# Barton's Run

**PUD** 

## Barton's Run

#### PLANNED UNIT DEVELOPMENT

Formerly known as: THE TARVER TRACT

BEAUFORT COUNTY, SOUTH CAROLINA

**Prepared For:** 

CraftBuilt Homes, LLC



This master plan represents the preliminary plan for development approved by action of the Beaufort County Council as of 5 23 05 ps the resident county of the preliminary plan for regioning to PUD

Submitted 10

pinent action must be

consistent with this approved plan.

Beaufort County

May 2004 Revised: January 28, 2005

#### 2005/15

SOUTHERN BEAUFORT COUNTY MAP AMENDMENT/REZONING REQUEST FOR R600-38-1F (170 ACRES, FORMERLY THE TARVER TRACT) FROM RURAL (R) TO PLANNED UNIT DEVELOPMENT (PUD) TO BE KNOWN AS BARTON'S RUN; APPLICANT: WILLIAM B. TARVER, JR./AGENT: CRAFTBUILT HOMES, LLC, JOHN CARDAMONE).

BE IT ORDAINED, that County Council of Beaufort County, South Carolina, hereby amends the Zoning Map of Beaufort County, South Carolina. The map is attached hereto and incorporated herein.

#### Special Conditions Attached to Barton's Run PUD

- The Applicant shall execute the Access and Utility Easement Agreement with the Town of Bluffton prior to the issuance of a development permit from the Development Review Team;
- 2. The Applicant shall donate \$63,000 to the construction of the proposed United States Tennis Association Center at the Buckwalter Regional Park prior to the issuance of the development permit. The Town of Bluffton shall collect the donation as per a Memorandum of Agreement executed with the County.
- 3. The final approved Development Plan shall show a future stubbed access to the Vaux property line on the western border of the Barton's Run PUD;
- 4. The final approved Development Plan shall show a fifty foot (50 foot) opaque buffer within the one hundred and fifty foot (150 foot) natural buffer along SC Highway 46;
- 5. The Applicant shall comply with the Zoning and Development Standards Ordinance, Article XII, Subdivision Design and Article XIII, Subdivision and Land Development Standards, in addition to the standards set forth in the Barton's Run PUD application;
- 6. The Applicant shall donate \$900 to defray the cost of the Bluffton Parkway per lot for 70 lots payable to the County at the time of lot sale or prior to the issuance of the residential building permit, whichever comes first.

Adopted this 23rd day of May, 2005.

COUNTY COUNCIL OF BEAUFORT COUNTY

Wm. Weston J. Newton, Chairman

Kelly J/Golden/Staff Attorney

ATTEST:

Suzanne M. Rainey, Clerk to Council

First Reading: April 25, 2005 Second Reading: May 9, 2005 Public Hearing: May 23, 2005

Third and Final Reading: May 23, 2005

Amending 99/12

### TABLE OF CONTENTS

Title		Page
Proje	ect Team	3
I.	INTRODUCTION AND NARRATIVE	4
	A. CraftBuilt Homes, LLC	4
	B. The Property	4
	C. Conceptual Master Plan	5
	D. Project Character and Rationale	6
	E. Infrastructure Capacity	7
	F. Public Benefits	_
	G. Environmental Protection.	. 7
	H. Endangered Species	8
	I. Cultural and Historical Resources	8
	J. Water and Sewer Service	8
	K. Utility Service	9
	L. Roadways and Traffic	9
	M. Ownership Improvements	10
	N. Development Standards	10
II.	LAND USE DESIGNATIONS AND DEVELOPMENT STANDARDS	10
	A. Proposed Land Uses	10
	B. Compatibility of Land Uses With The Surrounding Area	10
	C. Proposed Density	11
	D. Development Standards	11
III.	EXHIBITS	13
	A. Conceptual Master Plan	Exhibit A
	B. Boundary Survey and Legal Description	Exhibit B
	C. 2002 Aerial Photograph	
	D. Adjacent Property Owners and Land Uses	Exhibit D
	E. Topography	
	F. Flood Hazard Zones	
	G. Wetlands	
	H. Soils Map	
	I. Endangered Species Report	
	<u> </u>	

#### **BARTON'S RUN PUD**

J.	Agency Letters Exhibit .	J
	1. Water and Sewer (BJWSA)	
	2. Electricity and Gas (SCE&G)	
	3. Telephone and Cable TV (Hargray Communications)	
	4. Fire Protection (Bluffton Fire Department)	
	5. Emergency Medical Service (Beaufort County EMS)	
	6. Solid Waste (Waste Management)	
	7. School District (Beaufort County School System)	
	8. Health and Environmental Control (SCDHEC)	
	9. Ocean and Coastal Resource Management (OCRM)	
	10. Beaufort County Engineering Approval Request Letter	
	11. Archaeological Permit Approval Letter	
	12. Encroachment Permit Preliminary Approval Letter	
K.	Traffic Impact Analysis Exhibit	K
	Stormwater Conceptual Master Plan Exhibit	
	Water Conceptual Master Plan Exhibit	
	Sewer Conceptual Master Plan Exhibit	

#### **Project Team**

Developer:

CraftBuilt Homes, LLC

Mr. John Cardamone

Mr. Tim Franks

Engineering:

Thomas & Hutton Engineering Co.

Mr. Gary R. Wiggin, P.E.

**Land Planning** & Architecture: CraftBuilt Homes, LLC

Mr. Tim Franks

**Environmental** Consultant:

Sligh Environmental Consultants, Inc. Mr. Stuart Sligh

Legal

Mr. Lewis Hammett, Esq.

Counsel:

Mr. Steve Bird, Esq.

#### I. INTRODUCTION AND NARRATIVE

#### A. CraftBuilt Homes, LLC.

CraftBuilt Homes, LLC is a South Carolina Limited Liability Company that was formed in 2000 by John Cardamone. John was a partner in the successful golf communities of Colleton River and Belfair.

Tim Franks, the Vice President of Development of CraftBuilt was formerly the President of national builder Engle Homes North Carolina Division. Prior to Engle, Mr. Franks was president of homebuilder Parker Lancaster Corporation, North Carolina Division for 14 years.

Collectively, Mr. Cardamone and Mr. Franks have successfully developed over 5,000 home sites and homes in the southeast over the past twenty years.

CraftBuilt Homes, LLC is a successful developer of affordable homes in both the Hilton Head / Bluffton areas as well as Brunswick, Georgia. Homes from the low one hundred thousand dollars have been successfully developed in both the Sandy Pointe as well as the Arborwood and Willows communities of Bluffton. Woodbridge homes range from the mid one hundred thousand dollar range to the high two hundred thousand dollar range, providing housing for police officers, fire fighters, school teachers, store clerks, managers and retirees who live, work and shop near their homes.

#### B. The Property

The subject property is owned by The Tarver Company. The Barton's Run PUD has a total acreage of +/- 170 acres located off of South Carolina Highway 46 near the Buckwalter Parkway intersection (See Exhibit A). The property is generally bounded on the North by Hampton Hall and The Farm at Buckwalter developments, the East by a parcel of land earmarked for the Town of Bluffton's Buckwalter Community Park, and the South by South Carolina Highway 46. The property is bounded on the West by Hampton Hall as well as three other residential property owners. For a detailed list of adjacent property owners please refer to Exhibit D. The proposed PUD consists of 70 single family homes and a recreational facility for the development.

The parcel is located as District 600, Map 38, Parcel 1F of the Tax Maps of Beaufort County. The tract is currently zoned Rural.

Tree cover mostly consists of young row pine plantation with very few hardwoods. The few existing hardwoods are located mainly in the wetlands. Topography ranges in elevation from +15 MSL to 29 MSL across the site (See

Exhibit E). An existing ditch drains the property into the Hampton Hall development lagoon system which outfalls to Rose Due Creek. Rose Due creek flows into the May River.

The freshwater wetlands on the Barton's Run PUD were delineated by Newkirk Environmental, Inc., surveyed by T-Square Group, Inc. of Bluffton, South Carolina and certified by the U.S. Army Corps of Engineers on June 25, 2002 (See Exhibit G). The site has +/- 7.45 acres of isolated non jurisdictional freshwater wetlands, and 0.09 acres of 404-jurisdictional freshwater wetlands. A portion of the isolated non-jurisdictional freshwater wetlands on the site are proposed to be impacted by development activity. Since, at present, OCRM claims administrative jurisdiction over these wetlands, these impacts will be permitted through OCRM. The permit process requires mitigation for the wetland impacts. Mitigation will be accomplished through a combination of buffers and preservation of jurisdictional and/ or non-jurisdictional wetlands. The one 404-jurisdictional freshwater wetland located on the property will be preserved.

The Soils Map presents the soils found at the Barton's Run PUD as classified by the Soil Conservation Services for Beaufort and Jasper County as soil surveys prepared by the U.S. Department of Agriculture (See Exhibit H). The soils located within the Barton's Run PUD are classified as soil groups A, B, and C. The soil series include murad, seabrook, baratari, deloss, ridgeland, seewee, and onslow. Any limitations that there may be in these soil series can easily be overcome with proper design and planning.

#### C. Conceptual Master Plan

The Barton's Run PUD will be developed in accordance with the Barton's Run PUD Conceptual Master Plan prepared by CraftBuilt Homes, LLC, dated January 26, 2005 as shown in Exhibit A. Development permit applications for the project shall conform to the Beaufort County Zoning and Development Standards Ordinance (ZDSO), as modified herein by Section I, Part N and Section II, Part D.

The Barton's Run PUD property is currently zoned rural. As part of the permitted single-family residential uses under the Beaufort County Zoning and Development Standards Ordinance, the maximum housing density for a rural single family cannot exceed 0.34 dwelling units per gross acre. This PUD, as planned, has a total density of 0.41 dwelling units per gross acre (70 du).

The exact location of roads, lagoons, open spaces, and other elements may vary at the time of Development Permit Applications. The plan demonstrates a potential arrangement of land uses and road corridors. The final layout will vary based on market conditions and environmental constraints. However, if Conceptual Master Plan alterations are made during the implementation of the development, the maximum density of 0.41 dwelling units per gross acre (70 du's) will not be exceeded.

The property will be accessed from Buckwalter Parkway and South Carolina Highway 46. The Buckwalter Parkway access will be via a non-exclusive access easement to be granted by the Town of Bluffton across a portion of the Buckwalter Community Park site.

#### D. Project Character and Rationale

Over the last several years residential development in Southern Beaufort County has in large part centered on the greater Bluffton area and in particular the Buckwalter area. With new schools, good access to Bluffton, Northern Beaufort County, Hilton Head and Savannah, and a relatively strong economic environment, sales of most prices ranges of single family homes in that area have been robust. There has been particularly strong demand for new homes more affordably priced.

The requested PUD for this project represents a recognition for diversity in the Buckwalter Parkway corridor. Even though a strong argument can be made to continue the suburban densities which exist on three sides of the property, an alternate approach is being proposed. The property fronts onto SC 46, a designated scenic highway. A low density development is proposed in order to protect and enhance the scenic, rural character of SC 46. The significantly reduced number of dwelling units, and the anticipated shift in buyer profile, will result in little loading onto currently stressed public services.

The PUD designation allows for flexibility in calculating open space required by Rural, Single Family (RSF) classification. While some of the open space needs are obtained with the use of buffer yards at the perimeter of lots, the total substantially exceeds RSF minimum requirements. This is achieved by increasing the lot sizes significantly above the RSF minimum, to an average of two acres per lot. All setback and yard requirements are met or exceeded.

Even though this project is not subject to the Town of Bluffton standards, this PUD will agree to meet the 150 foot setback along the property's SC 46 right-of-way. The entrance will be understated and rural in character, so that it will blend with the attractive look of other properties along the scenic corridor.

#### E. Infrastructure Capacity

Presently, there is no potable water distribution system or wastewater collection system on the Barton's Run PUD property. Water distribution and wastewater collection/conveyance systems will be constructed to serve the PUD and connected to Beaufort Jasper Water and Sewer Authority infrastructure currently in operation and serving the adjacent areas.

Electrical and Gas service is provided to the Barton's Run PUD by South Carolina Electric and Gas Company.

Telephone and Cable service to the Barton's Run PUD is provided by Hargray Communications.

#### F. Public Benefits

The public will benefit in a number of ways from the development of the requested PUD. The overall density is consistent with rural zoning. The total DU's and the character of development will not alter the scenic, rural nature of the SC 46 corridor. The agreed-to setback of 150 feet will make the development invisible to anyone traveling the highway. The buyer profile will not result in loading of schools and roads, which are currently stressed. The overall density is well below the assumed one unit per acre for currently uncommitted rural property in South Beaufort County.

Most importantly, it is probable that the requested PUD will significantly add to revenues to the county through property taxes and other fees, without stressing public services.

#### G. Environmental Protection

Environmental Protection is of the highest priority for CraftBuilt Homes, LLC. The environment is crucial to the quality of life that is the attraction of the Lowcountry, and quality of the surrounding surface waters is a primary focus of the PUD. As part of the development process, CraftBuilt Homes, LLC will implement the Beaufort County Best Management Practices (BMPs) for Stormwater Management. The BMPs dictate stormwater treatment standards and provide a method to quantify the design of the stormwater treatment system. The use of detention lagoons for treating stormwater runoff from impervious areas prior to release off site will be utilized within the Barton's Run PUD.

The Storm drainage for the project will be filtered through a stormwater quality management system prior to being conveyed into the existing ditch adjacent to Hampton Hall. The Stormwater Conceptual Master Plan has been reviewed and approved by OCRM and the Beaufort County Engineering Department at the Conceptual Master Plan level (See Exhibit L). Construction drawings must be submitted and approved by Beaufort County and OCRM prior to issuance of construction permits.

The Stormwater Conceptual Master Plan is subject to modification as development progresses. Exact location of ponds, connector pipes and outfalls for the development will be determined through detailed field surveys and site design prior to submitting for a Beaufort County Development Permit.

#### H. Endangered Species

Sligh Environmental Consultants, Inc. of Savannah, Georgia was retained to conduct a survey of endangered plants and animals on the site. Sligh Environmental reviewed the property and a copy of their interim report is included as Exhibit I. The U.S. Fish and Wildlife Service reviewed the report and their preliminary comments are included. CraftBuilt Homes, LLC, agrees to coordinate, negotiate with, and abide by the final determination of the Department of Natural Resources and U.S Fish and Wildlife Service as to preservation and /or mitigation of habitat for any identified endangered species.

#### I. Cultural and Historical Resources

This property has been heavily disturbed by ongoing timber management. A preliminary assessment of cultural and historical resources was conducted by Beaufort County. Ian Hill of the Beaufort County Planning Department performed historical research of the property in order to determine if the site contained significant artifacts. His findings are included in Exhibit J.

#### J. Water and Sewer Service

The Beaufort Jasper Water and Sewer Authority is committed to serve this development through services made available to adjacent properties. The Authority will provide potable water for domestic use and fire protection. It is also the intent of the Authority to provide wastewater collection and treatment. Water will be served by the Chelsea Plant Water System (DHEC 0720003) through extensions of a 12" loop connection to the existing 16" water mains located on Buckwalter Parkway and South Carolina Highway 46 (See Exhibit M). Wastewater flows will be collected by a combination of gravity sewer, pumping station(s), and force main(s) pumped from the Barton's Run PUD to the Buckwalter Master Pump Station and processed at the Cherry Point Wastewater Treatment Plant (ND 00740004) (See Exhibit N).

The developer will construct both systems and dedicate them to the Authority upon acceptance by the State Department of Health and Environmental Control. The Water and Sewer Conceptual Master Plans are subject to modification as development progresses. Exact location of water mains, sewer pipes, pump station(s), force main(s), and associated infrastructure for the development will be determined prior to submitting for a Beaufort County Development Permit.

#### K. Utility Service

Electrical and Gas Service is available through utility services provided by South Carolina Electric and Gas Company (SCE&G) (See Exhibit J). Service will be extended on a needed basis as the Barton's Run PUD is developed.

Telecommunication and cable television service will be provided by Hargray Communications, Inc. (See Exhibit J). Service will be extended on a needed basis as the Barton's Run PUD is developed.

The water distribution system is capable of providing fire flow for the Conceptual Master Plan of the Barton's Run PUD. The plan was reviewed by the Bluffton Fire Department and their preliminary approval is enclosed (See Exhibit J).

Solid waste collection and disposal service for the Barton's Run PUD will be provided by Waste Management (See Exhibit J).

#### L. Roadways and Traffic

CraftBuilt Homes, LLC recognizes the potential impact on the public roadways as a result of the development of the Barton's Run PUD and continuing growth throughout Bluffton and Beaufort County. To address this issue, CraftBuilt Homes, LLC retained Thomas and Hutton Engineering Company to study the traffic impacts. The Traffic Impact Analysis is included as Exhibit K.

Potential traffic impacts to SC 46 will be mitigated by the potential construction of an entrance roadway directly connecting to the Buckwalter Parkway. This potential entrance will be built within a non-exclusive access easement to be granted across property reserved for the Buckwalter Community Park and owned by the Town of Bluffton.

The direct access to Buckwalter Parkway will affectively distribute traffic entering and exiting the PUD, thus significantly reducing the peak vehicle trips per day on SC 46, if required.

The roads in Barton's Run will be publicly access private roads, in order to enhance connectivity. For late-night security, card access gates will be incorporated into the entrances to the Barton's Run PUD. The layout of the private roads and the guard gates are subject to modification as development progresses. The roads within the Barton's Run PUD will be constructed in accordance with the standards of Beaufort County and maintained by the developer. After the sale of property is completed, the roads and maintenance responsibilities will be transferred to a property owners' association.,

#### M. Ownership of Improvements

The improvements and all common property within the Barton's Run PUD will be privately owned. Homeowner concerns over security at night have prompted us to provide our homeowners with a secure community after dark. This necessitates private ownership of the roads and common areas in the Barton's Run PUD.

#### N. Development Standards

Development standards for the Barton's Run PUD will substantially conform to the guidelines of the Beaufort County Zoning and Development Standards Ordinance (ZDSO), with minor modifications. The proposed modifications to open space and density standards, lot and building standards and buffer, yard and landscaping standards are outlined in Section II (D) below. Some sections of the ZDSO will not apply to the Barton's Run PUD, as explained below.

## II. LAND USE DESIGNATIONS AND DEVELOPMENT STANDARDS

#### A. Proposed Land Uses

The Barton's Run PUD is intended as a detached single family development. Lot widths and single family product types may vary at the developer's discretion so long as the maximum total dwelling units is not exceeded. Allowed product types will consist of single family detached.

During the development and buildout period the applicant and or its assigns would have need for various "other structures" such as construction trailers, storage containers, temporary sales trailers, sales models and sales offices. An onsite boat and recreational vehicle storage area for the residents is proposed.

#### B. Compatibility of Land Uses With The Surrounding Area

The Barton's Run is wrapped on three sides with existing suburban development. However, the south boundary, facing SC 46 is currently Scenic and rural in nature. The proposed PUD will preserve and enhance this character. The overall density, setbacks and buffers will make the development blend and disappear into the SC 46 landscape.

#### · C. Proposed Density

In order to produce an economically viable development, 70 lots averaging over two acres will be created. This will insure that the character of existing surrounding properties will be enhanced. Fewer lots will not produce sufficient revenues to support cost of land and development.

#### D. Development Standards

The following development standards will apply to all areas of the Barton's Run PUD. The development standards proposed herein are referenced to pertinent sections of the Beaufort County Zoning and Development Standards Ordinance (ZDSO). These standards will supersede the development standards requirements of the ZDSO. All other ZDSO standards shall remain applicable.

Article XI. Section 106-2447 specifies that all phases of the PUD will be required to adhere to the latest version of the ZDSO, in regards to the following standards. The proposed PUD will demonstrate adherence at the time of the Development Plan submittal to:

- (1) Tree and landscape standards.
- (2) Stormwater BMP's
- (3) Environmental quality standards
- (4) Impact fees

#### Article VI, Division 2. Open Space and Density Standards. Table 106-1526.

The proposed PUD will meet the Open Space Ration of 0.40. This will be achieved in large part by counting preserved wetlands, perimeter buffers, lakes, open space, and qualified buffer yards. A small percentage of the overall ratio will be met by counting setbacks within the lot lines. These areas will be restricted so that no structures will be allowed.

Category	Actual Calculation
Open Space Ratio	0.40
Density Ratio	0.41

#### Article VI, Division 3. Lot and Building Intensity Stds. Table 106-1556.

The proposed PUD will exceed all minimum standards in regard to lot size and width, as well as street, side and rear yard requirements for the Rural Single Family categories. The Maximum building height will not be exceeded.

## Article VI, Division 4. Bufferyards and Landscaping Standards. Subdivision II. Bufferyards. Sec. 106-1617. Bufferyard and Tree Standards Table.

All Landscape Standards for Rural Single Family will be met or exceeded by the proposed PUD. The depth of bufferyards will exceed the requirements with a 150 foot buffer along highway 46. There are no internatl arterial or collector streets in the PUD, because of the low overall density.

The 50 foot perimeter buffer exceeds all requirements for adjacent district classifications, which are primarily suburban residential.

#### Article VII, Division 2. Site Capacity Analysis.

Residential capacity will be in accordance with the narrative included in Section I (C) and the Conceptual Master Plan included as Exhibit "A", and will not exceed 0.41 dwelling units per gross acre (70 du).

## Article VII, Division 3. Natural Resource Protection Standards. Sec. 106-1843. Nontidal Wetlands.

The Threatened and Endangered Species Survey Report (Exhibit 1) indicates that limited resources exist on the site, due to its intense historical use for commercial timbering. The small isolated wetlands will be preserved to the greatest extent possible. Site inspections have revealed that all of these have been previously damaged to the point of being nonproductive and nonfunctioning. The large wetland system on the site will be protected in its entirety, and buffered. All wetland impacts and mitigation will be approved by the S.C. Department of Health and Environmental Control Office of Ocean and Coastal Resource Management.

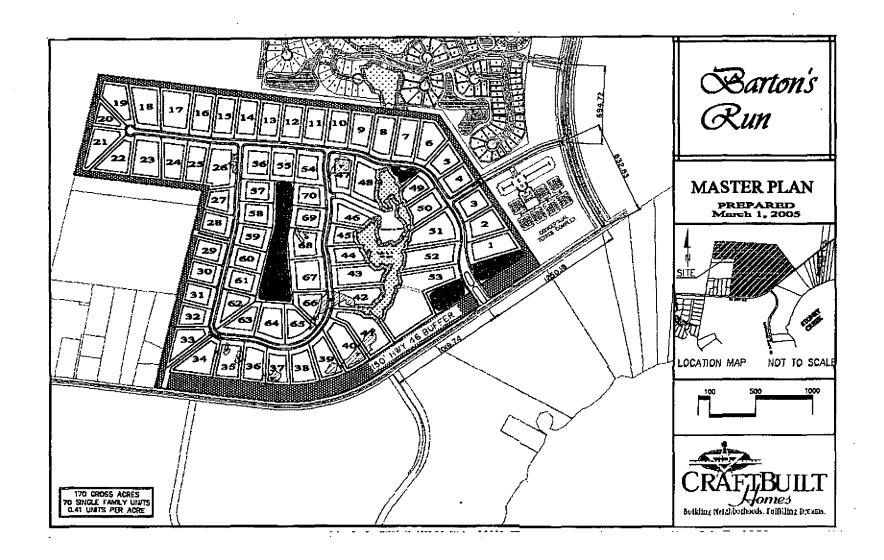
#### Article XII, Subdivision Design.

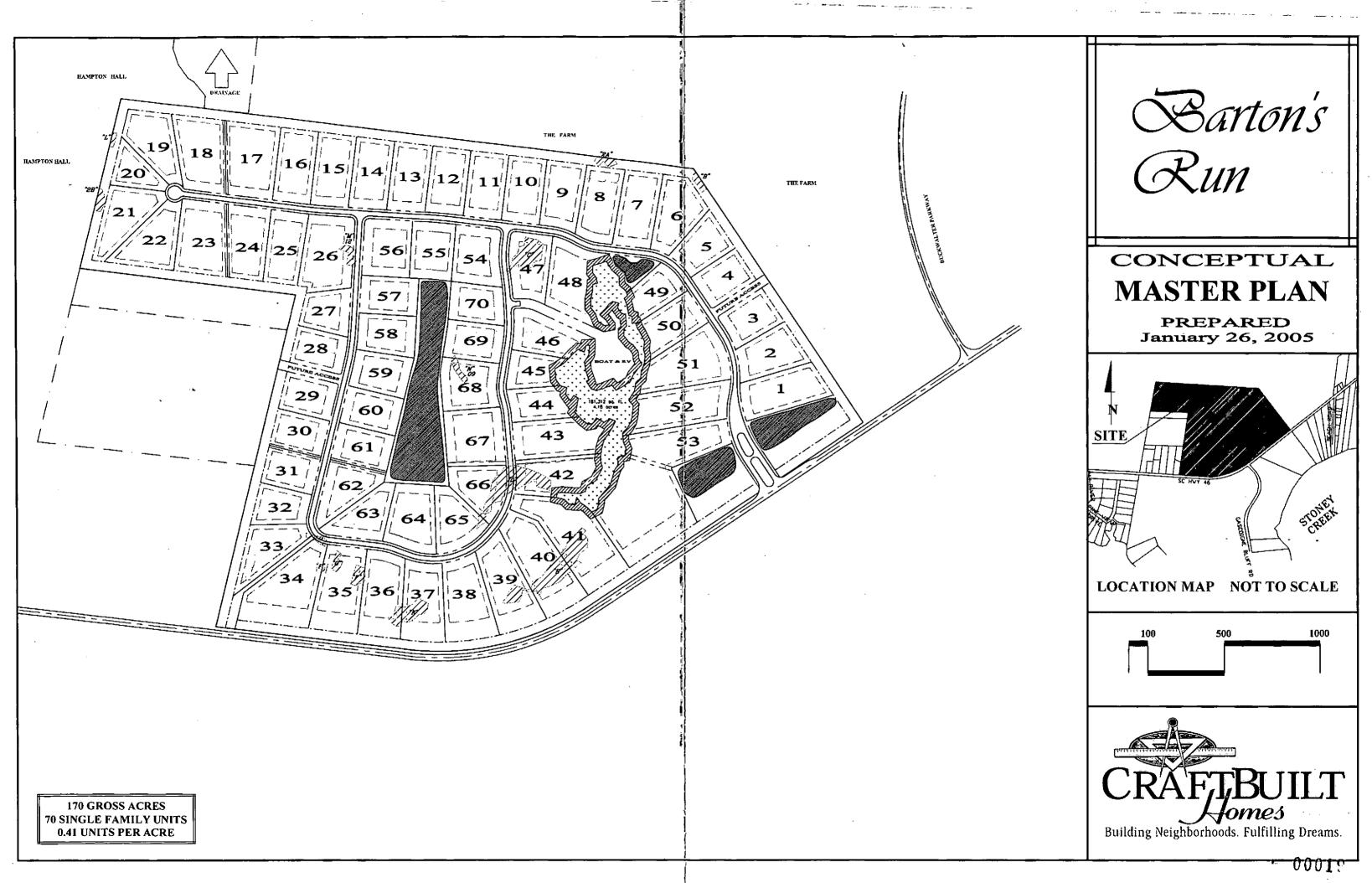
The Barton's Run PUD subdivision design will be in accordance with the Conceptual Master Plan included as Exhibit "A".

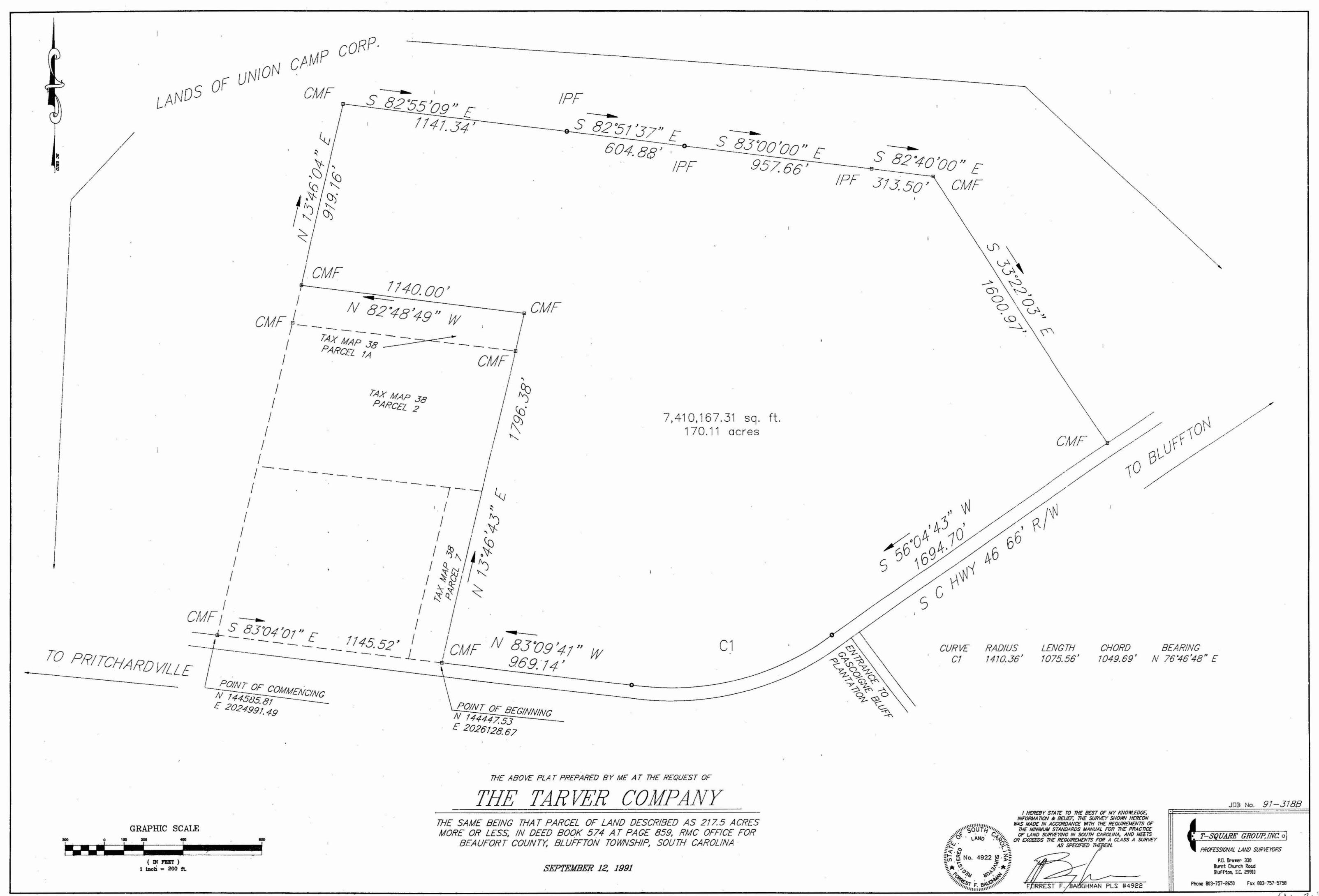
The exact location of roads, lagoons, open spaces, and other elements may vary at the time of Development Permit Applications. The plan demonstrates a potential arrangement of land uses and road corridors. The final layout will vary based on market conditions and environmental constraints. However, if Conceptual Master Plan alterations are made during the implementation of the development, the maximum density of 0.41 dwelling units per gross acre (70 du) will not be exceeded.

#### III. EXHIBITS

See appropriate Exhibit tab from page 1.







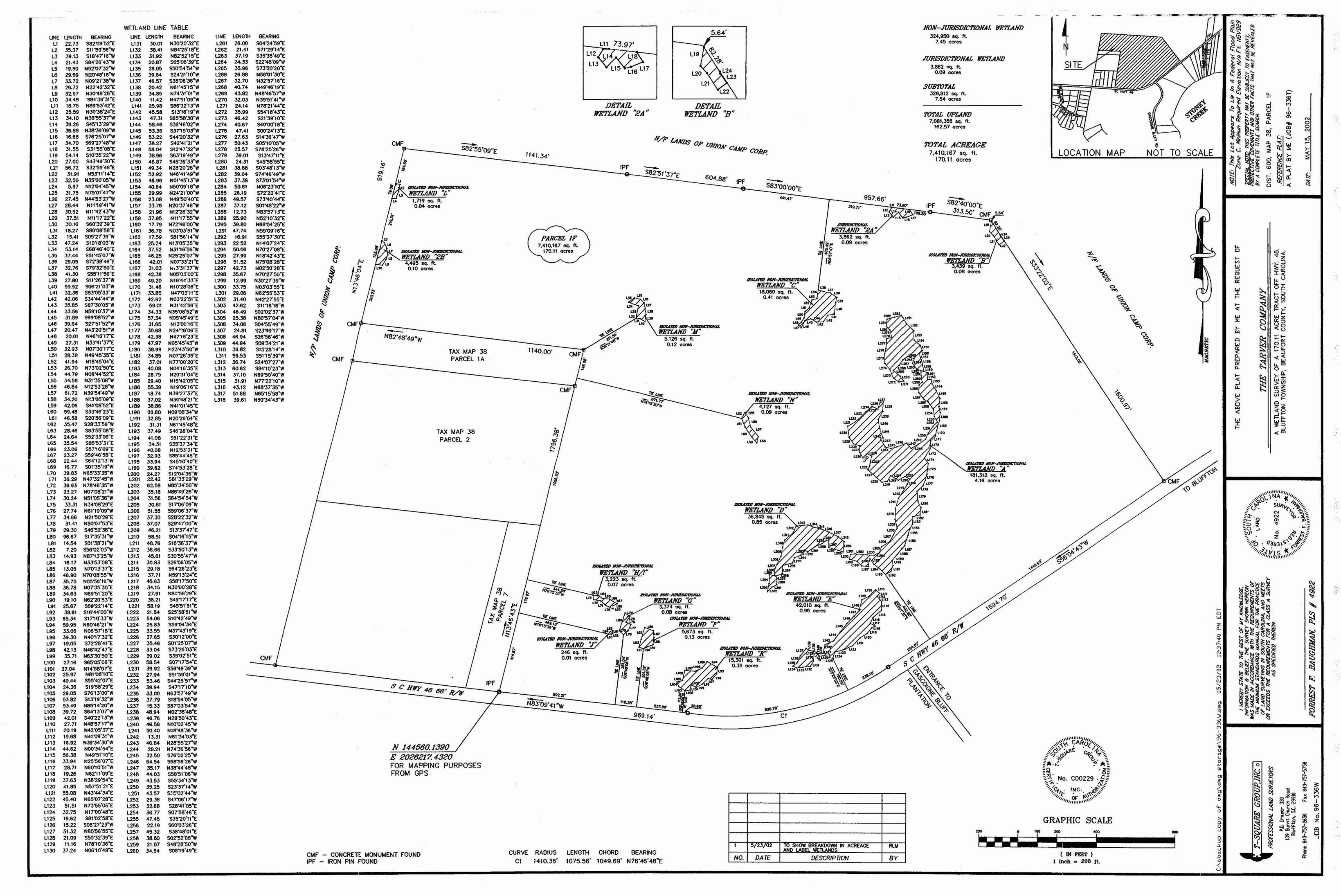
...00021 91-318E







EXHIBIT G



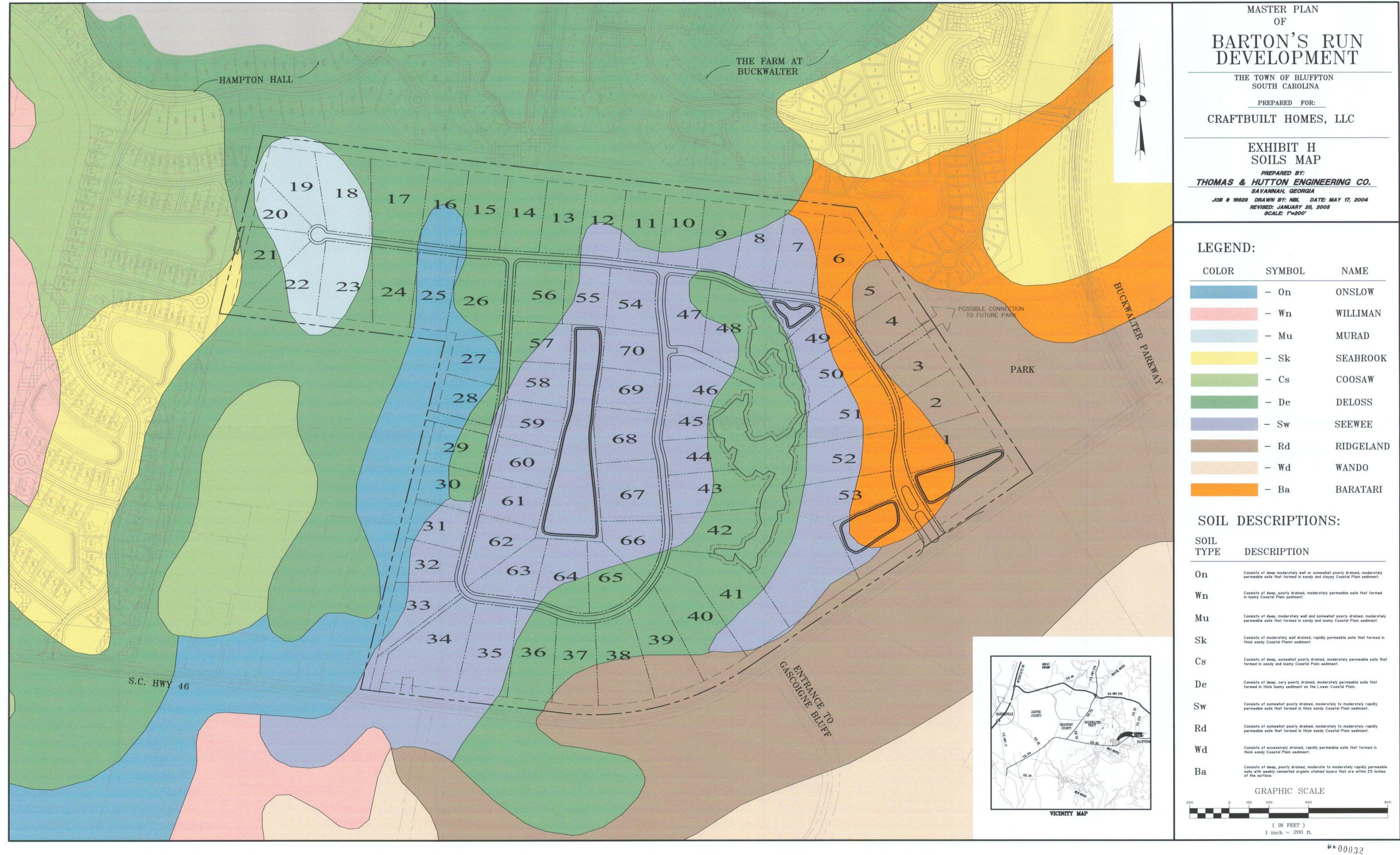


EXHIBIT I

#### Threatened and Endangered Species Survey Report

Tarver Tract

Beaufort County, South Carolina

Prepared for:

Craftbuilt Homes, LLC.
Post Office Box 22748
Hilton Head, South Carolina 29926

Prepared by:

Sligh Environmental Consultants, Inc. 49 Park of Commerce Way, Suite 203 Savannah, Georgia 31405

#### Threatened and Endangered Species Survey Report

#### **Tarver Tract**

#### Beaufort County, South Carolina

#### 1.0 Introduction:

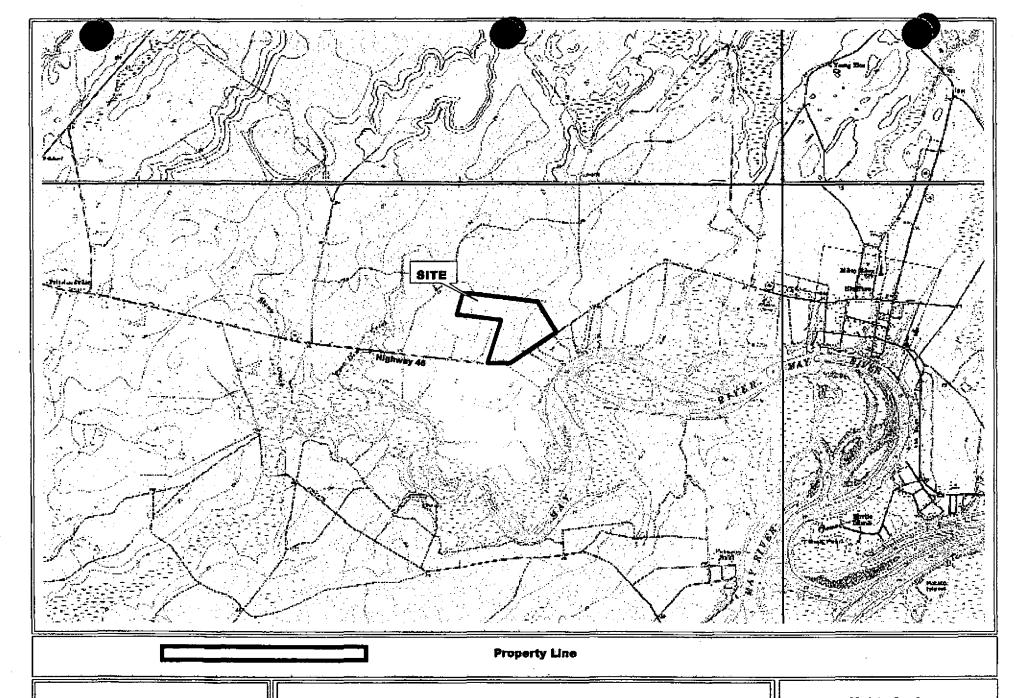
A preliminary threatened and endangered species survey was completed on the Tarver Tract on May 3, 2004. The tract is located adjacent to and north of Highway 46 and is situated west of Bluffton, Beaufort County, South Carolina (Figure 1). The threatened and endangered species survey was conducted to determine the potential occurrence of animal and plant species listed as endangered or threatened by current state and federal regulations [Federal Endangered Species Act of 1973 (16 USC 1531-1543) and the South Carolina Non-Game and Endangered Species Conservation Act of 1974 (58-2384)].

#### 2.0 Methods:

The threatened and endangered species survey consisted of a thorough pedestrian survey of the project site. If the potential habitat for a listed species was found on the site, all plants were identified at least to the genus taxonomic unit level to determine if the listed species was present.

The U.S. Fish and Wildlife Service (USFWS) list the following plant and animal species as threatened or endangered in Beaufort County, South Carolina.

SPECIES	STATUS
Right whale (Balaena glacialis)	Endangered
Humpback whale (Megaptera novaeangliae)	Endangered
Finback whale (Balaenoptera physalus)	Endangered
Sei whale (Balaenoptera borealis)	Endangered
Sperm whale (Physeter catodon)	Endangered
Eastern indigo snake (Drymarchon corais couperi)	Threatened
West Indian manatee (Trichecus manatus)	Endangered
Bald eagle (Haliaeetus leucocephalus)	Threatened
Piping plover (Charadris melodus)	Threatened
Kemp's ridley sea turtle (Lepidochelys kempi)	Endangered
Hawksbill sea turtle (Eretmochelys imbricata)	Endangered
Leatherback sea turtle (Dermochelys coriacea)	Endangered
Loggerhead sea turtle (Caretta caretta)	Threatened
Green sea turtle (Chelonia mydas)	Threatened
Shortnose sturgeon (Acipenser brevirostrum)	Endangered
Red-cockaded woodpecker (Picoides borealis)	Endangered
Flatwoods salamander (Ambystoma cingulatum)	Threatened
Wood stork (Mycteria americana)	Endangered
Canby's dropwort (Oxypolis canbyi)	Endangered



sligh environmental consultants, inc. 49 Park of Commerce Way, Suite 203 Savannah, Georgia 31405 p. (912) 232-0451 f. (912) 232-0453

Figure 1
Tarver Tract
Beaufort County, South Carolina

Not-to-Scale

U.S. Geological Survey Pritchardville Quadrangle

May 5, 2004 . 00036

Pondberry (Lindera melissifolia) Chaff-seed (Schwalbea americana) Endangered Endangered

### 3.0 Existing Site Conditions:

The project site is composed of wetland and upland habitats which are typical for southern Beaufort County, South Carolina. The habitat types found on the site are upland pine plantation and mixed hardwood depressional wetland. The past land use for this property has been long timber rotations within the wetland areas and the upland areas being managed for short term pine pulp production. The trees in the wetland areas range in age from ten to fifty years in age. These habitat types and the potential for the habitats on site to support threatened and endangered species are discussed below.

### **Upland Pine Plantation:**

The upland pine plantation habitat is dominated in the overstory by loblolly pine (Pinus taeda) which is approximately ten years old. The understory species include sweet gum (Liquidambar styraciflua), water oak (Quercus nigra), live oak (Quercus virginiana), red maple (Acer rubrum), red bay (Persea borbonia), southern red oak (Quercus falcata), black oak (Quercus velutina), blackgum (Nyssa sylvatica), and horse-sugar (Symplocus tinctora). The shrub layer includes wax myrtle (Myrica cerifera), American beautyberry (Callicarpa americana), fetter-bush (Lyonia lucida), sweet pepperbush (Clethra alnifolia), gallberry (Ilex glabra), blueberry (Vaccinium spp.), and sparkleberry (Vaccinium arboreum). The herbaceous species present include bracken fern (Pteridium aquilium), broomsedge (Andropogon virginicus), cinnamon fern (Osmunda cinnamomea), greenbrier (Smilax spp.), broomsedge (Andropogon virginicus), dogfennel (Eupatorium capillifolium), blackberry (Rubus betulifolius), muscadine (Vitis rotundifolia), plumegrass (Erianthus gigantea), poison ivy (Toxicodendron radicans), and winged sumac (Rhus copallinum). The majority of this habitat type remains an open canopy of young pine plantation which supports a thick understory and herbaceous layer.

### Mixed Hardwood Depressional Wetland:

The mixed hardwood depressional wetland habitat type is dominated by sweetgum, red maple, swamp tupelo (Nyssa biflora), loblolly pine, and slash pine in the overstory. The understory saplings and shrub species include red maple, sweetgum, button bush (Cephalanthus occidentalis), fetter-bush, blueberry, and swamp tupelo. The herbaceous layer is dominated by Virginia chainfern (Woodwardia virginica), royal fern (Osmunda regalis), cinnamon fern, sedges (Carex spp.), netted chainfern (Woodwardia areolata), broomsedge, plumegrass (Erianthus giganteus), blackberry, giant cane (Arundinaria gigantea), and dogfennel. Portions of this habitat type have been thinned during past logging activities, and the remaining wetlands were completely logged where all overstory trees were removed.

### 4.0 Findings

### 4.1 Endangered Plants Habitat Descriptions:

### Chaff-seed:

Chaff-seed (Schwalbea americana) is listed by the USFWS as an endangered species. It grows

in open pine savannas and openings in sandy longleaf forests, and is generally found in habitats described as open, moist pine flatwoods, fire maintained savanna's, ecotonal areas between peaty wetlands and xeric sandy soils, and other open grass-sedge systems. The plant flowers from May to June with yellow to purple flowers borne in the axils of the reduced upper leaves. Typically chaff-seed is associated with longleaf pine, blackjack oak (Quercus marilandica), goat's rue (Tephrosia virginiana), and black root (Pterocaulon pycnostachyum).

Evidence of the endangered chaff-seed plant was not observed on the subject site during our pedestrian survey. The upland habitat was not considered suitable habitat for this endangered plant due the bedding operations associated with planting the loblolly pine overstory and the lack of prescribed burning on the tract. The species commonly associated with chaff-seed were not observed or was the chaff-seed plant, thus we do not anticipate the populations of this plant species would be adversely impacted by site development.

### Pondberry:

Pondberry (Lindera melissifolia) is a small shrub that grows in sandy sinks and pond cypress (Taxodium ascendens)/gum pond margins. The site includes small depressional wetland habitats which are considered marginal habitat for the endangered pondberry. There are no pond cypress depressional wetland areas found within the project area which are considered the favorable habitat. The edges of the depressional wetland areas were typically thick with vegetation including fetter-bush and Vaccinium species. Evidence of the endangered pondberry was not observed in these depressions during our pedestrian survey of the site. Thus, we do not anticipate the populations of the pondberry plant species would be adversely impacted by site development.

### Canby's Dropwort:

Canby's dropwort (Oxypolis canbyi) is found in the coastal plain of South Carolina where it occupies pond cypress savannas, the shallow edges of cypress/pond pine sloughs and wet pine savannas. These sites require that the groundwater regime remain stable and the sites must be protected from adverse alterations such as ditches, dams, etc. for dropwort to occupy the site. The white flower is visible August through October. There are depressional wetlands which may be considered marginal habitat for this species. It should be noted that our survey was conducted during the time of the year when the flower is not usable and therefore impossible to identify individuals or populations of the endangered plant. Based on our experience of known habitats it is our opinion that the site contains no habitat for the endangered plant. Thus, we do not anticipate the populations of the Canby's dropwort plant species would be adversely impacted by development of the site.

### 4.2 Endangered Animals:

Right, Humpback, Finback, Sei and Sperm Whales:

These whales are known to inhabit the waters of the Atlantic Ocean including waters off the coast of South Carolina. The tract does not contain suitable habitat for any of these whales. Thus, it is not anticipated that any individual or population of these species will be adversely

impacted by project related activities.

### Eastern indigo snake:

The eastern indigo snake is found in South Carolina along dry longleaf pine/turkey oak sandhill communities. The eastern indigo snake spends the daylight hours foraging along the edge of wetlands, where frogs and other snakes are abundant during the warmer months. During the winter months, they are relatively concentrated to upland sand ridges where they spend much of their time in underground burrows and feed on rodents, birds, other snakes, and frogs. They often use gopher tortoise burrows as suitable dwellings. Due to the lack of suitable habitat on the tract and no evidence of wintering burrows commonly associated with eastern indigo snakes, it is unlikely that the proposed project would affect any population of eastern indigo snakes.

### West Indian manatee:

The west Indian manatee is a large aquatic mammal whose habitat consists of warm coastal and spring fed waters. During winter months these mammals are primarily confined to the coastal waters of the southern half of Florida and the spring fed rivers of Florida and Georgia. During the summer months as the water temperature rises, the manatees range expands to as far north as Virginia and it is during these months that the manatees may occasionally utilize the estuaries of coastal South Carolina. Critical habitat for this species has been identified as large portions of coastal Florida including the St. Mary's River on the Georgia-Florida border<sup>1</sup>. Due to the lack of suitable habitat on the tract for the manatee, we do not anticipate adverse impacts to any individual or population of the protected manatee.

### Bald eagle:

The bald eagle is a riparian species whose general habitat consists of the coasts, rivers and lakes near their nesting sites. Although tree selection and nesting sites vary, these birds typically nest in the tallest tree to allow for an open and clear viewing point and within 0.8 kilometers (0.5 miles) from the water body used for feeding. These birds are opportunistic feeders and will take a variety of prey, with both living and dead fish being the prey of choice. Decline of this threatened species has been attributed to environmental contamination resulting from the wide use of pesticides. This species is present within the coastal areas of South Carolina; however, no active or abandoned bald eagle nest sites are located on the tract. Therefore, it is not anticipated that any development activities will adversely affect this species.

### Piping plover:

The piping plover forages and nests on sandy beaches on the Atlantic Coast from South Carolina to the north shore of the Gulf of St. Lawrence, on sandy shores of the Great Lakes, and on alkaline wetlands and prairie river sandbars of the Northern Great Plains. Sparse clumps of grass or herbaceous vegetation are important habitat components. They feed on invertebrates found in the sand including insects, crustaceans, and mollusks. Due to the fact that no suitable habitat exists for feeding or nesting, no adverse impact to the piping plover is expected to result from

<sup>&</sup>lt;sup>1</sup>U.S. Fish and Wildlife Service, 1992. Endangered and Threatened Species of the Southeast United States (The Red Book). Prepared by Ecological Services, Division of Endangered Species, Southeast Region, Government Printing Office, Washington D.C. 1,242 pp. (two volumes).

project related activities.

Loggerhead, Green, Kemp's Ridley, and Leatherback sea turtles:

These large marine turtles inhabit the offshore waters of the Atlantic and Caribbean. During nesting periods which fall within the summer months, these species leave the water to nest on sandy beaches and primary dunes of the Atlantic and Caribbean coasts. Turtle nests are not uncommon on the barrier islands of South Carolina and have been located in the past. Since the project area does not contain suitable habitat, it is not anticipated that the proposed project will adversely impact these species.

### Shortnose sturgeon:

This large (up to 43") fish, which is easily recognized by the shovel shaped snout, large fleshy barbels, and ventrally located mouth, is known to inhabit the waters of coastal South Carolina. This species inhabits river mouths, bays and estuaries and depending on the water temperature enters freshwater to spawn during January through May. Acknowledged spawning periods for this area normally occur from February through March. Normal spawning locations are characterized by swift currents over gravel, rubble, or submerged timber/logs. Nursery habitat for this species is normally found downstream of the freshwater/saltwater line and is associated with a sandy bottom. No suitable sturgeon habitat is present within the project area and due to the lack of suitable habitat, it is not expected that any individual or population of the shortnose sturgeon will be adversely affected by the proposed project.

### Red-cockaded woodpecker:

The red-cockaded woodpecker (RCW) survey included the entire tract and was conducted using the "Guidelines for the Preparation of Biological Assessments and Evaluation for the Red-Cockaded Woodpecker". These guidelines include methods for identifying areas to survey as well as actual survey methods for determining the presence of the RCW. The guidelines state that timber stands that exhibit the following criteria should be surveyed when making a determination for the likely occurrence of RCW's. The criteria are:

- o mixed pine and hardwood stands over 60 years of age
- o mixed pine and hardwood stands under 60 years of age that contain clumps of pine trees over 60 years of age
- o stands containing pine sawtimber, including stands thought to be generally less than 60 years of age but containing scattered or clumped trees over 60 years of age
- o hardwood-pine over 60 years of age adjacent to pine and pine-hardwood over 30 years of age.

The RCW requires old growth pine forest habitat for cavity excavation, foraging and nesting. The upland area found on the tract is dominated by planted loblolly pine which is approximately ten years old. Neither evidence of the endangered RCW nor the specific pine old growth forest habitat it requires for foraging and nesting was observed during the pedestrian survey. Thus, we

<sup>&</sup>lt;sup>2</sup>Henry, V. Gary. Guidelines for the Preparation of Biological Assessments and Evaluations for the Red-Cockaded Woodpecker. U.S. Fish and Wildlife Service Southeast Region. September 1989. Not Paginated.

do not anticipate populations of the endangered RCW will be adversely affected by this project.

### Flatwoods salamander:

The USFWS has listed the flatwoods salamander as a threatened species under the authority of the Endangered Species Act of 1973, as amended. The flatwoods salamander requires open, mesic woodland of longleaf/slash pine maintained by frequent fire. Pine flatwoods are typically flat, low-lying open woodlands that lie between the drier sandhill community up slope and wetlands down slope. Wiregrasses (Aristida spp.), especially Aristida beyrichiana, are often the dominant grasses in the herbaceous layer. Adult flatwoods salamanders move to their wetland breeding sites during rainy weather from October to December. The breeding sites are isolated pond cypress (Taxodium ascendens), swamp tupelo, or slash pine dominated depressions which dry completely on a cyclic basis. These wetlands are generally shallow and relatively small and have a marsh-like appearance with sedges growing throughout; wiregrasses, panic grasses, and other herbaceous species are concentrated in shallow water edges. A relatively open canopy is necessary to maintain the herbaceous component which serves as cover for the flatwoods salamander larvae. There are isolated depressional wetlands present on site. Portions of the isolated depressional wetlands present on the site have had timber thinning operations within the last ten years. Due to the fact that the upland habitat found on the site has been bedded and planted with loblolly pine, the specific upland habitat for this species is not present within the Tarver tract. Since no evidence or the specific habitat requirements of the flatwoods salamander was observed within the project area and no species were found; it is not anticipated that the proposed project will adversely affect the flatwoods salamander.

#### Wood stork:

The wood stork was listed endangered by the USFWS on 28 February 1984 (Federal Register 49 (4):7332-7335). Wood storks use freshwater and estuarine wetlands as feeding, nesting, and roosting sites, and annual population fluctuations are closely related to the year-to-year differences in the quality and quantity of suitable habitat. The overall decline in wood stork numbers is attributed to the loss or degradation of essential wetland habitat primarily in southern Florida. No critical nesting habitat or any wood stork rookeries were located within the project area and no individuals were observed on the site during the time of our site visit. Therefore, it is not anticipated that the proposed project will adversely affect any individual or population of wood storks.

### 5.0 Conclusion

The subject property was assessed for the potential occurrence of listed species and habitats suitable to sustain listed species for Beaufort County, South Carolina. Based on our assessment, the site affords little suitable habitat to support threatened or endangered species due the recent logging activities and changes in recent management including lack of prescribed burning. During our extensive survey, no evidence of any listed species was found. Although the current absence of any listed species does not necessarily preclude the possibility of the future occupation, the available habitats found on the subject property are common throughout the region and the proposed project should not adversely affect existing populations.



POST OFFICE BOX 2149 / BEAUFORT, SOUTH CAROLINA 29901-2149 6 SNAKE ROAD, OKATIE, SC 29909-3937 843/987/9292 FAX 843/987/9293

Customer Service 843/987/9200
Operations & Maintenance 843/987/9220 • Engineering 843/987/9250
www.bjwsa.org

DEAN MOSS, General Manager

··· 00043

May 4, 2004

Nathan B. Long Thomas & Hutton Engineering, Co. PO Box 2727 Savannah, GA 31402-2727

Re: Water & Sewer Availability - Tarver Tract

Dear Nathan,

Please be advised that water and sewer service is available to the above referenced project. Plans, specifications, and loading calculations must be submitted to BJWSA for approval. At that time, capacity fees will be quoted. All fees must be paid in full before a commitment to provide service will be issued or construction begun.

Should you have any questions, please do not hesitate to contact me.

Sincerely,

Sharon Gibson

**Project Coordinator** 



May 3, 2004

Nathan Long
Thomas & Hutton

RE: Tarver Tract

Dear Nathan,

Thank you for giving us the opportunity to serve you.

We are pleased to inform you that SCE&G will be able to provide underground electric service and natural gas to the Tarver Tract development. Cost associated with providing underground service will be determined when a finalized/approved plat is submitted to our office for engineering.

To ensure that your deadline is met, please submit a finalized/approved plat of the development to our office at least two (2) months prior to the start of construction. The finalized/approved plat of the development must include lot numbers, street names and 911 addresses for each lot.

SCE&G will install service on an "as needed" basis, according to the existing sales policy at the time of construction.

We look forward to working with you as your project moves forward. If you have any questions or need further assistance, please don't hesitate to call our office at (843) 815 - 8808.

Sincerely,

Steve LaMonica
Account Manager

SCE&G



April 14, 2004

Nathan B. Long Thomas & Hutton Engineering Co. P.O. Box 2727 Savannah, GA 31402-2727

RE: Tarver Tract, Initial Master Plan

Dear Mr. Long:

The above-reference property is in the Hargray Telephone Company service area and this is to advise that Hargray has the ability and will be able to accommodate all of the telephone and cable television needs for this project.

Enclosed herewith is a Project Application Form to be completed by the owner/developer of the project and submitted to the Telephone Company along with two (2) sets of site plans/construction drawings. Upon receipt of the site plans/ construction drawings and the completed Project Application Form we will complete a preliminary design of the telephone plant, and designate the proposed location of our facilities on the one (1) set of the site plans/construction drawings. We will thereafter return to you one (1) set of the site plans/construction drawings showing our facilities location along with our Letter of Intent to serve the project, subject to any conditions that may be applicable.

If I can be of further assistance, please do not hesitate to call.

Sincerely,

Todd Cook

Todd Ca

Design Engineer



(843) 757-2800 OR (843) 757-4042

# **BLUFFTON TOWNSHIP FIRE DISTRICT**

357 FORDING ISLAND ROAD BLUFFTON, SOUTH CAROLINA 29910

### PRELIMINARY DEVELOPMENT APPROVAL

Project Name:	Tarver Tract Initial	Master Plan	
Address: 7	75 May River Road, E	uffton South Carolina	
Closest street(s)	intersection and/or lan	mark: <u>May River Ro</u>	ad & Buckwalter Parkway
location. The clos		oximately 3.5 mile	le ( ) to serve the above (s) from the site and
CONSTRUCTION		ROVAL ONLY, NO D PLANS SHALL BE S ROVAL.	· .
<u></u>	April 23, 2004 (Date)	Jed ficial	s Signature)
:		(Official's Nan	es / Fire Marshall ne/Title Print or Type)
	•	Bluttton Towns	hip / Beaufort County

Bluffton Township / Beaufort County
(City or County Name)



# COUNTY COUNCIL OF BEAUFORT COUNTY EMERGENCY MEDICAL SERVICES

Post Office Drawer 1228

Beaufort, South Carolina 29901-1228

Phone: (843) 525-4027/4040 FAX: (843) 525-4032

April 19, 2004

Nathan B Long Thomas & Hutton Engineering Co. PO Box 2727 Savannah, Georgia 31402-2727

Re: Tarver Tract

Dear Sir.

Sincerely,

I have received the master plan for the Tarver Tract in Bluffton as submitted and hereby offer my approval.

MM AN

J. Edward Allen Director EMS



Mr. Nathan B. Long Thomas & Hutton Engineering Co. 50 Park of Commerce Way PO Box 2727 Savannah, GA 31402

Dear Nathan:

Per your request, we have reviewed your development project for Craft Built Homes, L.L.C. We will be able to provide service to the development within Beaufort County adjacent to SC Highway 46, consisting of approximately 330 single-family homes on 170 acres.

If you have any further questions or concerns please call.

Sincerely,

Brian M. Leonard



May 4, 2004

Mr. Nathan B. Long THOMAS & HUTTON ENGINEERING CO. Post Office Box 2727 Savannah, GA 31402-2727

Dear Mr. Long:

SUBJECT: Tarver Tract Initial Master Plan, Beaufort County, SC

After review of the information you provided, please be advised that the Beaufort County School Board supports this project and intends to provide all necessary educational services to this area.

If I can be of any future assistance, please do not hesitate to call.

Sincerely,

Herman K. Gaither Superintendent

HKG/aam

HERMAN K. GAITHER

SUPERINTENDENT

Post Office Drawer 309 1300 King Street Beaufort, South Carolina 29901-309

> TELEPHONE 843•322•2322 1•800•763•1875

> > FAX 843•322•2330

kg8808@beaufort.k12.sc.us ot hgaither@islc.net

### TUPPER, GRIMSLEY & DEAN, P.A.

ATTORNEYS AT LAW POST OFFICE BOX 2055 611 BAY STREET

### **BEAUFORT, SOUTH CAROLINA 29901-2055**

RALPH E. TUPPER • • • • • JAMES A. GRIMSLEY, III • ERIN D. DEAN STACEY PATTERSON-CANADAY

TELEPHONE (843) 524-1116 FACSIMILE (843) 524-1463 INTERNET tgd@tgdpa.com

- \* MEMBER N.Y. BAR
- CERTIFIED CIRCUIT COURT MEDIATOR
- CERTIFIED CIRCUIT COURT ARBITRATOR
- · CERTIFIED FEDERAL DISTRICT COURT MEDIATOR

May 7, 2004

Mr. Nathan B. Long Thomas & Hutton Engineering Co. PO Box 2727 Savannah, GA 31402

Re: Tarver Tract / Bluffton, SC

Dear Mr. Long:

The Beaufort County School District has asked that I respond to your letter of April 8, 2004, regarding the above matter.

As is true with any large residential development, the School District will be directly affected as families begin to take up residence in the community. As a direct result of the development contemplated in your correspondence, coupled with ongoing development in the Bluffton area, the District can reasonably anticipate the necessity of significantly expanding the new Bluffton High School and Bluffton Middle School. Additionally, a new elementary school will very likely be necessary in the Bluffton community. All of this obviously will require public funding for significant capital expenditures and, once the facilities are in place, for operating costs and expenses of said facilities.

I trust this is helpful to you and please feel free to call if there are further questions.

Best regards.

Sincerely,

TUPPER, GRIMSLEY & DEAN, P.A.

James A. Grimsley III

Mr. Herman K. Gaither, Superintendent

Mr. Don Altman / AAG



Low Country District Environmental Quality Control 104 Parker Drive Burton, SC 29906 843-846-1030 Fax: 843-846-0604 Serving Beaufort, Colleton, Hampton and Jasper Counties

April 16, 2004

Mr. Nathan B. Long Thomas & Hutton Engineerinc Co. Post Office Box 2727 Savannah, GA 31402-2727

RE:

Tarver Tract

**Beaufort County** 

Dear Mr. Long:

I am in receipt of your request for preliminary approval of water and sewer service to the proposed development. As stated in your letter, the proposed development is located adjacent to Hwy 46. The project will consist of approximately 330 residential single-family homes and a recreation center on '170 acres.

Provided that the Beaufort Jasper Water & Sewer Authority has the capacity and is willing to provide water and sewer service, preliminary approval could be given. As you know, appropriate permits would have to be issued prior to the initiation of any construction of water or sewer lines. This preliminary approval does not mean that construction permits would be issued.

Should have any questions or require any additional information, please feel free to call me at 843-846-1030.

Sincerely,

Penny Cornett
District Engineer

Environmental Quality Control

Low Country District EQC



Office of Ocean and Coastal Resource Management

1362 McMillan Avenue, Suite 400 Charleston, SC 29405 (843) 744-5838 FAX (843) 744-5847

April 23, 2004

Nathan B. Long Thomas & Hutton Engineering Co. 50 Park Of Commerce Way P O Box 2727 Savannah, GA 31402-2727

Re:

Tarver Tract

**Beaufort County** 

Nathan B. Long:

The above referenced project may need several permits and certifications from DHEC-OCRM. If the site contain wetlands; a wetland delineation will be required. Also, DHEC-OCRM must issue a Stormwater Management and Sediment Control permit prior to any land disturbing activity on the site.

I am available to review more detailed plans of the project as it progresses. Presently, it appears you are aware of the various requirements relating to DHEC-OCRM approval of the project.

Sincerely,

Kichard V. Geer Engineer Associate

Regulatory Programs Division

### THOMAS & HUTTON ENGINEERING CO.

00053

50 PARK OF COMMERCE WAY
POST OFFICE BOX 2727
SAVANNAH, GEORGIA 31402-2727
TELEPHONE (912) 234-5300
FAX (912) 234-2950

April 13, 2004

Mr. Robert Klink, P.E. Beaufort County Engineering 102 Industrial Village Road Beaufort, SC 29901-1228

RE: Tarver Tract

Initial Master Plan Approval Request

Dear Bob:

On behalf of our client, Craft Built Homes, L.L.C., we request that you review the enclosed information and issue a letter stating your preliminary approval for the above referenced project. The site development is located within Beaufort County adjacent to SC Highway 46 and consists of approximately 330 residential single-family homes on approximately 170 acres. Enclosed within is an initial master plan and preliminary drainage layout for the development.

The preliminary pond routing analysis for the twenty-five (25) year storm event for the project indicates the lagoons and wetlands, as shown on the master plan, provide ample storage for the project. We will submit routing analysis to your office for review prior to submitting a final development permit application for any phase of the project.

We request that you review the enclosed plan and comment at your earliest convenience. Please call our office with any questions.

Sincerely,

THOMAS & HUTTON ENGINEERING, CO.

Nathan B. Long

NBL/nh Enclosures



# COUNTY COUNCIL OF BEAUFORT COUNTY BEAUFORT COUNTY PLANNING DEPARTMENT

Multi Government Center • 100 Ribaut Road, Room 260 Post Office Drawer 1228, Beaufort, SC 29901-1228 Phone: (843) 470-2724 • FAX: (843) 470-2686

May 5, 2004

Mr. Nathan long
Thomas & Hutton Engineering Co.
P.O. Box 2727
Savannah, GA 31402-2727

RE:

Tarver Tract PUD

Archaeological Permit of Approval

Dear Nathan:

I am writing in response to your request for an archaeology review, as required in Section 6.5.1(I) of the Beaufort County Development Standards Ordinance, for the Tarver Tract PUD project.

An extensive examination of existing documentation has been conducted. The documents examined include the Cartographic Survey of Historic Sites in Beaufort County, South Carolina; A Comprehensive Bibliography of South Carolina Archaeology, copies on file with Beaufort County of the topographic maps located at the South Carolina Institute of Archaeology and Anthropology the identify all the recorded archaeological sites in Beaufort County; copies of the records of all the archaeological properties listed in the National Register of Historic Places in Beaufort County; and all other documentation maintained by the Beaufort County Planning Department regarding archaeological and historic resources. In addition, we have consulted with South Carolina State Historic Preservation Office Compliance Archaeologists.

It is the opinion of the Planning Office that any proposed development will have no effect on any archaeological resources listed in, or eligible for listing in, the National Register of Historic Places. Therefore I am authorized by the Planning Director to issue you a Permit of Approval certifying that no archaeological resources will be affected by this project.

We request, however, that you cease work to notify this office immediately if archaeological or paleontological materials are encountered prior to or during construction. Archaeological remains consist of any materials one hundred years or older made, or altered, by man which remain from past historic or prehistoric times. Examples include pottery fragments, metal, wood, arrowheads, stone implements or tools, human burials, historic docks, structures, or non-recent vessel remains. Paleontological remains consist of prehistoric animal remains, original or fossilized, such as teeth, tusks, bone, or entire skeleton.

If I can be of further assistance please call me at 843/470-2727.

Sincerely,

lan D. Hill

Historic Preservationist

cc:

Hillary Austin



Department of Transportation

13 Munch Drive Beaulori, South Carolina 29906 (843) 524-7255 Telephone (843) 524-3478 Fax

May 14, 2004

Mr. Nathan B. Long Thomas & Hutton Engineering Company P.O. Box 2727 Savannah, Georgia 31402-2727

RE: The Tarver Tract PUD - \$C-46

Dear Mr. Long:

Thank you for your letter of May 11, 2004 and Tarver Tract master plan. Our preliminary review is favorable and we do not object to you continuing with development plans. Once drainage and access construction plans are available please submit them along with a signed encroachment permit application and we will work with you through final approval.

If you should have questions or if I can assist you further please don't hesitate to contact me.

Sincerely,

Ron Oddo

**Encroachment Permits Inspector** 

**RWO** 

File: D6/BEA/RO C: Thomas & Hutton Engineering Company oddorw@dot.state.sc.us

... 00056

# **BARTON'S RUN**

# TRAFFIC STUDY UPDATE

BLUFFTON, SC

January 2005

Prepared for: Craftbuilt Homes, LLC

Prepared by:
Thomas & Hutton Engineering Co.
935 Houston Northcutt Blvd., Suite 100
Mt. Pleasant, SC 29464
(843) 849-0200
(843) 849-0203 – fax

J-16629.402

### INTRODUCTION

Craftbuilt Homes, LLC proposes to construct a 70-home residential development, Bartons Run, on the section of land commonly known as the Tarver Tract in Bluffton. Previous traffic impact studies have been performed for plans that included much denser development. One access is planned on SC 46 west of Buckwalter Parkway.

### TRAFFIC COUNTS

Traffic counts were taken at the intersection of SC 46 and Buckwalter Parkway on December 7, 2004. Worksheets from the 2004 counts are attached at the end of the report.

The signalized intersection provides left and right turn lanes on SC 46 approaching Buckwalter Parkway. The Buckwalter Parkway approach to SC 46 has left and right turn lanes.

### TRIP GENERATION

Estimated trip generation is the shown in the following table.

		VIDID KIDA				
LAND USE CODE	LAND USE	24 Hour	AM I	PEAK OUT	PM I	PEAK OUT
210	70 Single-Family Detached Homes	749	15	44	49	29

Source: Institute of Transportation Engineers, Trip Generation, 7th Edition, 2003

### TRIP DISTRIBUTION

Approximately 70% of the site traffic is assumed to leave the development headed east on SC 46. Half of that traffic is assumed to turn on to northbound Buckwalter Parkway. Thirty (30) percent is assumed to head toward areas to the west.

Inbound traffic is assumed to follow the same pattern, with 35% coming from areas to the east, 35% from areas to the north along Buckwalter Parkway, and 30% from areas to the west.

### PROJECTED TRAFFIC VOLUMES

To account for the surrounding residential and commercial construction, an annual growth rate of 5% is assumed for volumes along SC 46 and Buckwalter Parkway. The 2004 traffic counts are annualized to the design year, 2009, to determine the future year volumes.

The projected design year (2009) volumes at the intersections are determined by adding the site-generated traffic to the background traffic. Existing counts, background volumes, site generated trips, and the 2009 design volumes are shown in attached sketches.

### TRAFFIC ANALYSIS

The existing counts at the SC 46 / Buckwalter Parkway intersection were analyzed to determine the current Level of Service. Background volumes were analyzed to determine the 2009 Level of Service without the proposed development.

	- AM I	PEAK	PM1	PEAK
INTERSECTION	Los	DELAY (SEC)	LOS	Delay (Sec)
Buckwalter Pkwy and SC 46 (2004 existing volumes)	A	9.8	A	7.4
Buckwalter Pkwy and SC 46 (2009 background volumes)	В	15.0	A	8.3

The SCDOT Highway Design Manual (HDM) was consulted to determine the need for auxiliary turn lanes at the development entrance point. With the relatively high volumes on SC 46, a left turn lane into the development is recommended. Right turn volumes into Bartons Run should be less than 40 vehicles during the peak hours. The HDM generally considers 40 turns the minimum to warrant a right turn lane.

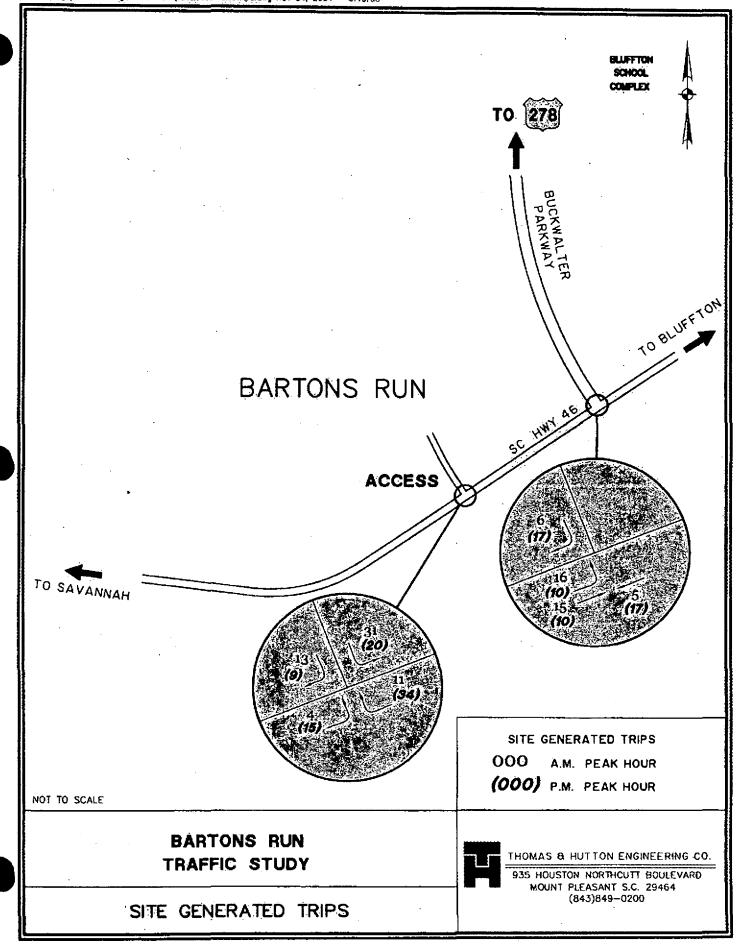
Volumes leaving the development should be low enough that a one-lane approach to SC 46 is adequate. Capacity analyses are completed as if only a one-lane approach is provided. It may be beneficial, however, to slightly widen the roadway just as it approaches SC 46 so that a right turning vehicle can pass one or two cars waiting to turn left.

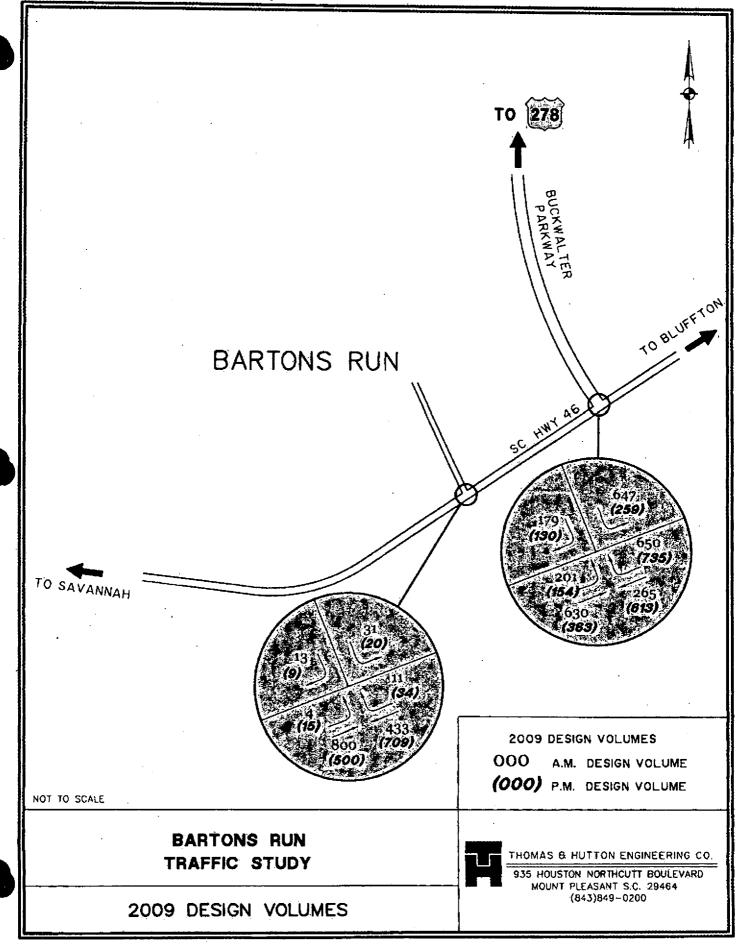
Capacity analyses for the 2009 design volumes at the study intersections are shown in the table below. Both intersections are expected to function at good Levels of Service.

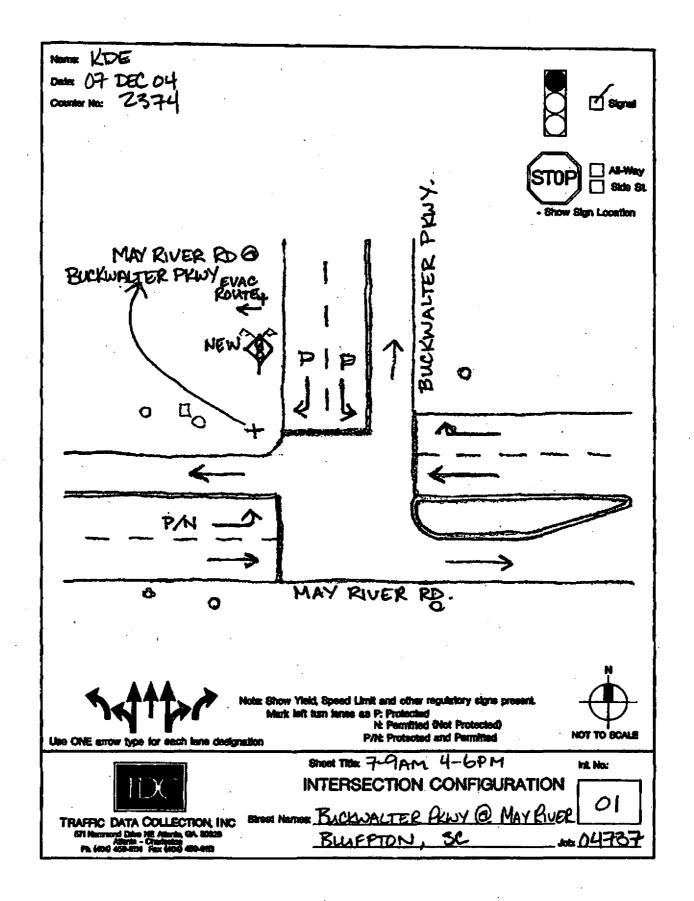
INTERSECTION	AMI	EAK .	PMI	EAK
(2009 DESIGN VOLUMES)	LOS	DELAY (SEC)	LOS	DELAY (SEC)
Development access approach to SC 46 (minor street approach)	D	27.3	D	27.0
Buckwalter Parkway and SC 46 (overall intersection LOS)	В	15.6	A	9.3

### **EFFECTS OF ZONING CHANGE**

Current zoning allows approximately 56 homes on this property. An increase of 14 homes would have a negligible effect on regional traffic volumes or on the County's TranPlan model.







# Traffic Data Collection, Inc. 917 Legends Club Dr.Mt.Pleasant,SC29466 Ph/843 216-3304 Fx/843 216-5621 Allanta - Charleston

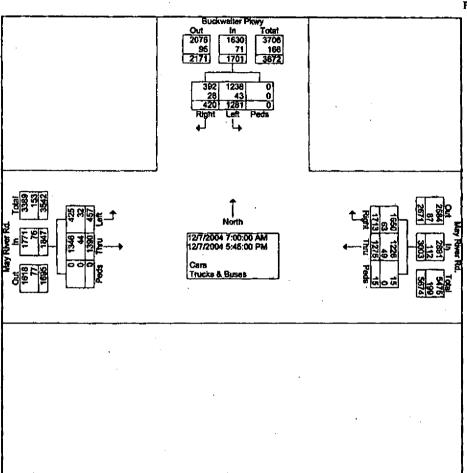
Counter: D4-2374 Counted By: KDB Weather: Mild Other: T&H

File Name : 04737-01 Site Code : 00473701 Start Date : 12/07/2004 Page No : 1

Juici. I deli							_	_		_									age M	5 . 1	
		,								- Cars	<u> - Tr</u>										
						E	3uck:	walte	r Pkw	ry [		May	Rive	r Rd.			May	Rive	г Rd.		
	ı	No	rthbo	und			So	uthbo	und			Ęε	stbou	ınd	!		We	estbo	und		
Start Time	Left	Thru	Righ	Ped	Арр.	Left	Thru	Righ	Ped	Арр.	Left	Thru	Righ	Ped	App.	Left	Thru	Righ	Ped	App.	Int.
			1	8	Total			1	S	Total			!	. 8	Total				6	Total	Total
Factor	1,0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	<u> </u>	1.0	1.0	<u> 1.0 </u>	1.0		1.0	1.0	1.0	1.0		
07:00 AM 07:15 AM	0	0	0	0	0	73	0	22 40	0	95	47	112 105	0	0	159 157	0	48 45	102	0	150 258	404
07:13 AM		0	0	Ö	0	104 141	0	28	0	144 169	52 33	130	Ö	0	183	a	50	212 185		223	559
	v	U	_	0	- 1		_		-				ů	-		0	57	100	8	134	555
07:45 AM	0	0	0	0	0	130	<u>0</u>	28 118	<u>0</u> _	158 566	32 164	139 486	0	0	171 650	- 0	200	556	9	765	463
Total	U	v		U	0]	448	U	115	Ü	300	104	460	U	U	600	U	200	220	8	700	1981
MA 00:80	0	0	0	0	0 \	132	0	40	0	172	28	109	0	0	137	0	52	58	1	109	418
08:15 AM	0	0	0	0	0	117	0	14	0	131	30	118	0	0	148	0	47	74	0	121	400
08:30 AM	0	0	0	0	0	93	0	29	0	122	35	78	C	0	113	0	45	64	1	110	345
08:45 AM	_0	0	. 0	0	0	86	. 0	35	0	121	17	<u>73</u>	0	0	90	0	65	42	0	107	318
Total	0	0	0	0	0	428	0	118	0	546	110	378	0	0	488	0	209	236	2	447	1481
3reak																					
04:00 PM	0	1	0	0	1	54	٥	17	0	71	12	53	0	0	65	0	77	76	2	155	292
04:15 PM	Ō	0	ă	Ŏ	o i	55	Ö	25	Ď	80	27	69	0	0	96	0	109	94	0	203	379
04:30 PM	0	Ō	Ō	Ō	Ö.	46	0	35	G	81	8	69	0	0	75	0	112	84	0	198	352
04:45 PM	Ŏ	Ď	ō	Ŏ	o'	47	0	18	ō	65	25	58	0	0	83	0	101	91	0	192	340
Total	0	1	0	Ö	1	202	0	95	0	297	70	249	0	0	319	0	399	345	2	748	1383
05:00 PM	0	0	0	G	o l	51	0	21	0	72	16	82	0	0	98	0	123	116	2	241	411
05:15 PM	ŏ	ŏ	ă	ŏ	ō.	47	ŏ	21	ŏ	68	30	79	ŏ	Õ	109	ŏ	137	128	ō	263	440
05:30 PM	ă	ō	ŏ	Ŏ	ā	58	ŏ	15	Ď	73	40	81	Ŏ	ā	121	Ō	108	152	0	258	452
05:45 PM	ō	ō	ā	0	ă	47	Ŏ	32	Õ	79	27	35	ō	0	62	Ò	101	182	0	283	424
Total	Ö	ō	O	0	0	203	0	89	0	292		277	0	0	390	0	467	578	2	1045	1727
Grand Total	0	f	0	0	1	128	0	420	0	1701	457	139 0	0	0	1847	0	127 5	171 3	15	3003	6552
Approh %	0.0	100.	0.0	0.0	1	75.3	0.0	24.7	0.0		24.7	75.3	0.0	0.0		0.0	42.5	57.0	0.5		
	0.0	0.0	0.0	0.0	0.0	19,6	0.0	6.4	0.0	26.0	7.0	21.2	0.0	0.0	28.2	0.0	19.5	26.1	0.2	45.8	ĺ
Total %	U.U	U.Ų	Ų,Ų	U.U	U.U	13.0	U.U	0.4	0.0	20.0	1 1.0	41.4	V.V	0.0	20.2	1 0.0	10.0	AV. I	U.4.	70.0	ı

# Traffic Data Collection, Inc. 917 Legends Club Dr.Mt.Pleasant,SC29468 Ph/843 216-3304 Fx/843 216-5621 Atlanta - Charleston

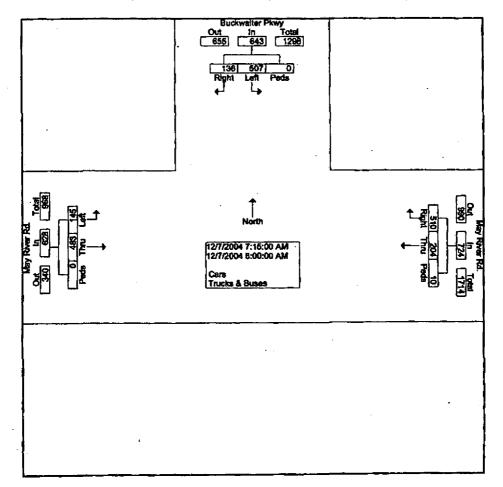
File Name : 04737-01 Sits Code : 00473701 Start Date : 12/07/2004 Page No : 2



# Traffic Data Collection, Inc. 917 Legends Club Dr.Mt.Pleasant,SC29468 Ph/843 216-3304 Fx/843 216-5621 Atlanta - Charleston

File Name : 04737-01 Site Code : 00473701 Start Date : 12/07/2004 Page No : 3

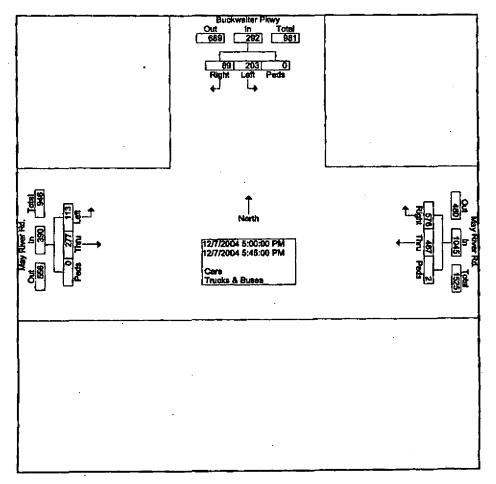
		No	rthbo	und		ĺ		walte uthbo	r Pkw	Ŋ			Rive	r Rd. und				Rive			
Start Time	Left	Thru	Righ I	Ped 8	App. Total	Left	Thru	Righ t	Ped s	App. Total	Left	Thru	Righ t	Ped 8	App. Total	Left	Thru	Righ t	Ped 8	App. Total	Int. Total
Peak Hour Fro	xm 07:0	O AM E	0 12:30	PM - F	eak 1 of	1															
intersection	07:15	AM			:	Ì					İ										
Volume	Û	0	0	0	0	507	0	136	0	643	145	483	0	0	628	0	204	510	10	724	1995
Percent	0.0	0.0	0.0	0.0		78.8	0.0	21.2	0.0		23.1	76.9	0.0	0.0		0.0	28.2	70.4	1.4		ļ
07:15	0	0	n	0	0	104	0	40	0	144	52	105	0	0	157	۵	45	212	4	258	559
Volume	U	U	u	٠	•	107	v	40	•	144	"2	100	·	v	131		70	# 1E	•	250	
Peak																l					0.892
Factor											1				1						•
High Int.	6:45:0	MA 00				08:00	I AM				07:45	AM				07:15	AM				
Volume	0	0	0	0	0	132	0	40	0	172	32	139	0	0	171	0	45	212	1	258	l
Peak Factor										0.935					0.918	j				0.702	l i



### Traffic Data Collection, Inc. 917 Legends Club Dr.Mt.Pleasant,SC29466 Ph/843 216-3304 Fx/843 216-5621 Allanta - Charleston

File Name : 04737-01 Site Code : 00473701 Start Date : 12/07/2004 Page No : 4

		No	rthbo	und				walte uthbo		Ŋ			stbo					Rive estbo			
Start Time	Left	Thru	Righ t	Ped 8	App.	Left	Thru	Righ	Ped s	App. Total	Left	Thru	Riigh t	Ped	App. Total	Left	Thru	Righ t	Ped 8	App. Total	Int. Total
Peak Hour Fro			05:45	PM - F	eak 1 of	1															
Intersection	05:00	PM			i	Į					1					1					1
Volume	0	0	0	0	0	203	0	89	0	292	113	277	0	0	390	0	467	576	2	1045	1727
Percent	0.0	0.0	0.0	0.0		69.5	0.0	30.5	0.0		29.0	71.0	0.0	0.0		0.0	44.7	55.1	0.2		
05:30 Volume Peak	0	0	0	0	. 0	58	0	15	0	73	40	81	0	0	121	0	106	152	0	258	452 0.955
Factor High Int.					į	05:45	PM				05:30	PM				05:45					0.555
Volume	0	0	0	0	0	47	0	32	0	79	40	81	0	0	121	0	101	182	0	283	
Peak Factor					,					0.924					0.806					0.923	1



#### Lane Configurations Volume (vph) 145 136 510 Turn Type pm+pt Perm Perm Protected Phases Permitted Phases Ŕ 6 Detector Phases 8 **...6** Minimum Initial (s) 4.0 4.0 4.0 4.0 4.0 4.0 Minimum Spilt (s) 8.0 20.0 20.0 20.0 20.0 20.0 Total Split (s) 8.0 28.0 20.0 27.0 27.0 20.0 Total Split (%) 15% 51% 36% 36% 49% 49% Yellow Time (s) 3.5 3.5 3.5 3.5 3.5 3.5 All-Red Time (s) 0.5 0.5 0.5 Lead/Lag Lead Lag Lag Lead-Lag Optimize? Yes Yes: Yes Recall Mode None None None Min Min Min X 019 2 18 0 3 12 12 14 12 14 17 17 18 17 19 18 17 19 18 17 19 18 17 19 18 17 19 18 17 19 18 17 19 18 17 19 18 Act Effet Green (s): Actuated g/C Ratio 0.27 0.42 0.40 0.27 0.40 0.40 Vic Halle 0.37 0.70 0.44 0.66 0.77 0.20 Uniform Delay, d1 8.2 10.4 13.6 0.0 11.8 0.0 Delay 98 1215 15.6 22 14.8 2.5 LÖS В В В Α Approach Delay 122 Approach LOS В Long amore fill by Billiage in Cycle Length: 55 Actuated Cycle Length 44.6 Natural Cycle: 55 Control Type: Actuated Uncoordinated Maximum v/c Ratio: 0.77 Intersection Skinal Delay 9 8 Intersection LOS: A Intersection Capacity Utilization 64.8% ICU Level of Service B 3: SC 46 & Buckwalter Pkwy Splits and Phases: **→** ±4

**43-** ø8

#### Lane Configurations **第189**章 44 Volume (vph) 576 203 Perm Perm Turn Type pm+pt Protected Phases Permitted Phases 8.0 Detector Phases 5 Minimum Initial (s) 4.0 4.0 4.0 4.0 4.0 4.0 Minimum Split (8) 80 200 20.0 20.0 20.0 20.0 Total Split (s) 9.0 34.0 25.0 25.0 21.0 21.0 Total Spin (%) 62% 38% 38% 16% 45%× 45% 3.5 3.5 3.5 Yellow Time (s) 3.5 3.5 3.5 All Red Time (8) 10.5 0.5 0.5 0.5 0.5 Lead/Lag Lead Lag Lag Yes Yes Y**e9** Lead Lag Optimize Min Recall Mode None Min Min None None AC Effet Green (6) 22.8 2285 11834 1183 1183 1184 302 Actuated g/C Ratio 0.23 0.60 0.61 0.46 0.46 0.23 0.55 0.22 0.59 VIC Reform Single Street 0.32 0.27 0.69 Uniform Delay, d1 17.2 0.0 4.0 4.4 10.3 0.0 4.0 Delay 5.13 5.4 \$115**9** 15.8 132 LOS A A В В Ä **8.3** Approach Delay 6.8 123 Approach LOS Α Cycle Length: 55 ACTUATION CONTINUES TO THE PARTY OF THE PART Natural Cycle: 55 Control Type: Actuated-Undoordinated Maximum v/c Ratio: 0.59 Intersection Signal Dalay 7 4 2 5 intersection LOS A Intersection Capacity Utilization 55.7% ICU Level of Service A 3: SC 46 & Buckwalter Pkwy Splits and Phases: 4

69

### SC 46 and Buckwalter Parkway 2009 AM background

# ノューベトイ

Lane Configurations  Volume (yeh)   185   615   260   650   647   173    Tum Type   pm-pr   Perm   Perm   Perm    Permitted Phases   4   8   6   6    Defector Phases   4   8   6   6    Minimum Initial (s)   4.0   4.0   4.0   4.0   4.0   4.0   4.0    Minimum Split (s)   600   200   200   200   200    Total Split (s)   9.0   31.0   22.0   22.0   34.0    Total Split (s)   148   489   548   528   528    Yellow Time (s)   3.5   3.5   3.5   3.5   3.5   3.5    All Right Time (s)   0.5   0.6   0.6    Lead/Lag   Lead   Leg   Leg    Lead/Lag   Lead   Leg   Leg    Lead/Lag   Leg   Leg   Leg    Lead/Lag   Leg   Leg    Leg   Leg   Leg			-			-	•	•			
Volume (voh)	State September 1		3.7 E.C	MV4547	Wilder		19145		· · · · · · · ·		• •
Volume (voh)		*	<b>A</b>	<b>A</b>	#	<u>j</u>	7	and Tourist Association	Andread to the same	The second is	9 + 20 + 1 + 10   1
Turn Type  Proficeded Phases  A  B  B  B  B  B  B  B  B  B  B  B  B	Volume (voh)	185	615	260	650	647	201731230			Maria de la companya	
Permitted Phases		Appropriate des Printers	4)A-recitable rick	ant in ordina.	Perm	aj destutte i (Japan)	Perm	a Produkti i Turk	in i de l'omentification	PRECINATION (	C 21 C 777 125 44 1779
Permitted Phases	Protected Phases	70	4	<b>1988</b>		<b>6</b>	PRODUCTION OF THE	an actua	#845.FB#8		Mind Spring
Minimum Initial (s)  4.0  4.0  4.0  4.0  4.0  4.0  4.0  4.		4	214 M-1/,, 2 (50)			فساحظ فياريه معمد	6	Tanki, ij trik at inglite labarit	. a. gant gandla ball der er er eine Bager j	ent period described in the	HERMENTER WILLIAMSTER
Minimum Spili (s)  Total Spili (s)  9.0 31.0 22.0 22.0 34.0 34.0  Total Spili (s)  143* 88* 544* 525*  Yellow Time (s)  3.5 3.5 3.5 3.5 3.5 3.5  Al/Right Time (s)  Lead Lag Lag Lag Leed Lag Lag Leed Lag		7	4.	8	. 8	6	6.5	<b>建设设置</b>			<b>蘇民國新</b>
Total Split (s) 9.0 31.0 22.0 22.0 34.0 34.0 34.0 Total Split (s) 14% 48% 34% 34% 52% 52% 52% 52% 52% 52% 52% 52% 52% 52								*** **********************************	in the second line		- 17
Total Spin (%)  Yellow Time (a)  3.5  3.5  3.5  3.5  3.5  3.5  3.5  3.			I manufacture to the first	P						en engan Metarlo	
Yellow Time (s) 3.5 3.5 3.5 3.5 3.5 3.5 3.5 All Right Time (s) 0.5 0.6 0.5 0.6 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	Total Split (s)	9.0									
Alfands imple Lead Lag			200	Total Paris	Ties and						
Lead/Lag Lag Lag Lag Sending Chimizer None None Min Min Min None None Act Effet Green (2)	Yellow Time (s)							-fedical and a fermi	That is the sense where will	Charles that are property and	n., acewa is sea, ea An
Recall Mode None Min Min Min None None Act Effot Green (s)  Actuated g/C Ratio V/c Rat			0.5	Call Towns of the control of		0.5	11992				
Recall Mode  None  Min Min Min None None  Actuated g/C Ratio  0.42 0.41 0.29 0.29 0.45 0.45  V. Hatie  0.55 0.88 0.52 0.73 0.89 0.23  Uniform Delay, d1 11.1 15.2 17.4 0.0 15.1 0.0  Selay  LOS B C B A C A  Approach LOS C A B  Cycle Length: 65  Actuated Cycle: 85  Collid Type Actuated Uncoordinated:  Maximum V/c Ratio: 0.89  Intersection Capacity Utilization 80.8%  Selits and Phases: 3: SC 46 & Buckwalter Pkwy			e de la companion de la compan	Lag		en manus i i i i i i i i i i i i i i i i i i i	arandennessa.	Missalina hakisi "J	San danah danah danah da	er <del>Sel</del> t Luguer Green	Unificatolistica and the
Actuated g/C Ratio											
Actuated g/C Ratio  0.42  0.41  0.29  0.29  0.45  0.45  0.89  0.23  0.73  0.89  0.23  0.73  0.89  0.23  0.73  0.89  0.23  0.73  0.89  0.23  0.73  0.89  0.23  0.73  0.89  0.23  0.73  0.89  0.23  0.73  0.89  0.23  0.73  0.89  0.23  0.89								er annihenten en	<b>当时中国共享的</b>		unangayanahahaha
VolTerino Delay, d1 11.1 15.2 17.4 0.0 15.1 0.0  Delay 13.3 23.3 2000 28 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Actuated of Patio	MIES€0.02						論可以指揮			等,這些
Uniform Delay, d1  Delay  13.3 23.3 20.0 28 27 21  LOS  B  C  Approach LoS  C  A  Approach LoS  C  A  C  C  C  C  C  C  C  C  C  C  C	WA Paris The Par										
Delay  LOS  B  C  B  C  Approach Delay  Approach LOS  C  A  C  A  C  C  C  A  C  C  C  A  C  C			the latest making the	City the steer state of		Carlo section of the	Asset To the Control of the Control	Helling Firmur.		<b>公司自己的公司</b>	是特別的
Approach LOS  B C A Approach LOS  C A B  Cycle Length: 65 Actuated Cycle: 65 Control type Actuated Unicoordinated  Maximum v/c Ratic: 0.89 Intersection Signat Delay 15.0 Intersection Capacity Utilization 80.8%  Splits and Phases: 3: SC 46 & Buckwalter Pkwy						21.4		HE WAR		antigation.	
Approach LOS  C  Approach LOS  C  A  Cycle Length: 65  Actuation Cycle: 85  Control Type Actuated Uncoordinated  Maximum v/c Ratio: 0.89  Intersection Capacity Utilization 80.8%  Splits and Phases:  3: SC 46 & Buckwalter Pkwy	LOS	A SALA A LANGE OF THE PARTY OF THE PARTY.	PARTITION TO BE		2 Carrierande	C	というない かまない 単位を合意		are need productive to the factor of the fac	(REALINE A) [644] H	ing and and the
Approach LOS C A B  Cycle Length: 65  Actuated Cycle: 65  Control type Actuated Uncoordinated Control type Actuated Uncoordinated Cycle: 65  Control type Actuated Uncoordinated Cycle: 65  Intersection Signal Delay 15 0  Intersection Capacity Utilization 80.8%  ICU Level of Service D  Splits and Phases: 3: SC 46 & Buckwalter Pkwy	Approach Delev		210	7.6		17.3					
Cycle Length: 65 Actuated Cycle: 65 Control Type Actuated Uncoordinated  Maximum v/c Ratio: 0.89 Intersection Signat Delay: 15 0.5 Intersection Capacity Utilization 80.8%  Splits and Phases: 3: SC 46 & Buckwalter Pkwy		meter compression (E. 148 146)	(hamerage ka	A	in etter isternatur	В	estite te met e reconstité mateur	Car (Saul) - 1, Adr - 151/21	antantan satar - 1 Mail A	FFT ( State Well: N. A. M. B. J	स्याप्तान्त्रकृतिक स्थापना स्थापना । स्थापना स्थापना स्थापन
Cycle Length: 65 Actuated Cycle: 65 Control Type Actuated Uncoordinated  Maximum v/c Ratio: 0.89 Intersection Signat Delay: 15 0.5 Intersection Capacity Utilization 80.8%  ICU Level of Service D  Splits and Phases: 3: SC 46 & Buckwalter Pkwy	THE RESIDENCE OF THE PARTY OF THE PARTY.										
Natural Cycle: 85 Control type Actuated Uncoordinated  Maximum v/c Ratio: 0.89 Intersection Capacity Utilization 80.8%  Splits and Phases: 3: SC 46 & Buckwalter Pkwy			<u>* , , , , , , , , , , , , , , , , , , ,</u>	and Land		7 <u></u>	<u> </u>	· v. · · · ·	San San Jack	5 2 ·	
Natural Cycle: 65  Control type Actuated Uncoordinated  Maximum v/c Ratio: 0.89 Intersection Signal Delay: 15.0 Intersection Capacity Utilization 80.8%  ICU Level of Service D  Splits and Phases: 3: SC 46 & Buckwalter Pkwy											
Control type Actuated Uncoordinated  Maximum v/c Ratio: 0.89 Intersection Signal Below 15.0 Intersection Capacity Utilization 80.8%  ICU Level of Service D  Splits and Phases: 3: SC 46 & Buckwalter Pkwy				SHIPPING THE					Territorius III		WALLE AND THE PER
Maximum v/c Ratio: 0.89 Intersection Signal Delay: 15.0 Intersection Capacity Utilization 80.8%  ICU Level of Service D  Splits and Phases: 3: SC 46 & Buckwalter Pkwy	Control Type Addition	d Uppnom	inalad			ang ang law					
Intersection Signat Delay: 15.0	Maximum v/c Ratio: 0	).89				THE CHARLES WE SEE	8798 2075 January 1815	APTIN SERVICE SERVICES	unan era karan Albah	HADEST HER	<b>进步的知识。1944年</b>
Intersection Capacity Utilization 80,8%  ICU Level of Service D  Splits and Phases: 3: SC 46 & Buckwalter Pkwy				TEN M		ntersect	on LOS: B				
Splits and Phases: 3: SC 46 & Buckwalter Pkwy	Intersection Capacity	Utilization	80.8%	STREETH SEE				D B	ander Frankliker, Staffe	manufation Fig.	econdata di Carini
\$ a4								*			
	Splits and Phases:	3: SC 46 8	Buckw	alter Pk	(Wy						
					1	~4					
→ m7 → mB	1					124					
▼ m7	<b></b>						42				
	ø6		<u>.</u>			ø7	σВ				

## SC 46 and Buckwalter Parkway 2009 PM background

	•	-	<b>←</b>		-	4				•	
aria rateta		1911	11/2/1	THE ST	(1) [3] [4]	Sigla					
Lane Configurations	7	<b>A</b>	<b>A</b>	7	۲	#	Para come a de Alestras	40,00 0	* * * * * * * * * * * * * * * * * * * *		
Velume (vph)	144	353	598	735	259	113					<u> </u>
Turn Type	pm+pt		. ,	Perm		Perm	nt Arts over english	1 42 , to = 100 32t	Aurita statistica	on it will statistic law	sesmonies.
Protected Phases		4	8/		6						
Permitted Phases	4			8		6					
Detector Phases			. 8	<b>3 8</b> .	<b>6</b>	6				<b>建筑类型</b>	ATTENDED TO
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	oner manerales	States   Shower arget o	Light of the Lagrangian and the same of the same	u entre entre en	بعدانه والا
Manager Spings		20.0	20.0	20.0	20 Q						神師
Total Split (s)	8.0 13%	39.0 -65%	31.0 52%	31.0 52%	21.0 35%	21.0 3 <b>5%</b>	(CASTERNATION)	illiaisenanaise	Pelitähetdavila	karenalikisioni	957 <b>647</b> 5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	Size like				
All Red Time (8)	0.5 10.5	3.5 20.5	0.5 0.5			3.5 3.5		e in de la constante de la cons	<b>语和范围的</b> 组织		e de la composition della comp
Lead/Lag	Lead	el Escasion	Lag	Lag				950 BERGER	i de la		ine <del>tri</del> ij
Lead Eag Collmize?	Yes		Yes	Yes					<b>通過基準機</b>	阿拉斯斯	
Recall Mode	None	Min	Min	Min	None	None	Single of the state of the stat	and the state of t	faronality page 141	SAN SALIZE SALISHOOD	o programme
Act Effct Green (8)	34.8	33.3	271	27.1	12.0	7129au					
Actuated g/C Ratio	0.61	0.61	0.50	0.50	0.24	0.24		SHEXMAN TITLES	-49,649,624,631		ALEXANDER.
Ve Ballo E	0.54	034	OZO	0.07	0.67						都能
Uniform Delay, d1	4.3	5.0	10.9	0.0	19.2	0.0				and the services are serviced.	
		<b>260</b>	A PRINCIPAL MAINTANANCE AND ADDRESS OF THE PARTY AND ADDRESS OF THE PAR			AN AN AN		医阿根斯氏			
LOS	A Militarii	A EOT	B	A Reservation	B 142		SERVER HAND SA	STEEN STEEN	ON HOME PROCES	(2) (2) (2) (2) (2) (2) (2) (2) (2) (2)	GT(#922
Approach Edley Approach LOS		سامه استهام مهجر واز الراطوار و	Control of the second		946 B		表别的社会	eranti s		ELYMPI	
Approach LOS		Α	Α		Б						
· 改为 医石榴、杂物 克尔。							ant i i di				
Cycle Length: 60								. January			
Kennaled Cycle Cenam											
Natural Cycle: 60	A A Print Beauty Court	PHERMINA	मिनिस्यं स्थापना गाउँ स्थापना स्थापना	ALCOHOLOGICAL	447200444333 <del>1</del>	and the state of t	en permentan	ariatenemenen Ariatenemenen	ing yakinahisus	ning looking pay na regions	and in the con-
Control you Aduated		Inated									
Maximum v/c Ratio: 0.			GINGE HEMP		in estados esta		<del>Gertefuledi</del> ans				septos
Intersection Signal in Intersection Capacity						ion LOS: A el of Servic		SEANISHEES.			
monsection capacity t	/IIIZaliON (	UO.470		Į,	O LOV	91 VI JBI YIÇ	Φ D				
Splits and Phases: 3	3: SC 46 8	Buckw	alter Pi	(WV							
		1		····			<del></del>				
			ō <b>4</b>								
				42							
<b>~</b> ₅6		، حما	<b>9</b> 7	e-6	3						
			,								

## Buckwalter Parkway and SC 46 2009 AM Design volumes

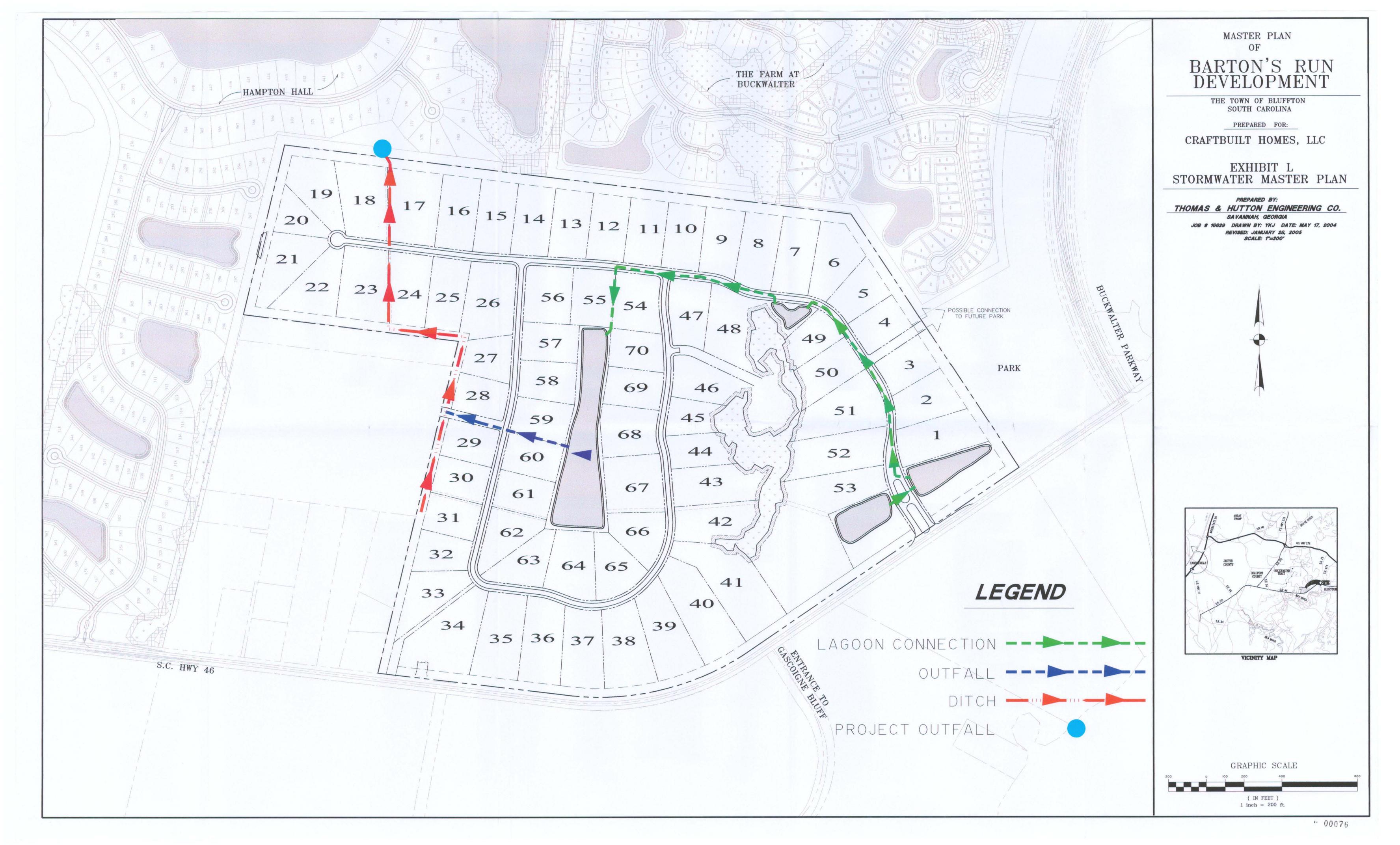
· · · · · · · · · · · · · · · · · · ·	١	<b>→</b>	4	4	<b>/</b>	1	
		MARINE		WE		100	
Lane Configurations		<b>†</b>	<b>†</b>	Particularity per	The second second	<b>7</b>	
Youne (von) Turn Type	201	0.00	265	650 Perm	64/	Perm	
Proteoted Phases	pm+pt					rom	
Permitted Phases	4			8	And the state of t	<u> Б</u>	<b>中国的企业的企业的企业的企业的企业的企业的企业的企业的企业的企业的企业的企业的企业的</b>
Delector Phases			8	8		6	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	History spiritary 2011, as report the fright has a property of the same of the
Minimum Split (s) Total Split (s)	<b>9.0</b>	20 0 31.0	20.0 22.0	20.0 22.0	20 0 34.0	20.0 34.0	
rotal Spin (%)		48%		22.U 84%			
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	。 时间的表面的电影的复数形式
All Red I fre (8)	0.5	0.5	0.5	0.5	015	105	
Lead/Lag	Lead	WENNAM IN	Lag	Lag	ferform		1980 Holds on a company of the Mark Company of the
Lead Ling Optimize? Recall Mode	Y 99		Yês Min	Yes			
Act Effet Green is	None	Min 24.0		Min 12.5	None	None	
Actuated g/C Ratio	0.42	0.41	0.30	0.30	0.45	0.45	
Actuated g/C Ratio	0.60	0.89	0.52	0.73	0.09		
Uniform Delay, d1	11.3	15.4	17.4	0.0	15.4	0.0	Constitution of the section of the s
Delay Table 1	B A	25/2	200 B	26			
Approach Delay		C 22.6		A UEEENST	C 175	A	
Approach LOS		C	A		B		
Difference Service of Page 1995							Programme and the state of the
Cycle Length: 65		San Property	. શેર્યા જિલ્લો	on on the		at my entarge of	and the trade who with a self of the analysis of the analysis
Actuated Cycle Length	<b>2585</b> 333						
Natural Cycle: 65	(4.002:: -mot:0320	maria artifici		4400000000	Hermouthic	urthat reserve	жасын төмүнүн бүсүн типин такка калымун жүнү баруын калымун түсүнүн байын калымун жасын жасын жасын жасын жасы -
Control Type: Actuated		inated					
Maximum v/c Ratio: 0.		enemanistros.			CONSTRUCTO	YEELSTEEN STANK	
Intersection Signal Dal Intersection Capacity L	ltilization	開始回信 R1 7%				el of Serv	
· · · · · · · · · · · · · · · · · · ·	, mizauvi i			41	CO LOV	oi Oi Odi V	
Splits and Phases: 3	3: SC 46 8	Buckw	alter Pi	wy			·
				1	<b>&gt;</b> σ.4		
						<u>:</u>	· · · · · · · · · · · · · · · · · · ·
<b>₩</b>					-7	42- 6	
ø6			ŢŔ		<u>φ7</u>		

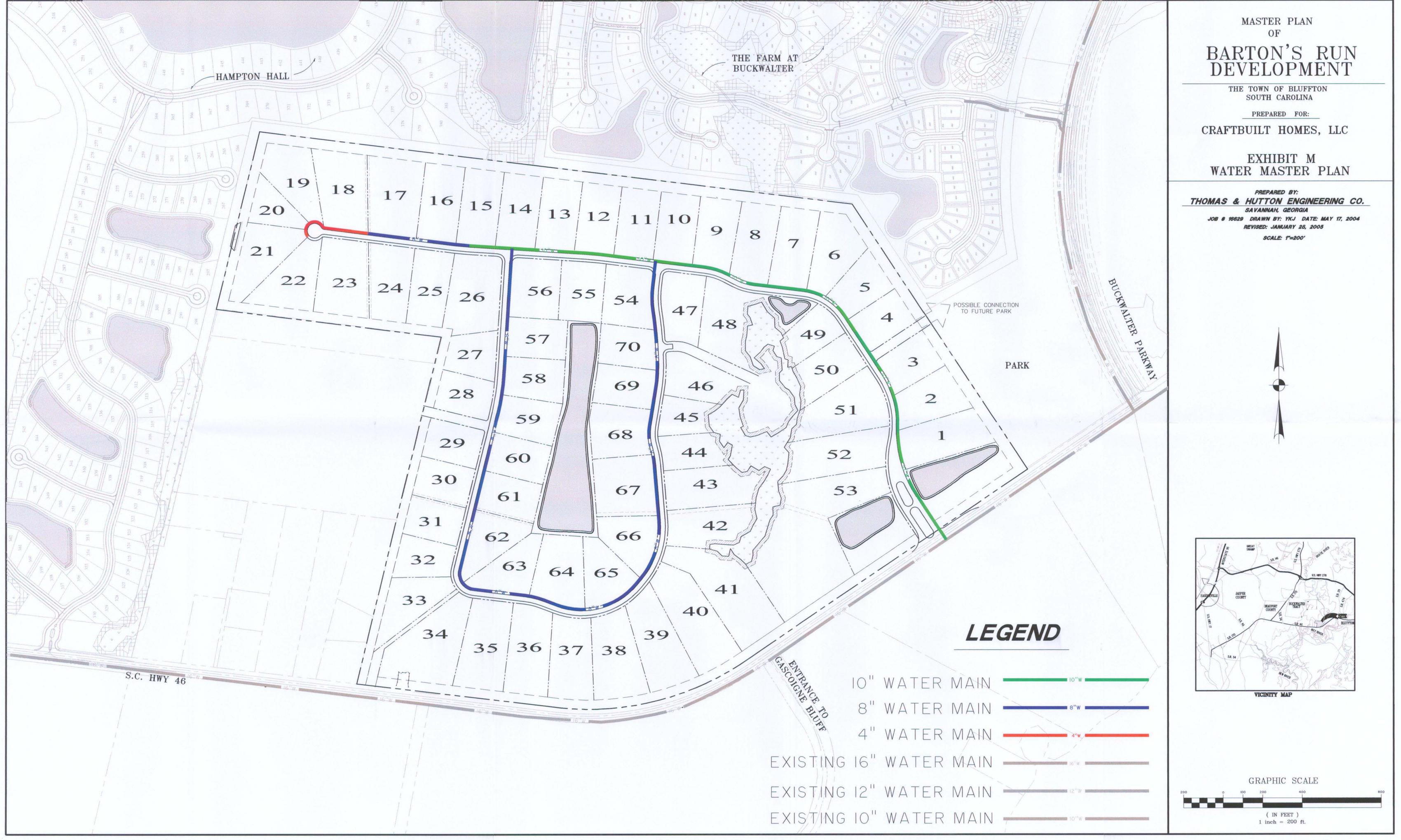
	۶	-	4-	~	-	4			7		<del>-</del>
			期目的	Willia.				HAT BEEN	. T. H. M.		
Lane Configurations Volume (vpn)			<b>†</b>		<b>T</b>		and Heritage			G121804-1524-113	enemouseus
Turn Type	pm+pt	200		Perm	259	130 Perm					
Protected Phases			8		1116						
Permitted Phases	4		titaturieie. U	8	HIATERIC MARKET	6	me # Widdigman	arrand-diller	1800 and 1944 and 1974 and 1975	anu bassanan 9ge	mark natural provided
Deleciói Phases				8							
Minimum Initial (s) Minimum Splitts)	4.0 8.0	4.0 20.0	4.0 20.0	4.0 20.0	4.0	4.0 20.0					
Total Split (s)	9.0	39.0	30.0	30.0	21.0	21.0					
Total Solic Walt		65%	50%	50%	35%	35%					
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	HPHE D'INSTITUTE	Owition description in	a france to the first state of the	Michael Colonial Colo	include hay the desired seed
	0.6	<b>D 6</b>	DAILER CONT.	12827   42 000 12 200 17	0.6	<b>103</b>					
Lead/Lag Lead-Lag Optimize?	Lead Yes		Lag	Lag							
Recall Mode	None	Min	Min	Min	None	None None					
Act/Effct Green (s)	85.5	33.8	28.9	269		13.0					
Actuated g/C Ratio	0.61	0.62	0.49	0.49	0.24	0.24					
VE PAIR DESIGNATION	0,58	994	073	OHE	differente ber 11 7 7	0.29					
Uniform Delay, d1	4.4 8.9	5.0 6.0	11.6 17.8	0.0	19.4	0.0 4.0					
LOS	A A	A	В	A	В						
Approach Delay		6.9			199	A Maiotai					
Approach LOS		A	A		В	,			•		
to be the second of the second of	10 20 30		4.	mi dia		人名英克莱			4000		
Cycle Length: 60							man on the carried Philadell Spaces	TR/Bulled and the works	- AND THE BARNET	utae ne alemanae e e	· ************************************
Actuated Cycle Lengt	1.64.9										
Natural Cycle: 60 Control Type: Actuate		THE STAR									
Maximum v/c Ratio: 0.	73										
Intersection Sonal De	N 93					ion ŁOŚ:					
Intersection Capacity	Utilization	69.9%	ou pay marui Meri			el of Servi					
O-line and Observer	n. 00 40 1	Duale:	unite - Di	***							
Splits and Phases:	3: SC 46 8	A BUCKW	alter Pi	(Wy		<del></del>				1	
			p4							İ	
L		A		42						Ţ	
ø6			o7		ø8		•				

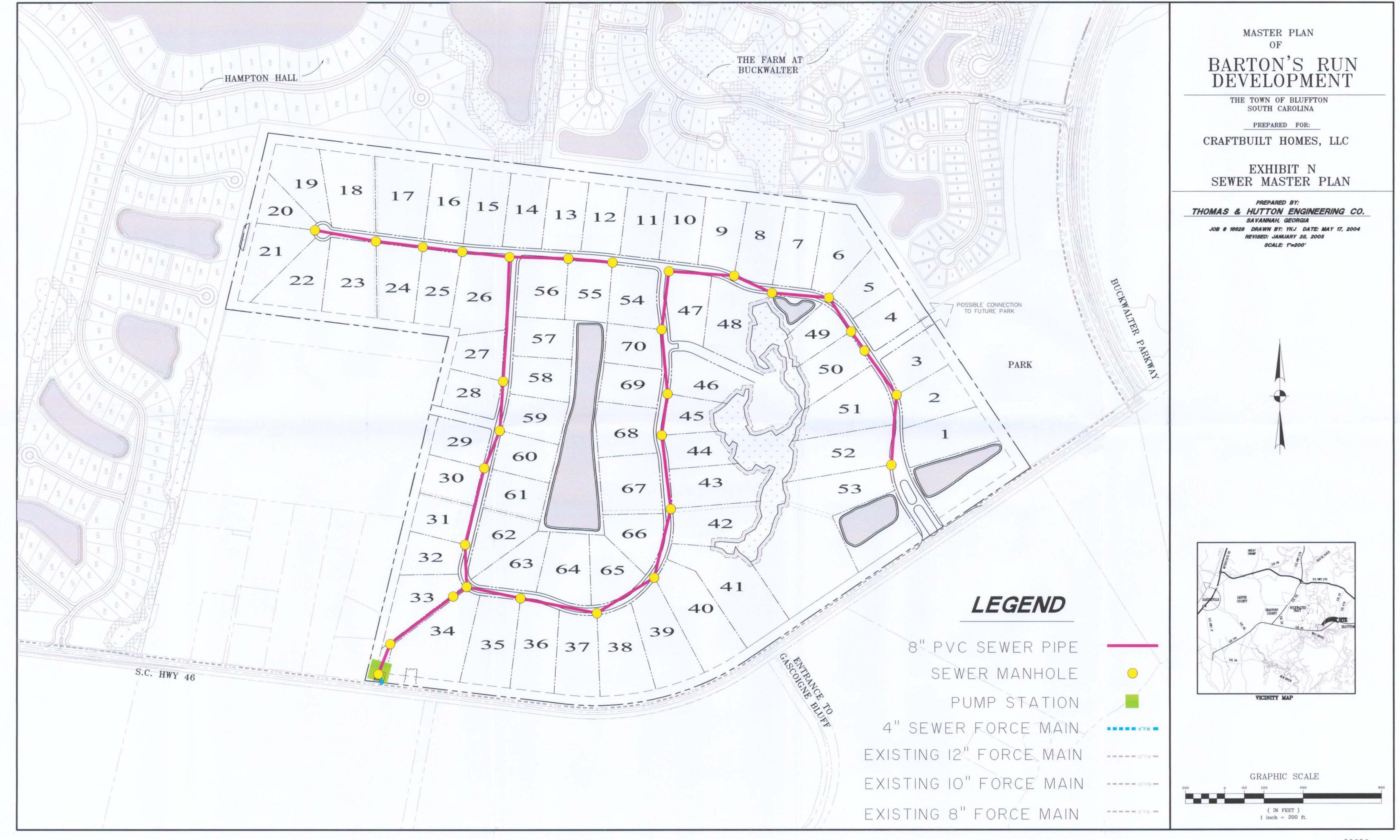
# **丿 → ← 乀 ┕ ┙**

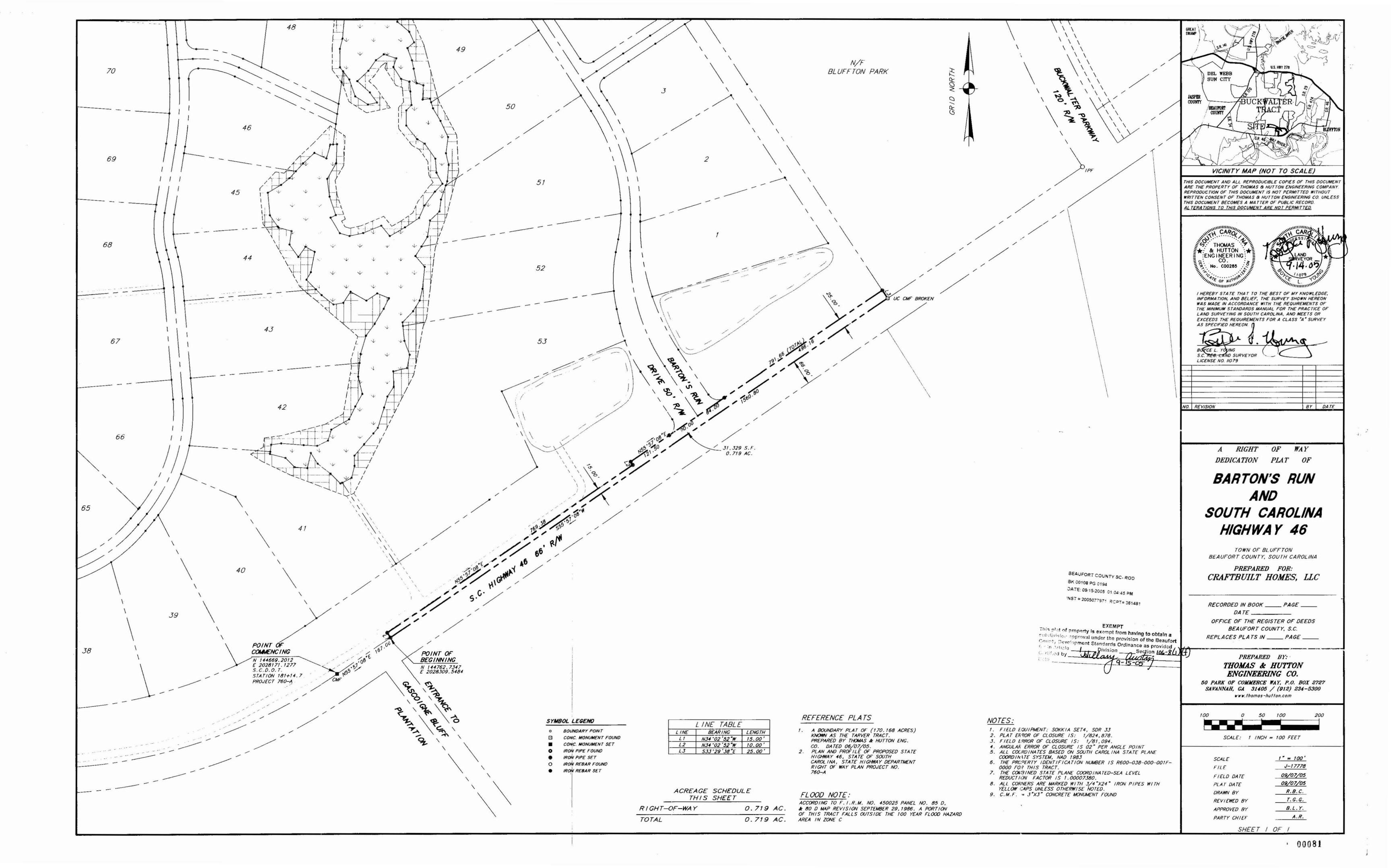
•										
Mesonia nastrena eta eta eta eta eta eta eta eta eta et	11.10	d Harris	Maria I				73.73			
Lane Configurations	*	<b>A</b>	λ		¥/					
SlaneComo		Plee	Pree		Slop					
Grade	amuni in ustueen	0%	0%	Sighte Hapitan	0%	***************************************	444444444444	edosodniki 600	SHI-MANDANIP FRANCI	turn natari 4 KBBBBBBBBBBB
Volume (vehin)		800	433		31					
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	(introduction of the section of	±	APA NATATANANA SECTIONA	Many and Cartificate Const.
Hourly flow rate (ventil)		870	<b>107</b> 1	12	84					
Pedestrians	P134 - 2411 - 2417 - 2417 - 2417 - 2417 - 2417 - 2417 - 2417 - 2417 - 2417 - 2417 - 2417 - 2417 - 2417 - 2417 -	(165107713 <b>146</b> km)	(44) R#IKILLIDIKI	POST THE SHADE SECTION	in time and the test error	HAME HE DESCRIPTIONS	minananissiasia	This are from the second firm to	isti amateria in Hall	**************************************
Lane William										
Walking Speed (ft/s)	(p. 4.00 m [:			Contrador (see 1.2.1)	B.1 (1.1.11114 L.1.111	·P·MANUTURE ELECTION	min ====================================	14.21.21.21.22.24.24.24.24.24.24.24.24.24.24.24.24.	(1311:1301E-121-11110)	HANNESS OF THE PROPERTY OF THE PARTY OF THE
Parcent Blockage										
Right turn flare (veh)								,		. 1 a - 1 a
Mediantype					None					
Median storage veh)	,,,,				,					,,
vC conflicting volume	483				1955	477				
vC1, stage 1 conf vol								restable .		
VC2 stage 2 conf vol.										
tC, single (s)	4.1		······································		6.4	6.2	elft i be da ba daden om mener br		. Wallough and The Table	THE STATE OF THE S
(G. 2 9 8 0 9 (B)										
<b>tF (s)</b>	2.2	ub.odornepretty	олигинета	Gillimuenus c	3.5	3.3	ilenen ervira	odičkahom om ma	anarmannere	lenus portores Especial
poquere free ?.	100									
cM capacity (veh/h)	1080				164	588				
Appropriate Annual Control	1412 1	J. Brette	New Services	20 (E. V.) (E.		10.00			d meeting	NI MI HIGHT
Volume Total	4	870	483	48						
Volume Left		4	100	34						
Volume Right	0	0	12	14				····	.,	
<b>CSHERRIFICATION</b>	1080	1700	1700	209						
Volume to Capacity	0.00	0.51	0.28	0.23					0 3 1 F 11 F 33 C - SEE B. B. L.	
Querie Lengin (f)	9.	0.4								
Control Delay (s)	8.3	0.0	0.0	27.3						
	A									
Approach Delay (s)	0.0		0.0	27.3	(1) (a) Species from property (2)	.communications	*********	and the control of the section		Page 8 Hill in the construction
Action of CS 9										<b>海斯湖兰</b> 的
per an authorization and the control	18.5.	(* 41 s-j								
Water a follower and the										
Intersection Capacity Util	lization	erreneralië !	55.8%	16 mentenana 11	CU Leve	of Service	:0	illeriakinenenenen 1		manight diames and

	_	-	4	•	•	4	•			
	MgT.	No.	W. Birg	WEIT:				and the second		44.00
Lane Configurations	7	<b>†</b>	). Fied		Y					A CONTRACTOR
Sion Centro		Free	The Land Land		Slop					
Grade	numare al Mahar	0%	0%	Marie Mary 10 Acres	0% 20			agjekt dannamiyani	nennikken eerrons	participal designation
Volume (vehin)	0.92	500 0.92	709 0.92	0.92	0.92	0.92				
Houry low rate (veh/b)		543		U.32	V.32	U.92				
Pedestrians			is near the		e e e e e e e e e e e e e e e e e e e				enthach fallenger	
Lane With the										
Walking Speed (ft/s)	richiral (A) (A) (Pro)	rananantanti tirka se	سحوصون الدمالا ليوازن	**************************************	Harris			: Ablabladay yer arrangy	Politica di California de Cara Politica Politica de Cara Politica Politica de Cara Politica Politi	
Hercent Blockape										
Right turn flare (veh)										
Median storage veh)										
vO conflicting volume	808				<b>#385</b>	759				
vC1, stage 1 conf vol						P4-(1818211211211211211211		1111227	- AND ARTECULAR INCOME.	international desired in
VC2 918 06 2 65 11 Vol										
tC, single (s)	4.1	realianes(ect			6.4	6.2				
tF (s)	2.2				3.5	3.3				
po quelle l'éé %	98				86					
cM capacity (veh/h)	818			- en-Amorasa	159	391				
Happing and the King King	9.59(3.5)		Mark and as	A STATE OF THE STA						
Volume Total	16	543	808	32						
vooma lait		anumining pri		22						
Volume Right	0 - 818	0 1700	37 9700	10 195	na percen					120 P6 C0 S154 195 1
volume to Capacity	0.02	0.32	0.48	0.16				e as an intervention		
Oliste Lengta (t)	155 25									
Control Delay (s)	9.5	0.0	0.0	27.0			돌아다다하네본만한			TELES AND MANAGEMENTS
Lene LOS - T. C. C.										
Approach Delay (s)	0.3	HANDING TRANSPORT	0.0 ************	27.0	merophikane.	<u>eelahan himmoong SARA</u>		acamonokasiiiA1#:	anasinakkan karasa	
Appropries					Alexandere					
resembled lines				uri senteri		Control of the Control of The Control				
Ayerage Delay			mer.							
Intersection Capacity Ut	ilization		52.8%	IC	U Leve	of Service		<b>A</b>		

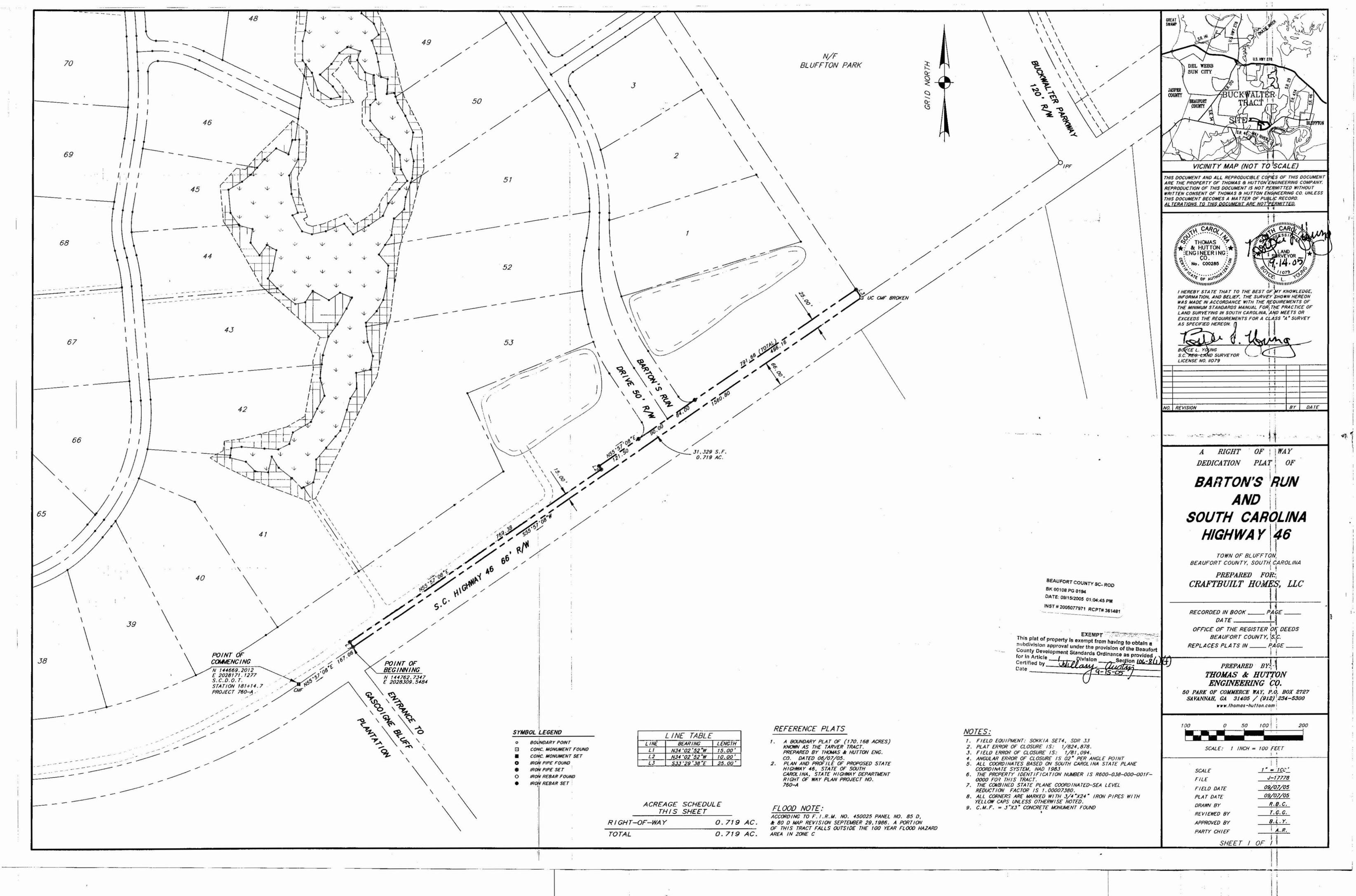












#### 2005/15

SOUTHERN BEAUFORT COUNTY MAP AMENDMENT/REZONING REQUEST FOR R600-38-1F (170 ACRES, FORMERLY THE TARVER TRACT) FROM RURAL (R) TO PLANNED UNIT DEVELOPMENT (PUD) TO BE KNOWN AS BARTON'S RUN; APPLICANT: WILLIAM B. TARVER, JR./AGENT: CRAFTBUILT HOMES, LLC, JOHN CARDAMONE).

BE IT ORDAINED, that County Council of Beaufort County, South Carolina, hereby amends the Zoning Map of Beaufort County, South Carolina. The map is attached hereto and incorporated herein.

### Special Conditions Attached to Barton's Run PUD

- 1. The Applicant shall execute the Access and Utility Easement Agreement with the Town of Bluffton prior to the issuance of a development permit from the Development Review Team;
- 2. The Applicant shall donate \$63,000 to the construction of the proposed United States Tennis Association Center at the Buckwalter Regional Park prior to the issuance of the development permit. The Town of Bluffton shall collect the donation as per a Memorandum of Agreement executed with the County
- 3. The final approved Development Plan shall show a future stubbed access to the Vaux property line on the western border of the Barton's Run PUD;
- 4. The final approved Development Plan shall show a fifty foot (50 foot) opaque buffer within the one hundred and fifty foot (150 foot) natural buffer along SC Highway 46;
- 5. The Applicant shall comply with the Zoning and Development Standards Ordinance, Article XII, Subdivision Design and Article XIII, Subdivision and Land Development Standards, in addition to the standards set forth in the Barton's Run PUD application;
- 6. The Applicant shall donate \$900 to defray the cost of the Bluffton Parkway per lot for 70 lots payable to the County at the time of lot sale or prior to the issuance of the residential building permit, whichever comes first.

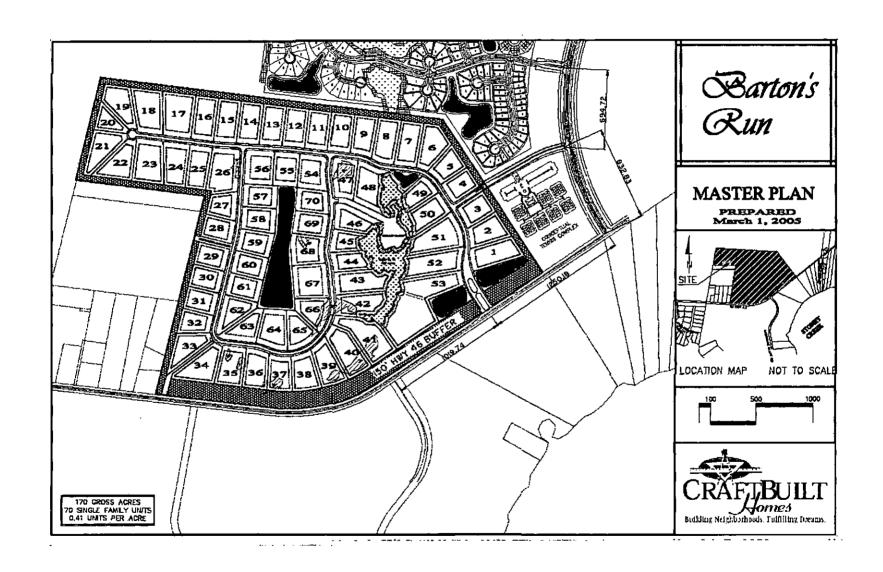
Adopted this 23rd day of May, 2005.

	COUNTY COUNCIL OF BEAUFORT COUNTY				
APPROVED AS TO FORM:	By: Wm. Weston J. Newton, Chairman				
Kelly J. Golden, Staff Attorney					
ATTEST:					
Suzanne M. Rainey, Clerk to Council					
First Reading: April 25, 2005					

Second Reading: May 9, 2005 Public Hearing: May 23, 2005

Third and Final Reading: May 23, 2005

Amending 99/12



# TABLE OF CONTENTS

Γitle		Page
Proje	ect Team	3
I.	INTRODUCTION AND NARRATIVE	4
	A. CraftBuilt Homes, LLC	4
	B. The Property	4
	C. Conceptual Master Plan	5
	D. Project Character and Rationale	6
	E. Infrastructure Capacity	7
	F. Public Benefits	7
	G. Environmental Protection.	
	H. Endangered Species	
	I. Cultural and Historical Resources	8
	J. Water and Sewer Service	8
	K. Utility Service	
	L. Roadways and Traffic	9
	M. Ownership Improvements	10
	N. Development Standards	10
II.	LAND USE DESIGNATIONS AND	
	DEVELOPMENT STANDARDS	10
	A Dronogod Land Ligar	10
	A. Proposed Land Uses	10
	B. Compatibility of Land Uses With The Surrounding Area	10
	C. Proposed Density	11 11
	D. Development Standards	11
III.	EXHIBITS	13
	A. Conceptual Master Plan	Exhibit A
	B. Boundary Survey and Legal Description	
	C. 2002 Aerial Photograph	
	D. Adjacent Property Owners and Land Uses	
	E. Topography	
	F. Flood Hazard Zones	
	G. Wetlands	
	H. Soils Map	
	I. Endangered Species Report	

J.	Agency Letters	Exhibit J
	1. Water and Sewer (BJWSA)	
	2. Electricity and Gas (SCE&G)	
	3. Telephone and Cable TV (Hargray Communications)	
	4. Fire Protection (Bluffton Fire Department)	
	5. Emergency Medical Service (Beaufort County EMS)	
	6. Solid Waste (Waste Management)	
	7. School District (Beaufort County School System)	
	8. Health and Environmental Control (SCDHEC)	
	9. Ocean and Coastal Resource Management (OCRM)	
	10. Beaufort County Engineering Approval Request Letter	
	11. Archaeological Permit Approval Letter	
	12. Encroachment Permit Preliminary Approval Letter	
K.	Traffic Impact Analysis	Exhibit K
	Stormwater Conceptual Master Plan	
	Water Conceptual Master Plan	
	Sawar Concentual Master Plan	Evhihit N

# **Project Team**

Developer:

CraftBuilt Homes, LLC

Mr. John Cardamone

Mr. Tim Franks

Engineering:

Thomas & Hutton Engineering Co.

Mr. Gary R. Wiggin, P.E.

**Land Planning** 

CraftBuilt Homes, LLC & Architecture:

Mr. Tim Franks

Environmental

Sligh Environmental Consultants, Inc. Mr. Stuart Sligh

Consultant:

Legal

Mr. Lewis Hammett, Esq.

Counsel:

Mr. Steve Bird, Esq.

# I. INTRODUCTION AND NARRATIVE

### A. CraftBuilt Homes, LLC.

CraftBuilt Homes, LLC is a South Carolina Limited Liability Company that was formed in 2000 by John Cardamone. John was a partner in the successful golf communities of Colleton River and Belfair.

Tim Franks, the Vice President of Development of CraftBuilt was formerly the President of national builder Engle Homes North Carolina Division. Prior to Engle, Mr. Franks was president of homebuilder Parker Lancaster Corporation, North Carolina Division for 14 years.

Collectively, Mr. Cardamone and Mr. Franks have successfully developed over 5,000 home sites and homes in the southeast over the past twenty years.

CraftBuilt Homes, LLC is a successful developer of affordable homes in both the Hilton Head / Bluffton areas as well as Brunswick, Georgia. Homes from the low one hundred thousand dollars have been successfully developed in both the Sandy Pointe as well as the Arborwood and Willows communities of Bluffton. Woodbridge homes range from the mid one hundred thousand dollar range to the high two hundred thousand dollar range, providing housing for police officers, fire fighters, school teachers, store clerks, managers and retirees who live, work and shop near their homes.

### B. The Property

The subject property is owned by The Tarver Company. The Barton's Run PUD has a total acreage of +/- 170 acres located off of South Carolina Highway 46 near the Buckwalter Parkway intersection (See Exhibit A). The property is generally bounded on the North by Hampton Hall and The Farm at Buckwalter developments, the East by a parcel of land earmarked for the Town of Bluffton's Buckwalter Community Park, and the South by South Carolina Highway 46. The property is bounded on the West by Hampton Hall as well as three other residential property owners. For a detailed list of adjacent property owners please refer to Exhibit D. The proposed PUD consists of 70 single family homes and a recreational facility for the development.

The parcel is located as District 600, Map 38, Parcel 1F of the Tax Maps of Beaufort County. The tract is currently zoned Rural.

Tree cover mostly consists of young row pine plantation with very few hardwoods. The few existing hardwoods are located mainly in the wetlands. Topography ranges in elevation from +15 MSL to 29 MSL across the site (See

Exhibit E). An existing ditch drains the property into the Hampton Hall development lagoon system which outfalls to Rose Due Creek. Rose Due creek flows into the May River.

The freshwater wetlands on the Barton's Run PUD were delineated by Newkirk Environmental, Inc., surveyed by T-Square Group, Inc. of Bluffton, South Carolina and certified by the U.S. Army Corps of Engineers on June 25, 2002 (See Exhibit G). The site has +/- 7.45 acres of isolated non jurisdictional freshwater wetlands, and 0.09 acres of 404-jurisdictional freshwater wetlands. A portion of the isolated non-jurisdictional freshwater wetlands on the site are proposed to be impacted by development activity. Since, at present, OCRM claims administrative jurisdiction over these wetlands, these impacts will be permitted through OCRM. The permit process requires mitigation for the wetland impacts. Mitigation will be accomplished through a combination of buffers and preservation of jurisdictional and/ or non-jurisdictional wetlands. The one 404-jurisdictional freshwater wetland located on the property will be preserved.

The Soils Map presents the soils found at the Barton's Run PUD as classified by the Soil Conservation Services for Beaufort and Jasper County as soil surveys prepared by the U.S. Department of Agriculture (See Exhibit H). The soils located within the Barton's Run PUD are classified as soil groups A, B, and C. The soil series include murad, seabrook, baratari, deloss, ridgeland, seewee, and onslow. Any limitations that there may be in these soil series can easily be overcome with proper design and planning.

# C. Conceptual Master Plan

The Barton's Run PUD will be developed in accordance with the Barton's Run PUD Conceptual Master Plan prepared by CraftBuilt Homes, LLC, dated January 26, 2005 as shown in Exhibit A. Development permit applications for the project shall conform to the Beaufort County Zoning and Development Standards Ordinance (ZDSO), as modified herein by Section I, Part N and Section II, Part D.

The Barton's Run PUD property is currently zoned rural. As part of the permitted single-family residential uses under the Beaufort County Zoning and Development Standards Ordinance, the maximum housing density for a rural single family cannot exceed 0.34 dwelling units per gross acre. This PUD, as planned, has a total density of 0.41 dwelling units per gross acre (70 du).

The exact location of roads, lagoons, open spaces, and other elements may vary at the time of Development Permit Applications. The plan demonstrates a potential arrangement of land uses and road corridors. The final layout will vary based on market conditions and environmental constraints. However, if Conceptual Master Plan alterations are made during the implementation of the development, the maximum density of 0.41 dwelling units per gross acre (70 du's) will not be exceeded.

The property will be accessed from Buckwalter Parkway and South Carolina Highway 46. The Buckwalter Parkway access will be via a non-exclusive access easement to be granted by the Town of Bluffton across a portion of the Buckwalter Community Park site.

# D. Project Character and Rationale

Over the last several years residential development in Southern Beaufort County has in large part centered on the greater Bluffton area and in particular the Buckwalter area. With new schools, good access to Bluffton, Northern Beaufort County, Hilton Head and Savannah, and a relatively strong economic environment, sales of most prices ranges of single family homes in that area have been robust. There has been particularly strong demand for new homes more affordably priced.

The requested PUD for this project represents a recognition for diversity in the Buckwalter Parkway corridor. Even though a strong argument can be made to continue the suburban densities which exist on three sides of the property, an alternate approach is being proposed. The property fronts onto SC 46, a designated scenic highway. A low density development is proposed in order to protect and enhance the scenic, rural character of SC 46. The significantly reduced number of dwelling units, and the anticipated shift in buyer profile, will result in little loading onto currently stressed public services.

The PUD designation allows for flexibility in calculating open space required by Rural, Single Family (RSF) classification. While some of the open space needs are obtained with the use of buffer yards at the perimeter of lots, the total substantially exceeds RSF minimum requirements. This is achieved by increasing the lot sizes significantly above the RSF minimum, to an average of two acres per lot. All setback and yard requirements are met or exceeded.

Even though this project is not subject to the Town of Bluffton standards, this PUD will agree to meet the 150 foot setback along the property's SC 46 right-of-way. The entrance will be understated and rural in character, so that it will blend with the attractive look of other properties along the scenic corridor.

### E. Infrastructure Capacity

Presently, there is no potable water distribution system or wastewater collection system on the Barton's Run PUD property. Water distribution and wastewater collection/conveyance systems will be constructed to serve the PUD and connected to Beaufort Jasper Water and Sewer Authority infrastructure currently in operation and serving the adjacent areas.

Electrical and Gas service is provided to the Barton's Run PUD by South Carolina Electric and Gas Company.

Telephone and Cable service to the Barton's Run PUD is provided by Hargray Communications.

#### F. Public Benefits

The public will benefit in a number of ways from the development of the requested PUD. The overall density is consistent with rural zoning. The total DU's and the character of development will not alter the scenic, rural nature of the SC 46 corridor. The agreed-to setback of 150 feet will make the development invisible to anyone traveling the highway. The buyer profile will not result in loading of schools and roads, which are currently stressed. The overall density is well below the assumed one unit per acre for currently uncommitted rural property in South Beaufort County.

Most importantly, it is probable that the requested PUD will significantly add to revenues to the county through property taxes and other fees, without stressing public services.

#### G. Environmental Protection

Environmental Protection is of the highest priority for CraftBuilt Homes, LLC. The environment is crucial to the quality of life that is the attraction of the Lowcountry, and quality of the surrounding surface waters is a primary focus of the PUD. As part of the development process, CraftBuilt Homes, LLC will implement the Beaufort County Best Management Practices (BMPs) for Stormwater Management. The BMPs dictate stormwater treatment standards and provide a method to quantify the design of the stormwater treatment system. The use of detention lagoons for treating stormwater runoff from impervious areas prior to release off site will be utilized within the Barton's Run PUD.

The Storm drainage for the project will be filtered through a stormwater quality management system prior to being conveyed into the existing ditch adjacent to Hampton Hall. The Stormwater Conceptual Master Plan has been reviewed and approved by OCRM and the Beaufort County Engineering Department at the Conceptual Master Plan level (See Exhibit L). Construction drawings must be submitted and approved by Beaufort County and OCRM prior to issuance of construction permits.

The Stormwater Conceptual Master Plan is subject to modification as development progresses. Exact location of ponds, connector pipes and outfalls for the development will be determined through detailed field surveys and site design prior to submitting for a Beaufort County Development Permit.

# H. Endangered Species

Sligh Environmental Consultants, Inc. of Savannah, Georgia was retained to conduct a survey of endangered plants and animals on the site. Sligh Environmental reviewed the property and a copy of their interim report is included as Exhibit I. The U.S. Fish and Wildlife Service reviewed the report and their preliminary comments are included. CraftBuilt Homes, LLC, agrees to coordinate, negotiate with, and abide by the final determination of the Department of Natural Resources and U.S Fish and Wildlife Service as to preservation and /or mitigation of habitat for any identified endangered species.

### I. Cultural and Historical Resources

This property has been heavily disturbed by ongoing timber management. A preliminary assessment of cultural and historical resources was conducted by Beaufort County. Ian Hill of the Beaufort County Planning Department performed historical research of the property in order to determine if the site contained significant artifacts. His findings are included in Exhibit J.

#### J. Water and Sewer Service

The Beaufort Jasper Water and Sewer Authority is committed to serve this development through services made available to adjacent properties. The Authority will provide potable water for domestic use and fire protection. It is also the intent of the Authority to provide wastewater collection and treatment. Water will be served by the Chelsea Plant Water System (DHEC 0720003) through extensions of a 12" loop connection to the existing 16" water mains located on Buckwalter Parkway and South Carolina Highway 46 (See Exhibit M). Wastewater flows will be collected by a combination of gravity sewer, pumping station(s), and force main(s) pumped from the Barton's Run PUD to the Buckwalter Master Pump Station and processed at the Cherry Point Wastewater Treatment Plant (ND 00740004) (See Exhibit N).

The developer will construct both systems and dedicate them to the Authority upon acceptance by the State Department of Health and Environmental Control. The Water and Sewer Conceptual Master Plans are subject to modification as development progresses. Exact location of water mains, sewer pipes, pump station(s), force main(s), and associated infrastructure for the development will be determined prior to submitting for a Beaufort County Development Permit.

#### K. Utility Service

Electrical and Gas Service is available through utility services provided by South Carolina Electric and Gas Company (SCE&G) (See Exhibit J). Service will be extended on a needed basis as the Barton's Run PUD is developed.

Telecommunication and cable television service will be provided by Hargray Communications, Inc. (See Exhibit J). Service will be extended on a needed basis as the Barton's Run PUD is developed.

The water distribution system is capable of providing fire flow for the Conceptual Master Plan of the Barton's Run PUD. The plan was reviewed by the Bluffton Fire Department and their preliminary approval is enclosed (See Exhibit J).

Solid waste collection and disposal service for the Barton's Run PUD will be provided by Waste Management (See Exhibit J).

# L. Roadways and Traffic

CraftBuilt Homes, LLC recognizes the potential impact on the public roadways as a result of the development of the Barton's Run PUD and continuing growth throughout Blufton and Beaufort County. To address this issue, CraftBuilt Homes, LLC retained Thomas and Hutton Engineering Company to study the traffic impacts. The Traffic Impact Analysis is included as Exhibit K.

Potential traffic impacts to SC 46 will be mitigated by the potential construction of an entrance roadway directly connecting to the Buckwalter Parkway. This potential entrance will be built within a non-exclusive access easement to be granted across property reserved for the Buckwalter Community Park and owned by the Town of Bluffton.

The direct access to Buckwalter Parkway will affectively distribute traffic entering and exiting the PUD, thus significantly reducing the peak vehicle trips per day on SC 46, if required.

The roads in Barton's Run will be publicly access private roads, in order to enhance connectivity. For late-night security, card access gates will be incorporated into the entrances to the Barton's Run PUD. The layout of the private roads and the guard gates are subject to modification as development progresses. The roads within the Barton's Run PUD will be constructed in accordance with the standards of Beaufort County and maintained by the developer. After the sale of property is completed, the roads and maintenance responsibilities will be transferred to a property owners' association.

# M. Ownership of Improvements

The improvements and all common property within the Barton's Run PUD will be privately owned. Homeowner concerns over security at night have prompted us to provide our homeowners with a secure community after dark. This necessitates private ownership of the roads and common areas in the Barton's Run PUD.

# N. Development Standards

Development standards for the Barton's Run PUD will substantially conform to the guidelines of the Beaufort County Zoning and Development Standards Ordinance (ZDSO), with minor modifications. The proposed modifications to open space and density standards, lot and building standards and buffer, yard and landscaping standards are outlined in Section II (D) below. Some sections of the ZDSO will not apply to the Barton's Run PUD, as explained below.

# II. LAND USE DESIGNATIONS AND DEVELOPMENT STANDARDS

### A. Proposed Land Uses

The Barton's Run PUD is intended as a detached single family development. Lot widths and single family product types may vary at the developer's discretion so long as the maximum total dwelling units is not exceeded. Allowed product types will consist of single family detached.

During the development and buildout period the applicant and or its assigns would have need for various "other structures" such as construction trailers, storage containers, temporary sales trailers, sales models and sales offices. An on-site boat and recreational vehicle storage area for the residents is proposed.

### B. Compatibility of Land Uses With The Surrounding Area

The Barton's Run is wrapped on three sides with existing suburban development. However, the south boundary, facing SC 46 is currently Scenic and rural in nature. The proposed PUD will preserve and enhance this character. The overall density, setbacks and buffers will make the development blend and disappear into the SC 46 landscape.

### C. Proposed Density

In order to produce an economically viable development, 70 lots averaging over two acres will be created. This will insure that the character of existing surrounding properties will be enhanced. Fewer lots will not produce sufficient revenues to support cost of land and development.

## D. Development Standards

1

The following development standards will apply to all areas of the Barton's Run PUD. The development standards proposed herein are referenced to pertinent sections of the Beaufort County Zoning and Development Standards Ordinance (ZDSO). These standards will supersede the development standards requirements of the ZDSO. All other ZDSO standards shall remain applicable.

Article XI. Section 106-2447 specifies that all phases of the PUD will be required to adhere to the latest version of the ZDSO, in regards to the following standards. The proposed PUD will demonstrate adherence at the time of the Development Plan submittal to:

- (1) Tree and landscape standards.
- (2) Stormwater BMP's
- (3) Environmental quality standards
- (4) Impact fees

### Article VI, Division 2. Open Space and Density Standards. Table 106-1526.

The proposed PUD will meet the Open Space Ration of 0.40. This will be achieved in large part by counting preserved wetlands, perimeter buffers, lakes, open space, and qualified buffer yards. A small percentage of the overall ratio will be met by counting setbacks within the lot lines. These areas will be restricted so that no structures will be allowed.

Category	Actual Calculation
Open Space Ratio	0.40
Density Ratio	0.41

#### Article VI, Division 3. Lot and Building Intensity Stds. Table 106-1556.

The proposed PUD will exceed all minimum standards in regard to lot size and width, as well as street, side and rear yard requirements for the Rural Single Family categories. The Maximum building height will not be exceeded.

# Article VI, Division 4. Bufferyards and Landscaping Standards. Subdivision II. Bufferyards. Sec. 106-1617. Bufferyard and Tree Standards Table.

All Landscape Standards for Rural Single Family will be met or exceeded by the proposed PUD. The depth of bufferyards will exceed the requirements with a 150 foot buffer along highway 46. There are no internatl arterial or collector streets in the PUD, because of the low overall density.

The 50 foot perimeter buffer exceeds all requirements for adjacent district classifications, which are primarily suburban residential.

# Article VII, Division 2. Site Capacity Analysis.

Residential capacity will be in accordance with the narrative included in Section I (C) and the Conceptual Master Plan included as Exhibit "A", and will not exceed 0.41 dwelling units per gross acre (70 du).

# Article VII, Division 3. Natural Resource Protection Standards. Sec. 106-1843. Nontidal Wetlands.

The Threatened and Endangered Species Survey Report (Exhibit 1) indicates that limited resources exist on the site, due to its intense historical use for commercial timbering. The small isolated wetlands will be preserved to the greatest extent possible. Site inspections have revealed that all of these have been previously damaged to the point of being nonproductive and nonfunctioning. The large wetland system on the site will be protected in its entirety, and buffered. All wetland impacts and mitigation will be approved by the S.C. Department of Health and Environmental Control Office of Ocean and Coastal Resource Management.

#### Article XII, Subdivision Design.

The Barton's Run PUD subdivision design will be in accordance with the Conceptual Master Plan included as Exhibit "A".

The exact location of roads, lagoons, open spaces, and other elements may vary at the time of Development Permit Applications. The plan demonstrates a potential arrangement of land uses and road corridors. The final layout will vary based on market conditions and environmental constraints. However, if Conceptual Master Plan alterations are made during the implementation of the development, the maximum density of 0.41 dwelling units per gross acre (70 du) will not be exceeded.

# III. EXHIBITS

See appropriate Exhibit tab from page 1.

# NARRATIVE IN RESPONSE TO BEAUFORT COUNTY PLANNING COMMENTS

(1) A narrative statement justifying why a PUD designation is desirable to achieve the goals of this development [Sec. 106-2446(b)(1)].

Over the last several years residential development in Southern Beaufort County has in large part centered on the greater Bluffton area and in particular the Buckwalter area. With new schools, good access to Bluffton, Northern Beaufort County, Hilton Head and Savannah, and a relatively strong economic environment, sales of most prices ranges of single family homes in that area have been robust. There has been particularly strong demand for new homes more affordably priced.

The requested PUD for this project represents a recognition for diversity in the Buckwalter Parkway corridor. Even though a strong argument can be made to continue the suburban densities which exist on three sides of the property, an alternate approach is being proposed. The property fronts onto SC 46, a designated scenic highway. A low density development is proposed in order to protect and enhance the scenic, rural character of SC 46. The significantly reduced number of dwelling units, and the anticipated shift in buyer profile, will result in little loading onto currently stressed public services.

The PUD designation allows for flexibility in calculating open space required by Rural, Single Family (RSF) classification. While some of the open space needs are obtained with the use of buffer yards at the perimeter of lots, the total substantially exceeds RSF minimum requirements. This is achieved by increasing the lot sizes significantly above the RSF minimum, to an average of two acres per lot. All setback and yard requirements are met or exceeded.

Even though this project is not subject to the Town of Bluffton standards, this PUD will agree to meet the 150 foot setback along the property's SC 46 right-of-way. The entrance will be understated and rural in character, so that it will blend with the attractive look of other properties along the scenic corridor.

(2) Reasons for the proposed deviations from the ZDSO [Sec. 106-2446(b)(5)].

The following summarizes the proposed deviations from the Zoning and

# **Development Standards Ordinance:**

Article VI, Division2. Open Space and Density Standards

	Rural Single family Community	Barton's Run PUD	Reason for Variation
Minimum Open Space Ratio	0.40	0.49	A portion of the open space requirement wil be included in side lots as buffer yards.
Max Gross Density	0.34*	0.41	Additional DU's required for economic viability
Sewer	OS	CS	Required

<sup>\*</sup> As calculated from Table 106-1815(1)

Article XI, Division 3. Lot and Building Standards for Rural, Single Family Community Use.

	Rural Single Family Community	Barton's Run PUD	Reason for Variation	·
SF Lot Area	43,560 sf	90,169 sf avg.	Exceed Minimum	
SF Lot Width	150 ft	200 ft avg.	Exceed Minimum	
SF Street Yard	50 ft	50 ft	Meet requirements	
SF Side Yard	18 ft.	25 ft	Exceed Minimum	
SF Rear Yard	50 ft	50 ft	Meet requirements	

Article VI, Division 4. Bufferyards and Landscaping Standards, Subdivision II, Bufferyards.

	Rural Single Family Community	Barton's Run PUD	Reason for Variation
Canopy Trees	N/A	N/A	No requirement
Canopy Trees Per Ac. Open Space	N/A	N/A	No requirement
Street Tree Spacing Per Feet of Row	50 ft	50 ft	Meets requirement.
Bufferyard Width Adjoining S.C. Hwy. 46	50	150	Agree to meet Town of Bluffton standard

# (3) A proposed build-out schedule [Sec. 106-2446(b)(7)].

Barton's Run proposed built-out for roads and infrastructure will be one year. Residences will be constructed a one to five year period.

(4) A description of the mechanism to be used to secure the future maintenance and upkeep of all privately-owned areas such as streets, drainage systems, open space and buffers, and the proposed recreation site. [Sec. 106-2447(a)(17)].

All of the streets, drainage and amenities within Barton's Run will be privately owned. Craftbuilt Homes will, at the appropriate time in the development's implementation, transfer ownership as well as maintenance responsibilities to a Owners Association (POA). The POA will then assume responsibility for maintenance. The cost will be funded through annual homeowner assessments adequate to provide reserve for future maintenance and replacement.

(5) Proposed internal site planning standards such as typical lot sizes and setbacks [Sec. 106-2447(a)(20)].

Internal site planning standards for Barton's Run will be as follows:

		Minimum						
<u>Development</u> <u>Type</u>	Lot Area (s.f.)	<u>Lot</u> Width (ft.)	<u>Street</u> <u>Setback</u> (ft.)	Side Setback (ft.)	<u>Rear</u> <u>Setback</u> (ft.)	Height (ft.)		
Single Family	65,430 sf	200	50	25	50	35		

(6) Item #8 on the application form, which addresses the standards for zoning map amendments (Sec. 106-492).

Item #8 on the application form is addressed below:

a. The change is consistent with the county's comprehensive plan and the purposes of this chapter. In areas of new development, consistency with the comprehensive plan shall be considered to meet the standards in subsections (1)b, (1)c and (1)d of this section, unless compelling evidence indicates the proposed amendment would threaten public health, safety, and welfare if so designated as planned in the comprehensive plan.

The proposed Barton's Run PUD rezoning is consistent with the Comprehensive Plan. A Comprehensive Plan amendment will not be required.

b. The change is consistent with the character of the neighborhood.

The Property is situated between suburban densities on the west, north and east; and rural development to the south. Because of its orientation to SC 46 and the rural, scenic nature of that corridor, the property will serve the public good to achieve the same rural character as is currently present on SC46.

c. The extent to which the property is consistent with the zoning and use of nearby properties.

The requested 0.41 DU's per acre represents a modest increase in density. The large lot sizes and increased open space created mitigate this request. All other critical and important criteria of Rural, Single Family zoning have been satisfied or exceeded.

d. The suitability of the property for the uses to which it has been proposed or restricted.

The property is highly suitable for the proposed use, which is rural and residential in character and intensity.

e. Allowable uses in the proposed district would not adversely affect nearby property.

All properties on three sides of the proposed project are already suburban uses. This project would easily justify a similar use. The proposed PUD steps back, and with its lower density relates to SC 46 and the rural, scenic Character.

f. The length of time a property has remained vacant as zoned, where the zoning is different from nearby developed properties.

The property has remained vacant since it was zoned rural in 1999. The zoning of all of the adjacent property West, North and East of the tract has been a Planned Unit Development (PUD) since 1999 with allowed uses far more intense than the proposed project.

g. The current zoning is not roughly proportional to the restrictions imposed upon the landowner in light of the relative gain to the public health, safety, and welfare provided by the restrictions.

Given the proposed use for this property very little, if any, additional loading onto current public services will occur. The proposed density is well below currently assumed build-out of one DU per acre for uncommitted lands in southern Beaufort County. The indicated resident profile will under utilize public services, while significantly adding to Real estate taxes.

h. A traffic impact analysis submitted as part of the rezoning requests to a higher intensity will not adversely impact the affected street network and infrastructure in the higher zoning classification.

The traffic impact analysis submitted as part of the rezoning request indicates all of the roadways and intersections studied will continue to operate at an acceptable level of service with Barton's Run fully developed.