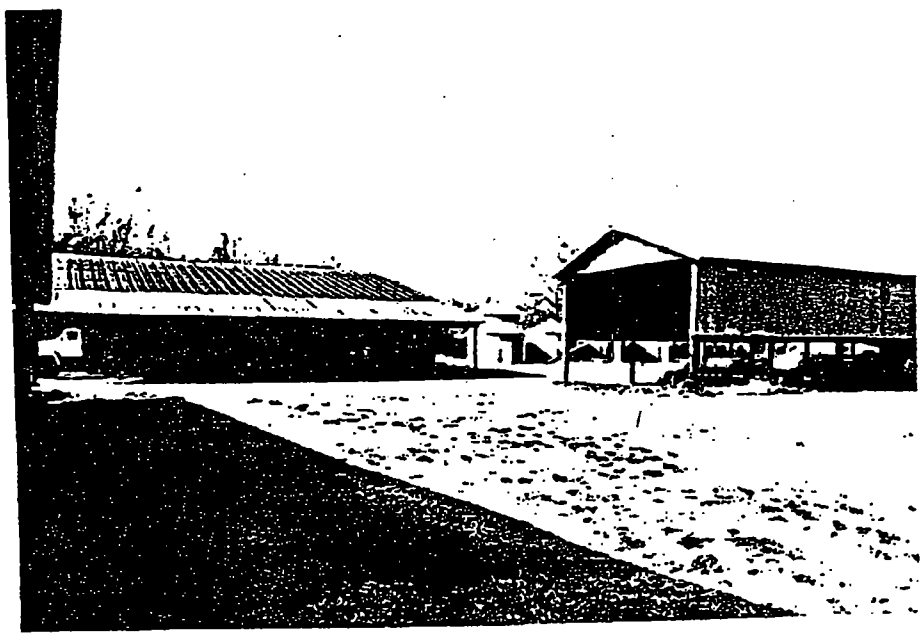
Looking northerly from White House Rd. at some of the barns. (S-25)



Looking easterly at petroleum pumps and underground tanks. (S-26)



Looking northwest at main shop. (S-27)

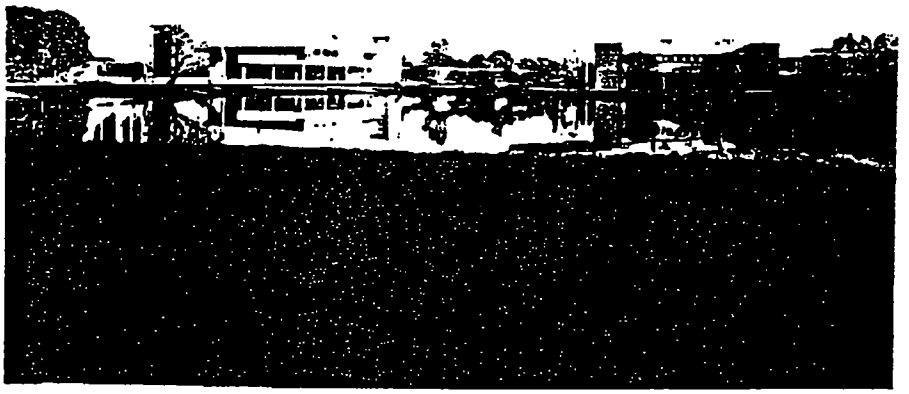


Looking northwest at more sheds. (S-28)

CV006044

PLTF TRIAL EXH 255

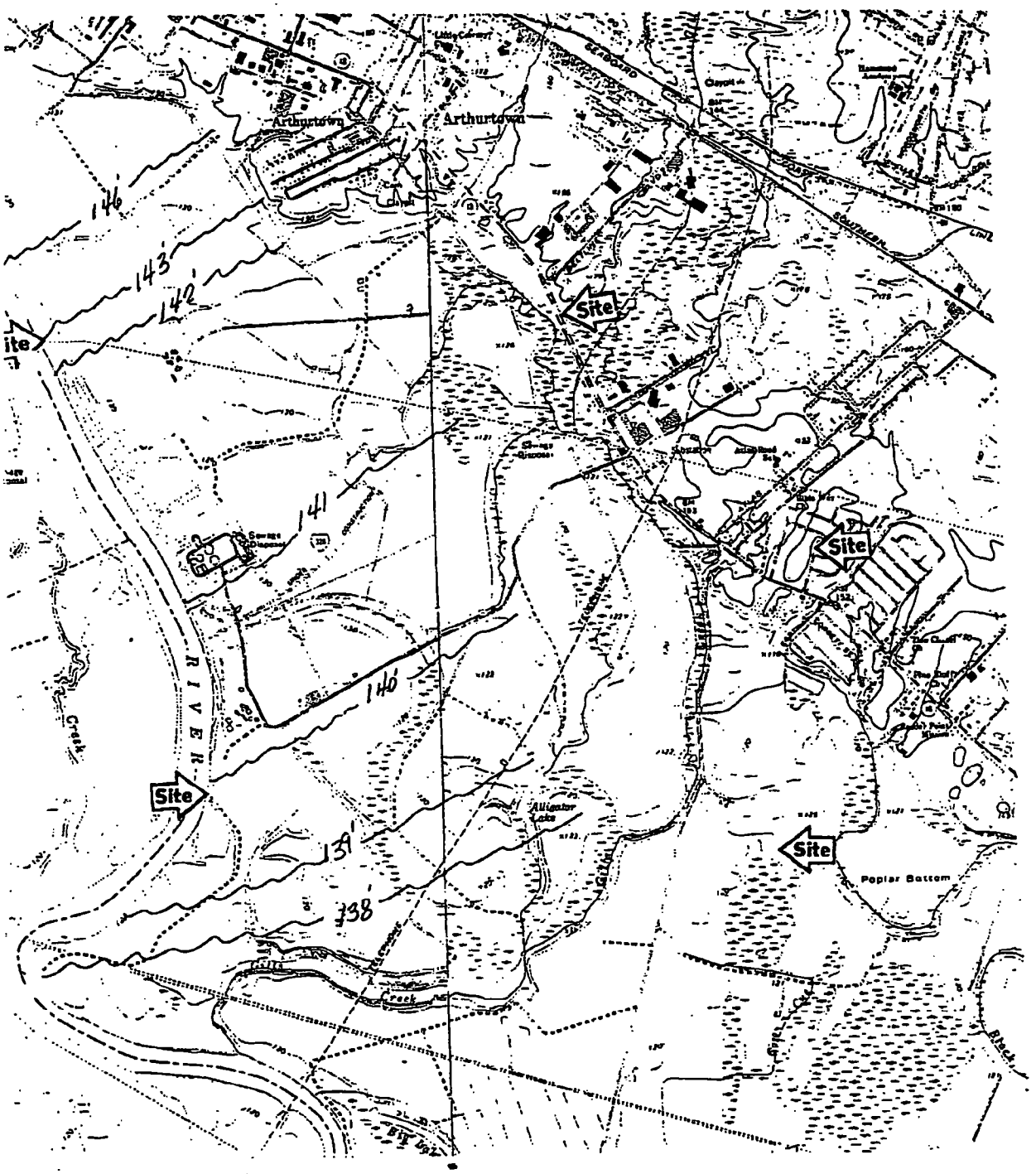
3736



Looking southerly at Heathwood Hall School improvements. (S-29)

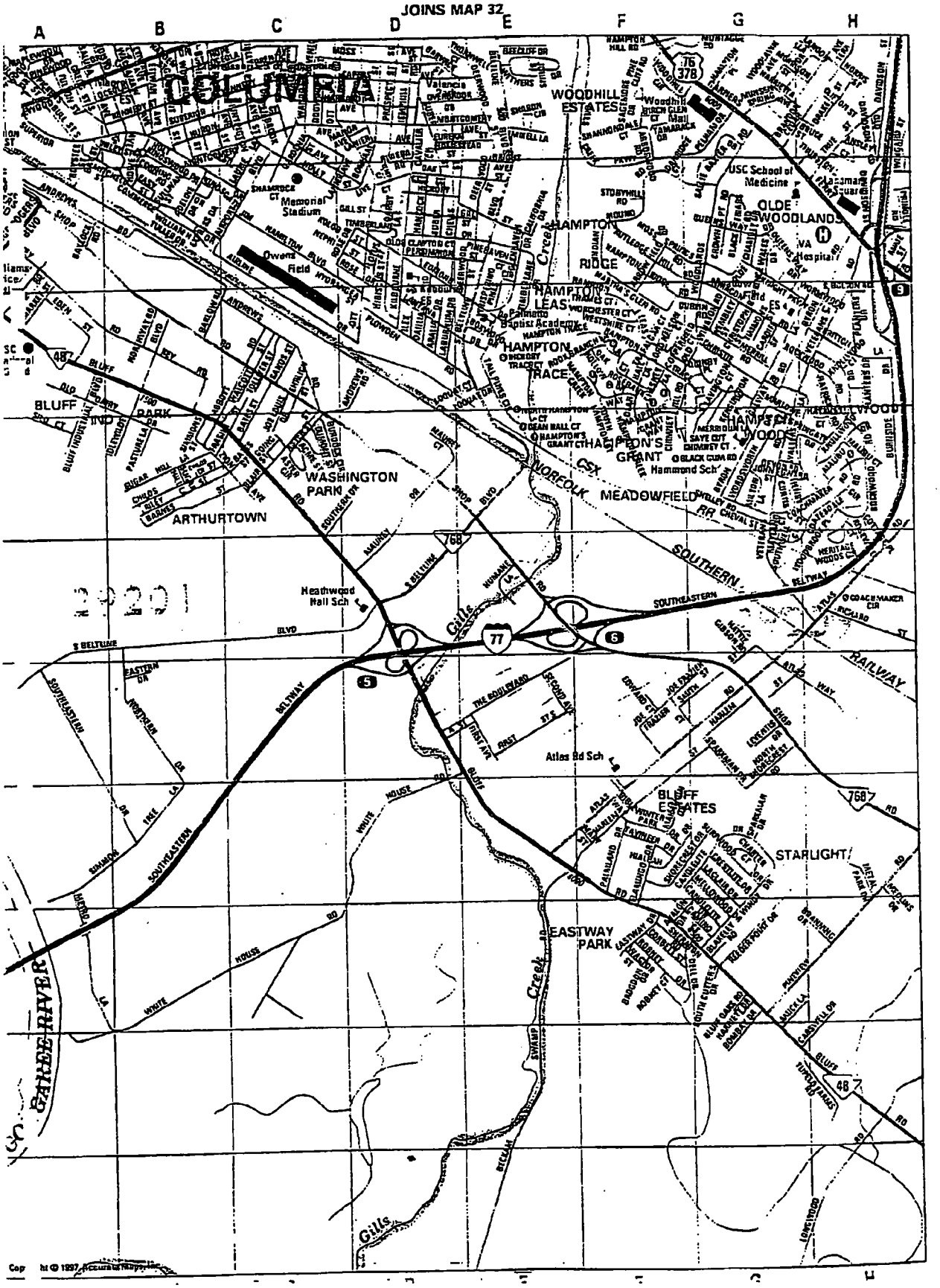


Looking east at the school with sewer man hole in foreground. (S-30)



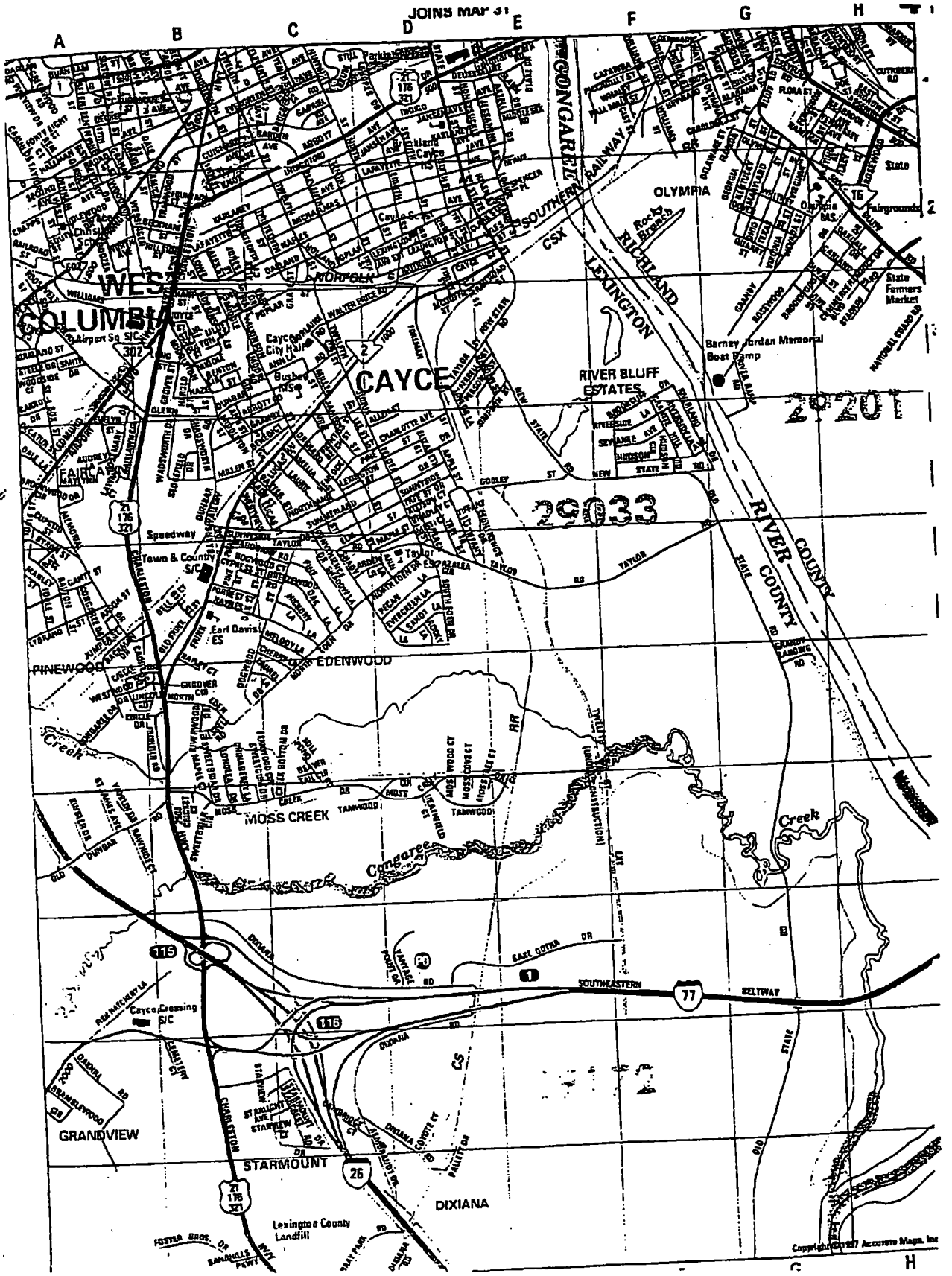
CV006046

PLTF TRIAL EXH 255



CV006047

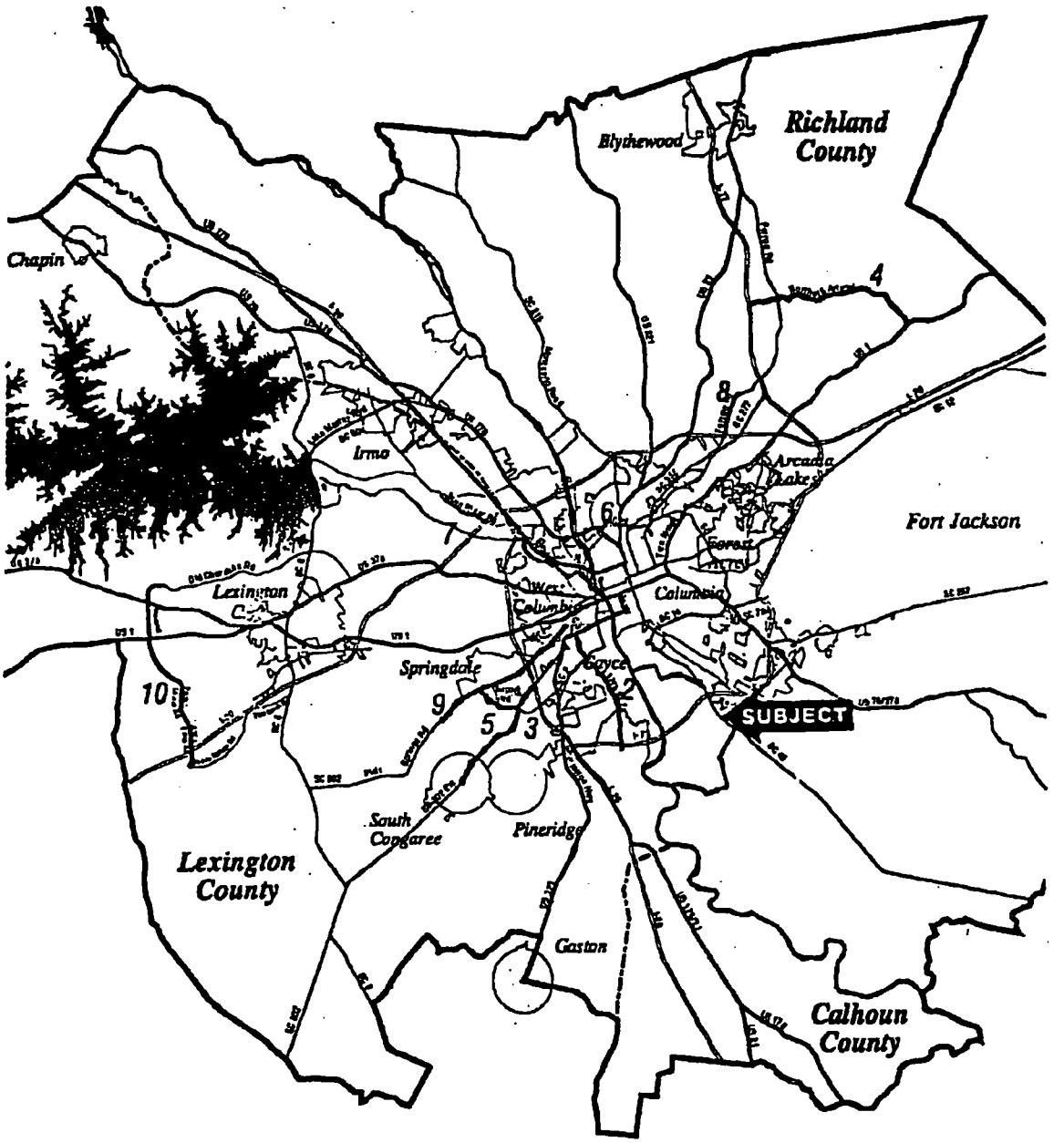
PLTF TRIAL EXH 255



CV006048

PLTF TRIAL EXH 255

LOCATION MAP



LOCATION DATA

The property is located in the southwest portion of Richland County between the Congaree River and Bluff Road about 2.5 miles south of the center of Columbia. Lexington county is located across the river. The Columbia Metropolitan Statistical Area (MSA) is made up of Lexington and Richland Counties with a 1995 population of 491,600. This was a 8.4% increase from 1990. The population is projected to grow to 524,800 by 2000.

Columbia is the state capital of South Carolina. The largest segment of the work force is government at 71,300, followed by services with 65,900, and wholesale and retail trade at 63,000 out of a total labor force of 271,900. The unemployment rate has continued to decline as the national economy rolls along. Some local employers have reported problems finding workers in a near full employment economy.

More than 400 new hotel rooms are under construction, 1,088 multi-family units with 1,448 planned, 32,500 square feet of office space with 334,500 planned, and 536,000 square feet of new shopping center space with 264,000 planned. Office vacancy rates stand at 9.9%, a decline of 3% from last year with 400,000 square feet of absorption in 1997. Hotel occupancy rates are over 66%, and apartment vacancy rates 4.7%...projected to increase to 6.5% next year.

The immediate neighborhood of the subject contains a variety of uses as would be expected for a large parcel. Areas east of Bluff with rail frontage were developed for distribution and manufacturing. Other areas around the Carolina stadium house the farmers market, state fair grounds, numerous state offices, and warehouses. Bluff road is a four lane arterial developed commercially with retail, service, office, and warehouses. The older Arthurtown residential neighborhood is on Bluff Road at the northeast of the subject. Much of the area remains undeveloped and rural/residential in character. Some commercial development has occurred over the years on Belt line and Atlas roads, but they remain residential.

New residential construction has been concentrated in the northeast between the I-20 and I-77 high speed access corridors, northwest in Irmo along I-26 and Lake Murray, and Lexington convenient to I-20. The schools in these areas also have good reputations.

The I-77 was only completed thru the subject property 3 years ago. Prior to that the nearest river crossing was in Columbia via 3 bridges at Blossom, Gervais, and Hampton. Traffic counts on I-77 were at 41,000 east of the river and 49,000 west of the river in 1996, and projected at 45,000 and 49,700 in 1997 respectively. Bluff road between stadium and Beltline were 17,100 in 1995 and 16,600 in 1996. The highest traffic counts around Columbia are 100,000+ at the I-26/I-20 interchange and I-26 to St. Andrews Road.

The municipal airport is about 10 minutes driving time from the subject via I-77. The subject is outside the noise and airspace of the airport. Owens Field is just northeast of Shop Road and is becoming more popular for private aircraft.

In conclusion, the subject is well positioned for future development near Columbia employment centers and USC. I-77 will attract developers seeking high speed access and visibility such as shopping centers, office parks, and restaurants. New residential development will provide the backup essential for successful commercial development. Good soil characteristics will reduce development costs, although flood

plain location will increase some costs. The Congaree River frontage enhances the property as the population is attracted to water recreation. Proximity to USC will also offer possibilities for school related development such as river and wetland studies, and sports like equestrian, golf, and crewing.

ZONING

The property falls in Richland County Development District (D-1) according to zoning officials. "This district is intended to provide for large tracts of land located primarily on the fringe of urban growth and ... further recognized that future demand for developable land will generate requests for amendments in zone designations to remove land from D-1 and place it into other more intensively developed classifications as a natural consequence of urban expansion." Permitted principal uses include single family detached dwellings on individual lots, agriculture uses, parks and play fields, libraries and fire stations, churches, schools, day nurseries, and cemeteries.

Special exception uses include colleges and universities on minimum 5 acre lots.

Prohibited uses include trade, service, or manufacturing uses, signs except as permitted by Article 8, and storage of building materials except in connection with active construction activities.

Lot and bulk requirements are as follows:

Lot area	20,000 square feet minimum
Lot width	100 foot minimum
Front yard	35 feet
Side yard	10 feet
Rear yard	30 feet
Lot coverage	25% maximum
Height	35 feet maximum

ASSESSMENT AND TAXES

The individual assessments and taxes for each of the subject parcels is shown in the table below. The subject enjoys the agriculture use tax reduction classification so long as the property is in use as a farm. When rezoning, subdivision, and development begin, portions or all of the property will have to be removed from the exemption and 5 years of roll-back taxes paid. I my preliminary discussions with the assessors office, the total roll-back tax was calculated based on the taxes for one parcel in the amount of about $650,000. It now appears that was exaggerated. A more reasonable estimate is about $410,000. This can be phased as the property is developed.

Mill Rate History

Year	Millage	% Change
1993	239.1	
1994	257.3	7.6%
1995	262.6	2.1%
1996	261.8	-0.3%
1997	271.1	3.6%
Average Change per year		3.3%r

The revised assessment amounts for the new uses after rezoning and subdivision approvals are received cannot be estimated at this time. They will definitely be much higher than the current amounts of about $2,400 per acre. Therefore, the $650,000 first year pay back of roll-back taxes projection is probably off set by the conservative future assessment and tax estimate.

	Agriculture Use Basis			Full Market Basis		
TMS	Value	Assessment	Taxes	Value	Assessment	Taxes
11000-02-01	$35,000	$1,440	$390	$462,200	$27,730	$7,518
11100-01-07	$2,572	$115	$31	$12,600	$756	$205
11100-01-02	$39,929	$1,573	$426	$214,612	$12,877	$3,491
11100-01-09	$20,700	$330	$225	$574,600	$34,480	$9,348
11000-01-02	$284,800	$11,350	$3,077	$2,291,600	$137,500	$37,276
10900-01-02	$205,600	$11,680	$3,221	$822,600	$49,356	$13,380
13400-01-01	$18,000	$720	$195	$33,200	$1,990	$539
13400-01-02	$18,900	$760	$206	$30,000	$1,800	$488
13400-01-03	$159,400	$6,380	$1,730	$309,600	$18,580	$5,037
13500-01-01	N/A	N/A	N/A	$1,800	$110	$30
13300-01-01	$12,812	$510	$138	$37,800	$2,270	$615
13300-01-04	$145,800	$5,830	$1,581	$236,400	$14,180	$3,844
13300-01-05	$84,900	$2,400	$922	$301,500	$18,090	$4,904
13400-02-01	$6,000	$240	$65	$48,900	$2,930	$794
13400-02-10	$59,900	$3,280	$889	$86,300	$5,178	$1,404
13400-02-16	$79,800	$3,190	$865	$244,900	$14,690	$3,982
13400-02-17	$4,300	$170	$46	$11,600	$700	$190
13500-05-01	$8,000	$320	$87	$41,000	$2,450	$667
13513-01-27	N/A	N/A	N/A	$113,000	$6,780	$1,838
13415-01-10	$2,400	$100	$27	$15,200	$910	$247
	$1,248,513	$52,089	$14,121	$5,989,412	$353,367	$95,798

SITE DATA

The subject site is situated between the Congaree River and Bluff Road, and between Big Lake and Idlewilde Boulevard.

The site characteristics are summarized as:

Area: 4,461 acres

Shape: Irregular

Frontage: About 4 miles of non-contiguous frontage on the Congaree River, 2 miles of non-access frontage on both sides of Interstate 77, and broken frontage along Bluff Road. Three public roads run through the property: South Beltline Boulevard, White House Road and Beckam Swamp Road

Topography: Generally level ranging in elevation from 120 feet to 130 feet except along the tops of levees that have an estimated maximum elevation of

Utilities: Both SCE&G and Santee Cooper have multiple transmission line easements across the property for electricity and natural gas. The City of Columbia's main waste water treatment plant is located just north of I-77 at the river with sanitary sewer and water lines to that site from the city down along the river and running easterly under I-77 toward Bluff Road.

Current Use: Agriculture and recreation

Site Improvements: Four single family houses and several farm structures according to assessment records. One of the houses is at 100 White House Road and the other three on the Chappell place near Bluff Road. These are unoccupied and in fair/poor condition for 1948± structures. Other abandoned buildings on the property include several silos located in 3 separate areas on Arthur and Lux, stables near the river on White House, commercial radio transmitter.

Easements: Numerous utility and road easements ranging from electric transmission, gas pipeline, sanitary sewer, public water, roads, and telephone occupy the property. None of these should detract from the development of the property, and is some cases are assets. Such as the roads providing access to various non-contiguous pieces, sanitary sewer mains crossing parts of the property, and large distribution water lines in Idlewilde Boulevard and White House Road.

Deed Restrictions: Manning has agreed to provide a 500 foot residential buffer on the north, east, and west sides of Heathwood Hall School.

Leases: 1000 acres in White House farm is leased year to year to the Capital Hunt Club for $24,000/year.

Encroachments: A recent survey of the property was not available, but we did not observe any obvious encroachments

Toxic Hazards: The property has been farmed for many years and various chemicals are used in the farming process. Small oil stained soil spots were seen around some of the shops, and 10± petroleum pumps with underground storage tanks (UST) are located in the vicinity of the barns and shops.

Wetlands and Flood Hazard - The property is shown on 3 different flood hazard maps due to its size. Most of the subject is within the 100 year flood plain according to FIRM Maps 45079C0160 G, 45079C0178 G, and 45079C0190 G revised January 19,

1994. The area along the Congaree outside the dikes and along Gills creek are within the Floodway. Several areas of poorly drained soils were noted during our inspections and will classified as wetlands. Some of these have already been extensively disturbed by the farm operation, utility installation, and Interstate 77 construction. Many of these are probably to be classified as Class 5 or 6 wetlands and further disturbances for project development will probably not be barred by the ACE... Although I am not an expert on wetlands classification and do not have the authority to make the determination. The developers will have a registered engineer flag or identify the on a survey map for the 404 permit process.

FEMA is currently updating the Flood Insurance Study and the Flood Insurance Rate Maps for both Lexington and Richland Counties. The preliminary maps for Lexington are available for comment and public hearings are in progress. Richland revisions are eminent. The Lexington revisions resulted in a significantly larger are of the SCANNA property across the river from the subject being reclassified as floodway—effectively eliminating any future development without extensive, expensive engineering studies (DHEC-II or DHEC- RAS).

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HIGHEST AND BEST USE

This concept is defined in The Dictionary of Real Estate Appraisal (American Institute of Real Estate Appraisers, 1993, Page 171) as:

1. "The reasonably probable and legal use of vacant land or an improved property, which is physically possible, appropriately supported, financially feasible, and that results in the highest value. The four criteria the highest and best use must meet are legal permissibility, physical possibility, financial feasibility, and maximum profitability."

2. "Among all reasonable, alternative uses, the use that yields the highest present land value, after payments are made for labor, capital, and coordination. The use of a property based on the assumption that the parcel of land is vacant or can be made vacant by demolishing any improvements."

3. "The use that should be made of a property as it exists. An existing property should be renovated or retained as is so long as it continues to contribute to the total market value of the property, or until the return from a new improvement would more than offset the cost of demolishing the existing building and constructing a new one."

Implied in these definitions is that the determination of highest and best use takes into account the contribution of a specific use to the community and community development goals as well as the benefits of that use to individual property owners. Hence, in certain situations the highest and best use of land may be for parks, greenbelts, preservation, conservation, wildlife habitats and the like.

The Highest and Best Use analysis in an appraisal report is shaped by competitive forces in the market and sets the stage for the analysis in the three approaches to value. In order to properly utilize these three approaches to value, the Highest and Best Use must be accurately interpreted.

HIGHEST AND BEST USE IF VACANT

Legally Permissible - Zoning regulations, deed restrictions and subdivision restrictions generally limit the use to which a vacant site can be developed. The subject site is zoned Development District D-1, which permits agriculture uses and single family dwellings on individual lots. This zoning classification is a general category anticipating future requests for zone change. The site is large enough to accommodate all of the zoning requirements regarding setbacks, building coverage ratios, and parking requirements. Your appraiser is not aware of any deed restrictions.

Physically Possible - The site has public water, public sewer, electricity, and telephone available. There are no apparent problems with the soil which would render it unsuitable for a foundation structure. The levee system

Financially Feasible - The feasibility of a use depends primarily on the demand for the use that is proper.

Maximally Productive - A mixed commercial and residential development on this large site with forward looking planning to accommodate various uses without intruding on

the privacy of single family home sites around the Heathwood Hall School per deed restrictions.

Based upon the four tests of Highest and Best Use, it is our opinion that the Highest and Best Use for subject property is a mixed commercial and residential planned unit development of a portion of the property and for speculative holding for the remaining portion until adequate demand is present and the first phase has been absorbed.

VALUATION PROCEDURE

The three approaches considered in estimating the market value of the subject are defined in The Dictionary of Real Estate Appraisal (1993) as follows:

Cost Approach - A set of procedures through which a value indication is derived for the fee simple interest in a property by estimating the current cost to construct a reproduction of, or replacement for, the existing structure; deducting accrued depreciation from the reproduction or replacement cost; and adding the estimated land value plus an entrepreneurial profit. Adjustments may then be made to the indicated fee simple value of the subject property to reflect the value of the property interest being appraised. (Page 81)

Sales Comparison Approach - A set of procedures in which a value indication is derived by comparing the property being appraised to similar properties that have been sold recently, applying appropriate units of comparison, and making adjustments to the sale prices of the comparables based on the elements of comparison. The sales comparison approach may be used to value improved properties, vacant land, or land being considered as though vacant; it is the most common and preferred method of land valuation when comparable sales data are available. (Page 318)

Income Capitalization Approach - A set of procedures through which an appraiser derives a value indication for an income-producing property by converting its anticipated benefits (cash flows and reversion) into property value. This conversion can be accomplished in two ways. One year's income expectancy can be capitalized at a market-derived capitalization rate or at a capitalization rate that reflects a specified income pattern, return on investment, and change in the value of the investment. Alternatively, the annual cash flows for the holding period and the reversion can be discounted at a specified yield rate. (Page 178)

In estimating the value of the property, a development approach was utilized. This involves elements of all the traditional valuation approaches. Cost Approach techniques were utilized to estimate the cost of obtaining approvals, engineering, construction of roads, etc, and other sales costs during the estimated sellout of the parcels. Sales Comparison Approach techniques were utilized in estimating the market prices for typical commercial and residential development parcels. Income Capitalization Approach techniques were used to discount the net sales proceeds to a present value indication after deductions for sales costs and developers' profit.

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PLTF TRIAL EXH 255

DEVELOPMENT APPROACH

Our analysis is summarized in the following tables and charts. In the first table we summarize some of the sales data that was analyzed. Additional data showing more recent sales in 1997 and 1998 were also consulted along with current listings or vacant development parcels. These are available for inspection in our files, but cannot be published below for confidentiality reasons.

The next table is the result of our analysis of building permits in Columbia MSA for the past 20 years, different types of commercial space construction and absorption, rental rates, housing sales, lot sales competition from active subdivisions, apartment construction and rentals.

Based on that analysis we projected the average aggregate construction for the Columbia market over the next 7 years. Next we estimated the amount of the market the subject project will capture given its location, timing, and target market. Since the project has generated interest prior to any approvals or construction, some pent-up demand and rapid early absorption may take place. Sales momentum will increase after the initial phase of construction takes place due to the high visibility from the I-77 corridor.

We next put forth our best estimate as to the cost of moving the project thru preliminary engineering and approvals to construction and sales. These are shown in the cash flow analysis in the third table. These cost projections were estimated from discussions with experienced developers and contractors.

We estimated annual engineering costs at $200,000. Wetlands will have to be surveyed and each residential structure will require an individual above flood level certification.

Architecture and land planning costs are estimated at $75,000 each year, Surveying at $200 per acre, legal at $200 per acre, annual construction of roads, utilities, and dikes is estimated at $1,000,000. This is hard to estimate without an approved plan showing the amount of elevated road way that is more costly (subdivison streets run about $100/lf and bridges $1,000/lf.

Sales commissions were estimated at 9%, permits at $5 per $1,000 of lots sold, Real estate taxes based on discussions with the assessors office, overhead at 2% of gross sales income, Management at $100,000 per year,

Developers' profit at 15% of gross sales income, and miscellaneous expenses at $50,000 per year. Based on current investor return criteria we discounted the net sales income at 12% and 15%.

The indicated profit and discount ranges from about 27% to 30%. We consider this adequate for a high risk development project with no engineering or approvals in place.

Proposed 4,461 acre River Pointe South mixed use development
I-77 and Bluff Road, Columbia, Richland County, SC

Street Name	Sale Date	Sale Price	Size	$/AC	Grantor	Grantee	Proposed Use
Columbiana Drive & I-26	27-Sep-95	$149,179	0.761	$196,030	Harbison Group	James R. Davis, Jr.	Insurance Office
Fernandina Road @ Harbison Blvd	21-Jul-94	$513,393	1.120	$458,387	Liberty Life Insurance Co.	Apple South, Inc.	Restaurant
Fernandina Road @ Harbison Blvd & I-26	21-Jul-94	$575,000	1.310	$438,931	Liberty Life Insurance Co.	Apple South, Inc.	Restaurant
Lake Murray Blvd (SC 60) @ Columbiana Dr & I-26	12-Oct-95	$252,000	1.400	$180,000	Harbison Group	Discover Columbia/Harbison	Day Care Center
NEC US 21 and Jenkins Bros. Road 1/2 mi N I-77	17-Dec-96	$233,750	1.800	$129,861	Sadie C. Kelly	Blythewood Oil Company, Inc	Convenience Store
SEC Brookwood Dr, Duvall St & Vine St	01-Jun-94	$84,415	1.810	$46,638	Fastener Supply Co	FSC, Limited Partnership	Warehouse
Fernandina Road & I-26	01-Nov-93	$200,000	2.140	$93,458	North Bay Dev. Corp	Metro Mobile Centers of Co	Commercial
Fernandina Road, Stone Mark Lane & I-26	08-Jan-95	$215,980	2.400	$98,325	Summerton Insurance	Bell South Carolina, LP	Antenna Site
S/S Lake Murray Blvd bet. College & Eastview	12-Dec-94	$452,400	2.950	$153,356	Irmo Joint Venture	MOPA Associates	Commercial
S/S Harbison Blvd @ Fernandina Road	05-Apr-95	$985,691	3.323	$296,627	Harbison Group	Quality Oil Company	Motel
SWC Bluff Industrial Blvd & Old Dairy Drive	01-May-94	$250,000	5.570	$44,883	Merc Associates	Paper Stock Dealers	Distribution Warehouse
Cross Bow Drive on Pond	18-Jul-95	$531,000	7.420	$71,563	Harpeco, LLC	Center Real Estate Corp	Residential Subdivision
Cross Bow Drive on Pond	05-Feb-96	$287,500	7.420	$38,747	P. W. Tracts	Harpeco, LLC	Residential Subdivision
Lake Murray Blvd opposite Columbiana Dr.	01-May-93	$834,592	7.590	$109,959	Harbison Group	Ronald M. Asbill	Shopping Center
NEC Harbison Blvd and I-26	01-Oct-91	$2,178,000	12.100	$180,000	Harbison Group	LCI Funding (Lowes)	Lowes Store
S/S Shop Road Bet. Atlas and Pineview Rds	01-Sep-90	$325,000	12.600	$25,794	L. C. Shannon, et ux	Dillard Paper Co	Timber/Future Industri
I-26 and Club Road N of Harbison	01-Sep-93	$1,330,000	14.000	$95,000	Harbison Group	Godley,GRP Limited	Frankies Fun Park
5901 Fairfield Road at I-20	14-Dec-93	$875,000	15.179	$57,645	Heath Manning, et al	CFJ Properties, a Utah Par	Beachside Top
Cross Bow Drive on Pond	11-Apr-94	$1,251,735	18.720	$66,866	Harbison Group	Columbiana Lakes, LP	Apartments
Devega Road 1/2 mile E of I-20 and US 378	12-Jul-95	$1,050,000	22.680	$46,296	Southeastern Freight Lines	Southern Farm Bureau Cas	Headquarters Office
Northpointe Blvd 1/2 mile N I-77 and US 21	01-Dec-95	$629,520	26.230	$24,000	Liberty Life Insurance Co.	Husck Foils LLC	Industrial Building
Two Notch opposite Alpine Rd	04-Jun-97	$1,125,000	41.380	$27,187	Two Notch LP	Manning Kirk	Mixed Apartment/Retail
Longwood Rd @ Southern RR Crossing	01-Oct-94	$720,000	60.000	$12,000	Camars Ferry Development	Italian Pizza Co.	Mixed Ind. Residential
NWC Farrow Rd & Hard Scrabble 1/2 mile N of I-77	27-Sep-94	$1,781,220	84.820	$21,000	Margaret P. Smith	Bi-Lo, Inc.	Distribution Warehouse
1/2 mi E of I-77, NWC Farrow & Marthan Rds	01-Nov-94	$1,161,189	105	$11,071	Carolina Land Group, et al	Bose Corporation	Distribution Warehouse
Santee River Rd. N of Bloomville Rd (Rd. 48)	16-Feb-95	$350,000	528	$663	Lotta L. Brannan	Charles Ingram Lumber Co	Timber Production
Rear Land N of Rd.48 and W of Rd 50, 30' access	16-Feb-95	$350,000	543	$644	James G. Brannan	Charles Ingram Lumber Co	Timber Production
Black River Swamp N of CR 40	23-Mar-95	$360,000	2,586	$139	Edward B. Mabry, Jr., et. al.	Jerry A. Meehan, Trustee	Timber Production
Rd. S-14-50 N of CR 40 & Black River Swamp	01-Jul-94	$300,000	2,586	$116	Southern Pine Plantations	Edward B. Mabry, Jr., et. al	Timber Production

Proposed 4,461 acre River Pointe South mixed use development
I-77 and Bluff Road, Columbia, Richland County, SC

USE	PROJECTED UNITS/	YEAR	UNITS/ ACRE	COLA MSA ACRES ABSORBED	PRICE/ ACRE	COLA TOTAL ANNUAL SALES	SUBJECT SHARE OF MARKET	SUBJECT GROSS SALES	SUBJECT ACRES ABSORBED	NUMBER OF UNITS
Single Family	3,500	units	4	875	$12,000	$10,500,000	20%	$2,100,000	175	700
Apartment	1,500	units	10	150	$35,000	$5,250,000	50%	$2,625,000	75	750
Office	300,000	sq. ft.	34.43525	35	$100,000	$3,500,000	50%	$1,750,000	17.5	
Retail	480,000	sq. ft.	60.60606	60	$120,000	$7,200,000	30%	$2,160,000	18	
Recreation	500	acres		500	$4,000	$2,000,000	50%	$1,000,000	250	
Motels	300	rooms		10	$300,000	$3,000,000	40%	$1,200,000	4	
Institutional	17	units		50	$25,000	$1,250,000	50%	$625,000	25	
Education	25	units		100	$15,000	$1,500,000	20%	$300,000	20	
R&D	78,000	sq. ft.		15	$25,000	$375,000	50%	$187,500	7.5	
Pads/year	5	pads		5	$400,000	$2,000,000	100%	$2,000,000	5	
				1,800				$13,947,500	597	Acres
			Dikes, Levies, Roads, Flood Way, Easements, Wetland Mitigation					20%	119.4	Acres
									716	Acres
								$19,469		

Proposed 4,461 acre River Pointe South mixed use development
I-77 and Bluff Road, Columbia, Richland County, SC

Year		1998	1999	2000	2001	2002	2003	2004
DEVELOPMENT INCOME								
Acres Absorbed		0	716	716	716	716	716	868
Cumulative acres Sold			716	1433	2149	2866	3582	4450
Unsold Acres		4450	3734	3017	2301	1584	868	0
Annual Gross Sales Income		0	$13,947,500	$13,947,500	$13,947,500	$13,947,500	$13,947,500	$16,898,981
DEVELOPMENT COSTS								
Engineering	$200,000 per year	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$0
Architect	$75,000 per year	$75,000	$75,000	$75,000	$75,000	$75,000	$75,000	$75,000
Surveying	$200 per acre	$143,280	$143,280	$143,280	$143,280	$143,280	$173,600	$890,000
Legal	$200 per acre	$0	$143,280	$143,280	$143,280	$143,280	$143,280	$173,600
Construction	1000000 per year	$1,000,000	$1,000,000	$1,000,000	$1,000,000	$1,000,000	$0	$0
Commissions	9% of sales		$1,255,275	$1,255,275	$1,255,275	$1,255,275	$1,255,275	$1,255,275
Permits	$5 per 1000	$6,276	$6,276	$6,276	$6,276	$6,276	$0	$0
Real Estate Tax	roll back first year	$650,000	$170,000	$142,632	$115,264	$87,896	$60,528	$33,160
Overhead	0.02 sales	$278,950	$278,950	$278,950	$278,950	$278,950	$278,950	$278,950
Management	100000 per year	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000
Developer Profit	0.15 sales		$2,092,125	$2,092,125	$2,092,125	$2,092,125	$2,092,125	$2,092,125
Miscellaneous	50000 per year	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000
Total Costs		$2,503,506	$5,514,186	$5,486,818	$5,459,450	$5,432,082	$4,428,758	$4,948,110
Net Proceeds		($2,503,506)	$8,433,314	$8,460,682	$8,488,050	$8,515,418	$9,518,742	$11,950,871
Reversion Factor @	12.0%	0.8929	0.7972	0.7118	0.6355	0.5674	0.5066	0.4523
Present Value This Year		($2,235,274)	$6,722,986	$6,022,146	$5,394,309	$4,831,877	$4,822,491	$5,405,967
Cumulative Present Value		($2,235,274)	$4,487,712	$10,509,859	$15,904,168	$20,736,044	$25,558,536	$30,964,503
Reversion Factor @	15.0%	0.8696	0.7561	0.6575	0.5718	0.4972	0.4323	0.3759
Present Value This Year		($2,176,962)	$6,376,797	$5,563,035	$4,853,070	$4,233,658	$4,115,215	$4,492,775
Cumulative Present Value		($2,176,962)	$4,199,835	$9,762,870	$14,615,940	$18,849,608	$22,964,823	$27,457,598
							(say)	$30,000,000

Jerry R Adkins MAI
Real Property Analysis Consultation Evaluation
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APPRAISAL AND CONSULTING QUALIFICATIONS: JERRY R. ADKINS, MAI

EDUCATION	MBA, Business Administration B. S., Economics Midwestern State University
PROFESSIONAL DESIGNATIONS AND ORGANIZATIONS	Member, (MAI Designation) Appraisal Institute (AI Member No. 7966) Continuing Education Completed

Qualified Expert Witness in Connecticut Superior Court, Federal Bankruptcy Ct. United States District Court, Hartford, Ct. Connecticut General Appraiser Certificate No. 000015. South Carolina General Certified Appraiser No. 2806.

Approved Appraiser: Connecticut National Bank, Fleet Bank, FDIC, CIGNA, Aetna Life, CM Alliance, The Hartford, HRA, MetLife Capital Credit, New Haven Savings, Union Trust, Savings Bank of Manchester, Liberty Bank, Connecticut Development Authority, People's Bank, Glastonbury Bank & Trust, Department of Transportation, Department of Environmental Protection, Resolution Trust Corporation, Bank of Boston, Tenenbaum Assoc., Maryland National Corp. Branch Bank and Trust [BB&T]

PROFESSIONAL EXPERIENCE

Adkins Counseling & Valuation, 4 Adare Court, Irmo, SC 29063. (803) 749-9988 Residential and Commercial counseling and valuation. Contract review appraiser and complaint investigator for South Carolina Appraisers Board. 1996 to present.
President, Jerry R. Adkins Co., Inc., PO Box 1178, 36 Welles Street, Glastonbury, Ct. 06033, 1985 - 1996. Real Estate Consulting and Appraisal of all types of income producing property throughout CT.
Consulting Appraiser, John J. Leary Company, Inc. 1988-1990, Meriden.
Consulting Appraiser, Phillip A. Goodsell, Inc. 1985-1988, Rocky Hill.

State of Connecticut, Department of Transportation, 1986-1987, Staff Appraiser and Reviewer.
General Services Administration, Fort Worth, Texas, 1979-1984, Staff appraiser and Contracting officer.
Bureau of Land Management, Santa Fe, New Mexico, 1978-1979, Real Estate Specialist.
Gillentine & Keever, Santa Fe, New Mexico, 1977-1978, Appraiser.
Federal Highway Administration, Baltimore, Maryland, 1973-1976, Real Estate Specialist.

Property types appraised include most commercial, residential, industrial, and recreational uses such as major office buildings, industrial facilities, retail centers, multi-family residential properties, mixed use buildings, residential subdivisions, condominium developments, time shares and raw land. Additional assignments include highest and best use studies, feasibility/marketability analysis and absorption studies.

SCDOT
FAX COVER SHEET



To: MR. JERRY ADKINS
Phone:
FAX: 803-749-9998
803-749-0205

From: BETH KENDALL
R/W Division
P. O. Box 191
Columbia, SC 29202-0191

Phone: (803) 737-1400
FAX: (803) 737-1403

No of Pages: 9
(Including cover sheet.)

REMARKS: ☐ **Urgent** ☐ **For your review** ☐ **Reply ASAP** ☐ **Please comment**

I AM SENDING THE INSTRUMENTS WHICH WERE THE ACQUISITION INSTRUMENTS FOR THE MANNING PROPERTY YOU INQUIRED ABOUT. THE FILE # IS 40771. THIS WAS ORIGINALLY I-326 (NOW I-77) THE PLAN SHEETS YOU MIGHT WANT TO ORDER → ARE: 1, 22, 22A, 24, 25, 26, 27, 28, 29, 30, 31. ← YOU WILL HAVE TO CALL PLAN STORAGE FOR THE PLAN SHEETS. YOU MIGHT ALSO ASK THEM ABOUT ANY PLAN SHEETS WITH ELEVATIONS IF I CAN BE FURTHER HELP PLEASE CALL.

If you do not receive all of this fax, please contact at the above number.

~~1993~~ Plan Storage - 737-1743 (Mark Loric/Calvin Johnson)

Resident Construction — 737-6660 Shop Road

CV006062

PLTF TRIAL EXH 255

TRACT 1

South Carolina
State Highway Department
Columbia
Form 803 (Rev. 9-1-64)

The State of South Carolina
COUNTY OF RICHLAND
ROUTE NO. I-326

RESOLUTION
OF
BOARD OF CONDEMNATION

SOUTH CAROLINA STATE HIGHWAY DEPARTMENT

vs.

Mr. Burwell D. Manning, Jr., P. O. Box 13501, Columbia, South Carolina
Southern Bank and Trust Co., 1244 Main Street, Columbia, S. C. (Mortgagee)
~~William Linder, Richland County Treasurer, Law Libra, Columbia, S. C.~~

See "Order" with Tract 1-E

After due notice served upon the above-named person, firm or corporation that a right-of-way would be condemned for the construction of ~~[illegible]~~ No. File 40.771

between Survey Stations 665+25 and 670+45 Right

and compensation fixed and damages assessed therefor and after full hearing of all testimony and arguments and careful consideration of all questions involved.

Be it Resolved by this Board of Condemnation that, after taking into consideration the benefits accruing to the landowner by the construction or improvement of the highway, the value of the lands being taken together with any special damages occasioned by the construction or improvement of the highway and deducting the total value of the benefits from the total value of the damages in accordance with the statutes, the members of this Board find that the damage exceeds the benefit and we therefore make an award of

STATEMENT REQUESTED 6-8-79

Seventy-Two Thousand and no/100 dollars ($72,000.00) for approximately 4.2 acres of land, improvements and all damages, with fee simple title to the land and improvements thereon, if any, as described in Notice of Condemnation dated May 23, 1979.

Any appeal by the landowner from this Award shall be served by mail or otherwise upon the Department within twenty days after the receipt of this Resolution in accordance with the provisions of Section 33-139.

Signed by the Board of Condemnation at Columbia, S. C.,

this 7th day of August, 1979.

Chairman

Member

Member

Deposited in Legal Matters with 7/12/98 by Linda C. McLeod for $ 72,000.00 Three Notations, Continued on 1, 1A, 1B & 1C

[redacted]

CV006063

PLTF TRIAL EXH 255

T-1

The State of South Carolina
COUNTY OF Richland
ROUTE NO. I-326

NOTICE OF CONDEMNATION OF PROPERTY IN FEE SIMPLE ON CONTROLLED-ACCESS HIGHWAY

TO: Mr. Burwell D. Manning, Jr., P.O. Box 13501, Columbia, S.C.
Southern Bank and Trust Co., 1244 Main Street, Columbia, S.C. (mortgagee)
William Lieder, Richland County Treasurer, Tax Lien, Columbia, S. C.
McComb and Associates, Inc., Judgement, & G. Thomas Cooper, Atty., 111 Broad St., Camden, S. C.

PLEASE TAKE NOTICE,

That the South Carolina State Highway Department and requires a right of way for a public highway through and across lands in which the above-named person, firm or corporation claims title or some interest. Fee simple title to the lands within the right of way is required by the State Highway Department, including rights of access, as may be needed for controlled-access facilities. Said lands are located in the County and State aforesaid as shown by plans of the State Highway Department for the construction of a section of Route I-326 between Route I-26 and Route S-48 (Bluff Road)

known as [redacted] File 40.771, and are described as follows:

All that parcel or strip of land, with the improvements thereon, if any, within 53 feet of the access road survey centerline on the right between approximate survey stations 665+25 and 670+45, including the entire tract of land on the North to the property line. Also herein condemned is a 50 X 50 foot triangular area left of Bluff Road(S-48) survey station 12+25, being bounded on the North by Burwell D. Manning, Jr. and Eastern Corn and Grain Co.,Inc., East by SC Route S-48, West by lands of J. Pope Truesdale and the Estate of James E. Truesdale, Sr., South by other lands of the condemnee.

This being a portion of the land heretofore conveyed to Burwell D. Manning, Jr. by deed of the City of Columbia as reflected in deed book D-97, page 212, as recorded in the records of Richland County.

Fee simple title to the above described property will be condemned and a right of way established by the State Highway Department, and

YOU WILL TAKE FURTHER NOTICE, That a public hearing will be held at 1:30 [redacted](P.M.) on the 12th day of June, 19 79, at the City Council Chamber on the 3rd. floor in the Town of Columbia,

to ascertain the amount of damages in excess of benefits as a result of using said lands for the proposed highway improvement.

Columbia, S. C.

Date May 23, 19 79

SOUTH CAROLINA STATE HIGHWAY DEPARTMENT
By [redacted]
Right of Way Engineer

S. C. Holstein, Jr.

CV006064

PLTF TRIAL EXH 255

TRACT 1-A

South Carolina
State Highway Department
Columbia
Form 803 (Rev. 9-1-64)

The State of South Carolina

COUNTY OF Richland

ROUTE NO. I-326

RESOLUTION
OF
BOARD OF CONDEMNATION

SOUTH CAROLINA STATE HIGHWAY DEPARTMENT

vs.

Mr. Burwell D. Manning, Jr., P. O. Box 13501, Columbia, S. C.
Eastern Corn and Grain, Company, Inc., P. O. Box 13501, Columbia, S. C.
Farmers Home Administration, 240 Stoneridge Drive, Columbia, S. C. (Mortgagee)
Mortgage recorded in Book 486, Page 532, in the records of Richland County
Copy to: U. S. Attorney for District of S. C., Federal Court House, Columbia, S.
~~William Linder, Richland County Treasurer, Tax Lien, Columbia, S. C.~~
Attorney General of the United States - Attn.: Land and Resources Divisi
of the Department of Justice, Washington, D. C.
Farmers Home Administration, 240 Stoneridge Drive, Columbia, S. C. (Secu
Interest).
Recorded in Book M-457, at Page 47, in the office of the RMC for Richla
County.

See Order with Tracts 1-E

After due notice served upon the above-named person, firm or corporation that a right-of-way would be condemned for the construction of ~~Project No.~~ File 40.771

between Survey Stations 559+57 and 664+66 Right and Left

and compensation fixed and damages assessed therefor and after full hearing of all testimony and arguments and careful consideration of all questions involved.

Be it Resolved by this Board of Condemnation that, after taking into consideration the benefits accruing to the landowner by the construction or improvement of the highway, the value of the lands being taken together with any special damages occasioned by the construction or improvement of the highway and deducting the total value of the benefits from the total value of the damages in accordance with the statutes, the members of this Board find that the damage exceeds the benefit and we therefore make an award of

PAYMENT REQUESTED 8-8-79

One Million Four Hundred Thirty-five Thousand, Six Hundred and no/100 ($1,435,600.00) dollars for approximately 113.3 acres of land, improvements and all damages, with fee title to the land and improvements thereon, if any, as described in Notice of Condemnation dated May 23, 1979.

Any appeal by the landowner from this Award shall be served by mail or otherwise upon the Department within twenty days after the receipt of this Resolution in accordance with the provisions of Section 33-139.

Signed by the Board of Condemnation at Columbia, S. C.,

CV006065

PLTF TRIAL EXH 255

Tract 1-A

South Carolina
State Highway Department
Columbia
Form 210-C (5-1-63)

The State of South Carolina

COUNTY OF Richland

ROUTE NO. I-326

NOTICE OF CONDEMNATION
OF PROPERTY IN FEE SIMPLE ON
CONTROLLED-ACCESS HIGHWAY

TO: Mr. Burwell D. Manning, Jr., P. O. Box 13501, Columbia, S. C.
Eastern Corn and Grain, Co., Inc., P. O. Box 13501, Columbia, S. C.
Farmer Home Administration, 240 Stoneridge Drive, Columbia, S.C. (Mortgagee)
Mortgage recorded in Book 486, Page 532, in the records of Richland County

Copy to: U. S. Attorney for District of S. C., Federal Court House, Columbia, S. C.
~~William Lindsey, Richland County Treasurer, Tax Dept., Columbia, S. C.~~

Copy to: Attorney General of the United States – Attn: Land and Resources Division
of the Department of Justice, Washington, D. C.
Farmers Home Administration, 240 Stoneridge Dr., Columbia, SC (Security Interest)
Recorded in Book M-457 at page 47, in the office of the RMC for Richland Co.
~~McComb & Assoc., Incr. Judgement, 40 Thomas Cooper Atty., 111 Broad St., Camden, S. C.~~
~~Grady Johnson, Agreement, A.B. Jordan, III, 440 Woodside Haven Dr., Columbia, S. C.~~
~~B. A. Jordan, III Agreement, 440 Woodside Haven Dr., Columbia, S.~~
~~Heathwood Hall Foundation, Lessee, Julius W. McKay, Atty., 1340 Bull St., Columbia, S. C.~~

PLEASE TAKE NOTICE,

That the South Carolina State Highway Department and
requires a right of way for a public highway through and across lands in which the above-named person, firm or corporation claims title or some interest. Fee simple title to the lands within the right of way is required by the State Highway Department, including rights of access, as may be needed for controlled-access facilities. Said lands are located in the County and State aforesaid as shown by plans of the State Highway Department for the construction of a section of Route I-326 between Route I-26

and Route 48 (Bluff Road)

known as Engineering File 40.771, and are described as follows:

All that parcel or strip of land, with the improvements thereon, if any, within 165 feet of the survey centerline on the right and left between approximate survey station 559+57 and 664+66, being bounded on the north and south by other lands of the condemnee, east by Bluff Road (S.C. Route 48) and west by the Congaree River.

Also herein condemned is additional variable width property as follows: On the left: 215 feet from station 562+00 to station 565+00, thence decreasing on a straight line to 165 feet at station 569+00, 280' from station 578+44.8 to station 580+25, thence decreasing to 175 feet at station 580+25 and continuing 175 feet to station 584+00, thence increasing on a straight line to 185 feet at station 587+00 and continuing 185 feet to station 599+00, thence increasing on a straight line to 195 feet at station 600+00 and continuing 195 feet to station 602+50, thence increasing to 300 feet at station 602+50 and continuing 300 feet to station 605+25 thence decreasi to 165 feet at station 605+25, 295 feet from station 609+50 to 612+25, thence decreasing to 190 feet at station 612+25 and continuing 190 feet to station 633+25, thence increasing to 305 feet at station 633+25 and continuing 305 feet to station 636+00, thence decreasing to 165 feet at station 636+00; increasing from 165 feet at station 640+25 to 340 feet at station 640+25 and continuing 340 feet to station 642+25.

Fee simple title to the above described property will be condemned and a right of way established by the attached State Highway Department, and

YOU WILL TAKE FURTHER NOTICE, That a public hearing will be held at 1:30 (AM) (P.M.)

on the 12th day of June, 1979, at the City Council Chamber on the

3rd floor in the Town of Columbia,

to ascertain the amount of damages in excess of benefits as a result of using said lands for the proposed highway improvement.

Columbia, S. C.

Date May 23, 19 79

SOUTH CAROLINA STATE HIGHWAY DEPARTMENT

By S.O. Holstein, Jr. Right of Way Engineer

CV006066

PLTF TRIAL EXH 255

Tract 1-A

Burwell D. Manning, Jr. - File 40.771 - Route I-326 - Richland County

(Description Cont. for Notice of Condemnation)

thence decreasing on a straight line to 245 feet at station 644+00 and continuing 245 feet to station 650+00, thence decreasing to 150 feet from the centerline of Line #2 at station 650+00 and continuing 150 feet to station 656+00, thence decreasing on a straight line to 125 feet at station 657+00, thence decreasing on a straight line to 100 feet at station 661+91.9, thence decreasing on a straight line to 63.2 feet at station 663+50 and continuing 63.2 feet to station 666+35.8 (63.2 feet left Line #2 = 110 feet left Route 48/survey centerline), thence 110 feet from Route 48 centerline at station 28+71.7 to station 31+00, thence decreasing on a straight line to 80 feet at station 34+00 and continuing 80 feet to station 39+90 (Property Line) on the right: All that area between the survey centerline and the tract line separating Tract 1-A from Tracts 1-B & 1-C between approximate station 563+50 and 582+15 (Tract Line Leaves 220 ft. right of way.), thence extending 220 feet from station 582+15 to station 630+00, thence decreasing on a straight line to 205 feet at station 632+00 and continuing 205 feet to station 636+00, thence decreasing to 165 feet at station 636+00; Increasing from 165 feet at station 640+25 to 205feet at station 640+25 and continuing 205 feet to station 643+00, thence decreasing on a straight line to 166 feet at station 644+00 and continuing 166 feet to station 650+00 (166 feet right main line centerline = 100 ft. right Line #1 centerline) thence 100 feet from Line #1 centerline at station 650+00 to station 651+26 (A point the 100 ft. right of way from Line #1 intersects the 50 ft. right of way of the Levee Relocation), thence 50 feet right or southwest of the Levee Relocation centerline from the afore mentioned point to a point 33 feet right or south of the access road centerline at the access road station 657+68, thence 33 feet right of the access road centerline from station 657+68 to station 659+00, thence increasing to 75 feet at station 659+00 and continuing 75 feet to station 660+00, thence decreasing to 33 feet at station 660+00 and continuing 33 feet to station 664+73 (Property Line) and to include all that area on the left or north of the access road centerline and the centerline of Line #1 that extends to the centerline of Line #2.

All right of way herein condemned is more particularly shown on plan sheets 31 thru 38, 80, 82, & 83 of the plans for this project.

CV006067

PLTF TRIAL EXH 255

PAGE 1-B & 1-C

South Carolina
State Highway Department
Columbia
Form 803 (Rev. 9-1-64)

The State of South Carolina
COUNTY OF RICHLAND
ROUTE NO. I-326

RESOLUTION
OF
BOARD OF CONDEMNATION

SOUTH CAROLINA STATE HIGHWAY DEPARTMENT

vs.

Mr. Burwell D. Manning, Jr., P. O. Box 13501, Columbia, S. C.
Farmer Home Administration, 240 Stoneridge Drive, Columbia, S. C. (Mortgagee)
Mortgage recorded in Book 486, Page 532, in the records of Richland County
Copy to: U. S. Attorney for District of S. C., Federal Court House, Columbia, S. C.
Copy to: Attorney General of the United States - Attn: Land and Resources Division
of the Department of Justice, Washington, D.C.
Farmers Home Administration, Security Interest, 240 Stoneridge Drive, Columbia, S. C.
Recorded in Book M457 at page 47 in the office of the RMC for Richland Co.
~~William Linder, Richland County Treasurer, Tax Lien, Columbia, S. C.~~

After due notice served upon the above-named person, firm or corporation that a right-of-way would be condemned for the construction of ~~SCHEME~~ No. File 40.771 between Survey Stations 569+57 and 582+15 right and compensation fixed and damages assessed therefor and after full hearing of all testimony and arguments and careful consideration of all questions involved.

Be it Resolved by this Board of Condemnation that, after taking into consideration the benefits accruing to the landowner by the construction or improvement of the highway, the value of the lands being taken together with any special damages occasioned by the construction or improvement of the highway and deducting the total value of the benefits from the total value of the damages in accordance with the statutes, the members of this Board find that the damage exceeds the benefit and we therefore make an award of Ninety-Two Thousand Four Hundred and no/100 dollars ($92,400.00) for approximately 6.6 acres of land, improvements, and all damages, with fee simple title to land and improvements thereon, if any, as described in Notice of Condemnation dated May 23, 1979.

PAYMENT REQUESTED 8-8-79

Any appeal by the landowner from this Award shall be served by mail or otherwise upon the Department within twenty days after the receipt of this Resolution in accordance with the provisions of Section 33-139.

Signed by the Board of Condemnation at Columbia, S. C.

this 7th day of August, 19 79.

Chairman

Member

Member

Posted per Legal Letter dated 11/12/98 by Linda C. McDonald for $ 110,000.00 Show Medication w/ 1, 1A, 1B & 1C enclosed

CV006068

PLTF TRIAL EXH 255

Form 502-C (6-1-63)

1861C

The State of South Carolina

COUNTY OF Richland

ROUTE NO. I-326

NOTICE OF CONDEMNATION OF PROPERTY IN FEE SIMPLE ON CONTROLLED-ACCESS HIGHWAY

TO: Mr. Burwell D. Manning, Jr., P. O. Box 13501, Columbia, S. C.
Farmer Home Administration, 240 Stoneridge Drive, Columbia, S. C. (Mortgagee)
Mortgage recorded in Book 486, Page 532, in the records of Richland County
Copy to: U. S. Attorney for District of South Carolina, Federal Court House, Columbia, S.C.

Copy to: Attorney General of the United States - Attn: Land and Resources Division of the Department of Justice, Washington, D. C.
Farmers Home Administration, Security Interest, 240 Stoneridge Dr., Columbia, S. C.
Recorded in Book M-457 at page 47 in the office of the RMC for Richland County.
William Linder, Richland County Treasurer, Tax Lien, Columbia, South Carolina
McComb and Associates, Inc., Judgement, % G. Thomas Cooper, Atty., 111 Board St., Camden, S. C.

PLEASE TAKE NOTICE,

That the South Carolina State Highway Department and requires a right of way for a public highway through and across lands in which the above-named person, firm or corporation claims title or some interest. Fee simple title to the lands within the right of way is required by the State Highway Department, including rights of access, as may be needed for controlled-access facilities. Said lands are located in the County and State aforesaid as shown by plans of the State Highway Department for the construction of a section of Route I-326 between Route I-26 and Route 48 (Bluff Road)

known as Bookmiller. File 40.771 , and are described as follows:

All that parcel or strip of land, with the improvements thereon, if any, within 165 feet of the survey centerline on the right and to include all that area on the left of the survey centerline extending to the tract line separating Tract 1-A from Tracts 1-B & 1-C, between approximately station 569+57 and 582+15 (Tract line leaves right of way.) being bounded on the north and east by lands of Burwell D. Manning, Jr. and Eastern Corn and Grain, Company on the south by other lands of the condemnee and on the west by the Congaree River. Also herein condemned is additional variable width property as follows: on the right; increasing from 165' at station 561+50 to 225' at station 561+50 and continuing 225' to station 563+00, thence decreasing on a straight line to 175 feet at station 568+00 and continuing 175 feet to station 573+00, thence increasing on a straight line to 200 feet at station 577+00 and continuing 200 feet to station 578+11.8; thence extending 220 feet from station 578+11.8 to station 582+15 (Tract line leaves right of way).

All right of way herein condemned is more particularly shown on plan sheets 31, 32 & 33 of the plans for this project.

Fee simple title to the above described property will be condemned and a right of way established by the State Highway Department, and

YOU WILL TAKE FURTHER NOTICE, That a public hearing will be held at 1:30 (P.M.)

on the 12th day of June , 1979 , at the City Council Chamber on the 3rd floor in the Town of Columbia

to ascertain the amount of damages in excess of benefits as a result of using said lands for the proposed highway improvement.

Columbia, S. C.

Date May 23 , 19 79

SOUTH CAROLINA STATE HIGHWAY DEPARTMENT

By S.O. Holstein, Jr.

S.O. Holstein, Jr. Right of Way Engineer

CV006069

PLTF TRIAL EXH 255

Table 1
Total New Housing Units Approved for Construction
Central Midlands Region

Year	Lexington	Richland	Columbia, S.C. MSA	Fairfield	Newberry	Region
1975	1,057	741	1,798	*	*	*
1976	1,095	1,481	2,576	*	*	*
1977	1,257	1,666	2,923	89	121	3,133
1978	1,324	2,140	3,464	73	265	3,802
1979	1,325	1,994	3,319	89	*	*
1980	1,089	1,634	2,723	49	*	*
1981	549	1,238	1,787	57	*	*
1982	715	1,346	2,061	113	98	2,272
1983	1,212	2,225	3,437	64	209	3,710
1984	1,631	3,848	5,479	128	233	5,843
1985	1,599	3,460	5,059	88	164	5,330
1986	1,591	2,927	4,518	76	129	4,735
1987	1,598	1,868	3,466	187	136	3,789
1988	1,278	2,445	3,723	187	93	4,003
1989	1,075	1,702	2,777	99	108	2,984
1990	1,186	1,433	2,619	84	115	2,818
1991	1,221	1,830	3,051	71	92	3,214
1992	1,463	1,710	3,173	66	102	3,341
1993	1,746	2,221	3,967	68	93	4,128
1994	1,872	1,902	3,774	51	164	3,989
1995	1,586	2,179	3,765	51	85	3,901
1996	1,445	2,609	4,054	134	99	4,287

*Information not available.

Table 2
New Single Family Units Approved for Construction
Central Midlands Region

Year	Lexington	Richland	Columbia S.C. MSA	Fairfield	Newberry	Region
1975	1,010	696	1,702	*	*	*
1976	1,011	1,010	2,021	*	*	*
1977	1,160	1,329	2,489	87	121	2,697
1978	1,138	1,246	2,384	68	131	2,583
1979	1,097	1,514	2,611	89	*	*
1980	864	1,088	1,952	49	*	*
1981	423	614	1,037	57	*	*
1982	643	749	1,392	47	96	1,535
1983	1,013	1,168	2,181	64	155	2,400
1984	1,059	1,270	2,329	81	145	2,558
1985	1,144	1,393	2,537	88	138	2,782
1986	1,260	1,643	2,903	76	129	3,120

CV006070

PLTF TRIAL EXH 255

3762

Table 2 (Continued)
New Single Family Units Approved for Construction
Central Midlands Region

Year	Lexington	Richland	Columbia S.C. MSA	Fairfield	Newberry	Region
1987	1,416	1,325	2,741	107	136	2,984
1988	1,236	1,151	2,387	82	89	2,558
1989	1,015	1,067	2,082	65	108	2,255
1990	1,015	1,157	2,172	84	113	2,369
1991	1,134	1,142	2,276	55	92	2,423
1992	1,453	1,395	2,848	66	98	3,012
1993	1,524	1,374	2,898	68	93	3,059
1994	1,434	1,509	2,943	51	116	3,110
1995	1,158	1,750	2,908	49	85	3,042
1996	1,354	2,225	3,579	62	99	3,740

*Information not available

Table 3
New Multi-Family Units Approved for Construction
Central Midlands Region

Year	Lexington	Richland	Columbia, S.C. MSA		Fairfield	Newberry	Region
1975	47	49	96		*	*	*
1976	84	471	555		*	*	*
1977	97	337	434		2	0	436
1978	186	894	1,080		5	134	1,219
1979	228	480	708		0	*	*
1980	225	546	771		0	*	*
1981	126	624	750		0	*	*
1982	72	597	669		66	2	737
1983	199	1,057	1,256		0	54	1,310
1984	572	2,578	3,150		47	88	3,285
1985	455	2,067	2,522	18,268	0	26	2,548
1986	331	1,284	1,615		0	0	1,615
1987	182	543	725	17yr	80	0	805
1988	42	1,294	1,336	1,075/yr	105	4	1,445
1989	60	635	695		34	0	729
1990	171	276	447		0	2	449
1991	87	688	775		16	0	791
1992	10	315	325		0	4	329
1993	222	847	1,069		0	0	1,069
1994	438	393	831		0	48	879
1995	428	429	857		2	0	859
1996	91	384	475		72	0	547

*Information not available.

5475 / 8yr = 684/yr

1997 801/yr 1088

1998 10yr 1448

CV006071

PLTF TRIAL EXH 255

3763

1996 Building Permits
Central Midlands Region
by Use

Type	Permits	Units	Total Cost ($)	Avg. Cost / Per Permit
ADDITION	661	661	$20,575,203	$31,127
ASSEMBLY	61	61	$50,740,541	$831,812
BUSINESS	378	396	$140,559,232	$371,850
EDUCATIONAL	28	28	$50,731,344	$1,811,834
FACTORY	46	46	$54,650,495	$1,188,054
INSTITUTIONAL	17	17	$28,848,199	$1,696,953
MERCANTILE	62	62	$30,680,415	$494,845
MULTI FAMILY	27	547	$10,938,981	$405,147
SINGLE FAMILY	3,740	3,740	$302,872,352	$80,982
STORAGE	79	79	$11,921,503	$150,905
Total	5,099	5,637	$702,518,265	

1996 Building Permits
Columbia, SC MSA
by Use

Type	Permits	Units	Total Cost ($)	Avg. Cost / Per Permit
ADDITION	613	613	$19,345,525	$31,559
ASSEMBLY	54	54	$50,287,441	$931,249
BUSINESS	363	371	$133,366,526	$367,401
EDUCATIONAL	25	25	$45,731,344	$1,829,254
FACTORY	43	43	$52,423,495	$1,219,151
INSTITUTIONAL	17	17	$28,848,199	$1,696,953
MERCANTILE	61	61	$30,204,107	$495,149
MULTI FAMILY	26	475	$8,413,981	$323,615
SINGLE FAMILY	3,579	3,579	$288,744,952	$80,678
STORAGE	77	77	$11,845,753	$153,841
Total	4,858	5,315	$669,211,323	

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Date	Units	Number of Units Increased Between Periods	Percent Vacant	Number of Units Absorbed Between Periods	Number Vacant
September '82	15,316	(257)	4.7	(342)	713
September ' 83	15,331	233	4.9	(28)	751
September '84	16,252	73	4.8	(470)	775
September '85	16,923	1,204	7.3	373	1,235
September '86	18,787	998	9.9	385	1,860
September '87	20,167	449	9.3	578	1,876
September '88	21,157	166	7.0	215	1,452
September '89	21,467	353	6.5	298	1,364
September '90	22,568	499	6.4	149	1,448
September '91	23,191	69	5.7	310	1,259
September '92	23,975	333	7.1	183	1,602
September '93	24,308	252	7.4	524	1,752

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Date	Units	Number of Units Increased Between Periods	Percent Vacant	Number of Units Absorbed Between Periods	Number Vacant
September '94	24,560	79	6.0	579	1,480
September '95	24,639	845	4.0	377	980
September '96	25,484	687	5.0	781	1,280
September '97	26,171		4.5		1,186
September '98	27,259		6.3 [1]		1,709 [2]

[1] The vacancy calculations are based on the addition of all units which will be 3 months old or older by the next survey (September 1998).

[2] %vacant=the number of units vacant/the number of units surveyed, not the units in column 2 of this table. Vacancies can not be calculated for units that no information was received on.

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Average Size and Rent Per Square Foot Per Month for Type A Units

The average one bedroom unit surveyed has 710 square feet and an average rent per square foot of $.65. Two bedroom units surveyed averaged 991 square feet with an average rent per square foot of $.54. Three or more bedroom units averaged 1,220 square feet at $.53 per square foot.

TABLE 15
TYPE A - NONSUBSIDIZED UNITS UNDER CONSTRUCTION
COLUMBIA, S.C. MSA, 1997

Market Area	Apartment Name	Total Units	Eff	1 BDRM	2 BDRM	3 BDRM /+	Completion Date
IIa	Huntington Place	180	-				N/A
IXa	The Grove at Wildwood	264 -	-	96	128	40	Early 1998
IXa	Renaissance Park	216	-	48	136	32	Early 1998
XIIb	Swansea Arms	40	-	12	12	16	N/A
Va	Cypress Run	204	-	-	-	-	N/A
IIIb	Trenholm Road Apartments	184	-	136	48	-	N/A
Total		1,088	-	292	324	88	

Area IIa - East Richland
Area Va - St. Andrews (Richland County)
Area IXA - Richland Northeast
Area XIIb - Gaston\Swansea
Area IIIb - Forest Acres\Dentsville

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Type A NONSUBSIDIZED Units Under Construction

In the fall of 1997, there were 1,088 Type A units under construction in six developments in the Columbia, S.C. MSA. This represents an increase of 449 units reported under construction since the 1996 survey. These units are listed above in Table 15 by submarket area. The total number of units under construction, the bedroom mix, and known scheduled completion dates are also listed.

Units under construction are in five submarkets: the East Richland area (Area IIa), the Gaston/Swansea area (Area XIIB), the St. Andrews (Richland County) area (Area Va), Richland Northesat area (Area IXA), and the Forest Acres/Dentsville area (Area IIIb). These 1,088 units are scheduled to be completed in the spring and summer of 1998.

TABLE 16
TYPE A NONSUBSIDIZED UNITS PLANNED FOR CONSTRUCTION
COLUMBIA, S.C. MSA, 1997

Market Area	Apartment Name	Total Units	Eff	1 BDRM	2 BDRM	3 BDRM /+	Status
IXa	Sparkleberry Apartments	180	-	-	-	-	
XI	Lexington Apartments	187	-	-		-	
I	CCI Development	700	-	-	700	-	N/A
I	The Grove on Gervais	180	-	-	-	-	
IIa	Garner's Ferry Rd Apartments	201	18	39	120	24	
Total		1,448	18	39	820	24	

Area IXa - Richland Northeast
Area I - Downtown Columbia
XI - Lexington \ Lake Murray
IIa - East Richland

Type A Nonsubsidized Planned

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RETIREMENT, NURSING AND REST HOMES

The development of retirement housing in the Columbia area, gained momentum in 1996 and continued in 1997. It is logical to assume that as the population continues to age and as retirement age persons become more familiar with retirement housing options, the number of developments within the Columbia area will continue to increase.

This survey provides a comprehensive inventory of elderly housing/care facilities available in the Columbia MSA, including retirement, nursing and rest homes. In the Fall of 1997, 29 communities designated for the elderly were surveyed. These communities totaled 1,214 units with 358 units under construction and 60 planned. The geographic distribution of existing, under construction and planned units is indicated by submarket Roman numerals on Table 20. The following table is not a complete listing of all retirement, nursing and rest homes in the Columbia, S.C. metropolitan area.

TABLE 20
RETIREMENT / NURSING / REST HOMES
COLUMBIA, S.C. MSA
1996

Complex	Submarket	Total Units	Status
Hulon Greene Condominiums	VIa	143	3mo+
Still Hopes Retirement Community	VIa	61	3mo+
Presbyterian Home SC	XIa	74	3mo+
Lowman Home (The)	Xa	87 24	3mo+ uc
Agape Villas	VIb	52	3mo+
Agape House	VIb	24	3mo+
Generations	IIIb	67	3mo+

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ation o.	Route Number	Route Name	Station Location Description	1992	1993	1994	1995	1996
	S-1802	CHRISTIE RD	S-1447 TO S-1800	850	900	1,050	1,000	1,000
	S-1844	CHRISTIE RD	S-1800 TO S-1100	4,500	4,300	4,500	4,300	4,200
	S-2744	ALBA DR	S-708 TO S-88	125	100	150	125	125
	S-2745	DEBORAH DR	S-2744 TO S-1002	75	75	75	75	75
	S-1534	VETERANS RD	S-1534 TO U.S. 76	4,550	4,500	4,400	4,800	4,500
4	SC 77	INTERSTATE 77	S.C. 48 TO S.C. 768	17,250	21,800	20,800	37,300	41,000
6	SC 77	INTERSTATE 77	S.C. 768 TO U.S. 76/378	12,150	17,400	16,900	33,800	38,500
8	SC 77	INTERSTATE 77	U.S. 76 TO FORT JACKSON BLVD.	0	16,900	16,100	35,100	36,700
0	SC 77	INTERSTATE 77	SC 760 TO SC 12 SPUR	0	14,800	15,200	40,300	43,700

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3.3 Coastal Plain Province

Prime farmlands of the Coastal Plain are situated primarily in the Middle Coastal Plain region between Fort Jackson and the Congaree River flood plain. Three dominant soil associations contribute to the productivity of this nearly level to sloping plain. The Orangeburg-Norfolk-Marlboro association edges along the northern border of the middle coastal plain. Orangeburg loamy sands with slopes between 0 and 6 percent have high potentials for row crops, hay, and pasture. This association makes up 13 percent of the county soils and is found along broad ridge-tops and inter-stream divides. With moderate permeability, medium available water capacity and runoff, and good tilth, most land of this association is used for row crops. However, with increasing slope, erosion control measures are needed. Because Norfolk and Marlboro soils have the same properties as the Orangeburg series, they too have a high potential to support row crops, small grains, hay, and pasture. All of these soils are deep, well drained, and easily penetrated by plant roots for optimum growth. Marlboro sandy loams are almost all used for cultivated crops. Goldsboro soils, found intermingled in this association, also contribute to the productivity of the region. Although this soil needs to be drained to control excess surface water after a rain, its properties and farming potentials are similar to the Orangeburg series (U.S. Department of Agriculture, 1978).

The Norfolk-Marlboro-Goldsboro association of this area holds 27 percent of the agriculture, grassland, and pasture land of Richland County. Although these soils also hold 27 percent of the urban acreage, mainly within the City of Columbia, most of the crops, grass, and pasture are located here and on the Dothan-Coxville-Clarendon association. The Norfolk-Marlboro-Goldsboro association holds 9.3 percent of Richland County forested land in its middle coastal plain area (Appendix B). Most of this forest is evergreen with sparse deciduous and mixed patches throughout. Common trees include the following:

Loblolly pine	Longleaf pine
Slash pine	Sweetgum
Southern red oak	White oak

These trees have a site index, (average height), which ranges from 60-90 feet for dominant trees. Mainly Loblolly and Slash pines are planted due to their low seedling mortality (U.S. Department of Agriculture, 1978).

The Dothan-Clarendon soil association is found in the central area of the middle coastal plain, east and west of Gadsden, and makes up 5 percent of the county soils. Both Dothan and Clarendon soils are deep, moderate to well drained, nearly level soils which occur on broad ridge-tops, flats, and in some slightly depressed areas. Dothan loamy sands and Clarendon sandy loams have moderate permeability in surface layers and decreasing permeability with increasing depth because of a plinthite layer which retards downward water movement. Runoff is slow, tilth is good, and available water capacity is medium. Properties of these soils allow for good corn, cotton, soybean, small grain, hay, and peach tree growth. Mixed with this soil association, in concave elliptical depressions on broad ridges, are the Coxville soils. These deep soils are poorly drained and have a high water table most of the year. With proper drainage however, these soils are used for crops, pasture, and woodland (U.S. Department of Agriculture, 1978). The Dothan-

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Coxville-Clarendon soil association of the middle coastal plain contains 10.7 percent of Richland County's agriculture, grasses, and pasture land (Appendix B). Used little for urbanization, wetland, or woodland, this association is predominately covered with pasture.

Dothan-Clarendon soils contain the following trees which are important to the productivity of the county:

Loblolly pine
Slash pine
Longleaf pine
Sweetgum

However, as stated before, relatively little of this association or the Dothan-Coxville-Clarendon association contain forest lands, only 3.2 percent of all woodlands, mostly evergreens (Appendix B). The site index, average height, ranges from 75 to 90 feet. Loblolly, Slash, and Longleaf pines, American sycamore, Yellow-poplar, and Sweetgum are suitable to plant without great seedling mortality (U.S. Department of Agriculture, 1978).

The Persanti-Cantey-Goldsboro soil association is located just above the northern edge of the lower coastal plain, fringing along the Congaree River flood plain. As it comprises only 5 percent of the county's soils, contributions to Richland County's agriculture productivity are minimal. However, the soils themselves give rise to prime farmlands. Persanti soils, deep and moderately well drained, have a slow permeability and poor tilth. These very fine sandy loams have a seasonal high water table. However, with proper surface drainage, maximum grass production can be attained. Cantey loams also need adequate drainage for top crop performance. These soils are found on flats and in small depressions in the Congaree and Wateree River valleys. Goldsboro sandy loams are more suited to crop production. With moderate permeability, medium available water capacity and runoff, and good tilth, most land of this association is used for row crops, hay, and pasture. Some drainage is needed to control excess surface water (U.S. Department of Agriculture, 1978). The Cantey-Persanti-Smithsboro association, a band of soil beneath the Dothan-Coxville-Clarendon, was found to hold 3.9 percent of Richland County's agriculture, grassland, and pasture land. In addition, it contains 5.5 percent of the forestland, most of which is evergreen (Appendix B).

Important productive trees of the Persanti-Cantey-Goldsboro association are:

Loblolly pine	Longleaf pine
Slash pine	Sweetgum
Southern red oak	White oak
Water oak	

These trees have a site index which ranges from 60-90 feet and most are good for planting without high seedling mortality (U.S. Department of Agriculture, 1978).

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5.4 Catawba-Wateree River Basin

The Catawba-Wateree River Basin runs along the eastern edge of Richland County, almost entirely in the upper Coastal Plain Province. Before reaching Richland County, the Catawba River flows south, until it merges in with Big Wateree Creek. Here, it becomes the Wateree River which flows through Wateree Lake, continuing south to the Richland/Sumter County border. Below Eastover, the main stem of the Wateree River gives an average annual flow of 7,090 cfs, with only slight variations. The main tributary found in Richland County is Colonels Creek which also gives a well sustained flow of 47 cfs. This is attributed to the location of the Creek in the Upper Coastal Plain sediments. Water quality is generally good (S.C. Water Resources Commission, 1983).

Groundwater in the Catawba-Wateree Basin of Richland County is mostly in the Carolina Slate Belt which traverses the Piedmont Province. This supply appears to be limited with many wells yielding only 10 gpm. However, below the Fall Line, the Middendorf, Black Creek, and Black Mingo Aquifer Systems provide much better sources of groundwater with the upper coastal plain sediments reaching depths up to 650 feet. The Black Mingo is the most shallow aquifer and provides most of the water for domestic and small municipal wells. This groundwater generally has good water quality (S.C. Water Resources Commission, 1983).

Wetlands of the Catawba-Wateree River Basin are concentrated in the Lower Coastal Plain which lies in a north to south band along the Wateree River in the lower most part of the sub-basin. This area contains mostly deciduous forested wetlands with some fresh water non-forested wetlands and some bottomland hardwoods. The entire southeastern border of Richland County, bounded by the Wateree River, has bottomland forest.

5.5 Congaree River Basin

The Congaree River basin is comprised of the Congaree River and its tributaries below the convergence of the Saluda and Broad Rivers. A 45 mile segment of the Congaree, located between the Congaree Creek and the US Highway 601 Bridge is to be placed in the Scenic Rivers Program. Most of Richland County's agriculturally productive soils are on the Middle Coastal Plain, in the Congaree River Sub-basin. Near Columbia, stream flow on the main stem of the Congaree is very stable. Average annual stream flow is 9,425 cfs. This uniform, well-sustained flow provides a good source of water supply for Richland County. Eastern tributaries, such as Gills Creek, originate in almost impermeable soils which result in a less sustained flow. Water quality of the Congaree River is generally good with exceptions arising from municipal point source discharges and urban runoff (S.C. Water Resources Commission, 1983).

The Middendorf Aquifer System lies under the entire Congaree River basin. The Tertiary Sands Aquifer System overlies the Middendorf in the northern reaches while Black Mingo Aquifer System overlies it in the south. The stable water supply of the Middendorf provides acidic, soft water, low in fluoride and chloride for this basin. Near Eastover, groundwater, used mainly for domestic activities, is taken from the Black Mingo which yields 3 to 387 gpm (S.C. Water Resources Commission, 1983).

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Lexington

1. Major Public Water Systems

1.1 Background

Major public providers in Lexington County include: City of Columbia, City of West Columbia, Lexington County Joint Municipal Water & Sewer Commission, City of Cayce, Town of Lexington, Town of Batesburg-Leesville, , Town of Chapin, Town of Pelion, Town of Swansea, Gilbert-Summit Water District, Gaston Water District and Bull Swamp Water District.

1.2 Service Area and Treatment Capacity

City of Columbia provides water service to portions of Lexington County that lie between I-26 and Bush River Road. The City of Columbia's water supply comes from two sources: Broad River (Columbia Canal) and Lake Murray. The two water treatment plants and over 1,640 miles of distribution mains serve all of the City of Columbia and portions of Richland and Lexington County. The customer population served is approximately 90,000. The Columbia Canal Plant has a rated treatment capacity of 72 MGD, with average and maximum recorded high service pumping rates of 31 MGD and 70 MGD respectively. The Lake Murray Plant has a rated treatment capacity of 30 MGD. The Plant has an average high service pumping rate of 18.8 MGD with a maximum recorded high service pumping rate of 28.4 MGD.

The City of West Columbia gets its water supply from Saluda River and Lake Murray. The treatment plants are located at Lake Murray and Saluda River. The customer population served is approximately 15,701. The total average pumpage is 4.9 MGD. The total plant capacity is 12 MGD. The total storage capacity including elevated, ground and pressure tanks is 9.37million gallons. The per capita use is about 126 GPD. The City sells at least 0.5 MGD to smaller systems.

Lexington County Joint Municipal Water & Sewer Commission purchases its water from the City of West Columbia's Lake Murray Plant. Its allocation is approximately two million gallons, where consumption is currently operating at about one million gallons per day. The system operates with one half million gallon elevated storage tank. The system has about 2,300 customers.

City of Cayce: The City of Cayce gets its water supply from the Congaree Creek and the water treatment plant is located on US 321 near Dunbar Road. The approximate customers population served is 6,023. The average pumpage is 3.2 MGD. The total plant capacity is 6.4 MGD with the total storage capacity including elevated, ground and pressure tanks is 5.72 million gallons. The per capita use is 140 GPD. Major distribution lines run throughout the City of Cayce as well as portions of the Town of Springdale and several areas of unincorporated Lexington County. The unincorporated areas include the Three Fountains area, areas out SC 302 toward South Congaree and Pine Ridge, areas out Fish Hatchery Road, the Lloydwood subdivision south of the City, and the new industrial park off Dixiana Road, south of the City.

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Town of Lexington: The Town gets its raw water supplv from the Twelve Mile Creek. The average pumpage is 1.4 MGD and the customer population served is approximately 2,452. The total plant capacity is 2.8 MGD and the total storage capacity including elevated, ground and pressure tanks is approximately 1.32 million gallons. The per capita use is 237 GPD.

Town of Batesburg-Leesville: Batesburg-Leesville gets is supply of raw water from Lightwood knot and Duncan Creeks. The average pumpage of the plant is 1.1 MGD. The approximate population served is 2,561. The total plant capacity is 2.1 MGD. The total storage capacity including elevated, ground and pressure tanks is 1.45 million gallons. About 125,000 GPD are sold to Ridge Spring.

Town of Chapin: The Chapin customers now get water from the City of Columbia. since 1990 when City of Columbia completed water extension to Chapin water tank. The old tank had a capacity of 150,000 gallons and the new tank holds 2.0 million gallons. Water acquired from wells goes to Timberlake, Oakbrook, Plantation Hills, Night Harbor and Towner Mills subdivisions. It is anticipated that these will be deeded to the City of Columbia when water extension line is completed to these areas.

Town of Pelion: Pelion has two wells and at this point gets 60,000 gallons per day. The amounts vary depending on the season, from 40,000 to 80,000 gallons per day. The Town has a water holding tank with a capacity of 75,000 gallons per day. The Town serves areas within its limits.

Town of Swansea: The Town has three wells that provide service to its residents. These wells provide a water supply of approximately 162,000 gallons per day.

Gilbert-Summit Rural Water District was established by the General Assembly in 1960s for service to the towns of Gilbert and Summit. The system now serves some areas immediately adjacent to both towns. Its water supply is from 8 groundwater wells, with storage capacity of 540,000 gallons from three tanks. The customer population is approximately 1070 persons. The system averages 30,000 gallons per day pumpage.

Gaston Rural Community Water District was established by the General Assembly in 1966. The Water District has five groundwater wells as its water supply and maintains 3 storage facilities with a combined capacity of 300,000 gallons. Its service area is the Town of Gaston and the immediate surrounding area. The customer population is 1400 persons.

Other Non-public Providers: AAA Utilities Inc. provide water to some subdivisions and mobile home parks in the vicinity of Lake Murray. Carolina Water Service also provides water to some residential subdivisions in Lexington County. Heater Utilities, Inc. provides water service to quite a few areas in Lexington County. Some of these are Bellemede in Cayce, Charwood, Lexington Estates, Lexington Farms, Murray Park, Murray Lodge, Lake Village, Hilton Place, Vanarsdale and Windy Hill.

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2. Wastewater

2.1 Background

The City of Columbia, Lexington County Joint Municipal Water & Sewer Commission, City of Cayce, City of West Columbia, Town of Lexington, Town of Chapin, Town of Swansea are the public sewer providers.

2.2 Service Area and Treatment Capacity

City of Columbia: The City's Main Plant is located on the Congaree River and has a treatment capacity of 40 MGD. With over 850 miles of sewer lines, the Plant currently provides sewage treatment services for all of Columbia and portions of northwest, north central, northeast, and lower Richland County, and portions of northeast Lexington County. The customer base is approximately 45,000 to 50,000 accounts. Average daily flow is 30 MGD.

Lexington County Joint Municipal Water & Sewer Commission: The Commission operates two wastewater treatment plants. The Two Notch Road Plant serves part of the I-20 and US 1 Industrial Corridor and has an existing capacity of 400,000 gallons per day. The County currently uses an average of 250,000 gallons per day.

City of Cayce: The City of Cayce has a sewage treatment plant off Old State Road near the Congaree River which has a capacity to treat 8 million gallons per day. Most of the incorporated areas of Cayce presently have available sewer service. The City also provides sewer service to other area of Lexington County including portions of West Columbia, all sewer service to Springdale, the Three Fountains Area, SC 302 toward South Congaree, Pine Ridge, Fish Hatchery Road, and off Dixiana Road south of the City.

City of West Columbia: The City of West Columbia serves residents within its jurisdiction. The City does not have its own wastewater treatment plant and send its wastewater to City of Columbia for treatment.

Town of Lexington: The Town of Lexington current sewer treatment capacity is 1.0 MGD with a current average daily flow of 750,000 gallons per day.

Town of Chapin: The Town has a wastewater treatment plant with a capacity of 1.2 MGD. The Town treats 200,000 gallons per day of its own sewage and 600,000 gallons per day for outlying communities.

Town of Swansea: The Town has a sewer lagoon (oxidation pond) that has a capacity of 160,000 gallons per day. The town's average flow is 110,000 gallons per day. Rains cause the lagoon to overflow and has to be monitored carefully.

Other Non-Public Providers: Bush River Utilities service some areas along Bush River Road. Lakewood Utilities provide service to the vicinity of Rikard Nursing Home. Midlands Utilities service Westgate and Vanarsdale subdivisions in West Columbia and other subdivisions in the unincorporated area of Lexington County. Quail Hollow subdivision operates its own sewer system. Carolina Water Service serves the I-20 Regional and residential subdivisions in the County. Woodland Utilities, Inc. serves Woodland Hills and the Seven Oaks Elementary School.

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Richland County

1. Major Public Water Systems

1.1 Background

The City of Columbia is the only public water service provider in the County.

1.2 Service Area and Treatment Capacity

City of Columbia: The City's water supply comes from two sources: Broad River (Columbia Canal) and Lake Murray. The two water treatment plants and over 1,640 miles of distribution mains serve all of the City of Columbia and portions of Richland and Lexington Counties. The customer population served is approximately 90,000. The City of Forest Acres purchases water from Columbia to serve its customers in the incorporated limits of that city.

The Columbia Canal Plant has a treatment capacity of 72 MGD, with average and maximum recorded high service pumping rates of 31 MGD and 70 MGD respectively. The Lake Murray Plant has a rated treatment capacity of 30 MGD. The Plant has an average high service pumping rate of 18.8 MGD with a maximum recorded high of 28.4 MGD.

Other Non-Public Providers: AAA Utilities Inc. provides water to a small portion in Richland County in the Ballentine area. Ashley Oaks Subdivision in Blythewood operates its own water system. Carolina Water Service serves some area in Ballentine. Heater Utilities provides water service to Raintree Acres and Dutch Village, Harmon Estates and Washington Heights subdivisions.

2. Major Public Wastewater Systems

2.1 Background

The following are the major public sewer service providers within the county. City of Columbia Utilities Department, Richland County Utilities Department, East Richland Public Service District.

2.2 Service Area and Treatment Capacity

City of Columbia: The City's Main Plant is located on the Congaree River and has a treatment capacity of 40 MGD. With over 850 miles of sewer lines, the Plant currently provides sewage treatment services for all of Columbia and portions of northwest, north central, northeast, and lower Richland County. The customer base is approximately 45,000 to 50,000 accounts. Average daily flow is 30 MGD.

Richland County : Richland County provides sewer service in the Northwestern portion of the County, locally described as the "Broad River" area. In January 1994, the County proposed to combine the permitted flows from two plants, Hollingshed and Nicholas Creek, into

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one regional facility with a flow of 2.5 MGD. The discharges would be redirected to one point, located some 10 miles up from the City of Columbia's water intake on the Columbia Canal. Currently the Hollingshed system is discharging 210,000 GPD from the Stonegate Plant and the Nicholas Creek is discharging 400,000 GPD from its facility. The new regional facility is expected to handle new growth for the next 10 to 15 years.

East Richland Public Service District: East Richland Public Sewer District's plant has a current treatment capacity of 10.5 MGD. The treatment Plant is located off Bluff Road in Lower Richland County. There are no plans to expand at present. Current average flow is 8.5 MGD. This district serves the north east portion of Richland County, the area between Farrow Road and Percival Road.

Other Non-public Providers: Wildewood Utilities is a private utility system franchised to provide sewer service in the northeastern portion of Richland County. Granted a contract and franchise by Richland County and the Public Service Commission, Wildewood Utilities provides service to several large developments including Briarcliffe Estates, Longcreek Plantation, The Summit and Woodbranch. Wildewood Utilities operates a land application plant located in Kershaw County with a permitted capacity of 2.25 MGD.

Alpine Utilities provides sewer service to some areas in the northwest portion of Richland County. Most of its customers are apartment complexes. Bush River Utilities provides sewer service to Dutch Square and vicinity. Midlands Utilities provides sewer service to Raintree Acres and Dutch Village subdivisions. Terraceway Service Co., Inc. provides sewer service to a couple of residential areas in central and lower Richland County. Carolina Water service provides sewer to Friarsgate subdivision in Irmo. Utilities Inc. services Charles Towne, Mountainbrook subdivisions and the Caughman Road School.

3. Transportation

3.1 Highway Network

Of the four counties in the region, Richland County has the most complex and integrated road network. As shown in Table 33, the County has the highest overall highway mileage as well as by individual functional class. As shown on the transportation map in Appendix E, the County's road pattern has developed in the form of an hour-glass with the majority of major arterials flowing from the fringes of the County into a small collection of arterials within the City of Columbia. In the past, the traffic flow has remained stable with few constraints; however, new development, in-migration of traffic from other counties and limited resources have created capacity deficits in some interstate and secondary road segments.

Specifically, roadway sections evaluated along I-20, I-26, I-77 and I-126 currently operate at acceptable service levels ranging from A to D. However, one specific section along I-26, between I-20 and I-126, has been identified as operating under capacity deficient conditions on a daily basis. Of the major arterials evaluated, all appear to operate at good service levels with the exception of the section between S-42 (St. Andrews Road) and S-31(Bush River Road) on US 176 (Broad River Road). Analysis of minor arterials within Richland County identifies two

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locations which presently operate over capacity during an average 24-hour period. These roadways include SC-60 (Lake Murray Blvd.), between the Lexington County line and US 176 (Broad River Road), and S-31(Bush River Road), from I-26 to US 176 (Broad River Road). No deficiencies in capacity have been identified along roadways classified as major collectors in Richland County.

Table 33
Existing Mileage By Functional Classification, Richland County

Roadway Classification	Estimated Length in Miles	Percent of Total
Interstate	63	9 %
Major Arterial	88	13%
Minor Arterial	167	25%
Major Collector	362	53%
Total	680	

3.2 Transit Network

In Richland County, there are two operating transit providers: SCE&G Transit and the Santee-Wateree Regional Transportation Authority. SCE&G primarily serves the metropolitan area, including parts of Lexington County, while Santee-Wateree RTA only serves a portion of the lower Richland area.

SCE&G Transit is a public fixed route system which is operated by the SC Electric and Gas Company. The utility's involvement in the provision of public transportation is the result of commitments made by the company in the late 1800's and later upheld by the courts in the late 1930's. These commitments to provide public mass transportation were made in conjunction with the utility's use of public rights-of-ways for electric and gas transmission lines.

The system has 34 fixed routes that operate daily with an estimated 9,100 passengers per day. Service runs both weekday and weekend, with some routes operating till midnight.

The Santee-Wateree RTA accepted the fixed operation from the former Eastover Transit Authority in 1995. The SWRTA provides service to the Town of Eastover and the unincorporated areas of lower Richland County. Currently, there are four daily trips made to Columbia with pick-up points along SC 48 (Bluff Road) at Gadsden, Congaree and Hopkins, and limited service during Saturdays. SWRTA projects an average of 80 passengers boarding per day on the fixed route system.

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Table 38
Inventory of Schools for District One, Richland County

Alcorn Elementary	Johnson, CA, High
Arden Elementary	Keenan High
Bradley Elementary	Lewis, AJ Greenview Elementary
Brennen Elementary	Lower Richland High
Burnside Elementary	Lyon Street Elementary
Burton, WH, Elementary	McCants Elementary
Carver Elementary	Meadowfield Elementary
Caughman Road,	Mill Creek Elementary
Elementary	Moore, AC, Elementary
Columbia High	Nance, Sarah, Elementary
Crane Creek Elementary	Pack, Virginia, Elementary
Crayton Middle	Perry, WA, Middle
Denny Terrace Elementary	Rhame, HB, Jr. Elementary
Dreher High	Rosewood Elementary
Eau Claire High	St. Andrews Middle
Flora, AC High	Sandel, WS Elementary
Gadsden Elementary	Sanders, WG, Middle
Gibbs, Heyward, Middle	Satchel Ford Elementary
Hand Middle	Kilbourne Elementary
Heyward, SA Career Ctr.	Taylor, EE Elementary
Hopkins Elementary	Thomas, JP Elementary
Hopkins Middle	Watkins Elementary
Horrell Hill Elementary	Webber School
Hyatt Park Elementary	

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TABLE 1
OFFICE AND OFFICE DISTRIBUTION
BUILDINGS PLANNED FOR CONSTRUCTION
Columbia MSA
1997

AREA	RENTABLE BUILDING NAME	VACANT ADDRESS	R SQUARE FEET	✓ SQUARE FEET
1	Suggs & Kelly Bldg.	Huger Street	65,000	37,500
1	Carolina First Bldg.	1500 Main St.	160,000	65,000
1	Municipal Office Bldg.	1411 Main St.	60,000	30,000
4	Winhill Center	Monticello @ I-20	49,500	49,500
			334,500	182,000

UNDER CONSTRUCTION

AREA	RENTABLE → BUILDING NAME	VACANT → ADDRESS	SQUARE FEET	SQUARE FEET
7	BB&T Building	8910 Two Notch Rd.	32,500	20,500

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TABLE 2
OFFICE ABSORPTION FIGURES (IN SQUARE FEET)

COLA MSA

SURVEY DATE	TOTAL RENTABLE	TOTAL OCCUPIED	TOTAL ABSORBED
December 1997	9,907,434	8,927,201	409,708
December 1996	9,781,862	8,517,493	197,012
June 1995	9,747,991	8,320,481	220,949
June 1994	9,579,718	8,099,532	71,393
June 1993*	9,436,267	8,028,139	33,500
June 1992	9,435,799	8,099,703	191,666
June 1991	9,128,847	7,552,442	129,330
June 1990	8,676,329	7,199,675	269,942
June 1989	8,325,003	6,610,104	425,090
June 1988	6,597,452	5,786,201	698,919
June 1987	6,223,994	5,087,282	317,435
June 1986	5,473,277	4,769,847	643,713
June 1984	4,396,060	3,896,481	861,255
			4,469,917

LOLA AREA | CBD Downtown

TOTAL RENTABLE	TOTAL OCCUPIED	TOTAL ABSORBED
4,337,416	3,837,168	148,316
4,307,452	3,688,852	109,054
4,224,682	3,579,798	37,089
4,240,269	3,574,336	-37,838
4,123,655	3,812,174	4,464
4,095,360	3,607,710	53,729
4,045,745	3,475,656	24,600
4,054,381	3,427,628	92,550
3,988,430	3,244,514	184,729
3,411,490	2,922,712	544,531
2,744,173	2,378,181	25,485
2,262,430	2,352,696	250,010
2,262,430	1,984,624	524,620
		2,062,088

NOTE: This absorption figure is for twelve (12) months. The 1992 figures were adjusted to reflect the deletion of office building that was erroneously reported.

Average 343,839/yr

158,622

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TABLE 3
OFFICE SPACE SURVEY BY AREA 1997

AREA	LOCATION	NO. OF BLDGS	MARKET RATE SHARE(%)	RENTABLE SQUARE FT.	VACANT SQ.FT.	% VACANT	RENTAL AVG/SF
1	Downtown	78	43.8	4,337,416	500,248	11.5	$14.23
2	South Columbia	6	0.6	63,500	13,000	20.4	8.90
3	East Columbia	96	18.7	1,850,903	186,107	10.1	12.27
4	North Columbia	18	6.5	642,583	17,576	2.7	14.35
5	St. Andrews	64	17.6	1,746,516	216,763	12.4	12.80
6	Cayce/West Cola.	34	6.1	608,547	26,429	4.3	11.03
7	Richland Northeast	20	3.4	337,587	7,300	2.2	10.75
8	Dutch Fork/Irmo	15	2.2	213,517	6,960	3.3	12.77
9	Lexington	10	1.0	99,200	5,850	5.9	6.00
10	Batesburg-Leesville	2	0.1	7,665	0	0	5.00
	COLUMBIA MSA	343	100	9,907,434	980,233	9.9	$13.38

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TABLE 1
SHOPPING CENTERS UNDER CONSTRUCTION
Columbia MSA
1997

AREA	BUILDING NAME	ADDRESS	RENTABLE SQUARE FEET	VACANT SQUARE FEET
8	Kinley Road Center	Kinley Rd. & Broad River	51,778	13,800
9	South Lake Pointe Center	1123 South Lake Drive	44,318	2,400
9	Shopping Center	Hwy. 378 & St. Peters Church Road	40,000	6,000
8	Columbiana Station	Harbison Blvd	400,000	400,000
			536,096	422,200

TABLE 2
PLANNED SHOPPING CENTERS
Columbia MSA
1997

AREA	BUILDING NAME	ADDRESS	RENTABLE SQUARE FEET	VACANT SQUARE FEET
6	Sunset Shoppes	944-48 Sunset Blvd.	25,000	17,000
7	Park Terrace Shopping Center	Park Terrace Drive	105,000	80,000
8	Oakwood Plaza	Blythewood	54,000	20,000
9	Lexington Place, Ph. 2	378 Old Cherokee Rd.	80,000	80,000
			264,000	197,000

TABLE 4
EXISTING SHOPPING CENTERS BY YEAR BUILT (20,000 SQ. FT. OR GREATER)

YEAR	No. OF BLDGS.	GROSS LEASABLE AREA		VACANT AREA	% VACANT	AVERAGE RATE/SF
1997	3	381,517		18,000	4.7	$ 16.94
1996	3	239,350		10,700	4.4	10.20
1995	4	578,995		0	0	11.46
1994	5	492,174	4,343,406	5,300	1.0	11.22
1993	2	92,863	9yr	0	0	9.00
1992	5	216,506		2,900	1.3	9.27
1991	4	487,736	482,000/yr.	29,241	6.0	12.75
1990	9	897,801		71,878	8.0	10.19
1989	13	955,464		88,943	9.3	10.87
1988	15	1,620,902		86,012	5.3	18.03
1987	10	330,910		22,250	6.7	8.46
1985-1986	19	1,171,244		144,754	12.3	9.33
1980-1984	22	963,626		157,106	16.3	8.29
1975-1979	24	3,074,355		404,555	13.1	7.92
1970-1974	9	1,275,774 —		215,470	16.8	5.72
1950-1969	9	680,630		94,682	13.9	5.69
< 1939	2	80,000		7,950	9.9	6.50
NA	3	138,750		9,600	6.4	10.50
	161	13,678,597		1,369,339	10.0	$ 11.73

47yr
13, $60,000
286,380/yr

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TABLE 6
HISTORIC TRENDS IN RETAIL SPACE COLUMBIA MSA 1997

Date	Gross Leasable Area	Vacant Area	Vacant % Vacant	No. of Centers
12/97	13,678,597	1,369,339	10.0	161
12/96	13,223,373	1,293,165	9.8	158
6/95	12,334,640	1,192,374	9.7	158
6/94	12,274,992	1,259,708	10.2	159
6/93	11,737,582	1,314,438	11.2	157
6/92	11,348,760	1,516,087	13.4	154
1/92	11,084,619	1,535,633	13.9	150
6/92	10,845,827	1,449,434	13.4	140
1/91	10,351,321	1,420,093	13.7	135
6/91	9,583,958	1,269,126	13.2	123
1/90	9,535,141	1,112,971	11.7	122
6/89	8,736,572	884,192	10.1	119
1/89	8,084,980	787,724	9.7	102
6/88	7,696,888	739,687	9.4	96

TABLE 1
WAREHOUSES AND INDUSTRIAL BUILDINGS FOR LEASE PLANNED FOR CONSTRUCTION

COLUMBIA MSA 1997

ADDRESS	BUILDING NAME	COUNTY	GROSS SQUARE FOOTAGE	VACANT SQUARE FOOTAGE
2013 Wayne Street		R	30,000	0
Clemson Road		R	25,000	25,000
Walter Price Drive		L	20,000	0
Elmwood & Wayne St.		R	3,500	3,500
			78,500	25,000

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TABLE 1
DISTRIBUTION OF LAND BY CURRENT ZONING AND COUNTY

LEXINGTON COUNTY

ZONING	TOTAL ACREAGE
C	0.00
C-1	0.00
C-2	7.60
C-3	29.74
CN	2.40
D	0.00
D-1	343.4
GC	0.00
ID	1,704.56
LM	1.25
M-1	174.36
M-2	10.00
R	47.36
R-1	0.00
RG	0.00
RU	165.00
Not Zoned	7021.61
TOTAL	9,507.28

RICHLAND COUNTY

ZONING	TOTAL ACREAGE
C	3.51
C-1	22.63
C-2	172.60
C-3	521.49
CN	8.00
D	32.00
D-1	1,194.25
M-1	2,919.37
M-2	1,336.50
R-1	2.00
RG-1	86.00
RG-2	198.44
RS-1	0.00
RU	400.00
Not Zoned	12,317.20
TOTAL	19,213.99

INVENTORY OF COMMERCIAL LAND SITES

COLUMBIA, SC MSA

ABBREVIATIONS USED IN THIS SURVEY

BTS/NFS	Build to suit/Not for sale	W	Water available
S	Sewer available	G	Gas Available
R	Rail available	E	Electricity Available
$15,000/ac.	$15,000 per acre	$6.16/SF	$6.16 per square foot
N/Z	Not zoned	N/A	Not available
attn.	Attainable, i.e. sewer	FMV	Fair market value

CONGAREE RIVER AT COLUMBIA, SC 02169500

Date	AVG DISCHARGE	AVG STAGE
1998/03/09 00	43166.67	14.97
1998/03/09 01	46325.00	15.71
1998/03/09 02	49300.00	16.37
1998/03/09 03	51225.00	16.80
1998/03/09 04	52300.00	17.03
1998/03/09 05	52475.00	17.06
1998/03/09 06	52325.00	17.03
1998/03/09 07	52600.00	17.09
1998/03/09 08	53650.00	17.31
1998/03/09 09	54950.00	17.58
1998/03/09 10	56750.00	17.95
1998/03/09 11	59075.00	18.40
1998/03/09 12	61075.00	18.79
1998/03/09 13	62275.00	19.01
1998/03/09 14	63250.00	19.17
1998/03/09 15	64075.00	19.30
1998/03/09 16	64400.00	19.36
1998/03/09 17	65300.00	19.51
1998/03/09 18	66675.00	19.74
1998/03/09 19	68150.00	19.97
1998/03/09 20	69375.00	20.17
1998/03/09 21	70700.00	20.36
1998/03/09 22	71900.00	20.54
1998/03/09 23	72740.00	20.66
1998/03/10 00	72533.33	20.63
1998/03/10 01	72050.00	20.56
1998/03/10 02	72000.00	20.56
1998/03/10 03	72350.00	20.60
1998/03/10 04	73100.00	20.71
1998/03/10 05	74150.00	20.86
1998/03/10 06	75000.00	20.98
1998/03/10 07	75375.00	21.03
1998/03/10 08	76350.00	21.17
1998/03/10 09	77725.00	21.37
1998/03/10 10	78275.00	21.44
1998/03/10 11	78950.00	21.54
1998/03/10 12	79625.00	21.62
1998/03/10 13	80225.00	21.69
1998/03/10 14	79725.00	21.64
1998/03/10 15	80025.00	21.67
1998/03/10 16	80875.00	21.78
1998/03/10 17	81750.00	21.90
1998/03/10 18	82375.00	21.97
1998/03/10 19	81050.00	21.80
1998/03/10 20	79825.00	21.65
1998/03/10 21	79450.00	21.60
1998/03/10 22	78400.00	21.46
1998/03/10 23	77020.00	21.27
1998/03/11 00	76100.00	21.14
1998/03/11 01	75575.00	21.06
1998/03/11 02	75525.00	21.06
1998/03/11 03	75950.00	21.12
1998/03/11 04	77200.00	21.29
1998/03/11 05	77450.00	21.33
1998/03/11 06	76533.33	21.20

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AMENDMENT TO AGREEMENT

This Amendment to Agreement (the "Amendment") is made on this 17th day of February, 1999 by and between **BURWELL D. MANNING, JR., EASTERN CORN & GRAIN COMPANY, INC.** and **OVERLOOK, INC.** (hereinafter, collectively, "Manning"), **CHAPEL HILL, LLC,** or its assigns ("Chapel Hill") and **DAK III, LLC** ("DAK") to extend certain repurchase rights held by Manning as set forth in that certain Agreement dated July 17, 1998 entered into by the parties to this Amendment (the "Agreement").

NOW, THEREFORE, for and in consideration of the mutual covenants and promises herein contained, the receipt and adequacy of which are hereby acknowledged, the parties do hereby agree as follows:

1. Effective as of date of this Amendment, Paragraph 4, subparagraph (a) is hereby amended so that the purchase right held by Manning as set forth in subparagraph (a) shall now expire on February 24, 1999 at 12:00 Noon.

2. Effective as of date of this Amendment, Paragraph 4, subparagraph (b) is hereby amended so that the purchase right held by Manning as set forth in subparagraph (b) shall now expire on February 24, 1999 at 12:00 Noon.

3. This Amendment may be executed in one or more counterparts which when assembled shall constitute one Amendment.

4. All terms and conditions of the Agreement, except as amended herein, shall remain in full force and effect.

IN WITNESS WHEREOF, the parties have caused this Amendment to be executed to be effective as of the date first set forth above.

[SIGNATURE PAGES ATTACHED]

BURWELL D. MANNING, JR., individually
and on behalf of Eastern Corn & Grain Company,
Inc. and Overlook, Inc

CVMcNair000383

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CHAPEL HILL, LLC

By: _____, M.M.

Its: Man. Member.

DAK III, LLC

By: 

Alec H. Chaplin, Member

CVMcNair000385

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DAK III, LLC
By: Manning, Kirk & Associates, Member

By: _____
B. Deas Manning
Its: President

DAK III, LLC
By: Chapel Hill, LLC, Member

By: _____
Kirkman Finlay, III

DAK III, LLC

By: _____
E. Robertson Kibler, Member

DAK III, LLC
By: Manning, Kirk & Associates, Member

By: _____

B. Deas Manning
Its: President

DAK III, LLC
By: Chapel Hill, LLC, Member

By: _____

Kirkman Finlay, III

DAK III, LLC

By: _____
E. Robertson Kibler, Member

COPY

AGREEMENT

This Agreement is made on this the ___ day of July, 1998, by and between BURWELL D. MANNING, JR., EASTERN CORN & GRAIN COMPANY, INC., and OVERLOOK, INC., (hereinafter, collectively "Manning"), CHAPEL HILL, L.L.C. , or its assigns ("Chapel Hill"), and DAK III, L.L.C. ("DAK"), to state the rights that Manning will have in certain real property that Chapel Hill and DAK are purchasing pursuant to Manning's rights under an agreement and Memorandum of Purchase Options by and between Manning and Congaree Farms, L.L.C. ("Congaree Farms"). This Agreement also states rights that Chapel Hill and DAK will have in property not yet acquired, but which Manning has the right to sell or reacquire, under the agreement and the Memorandum of Purchase Options by and between Manning and Congaree Farms.

1. Purpose of the Agreement. This Agreement allows Manning an opportunity to repurchase property that Chapel Hill and DAK are purchasing pursuant to Manning's rights under his agreement with Congaree Farms, and to avoid the loss of Manning's rights and interest in the property. On July 16, 1997, Manning conveyed real property to Congaree Farms pursuant to a financing agreement, under which Manning retained the right to make payment to Congaree Farms for the release and return of the conveyed property pursuant to terms and conditions stated in that certain Agreement dated June 25, 1997, as amended by the Addendum to Agreement executed on July 16, 1997, (hereinafter, as amended by the Addendum, the "Congaree Farms Agreement") by and between Manning and Congaree Farms. The Congaree Farms Agreement provides that Manning may sell and use the property, and may obtain the release and return of all or a portion of the property, upon required payments to Congaree Farms. These payments include release prices for acreage in the parcels of property conveyed to Congaree Farms. The Congaree Farms Agreement requires that Manning pay not less than $3,300,000 to Congaree Farms on or before July 16, 1998 (the time for this payment has been extended to July 17, 1998 by Congaree Farms' agreement); if such payment were not made, Manning would lose all right and interest in the property. Furthermore, Manning has until July 16, 1999 in which to pay an additional $3,360,800 to Congaree Farms; if such payment were not made, Manning would lose all rights and interest in the property not repurchased from Congaree Farms. The sale of property to Chapel Hill and DAK provides the required $3,300,000 payment to Congaree Farms on July 17, 1998. Chapel Hill and DAK have agreed to allow Manning a limited time in which to repurchase the property they have purchased, upon the terms stated hereinbelow. Their purchase also enables Manning to retain Manning's interest in the property not yet repurchased from Congaree Farms; in return, Manning has agreed to assign his rights in the Unreleased Property, subject to the provisions set forth hereinbelow, to Chapel Hill and DAK.

2. Property. The real property and improvements which are the subject of this Agreement (hereinafter, the "Property") comprise approximately 4,500 acres, which are described in Exhibit A to this Agreement. The Property is comprised of numerous parcels, which are divided into three sections: Levy Section I, Levy Section II and Levy Section III. Levy Section I is comprised of the real estate known as the Arthur, Overlook and Ehrlich tracts; Levy Section

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II is comprised of the real estate known as the Whitehouse, Rutledge, Tokunaga, Martin, Barron II and Truesdale tracts; and Levy Section III is comprised of the Guignard, Shull and Miller Chappell, Manning, Lux, Chappell I, Chappell II, Barron I, Kirkland, McCrae-Kirkland, and Drucilla Chappell tracts.

3. Purchase of Property. Chapel Hill and DAK are each purchasing a portion of the Property through Manning, pursuant to Manning's rights under the Congaree Farms Agreement. The purchase price paid by Chapel Hill and DAK is the total of (a) the release price for the acreage purchased under the Congaree Farms Agreement, (b) all costs of closing the sale (excluding Manning's attorneys fees), and © all other costs incurred by Chapel Hill and DAK in their purchase of the property (hereinafter, in aggregate, the "Purchase Price").

a. Chapel Hill is purchasing 1,406 acres, more or less, of property located in Levy Section II and Levy Section III. This property consists of the following: the "Rutledge Farm Tract", consisting of 516± acres; the "Truesdale Tracts", consisting of 11.44 acres; the "Tokunaga Tracts", consisting of 55.5 acres; the "Guignard Farm Tract", consisting of 544±acres; and the portion comprising Parcel B of the "Shull and Miller Chappell Tracts" (as shown on the plat of these tracts), consisting of 279± acres.

b. DAK is purchasing 811.684 acres of property in Levy Section I. This property consists of Parcel A-2, consisting of 236.585 acres; Parcel B-1, consisting of 246.57 acres; Parcel B-2, consisting of 8.227 acres; and Parcel E, consisting of 320.21 acres. These parcels are described on the plat of the Levy Section I property prepared by B. P. Barber & Associates, Inc., recorded in Richland County, South Carolina on or about July 16, 1998.

c. By Chapel Hill's purchase of the property described in subparagraph 3.a. above, the payment of $1,803,716 is being made to Congaree Farms for the conveyance of such property. By the DAK's purchase of the property described in subparagraph 3.b. above, the payment of $1,513,024 is being made to Congaree Farms for the release and conveyance of such property. These properties are hereinafter referred to as the "Released Property". The property still held by Congaree Farms after Congaree Farms' release and conveyance of the Released Property to Chapel Hill and DAK is hereinafter referred to as the "Unreleased Property".

4. Manning's Right to Repurchase the Released Property. Manning may purchase the Released Property upon the following provisions:

a. Manning shall have the right to purchase the Released Property in Levy Sections II and III from Chapel Hill for the purchase price of $2,502,400; provided, however, that Manning's right to purchase the Released Property from Chapel Hill will expire on February 17, 1999.

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b. Manning shall have the right to purchase the Released Property in Levy Section I from DAK for the repurchase price of $2,097,600; provided, however, that Manning's right to purchase the Released Property from DAK will expire on February 17, 1999.

c. If Manning does not make the required payment to purchase the Released Property from Chapel Hill within the allowed seven month period, Manning's right to purchase the Released Property will no longer exist, but Manning, his heirs and assigns shall have the right to receive a 10% share of Chapel Hill's net profits from the Released Property in Levy Sections II and III through July 31, 2003, after Chapel Hill has recovered its Purchase Price plus all of its costs associated with the acquisition and development of the Released Property in Levy Sections II and III and all costs associated with maintaining and managing the property.

d. If Manning does not make the required payment to purchase the Released Property from DAK within the allowed seven month period, Manning's right to purchase the Released Property will no longer exist, but Manning shall have the right to receive a 25% share of DAK's net profits from the Released Property in Levy Section I through July 31, 2003, after DAK has recovered its Purchase Price plus all of its costs associated with the acquisition and development of the Released Property in Levy Section I and all costs associated with maintaining and managing the property.

5. Assignment of Manning's Interest in Unreleased Property. Manning assigns his interest in the Unreleased Property to Chapel Hill and DAK as follows:

a. Manning hereby assigns to Chapel Hill Manning's right to sell and/or repurchase the Unreleased Property in Levy Sections II and III, as such rights exist under the Congaree Farms Agreement; provided, however, that Chapel Hill may not exercise such assigned rights prior to February 17, 1999; and further provided that Manning shall retain the right to sell and/or repurchase the Unreleased Property in Levy Sections II and III under the Congaree Farms Agreement through February 17, 1999, subject to the provisions set forth hereinafter.

b. Manning hereby assigns to DAK Manning's rights to sell and/or repurchase the Unreleased Property in Levy Section I, as such rights exist under the Congaree Farms Agreement; provided, however, that DAK may not exercise such assigned rights prior to February 17, 1999; and further provided that Manning shall retain the right to sell and/or repurchase the Unreleased Property in Levy Section I under the Congaree Farms Agreement through February 17, 1999, subject to the provisions set forth hereinafter.

c. Manning hereby assigns to Chapel Hill, subject to the assignment to DAK made in subparagraph 5.b. above, Manning's rights to sell and/or repurchase the Unreleased Property in Levy Section I; provided, however, that Chapel Hill may not exercise such rights prior to February 17, 1999, and that Chapel Hill may exercise such rights only if DAK does not exercise such rights in the Levy Section I Unreleased Property pursuant to its assignment in subparagraph 5.b. above; and further provided that Manning shall retain the right to sell and/or repurchase the Levy Section I Unreleased Property through February 17, 1999.

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d. Manning hereby assigns to DAK, subject to the assignment to Chapel Hill made in subparagraph 5.a. above, Manning's rights to sell and/or repurchase the Unreleased Property in Levy Sections II and III; provided, however, that DAK may not exercise such rights prior to February 17, 1999, and that DAK may exercise such rights only if Chapel Hill does not exercise such rights in the Levy Sections II and III Unreleased Property pursuant to its assignment in subparagraph 5.a. above; and further provided that Manning shall retain the right to sell and/or repurchase the Levy Sections II and III Unreleased Property through February 17, 1999.

e. During the period through February 17, 1999 in which Manning retains the right to sell or repurchase the Unreleased Property under the Congaree Farms Agreement, Manning may not sell or repurchase such Unreleased Property unless Manning simultaneously purchases the Released Property from Chapel Hill and DAK.

f. If Chapel Hill exercises the assigned rights under the Congaree Farms Agreement to sell or repurchase the Unreleased Property as provided hereinabove, Manning, his heirs and assigns shall receive a 10% share of Chapel Hill's net profits from the Unreleased Property through July 31, 2003. It is contemplated that Chapel Hill, or one or more members of Chapel Hill, may create a new entity and add new investors to own the Released Property Chapel Hill purchased and to own Chapel Hill's interest in DAK; the creation of such new entity and the transfer of Chapel Hill's rights in the Released Property and in DAK to such new entity will not constitute a transaction to which Manning will be entitled to a share of the profits.

g. If DAK exercises the assigned rights under the Congaree Farms Agreement to sell or repurchase the Unreleased Property as provided hereinabove, Manning shall receive a 25% share of DAK's net profits from the Unreleased Property through July 31, 2003.

h. Unless and until Manning purchases the Released Property as provided under paragraphs 4.a. and 4.b. hereinabove, Manning shall not reassign or transfer the rights and interest retained by Manning after the above assignments to Chapel Hill and DAK to repurchase the Unreleased Property under the Congaree Farms Agreement.

i. If Manning purchases the Released Property in Levy Sections II and III from Chapel Hill on or before February 17, 1999, Manning's assignment to Chapel Hill of Manning's rights under the Congaree Farms Agreement shall terminate upon such payment to Chapel Hill; provided, however, that if Manning does not exercise Manning's rights to purchase the Unreleased Property under the Congaree Farms Agreement, Manning shall allow Chapel Hill and DAK to exercise such purchase rights under the Congaree Farms Agreement in the same priority (as between Chapel Hill and DAK) as would exist under subparagraphs 5.c. and 5.d. above.

j. If Manning purchases the Released Property in Levy Section I from DAK on or before February 17, 1999, Manning's assignment to DAK of Manning's rights under the Congaree Farms Agreement shall terminate upon such payment to DAK; provided, however, that if Manning does not exercise Manning's rights to repurchase the Unreleased Property under the Congaree Farms Agreement, Manning shall allow Chapel Hill and DAK to exercise such

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repurchase rights under the Congaree Farms Agreement in the same priority (as between Chapel Hill and DAK) as would exist under subparagraphs 5.c. and 5.d. above.

6. Manning's Right to Use of the Property. During the period under this Agreement in which Manning may repurchase the Released Property, Manning shall have the right to hunt and fish on the Property for recreational and social purposes, and Manning shall have the right of first refusal to farm the Property at a rental rate to be agreed by Chapel Hill (as to Levy Sections II and III) and DAK (as to Levy Section I); provided, however, that Manning shall maintain all portions of the Property in a reasonable manner.

7. Rollback Taxes. Manning shall be responsible for all rollback taxes assessed on the Property for periods through the calendar year ending December 31, 1998. If Manning purchases the Released Property from Chapel Hill and/or DAK under paragraph 4.a. and/or 4.b. hereinabove, Manning shall be responsible for rollback taxes assessed on the property for periods after December 31, 1998.

Burwell D. Manning, Jr., Individually
and on behalf of Eastern Corn & Grain Company, Inc.
and Overlook, Inc.

CHAPEL HILL, L.L.C.

By: _____

Its: _____

DAK III, L.L.C.

By: _____
Alec H. Chaplin, Member

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DAK III, L.L.C.
By: MANNING, KIRK & ASSOCIATES, Member

By: _____
B. Deas Manning
Its: President

DAK III, L.L.C.
By: CHAPEL HILL, L.L.C., Member

By: _____
Kirkman Finley, III

DAK III, L.L.C.

By: _____
E. Robertson Kibler, Member

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