This instrument was prepared by:

W. Benjamin Johnson

Burr & Forman LLP

420 North 20th Street; Suite 3100

Birmingham, Alabama 35203

Inst # 2002-13460

STATE OF ALABAMA

)

O3/21/2002-13460

SHELBY COUNTY

)

O4:02 PM CERTIFIED

SHELBY COUNTY JUDGE OF PROBATE

TEMPORARY CONSTRUCTION CH

65.00

AND SLOPE EASEMENT AGREEMENT

RECITALS

- A. Schein is the owner of that certain parcel of real estate (the "Schein Parcel") located in Shelby County, Alabama as more particularly described on Exhibit "A" attached hereto and incorporated herein by reference.
- B. Grantee is the owner of that certain parcel of real estate ("Grantee's Parcel") contiguous to the Schein Parcel and located in Shelby County, Alabama as more particularly described on Exhibit "B" attached hereto and incorporated herein by reference.
- C. Grantee has requested that Schein allow Grantee to enter that certain area within the Schein Parcel (the "Slope Easement Area"), which Slope Easement Area is more particularly described on Exhibit "C" attached hereto and incorporated herein by reference, for the purposes of regrading the existing hill and constructing a slope as set forth hereafter.
- D. Schein is willing to allow Grantee to perform such work, so long as Grantee is willing to take all reasonable efforts to minimize dust and disruption to the Schein Parcel and to indemnify Schein as hereafter set forth.

AGREEMENT

NOW, THEREFORE, in consideration of the sum of Ten and No/100 Dollars in hand paid to Schein, the covenants and agreements contained herein, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Schein does hereby grant, bargain, sell, and convey to Grantee, upon the conditions and subject to the limitations hereinafter set forth, the easements hereinafter set forth.

TO HAVE AND TO HOLD said easements unto Grantee, its successors and assigns until such date as the "Conversion" shall occur, if it does.

Schein covenants with Grantee that she owns in fee the real property herein conveyed, and that she has a good right to execute this Temporary Construction and Slope Easement Agreement and to grant said easements.

- establish, grant, and convey, for the benefit of Grantee's Parcel, a temporary construction easement appurtenant to Grantee's Parcel over the portions of the Schein Parcel adjacent to the Slope Easement Area for the purpose of permitting Grantee to clear and grade the Slope Easement Area to form a self-supporting slope on the northerly side of the proposed new roadway (the "Roadway"), all as shown on that certain plan more particularly set forth on Exhibit "D" attached hereto and incorporated herein by reference (the "Slope Plan"). Grantee agrees that such entry onto the Schein Parcel shall be limited and shall not interfere with the automobile business conducted on the Schein Parcel. All construction work, once commenced, shall be processed expeditiously to conclusion. This temporary construction easement shall cease without further action of the parties after the earlier of: (i) thirty (30) days after completion of construction of said slope on the Slope Easement Area; or (ii) two (2) years from the date hereof.
- 2. SLOPE EASEMENT. Schein does hereby declare, establish, grant, and convey, for the benefit of Grantee's Parcel, a perpetual (but subject to Schein's right of conversion as set forth in paragraph 4 hereinbelow), non-exclusive easement appurtenant to Grantee's Parcel for the purposes of permitting Grantee, after construction of said slope, to enter upon said Slope Easement Area, from time to time as necessary, to maintain and repair, as the case may require, any damage or weathering on said slope which may interfere with traffic on the Roadway or which may damage the Schein Parcel, and Grantee hereby covenants and agrees to perform such work and keep said slope in good order and repair. Grantee's use of the Slope Easement Area shall be in common with Schein's, it being expressly agreed that Schein reserves to herself, her heirs, executors, successors, assigns, tenants, and others claiming under or through Schein, as the case may be, the unrestricted use of the Slope Easement Area, subject only to the rights of Grantee as herein set forth.
- 3. RESTORATION OF THE SCHEIN'S LAND. Grantee shall and hereby agrees to promptly restore the Slope Easement Area and any other portion of the Schein Parcel which may be disturbed through Grantee's use of the easements hereby granted, by seeding or sodding and repairing as necessary the surface of the Slope Easement Area and any other portion of the Schein Parcel which may have been disturbed through Grantee's construction activities, all in accordance with the provisions of that certain landscaping plan set forth on Exhibit "E" attached hereto and incorporated herein by reference. During the pendency of this Agreement, Grantee shall and hereby agrees to promptly restore, grade, seed or sod, and repair as necessary the surface of the Slope Easement Area and any other portion of the Schein Parcel which may be disturbed from time to time through Grantee's use of the easements and rights hereby granted.
- 4. <u>CONVERSION</u>. It is understood that Schein shall retain ownership of the Slope Easement Area and further that this Agreement does not prohibit Schein from performing additional grading on the Slope Easement Area in order to convert the Slope Easement Area (or any portion

thereof) to useable, buildable area for Schein's use ("Conversion"), so long as the Conversion does not occur before the earlier of: the date the Roadway is dedicated; or (ii) January 1, 2004. Any such Conversion by Schein shall be performed in a manner which utilizes appropriate precautions to protect against landslides, sloughage, or other disturbance to the Roadway or to the vehicular traffic thereon and shall be subject to the approval of the City of Pelham. Upon proper Conversion by Schein and the resulting elimination of the need for said slope easement, as confirmed in writing by a qualified geotechnical engineering firm such as Bhate Engineering Corp. or Gallet & Associates, or such other comparable local and reputable engineering firm, then the easement pertaining to said Conversion area shall automatically terminate. Said termination shall apply to such Conversion area whether such Conversion area includes part or all of the area encompassed under this conveyance.

- INDEMNIFICATION AND AGREEMENT TO PAY COSTS. Grantee shall protect, defend, indemnify, and hold Schein harmless from and against any and all claims, demands, costs, expenses, damages, and liabilities (including costs and expenses of defending such claims, demands, costs, expenses, damages and liabilities, including all appeals) for any injury to person or damage to real or personal property caused by, resulting from or arising out of an act, omission, or neglect of Grantee or its agents, servants, employees, or contractors in connection with Grantee's use of the easements and rights hereby granted. Grantee agrees to exercise care in connection with Grantee's use of the easements and rights hereby granted so as to minimize the amount of dust created which may be deposited on the Schein Parcel, and to minimize any disruption of the automobile business conducted on the Schein Parcel, and Grantee further agrees to pay any extra costs which may be incurred by the automobile dealership located on the Schein Parcel (such as car washing (up to a maximum of \$1,000 per month) or such as damage to buildings or other property on the Schein Parcel) to the extent caused by Grantee's construction or slope maintenance activities. Prior to undertaking any blasting in connection with Grantee's construction as set forth in paragraph 1 of this Agreement, Grantee agrees to have a pre-blasting report prepared at Grantee's expense showing the condition of the buildings and facilities located on the Schein Parcel, with pictures. In the event of any damage to the buildings and facilities located on the Schein Parcel, Schein shall submit evidence of such damage to Grantee. If Grantee disputes that Grantee's activities caused such damage, the parties shall submit such evidence to Gallet & Associates. In the event Gallet & Associates determines that the damage was caused by Grantee's activities, Grantee shall pay any costs incurred in so engaging Gallet & Associates, and Grantee shall pay to Schein all costs incurred in repairing such damage. In the event Gallet & Associates determines that the damage was not caused by Grantee's activities, Schein shall pay any costs incurred in so engaging Gallet & Associates, and Schein shall bear any costs associated with repairing such damage.
- 6. AGREEMENTS RUN WITH LAND. Both the benefits and the burdens of all easements, restrictions, benefits and obligations established by this Temporary Construction and Slope Easement shall run with and bind the lands described herein, and shall be binding upon and inure to the benefit of any and all owners thereof and their respective tenants, licensees, invitees, employees, personal representatives, heirs, successors and assigns, and, except as herein expressly provided to the contrary, shall be perpetual. This Temporary Construction and Slope Easement Agreement and all rights for its use and maintenance are assignable and may be transferred and/or assigned by Grantee to the City of Pelham upon dedication of the Roadway to said City. Schein agrees to cooperate in the dedication of such Roadway, provided any expenses incurred in connection with such dedication shall be borne by Grantee.

891809.7

- 7. ATTORNEY'S FEES. In the event of litigation arising out of or in connection with this Agreement, the losing party agrees to pay to the prevailing party the prevailing party's reasonable attorneys' fees and costs of suit, including fees and costs of appeal.
- 8. <u>INTERPRETATION</u>. The easements, restrictions, benefits and obligations set forth herein shall be interpreted so as to allow the owners of all lands affected hereby to enjoy the commercially reasonable use and benefit of the same while fulfilling the essential purposes of such easements, covenants and restrictions.

IN WITNESS WHEREOF, the parties hereto have caused this TEMPORARY CONSTRUCTION AND SLOPE EASEMENT AGREEMENT to be executed as of the day and year first above written.

SCHEIN:

SUSAN STRICKLAND SCHEIN

STATE OF Alabama)
COUNTY OF Jefferson)

I, Kathun 5 Eady, a notary public in and for said County in said State, hereby certify that SUSAN STRICKLAND SCHEIN, whose name is signed to the foregoing agreement, and who is known to me, acknowledged before me on this day that, being informed of the contents of the agreement, she executed the same voluntarily as of the day the same bears date. Given under my hand this 42 day of March, 2002.

Notary Public

My Commission Expires: 7-27-05

	INTE	RSTATE RESTAURANT INVESTORS, LLP
	By:	Its:
STATE OF Ala) COUNTY OF Leff)		
RESTAURANT INVESTORS, LLP, an foregoing agreement and who is known to informed of the contents of the agreement, he executed the same voluntarily for and as the same bears date.	Alabam me, ac e/she, as act of s	nd for said County in said State, hereby certify Partner of INTERSTATE na limited liability partnership, is signed to the knowledged before me on this day that, being such Partner and with full authority, aid limited liability partnership as of the day the
Given under my hand this 20 day of	Lo de la constante de la const	y Public ommission Expires: 10 -> 7 - 2003
	_	NTEE: HMARK PROPERTIES, LLC
STATE OF <u>Ala.</u>	By:	Its:
PROPERTIES, LLC, an Alabama limited and who is known to me, acknowledged be of the agreement, he/she, as such	ame as liability fore me	and for said County in said State, hereby certify Manager of SOUTHMARK company, is signed to the foregoing agreement on this day that, being informed of the content and with full authority, executed the same company as of the day the same bears date.
Given under my hand this 20 day of	Notar	y Public ommission Expires: 10-27-2003

GRANTEE:

GMAC, as the holder of the mortgage recorded at Instrument 1993-13089 in the Office of the Judge of Probate of Shelby County, Alabama, with Assignment of Rents and Leases recorded at Instrument 1993-13091 in said Probate Office, joins in the execution of this Agreement solely for the purposes of consenting thereto, and agreeing that if GMAC shall become the owner of the Schein Parcel by reason of foreclosure or the acceptance of a deed or assignment in lieu of foreclosure or otherwise, this Temporary Construction and Slope Easement Agreement shall not be terminated or affected thereby but shall continue in full force and effect upon all of the terms, covenants and conditions set forth therein.

CAKAC.

OPERT MOTORO	
GENERAL MOTORS	ACCEPTANCE
CORPORATION	
By: 185 Lellell	

STATE OF GEORGIA)
COUNTY OF JOYTH)

I, the undersigned, a Notary Public in and for said County in said State, hereby certify that A.B. Shilwell, whose name as ASSF Soc. of GENERAL MOTORS ACCEPTANCE CORPORATION, a corporation, is signed to the foregoing agreement and who is known to me, acknowledged before me on this day that, being informed of the contents of the agreement, he/she, as such officer and with full authority, executed the same voluntarily for and as the act of said corporation as of the day the same bears date.

Given under my hand this H day of February, 2002.

Notary Public

My Commission Expires:

Notary Public, Forsyth County, Georgia
My Commission Expires November 15, 2003

to Temporary Construction and Slope Easement Agreement "Schein Parcel"

A part of the NE 1/4 of the NW 1/4 and the NW 1/4 of the NW 1/4 of Section 24, Township 20 South, Range 3 Wost, of the Muntsville Principal Heridian, Shelby County, Alabama and being more particularly described as follows:

Commence at the Northwest corner of Section 24, Township 20 South, Range 3 West, H.P.H., Shelby County, Alabama and run thence Easterly along the North line of said Suction a distance of 969.58 feet to an existing steel corner set on the Easterly right of way line of U.S. Highway No. 31 and the point of beginning of the property being described; thence continue along last described course a distance of 702.31 feet to an existing steel corner, thence turn a deflection angle of 106° 26' 00" to the right and vun Southwesterly a distance of 190.51 feet to an existing steel corner, thence turn a deflection angle of 6° 59' 10" to the left and run a distance of 369.30 feet to an existing steel pin, thence turn a deflection angle of 69° 00' 18" to the right and run a distance of 37.50 feet to an existing corner, thence turn a deflection angle of 69° 00' 18" to the left and run Southwesterly a distance of 74.13 feet to an existing corner in or near the centerline of a chert based road serving a Polham Water Storago Tank, thence turn a deflection angle of 69° 00' 18" to the right and run west southwesterly along the approximate conterline of said chert road a distance of 408.93 fout to an existing corner set on the same said Easterly right of way line of U.S. Highway No. 31 in a curve to the left having a central angle of 4° 49' 24" and a rudius of 3,877.97, thence run Northwesterly along the arc of said right of way line an arc distance of 326.46 feet to the P.T. of said curve, thence continue along the tangent of said curve and along the same said right of way line of same said Highway No. 31 a tangent distance of 396.65 feet to the point of beginning.

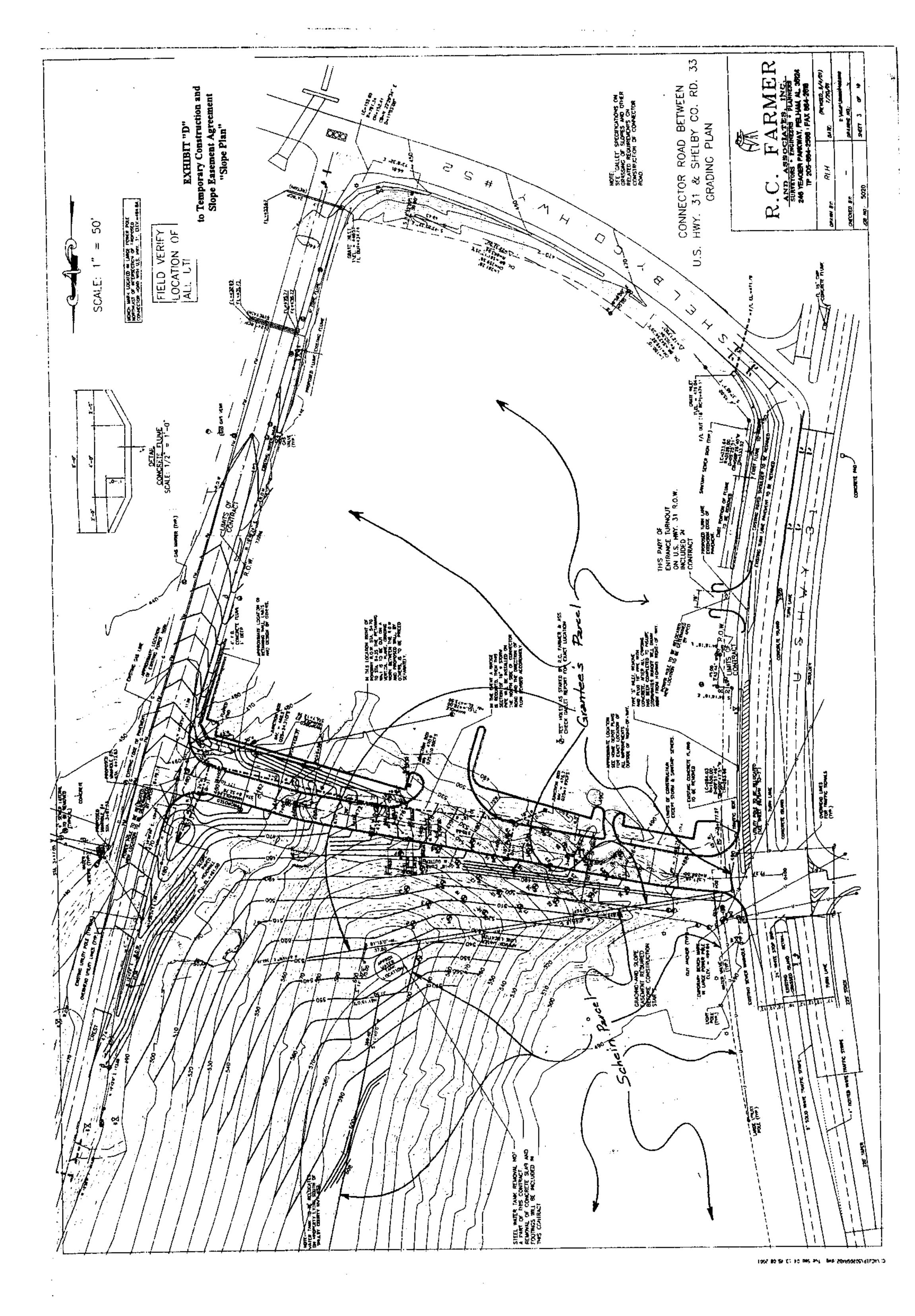
EXHIBIT "B"
to Temporary Construction and
Slope Easement Agreement
"Grantee's Parcel"

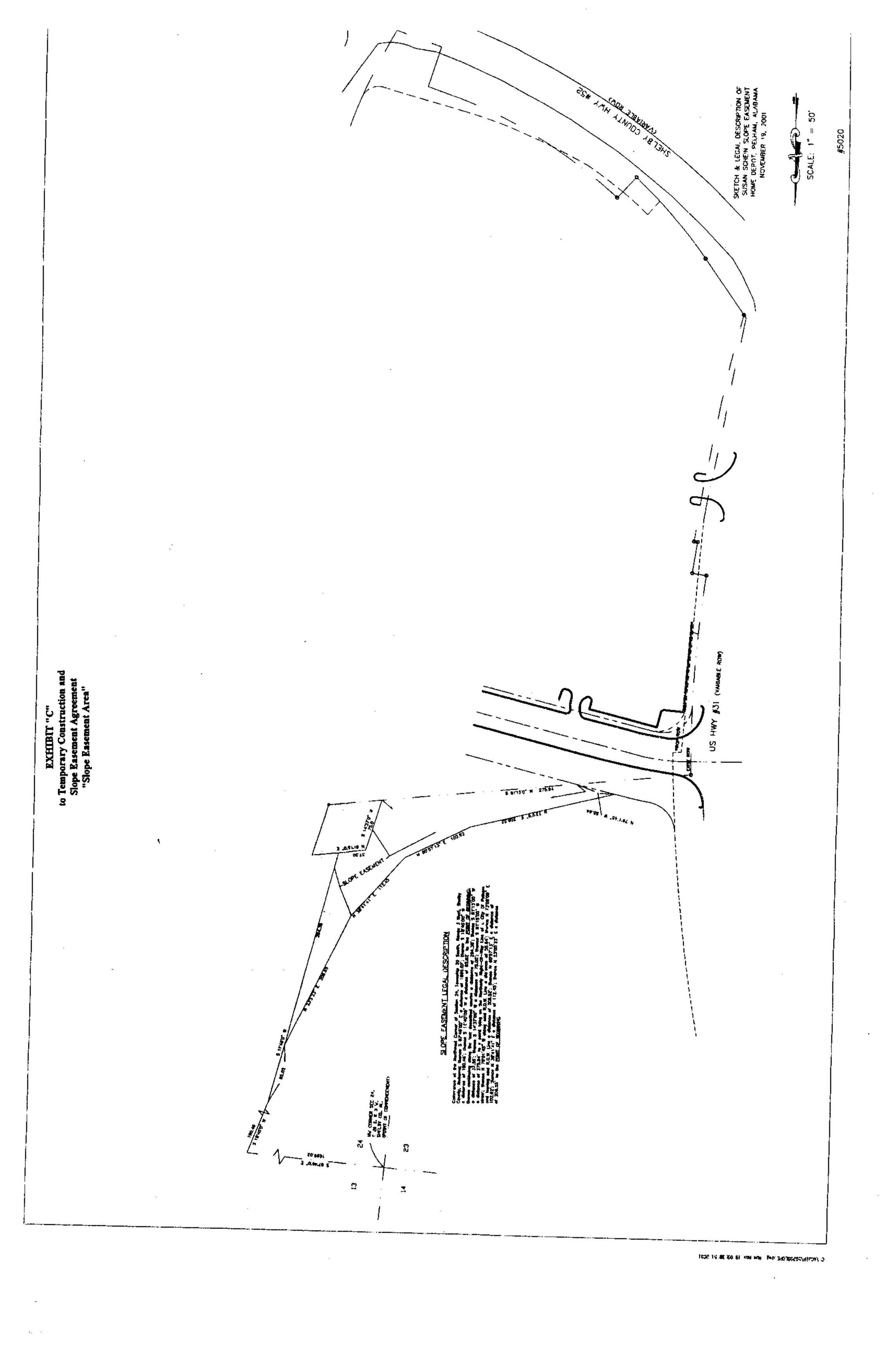
Grantee's Parcel

A PARCEL OF LAND SITUATED IN THE NW 1/4 OF SECTION 24, TOWNSHIP 20 SOUTH, RANGE 3 WEST, SHELBY COUNTY, ALABAMA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NW CORNER OF SAID SECTION 24; THENCE S 870EG-46'-00" E A DISTANCE OF 1669.02'; THENCE S 180EG-40'-00" W A DISTANCE OF 190.46"; THENCE S 11DEG-40'-00" W A DISTANCE OF 369.40"; THENCE N 81DEG-15'-00" E A DISTANCE OF 37.50': THENCE S 14DEG-37'-00" W A DISTANCE OF 75.00' TO THE POINT OF BEGINNING; THENCE S 810EG-15'-00" W A DISTANCE OF 487.45' TO A POINT LYING ON THE PROPOSED EASTERLY RIGHT-OF-WAY LINE OF U.S. HWY. # 31 (VARIABLE RIGHT-OF-WAY); THENCE S 4DEG-34'-46" E, ALONG SAID RIGHT-OF-WAY LINE A DISTANCE OF 33.51'; THENCE S 850EG-25'-14" W, ALONG SAID RIGHT-OF-WAY LINE A DISTANCE OF 12.07; THENCE S 1DEG-46'-13" W. ALONG SAID RIGHT-OF-WAY LINE A DISTANCE OF 331.35'; THENCE S 7DEG-55'-06" W, ALONG SAID RIGHT-OF-WAY LINE A DISTANCE OF 297.59' TO ITS INTERSECTION WITH THE NORTHERLY RIGHT-OF-WAY LINE OF SHELBY COUNTY HIGHWAY # 52 (VARIABLE RIGHT-OF-WAY); THENCE S 37DEG-48'-07" E, ALONG SAID NORTHERLY RIGHT-OF-WAY LINE A DISTANCE OF 100.47' TO THE BEGINNING OF A CURVE TO THE LEFT HAVING A RADIUS OF 703.94', A CENTRAL ANGLE OF 120EG-13'-03". AND SUBTENDED BY A CHORD WHICH BEARS S 430EG-54'-39" E, A CHORD DISTANCE OF 149.82'; THENCE ALONG THE ARC OF SAID CURVE AND SAID NORTHERLY RIGHT-OF-WAY LINE A DISTANCE OF 150.10'; THENCE N 39DEG-58'-50" E, ALONG SAID RIGHT-OF-WAY LINE A DISTANCE OF 40.00' TO THE BEGINNING OF A CURVE TO THE LEFT HAVING A RADIUS OF 663.94", A CENTRAL ANGLE OF 220EG-32"-50" AND SUBTENDED BY A CHORD WHICH BEARS S 61DEG-17'-35" E. A CHORD DISTANCE OF 259.59'; THENCE ALONG THE ARC OF SAID CURVE AND SAID RIGHT-OF-WAY LINE A DISTANCE OF 261.28' TO THE END OF SAID CURVE; THENCE S 730EG-20'-32" E, ALONG SAID RIGHT-OF-WAY LINE A DISTANCE OF 49.43'; THENCE S 14DEG-32'-22" W, ALONG SAID RIGHT-OF-WAY LINE A DISTANCE OF 59.90'; THENCE S 73DEG-08'-32" E, ALONG SAID RIGHT-OF-WAY LINE A DISTANCE OF 66.81' TO ITS INTERSECTION WITH THE WESTERLY RIGHT-OF-WAY LINE OF SHELBY COUNTY HIGHWAY # 33 (80' RIGHT-OF-WAY); SAID POINT OF INTERSECTION IS ALSO THE BEGINNING OF A CURVE TO THE LEFT HAVING A RADIUS OF 791.34', A CENTRAL ANGLE OF 11DEG-03'-08", AND SUBTENDED BY A CHORD WHICH BEARS N 22DEG-29'-34" E, A CHORD DISTANCE OF 152.41'; THENCE ALONG THE ARC OF SAID CURVE AND SAID WESTERLY RIGHT-OF-WAY LINE A DISTANCE OF 152.65'; THENCE N 16DEG-43'-24" E, ALONG SAID RIGHT-OF-WAY LINE A DISTANCE OF 732.86'; THENCE N 16DEG-53'-24" E, ALONG SAID RIGHT-OF-WAY LINE A DISTANCE OF 11.59'; THENCE N 14DEG-26'-26" E, ALONG SAID RIGHT-OF-WAY LINE A DISTANCE OF 134.61': THENCE N 14DEG-35'-24" E, ALONG SAID RIGHT-OF-WAY LINE A DISTANCE OF 136.71'; THENCE N 12DEG-43'+00" E. ALONG SAID RIGHT-OF-WAY LINE A DISTANCE OF 41.58'; THENCE, LEAVING SAID RIGHT-OF-WAY LINE, S 81DEG-15'00" W A DISTANCE OF 326.28' TO THE POINT OF BEGINNING. SAID PARCEL OF LAND CONTAINS 14.81' ACRES, MORE OR LESS.

initials	of parties





ALDOT Specs

(b) PLANTING ZONES.

For the purpose of specifying seeding and sowing dates considered appropriate to locations in Alabama, the State has been divided into three planting zones: Zone 1 is the northern section, Zone 2 is the central section, and Zone 3 is the southern section of the State. Acceptable mixes are provided in the mixed seeding tables of Article 860.01.

The planting zones consist of the following counties:

ZON		ZONE 2		ZONE 3		7
Blount Calhoun Cherokee Clay Cleburne Colbert Culiman Dekaib Etowah Fayette Franklin Jackson Jefferson Lamar	Lauderdale Lawrence Limestone Madison Marshall Morgan Randolph Shelby St. Clair Tailadega Walker Winston	Autauga Bibb Bullock Chambers Chilton Choctaw Coosa Dallas Elmore Greene Hale Lee Lowndes Macon	Marengo Montgomery Perry Pickens Russell Sumter Tallapoosa Tuscaloosa Wilcox	Baldwin Barbour Butler Clarke Coffee Conecuh Covington Crenshaw Dale Escambia Geneva Henry Houston Mobile	Monroe Pike Washington to Ter	EXHIBIT "E" mporary Construction and pe Easement Agreement "Landscaping Plan"

Phonesia - Toron	K 2	ar furnouse	S PER HECTARE	G FORE LI	VC SCED	
Planting Zone		3	3 /		1	
Mix Number	20T	3 D	30T /	_	16	
Planting Dates	November 16 Until January 15	February 15 Until August 31	September 1 Uptil Jamuary 1	March 1 Until July 31	August 1 Until November 15	November 16 Until February 28
Annual Rye Grass	25 (28)		/25 [28]			15 [17]
Hulled Burmuda Grass				15 (17)		
Unhulted Burmuda Grass				10 (11)	15 (17)	30 (34)
Brown Top Millet						
Yail Fescue				30 (34)	30 [34]	30 [34]
Weeping Love Grass		415		2 [2]	+	
Unnuel Lespedeza (Kobe)			t			
Sericea Lespedeza		50 (56)		30 [34]	30 [34]	
White Dutch Clover				·— <u> </u>		<u> </u>
Reseed Crimson Clover					25 (28)	
Pensacola Bahla Grass						
Coreopsis Lancolate				5 [4] *	5 [6] *	5 [6] *
Required Permanent Plant	Home - Ist Stage (2)	Sericea Lespedeza (Interstate Variety) (3) (4)	Mohe - 1st Stage (2)	Mixed Species (3)	Mixed Species	Mixed Species

initials o	f parties
	1

initials of parties



July 16, 2001

Crest Realty, Inc. 162 Cahaba Valley Road Birmingham Alabama 35124

Attention:

Mr. Gary Knight Mr. John McGeever

> Connector Road (Highway 52 West) from US Highway 31 to County Highway 33 Pelham, Alabama Project 00BHCRE02.A03

Gentlemen:

Gallet & Associates, Inc. (GAI) appreciates the opportunity of providing consulting services for the project referenced above. At your request, Gallet & Associates, Inc. would like to offer additional information relative to the project referenced above, specifically addressing subsurface void remediation and roadway construction. The information below is intended only as a summary of the previous information presented by Gallet & Associates, Inc. and other Geotechnical/Geologic consultants. The following information relative to subsurface investigation at the project site is available.

• Subsurface Investigation-Project 00BHCRE02.A03, prepared by Gallet & Associates, Inc. and dated December 21, 2000

• Geotechnical Engineering Services Report-Project No. 875-05214 prepared by PSI and dated February 02, 2001

Report of Supplemental Geophysical and Geotechnical Studies-Project No. 875-05214 prepared by PSI and dated March 05, 2001

• Subsurface Evaluation of an Area of the Planned Connector Road Between U.S. Highway 31 and Shelby County Highway 33-Project No. 290-01 prepared by Kendrick Geologic Associates, and dated May 18, 2001

Subsurface Void

Generally, the subsurface information evaluated (rock core and air-rotary borings performed by Gallet & Associates, Inc., PSI and Kendrick Geologic Associates) indicates that an area of void space that is primarily filled with wet clay is present along the proposed roadway alignment, at or near the proposed roadway finish grades. The information indicates that the void space is less

than about 20 feet across, and ranges in depth from about 5 feet below finish grade, to about 55 feet below finish grade in a distance of about 4 feet horizontally. Competent limestone was penetrated to the east and west of the clay-filled void. More specific information is included in the geotechnical information indicated previously.

The significant variation in the depth of the void space is consistent with the pinnacled limestone formation at the site, and is indicative of a relatively narrow "slot" within the underlying limestone bedrock. Generally, two options have been considered for the roadway development relative to the subsurface void, construction of an inverted filter, and construction of a bridge system.

The appropriate option to be implemented will be determined at the time of construction (when the proposed roadway is at rough grade at the void location) by the geotechnical engineer (Gallet & Associates, Inc.) and the developer based upon the site-specific conditions noted. More information relative to each option is indicated below.

Inverted Filter

Based upon our review of the available information, it is our opinion that an acceptable remedial action to suitably prepare the proposed roadway subgrade would be to choke off the apparent solution feature with a graded inverted filter as indicated below.

- After rough grade has been established, the topsoil and other soft, deleterious materials should be excavated from the solution feature with an excavator, to the underlying bedrock.
- Once the bedrock is reached, the excavation should be examined by a representative of this office. The base of the excavation should then be choked-off with large boulders, until the boulders are above the ground water level (if any). Following boulders, the hole should be backfilled with surge stone, followed by crushed stone.
- Next, a layer of geotextile should be placed above the stone. The sides of the excavation should be flattened to facilitate the installation of the geotextile. We recommend that the geotextile fabric be a non-woven fabric such as Amoco 4553, Nicolon S700, Mirafi 180N, or equivalent.
- A minimum of 24 inches of relatively impervious compacted soils should be placed in thin compacted layers above the geotextile until final grade is achieved. The fill should be compacted to at least 98 percent of its standard Proctor maximum dry density.

It will be essential that any stabilization procedures be monitored by a qualified geotechnical engineer. Furthermore, we strongly recommend that positive drainage be maintained toward the edges of the site during grading. Proper drainage and collection of surface water runoff will minimize ponding that can soften surficial soils and potentially expedite soil piping.



Based upon the anticipated size of the subsurface void (from the subsurface information in the sources indicated above) we have estimated that approximately 4,500 cubic yards of boulders and rip-rap could be required to construct the inverted filter, provide this option is selected. This estimate is based upon filling the full depth of the void over a length of about 20 feet, and a width of about 60 feet. Graded limestone from on site could be used to construct the inverted filter.

Bridge Design

In the event that construction of the inverted filter is deemed to be unsuitable for the subsurface conditions encountered, a bridge across the void could be constructed. Two (2) bridge sections have been presented by Christy Cobb Consulting Engineers, in their Letter of Transmittal dated June 26, 2001, which includes two (2) sheets dated June 25TH, 2001 depicting precast bridge slabs. Generally, we understand that the bridge sections presented consist of a 24-foot span, and a 34-foot span, and that contractors will price both concepts, with the appropriate span to be constructed as necessary.

In either scenario, the bridge(s) may be bear on limestone bedrock or hard/dense chert, and be designed with a bearing pressure not to exceed 10 kips per square foot (ksf). Evaluation of the foundation conditions will be performed by Gallet & Associates during construction.

Pavement Subgrade

Based upon our review of the available subsurface information, it is our opinion that the proposed cuts along the proposed roadway alignment will expose both limestone bedrock and residual cherty soils at the anticipated roadway subgrade elevation. Due to the variable subsurface conditions, we recommend that the roadway be supported on a minimum of 24 inches of select new-engineered fill below the finish subgrade elevation. This will require overexcavation of the limestone bedrock and residual soils.

All material to be used as subgrade fill should be inspected, tested and approved by the geotechnical engineer. On-site or off-site borrow materials may be used as fill within pavement areas provided that their Liquid Limit (LL) and Plasticity Index (PI) do not exceed 50 and 25, respectively, and are free of rock particles larger than 6 inches in maximum dimension.

The subgrade fill should be compacted to a minimum of 98 percent of the soils maximum standard Proctor density value (ASTM D-698), at a moisture content ranging from -2 to + 2 percentage points of its optimum level.

In order for the fill material to perform as intended, the fill must be placed in a manner which results in a uniform fill compacted within the moisture and density ranges previously outlined. Density testing must be performed on fill soils to verify this performance as construction progresses. We recommend that the density be performed on each lift at a frequency of no less than 1 test for each 2,500 square feet of fill placement.



Pavement Design

Pavement thickness is dependant upon the anticipated traffic conditions during the life of the pavement, subgrade and paving material characteristics, and climate conditions of the region. The actual pavement performance is highly dependent upon the proper preparation of the subgrade soils and the types of soils used.

We recommend that any off-site borrow material be tested to verify that its CBR values are compatible to the assumed CBR values indicated below. Once the pavement areas are brought up to subgrade (entirely or partially), CBR tests should be performed to more accurately represent the actual conditions and characteristics of the subgrade material. We recommend one CBR test for approximately each 10,000 square feet of new roadway. The pavement sections presented below may be revised based on the results of these CBR tests.

We understand that the typical Home Depot Heavy Duty Pavement loading consists of a design EAL of 220,000, and a 10-year design life. We also understand that the recommended section for the connector road would consist of 1.5 inches of an Asphaltic Concrete Wearing Surface over 3.0 inches of an Asphaltic Concrete Binder over 8.0 inches of Dense Graded Aggregate Base (DGAB) material.

Assuming a 10-year design life and a subgrade CBR value of 5 or greater, we have calculated that the recommended section for the connector road would be suitable for an EAL approximately double that of the typical Home Depot Heavy Duty Pavement loading.

Temporary Slopes

Provided that no water is observed to be freely seeping from the sides of excavations, the on-site soils having a medium stiff consistency or better, can be classified as "Type B" according to the Construction Standard for Excavations (29 CFR Part 1926.650-.652, Subpart P) promulgated by the Occupational Safety and Health Administration (OSHA).

Therefore, temporary slopes in confined areas should typically be cut no steeper, than 1(H):1(V). Slopes excavated in lower consistency soils or from which water is seeping should be sloped at a maximum of 1.5(H):1(V). Temporary slopes in weathered rock should be cut no steeper than 1.0(H):1.0(V) in areas of unfavorable dip, while cuts into weathered rock with favorable dip may be cut vertically. However, current OSHA regulations should be observed for the temporary slopes. During construction, these temporary slopes should be regularly inspected for signs of movement or unsafe condition. Soil slopes should be covered for protection from rain and surface runoff should be diverted away from the slopes.

Slope Protection

For erosion protection, a protective cover of grass or other vegetation should be established on slopes as soon as possible. Generally, it is our opinion that heavy mulching and seeding will be



appropriate forms of erosion control for the slopes at the site. For slopes exposed over the rainy season(s), a lightweight erosion control matting is often used, with the intent of minimizing the remedial grading during the construction progress.

While some future remedial grading to fill the small surface erosional features will likely be required during and after construction, we do not feel that the erosion will adversely influence the overall global slope stability of the slopes.

Gallet & Associates, Inc. appreciates the opportunity of assisting you on this phase of your project and look forward to providing you with our construction quality control services. Should you have any questions regarding this information or if we can be of further service to you, please contact our office.

Sincerely,

GALLET & ASSOCIATES, INC.

Jerome A. Smith, P.E.

Senior Engineer

Alain J. Gallet, P.E. Principal Engineer

Inst # 2002-13460

03/21/2002-13460 04:02 PM CERTIFIED SHELBY COUNTY JUDGE OF PROBATE 65.00 018 CH

